I-5 NORTH COAST CORRIDOR
FINAL COMMUNITY IMPACT ASSESSMENT

Prepared for
California Department
of Transportation
4050 Taylor Street
San Diego, California 92210

Prepared by
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Under Contract to
SANDAG
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October 2007

Memorandum

Flex your power!
Be energy efficient!

To: Shay Lynn Harrison, Chief
Environmental Analysis Branch

Date: May 11, 2010
File: 11-SD-5
EA: 235800

From: **Michelle Trudell** M. Trudell
Community Impact Assessment
District 11 – Environmental

Subject: **Addendum to the *I-5 North Coast Corridor Final Community Impact Assessment (October 2007)***

This memorandum serves as an addendum to the *I-5 North Coast Corridor Final Community Impact Assessment (October 2007)*, to provide updated information to the impact analysis because of recent project design changes to the **8+4 With Barrier Alternative,** only. All other conclusions within that study remain valid.

Relocation Changes
A recent change to the design of the 8+4 With Barrier Alternative has resulted in the reduction of the amount of right of way needed from a 47 unit apartment complex located in the city of Carlsbad. The original design affected all of the 47 units within the complex, however, with the recent design changes it is estimated there would only be 10 units potentially impacted at the apartment complex. This is documented in a revised *Draft Relocation Impact Report Memorandum (May 3, 2010)*, the technical study providing information on relocation impacts, and issued in response to a field visit conducted on April 30, 2010 by Caltrans engineers and right-of-way staff investigating potential effects of the modified design. (See Attachment-1 for mapping showing the subject area.)

Conclusions
The recent design change in the 8+4 With Barrier Alternative reduces the impacts to the 47 unit apartment complex by reducing the total number of people potentially displaced by this alternative, while the other build alternatives (10 +4 Barrier Alternative, 10 +4 Buffer Alternative, and 8 +4 Buffer Alternative) continue to avoid impacts to the complex.

The 47 unit complex is located within an area identified as a cohesive minority and linguistically-isolated community. The changes in the 8+4 With Barrier Alternative would also reduce the potential affects to individuals who are residents of the complex and members of the protected populations, per Executive Order 12898 - "Federal Actions required to address Environmental Justice in Minority Populations and Low-Income Populations". Environmental Justice impacts were analyzed in the *I-5 North Coast Corridor Final Community Impact Assessment (October 2007)* and the *Barrio Carlsbad Community Cohesion Report (June 2008)*.

Adequate replacement housing has been identified within the area for all individuals potentially requiring relocation services, should the modified 8+4 Barrier Alternative be selected as the "Preferred Alternative", per the *Draft Relocation Impact Report (October 2007)*.

A Final Relocation Impact Report (FRIR) will be completed once the Preferred Alternative is identified. This new study will provide updated information regarding the number of potential displacements, as well as, availability of replacement properties, and an assessment of the "special needs" for those potentially displaced.

Errata Sheet:

Interstate 5 North Coast Corridor Final Community Impact Assessment (October 2007)

The project footprint has been refined since the Final Community Impact Assessment (October 2007) was completed, and now has reduced impacts to relocations and farmland. These changes are described in memos dated May 11, 2010 and February 4, 2013, respectively. This information has also been incorporated into the *Interstate 5 North Coast Corridor Final Environmental Impact Report/Statement* (September 2013). The 2000 Census data has also been updated with 2010 data in the Final Environmental Impact Report/Statement.

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CHAPTER 1.0
INTRODUCTION

1.1 BACKGROUND

The California Department of Transportation (Department) is proposing to construct High Occupancy Vehicle (HOV) lanes or HOV and main travel/general purpose (GP) lanes in both the northbound and southbound directions of Interstate 5 (I-5) between the cities of San Diego and Oceanside in northwest San Diego County. The I-5 North Coast Corridor project would extend northerly from La Jolla Village Drive in San Diego to approximately 1 mile north of the I-5 Harbor Drive exit at Vandegrift Boulevard at the City of Oceanside/Marine Corps Base (MCB) Camp Pendleton boundary. This project traverses 27 miles of the urbanized coastal area of northern San Diego County (I-5 North Coast Corridor). The main purpose of this project is to reduce congestion on I-5 by increasing capacity along this segment of the corridor through the addition of HOV lanes, and either no, or one GP lane, in each direction.

This project was developed in accordance with Executive Order Number 13274, which identified improvements along I-5 between Mexico and Oceanside as a high-priority project, to provide congestion relief along the segment and to encourage carpool and transit use along the I-5 corridor. The project is sponsored by the Department, the Federal Highway Administration (FHWA), and the San Diego Association of Governments (SANDAG) as part of the Transnet Tax Program.

The I-5 North Coast Corridor is one of the primary north-south corridors for both local commuter and commercial traffic in San Diego County. It also provides a direct route to Mexico to the south, as well as to Orange and Los Angeles County cities to the north. I-5 is an important highway on a national scale as well, as it traverses the entire U.S. west coast from Mexico to Canada. The corridor currently experiences severe periodic peak hour congestion during weekdays largely due to commuter traffic. As a major interregional route for recreation and tourism, linking activity centers from Orange and Los Angeles counties to Baja California, Mexico, and beyond, it is also heavily traveled on weekends. In addition, the corridor serves as a critical commercial link between Mexico and the Los Angeles area and carries a majority of the commercial traffic passing through the Otay Mesa Port of Entry into the United States.

1.2 PURPOSE AND NEED

Population growth and associated traffic within the I-5 North Coast Corridor cities (i.e., Del Mar, Solana Beach, Encinitas, Carlsbad, and Oceanside) and San Diego are expected to continue to increase over the reasonably foreseeable future. The existing infrastructure system is currently constrained, and I-5 serves as one of two north-south freeway corridors in San Diego County. Interstate 15 (I-15), the second north-south corridor, is located east of I-5 and is connected to the I-5 North Coast Corridor via four state routes in this area: Interstate 805 (I-805), State Route (SR) 56, SR 76, and SR 78. Each of these routes is heavily traveled and is congested during peak hours and weekends. Commercial traffic is also increasing along the I-5 corridor due to increased United States/Mexico border crossings following passage of North American Free Trade Agreement. The congestion related to both local and regional traffic needs along the corridor could potentially hamper the ability of the corridor to function as part of the Strategic National Highway Network, which is a network of highways that provides “defense access, continuity and emergency capabilities for defense purposes” (FHWA 2007).

The main purpose of the project is to reduce congestion on I-5 within San Diego County and to maintain or improve existing and future traffic operations in the I-5 North Coast Corridor. The proposed improvements would also provide consistency with the Regional Transportation Plan (RTP) prepared by the San Diego Association of Governments (SANDAG) (SANDAG 2003) and maintain the facility as an effective link in the national Strategic Highway Network.

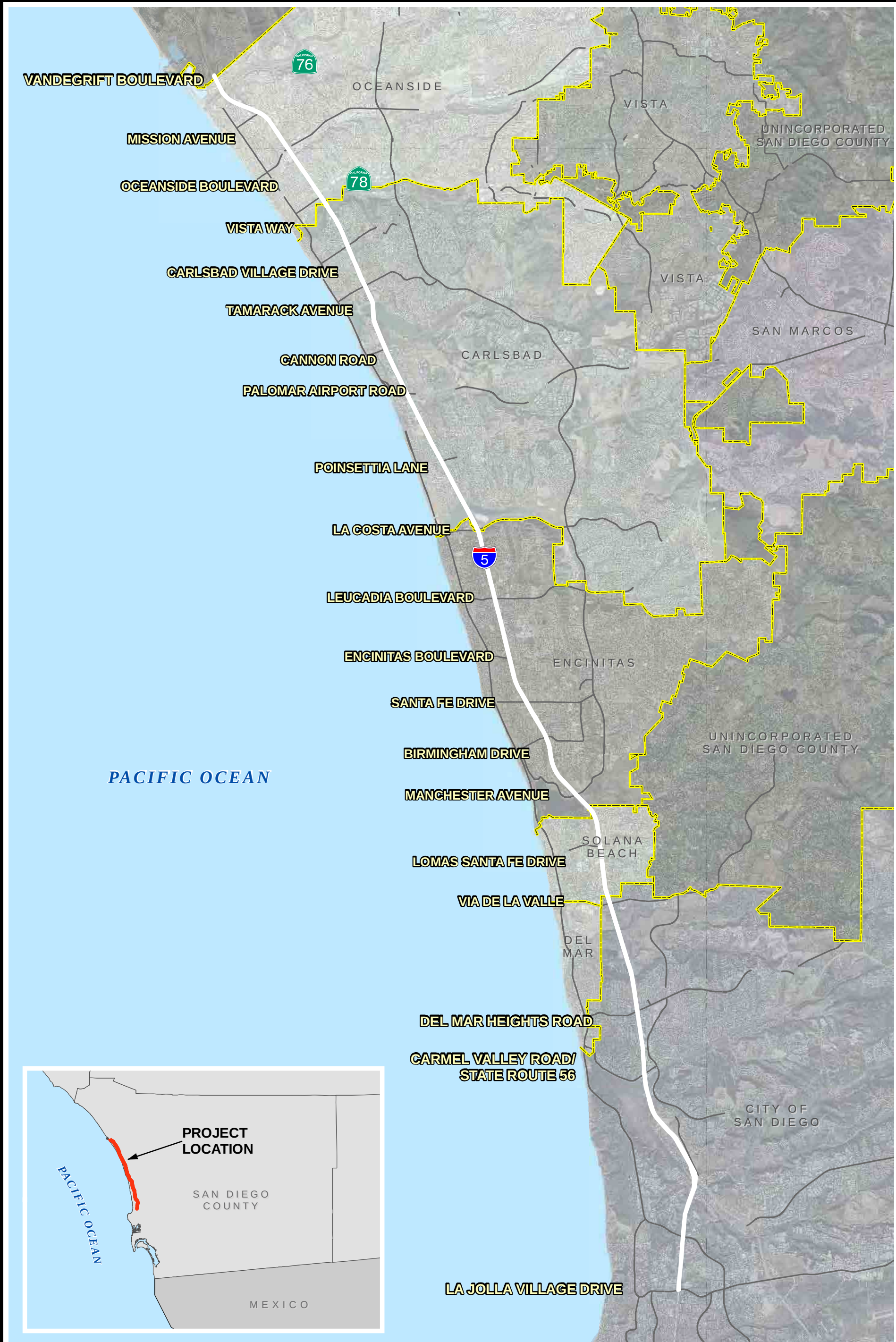
1.3 PROJECT LOCATION AND REGIONAL OVERVIEW

The I-5 North Coast Corridor project is located entirely within northern San Diego County and traverses portions of the municipalities of San Diego, Solana Beach, Encinitas, Carlsbad, and Oceanside; it additionally passes near the municipality of Del Mar. The southern terminus of the project is at Post Mile (PM) 28.4 in San Diego and the northern terminus is located at PM 55.4 in northern Oceanside at its boundary with MCB Camp Pendleton. Figure 1-1 shows the extent of the project and municipal boundaries and interchanges.

As shown in Figure 1-2, the northern San Diego region is highly developed with residential and commercial uses interspersed among large open space areas with isolated tracts of coastal agricultural land. Residential and commercial land uses are highly integrated with the circulation system as well as the natural topography and land features of the region. The beach culture present in the adjacent cities serves both the local resident population as well as visiting tourists. In general, the large majority of the coastal area and land adjacent to the I-5 corridor has been developed with residential and supporting commercial uses. Increased accessibility and demand over time have led to residential growth in the inland areas as well. Shown in red in Figure 1-2, residential clusters along the coast and I-5 are generally of high density and designed along a grid-street pattern, while residential neighborhoods in more inland areas are associated with lower density residential developments commonly associated with “urban sprawl.” Shown in blue in Figure 1-2, commercial centers are generally located around major transportation routes and are linear in nature. Larger commercial clusters, such as those seen in eastern Carlsbad and San Diego, are typically associated with industrial areas.

Historical development patterns, desirability of location, and land use regulations such as density designations, permitted development types, and designated open space, influence contemporary demographic and economic characteristics including population density, minority population distribution, and land values. Figure 1-3 shows regional patterns of population density within the study area and surrounding region that are highly linked to land use patterns. Generally, the most densely populated areas in San Diego are located within the older communities along the coastal area and along the I-5 North Coast Corridor. However, recent residential growth in inland San Diego has led to increasing densities in more eastern portions of San Diego. Figure 1-4 shows minority population distribution patterns in the corridor area. As shown, communities in the corridor vary widely in their relative racial/ethnic diversity.

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SanGIS 2006

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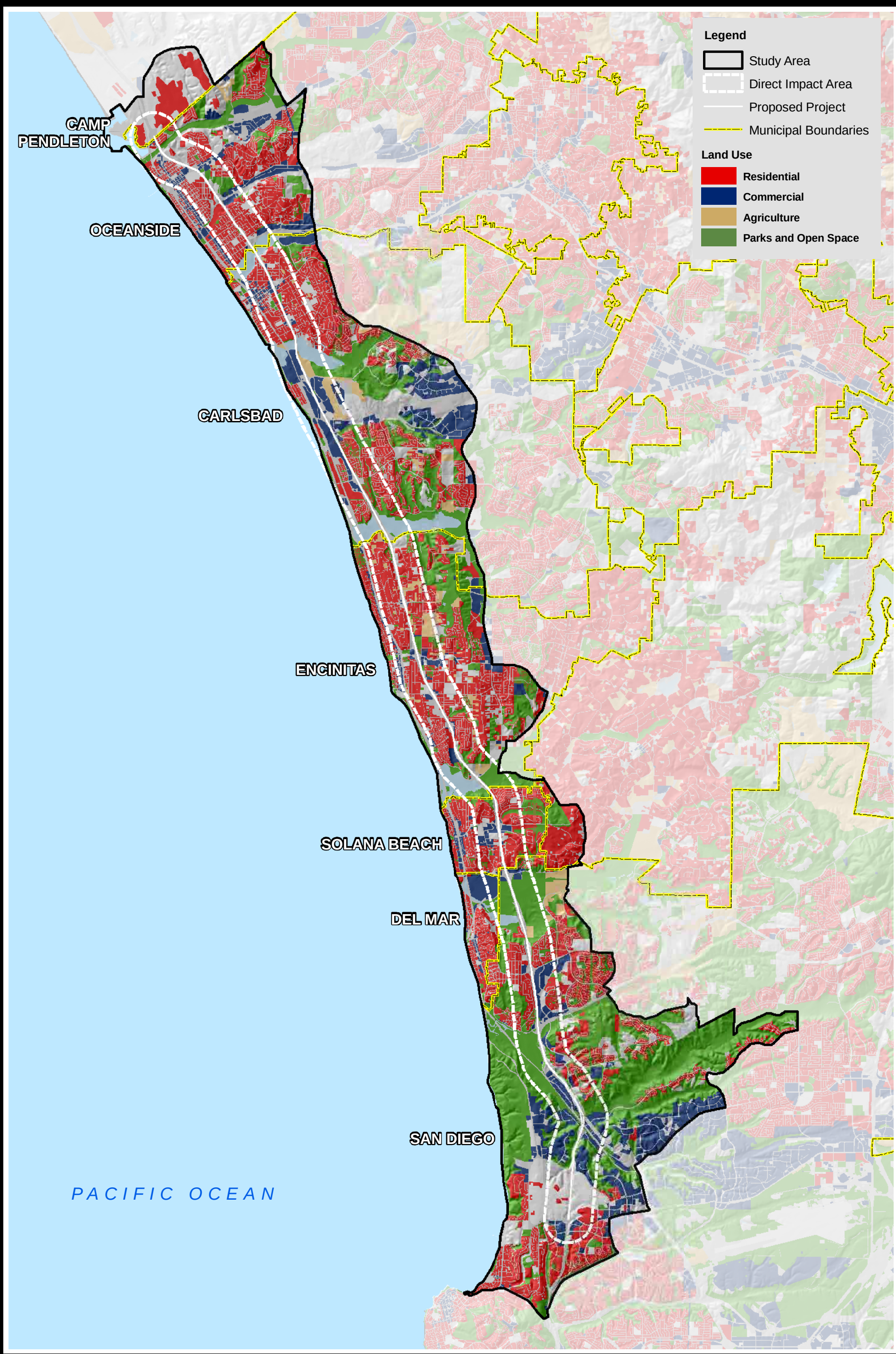
Figure 1-1
I-5 North Coast Corridor

1.75 0 1.75 Miles

Scale : 1:110,500; 1 inch = 1.75 miles

I-5 NORTH COAST CORRIDOR CIA



Source: USGS 2000; SANDAG 2006

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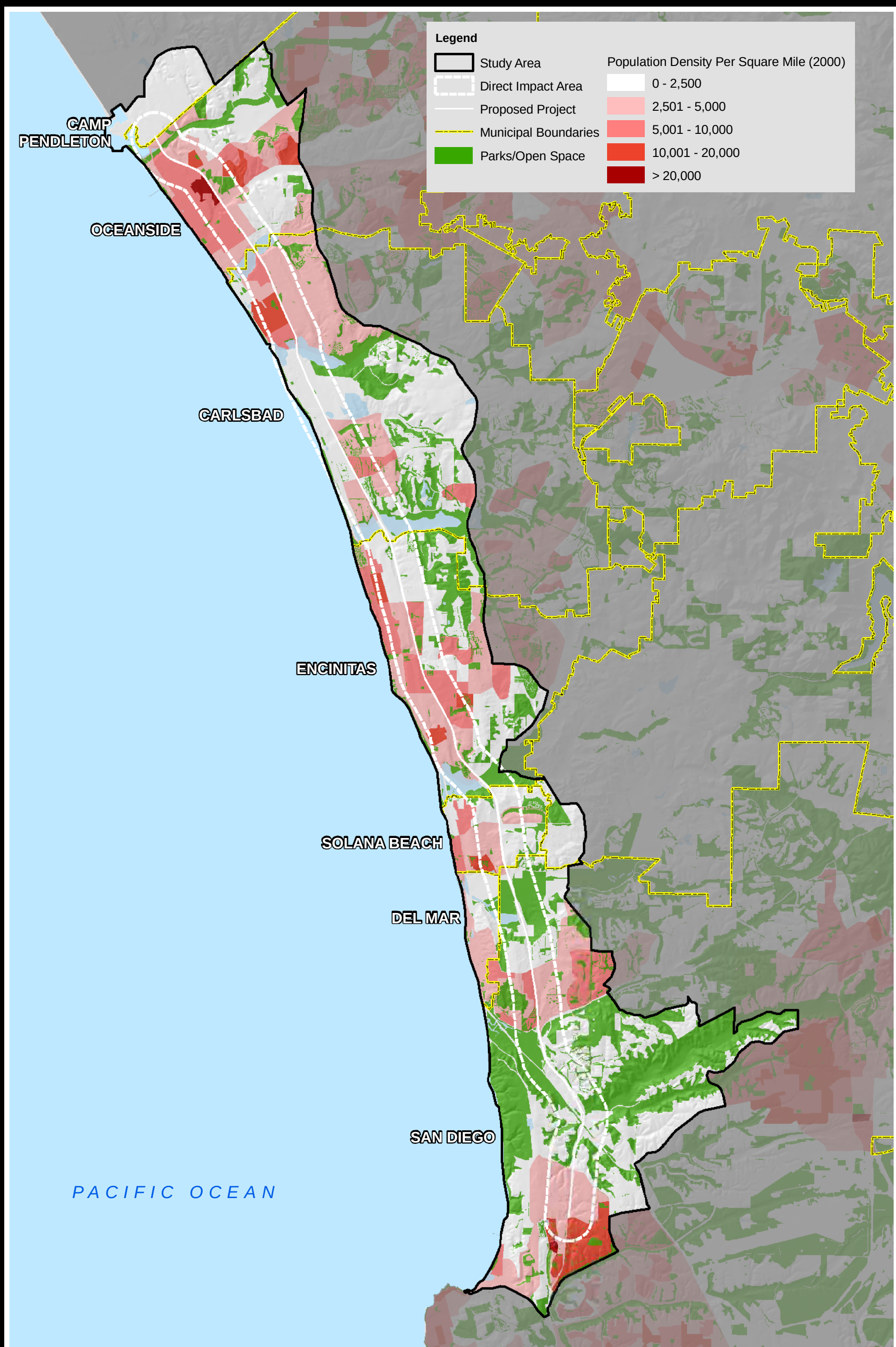
Figure 1-2
STUDY AREA AND REGIONAL Land Use

2 0 2 Miles

SCALE: 1:124,000; 1 inch = 2 miles

I-5 NORTH COAST CORRIDOR CIA



Source: USGS 2000; US Census 2000

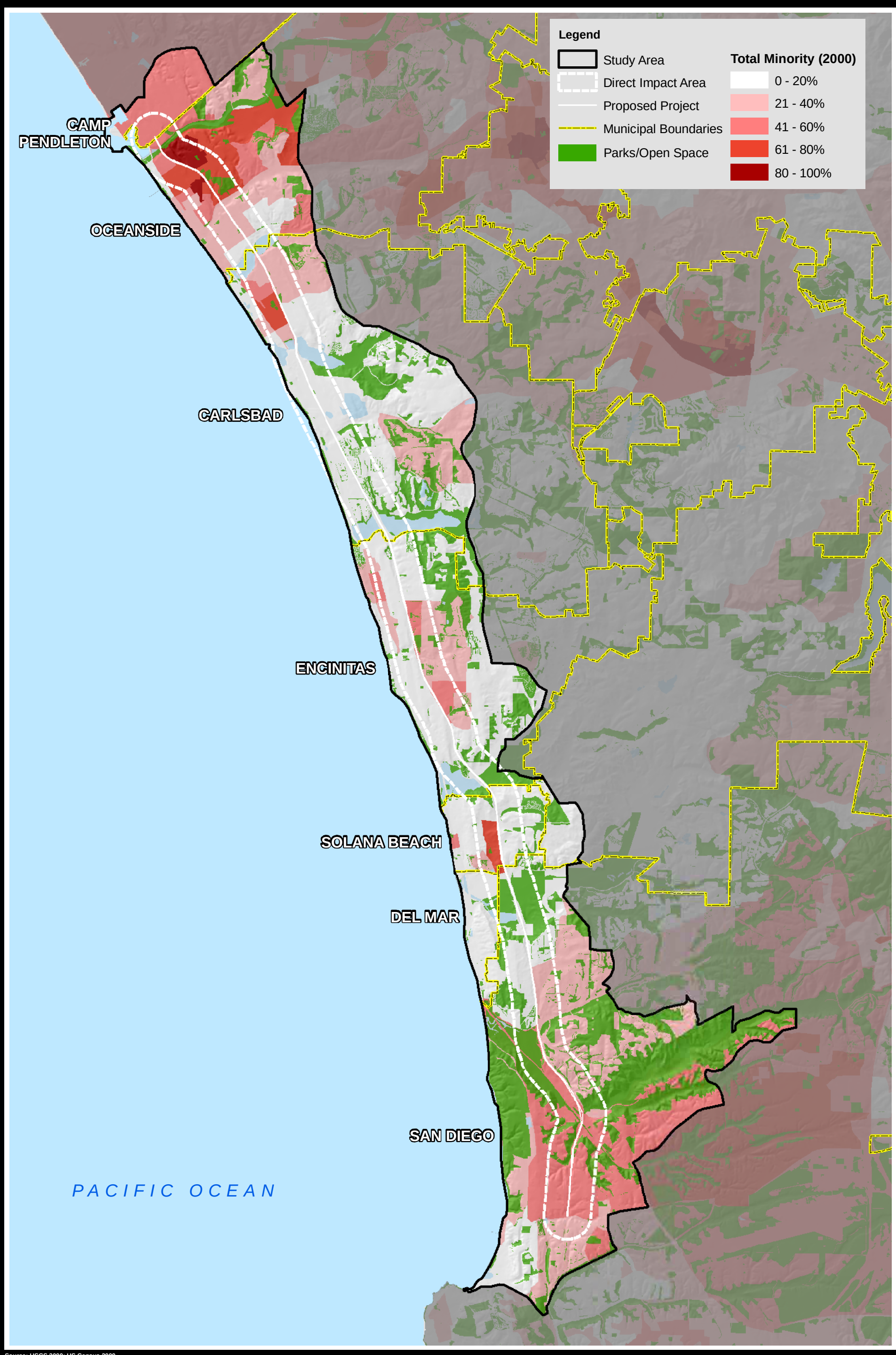
EDAW | AECOM

Figure 1-3
STUDY AREA AND REGIONAL
Population Density

2 0 2 Miles

SCALE: 1:124,000; 1 inch = 2 miles

I-5 NORTH COAST CORRIDOR CIA



Source: USGS 2000; US Census 2000

EDAW | AECOM

Figure 1-4
STUDY AREA AND REGIONAL
Proportion of Total Minority

2 0 2 Miles

SCALE: 1:124,000; 1 inch = 2 miles

Although agricultural activities continue to some extent within San Diego County, commercial and industrial businesses are concentrated along the major roadways transecting I-5, creating a dominant presence. In addition to this, tourism plays a significant economic role, especially within the coastal communities of San Diego County. Figure 1-5 illustrates the assessed value of property based upon data from the Assessor's Parcel Number (APN) from SanGIS data (2005) for the entire study area. While the values of parcels within the study area lie primarily within the lower ranges of $100,000-$250,000 and above $250,000,001, higher-value commercial areas are evident surrounding major roadways.

1.4 PROJECT DESCRIPTION

The I-5 North Coast Corridor project would extend from La Jolla Village Drive in San Diego north to the boundary between the City of Oceanside and MCB Camp Pendleton, ending approximately 1.0 mile north of the Harbor Drive exit at Vandegrift Boulevard. There are four alternatives being considered, in addition to the No Build Alternative:

- 10+4 with Buffer Alternative
- 10+4 with Barrier Alternative
- 8+4 with Buffer Alternative
- 8+4 with Barrier Alternative

All the 8+4 and 10+4 alternatives are similar in that they all include the construction of four HOV lanes along the majority of the I-5 North Coast Corridor. The 10+4 alternatives differ in that they also include the construction of GP lanes along portions of the I-5 North Coast Corridor. Common features to all four build alternatives include the construction of Direct Access Ramps (DARs) at Voigt Drive, Manchester Avenue, Cannon Road, and Oceanside Boulevard. Auxiliary lanes would also be constructed in various locations along the corridor to facilitate traffic entering and exiting main travel lanes along the freeway. Freeway overcrossings and undercrossings would be widened. Reconfiguration of various interchanges to improve vehicular, pedestrian, and bicycle circulation would also occur. Bridges would be widened across the coastal lagoons, and several would also be lengthened. Other features, such as sound walls, retaining walls, concrete barriers, guard rails, end treatments, crash cushions, bridge rails, drainage improvements, and signage, would also be installed at specific locations along the corridor.

The 10+4 and 8+4 alternatives would be constructed with either a buffer or barrier between the HOV and GP lanes. The buffer alternatives would include a 4-foot-wide buffer as a double stripe along the length of the HOV lane, with specific areas hatched for entry and exit to and from the GP lanes. The barrier alternatives would involve the installation of a concrete K-rail barrier between HOV and GP lanes, with similar areas for controlled entry and exit to and from the HOV lanes. Additional widening of the freeway may occur with the barrier alternatives as an additional shoulder would be constructed around the barrier within the HOV lane area to comply with FHWA standard shoulder width requirements.

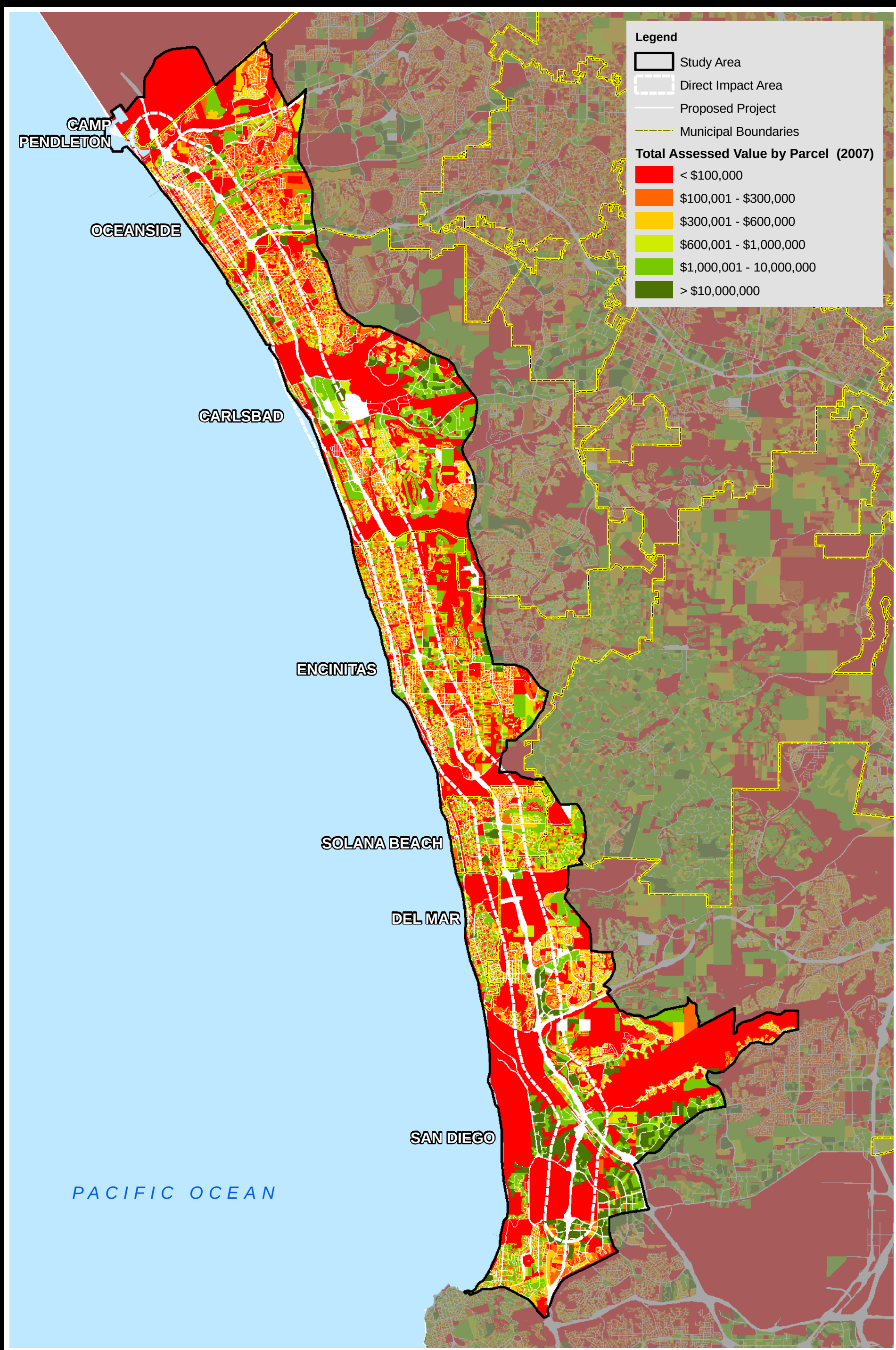
Depending on the selection of a buffer or barrier HOV lane separation, auxiliary lane locations, and GP lane construction, the 10+4 alternatives would generally require widening the existing right-of-way (ROW). Construction of the buffer HOV separation would require less ROW acquisition since separate shoulder space would not be required for the HOV and GP travel lanes as they would under the barrier alternative. The 8+4 alternatives also have the potential to require acquisition of additional Department ROW at certain locations along the corridor. The location of retaining walls along the corridor would also affect the ultimate extent of ROW expansion associated with the I-5 North Coast Corridor. Retaining walls would ideally be placed in areas that are relatively steep to minimize cut and/or fill slope requirements, or areas that have ROW limitations, thereby limiting ROW acquisition needs.

HOV lanes would be designed according to the state Transportation Management System Standardization Plan and would incorporate Intelligent Transportation System components to manage traffic operations and enforcement. Such components would include intersection traffic signals, traffic monitoring station, ramp meters, closed circuit television, changeable message signs, extinguishable message signs, highway advisory radio, and roadside weather information systems.

1.4.1 <u>10+4 with Buffer Alternative</u>

- Construct two HOV lanes on I-5 from north of La Jolla Village Drive to south of Sorrento Valley Road in San Diego. One HOV lane would operate in each direction and would be separated from GP lanes by striping.
- Construct a two-lane HOV viaduct on I-5 from south of Sorrento Valley Road to I-805 in San Diego. One HOV lane would operate in each direction.
- Construct two HOV lanes on I-5 from I-805 in San Diego to south of the San Elijo Lagoon in Encinitas. Two HOV lanes would operate in each direction and would be separated from GP lanes by striping from I-805 to north of Del Mar Heights Road. Two HOV lanes would operate in each direction and would be separated from GP lanes by a 3-foot-wide buffer from north of Del Mar Heights Road to the San Elijo Lagoon.
- Construct four HOV lanes on I-5 from south of the San Elijo Lagoon in Encinitas to SR-78 in Oceanside. Two HOV lanes would operate in each direction and would be separated from the GP lanes by a 1- to 4-foot-wide buffer.
- Construct four HOV lanes on I-5 from SR-78 north to Harbor Drive/Vandegrift Boulevard in Oceanside. Two HOV lanes would operate in each direction and would be separated from the GP lanes by a 1- to 4-foot-wide buffer.
- Construct two GP lanes on I-5 from south of Via de la Valle in San Diego to SR 78 in Oceanside.
- Construct DARs on I-5 at four locations: Voigt Drive, north of Manchester Avenue, north of Cannon Road, and north of Oceanside Boulevard.
- Construct northbound and southbound auxiliary lanes in various locations.

I-5 NORTH COAST CORRIDOR CIA



Source: SanGIS 2007

EDAW | AECOM

Figure 1-5
STUDY AREA AND REGIONAL
Total Assessed Value

2 0 2 Miles

SCALE: 1:124,000; 1 inch = 2 miles

1.4.2 10+4 with Barrier Alternative

The 10+4 Barrier Alternative proposes the same features as the 10+4 with Buffer Alternative with the exception of a fixed concrete barrier in lieu of the buffer. Shoulders would also be provided adjacent to either side of the concrete barrier. The 10+4 with Barrier Alternative generally has the widest footprint of the four alternatives, as the barrier necessitates an additional buffer to comply with safety standards.

1.4.3 8+4 with Buffer Alternative

- Construct two HOV lanes on I-5 from north of La Jolla Village Drive to south of Sorrento Valley Road in San Diego. One HOV lane would operate in each direction and would be separated from GP lanes by striping.
- Construct a two-lane HOV viaduct on I-5 from south of Sorrento Valley Road to I-805. One HOV lane would operate in each direction.
- Construct two HOV lanes on I-5 from I-805 in San Diego to south of the San Elijo Lagoon. Two HOV lanes would operate in each direction and would be separated from general-purpose lanes by striping from I-805 to north of Del Mar Heights Road. Two HOV lanes would operate in each direction and are separated from GP lanes by a 1- to 4-foot-wide buffer from north of Del Mar Heights Road to the San Elijo Lagoon.
- Construct four HOV lanes on I-5 from south of the San Elijo Lagoon in Encinitas to SR-78 in Oceanside. Two HOV lanes would operate in each direction and would be separated from GP lanes by a 1- to 4-foot-wide buffer.
- Construct four HOV lanes on I-5 from SR-78 to north of Harbor Drive/Vandegrift Boulevard in Oceanside. Two HOV lanes would operate in each direction and would be separated from GP lanes by a 1- to 4-foot-wide buffer.
- Construct DARs on I-5 at Voigt Drive, north of Manchester Avenue, north of Cannon Road, and north of Oceanside Boulevard.
- Construct northbound and southbound auxiliary lanes in various locations.

1.4.4 8+4 with Barrier Alternative

The 8+4 with Barrier Alternative proposes the same features and would function similarly to the 8+4 with Buffer Alternative, but it would have a fixed concrete barrier in lieu of the buffer. Shoulders would be provided to either side of the concrete barrier.

1.4.5 No Build Alternative

The No Build Alternative represents the option of no action and is considered the baseline for the affected environment and impact analysis in this Community Impact Analysis (CIA). This alternative would not address the proposed project's purpose and need. No construction activities associated with this project would occur; however, other projects may move forth separately. No changes are proposed to the existing number of GP or HOV lanes, or to the configuration of existing changes along the corridor under this alternative. Existing congestion on this segment of I-5 would continue and would likely be exacerbated by continuing growth throughout the region. The No Build Alternative would further intensify impacts to the community as traffic is forecasted to increase in the coming years.

1.5 CIA STUDY AREA DELINEATION

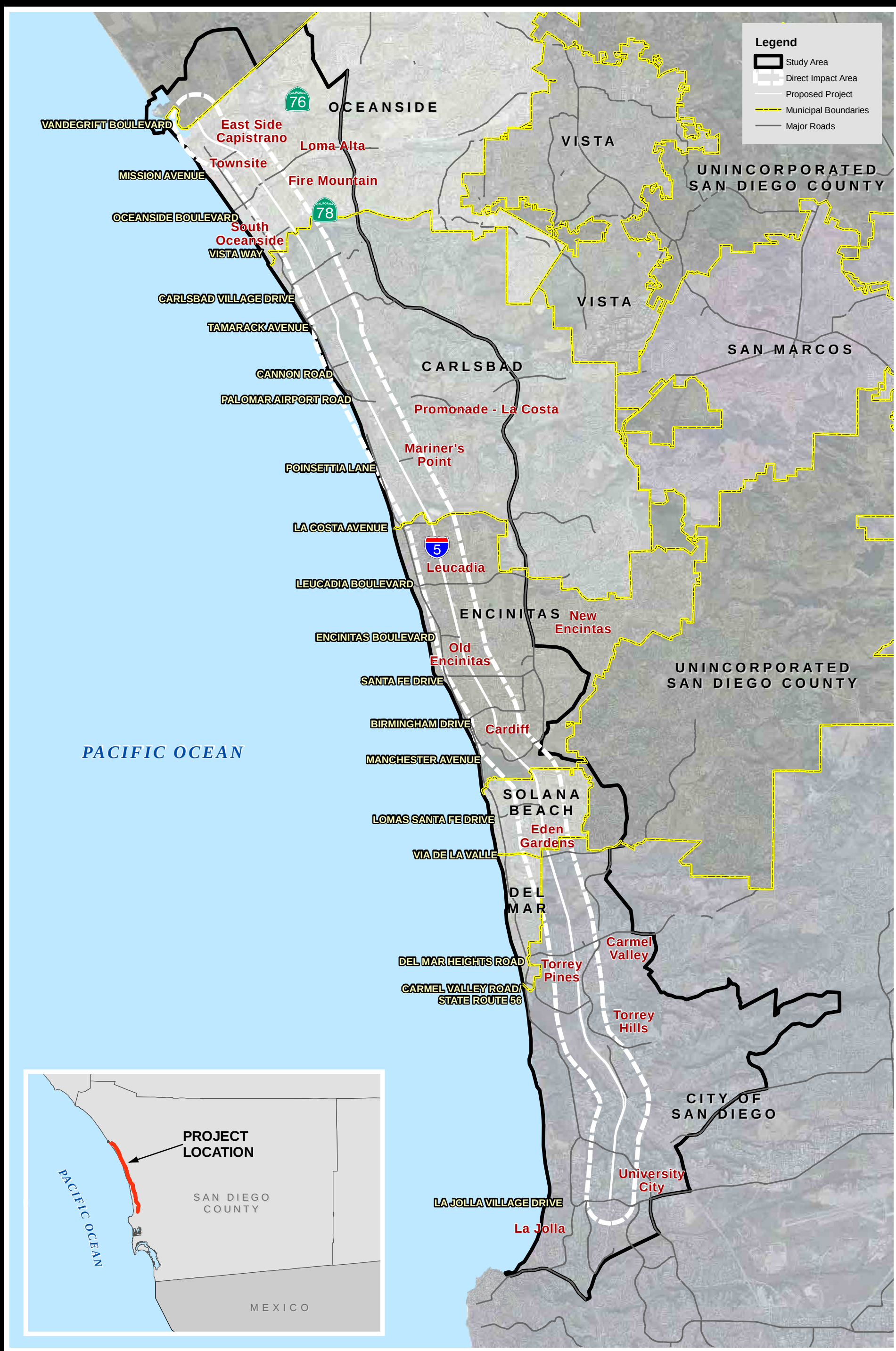
The assessment of community impacts utilizes a methodology by which potential impacts to a community or populations from a proposed transportation project can be evaluated. The Department's Standard Environmental Reference (SER) Environmental Handbook, Volume 4: Community Impact Assessment (CIA Handbook) provides a compilation of laws, guidelines, and procedures that should be addressed as part of the project development and planning process (Caltrans 1997). As stated in the CIA Handbook, a CIA should consider how the proposed project activity would affect the surrounding people, institutions, neighborhoods, communities, organizations, and larger social and economic systems.

Delineation of the proposed project study area represents the first step in a CIA as it facilitates the identification and examination of where community impacts are expected to occur. As shown in Figure 1-1 and discussed previously, the proposed project extends from La Jolla Village Drive in the City of San Diego to Harbor Drive/Vandegrift Boulevard in the City of Oceanside, covering a linear distance of approximately 27 miles. The proposed project traverses five municipalities located in northwest San Diego County, including San Diego, Solana Beach, Encinitas, Carlsbad, and Oceanside, in addition to a small portion of MCB Camp Pendleton. Though not traversed by I-5, Del Mar is located approximately 0.75 mile west of I-5 and has a main point of entry from I-5; therefore, it has been included in the study area, resulting in six municipalities in the study area.

The study area for the I-5 North Coast Corridor includes a region defined to encompass both primary or direct and secondary impacts associated with the proposed project. The CIA study area for the analysis of community impacts is composed of a footprint resulting from a combination of numerous community plans, contiguous census tracts, and communities that are at least partially within the 0.5-mile buffer of the project and may be potentially affected by the proposed project, community features, and school districts. The study area boundary is designed to facilitate the integration and analysis of aspects of community cohesiveness and the spatially and temporally diverse nature of the proposed project.

Due to the extended north-south nature of the proposed project, multiple communities or neighborhoods with diverse demographics, spatial characteristics, and attributes are located within each of the six municipalities. Figure 1-6 shows the location of several defined communities within each jurisdiction that are located in the vicinity of the I-5 North Coast Corridor. These communities have the potential to experience impacts associated with the proposed project. In addition, due to the region-serving nature of the I-5 North Coast Corridor, the beneficial effects of increased capacity would be realized beyond those adjacent communities. To facilitate an accurate definition of the communities potentially affected by the proposed project, each of the six municipalities located within the study area may be usefully broken down into a corresponding community plan, census tract, and school district areas.

I-5 NORTH COAST CORRIDOR CIA



Source: SanGIS 2006

EDAW | AECOM

Figure 1-6
Study Area Communities

2 0 2 Miles

Scale : 1:124,000; 1 inch = 2 miles

General and Community plans, which are focused planning policy documents for a specific region, can help identify goals of each community in relation to growth and transportation, identify key community features, and locate community facilities and defined neighborhoods. The inclusion of census tracts along the length of the proposed project allows the specific quantification of a wide variety of demographic variables within each community being studied along the I-5 North Coast Corridor. This includes population estimates and population trends, growth or decline, economic trends, and housing characteristics. School district boundaries are identified as they reflect where schools are located in relation to where families are living. It is, however, common that communities, census tracts, and school districts share boundaries. By identifying these boundaries in relation to the proposed project, community impacts can then be assessed at defined locations within a community in relation to their surroundings, while also considering the aspects of community cohesiveness, or the degree to which residents have a "sense of belonging" to their neighborhood.

The identified community plans, census tracts, and school district boundaries comprising the study area have been used to assist in determining which communities, neighborhoods, and business centers may be affected due to the construction and post-construction phases of the proposed project. The CIA Handbook identifies four main community features that should be considered in a CIA. These include land use, structures, transportation facilities, and neighborhood and community features. Each of these types of community features may be subject to direct or secondary impacts as a result of the proposed project.

Land affected by the proposed project may include agricultural land or developable land areas that would become more or less accessible upon completion of the proposed project. Structures that may be affected by the proposed project include any residences, businesses, community centers, or schools that would be removed, relocated, or made more or less accessible as a result of the proposed project. Transportation features that may be subject to direct or secondary impacts include major roads, transit lines, and pedestrian corridors including sidewalks, trails, and bike lanes, as well as general access within the area. Community facilities that may be subject to impacts include parks, community centers, schools, and libraries.

The process for delineating the CIA study area for this project includes the designation of an area of primary impacts and wider area of secondary and cumulative impacts. The total study area then is designed to include communities that will be directly impacted by the construction phases of the proposed project, as well as the surrounding areas that may experience secondary and/or cumulative impacts. This method reflects the CIA guidelines in that it encompasses a broad area of potential impacts in relation to key social and economic factors for a given community.

1.5.1 Area of Direct Impacts

The area of primary or direct impacts is designed to encompass the area of greatest intensity of socioeconomic impacts that may result from the proposed project and includes the proposed project footprint. This may include residential or commercial building or property relocation, the potential relocation of existing community facilities and services, air quality and noise impacts, visual impacts, and traffic access issues, in addition to direct economic effects including construction-related employment. All post-construction ROW activities associated with the proposed project are anticipated to be limited to the area of direct impacts.

While the designated area of direct impacts is designed to include all of the proposed improvements, construction activities, and direct impacts related to the construction and operational phases of the proposed project, the potential exists that some traffic-related impacts along specific roadways may extend beyond this area. The extent of these traffic-related impacts is unknown at this stage, though as the timing and location of construction activities are planned in more detail, the area of impacts can be more closely defined.

To effectively analyze the extent of direct impacts associated with the proposed project, the CIA study area has been delineated using a set uniform width. To this end, a 1.0-mile area was defined to identify the potential area of direct impacts along I-5. This area extends 0.5 mile parallel to the centerline of the existing I-5 ROW both east and west along the entire length of the proposed project. A detailed example is shown in Figure 1-7. The direct impact area is not expected to change throughout the duration of the proposed project, as the main construction staging areas, residential and business relocations, and other construction-related impacts have been identified within the area. The direct impact area is approximately 28 miles long and runs along the length of the proposed project with a 0.5-mile buffer around each end point. The direct impact area should not be confused with the project footprint, which constitutes the area that would physically be converted or expanded to I-5 ROW.

1.5.2 Area of Secondary Impacts

As additional impacts associated with the proposed project can occur at a distance from the area of direct impacts, a broader, nonuniform boundary has been estimated for the analysis of secondary impacts. Secondary impacts associated with the proposed project may include temporary traffic and circulation impacts or changes to the existing air quality and noise conditions. No direct impacts such as construction activity, residential or commercial acquisitions, or ROW expansions would occur outside of the 1.0-mile defined area. However, direct impacts may disrupt the qualities of community cohesiveness or otherwise broader community functioning within a larger context.

The area of secondary impacts was delineated through a combination of adjacent municipal and local planning boundaries as well as contiguous census tracts, school districts, and community facilities that are partially within or immediately adjacent to the area of direct impacts. Several modifications to the area of secondary impacts were made where it was felt that the contiguous census tracts did not adequately encompass the area of potential effects or if the boundaries extended an excessive distance from the proposed project footprint. For the assessment of impacts to community cohesion, it is important to recognize that specific neighborhoods, developments, subdivisions, or other areas may have internal physical features or social aspects where an impact in one part may affect the whole. Also, the delineation of these areas may not be contiguous with tract, district, or facilities boundaries.

A total of 51 census tracts of varying size are located within the study area, as listed in Table 1-1 and shown in Figure 1-8. The total area of secondary impacts covers approximately 54 square miles. The majority of the study area is located within San Diego (approximately 36 percent) with a large portion in

I-5 NORTH COAST CORRIDOR CIA

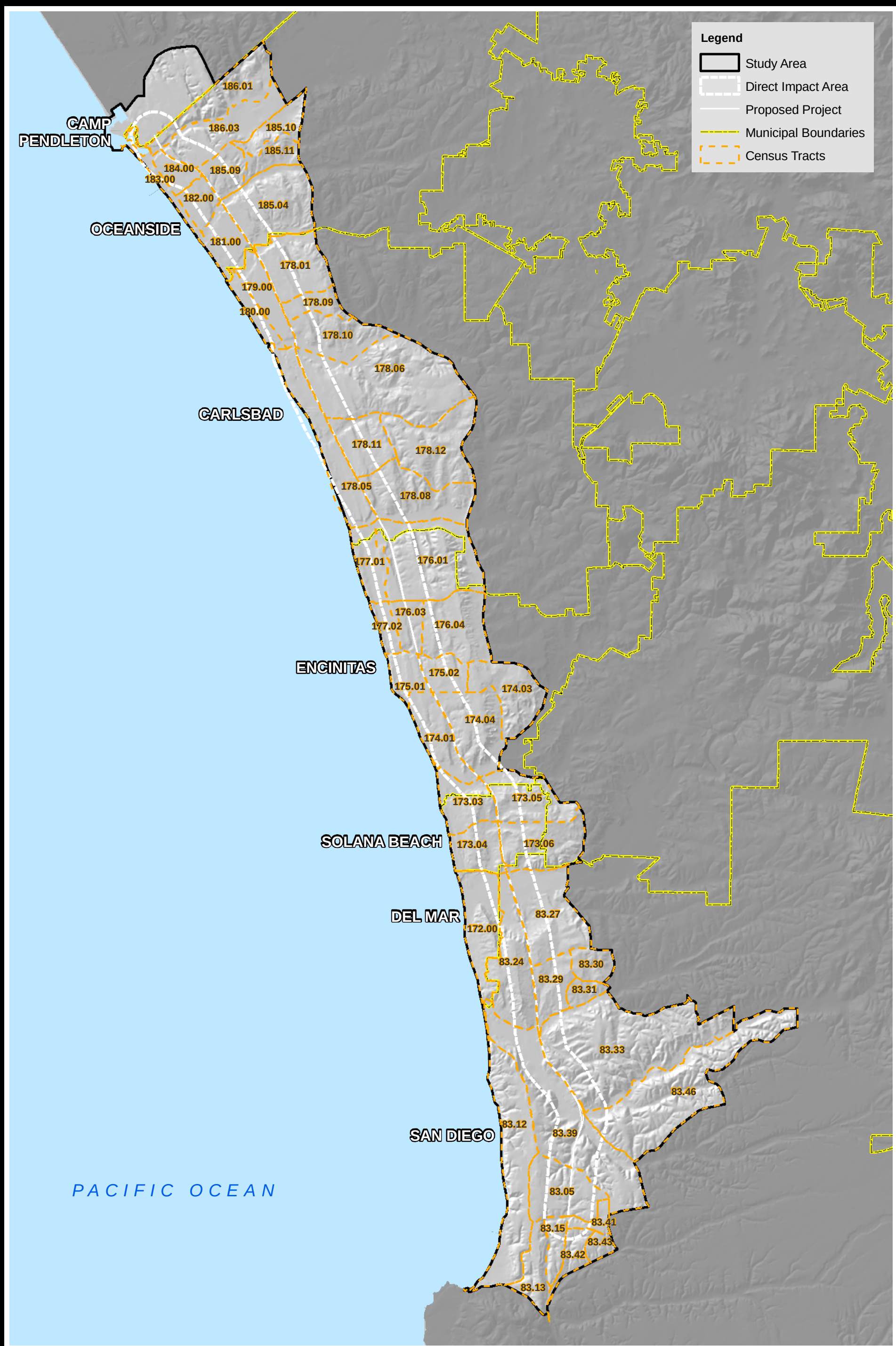
Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 1-7
Example Detail Map of Direct Impact Area

1,000 0 1,000 Feet
SCALE: 1:12,000; 1 inch = 1,000 feet

I-5 NORTH COAST CORRIDOR CIA



Source: USGS 2000; US Census 2000

EDAW | AECOM

Figure 1-8
STUDY AREA
Census Tracts

2 0 2 Miles

SCALE: 1:126,720; 1 inch = 2 miles

Carlsbad (approximately 23 percent). The remaining portions of the study area are located in Del Mar, Solana Beach, Unincorporated San Diego County, Encinitas, and Oceanside.

Table 1-1. Study Area Jurisdictions and Census Tracts

Jurisdiction	Proportion of Municipality in Study Area	Census Tracts
San Diego	36 percent (30 square miles)	83.05, 83.123, 83.13, 82.15, 83.24, 83.27, 83.29, 83.30, 83.31, 83.33, 83.39, 83.41, 83.42, 83.43, 83.46 (15 total)
Del Mar	2 percent (2 square miles)	172.00 (1 total)
Solana Beach	4 percent (3 square miles)	173.03 through 173.06 (4 total)
Encinitas	17 percent (13 square miles)	174.01, 174.03, 174.04, 175.01, 175.02, 176.01, 176.03, 176.04, 177.01, 177.02 (10 total)
Carlsbad	23 percent (19 square miles)	178.01, 178.05, 178.06, 178.08 through 178.12, 179.00, 180.00 (10 total)
Oceanside	13 percent (6 square miles)	181.00, 182.00, 183.00, 184.00, 185.04, 185.09, 185.10, 185.11, 186.01, 186.03 (10 total)
Unincorporated San Diego County	5 percent (3 square miles)	Portions of 173.05 and 173.06

1.5.3 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effects assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

The area of secondary impacts is also considered the general area that has the potential to experience cumulative community impacts with some cumulative impacts possible at the community level for the geographically smaller municipalities. The study area encompasses the majority of the coastal portion of northern San Diego County, and is composed of comprehensive census and community boundaries, which covers a large area of approximately 82 square miles. Projects that have the potential to cumulatively affect community character, community cohesion, access patterns, and economy of the region would likely be located within these boundaries. A cumulative analysis is presented in Chapter 5.0, and Table 5-1 lists projects within the study area that have the potential to contribute to cumulative impacts to the community.

1.6 METHODOLOGY

The methodology for assessing project-related impacts to the community includes a compilation of an accurate baseline description of the entire study area. As outlined above, the study area consists of an area of direct impacts (within 1.0 mile of the I-5 corridor) and a wider area of secondary and cumulative impacts. The description is necessarily detailed enough to allow the demographic, economic, and community-based implications of the project to be accurately ascertained. This has been accomplished through the utilization of a wide variety of information sources, as described below.

Information collection was shaped by various state and federal guidance documents, publications, and websites. The SER and CIA Handbook have been the primary guides for the structure and direction of the CIA. Additional guidance related to the structure and approach of the study was provided by FHWA publications such as *Community Impact Assessment – A Guide for Transportation*, as well as the variety of resources available through the FHWA's CIA website.

Various sources and types of information have been used to prepare this analysis, including local planning documents, statistical datasets, geographic information systems (GIS), aerial photography, and written and photographic field observations. Individual sources include local, specific, circulation, and community/neighborhood plans within the potentially affected areas of each municipality and unincorporated community, GIS layers of individual assessor parcels within the study area, and labor statistics. Detailed demographic, economic, and housing characteristics of the affected communities within the study area were obtained from the 2000 decennial U.S. Census. Census data have been utilized on the broader city and county levels as well on a much more detailed level, primarily block group analysis. Several key plans and programs that determine and affect the planning of community character within the study area include the City of San Diego General Plan, Del Mar Community Plan, Solana Beach General Plan, Encinitas General Plan, Carlsbad General Plan, and Oceanside General Plan.

The analysis of project-related impacts to local communities in the study area was based, in part, on environmental analyses prepared for the proposed project for specific issue areas, including traffic reports, a visual assessment, a Draft Relocation Impact Report, noise report, and air quality reports. Review of these reports, in addition to field verification along the I-5 North Coast Corridor, use of aerial photographs, GIS overlays, and review of local planning documents, served to identify potential impacts to communities in the study area.

1.7 CIA OVERVIEW

As recommended by the CIA Handbook, Chapter 1.0 of this CIA discusses project background, purpose and need, and project alternatives. It also includes a discussion of the CIA methodology and general study area characteristics. Chapter 2.0 describes the affected environment of the study area within each community according to CIA Handbook guidelines and includes a discussion of current land uses and policies, agricultural characteristics, demographic and housing patterns, community-serving public facilities and services, and local and regional economic characteristics.

Chapter 3.0 analyzes the potential impacts associated with implementation of the 10+4 with Barrier Alternative (proposed project), including displacement of residences, businesses, and recreation facilities; impacts to circulation and access; tax impacts; and consistency with land use policies. Potential impacts discussed include temporary or construction-related impacts and long-term operational impacts to the surrounding community. Chapter 4.0 analyzes potential impacts to community cohesion and character. Chapter 5.0 includes a discussion of cumulative impacts associated with the proposed project in combination with other reasonably foreseeable projects in the CIA study area.

Chapter 6.0 includes an Environmental Justice analysis pursuant to Executive Order 12898 (59 Code of Federal Regulations [CFR] 7629). Under Executive Order 12898, demographic information is used to determine whether minority populations and/or low-income populations are present within the study area. If so, a determination is made as to whether implementation of the proposed project would result in disproportionately high and adverse human health or environmental impacts to those populations. Chapter 7.0 discusses how the proposed project relates to growth in the surrounding vicinity, and whether it has the potential to result in unforeseen direct, indirect, or secondary growth, otherwise known as growth inducement. It examines growth policies for the project area, and how the project relates to population growth projections for the region.

Chapter 8.0 provides a summary of ongoing community outreach, as well as recommendations for mitigation measures related to the potential adverse impacts associated with implementation of the proposed project. It includes measures designed to minimize impacts to the community during both the construction and operational phases of the project. Chapter 9.0 provides a summary of project-related impacts. It includes a matrix summarizing the differences in impacts between each alternative. Lastly, Chapter 10.0 provides a list of references that were used in the preparation of this document.

CHAPTER 2.0
AFFECTED ENVIRONMENT

Following the study area delineation as presented in Section 1.5, the second major step in the CIA process is to describe the affected environment of each municipality in the study area in terms of its spatial, structural, demographic, and socioeconomic characteristics. This is often referred to as developing a "community profile" (Caltrans 1997). Accordingly, Chapter 2.0 consists of detailed descriptions of each of the municipalities and communities within the study area and provides a comparison to the surrounding region. It also includes a historical overview of each municipality. As recommended in the CIA Handbook, each community will be discussed in terms of land use, farmland, population and housing, public facilities and services, and economics.

An examination of land use patterns can effectively convey the general form of a city's organizational structure including where its residents live, work, and recreate. The Land Use Element is a required section of a municipality's General Plan that governs zoning and planning for the given region. The Land Use Element also defines where growth may occur within the region as well as identifies Specific Plans for areas of special interest, such as commercial centers, neighborhoods, and redevelopment areas within the city. By describing the existing and projected major land uses in the affected area and surrounding region, the information can be used to "analyze any potential land use changes or land use conflicts associated with the proposed project" (Caltrans 1997). Specific topics within land uses include historic and existing land use patterns, farmlands, and development trends, as well as adopted planning goals and policies. Land use patterns also affect a region's "job/housing balance," which focuses on the need for a balance between employment generating and residential land uses (Caltrans 1997).

Agriculture remains an important industry within the study area as well as San Diego County as a whole. As of 2005, San Diego had a total of 273,176 acres under agricultural production and the number of farms located within the county has declined from 7,293 in 1997 to 5,255 in 2004. According to the Agricultural Census, the average farm size in the county is 78 acres (NASS 2002). The main form of agriculture in the study area is flower and nursery crops, which are often within proximity to urban, high-density residential areas, providing a dramatic agriculture-urban interface. The California Land Conservation Act (Williamson Act) of 1965 is the state's principal policy for the "preservation of a maximum amount of the limited supply of agricultural land" in the state (Government Code Section 51220). The purpose of the Williamson Act is to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses.

The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (7 U.S.C. 4201-4209; and its regulations, 7 CFR Part 658) require that before taking or approving any federal action that would result in the conversion of farmland, the federal agency must examine the effects of the action using the criteria set forth in the Farmland Protection Policy Act (FPPA), which is administered by the Natural Resource Conservation Service (NRCS). The Farmland Mapping and Monitoring Program (FMMP) monitors and documents land use changes that affect California's farmland. The program, administered by the California Department of Conservation (CDC), Division of Land Resource Protection, produces Important Farmland Maps, which use a classification system based on NRCS soil survey data and land use (CDC 2002). The FMMP classifies land as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-Up Land, and Other Land. Definitions of these classifications are outlined in Table 2.0-1. The first four categories are collectively known as Important Farmland.

Table 2.0-1. Farmland Designations

Classifications	Definition
Prime Farmland	Land with the best combination of physical and chemical characteristics able to sustain long-term production of agricultural crops.
Farmland of Statewide Importance	Land with a good combination of physical and chemical characteristics for agricultural use, having only minor shortcomings, such as less ability to store soil moisture, compared to Prime Farmland.
Unique Farmland	Land used for production of the state's major crops on soils not qualifying for prime or statewide importance. This land is usually irrigated but may include nonirrigated fruits and vegetables as found in some climatic zones in California.
Farmland of Local Importance	Land that meets all the characteristics of Prime and Statewide, with the exception of irrigation. Farmlands not covered by the above categories, but which are of significant economic importance to the County. They have a history of good production for locally adapted crops. The soils are grouped in types that are suitable for truck crops and soils suited for orchard crops.
Grazing Land	Land on which the existing vegetation is suitable for grazing of livestock. The minimum mapping unit for this category is 40 acres.
Urban and Built-Up Land	Residential land with a density of at least six units per 10-acre parcels, as well as land used for industrial and commercial purposes, golf courses, land fills, airports, water treatment, and water control structures.
Other Land	Land does not meet the criteria of any other category. Common examples include low-density rural developments, wetlands, dense brush and timberlands, gravel pits, and small water bodies.

Source: CDC 2002

Population and housing is a descriptive account of the physical dimensions of the social characteristics for a defined place. It provides an overview of a range of local and regional demographic characteristics including population growth, race and ethnic group, age, and housing density. Information on population and housing is generally obtained from the U.S. Census Bureau, as well as local planning documents. This information may help determine whether the proposed project has environmental justice concerns (Caltrans 1997). Population and housing is discussed at a regional level as well as a more detailed examination of demographics within the area of direct impacts. It also includes a description of the potentially affected communities and neighborhoods within the study area as defined within planning documents and local knowledge. In addition, municipalities often have policies that guide relocation and land use changes.

Municipalities generally offer a variety of public services and facilities, including schools; police and fire protection; recreational facilities; and circulation, access, and parking facilities. Information about these services is generally obtained from a municipality's General Plan, specifically in Public Safety, Land Use, or Community Facilities Elements. Often, a municipality will provide specific direction for the provision of adequate public facilities necessary to serve the existing and future developing areas.

Often, a project may affect or disrupt circulation within a region; therefore, it is important to describe types of transit facilities, highways, streets, and pedestrian facilities.

Economics is defined as the study of how the productive and distributive aspects of human life are organized. An assessment of economics within a CIA focuses on ultimately evaluating the impacts a project would have on the economic well-being of the community. The resultant impacts can be characterized in terms of changes in community demographics, housing demand, employment and income, market effects, public services, and aesthetic qualities of the community. Assessing developments with an economic context will help to identify potential social equity issues, evaluate the adequacy of social services, and determine whether the project may adversely affect overall social well-being.

In this chapter, affected environment information for each community within the I-5 North Coast Corridor, following the CIA Handbook outline, is presented. The communities are presented from south to north, in turn, in the following subsections.

2.1 SAN DIEGO

Historic Overview

The City of San Diego was incorporated in 1850 and, similar to the rest of the region, has experienced prolonged periods of rapid growth, especially following the opening of the Southern California Railway in 1883. The Carmel Valley area in northern San Diego, located east of I-5 generally between Del Mar Heights Road and Carmel Mountain Road, was constructed around a dairy farm and monastery in 1905 and was given its name by the Carmelite Sisters of Mercy (City of San Diego 2005a). The initial planning document for the area, the “North City West” plan, adopted in 1974, attempted to reduce sprawl by confining development to the mesa tops, leaving the canyons untouched, and focusing development around an urban core surrounded by decreasing residential densities (City of San Diego 2005b). Figure 2.1-1 uses historic aerial photographs to illustrate land use changes near Torrey Pines in north San Diego, where an increase in residential density is shown to have occurred along what is now the I-5 corridor and Coast Highway 101, within a 13-year period between 1953 and 1966 that spanned the pre- and post-I-5 construction eras. Current land use patterns and lot sizes, as well as the higher densities along the coast areas and I-5, were becoming more and more evident by the end of this period.

2.1.1 Land Use

2.1.1.1 Major Land Uses

General Land Use

For the purposes of this analysis, the portion of San Diego within the study area includes the area east of Del Mar and south approximately to La Jolla. San Diego is the largest city in the study area with regard to total population (1,223,400) and overall land area (342.5 square miles). There are 52 defined communities within San Diego. Communities within the study area are shown in Figure 1-6, and include La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley. Figure 2.1-2 shows general land use patterns for the study area within San Diego and the surrounding area. Primary land uses include parks and open space and residential as well as commercial, industrial, and the University of California, San Diego (UCSD).

The eastern areas of San Diego have a more rural quality established through the greater presence of open space as well as low-density residential development. As shown in red in Figure 2.1-2, much of land within the portion of San Diego within the study area is designated for residential uses; however, the topography of the area has required much of this land to remain as open space. Residential developments are generally located in the northern portion east of Del Mar, and in the southern area around UCSD.

As shown in blue in Figure 2.1-2, commercial areas are generally located along major transportation corridors including I-5, Del Mar Heights Road, and Mira Mesa Boulevard, and surrounding UCSD. These commercial centers typically serve multiple surrounding neighborhoods, as well as the college area. Industrial uses cover a large portion of land use within San Diego as well and are generally located in the communities of Mira Mesa and Torrey Pines, east of I-805 and in the northwest portion of University north of UCSD.

Study Area Land Use

As discussed in Chapter 1.0, the study area consists of both an area of direct impacts that extends 0.5 mile from the I-5 corridor and a wider region of secondary impacts. The total land area of San Diego within the study area is 35.38 square miles, or 10.32 percent of the total land area of San Diego. As shown in Figure 2.1-2, land uses within the study area are primarily a mixture of open space, single-family, and multi-family residential areas, as well as community commercial developments, office space, industrial uses, and the UCSD campus. Areas of undeveloped land, shown in white in Figure 2.1-2, are limited.

Much of the land within the study area is either developed and urban in nature or is preserved as open space. An open space corridor of mainly undevelopable land associated with the San Dieguito River Valley is located in the northern portion of San Diego, as shown in Figure 2.1-2. Open space areas are also located at Torrey Pines State Reserve west of I-5 along the Pacific Coast, and at Los Peñasquitos Canyon Preserve located east of I-805. The southeast corner of the study area is primarily characterized by industrial uses, with some commercial along major transportation routes. Industrial uses are also located along the west side of the I-5 corridor.

Area of Direct Impacts Land Use

Figures 2.1-3a and 2.1-3b show the land uses within the area of direct impacts at a more detailed level. They illustrate the differences in land use patterns between the northern and southern portions of the direct impact area. In addition to other land uses, the residential designation is broken into single-family and multi-family developments, and commercial is further expanded into six categories that describe the types of services provided.

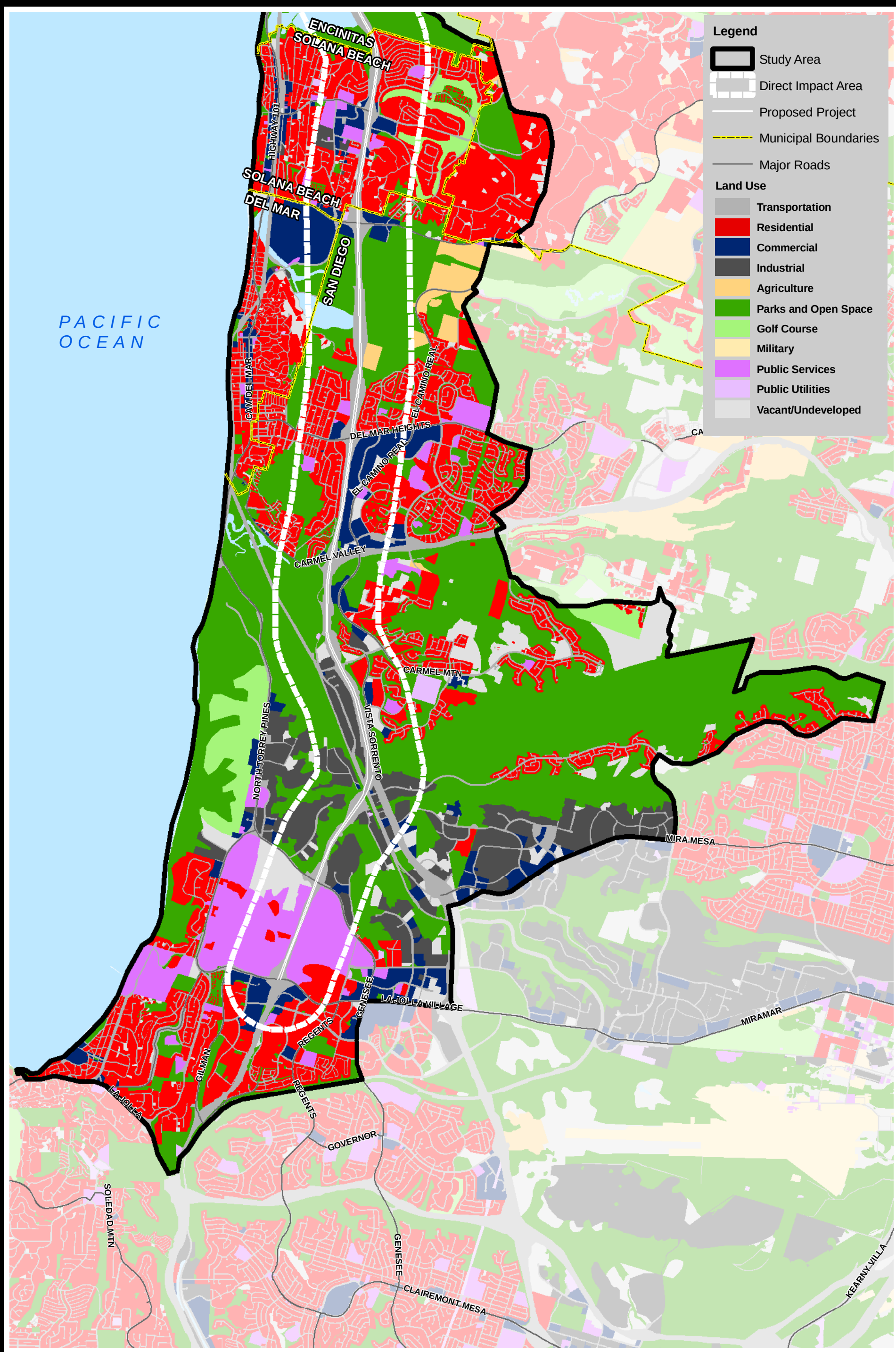
Source: San Diego County Department of Planning and Land Use

Source: San Diego County Department of Planning and Land Use

EDAW | AECOM

Figure 2.1-1
SAN DIEGO
Historic Aerial Photographs

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

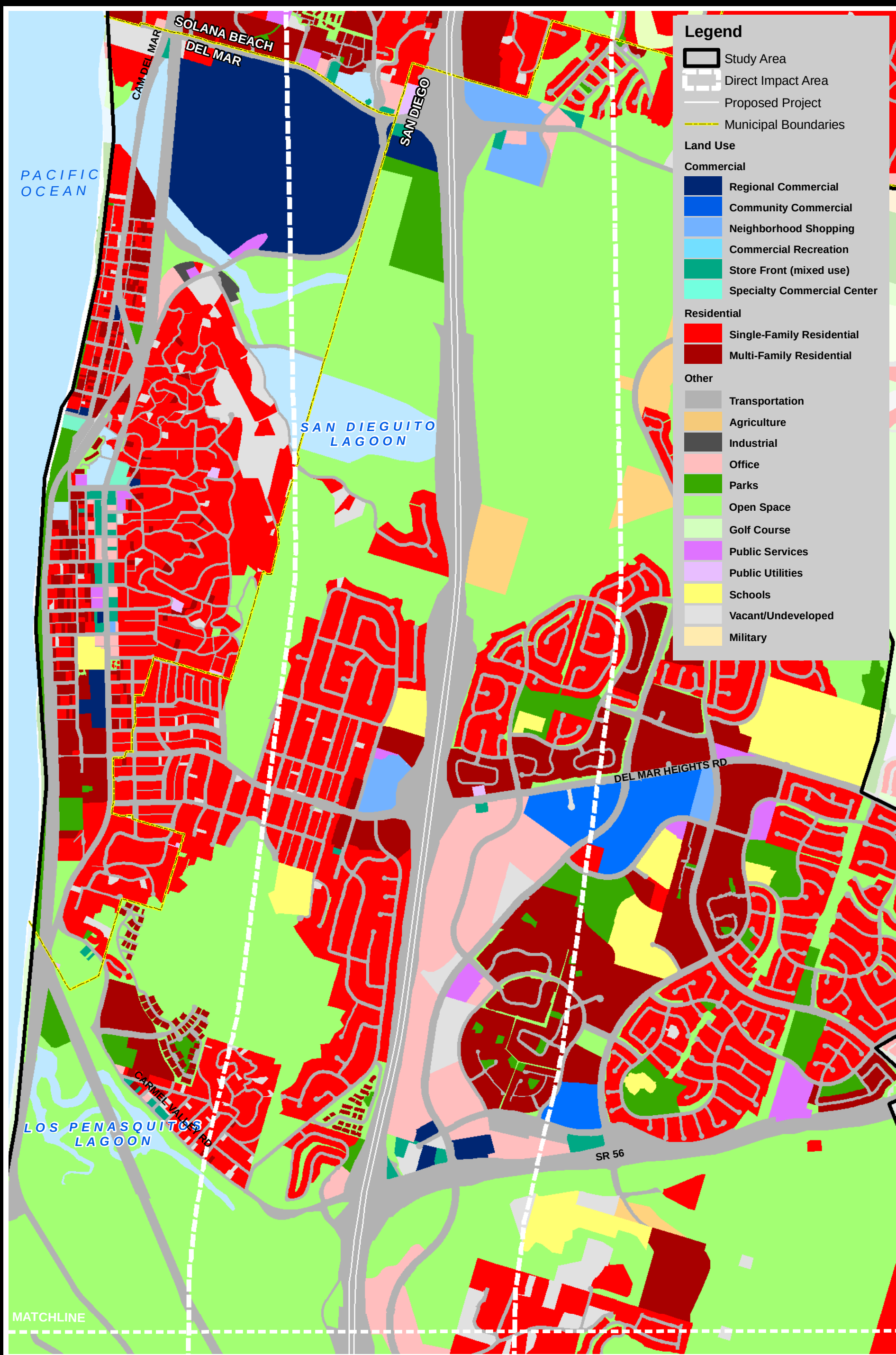
EDAW | AECOM

Figure 2.1-2
SAN DIEGO
Regional Land Use

4,750 0 4,750 Feet

SCALE: 1:57,000 1 inch = 4,750 feet

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

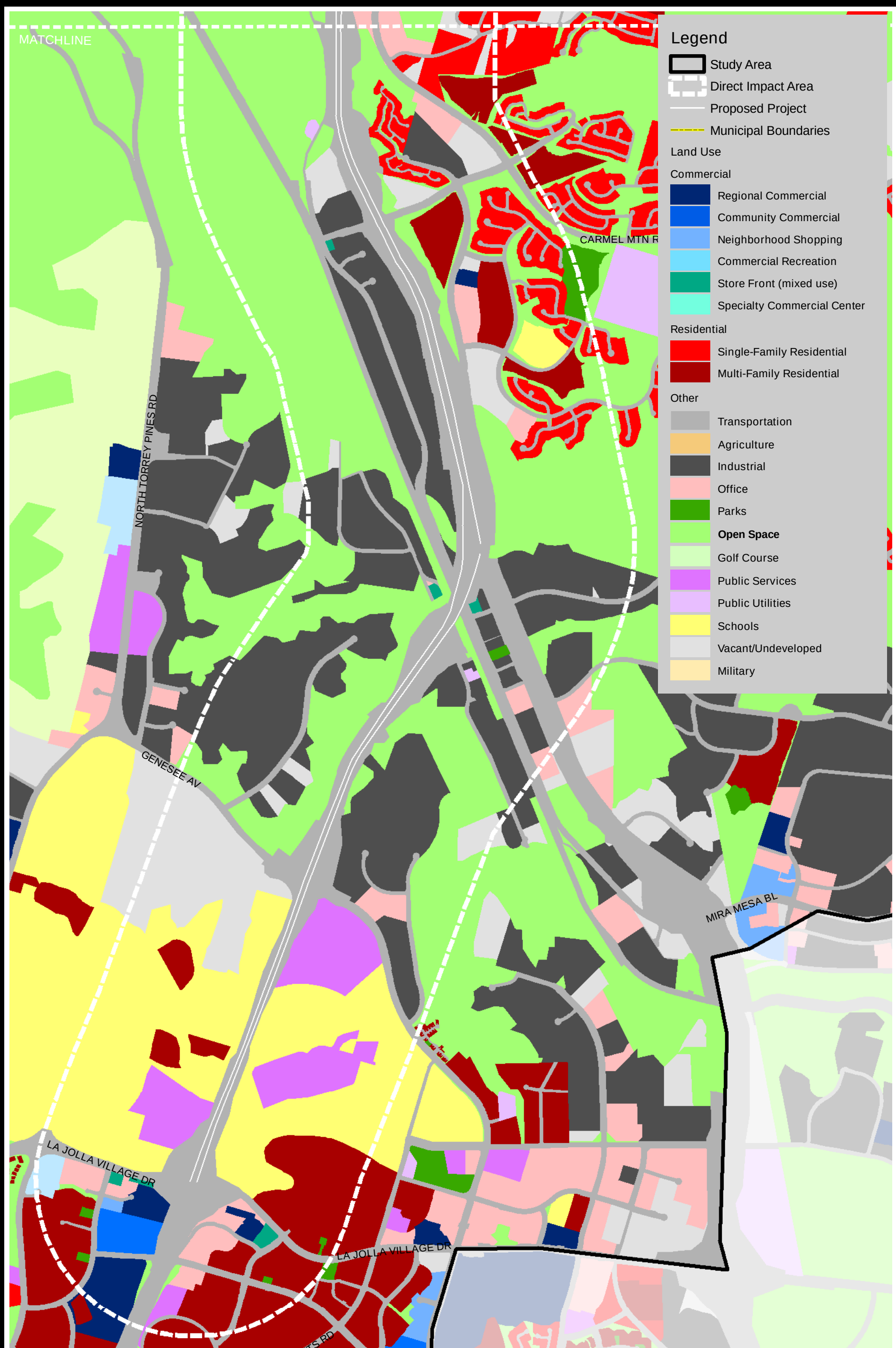
EDAW | AECOM

Figure 2.1-3a
SAN DIEGO - NORTH
Direct Impact Area Land Use

1,500 0 1,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

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Figure 2.1-3b
SAN DIEGO - SOUTH
Direct Impact Area Land Use

1,550 0 1,550 Feet

SCALE: 1:18,000; 1 inch = 1,550 feet

Much of the direct impact area consists of open space; however, single-family and multi-family residential developments, as well as commercial and office developments, are located along I-5, Del Mar Heights Road, and SR 56. Planned developments have been centered around an urban core surrounded by decreasing residential densities. Community facilities including public services and schools are located among residential neighborhoods and commercial centers. Multi-family residential is generally located along the main transportation routes.

2.1.1.2 Affected Urban Community and Neighborhood Characteristics

The City of San Diego General Plan (2002) identifies 52 communities within the municipality, which each have a unique community plan reflecting local policies and goals. Neighborhoods within the study area include La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley. Boundaries of the defined neighborhood areas generally follow major landmarks and thoroughfares.

La Jolla is the southwesternmost community in the study area. Located west of I-5, La Jolla is bounded by University to the north and Pacific Beach to the south. La Jolla is an entirely urbanized community set along the rugged coast of the Pacific Ocean.

University is the largest San Diego community in the study area and is located between Torrey Pines and La Jolla. University is primarily composed of the UCSD campus and Medical Center, with residential, parks and open space, commercial uses, and some industrial and vacant/undeveloped land.

Torrey Pines is located on the west side of I-5, with Del Mar on the northwest and Los Peñasquitos Lagoon running along the south side. It is primarily parks and open space (42 percent) with a portion of residential north of Carmel Valley Road (24 percent), and industrial uses (15 percent) near Genesee Avenue.

Torrey Hills is located east of I-5 between Carmel Valley and Los Peñasquitos Creek. It consists largely of the Los Peñasquitos Canyon Preserve, which is preserved as open space.

Carmel Valley is bordered by Carmel Valley Road on the north, with I-5 on the west and Los Peñasquitos Preserve on the south. It is a newer, master planned community with both residential areas and job centers. It consists of parks and open space and single-family and multi-family residential. There are also scattered commercial, public service, and public utility buildings.

There are five community plans that cover portions of San Diego within the study area: La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley. As discussed previously, each of these areas has a Community Plan that discusses General Plan topics for the individual community, while being consistent with San Diego policies. In addition, the Local Coastal Program (LCP) defines policies and goals pertaining to development along the coastal portions of San Diego. The LCP, for the purposes of this study, includes Torrey Pines and University. The other cities within the study area are not considered to be within the coastal zone. The LCP policies for San Diego County are integrated into each Community Plan as they are updated and completed.

2.1.1.3 Farmland

A limited amount of agricultural activity occurs within the City of San Diego, the majority of which is located within the northern and eastern parts of the city. A parcel of Farmland of Statewide Importance currently used for agricultural production is located in the area of direct impacts adjacent to the east side of I-5, south of San Dieguito Lagoon. The protection and value of agricultural land in San Diego are discussed in the Conservation Element of the General Plan. Agricultural lands represent a valuable resource; however, it is recognized that agricultural lands are also a prime target for urbanization within the rapidly growing region. The goal of the General Plan is the “retention of premium agriculturally productive lands” (City of San Diego 1989).

2.1.1.4 Development Trends

Development of the San Diego metropolitan area has reflected the rapid population growth and urbanization seen throughout California in recent years. During the 1980s, economic diversification and high job growth in San Diego led to a 35 percent population increase (City of San Diego 1992). As the majority of the area is developed and land use patterns are established, future development can occur in a more directed manner than the very rapid growth of vacant areas during the preceding 40 years (City of San Diego 1992).

Overall goals for growth within San Diego are outlined in the Guidelines for Future Development. Goal 1 is to “manage the growth of the region through assurance of adequate and timely public facilities to serve the additional population” (City of San Diego 1992). In addition, San Diego strives to develop an effective “development management system” that will monitor the distribution and timing of growth in relation to environmental, physical, and public facility and service performance goals (City of San Diego 1992). Chapter 7.0, Growth, discusses in more detail, historical, current, and projected growth trends within San Diego.

2.1.1.5 Jobs/Housing Balance

Based on residential density designations, implementation of the Land Use Element of the San Diego General Plan and subsequent community plans may result in a population increase. The land use patterns of housing in relation to employment (commercial, industrial, military, and office locations) and commercial centers greatly influence commuting patterns and the various types of transportation used within San Diego. The lengthening commute times and increasing traffic congestion often associated with sprawl have brought the concept of the need for a “jobs/housing balance” to the forefront in many communities. The primary element of the jobs/housing balance concept is to locate residential areas near employment centers and commercial services, with the premise that commuting, the overall number of vehicle trips, and the resultant vehicle miles traveled can be reduced.

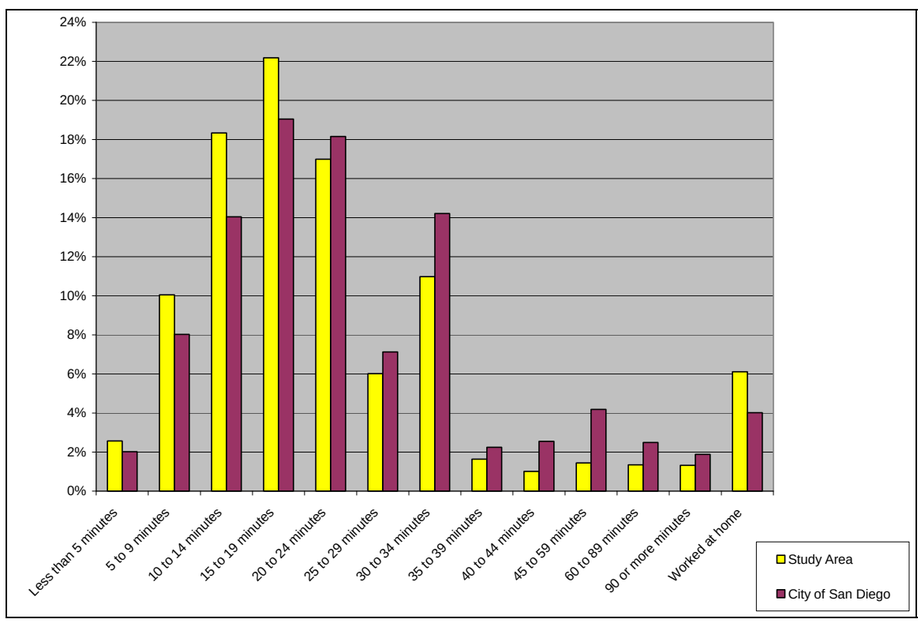
“Smart growth” is one concept that, among other goals, attempts to locate housing around a variety of transportation choices and create “walkable” neighborhoods. SANDAG provides an incentive program to promote smart growth development within the region, including San Diego (SANDAG 2005). In addition to the regional smart growth incentive program, San Diego and the individual community plans

address alternative modes of transportation and the relation to land use. While it is expected that the private car will continue to be the principal mode of transportation in the region, the University Community Plan proposes land uses that are "of an intensity which could support a wide variety of transportation alternatives" (City of San Diego 1987). Such programs are designed to have a positive effect on the jobs/housing balance and reducing vehicle trips within San Diego.

San Diego has a number of policies and goals related to maintaining a job/housing balance. In general, and as stated in Goal 4 of the Guidelines for Future Development, San Diego desires to "accommodate social and community needs in all areas by providing for balanced housing within all communities for all income levels; proximity of place of employment and residence; recognition of community economic, social, and physical values" (City of San Diego 1992).

The 2000 U.S. Census gathered information on the amount of time that people spend commuting to and from the workplace, in turn giving a general idea of those who work and live within proximate distance of each other. As of 2000, San Diego had a population of 1,223,400 persons. Of this, 630,124 were in the labor force, of which 88.5 percent were employed (557,382 people) and 36,384 were in the armed forces (U.S. Bureau of the Census 2000). As shown in Table 2.1-1, in general, San Diego as a whole has similar commute times to that of the population within the study area of San Diego itself. The largest proportion of people in both San Diego and the study area spend 15 to 19 minutes commuting (19.0 and 22.2 percent, respectively). Due to the large area and job market of San Diego, it is likely that most people both live and work within the municipal boundaries.

Table 2.1-1. Commute Times – San Diego



Source: U.S. Bureau of the Census 2000, Summary File 3

Approximately 53 percent of the employed population within the study area commutes less than 20 minutes to work, as compared to 43 percent for San Diego as a whole. This may indicate that the study area has a higher jobs/housing balance than the region as a whole. In comparison, approximately 4.1 percent of commuters in the study area spend 45 minutes or more traveling to work, as compared to approximately 8.6 percent for San Diego as a whole. As the jobs/housing balance attempts to reduce commuting times and vehicle trips, those who have lengthy commute times do not contribute to a balance of housing and jobs. However, as discussed previously, regional incentives and City-defined goals attempt to control the location, intensity, and nature of jobs and housing in order to encourage a reduction in vehicle trips and miles traveled.

2.1.1.6 Adopted Planning Goals and Policies

There are several plans that identify planning goals and policies for the City of San Diego, which are identified below.

<u>City of San Diego General Plan</u>

The City of San Diego Process Guide and General Plan was prepared in 1979 to set forth goals and objectives for the development of the City of San Diego through the year 1995. The Process Guide and General Plan established a land use distribution pattern for future development, established a framework for future transportation networks, and provided recommendations and measures for achieving the plan's goals and objectives. The Process Guide and General Plan are currently being updated with the City of San Diego General Plan Update. A public review draft of the plan was circulated in October 2006. The General Plan Update provides guidance to meet both the needs of a growing city and enhance the quality of life for current and future residents of San Diego. The General Plan Update utilizes the City of Villages strategy, which aims to enhance the City's many communities as growth occurs over the next 20-plus years by focusing growth into mixed-use development areas linked to an improved regional transportation system. The strategy is designed to sustain long-term economic, environmental, and social health for the City of San Diego and its communities. The proposed project traverses a variety of land uses along the I-5 corridor, which have been identified by the Land Use Element. Land uses surrounding the proposed project are shown in Figures 2.1-3a and 2.3-1b. The Zoning Code must be consistent with the General Plan and land use designations stated in the Land Use Element. The Zoning Code includes a map delineating zoning boundaries and text that explains permitted uses within zones and standards.

The City of San Diego has developed community plans that identify specific goals for each of the communities within the city. Each of these community plans discusses issues that are specific to that community, while also being consistent with the broader City of San Diego General Plan policies. The proposed project would traverse the following City of San Diego communities: La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley. Each of these communities has a community plan that discusses General Plan topics that are more specific to that community, while also being consistent with the larger policies of San Diego. A brief discussion of each community plan as it pertains to the proposed project is provided below. Policies at the community plan level are most relevant to the proposed project since the Process Guide and General Plan was developed for the City through 1995, and the General Plan Update is currently in draft form.

La Jolla: The overall goals of the La Jolla community plan are to maintain La Jolla as a primarily residential recreation-oriented community, conserve and enhance the natural amenities of the community, and provide adequate public facilities and an adequate circulation system. The community plan also aims to enhance existing public access to the ocean, beach, and park areas and allow for the provision of added public parking in the village core area.

University Community Plan: The overall goals of the University community plan are to meet the needs of the growing professional and commercial sectors of the community while also meeting the needs of the University of California San Diego (UCSD) campus. No relevant goals from this community plan were identified for the proposed project. In addition, the UCSD Long Range Development Plan (PBS&J 2004) discusses development and growth for the University area.

Torrey Pines Community Plan: The overall goals of the Torrey Pines community plan are to provide a high quality of life for its residents and businesses while preserving the community's unique natural environment. The Transportation Element sets out to provide an efficient, safe, and environmentally sensitive transportation system, and to ensure that transportation improvements do not negatively impact open space systems located throughout the planning area. The Resource Management and Open Space Element sets out to ensure the long-term sustainability of the planning area's unique ecosystems; plant communities and wildlife habitat; and paleontological, archaeological, Native American, and historic resources. The Resource Management and Open Space Element also sets out to preserve, enhance, and restore all natural open space and sensitive resource areas.

Torrey Hills Community Plan: The overall goals of the Torrey Hills community plan are to develop the community with land uses that complement surrounding developing areas and maximize mobility opportunities; that reflect the variety of landforms characterizing the community; that protect and enhance important wildlife habitat; and that provide for a high-quality urban form reflective of the areas unique location and natural attributes. The Transportation Element sets out to provide a transportation system that provides linkages to the community's activity centers and to the rest of the metropolitan region and ensure that development of transportation facilities shall avoid unnecessary encroachment into environmentally sensitive areas. The Open Space and Resource Management Element sets out to preserve, protect, enhance, and, where possible, restore all natural open space and sensitive resource areas, and prohibit encroachment and impacts of adjacent development, both private and public, on areas designated open space.

Carmel Valley: The overall goals of the Carmel Valley (North City West) community plan include establishing a physical, social, and economically balanced community; establish an identity for the community; preserve the natural environment; establish a balanced transportation system; and establish a phased development plan. The Circulation Element's primary goal is to provide a transportation system that provides mobility, accessibility, and safety for residents within the community. The Park, Recreation, and Open Space Element sets out to meet the recreational needs of the community with both parks and open space areas.

The Carmel Valley community plan stipulated that precise plans must be developed for each development unit within the community. The proposed project is located near Neighborhoods 2 and 3 of the Carmel Valley community plan. The Neighborhood 2 Precise Plan, also known as the North City West Employment Center, was designed to serve as an employment base for housing in other areas of Carmel Valley. The Neighborhood 2 Precise Plan provides guidance for future development within the community in conformance with the existing Carmel Valley community plan. The Neighborhood 2 Precise Plan does not contain policies relevant to the proposed project. The Neighborhood 3 Precise Plan is primarily a residential development with some recreation and open space uses. The Neighborhood 3 Precise Plan provides guidance for future development within the community in conformance with the existing Carmel Valley community plan. The Neighborhood 3 Precise Plan does not contain policies relevant to the proposed project.

<u>San Diego Association of Governments 2030 RTP and 2006 RTIP</u>

SANDAG's Regional Comprehensive Plan (RCP) for the San Diego Region is a compilation of local and regional plans of each jurisdiction. The RCP contains the long-term planning framework for the San Diego region. It sets forth a regional vision and balances population, housing, and employment growth with habitat preservation, agriculture, open space, and infrastructure needs.

Mobility 2030, the Regional Transportation Plan (RTP) prepared by SANDAG, lays out a regional transportation system to enable current and future planning efforts to enhance quality of life. As part of the RCP, the RTP identifies specific transportation needs throughout the next 25 years that would enhance the land use-transportation connection in development within the San Diego region. The proposed project is an integral part of the RTP.

The 2006 Regional Transportation Improvement Program (RTIP) was developed to implement the San Diego region's overall transportation strategy for providing mobility and improving the efficiency and safety of the transportation system. The 2006 RTIP aims to reduce transportation-related air pollution to reduce air pollution in an effort to attain federal and state air quality standards for the San Diego region. The 2006 RTIP also incrementally implements the latest update to the RTP.

<u>Natural Communities Conservation Plans: Multiple Species Conservation Program Subarea Plan</u>

The Multiple Species Conservation Program (MSCP) Subarea Plan was prepared to meet the requirements of the California Natural Communities Conservation Planning (NCCP) Act of 1992 pursuant to a general outline developed by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) (both of these agencies are referred to herein as the "wildlife agencies"). The MSCP Subarea Plan serves as the basis for the Implementing Agreement that serves as the contract between the City of San Diego and the wildlife agencies to ensure implementation of the plan and allow the City of San Diego to issue take permits at the local level. The Multiple Habitat Planning Area (MHPA) delineates core biological resource areas and corridors targeted for conservation while also allowing for limited development to occur (City of San Diego 1997). The MHPA was developed by the City of San Diego in cooperation with wildlife agencies, property owners, developers, and environmental groups based on the Preserve Design Criteria contained in the overall MSCP Plan and the City Council adopted criteria for the creation of the MHPA (City of San Diego 1997).

Coastal Zone Management Act

The Coastal Zone Management Act of 1972 (CZMA) is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA; they include the protection and expansion of public access and recreation; the protection, enhancement, and restoration of environmentally sensitive areas; the protection of agricultural lands; the protection of scenic beauty; and the protection of property and life from coastal hazards. The California Coastal Commission (CCC) is responsible for implementation and oversight under the California Coastal Act and is delegated federal authority under the CZMA. Several jurisdictions affected by the proposed project have their own local coastal plans (LCPs), which are discussed for each jurisdiction in the study area, below.

2.1.2 Population and Housing

The "great boom," which was recorded in a special census in 1887, began a long-standing trend of substantial population growth within San Diego. The population at that time was estimated to have reached 30,000, having expanded from a population of 2,637 persons in 1880, primarily due to a "land stampede" caused by the railroad expansion. At the turn of the 20th century, however, the population of San Diego had receded to 17,700 persons. In 1919, the Navy established San Diego Bay as the home of the Pacific Fleet. Around that time, the railroad connecting Arizona and San Diego was completed, bringing commerce and a greater military population to the area. The population doubled every decade until the Great Depression in 1930, when it had reached 147,995. In the years following World War II, there was another large population boom, rising from 333,865 to 573,224 persons between 1950 and 1960 (San Diego Historical Society 2005; City of San Diego 2005a,b). The population steadily grew in subsequent decades, reaching 1,110,549 persons in 1990 and 1,223,400 persons in 2000 (U.S. Bureau of the Census 1990, 2000).

2.1.2.1 Population and Growth

As outlined above, San Diego, as of 2000, showed a population of 1,233,400 persons and consisted of approximately 44 percent of the county's total population (2,813,833 persons). Continuing a long-standing trend, San Diego showed significant population growth over the last two decades, rising 27 percent between 1980 and 1990 (from 875,538 to 1,110,549 persons), and 10 percent between 1990 and 2000 (from 1,110,549 to 1,233,400 persons) (SANDAG 2004a). A 2004 estimate indicated a population of 1,249,032 persons, showing an estimated population growth of 6 percent. San Diego's rate of growth was consistently lower than that shown by San Diego County, which was 34 percent between 1980 and 1990 and 13 percent between 1990 and 2000, with an estimated growth of 7 percent in 2000-2004 (U.S. Bureau of the Census 2000). Long-range forecasts for San Diego indicate a continuation of significant population growth, with the population anticipated to increase by 35 percent in 2000-2030 although slightly lower than that predicted for the county (37 percent) (SANDAG 2004a).

As of 2000, the San Diego population within the study area was approximately 69,045 and comprised 5.6 percent of the total population of San Diego itself. As shown in Figure 2.1-4, several areas of San Diego within and adjacent to the study area are heavily urbanized, resulting in elevated population densities. Larger, more densely populated areas are located to the east of the study area in Mira Mesa. Increased population densities were present within northern portions of San Diego, as well as immediately south of the study area. In particular, there are areas of elevated population density both to the east and west of I-5 north of Carmel Valley Road. Within the area of direct impacts, the highest population densities within San Diego are located immediately south of La Jolla Village Drive, as well as immediately east and west of I-5. There are also several smaller areas of moderate population density to the east and west of these areas.

2.1.2.2 Race and Ethnicity

As shown in Table 2.1-2, racially, as of 2000, San Diego was predominantly White (60.2 percent) with much smaller proportions of Black/African American (7.9 percent), Asian (13.6 percent), "some other race" (12.4 percent), and "two or more races" (4.8 percent) populations. American Indian and Alaskan Native (0.6 percent) and Native Hawaiian/Pacific Islander (0.5 percent) populations were smaller still. The Hispanic population within San Diego, at 25.4 percent, remained substantial.

Table 2.1-2. Race and Ethnicity – San Diego and San Diego County

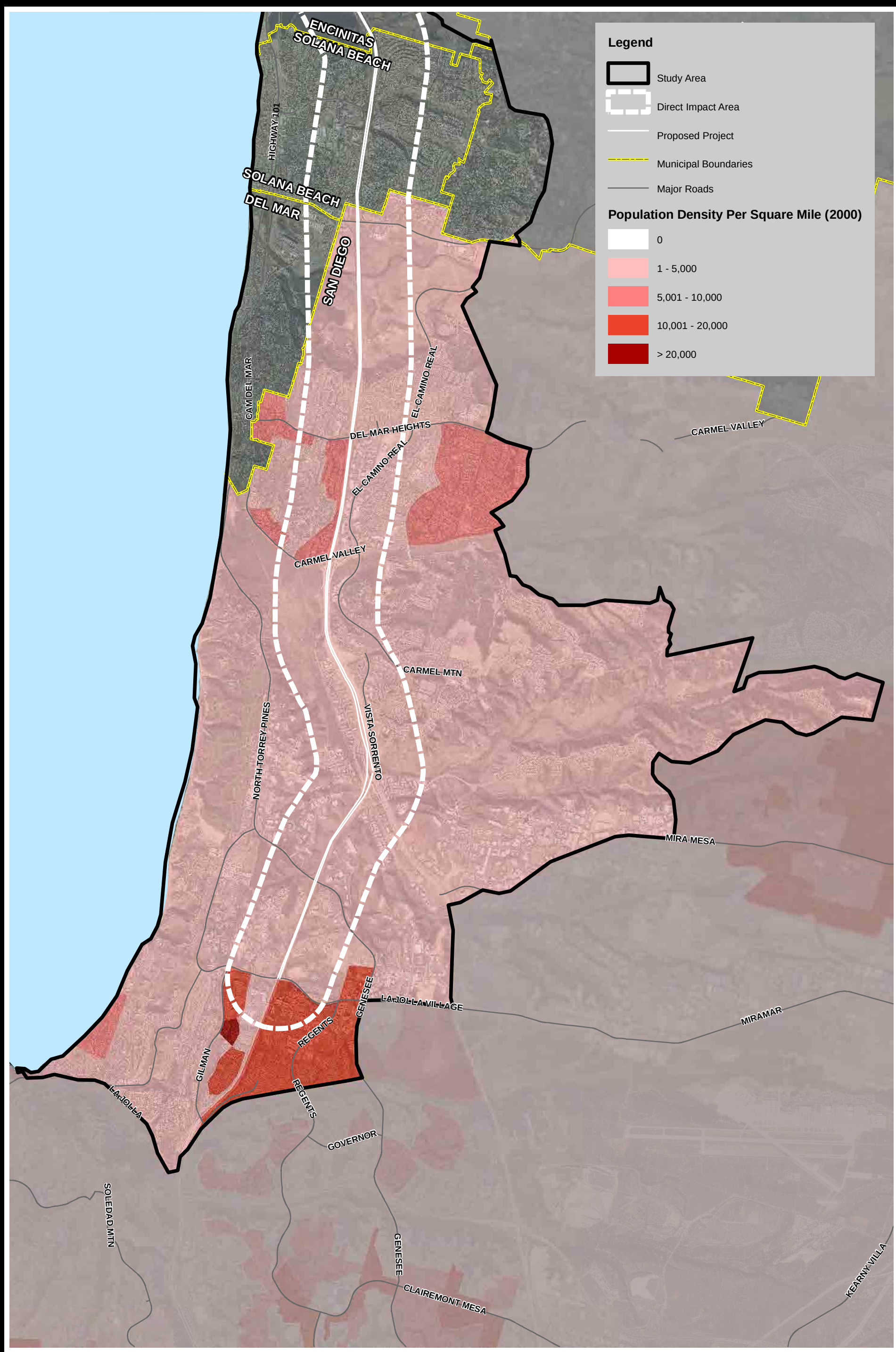
	San Diego		San Diego County	
White	60.2%	(736,207)	66.5%	(1,871,839)
Black/African American	7.9%	(96,216)	5.7%	(161,480)
American Indian and Alaskan Native	0.6%	(7,534)	0.9%	(24,337)
Asian	13.6%	(166,968)	8.9%	(249,802)
Native Hawaiian/Pacific Islander	0.5%	(5,853)	0.5%	(13,561)
Some other race	12.4%	(151,532)	12.8%	(360,847)
Two or more races	4.8%	(59,081)	4.7%	(131,967)
Hispanic	25.4%	(310,752)	26.7%	(750,965)
Total Minority	50.6%	(619,508)	45.0%	(1,256,000)

Source: U.S. Bureau of the Census 2000

As of 2000, the breakdown of race and ethnicity within San Diego broadly paralleled that of San Diego County, although showing marginally more diversity overall. In particular, the Asian population at 13.6 percent was markedly elevated when compared to the county average, whereas, Black/African American populations and persons of "two or more races" were only marginally so. Conversely, American Indian/Alaskan Native populations, Native Hawaiian/Pacific Islander populations, and persons of "some other race" were either at or marginally below the county average. As of 2000, the

I-5 NORTH COAST CORRIDOR CIA

4,750 0 4,750 Feet
SCALE: 1:57,000; 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.1-4
SAN DIEGO
Population Density

total minority[1] population within San Diego was 50.6 percent of the total population, marginally higher than that of the county (45.0 percent).

As shown in Figure 2.1-5, as of 2000, minority populations within San Diego were generally more elevated toward University and Torrey Pines within the southern portion of the municipality within the study area. Although areas to the west and northeast of the study area showed, for the most part, relatively low minority populations, a smaller, significantly elevated area was evident adjacent to Solana Beach in the northwest corner of the study area. While minority populations within the direct impact area were generally lower than both the study area and the municipality as a whole, moderately elevated areas were present both to the west of I-5, and surrounding the I-5 and 805 split.

2.1.2.3 Age

As shown in Table 2.1-3, as of 2000, the population of minors (under 18 years), at 24.0 percent, was marginally below that of the county average. Conversely, the working age population of San Diego (18-64 years), at 65.5 percent, was marginally above that of San Diego County. The proportion of senior citizens (over 65 years) within San Diego, at 10.5 percent, was marginally below that of San Diego County, as was the city's median age of 32.5 years. These slightly lower age levels suggested a lower proportion of elderly and/or retired persons residing within San Diego compared to the county as a whole.

Table 2.1-3. Age Breakdown – San Diego and San Diego County

	San Diego	San Diego County
Under 18 years	24.0% (293,908)	25.7% (811,038)
18 to 64 years	65.5% (801,484)	63.1% (1,776,442)
Over 65 years	10.5% (128,008)	11.2% (313,750)
Median Age	32.5 years	33.2 years

Source: U.S. Bureau of the Census 2000

As shown in Figure 2.1-6, populations of senior citizens were generally more elevated within northern and southern portions of the municipality within the study area, although a number of scattered areas of elevated populations were present to the east. Within the direct impact area, markedly higher populations of senior citizens were present north of Carmel Valley Road to the east and west of I-5, and south of La Jolla Village Drive to the east and west of I-5.

2.1.2.4 Housing

As shown in Figure 2.1-7, relatively low levels of housing density were present throughout the portion of the municipality within the study area, although areas of more moderate density were evident adjacent to the I-5 corridor. Within the study area, a number of eastern areas, specifically toward Mira Mesa, showed more elevated housing densities. Within the direct impact area, areas east and west of I-5 generally showed elevated levels of housing density, with particular concentrations between Del Mar Heights Road and Carmel Valley Road, as well as south of La Jolla Village Drive. It is worth noting that the housing densities within San Diego generally correlated with population density. As of 2000, the average household size in San Diego was 2.61 persons, compared to the county average of 2.73 persons. As of 2000, San Diego households made up 47 percent of the county total (469,689 of 994,677 persons, respectively).

Affordable Housing

The City of San Diego General Plan contains stated community goals and policies designed to shape the long-term development of the city. The general goals of the long-range policy for housing opportunities are to provide affordable housing for low-income renters and first-time home buyers. The City of San Diego's Housing Commission works with 18 other managerial entities to promote affordable housing on an individual project level. They are guided by the Housing Element in the General Plan, which outlines the affordable housing needs of the city, the funding required, and specific projects in each community. There are 115 affordable housing complexes in San Diego, 31 designated for seniors and 10 for disabled persons.

2.1.3 Public Facilities and Services

2.1.3.1 Schools

San Diego is served by the San Diego Unified School District, which is the second-largest school district in California (SDCS 2005). The district includes 113 elementary schools, 23 middle schools, 27 high schools, 4 atypical schools, and 25 charter schools (SDCS 2005). As shown in Figures 2.1-8a and 2.1-8b, there are 13 schools located within the study area, of which 6 are in the area of direct impacts. Del Mar Hills Academy is the closest to the I-5 corridor and is adjacent to the west side of I-5 north of Del Mar Heights Road. Del Mar Hills Academy of Arts and Sciences is located on Mango Drive adjacent to the west side of I-5, north of Del Mar Heights Road. Solana Highlands, Del Mar Heights, and Torrey Hills elementary schools are also in the area of direct impacts.

2.1.3.2 Police Protection

The City of San Diego Police Department provides law enforcement services for the region. San Diego is divided into eight geographical divisions, of which the Northern and Northeastern Divisions are included in the study area. The Northern Division is stationed on Eastgate Mall between I-5 and I-805 in the area of secondary impacts, as shown in orange in Figure 2.1-8b. The Northeastern Division is located outside of the study area at Black Mountain Road and SR 56.

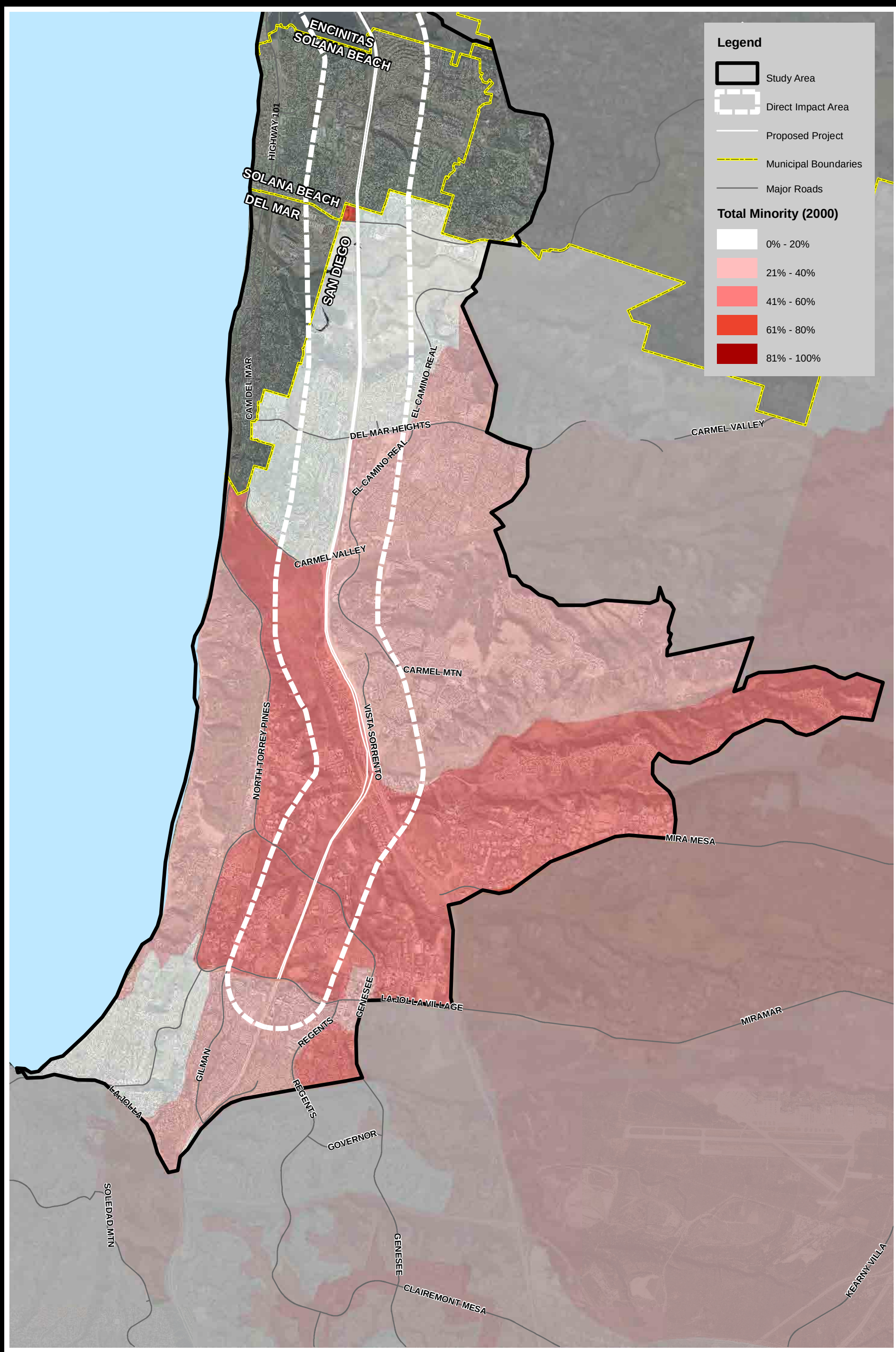
2.1.3.3 Fire Protection

The San Diego Fire-Rescue Department serves the city, including the portion of the city within the study area. There are a total of 44 fire stations serving San Diego, of which 2 are located within the study

[1] The term "total minority" includes all persons classified by the U.S. Bureau of the Census to be a minority. Minority populations include persons within the following categories: Black/African American, Asian, American Indian and Alaskan Native, Native Hawaiian/Pacific Islander, "two or more races," and "some other race." It also includes Hispanic populations (of any race).

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:57,000; 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; US Census 2000

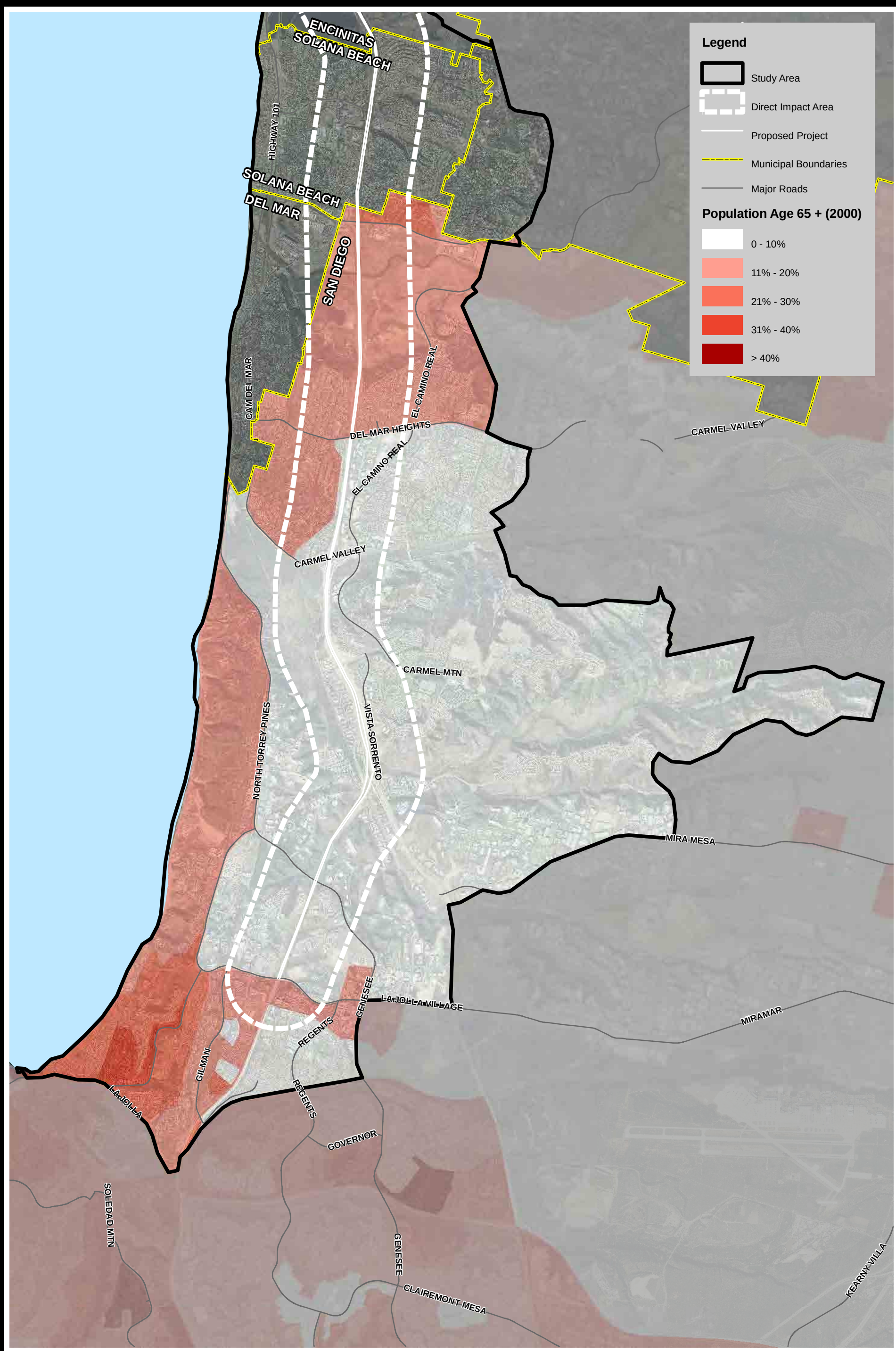
EDAW | AECOM

Figure 2.1-5
SAN DIEGO
Proportion of Total Minority

I-5 NORTH COAST CORRIDOR CLA

4,750 0 4,750 Feet

SCALE: 1:57,000; 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; US Census 2000

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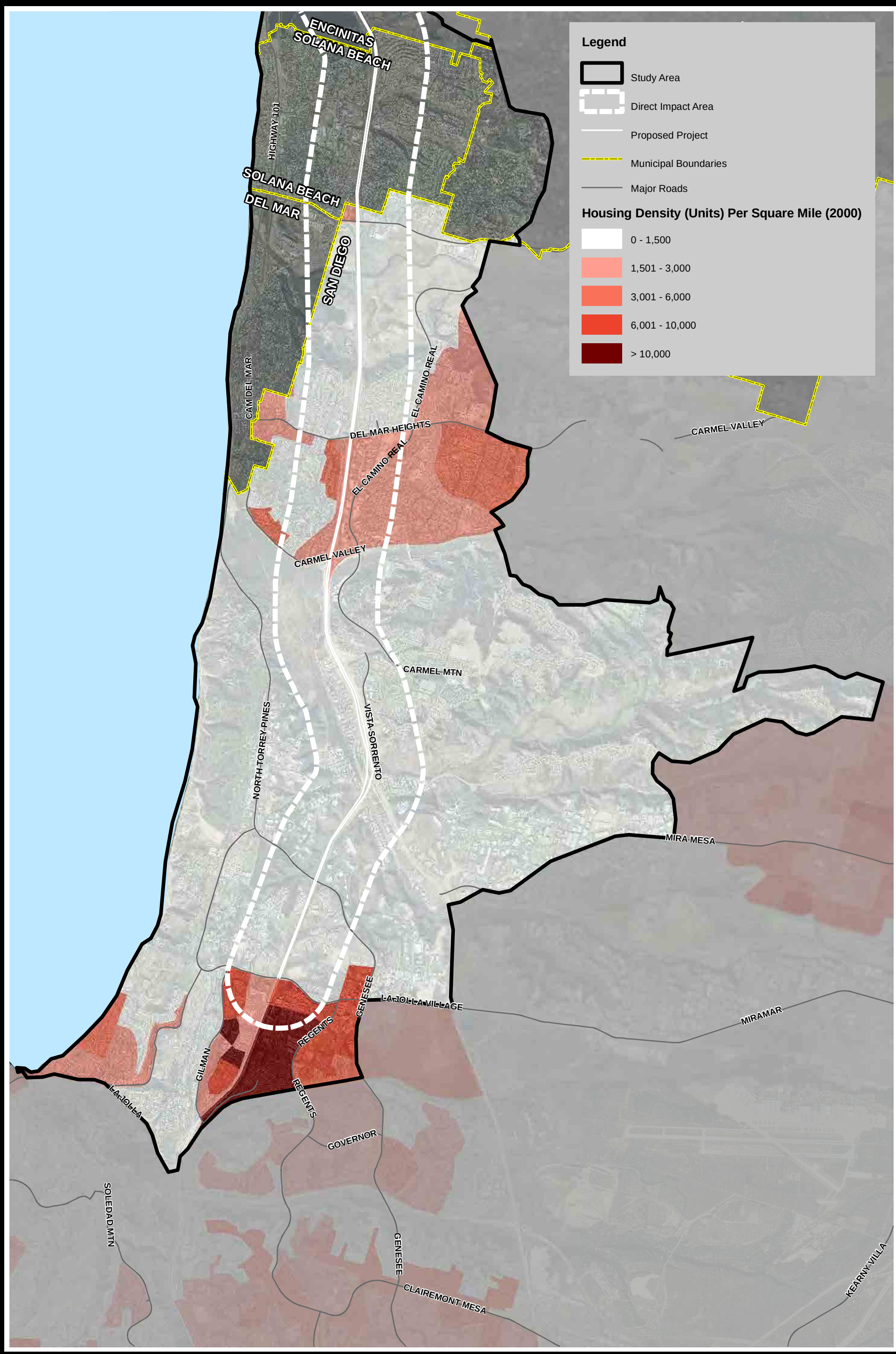
Figure 2.1-6
SAN DIEGO
Population Age 65 +

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:57,000; 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; US Census 2000

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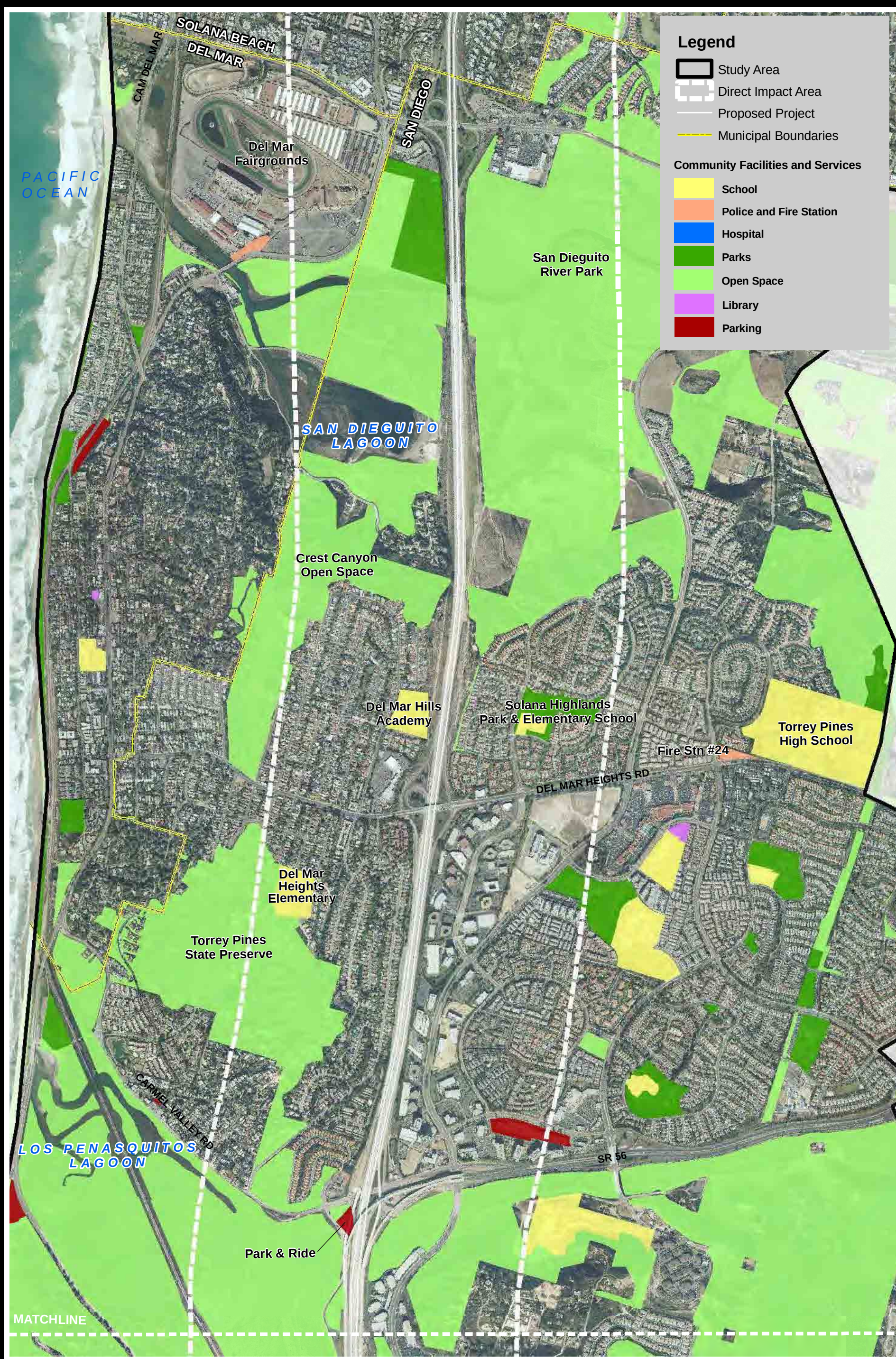
Figure 2.1-7
SAN DIEGO
Housing Density

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

EDAW | AECOM

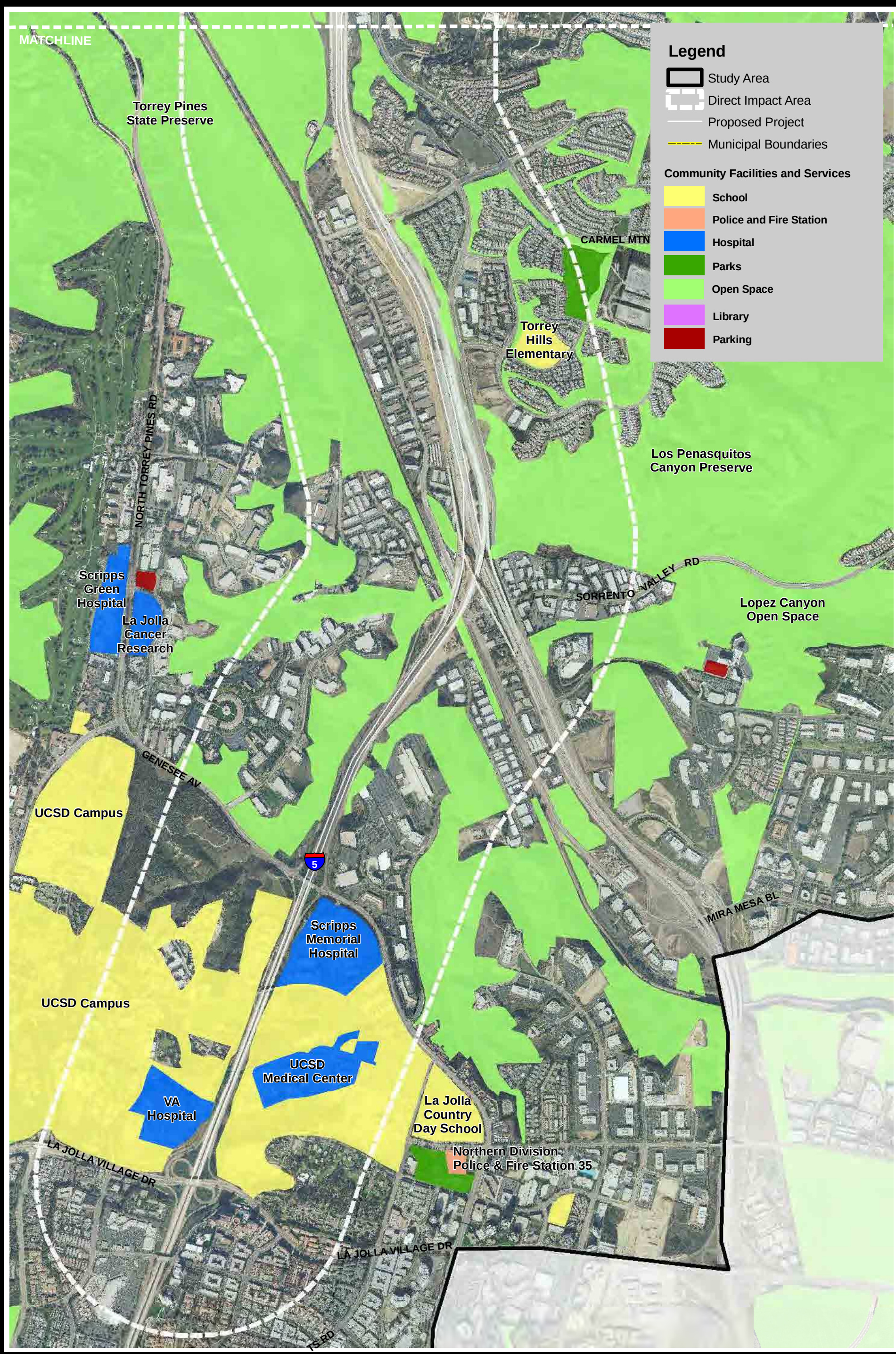
Figure 2.1-8a
SAN DIEGO - NORTH
Community Facilities and Services

1,500 0 1,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:18,000; 1 inch = 1,550 feet



Source: AirPhotoUSA 2006; SANDAG 2006

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Figure 2.1-8b
SAN DIEGO - SOUTH
Community Facilities and Services

area. Fire Station 35 is located near the Police Station on Eastgate Mall. Fire Station 35 maintains an engine, truck, and other emergency apparatus. Fire Station 24 is located northeast of El Camino Real and Del Mar Heights Road, within the area of secondary impacts. Fire Station 24 maintains engine, rescue, and wildfire fighting equipment. Fire Stations 24 and 35 are shown in orange in Figures 2.1-8a and 2.1-8b, respectively.

2.1.3.4 Hospitals and Medical Facilities

The UCSD Medical Center, which has facilities both east and west of I-5 at La Jolla Village Drive, is one of the main medical centers in San Diego. West of I-5 is the Veterans Affairs (VA) Medical Center and the UCSD School of Medicine. East of I-5 is the UCSD Medical Center Thornton Hospital, Perlman Ambulatory Care Center, Moores Cancer Center, and other various specialty care facilities. All of these facilities are located within 0.5 mile of I-5, within the direct impact area.

2.1.3.5 Recreational and Community Facilities

As mentioned in Section 2.1.1.2, there are several community planning areas in San Diego that are also located within the study area. These include La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley. There are a number of parks, recreation areas, and open spaces within the communities that are also located within the northern portion of the City of San Diego study area, as shown in Figure 2.1-8a. Parks and open space within the direct impact area of northern San Diego include San Dieguito Lagoon Ecological Reserve, Crest Canyon Open Space Park, and Solana Highlands Park. A portion of The Carmel Valley Community Park and Carmel Valley Community Center is within the area of direct impacts as well. The Carmel Valley Community Recreation center includes a public pool, game room, gymnasium, indoor multipurpose courts, picnic areas, basketball courts, amphitheater, playgrounds, and tennis courts. The Torrey Pines State Reserve is partially within the direct impact area, south of Del Mar Heights Road. The Carmel Valley Community Park is also located partially within the direct impact area west of Carmel Valley Middle School.

As shown in Figure 2.1-8b, there is a large amount of open space located within the southern portion of the City of San Diego study area. Much of the open space shown is associated with residential developments and/or the unique topography of the area. Los Peñasquitos Canyon Preserve and Lopez Canyon Open Space are located east of I-5, within the direct and secondary study areas. Torrey Hills Neighborhood Park is partially within the direct impact area south of Carmel Mountain Road. The Nobel Athletic Park north of Nobel Drive is located within the direct impact area. The Mandell Weiss Eastgate City Park and Recreation Center are located in the secondary impact area, near the police station.

Additional parks within the area of secondary impacts include Carmel Creek Park, Carmel Del Mar Park, Carmel Mission, Del Mar Trails, Torrey Highlands, and Ashley Falls Park.

2.1.3.6 Circulation, Access, and Parking

Traffic flow and access in and out of San Diego are described in the Transportation Element of the San Diego General Plan (1989). Transportation facilities play a major role in shaping urban and regional form by influencing the location of housing, employment, commercial activities, and other land uses (City of San Diego 1989). Major roads, transit lines, pedestrian corridors, parking, and airports are outlined below. Table 2.1-4 shows the main modes of transportation for commuters in Oceanside.

Table 2.1-4. Modes of Transportation – San Diego

Means of Transportation	Number of Commuters per Day	Percentage
Total daily commuters	580,318	100.00
Car, truck, or van	500,056	86.17
Railroad	268	0.05
Bus (including trolley bus)	22,342	3.85
Other public transportation[1]	1,043	0.18

[1] Includes census categories of street car or trolley car, and subway or elevated.
Source: U.S. Bureau of the Census 2000

Major Roads

I-5 is a major transportation feature in San Diego, dividing the coastal areas of the city from the inland region. Six interchanges within this portion of the study area provide access into and out of the communities within San Diego. These include Via de la Valle, Carmel Valley Road/SR 56, Sorrento Valley Road, Genesee Avenue, Del Mar Heights Road, and La Jolla Village Drive, the southernmost interchange of the study area. In addition, there is an interchange to SR 56.

Prime arterials are defined as carrying very heavy traffic volumes (over 40,000 estimated average daily trips [ADT]) and provide for regional and intra-city circulation and connections to freeways and other regional roads. Prime arterials in the study area of San Diego include Del Mar Heights Road, SR 56, Carmel Mountain Road, Mira Mesa Boulevard, Camino Santa Fe, Torrey Pines Drive, and La Jolla Village Drive.

Major arterials carry moderate to heavy traffic volumes (20,000 to 40,000 estimated ADT) and have a minimum of two traffic lanes in each direction with a raised median. Major arterials in the study area of San Diego include Sorrento Valley Parkway, El Camino Real, Carmel Creek Road, Carmel Valley Road, Carmel Canyon Road, Carmel Mountain Road east of Vista Sorrento Parkway, Vista Sorrento Parkway, Sorrento Valley, Camino Santa Fe, Lusk Boulevard, Scranton Road, North Torrey Pines Road, Town Centre, Nobel Drive, Regents Road, and Gilman Drive.

Collector streets, which provide immediate access to adjoining properties and carry light to moderate traffic volumes (2,000 to 10,000 estimated ADT) are located throughout San Diego. Collector roads in the study area include Half Mile Road, Long Run Drive, Townsgate Drive, Carmel Country Road, Carmel Mountain Road, Calle de Mariposa, Ocean Air, Barnes Canyon Road, Vista Sorrento Parkway, Pacific Center Boulevard, Flanders Drive, Campus Point, East Gate, Palm Hills Drive, and Golden Haven Drive.

Public Transit

Rail service is provided to San Diego by the Coast Express Rail (Coaster), Amtrak, and the San Diego Trolley. North County Transit District (NCTD) operates the Coaster, which began service in 1995. The Coaster serves the cities of Oceanside, Carlsbad, Encinitas, Solana Beach, and San Diego. San Diego Trolley service is provided by the Metropolitan Transit System (MTS), which includes San Diego, National City, La Mesa, El Cajon, Chula Vista, San Ysidro, Lemon Grove, and Santee.

The rail line travels east from the coastal area through Torrey Pines State Park Reserve, east of I-805 though Sorrento Valley, and then winds back west through University to parallel I-5 where it travels on to downtown San Diego. The Sorrento Valley Station is the only transit station located within the study area and is within the area of direct impacts. The Sorrento Valley Station services primarily Coaster traffic; however, Amtrak trains may stop there if needed. As of 2000, approximately 268 commuters daily in San Diego used the railroad (presumably the Coaster) as the main mode of transportation (U.S. Bureau of the Census 2000). The study area within San Diego does not contain trolley stops or lines.

The San Diego Transit Corporation, a subsidiary of MTS, maintains bus service within San Diego (MTS 2005). There are 29 fixed bus routes in San Diego, of which 7 are express and 22 are local (MTS 2005). These fixed bus routes include the study area and travel north, south, east, and west from this portion of the study area. As of 2000, approximately 22,342 commuters daily in San Diego used the bus system as the main mode of transportation (U.S. Bureau of the Census 2000).

Pedestrian Corridors

The City of San Diego has adopted a Bicycle Master Plan that depicts existing bikeways identified in adopted community plans as well as recommended routes (City of San Diego 2002). In La Jolla, streets most used by pedestrians are commercial streets that contain a variety of retail uses and activities. Bike lanes run throughout La Jolla, with most along selected neighborhood streets connecting beach and shoreline areas. In University, there is an extensive network of bike and pedestrian paths linking the neighborhoods and commercial centers to UCSD. In Torrey Pines, the bike and pedestrian pathway is located adjacent to I-5. In Torrey Hills, there are currently no defined bike or pedestrian trails, though there are bike lanes along all prime and major arterials. In Carmel Valley, a well-established bike and pedestrian trail is located along SR 56 and Carmel Center Drive. Bike lanes are established along the prime and major arterials throughout the community.

Parking

As stated in the General Plan, the “type and location of parking provided within a community can noticeably affect its character, as well as the efficiency of its traffic flows” (City of San Diego 1986). The majority of parking in San Diego is provided on public streets (City of San Diego 1986). In addition, a “Park & Ride” lot, which is free convenient parking where one would meet a carpool, or take the bus or train, is located east of I-805 north of Mira Mesa Boulevard. The Park & Ride lot is shown in red in Figure 2.1-8a.

2.1.4 Economics

2.1.4.1 Local Economy

Historically, San Diego’s economy has been based in large part upon a significant military presence within the city and region, but early growth, like in other coastal areas of the county, was also supported by the railroad. In 1912, the U.S. Navy established a base on North Island, and in 1919 the U.S. Navy made San Diego Bay home base for the Pacific Fleet (City of San Diego 2005a). In 1923, the Marine Corps Recruit Depot opened and the Naval Training Center was commissioned. Naval Air Station Miramar was developed on the site of Camp Kearny in 1939 (City of San Diego 2005a). In the area of what is present-day UCSD, La Jolla, and Torrey Pines, U.S. Marine Corps Camp Calvin B. Matthews was a training camp and firing range for the Marines from 1915 until the early 1960s (PBS&J 2004). In addition, U.S. Army Camp Robert E. Callan, an anti-aircraft training center, was established in the area in 1940 in response to the perceived necessity for coastal defenses during World War II (PBS&J 2004).

Currently, San Diego continues to support a large military presence but also has developed a diverse economic portfolio with significant telecommunications and wireless technology industries, and biotechnology research firms as well as a substantial tourism sector (San Diego Chamber of Commerce 2005). The beach areas are a consistently popular visitor destination as is the nearby Torrey Pines Golf Course and Birch Aquarium at Scripps located on the UCSD campus.

San Diego is a predominantly urbanized city with a variety of commercial, industrial, and agricultural land uses located within and surrounding the San Diego study area. Figures 2.1-9a and 2.1-9b illustrate the detailed land uses within the direct impact area along the project corridor to a more detailed extent. The data provided in these figures are derived from SANDAG land use categories (2003).

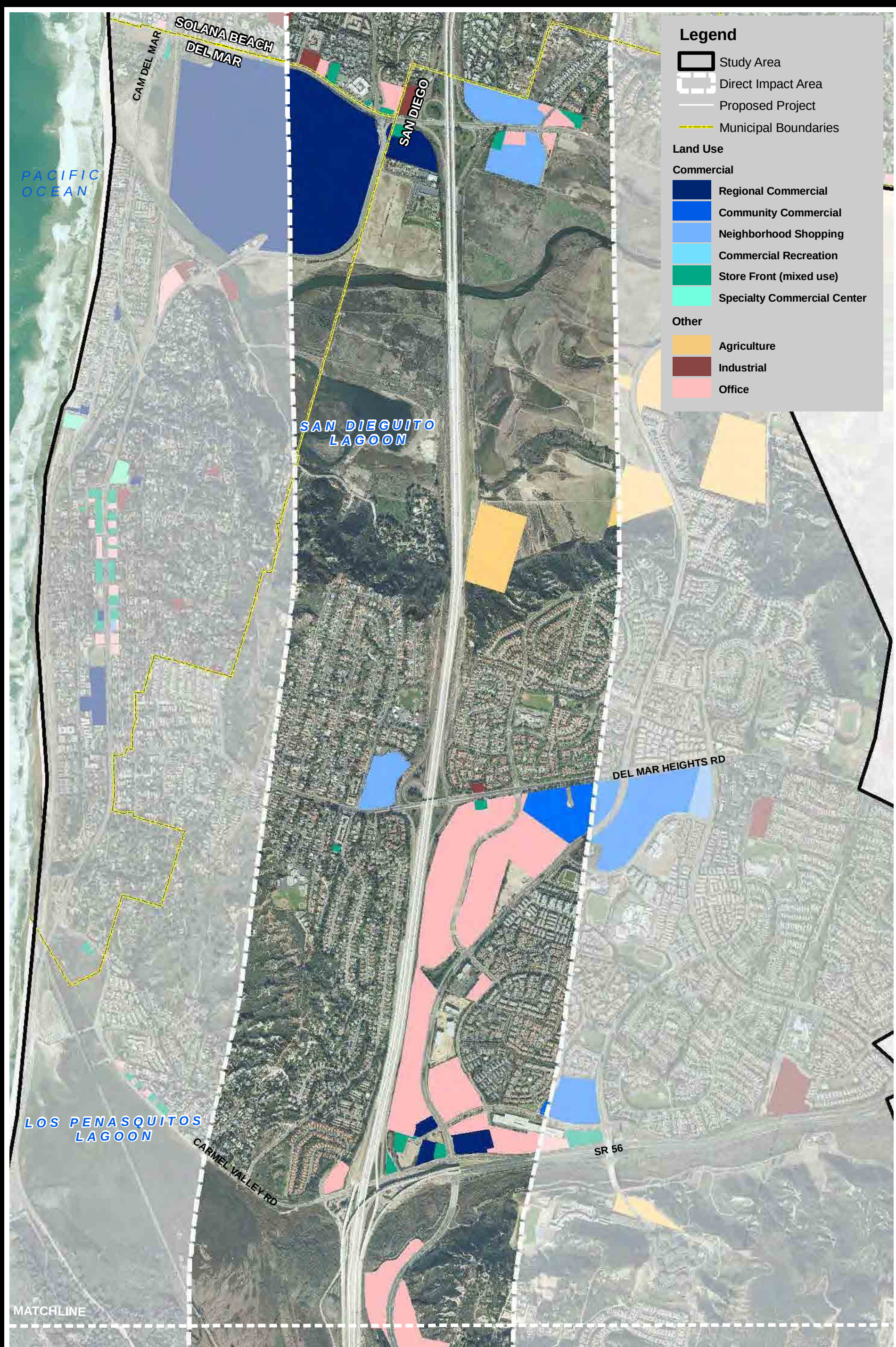
As shown in Figures 2.1-9a and 2.1-9b, the commercial and industrial areas are primarily located along the major roadways transecting I-5, which include Via de la Valle, Del Mar Heights Road, Carmel Valley Road/SR 56, Genesee Avenue, Roselle Street/Sorrento Valley Road, La Jolla Village Drive, and Sorrento Valley Road/Mira Mesa Boulevard. Commercial areas are also located along Coast Highway 101, which parallels I-5 to the west. Agricultural areas are situated primarily in the north between Del Mar Heights Road to the municipal boundary with Solana Beach east of I-5.

2.1.4.2 Income and Employment

Median Household Income

Median household income is defined as the middle value of all incomes as arranged from highest to lowest in a selected geographic area. Based on data according to block groups from the 2000 U.S. Census, the median household income for San Diego was $45,733 with $189,785 as the highest median household income for a block group in San Diego and $9,208 as the lowest median household income for a block group in San Diego. In comparison, the median household income according to block groups for San Diego County as of 2000 was $47,067, slightly higher than San Diego, although it

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

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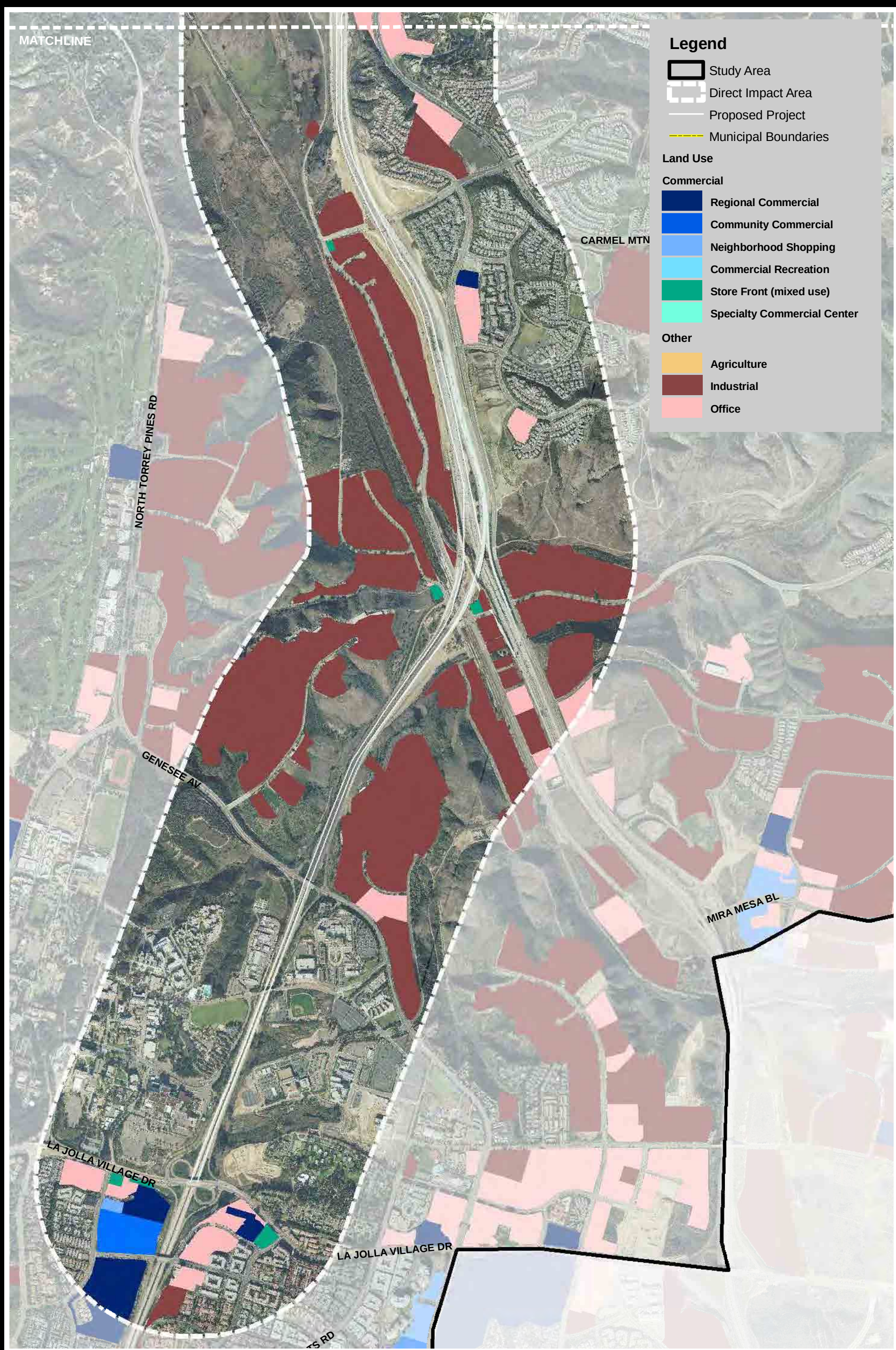
Figure 2.1-9a
SAN DIEGO - NORTH
Direct Impact Area Economy

1,500 0 1,500 Feet
SCALE: 1:18,000; 1 inch = 1,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

EDAW | AECOM

Figure 2.1-9b
SAN DIEGO - SOUTH
Direct Impact Area Economy

1,550 0 1,550 Feet

SCALE: 1:18,000; 1 inch = 1,550 feet

showed $200,001 for the highest median household income for a block group in the county and $9,208 as the lowest median household income for a block group in the county.

Figure 2.1-10 illustrates the median household income for the study area and direct impact areas, respectively, arranged by block groups and grouped together according to six different ranges. Areas showing incomes within the higher median household income ranges ($105,001-$165,000 and above $165,001) were located primarily along the coast along North Torrey Pines Road, east of I-5 between Carmel Valley Road/SR 56 and Roselle Street/Sorrento Valley Road, and west of I-5 between Del Mar Heights Road north to the municipal boundary with Solana Beach, as well as outside the study area.

Areas that showed lower median household income ranges in the study area ($25,001-$35,000 and $35,001-$45,732) were located primarily between Genesee Avenue and La Jolla Village Drive along I-5 (which encompasses the UCSD campus); a small area along the southern edge of the study area boundary; the area west of I-5 from Carmel Valley Road to the southern edge of the study area boundary; and small areas in the southern portion of the study area.

As shown in Figure 2.1-10, areas showing higher median household income ranges for the direct impact area ($105,001-$165,000) were located west of I-5 from Del Mar Heights Road north to the municipal boundary with Solana Beach and east of I-5 from Carmel Valley Road/SR 56 south to where I-5 and I-805 split. Areas showing lower median household income ranges ($25,001-$35,000 and $35,001-$45,732) were located between Genesee Avenue and La Jolla Village Drive along I-5 (which encompasses the UCSD campus), as well as the area west of I-5 between Carmel Valley Road and Genesee Avenue and the area west of I-805.

Per Capita Income

Per capita income is defined as the average income of every resident of a selected geographic area, including all adults and children. Per capita income is typically reported in units of currency per year and often used as a measure of the wealth of the selected population. Based upon data according to block groups from the 2000 U.S. Census, per capita income for San Diego was $23,609 with $104,388 as the highest per capita income for a block group in San Diego and $4,505 as the lowest per capita income in a block group for San Diego. In comparison, per capita income for block groups in San Diego County was $22,926, with $112,849 as the highest per capita income in a block group for the county and $4,505 as the lowest per capita income for a block group in the county. Similar to median household income values, per capita income for San Diego was slightly elevated and showed a smaller range of values than that of the county.

Figure 2.1-11 illustrates per capita income for the study area and direct impact area, respectively, arranged by block groups and grouped together according to six different ranges. Areas within the higher per capita income ranges ($23,609-$55,000 and $55,001-$81,000) were primarily located within the northern portion of the study area, the majority of the study area east of I-5, and in various areas to the west of I-5 along the coast. There were no areas within the highest per capita income range (above $81,001) located within the study area.

As shown in Figure 2.1-11, areas within the higher per capita income ranges located within the direct impact area ($23,609-$55,000 and $55,001-$81,000) were located between Del Mar Heights Road and Carmel Valley Road/SR 56 and the municipal boundary with Solana Beach, and the area west of I-5 and I-805 south of SR 56. Areas showing lower per capita income ranges were located between Genesee Avenue and La Jolla Village Drive along I-5 (encompassing the UCSD campus) (below $8,000), as well as areas south of Carmel Valley Road west of I-5 and I-805 ($8,001-$15,000).

Employment

As outlined above, the economy of San Diego has centered on a large military presence, agriculture, and tourism but is diversified to include industries from the technology and communications sectors. The region of San Diego within and surrounding the study area contains numerous large telecommunications and wireless technology businesses. Similarly, multiple biotechnology research firms and support companies are also located in this area. Notable employers within the area include Qualcomm, Scripps Memorial Hospital, the City of San Diego, and UCSD.

Based on the data from the California Employment Development Department (EDD), the unemployment rate in San Diego has averaged about 4.8 percent over the past 5 years (2000-2004), marginally above the average of 4.6 percent for San Diego County over the same period. As of May 2005, the unemployment rate for San Diego had fallen to 3.9 percent, compared to 3.8 percent for San Diego County. Table 2.1-5 compares the employment statistics between San Diego and San Diego County.

Table 2.1-5. Annual Unemployment Rate – San Diego and San Diego County

Area	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004	Average
San Diego	4.0%	4.3%	5.3%	5.4%	4.9%	4.78%
San Diego County	3.9%	4.2%	5.1%	5.2%	4.7%	4.62%

Source: EDD 2005

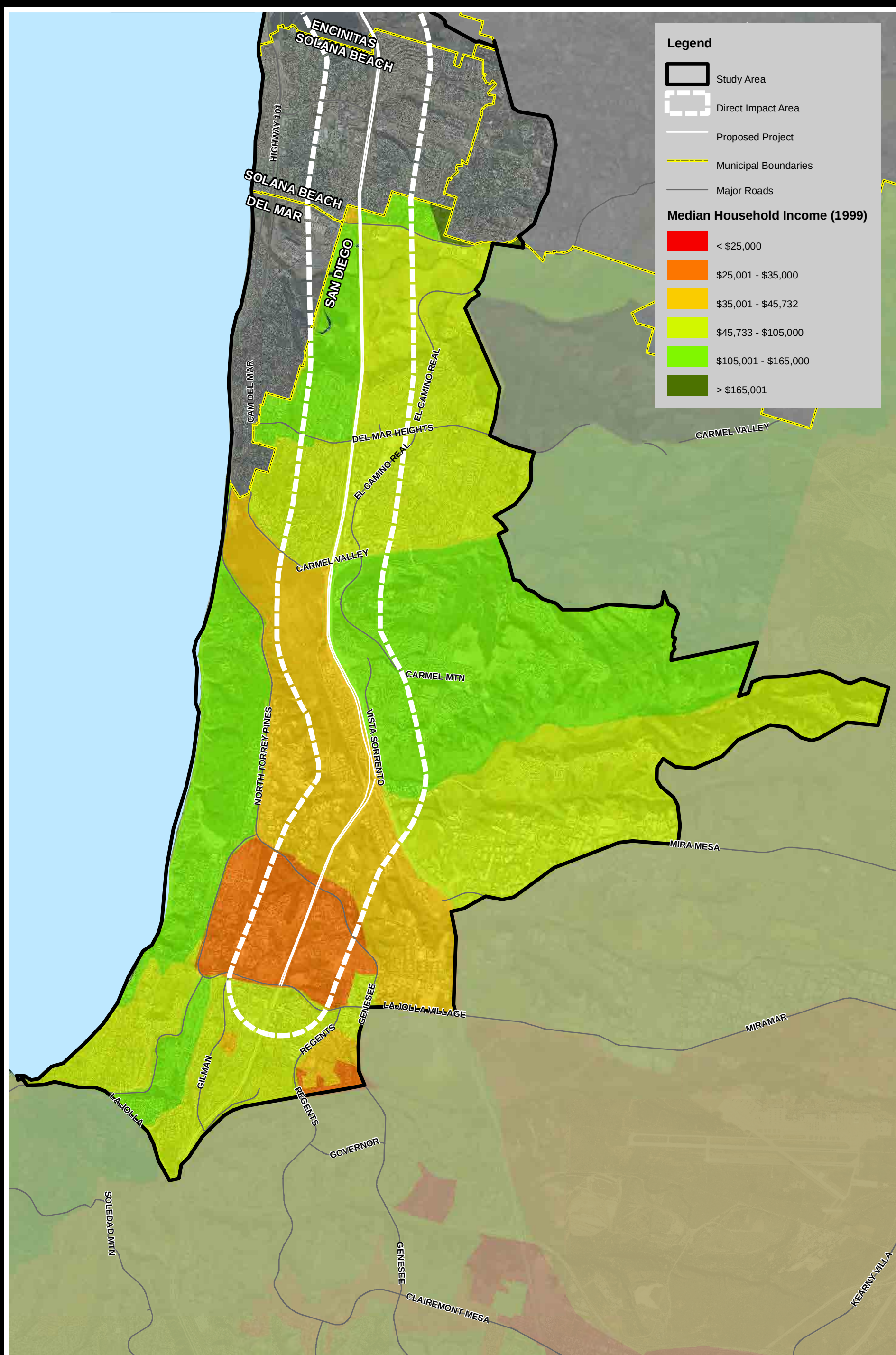
2.1.4.3 Labor Force Characteristics

As of 2000, San Diego had a population of 1,223,400 persons. Of this, the labor force consisted of 630,124 persons, of whom 88.5 percent were employed (557,382 persons) and 36,384 persons were in the armed forces (U.S. Bureau of the Census 2000).

Table 2.1-6 summarizes the labor force characteristics for San Diego and San Diego County based upon 2000 U.S. Census data including employment status, occupation, industry, and class of worker. Although the numbers vary to some degree, San Diego broadly mimics the labor force composition of San Diego County. As of 2000, the civilian labor force within San Diego (58.1 percent of the population over 16) showed an unemployment rate of 6.1 percent.

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:57,000; 1 inch = 4,750 feet



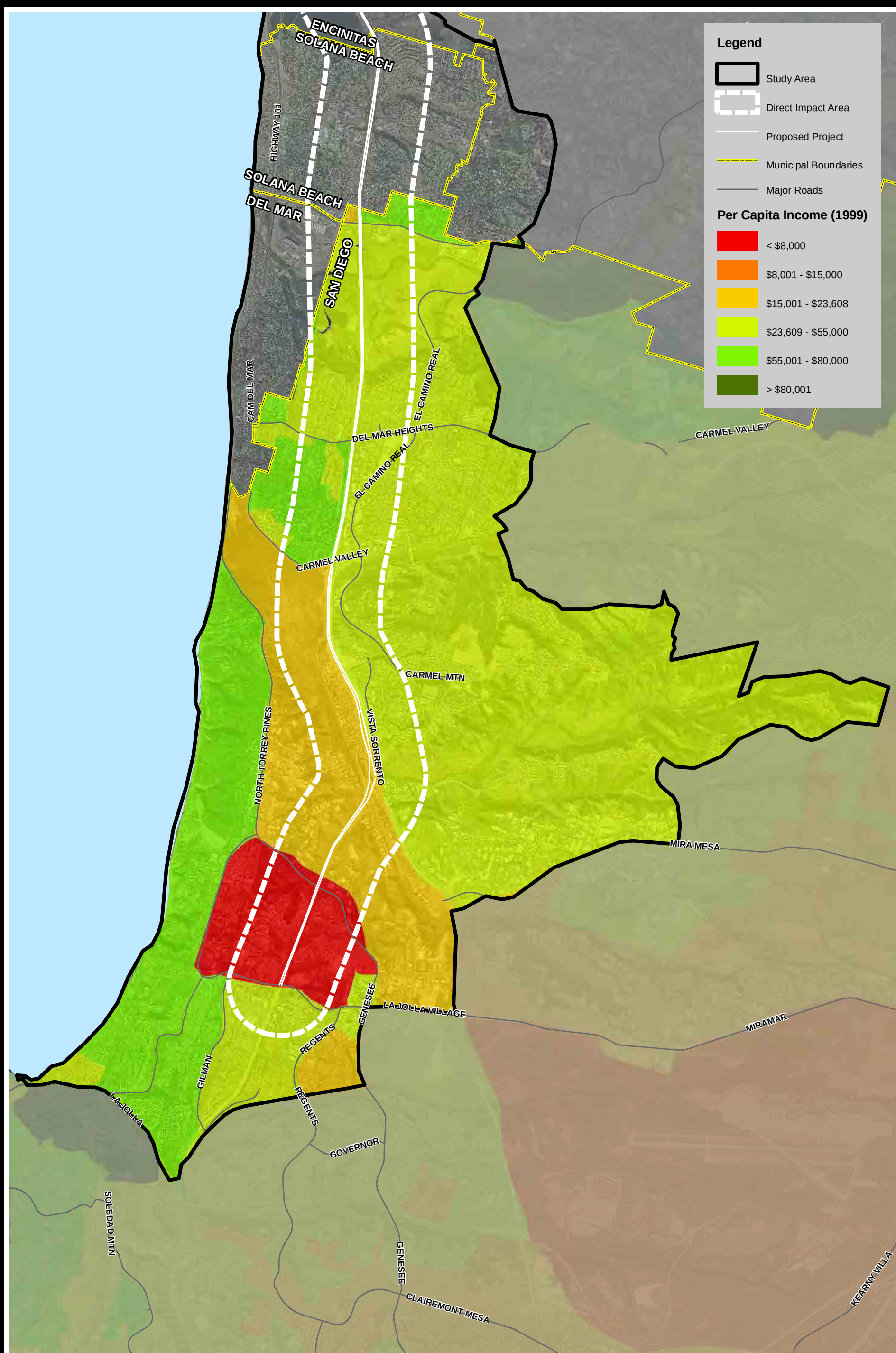
Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.1-10
SAN DIEGO
Median Household Income

I-5 NORTH COAST CORRIDOR CIA

4,750 0 4,750 Feet
SCALE: 1:57,000; 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.1-11
SAN DIEGO
Per Capita Income

Table 2.1-6. Labor Force Characteristics – San Diego and San Diego County

Subject	San Diego	San Diego County
EMPLOYMENT STATUS		
Population 16 years and over	**100.0% (959,432)**	**100.0% (2,165,034)**
In labor force	65.7% (630,124)	65.0% (1,407,152)
Civilian labor force	61.9% (593,740)	60.9% (1,319,517)
Employed	58.1% (557,382)	57.3% (1,241,258)
Unemployed	3.8% (36,358)	3.6% (78,259)
Percent of civilian labor force	6.1%	5.9%
Armed Forces	3.8% (36,384)	4.0% (87,635)
Not in labor force	34.3% (329,308)	35.0% (757,882)
Employed civilian population 16 years and over	**100.0%**	**100.0%**
OCCUPATION		
Management and professional	41.8%	37.7%
Service	15.9%	16.1%
Sales and office	26.4%	27.2%
Farming, fishing, and forestry	0.2%	0.5%
Construction, extraction, and maintenance	6.7%	8.7%
Production, transportation, and material moving	9.0%	9.9%
INDUSTRY		
Agriculture, forestry, fishing and hunting, and mining	0.3%	0.7%
Construction	4.8%	6.6%
Manufacturing	10.6%	11.0%
Wholesale trade	2.7%	3.3%
Retail trade	10.3%	11.3%
Transportation and warehousing, and utilities	3.7%	3.8%
Information	4.0%	3.5%
Finance, insurance, real estate, and rental and leasing	7.3%	7.1%
Professional, scientific, management, administrative, and waste management services	15.0%	13.3%
Educational, health and social services	20.5%	19.3%
Arts, entertainment, recreation, accommodation and food services	10.5%	9.6%
Other services (except public administration)	5.0%	5.2%
Public administration	5.3%	5.4%
CLASS OF WORKER		
Private wage and salary	75.2%	75.0%
Government	16.5%	16.0%
Self-employed (not incorporated business)	7.9%	8.7%
Unpaid family	0.3%	0.3%

Source: U.S. Bureau of the Census 2000

As of 2000, San Diego and San Diego County showed broadly similar numbers in the employment categories as listed in Table 2.1-6. San Diego had a marginally higher percentage of persons in management and professional occupations (41.8 percent) than San Diego County (37.7 percent) and slightly lower proportion in construction, extraction, and maintenance occupations (6.7 percent) than San Diego County (8.7 percent). Conversely, San Diego showed a slightly larger proportion in the professional, scientific, management, administrative, and waste management services (15.0 percent) than San Diego County (13.3 percent).

2.1.4.4 Tax Revenue and Fiscal Conditions

Property tax is imposed on real property and based upon the assessed value of the property and allocated by tax rate areas throughout the county. Assessment values are set at the time a property changes ownership and increase at no more than 2 percent annually at that value. The primary revenue sources are property and sales taxes for San Diego. In the fiscal year 2004-2005, the total revenue was $817,400,000 for San Diego of which 33 percent was derived from property taxes and 16.6 percent was derived from sales taxes. Based upon the Assessor's Parcel Number (APN) data from SanGIS data (2005), the average assessed value for a property in San Diego was $282,462, substantially above the county average of $245,946.

There are six ranges of assessed value for San Diego as depicted in Figure 2.1-12 for the study area and direct impact area, respectively. This figure illustrates within the municipality where the revenue is generated and in relationship to the location of the project. APN data from SanGIS included numerous parcels with no available data and assessed values listed as $0 or a nominal value. Thus, these parcels are included in the range of <$100,000 for assessed value. The majority of San Diego values fall within the ranges of <$100,000 and $1,000,001-$250,000,000. Areas within the $1,000,001-$250,000,000 range are geographically widespread throughout the study area.

The areas with higher assessed values within the study area and direct impact area are typically related to commercial and business areas, but not exclusively so. Some residential areas within the study area fall within the ranges of the higher assessed values and are located west of I-5 along Del Mar Heights Road. As previously indicated, the majority of the San Diego area falls within the ranges of <$100,000 and $1,000,001-$250,000,000. These areas within the direct impact area are primarily commercial and industrial land uses and are located in the region south of Carmel Valley Road/SR 56 on either side of I-5 and along the east side of I-5 north of Carmel Valley Road/SR 56, with a few smaller areas in the northern portion of the municipality.

2.1.4.5 Business Activity

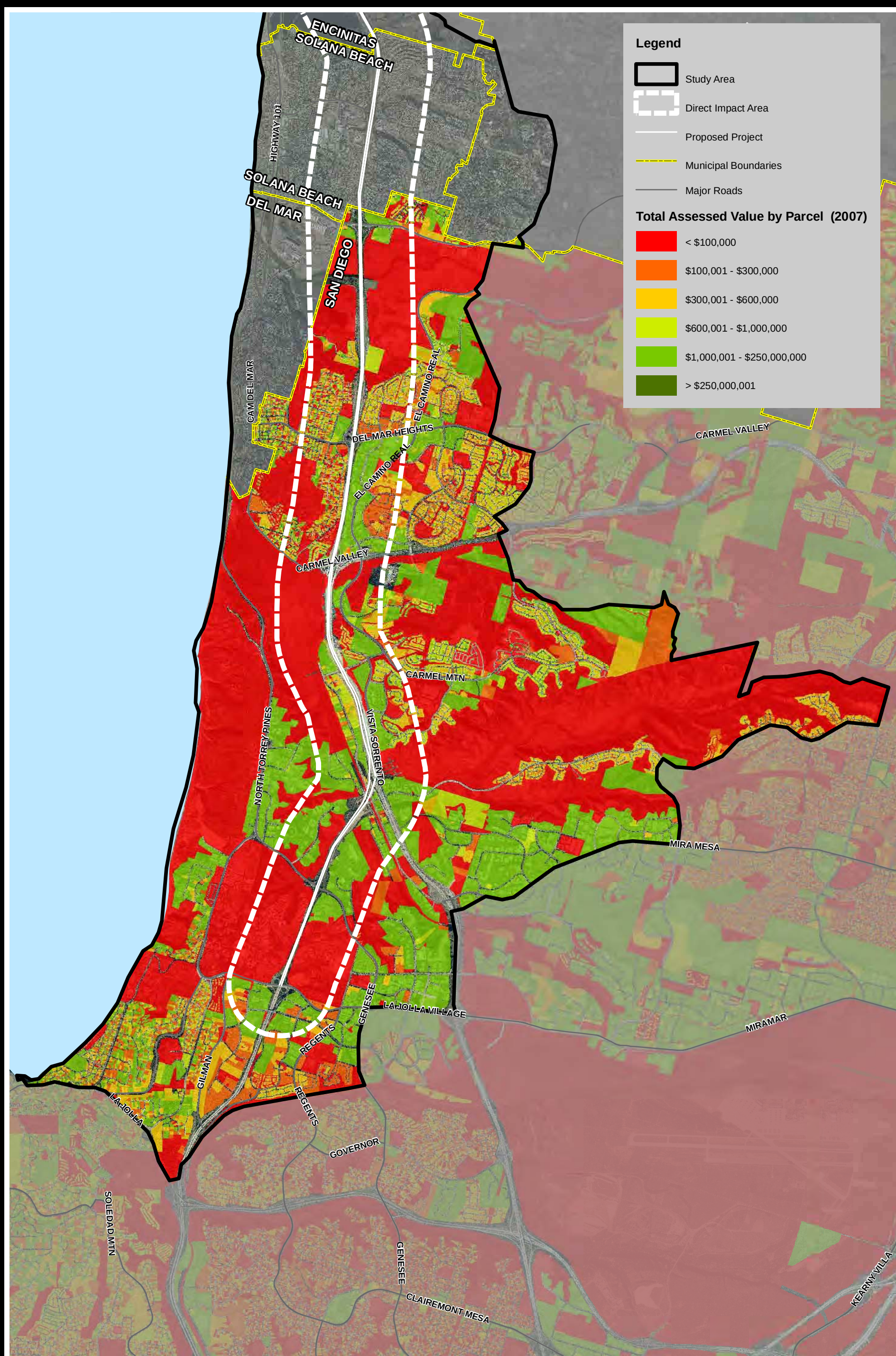
As previously shown in Figures 2.1-9a and 2.1-9b, a variety of commercial land uses, agriculture, office, and industrial areas are located within the area of direct impacts. Commercial land uses are divided into six different categories: regional commercial (i.e., wholesale trade and large regional shopping centers), community commercial (i.e., shopping centers typically with a main anchor tenant), neighborhood shopping (i.e., shopping centers with a market and/or drugstore and may include offices), commercial recreation (i.e., tourist attractions/destinations, golf courses, and recreational facilities), store front (i.e., commercial activities along major roadways not within planned centers and may include mixed uses with office and/or residential units attached), and specialty commercial center (i.e., tourist or specialty commercial shopping areas). Commercial centers are generally located along major transportation corridors including Via de la Valle, Del Mar Heights Road, Carmel Valley Road/SR 56, La Jolla Village Drive, and Sorrento Valley Road/Mira Mesa Boulevard.

The agriculture land use designation includes orchards, vineyards, nurseries, greenhouses, dairies, livestock, poultry, equine ranches, row crops, grains, and pastures. There is a small area designated for agriculture south of San Dieguito Lagoon and east of I-5.

The land use designation for office includes government office buildings (outside of military), banks, offices for businesses and professional services, some retail activities, and restaurants. Office land use

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:57,000; 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; SanGIS 2007

EDAW | AECOM

Figure 2.1-12
SAN DIEGO
Total Assessed Value

designations are located primarily east of I-5 between Del Mar Heights Road and SR 56. Additional office land use areas include the area east of I-5 along Via de la Valle, west of I-5 along Carmel Valley Road, east of I-5 between SR 56 to Roselle Street/Sorrento Valley Road, and on both sides of I-5 and I-805 south of Roselle Street/Sorrento Valley Road.

The industrial land use designation incorporates heavy manufacturing activities, light industrial and manufacturing (i.e., lumber, furniture, paper, rubber, stone, clay, and glass), clustered office/retail/ industrial uses, and industrial/strip commercial areas (i.e., public self-storage). Industrial uses are located primarily south of Carmel Valley Road to Genesee Avenue along I-5 and along the entire portion of I-805 within the study area and direct impact area.

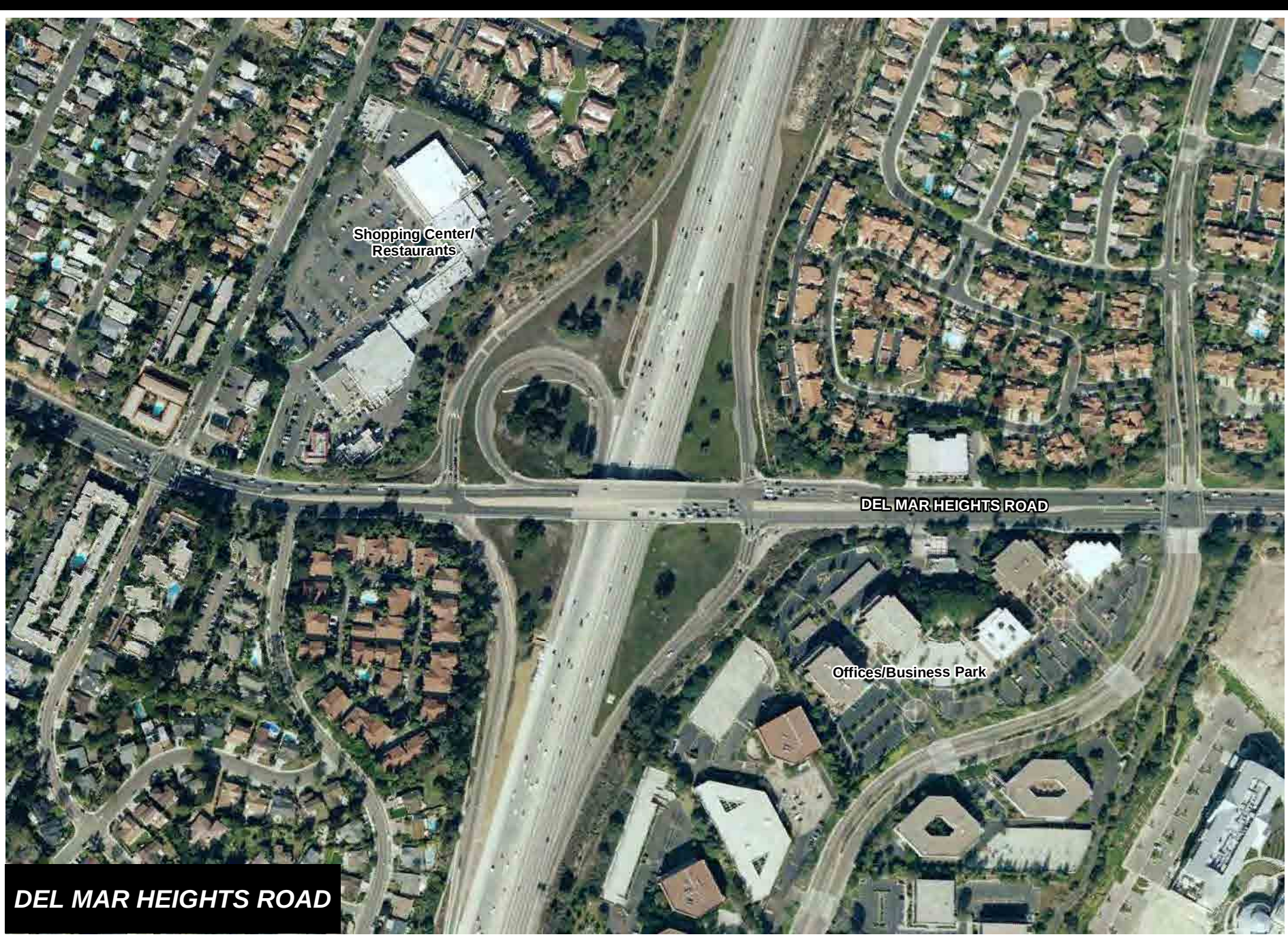
The majority of the mixed-use and specialty commercial areas are located within the direct impact area along Via de la Valle, Del Mar Heights Road, Carmel Valley Road/SR 56, and La Jolla Village Drive east and west of I-5.

Interchanges

There are seven main freeway interchanges in the San Diego portion of the study area: Via de la Valle, Del Mar Heights Road, Carmel Valley Road/SR 56, Genesee Avenue, Roselle Street/Sorrento Valley Road, and La Jolla Village Drive. These intersections are vital entry points into the northern communities of San Diego, as well as main servicing points for residents, tourists, and motorists along I-5. Business activities at each of the main interchanges in San Diego are illustrated in aerial photos in Figures 2.1-13 through 2.1-15.

- Via de la Valle (Figure 2.1-13). Although this northernmost interchange within the San Diego portion of the study area is a vital entry point into Del Mar and the Del Mar Fairgrounds and Racetrack west of I-5, it also serves as main servicing points for residents, tourists, and motorists to the east of I-5. A shopping center is located in the southeast area and a small shopping mall is located in the northeast area of the interchange. A gas station, hotel, and restaurant are located in the southwest area of the interchange. A hotel, gas station, offices, and restaurant are located in the northwest area of the interchange.
- Del Mar Heights Road (Figure 2.1-13). A shopping center and a gas station are located in the northwest area of the interchange. Numerous offices and business parks are located in the southeast area of the interchange.
- Carmel Valley Road/SR 56 (Figure 2.1-14). Offices are located in a small area in the northwest area of the interchange. A hotel, restaurant, and two gas stations are located in the northeast and offices are located in the southeast area of the interchange. SR 56 provides access to inland San Diego County.
- The Genesee Avenue interchange is located immediately south of Carmel Valley Road/SR 56 on I-5 (Figure 2.1-14). This interchange provides access for motorists to Scripps Memorial Hospital located in the southeast area of the interchange and to UCSD located in the southwest area of the interchange. Offices and business parks are located along the north side of Genesee Avenue on either side of I-5.
- Roselle Street/Sorrento Valley Road is the northernmost interchange in the study area located on I-805 (Figure 2.1-15). This interchange provides access for motorists to various businesses, offices, and industrial parks surrounding I-5 and I-805.
- The southernmost interchange of the study area from I-5 into the northern San Diego community of La Jolla is La Jolla Village Drive (Figure 2.1-15). La Jolla Village Drive also provides access to MCAS Miramar located to the east. UCSD is located along the north side of La Jolla Village Drive on either side of I-5. A hotel and a shopping center are located in the southwest area of the interchange. Businesses, a hotel, and restaurants are located in the southeast area of the interchange.

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006

EDAW | AECOM

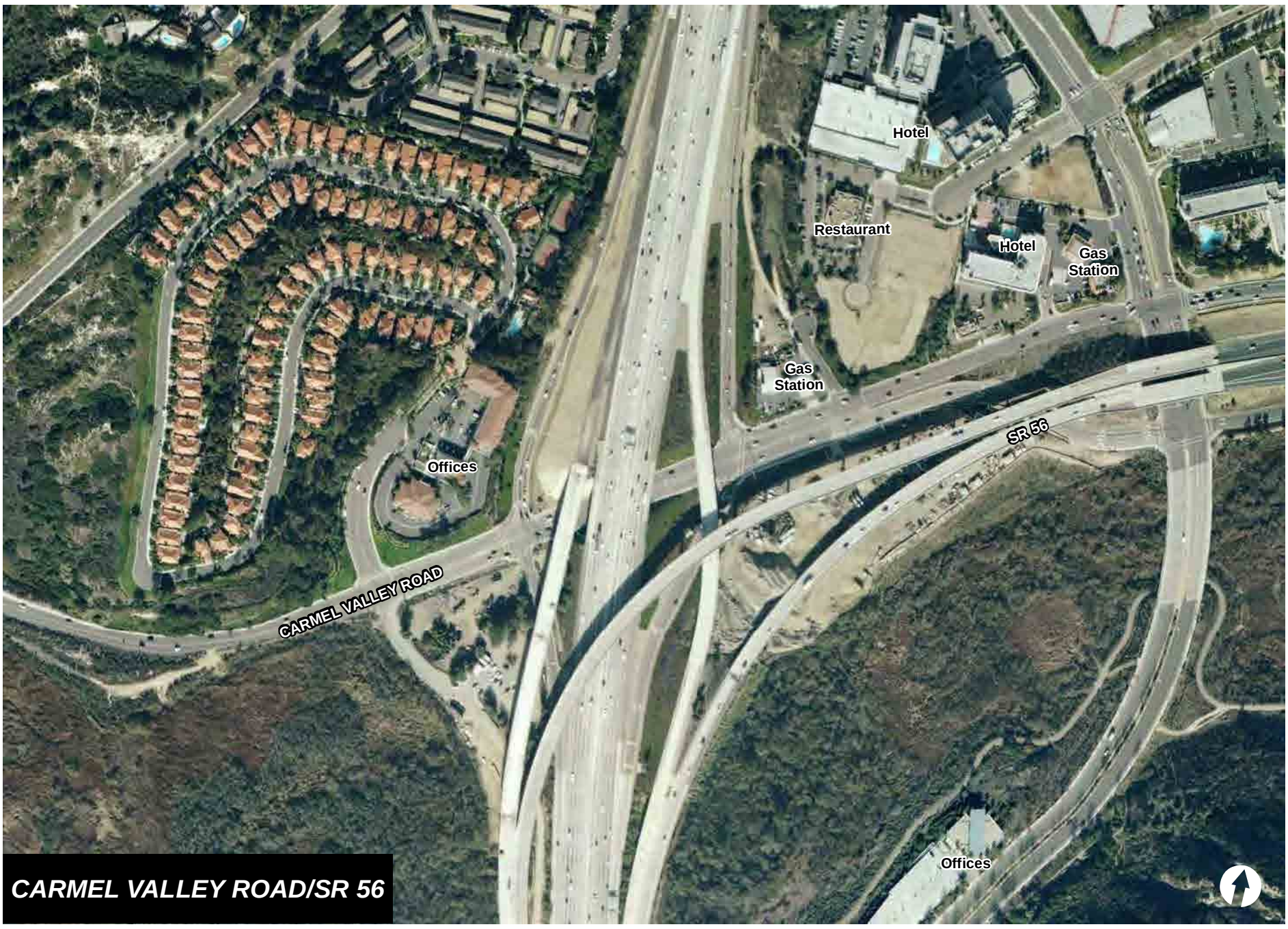
Figure 2.1-13
SAN DIEGO
Interchanges

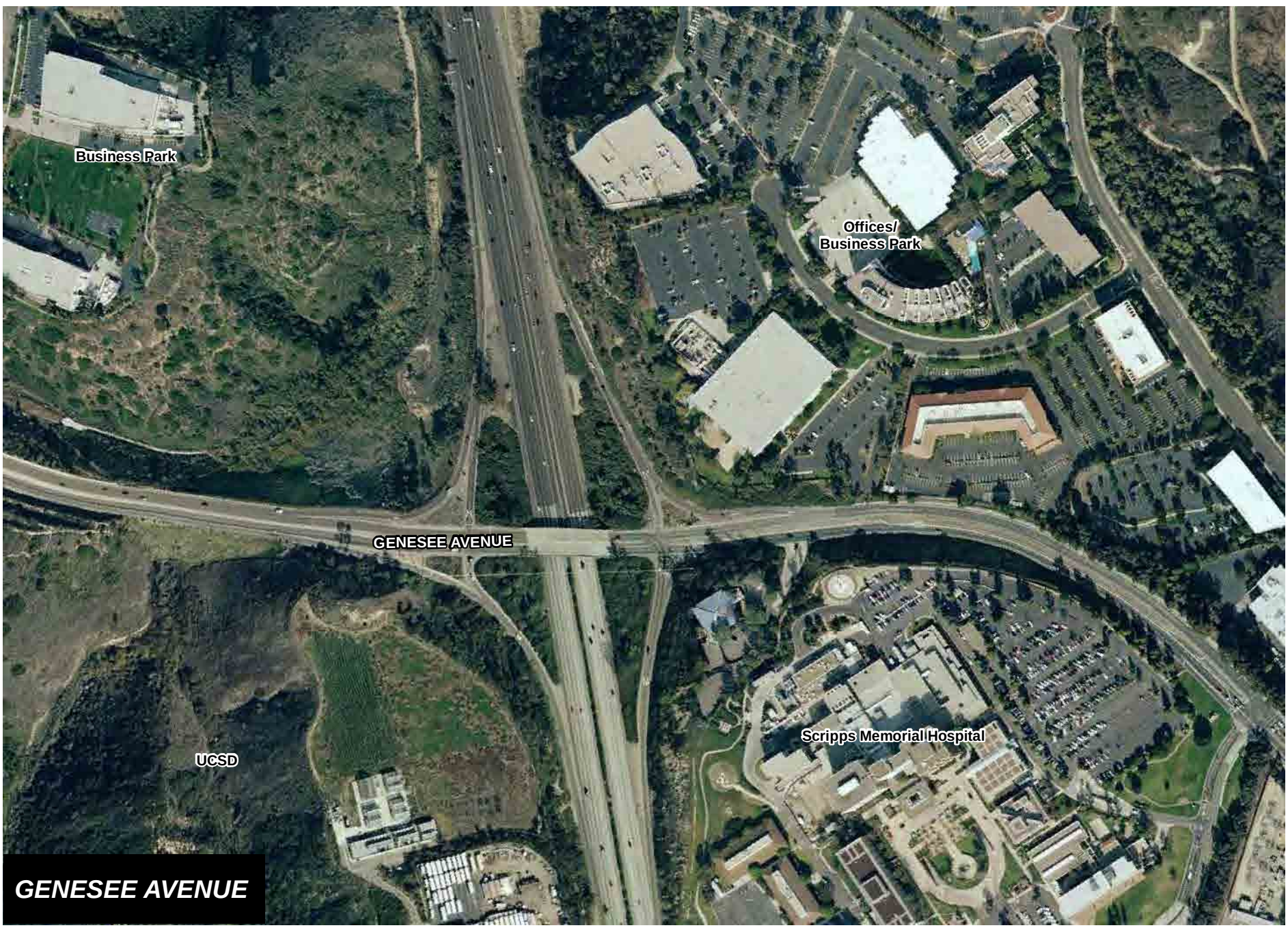
350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:4,200; 1 inch = 350 feet





Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.1-14
SAN DIEGO
Interchanges

350 0 350 Feet

I-5 NORTH COAST CORRIDOR CIA

Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.1-15
SAN DIEGO
Interchanges

675 0 675 Feet

SCALE: 1:8,100; 1 inch = 675 feet

2.2 DEL MAR

Historic overview

The City of Del Mar was incorporated in 1986 and, at 1.79 square miles, is the smallest municipality within the study area. It is also the only municipality within the study area that is not transected by the I-5 corridor. Much of the land that is currently within Del Mar was purchased by the South Coast Land Company in 1905, a firm that envisioned a unique and upscale residential community. Initial building guidelines required developments to consist solely of single-family residential homes. Residential development occurred on irregular lots to ensure individuality and view (City of Del Mar 1976).

Del Mar, similar to the rest of the southern California coastal area, experienced significant early expansion, growing from 450 to 2,800 residents between 1938 and 1958 (City of Del Mar 1976). In conjunction with this, the opening of the Del Mar Fairgrounds and Racetrack in 1935 also sparked growth as well as increased the number of tourists visiting the city.

This growth is illustrated to a degree via the aerial photographs in Figure 2.2-1, where a significant increase in residential density is shown to have occurred on the irregular lots typical of Del Mar, mainly along what is now the I-5 corridor and Camino Del Mar, within a 16-year period between 1953 and 1969, which spans the pre- and post-I-5 construction eras. Current land use patterns and lot sizes, as well as the higher densities along the coast areas and I-5, were becoming more and more evident by the end of this period. It is worth noting that Del Mar residents strongly opposed the construction of I-5 originally planned to run along 2 miles of Del Mar ocean bluffs and it was subsequently located east of the community.

2.2.1 Land Use

2.2.1.1 Major Land Uses

Study Area Land Use

Del Mar is the smallest municipality in the study area as well as in San Diego County, with regard to population (4,389 in 2000) and as well as overall land area. Similar to neighboring Solana Beach, all of Del Mar is included within the study area. The municipal boundary of Del Mar is a long and narrow area centered along Camino Del Mar. Figure 2.2-2 shows general land use patterns for Del Mar including Solana Beach in the north and a portion of San Diego to the east. Del Mar, due to its small size and desirable location, has been completely developed as an urbanized city.

Del Mar is composed primarily of residential areas with several interspersed commercial areas. The City of Del Mar LCP divides Del Mar into 10 districts, which have varying land uses (City of Del Mar 1993). Residential uses range from estate residential to high-density residential in densities between 1 and 17.5 dwelling units per acre (du/ac). Single-family residential development is the main land use, comprising 62 percent of total housing land area (Cotton Beland Associates 2000). Of this, low-density residential (1 to 4 du/ac) is the most common, which is generally located south of the Del Mar Fairgrounds and west of Camino Del Mar (City of Del Mar 1976). Very low-density and modified low-density uses (1 to 3.1 du/ac) are located in northern Del Mar, near San Dieguito Lagoon. The area west of Camino Del Mar includes a range in density from 4.3 to 17.4 du/ac. Multi-family residential developments comprise 38 percent of residential land uses in Del Mar (City of Del Mar 2000). The southern coastal area is zoned for a maximum density of 10.9 du/ac and mainly contains multi-family residential developments (City of Del Mar 1993).

Commercial uses in Del Mar are generally located along Camino Del Mar, an area known as “Village Center.” Village Center is Del Mar’s principal commercial, visitor-serving, and professional area (City of Del Mar 1993). This area is also included in the Del Mar Hotel and Del Mar Plaza Specific Plans. The Del Mar Hotel planning area limits uses to the hotel, timeshare units, and associated retail uses. The Del Mar Plaza planning area limits uses to restaurant and retail with a small percentage for office use. The primary use in Village Center, however, is commercial, serving the needs of both residents and visitors.

The Del Mar Fairgrounds and Racetrack, a regionally significant sporting and entertainment venue, is located in the northern portion of Del Mar and is separated from residential neighborhoods in the south by the San Dieguito River and floodway. This area is managed by the 22nd District Agricultural Association, an independent agency of the State of California (City of Del Mar 1993).

Area of Direct Impacts Land Use

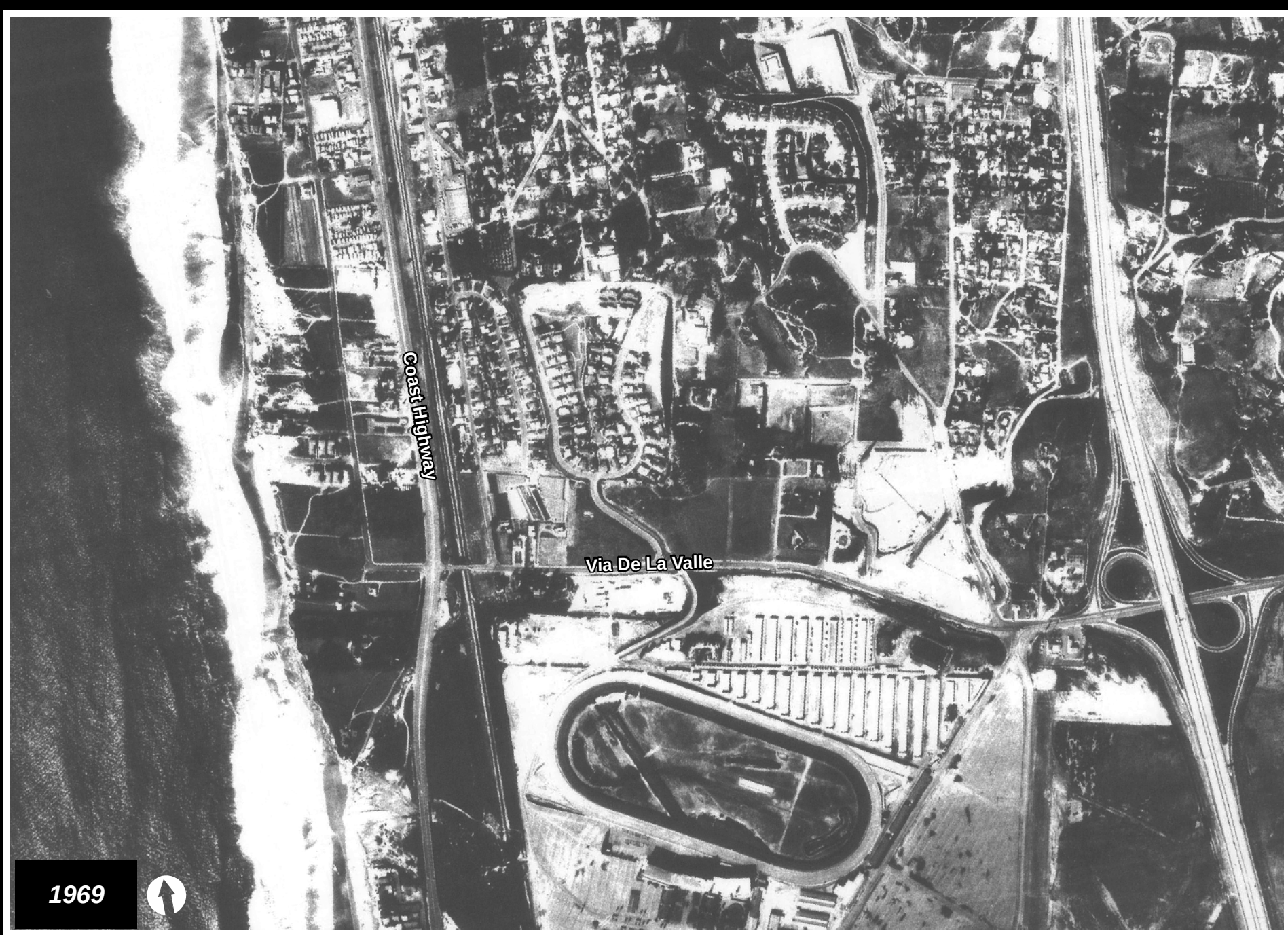
As shown in Figure 2.2-3, only the northeast corner of Del Mar is included in the area of direct impacts. This area includes the Del Mar Fairgrounds and Racetrack as well as open space associated with San Dieguito Lagoon. The majority of Del Mar is located within the wider area of secondary impacts.

2.2.1.2 Affected Urban Community and Neighborhood Characteristics

The City of Del Mar LCP (1993) identifies nine specific geographic areas, or “districts” within the municipality: North Bluff District, Valley District, 22nd District Agricultural Association (Del Mar Fairgrounds and Racetrack), North Beach, South Beach, South Bluff, South Hills, North Hills, and Village Center. The LCP identifies goals and policies within each of these districts, in addition to the railroad ROW.

There are four specific plans that cover portions of Del Mar, including the Camino Del Mar Streetscape Plan, the Del Mar Hotel and Del Mar Plaza Specific Plans, and the Carmel Valley Precise Plan. The Camino Del Mar Streetscape Plan is designed to maintain and increase community character along Camino Del Mar, the main commercial area. The Del Mar Hotel and Del Mar Plaza Specific Plans, covering areas west and east of Camino Del Mar, respectively, address the compatibility of the two developments with the general character and community goals of Del Mar. The Carmel Valley Precise Plan covers the development of approximately 15 acres of land along Carmel Valley Road.

Source: San Diego County Department of Planning and Land Use

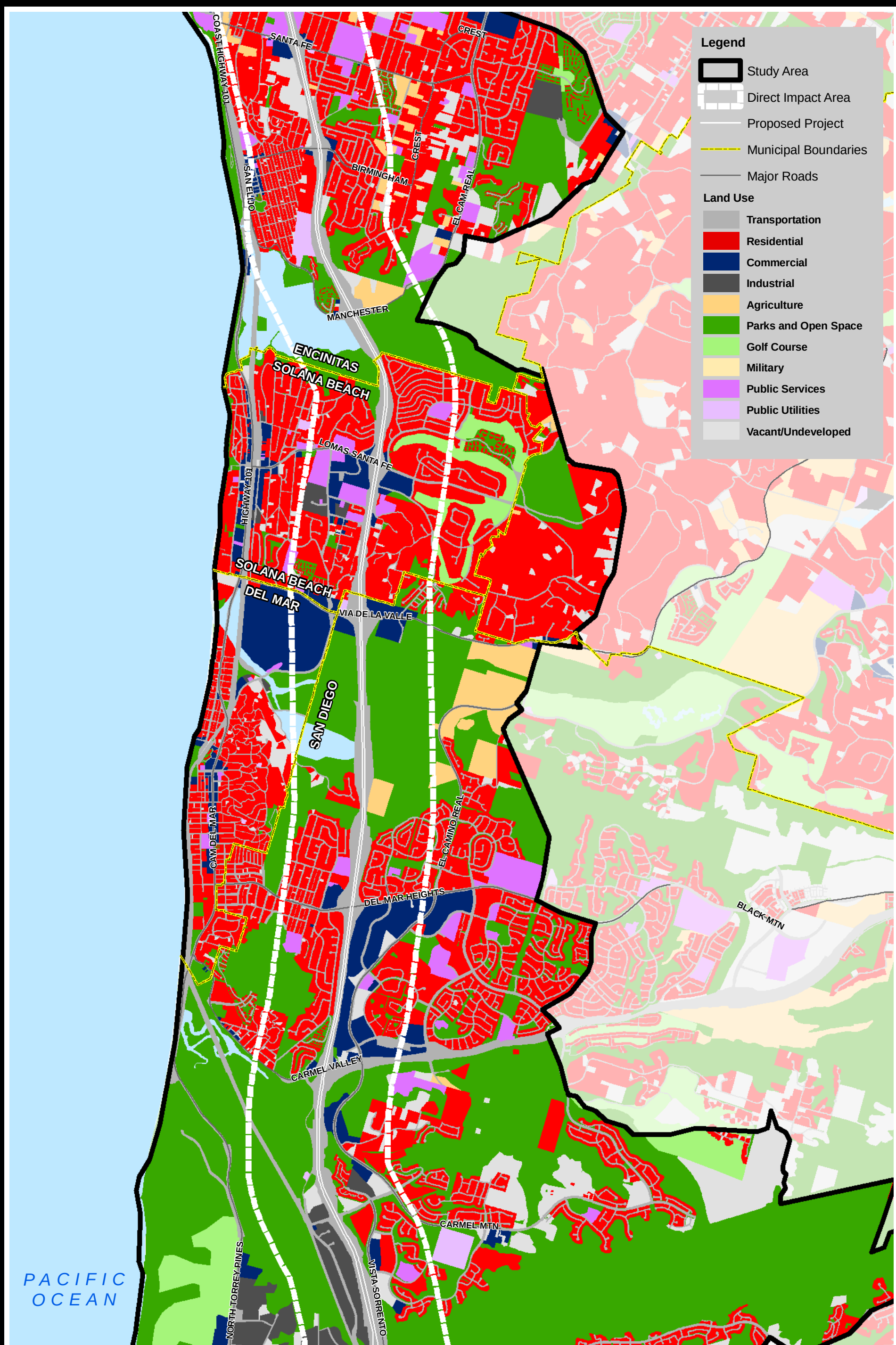


Source: San Diego County Department of Planning and Land Use

EDAW | AECOM

Figure 2.2-1
SOLANA BEACH AND DEL MAR
Historic Aerial Photographs

I-5 NORTH COAST CORRIDOR CIA



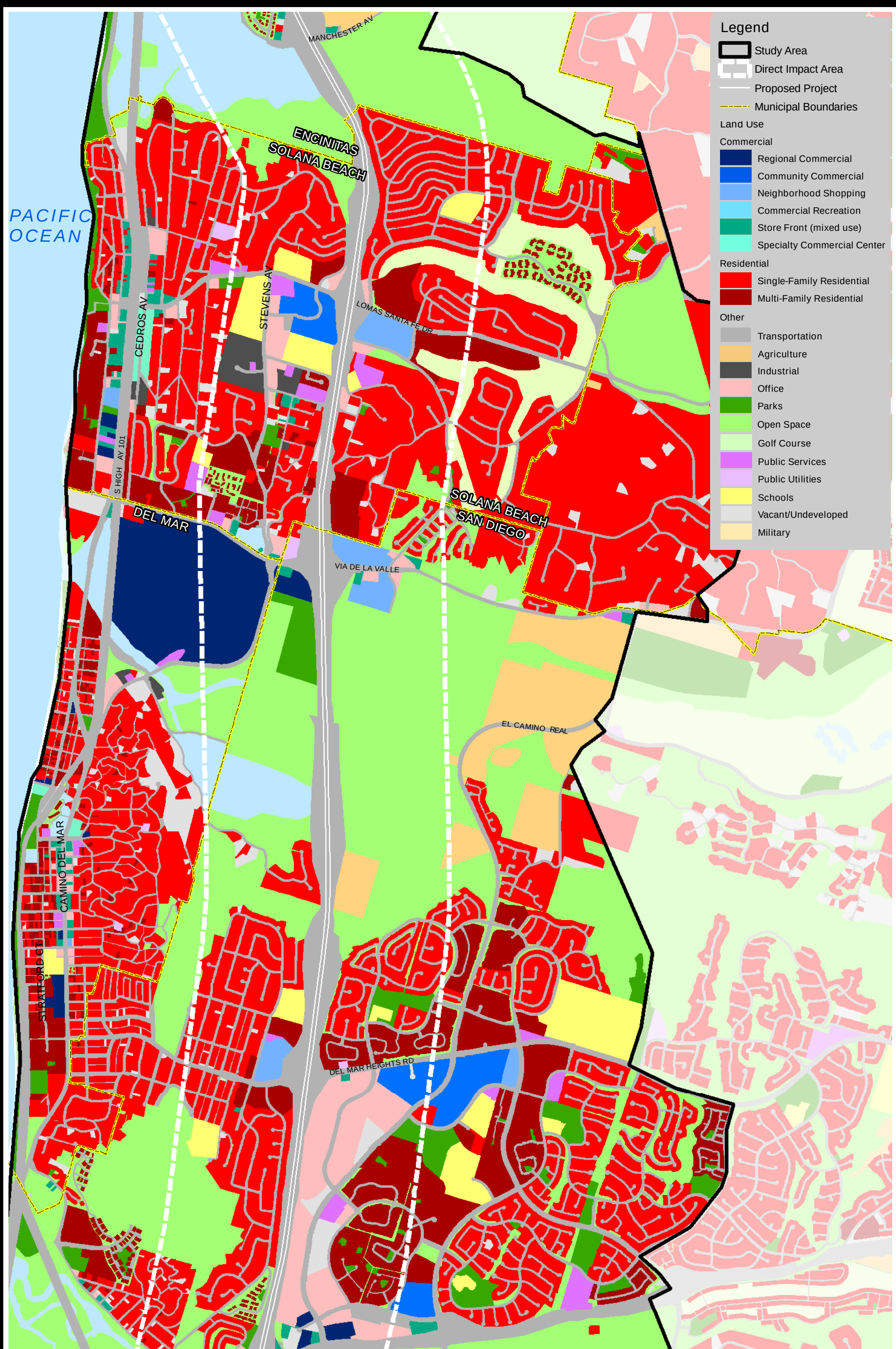
Source: SANDAG 2006

EDAW | AECOM

Figure 2.2-2
SOLANA BEACH & DEL MAR
Regional Land Use

3,500 0 3,500

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

EDAW | AECOM

Figure 2.2-3
SOLANA BEACH & DEL MAR
Direct Impact Area Land Use

2,000 0 2,000 Feet

SCALE: 1:2 ,000; 1 inch = 2,000 feet

2.2.1.3 Farmland

There are currently no designated agricultural lands in Del Mar. Though Del Mar once contributed to the agricultural production of the region, rapid growth has led to the subsequent development of these agricultural lands for residential uses.

2.2.1.4 Development Trends

Del Mar has been nearly entirely developed since its incorporation in 1986. Del Mar has experienced lower population growth than the region as a whole (Cotton Beland Associates 2000). Slower growth is most likely due to low vacancy rates, few multi-family developments, and high property cost (Cotton Beland Associates 2000). The 1999 to 2004 Housing Element of the Community Plan identified the possible construction of 51 residential units throughout the city. Based on development between 1991 and 1999, the City had constructed about seven units annually (Cotton Beland Associates 2000). As Del Mar is extensively developed, future development will most likely involve infill and redevelopment on existing lots (Cotton Beland Associates 2000). Chapter 7.0, Growth, discusses in more detail, historical, current, and projected growth trends within Del Mar.

2.2.1.5 Jobs/Housing Balance

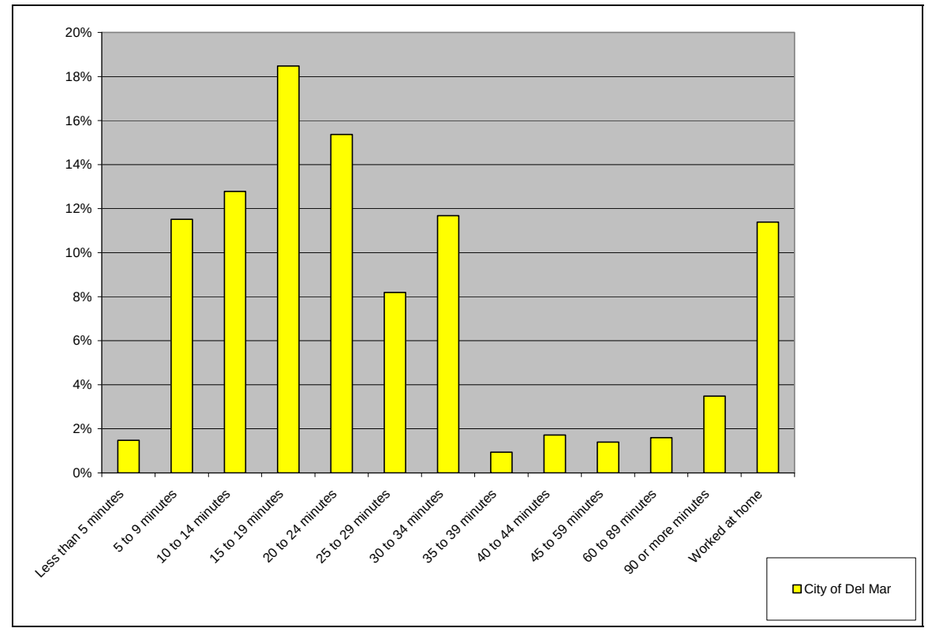
The land use patterns of housing, in relation to employment (commercial and office locations) and commercial centers, greatly influence commuting patterns and the various types of transportation used within Del Mar. The lengthening commute times and increasing traffic congestion, often associated with urban sprawl, have brought the concept of the need for a “jobs/housing balance” to the forefront in many communities. The primary element of the jobs/housing balance concept is to locate residential areas near employment centers and commercial services, with the premise that commuting, the overall number of vehicle trips, and the resultant vehicle miles traveled can be reduced.

“Smart growth” is one concept that, among other goals, attempts to locate housing around a variety of transportation choices and create walkable neighborhoods. SANDAG provides an incentive program to promote smart growth development within the region, including Del Mar (SANDAG 2005). In addition to the regional smart growth incentive program, the Del Mar Zoning Ordinance has established a residential-commercial designation along Stratford Court allowing flexibility to establish mixed-use developments in areas that would otherwise be restricted to commercial use (SANDAG 2004a). Such programs increase the jobs/housing balance within Del Mar.

Del Mar, though designed as a primarily residential community, has a number of policies and goals related to maintaining a job/housing balance. Goal IIB of the LCP Land Use Element states the need to “focus major retail and office activity into an economically viable, pedestrian-oriented area that serves the need of both residents and visitors” (City of Del Mar 1993). Goal IIC states the need to “preserve the economic integrity of the community” (City of Del Mar 1993).

The 2000 U.S. Census gathered information on the amount of time that people spend commuting to and from the workplace, in turn giving a general idea of those who work and live within proximate distance of each other. As of 2000, Del Mar had a population of 4,389. Of this, 2,548 were in the labor force, of which 97.1 percent were employed (2,475 people) (U.S. Bureau of the Census 2000). As the boundary of the study area within Del Mar is the same as that of the municipality, commute times shown in Table 2.2-1 are representative of the study area in Del Mar and the city as a whole. The largest proportion of people in Del Mar (approximately 15.4 percent) spent 20 to 24 minutes commuting. Given the small area of Del Mar, the vast majority of these commuters are very likely to work outside of the community. Those commuting less than 15 minutes, however, may both live and work within Del Mar, thereby reducing commute times and contributing to a positive job/housing balance.

Table 2.2-1. Commute Times – Del Mar



Source: U.S. Bureau of the Census 2000, Summary File 3

Approximately 9 percent of the employed population within Del Mar commutes over 35 minutes to work. However, as discussed previously, regional incentives, redevelopment, and City-defined goals attempt to control the location, intensity, and nature of jobs and housing in order to encourage a reduction in vehicle trips and miles traveled.

2.2.1.6 Adopted Planning Goals and Policies

The City of Del Mar has a community plan and LCP, as well as several additional plans for specific regions of the city. The proposed project does not traverse, or directly affect Del Mar; therefore, no specific policies or goals in the Del Mar plans pertain to the proposed project. However, a summary of those plans pertinent to Del Mar is provided below.

City of Del Mar Community Plan and LCP

The City of Del Mar Community Plan (synonymous with a General Plan) contains stated community goals and policies designed to shape the long-term development of the city, as well as protect its environmental, social, cultural, and economic resources. As all of Del Mar is located within the California Coastal Zone, the LCP for the City of Del Mar is the main planning document for the City. The LCP outlines issues and policies related to the requirements of the California Coastal Act, including land use. The LCP includes the Land Use Element, which describes and shows designated land uses within Del Mar.

In addition to the Land Use Element of the LCP and associated maps, the Zoning Code is the principal tool used by Del Mar to implement land use policy. The Zoning Code must be consistent with the Community Plan and land use designations stated in the LCP. The Zoning Code includes a map delineating zoning boundaries and text that explains permitted uses within zones and standards.

Additional Del Mar Plans

Additional planning documents for Del Mar include the Carmel Valley Precise Plan, Del Mar Hotel Specific Plan, Del Mar Plaza Specific Plan, San Dieguito Lagoon Program, and the Parking Master Plan, all of which are in compliance with the Zoning Code and LCP. The Carmel Valley Precise Plan covers a residential area in south Del Mar, north of Carmel Valley Road and east of Camino Del Mar. The Del Mar Hotel and Del Mar Plaza Specific Plans are located west and east of Camino del Mar, respectively. The San Dieguito Lagoon Plan is an enhancement plan that includes implementation guidelines and some land use guidance surrounding the lagoon (City of Del Mar 1976). The Parking Master Plan evaluates parking conditions and identifies parking recommendations within the Village Center and north Del Mar beach areas.

2.2.2 Population and Housing

In the early years of the 20th century, community building guidelines required developments to consist solely of single-family residential homes, ensuring the density of new residential developments in Del Mar was controlled from early in its history. When the South Coast Land Company built the Stratford Inn in 1910, it became a focal point of town and a destination for wealthy tourists (City of Del Mar 2005). In the 1920s, the City received electricity from San Diego Gas and Electric and the residential areas of Del Mar began developing at a record pace. From 1912 to 1920, beautiful new homes soon became landmarks. Due to the Great Depression, home building came to a halt in the late 1930s as it did throughout the region.

By 1959, Del Mar became incorporated as a city. As the University of California, San Diego came into being in the 1960s, its presence influenced the social, cultural, and political life of the area and Del Mar gained new residents. Del Mar grew to become home to a major publishing concern and attracted artists, writers, and businesses (Del Mar Historical Society 2005). Due to the small land area of Del Mar, its population has not mirrored that of the surrounding region and after an early period of development has shown historically slow growth, and at times, decline.

2.2.2.1 Population and Growth

Del Mar, as of 2000, showed a population of 4,389 persons, or approximately 1.5 percent of the total population of San Diego County (2,813,833 persons). In contrast to growth trends in the county, Del Mar experienced a decline in population over the last two decades, decreasing by 3 percent between 1980 and 1990 (5,017 to 4,860 persons), and 10 percent between 1990 and 2000 (4,860 to 4,389 persons) (SANDAG 2004b). A 2004 estimate indicated a population of 4,555 persons showing an estimated population growth of 4 percent. Del Mar's rate of growth was consistently lower than that shown by San Diego County, which showed 34 percent between 1980 and 1990 and 13 percent between 1990 and 2000 and an estimated growth of 7 percent 2000-2004 (U.S. Bureau of the Census 2000). Long-range forecasts for Del Mar indicate a continuation of slight population growth, with the population anticipated to increase by 8 percent in 2000-2030, a much lower number than predicted for the county (37 percent) (SANDAG 2004b).

As of 2000, the population within the study area, which includes the entire municipality of Del Mar, was 4,389. As shown in Figure 2.2-4, Del Mar was divided into two distinct population density areas. The northeastern portion of Del Mar that includes the Del Mar Fairgrounds and Racetrack and the San Dieguito River channel had very low population densities, from 1 to 1,500 persons per square mile, as there are generally few residential developments in this area. The southwestern and coastal areas of Del Mar contained higher population densities, ranging from 3,001 to 4,500 persons per square mile. As illustrated in Figure 2.2-4, the higher population densities in Del Mar are located outside of the area of direct impacts. The northeast portion of Del Mar that lies within the area of direct impacts is generally free of any residential development.

2.2.2.2 Race and Ethnicity

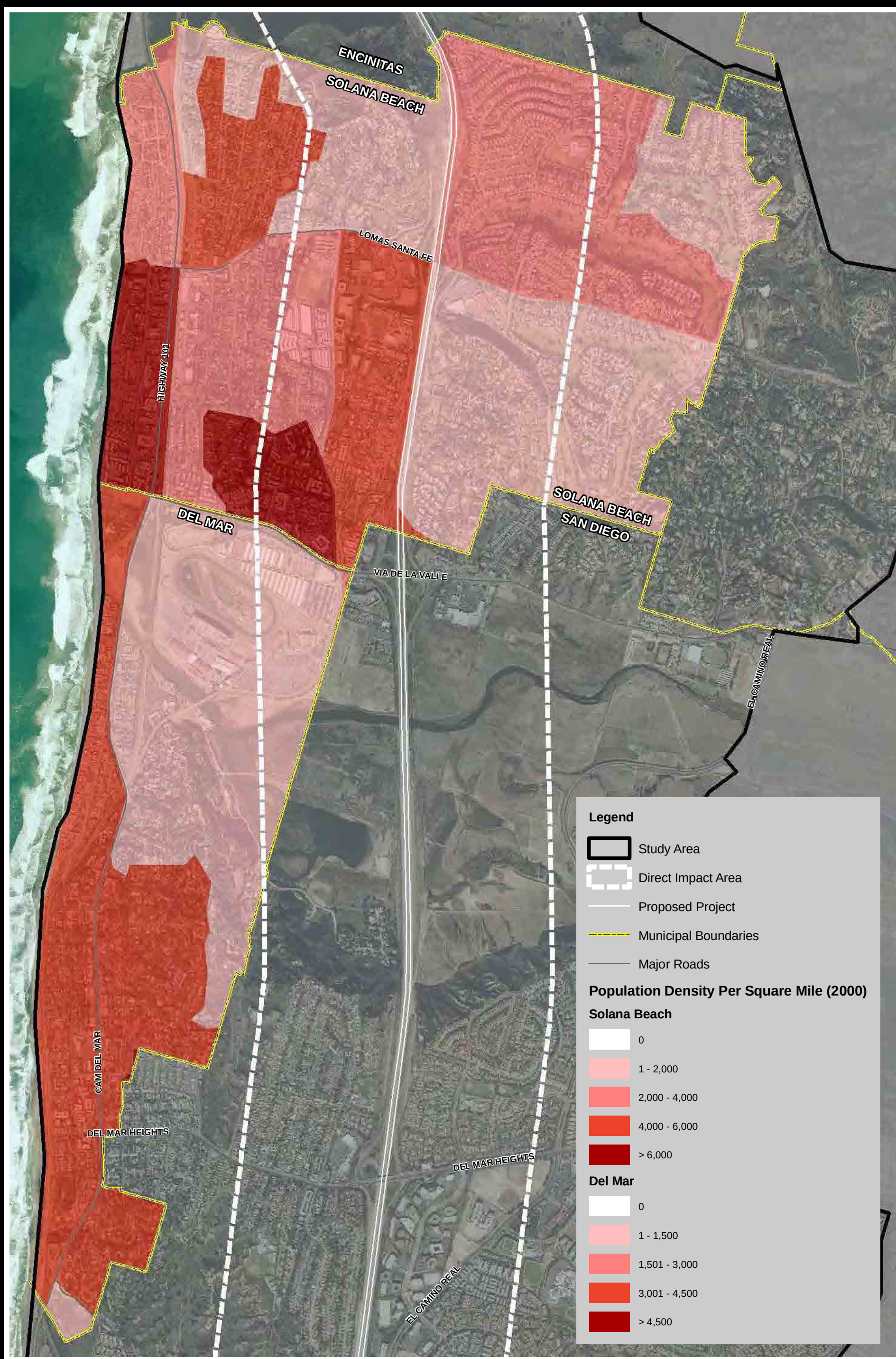
As shown in Table 2.2-2, as of 2000, Del Mar was predominantly White (94.1 percent). The population consisted of extremely small percentages of Black/African American (0.3 percent), American Indian and Alaskan Native (0.3 percent), and Native Hawaiian/Pacific Islander (0.1 percent) populations. There were slightly higher proportions of Asian (2.9 percent), "some other race" (0.6 percent), and "two or more races" (1.7 percent) populations.

Table 2.2-2. Race and Ethnicity – Del Mar and San Diego County

	Del Mar		San Diego County	
White	94.1%	(4,132)	66.5%	(1,871,839)
Black/African American	0.3%	(11)	5.7%	(161,480)
American Indian and Alaskan Native	0.3%	(15)	0.9%	(24,337)
Asian	2.9%	(126)	8.9%	(249,802)
Native Hawaiian/Pacific Islander	0.1%	(5)	0.5%	(13,561)
Some other race	0.6%	(25)	12.8%	(360,847)
Two or more races	1.7%	(75)	4.7%	(131,967)
Hispanic	3.9%	(170)	26.7%	(750,965)
Total Minority	9.1%	(399)	45.0%	(1,256,000)

Source: U.S. Bureau of the Census 2000

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.2-4
SOLANA BEACH & DEL MAR
Population Density

1,700 0 1,700

As of 2000, the breakdown race and ethnicity within the population of Del Mar was markedly different from that of San Diego County, namely via lower levels of diversity. As shown in Table 2.2-2, all minority populations were proportionately less than half of the percentages present within the county. Conversely, the White population was much higher than that of the county. As of 2000, the total minority population in Del Mar was 9.1 percent of the total population, which was much substantially lower than that of the county. As shown in Figure 2.2-5, the majority of Del Mar contained a very low proportion of minority groups within the total population. The exception was in the very southern tip of Del Mar, where the proportion of total minority was between 41 and 60 percent of the population.

2.2.2.3 Age

As shown in Table 2.2-3, as of 2000, the population of minors (under 18 years), at 13.6 percent, was markedly below that of the county average. Conversely, the working age population of Del Mar (18-64 years), at 72.3 percent, was marginally above that of San Diego County. Similarly, the proportion of senior citizens (over 65 years) within Del Mar, at 14.1 percent, was marginally above that of San Diego County, as was the city's median age of 43.5 years. These elevated age levels suggest a greater percentage of elderly and/or retired persons reside within Del Mar compared to the County as a whole. As shown in Figure 2.2-6, elevated populations of senior citizens were generally present in the central area of the municipality east of Camino Del Mar.

Table 2.2-3. Age Breakdown – Del Mar and San Diego County

	Del Mar		San Diego County	
Under 18 years	13.6%	(598)	25.7%	(811,038)
18 to 64 years	72.3%	(3,171)	63.1%	(1,776,442)
Over 65 years	14.1%	(620)	11.2%	(313,750)
Median Age	43.5 years		33.2 years	

Source: U.S. Bureau of the Census 2000

2.2.2.4 Housing

As shown in Figure 2.2-7, the area within the northeastern portion of the municipality, near the Del Mar Fairgrounds and Racetrack and the San Dieguito River channel, showed relatively low levels of housing density. As shown in Figure 2.2-7, this northeast portion of Del Mar is also the part that is included in the direct impact area. Conversely, the coastal area and southern portion of Del Mar show significantly elevated housing densities. Additionally, an area of moderate density was seen in central Del Mar. It is worth noting that the housing density patterns generally coincide with increased age and higher population density. As of 2000, the average household size in Del Mar was 2.01 persons, compared to the county average of 2.73. As of 2000, Del Mar households made up only 0.26 percent of the county total (2,557 of 994,677, respectively).

Affordable Housing

The City of Del Mar Community Plan and LCP contain stated community goals and policies designed to shape the long-term development of the city. The City of Del Mar's Planning Department has developed a affordable housing plan in the Housing Element of the Community Plan, which outlines the affordable housing needs and the actions that must be taken to achieve these goals. Due to the limited amount of available land in Del Mar, the general goals of the long-range policy for housing opportunities are to "conserve and improve *existing* stock of affordable housing," as well as promote a variety of equal housing opportunities (City of Del Mar 2000). The Condominium Conversion Ordinance is designed to retain a steady number of low- and moderate-income housing units within Del Mar.

Between 1995 and 1999, three rental units were converted into condominiums under the Condominium Conversion Ordinance. The Torrey Del Mar Apartments, located on Carmel Valley Road, is an example of affordable housing within Del Mar. As mentioned previously, no residential developments are located within the direct impact area of Del Mar, including affordable housing developments.

2.2.3 Public Facilities and Services

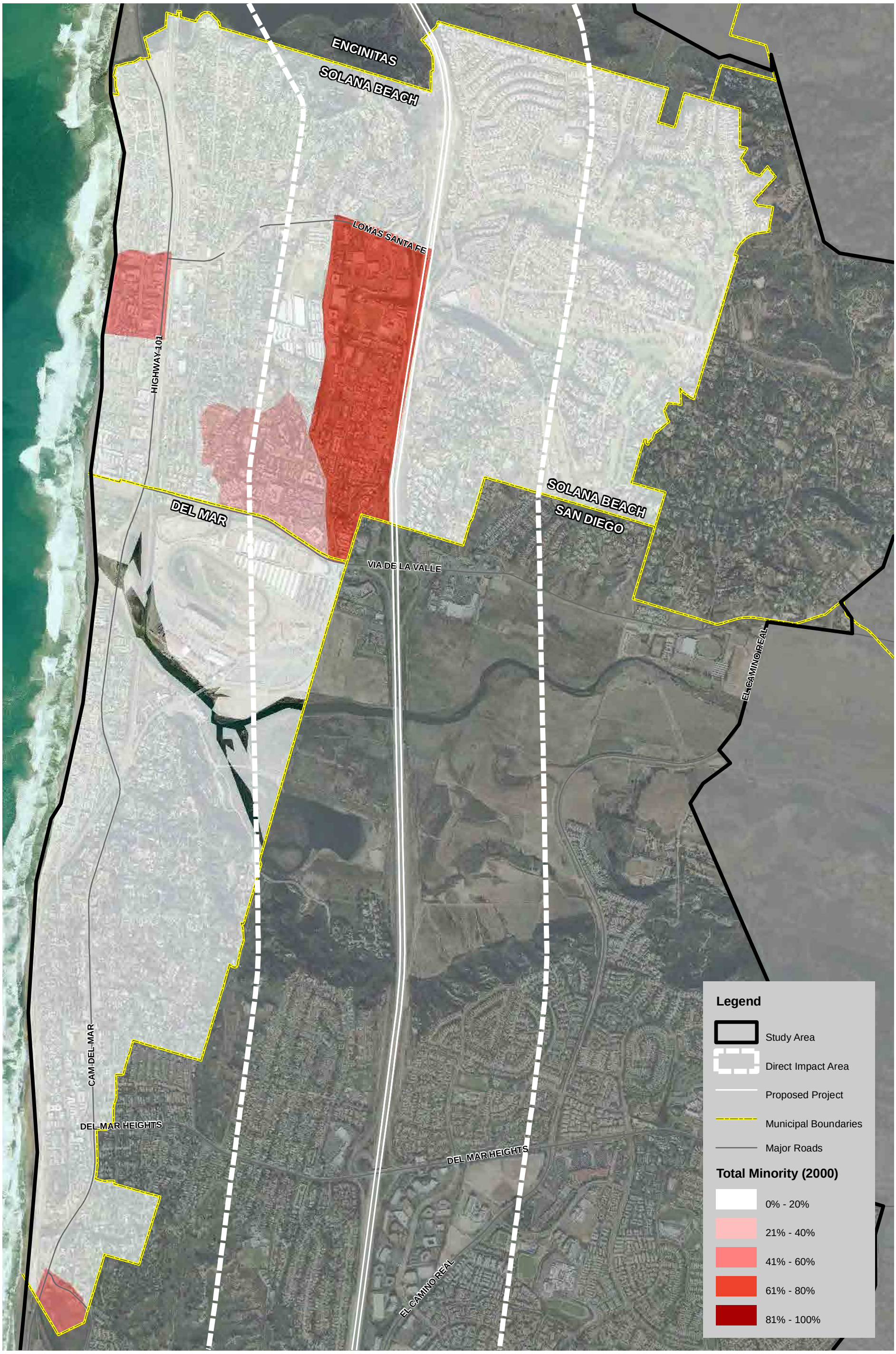
2.2.3.1 Schools

Del Mar elementary schools are served by the Del Mar School Union District. Del Mar is also served by San Dieguito Union High School District, which oversees middle and high schools in Encinitas, Solana Beach, and Del Mar, in addition to several unincorporated communities in the vicinity. Schools that serve Del Mar are generally located outside of the municipality, in the City of San Diego. As shown in Figure 2.2-8, there are seven schools located within the study area impacts, including five elementary schools, a middle school, and a high school. Two the elementary schools, the middle school, and the high school are located in the area of secondary impacts. Three elementary schools are located in the area of direct impacts. Del Mar Hills Academy is the closest to the I-5 corridor and is adjacent to the west side of I-5 north of Del Mar Heights Road. Del Mar Hills Academy of Arts and Sciences is located on Mango Drive adjacent to the west side of I-5, north of Del Mar Heights Road. Solana Highlands and Del Mar Heights elementary schools are also in the area of direct impacts. Solana Highlands Elementary is located on Long Run Drive on the east side of I-5 and north of Del Mar Heights Road. Elementary schools within the area of secondary impacts include Ashley Falls, Carmel Del Mar, Carmel Valley Middle School, and Torrey Pines High.

2.2.3.2 Police Protection

The San Diego County Sheriff's Department provides law enforcement services through contract for the City of Del Mar. These services are provided by deputy sheriffs and professional staff from the Encinitas Sheriff's Station. In addition to Del Mar, the Encinitas Sheriff's Station also patrols Encinitas, Solana Beach, the unincorporated areas of Rancho Santa Fe, Fairbanks Ranch, the Rancho Cielo development, and the San Onofre-MCB Camp Pendleton coastal area. The Sheriff's Station is located at the northeast corner of Encinitas Boulevard and El Camino Real, outside of the study area. The Sheriff's Station is also home to the NCTD's Railroad Enforcement Unit, which is responsible for patrolling the Coaster ROWs and railroad operations.

I-5 NORTH COAST CORRIDOR CIA

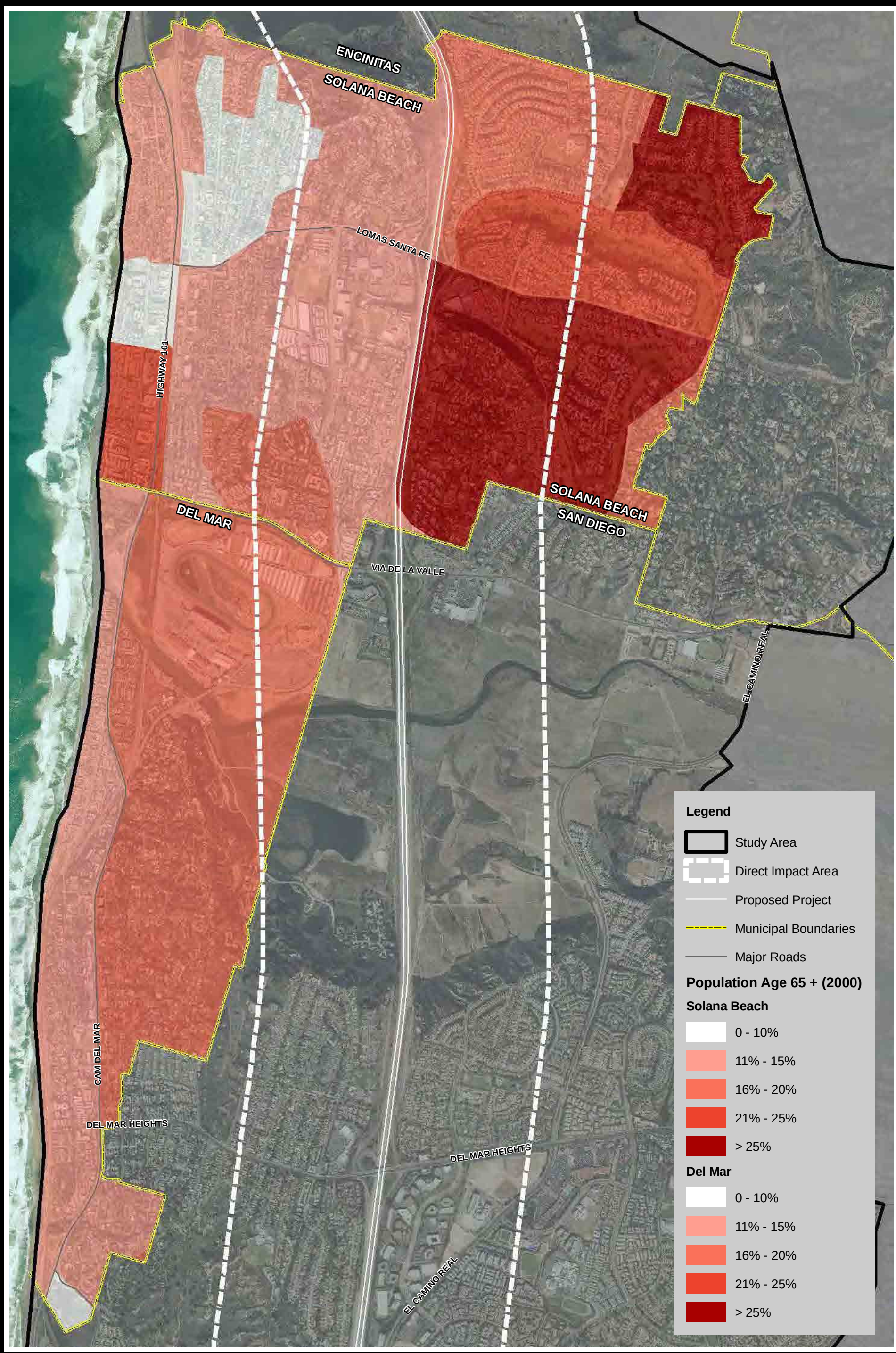


Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.2-5
SOLANA BEACH & DEL MAR
Proportion of Total Minority

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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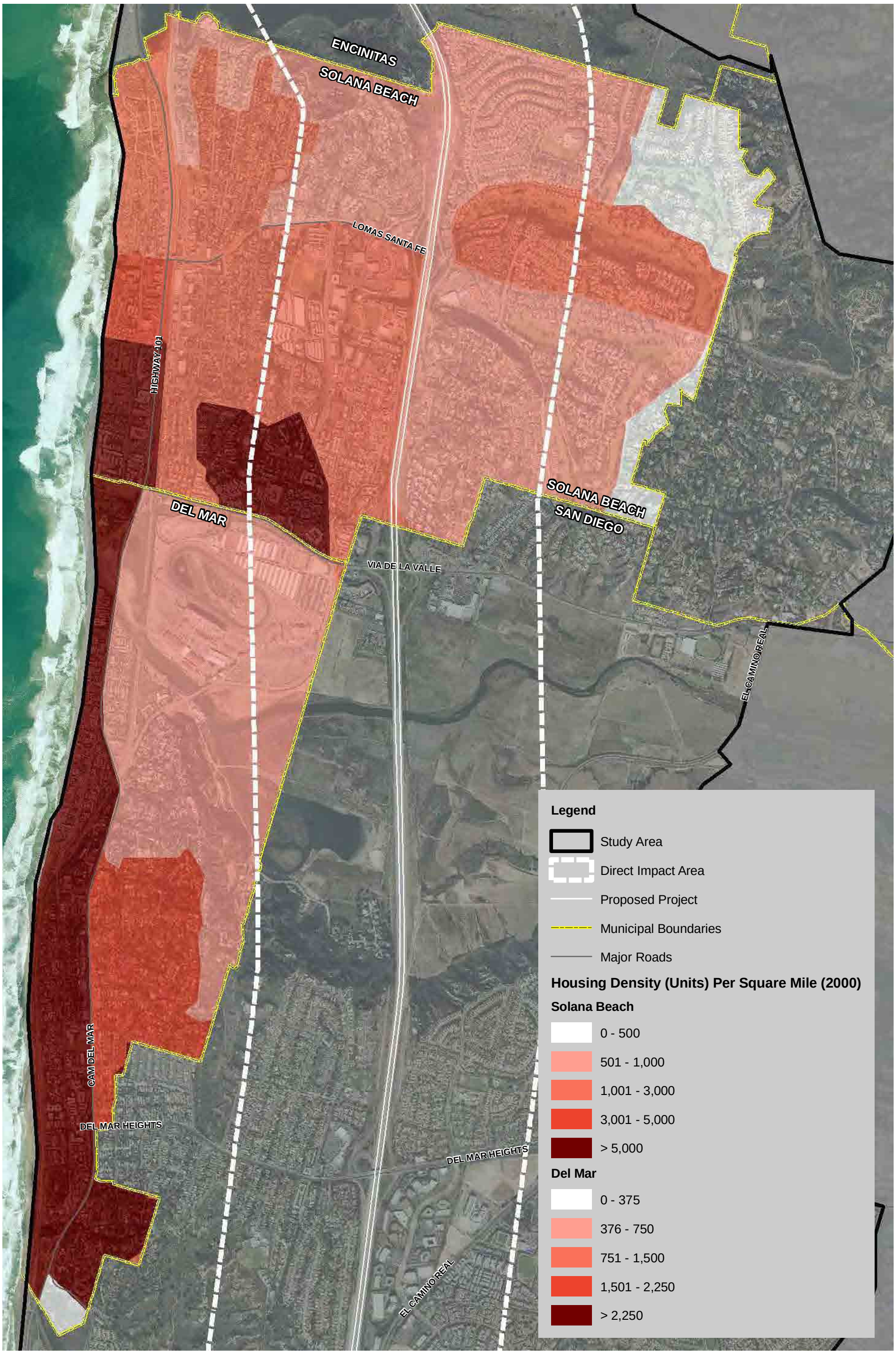
Figure 2.2-6
SOLANA BEACH & DEL MAR
Population Age 65 +

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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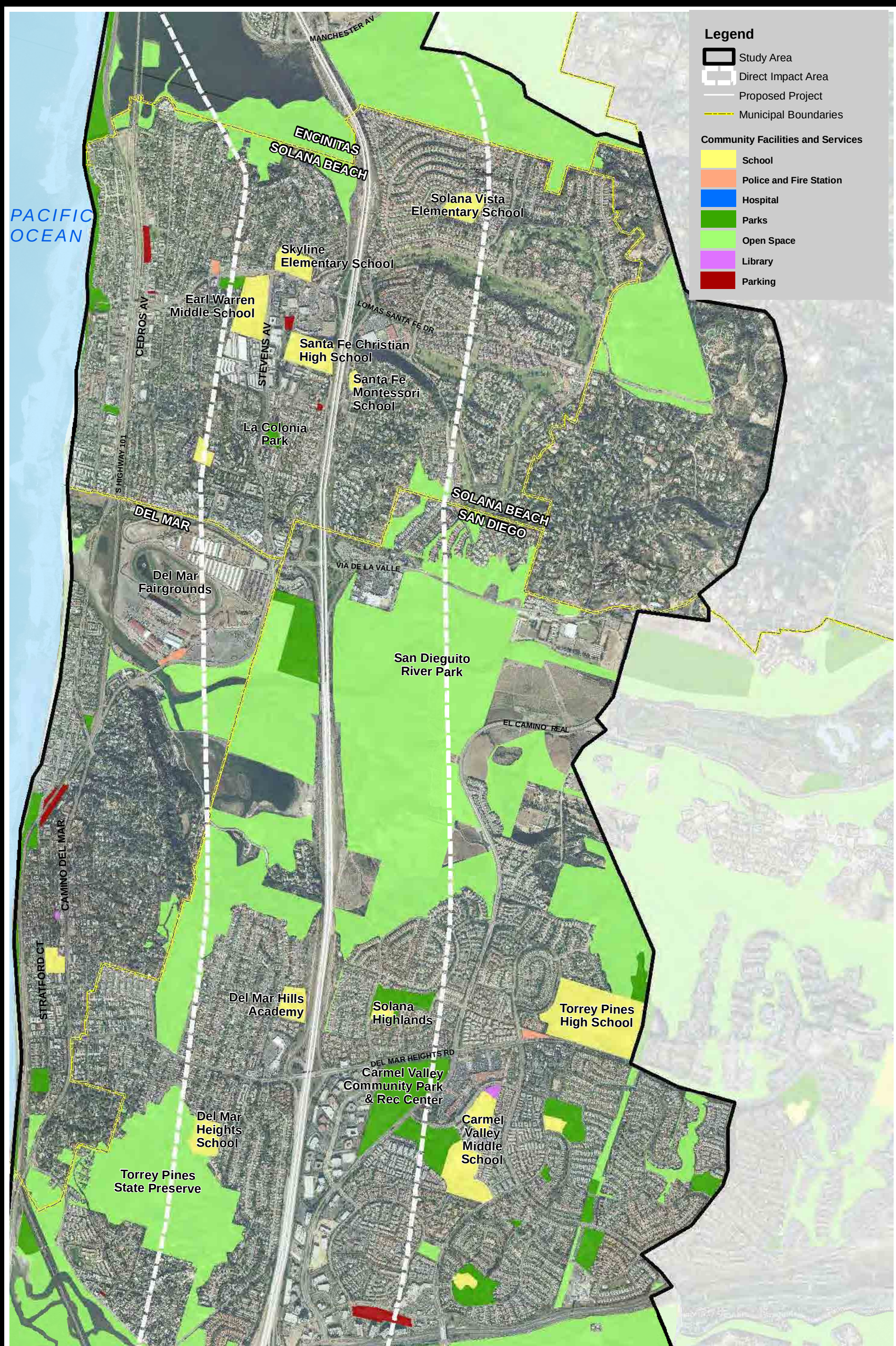
Figure 2.2-7
SOLANA BEACH & DEL MAR
Housing Density

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

EDAW | AECOM

Figure 2.2-8
SOLANA BEACH & DEL MAR
Community Facilities and Services

2,000 0 2,000 Feet

SCALE: 1:24,000; 1 inch = 2,000 feet

2.2.3.3 Fire Protection

The Del Mar Fire Department serves the city, including the study area. As shown in Figure 2.2-8, there is currently one operational fire station located within Del Mar on the Del Mar Fairgrounds and Racetrack, in the area of secondary impacts. The Del Mar Fire Department is staffed with a combination of 9 full-time firefighters as well as 4 students and over 15 paid-call firefighters (City of Del Mar 2005). The Del Mar Fire Department operates with two staff vehicles, three fire engines, a rescue unit, and one EMT ambulance. In addition to the services provided to Del Mar, the Del Mar Fire Department also includes service to San Diego, Solana Beach, Encinitas, and the Rancho Fire Protection District on a mutual aid basis (City of Del Mar 2005).

2.2.3.4 Hospitals and Medical Facilities

There are no hospitals or medical facilities located within Del Mar. Residents of Del Mar would likely utilize medical facilities at the UCSD Medical Center, which is located approximately 3 miles south.

2.2.3.5 Recreational and Community Facilities

As only the northeast portion of Del Mar is in the area of direct impacts, the Del Mar Fairgrounds and Racetrack and open space associated with San Elijo Lagoon are located within the direct impact area (Figure 2.2-8). In addition, the Surf and Turf RV Park is located adjacent to I-5, north of the San Dieguito River. The 22nd District Agricultural Association manages and operates the fairgrounds and its nearby equestrian facility, Horsepark, on behalf of the State of California. There are approximately 350 events at the Fairgrounds and Horsepark each year, including the annual San Diego County Fair, the Del Mar National Horse Show, weddings, receptions, dog shows, and other social and consumer events. No public parks or community centers lie within the area of direct impacts associated with the proposed project.

Four parks are located within the area of secondary impacts. Two of these, the James Scripps Bluff Preserve and Powerhouse Park, are located along the coastal area of Del Mar. Powerhouse Park is also home to the Community Center, which is located on the central coast of Del Mar. The Powerhouse Community Center is home to public and private events throughout the year and one of the main tourist attractions in the city. Crest Canyon Open Space Park, while mainly outside of the Del Mar jurisdiction, provides hiking and recreational trails to the citizens of Del Mar and is within the area of secondary impacts. Torrey Pines State Preserve is also mainly outside of the city boundary but does provide recreation to citizens of Del Mar and the surrounding region, and is within the area of secondary impacts.

2.2.3.6 Circulation, Access, and Parking

Traffic flow and access in and out of Del Mar are described in the Circulation Element of the Del Mar Community Plan (1976). Goal A of the Circulation Element is to create a “City which promotes, encourages, and accommodates a variety of transportation modes as alternatives to the automobile” (City of Del Mar 1976). Major roads, transit lines, pedestrian corridors, parking, and airports are outlined below. Table 2.2-4 shows the main modes of transportation for commuters in Del Mar.

Table 2.2-4. Modes of Transportation – Del Mar

Means of Transportation	Number of Commuters per Day	Percentage
Total daily commuters	2,441	100.00
Car, truck, or van	2,021	82.79
Railroad	0	0.00
Bus (including trolley bus)	0	0.00
Other public transportation[1]	0	0.00

[1] Includes census categories of street car or trolley car, and subway or elevated.
Source: U.S. Bureau of the Census 2000

Major Roads

Unlike the other municipalities within the study area, I-5 does not run directly through Del Mar and is therefore not a dominant transportation route lying within the city boundary. However, I-5 is located a short distance (up to 0.75 mile) east of the municipal boundary and provides major entrance and exit routes for residents as well as visitors. The three main interchanges from I-5 that connect to Del Mar are Via de la Valle at the northernmost boundary of the city, Del Mar Heights Road, and Carmel Valley Road, which connects to the southernmost boundary of the city. The prime arterial within Del Mar is Camino Del Mar (formerly U.S. Highway 101), which is the main north-south route in the city. Other major roads in Del Mar include Jimmy Durante, which connects to the Del Mar Fairgrounds and Racetrack; Del Mar Heights Road, which is the main road to access I-5; and Via de la Valle, which connects I-5 to the Del Mar Fairgrounds, and to the City of Solana Beach. Many collector roads connect the residential neighborhoods to the main arterials.

Public Transit

Del Mar does not have an operating transit station or provide a stop from the Coaster. The Santa Fe Station that was once in Del Mar was relocated to Solana Beach in 1995. NCTD operates the bus system, “the Breeze,” throughout the northern San Diego County region, including from Oceanside to Del Mar, northeast to Escondido, east to Ramona, north to Fallbrook and San Clemente in Orange County, and to MCB Camp Pendleton. NCTD currently provides service to the area. The main routes serve the length of the coastal area from Oceanside to Del Mar, and on to Westfield University Towne Centre (UTC). As shown in Table 2.2-4 above, public transportation is not a significant mode of transportation for commuters in Del Mar.

Pedestrian Corridors

Pedestrian and bicycle paths in Del Mar are generally located along a number of the major roads. Camino Del Mar has a well-defined bike lane of street ROWs. There are also short trails located in Del Mar Hills east of Camino Del Mar, and around San Dieguito Lagoon.

Parking

The Parking Master Plan for the Village and North Beach Areas (Meyer 2000) includes an evaluation of parking conditions in Del Mar and provides goals and possible solutions to parking issues within the coastal and commercial areas of Del Mar. Parking master plan goals include providing "adequate and convenient parking for residents, business patrons and employees, and recreational visitors" (Meyer 2000). At the time of the study, there were a total of 3,705 parking spaces within the Village and North Beach areas. Of this, 1,798 (49 percent) were publicly owned and operated, which includes meters, lots, on-street nonmetered, and "pay and display." A total of 1,907 spaces (51 percent) were privately owned in lots or structures.

2.2.4 Economics

2.2.4.1 Local Economy

Similar to the cities surrounding it, the economy of Del Mar was historically based around agriculture. In addition to this, tourism, specifically beach area visitation, played another important economic role. The Stratford Inn was constructed in 1910 as a resort hotel, and residential construction increased in the 1920s (San Diego Daily Transcript 2005). The opening of the Del Mar Fairgrounds and Racetrack in 1935 sparked growth as well as increased the number of tourists visiting the city. The Del Mar Fairgrounds and Racetrack grew in popularity in part due to the participation of members of the Hollywood film industry, who established the Del Mar Thoroughbred Club and second residences in Del Mar (Del Mar Historical Society 2005). Tourism continues to play a significant role in Del Mar, with the beaches along with the Del Mar Fairgrounds and Racetrack proving consistently popular destinations.

Figure 2.2-9 illustrates the detailed land uses within the direct impact area along the project corridor. The data provided in this figure are derived from SANDAG land use categories (2003). As shown in Figure 2.2-9, the commercial and industrial areas are primarily located along Via de la Valle, which transects I-5. Commercial areas are also located along Camino Del Mar, which parallels I-5 to the west. Agricultural areas are not located within the municipal boundaries of Del Mar.

2.2.4.2 Income and Employment

Median Household Income

Median household income is defined as the middle value of all incomes as arranged from highest to lowest in a selected geographic area. Based on data according to block groups from the 2000 U.S. Census, the median household income for Del Mar was $81,001 with $129,229 as the highest median household income for a block group in Del Mar and $38,580 as the lowest median household income for a block group in Del Mar. In comparison, the median household income according to block groups for San Diego County as of 2000 was $47,067, significantly lower than Del Mar, although it showed $200,001 for the highest median household income for a block group in the county and $9,208 as the lowest median household income for a block group in the county.

Figure 2.2-10 illustrates the median household income for the Del Mar study area and direct impact areas, respectively, arranged by block groups and grouped together according to six different ranges. The majority of Del Mar is within the median household income range of $63,001-$81,000. Areas of higher median household incomes ($95,001-$110,000 and above $110,001) are located in the southern areas of Del Mar west of I-5 along the east side of Camino Del Mar. The areas with lower median household income ranges in the study area (below $45,000) are located west of I-5 in the southernmost area of the municipality.

As shown in Figure 2.2-10, the only area of higher median household income ($95,001-$110,000) located in the direct impact area is located west of I-5 south along Via de la Valle at the municipal boundary with San Diego. The remaining areas show median household income ranges of $63,001-$81,000 located west of I-5 within the area of direct impact.

Per Capita Income

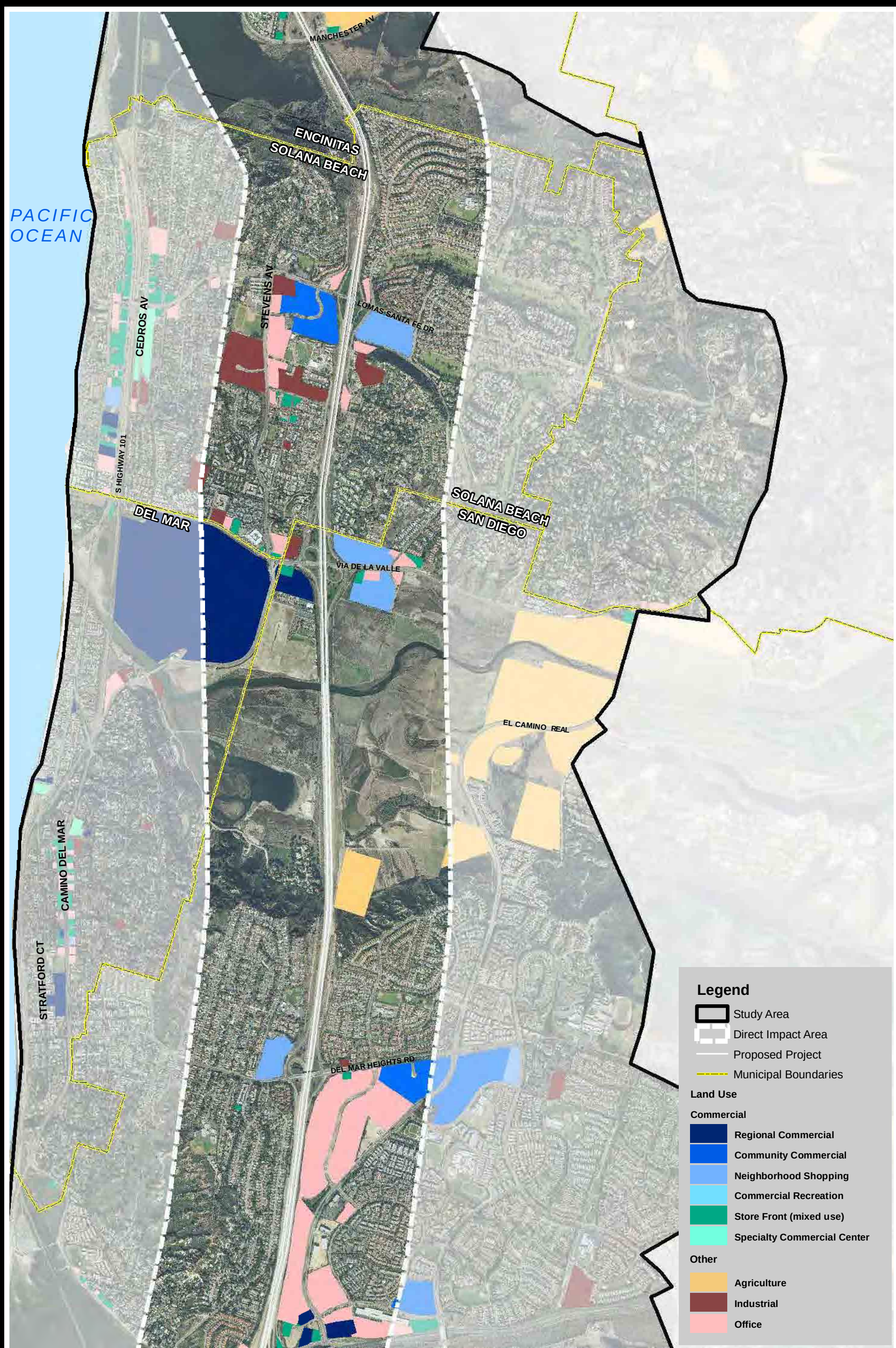
Per capita income is defined as the average income of every resident of a selected geographic area, including all adults and children. Per capita income is typically reported in units of currency per year and often used as a measure of the wealth of the selected population. Based upon data according to block groups from the 2000 U.S. Census, per capita income for Del Mar was $62,425 with $90,243 as the highest per capita income for a block group in Del Mar and $20,705 as the lowest per capita income in a block group for Del Mar. In comparison, per capita income for block groups in San Diego County was $22,926, with $112,849 as the highest per capita income in a block group for the county and $4,505 as the lowest per capita income for a block group in the county. Similar to median household income values, per capita income for Del Mar was significantly higher and showed a much smaller range of values than that of the county.

Figure 2.2-11 illustrates per capita income within the study area and direct impact areas, respectively, arranged by block groups and grouped together according to six different ranges. Areas showing higher per capita income ranges ($62,425-$70,000 and above $81,001) are located in the area along the coast line and in the southern areas of Del Mar west of I-5 along the east side of Camino Del Mar. Areas showing lower median household income levels in the study area ($45,001-$62,424 and below $30,000) are located in the northeastern and the southernmost areas of the municipality. As shown in Figure 2.2-11, per capita income within the direct impact area is within the $45,001 to $62,424 range.

Employment

As outlined previously, the economy of Del Mar historically centered around agriculture – specifically fruit orchards and cattle-raising activities – and tourism at local beaches and the Del Mar Fairgrounds and Racetrack. Agriculture is no longer practiced in the city, but several of the main contemporary employers within Del Mar are tourism-oriented including the Del Mar Fairgrounds and Racetrack, and the Del Mar Marriott hotel. Another larger employer in Del Mar is Prudential Real Estate.

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

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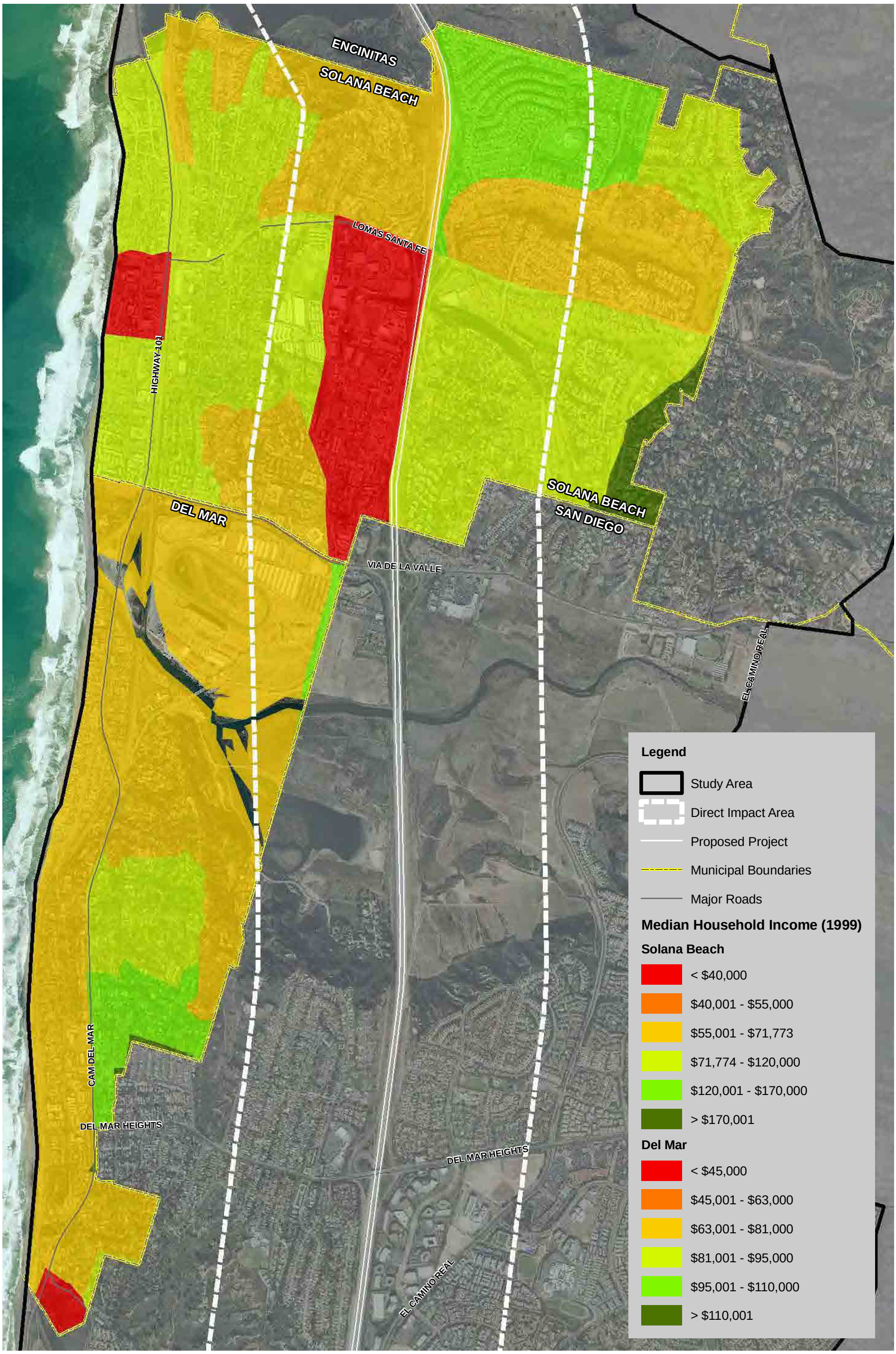
Figure 2.2-9
SOLANA BEACH & DEL MAR
Direct Impact Area Economy

2,000 0 2,000 Feet
SCALE: 1:24,000; 1 inch = 2,000 feet

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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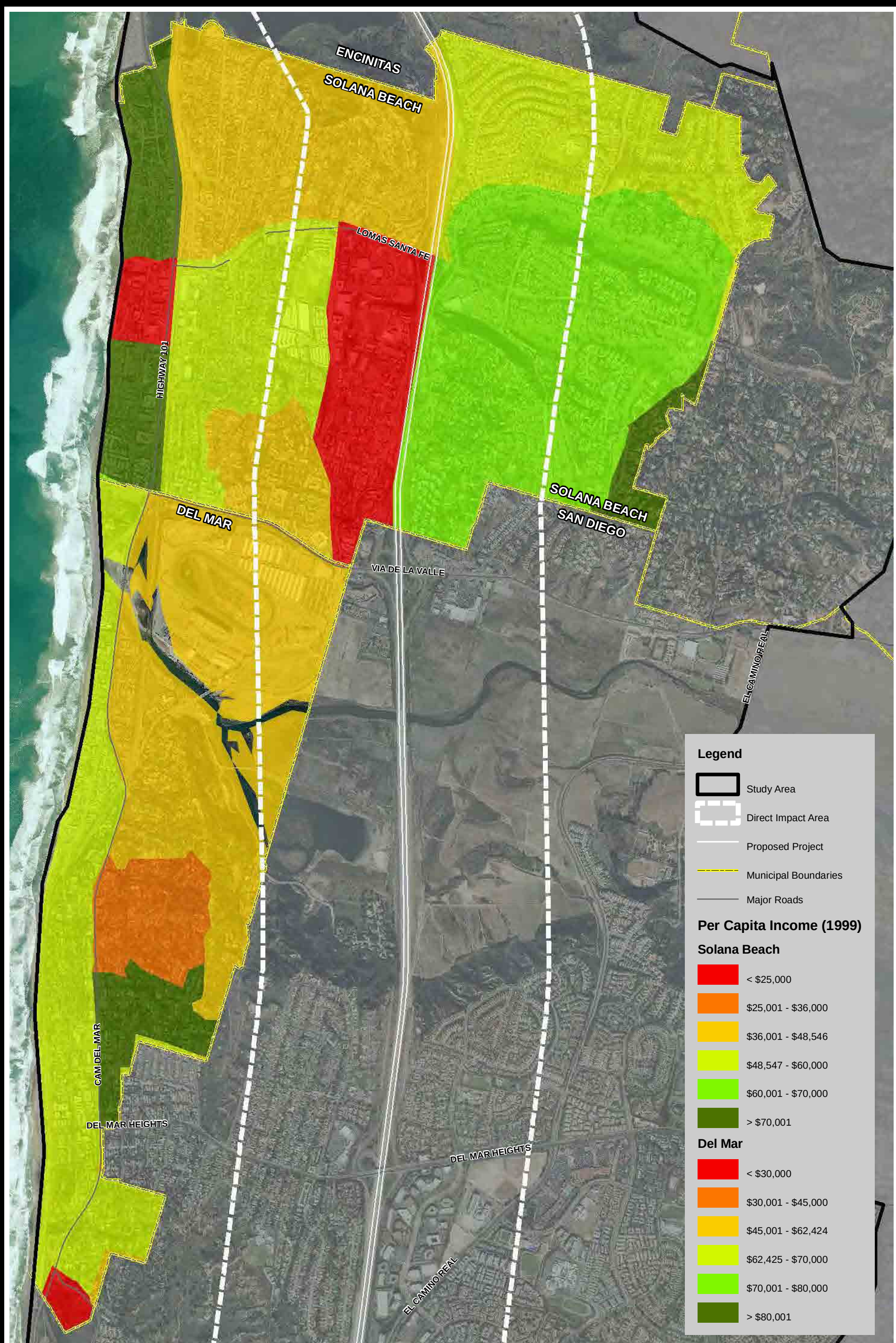
Figure 2.2-10
SOLANA BEACH & DEL MAR
Median Household Income

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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Figure 2.2-11
SOLANA BEACH & DEL MAR
Per Capita Income

Based on the data from the California EDD, the unemployment rate in Del Mar has averaged about 2.3 percent over the past 5 years (2000-2004), significantly below the average of 4.6 percent for San Diego County over the same period. As of May 2005, the unemployment rate for Del Mar was 1.8 percent compared with 3.8 percent for San Diego County. Table 2.2-5 compares the employment statistics between Del Mar and San Diego County.

Table 2.2-5. Annual Unemployment Rate – Del Mar and San Diego County

Area	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004	Average
Del Mar	1.9%	2.0%	2.5%	2.5%	2.3%	2.26%
San Diego County	3.9%	4.2%	5.1%	5.2%	4.7%	4.62%

Source: EDD 2005

2.2.4.3 Labor Force Characteristics

As of 2000, Del Mar had a population of 4,389 persons, with a labor force of 2,548 persons (65.0 percent) of which 97.13 percent were employed (2,475 persons). No armed forces personnel were present within the workforce (U.S. Bureau of the Census 2000).

Table 2.2-6 summarizes the labor force characteristics for Del Mar and San Diego County based upon 2000 U.S. Census data. Labor force characteristics in Table 2.2-6 include employment status, occupation, industry, and class of worker. Although the numbers vary to some degree, Del Mar broadly mimics the labor force composition of San Diego County. As of 2000, the civilian labor force within Del Mar (64.9 percent of the population over 16) showed an unemployment rate of 2.9 percent, well below that that of the county.

As of 2000, Del Mar and San Diego County showed broadly similar numbers in the employment categories as listed in Table 2.2-6. Del Mar had a significantly higher percentage of persons in management and professional occupations (67.3 percent) than that of San Diego County (37.7 percent). Conversely, Del Mar showed a significantly lower percentage of persons in production, transportation, and material moving occupations (4.0 percent) than San Diego County (9.9 percent). While Del Mar only showed a very minor proportion of its population working in the agriculture, forestry, fishing and hunting, and mining industries (1.1 percent), it did show a significantly higher proportion of residents working within the professional, scientific, management, administrative, and waste management services (28.6 percent) than San Diego County (13.3 percent). Finally, a significantly larger proportion of the population of Del Mar was classified as self-employed (14.8 percent) compared to San Diego County (8.7 percent).

Table 2.2-6. Labor Force Characteristics – Del Mar and San Diego County

Subject	Del Mar		San Diego County	
EMPLOYMENT STATUS				
Population 16 years and over	**100.0%**	**(3,815)**	**100.0%**	**(2,165,034)**
In labor force	66.8%	(2,548)	65.0%	(1,407,152)
Civilian labor force	66.8%	(2,548)	60.9%	(1,319,517)
Employed	64.9%	(2,475)	57.3%	(1,241,258)
Unemployed	1.9%	(73)	3.6%	(78,259)
Percent of civilian labor force	2.9%		5.9%	
Armed Forces	0.0%	(0)	4.0%	(87,635)
Not in labor force	33.2%	(1,267)	35.0%	(757,882)
Employed civilian population 16 years and over	**100.0%**		**100.0%**	
OCCUPATION				
Management and professional	67.3%		37.7%	
Service	4.6%		16.1%	
Sales and office	21.9%		27.2%	
Farming, fishing, and forestry	0.7%		0.5%	
Construction, extraction, and maintenance	1.5%		8.7%	
Production, transportation, and material moving	4.0%		9.9%	
INDUSTRY				
Agriculture, forestry, fishing and hunting, and mining	1.1%		0.7%	
Construction	4.2%		6.6%	
Manufacturing	9.3%		11.0%	
Wholesale trade	2.7%		3.3%	
Retail trade	6.1%		11.3%	
Transportation and warehousing, and utilities	0.7%		3.8%	
Information	6.0%		3.5%	
Finance, insurance, real estate, and rental and leasing	11.3%		7.1%	
Professional, scientific, management, administrative, and waste management services	28.6%		13.3%	
Educational, health and social services	15.6%		19.3%	
Arts, entertainment, recreation, accommodation and food services	7.6%		9.6%	
Other services (except public administration)	1.9%		5.2%	
Public administration	4.8%		5.4%	
CLASS OF WORKER				
Private wage and salary	72.9%		75.0%	
Government	12.3%		16.0%	
Self-employed (not incorporated business)	14.8%		8.7%	
Unpaid family	0.0%		0.3%	

Source: U.S. Bureau of the Census 2000

2.2.4.4 Tax Revenue and Fiscal Conditions

Property tax is imposed on real property and based upon the assessed value of the property and allocated by tax rate areas throughout the county. Assessment values are set at the time a property changes ownership and increase at no more than 2 percent annually at that value. The property tax rate for Del Mar is 1.06 percent of taxable value. Property and sales taxes are the second-largest revenue source behind services for Del Mar. In the fiscal year 2003-2004, the total revenue was $15,200,000 for Del Mar, of which 17 percent was derived from property taxes and 10 percent was derived from sales taxes. Based upon the APN data from SanGIS data (2005), the average assessed value for a property in Del Mar was $436,334, substantially above the county average of $245,946.

There are six ranges of assessed value for Del Mar as depicted in Figure 2.2-12. These figures illustrate within the municipality where the revenue is generated and in relationship to the location of the project. APN data from SanGIS included numerous parcels with no available data and assessed values listed as $0 or a nominal value. Thus, these parcels are included in the range of <$250,001 for assessed value. The majority of Del Mar values fall within the ranges of <$250,001 and $250,001-$500,000. Areas with higher values are geographically widespread throughout Del Mar and the areas with the highest assessed values are primarily outside of the direct impact area within the western portions of Del Mar.

Although the areas with higher assessed values are typically related to commercial and business areas, it is not exclusive, as some residential areas within the study area and direct impact area fall within the ranges of the higher assessed values. Areas within the highest assessed value range (above $15,000,001) are located in the study area west of I-5 and Camino Del Mar south of Via de la Valle. As previously indicated, the majority of the Del Mar area falls within the ranges of <$250,000 and $250,001-$500,000. These areas are primarily residential and generally do not correlate with commercial, industrial, and agricultural areas.

2.2.4.5 Business Activity

As previously shown in Figure 2.2-9, a variety of commercial land uses, agriculture, office, and industrial areas are located within the study area near Del Mar. Commercial land uses are divided into six different categories: regional commercial (i.e., wholesale trade and large regional shopping centers), community commercial (i.e., shopping centers typically with a main anchor tenant), neighborhood shopping (i.e., shopping centers with a market and/or drugstore and may include offices), commercial recreation (i.e., tourist attractions/destinations, golf courses, and recreational facilities), store front (i.e., commercial activities along major roadways not within planned centers and may include mixed uses with office and/or residential units attached), and specialty commercial center (i.e., tourist or specialty commercial shopping areas). Commercial centers are generally located along the major transportation corridor of Via de la Valle. These commercial centers typically serve multiple surrounding neighborhoods. In addition, the Village Center is Del Mar's principal commercial, visitor-serving, and professional area located along Camino Del Mar (City of Del Mar 1993).

The agriculture land use designation includes orchards, vineyards, nurseries, greenhouses, dairies, livestock, poultry, equine ranches, row crops, grains, and pastures. Agricultural areas are not located within the municipality boundaries of Del Mar.

The land use designation for office includes government office buildings (outside of military), banks, offices for businesses and professional services, some retail activities, and restaurants. Office land use designations are located outside the direct impact area along Camino Del Mar.

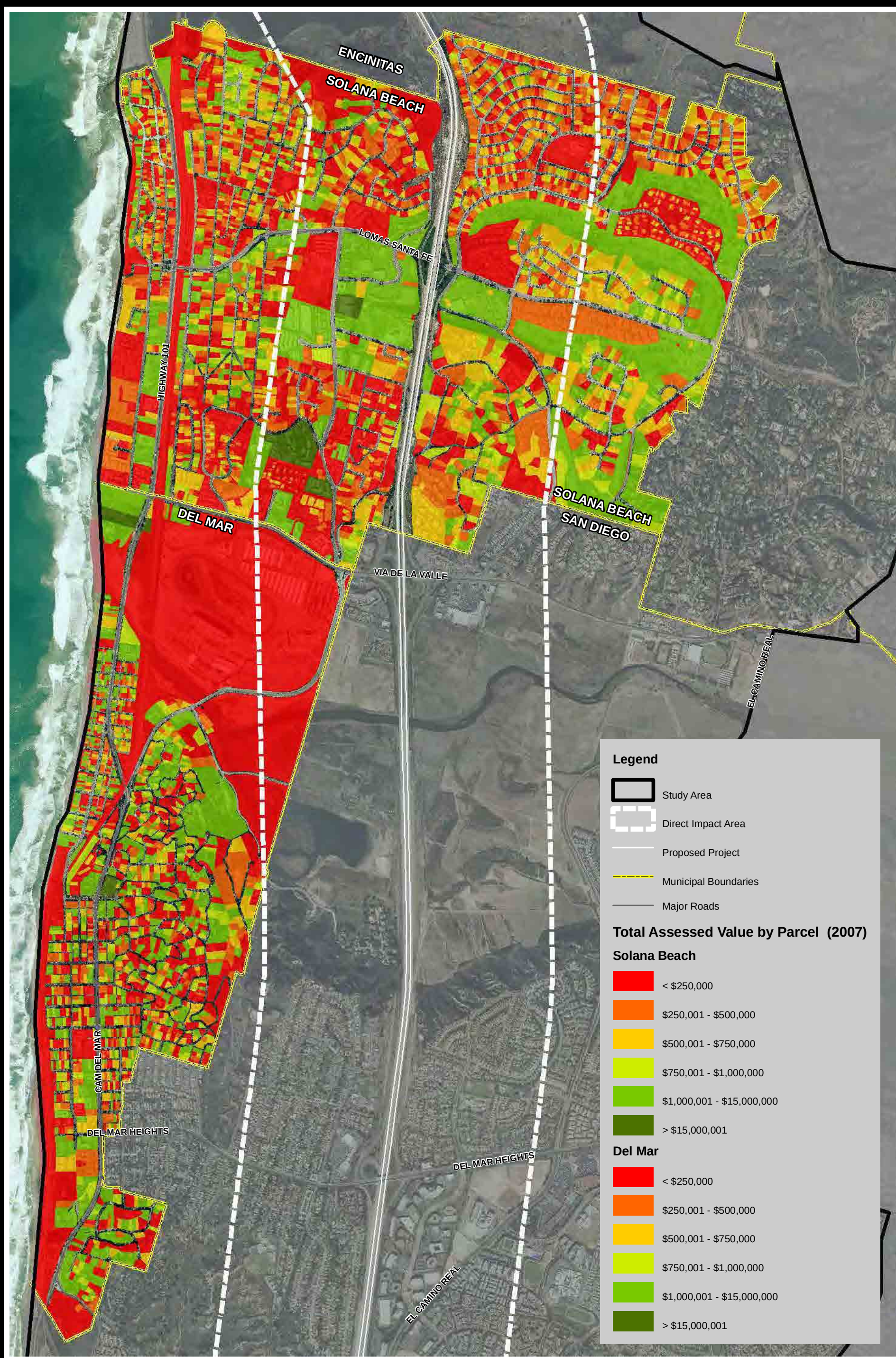
The industrial land use designation incorporates heavy manufacturing activities, light industrial and manufacturing (i.e., lumber, furniture, paper, rubber, stone, clay, and glass), clustered office/retail/ industrial uses, and industrial/strip commercial areas (i.e., public self-storage). Industrial land use designations are located outside the direct impact area along Camino Del Mar.

The majority of the mixed-use and specialty commercial areas along Camino Del Mar are outside the direct impact area.

Interchanges

There is one main freeway interchange utilized to provide access into Del Mar although the majority of Via de la Valle is located within the boundaries of San Diego (Figure 2.2-13). In addition, the Carmel Valley Road and Del Mar Heights Road interchanges, which are discussed in Section 2.1.4.5, are important access points into the community. This intersection is a vital entry point into Del Mar and the Del Mar Fairgrounds and Racetrack west of I-5, as well as main servicing points for residents, tourists, and motorists along I-5. A shopping center is located in the southeast area and a small shopping mall is located in the northeast area of this interchange. A gas station, hotel, and restaurant are located in the southwest area of this interchange. A hotel, gas station, offices, and restaurants are located in the northwest area of this interchange.

I-5 NORTH COAST CORRIDOR CIA

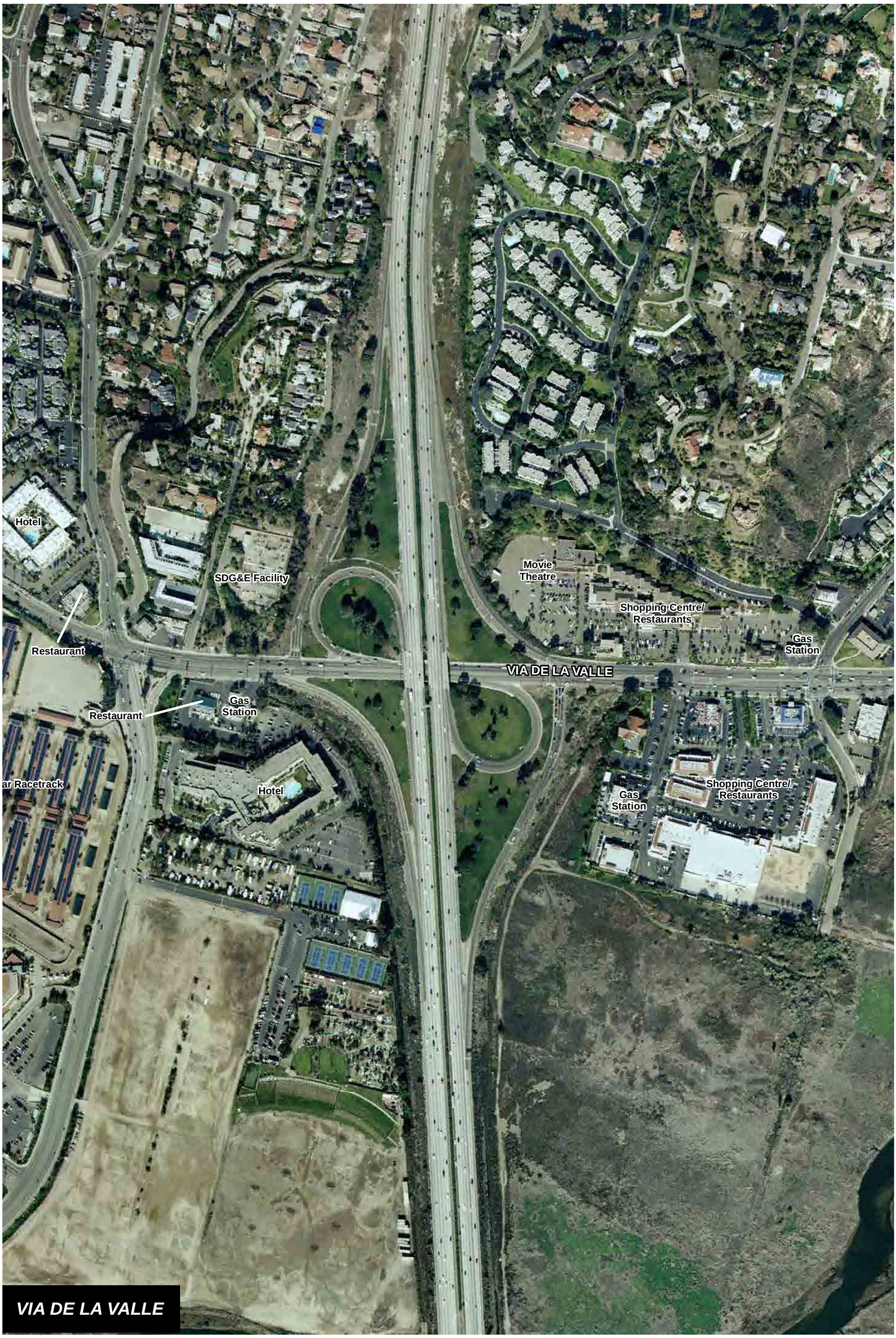


Source: AirPhotoUSA 2006; SanGIS 2007

EDAW | AECOM

Figure 2.2-12
SOLANA BEACH & DEL MAR
Total Assessed Value

1,700 0 1,700



Source: AirPhotoUSA 2006

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Figure 2.2-13
DEL MAR
Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

2.3 SOLANA BEACH

Historic Overview

The City of Solana Beach was incorporated in 1986 and is one of the smaller municipalities within the study area. The main area known as Solana Beach was originally called Lockwood Mesa and was first settled in 1886 (City of Solana Beach 2005). In 1922, 140 acres were purchased at $20 an acre to develop the town of Solana Beach (City of Solana Beach 2005). Eden Gardens, one of the oldest residential areas of Solana Beach, was a community formed by Mexican farmers and was originally known as La Colonia (City of Solana Beach 2005).

With the addition of I-5 through the city in the 1960s, planning and growth were changed and the entire city became more open for development, ultimately leading to the nearly built-out conditions of today (City of Solana Beach 2005). This is illustrated to a degree via the aerial photographs in Figure 2.2-1, where a significant increase in residential density is shown to have occurred in Solana Beach, mainly along what is now the I-5 corridor and Highway 101, within a 16-year period between 1953 and 1969, which spans the pre- and post-I-5 construction eras. Irregular lot sizes and an increase in residential density along I-5 were becoming more and more evident by the end of this period. Rapid conversion of agricultural areas primarily west of I-5 was occurring to accommodate residential development.

2.3.1 Land Use

2.3.1.1 Major Land Uses

Study Area Land Use

Following Del Mar, Solana Beach is the smallest city in the study area with regard to population (12,979 persons as of 2000) and overall land area (3.42 square miles). All of Solana Beach lies within the study area. Figure 2.2-2 shows general land use patterns within Solana Beach, Del Mar, and a portion of San Diego. Solana Beach, due to its small size and desirable location, has been almost completely developed as an urbanized city.

As Solana Beach is extensively developed, future development will primarily involve infill and redevelopment projects. Such development is more likely to occur west of I-5 along Highway 101, Cedros Avenue, and Lomas Santa Fe Drive due to the age and mix of the existing development. Further, most of the area east of I-5 and north of Lomas Santa Fe Drive has been developed according to a master plan and is expected to experience very little new development activity over the next 20 years (City of Solana Beach 1986).

The majority of land in Solana Beach, approximately 57.7 percent, is designated for residential uses with a range of densities from estate residential to high-density residential, 0 to 20 du/ac. Low-medium residential (4 du/ac) is the most common density comprising 17 percent of the total land in Solana Beach. Covering a total of 375.5 acres, low-medium residential provides 1,502 housing units (City of Solana Beach 1986). This density is typically found in the northeast and northwest portions of Solana Beach. Estate residential (0 to 2 du/ac) comprises 12.5 percent of land in Solana Beach and is generally located east of I-5 and south of Lomas Santa Fe. Medium-high and high residential, 8 to 12 and 13 to 20 du/ac, respectively, is generally associated with multi-family residential. Higher-density multi-family residential developments are located along the Pacific coast, along the southwest municipal boundary, along Lomas Santa Fe Drive east of I-5, and adjacent to the I-5 corridor south of Lomas Santa Fe. Together, medium-high and high-density residential account for 9.9 percent of the total acreage and provide 3,112 housing units (City of Solana Beach 1986).

Commercial uses are designated for approximately 6.8 percent of the total land area in Solana Beach (City of Solana Beach 1986). As shown in Figure 2.2-2, commercial areas are generally located along major transportation corridors. These include Highway 101, Cedros Avenue, Lomas Santa Fe Drive, and Stevens Avenue. East and west areas along the Highway 101 corridor, which is also covered by the Highway 101 Corridor Specific Plan (Cotton 2000), provide diverse commercial uses for residents as well as tourists. Mixed-use commercial, office, and residential uses are located along Highway 101 (Cotton 2000). The Cedros Design District is located along Cedros Avenue between Lomas Santa Fe Drive and Via de la Valle. It offers shopping and art galleries for residents as well as the tourist base. Lomas Santa Fe Drive, as the main interchange into Solana Beach, also provides commercial activity centers, including community and neighborhood shopping such as grocery stores and large retailers. In addition, the Eden Gardens/La Colonia neighborhood in south Solana Beach near Stevens Avenue has a mixed-use commercial center.

Area of Direct Impacts Land Use

Figure 2.2-3 shows land use within the area of direct impacts at a more detailed level. Land uses within the portion of Solana Beach within the area of direct impacts are mainly a mixture of single-family and multi-family residential developments as well as commercial, light industrial, office, school, and open space land uses. Generally, residential neighborhoods in the direct impact area are divided north and south by commercial, office, and light industrial uses along Lomas Santa Fe Drive.

Residential uses are located throughout the direct impact area with single-family residential developments to the north and south, and multi-family residential developments along Lomas Santa Fe Drive, along Sun Valley Road, as well as in the southern part of the municipality. The highest-density multi-family residential developments are located at the northwest and northeast corners of the I-5/Lomas Santa Fe Drive interchange, with 13 to 20 du/ac. The lowest-density residential developments in the direct impact area, spaced rural residential, are located in the extreme northeast corner of Solana Beach, and south of the southeast intersection of Lomas Santa Fe Drive and I-5.

Lomas Santa Fe Drive is the only interchange from I-5 into Solana Beach. As shown in Figure 2.2-3, the I-5/Lomas Santa Fe Drive interchange supports mainly commercial, office, and light industrial uses. Community commercial development is located west of I-5 on Lomas Santa Fe Drive, with permitted uses including tourist-oriented and large-scale retail uses. A neighborhood shopping center is located southeast of I-5 on Lomas Santa Fe Drive and includes grocery and drug stores. Via de la Valle is partially in Solana Beach and serves the southern portion of the community, supporting community and retail uses.

Stevens Avenue supports mainly office and light industrial uses, although some single-family and multi-family residential developments are also present. Permitted uses in the office and professional land uses include medical and dental centers, financial services, and general office uses (City of Solana Beach 1986). The light industrial use "provides for light manufacturing, mini-warehousing, and research and development uses" (City of Solana Beach 1986). Most industrial uses within Solana Beach are located entirely within this area along Stevens Avenue and are designated to total approximately 13.1 acres (City of Solana Beach 1986).

2.3.1.2 Affected Urban Community and Neighborhood Characteristics

Solana Beach has no officially designated neighborhoods within the municipality but is generally divided by Lomas Santa Fe Drive running east to west and I-5 running north to south.

The Cedros Design District is an unofficial neighborhood in Solana Beach, located on Cedros Avenue between Villa de la Valle and Lomas Santa Fe Drive. The area is home to approximately 85 shops and has a distinctly artistic character. Eden Gardens is another unofficial neighborhood and is known to tourists for its specialty restaurants featuring Mexican cuisine.

There are two specific plans that cover portions of Solana Beach, including the Highway 101 Corridor Specific Plan and the City of Solana Beach Eden Gardens Master Streetscape Plan (City of Solana Beach 1995). The Highway 101 Corridor Specific Plan stretches along Highway 101 through the entire municipality, including some target revitalization areas to the east and west of the highway.

The Eden Gardens Master Streetscape Plan encompasses the area known as Eden Gardens, located north of the Del Mar racetrack. It is a six-block cluster of older homes on small lots. The area is characterized as "one of a handful of neighborhoods in North County that is populated almost exclusively by Latino families" (North County Times 2002). The plan is designed to revitalize the area and continue the community character of Solana Beach.

2.3.1.3 Farmland

There are no designated FMMP agricultural lands in Solana Beach. Though Solana Beach once contributed to the agricultural production of the region, rapid growth has led to the subsequent development of these agricultural lands for residential uses.

2.3.1.4 Development Trends

When Solana Beach was incorporated in 1986, the population was estimated to total 14,892 persons. The population of Solana Beach as of 2000 totaled 12,979 persons (U.S. Bureau of the Census 2000). In contrast to the larger municipalities to the north, Solana Beach has experienced a prolonged overall decline in population, which has been primarily attributed to an increase in vacancy rates, a decrease in the average household size, and an apparent increase in the number of housing units purchased as second homes (City of Solana Beach 1986).

As mentioned previously, Solana Beach has been almost entirely developed since its incorporation. East of I-5 in Solana Beach, residential areas are completely developed. West of I-5, there are some scattered vacant sites either designated or considered suitable for residential use; however, future development trends within the municipality will most likely be in the form of redevelopment and infill development (City of Solana Beach 1986). The City encourages the "expansion of housing developments opportunities by mixed-use developments" (City of Solana Beach 1986). Adopted amendments to the General Plan facilitate this growth. "In order to implement the City's Redevelopment Plan, Mixed-Use Concepts of the Highway 101 Vicinity Specific Plan and Housing Element, residential uses are allowed as a secondary use in conjunction with permitted commercial uses" (City of Solana Beach 1986). Chapter 7.0, Growth, discusses in more detail, historical, current, and projected growth trends within Solana Beach.

2.3.1.5 Jobs/Housing Balance

The land use patterns of housing in relation to employment (commercial, industrial, and office locations,) and commercial centers greatly influence commuting patterns and the various types of transportation used within Solana Beach. Lengthening commute times and increasing traffic congestion often associated with sprawl have brought the concept of the need for a "jobs/housing balance" to the forefront in many communities. The primary element of the jobs/housing balance concept is to locate residential areas near employment centers and commercial services, with the premise that commuting, the overall number of vehicle trips, and the resultant vehicle miles traveled can be reduced.

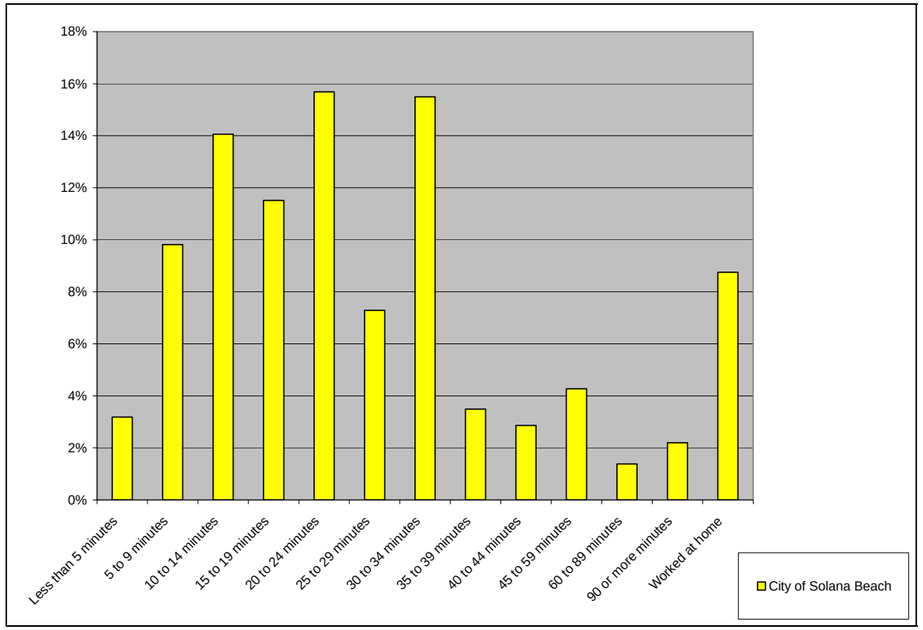
"Smart growth" is one concept that, among other goals, attempts to locate housing around a variety of transportation choices and create walkable neighborhoods. SANDAG provides an incentive program to promote smart growth development within the region, including Solana Beach (SANDAG 2005). In addition to the regional smart growth incentive program, Solana Beach allows residential uses as a secondary use in conjunction with permitted commercial uses, allowing flexibility to establish mixed-use developments in areas that would otherwise be restricted to commercial use (SANDAG 2004a). Such programs increase the jobs/housing balance within Solana Beach.

Solana Beach has a number of policies and goals related to maintaining a job/housing balance. In general, and as stated in Land Use Goal 3.1 of the Solana Beach General Plan, Solana Beach strives to "promote development of a well-balanced and functional mix of residential, commercial, industrial, open space, recreational, and institutional land uses" (City of Solana Beach 1986). In addition, Objective 2.0 aims to "encourage the development of commercial land uses which strengthen the city's economic base and offer a range of commercial enterprises to meet the needs of residents and visitors" (City of Solana Beach 1986).

The 2000 U.S. Census gathered information on the amount of time that people spend commuting to and from the workplace, in turn giving a general idea of those who work and live within proximate distance of each other. As of 2000, Solana Beach had a population of 12,979. Of this, 7,230 are in the labor force of which 95.46 percent is employed (6,902 people) (U.S. Bureau of the Census 2000). As the boundary of the study area within Solana Beach is the same as that of the municipality, commute

times shown in Table 2.3-1 are representative of both. The largest proportions of people in Solana Beach spend 20 to 24 or 30 to 34 minutes commuting (15.7 percent and 15.5 percent, respectively). It is unlikely that many commuters within these categories both live and work in Solana Beach.

Table 2.3-1. Commute Times – Solana Beach



Source: U.S. Bureau of the Census 2000, Summary File 3

Approximately 7.8 percent of the employed population within the study area of Solana Beach commutes 45 minutes or more to work. As the jobs/housing balance attempts to reduce commuting times and vehicle trips, those commuting in excess of 45 minutes do not contribute to a balance of housing and jobs within Solana Beach.

2.3.1.6 Adopted Planning Goals and Policies

There are several plans that identify planning goals and policies for the City of Solana Beach, which are identified below.

City of Solana Beach General Plan

The City of Solana Beach General Plan contains stated community goals and policies designed to shape the long-term development of the city, as well as protect its environmental, social, cultural, and economic resources. The Land Use Element sets out to promote development of a well-balanced and functional mix of land uses and ensure that long-term protection of the environment is given the highest priority. The I-5 North Coast Corridor traverses a variety of land uses along the I-5 corridor (Figure 2.2-3), which have been identified by the Land Use Element. The Land Use Map shows designated land use areas within Solana Beach. In addition to the Land Use Element and associated maps, the Zoning Code is the principal tool used by Solana Beach to implement land use policy. The Zoning Code must be consistent with the General Plan and land use designations stated in the Land Use Element. The Zoning Code includes a map delineating zoning boundaries and text that explains permitted uses within zones and standards. The Circulation Element sets out to provide a street network to move people and goods safely and efficiently. The Open Space and Conservation Element sets out to protect and conserve the City's natural resources, cultural resources, sensitive open space areas, and viewsheds.

Although a large portion of Solana Beach is located within the California Coastal Zone, Solana Beach has not yet developed an LCP outlining issues and policies related specifically to the requirements of the California Coastal Act. Planning in the coastal zone is generally discussed in the Land Use and Open Space and Conservation Elements of the General Plan.

Additional Solana Beach Plans

Additional plans recognized within the General Plan that are located within the study area include the Highway 101 Corridor Specific Plan and the Eden Gardens Master Streetscape Plan. The Highway 101 Corridor Specific Plan includes a 163-acre area of land along the coast and is a plan for physical development and redevelopment along the significant coastal roadway through Solana Beach (Cotton 2000). The specific land use plan for this area includes primarily general commercial (39.4 percent of the area) and high- and medium-high density residential (5.1 percent of the area) as well as a small parcel of planned light industrial and other uses (Cotton 2000).

The irregular lot sizes and roadway widths of one of the older Solana Beach neighborhoods are addressed in the Eden Gardens Master Streetscape Plan (City of Solana Beach 1995). The Eden Gardens community is located south of Lomas Santa Fe Drive adjacent to I-5. The purpose of the plan is to establish desirable design standards for streetscape improvements within public ROWs (City of Solana Beach 1995).

Natural Communities Conservation Plans: Multiple Habitat Conservation Program

The Draft Multiple Habitat Conservation Program (MHCP) encompasses the seven incorporated cities in northwestern San Diego County. Solana Beach, Encinitas, Carlsbad, and Oceanside are four of the seven cities in northwest San Diego County that have adopted a joint MHCP. This regional MHCP is characterized by a regulatory compliance status similar to that described above for the MSCP. Within this plan, the cities of Encinitas, Carlsbad, and Oceanside constitute their own subareas. The City of Carlsbad Subarea Plan has been approved, while the cities of Encinitas and Oceanside issued draft Subarea Plans in 2001. These plans are still undergoing agency review and revision. Until plan approval, all jurisdictions must apply directly to the resource agencies for incidental take authorizations under Section 10 of the Endangered Species Act. Due to its small size and level of build-out, the City of Solana Beach is exempt from preparing a subarea plan.

2.3.2 Population and Housing

Solana Beach was first settled in 1886 but began to develop quickly after Lake Hodges Dam was built in 1918. During the 1920s, Solana Beach expanded to include a bank, grocery, and drugstore but was mainly known for growing avocadoes. Hydraulic water pressure was used to create beach access at Fletcher Cove, adding a tourist attraction to the area. The 1929 depression slowed population growth considerably and curtailed industry and housing construction. After World War II, between 1950 and 1960, the city began developing again (City of Solana Beach 2005).

2.3.2.1 Population and Growth

Solana Beach, as of 2000, showed a population of 12,979 persons and consisted of approximately 0.46 percent of San Diego County's total population (2,813,833 persons). Population growth within Solana Beach has shown no rise over the last decade, rising zero percent between 1990 and 2000 (from 12,962 to 12,979 persons) (SANDAG 2004a). A 2004 estimate indicated a population of 13,431 persons showing an estimated population growth of only 3 percent. Solana Beach's rate of growth was much lower than that shown by San Diego County, which was 34 percent between 1980 and 1990 and 13 percent between 1990 and 2000 with an estimated growth of 7 percent 2000-2004 (U.S. Bureau of the Census 2000). Long-range forecasts for Solana Beach indicate a continuation of low population growth, with the population anticipated to increase over the coming decades (2000-2030) by only 5 percent, again, much lower than that predicted for the county (37 percent) (SANDAG 2004a).

The study area encompasses the entire city of Solana Beach as well as an additional area that encompasses a contiguous area of the census tracts east of I-5. As of 2000, the population within the study area was 14,546 persons. As shown in Figure 2.2-4, several portions of Solana Beach are heavily urbanized resulting in elevated population densities. A relatively large area of denser population was present in newer residential developments to the northeast of the city. Population densities also generally increased to the west of the study area. This was particularly evident between the coastal strip and I-5, including the beachfront area adjacent to Del Mar.

Within the area of direct impacts, one of the highest population densities within Solana Beach was located in the neighborhood known as Eden Gardens, immediately north of Via de la Valle between I-5 and Highway 101 (Figure 2.2-4). Another higher-density area was located along the beachfront, bounded by Highway 101 to the east and Del Mar to the south. There were smaller areas of moderate population density (3,001 to 4,500 persons) located immediately west of I-5, south of Lomas Santa Fe Drive and extending west of the direct impact area between I-5 and Highway 101, with Lomas Santa Fe Drive on the south. There were also scattered areas of slightly dense population on either side of I-5 and along the beachfront, north of Lomas Santa Fe Drive.

2.3.2.2 Race and Ethnicity

As shown in Table 2.3-2, as of 2000, Solana Beach was predominantly White (87.0 percent). The population consisted of extremely small percentages of Black/African American (0.5 percent), American Indian and Alaskan Native (0.4 percent), and Native Hawaiian/Pacific Islander (0.1 percent) populations. There were slightly higher populations of Asian (3.5 percent), "some other race" (5.6 percent), and "two or more races" (2.9 percent) populations. Ethnically, Solana beach showed a Hispanic population of 14.8 percent.

Table 2.3-2. Race and Ethnicity – Solana Beach and San Diego County

	Solana Beach		San Diego County	
White	87.0%	(11,293)	66.5%	(1,871,839)
Black/African American	0.5%	(65)	5.7%	(161,480)
American Indian and Alaskan Native	0.4%	(54)	0.9%	(24,337)
Asian	3.5%	(449)	8.9%	(249,802)
Native Hawaiian/Pacific Islander	0.1%	(18)	0.5%	(13,561)
Some other race	5.6%	(725)	12.8%	(360,847)
Two or more races	2.9%	(375)	4.7%	(131,967)
Hispanic	14.8%	(1,922)	26.7%	(750,965)
Total Minority	21.0%	(2,729)	45.0%	(1,256,000)

Source: U.S. Bureau of the Census 2000

As of 2000, the breakdown of race and ethnicity within Solana Beach was markedly different from that of San Diego County, with substantially less diversity overall. Most minority populations were proportionately well below half of the percentages present within the county, with the Black/African American and Native Hawaiian/Pacific Islander populations being particularly low. Conversely, the White population at 87.0 percent was substantially greater (20.5 percent) than that of the county. The Hispanic population, at 14.8 percent, was again significantly lower. As of 2000, the total minority population in Solana Beach was 21.0 percent of the total population, which was substantially lower than that of the county (by 45.0 percent).

As shown in Figure 2.2-5, minority populations within Solana Beach correlated somewhat with increased population density. As of 2000, Solana Beach was generally characterized by very low minority populations, with moderately elevated populations evident within western portions of the study area, particularly in areas west of I-5. Minority populations within the direct impact area are shown in Figure 2.2-5. Within the direct impact area, increased minority populations were evident immediately west of I-5, specifically between Via de la Valle and Lomas Santa Fe Drive, which encompasses the Eden Gardens neighborhood. Additionally, an area adjacent to the beachfront with Highway 101 to the east, just south of Lomas Santa Fe Drive, showed an elevated proportion of minority populations.

2.3.2.3 Age

As shown in Table 2.3-3, as of 2000, the population of minors (under 18 years) at 17.9 percent was markedly below that of the county average. Conversely, the working age population of Solana Beach (18-64 years), at 64.8 percent, was marginally above that of San Diego County. Similarly, the proportion of senior citizens (over 65 years) within Solana Beach, at 17.3 percent, was marginally above that of San Diego County, although the city's median age of 41.6 years was significantly above that of the county. These elevated age levels suggest a greater percentage of elderly and/or retired persons reside within Solana Beach compared to the county as a whole.

Table 2.3-3. Age Breakdown – Solana Beach and San Diego County

	Solana Beach		San Diego County	
Under 18 years	17.9%	(2,325)	25.7%	(811,038)
18 to 64 years	64.8%	(8,415)	63.1%	(1,776,442)
Over 65 years	17.3%	(2,239)	11.2%	(313,750)
Median Age	41.6 years		33.2 years	

Source: U.S. Bureau of the Census 2000

As shown in Figure 2.2-6, populations of senior citizens were significantly elevated within eastern portions of the municipality. Specifically, areas east of the I-5 and north of Lomas Santa Fe Drive showed elevated populations. As shown in Figure 2.2-6, elevated populations were present within the direct impact area, in particular east of I-5.

2.3.2.4 Housing

As shown in Figure 2.2-7, the majority of the eastern portion of Solana Beach showed relatively low levels of housing density, although one area of moderate housing density was evident in the northeast portion of the municipality, above Lomas Santa Fe Drive. Within the study area, areas northwest of I-5 generally showed relatively lower densities, although increasing in the southwestern portion of city. As shown in Figure 2.2-7, within the direct impact area, areas west of I-5 generally showed elevated levels of housing density, with particular concentrations between Highway 101 and the beachfront, and between Highway 101 and I-5. It is worth noting that the housing densities within Solana Beach generally correlate with population density. As of 2000, the average household size in Solana Beach was 2.25 persons, compared to the county average of 2.73 persons. As of 2000, Solana Beach households made up only 0.65 percent of the county total (6,456 of 994,677, respectively).

Affordable Housing

The City of Solana Beach General Plan contains stated community goals and policies designed to shape the long-term development of the city. The general goals of the long-range policy for housing opportunities are to provide for the needs of “handicapped, elderly, large families, farmworkers, families with female heads of households, and families and persons in need of emergency shelter” (City of Solana Beach 1986).

The City of Solana Beach Planning Department bases its affordable housing policy out of the General Plan, which outlines the affordable housing needs, resources, and constraints of the city. There are two affordable housing complexes in Solana Beach; one is designated for seniors. Both properties, Las Casitas and Solana Highlands Apartments, are within the area of primary impacts along the I-5 corridor.

2.3.3 Public Facilities and Services

2.3.3.1 Schools

Solana Beach is served by the Solana Beach School District, which is composed of five elementary schools ranging from kindergarten to 6th grade. Solana Beach is also served by the San Dieguito Union High School District, which has one middle school in Solana Beach. High school students in Solana Beach attend Torrey Pines High School, which is located southeast of Solana Beach. Additionally, there are several private schools in Solana Beach.

A total of six schools are located in the study area, of which five are located within the area of direct impacts. Santa Fe Christian High School is located closest to the I-5 corridor, southwest of the I-5/Lomas Santa Fe interchange. Warren Earl Middle School, Skyline Elementary School, Solana Vista Elementary School, and Santa Fe Montessori School are also located within 0.5 mile of the I-5 corridor.

2.3.3.2 Police Protection

The San Diego County Sheriff’s Department provides law enforcement services through contract for the City of Solana Beach. These services are provided by deputy sheriffs as well as professional staff from the Encinitas Sheriff’s Station. In addition to Solana Beach, the Encinitas Sheriff’s Station also patrols Encinitas, Del Mar, the unincorporated areas of Rancho Santa Fe, Fairbanks Ranch, the Rancho Cielo development, and the San Onofre-MCB Camp Pendleton coastal area. The Sheriff’s Station is located at the northeast corner of Encinitas Boulevard and El Camino Real, outside of the study area. The Sheriff’s Station is also home to the NCTD’s Railroad Enforcement Unit, which is responsible for patrolling the Coaster ROWs and railroad operations.

2.3.3.3 Fire Protection

The Solana Beach Fire Department serves the city, including the study area. There is currently one operational fire station located within Solana Beach. The Solana Beach Fire Department has a staff of 37 fire and paramedic staff and an engine, truck, and paramedic vehicle. The Solana Beach Fire Department also coordinates with personnel and equipment from Rancho Santa Fe, Del Mar, Encinitas, and San Diego. This fire station is located outside the direct impact area west of I-5 along Lomas Santa Fe Drive (Figure 2.2-8).

2.3.3.4 Hospitals and Medical Facilities

There are no hospitals or medical facilities located within Solana Beach. Residents of Solana Beach likely utilize medical facilities at the UCSD Medical Center, which is located approximately 5 miles south, or the Scripps Memorial Hospital at Encinitas, approximately 2 miles north.

2.3.3.5 Recreational and Community Facilities

There are currently three community parks in Solana Beach, one of which is in the area of direct impacts (Figure 2.2-8). La Colonia Park is located approximately 0.25 mile west of I-5 on Stevens Lane. La Colonia Park, in the Eden Gardens community, is home to the historical Stevens House and the Solana Beach Heritage Museum. In addition, a southern portion of the San Elijo Lagoon County Park and Ecological Reserve extends into the jurisdiction of Solana Beach and is within the area of direct impacts. Tide Beach Park and Fletcher Cove Beach Park are located in the northern portion of the city, along the Pacific Coast in the area of secondary impacts.

The city has two community centers, Fletcher Cove and La Colonia, the latter of which is located in the preliminary area of direct impacts. Program activities at both community centers include adult education classes and a meeting place for numerous community groups. The Solana Beach Branch Library is located east of I-5 on Lomas Santa Fe, within the area of direct impacts. The Lomas Santa Fe Country Club is located east of I-5, at the Lomas Santa Fe Golf Course, within the study area. The northern portion of the country club contains the Executive Golf Course, which is public, while the southern portion of the country club houses the private golf course. This private section of the golf course extends into the area of direct impacts.

2.3.3.6 Circulation, Access, and Parking

Traffic flow and access in and out of Solana Beach are described in the Circulation Element of the Solana Beach General Plan (1986). Goal A of the Circulation Element is to create a "City which promotes, encourages, and accommodates a variety of transportation modes as alternatives to the automobile" (City of Solana Beach 1986). Major roads, transit lines, pedestrian corridors, parking, and airports are outlined below. Table 2.3-4 shows the main modes of transportation for commuters in Solana Beach.

Table 2.3-4. Modes of Transportation – Solana Beach

Means of Transportation	Number of Commuters per Day	Percentage
Total daily commuters	6,878	100.00
Car, truck, or van	5,615	81.64
Railroad	113	1.64
Bus (including trolley bus)	88	1.28
Other public transportation[1]	8	0.12

[1] Includes census categories of street car or trolley car, and subway or elevated.
Source: U.S. Bureau of the Census 2000

Major Roads

I-5 is a major transportation feature in Solana Beach, dividing the coastal areas of the city from the inland region. Lomas Santa Fe is the only I-5 interchange into and out of Solana Beach. Highway 101, Lomas Santa Fe Drive, and Via de la Valle also provide primary access into and out of Solana Beach. In addition, prime arterials, major arterials, secondary arterials, and collector streets have been identified in the Circulation Element of the General Plan.

Prime arterials are defined as carrying very heavy traffic volumes (over 40,000 estimated ADT) and provide for regional and intra-city circulation and connections to freeways and other regional roads. Prime arterials in Solana Beach include Via de la Valle and Highway 101. Major arterials carry moderate to heavy traffic volumes (20,000 to 40,000 estimated ADT) and have a minimum of two traffic lanes in each direction with a raised median. Lomas Santa Fe Drive is the major arterial in Solana Beach. Secondary arterials provide limited access to adjacent properties, have two lanes in each direction, and carry moderate traffic volumes (10,000 to 20,000 estimated ADT). Secondary arterials include Cedros Avenue east of Highway 101; San Andreas Drive, which provides secondary access to the primarily residential areas of southeast Solana Beach; Highland Drive, which forms the eastern boundary of the city; and Stevens Avenue.

Public Transit

Goal 3.2 of the Circulation Element is to "promote a public transportation system that is safe, convenient, efficient, and meets the identified needs of the Solana Beach community" (City of Solana Beach 1986). Rail service is provided to Solana Beach by the Coaster and Amtrak. NCTD operates the Coaster, which began service in 1995. The Coaster serves the cities of Oceanside, Carlsbad, Encinitas, Solana Beach, and San Diego. Amtrak rail service is provided between Los Angeles and San Diego with a stop in Solana Beach.

The railway traverses Solana Beach west of I-5, within the area of secondary impacts. Coaster stops are made at seven stations along the route, which is broken down into four zones. In 1995, the Santa Fe train station was moved from Del Mar to Solana Beach and is located at the northeast corner of Lomas Santa Fe and Coast Highway 101, in the area of secondary impacts. The Solana Beach transit station is located within Zone 2 of the Coaster service. Both Coaster and Amtrak service accessibility and, to an extent, ridership of public transit lines vary throughout each municipality. As of 2000, approximately 113 commuters per day in Solana Beach used the railroad (presumably the Coaster) as the main mode of transportation (U.S. Bureau of the Census 2000).

NCTD also operates the bus system, "the Breeze," throughout the north San Diego County region, including routes from Oceanside to Del Mar, northeast to Escondido, east to Ramona, north to Fallbrook and San Clemente in Orange County, and to MCB Camp Pendleton. NCTD currently provides service to the area via seven routes. As of 2000, approximately 88 commuters per day in Solana Beach used the bus system as the main mode of transportation (U.S. Bureau of the Census 2000).

Pedestrian Corridors

Solana Beach currently has three bicycle routes within its boundaries, which are along Highway 101, Via de la Valle, and Lomas Santa Fe Drive. Objective 2.0 of the Circulation Element is to "provide a system of sidewalks or pathways in residential and commercial areas that provides a safe environment for pedestrians" (City of Solana Beach 1986). A separate system of off-road pedestrian trails is not proposed as part of the Circulation Element; however, the City strives to increase pedestrian accessibility by implementing the policies of the Circulation Element that call for the provision of sidewalks and wheelchair ramps (City of Solana Beach 1986).

Parking

Goal 3.4 of the Circulation Element is to "provide an adequate supply of private off-street and public parking to meet the needs of residents and visitors to the City" (City of Solana Beach 1986). Public parking associated with the Solana Beach transit station is shown in red in Figure 2.2-8.

2.3.4 Economics

2.3.4.1 Local Economy

Historically, Solana Beach's economy was based upon agriculture. Prior to 1923, agricultural production centered on grains and lima beans (Solana Beach Chamber of Commerce 2005). Around the time when Lake Hodges Dam was constructed (1917-1918), the area encompassing Solana Beach began to develop rapidly. The creation of the 12,000-acre Santa Fe Irrigation District in 1918 furthered this expansion, which subsequently included the creation of Fletcher Cove in the 1920s (City of Solana Beach 2005). This level of expansion continued until the Great Depression (City of Solana Beach 2005). Solana Beach began to grow again after World War II with the construction of the Bill Jack Plant in 1949 bringing industry into the area and private contractors building a number of homes. Eden Gardens, one of the oldest residential areas of Solana Beach, was a community formed by Mexican farmers who were hired by the owners of large ranches in Rancho Santa Fe, an unincorporated area of San Diego County.

Currently, Solana Beach has a relatively diverse economic portfolio with several local business districts and shopping centers. The Cedros Design District is an upscale pedestrian-friendly design district that offers galleries, boutiques, and antiques as well as the Belly Up Tavern, a popular local and regional entertainment venue. The beach continues to consistently be a popular destination at Fletcher Cove, the western terminus of Lomas Santa Fe Drive and the location of the annual Fiesta del Sol.

Solana Beach is a predominantly urbanized city and Figure 2.2-9 depicts commercial, industrial, and agricultural land uses located within and surrounding the Solana Beach study area. Figure 2.2-9 illustrates the detailed land uses within the direct impact area along the project corridor. The data provided in this figure are derived from SANDAG land use categories (2003).

As shown in Figure 2.2-9, the commercial and industrial areas are primarily located along the major roadway transecting I-5, which includes Lomas Santa Fe Drive. The Cedros Design District commercial area is also located along Highway 101, which parallels I-5 to the west. No agricultural areas are located within the municipal boundaries of Solana Beach.

2.3.4.2 Income and Employment

Median Household Income

Median household income is defined as the middle value of all incomes as arranged from highest to lowest in a selected geographic area. Based on data according to block groups from the 2000 U.S. Census, the median household income for Solana Beach was $71,774 with $189,629 as the highest median household income for a block group in Solana Beach and $31,250 as the lowest median household income for a block group in Solana Beach. In comparison, the median household income according to block groups for San Diego County as of 2000 was $47,067, significantly lower than Solana Beach, although it showed $200,001 for the highest median household income for a block group in the county and $9,208 as the lowest median household income for a block group in the county.

Figure 2.2-10 illustrates the median household income for the study area and direct impact area, respectively, arranged by block groups and grouped together according to six different ranges. Within the study area, areas showing higher median household income ranges (above $170,000 and $120,001-$170,000) are located east of I-5. Areas located in the southeastern area of Solana Beach east of I-5 along the municipal boundaries with Del Mar and San Diego, as well as areas east of I-5 are primarily within the range of $71,774-$120,000. Areas that showed lower median household income ranges in the study area (below $40,000) are located west of I-5 south of Lomas Santa Fe and in a small area west of Highway 101, as well as the area west along I-5 from Lomas Santa Fe Drive to the municipal boundary with Del Mar and San Diego.

As shown in Figure 2.2-10, areas showing higher median household income ranges for the direct impact area ($71,774-$120,000 and $120,001-$170,000) are located east of I-5 from Lomas Santa Fe Drive north to the municipal boundary with Encinitas as well as areas west of I-5 and east along I-5 between Lomas Santa Fe Drive to the municipal boundary with San Diego. Areas showing lower median household income ranges were located along the south side of Lomas Santa Fe Drive west of I-5 to the municipal boundaries with Del Mar and San Diego (below $40,000) as well as areas west of I-5 between Lomas Santa Fe and the municipal boundary with Encinitas, east of I-5 along Lomas Santa Fe Drive, and in the southern portion of the direct impact area along the municipal boundary with Del Mar.

Per Capita Income

Per capita income is defined as the average income of every resident of a selected geographic area, including all adults and children. Per capita income is typically reported in units of currency per year and often used as a measure of the wealth of the selected population. Based upon data according to block groups from the 2000 U.S. Census, per capita income for Solana Beach was $48,547 with $76,182 as the highest per capita income for a block group in Solana Beach and $20,577 as the lowest per capita income in a block group for Solana Beach. In comparison, per capita income for block groups in San Diego County was $22,926, with $112,849 as the highest per capita income in a block group for the county and $4,505 as the lowest per capita income for a block group in the county. Similar to median household income values, per capita income for Solana Beach was significantly higher and showed a much smaller range of values than that of the county.

Figure 2.2-11 illustrates per capita income for the study area and direct impact area, respectively, arranged by block groups and grouped together according to six different ranges. The areas within higher per capita income ranges ($48,547-$60,000 and above $70,000) were located in the western areas of Solana Beach west of I-5 along the coast and the area east of I-5 ($48,547-$60,000; $60,001-$70,000; and above $70,001). The areas within lower per capita income ranges ($36,001-$48,546 and below $25,000) were located east of I-5 between Lomas Santa Fe Drive and the municipal boundary with Encinitas; and in the southern portion of Solana Beach along the municipal boundary with Del Mar; as well as the area west of I-5 between Lomas Santa Fe Drive and the municipal boundary with Del Mar and San Diego; and a small area along the coastline.

As shown in Figure 2.2-11, areas within the direct impact area that showed higher per capita income ranges ($48,547-$60,000 and $60,001-$70,000) were located east of I-5 and west of I-5 south of Lomas Santa Fe Drive. Conversely, areas within the direct impact area that showed lower per capita income ranges ($36,001-$48,548 and below $25,000) were located west of I-5 between Lomas Santa Fe Drive and the municipal boundary with Encinitas and the southern portion of the direct impact area along the municipal boundary with Del Mar, as well as west of I-5 south of Lomas Santa Fe Drive to the municipal boundary with Del Mar and San Diego.

Employment

As previously discussed, although the economy was historically centered around agriculture, currently Solana Beach is supported by significant levels of tourism centered around the beaches and several other larger visitor attractions. Larger employers within Solana Beach include the Solana Beach School District, San Dieguito School District, and the Belly Up Tavern.

Based on the data from the California EDD, the unemployment rate in Solana Beach averaged about 2.8 percent over the past 5 years (2000-2004), significantly below the average of 4.6 percent for San Diego County over the same period. As of May 2005, the unemployment rate for Solana Beach was 2.3 percent compared with 3.8 percent for San Diego County. Table 2.3-5 compares the employment statistics between Solana Beach and San Diego County.

Table 2.3-5. Annual Unemployment Rate – Solana Beach and San Diego County

Area	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004	Average
Solana Beach	2.3%	2.5%	3.1%	3.1%	2.8%	2.76%
San Diego County	3.9%	4.2%	5.1%	5.2%	4.7%	4.62%

Source: EDD 2005

2.3.4.3 Labor Force Characteristics

As of 2000, Solana Beach had a population of 12,979 persons. Of this, the labor force consisted of 7,230 persons, of which 95.46 percent were employed (6,902 people) and 72 persons were in the armed forces (U.S. Bureau of the Census 2000).

Table 2.3-6 summarizes the labor force characteristics for Solana Beach and San Diego County based upon 2000 U.S. Census data. Labor force characteristics in Table 2.3-6 include employment status, occupation, industry, and class of worker. Although the numbers vary to some degree, Solana Beach broadly mimics the labor force composition of San Diego County. As of 2000, the civilian labor force within Solana Beach (63.0 percent of the population over 16) showed an unemployment rate of 3.6 percent.

Table 2.3-6. Labor Force Characteristics – Solana Beach and San Diego County

Subject	Solana Beach		San Diego County	
EMPLOYMENT STATUS				
Population 16 years and over	**100.0%**	**10,947**	**100.0%**	**(2,165,034)**
In labor force	66.0%	7,230	65.0%	(1,407,152)
Civilian labor force	65.45%	7,158	60.9%	(1,319,517)
Employed	63.0%	6,902	57.3%	(1,241,258)
Unemployed	2.35%	256	3.6%	(78,259)
Percent of civilian labor force	3.6%		5.9%	
Armed Forces	0.7%	72	4.0%	(87,635)
Not in labor force	34.0%	3,717	35.0%	(757,882)
Employed civilian population 16 years and over	**100.0%**		**100.0%**	
OCCUPATION				
Management and professional	55.4%		37.7%	
Service	13.6%		16.1%	
Sales and office	23.9%		27.2%	
Farming, fishing, and forestry	0.0%		0.5%	
Construction, extraction, and maintenance	4.3%		8.7%	
Production, transportation, and material moving	2.7%		9.9%	
INDUSTRY				
Agriculture, forestry, fishing and hunting, and mining	0.3%		0.7%	
Construction	4.1%		6.6%	
Manufacturing	7.8%		11.0%	
Wholesale trade	3.5%		3.3%	
Retail trade	6.9%		11.3%	
Transportation and warehousing, and utilities	2.5%		3.8%	
Information	6.0%		3.5%	
Finance, insurance, real estate, and rental and leasing	11.7%		7.1%	
Professional, scientific, management, administrative, and waste management services	21.5%		13.3%	
Educational, health and social services	18.9%		19.3%	
Arts, entertainment, recreation, accommodation and food services	11.0%		9.6%	
Other services (except public administration)	3.7%		5.2%	
Public administration	2.2%		5.4%	
CLASS OF WORKER				
Private wage and salary	71.6%		75.0%	
Government	11.2%		16.0%	
Self-employed (not incorporated business)	17.0%		8.7%	
Unpaid family	0.2%		0.3%	

Source: U.S. Bureau of the Census 2000

As of 2000, Solana Beach and San Diego County showed broadly similar numbers in the employment categories as listed in Table 2.3-6. Solana Beach had a significantly higher percentage of persons in management and professional occupations (55.4 percent) than that of San Diego County (37.7 percent). Conversely, Solana Beach showed significantly lower percentage of persons in production, transportation, and material moving occupations (2.7 percent) than San Diego County (9.9 percent). While Solana Beach did not show any residents working within farming, fisheries, or forestry occupations, it did show a significantly higher proportion of residents working within the professional, scientific, management, administrative, and waste management services (21.5 percent) than San Diego County (13.3 percent). Finally, a significantly larger proportion of the population of Solana Beach was classified as self-employed (17.0 percent) compared to San Diego County (8.7 percent).

2.3.4.4 Tax Revenue and Fiscal Conditions

Property tax is imposed on real property and based upon the assessed value of the property and allocated by tax rate areas throughout the county. Assessment values are set at the time a property changes ownership and increase at no more than 2 percent annually at that value. The primary revenue sources are property and sales taxes for Solana Beach. In the fiscal year 2003-2004, the total revenue was $9,726,400 for Solana Beach, of which 37 percent was derived from property taxes and 23 percent was derived from sales taxes.

Based upon the APN data from SanGIS data (2005), the average assessed value for a property in Solana Beach was $436,334, substantially above the county average of $245,946.

There are six ranges of assessed value for Solana Beach as depicted in Figure 2.2-12 for the study area and direct impact area, respectively. This figure illustrates within the municipality where the revenue is generated and in relationship to the location of the project. APN data from SanGIS included numerous parcels with no available data and assessed values listed as $0 or a nominal value. Thus, these parcels are included in the range of <$250,000 for assessed value. The majority of Solana Beach values fall within the ranges of <$250,000 and $250,001-$500,000. Areas with higher values are geographically widespread throughout Solana Beach.

The areas with higher assessed values within the study area and direct impact area are typically related to commercial and business areas, but not exclusively so, given that some residential areas within the study area fell within the ranges of the higher assessed values. Areas within the highest assessed value range (>$15,000,001) are located within the direct impact area west of I-5 near the municipal boundary with Del Mar. Areas within the study area that fell within the assessed values of $1,000,001-$15,000,000 were located east and west of I-5 along Lomas Santa Fe Drive. As previously indicated, the majority of the Solana Beach area falls within the ranges of <$250,000 and $250,001-$500,000. These areas are primarily residential and generally do not correlate with commercial, industrial, and agricultural areas.

2.3.4.5 Business Activity

As previously shown in Figure 2.2-9, a variety of commercial land uses, agriculture, office, and industrial areas are located within the area of direct impacts. Commercial land uses are divided into six different categories: regional commercial (i.e., wholesale trade and large regional shopping centers), community commercial (i.e., shopping centers typically with a main anchor tenant), neighborhood shopping (i.e., shopping centers with a market and/or drugstore and may include offices), commercial recreation (i.e., tourist attractions/destinations, golf courses, and recreational facilities), store front (i.e., commercial activities along major roadways not within planned centers and may include mixed uses with office and/or residential units attached), and specialty commercial center (i.e., tourist or specialty commercial shopping areas). Commercial centers are generally located along the major transportation corridors, Lomas Santa Fe Drive on the east and west side of I-5 and along Highway 101. These commercial centers typically serve the surrounding neighborhoods. There is also a small area west of I-5 along the southern municipal boundary with Del Mar.

The agriculture land use designation includes orchards, vineyards, nurseries, greenhouses, dairies, livestock, poultry, equine ranches, row crops, grains, and pastures. Agricultural areas are not located within the municipality boundaries of Solana Beach.

The land use designation for office includes government office buildings (outside of military), banks, offices for businesses and professional services, some retail activities, and restaurants. Office land use designations are located along Lomas Santa Fe Drive on both sides of I-5 and Highway 101. There is also a small area west of I-5 along the southern municipal boundary with Del Mar.

The industrial land use designation incorporates heavy manufacturing activities, light industrial and manufacturing (i.e., lumber, furniture, paper, rubber, stone, clay, and glass), clustered office/retail/ industrial uses, and industrial/strip commercial areas (i.e., public self-storage). Industrial uses are located primarily south along Lomas Santa Fe Drive and a small area west of I-5 along the southern municipal boundary with Del Mar.

The majority of the mixed-use and specialty commercial areas along Highway 101 are outside the direct impact area. However, there are mixed-use and specialty commercial areas located in a few areas within the direct impact area in the area west of I-5 between Lomas Santa Fe Drive and the municipal boundary with Del Mar.

<u>Interchanges</u>

There is one main freeway interchange in Solana Beach – Lomas Santa Fe Drive (Figure 2.3-1). This intersection is a vital entry point into Solana Beach, as well as main servicing points for residents, tourists, and motorists along I-5. There are shopping centers located along the south side of Lomas Santa Fe on either side of I-5. There are offices located in the northwest area of this interchange. The Via de la Valle interchange is also partially in Solana Beach and is discussed in Section 2.2.4.5.

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:4,200; 1 inch = 350 feet

Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.3-1
SOLANA BEACH
Interchanges

350 0 350 Feet

2.4 ENCINITAS

Historic Overview

Founded over 100 years ago, Encinitas was originally settled on 160 acres at the location of the current Civic Center and divided into 5-acre tracts (City of Encinitas 2005a). I-5 was established through the community of Encinitas in the 1960s and has been a major factor in the growth of the area. This is illustrated to a degree via the aerial photographs in Figure 2.4-1, where a significant increase in residential density is shown to have occurred in Encinitas, mainly along what is now the I-5 corridor, within a 7-year period between 1953 and 1960. Although I-5 was not yet constructed in Encinitas in 1960, the current land use patterns and lot sizes, as well as the higher densities along the coast areas and Coast Highway 101, were were becoming more and more evident by this time. During the years preceding I-5, the area that was to become the I-5 corridor was mainly agricultural land. By 1986, when Encinitas was incorporated as a city with five distinct communities, it had experienced rapid growth, which continues today.

2.4.1 Land Use

2.4.1.1 Major Land Uses

General Land Use

The City of Encinitas is the third most populous region within the project study area, with a population as of 2000 of 58,014 persons and a total land area of 19.4 square miles. Figure 2.4-2 shows general land use patterns within the majority of the municipal boundaries, including the study area. Encinitas is largely an urbanized city, although the eastern areas have a more rural quality, established through the presence of open space, agricultural areas, and spaced residential development.

The main designated land use in Encinitas is single-family residential, which along with other residential uses is seen in red in Figure 2.4-2. Residential densities range from 0.25 to 25.0 du/ac. The eastern portions of Encinitas are characterized by rural residential developments with low density and planned open space. Other land uses include agriculture, open space, and commercial centers. Commercial centers and multi-family residential units are generally located along major roads, including the length of Coast Highway 101, Encinitas Boulevard, and El Camino Real.

Encinitas is composed of five distinct communities: Leucadia, Old Encinitas, Cardiff-by-the-sea (Cardiff), New Encinitas, and Olivenhain. Leucadia, Old Encinitas, and Cardiff are located entirely within the study area and will be discussed in the following section. New Encinitas is located partially within the study area and Olivenhain is located in east Encinitas, outside of the study area. Olivenhain is the easternmost part of Encinitas and is set in a rural locale with expansive homes and ranches (Encinitas Chamber of Commerce 2005). Densities in this eastern part of Encinitas are generally lower than the rest of the municipality and the coastal area. Typical residential designations in Olivenhain as defined in the City of Encinitas General Plan (1989) include rural residential (RR) and residential 3 (R3) at 0.0-0.25 and 2.01 to 3.00 du/ac, respectively.

Study Area Land Use

As discussed in Chapter 2.0, the study area consists of both a wider region of secondary impacts and an area of primary impacts that extends 0.5 mile from the I-5 corridor. The total land area of Encinitas within the study area is 13.06 square miles, or 66.77 percent. As shown in Figure 2.4-2, land uses within the study area are mainly a mixture of single-family residential, community and neighborhood commercial centers, open space, and agriculture. A portion of the study area within Encinitas also consists of open space and parks. Open space preserves are generally located to the east of I-5 around Batiquitos Lagoon, San Elijo Lagoon, and the Encinitas Ranch Golf Course. Parks are generally located near residential neighborhoods and schools.

The majority of land within the study area is developed and urban in nature. Vacant land (shown in light grey in Figure 2.4-2), though limited due to the urbanized nature, is located east of I-5 near Batiquitos Lagoon, west of I-5 at Santa Fe Drive, and east of South El Camino Real near Manchester Avenue. According to the Encinitas Land Use Map (2003a), the land in north Encinitas is designated for rural residential uses (1 to 2 du/ac) and the vacant land in southern Encinitas is categorized as rural residential and open space/ecological resource/park. Both of the vacant pieces of land in southern Encinitas are Special Study Areas indicating development constraints and the need to conserve unique natural resources (City of Encinitas 1989).

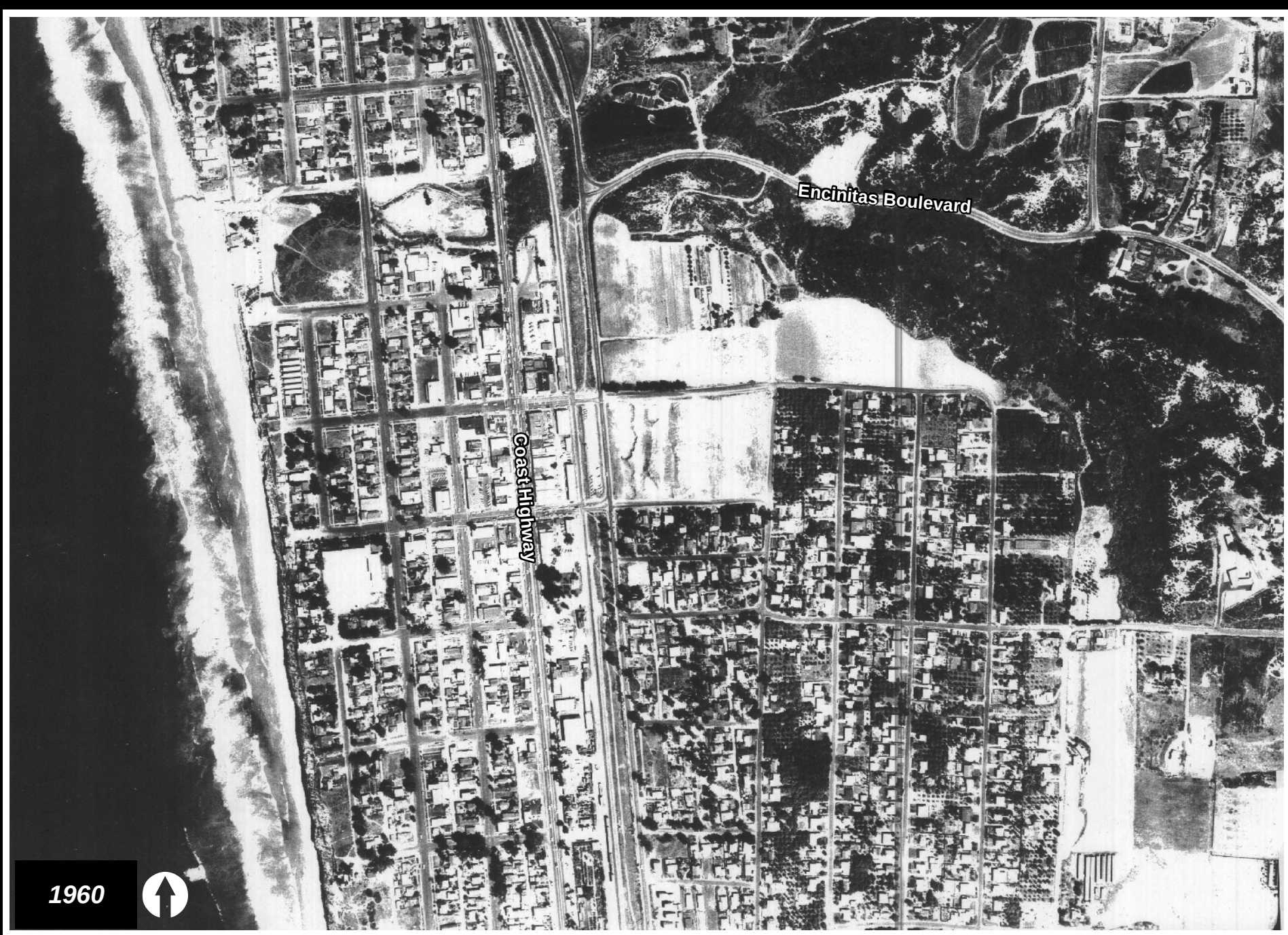
East of I-5 within the study area is primarily single-family residential with typical densities ranging from 1 to 8 du/ac. High-density multi-family residential ranging from 11 to 15 du/ac is located along Encinitas Boulevard and along the coastal areas (City of Encinitas 1989). An open space corridor of mainly undevelopable land associated with Batiquitos Lagoon is located around the Encinitas Ranch Golf Course; however, there is some residential use to the north of the course. Agricultural areas are also located around the Encinitas Ranch Golf Course.

Area of Direct Impacts Land Use

The portion of Encinitas within the area of direct impacts contains some higher-density residential, a commercial and office center along Encinitas Boulevard, multiple schools, agricultural land, and open space at San Elijo Lagoon. Generally, residential is the main land use, with each residential area serviced by neighborhood and mixed-use shopping areas, schools, and parks. Figure 2.4-3 shows land use within the area of direct impacts.

There are a total of five I-5 freeway interchanges within Encinitas, not including the interchange with La Costa Avenue (which serves both Encinitas and Carlsbad): Leucadia Boulevard, Encinitas Boulevard, Santa Fe Drive, Birmingham Drive, and Manchester Avenue. These intersections are vital entry points into Encinitas, as well as main servicing points for residents, tourists, and motorists along I-5. Visitor-serving commercial, as defined in the General Plan as an important source of tax revenue, is located at all interchanges except Manchester Avenue. Policy 1.6 of the Land Use Element states that the provision of visitor-serving commercial land use should be located where it will not intrude into existing residential communities. Compatible uses include tourist lodging, gas stations, and other

Source: San Diego County Department of Planning and Land Use

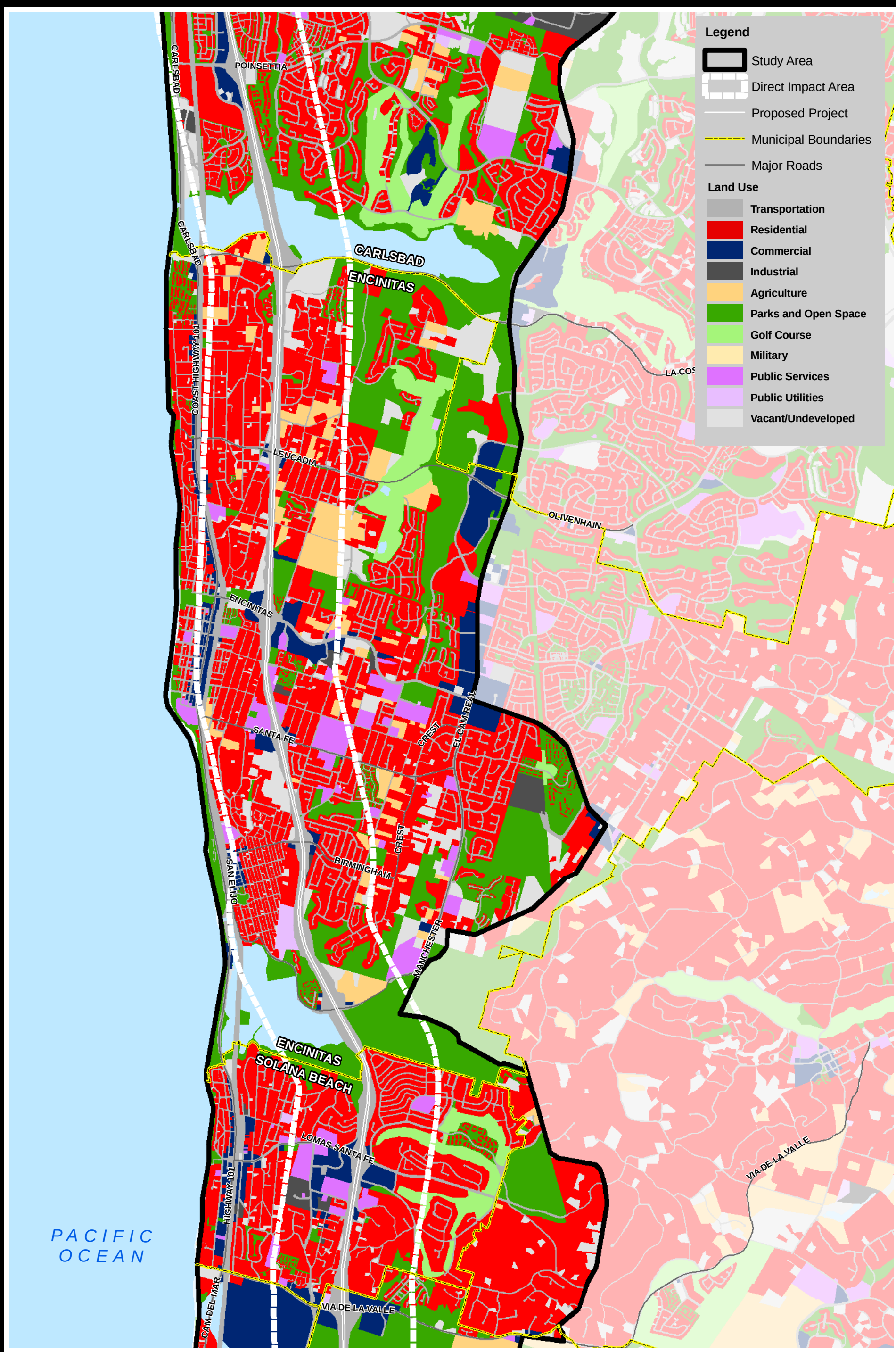


Source: San Diego County Department of Planning and Land Use

EDAW | AECOM

Figure 2.4-1
ENCINITAS
Historic Aerial Photographs

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

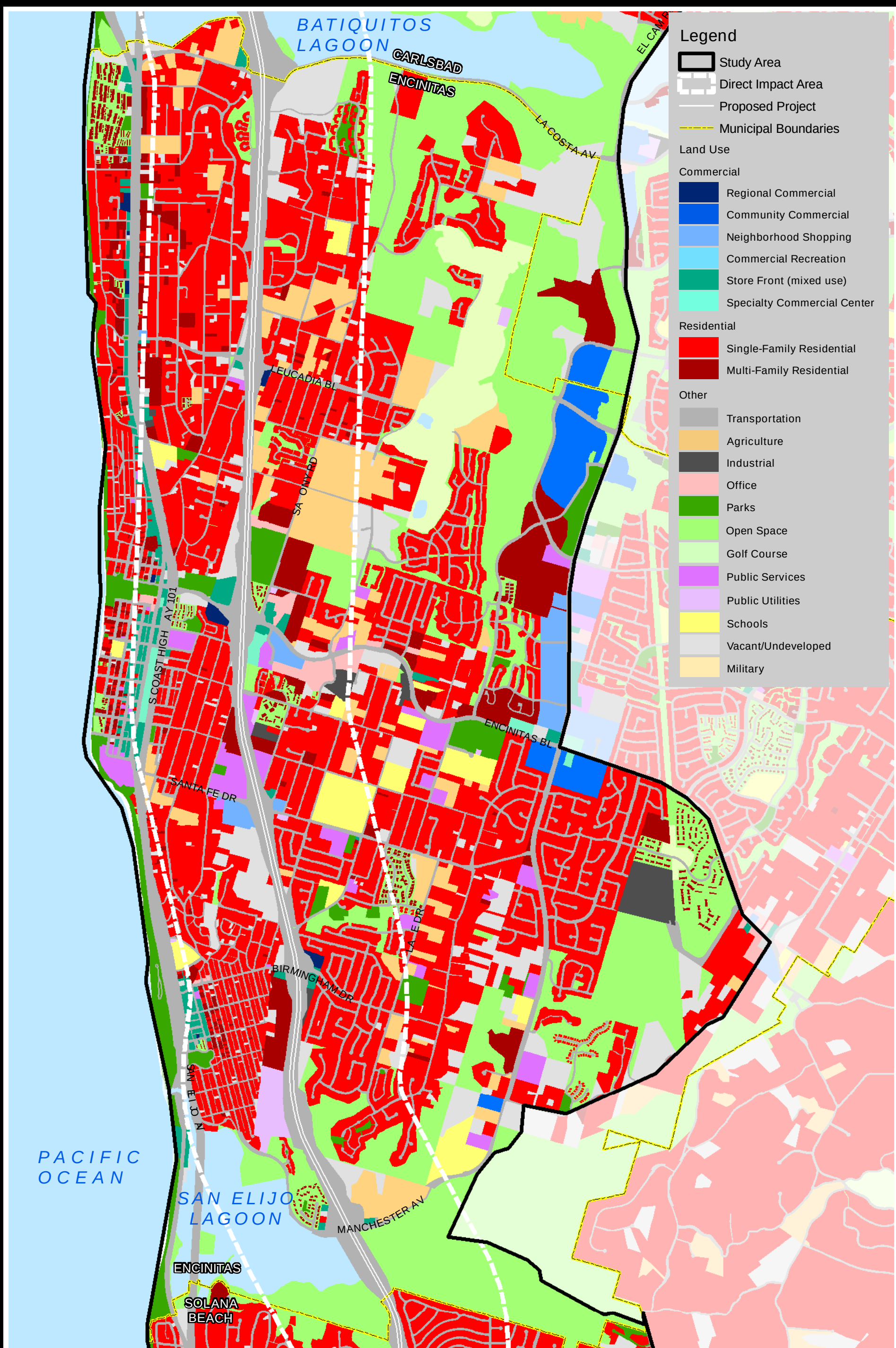
EDAW | AECOM

Figure 2.4-2
ENCINITAS
Regional Land Use

3,500 0 3,500 Feet

SCALE: 1:42,000; 1 inch = 3,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

EDAW | AECOM

Figure 2.4-3
ENCINITAS
Direct Impact Area Land Use

2,250 0 2,250 Feet

SCALE: 1:2 ,000; 1 inch = 1,500 feet

services (City of Encinitas 1989). The Manchester Drive interchange leads primarily to residential neighborhoods in southern Encinitas and Cardiff.

West of I-5 and along the Pacific Coast the study area is highly developed and urban in nature. Coast Highway 101 generally forms the western boundary of the area of primary impacts and is lined with commercial and mixed uses on small lots. Single-family residential developments (1 to 8 du/ac) are located south of Batiquitos Lagoon to Encinitas Boulevard. Agricultural greenhouses are also scattered throughout the area, some adjacent to the existing I-5 corridor. Densities generally increase south of Encinitas Boulevard and range from 3 to 15 du/ac.

As shown in brown in Figure 2.4-3, agriculturally zoned land is located east of I-5 north of the Quail Botanical Gardens. Agriculture here is typically in the form of productive greenhouses surrounded by residential developments, an active public park, and the Encinitas Ranch Golf Course. The Encinitas Boulevard interchange offers a commercial and office corridor and the highest-density multi-family residential classification in Encinitas (15.01 to 25 du/ac). South of Encinitas Boulevard, typical residential densities range from 5.01 to 11 du/ac. A series of parks and schools is located within the residential neighborhoods.

2.4.1.2 Affected Urban Community and Neighborhood Characteristics

The City of Encinitas General Plan (1989) identifies five official neighborhood communities within the municipality. The neighborhoods within the study area include Cardiff, Leucadia, and Old Encinitas, and part of New Encinitas. Boundaries of the defined neighborhood areas generally follow major intersections and thoroughfares. The coastal area of Encinitas is characterized by a casual village atmosphere with an emphasis on surfing and the coastal lifestyle (Caltrans 2007a).

Cardiff is bound by Santa Fe Drive to the north and San Elijo Lagoon to the south, with the beachfront on the west and El Camino Real to the east. It is mostly composed of single-family and multi-family residential buildings. There are also a few public service and public utility buildings, scattered commercial buildings, some agricultural lands, and two industrial buildings. Cardiff Reef and the small Cardiff business district are focal points within the community. This area also has an important agricultural history, with greenhouses and agricultural land interspersed with residential uses.

Leucadia is bordered by Batiquitos Lagoon to the north, the beachfront to the west, and El Camino Real to the east. It contains Encinitas Ranch, which is mostly parks and open space, golf courses, and single-family residential. The remainder of Leucadia is mostly single-family and multi-family residential buildings, with some agriculture and scattered commercial buildings.

Old Encinitas is bordered by Santa Fe Drive on the south, Crest Drive on the east, and the beachfront on the west. It is generally more urbanized, with several public utility buildings, some small Industry buildings, and a strip of commercial buildings near the beachfront. The remainder of the Old Encinitas community is made up of single-family and multi-family residential buildings.

A portion of New Encinitas is within the study area. The area extends from Manchester Avenue on the south to Olivenhain Road to the north, and Crest Drive to the west. The land use within this area is mixed-use consisting of residential, commercial, vacant/undeveloped, and parks and open space. There are a few industry buildings as well.

There are four specific plans that cover portions of Encinitas, including the Cardiff-by-the-Sea Specific Plan, Downtown Encinitas Specific Plan, Encinitas Ranch Specific Plan, and the North 101 Corridor Specific Plan. The Cardiff-by-the-Sea Specific Plan covers properties bordered by Mozart Avenue to the north and Orinda Drive to the south, between San Elijo Avenue and the alley west of Manchester Avenue. The Cardiff-by-the-Sea Plan is designed to revitalize the commercial area within the Plan. The Downtown Encinitas Specific Plan was written to address specific planning problems of the downtown area and “maintain its identity, community character, and scale, while fostering rehabilitation and successful economic restructuring.” The downtown plan stretches from Encinitas Boulevard to Santa Fe Drive to the south, with the beachfront on the west and Cornish Drive on the east. The Encinitas Ranch Specific Plan drives to maintain the agricultural character of the old Paul Ecke Ranch, while allowing new development to occur in the area in a complementary style. The area is east of I-5 with El Camino Real on the east, Encinitas Boulevard on the south, and La Costa Avenue on the north. The North 101 Corridor Specific Plan addresses the area west of I-5 along Coast Highway 101 between Encinitas Boulevard and Carlsbad going north. The Plan is designed to revitalize the commercial corridor while maintaining the community character of the area.

2.4.1.3 Farmland

A significant amount of land within Encinitas is devoted toward some form of agricultural production, much of which lies adjacent to I-5 within the area of direct impacts. The majority of agricultural operations within Encinitas are in the form of nurseries or greenhouses. Several such operations are located adjacent to the existing I-5 corridor in the area of direct impacts, and are designated as Unique Farmland (CDC 2004).

East of I-5 at Manchester Avenue is a parcel of active agricultural land, often cultivated with strawberries and flowers. This parcel is designated as Prime Farmland and is located within the direct impact area. Anderson’s La Costa Nursery and West Coast Nurseries are designated as Unique Farmland and are located south of Batiquitos Lagoon, approximately 220 feet west of I-5 north of La Costa Avenue. This land, however, is designated as residential 2.01-3.00 du/ac (City of Encinitas 1989). Weidners’ Gardens and Samia Rose Topiary are also designated Unique Farmland. They are located adjacent to the east side of I-5 north of Leucadia Boulevard. North of and adjacent to Leucadia Boulevard east of I-5 are the Leucadia Nursery and Emerald M. Growers, both of which are designated as Unique Farmland. Two Unique Farmland parcels that house greenhouse and nursery operations (Florabunda and Pacific Verde Nursery) are located east of and adjacent to I-5 at Union Street. Paul Ecke Ranch, the world’s largest poinsettia producer, consists of Unique, Prime, and Statewide farmland, as well as lands under Williamson Act Contracts. It is located 0.25 mile east of I-5 south of Puebla Street, partially within the direct impact area. Sunshine Gardens, a nursery and greenhouse operation designated as Unique Farmland, is located 0.25 mile east of I-5 at Encinitas Boulevard.

Three greenhouse operations located in the direct impact area are not designated as important farmland. This includes the Cal Pacific Orchid Farm west of I-5 on Orpheus Aveune, the Jungle Music Nursery immediately west of I-5 on Ocean View Avenue, and a greenhouse located north of Puebla Street.

In recent years, much of this agricultural land has been lost due to development, and remaining agricultural lands may still be under pressure to develop (City of Encinitas 1989). The protection of agricultural lands in Encinitas is outlined in the Resource Management Element of the General Plan (City of Encinitas 1989) and the Encinitas Ranch Specific Plan (Boyd 1994). Goal 11 of the Resource Element recognizes the important contribution of agricultural and horticultural land uses in the local economy and places emphasis on the need to maintain these activities. Goal 12 states the City will encourage the preservation of "prime" agricultural lands within the Encinitas Ranch Planning Area west of El Camino Real (City of Encinitas 1989).

The Encinitas Ranch Specific Plan is intended to preserve and promote agricultural uses by establishing Section 6.2, the Agricultural Zone. The Agricultural Zone identifies permitted uses within the 130 agriculturally designated acres east of I-5. Much of the agricultural land in the planning area and Encinitas is maintained for greenhouse flower production, which supplies a large portion of the statewide market for cut flowers.

2.4.1.4 Development Trends

As with the majority of coastal cities in southern California, Encinitas has grown at a relatively rapid pace over the last several decades. Accordingly, the Land Use Element of the General Plan addresses Growth Management and states policies and guidelines so that the City should manage slower, more orderly growth in accordance with a long-term plan that protects and enhances community values (City of Encinitas 1989). Policy 2.3 states the growth within Encinitas will be managed in a manner that does not exceed the availability of the City.

While urban Encinitas continues to grow, much of the remaining undeveloped land within the municipality has environmental constraints such as topography, drainage, and other limitations. The Housing Element addresses growth within Encinitas and has established policies, including an annual residential building limitation based on the total number of dwelling units in the City at build-out. The annual allocation limit is updated at the beginning of each year. Based on experience, an estimated 200 new units have been permitted each year since 1989 (City of Encinitas 2005b). Moderate- and low-income residential units are exempted from this annual allocation of permits. According to the Housing Element that is currently being updated by the City, the 2005 net developable acres in Encinitas is 866.25, with a total potential of 669 units. In addition to development on vacant land, there is also potential for additional units as infill and mixed-use developments in downtown Encinitas and along Coast Highway 101 (City of Encinitas 2005b).

Under land use build-out at mid-range densities, the General Plan would accommodate approximately 25,842 dwelling units, supporting an estimated population of 66,122 persons (City of Encinitas 1989). Given this estimation and based on a population of 58,014 as of 2000, this would represent an additional 7,108 persons (an increase of 11 percent). The projected number of new housing units by the end of 2005 is 25,227 leaving a shortfall of 615 units. The residential capacity of Encinitas varies within each of the five communities. As of 2003, New Encinitas is projected to experience the most growth, followed by Leucadia, Old Encinitas, Cardiff, and Olivenhain. Chapter 7.0, Growth, discusses in more detail, historical, current, and projected growth trends within Encinitas.

2.4.1.5 Jobs/Housing Balance

Based on residential density designations, implementation of the Land Use Element of the Encinitas General Plan may result in a population increase. The land use patterns of housing in relation to employment and commercial centers greatly influences commute patterns and types of transportation used within Encinitas. The jobs/housing balance concept is to locate residential areas near employment centers and commercial services with the premise that commuting, the overall number of vehicle trips, and the resultant vehicle miles traveled can be reduced.

"Smart Growth" is one concept that, among other goals, attempts to locate housing around a variety of transportation choices and create walkable neighborhoods. SANDAG provides an incentive program to promote smart growth development within the region, including Encinitas (SANDAG 2005). In addition to the regional smart growth incentive program, Encinitas provides incentives for mixed-use development and parking reductions in appropriate locations (SANDAG 2004a). Such programs are designed to have a positive effect on the jobs/housing balance and reducing vehicle trips within Encinitas.

In addition, goals and policies within the General Plan encourage a jobs/housing balance. Goal 1 of the Land Use Element states that:

> "Encinitas will strive to be a unique seaside community providing a balance of housing, commercial, light industrial/office development, recreation, agriculture, and open space compatible with the predominant residential character of the community."

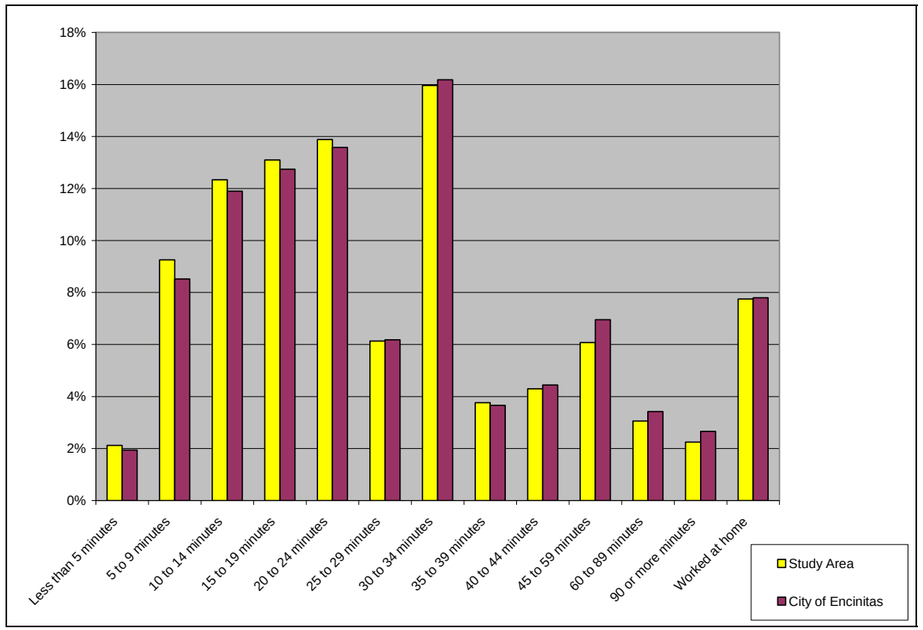
Policy 5.1 states that commercial growth within Encinitas should be sufficient to support residential growth and provide adequate services to the citizens within each of the five communities (City of Encinitas 1989).

Encinitas is currently in the process of updating the Housing Element of the General Plan. The Draft Goals and Policies and Programs identifies a new program to encourage smart growth and/or mixed-use development (City of Encinitas 2005b). This includes identifying smart growth potential areas, particularly those centering around high levels of transit service. An estimated 592 and 380 mixed-use units are available for development in the downtown area and along Coast Highway 101, respectively.

The 2000 U.S. Census gathered information on the amount of time that people spend commuting to and from the workplace, in turn giving a general idea of those who work and live within proximate distance of each other. As of 2000, Encinitas showed a population of 78,247 persons. Of this total, 32,816 persons comprised the labor force, of which 95.7 percent were classified as employed (31,399 persons) (U.S. Bureau of the Census 2000).

As shown in Table 2.4-1, the commuting times for Encinitas as a whole were similar to those for that portion of Encinitas within the study area. Approximately 37 percent of commuters within the study area of Encinitas spent less than 20 minutes driving to and from work as compared to the approximately 35 percent of the total population of Encinitas. It is likely that a substantial number of those commuting less than 20 minutes may live and work within Encinitas, thereby having short commute times and contributing to a positive job/housing balance. Approximately 44 percent of employed persons in the study area, as well as the remainder of Encinitas, commute from 20 to 44 minutes. Conversely, these commuters would be more likely to leave Encinitas to get to their work place.

Table 2.4-1. Commute Times – Encinitas



Source: U.S. Bureau of the Census 2000, Summary File 3

Approximately 11 percent of the employed population within the study area and Encinitas as a whole commutes over 45 minutes to work. Those who spend more than 45 minutes commuting are virtually certain not to work within Encinitas. As the jobs/housing balance attempts to reduce commuting times and vehicle trips, the latter group did not contribute to a balance of housing and jobs. However, as discussed previously, regional incentives and City-defined goals attempt to control the location, intensity, and nature of jobs and housing in order to encourage a reduction in vehicle trips and miles traveled.

2.4.1.6 Adopted Planning Goals and Policies

There are several plans that identify planning goals and policies for the City of Encinitas, which are identified below.

City of Encinitas General Plan and LCP

The City of Encinitas General Plan contains stated community goals and policies designed to shape the long-term development of the city, as well as protect its environmental, social, cultural, and economic resources. The proposed project traverses a variety of land uses along the I-5 corridor, which have been identified by the Land Use Element. The Land Use Map shows designated land use areas within Encinitas. The Land Use Element establishes a land use distribution based on a mix of development consistent with the goals and objectives of the General Plan. The Land Use Element sets out to preserve natural open spaces, slopes, bluffs, and lagoon areas, and to maintain the sense of spaciousness and semi-rural living within the I-5 view corridor. The Circulation Element sets out to provide a safe, convenient, and efficient transportation system that is sensitive to and compatible with surrounding community character. The Resource Management Element sets out to preserve natural resources such as significant mature trees, vegetation, and wildlife habitat within the City of Encinitas.

A large portion of Encinitas and study area is located within the California Coastal Zone; therefore, issues and policies related to the requirements of the California Coastal Act are also included in the General Plan. These are combined to create the General Plan and LCP Land Use Plan (LUP) for the city. The LUP includes the entire coastal area of Encinitas, generally from the Pacific Ocean to Hill Street. It is also inclusive of San Elijo Lagoon.

In addition to the Land Use Element and associated maps, the City of Encinitas Zoning Code and Encinitas Ranch Zoning Code are the principal tools used by Encinitas to implement land use policy. The Zoning Code must be consistent with the General Plan and land use designations stated in the Land Use Element. The Zoning Code includes a map delineating zoning boundaries and text that explains permitted uses within zones and standards.

Additional Encinitas Plans

Additional plans recognized within the General Plan and by the City that are included within the study area include the Encinitas Ranch Specific Plan, Cardiff-by-the-Sea Specific Plan, Downtown Encinitas Specific Plan, and the North 101 Corridor Specific Plan. The City of Encinitas Design Guidelines also set guiding principles for development within the city to ensure that each of the five communities retains its individual character (City of Encinitas 2005c).

2.4.2 Population and Housing

The City of Encinitas was incorporated in 1986 but was founded approximately 100 years prior. In the early 1900s, the city became better known as a visitor destination when a number of Hollywood celebrities began buying second homes in Encinitas (Downtown Encinitas Mainstreet Association 2005). In 1922, the flower industry began to grow when water rights were secured for the city, giving rise to the title the “Flower Capital of the World.” The Great Depression of 1929 negatively affected the economy of the city as with the rest of the Nation, although Encinitas’s population growth remained relatively unaffected, expanding by 33 percent from 1930 to 1940 (3,508 persons in 1930 to 4,652 persons), according to data from the U.S. Bureau of the Census. The population of Encinitas increased

to 12,888 persons as of 1950. In 1952, a special census showed the city's population exceeding 18,000. Slower rates of population growth occurred during subsequent decades with the population of Encinitas reaching 55,386 persons as of 1990 and 58,014 persons as of 2000.

2.4.2.1 Population and Growth

Encinitas, as of 2000, showed a population of 58,014 persons and consisted of approximately 6 percent of San Diego County's total population (2,813,833 persons). Continuing a long-standing trend, Encinitas showed only minimal population growth over the past decade, rising only 5 percent between 1990 and 2000 (from 55,386 to 58,014 persons) (SANDAG 2004b). A 2004 estimate indicated a population of 62,586 persons showing an estimated population growth of 8 percent. As such, the rate of growth within Encinitas has been consistently lower than that shown by San Diego County, which was at 13 percent between 1990 and 2000 with an estimated growth of 7 percent in 2000-2004 (SANDAG 2004b). Long-range forecasts for Encinitas indicate a continuation of relatively low levels of population growth, with the population anticipated to increase by 22 percent between 2000 and 2030, much lower than that predicted for the county (37 percent) (SANDAG 2004a).

As of 2000, the population within the study area was 42,843 and comprised 73.9 percent of the total population of Encinitas. As shown in Figure 2.4-4, several areas within Encinitas showed elevated population densities, mainly stemming from more concentrated levels of urban development. While smaller pockets of more densely populated areas exist in newer residential developments to the east of the city, population densities generally increased toward the center and to the west of the study area. This is particularly evident between the coastal strip and I-5, and within areas east of I-5. As illustrated in Figure 2.4-4, the highest population densities within Encinitas are located at least partially within the area of direct impacts. Specifically, particularly densely populated areas were located west of I-5 north and south of Birmingham Drive, east of I-5 north and south of Santa Fe Drive, and west of I-5 along the beachfront just north of Leucadia Boulevard.

2.4.2.2 Race and Ethnicity

As shown in Table 2.4-2, as of 2000, Encinitas was predominantly White (86.6 percent). The population consisted of extremely small percentages of Black/African American (0.6 percent), American Indian and Alaskan Native (0.5 percent), and Native Hawaiian/Pacific Islander (0.1 percent) populations. There were slightly higher proportions of Asian (3.1 percent), "some other race" (6.3 percent), and "two or more races" (2.9 percent) populations.

As of 2000, the breakdown race and ethnicity within the population of Encinitas was markedly different from that of San Diego County, namely via lower levels of diversity. Most minority populations were proportionately well below half of the percentages present within the county, with the Black/African American population being particularly low. The Hispanic population was again significantly lower. Conversely, the White population was much higher than that of the county. As of 2000, the total minority population in Encinitas was 21.0 percent of the total population, which was substantially lower than that of the county.

Table 2.4-2. Race and Ethnicity – Encinitas and San Diego County

	Encinitas		San Diego County	
White	86.6%	(50,241)	66.5%	(1,871,839)
Black/African American	0.6%	(340)	5.7%	(161,480)
American Indian and Alaskan Native	0.5%	(267)	0.9%	(24,337)
Asian	3.1%	(1,798)	8.9%	(249,802)
Native Hawaiian/Pacific Islander	0.1%	(69)	0.5%	(13,561)
Some other race	6.3%	(3,645)	12.8%	(360,847)
Two or more races	2.9%	(1,654)	4.7%	(131,967)
Hispanic	14.8%	(8,584)	26.7%	(750,965)
Total Minority	21.0%	(12,162)	45.0%	(1,256,000)

Source: U.S. Bureau of the Census 2000

As shown in Figure 2.4-5, minority populations within Encinitas are loosely correlated with increased population density, at least in some portions of the city. In the eastern portion of the municipality, low minority populations were generally evident, although smaller areas of slightly higher minority populations were located within eastern portions of the study area. As shown in Figure 2.4-5, east of I-5 within the direct impact area there was a more discernable increase in minority levels south of Leucadia Boulevard and south of Encinitas Boulevard. Additionally, the areas directly west of I-5 showed a number of areas with elevated levels of minority populations, with one particular concentration toward the beachfront north of Leucadia Boulevard.

2.4.2.3 Age

The age makeup of Encinitas generally paralleled that of San Diego County in 2000. The percentages of persons between 18 and 64 in Encinitas were slightly higher than the county percentages, while the percentage of persons under 18 and over 65 were slightly lower than the county. This suggests that a greater percentage of the workforce inhabits Encinitas compared to San Diego County as a whole.

As shown in Table 2.4-3, as of 2000, the population of minors (under 18 years), at 23.1 percent, was marginally below that of the county average. Conversely, the working age population of Encinitas (18-64 years), at 66.5 percent, was marginally above that of San Diego County. The proportion of senior citizens (over 65 years) within Encinitas was 10.0 percent. The city's median age of 37.9 years remained markedly above the county average.

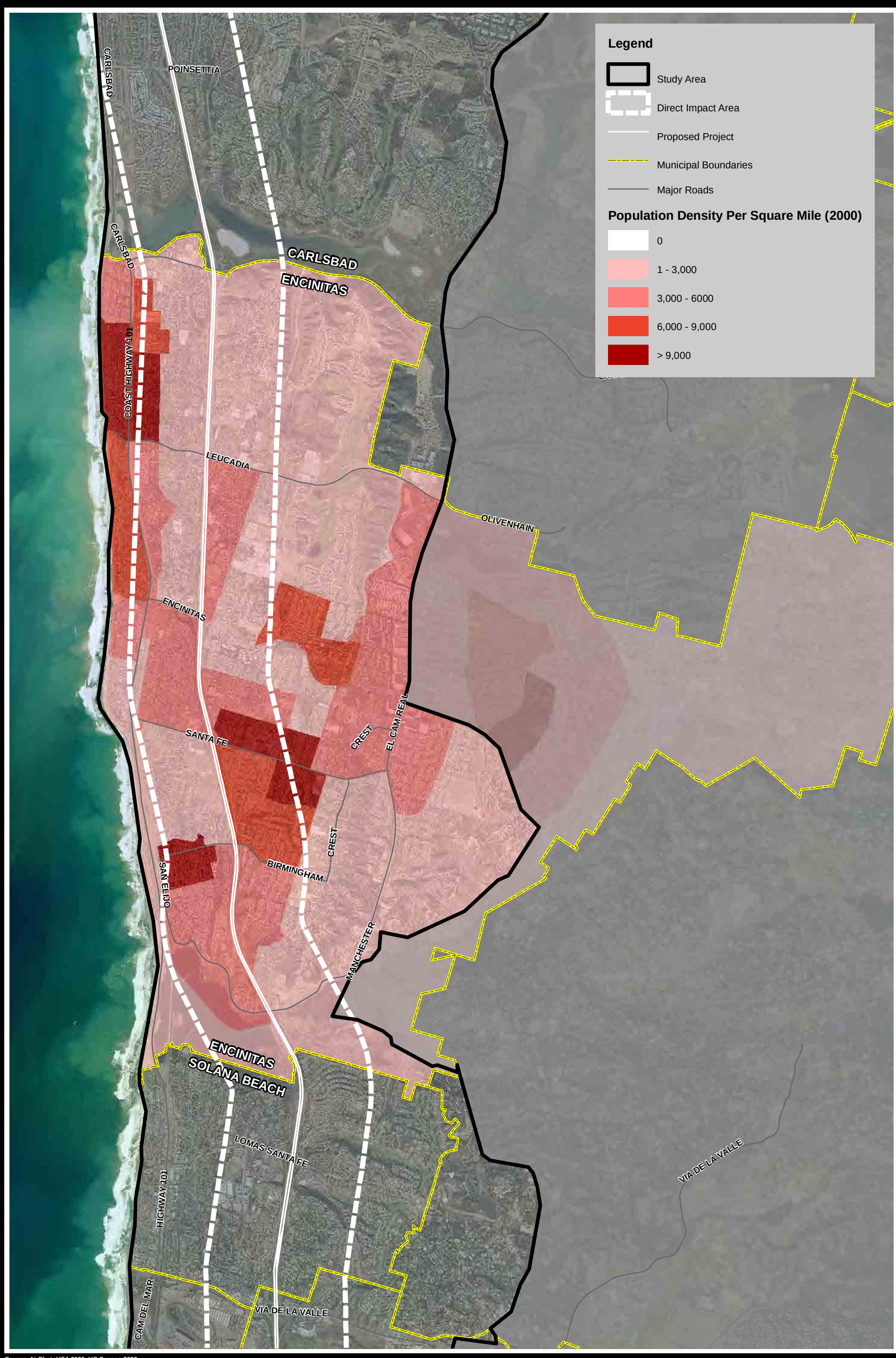
Table 2.4-3. Age Breakdown – Encinitas and San Diego County

	Encinitas		San Diego County	
Under 18 years	23.1%	(13,377)	25.7%	(811,038)
18 to 64 years	66.5%	(38,582)	63.1%	(1,776,442)
Over 65 years	10.4%	(6,055)	11.2%	(313,750)
Median Age	37.9 years		33.2 years	

Source: U.S. Bureau of the Census 2000

I-5 NORTH COAST CORRIDOR EIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; US Census 2000

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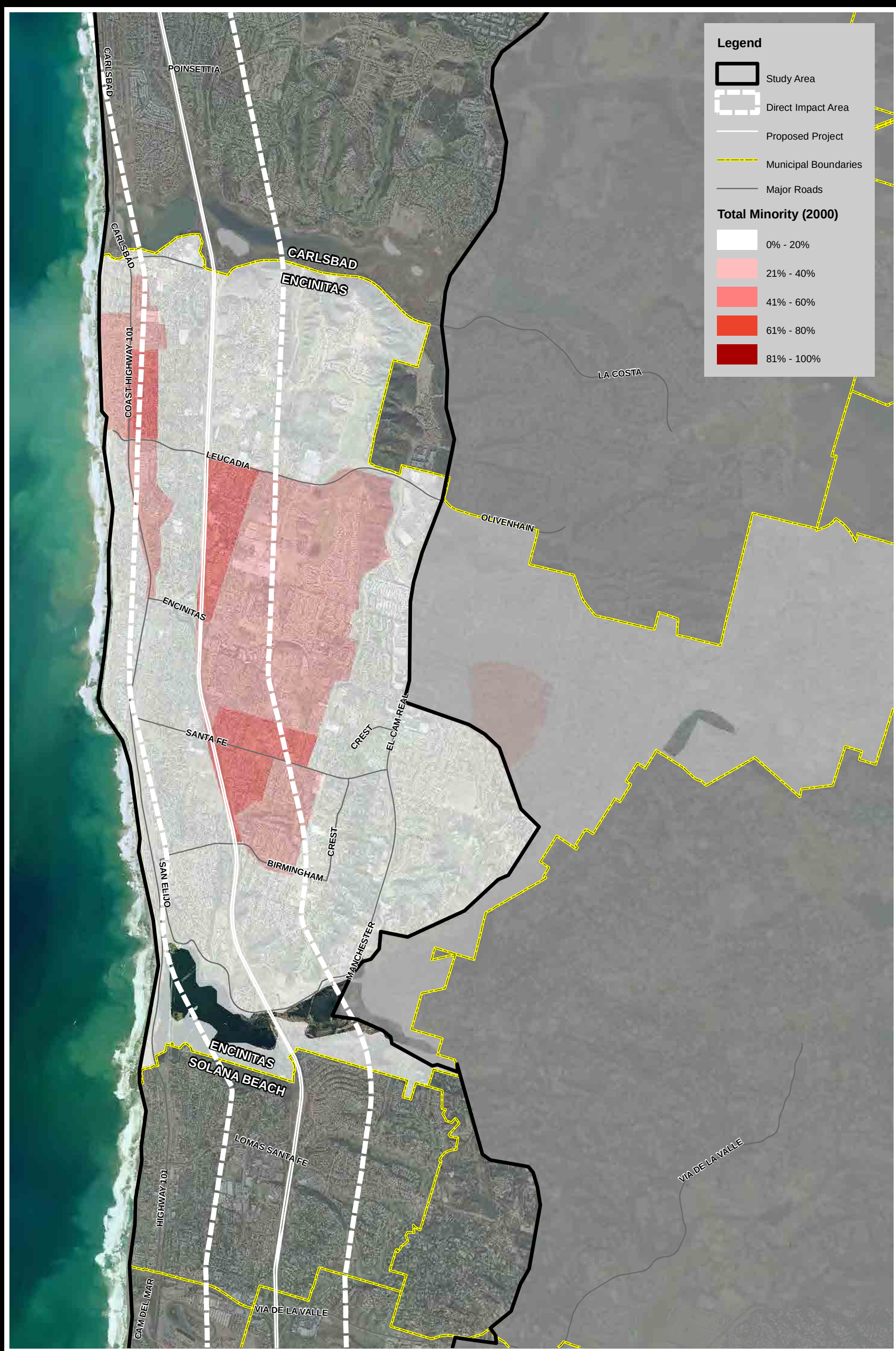
Figure 2.4-4
ENCINITAS
Population Density

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; US Census 2000

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Figure 2.4-5
ENCINITAS
Proportion of Total Minority

As shown in Figure 2.4-6, high populations of senior citizens were present within eastern and southern portions of the study area but showed much lower levels within more eastern portions of the municipality. Specifically, southeast of the study area the areas south of Leucadia Boulevard and north of Encinitas Boulevard, as well as at the easternmost border of the study area south of Encinitas Boulevard, showed elevated populations. As shown in Figure 2.4-6, high populations were also present within large portions of the direct impact area, especially to the west of I-5. In addition, there were significantly elevated populations within areas east of I-5, both north and south of Leucadia Boulevard and south of Santa Fe Drive.

2.4.2.4 Housing

As shown in Figure 2.4-7, large areas within the eastern portion of Encinitas showed relatively low levels of housing density, although increasing significantly within some areas immediately east of the study area boundary. The central and western portions of the city conversely showed generally elevated densities, sometimes significantly so, such as the coastal area. As shown in Figure 2.4-7, areas of higher densities within the direct impact area were generally located to the west of I-5 and north and south of Birmingham Drive, east of I-5 north and south of Santa Fe Drive, and west of I-5 along the beachfront just north of Leucadia Boulevard. Additionally, several areas of more moderate density were present within the northern and southeastern portions of the direct impact area, east of I-5. Housing densities within Encinitas generally correlated to population density. As of 2000, the average household size in Encinitas was 2.52 persons, compared to the county average of 2.73. As of 2000, Encinitas households made up only 2.4 percent of the county total (23,843 of 994,677, respectively).

Affordable Housing

The City of Encinitas General Plan contains stated community goals and policies designed to shape the long-term development of the city. The general goals of the long-range policy for housing opportunities are to produce opportunities for “the continued affordability of guaranteed-affordable units” (City of Encinitas 1989).

The City of Encinitas Planning and Buildings Department has developed programs including home buying assistance, rent assistance, and affordable housing. There are seven affordable housing complexes in Encinitas, including two that are designated to serve senior citizens. Second Street Apartments, Cantebria Senior Homes, Encinitas Terrace Senior Apartments, Esperanza Garden Apartments/Regal Road Family Apartments, Poinsettia Ridge Apartments, Su Casa Por Cortez Apartments, and Manchester Apartments are all within the area of direct impacts along the I-5 corridor.

2.4.3 Public Facilities and Services

2.4.3.1 Schools

The Encinitas area is served by the Encinitas Union Elementary District and the San Dieguito Union High School District. Encinitas Union Elementary District has nine schools that provide kindergarten to 6th grade educational facilities. San Dieguito Union High School District has 10 middle and high schools providing 6th to 12th grade to the region, of which 2 are located in Encinitas. There are a total of 12 schools located within the study area. As shown in Figure 2.4-8, six of these schools are within the area of direct impacts, including four elementary schools and two high schools. Ada Harris Elementary and San Dieguito High School are nearest to the I-5 corridor, north and south of Santa Fe Drive, respectively. In addition, a portion of Mira Costa Community College is located in the direct impact area in south Encinitas along Manchester Avenue.

2.4.3.2 Police Protection

The San Diego County Sheriff’s Department provides law enforcement services through contract for the City of Encinitas. These services are provided by deputy sheriffs and professional staff from the Encinitas Sheriff’s Station. In addition to its own city boundaries, the Encinitas Sheriff’s Station also patrols Solana Beach, Del Mar, the unincorporated areas of Rancho Santa Fe, Fairbanks Ranch, the Rancho Cielo development, and the San Onofre-MCB Camp Pendleton coastal area. The Sheriff’s Station is located at the northeast corner of Encinitas Boulevard and El Camino Real, outside of the study area. The Sheriff’s Station is also home to the NCTD’s Railroad Enforcement Unit, which is responsible for patrolling the Coaster ROWs and railroad operations.

2.4.3.3 Fire Protection

The Encinitas Fire Protection District serves the city, including the study area. There are currently five operational fire stations within Encinitas. Each station houses an engine company of three fire suppression personnel per shift, a fire engine, and various other emergency apparatus for specialized responses. Fire Station 5 houses a truck ladder company with a 100-foot ladder, water pump, hoses, and other rescue equipment.

Of the five fire stations, two are located outside of the study area, and three are located within the area of direct impacts. Fire Station 1 is located west of I-5 and south of Encinitas Boulevard. It is the nearest station to the coastal area. Fire Station 2 is located in southern Encinitas at the corner of the I-5/Birmingham Drive interchange. Fire Station 3 is located in north Encinitas adjacent to the west side of I-5 and south of Leucadia. The three fire stations in the direct impact area have direct access to I-5 and the surrounding roads. Figure 2.4-8 shows the location of these fire stations within the direct impact area.

2.4.3.4 Hospitals and Medical Facilities

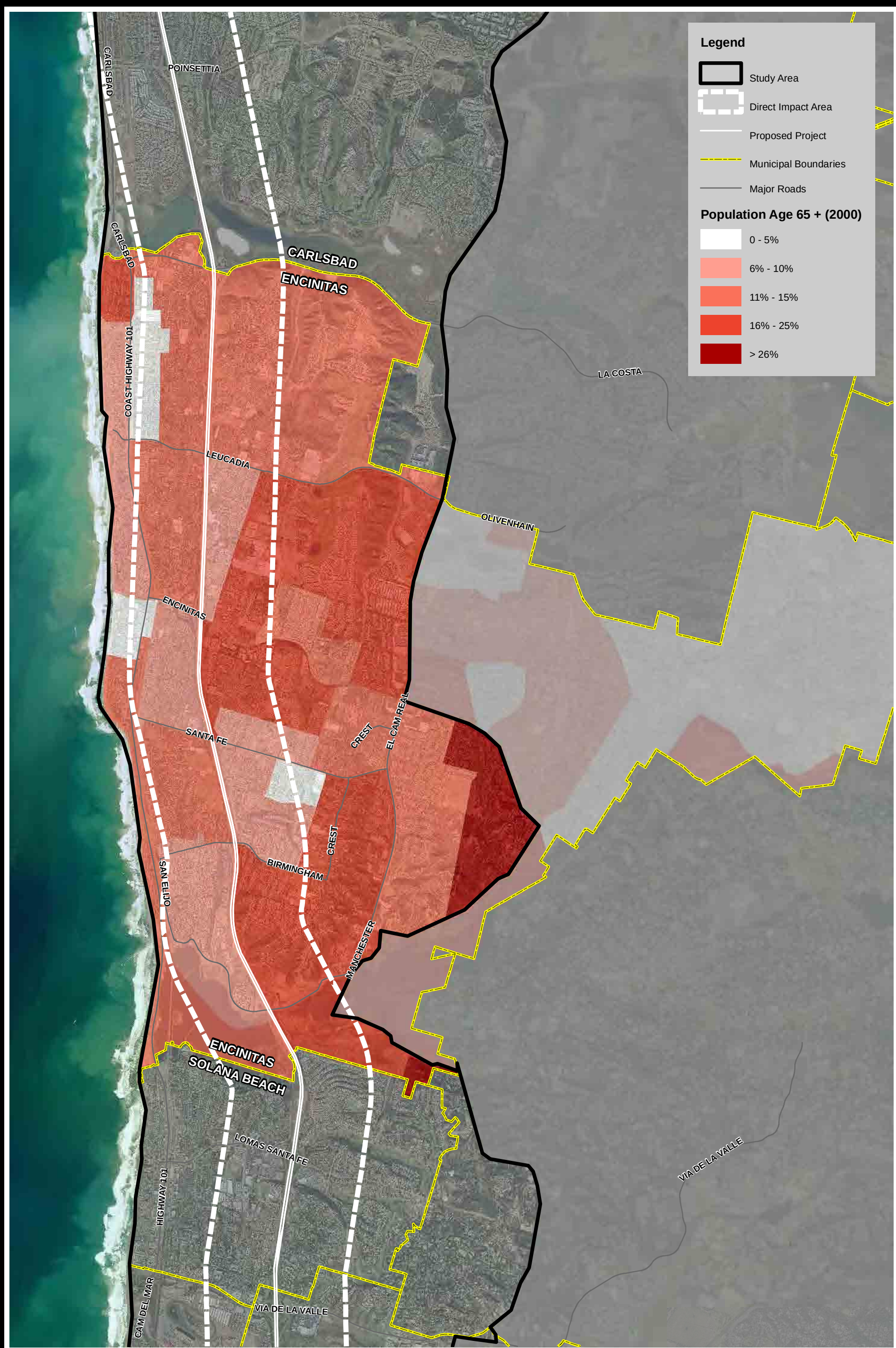
The Scripps Memorial Hospital in Encinitas is the primary medical facility in the city. It is located adjacent to the west side of I-5 north of Santa Fe Avenue, in the direct impact area. The hospital is currently proposing to expand the existing hospital site and add new facilities, including a three-story parking structure, a medical office building, an emergency facility expansion, and other facility improvements.

2.4.3.5 Recreational and Community Facilities

There are 13 parks in Encinitas that lie within the study area, of which 7 are located in the area of direct impacts. The Paul Ecke Sports Park is closest to the I-5 corridor being adjacent to its east side, north

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; US Census 2000

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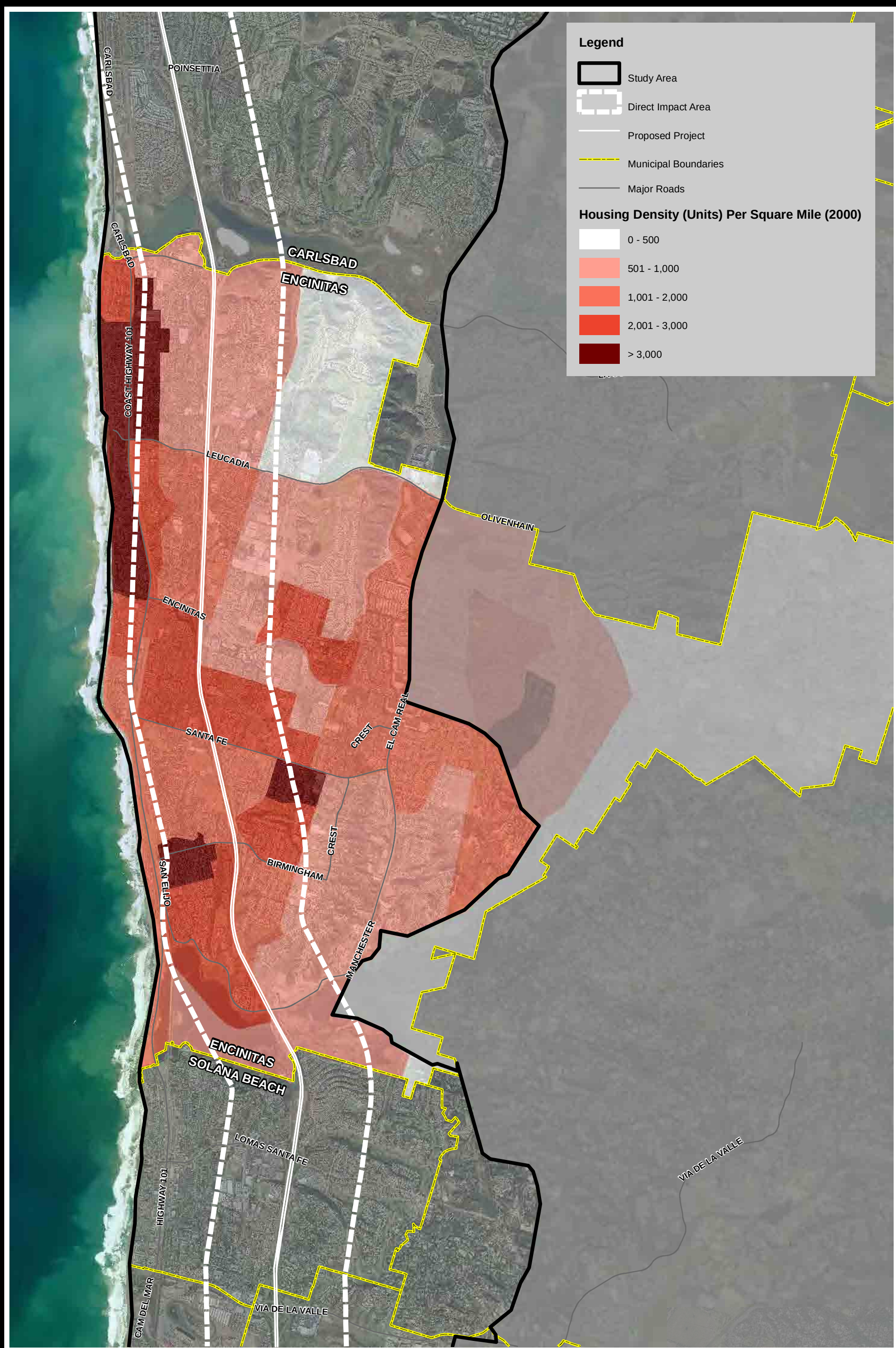
Figure 2.4-6
ENCINITAS
Population Age 65 +

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; US Census 2000

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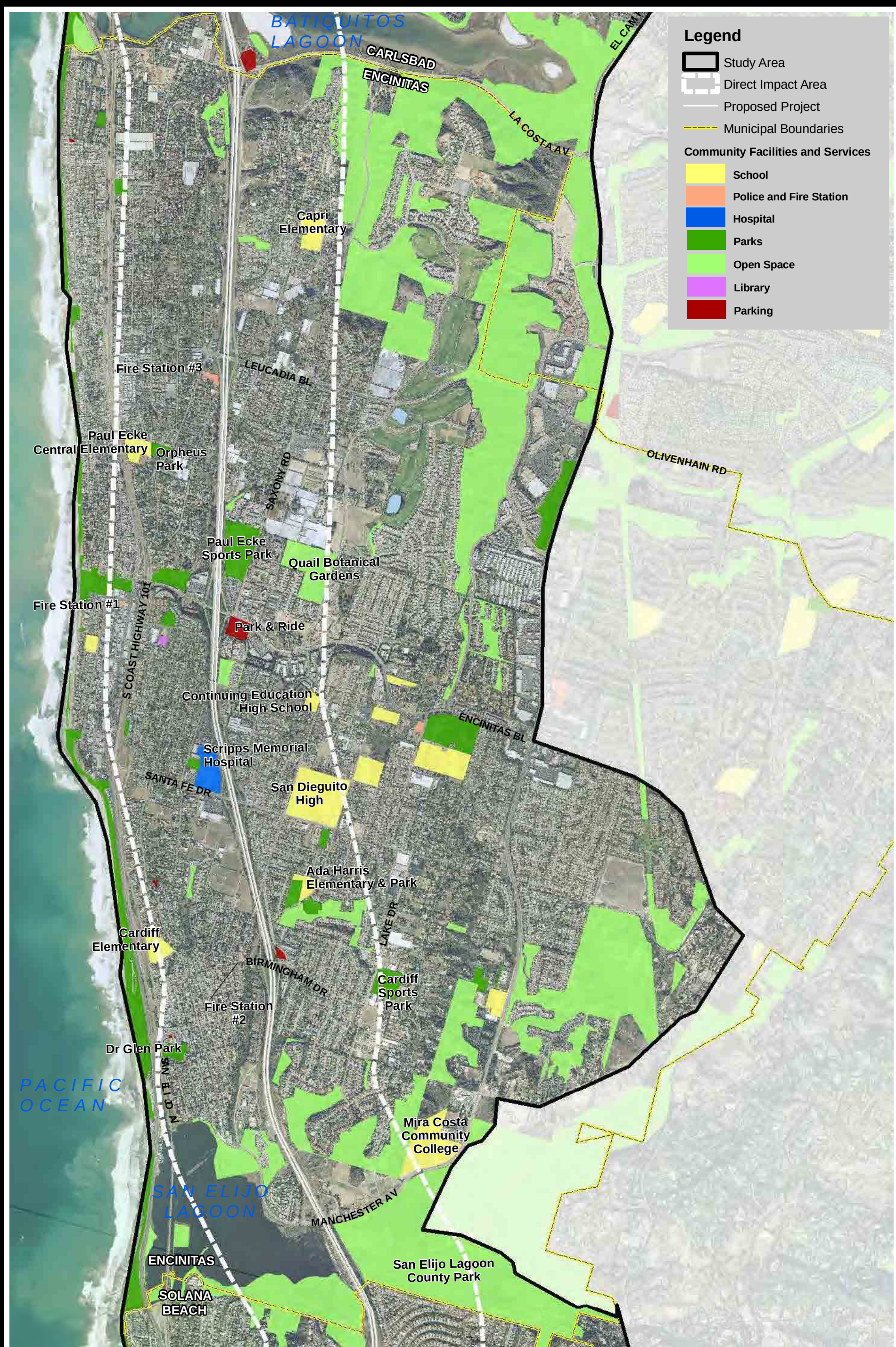
Figure 2.4-7
ENCINITAS
Housing Density

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

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Figure 2.4-8
ENCINITAS
Community Facilities and Services

2,250 0 2,250 Feet

SCALE: 1:27,000; 1 inch = 2,250 feet

of Encinitas Boulevard. The Paul Ecke Sports Park has baseball, soccer, and multipurpose fields. Other parks in the area of direct impacts include Orpheus Park, Encinitas Viewpoint Day Use Park, Cottonwood Creek Park, Glen Park in Cardiff, Cardiff Sports Park, and Leucadia Oaks Park. Parks located in the area of secondary impacts include Leucadia Roadside Park, Oakcrest Park, Leo Mullen Sports Park, and Hawk View Park.

Other community facilities in Encinitas include the Encinitas Ranch Golf Course and the Quail Botanical Gardens. The City-owned and operated Encinitas Ranch Golf Course is located in the area of secondary impacts, both north and south of Leucadia Boulevard. Quail Botanical Gardens hosts community events such as educational services, wedding ceremonies, children's events, and volunteer opportunities, and it is also home to the Botanical Library. Quail Botanical Gardens is located within the preliminary area of secondary impacts.

The Encinitas Community Center and Senior Center is located at the southwest corner of Encinitas Boulevard and El Camino Real in the area of secondary impacts, in Oakcrest Park. Its facilities provide educational, recreational, social, and civic opportunities to the citizens of Encinitas. Programs offered at the Senior Center include luncheons, exercise classes, art classes, and recreational gatherings. Community activities offered at the Encinitas Community Center include Family Fun Night, classes, concerts, workshops, festivals, and indoor sports functions.

One community hospital is located adjacent to I-5 and therefore is within the proposed area of direct impacts. Scripps Memorial Hospital is located on the west side of I-5 near Santa Fe, as shown in Figure 2.4-8.

The Encinitas Branch Library is located west of I-5 and south of Encinitas Boulevard, within the area of direct impacts. There is also a library located in Cardiff west of I-5 and south of Birmingham Drive within the area of direct impacts.

2.4.3.6 Circulation, Access, and Parking

Traffic flow and access in and out of Encinitas are described in the Circulation Element of the Encinitas General Plan (2003b). Major roads, transit lines, pedestrian corridors, parking, and airports are outlined below. Table 2.4-4 shows the main modes of transportation for commuters in Encinitas.

Table 2.4-4. Modes of Transportation – Encinitas

Means of Transportation	Number of Commuters per Day	Percentage
Total daily commuters	31,068	100.00
Car, truck, or van	26,572	85.53
Railroad	432	1.39
Bus (including trolley bus)	423	1.36
Other public transportation[1]	29	0.09

[1] Includes census categories of street car or trolley car, and subway or elevated.
Source: U.S. Bureau of the Census 2000

Major Roads

I-5 is a major transportation feature in Encinitas, dividing the coastal areas of the city from the inland region. Freeway interchanges from I-5 into and out of Encinitas are located at La Costa Avenue, Leucadia Boulevard, Encinitas Boulevard, Santa Fe Drive, Birmingham Drive, and Manchester Avenue. In addition, prime arterials, major arterials, secondary arterials, and collector streets have been identified in the Circulation Element of the General Plan. Policy 3.2 of the Circulation Element is to "continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost-effective alternatives" (City of Encinitas 1989).

Prime arterials are defined as carrying very heavy traffic volumes (over 40,000 estimated ADT) and providing for regional and intra-city circulation and connections to freeways and other regional roads. Prime arterials in Encinitas include Encinitas Boulevard, South El Camino Real, Olivenhain Road, and Rancho Santa Fe Road. Major arterials carry moderate to heavy traffic volumes (20,000 to 40,000 estimated ADT) and have a minimum of two traffic lanes in each direction with a raised median. Major arterials include La Costa Avenue west of El Camino Real and Coast Highway 101. Collector streets, which provide immediate access to adjoining properties and carry light to moderate traffic volumes (2,000 to 10,000 estimated ADT) include La Costa Avenue east of El Camino Real, Balour Drive, and Mountain Vista Drive. The General Plan has defined the majority of roads in Encinitas as "augmented roadways," which can be any of the roadway classes mentioned above that have an augmented, or improved, designation (City of Encinitas 1989).

Public Transit

Rail service is provided to Encinitas by the Coaster along the Santa Fe Railway. NCTD operates the Coaster, which began service in 1995. The Coaster serves the cities of Oceanside, Carlsbad, Encinitas, Solana Beach, and San Diego.

The railway traverses Encinitas west of I-5, within the area of secondary impacts. Coaster stops are made at seven stations along the route, which is broken down into four zones. Encinitas is within Zone 2 of the Coaster and has one transit station. The Encinitas Transit Center Station is located at the southeast corner of Encinitas Boulevard and Coast Highway 101, within the area of direct impacts. Accessibility and, to an extent, ridership of public transit lines vary throughout each municipality. As of 2000, approximately 432 commuters per day in Encinitas used the railroad (presumably the Coaster) as the main mode of transportation (U.S. Bureau of the Census 2000).

NCTD also operates the bus system, "the Breeze," throughout the north San Diego County region, including from Encinitas to Del Mar, northeast to Escondido, east to Ramona, north to Fallbrook and San Clemente in Orange County, and to MCB Camp Pendleton. The Encinitas Transit Center currently provides service to the area via five routes. This includes routes north to Oceanside, east to San Marcos, and local service within Encinitas. Local routes serve main community services such as the Community Center and Senior Center, Scripps Memorial Hospital, and commercial activity centers. As of 2000, approximately 423 commuters per day in Encinitas used the bus system as the main mode of transportation (U.S. Bureau of the Census 2000).

Pedestrian Corridors

Sidewalks and bike lanes are located throughout Encinitas along the roadways connecting with the street pattern and interchanges. Encinitas has a well-defined recreational trail system along the coastal front, lagoons, and through the open space preserves in the eastern portion of the city. Indian Head Canyon Trail is located on the west side of I-5 and is a total of 2.97 miles. A portion of this trail is located adjacent to I-5 at Olympus Street in the area of direct impacts. The main trail is located near Quail Gardens. The Encinitas Ranch Trails are located west of Saxony Road and run a total of 4.65 miles. The Manchester Trails, located north of Manchester Avenue, run a distance of 2.37 miles. All of these trails are located within the study area.

Parking

The City of Encinitas General Plan does not specifically address parking locations and needs within the city. However, "Park & Ride" lots, which are free convenient parking lots where one would meet a carpool or take the bus or train, are located at the I-5/Encinitas Boulevard and I-5/Birmingham Drive interchanges. The Park & Ride lots are shown in red in Figure 2.4-8.

2.4.4 Economics

2.4.4.1 Local Economy

Historically, the economy of Encinitas was based upon agriculture, with poinsettias, avocadoes, flower and plant nurseries, and bamboo (City of Encinitas 2005a). The presence of the railroad has helped to promote the Encinitas area for growth and development since the 1880s (San Diego Daily Transcript 2005). The growth of Encinitas further expanded with the construction of a highway connecting San Diego and Los Angeles before 1920 and the construction of I-5 during the 1960s.

Currently, Encinitas continues to support agriculture, but it also has acquired a diverse economic portfolio, including significant levels of tourism. For instance, while agriculture remains important to the economy with the production of flowers, the beaches and Quail Botanical Gardens along Encinitas Boulevard east of I-5 are consistently popular destinations for tourists (Encinitas Chamber of Commerce 2005). Encinitas is a predominantly urbanized city although it does exhibit more of a rural quality in the eastern portion of the city, established through the presence of open space, agricultural areas, and less dense residential developments. Figure 2.4-9 depicts commercial, industrial, and agricultural land uses located within and surrounding the Encinitas study area. The data provided in this figure is derived from SANDAG land use categories (2003).

As shown in Figure 2.4-9, commercial and industrial areas within Encinitas are primarily located along the major roadways transecting I-5, with a dominant presence along Encinitas Boulevard. Commercial areas are also located along Coast Highway 101, which parallels I-5 to the west, as well as in the areas along the eastern boundary of the study area. Agricultural areas are located all throughout Encinitas in varying parcel sizes but are primarily located in the area east of I-5.

2.4.4.2 Income and Employment

Median Household Income

Median household income is defined as the middle value of all incomes as arranged from highest to lowest in a selected geographic area. Based on data according to block groups from the 2000 U.S. Census, the median household income for Encinitas was $63,954 with $186,299 as the highest median household income for a block group in Encinitas and $31,675 as the lowest median household income for a block group in Encinitas. In comparison, the median household income according to block groups for San Diego County as of 2000 was $47,067, significantly lower than Encinitas, although it showed $200,001 for the highest median household income for a block group in the county and $9,208 as the lowest median household income for a block group in the county.

Figure 2.4-10 illustrates the median household incomes within the study area and direct impact areas, respectively, arranged by block groups and grouped together according to six different ranges. The majority of the study area is within the median household income range of $63,954-$114,000 along the I-5 corridor and to the areas east. Within the study area, the areas within the highest median household income range (above $165,001) are located east of I-5 in the southern areas of Encinitas adjacent to the municipal boundary with Solana Beach. The areas sharing the lowest median household income range in the study area (below $35,000) are located to west of I-5 along the coast north of Leucadia Boulevard and west of Santa Fe Drive.

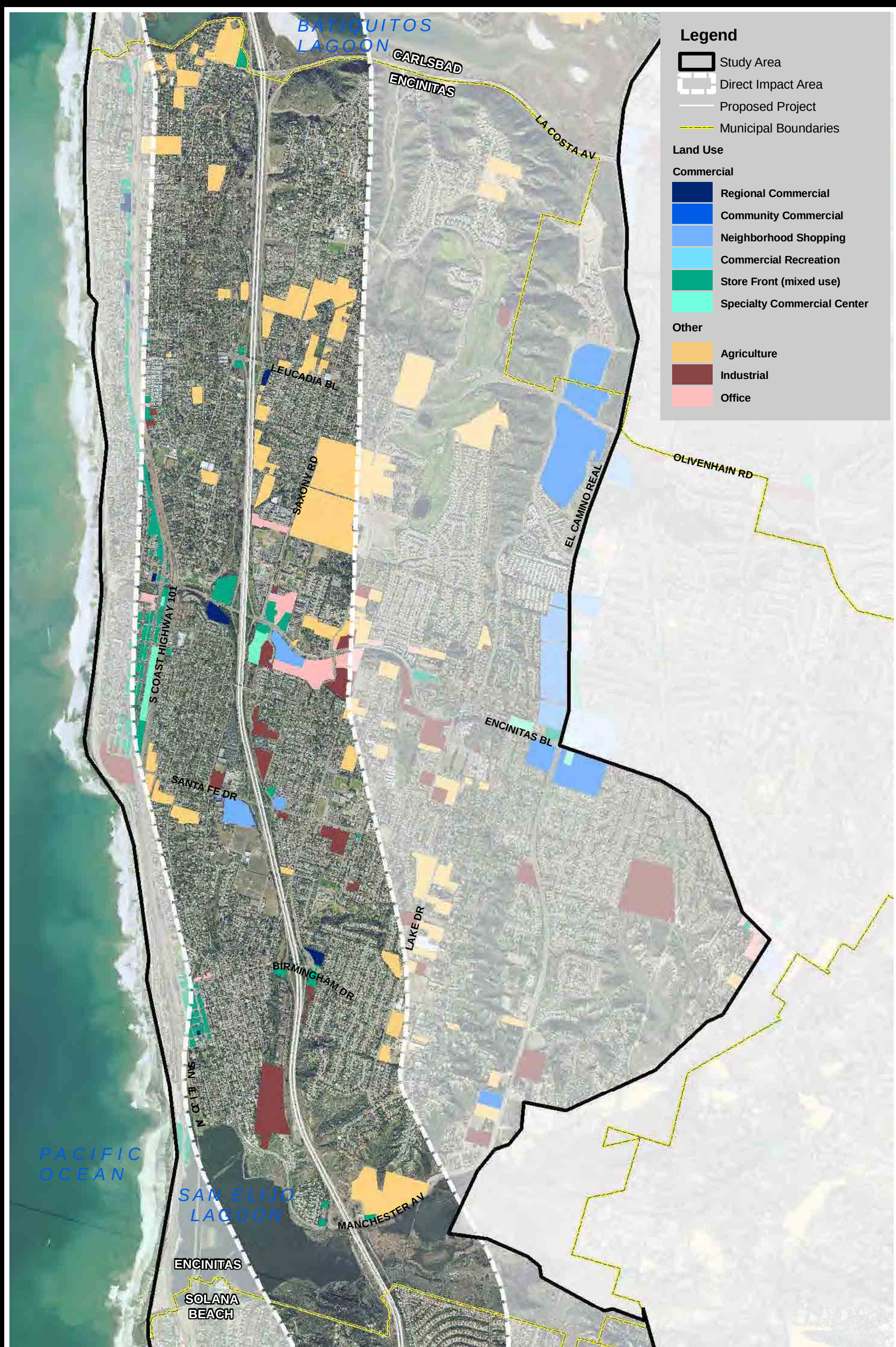
As shown in Figure 2.4-10, most of the direct impact area is within the median household income range of $63,954-$114,000. An area of highest median household income range within the direct impact area is located east of I-5 south of Manchester Avenue to the municipal boundary with Solana Beach. The area within the lowest median household income range is located northwest of Santa Fe Drive.

Per Capita Income

Per capita income is defined as the average income of every resident of a selected geographic area, including all adults and children. Per capita income is typically reported in units of currency per year and often used as a measure of the wealth of the selected population. Based upon data according to block groups from the 2000 U.S. Census, per capita income for Encinitas was $34,336 with $104,388 as the highest per capita income for a block group in Encinitas and $13,470 as the lowest per capita income in a block group for Encinitas. In comparison, per capita income for block groups in San Diego County was $22,926, with $112,849 as the highest per capita income in a block group for the county and $4,505 as the lowest per capita income for a block group in the county. Similar to median household income values, per capita income for Encinitas was significantly higher but showed a much smaller range of values than that of the county.

Figure 2.4-11 illustrates per capita income for the study area and direct impact area, respectively, arranged by block groups and grouped together according to six different ranges. While no areas within the highest per capita income range (above $90,000) are located within the study area, areas within the next highest range ($63,001 and $90,000) are located in the southwestern portion of the

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

EDAW | AECOM

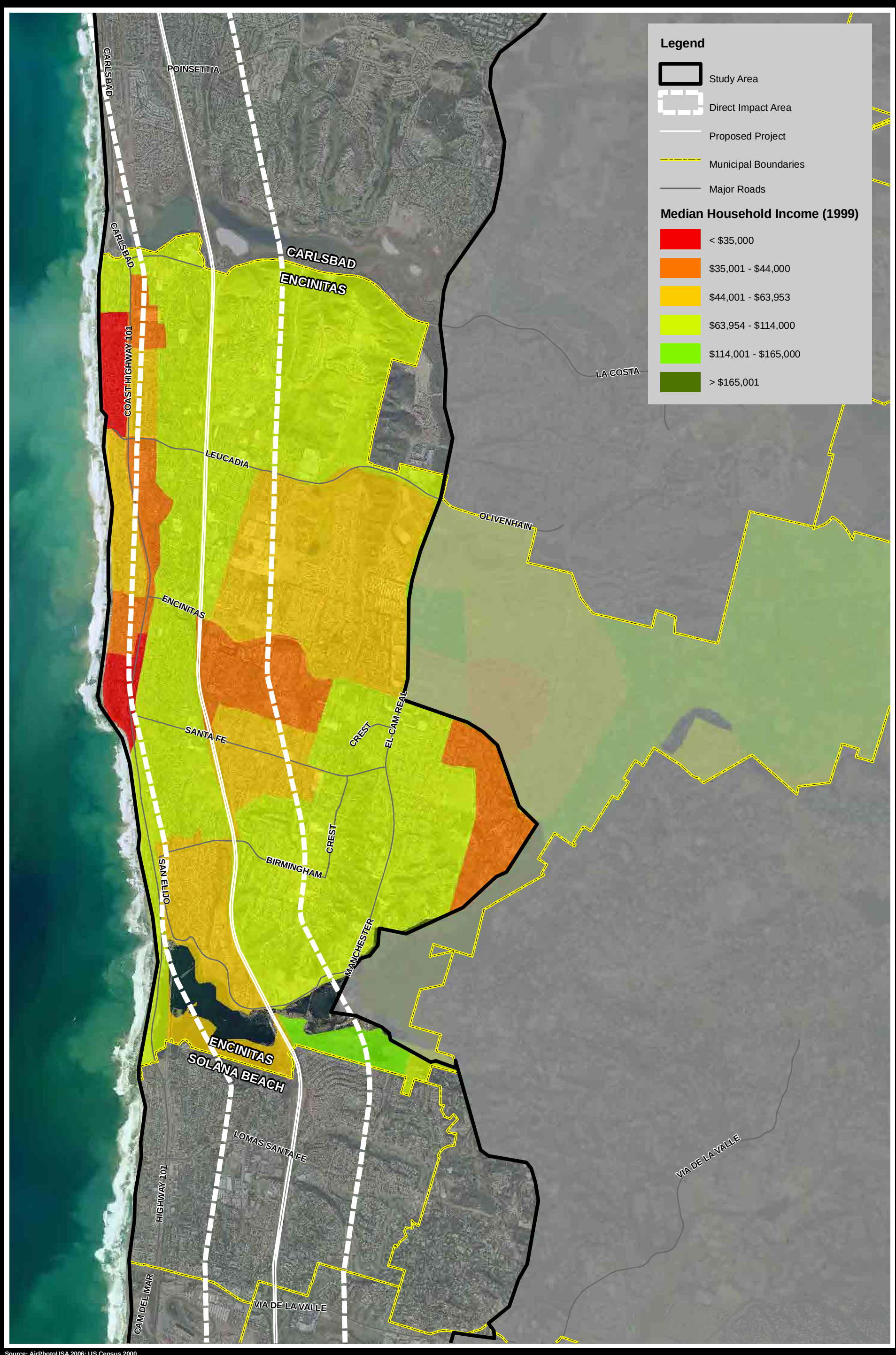
Figure 2.4-9
ENCINITAS
Direct Impact Area Economy

2,250 0 2,250 Feet

SCALE: 1:27,000; 1 inch = 2,250 feet

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



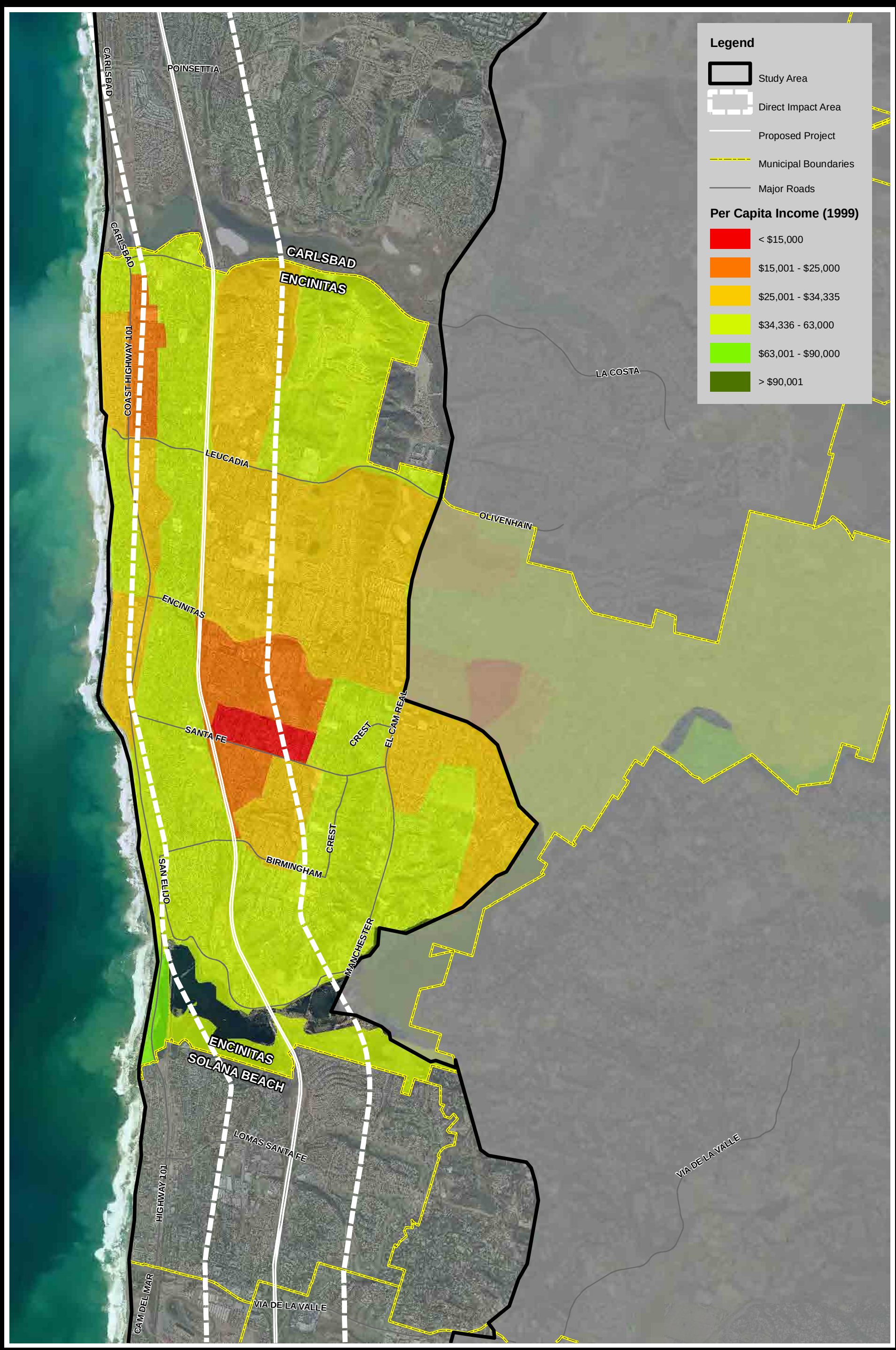
Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.4-10
ENCINITAS
Median Household Income

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.4-11
ENCINITAS
Per Capita Income

study area, west of Coast Highway 101 along the municipal boundary with Solana Beach. Only one area within the lowest per capita income range (below $15,000) is located east of I-5 north of Santa Fe Drive. The majority of the study area is within the per capita income range of $34,336-$63,000 and is generally located west of I-5 and in the southern portion of the municipality. The areas east of I-5 within the study area are within the per capita income range of $25,001 to $63,000.

As shown in Figure 2.4-11, areas within the highest per capita income range located within the direct impact area (from $34,001 to $63,000) are primarily located all along the west side of I-5, as well as the area east of I-5 north of Leucadia Boulevard and south of Birmingham Drive to the municipal boundary with Solana Beach. Only one area within the lowest per capita income range is within the direct impact area east of I-5 just north of Santa Fe Drive. The majority of the direct impact area is within the per capita income range of $34,336-$63,000 and is generally located west of I-5 and in the southern portion of the municipality south of Birmingham Drive. The areas along the east side of I-5 within the study area are within the per capita income range of $25,001-$34,335.

Employment

As previously discussed, Encinitas's economy has historically been based upon agriculture, primarily with poinsettias, avocadoes, flower and plant nurseries, and bamboo. Although Encinitas continues to support agriculture, tourism has become a significant part of the local economy with a number of popular destinations such as the beaches and the Quail Botanical Gardens. In addition to many locally owned businesses that support the economy, several larger public employers are located in Encinitas, including the significant Scripps Memorial Hospital and the Encinitas Union Elementary District.

Based on the data from the California EDD, the unemployment rate in Encinitas has averaged approximately 3.0 percent over years 2000 to 2004, significantly below the county average of 4.6 percent over the same period. As of May 2005, the unemployment rate for Encinitas was 2.5 percent compared to 3.8 percent for San Diego County. Table 2.4-5 compares the employment statistics between Encinitas and San Diego County.

Table 2.4-5. Annual Unemployment Rate – Encinitas and San Diego County

Area	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004	Average
Encinitas	2.6%	2.7%	3.4%	3.4%	3.1%	3.0%
San Diego County	3.9%	4.2%	5.1%	5.2%	4.7%	4.6%

Source: EDD 2005

2.4.4.3 Labor Force Characteristics

As of 2000, Encinitas showed a population of 78,247 persons, and a labor force of 32,816 persons. As of 2000, 95.7 percent were classified as being employed, with an additional 135 residents (0.3 percent) classified as members of the armed forces (U.S. Bureau of the Census 2000).

Table 2.4-6 summarizes the labor force characteristics for Encinitas and San Diego County based upon 2000 U.S. Census data. Labor force characteristics in Table 2.4-6 include employment status, occupation, industry, and class of worker with a few exceptions. Encinitas generally mimics the labor force composition of San Diego County. Within the civilian force, Encinitas recorded 67.8 percent of the population over 16 years old as employed compared to 57.3 percent employment within San Diego County.

Table 2.4-6. Labor Force Characteristics – Encinitas and San Diego County

Subject	Encinitas		San Diego County	
EMPLOYMENT STATUS				
Population 16 years and over	**100.0%**	**46,306**	**100.0%**	**(2,165,034)**
In labor force	70.9%	32,816	65.0%	(1,407,152)
Civilian labor force	70.6%	32,681	60.9%	(1,319,517)
Employed	67.8%	31,399	57.3%	(1,241,258)
Unemployed	2.8%	1,282	3.6%	(78,259)
Percent of civilian labor force	3.9%		5.9%	
Armed Forces	0.3%	135	4.0%	(87,635)
Not in labor force	29.1%	13,490	35.0%	(757,882)
Employed civilian population 16 years and over	**100.0%**		**100.0%**	
OCCUPATION				
Management and professional	50.7%		37.7%	
Service	13.5%		16.1%	
Sales and office	24.5%		27.2%	
Farming, fishing, and forestry	0.3%		0.5%	
Construction, extraction, and maintenance	6.3%		8.7%	
Production, transportation, and material moving	4.7%		9.9%	
INDUSTRY				
Agriculture, forestry, fishing and hunting, and mining	0.8%		0.7%	
Construction	6.7%		6.6%	
Manufacturing	8.7%		11.0%	
Wholesale trade	4.6%		3.3%	
Retail trade	10.4%		11.3%	
Transportation and warehousing, and utilities	2.8%		3.8%	
Information	4.3%		3.5%	
Finance, insurance, real estate, and rental and leasing	7.8%		7.1%	
Professional, scientific, management, administrative, and waste management services	18.2%		13.3%	
Educational, health and social services	18.6%		19.3%	
Arts, entertainment, recreation, accommodation and food services	9.2%		9.6%	
Other services (except public administration)	5.0%		5.2%	
Public administration	2.7%		5.4%	
CLASS OF WORKER				
Private wage and salary	72.9%		75.0%	
Government	12.6%		16.0%	
Self-employed (not incorporated business)	14.3%		8.7%	
Unpaid family	0.2%		0.3%	

Source: U.S. Bureau of the Census 2000

Encinitas and San Diego County as of 2000 showed broadly similar trends with regard to the employment categories as listed in Table 2.4-6. Both Encinitas and San Diego County had higher percentages of persons in management and professional, service, and sales and office occupations. Encinitas had a significantly higher percentage (50.7 percent) than San Diego County (37.7 percent) in

management and professional occupations and significantly lower numbers in the remaining occupations.

As summarized in Table 2.4-6, Encinitas and San Diego showed similar proportions in the industry categories. Encinitas had a significantly larger percentage (18.2 percent) in professional, scientific, management, administrative, and waste management industries than San Diego County (13.3 percent) and a significantly lower percentage in public administration (2.7 percent) than San Diego County (5.4 percent). A larger proportion of the population was classified as self-employed in Encinitas (14.3 percent) than San Diego County (8.7 percent), and a significantly lower proportion was employed by the government in Encinitas (12.6 percent) than in San Diego County (16.0 percent).

2.4.4.4 Tax Revenue and Fiscal Conditions

Property tax is imposed on real property and based upon the assessed value of the property and allocated by tax rate areas throughout the county. Within San Diego County, assessment values are set at the time a property changes ownership and can increase at no more than 2 percent annually from that value. The primary revenue sources are property and sales taxes for Encinitas. In the fiscal year 2002-2003, the total revenue was $37,259,846 for Encinitas, of which 28 percent was derived from property taxes and 28 percent was derived from sales taxes.

Based upon the APN data from SanGIS data (2005), the average assessed value for a property in Encinitas was $288,738, whereas, the average assessed value for San Diego County was $245,946.

There are six ranges of assessed value for Encinitas as depicted in Figure 2.4-12 for the study area and direct impact area, respectively. These figures illustrate within the municipality where the revenue is generated and in relationship to the location of the project. APN data from SanGIS included numerous parcels with no available data and assessed values listed as $0 or a nominal value. Thus, these parcels are included in the range of <$100,000 for assessed value. The majority of Encinitas values fall within the ranges of <$100,000 and $100,001-$300,000. Areas with higher values are geographically widespread throughout Encinitas.

The areas with higher assessed values within the study area and direct impact area are typically related to commercial and business areas, but not exclusively so. Residential areas within the study area fall within the ranges of the higher assessed values and are located north of Encinitas Boulevard east of I-5, and east of I-5 north of Santa Fe Drive. As previously indicated, the majority of the Encinitas area falls within the ranges of <$100,000 and $100,001-$300,000. These areas are primarily residential and generally do not correlate with commercial, industrial, and agricultural areas.

2.4.4.5 Business Activity

As previously shown in Figure 2.4-9, a variety of commercial land uses and agriculture, office, and industrial areas are located within the area of direct impacts. Commercial land uses are divided into six different categories: regional commercial (i.e., wholesale trade and large regional shopping centers), community commercial (i.e., shopping centers typically with a main anchor tenant), neighborhood shopping (i.e., shopping centers with a market and/or drugstore and may include offices), commercial recreation (i.e., tourist attractions/destinations, golf courses, and recreational facilities), store front (i.e., commercial activities along major roadways not within planned centers and may include mixed uses with office and/or residential units attached), and specialty commercial center (i.e., tourist or specialty commercial shopping areas). Commercial centers are generally located along major transportation corridors including Leucadia Boulevard, Encinitas Boulevard, and Santa Fe Drive as well as Coast Highway 101, which is parallel with I-5 to the west. These commercial centers typically serve multiple surrounding neighborhoods.

The agriculture land use designation includes orchards, vineyards, nurseries, greenhouses, dairies, livestock, poultry, equine ranches, row crops, grains, and pastures. There are numerous areas designated for agriculture along I-5 east and west within the entire municipality.

The land use designation for office includes government office buildings (outside of military), banks, offices for businesses and professional services, some retail activities, and restaurants. Office land use designations are primarily located along Encinitas Boulevard east and west of I-5.

The industrial land use designation incorporates heavy manufacturing activities, light industrial and manufacturing (i.e., lumber, furniture, paper, rubber, stone, clay, and glass), clustered office/retail/ industrial uses, and industrial/strip commercial areas (i.e., public self-storage). Industrial uses are located south of Encinitas Boulevard to the area just south of Santa Fe Drive on the east and west sides of I-5.

The majority of the mixed-use and specialty commercial areas are primarily located along Coast Highway 101 as well as Encinitas Boulevard and Birmingham Drive.

<u>Interchanges</u>

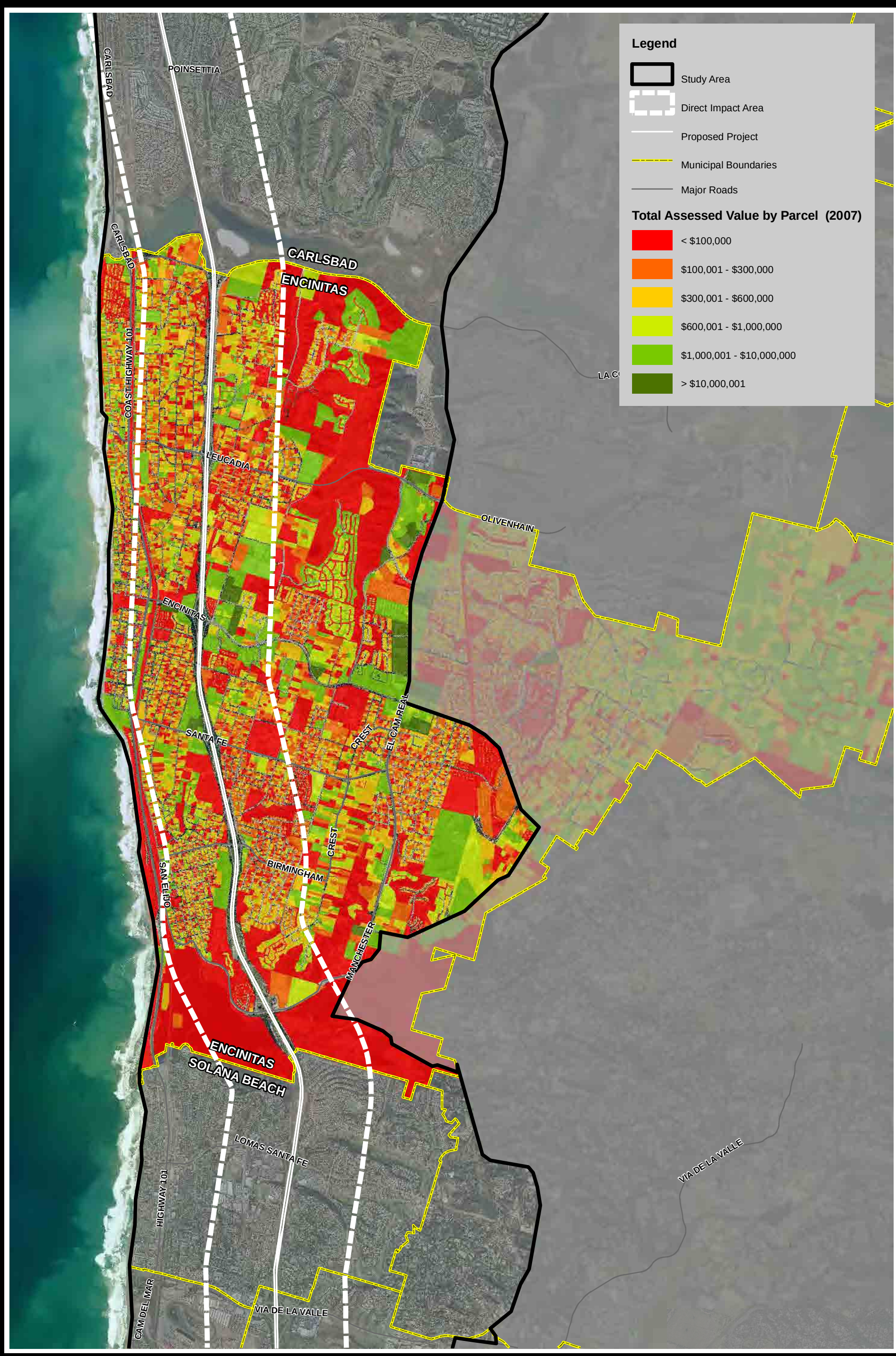
Excluding La Costa Boulevard, shared with Carlsbad and discussed under that community, there are five main freeway interchanges in Encinitas: Leucadia Boulevard, Encinitas Boulevard, Santa Fe Drive, Birmingham Drive, and Manchester Avenue. These intersections are vital entry points into Encinitas, as well as main servicing points for residents, tourists, and motorists along I-5. Business activities at each of the main interchanges in Encinitas are illustrated in aerial photos in Figures 2.4-13, 2.4-14, and 2.4-15.

Leucadia Boulevard is the northernmost interchange within the study area (Figure 2.4-13). There is a motel located in the southeast area of the interchange and a nursery in the northeast area, and gas stations to the northwest and southwest.

Encinitas Boulevard leads into the historical area of Encinitas, which includes a variety of restaurants and specialty retail shops located west of I-5 along Coast Highway 101 (Figure 2.4-13). The city offices are located in the southwest area of the interchange. A gas station, restaurants, offices, and a shopping center are located to the east of I-5.

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet

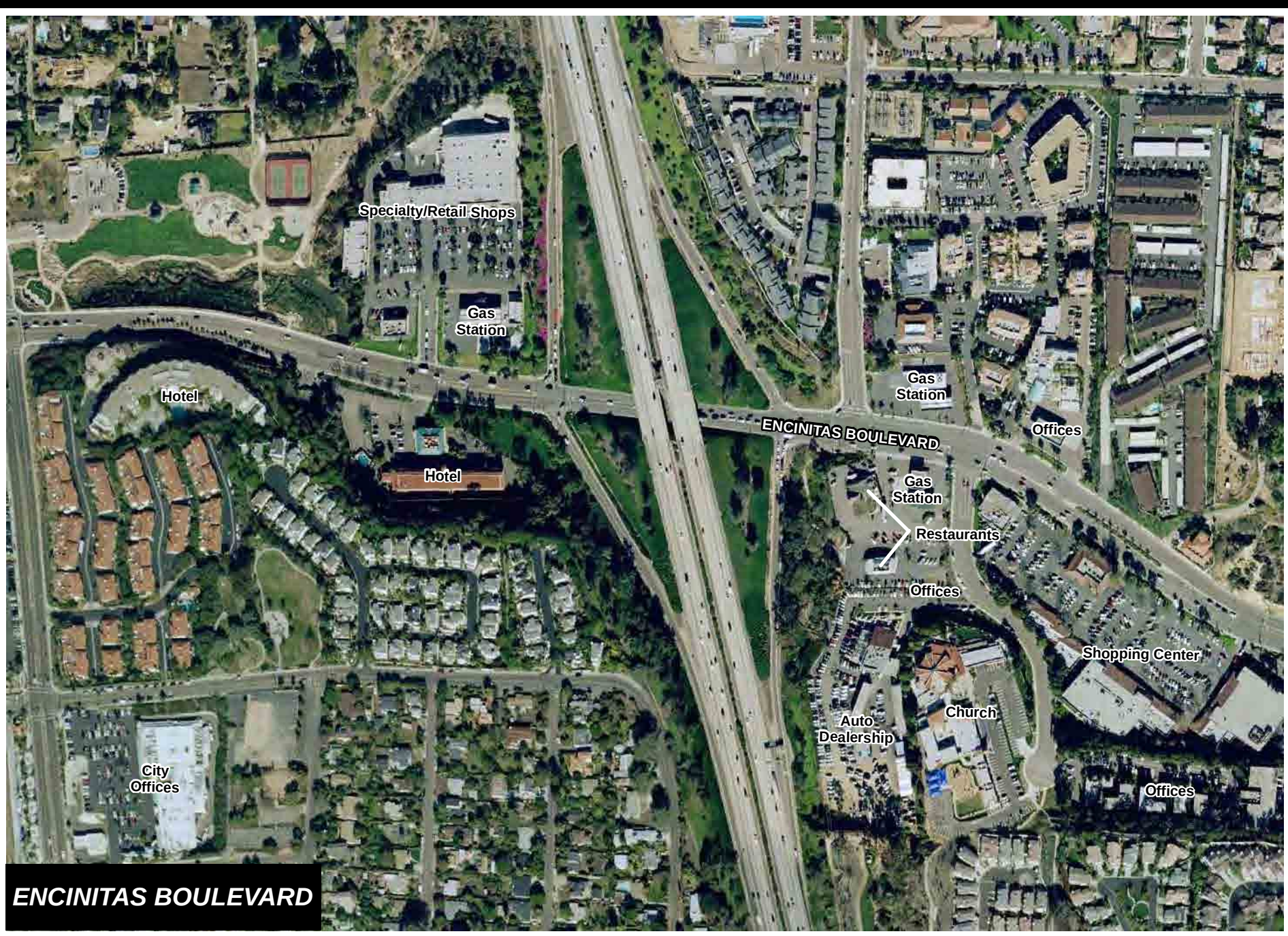


Source: AirPhotoUSA 2006; SanGIS 2007

EDAW | AECOM

Figure 2.4-12
ENCINITAS
Total Assessed Value

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.4-13
ENCINITAS Interchanges

350 0 350 Feet

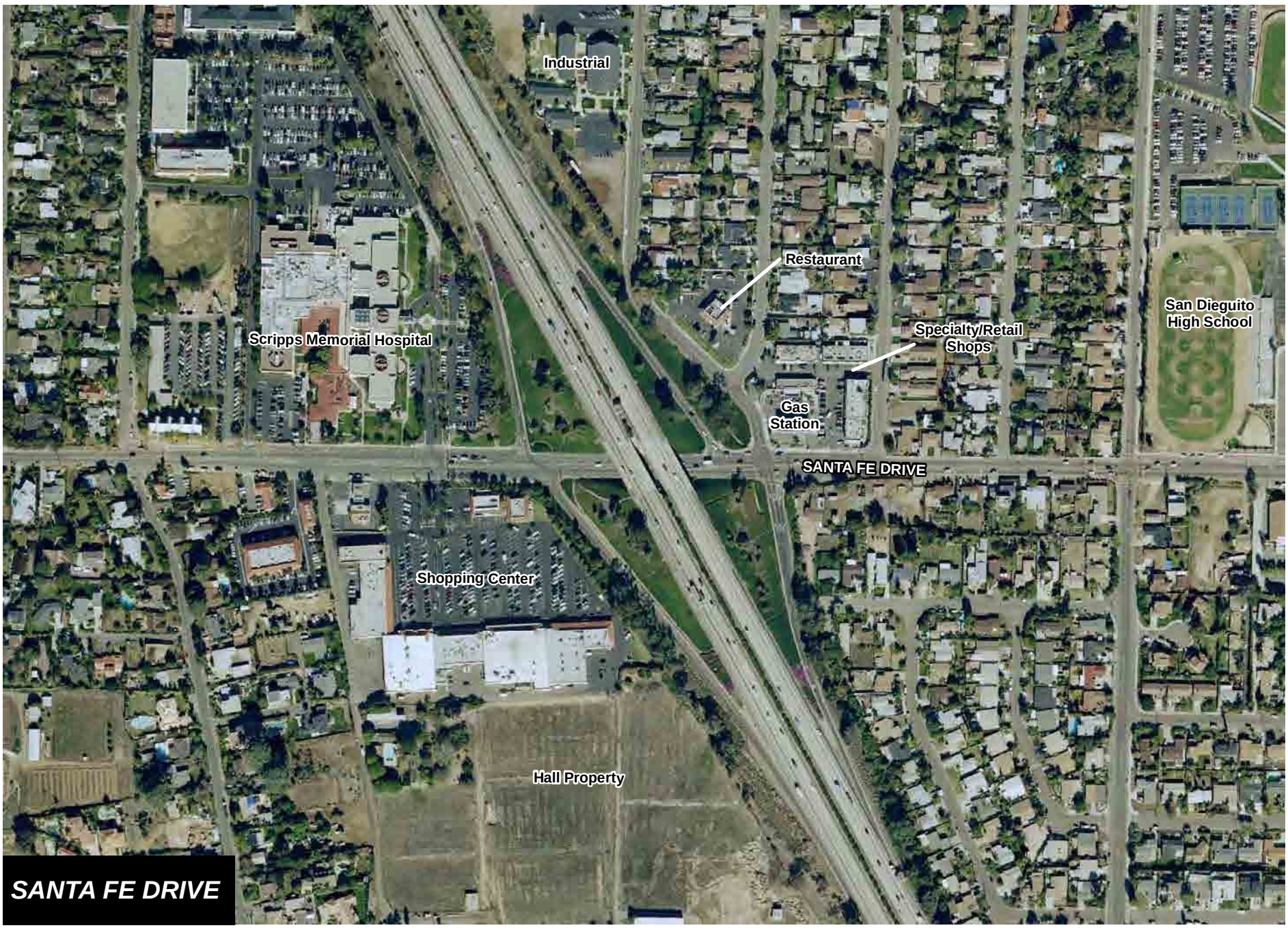
SCALE: 1:4,200; 1 inch = 350 feet

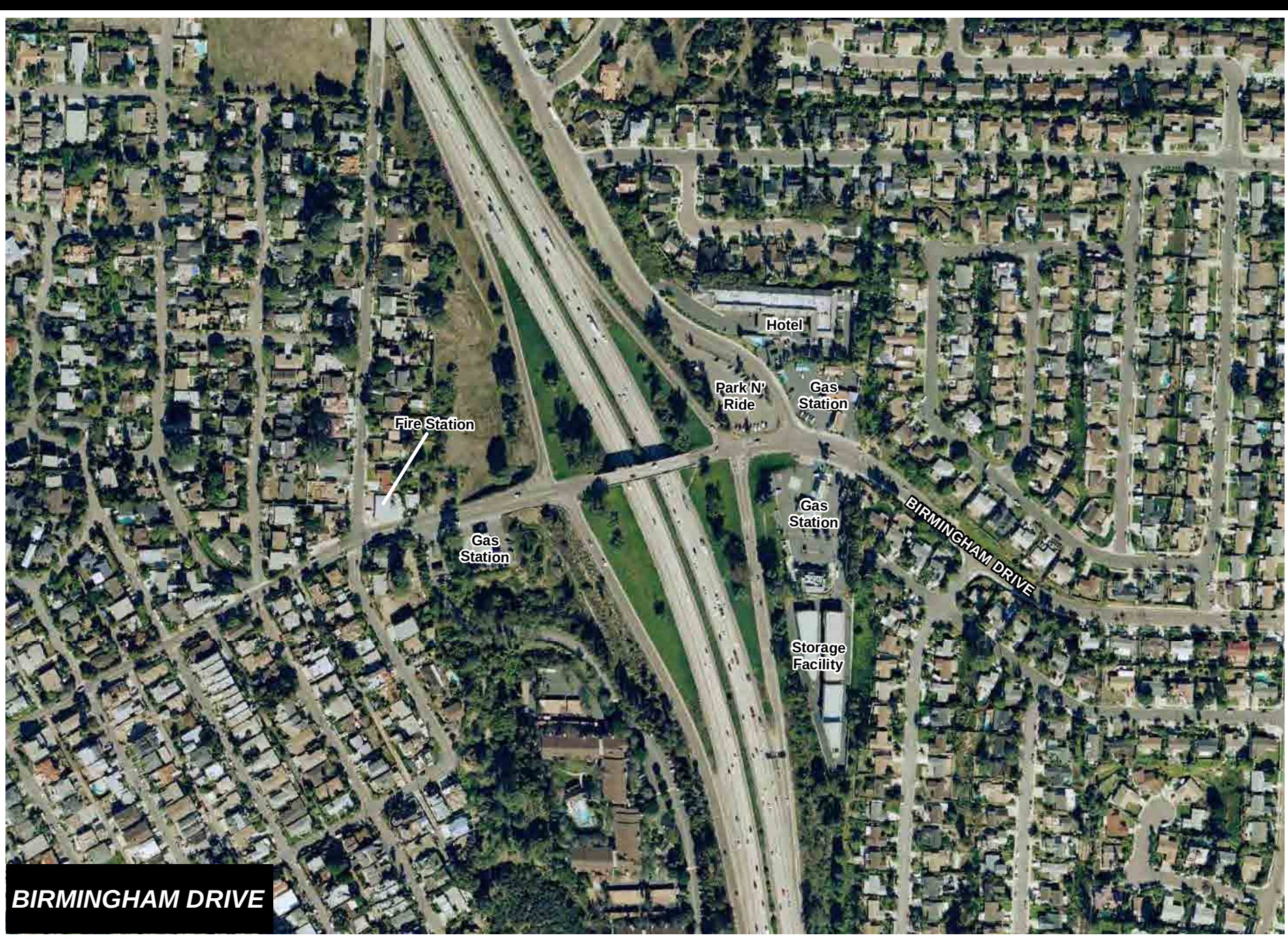
Santa Fe Drive provides direct access to Scripps Memorial Hospital located in the northwest area of the interchange (Figure 2.4-14). There is a shopping center located in the southwest area of the interchange. An industrial area is located along the east side of I-5 north of Santa Fe Drive. A gas station, restaurants, and specialty/retail shops are located in the northeast area of the interchange.

Birmingham Drive is located south of Santa Fe Drive and provides direct access to a fire station located in the northwest area of the interchange (Figure 2.4-14). A hotel and gas station are located in the northeast area, a public storage facility and gas station are located in the southeast area, and a gas station is located in the southwest area of the interchange.

The southernmost interchange from I-5 into Encinitas is Manchester Avenue (Figure 2.4-15). A gas station and agricultural fields are located in the northeast area of the interchange.

I-5 NORTH COAST CORRIDOR CIA





Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.4-14
ENCINITAS
Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.4-15
ENCINITAS
Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

2.5 CARLSBAD

Historic overview

Carlsbad was incorporated as a city in 1952. Since that time, it has grown in land area by approximately 300 percent and increased in population by 700 percent (City of Carlsbad 2005). Early settlement in what is now Carlsbad was associated with the San Luis Rey Mission in what is now Oceanside (City of Carlsbad 2005). With completion of the Southern California Railway in 1883 and later the construction of MCB Camp Pendleton in 1942, Carlsbad's population began to grow (City of Carlsbad 2005). I-5 was established through the community of Carlsbad in the 1960s and has been a major factor in the growth of the area during subsequent decades. This is illustrated to a degree via the aerial photographs in Figure 2.5-1, where a significant increase in residential density is shown to have occurred in Carlsbad, mainly along what is now the I-5 corridor, within a 14-year period between 1953 and 1967, which spans the pre- and post-I-5 completion eras. Current land use patterns and lot sizes, as well as the higher densities along the coast areas and I-5, were becoming more evident by the close of this period. Rapid conversion of agricultural areas primarily east of I-5 was occurring to accommodate residential development.

2.5.1 Land Use

2.5.1.1 Major Land Uses

General Land Use

Carlsbad is the third-largest city within the study area, with a population as of 2000 of 41,681 persons and a total land area of 42.2 square miles. Figure 2.5-2 shows the patterns of land use within Carlsbad at a regional level, including those within the study area. Carlsbad is primarily residential; however, it does provide commercial centers, recreational activities, and employment opportunities. Carlsbad also has several larger tourist attractions, including Legoland, "The Flower Fields," the Westfield Shoppingtown Plaza El Camino Real, and the Carlsbad Company Stores. Carlsbad is known for its natural resources and open space, including the Buena Vista, Agua Hedionda, and Batiquitos lagoons in addition to its stretch of beaches.

Carlsbad is an urbanized city; however, the eastern areas have a relatively rural quality that is established through the presence of open space, agricultural areas, and spaced residential development.

As shown in Figure 2.5-2, much of the central portion of Carlsbad between Agua Hedionda Lagoon and Poinsettia Lane is open space, industrial, and commercial, with residential areas east of I-5 south of Palomar Airport Road. Agua Hedionda Lagoon and its associated open space, the McClellan-Palomar Airport, and an industrial sphere divide Carlsbad into north and south residential sectors. The McClellan-Palomar Airport is located south of the Agua Hedionda Lagoon valley and east of Aviara Parkway in central Carlsbad. Due to health, safety, and noise issues generated by the airport, the entire central portion of Carlsbad is influenced in the type and intensity of development. Residential and institutional uses (including schools and hospitals) have been excluded north and south of the airport itself (but within the airport influence area) as well as through much of the central part of the city. As a result, industrial, commercial, and open space uses have grown throughout the center of Carlsbad and it is now a regional employment center.

The largest proportion of residential uses in Carlsbad, approximately 34 percent, is reserved for single-family designations, defined by the City of Carlsbad General Plan as low-medium density with 0 to 4 du/ac (City of Carlsbad 1994). Residential developments within the eastern portions of Carlsbad are typically of lower density and along with the open space in this area give the area a relatively rural quality. The more densely populated portion of Carlsbad is located between the coast and I-5. Primarily medium-high density (8 to 15 du/ac) and high-density (15 to 23 du/ac) single-family and multi-family residential developments are located in this area. Together, these higher densities encompass approximately 5 percent of the total land area of Carlsbad (City of Carlsbad 1994). Commercial centers serving residents, tourists, and traffic along I-5 are typically located along major thoroughfares including Carlsbad Village Drive, SR 78, and adjacent to I-5 between Cannon Road and Palomar Airport Road.

Vacant lands, shown as light grey in Figure 2.5-2, are located in the eastern parts of Carlsbad and are generally associated with areas surrounding the airport and industrial center. Much of this land is designated as open space, planned industrial, and low-density residential (0 to 1.5 du/ac) by the Carlsbad General Plan (1994). The northwest corner of College Boulevard and Cannon Road is currently vacant but is planned for a mix of low- to medium-density residential and open space.

Study Area Land Use

The study area within Carlsbad comprises approximately 48 percent of the total land of Carlsbad (19.01 square miles) and includes marginally over half of the total population of the municipality (53 percent). Land uses within the study area are largely a mix of residential, commercial, industrial, agriculture, and public services. As discussed previously and shown in Figure 2.5-2, the central portion of Carlsbad is relatively devoid of residential uses, with clusters mainly to the north and south of Agua Hedionda Lagoon. As much of this central land area is unsuited for residential development, the eastern parts of the study area, which contain large amounts of open space, will remain primarily undeveloped.

Area of Direct Impacts Land Use

The portion of Carlsbad within the area of direct impacts is highly urbanized with residential and residential services. In addition to the northern and southern residential spheres, the presence of I-5 further divides Carlsbad into eastern and western geographical areas. A comprehensive view of land uses within the area of direct impacts is shown for North Carlsbad in Figure 2.5-3a and South Carlsbad in Figure 2.5-3b.

While the majority of residential land uses within Carlsbad are single-family residential, areas with numerous higher-density multi-family residential uses are located between I-5 and the Pacific Coast. As shown in Figure 2.5-3a, from the municipal boundary south to Agua Hedionda Lagoon, residential use is the main component, although there is variation between the west and east sides of I-5. West of

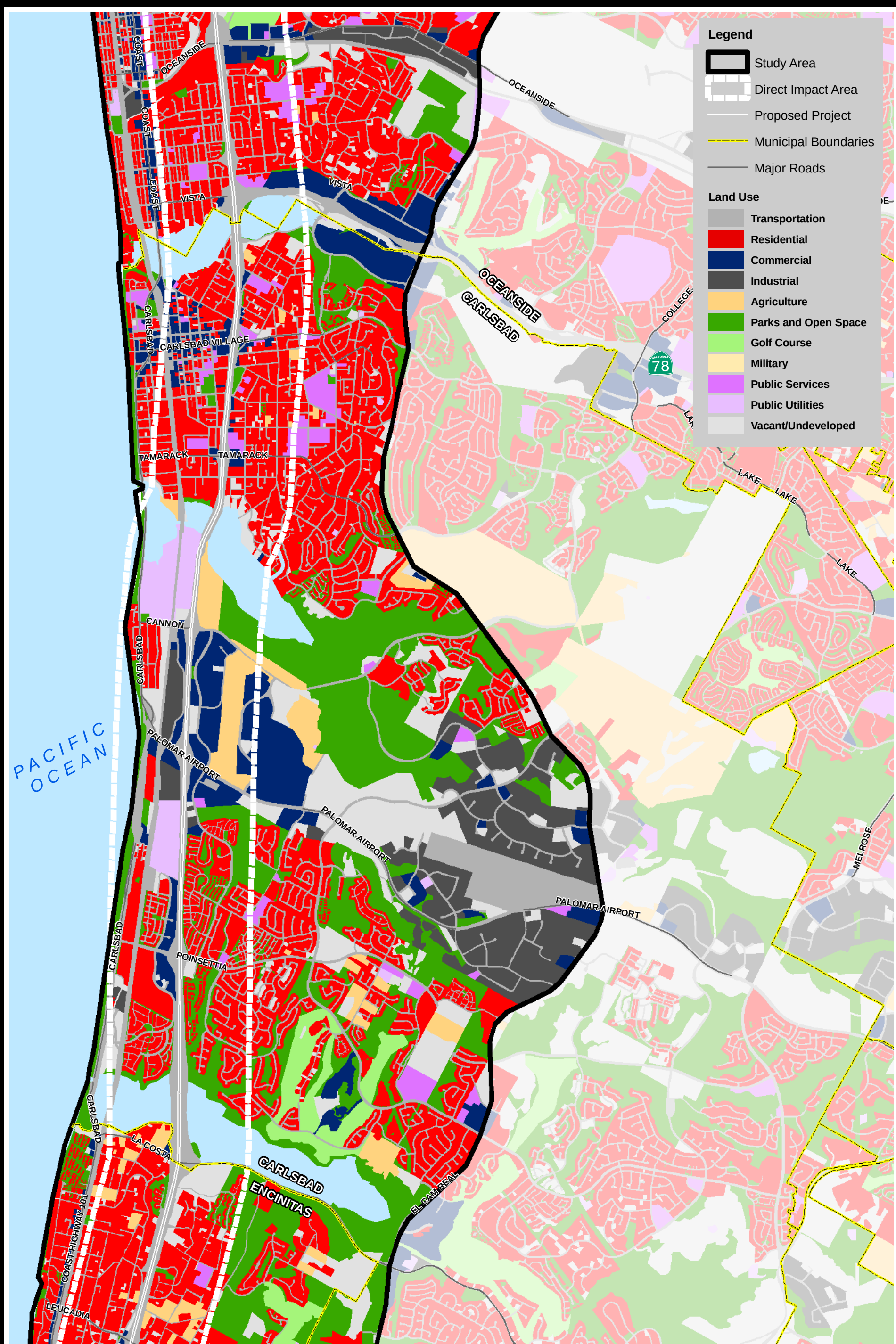
Source: San Diego County Department of Planning and Land Use

Source: San Diego County Department of Planning and Land Use

EDAW | AECOM

Figure 2.5-1
CARLSBAD
Historic Aerial Photographs

I-5 NORTH COAST CORRIDOR CIA



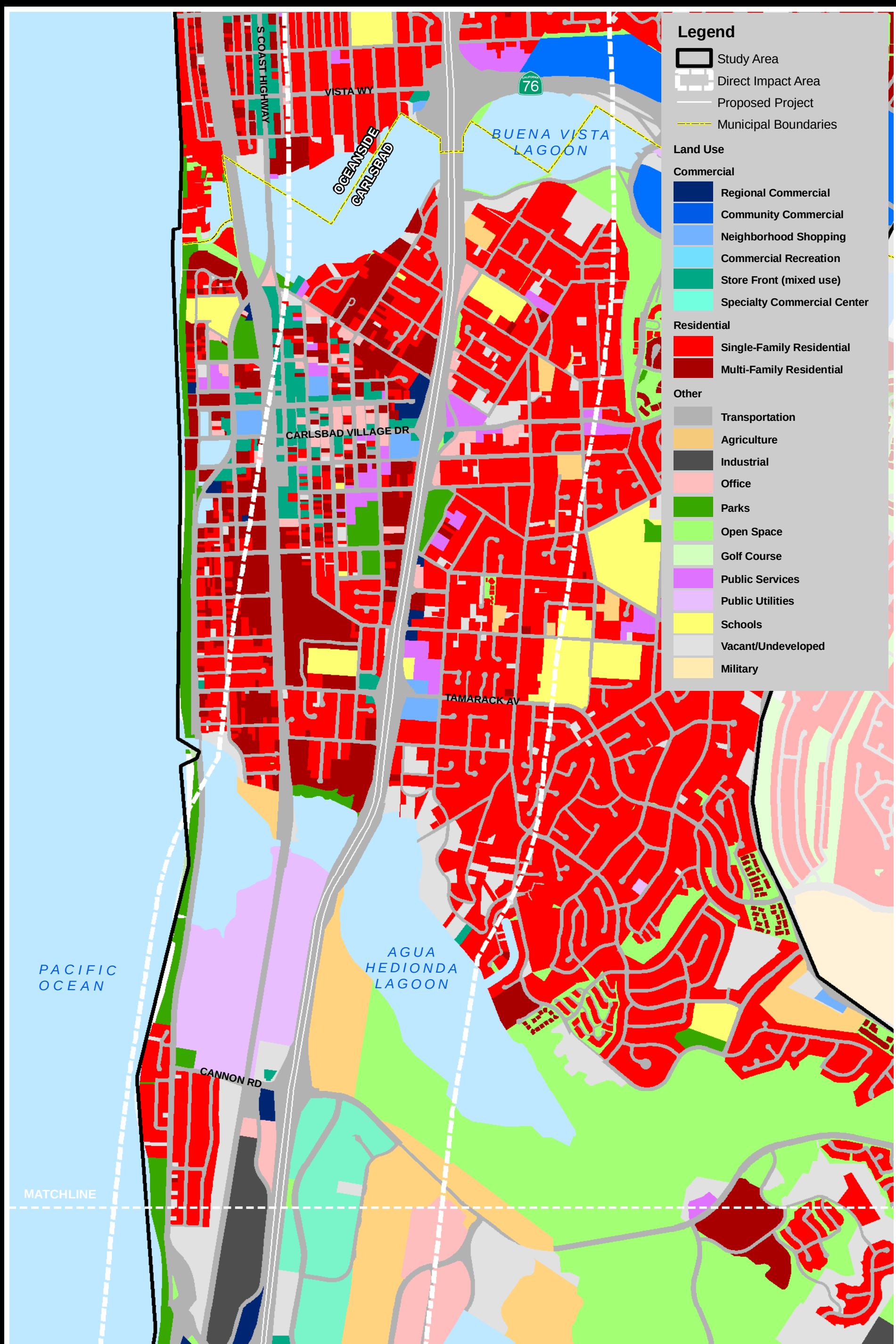
Source: SANDAG 2006

EDAW | AECOM

Figure 2.5-2
CARLSBAD
Regional Land Use

3,500 0 3,500

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

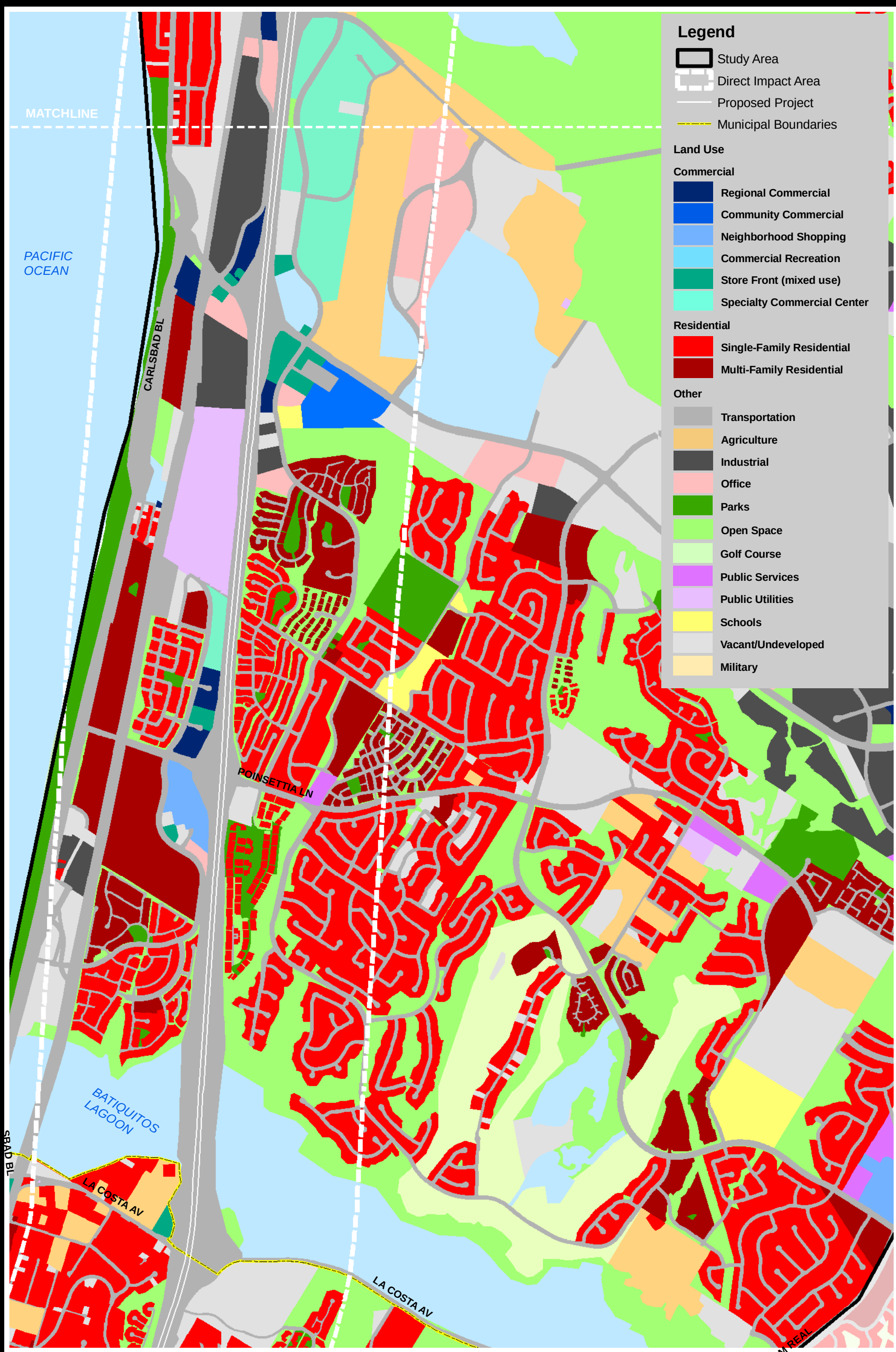
EDAW | AECOM

Figure 2.5-3a
CARLSBAD NORTH
Direct Impact Area Land Use

1,500 0 1,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

EDAW | AECOM

Figure 2.5-3b
CARLSBAD SOUTH
Direct Impact Area Land Use

1,500 0 1,500

I-5, the Carlsbad Village Redevelopment Zone has been divided into nine distinct land use districts: the Carlsbad Village Center, two Office Support Centers, Freeway Commercial Support, two Residential Support Centers, Hispanic Mixed-use Support, Service Commercial Support, and Tourism Support. Surrounding the Carlsbad Village area are mainly multi-family residential (high density with 15 to 23 du/ac) with a mix of single-family residential designations (City of Carlsbad 2005). East of I-5 is mainly single-family residential, all defined as low- to medium-density by the General Plan (City of Carlsbad 1994). Land immediately adjacent to I-5 on the east contains higher-density multi-family residential units, office space, and community commercial centers.

South of Agua Hedionda Lagoon, land use patterns in the direct impact area along I-5 are distinctly different (Figure 2.5-3b). Public utility facilities, industrial, and regional commercial designations are the main land uses west of I-5 between Agua Hedionda Lagoon and Poinsettia Lane, with small pockets of residences immediately along the coast. Residential neighborhoods, both single-family and multi-family developments, are located along the coast in high densities, concentrated around Poinsettia Lane and down to Batiquitos Lagoon. Agriculture, open space, commercial, and residential designations are the main land uses east of I-5 near Agua Hedionda Lagoon to Palomar Airport Road. Though agriculture is the existing use, travel and recreational commercial are the planned uses for this area (City of Carlsbad 1994). Open space is adjacent to the agricultural area and Agua Hedionda Lagoon. South of Palomar Airport Road are single-family and multi-family residential neighborhoods with open space, zoned as medium density with 0 to 4 du/ac (City of Carlsbad 1994). The major commercial centers of the direct impact area of south Carlsbad are located at the Carlsbad Company Stores at Palomar Airport Road and at Poinsettia Lane.

There are seven freeway interchanges in Carlsbad: Las Flores Drive, Carlsbad Village Drive, Tamarack Avenue, Canon Road, Palomar Airport Road, Poinsettia Lane, and La Costa Avenue. These intersections are vital entry points into Carlsbad, as well as main servicing points for residents, tourists, and motorists along I-5. A commercial, mixed-use, and office center can be reached from the Carlsbad Village Drive interchange.

2.5.1.2 Affected Urban Community and Neighborhood Characteristics

The City of Carlsbad General Plan (1994) identifies four quadrants within the municipality. El Camino Real divides the eastern and western halves of the city, with Palomar Airport Road as the divider between the north and south. The quadrants are referred to as the Northwest, Northeast, Southwest, and Southeast. The Northwest and Southwest quadrants are within the study area for this project.

Unofficially defined specific areas also exist, including the Barrio, Mariners Point, and Promenade-La Costa. The Barrio is located between I-5 and the AT&SF Railroad, with Carlsbad Village Drive on the north and Tamarack Avenue on the south. This area is a center for the Hispanic community and is thought to be the first settled neighborhood in Carlsbad in the 1920s. The Barrio is the site of the city's Centro de Información, a Spanish division of the Carlsbad City Library. Mariners Point is bordered by Palomar Airport Road on the north, Camino De Ondes on the south, Aviara Parkway on the east, and Hidden Valley Road on the west. Mariners Point is in the Southwest Quadrant of the city and is a residential area with parks and open space, and small pockets of commercial, industrial, and public services. Promenade-La Costa is bordered by Alga on the north, Camino Valencia on the south, Melrose on the east, and Xana on the west. Promenade-La Costa is also in the Southwest Quadrant of the city and is characterized by golf courses, parks and open space, and single-family residential units.

There are three specific plans that cover portions of Carlsbad, including the City of Carlsbad LCP, McClellan-Palomar Airport Comprehensive Land Use Plan (CLUP), and the Barrio Community Design and LUP. A large portion of Carlsbad and the study area is located within the California Coastal Zone; therefore, issues and policies related to the requirements of the California Coastal Act are also included in the General Plan. These are combined to create the General Plan and Carlsbad's LCP for the city. The LCP includes the entire coastal area of Carlsbad, generally from the Pacific Ocean to El Camino Real. The General Plan is designed to be consistent with the CLUP, which is updated every 5 years to "reflect the anticipated growth of the airport over at least the next 20 years" (City of Carlsbad 1994). The Barrio Community Design and LUP address economic revitalization within the community.

2.5.1.3 Farmland

A sizeable quantity of agricultural land occurs within Carlsbad, a portion of which lies within the area of direct impacts. Two greenhouse and agricultural operations designated as Unique Farmland are located in north Carlsbad. Adjacent to the east side of I-5 south of Jefferson Street is a greenhouse and agricultural operation, south of Buena Vista Lagoon. Approximately 0.4 mile east of I-5 is the Miles Pacific Nursery, which is located north of Carlsbad Village Drive.

Larger parcels of agricultural land in Carlsbad are located south of Agua Hedionda Lagoon. The Flower Fields, located 0.25 mile east of I-5 between Legoland and the Carlsbad Company Stores, is situated partially within the area of direct impacts. The Flower Fields cover approximately 330 acres and is open seasonally for tourism (City of Carlsbad 1994). The Flower Fields is notable in that it is the only Williamson Act reserve in Carlsbad and is designated as Prime and Unique Farmland by the CDC (2002). A contiguous section of agricultural land is located south of Agua Hedionda Lagoon bound by I-5 to the west, Cannon Road to the south, and open space to the east. This portion of land is used primarily for strawberries, but also supports flower production. It is designated as Prime Farmland and Farmland of Statewide Importance (CDC 2004). Adjacent to the west side of I-5 along Avenida Encinas is a parcel of Farmland of Local Importance, which houses greenhouses and some agricultural uses.

Policies in the General Plan and the LCP support existing agriculture resources while planning for possible future transition of land to more urban uses. The LCP includes an Agricultural Mitigation Fee Program and Coastal Agricultural Overlay Zone, which designates certain properties within the Coastal Zone as subject to a mitigation fee if the agricultural land is converted to urban uses. This is designed to prevent premature conversion of agricultural resources by enforcing mitigation measures, establishing guidelines for determining agricultural feasibility, and creating agricultural conversion mitigation fees. While agricultural lands and their economic viability are an important resource in Carlsbad, it is noted that the projected development trends may limit the amount of lands required for economic agricultural operations.

2.5.1.4 Development Trends

Since 1986, Carlsbad has been a "growth management" city, in which major public facilities have been carefully planned and financed with defined capacities in order to best serve a targeted ultimate population and number of household units (City of Carlsbad 1994). The City has recognized that Carlsbad is approximately half "built out" and that there will be an upper limit on the ultimate population and intensity of development in Carlsbad. Carlsbad's future development patterns will be influenced greatly by its unique landforms, nonresidential corridor in the center of the city, the airport, and the regional employment center surrounding the airport. Chapter 7.0, Growth, discusses in more detail, historical, current, and projected growth trends within Carlsbad.

To help preserve the quality of life for its residents, Carlsbad has developed a Growth Management Plan, which was ratified by Carlsbad voters in 1986 and is included in the Carlsbad General Plan (1994). The Growth Management Plan will ensure that adequate public facilities and services are guaranteed as growth occurs within the city. The plan divides Carlsbad into four quadrants with a maximum number of dwelling units set for each. The limits are as follows: Northwest Quadrant 5,844; Northeast Quadrant 6,166; Southwest Quadrant 10,677; and Southwest Quadrant 10,801 (City of Carlsbad 1994). The future development of Carlsbad is based on the centralized employment core of the airport and industrial sphere that both supports and is supported by the adjoining self-contained residential communities. In addition to the Growth Management Plan, a Citywide Facilities and Improvements Plan and Local Facilities Management Zone have been established to set performance standards for 11 public facilities. Comprehensive city review of all proposed developments determines compliance with these set standards. Based on targeted numbers, as of January 2004, Carlsbad had been developed to approximately 72 percent of its capacity. An additional 11 percent of the capacity has been planned and/or is under construction. The remaining 17 percent of residential capacity remains undetermined and will most likely consist of infill development (City of Carlsbad 1994).

2.5.1.5 Jobs/Housing Balance

Based on residential density designations, implementation of the Land Use Element of the Carlsbad General Plan may result in a population increase. The land use patterns of housing in relation to employment (commercial, office, tourism, and industrial locations) and commercial centers greatly influence commute patterns and types of transportation used within Carlsbad. The jobs/housing balance concept is to locate residential areas near employment centers and commercial services with the premise that commuting, the overall number of vehicle trips, and the resultant vehicle miles traveled can be reduced.

"Smart growth" is one concept that, among other goals, attempts to locate housing around a variety of transportation choices and create walkable neighborhoods. SANDAG provides an incentive program to promote smart growth development within the region, including Carlsbad (SANDAG 2005). The Village area is an example of Carlsbad's incorporation of smart growth concepts and transit-oriented development. Such programs are designed to have a positive effect on the jobs/housing balance and reducing vehicle trips within Carlsbad.

The City of Carlsbad Economic Development Department states that it is committed to enhancing the City's ability to provide its residents with services as well as housing and job opportunities. The central industrial sphere, along with commercial, restaurant, and retail outlets, provides many jobs for residents within Carlsbad. In addition, Goal 4 of the Housing Element of the *City of Carlsbad General Plan*, Housing, Jobs, Work Force Balance, strives for:

> "Maintenance of a high quality of life and a strong local economy through a balance of residential and non-residential development, in particular, a balance of the skills desired and wages offered by local employers; the skills and education possessed, and wages earned by the local work force; and the cost of local housing" (City of Carlsbad 1994).

The decennial U.S. Census 2000 gathered information on the amount of time that people spend commuting to and from the workplace, which in turn gives a general idea of those who work and live within proximate distance of each other. As of 2000, Carlsbad had a population of 77,998. Of this, 40,913 were in the labor force, of which 94.74 percent were employed (38,763 people) and 585 were the armed forces (U.S. Bureau of the Census 2000).

As shown in Table 2.5-1, the commuting times for Carlsbad as a whole were similar to those of the study area. Approximately 43 percent of commuters within the study area of Carlsbad spent less than 20 minutes driving to and from work as compared to the approximately 39 percent of the total population of Carlsbad. It is very likely that a number of those commuting less than 20 minutes live and work within Carlsbad, thereby reducing commute times, and contribute to a positive job/housing balance. Approximately 32 percent of workers in the study area commute between 20 and 44 minutes, compared to 34 percent in the whole city. A large proportion of these commuters are likely to leave Carlsbad to get to their work place.

Approximately 17 percent of the employed population within the study area commutes over 45 minutes to work, as compared to 18 percent for the entire city. Those who spend more than 45 minutes commuting most likely do not work within Carlsbad. As the jobs/housing balance attempts to reduce commuting times and vehicle trips, those who commute in excess of 45 minutes do not contribute to a balance of housing and jobs. However, as discussed previously, regional incentives, Carlsbad Village redevelopment, and City-defined goals attempt to control the location, intensity, and nature of jobs and housing in order to encourage a reduction in vehicle trips and miles traveled.

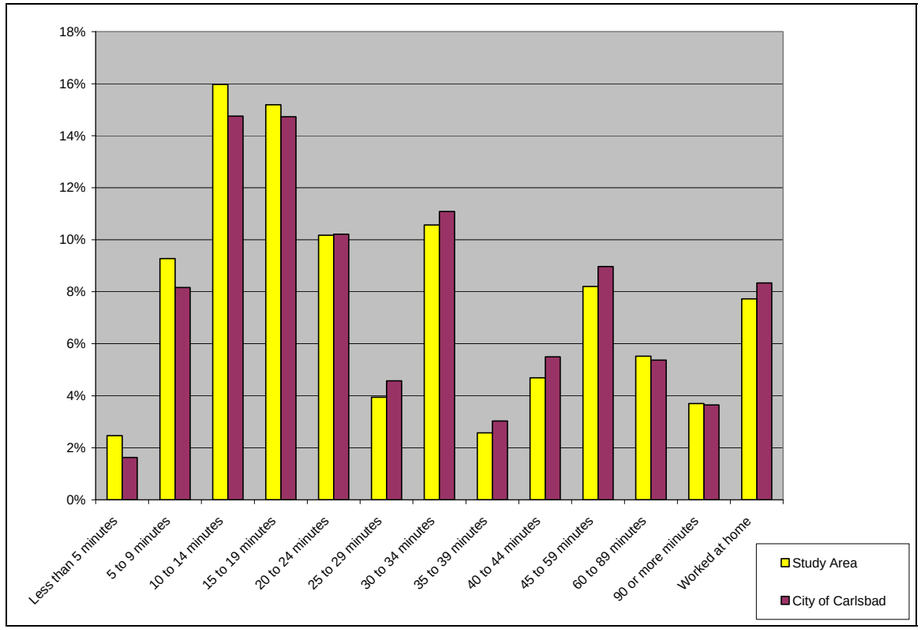
2.5.1.6 Adopted Planning Goals and Policies

There are several plans that identify planning goals and policies for the City of Carlsbad, which are identified below.

<u>City of Carlsbad General Plan and LCP</u>

The City of Carlsbad General Plan (1994) establishes the vision and planning framework for the development of Carlsbad and identifies the location, distribution, and arrangement of land uses within the municipal boundaries. The proposed project transects a broad variety of land uses along the I-5

Table 2.5-1. Commute Times – Carlsbad



Source: U.S. Bureau of the Census 2000, Summary File 3

corridor, which have been identified by the Land Use Element of the General Plan. The underlying principle of the Land Use Element is that Carlsbad will develop as a balanced community with a full range and variety of land uses. The Land Use Element sets out to protect and conserve natural resources, fragile ecological areas, unique natural assets, and historically significant features of the community (including Buena Vista Lagoon, Batiquitos Lagoon, and Agua Hedionda Lagoon). The Circulation Element sets out to provide a transportation system that helps minimize air pollution and traffic congestion and supports commerce and economic development. In addition to the Land Use Element and associated maps, the Zoning Code is the principal tool used by Carlsbad to implement land use policy. The Zoning Code must be consistent with the General Plan and land use designations stated in the Land Use Element. The Zoning Code includes a map delineating zoning boundaries and text that explains permitted uses within zones and standards.

A large portion of Carlsbad and the study area is located within the California Coastal Zone; therefore, issues and policies related to the requirements of the California Coastal Act are included in the City of Carlsbad LCP. The LCP includes the entire coastal area of Carlsbad, generally from the Pacific Ocean to El Camino Real in the north and south and to the industrial area in central Carlsbad. It is also inclusive of Agua Hedionda and Batiquitos lagoons. Relevant LCP policies include the preservation of prime agricultural land throughout the coastal zone. This policy includes preservation of the Carlsbad Flower Fields, an approximately 50-acre flower field that blooms between early March and early May each year. In addition, the Agua Hedionda LUP proposes land uses and environmental control measures for a 1,100-acre segment of the Carlsbad Coastal Zone, including the 230-acre Agua Hedionda Lagoon and adjacent marsh, upland habitats, and wetland areas.

Additional Carlsbad Plans

Additional plans recognized within the General Plan that are included within the study area include the Agua Hedionda LUP, the Growth Management Program/Local Facilities Management Plan, the Village Redevelopment Plan, the South Carlsbad Coastal Redevelopment Area (SCCRA), and the McClellan-Palomar Airport CLUP.

The “Village” area is located in downtown Carlsbad and has been established as a redevelopment project area. A Redevelopment Master Plan with Implementing Strategies and the Village Design Guidelines Manual guide all development in the Village. In addition, the SCCRA was established in 2000 and gives the Carlsbad Housing and Redevelopment Commission the legal authority to use various powers to achieve the Redevelopment Plan’s goals. Within the SCCRA is the Ponto Beachfront Village Visionary Plan (RBF Consulting 2005). The Ponto Beachfront Village Visionary Plan is located at the southwest corner of Carlsbad near the South Carlsbad State Beach and Campground. This plan aims to redevelop the currently residential and commercial center into a hotel/tourism-centered village.

2.5.2 Population and Housing

Carlsbad began as a small coastal community with the railroad as the center of commerce and development. The population numbered approximately 300 persons until 1914, when the South Coast Land Company procured water rights from Oceanside. Soon the farming industry was able to expand to grow the fruit, avocadoes, and flowers for which Carlsbad is known for today. By the 1920s, Carlsbad had expanded to include new churches, a movie theater, and a separate school district, although it remained relatively small until the 1940s (City of Carlsbad 2005).

The proximity of MCB Camp Pendleton brought a population influx to Carlsbad during the 1940s. This, and subsequent population growth, led to the formation of the City of Carlsbad in 1952, at which time it covered only 7.5 square miles. A special census in 1952 found that the population had already risen to 7,000 persons. During the 1960s, Carlsbad grew from a small fruit and vegetable packing town to a larger city, acquiring 34.7 additional square miles through a series of annexations. In 1959, Palomar Airport opened, and by 1978 it was annexed into the city, adding to commercial, corporate, and community accessibility (County of San Diego 2005). As the tourism aspect of Carlsbad grew, the proximity of the airport to recreational activities and businesses made Carlsbad a more convenient destination. The population continued to increase in subsequent decades, reaching 63,126 persons by 1990 and, as of 2000, 78,247 persons (a 24 percent increase) (City of Carlsbad 2005).

2.5.2.1 Population and Growth

Carlsbad, as of 2000, showed a population of 78,247 persons and consisted of approximately 3 percent of the total population of San Diego County (2,813,833 persons). Continuing a long-standing trend,

Carlsbad showed significant population growth over the last two decades, rising 78 percent between 1980 and 1990 (from 35,490 to 63,126 persons), and 25 percent between 1990 and 2000 (SANDAG 2004b). A 2004 estimate indicated a population of 92,995 persons, showing an estimated population growth of 19 percent. Carlsbad's rate of growth was consistently higher than that shown by San Diego County, which showed 34 percent between 1980 and 1990, 13 percent between 1990 and 2000, and an estimated growth of 7 percent 2000-2004 (U.S. Bureau of the Census 2000). Long-range forecasts for Carlsbad indicate a continuation of significant population growth, with the population anticipated to increase by 65 percent in 2000-2030, almost double that predicted for the county (37 percent) (SANDAG 2004b).

As of 2000, the population within the study area was 41,681 and comprised 53.2 percent of the total population of Carlsbad. As shown in Figure 2.5-4, several concentrated portions of Carlsbad are urbanized resulting in elevated population densities. Small pockets of more densely populated areas existed in newer residential developments to the east and southeast of the city. Population densities generally decreased in the central part of Carlsbad as it is composed mainly of agricultural uses and the Carlsbad Wastewater Treatment Plant. This is particularly evident between the northern coastal strip and I-5, including the beachfront areas close to Oceanside. As illustrated in Figure 2.5-4, the highest population densities within Carlsbad were at least partially located within the area of direct impacts, immediately west of I-5, as well as north of Agua Hedionda Lagoon. A particularly densely populated area was located between Carlsbad Village Drive and Tamarack Avenue to the west of I-5. As shown in Figure 2.5-4, there were also several additional scattered pockets of dense population to the south on either side of I-5.

2.5.2.2 Race and Ethnicity

As shown in Table 2.5-2, as of 2000, Carlsbad was predominantly White (86.6 percent). The population consisted of extremely small percentages of Black/African American (1.0 percent), American Indian and Alaskan Native (0.4 percent), and Native Hawaiian/Pacific Islander (0.2 percent) populations. There were slightly higher proportions of Asian (4.2 percent), "some other race" (4.6 percent), and "two or more races" (3.0 percent) populations.

Table 2.5-2. Race and Ethnicity – Carlsbad and San Diego County

	Carlsbad		San Diego County	
White	86.6%	(67,723)	66.5%	(1,871,839)
Black/African American	1.0%	(753)	5.7%	(161,480)
American Indian and Alaskan Native	0.4%	(329)	0.9%	(24,337)
Asian	4.2%	(3,315)	8.9%	(249,802)
Native Hawaiian/Pacific Islander	0.2%	(155)	0.5%	(13,561)
Some other race	4.6%	(3,636)	12.8%	(360,847)
Two or more races	3.0%	(2,336)	4.7%	(131,967)
Hispanic	11.7%	(9,170)	26.7%	(750,965)
Total Minority	19.4%	(15,234)	45.0%	(1,256,000)

Source: U.S. Bureau of the Census 2000

As of 2000, the breakdown race and ethnicity within the population of Carlsbad were markedly different from those of San Diego County, namely via lower levels of diversity. Most minority populations were proportionately about half of the percentages present within the county, with the Black/African American population being particularly low. The Hispanic population was again significantly lower. Conversely, the White population was much higher than that of the county. As of 2000, the total minority population in Carlsbad was 19.4 percent of the total population, which was much substantially lower than that of the county.

As shown in Figure 2.5-5, minority populations within Carlsbad generally correlated with increased population density in northern Encinitas. The Barrio community west of I-5 in the northern portion of the study area consists of between 61 and 80 percent minority populations. East of the study area but still within the municipality, low-minority populations were generally evident, although smaller areas of more moderate-minority populations were located both north and south of the study area itself. Within the northern portion of the direct impact area, there was a more discernable increase in minority levels, as the population densities increased toward the downtown areas (Figure 2.5-5). Additionally, a number of the areas directly west of I-5 and north of Agua Hedionda Lagoon showed elevated levels of minority populations, some extremely so.

Conversely, in the southern portion of the direct impact area, minority levels were generally low, although an area adjacent to Batiquitos Lagoon in the southwest corner of the municipality west of I-5 showed a markedly higher minority population than the surrounding areas (Figure 2.5-5).

2.5.2.3 Age

Table 2.5-3 shows that, as of 2000, the population of minors (under 18 years) was at 23.3 percent, which was marginally below that of the county average. Conversely, the working age population of Carlsbad (18-64 years), at 62.7 percent, was marginally above that of San Diego County. Similarly, the proportion of senior citizens (over 65 years) within Carlsbad, at 14.0 percent, was marginally above that of San Diego County, as was the city's median age of 38.9 years. These elevated age levels suggest a greater percentage of elderly and/or retired persons reside within Carlsbad compared to the county as a whole.

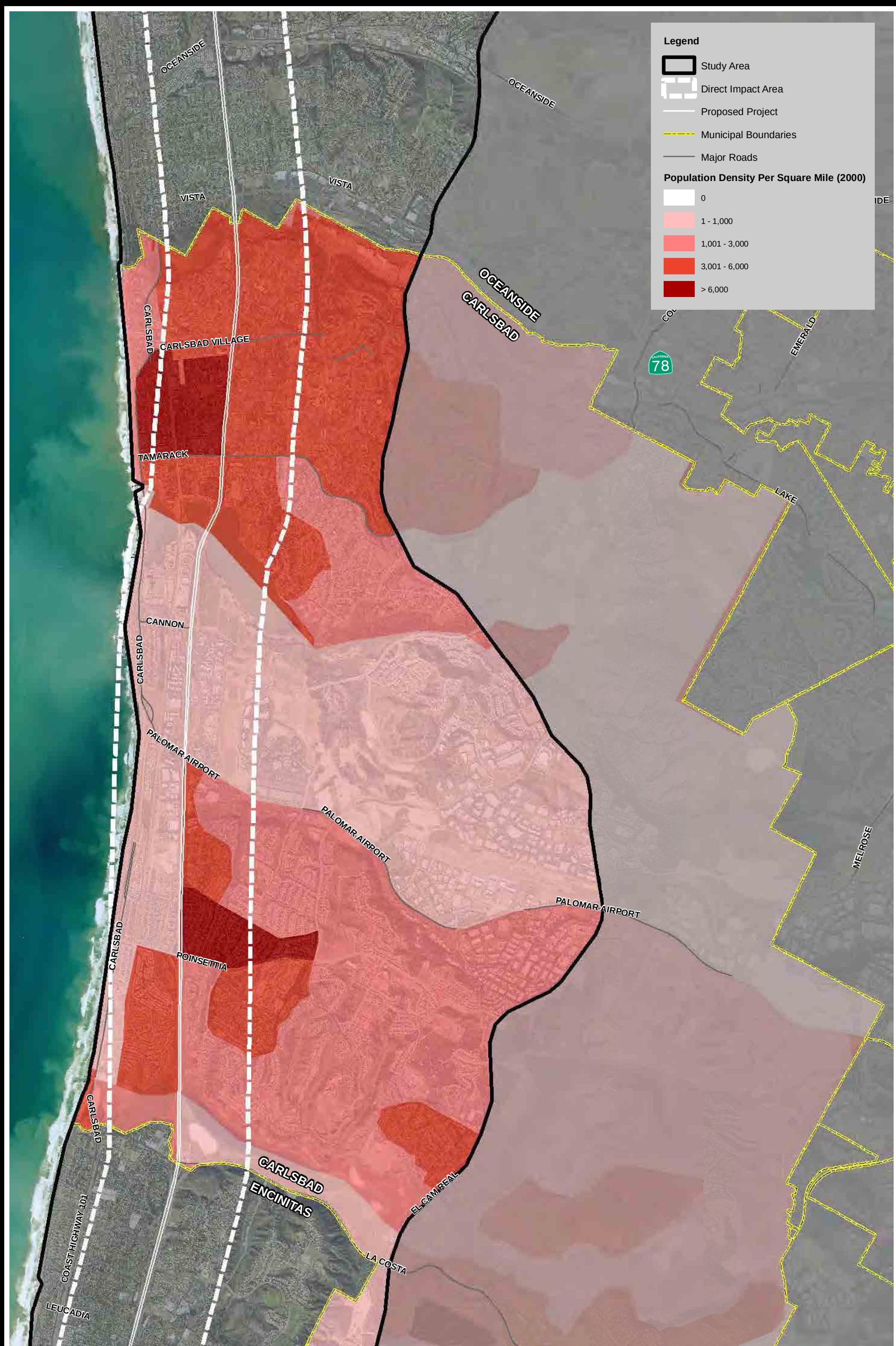
Table 2.5-3. Age Breakdown – Carlsbad and San Diego County

	Carlsbad		San Diego County	
Under 18 years	23.3%	(18,240)	25.7%	(811,038)
18 to 64 years	62.7%	(49,027)	63.1%	(1,776,442)
Over 65 years	14.0%	(10,980)	11.2%	(313,750)
Median Age	38.9 years		33.2 years	

Source: U.S. Bureau of the Census 2000

As shown in Figure 2.5-6, elevated populations of senior citizens were generally present within western and southern portions of the municipality. As shown in Figure 2.5-6, elevated populations were present along the vast majority of the direct impact area, especially to the west of I-5. In addition, there was a

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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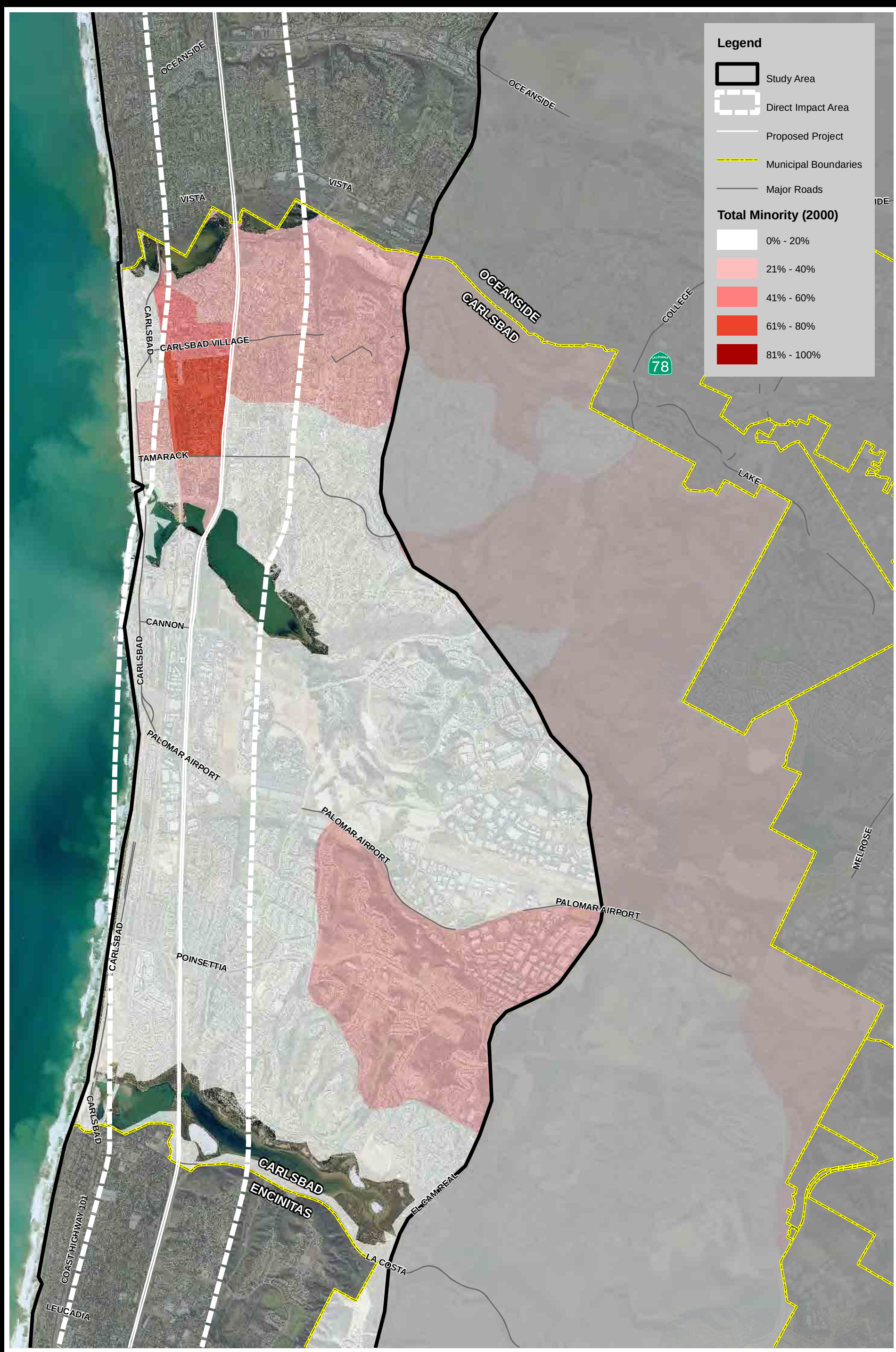
Figure 2.5-4
CARLSBAD
Regional Population Density

3,500 0 3,500

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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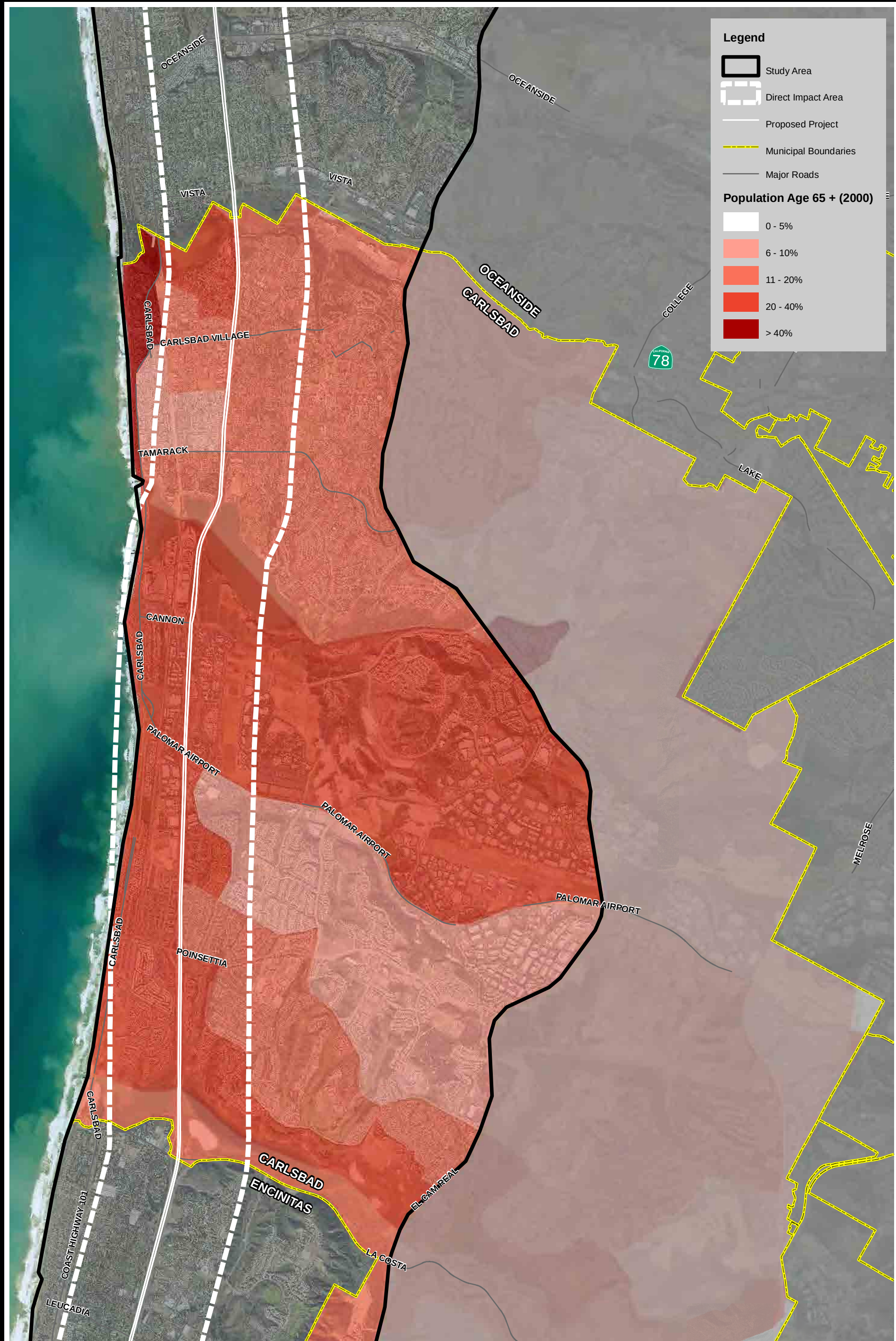
Figure 2.5-5
CARLSBAD
Proportion of Total Minority

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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Figure 2.5-6
CARLSBAD
Population Age 65 +

3,500 0 3,500

significantly elevated population within a small area in the northeast corner of the study area, adjacent to the coast.

2.5.2.4 Housing

As shown in Figure 2.5-7, the majority of the areas within the eastern portion of Carlsbad showed relatively low levels of housing density, whereas, the northern portion of the city conversely showed generally elevated densities, sometimes substantially so. Additionally, several smaller areas of more moderate density were present in the south and southeast portions of the municipality. While smaller pockets of moderate densely populated areas existed in newer residential developments in the eastern and southeastern portions of the study area, population densities generally increased in the northern and western portions of the study area.

Within the direct impact area elevated housing densities were present north of Agua Hedionda Lagoon in the heavily developed downtown and beachfront areas of Carlsbad (Figure 2.5-7). In particular, west of I-5 showed the highest concentrations present along the western boundary of the direct impact area, especially north of Agua Hedionda Lagoon, between Tamarack Avenue and Carlsbad Village Drive (Figure 2.5-7). In the southern portion of the direct impact area (Figure 2.5-7), more isolated areas of elevated housing densities were also present, particularly east of I-5, between Palomar Airport Road and Poinsettia Lane and west of I-5, north of Batiquitos Lagoon. Housing densities within Carlsbad generally correlated to population density. As of 2000, the average household size in Carlsbad was 2.46 persons, compared to the county average of 2.73. As of 2000, Oceanside households made up only 3.4 percent of the county total (33,798 of 994,677, respectively).

Affordable Housing

The City of Carlsbad General Plan contains stated community goals and policies designed to shape the long-term development of the city. Carlsbad has a particularly unique challenge to create a sufficient amount of affordable housing opportunities, as the City ordinances limit the allowable housing density. As such, one of the general goals of the long-range policy for housing opportunities is to increase the allowable density in areas where affordable housing could be created. In addition, the program strives to create affordable housing opportunities “in all quadrants of the City to meet the needs of groups, with special requirements, and, in particular the need of current lower and moderate income households and fair share proportion of future lower and moderate income households” (City of Carlsbad 1994).

The City of Carlsbad’s Housing and Redevelopment Department is responsible for providing the aforementioned opportunities, which include redevelopment, grant programs, investment programs, and affordable housing. There are 14 affordable housing complexes in Carlsbad, with one specifically designated for seniors. Archstone Pacific View, Laurel Tree Apartments, Poinsettia Station Apartments, Pacific View/Kelly Ranch, Seascape Apartments, Tyler Court Apartments, and Vista Las Flores are all within the area of primary impacts along the I-5 corridor. The remaining seven are located east of the direct impact area.

2.5.3 Public Facilities and Services

2.5.3.1 Schools

Carlsbad is served by the Carlsbad Unified School District, which maintains 18 schools serving students ranging from kindergarten to 12th grade. Carlsbad is also served by the Encinitas Union Elementary, San Dieguito Union High School, and San Marcos Unified school districts. School service areas are designated for each of the school locations based on generation factors, school sizes, and maximum travel distances (City of Carlsbad 1994).

A total of 12 schools are located within the study area. Figures 2.5-8a and 2.5-8b show the locations of schools within the direct impact area and surrounding vicinity. There are five schools within the area of secondary impacts, including two elementary schools, one middle school, and one high school. A total of seven schools are located within the area of direct impacts and are shown in Figures 2.5-8a and 2.5-8b. This includes four elementary schools, one middle school, and two high schools. Buena Vista, Jefferson, and St. Patrick elementary schools are nearest to the existing I-5 corridor. Buena Vista Elementary is located less than 0.125 mile from I-5, north of Carlsbad Village Drive. Jefferson Elementary is located west of I-5 north of Tamarack Avenue, approximately 0.25 mile from I-5. St. Patrick, a private elementary and junior high school, is located north of Tamarack Avenue and east of I-5, less than 0.125 mile from the existing I-5 corridor.

2.5.3.2 Police Protection

The Carlsbad Police Department serves the city, including the study area. There are two police stations in Carlsbad, one located within the area of direct impacts and the other located outside the study area. As shown in orange in Figure 2.5-8a, the police station within the area of direct impacts is located east of I-5 on Carlsbad Village Drive. The Safety Center and Police Department are located in east Carlsbad northeast of Palomar Airport Road and El Camino Real.

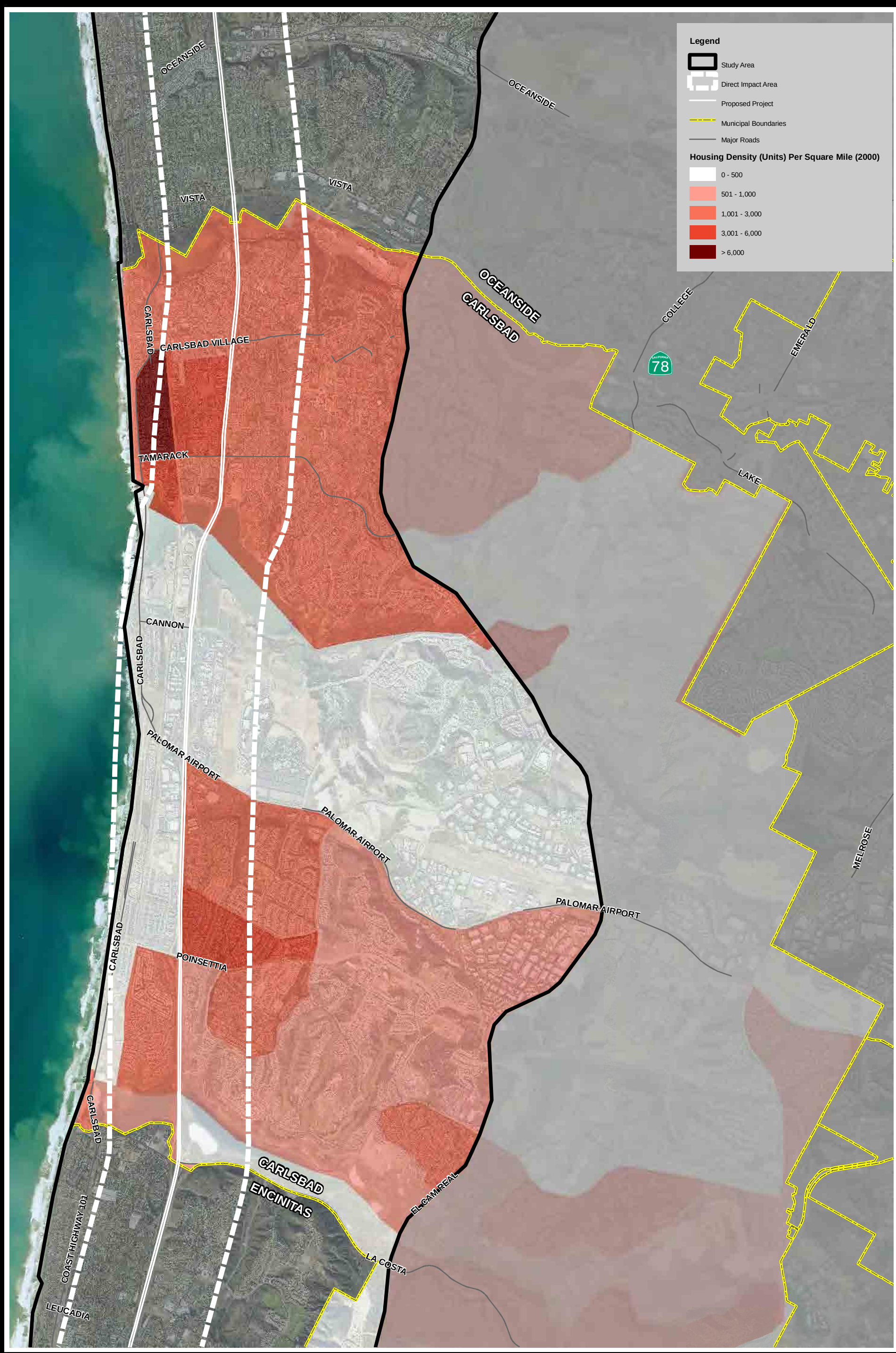
2.5.3.3 Fire Protection

The Carlsbad Fire Department serves the city, including the study area. There are currently six operational fire stations located within Carlsbad. The Carlsbad Fire Department has a staff of 80 personnel, six fire trucks, and two fire trucks designed to fight brush fires. A typical 24-hour shift includes 22 fire fighters and a battalion chief.

Of the six fire stations, three are located outside of the area, one is located in the secondary impact area, and two are located within the area of direct impacts. As shown in Figures 2.5-8a and 2.5-8b, Fire Stations 1 and 4 are located in the area of direct impacts. Fire Station 1 is located east of I-5 and provides service to the downtown area. It is located at 1275 Carlsbad Village Drive near the Police Station. Fire Station 4 is located east of I-5 on Poinsettia Lane and is located in a primarily residential area.

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; US Census 2000

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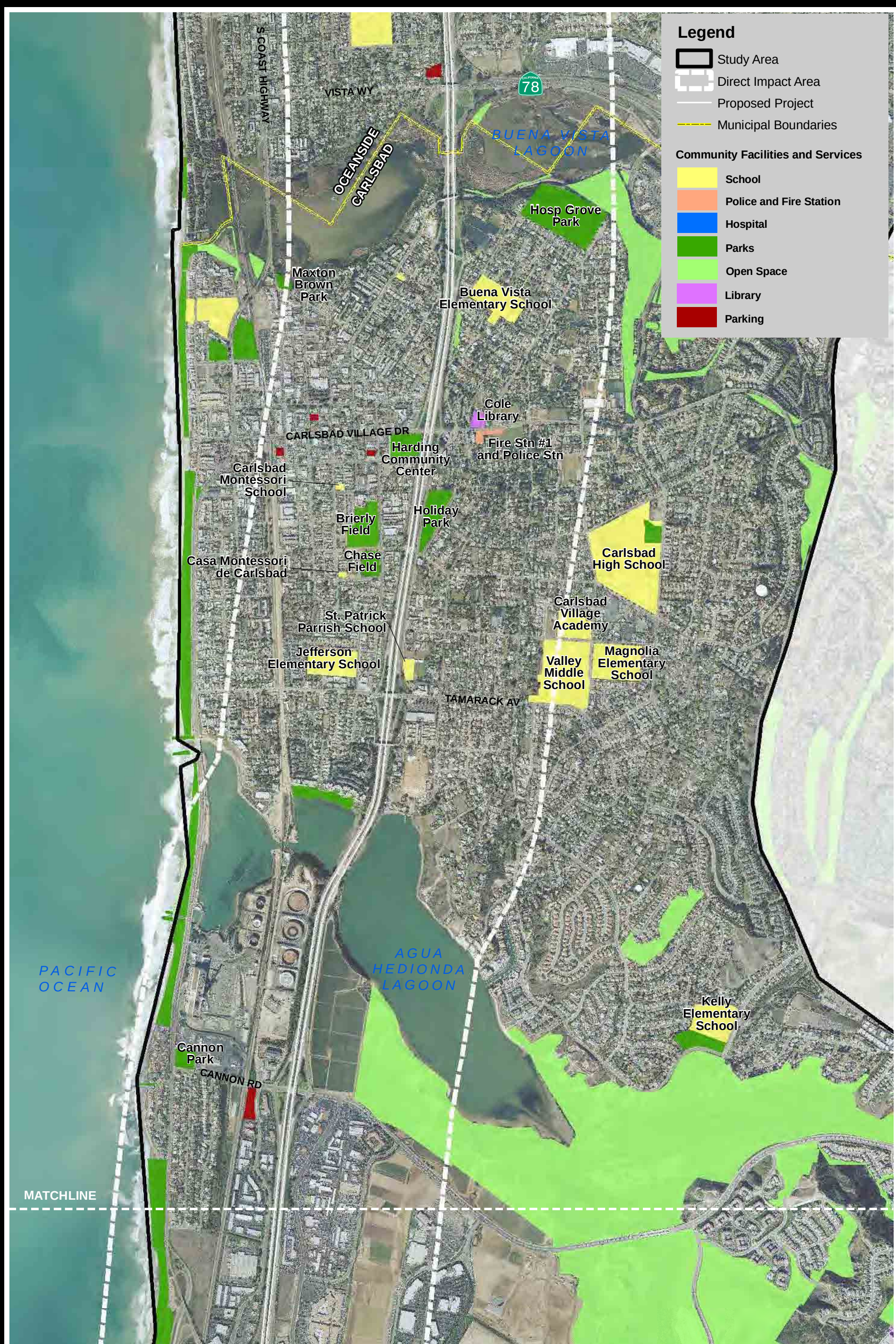
Figure 2.5-7
CARLSBAD
Housing Density

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

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Figure 2.5-8a
CARLSBAD NORTH
Community Facilities and Services

1,500 0 1,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

I-5 NORTH COAST CORRIDOR CIA

Source: AirPhotoUSA; SANDAG 2006

EDAW | AECOM

Figure 2.5-8b
CARLSBAD SOUTH
Community Facilities and Services

1,500 0 1,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

2.5.3.4 Hospitals and Medical Facilities

There are no major hospitals or medical facilities located in the study area within Carlsbad. Residents within Carlsbad utilize the Scripps Memorial Hospital in Encinitas, which is south of Carlsbad or the Tri-City Medical Center in Oceanside.

2.5.3.5 Recreational and Community Facilities

Carlsbad has variety of indoor and outdoor parks, as well as open space areas associated with the unique topography and the Buena Vista, Agua Hedionda, and Batiquitos lagoons. In addition to the open space associated with the three lagoons, four City-managed parks are within the area of direct impacts. Open space and parks can be seen in green in Figures 2.5-8a and 2.5-8b. Hosp Grove Park is located east of I-5 south of Batiquitos Lagoon. This park features a play area, picnic tables, and a 1.5-mile trail. Holiday Park is located on the east side of I-5 between Carlsbad Village Drive and Tamarack Avenue. It consists of 5.9 acres and includes playground and picnic areas. Cannon Park is located north of Cannon Road near the Pacific Ocean. It features basketball courts, picnic areas, and a playground. Poinsettia Park, which is currently under construction, is located partially within the area of direct impacts east of I-5 in south Carlsbad. Upon completion, it will be the largest park in Carlsbad, approximately 42 acres. It currently has playing fields, tennis courts, and picnic areas.

The Harding Community Center is located west of I-5 and south of Carlsbad Village Drive. The Harding Community Center provides meeting rooms, an auditorium, and a recreation hall. The auditorium has a capacity of 180 and a theater area with a capacity of 250. There are two libraries in Carlsbad, both of which are located in the area of direct impacts. Dove Library is located near Aviara Oaks Middle School and the Aviara Golf Course. Cole Library is located near the Harding Community Center.

2.5.3.6 Circulation, Access, and Parking

Traffic flow and access in and out of Carlsbad are described in the Circulation Element of the Carlsbad General Plan (1994). Goal A of the Circulation Element is to create a “City which promotes, encourages, and accommodates a variety of transportation modes as alternatives to the automobile” (City of Carlsbad 1994). Major roads, transit lines, pedestrian corridors, parking, and airports are outlined below. Table 2.5-4 shows the main modes of transportation for commuters in Oceanside.

Table 2.5-4. Modes of Transportation – Carlsbad

Means of Transportation	Number of Commuters per Day	Percentage
Total daily commuters	38,644	100.00
Car, truck, or van	33,396	86.42
Railroad	495	1.28
Bus (including trolley bus)	285	0.74
Other public transportation[1]	22	0.06

[1] Includes census categories of street car or trolley car, and subway or elevated.
Source: U.S. Bureau of the Census 2000

Major Roads

I-5 is a major transportation feature in Carlsbad, dividing the coastal areas of the city from the inland region. Freeway interchanges from I-5 into and out of Carlsbad are located at Las Flores Drive, Carlsbad Village Drive, Tamarack Avenue, Cannon Road, Palomar Airport Road, and Poinsettia Lane. There is also a connector at the SR 78 junction. In addition, prime arterials, major arterials, secondary arterials, and collector streets have been identified in the Circulation Element of the General Plan.

Prime arterials are defined as carrying very heavy traffic volumes (over 40,000 estimated ADT) and provide for regional and intracity circulation and connections to freeways and other regional roads. Prime arterials in Carlsbad include El Camino Real, Rancho Santa Fe Road, Palomar Airport Road, Olivenhain Road, and Melrose Drive. Major arterials carry moderate to heavy traffic volumes (20,000 to 40,000 estimated ADT) and have a minimum of two traffic lanes in each direction with a raised median. Major arterials include College Boulevard, Cannon Road, Poinsettia Lane, and La Costa Avenue. Secondary arterials provide limited access to adjacent properties, have two lanes in each direction, and carry moderate traffic volumes (10,000 to 20,000 estimated ADT). Secondary arterials in Carlsbad include Marron Road, Carlsbad Village Drive, Calle Barcelona, and Aviara Parkway. Collector streets, which provide immediate access to adjoining properties and carry light to moderate traffic volumes (2,000 to 10,000 estimated ADT), include Tamarack Avenue and Faraday Avenue.

Public Transit

Rail service is provided to Carlsbad by the Coaster along the Santa Fe Railway. NCTD operates the Coaster, which began service in 1995. The Coaster serves the cities of Oceanside, Carlsbad, Encinitas, Solana Beach, and San Diego.

The railway traverses Carlsbad west of I-5, within the area of direct and secondary impacts. Coaster stops are made at seven stations along the route, which is broken down into zones. Carlsbad has two transit stations within Zones 1 and 2 of the Coaster. The Carlsbad Village and Carlsbad Poinsettia Coaster stations are located at 2775 State Street, and 6511 Avenida Encinas, both within the area of direct impacts. Accessibility and, to an extent, ridership of public transit lines vary throughout each municipality. As of 2000, approximately 495 commuters per day in Carlsbad used the railroad (presumably the Coaster) as the main mode of transportation (U.S. Bureau of the Census 2000).

NCTD also operates the bus system, “the Breeze,” throughout the north San Diego County region, including from Oceanside to Del Mar, northeast to Escondido, east to Ramona, north to Fallbrook and San Clemente in Orange County, and to MCB Camp Pendleton. NCTD currently provides service to the area via seven routes. This includes routes south to Encinitas, east to Vista, and local service within Carlsbad. Local routes serve main community services such as connections to the Poinsettia and Carlsbad Village Coaster Stations, business parks, the Flower Fields, and Palomar College. As of 2000, approximately 285 commuters per day in Oceanside used the bus system as the main mode of transportation (U.S. Bureau of the Census 2000).

Pedestrian Corridors

The City of Carlsbad has established a Citywide Trails Program that provides a comprehensive network of nonmotorized transportation routes that connect neighborhoods to commercial and business areas, schools, parks, and beaches. There are currently approximately 16 miles of unpaved recreational trails located throughout Carlsbad's open space areas, with plans for the future addition of 44 miles. In addition, there are over 48 miles of paved bike lanes that are outlined in the Circulation Element (City of Carlsbad 2001).

Airports

The McClellan-Palomar Airport is located west of El Camino Real, just north of Palomar Airport Road in the area of secondary impacts. It serves the general aviation community, corporate aircraft, and commercial services.

Parking

The City of Carlsbad General Plan does not specifically address parking locations and needs within the City. However, a "Park & Ride" lot, which provides free convenient parking lots where one would meet a carpool or take the bus or train, is located in south Carlsbad, near Batiquitos Lagoon west of I-5, and is shown in red in Figure 2.5-8b.

2.5.4 Economics

2.5.4.1 Local Economy

Historically, Carlsbad's economy was largely based upon agriculture, tourism, and supporting MCB Camp Pendleton. Dry farming, the town's principal industry, was expanded to include propagation of flowers, bulbs, and fruit orchards, including the then-exotic avocado. The railroad packing shed became a vital hub of the community, as well as an increase in beach campers and other tourists. The Depression was weathered with the economic support of a new group of settlers from Los Angeles. They were writers, directors, and other members of the Hollywood film industry who built second homes in Carlsbad (City of Carlsbad 2005). Proximity to MCB Camp Pendleton brought about the military influence during World War II, and the post-war activity was based on the return of veterans.

Currently, Carlsbad continues to support agriculture and resort tourism but also has developed a diverse economic portfolio that includes a large golf equipment manufacturing sector as well as a large number of biomedical and multimedia companies (Carlsbad Chamber of Commerce 2005). Agriculture remains important to the economy with the Flower Fields located east of I-5 next to Legoland, which is a major tourist attraction and the only park of its type in the United States. The Flower Fields is approximately 330 acres in area and is open seasonally for tourism (City of Carlsbad 2005). The golf course and resort at the Four Seasons Resort Aviara is a major and desirable tourist attraction. In addition, the beaches are consistently a popular destination.

Carlsbad is a predominantly urbanized city although it does have more of a rural quality in the eastern portion of the municipality established through the presence of open space, agricultural areas, and less dense residential developments. Figures 2.5-9a and 2.5-9b illustrate the detailed land uses within the direct impact area along the project corridor to a more detailed extent. The data provided in these figures are derived from SANDAG land use categories (2003).

As shown in Figures 2.5-9a and 2.5-9b, the commercial and industrial areas are primarily located along the major roadways transecting I-5, which include Carlsbad Village Drive, SR 78, and adjacent to I-5 between Cannon Road and Palomar Airport Road. The majority of the industrial areas are located along Palomar Airport Road. Agricultural areas are situated primarily to the east of I-5 with some smaller locations in the northern portion of Carlsbad.

2.5.4.2 Income and Employment

Median Household Income

Median household income is defined as the middle value of all incomes as arranged from highest to lowest in a selected geographic area. Based on data according to block groups from the 2000 U.S. Census, the median household income for Carlsbad was $65,165 with $153,863 as the highest median household income for a block group in Carlsbad and $24,569 as the lowest median household income for a block group in Carlsbad. In comparison, the median household income according to block groups for San Diego County as of 2000 was $47,067, significantly lower than Carlsbad, although it showed $200,001 for the highest median household income for a block group in the county and $9,208 as the lowest median household income for a block group in the county.

Figure 2.5-10 illustrates the median household income for the study area and direct impact areas, respectively, arranged by block groups and grouped together according to six different ranges. Within the study area, the areas within the highest median household income range (above $140,000) are located in the southern areas of Carlsbad east of I-5 along the south side of Palomar Airport Road and Poinsettia Lane. It should be noted that the area along Poinsettia Lane is the Four Seasons Resort Aviara, which includes a hotel and golf course. The area within the lowest median household income range in the study area (below $30,000) is located west of I-5 and east of Carlsbad Boulevard along Carlsbad Village Drive.

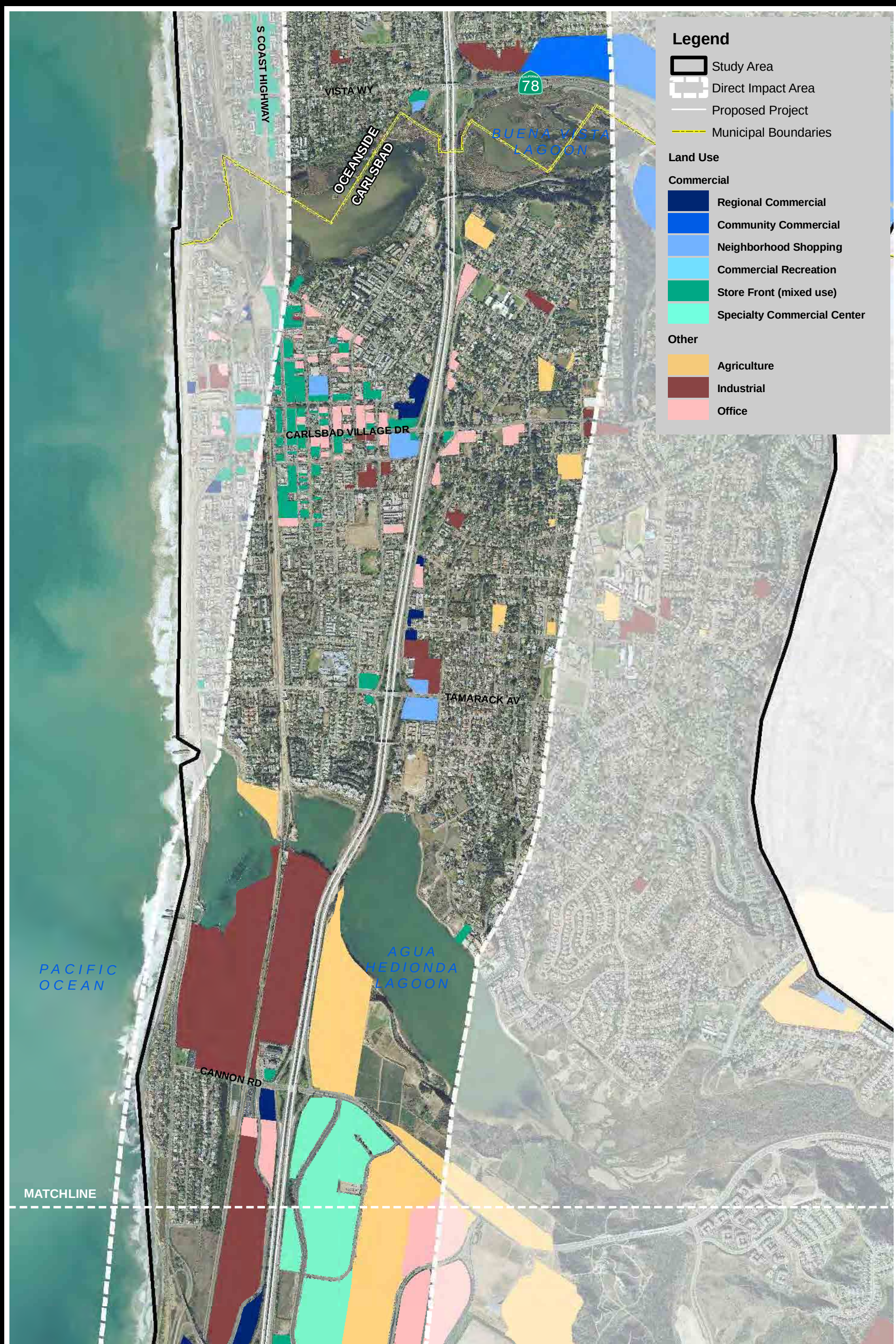
As shown in Figure 2.5-10, the highest median household income range for the direct impact area is located east of I-5 from Carlsbad Boulevard south to the municipal boundary with Carlsbad. The area within the lowest median household income range is along the north and south sides of Carlsbad Village Drive west of I-5 and east of Carlsbad Boulevard.

Per Capita Income

Per capita income is defined as the average income of every resident of a selected geographic area, including all adults and children. Per capita income is typically reported in units of currency per year and often used as a measure of the wealth of the selected population. Based upon data according to block groups from the 2000 U.S. Census, per capita income for Carlsbad was $34,863 with $79,743 as

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:18,000; 1 inch = 1,500 feet



Source: AirPhotoUSA 2006; SANDAG 2006

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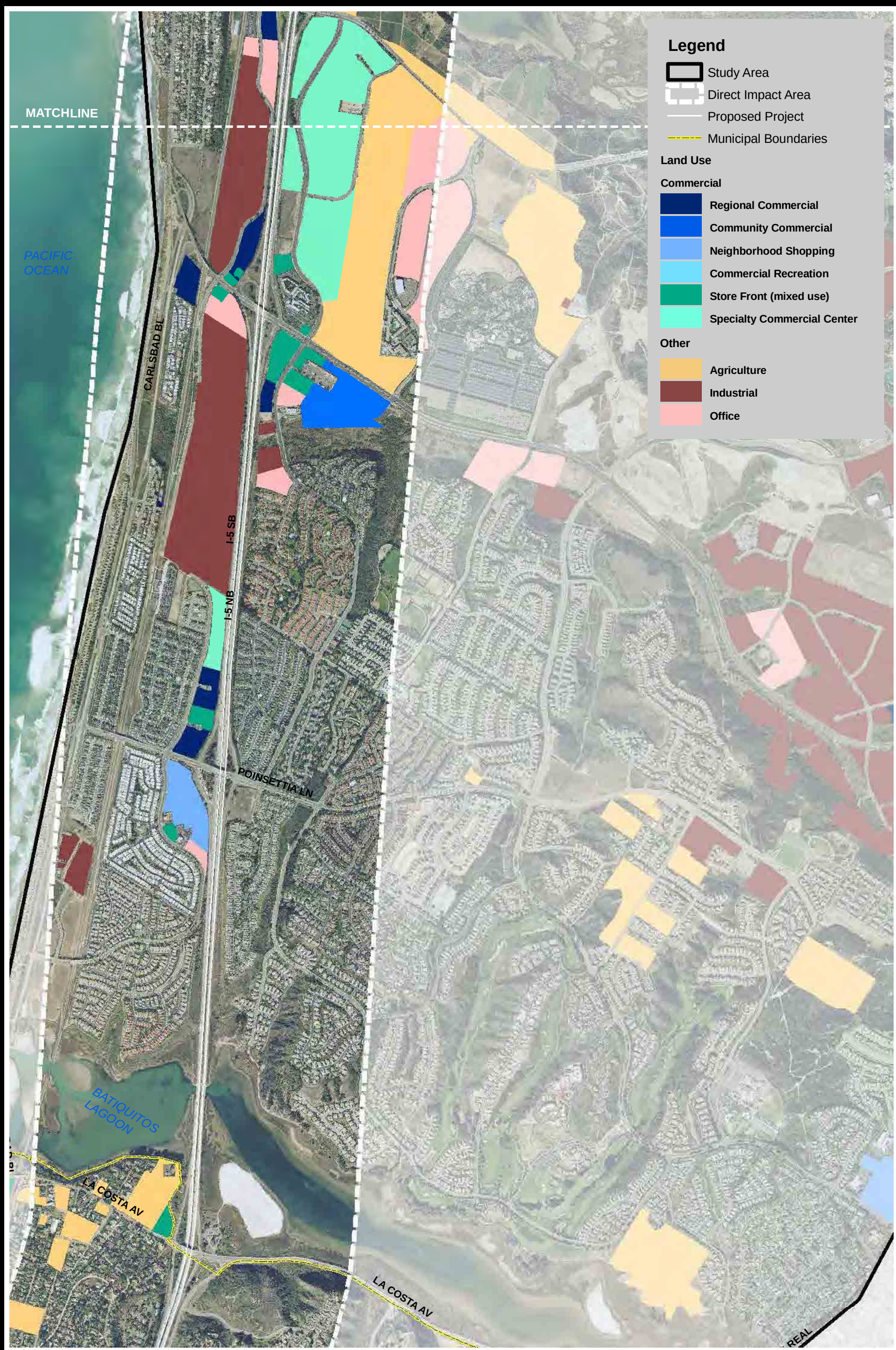
Figure 2.5-9a
CARLSBAD - NORTH
Direct Impact Area Economy

I-5 NORTH COAST CORRIDOR CIA



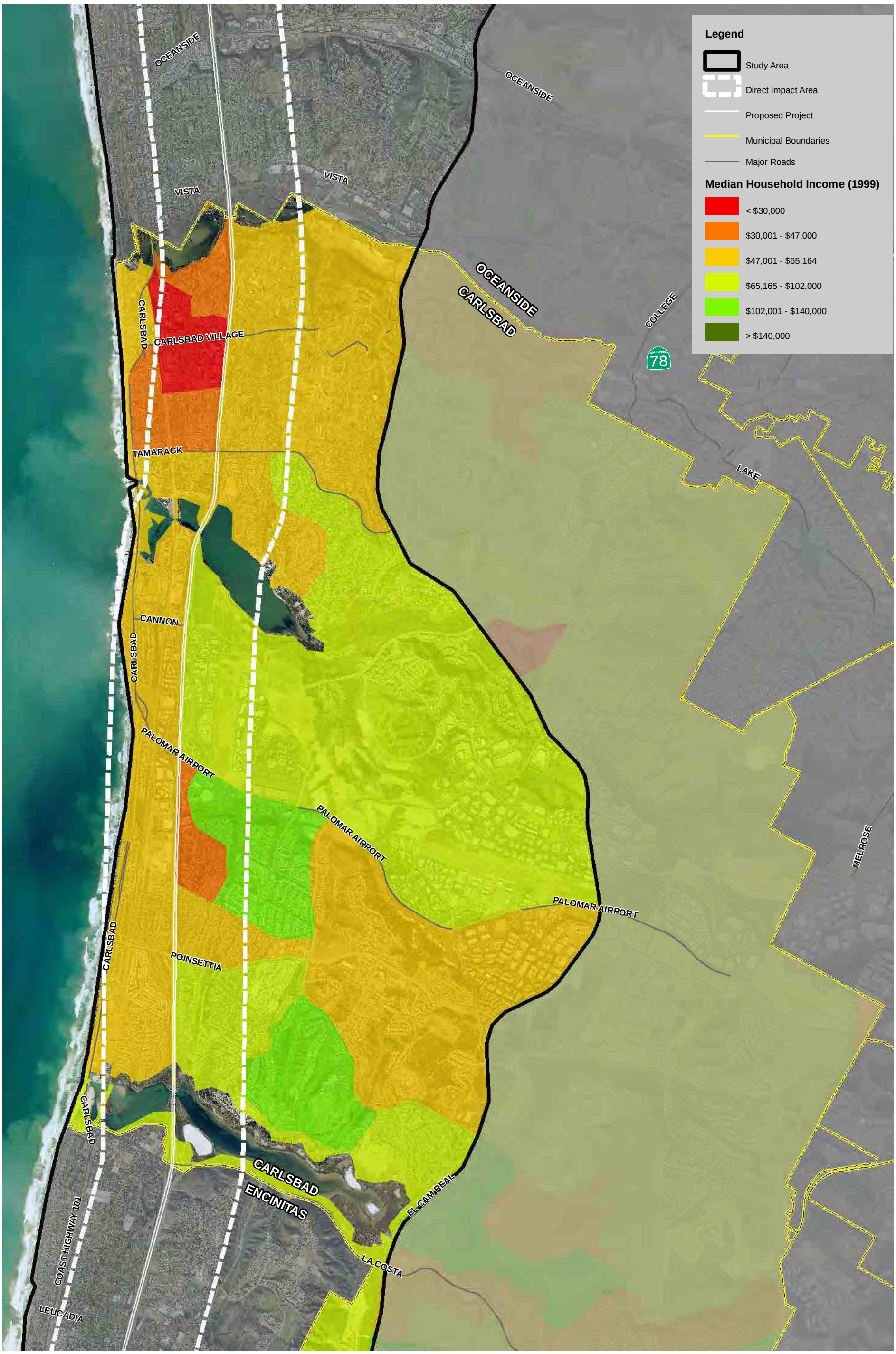
Source: AirPhotoUSA; SANDAG 2006

EDAW | AECOM

Figure 2.5-9b
CARLSBAD - SOUTH
Direct Impact Area Economy

1,500 0 1,500 Feet
SCALE: 1:18,000; 1 inch = 1,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.5-10
CARLSBAD
Median Household Income

3,500 0 3,500

the highest per capita income for a block group in Carlsbad and $11,082 as the lowest per capita income in a block group for Carlsbad. In comparison, per capita income for block groups in San Diego County was $22,926, with $112,849 as the highest per capita income in a block group for the county and $4,505 as the lowest per capita income for a block group in the county. Similar to median household income values, per capita income for Carlsbad was significantly higher and showed a much smaller range of values than that of the county.

Figure 2.5-11 illustrates per capita income for the study area and direct impact area, respectively, arranged by block groups and grouped together according to six different ranges. The area within the highest per capita income range (above $65,000) is located in the southern areas of Carlsbad, east of I-5 along the south side of Poinsettia Lane (Four Seasons Resort Aviara).

As shown in Figure 2.5-11, the highest per capita income range located within the direct impact area is the range over $65,001. This area is located south of Aviara Parkway, just east of the direct impact area. The area with the lowest per capita income range (below $15,000) is located west of I-5, and south of Carlsbad Village Drive and east of Carlsbad Boulevard.

Employment

As previously discussed, Carlsbad's economy has historically been centered around agriculture and resort tourism. Although Carlsbad continues to support agriculture and tourism, it also has a large golf equipment manufacturing sector as well as a large number of biomedical and multimedia companies. Other larger private employers include Legoland, Four Seasons Resort Aviara, La Costa Resort and Spa, Callaway, Taylor Made, Cobra Golf, ViaSat, Isis Pharmaceuticals, and Car Country Carlsbad, which is one of the premiere auto malls in southern California. The City of Carlsbad and Carlsbad Unified School District are some of the largest public employers for Carlsbad.

Based on data from the California EDD, the unemployment rate in Carlsbad has averaged about 3.0 percent over the past 5 years (2000-2004), significantly below the average of 4.6 percent for San Diego County over the same period. As of May 2005, the unemployment rate for Carlsbad was 2.5 percent and 3.8 percent for San Diego County. Table 2.5-5 compares the employment statistics between Carlsbad and San Diego County.

Table 2.5-5. Annual Unemployment Rate – Carlsbad and San Diego County

Area	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004	Average
Carlsbad	2.5%	2.7%	3.3%	3.4%	3.1%	3.0%
San Diego County	3.9%	4.2%	5.1%	5.2%	4.7%	4.62%

Source: EDD 2005

2.5.4.3 Labor Force Characteristics

As of 2000, Carlsbad had a population of 77,998 persons. Of this, the labor force consisted of 40,913 persons, of which 94.74 percent were employed (38,763 people) and 585 persons were in the armed forces (U.S. Bureau of the Census 2000).

Table 2.5-6 summarizes the labor force characteristics for Carlsbad and San Diego County based upon 2000 U.S. Census data. Labor force characteristics in Table 2.5-6 include employment status, occupation, industry, and class of worker. Carlsbad generally mimics the labor force composition of San Diego County with slightly higher numbers. Within the civilian force, Carlsbad had 62.9 percent of the population over 16 employed and San Diego County had 57.3 percent employment.

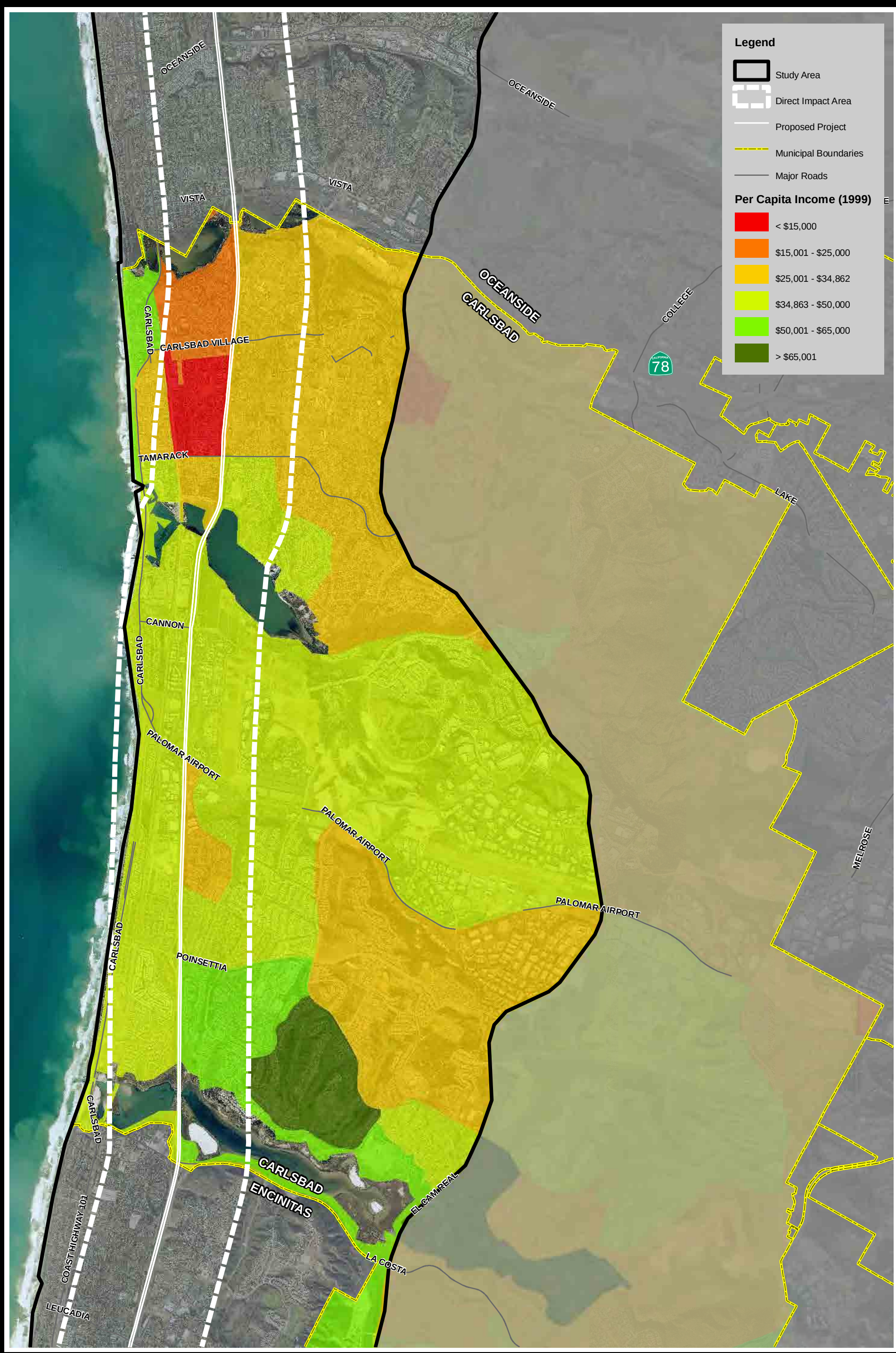
Table 2.5-6. Labor Force Characteristics – Carlsbad and San Diego County

Subject	Carlsbad		San Diego County	
EMPLOYMENT STATUS				
Population 16 years and over	**100.0%**	**(61,582)**	**100.0%**	**(2,165,034)**
In labor force	66.4%	(40,913)	65.0%	(1,407,152)
Civilian labor force	65.5%	(40,328)	60.9%	(1,319,517)
Employed	62.9%	(38,763)	57.3%	(1,241,258)
Unemployed	2.5%	(1,565)	3.6%	(78,259)
Percent of civilian labor force	3.9%		5.9%	
Armed Forces	0.9%	(585)	4.0%	(87,635)
Not in labor force	33.6%	(20,669)	35.0%	(757,882)
Employed civilian population 16 years and over	**100.0%**		**100.0%**	
OCCUPATION				
Management and professional	49.2%		37.7%	
Service	11.7%		16.1%	
Sales and office	27.9%		27.2%	
Farming, fishing, and forestry	0.3%		0.5%	
Construction, extraction, and maintenance	5.6%		8.7%	
Production, transportation, and material moving	5.3%		9.9%	
INDUSTRY				
Agriculture, forestry, fishing and hunting, and mining	0.3%		0.7%	
Construction	5.8%		6.6%	
Manufacturing	11.9%		11.0%	
Wholesale trade	4.4%		3.3%	
Retail trade	10.6%		11.3%	
Transportation and warehousing, and utilities	3.2%		3.8%	
Information	3.9%		3.5%	
Finance, insurance, real estate, and rental and leasing	9.7%		7.1%	
Professional, scientific, management, administrative, and waste management services	15.0%		13.3%	
Educational, health and social services	17.8%		19.3%	
Arts, entertainment, recreation, accommodation and food services	9.5%		9.6%	
Other services (except public administration)	4.3%		5.2%	
Public administration	3.5%		5.4%	
CLASS OF WORKER				
Private wage and salary	73.7%		75.0%	
Government	13.2%		16.0%	
Self-employed (not incorporated business)	12.9%		8.7%	
Unpaid family	0.3%		0.3%	

Source: U.S. Bureau of the Census 2000

Carlsbad and San Diego County have broadly similar numbers in the employment categories, as listed in Table 2.5-6. Carlsbad had a higher percentage of persons (49.2 percent) in management and professional occupations than San Diego County (37.7 percent). Carlsbad had slightly larger numbers in the manufacturing, wholesale trade, and information industries and significantly higher numbers in the finance, insurance, real estate and rental and leasing; and professional, scientific, management,

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

EDAW | AECOM

Figure 2.5-11
CARLSBAD
Per Capita Income

3,500 0 3,500

administrative, and waste management services than San Diego County. A significantly larger number of the population for Carlsbad (12.9 percent) was self-employed than for San Diego County (8.7 percent).

The 2000 U.S. Census gathered information on the amount of time that people spend commuting to and from the workplace within the study area. As discussed in Section 2.5.1.5, approximately 43 percent of commuters within the study area of Carlsbad spent less than 20 minutes driving to and from work. It is likely that a number of those commuting less than 20 minutes live and work within Carlsbad, thereby reducing commute times and contribute to a positive job/housing balance. Approximately 32 percent of workers in the study area commute between 20 and 44 minutes and approximately 17 percent of the employed population within the study area commutes over 45 minutes to work. Commuters in these longer commute time categories likely work outside of Carlsbad and do not contribute to a balance of housing and jobs.

2.5.4.4 Tax Revenue and Fiscal Conditions

Property tax is imposed on real property and is based upon the assessed value of the property and allocated by tax rate areas throughout the county. Assessment values are set at the time a property changes ownership and increase at no more than 2 percent annually at that value.

Based upon the APN data from SanGIS data (2005), the average assessed value for a property in Carlsbad was $391,232, whereas, the average assessed value for San Diego County of $245,946 was substantially below the average assessed value for Carlsbad.

There are six ranges of assessed value for Carlsbad as depicted in Figure 2.5-12 for the study area and direct impact area, respectively. This figure illustrates within the municipality where the revenue is generated and in relationship to the location of the project. APN data from SanGIS included numerous parcels with no available data and assessed values listed as $0 or a nominal value. Thus, these parcels are included in the range of <$350,000 for assessed value. The majority of Carlsbad values fall within the range of <$350,000. Areas with higher values are geographically widespread throughout Carlsbad and the areas with the highest assessed values are located at the hotel and golf course of the Four Seasons Resort Aviara and the Encina Wastewater Authority.

The areas with higher assessed values within the study area and direct impact area are typically related to commercial and business areas, but are not exclusive. Some residential areas within the study area fall within the ranges of the higher assessed values ($1,000,001-$10,000,000). As previously indicated, the majority of the Carlsbad area falls within the range of <$350,000 and these areas are primarily residential and generally do not correlate with commercial, industrial, and agricultural areas.

2.5.4.5 Business Activity

As previously shown in Figures 2.5-9a and 2.5-9b, a variety of commercial land uses, and agriculture, office, and industrial areas are located within the area of direct impacts. Commercial land uses are divided into six different categories: regional commercial (i.e., wholesale trade and large regional shopping centers), community commercial (i.e., shopping centers typically with a main anchor tenant), neighborhood shopping (i.e., shopping centers with a market and/or drugstore and may include offices), commercial recreation (i.e., tourist attractions/destinations, golf courses, and recreational facilities), store front (i.e., commercial activities along major roadways not within planned centers and may include mixed uses with office and/or residential units attached), and specialty commercial center (i.e., tourist or specialty commercial shopping areas). Commercial centers are generally located along major transportation corridors including Mission Avenue, SR 76, and Carlsbad Boulevard. These commercial centers typically serve multiple surrounding neighborhoods. McClellan-Palomar Airport is located in central Carlsbad and, due to health, safety, and noise issues generated by the airport, industrial, commercial, and open space uses have flourished and the center of Carlsbad is now a regional employment center.

The agriculture land use designation includes orchards, vineyards, nurseries, greenhouses, dairies, livestock, poultry, equine ranches, row crops, grains, and pastures. Agricultural areas are situated primarily to the east of I-5 along Cannon Road and Palomar Airport Road. There are smaller agricultural areas located north of Agua Hedionda Lagoon.

The land use designation for office includes government office buildings (outside of military), banks, offices for businesses and professional services, some retail activities, and restaurants. Office land use designations are located primarily along Carlsbad Village Drive east and west of I-5 and on either side of I-5 south of Agua Hedionda Lagoon and Cannon Road.

The industrial land use designation incorporates heavy manufacturing activities, light industrial and manufacturing (i.e., lumber, furniture, paper, rubber, stone, clay, and glass), clustered office/retail/ industrial uses, and industrial/strip commercial areas (i.e., public self-storage). Industrial uses are located primarily to the west of I-5 between Cannon Road and just south of Palomar Airport Road. There are smaller industrial areas located north of Agua Hedionda Lagoon along Carlsbad Village Drive on either side of I-5.

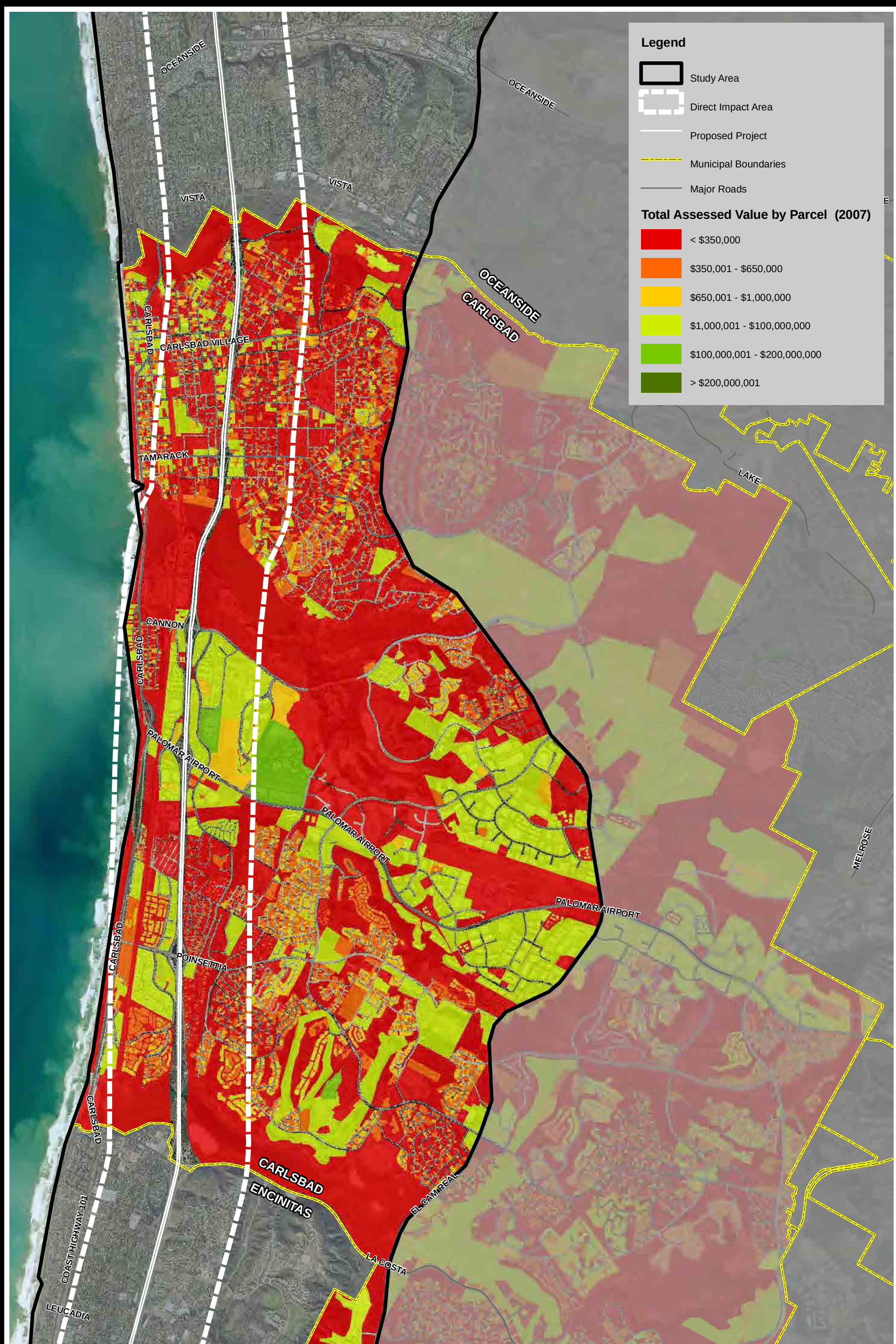
The majority of the mixed-use and specialty commercial areas are located along Carlsbad Village Drive on either side of I-5.

<u>Interchanges</u>

There are seven freeway interchanges in Carlsbad: Las Flores Drive, Carlsbad Village Drive, Tamarack Avenue, Cannon Road, Palomar Airport Road, Poinsettia Lane, and La Costa Avenue. These intersections are vital entry points into Carlsbad, as well as main servicing points for residents, tourists, and motorists along I-5. Business activities at each of the main interchanges in Carlsbad are illustrated on aerial photos in Figures 2.5-13 through 2.5-16.

Las Flores Drive is the northernmost interchange within the study area (Figures 2.5-13). West of I-5, the roadway ends at Jefferson Street. There is a dental office located in the southeast area of the interchange.

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SanGIS 2007

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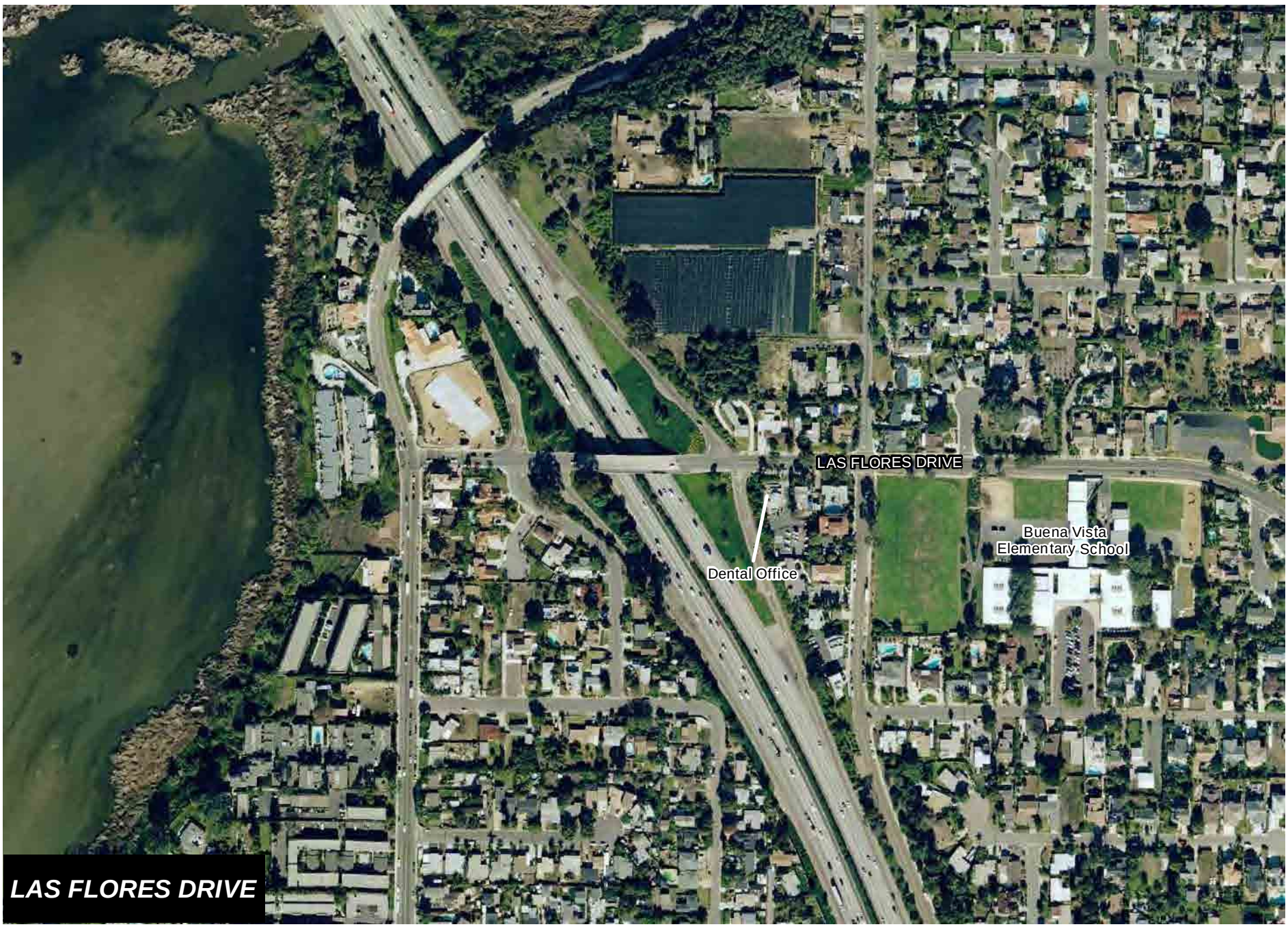
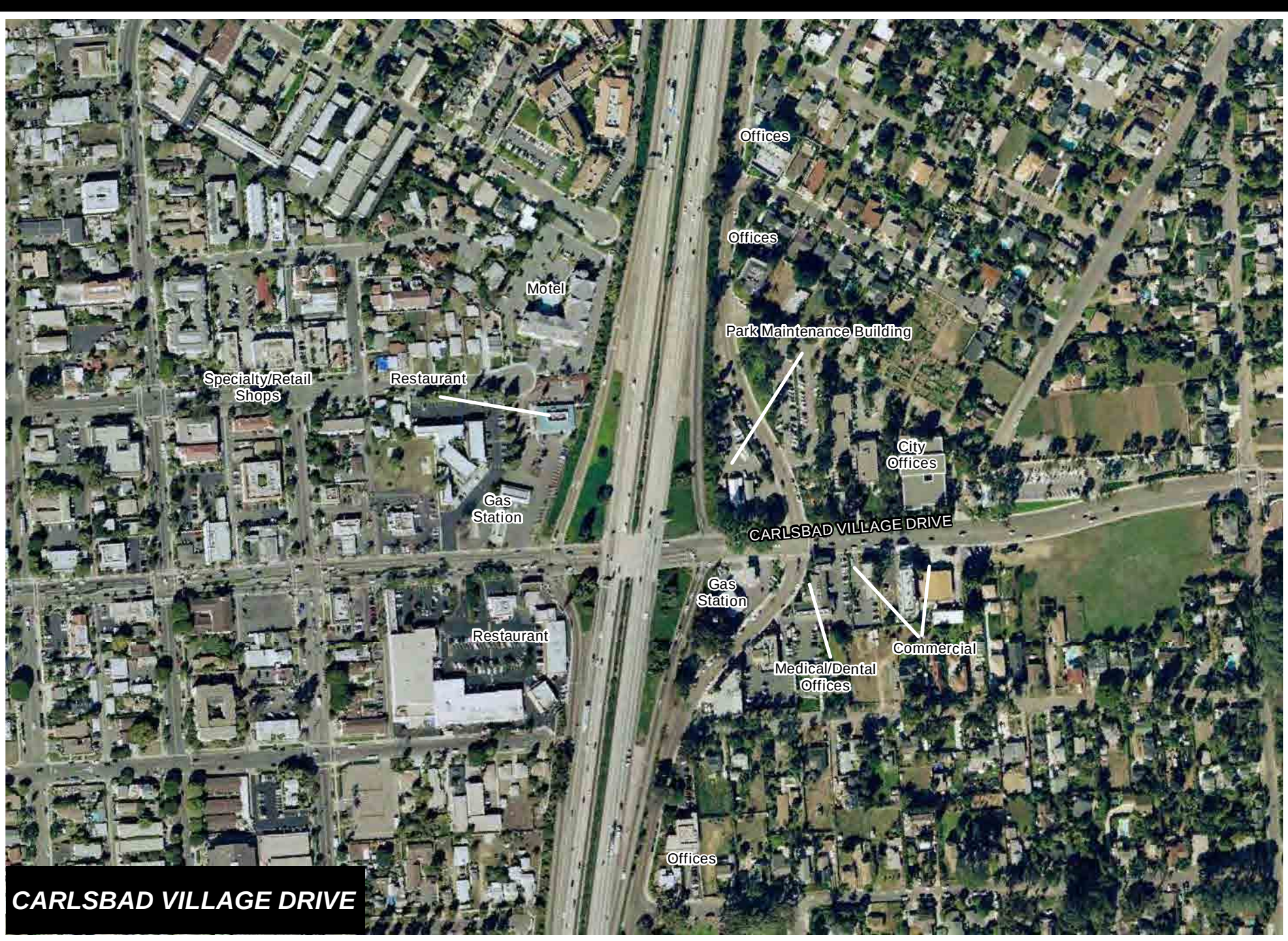
Figure 2.5-12
CARLSBAD
Total Assessed Value





Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.5-13
CARLSBAD
Interchanges

50 0 50 Feet

SCALE: 1: ,200; 1 inch = 50 feet

Carlsbad Village Drive leads into the Carlsbad Village Redevelopment Area west of I-5, which includes a variety of restaurants, specialty retail shops, and offices (Figures 2.5-13). There are gas stations located at the northwest and southeast areas of the interchange. The city and park maintenance offices are located in the northeast area. A small commercial area is located in the southeast area of the interchange. Offices are located along the east side of I-5.

The Tamarack Avenue interchange is located immediately south of Carlsbad Village Drive (Figure 2.5-14). A gas station and restaurant are located in the northwest area of the interchange. A private school is located along the northeast side of I-5 along with a gas station. A small shopping center is located in the southeast area of the interchange.

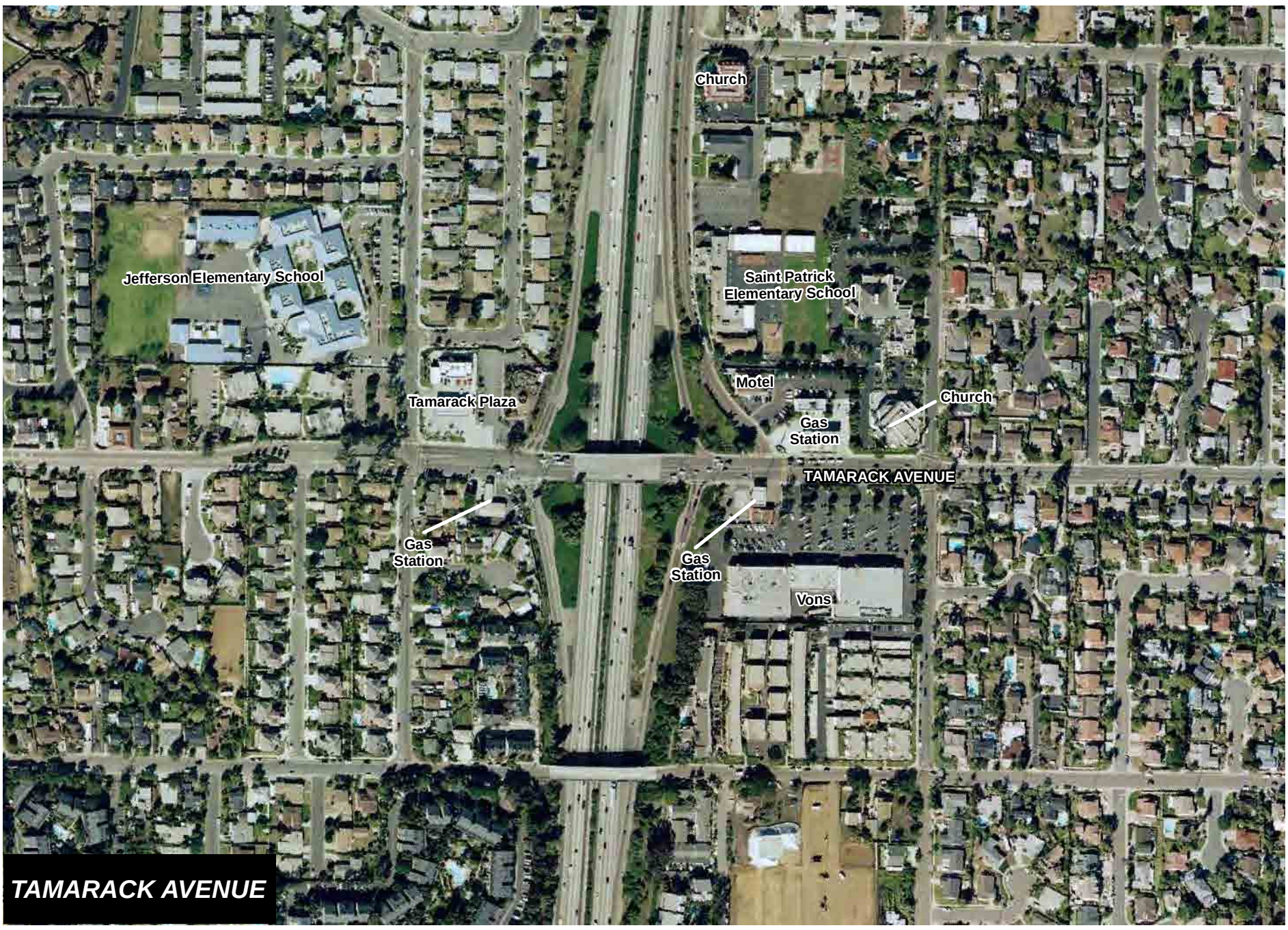
Cannon Road leads to the Encina Wastewater Authority located to the northwest of the interchange (Figure 2.5-14). The northeast area of the interchange is agriculture, specifically strawberry fields. Offices are located in the southwest area and auto dealerships are located in the southeast.

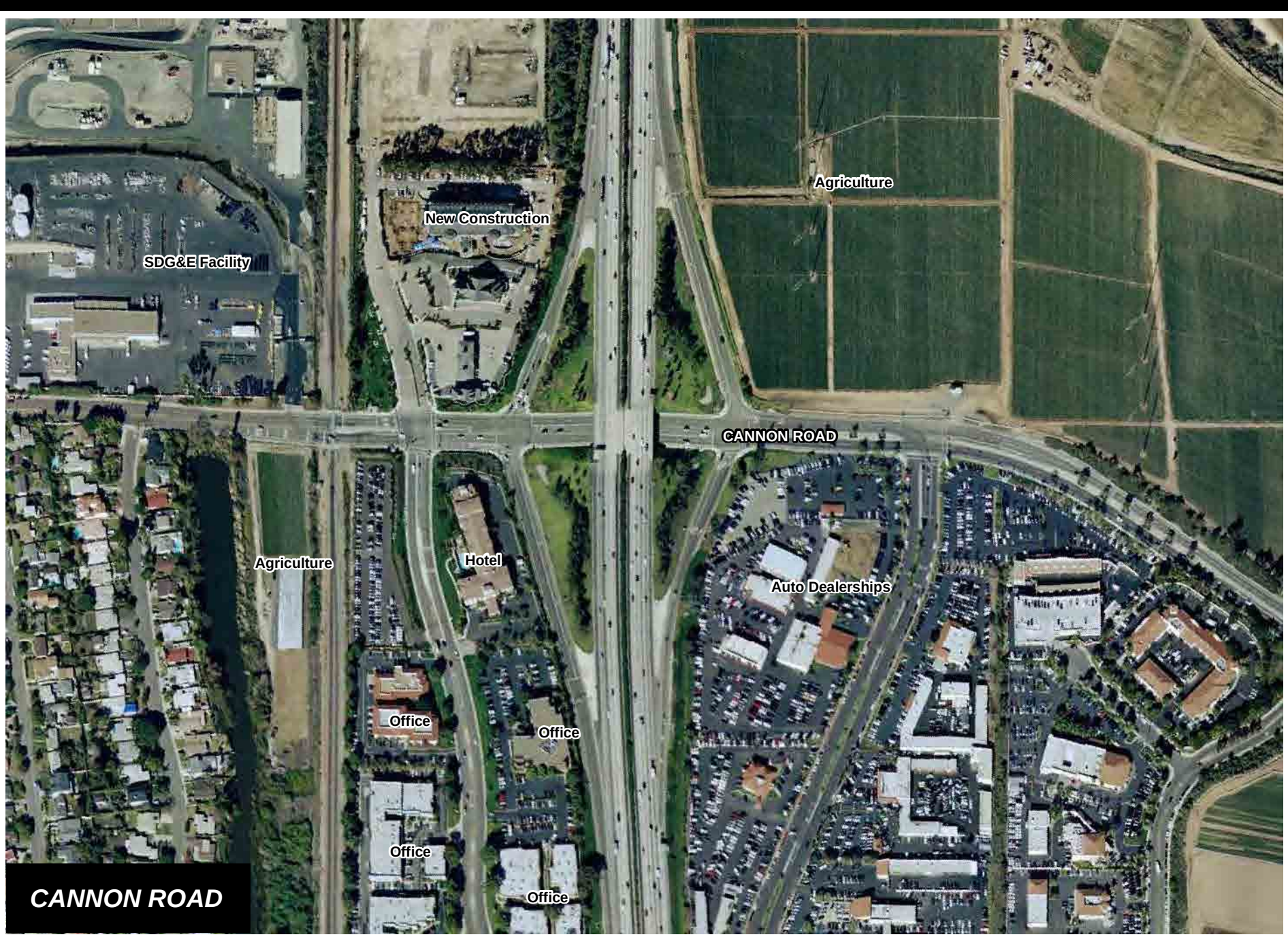
Palomar Airport Road is the main road leading to Legoland east of I-5 and McClellan-Palomar Airport located in central Carlsbad (Figure 2.5-15). There are restaurants and offices located in the northwest area. Offices and an industrial business park are located in the southwest area of the interchange. A hotel and a large shopping mall are located in the northeast area next to the Flower Fields. Restaurants, a gas station, and a motel are located in the southeast area.

Poinsettia Lane is located immediately south of Palomar Airport Road and is the main road leading to the large resort and golf course at the Four Seasons Resort Aviara in central Carlsbad (Figure 2.5-15). There is a shopping center located in the southwest area and hotels in the northwest area of the interchange.

The southernmost interchange from I-5 into Carlsbad is La Costa Avenue (Figure 2.5-16). A gas station and nursery are located in the northwest area of the interchange.

I-5 NORTH COAST CORRIDOR CIA





Source: AirPhotoUSA 2006

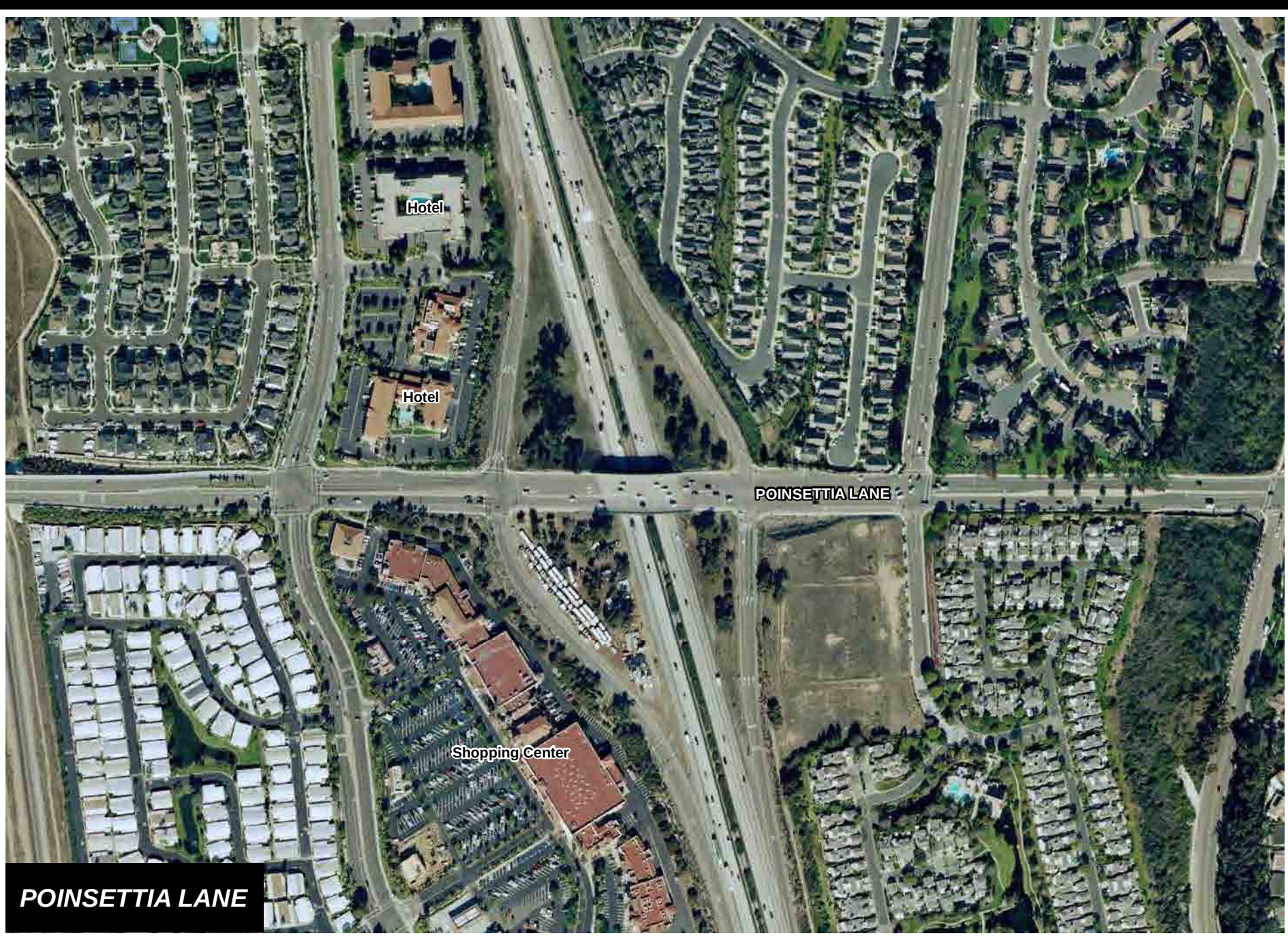
EDAW | AECOM

Figure 2.5-14
CARLSBAD
Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.5-15
CARLSBAD
Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

EDAW | AECOM

Figure 2.5-16
CARLSBAD
Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

2.6 OCEANSIDE

Historic Overview

The City of Oceanside was incorporated in 1888 and was populated by 330 residents as of 1900 (City of Oceanside 2005). The presence of railroads formed the primary factor of the development of the city during the early part of the 20th century. This continued until 1926 when U.S. Highway 101 connected the Mexican border, San Diego, and Los Angeles, passing through Oceanside. During the 1920s, the city prospered with a new golf course and theater built, as well as the introduction of services such as streetlights (City of Oceanside 2005).

The Great Depression of 1929 negatively affected the economy of Oceanside as with the rest of the nation, although Oceanside's population growth remained relatively unaffected expanding by 33 percent from 1930 to 1940 (3,508 persons in 1930 to 4,652 persons in 1940), according to figures from the U.S. Bureau of the Census). The period surrounding World War II saw Oceanside grow from a small town to a much more modern city. The decision in 1942 to locate the nation's largest Marine Corps Base immediately north of the city created a significant construction boom within Oceanside. The construction of MCB Camp Pendleton led to a substantial influx of workers to the area. The community played a significant supporting role during World War II and, consequently, the population of Oceanside increased to 12,888 persons as of 1950 (City of Oceanside 2005). In 1952, a special census showed the city's population exceeding 18,000 as MCB Camp Pendleton grew with the Korean War and more service-connected families moved into the area. The construction of I-5 through the city allowed the drastic increase in population in the early 1950s to continue. The 1960s saw the opening of Tri-City Hospital and the building of the Oceanside Small Craft Harbor. Rapid populated growth continued during subsequent decades with the population of Oceanside reaching 76,698 persons as of 1980, 128,398 persons as of 1990, and 161,029 persons as of 2000 (City of Oceanside 2005).

2.6.1 Land Use

Historic Land Use

The City of Oceanside was incorporated in 1888 and is one of the oldest of the six municipalities in the study area. Oceanside was originally settled around the San Luis Rey Mission with Mexican land grants and a federal grant of 160 acres in the current downtown area (City of Oceanside 2005). With completion of the Southern California Railway in 1883, coastal development in Oceanside began (City of Oceanside 2005). The "ocean side" became a desirable location and its population began to grow (City of Oceanside 2005). During World War II, construction of MCB Camp Pendleton further sparked growth in Oceanside (City of Oceanside 2005). With the opening of I-5 through the city in the 1960s, planning and growth were again altered. The city, though bisected by a new freeway, began to grow at a rapid pace, especially in the eastern portions of the city where large planned residential neighborhoods were developed (City of Oceanside 2005).

This growth is illustrated to a degree via the aerial photographs in Figure 2.6-1, where a significant increase in residential density is shown to have occurred in Oceanside, mainly along what is now the I-5 corridor, within a 14-year period between 1953 and 1967. Current land use patterns and lot sizes, as well as the higher densities along the coast areas and I-5, were becoming increasingly evident during this period. Rapid growth within older communities of Oceanside, including Eastside and Crown Heights, shown in the northeast and southwest portions of the photographs, respectively, has also taken place.

2.6.1.1 Major Land Uses

General Land Use

As the northern end of the study area encompasses a portion of MCB Camp Pendleton, approximately 2.40 square miles of the military installation are included in the Oceanside discussion. MCB Camp Pendleton-related development and ongoing activities have influenced the social and economic context of Oceanside since its origins in the World War II era.

Following San Diego, Oceanside is the largest city in the study area with regard to total population (161,029) and overall land area (42.16 square miles). Figure 2.6-2 shows regional land use patterns within the Oceanside portion of the study area. Land uses include residential, commercial, industrial, and agricultural uses, as well as parks and open space, golf courses, public services, vacant land, and military areas.

Large portions of Oceanside lie within a highly urbanized area of coastal California. Eastern areas of Oceanside, however, generally have a more rural quality established through the greater presence of open space and agricultural uses as well as low-density residential development. As shown in red in Figure 2.6-2, the majority of land within the Oceanside study area is designated for residential uses. Residential densities within Oceanside range from 0.9 to 43.0 du/ac. The eastern portions of Oceanside are characterized by larger residential developments surrounded by planned open space with commercial areas generally located along major roads. Typical residential designations in eastern Oceanside, as defined in the General Plan (2002), include estate residential and medium-density (A and B) residential, which vary from 0.9 to 20.9 du/ac, respectively. The portion of MCB Camp Pendleton within the study area is a mixture of residential; institutional facilities, including schools; and open space used by the U.S. Marine Corps.

Residential densities within Oceanside are generally higher near the coastal area and along the I-5 corridor, with urban high-density and single-family detached lots being the most abundant, at 43.0 and 5.9 du/ac, respectively (City of Oceanside 2002). Transit-oriented development (TOD), which aims to locate high-density residential complexes and mixed uses around public transportation centers, is located within the coastal region, in particular adjacent to the NCTD Coaster station. TOD is expected to expand in eastern Oceanside with the development of the Sprinter Community Rail (Sprinter), currently under construction, which will provide service from Oceanside to San Marcos south of and parallel to Oceanside Boulevard by December 2007 (NCTD 2005).

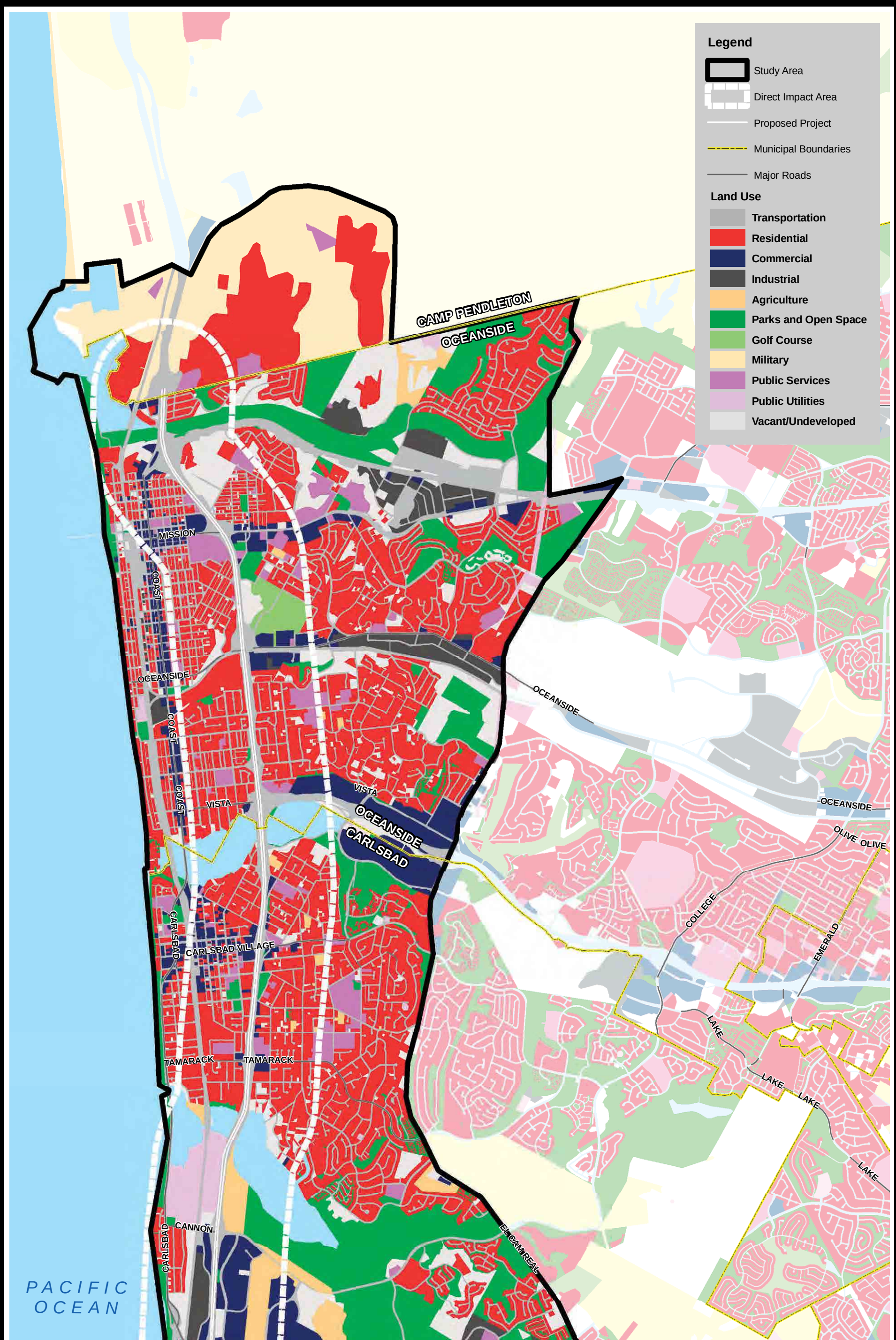
As shown in blue in Figure 2.6-2, commercial areas are generally located along major transportation corridors, including Mission Avenue, SR 76, and Oceanside Boulevard. These commercial centers

Source: San Diego County Department of Planning and Land Use

EDAW | AECOM

Figure 2.6-1
OCEANSIDE
Historic Aerial Photographs

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

EDAW | AECOM

Figure 2.6-2
OCEANSIDE
Regional Land Use

3,500 0 3,500 Feet

SCALE: 1:42,000 1 inch = 3,500 feet

typically serve multiple surrounding neighborhoods. The far northeast corner of Oceanside (area excluded from Figure 2.6-2) is primarily reserved for agricultural uses. Industrial uses cover a large portion of land use within Oceanside as well, as either existing or planned, and are generally located in the Rancho Del Oro planning area. The Rancho Del Oro planning area is a large, mainly undeveloped portion of land adjacent to the study area boundary and north of Oceanside Boulevard. The Rancho Del Oro planning area is also defined by the General Plan as a Mineral Resource Area and is used for extractive industry.

Study Area Land Use

As discussed in Chapter 2.0, the study area consists of both an area within which primary or direct impacts may be expected to occur that extends 0.5 mile from the I-5 corridor and a wider region where secondary impacts, if any, may be expected to occur. The total land area of Oceanside within the study area is 10.88 square miles, or 25.8 percent of the total land area of Oceanside. As shown in Figure 2.6-2, land uses within the study area are primarily a mixture of single-family and multi-family residential areas, as well as general and community commercial centers, open space, and light industrial uses.

The majority of land within the study area is developed and urban in nature. Areas of undeveloped land, shown in grey in Figure 2.6-2 are located east of and adjacent to I-5 and south of SR 76. According to the Oceanside Land Use Map (City of Oceanside 2002), this land is designated for medium-density residential (15.0 du/ac) with special commercial along SR 76. Another undeveloped tract of land is located at the southwest intersection of Oceanside Boulevard and El Camino Real. This tract of land is planned for estate B residential (3.5 du/ac).

East of I-5 within the study area is primarily single-family detached residential with a maximum density of 5.9 du/ac and estate B residential with a maximum density of 3.5 du/ac (City of Oceanside 2002). An open space corridor of mainly undevelopable land associated with the San Luis Rey River is located along the northern edge of the city. Light industrial uses are located just south of the San Luis Rey River open space area, south of SR 76. These parcels provide a wide range of moderate- to low-intensity industrial uses that are deemed compatible with the surrounding residential uses.

Area of Direct Impacts Land Use

Figure 2.6-3 shows land use within the area of direct impacts at a more detailed level. The portion of Oceanside within the area of direct impacts contains some the highest-density residential land uses within the municipality: a tourist-based commercial area, downtown Oceanside, and the Redevelopment Area. In addition to other land uses, the residential designation is broken into single-family and multi-family developments, and the commercial designation is further expanded into six categories that describe the types of services provided. Community facilities such as public services, schools, and parks are located at various points along the I-5 corridor among residential neighborhoods and commercial centers.

West of I-5 and Coast Highway the direct impact area is highly developed and urban in character with the downtown and Redevelopment Area of Oceanside found in the northwest. Land use within the Redevelopment Area Plan is defined in Appendix A of the General Plan. As shown in Figure 2.6-3, single-family and multi-family residential, commercial, and office space are the main components of the land use plan for the Redevelopment Area (City of Oceanside 2002). Visitor-serving commercial and mixed-use residential designations are located adjacent to I-5 and north of the San Luis Rey River.

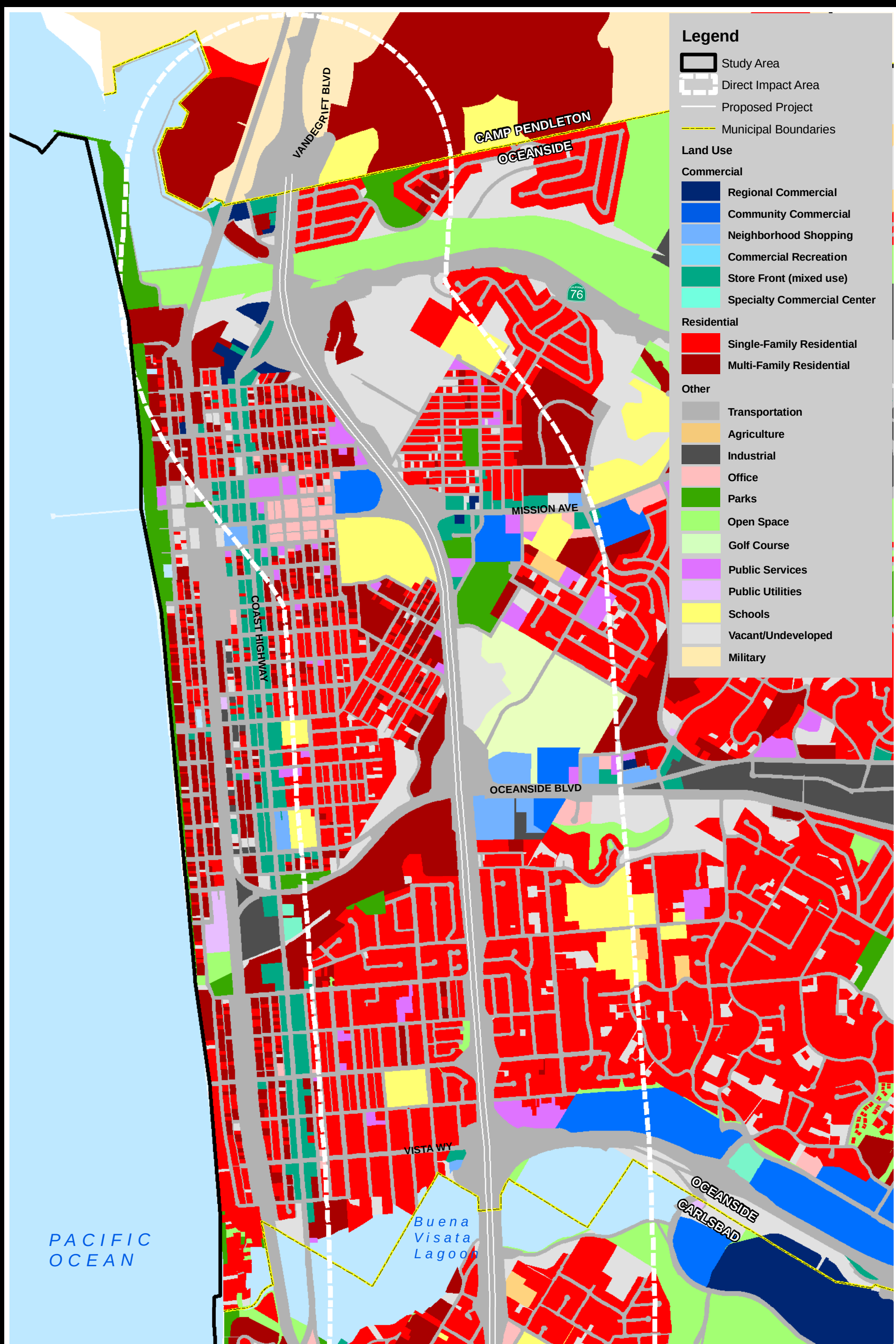
Residential uses are located along the length of the direct impact area, adjacent to I-5. North of Oceanside Boulevard, single-family and multi-family residential uses are mixed. Single-family detached (5.9 du/ac), high-density (28.9 du/ac), and urban high-density (43.0 du/ac) are the main uses within this area. South of Oceanside Boulevard however, lower-density housing with single-family detached and estate B residential comprise the main densities. The master planned Sterling Property development is a mix of single-family and multi-family residential designations and is located partially within the area of direct impacts northeast of I-5 and Mission Avenue.

Each residential area is generally serviced by commercial and/or neighborhood shopping areas. The Land Use Element of the General Plan recognizes “Special Commercial Areas” along the I-5 corridor as having high accessibility and visibility from I-5, and as entry points into the Coastal Zone. These commercial areas are encouraged to provide commercial uses, services, and facilities “compatible to and in support of coastal development” as well as providing facilities that “promote and support the use of public transportation systems” (City of Oceanside 2002). “Special Commercial Areas” are located at the northwest and southeast corners of the I-5/Mission Avenue interchange and at the northeast and southeast corners of the Oceanside Boulevard/I-5 interchange. In addition, mixed-use commercial is located along the length of Coast Highway, with tourist-serving commercial uses associated with the Oceanside Harbor and Municipal Pier. Business park-related uses are located south of Oceanside Boulevard with light industrial, professional commercial, and special and community commercial. The Pacific Coast Plaza and El Camino North Center are located in southern Oceanside and are large special and community commercial centers that attract residents of Oceanside as well as traffic from I-5 and SR 78 and tourists. The south side of Mission Avenue is designated primarily for neighborhood commercial, which is designed to meet the day-to-day commercial needs of the community. Retail uses under this classification include grocery, drug, and variety stores, as well as some restaurants and retail shops. For a more detailed description of businesses located within the direct impact area, refer to Section 3.2.6.5.

Vacant land within the direct impact area is rare due to the developed nature of the coastal area and is largely located at the southeast corner of the SR 76/I-5 interchange. Though currently undeveloped, this parcel has planned land uses for special commercial and medium-density residential.

There are five freeway interchanges in Oceanside, including Harbor Drive/Vandegrift Boulevard (MCB Camp Pendleton), SR 76/Coast Highway 101, Mission Avenue, Oceanside Boulevard, and Vista Way/ SR 78. These interchanges are vital entry points into Oceanside and MCB Camp Pendleton, as well as the main servicing points for residents, tourists, and motorists along I-5. Harbor Drive/Vandegrift enters the Oceanside Harbor to the west and MCB Camp Pendleton on the east. The Mission Avenue interchange is a main intersection into the downtown and Redevelopment Area of Oceanside. Oceanside Boulevard leads to residential and commercial areas, and farther east towards the Rancho Del Oro planning area. Vista Way/SR 78 leads to southern Oceanside and regional shopping centers.

I-5 NORTH COAST CORRIDOR CIA



Source: SANDAG 2006

EDAW | AECOM

Figure 2.6-3
OCEANSIDE
Direct Impact Area Land Use

1,500 0 1,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

2.6.1.2 Urban Community and Neighborhood Characteristics

The City of Oceanside General Plan (2002) identifies 17 neighborhoods within the municipality. The neighborhoods within the study area include Townsite (also known as Crown Heights), South Oceanside, East Side Capistrano, Loma Alta, and Fire Mountain. Boundaries of the defined neighborhood areas generally follow census tract boundaries.

Townsite is west of I-5, bordered by Oceanside Boulevard on the south and MCB Camp Pendleton on the north. It is generally composed of a mix of single-family residential units and multi-family residential units. There is a smaller amount of offices and store front properties, and a few scattered public service buildings, schools, industry buildings, community commercial buildings, and commercial recreation buildings.

South Oceanside is located west of I-5, with Oceanside Boulevard on the north and Carlsbad on the south. It is primarily single-family residential units with a school and scattered multi-family residential units, parks and open space, industry buildings, neighborhood shopping, store front properties, and a commercial recreational building.

East Side Capistrano is east of I-5 with MCB Camp Pendleton on the north and Mission Avenue on the south. It is a mix of single-family residential and multi-family residential units, parks and open space, and schools. There are scattered regional commercial buildings, store front properties, and industry buildings.

Loma Alta is east of I-5 between Mission Avenue and Oceanside Boulevard, bordered by El Camino Real to the east. It is primarily commercial recreational property with a mix of neighborhood shopping, community commercial, single-family residential and multi-family residential units, a school, office property, and industry. There is also a small amount of parks and open space and agriculture.

Fire Mountain is east of I-5 between Oceanside Boulevard and Carlsbad, with El Camino Real as its eastern border. It is primarily single-family residential units. There is a roughly even mix of community commercial property, industry buildings, schools, and neighborhood shopping, with a small amount of office property and parks and recreational property.

Unofficially defined specific areas also exist, such as the Eastside (part of East Side Capistrano) and Townsite. Eastside is bordered by I-5 to the west, Mission Avenue to the south, the San Luis Rey River to the north, and North Canyon Drive to the east. The area is predominantly Hispanic and is bordered by I-5 on the east, Horne Street on the west, Center Avenue on the north, and Minnesota Avenue on the south. Crown Heights also has a predominantly Hispanic population and has been characterized as “Oceanside’s most densely populated and lowest-income neighborhood” (San Diego Union Tribune 2004). As described in Section 2.6.2, this area has the highest minority percentage, population over 65, housing density, and population density (U.S. Bureau of the Census 2000).

There are four specific plans that cover portions of Oceanside, including the LCP, Redevelopment Plan, Rancho Del Oro Specific Plan (Lightfoot & Associates 1985), and the Sterling Specific Plan (Gruen Associates 1985). A large portion of Oceanside and the study area is located within the California Coastal Zone; therefore, issues and policies related to the requirements of the California Coastal Act are also included in the General Plan. These are combined to create the General Plan and LCP LUP for the City. The LUP includes the entire coastal area of Oceanside, generally from the Pacific Ocean to Hill Street. It is also inclusive of the San Luis Rey River and Buena Vista Lagoon. The Redevelopment Plan consists of a 375-acre downtown area with a mix of residential and commercial uses, designed to revitalize the character of Oceanside while accomplishing a portion of the housing goals. The Rancho Del Oro Specific Plan is a planned community, extending from El Camino Real on the west to College Boulevard on the east and from Oceanside Boulevard on the south to Mesa Drive on the north. The City of Oceanside has prepared a Specific Plan for the Sterling Property, which is located on the east side of I-5 north of Mission Boulevard within the area of direct impacts. The Sterling Property is a residential development that provides military family housing.

2.6.1.3 Farmland

The protection and value of agricultural land in Oceanside are discussed in the Land Use and Environmental Resource Management Elements of the City General Plan (2002). The Land Use Element defines agricultural areas as being characterized by their primary function to farm, graze, or conduct animal husbandry. Agricultural areas typically involve large contiguous tracts of agricultural land uses with little intrusion of nonagricultural uses (City of Oceanside 2002).

There are no designated agricultural lands in the study area within Oceanside. However, the entire northeast corner of Oceanside is designated for agricultural uses. The agriculture industry in Oceanside is valued at approximately $12 million annually, which accounts for approximately 10 percent of San Diego County’s agricultural output. Major crops within Oceanside, as well as the region, include tomatoes, avocadoes, citrus, and nursery stock (City of Oceanside 2002).

There are two primary areas of significant agricultural production in Oceanside: Morro Hills and Rancho Del Oro. The Morro Hills agricultural area is the location of a master planned community and golf course located near Vandegrift Boulevard and Douglas Drive. Avocadoes are the primary crop and production contributes to the North County avocado output of over 90 percent of all avocadoes in California. Rancho Del Oro, also the location of a master planned community, is located between Mission Avenue and Oceanside Boulevard. Planting began here in 1967, and it now contains the largest lime grove in California numbering more than 10 percent of the state’s total lime plantings. There are also significant numbers of lemons, oranges, tangelos, and avocadoes. In total, there are over 41,500 trees on 2,200 acres at Rancho Del Oro.

Land Use Policy 2.5A in the Oceanside General Plan states that residential development is permitted in agricultural areas, provided it does not interfere with existing agricultural operations, and that the open space character of the area remains intact.

2.6.1.4 Development Trends

Since 1970, Oceanside’s population has continued to increase at a faster pace than the larger San Diego region. During the 1970s and 1980s, the population of Oceanside grew by 82 percent and

67 percent, respectively (City of Oceanside 2002). By 1995, approximately 75 percent (20,162 acres) of the land in Oceanside was developed. About 10 percent (2,567 acres) of the land was deemed undevelopable due to physical or environmental constraints such as steep slopes, floodplains, wetlands, or public ownership. The remaining 15 percent (4,255 acres) of land in the city was deemed vacant and available for development (City of Oceanside 2002).

The City's General Plan identifies a broad range of residential land use categories and does not constrain the opportunity for a broad range of housing types and densities. Oceanside does not currently implement any growth management activities that constrain residential development. SANDAG has identified Oceanside's share of regional housing needs for 1994-2004 as 7 percent, or 6,671 units.

The coastal area in Oceanside, west of I-5, is primarily developed with high-density single-family and multi-family residential. Development opportunities in this area are limited and recently have been mainly associated with the redevelopment of the downtown area. The eastern portions of Oceanside are generally characterized by lower-density single-family residential developments, which help maintain a more rural residential quality. Chapter 7.0, Growth, discusses in more detail, historical, current, and projected growth trends within Oceanside.

2.6.1.5 Jobs/Housing Balance

Based on residential density designations, implementation of the Land Use Element of the Oceanside General Plan may result in a population increase. The land use patterns of housing in relation to employment (commercial, industrial, military, and office locations,) and commercial centers greatly influence commuting patterns and the various types of transportation used within Oceanside. The lengthening commute times and increasing traffic congestion, often associated with sprawl, have brought the concept of the need for a "jobs/housing balance" to the forefront in many communities. The primary element of the jobs/housing balance concept is to locate residential areas near employment centers and commercial services, with the premise that commuting, the overall number of vehicle trips, and the resultant vehicle miles traveled can be reduced.

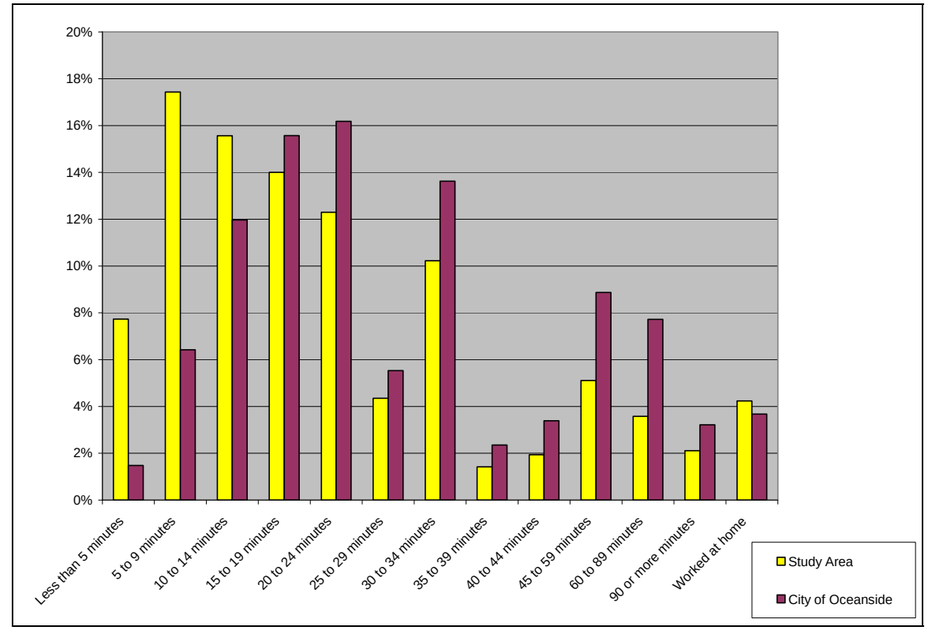
"Smart growth" is one concept that, among other goals, attempts to locate housing around a variety of transportation choices and create walkable neighborhoods. SANDAG provides an incentive program to promote smart growth development within the region, including Oceanside (SANDAG 2005). In addition to the regional smart growth incentive program, Oceanside allows mixed-use development as a conditional use in its commercial zones, allowing flexibility to establish mixed-use developments in areas that would otherwise be restricted to commercial use (SANDAG 2004a). Such programs are designed to have a positive effect on the jobs/housing balance and reduce vehicle trips within Oceanside.

Oceanside has a number of policies and goals related to maintaining a job/housing balance. In general, and as stated in Land Use Policy 1.1B, the City aims to analyze proposed land uses to ensure that the land use will contribute to a "proper balance of land uses" within the community. More specifically, Land Use Policy 1.16C states that the City is to ensure that housing is developed in areas with "adequate access to employment opportunities" (City of Oceanside 2002).

The jobs/housing balance is also addressed in the Circulation Element of the General Plan, in terms of strategies to reduce the number of vehicle trips. The long-range direction of the Public Transit and Railway Transit Policy F encourages coordination with NCTD to utilize multimodal transit centers by coordinating bus routes and requiring shuttle service to major employment centers. Generally, the City aims to apply mixed-use, and transit and pedestrian-friendly design concepts to existing, planned, and redevelopment areas (City of Oceanside 2002).

The 2000 U.S. Census gathered information on the amount of time that people spend commuting to and from the workplace, in turn giving a general idea of those who work and live within proximate distance of each other. As of 2000, Oceanside had a population of 161,029 persons; of this, 76,443 persons were considered to be in the labor force, with 89.0 percent classified as employed (68,063 persons) and 4,242 persons in the armed forces (U.S. Bureau of the Census 2000). As shown in Table 2.6-1, in general, commuters within Oceanside as a whole have longer commute times than the population within the study area of Oceanside. The largest proportion of people (16.2 percent) in Oceanside as a whole spends 20 to 24 minutes commuting, while in the study area itself, the largest proportion of people (17.4 percent) have commute times from 5 to 9 minutes. This may indicate that the jobs/housing ratio within the study area is more balanced than that within the city as a whole (or it may be in part an artifact of quicker freeway access).

Table 2.6-1. Commute Times – Oceanside



Source: U.S. Bureau of the Census 2000, Summary File 3

Approximately 11 percent of the employed population within the study area commutes 45 minutes or more to work, as compared to approximately 20 percent for Oceanside as a whole. As the jobs/housing balance attempts to reduce commuting times and vehicle trips, those who have lengthy commute times do not contribute to a balance of housing and jobs. However, as discussed previously, regional incentives, the Redevelopment Area, and City-defined goals attempt to control the location, intensity, and nature of jobs and housing in order to encourage a reduction in vehicle trips and miles traveled.

2.6.1.6 Adopted Planning Goals and Policies

There are several plans that identify planning goals and policies for the City of Oceanside, which are identified below.

City of Oceanside General Plan and LCP

The City of Oceanside General Plan is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life within the City of Oceanside. The Oceanside General Plan states that a goal of the City is to analyze proposed land uses to ensure that the designations would contribute to a proper balance of land uses within the community. The City of Oceanside General Plan contains stated community goals and policies designed to shape the long-term development of the city, as well as protect its environmental, social, cultural, and economic resources (City of Oceanside 2002). The proposed project traverses a variety of land uses along the I-5 corridor, which have been identified by the Land Use Element. The Land Use Map shows designated land use areas within Oceanside. As described in the Land Use Element of the General Plan, the Zoning Code is the principal tool used by Encinitas to implement land use policy. The Zoning Code must be consistent with the General Plan and land use designations stated in the Land Use Element. The Zoning Code includes a map delineating zoning boundaries and text that explains permitted uses within zones and standards (City of Oceanside 2002).

The Circulation Element contained within the City of Oceanside General Plan sets out the City's long-range policy direction for transportation. The Circulation Element's principal objective is to provide for the transportation needs of the community and sub-region by implementing a circulation system that provides a high level of mobility, efficiency, access, safety, and environmental consideration for all modes and purposes of trips. The Circulation Element acknowledges that the circulation system does not stand on its own but is an integral part of the overall land use planning for the City. It also must function as a component of the regional transportation system.

Additional Oceanside Plans

Additional plans recognized within the General Plan that are included within the study area include the LCP, Redevelopment Plan, Rancho Del Oro Specific Plan, and the Sterling Specific Plan. A large portion of the City of Oceanside and the study area is located within the California Coastal Zone; therefore, issues and policies related to the requirements of the California Coastal Act are also included in the General Plan. These are combined to create the General Plan and LCP LUP for the City. The LUP includes the entire coastal area of Oceanside, generally from the Pacific Ocean to Hill Street. It is also inclusive of the San Luis Rey River and Buena Vista Lagoon.

The Redevelopment Plan provides the City of Oceanside with the powers, duties, and obligations required to implement the stated goals within the plan for redevelopment, rehabilitation, and revitalization of the downtown area of Oceanside (City of Oceanside 2002). The Redevelopment Area is located adjacent to I-5 and along the Pacific Coast, within the area of primary impacts associated with the proposed project. The City may acquire any real property located within the redevelopment project area in order to execute the plan subject to the conditions stated in the General Plan, Appendix A.

The Rancho Del Oro Specific Plan (Lightfoot & Associates 1985) provides for the development of a high-quality, comprehensively planned community within Oceanside. The Rancho Del Oro planning area is a mixed-use area that includes industrial, commercial, and various residential housing types. The Rancho Del Oro planning area is within the area of secondary impacts associated with the proposed project.

The Sterling Specific Plan (Gruen Associates 1985) is located on a 56.65-acre parcel of land east of I-5 off Mission Avenue. The area is a residential neighborhood that replaced a substandard housing development used by the U.S. Marine Corps. The Sterling Property is located partially within the area of secondary impacts associated with the proposed project.

2.6.2 Population and Housing

2.6.2.1 Population and Growth

As of 2000, Oceanside showed a population of 161,029 persons and consisted of approximately 6 percent of San Diego County's total population (2,813,833 persons). Continuing a long-standing trend, Oceanside showed significant population growth over the last two decades, rising 67 percent between 1980 and 1990 (76,698 persons), and 25 percent between 1990 and 2000 (128,398 persons) (U.S. Bureau of the Census 2000). A 2004 estimate indicated a population of 173,307 persons, showing an estimated population growth of 8 percent. Oceanside's rate of growth was consistently higher than that shown by San Diego County, which was 34 percent between 1980 and 1990 and 13 percent between 1990 and 2000, and an estimated growth of 7 percent in 2000-2004 (U.S. Bureau of the Census 2000). Long-range forecasts for Oceanside indicate a continuation of significant population growth, with the population anticipated to increase by 30 percent 2000-2030, although slightly lower than that predicted for the county (37 percent) (SANDAG 2004a).

As of 2000, the population within the study area numbered 58,184 persons and comprised 36.13 percent of the total population of Oceanside. For the purposes of this analysis, approximately 1,573 acres of the southern portion of MCB Camp Pendleton is included within the study area. Although specific statistics related to population of this portion of MCB Camp Pendleton are unavailable, a total of 35,000 active duty marines and sailors are assigned to the various units within the camp; the service members combined with their families and base civilians employees bring the base daytime population to more than 60,000 persons (USMC 2005).

As shown in Figure 2.6-4, large portions of Oceanside are predominantly urbanized, resulting in elevated population densities. While smaller pockets of more densely populated areas exist in newer residential developments east and northeast of the city, population densities generally increase to the west within the study area. This is particularly evident between the coastal strip and I-5, including the beachfront areas and in the neighborhoods of Townsite and South Oceanside. The highest population densities within Oceanside are located within the area of direct impacts, specifically the southeast corner of Townsite, immediately west of where Oceanside Boulevard and I-5 cross (Figure 2.6-4). The highest population density within the entire direct impact area, over 20,000 people per square mile, was seen in the Crown Heights neighborhood. There are two fairly dense (10,001 to 20,000 persons) pockets, one just east of the I-5, north of Mission Avenue and another that extends east of the direct impact area between Mission Avenue and Oceanside Boulevard. The beachfront areas exhibit slightly elevated population densities compared to the eastern portion of the municipality.

2.6.2.2 Race and Ethnicity

As shown in Table 2.6-2, as of 2000, racially, Oceanside was predominantly White (66.4 percent) with much smaller Black/African American and Asian populations (6.3 percent and 5.5 percent, respectively). American Indian and Alaskan Native and Native Hawaiian/Pacific Islander populations were smaller still (0.9 percent and 1.3 percent, respectively). Conversely, populations considered to be of “two or more races” and “some other race” were much larger (5.2 percent and 14.5 percent, respectively). As of 2000, the Hispanic population within Oceanside, 30.2 percent, was substantial.

Table 2.6-2. Race and Ethnicity – Oceanside and San Diego County

	Oceanside		San Diego County	
White	66.4%	(106,866)	66.5%	(1,871,839)
Black/African American	6.3%	(10,189)	5.7%	(161,480)
American Indian and Alaskan Native	0.9%	(1,370)	0.9%	(24,337)
Asian	5.5%	(8,896)	8.9%	(249,802)
Native Hawaiian/Pacific Islander	1.3%	(2,042)	0.5%	(13,561)
Some other race	14.5%	(23,342)	12.8%	(360,847)
Two or more races	5.2%	(8,324)	4.7%	(131,967)
Hispanic	30.2%	(48,691)	26.7%	(750,965)
Total Minority	46.4%	(74,719)	45.0%	(1,256,000)

Source: U.S. Bureau of the Census 2000

As of 2000, the breakdown of race and ethnicity within Oceanside broadly mirrored that of San Diego County, although it was slightly more diverse. Specifically, Hispanic and Black/African American populations and persons of “some other race” are markedly elevated within Oceanside when compared to the county average. Although, to a lesser extent, this is also the case for persons considered to be of “two or more races.” As of 2000, the total minority population within Oceanside was 46.4 percent of the total population, marginally higher than that of the county (45.0 percent).

As shown in Figure 2.6-5, as of 2000, total minority populations within Oceanside loosely correlated with some of the areas of increased population density (Figure 2.6-4). Small areas or pockets of high minority populations were evident in Oceanside, specifically north of SR 76. Total minority populations within the direct impact area were generally higher than both the study area and the municipality as a whole. Although the areas below, and southeast of, Oceanside Boulevard showed relatively low-minority populations, areas to the north of Oceanside Boulevard had much larger minority populations. Specifically, this included the neighborhoods of Townsite and East Side Capistrano, to the west and east of I-5, respectively. It is worth noting that these two areas also showed elevated population densities.

2.6.2.3 Age

Table 2.6-3 shows that, as of 2000, the working age population of Oceanside (18-64 years) was 58.8 percent, which was marginally below that of San Diego County. Conversely, the populations of minors (under 18 years) and senior citizens (over 65 years) within Oceanside, at 27.6 percent and 13.6 percent, respectively, were marginally above that of the county average, as was the city’s median age of 33.3 years.

Table 2.6-3. Age Breakdown – Oceanside and San Diego County

	Oceanside		San Diego County	
Under 18 years	27.6%	(44,456)	25.7%	(811,038)
18 to 64 years	58.8%	(94,714)	63.1%	(1,776,442)
Over 65 years	13.6%	(21,859)	11.2%	(313,750)
Median Age	33.3 years		33.2 years	

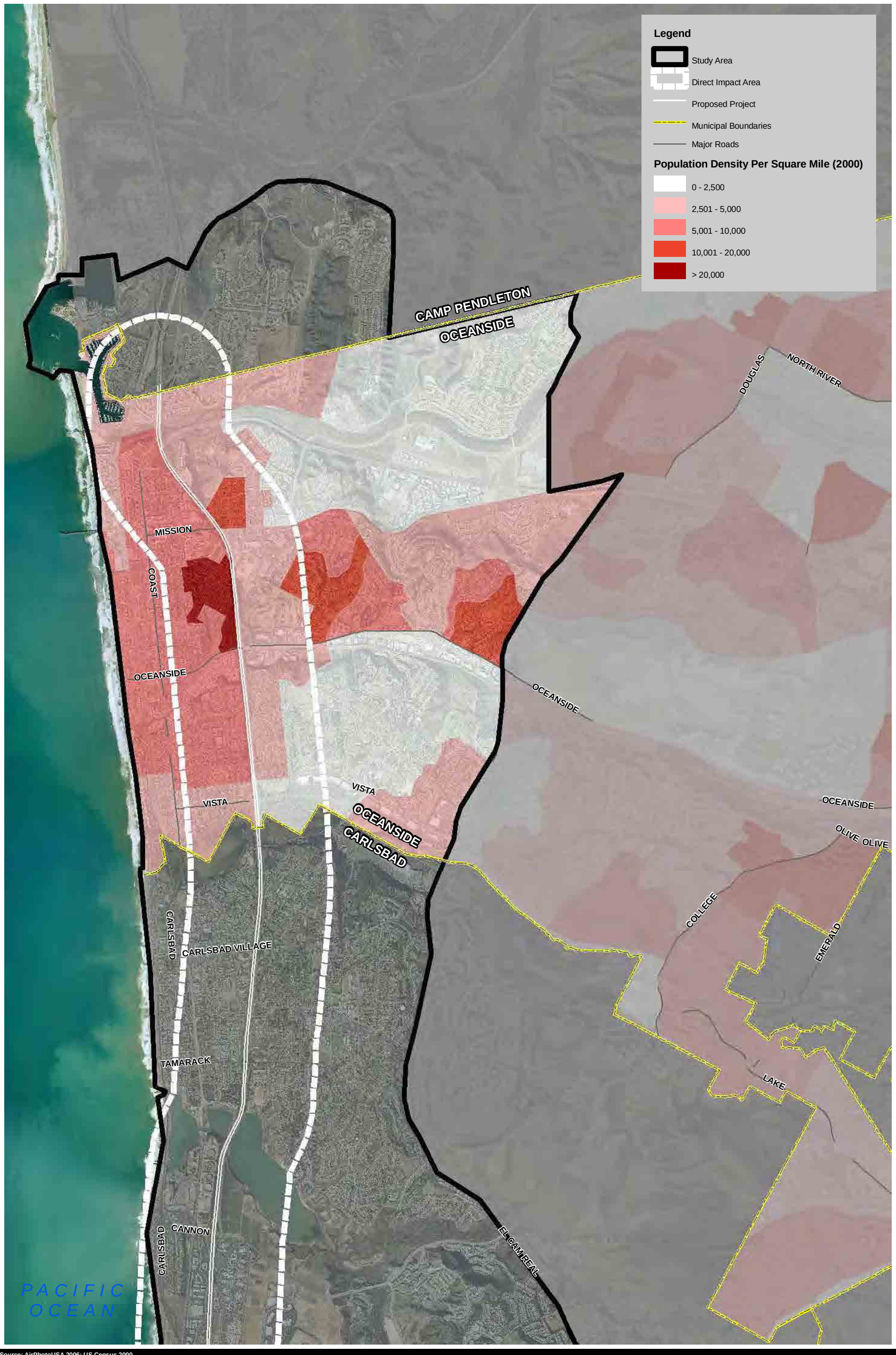
Source: U.S. Bureau of the Census 2000

As shown in Figure 2.6-6, elevated populations of senior citizens were generally present within the east and southeast portions of the municipality, as well as within two pockets in the northeast. Within the direct impact area (Figure 2.6-6), areas below Oceanside Boulevard and east of I-5, to the north along the coast, and within the Townsite neighborhood showed markedly higher senior citizen populations than the surrounding areas. Within Oceanside, with the exception of the Townsite neighborhood, higher populations of senior citizens tend to be inversely related to high minority populations.

2.6.2.4 Housing

The majority of the areas within the east portion of the municipality showed relatively low levels of housing density, although three smaller pockets of more moderate density and one extremely dense section were present in the northeast portion of the municipality. Within the study area, areas east of I-5 generally showed a relatively low density, although a few areas of elevated density were present in the southeast and central portions (Figure 2.6-7). Within the direct impact area, west of I-5 showed elevated levels of housing density, with particular concentrations in the Townsite area, and adjacent to the beachfront areas between Oceanside Boulevard and Mission Avenue. It is worth noting that the housing densities within Oceanside generally correlated with population density. As of 2000, the average household size in Oceanside was 2.83 persons, compared to the county average of 2.73. As of 2000, Oceanside households made up only 6.3 percent of the county total (62,557 of 994,677, respectively).

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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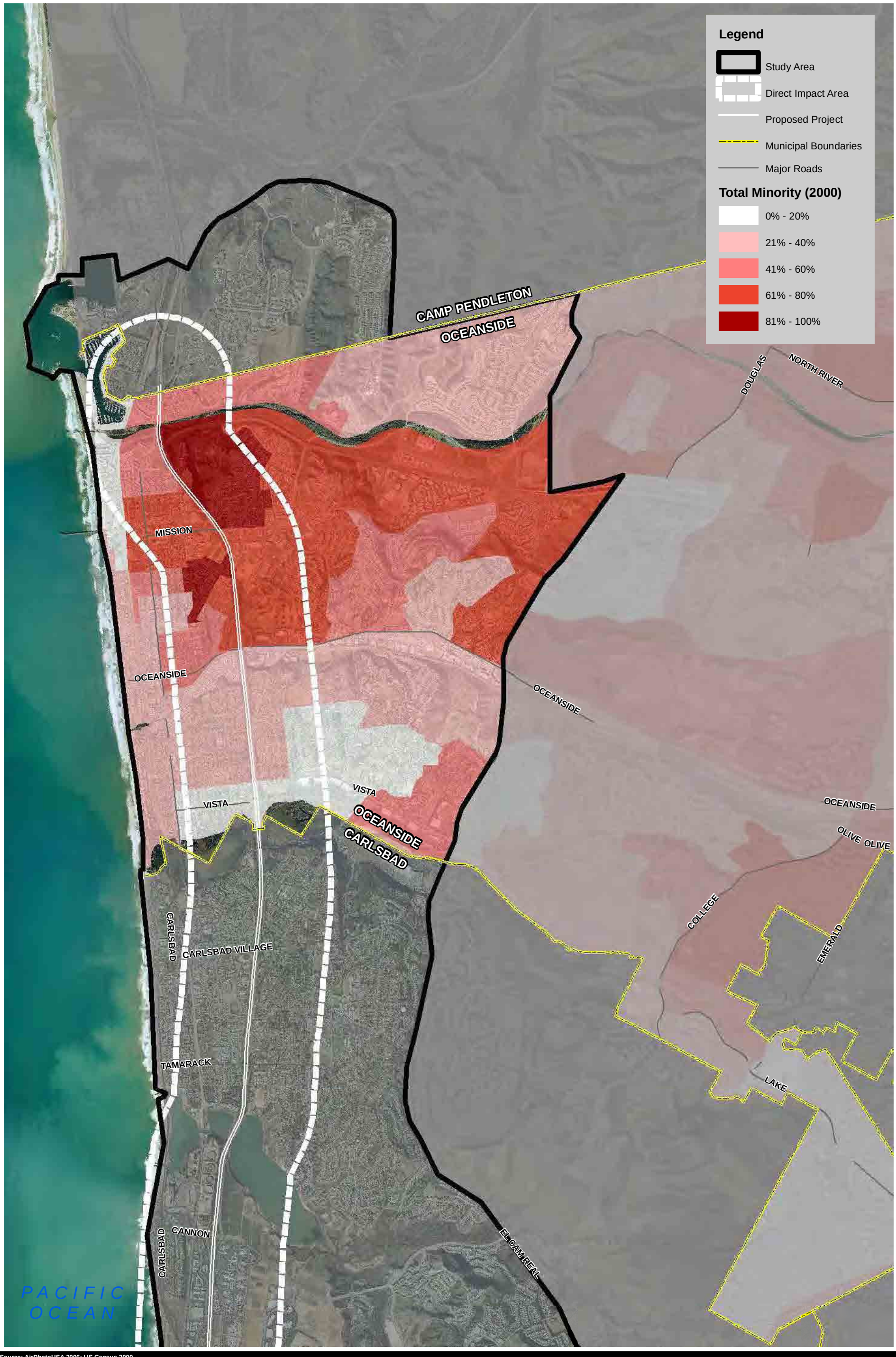
Figure 2.6-4
OCEANSIDE
Population Density

3,500 0 3,500 Feet

SCALE: 1:42,000 1 inch = 3,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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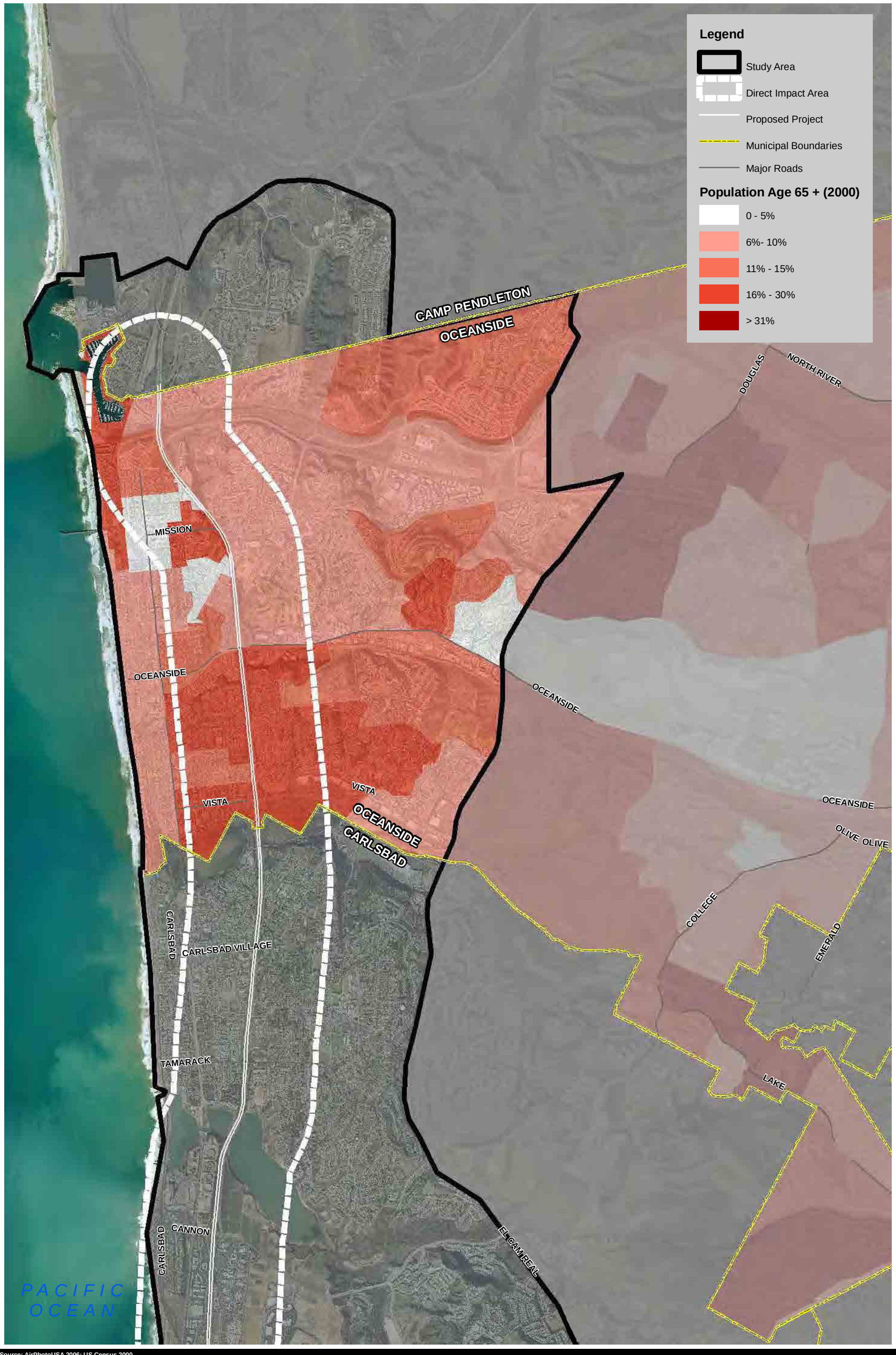
Figure 2.6-5
OCEANSIDE
Proportion of Total Minority

3,500 0 3,500 Feet

SCALE: 1:42,000 1 inch = 3,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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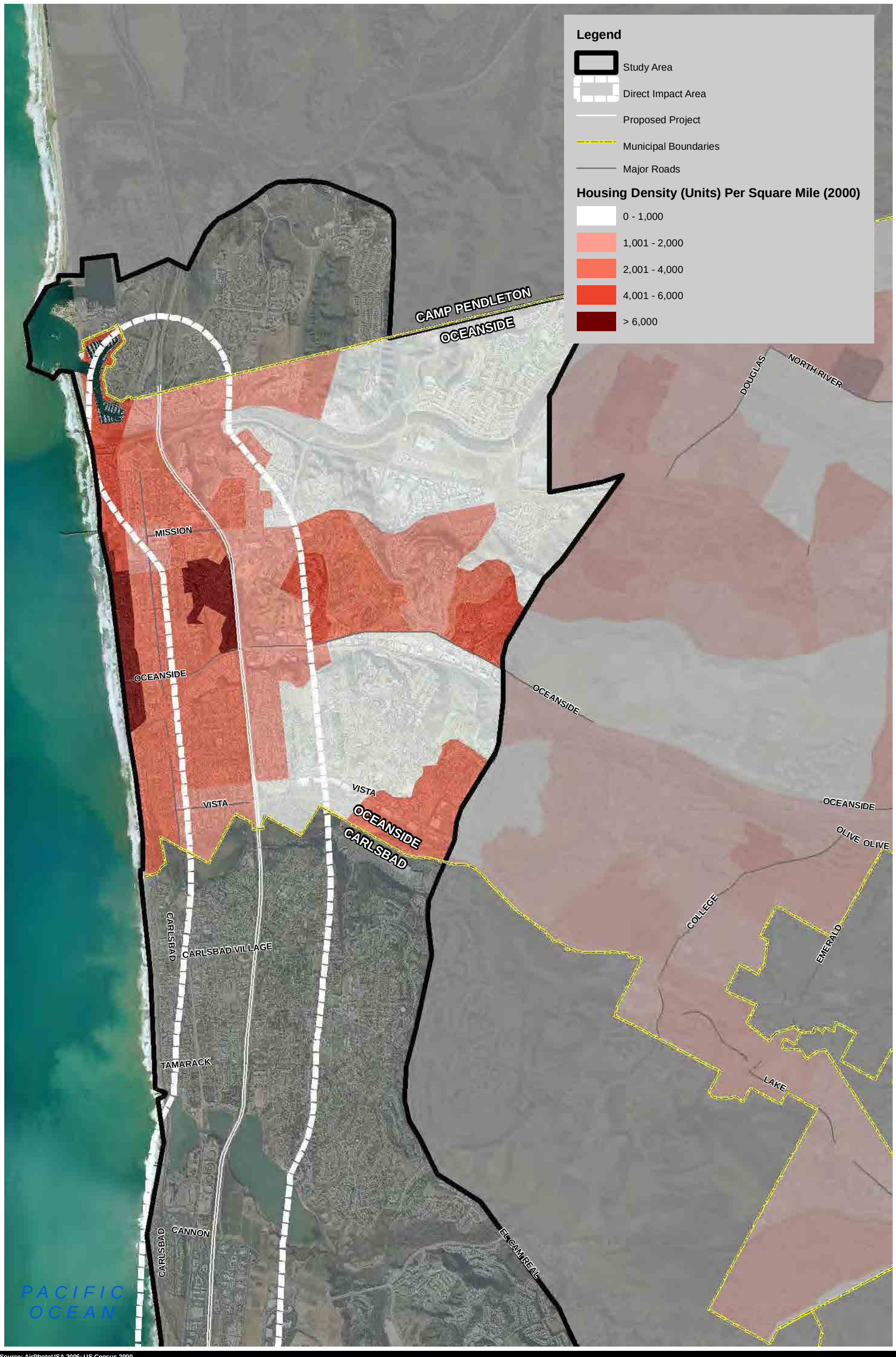
Figure 2.6-6
OCEANSIDE
Population Age 65 +

3,500 0 3,500 Feet

SCALE: 1:42,000 1 inch = 3,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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Figure 2.6-7
OCEANSIDE
Housing Density

3,500 0 3,500 Feet

SCALE: 1:42,000 1 inch = 3,500 feet

Affordable Housing

The City of Oceanside General Plan contains stated community goals and policies designed to shape the long-term development of the city, as well as protect its environmental, social, cultural, and economic resources. The general goals of the long-range policy for housing opportunities are to "produce opportunities for affordable housing for persons of low and moderate income," as well as persons with disabilities, and "to allow for sufficient rental stock for all segments of the community" (City of Oceanside 2002).

The City of Oceanside's Housing and Neighborhood Services Department has developed a Comprehensive Affordable Housing Strategy, which outlines the affordable housing needs of the city and the funding required. There are 14 affordable housing complexes in Oceanside, 5 designated for seniors and 1 for disabled persons. Cape Cod Senior Villas, Casita De Cortez, Marisol Apartments, Ocean Breeze Senior Village, Villa De Cortez, and Vintage Pointe East and West Senior complexes are all within the area of primary impacts along the I-5 corridor. The remaining seven are located east of the area of primary impacts.

2.6.3 Public Facilities and Services

2.6.3.1 Schools

Oceanside is served by the Oceanside School District, which maintains 28 schools serving students ranging from kindergarten to 12th grade. Oceanside is also served by Carlsbad Unified, Vista Unified, Bonsall Elementary, and Fallbrook High school districts in order that adequate access, utilities, fire protection, police protection, and other City services will continue to serve all public educational facilities (City of Oceanside 2002).

A total of 13 schools are located within the Oceanside portion of the study area. There are six schools within the area of secondary impacts, including four elementary schools, one middle school, and one high school. Seven schools are located within the area of direct impacts and are shown in Figure 2.6-8. This includes four elementary schools, one middle school, and two high schools. Oceanside High School, the most northwestern school in the direct impact area, is located adjacent to I-5 at One Pirate Cove. Oceanside High School is the nearest school to the I-5 corridor and serves approximately 2,300 students.

2.6.3.2 Police Protection

The Oceanside Police Department (OPD) serves the city including the study area. There are two police stations in Oceanside, both located within the area of direct impacts and shown in Figure 2.6-8. The Downtown Police Resource Station is located east of I-5 at 401 Mission Avenue and the Police Beach Facility is located at 122 The Strand. There are 174 sworn officers and 90 nonsworn employees that handle over 120,000 emergency calls a year and serve Oceanside.

In addition, the OPD works in conjunction with four Community Resource Centers, which provide housing and neighborhood services to residents of the surrounding area. The centers are operated by the Housing and Neighborhood Services Department. The Chavez Resource Center, at Balderama Park, and the Crown Heights Resource Center, near Recreation Park, are located within the area of direct impacts. The Libby Lake Resource Center is located in east Oceanside outside of the study area at 4700 North River Road. The San Luis Rey Resource Center is located at 521 Vandegrift Boulevard, outside of the study area.

2.6.3.3 Fire Protection

The Oceanside Fire Department serves the city, including the study area. There are currently six operational fire stations and plans for a future Fire Station 7. The Oceanside Fire Department operates a total of nine fire engines, two ladder trucks, eight ambulances, two brush engines, a heavy rescue/light and air unit, water tender, and two command vehicles.

Of the six fire stations, four are located outside of the area and two are located within the area of direct impacts. Four fire stations are located outside of the study area. Fire Station 3 is located near El Camino Real at 3101 Oceanside Boulevard. Fire Station 4 is located in southeast Oceanside at 3990 Lake Boulevard. Fire Station 5 is located in northeast Oceanside at 4841 North River Road. Fire Station 6 is located near Guajome Regional Park at 685 North Santa Fe Avenue. The planned Fire Station 7 will be located at 110 Jones Road near the Oceanside Municipal Airport.

As shown in Figure 2.6-8, fire stations 1 and 2 are located in the area of direct impacts. Fire Station 1 is located west of I-5 north of Mission Avenue at 714 Pier View Way. Fire Station 2 is located west of I-5 in south Oceanside at 1740 South Ditmar Street.

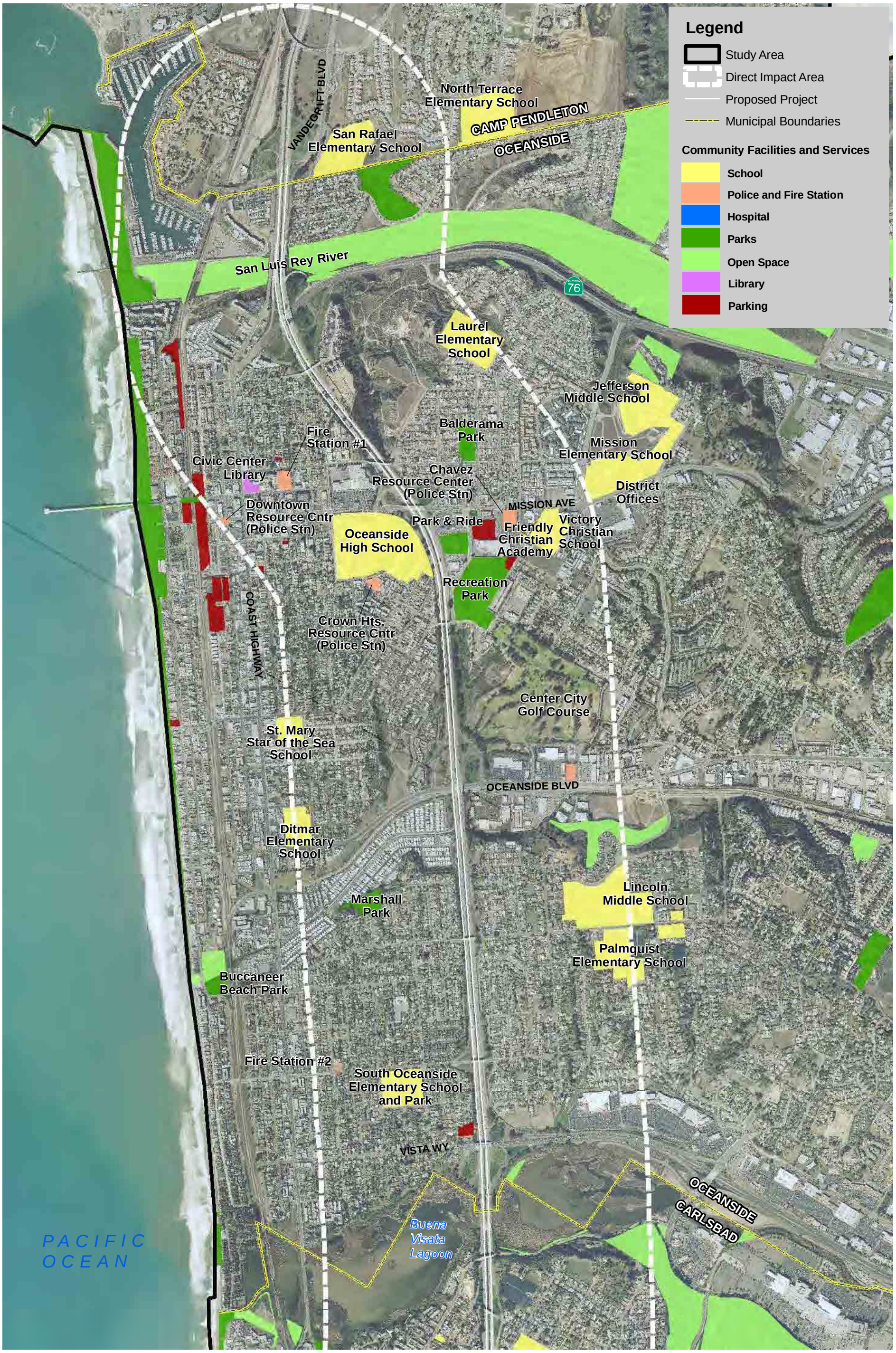
2.6.3.4 Hospitals and Medical Facilities

Oceanside is served by the Tri-City Medical Center, which is located outside (east) of the study area on Vista Way. The Tri-City Medical Center has been serving residents of Oceanside, Carlsbad, Vista, San Marcos, and other northeast unincorporated communities since 1961.

2.6.3.5 Recreational and Community Facilities

The City of Oceanside Parks and Recreation Department has identified 24 parks and community centers within their jurisdiction. Of the 24, a total of 9 are located within the area of secondary impacts and 6 are located within the area of direct impacts. Ron Ortega Recreation Park, commonly known as Recreation Park, is located adjacent to the existing I-5 ROW south of Mission Avenue. At 12 acres, Ron Ortega Recreation Park has baseball and softball fields, food services, and parking. South Oceanside Park is located on the west side of I-5 north of SR 78, within the area of direct impacts. The Center City Golf Course is located just south of the Recreation Park. Capistrano Park is located east of I-5, north of SR 76 and is approximately 14 acres. Its facilities include barbeque and picnic areas, baseball fields, tennis court, volleyball nets, and playground equipment. Balderama Park is on the east side of I-5 north of Mission Avenue. Marshall Park is located in south Oceanside, west of I-5.

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

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Figure 2.6-8
OCEANSIDE
Community Facilities and Services

1,500 0 1,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

Located north of Recreation Park, within the preliminary area of direct impacts, is the 14,000-square-foot Senior Citizens Center. The Senior Citizens Center provides social, educational, health, and recreational services to the senior population (55 years and older) of Oceanside. Approximately 75,000 participants take part in the various Senior Citizens Center programs and activities annually. Other community centers include the City-owned Sunshine Brooks Theater and the Women's Club Park, which are both in the area of secondary impacts. The Brooks Street and Marshall Street public Swim Centers are located within the preliminary area of direct impacts. There are four branch libraries within the city, one of which is located within the proposed area of secondary impacts, at 330 N. Coast Highway 101.

2.6.3.6 Circulation, Access, and Parking

Traffic flow and access in and out of Oceanside are described in the Circulation Element of the Oceanside General Plan (2002). Major roads, transit lines, pedestrian corridors, parking, and airports are outlined below. Table 2.6-4 shows the main modes of transportation for commuters in Oceanside.

Table 2.6-4. Modes of Transportation – Oceanside

Means of Transportation	Number of Commuters per Day	Percentage
Total daily commuters	70,782	100.00
Car, truck, or van	63,472	89.67
Railroad	708	1.00
Bus (including trolley bus)	1,851	2.62
Other public transportation[1]	60	0.08

[1] Includes census categories of street car or trolley car, and subway or elevated.
Source: U.S. Bureau of the Census 2000

Major Roads

I-5 is a major transportation feature in Oceanside, dividing the coastal areas of the city from the inland region. Freeway interchanges from I-5 into and out of Oceanside are located at Harbor Drive/Vandegrift Boulevard, SR 76/Coast Highway, Mission Avenue, Oceanside Boulevard, and Vista Way/SR 78. In addition, prime arterials, major arterials, secondary arterials, and collector streets have been identified in the Circulation Element of the General Plan.

Prime arterials are defined as carrying very heavy traffic volumes (over 40,000 estimated ADT) and provide for regional and intra-city circulation and connections to freeways and other regional roads. Prime arterials in Oceanside include Oceanside Boulevard east of El Camino Real and El Camino Real south of Oceanside Boulevard. Major arterials carry moderate to heavy traffic volumes (20,000 to 40,000 estimated ADT) and have a minimum of two traffic lanes in each direction with a raised median. Major arterials include Mission Avenue, College Boulevard, and El Camino Real and Rancho Del Oro north of Oceanside Boulevard. Secondary arterials provide limited access to adjacent properties, have two lanes in each direction, and carry moderate traffic volumes (10,000 to 20,000 estimated ADT). Secondary arterials include Coast Highway, Canyon Drive, River Road, Pala Road, Mesa Drive, and Lake Boulevard. Collector streets, which provide immediate access to adjoining properties and carry light to moderate traffic volumes (2,000 to 10,000 estimated ADT), are numerous throughout the residential neighborhoods.

Public Transit

Rail service is provided to Oceanside by Amtrak, Metrolink, and the Coaster along the Burlington Northern and Santa Fe Railway. Amtrak provides rail service to Oceanside between San Diego and Los Angeles with eight trains each direction per day. Metrolink provides commuter rail service between Oceanside and Los Angeles with three northbound trains in the morning and three southbound trains from Los Angeles in the evening. NCTD operates the Coaster, which began service in 1995. The Coaster serves the cities of Oceanside, Carlsbad, Encinitas, Solana Beach, and San Diego.

The railway traverses Oceanside west of I-5, within the area of secondary impacts. Coaster stops are made at seven stations along the route, which is broken down into zones. Oceanside is within Zone 1 of the Coaster and has one transit station. The Oceanside Transit Center Station is located at 195 South Tremont Street, within the area of secondary impacts and hosts Amtrak, Coaster, and Metrolink traffic. Accessibility and, to an extent, ridership of public transit lines vary throughout each municipality. Data from the decennial 2000 U.S. Census indicated that a total of 708 residents per day in Oceanside were using the railroad to commute.

In addition to rail traffic along the Santa Fe Railway, NCTD is offering a new rail service, the Sprinter, which will provide rail transportation between Oceanside, Vista, San Marcos, and Escondido. The Sprinter is currently under construction and will have 15 transit stops along the route by December 2007 (NCTD 2005).

NCTD also operates the bus system, "the Breeze," throughout the north San Diego County region, including from Oceanside to Del Mar, northeast to Escondido, east to Ramona, north to Fallbrook and San Clemente in Orange County, and to MCB Camp Pendleton. The Oceanside Transit Center currently provides service to the area via 15 routes. This includes routes north to San Clemente and MCB Camp Pendleton; south to La Jolla, UTC, and UCSD; east to Escondido, the Vista Transit Center, and Fallbrook; and local service within Oceanside. Local routes serve main community services such as El Camino North Shopping Center, the Oceanside Senior Center, the Industrial Center, the Oceanside Municipal Airport, and the beach areas.

Pedestrian Corridors

Bicycle and pedestrian corridors are discussed both in the Circulation Element and the Recreational Trails Element of the General Plan (2002). Pedestrian corridors, including sidewalks, trails, and bike lanes, are located throughout Oceanside and are situated mainly around beach access points, the San Luis Rey River, and Buena Vista Lagoon, and along major transportation corridors. To encourage the use of nonmotorized travel and recreation, Oceanside has created a number of bike routes throughout the city, linking major residential areas with schools, parking, and other commuter

destinations. Equestrian trails are located along the San Luis Rey River and around Guajome Regional Park (outside of the study area).

Airports

The Oceanside Municipal Airport is located approximately 2 miles from the Pacific Ocean at 480 Airport Road, in the area of secondary impacts. The airport serves as a small commuter airport and pilot school site. Access to the airport is from SR 76.

Parking

The City of Oceanside General Plan does not specifically address parking locations and needs within the city. However, "Park & Ride" lots, which are free convenient parking lots where one would meet a carpool or take the bus or train, are located at the Transit Center, south of Mission Avenue at Recreation Park, and in south Oceanside, at the SR 78 interchange. The Park & Ride lots are shown in red in Figure 2.6-8.

2.6.4 Economics

2.6.4.1 Local Economy

Historically, Oceanside's economy was based upon agriculture (fruit orchards and cattle-raising activities), tourism (anchored by the pier and beaches), and supporting MCB Camp Pendleton. The large military presence adjacent to the municipality helped create a demand for housing and municipal services, and the construction of the railroad linking San Bernardino and San Diego helped to promote the beach area for growth and development. The growth of Oceanside further expanded with the construction of a highway connecting San Diego and Los Angeles before 1920 and the construction of I-5 in the 1960s.

Currently, Oceanside continues to support agriculture, tourism, and MCB Camp Pendleton. It also has a diverse economic portfolio with a large sporting and recreational goods manufacturing sector as well as a large number of biotechnology and medical technology companies. Commercial growth has been fostered by the relatively flat topography and terrain of Oceanside, which easily allows for large parcels. Agriculture remains important to the economy with the production of tomatoes, avocados, citrus fruit, nursery stock, and flowers. Avocadoes are the primary crop and production contributes to the North County avocado output of over 90 percent of all avocadoes in California. Oceanside supports the largest lime grove in California with the production of more than 10 percent of the state's total lime plantings. The beaches are consistently a popular destination and the marina harbors over 800 boat slips covering approximately 100 acres (30 acres of land and 70 acres of water). MCB Camp Pendleton is the largest of all U.S. Marine Corps amphibious training bases and continues to support a strong military presence across the municipality.

Oceanside is a predominantly urbanized city although it does have more of a rural quality in the eastern portion of the city, which established through the presence of open space, agricultural areas, and less dense residential developments. Figure 2.6-9 illustrates the detailed commercial land uses within the direct impact area along the project corridor to a more detailed extent. The data provided in these figures are derived from SANDAG land use categories (2003).

As shown in Figure 2.6-9, the commercial and industrial areas are primarily located along the major roadways transecting I-5, which include Vandegrift Boulevard, SR 76, Mission Avenue, Oceanside Boulevard, and SR 78. Commercial areas are also located along Coast Highway, which parallels I-5 to the west. Agricultural areas are situated primarily to the north and east of the city boundaries with few small locations east of I-5.

2.6.4.2 Income and Employment

Median Household Income

Median household income is defined as the middle value of all incomes as arranged from highest to lowest in a selected geographic area. Based on data according to block groups from the 2000 U.S. Census, the median household income for Oceanside was $46,301 with $85,054 as the highest median household income for a block group in Oceanside and $15,156 as the lowest median household income for a block group in Oceanside. In comparison, the median household income according to block groups for San Diego County as of 2000 was $47,067, slightly higher than Oceanside, although it showed $200,001 for the highest median household income for a block group in the county and $9,208 as the lowest median household income for a block group in the county.

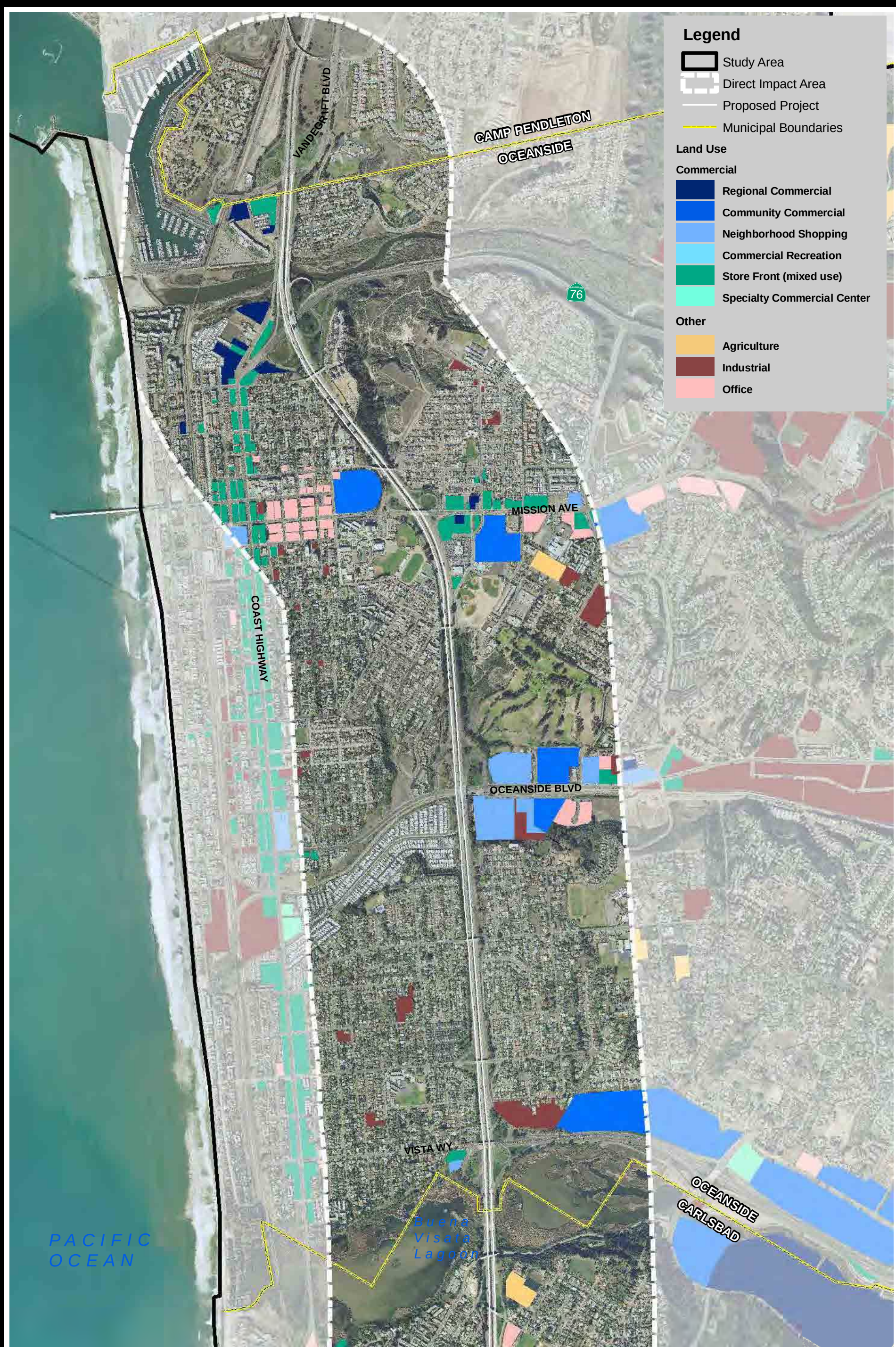
Figure 2.6-10 illustrates the median household income for the study area and direct impact areas, respectively, arranged by block groups and grouped together according to six different ranges. Within the study area, the areas within the highest median household income range (above $65,000) are located east of I-5 in the northern and southern areas of Oceanside near the municipal boundaries with MCB Camp Pendleton and Carlsbad. The area within the lowest median household income range in the study area (below $25,000) is located east and west of I-5 between Mission Avenue and Oceanside Boulevard.

As shown in Figure 2.6-10, the highest median household income range for the direct impact area is located east of I-5 from Oceanside Boulevard south to the municipal boundary with Carlsbad. The areas within the lowest median household income range are primarily located in the Townsite and Eastside communities between Mission Avenue and Oceanside Boulevard.

Per Capita Income

Per capita income is defined as the average income of every resident of a selected geographic area, including all adults and children. Per capita income is typically reported in units of currency per year and often used as a measure of the wealth of the selected population. Based upon data according to block groups from the 2000 U.S. Census, per capita income for Oceanside was $20,329 with $52,192 as the highest per capita income for a block group in Oceanside and $8,117 as the lowest per capita income in a block group for Oceanside. In comparison, per capita income for block groups in

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SANDAG 2006

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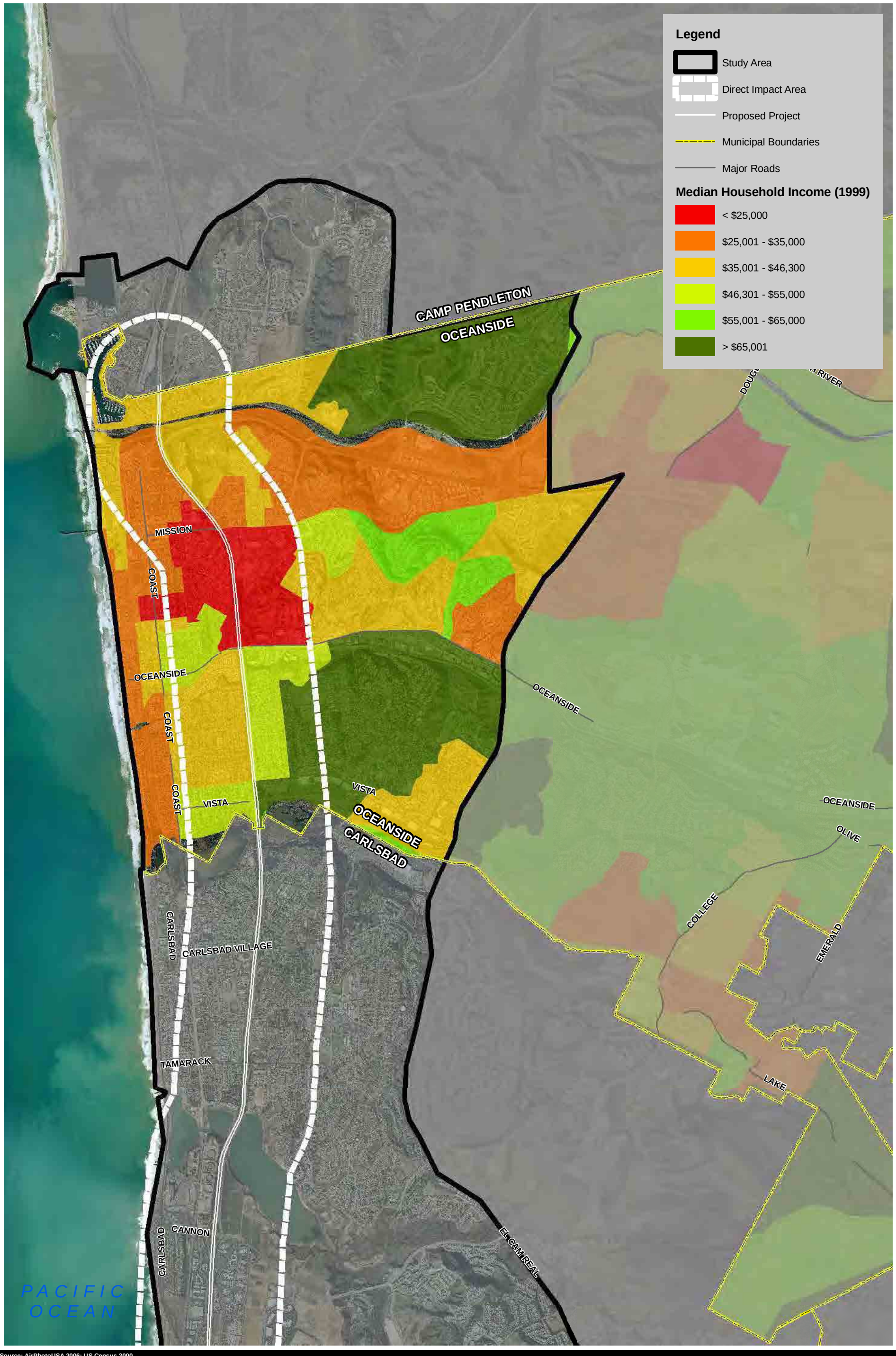
Figure 2.6-9
OCEANSIDE
Direct Impact Area Economy

1,500 0 1,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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Figure 2.6-10
OCEANSIDE
Median Household Income

3,500 0 3,500 Feet

SCALE: 1:42,000 1 inch = 3,500 feet

San Diego County was $22,926, with $112,849 as the highest per capita income in a block group for the county and $4,505 as the lowest per capita income for a block group in the county. Similar to median household income values, per capita income for Oceanside was slightly lower and again showed a much larger range of values than that of the county.

Figure 2.6-11 illustrates per capita income for the study area and direct impact area, respectively, arranged by block groups and grouped together according to six different ranges. Areas within the highest per capita income range (above $45,000) are not located within the study area. However, areas within the next highest range ($33,000 to $45,000) are located west of Coast Highway between MCB Camp Pendleton and just south of Mission Avenue as well as the area east of I-5 from Oceanside Boulevard south to the municipal boundary with Carlsbad. The area within the lowest per capita income range (below $10,000) is located west of I-5 between Mission Avenue and Oceanside Boulevard and east of I-5 just north of Oceanside Boulevard.

As shown in Figure 2.6-11, the highest per capita income range located within the direct impact area is the range from $33,000 to $45,000. These areas are located west of Coast Highway from MCB Camp Pendleton to Mission Avenue as well as the area east of I-5 south of Oceanside Boulevard to the municipal boundary with Carlsbad. The area within the lowest per capita income range, the Townsite and Eastside communities, are within the direct impact area west of I-5 between Mission Avenue and Oceanside Boulevard and east of I-5 just north of Oceanside Boulevard.

Employment

Although Oceanside continues to support agriculture, tourism, and the military, it also has a large sporting and recreational goods manufacturing sector as well as a large number of biotechnology and medical technology companies. Other larger private employers include the Tri-City Medical Center, North County Times, and San Diego Auto Auction. The NCTD, Oceanside Unified School District, and Mira Costa Community College are some of the largest public employers for Oceanside.

Based on the data from the California EDD, the unemployment rate in Oceanside has averaged about 4.6 percent over the past 5 years (2000-2004), similar to the average of 4.6 percent for San Diego County over the same period. As of May 2005, the unemployment rate for Oceanside was 3.7 percent and 3.8 percent for San Diego County. Table 2.6-5 compares the employment statistics between Oceanside and San Diego County.

Table 2.6-5. Annual Unemployment Rate – Oceanside and San Diego County

Area	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004	Average
Oceanside	3.8%	4.0%	5.0%	5.0%	4.6%	4.6%
San Diego County	3.9%	4.2%	5.1%	5.2%	4.7%	4.6%

Source: EDD 2005

2.6.4.3 Labor Force Characteristics

As of 2000, Oceanside had a population of 161,029 persons. Of this, the labor force consisted of 76,443 persons, of which 89.04 percent were employed (68,063 people) with an additional 4,242 persons (3.5 percent) in the armed forces (U.S. Bureau of the Census 2000).

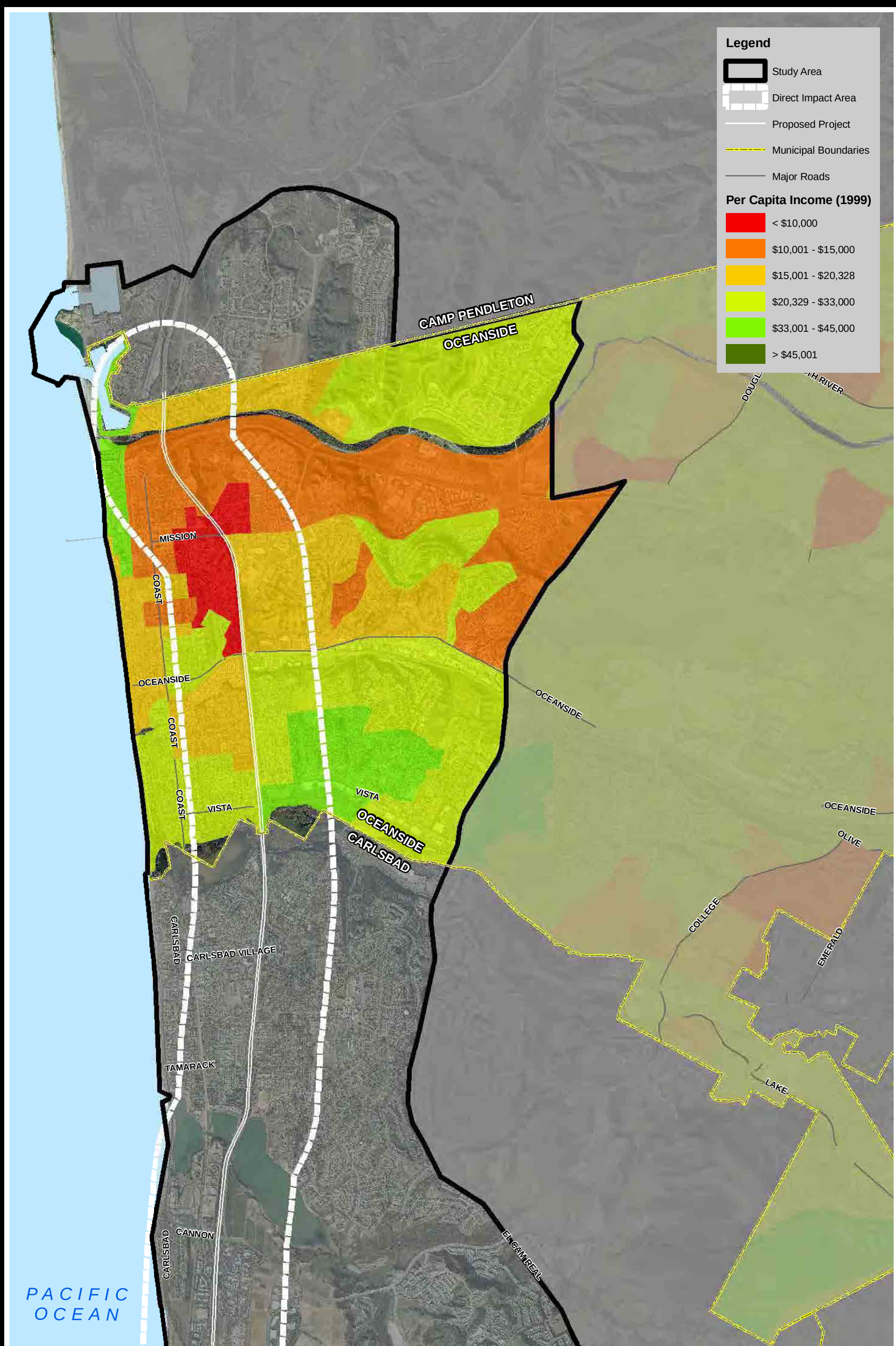
Table 2.6-6 summarizes the labor force characteristics for Oceanside and San Diego County based upon 2000 U.S. Census data. Labor force characteristics in Table 2.6-6 include employment status, occupation, industry, and class of worker. Oceanside generally mimics the labor force composition of San Diego County with slightly lower numbers. Within the civilian force, Oceanside had 56.3 percent of the population over 16 employed and San Diego County had 57.3 percent employment.

Table 2.6-6. Labor Force Characteristics – Oceanside and San Diego County

Subject	San Diego		San Diego County	
EMPLOYMENT STATUS				
Population 16 years and over	**100.0%**	**(120,983)**	**100.0%**	**(2,165,034)**
In labor force	63.2%	(76,443)	65.0%	(1,407,152)
Civilian labor force	59.7%	(72,201)	60.9%	(1,319,517)
Employed	56.3%	(68,063)	57.3%	(1,241,258)
Unemployed	3.4%	(4,138)	3.6%	(78,259)
Percent of civilian labor force	5.8%		5.9%	
Armed Forces	3.5%	(4,242)	4.0%	(87,635)
Not in labor force	36.8%	(44,540)	35.0%	(757,882)
Employed civilian population 16 years and over	**100.0%**		**100.0%**	
OCCUPATION				
Management and professional	31.5%		37.7%	
Service	17.1%		16.1%	
Sales and office	27.5%		27.2%	
Farming, fishing, and forestry	1.0%		0.5%	
Construction, extraction, and maintenance	9.1%		8.7%	
Production, transportation, and material moving	13.7%		9.9%	
INDUSTRY				
Agriculture, forestry, fishing and hunting, and mining	1.2%		0.7%	
Construction	6.5%		6.6%	
Manufacturing	13.7%		11.0%	
Wholesale trade	3.9%		3.3%	
Retail trade	12.3%		11.3%	
Transportation and warehousing, and utilities	4.5%		3.8%	
Information	3.1%		3.5%	
Finance, insurance, real estate, and rental and leasing	6.2%		7.1%	
Professional, scientific, management, administrative, and waste management services	11.1%		13.3%	
Educational, health and social services	17.0%		19.3%	
Arts, entertainment, recreation, accommodation and food services	9.7%		9.6%	
Other services (except public administration)	5.5%		5.2%	
Public administration	5.2%		5.4%	
CLASS OF WORKER				
Private wage and salary	76.5%		75.0%	
Government	14.7%		16.0%	
Self-employed (not incorporated business)	8.4%		8.7%	
Unpaid family	0.4%		0.3%	

Source: U.S. Bureau of the Census 2000

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; US Census 2000

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Figure 2.6-11
OCEANSIDE
Per Capita Income

3,500 0 3,500 Feet

SCALE: 1:42,000 1 inch = 3,500 feet

Oceanside and San Diego County have broadly similar numbers in the employment categories as listed in Table 2.6-6. Both Oceanside and San Diego County had higher percentages of persons in management and professional, service, and sales and office occupations. Oceanside had higher numbers in all the various industry sectors except for management and professional occupations with 11.1 percent, and San Diego County had 13.3 percent.

As summarized in Table 2.6-6, Oceanside had slightly larger numbers involved in agriculture, forestry, fishing and hunting, and mining; manufacturing; wholesale trade; retail trade; transportation and warehousing, and utilities; nonpublic administration services; and arts, entertainment, recreation, accommodation and food services than San Diego County. A significantly large number of the population consisted of either private or government workers for both Oceanside and San Diego County with a combined number of 91.2 percent for Oceanside and 91 percent for San Diego County.

The 2000 U.S. Census gathered information on the amount of time that people spend commuting to and from the workplace, which may indicate that the jobs/housing ratio within the study area is more balanced than within the city as a whole.

2.6.4.4 Tax Revenue and Fiscal Conditions

Property tax is imposed on real property and based upon the assessed value of the property and allocated by tax rate areas throughout the county. Assessment values are set at the time a property changes ownership and increase at no more than 2 percent annually at that value. The property tax rate for Oceanside is 1.06 percent of taxable value.

Based upon the APN data from SanGIS data (2005), the average assessed value for a property in Oceanside was $186,972, whereas, the average assessed value for San Diego County was $245,946, which is substantially below the average assessed value for San Diego County.

There are six ranges of assessed value for Oceanside as depicted in Figure 2.6-12 for the study area and direct impact area, respectively. This figure illustrates within the municipality where the revenue is generated and in relationship to the location of the project. APN data from SanGIS included numerous parcels with no available data and assessed values listed as $0 or a nominal value. Thus, these parcels are included in the range of <$100,000 for assessed value. The majority of Oceanside values fall within the ranges of <$100,000 and $100,001-$300,000. Areas with higher values are geographically widespread throughout Oceanside and the areas with the highest assessed values are primarily outside of the study area within the eastern portions of Oceanside.

The areas with higher assessed values within the study area and direct impact area are typically related to commercial and business areas, but not exclusively. Some residential areas within the study area fall within the ranges of the higher assessed values. There are a few areas that fall within the highest assessed values (>$10,000,001) in the study area and are located east of I-5, north of Mission Avenue, north of Oceanside Boulevard east of I-5, west of I-5 in the Redevelopment Area (commercial), and east of I-5 along the north side of SR 78 (commercial/industrial). As previously indicated, the majority of the Oceanside area falls within the ranges of <$100,000 and $100,001-$300,000. These areas are primarily residential and generally do not correlate with commercial, industrial, and agricultural areas.

2.6.4.5 Business Activity

As previously shown in Figure 2.6-9, a variety of commercial land uses, agriculture, office, and industrial areas are located within the area of direct impacts. Commercial land uses are divided into six different categories: regional commercial (i.e., wholesale trade and large regional shopping centers), community commercial (i.e., shopping centers typically with a main anchor tenant), neighborhood shopping (i.e., shopping centers with a market and/or drugstore and may include offices), commercial recreation (i.e., tourist attractions/destinations, golf courses, and recreational facilities), store front (i.e., commercial activities along major roadways not within planned centers and may include mixed uses with office and/or residential units attached), and specialty commercial center (i.e., tourist or specialty commercial shopping areas). Commercial centers are generally located along major transportation corridors including Mission Avenue, SR 76, and Oceanside Boulevard. These commercial centers typically serve multiple surrounding neighborhoods.

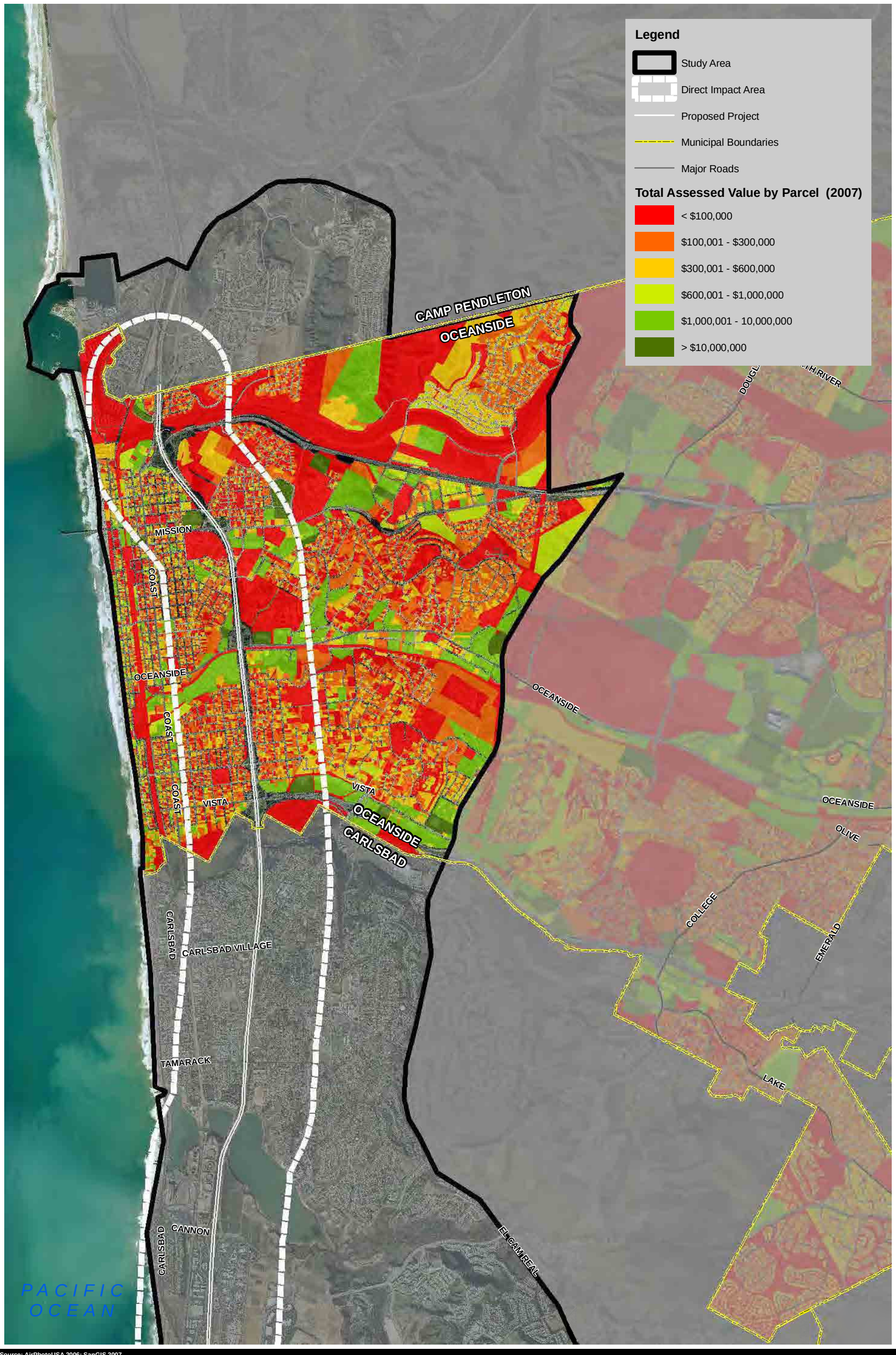
The agriculture land use designation includes orchards, vineyards, nurseries, greenhouses, dairies, livestock, poultry, equine ranches, row crops, grains, and pastures. There is a small area designated for agriculture south of Mission Avenue and east of I-5.

The land use designation for office includes government office buildings (outside of military), banks, offices for businesses and professional services, some retail activities, and restaurants. Office land use designations are located along Mission Avenue east and west of I-5 and along Oceanside Boulevard east of I-5.

The industrial land use designation incorporates heavy manufacturing activities, light industrial and manufacturing activities (i.e., lumber, furniture, paper, rubber, stone, clay, and glass), clustered office/retail/industrial uses, and industrial/strip commercial areas (i.e., public self-storage). Industrial uses are located entirely outside the direct impact area. Ocean Ranch Corporate Center is a master planned business park located along Oceanside Boulevard east of I-5. The Oceanside Industrial Center was the first industrial park within the municipality and is located east of I-5 along SR 76. The Oceanside Industrial Center is the westernmost major industrial center of San Diego County and is the second-largest contiguously zoned industrial area in Oceanside. The RDO Technology Park is located east of I-5 and SR 76 along Coast Highway near a range of business interests and access to retail and commercial amenities. The RDO Technology Park provides auxiliary community facilities including daycare, private recreation, worship centers, and a credit union (Oceanside Chamber of Commerce 2005).

The northwest part of Oceanside contains the downtown area, which is within the Redevelopment Area. Mixed-use, medium- and high-density residential, commercial, and office space are the main components of the land use plan for the Redevelopment Area. The majority of the mixed-use and specialty commercial areas along Coast Highway are outside the direct impact area. However, there

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SanGIS 2007

EDAW | AECOM

Figure 2.6-12
OCEANSIDE
Total Assessed Value

3,500 0 3,500 Feet

SCALE: 1:42,000 1 inch = 3,500 feet

are mixed-use and specialty commercial areas located within the direct impact area along Mission Avenue and Oceanside Boulevard east of I-5. The area adjacent to I-5 and north of the San Luis Rey River is identified as visitor-serving commercial with possible mixed-use residential.

Interchanges

There are seven main freeway interchanges in Oceanside: Harbor Drive/Vandegrift Boulevard, SR 76, Mission Avenue, Oceanside Boulevard, California Street, Cassidy Street, and Vista Way/SR 78. These intersections are vital entry points into Oceanside and MCB Camp Pendleton, as well as main servicing points for residents, tourists, and motorists along I-5. Business activities at each of the main interchanges in Oceanside are illustrated on aerial photos in Figures 2.6-13 through 2.6-16.

Harbor Drive/Vandegrift Boulevard and I-5 is the northernmost interchange within the study area and primarily serves the southern MCB Camp Pendleton area east of I-5 (Figure 2.6-13). West of I-5, Vandegrift Boulevard becomes Oceanside Harbor Drive and leads into an area with commercial and retail services. Motels, restaurants, a mobile home park, a gas station, and specialty businesses are located in the southwest corner. The NCTD/Amtrak facility is located in the northwest corner of the interchange.

SR 76 is currently undeveloped in the northeastern corner, but planned land uses include special commercial and medium-density residential (Figure 2.6-13). The west side of this interchange is part of the Redevelopment Area and consists of commercial and mixed uses to support visitors; primarily motels. The Oceanside Chamber of Commerce is also located along the west side of I-5.

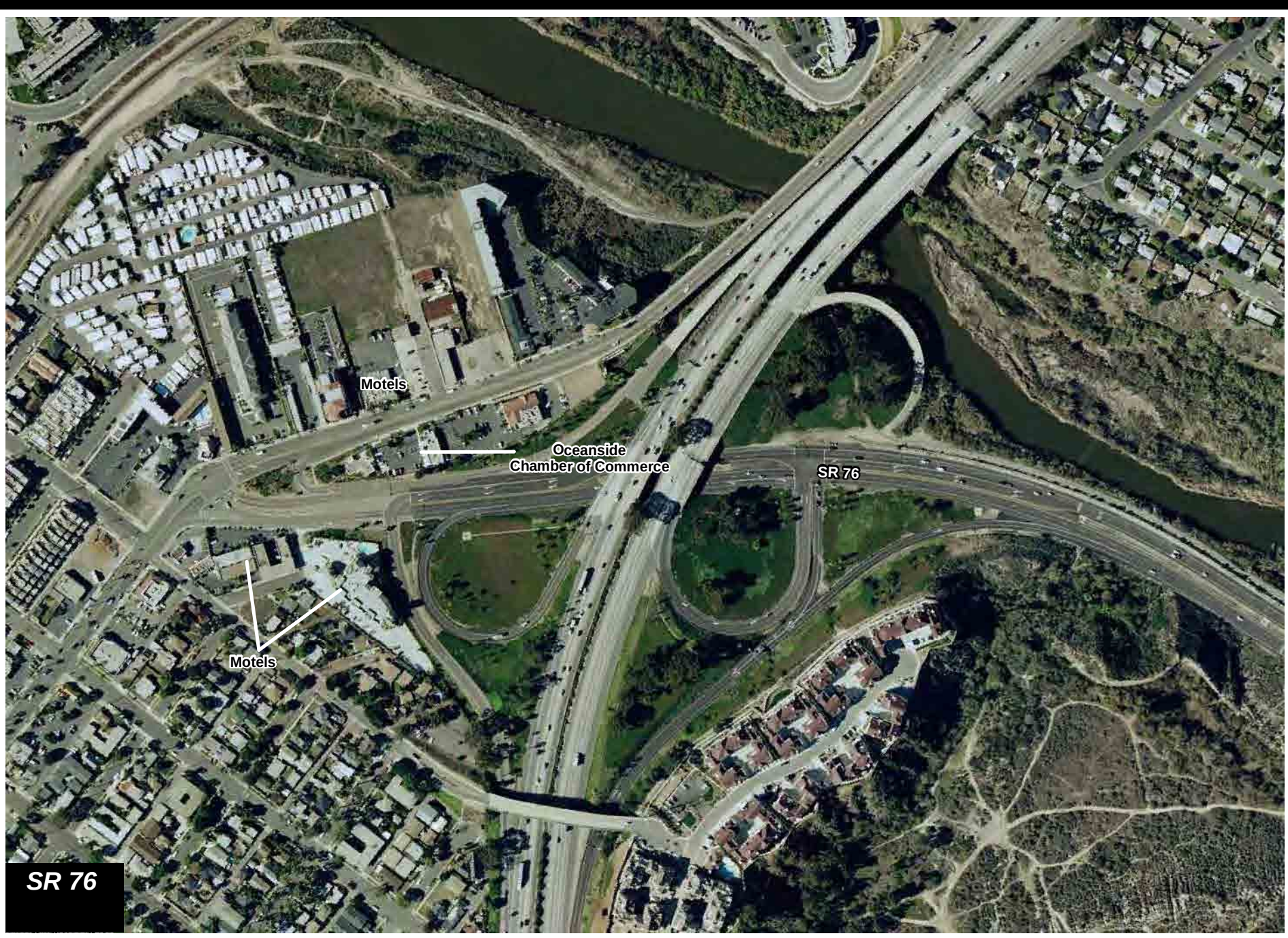
The Mission Avenue interchange is located immediately south of SR 76 and leads into the downtown and Redevelopment Area of Oceanside toward the west (Figure 2.6-14). Retailers in the shopping center located to the northwest include grocery stores, drug stores, variety stores, and some restaurants and retail shops. A motel, mechanic/auto body shop, and restaurants are located to the northeast. A gas station is located in the southeast area of the interchange.

The Oceanside Boulevard interchange leads to the southern part of the downtown area toward the west, and commercial centers are located at the northeast and southeast corners of the interchange (Figure 2.6-14). Special and general commercial areas in the area northeast of the interchange provide retail, restaurants, and services to the local community as well as traffic along I-5. Southeast of the interchange are business park-type uses, with light industrial, professional commercial, and special and community commercial uses. An undeveloped parcel of land is located to the northwest and designated for general and special commercial uses. A gas station and a motel are located in the northwest area of the interchange.

California Street cannot be accessed from I-5; however, there is an on-ramp to the northbound lanes (Figure 2.6-15). No businesses, including commercial or industrial activities, are located at this interchange. Residential homes are located on both sides of I-5.

Cassidy Street can only be accessed from southbound I-5 and there is an on-ramp to the southbound lanes (Figure 2.6-15). No businesses, including commercial or industrial activities, are located at this interchange. Residential homes are located on both sides of I-5. Westbound traffic from SR 78 entering northbound I-5 merges onto the freeway near Cassidy Street.

The southernmost interchange from I-5 into Oceanside is Vista Way/SR 78 (Figure 2.6-16). Vista Way becomes SR 78 east of I-5 and provides access to the cities of inland San Diego County. A restaurant and specialty retail stores are located in the southwest area of the interchange. East of the interchange are large shopping centers (Pacific Coast Plaza and El Camino North Center), which attract residents of Oceanside as well as traffic from I-5 and SR 78 and tourists.



EDAW | AECOM

Figure 2.6-13
OCEANSIDE Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

I-5 NORTH COAST CORRIDOR, CA

SCALE: 1:4,200; 1 inch = 350 feet

EDAW | AECOM

Figure 2.6-14
OCEANSIDE
Interchanges

350 0 350 Feet

I-5 NORTH COAST CORRIDOR CIA

EDAW | AECOM

Figure 2.6-15
OCEANSIDE
Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

Source: AirPhotoUSA 2006

EDAW | AECOM

Figure 2.6-16
OCEANSIDE Interchanges

350 0 350 Feet

SCALE: 1:4,200; 1 inch = 350 feet

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CHAPTER 3.0
IMPACT ANALYSIS

3.1 CONSTRUCTION-RELATED IMPACTS

The proposed alternatives would widen I-5 for 27 miles within San Diego County, extending from La Jolla Village Drive in the south to just north of Harbor Drive at Vandegrift Boulevard in Oceanside. Implementation of the proposed project would result in temporary construction-related impacts along the length of the I-5 North Coast Corridor. Construction-related impacts could include, but are not limited to, those related to temporary disruptions of vehicular or pedestrian access and mobility, increased noise, dust generation, light pollution during nighttime construction hours, and visual changes to the existing landscape of the study area. Construction-related impacts are anticipated to occur mainly within the direct impact area. The following analysis discusses construction-related impacts within each jurisdiction along the corridor for the 10+4 alternatives. Construction of the 8+4 alternatives would have similar but reduced impacts, as they would not include construction of GP lanes.

Construction of the proposed project would occur in phases along the length of the existing I-5 ROW; therefore, the timing and locations of potential community impacts may be altered or modified as construction progresses. Due to the spatially and temporally diverse nature of the proposed project corridor, the area of direct and secondary impacts is preliminary and may change throughout the duration of the proposed project.

Construction of the proposed alternatives would take place in four phases. Phase 1 would include the construction of four HOV lanes (two in each direction) from San Elijo Lagoon to the Harbor Drive/Vandegrift Boulevard interchange. It would also include widening of the I-5 bridge across San Elijo Lagoon and construction of sound walls in the existing Department ROW. Phase 2 would include the construction of two HOV lanes from La Jolla Village Drive to Sorrento Valley Road (one in each direction), the construction of the HOV Viaduct, and construction of the DAR at Voigt Drive. Phase 3 would include the construction of four HOV lanes (two in each direction) from south of Agua Hedionda Lagoon to south of Buena Vista Lagoon. It would also include widening of the I-5 bridge over Agua Hedionda Lagoon and construction of sound walls along the corridor. Phase 4 would include construction of the DARs at Manchester Avenue, Cannon Road, and Oceanside Boulevard. It would also include construction of two GP lanes (one in each direction) along the length of the corridor and widening of the I-5 bridge across Buena Vista Lagoon.

All existing Park and Ride facilities along the corridor would be used at some time for construction staging activity and could have reduced parking availability; however, they would remain open to the public during construction. Though lane closures and detours would be necessitated at certain times during construction, there would be no time where an overpass or underpass would be entirely closed to traffic. Construction activity would occur mainly during regular business hours but could also occur at night to minimize disruptions within the corridor or at interchanges.

The Department would implement a transportation management plan (TMP) for each construction phase throughout the duration of construction activities. The TMPs would be made available to the public and to each jurisdiction within the study area. TMPs are designed to minimize project-related traffic delay and accidents by adopting traditional traffic mitigation strategies and through an innovative combination of public and motorist information, demand management, incident management, system management, alternate route strategies, and construction strategies. The TMPs would include detour signage, public transportation information, construction timing, and other useful construction information for residents and motorists.

3.1.1 San Diego

Approximately 6 miles of the proposed alternatives are located in San Diego, from La Jolla Village Drive to Via de la Valle. The 10+4 alternatives would include the construction of two HOV lanes on I-5 within San Diego (one in each direction), resulting in the operation of two HOV lanes in both north and south directions. Two GP lanes (one in each direction) would also be constructed, beginning south of Via de la Valle. The 8+4 alternatives would have the same HOV configuration, with no GP lanes. The proposed alternatives in San Diego also include the construction of a DAR at Voigt Drive. Four community enhancement features would be constructed within San Diego: the Peñasquitos Creek trail connection, the Carmel Valley bicycle/pedestrian trail connection, an enhanced Park and Ride at Carmel Valley Road, and a pedestrian overpass connection north of Del Mar Heights Road. The alternatives would necessitate the construction of a number of retaining walls and noise abatement structures.

Various locations within San Diego could experience temporary disruptions to existing travel patterns, primarily along I-5, during construction activities, due to lane restrictions, lane closures, or temporary detours. This could, in turn, affect other major roads within the study area in San Diego, specifically the I-5 interchanges at La Jolla Village Drive, Genesee Avenue, Roselle Street/Sorrento Valley Road, Carmel Valley Road/SR 56, Del Mar Heights Road, and Via de la Valle. Additionally, the construction of the DAR at Voigt Drive could interrupt circulation on Voigt Drive, as well as other roads in the vicinity of construction activities, particularly those that connect with the UCSD campus and Medical Center. Disruptions to travel patterns could also occur near the interchange of I-805 and I-5, as any construction-related traffic congestion along I-5 would affect the I-5/I-805 merge. These disruptions could affect local and regional travel patterns depending on the level of congestion experienced during peak periods.

Public transportation facilities and routes, particularly those within the area of direct impacts, may also experience service delays and disruptions. This includes the Coaster and Amtrak rail lines, which cross through Torrey Pines State Park Reserve and University before paralleling I-5 south into San Diego. Access to the Sorrento Valley Station, which is the only train station within the area of direct impacts in San Diego, may experience temporary disruptions, as well, from traffic along Sorrento Valley Boulevard. These disruptions may also delay or detour a few of the 29 fixed bus routes in San Diego, which travel north, south, east, and west from this portion of the study area. Additionally, the Carmel Valley Park and Ride facility would be used as a temporary staging area for construction. While the

construction activities at the Park and Ride would not necessitate closure of the facility, they could decrease the number of available parking spaces thereby affecting the use of alternative transportation.

Construction of the proposed alternatives may have the potential for indirect temporary economic impacts to a number of businesses as a direct result of disruptions to traffic flow and existing traffic patterns. Construction-related traffic has the potential to discourage travelers on I-5 from accessing interchanges to patronize nearby businesses. This is particularly true for those businesses along roads that directly interchange with I-5. Businesses that are heavily dependent upon patrons who travel along the roadways, particularly businesses such as restaurants, lounges, gas stations, convenience stores, and specialty food stores (e.g., ice cream parlors, candy stores, roadside produce stands) could experience indirect economic impacts associated with decreased visitation resulting from congestion or detours. During construction activity at the La Jolla Village Drive interchange, the potentially affected businesses could include a hotel and shopping center southwest of I-5, as well as the businesses, restaurants, and the hotel located in the southeast quadrant of the interchange. At the Genesee Avenue interchange, temporary indirect economic impacts are not likely, as this area is an employment center with offices and business parks. Few highway-dependent businesses are located in this area. During localized construction activity at the SR 56 interchange, a hotel, several restaurants, and a gas station located in the northeast quadrant of the interchange could be indirectly affected. During localized construction activity at the Del Mar Heights Road interchange, the shopping center and gas station northwest of I-5 could be indirectly affected. During localized construction activity at the Via de la Valle interchange, tourist-dependent businesses could be indirectly affected, including a shopping center at the southeast quadrant of the interchange; a shopping mall at the northeast quadrant of the interchange; a gas station, restaurants, and a hotel in the southwest quadrant of the interchange; and a hotel, gas station, and restaurants in the northwest quadrant of the interchange.

During construction of the proposed alternatives, a number of incrementally positive economic impacts to businesses in San Diego and the surrounding region may be realized. For the duration of construction activities, use of local labor and local procurement of materials, goods, and services would result in positive impacts to local employment and business activity, a portion of which would likely accrue to the City of San Diego. However, no permanent employment or increase in business activity is anticipated as a result of construction activities associated with the proposed alternatives.

Construction activities along I-5 would be located near a number of neighborhoods within San Diego, including La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley. Depending on the time of day when construction occurs, and the extent and duration of construction activities, residents of these communities could experience longer wait times as they travel to and from I-5. However, as described above, the Department would implement measures to minimize access and traffic impacts during construction activities.

In addition to the businesses and residential areas mentioned above, public service and recreational facilities within the study area may also experience temporary access impacts. Those within the direct impact area are most likely to be affected and include UCSD campus and medical facilities, Torrey Hills Elementary School, Del Mar Academy, Del Mar Heights Elementary School, Solana Highlands Elementary School, and a Park and Ride facility. Access to parks and recreation centers near I-5 may also be affected, including the San Dieguito River Park, Crest Canyon Open Space Park, Solana Highlands Park, Carmel Valley Community Park, the Torrey Pines State Reserve, and the Carmel Valley Community Center. However, as described above, the Department would implement measures identified in the TMP, such as detour signage, and other features mentioned above in Section 3.1, to minimize potential access impacts to businesses and facilities similar to those utilized for residential neighborhoods. In addition, these impacts would be temporary and would not result in long-term access disruptions.

Construction of the proposed alternatives would unavoidably result in noise and dust generation. Residential neighborhoods and community facilities within the direct impact area, particularly those immediately adjacent to I-5, could experience temporary indirect impacts related to construction noise and dust generation. This includes the VA Hospital; UCSD Medical Center; Scripps Memorial Hospital; parts of UCSD; residents of the Torrey Hills, Torrey Pines, and Carmel Valley communities; and Del Mar Hills Academy. These temporary indirect construction-related impacts are considered proximity impacts and would not be physical in nature. Depending on the placement of the staging areas, construction equipment also has the potential to affect views along I-5. If construction occurs after daylight hours, construction equipment that requires lighting could result in temporary indirect visual impacts related to temporary light pollution. Dust generation would be minimized by employing Best Management Practices (BMPs) during construction such as regular watering, covering exposed dirt piles, and construction site maintenance.

3.1.2 Del Mar

Contrary to the other municipalities analyzed in the CIA study area, Del Mar is not traversed by the proposed alternatives but would likely experience project-related impacts as it is located approximately 0.5 mile west of I-5. One major interchange, Via de la Valle, directly enters into the municipality. No construction activity would occur in Del Mar; however, residents and visitors of Del Mar may experience temporary impacts due to travel disruptions.

The northeast part of Del Mar could experience temporary disruptions to existing traveling patterns, primarily along Del Mar Heights Road, Via de la Valle, and Jimmy Durante Boulevard, during construction activities. This could include lane restrictions, lane closures, and temporary detours. This could, in turn, affect other major roads within the study area in Del Mar, specifically Camino Del Mar and other roads along the coast. These coastal roads may be used more heavily as an alternative route through North County communities and could experience heavy congestion.

There are no Coaster or Amtrak stops within Del Mar. NCTD currently provides bus service to the area; however, the nearest route is along Camino Del Mar, approximately 1 mile from I-5. Thus, potential temporary impacts to the public transportation system would not be considered adverse.

Construction of the proposed alternatives may have the potential for temporary indirect economic impacts to businesses in the area as a direct result of temporary disruptions to traffic flow and existing traffic patterns. These impacts would most likely be experienced by those businesses along Via de la Valle. This would include the Del Mar Racetrack and other businesses heavily dependent upon

automobile-based patrons such as restaurants, lounges, gas stations, and convenience stores. Reduction in economic activity would be slight, however, as events at the Del Mar Fairgrounds and Racetrack are not necessarily considered highway dependent.

During construction activity, a number of incrementally positive economic impacts to the study area and the surrounding region may be realized. For the duration of construction activities, use of local labor and local procurement of materials, goods, and services would result in positive impacts to the local employment and business activity. Additionally, tourists, commuters, and the overall general public may find Camino Del Mar an agreeable alternative to the potential traffic interruptions closer to I-5. If this is the case, the increase in people may provide an increase in local economic activity in Del Mar. However, no permanent employment or increase in business activity is anticipated as a result of construction activities associated with the proposed alternatives.

While businesses and residents within Del Mar would not be directly affected by the proposed alternatives, public services may be affected by temporary disruptions to access. This is because many of the public facilities are located outside of Del Mar and necessitate travel to the east of the city. These include schools such as Torrey Pines High School and Carmel Valley Middle School and the Encinitas Sheriff's Station, which serves Del Mar and is located at Encinitas Boulevard and El Camino Real east of Del Mar. The fire station, which is located on the grounds of the Del Mar Fairgrounds and Racetrack, also provides fire fighting services through a mutual aid agreement to other area municipalities, including San Diego, Solana Beach, Encinitas, and the Rancho Fire Protection District. Depending on the time of day when construction occurs, and the extent and duration of construction activities, students going to school and emergency responders, both of whom would travel outside of Del Mar and on I-5, could experience longer travel times due to construction or lane closures. However, as described above, the Department would implement measures such as signage and detours to minimize access and traffic impacts during construction activities. In addition, these impacts would be temporary and would not result in a long-term shift in area land uses.

The Del Mar Fairgrounds and Racetrack and San Dieguito River Park are the only recreational facilities within the area of direct impacts in Del Mar. With major access to the Del Mar Fairgrounds and Racetrack provided by the interchange at Via de la Valle, the events that occur each year at the facility could be affected by traffic congestion, depending on the extent and duration of construction activities. However, the Department would likely implement measures to minimize potential access impacts to the Del Mar Fairgrounds and Racetrack in ways similar to those utilized elsewhere throughout the study area.

Construction of the proposed alternatives would unavoidably result in noise and dust generation. However, as no construction activity would occur within Del Mar city limits, impacts associated with these phenomena are not considered to be adverse.

3.1.3 Solana Beach

Approximately 2 miles of the proposed alternatives are located in Solana Beach, from just north of the interchange at Via de la Valle to 0.75 mile north of the interchange at Lomas Santa Fe Drive. The 10+4 alternative would include the construction of four HOV lanes (two in each direction) and two GP lanes (one in each direction) within Solana Beach. The 8+4 alternatives would have the same HOV configuration, with no GP lanes. The proposed alternatives also include the construction of two community enhancement features in Solana Beach, including streetscape enhancements on Ida Avenue and the construction of a trailhead at Solana Hills Drive. The alternatives would also necessitate the construction of a number of retaining walls and noise abatement structures as described in Section 3.2.1.8.

Various locations within Solana Beach could experience temporary disruptions to existing travel patterns, primarily on I-5, during construction activities due to lane restrictions, lane closures, or temporary detours. This could, in turn, affect other major roads within the study area in Solana Beach, specifically the I-5 interchanges, which include Via de la Valle and Lomas Santa Fe Drive. Other roads adjacent to the construction area, such as Ida Avenue, may also experience disruptions. Areas potentially used as construction staging areas, as well as the roads connecting these staging areas to the construction sites, may also be disrupted. These disruptions could affect local and regional travel patterns depending on the level of service (LOS) experienced during peak hours.

Public transportation facilities and routes throughout the study area, particularly those within the area of direct impacts, may also experience service delays and disruptions. Although the Coaster and Amtrak rail lines have a stop in Solana Beach, due to the distance from the proposed alternatives and the fact that the rail line does not cross the proposed alternatives in this part of the study area, no impacts are anticipated. The NCTD bus system in this area, "The Breeze," may experience temporary disruptions such as delays due to construction activities. The area is serviced by seven bus routes, some of which travel on roads that may experience construction-related delays and detours.

Construction of the proposed alternatives may have the potential for indirect temporary economic impacts to businesses located within the direct impact area, as a direct result of disruptions to traffic flow and existing traffic patterns. This is particularly true for those businesses along roads that directly interchange with I-5. Businesses that are heavily dependent upon patrons who travel along the roadways, such as restaurants, lounges, gas stations, convenience stores, and specialty food stores (e.g., ice cream parlors, candy stores, roadside produce stands) could experience economic impacts associated with decreased visitation resulting from congestion or detours. The interchange at Via de la Valle, while providing access to the southern portion of Solana Beach, is discussed in Section 3.1.2. Businesses located at the Lomas Santa Fe Drive interchange could be affected by construction activity, as this interchange is a vital entry point into the municipality. Service businesses and a shopping center are located in this area, as are offices in the northwest quadrant of the interchange.

During construction of the proposed alternatives, a number of incrementally positive economic impacts to businesses in Solana Beach and the surrounding region may be realized. For the duration of construction activities, use of local labor and local procurement of materials, goods, and services would result in positive impacts to the local employment and business activity. Additionally, tourists, commuters, and the general public may utilize Highway 101 through Solana Beach as an agreeable alternative to the potential traffic interruptions closer to I-5. The potential increase in vehicular traffic may result in an increase in local economic activity in Solana Beach. However, no permanent

employment or increase in business activity is anticipated as a result of construction activities related with the proposed alternatives.

Construction activities on I-5 would be located near a number of neighborhoods within Solana Beach. These neighborhoods are not necessarily delineated by planning documents but do include Eden Gardens, a cluster of older homes with a high proportion of Hispanic residents. Aerial surveys show that I-5 is bounded on each side by residential land uses throughout Solana Beach, including newer construction in the north. Depending on the time of day and the extent and duration of the construction activities, residents of these neighborhoods could experience longer wait times as they travel to and from I-5. However, as described above in Section 3.1, the Department would implement measures including detours and signage to minimize access and traffic impacts during construction activities.

In addition to the business and residential areas mentioned above, public service and recreation facilities within the study area may also experience temporary access impacts. Residents of Solana Beach use a number of services outside of the municipality and, similar to Del Mar, may experience impacts because travel on I-5 and to areas east of the city is necessitated. Public facilities potentially affected include four schools within the area of direct impacts (Solana Presbyterian, Santa Fe Christian High, Solana Vista Elementary, and Earl Warren Middle), with high school students in Solana Beach traveling southeast to Torrey Pines High School in San Diego. The one fire station in Solana Beach is not within the area of direct impacts but generally coordinates service and personnel on a mutual aid basis with Rancho Santa Fe, Del Mar, Encinitas, and San Diego and may experience traffic-related impacts from construction. Police protection is provided by the San Diego County Sheriff's Department, which operates out of the Encinitas Sheriff's Station. Parks and recreation centers may also be temporarily affected by access disruptions, including La Colonia Park, which is the only park completely within the area of direct impacts. However, La Colonia Park is 0.25 mile west of I-5, and impacts are not anticipated to be adverse. Finally, a number of community centers and clubs could be affected by temporary construction-related impacts. These centers include the community centers at La Colonia and Fletcher Cove, the Solana Beach Branch Library, and parts of the private golf course at Lomas Santa Fe Country Club. However, these facilities are located away from the project footprint, and the Department would implement measures to minimize potential access and environmental impacts to businesses and facilities similar to those utilized for residential neighborhoods.

Construction of the proposed alternatives would unavoidably result in noise and dust generation. Residential neighborhoods and community facilities within the direct impact area, particularly Santa Fe Christian High School, which is immediately adjacent to I-5, could experience temporary indirect impacts related to construction noise and dust generation. Depending on the placement of staging areas throughout the study area, construction equipment also has the potential to temporarily affect views along I-5. If construction occurs after daylight hours, construction equipment that requires lighting could result in temporary indirect visual impacts related to temporary light pollution. Dust generation would be minimized by employing BMPs during construction such as regular watering, covering exposed dirt piles, and construction site maintenance.

3.1.4 Encinitas

Approximately 6.75 miles of the proposed alternatives are located in Encinitas, from San Elijo Lagoon to La Costa Avenue. The 10+4 alternatives would result in the construction of four HOV lanes (two in each direction) and two GP lanes (one in each direction) on I-5 within Encinitas, operating in both north and south directions. The 8+4 alternatives would have the same HOV configuration, with no GP lanes. The proposed alternatives also include the construction of a DAR and transit facility at Manchester Avenue. Six community enhancement features would be constructed within Encinitas: a Manchester Avenue pedestrian bridge and trails, Villa Cardiff Drive improvements, a Hall Property Park trail connecting to Santa Fe Drive, a trail connecting Santa Fe Drive to Requeza Street, a trail connecting Requeza Street to Encinitas Boulevard, and a Union Street pedestrian overpass and trail connection. The alternatives would also necessitate the construction of a number of retaining walls and noise abatement structures as described in Section 3.2.4.8.

Various locations within Encinitas could experience temporary disruptions to existing travel patterns, primarily along I-5, during construction activities due to lane restrictions, lane closures, or temporary detours. This could, in turn, affect other major roads, specifically those at I-5 interchanges including Manchester Avenue, Birmingham Drive, Santa Fe Drive, Encinitas Boulevard, Leucadia Boulevard, and La Costa Boulevard. Additionally, the construction of the DAR at Manchester Avenue could interrupt circulation on Manchester Boulevard, as well as other roads in the vicinity of the construction. Encinitas Boulevard may experience substantial temporary disruptions, as the existing roadbed would be lowered to below grade levels to accommodate a wider overpass. These disruptions could affect local and regional travel patterns depending on the congestion experienced during peak periods.

Public transportation facilities and routes throughout the study area, particularly those within the area of direct impacts, may also experience service delays and disruptions. This includes Coaster access at the Encinitas Transit Center Station, located at the southeast corner of Encinitas Boulevard and Coast Highway 101. Disruptions may affect the regional bus system through detours or delays. The Encinitas Transit Center provides service along five routes to Oceanside, San Marcos, and destinations within Encinitas. These destinations include Scripps Memorial Hospital and commercial activity centers. The Park and Ride facility at Birmingham Drive and Encinitas Boulevard would likely be used, in whole or in part, as a construction staging area, which may temporarily limit the number of available parking spaces and its use by commuters.

Construction of the proposed alternatives may have the potential for temporary indirect economic impacts to a number of businesses as a direct result of disruptions to traffic flow and existing traffic patterns. This is particularly true for those businesses along roads that directly interchange with I-5. Businesses that are heavily dependent upon patrons who travel along the roadways such as restaurants, lounges, gas stations, convenience stores, and specialty food stores (e.g., ice cream parlors, candy stores, roadside produce stands) could experience indirect economic impacts through decreased visitation resulting from congestion or detours. At the Manchester Avenue interchange, affected businesses could include a gas station and roadside produce stands. At the Birmingham Drive interchange, affected businesses could include a hotel and gas station located in the northeast quadrant, a public storage facility and gas station located in the southeast quadrant, and a gas station

located in the southwest quadrant. At the Santa Fe Drive interchange, affected businesses could include the shopping center in the southwest quadrant of the interchange, as well as the gas station, restaurants, and retail shops located in the northeast quadrant. At the Encinitas Boulevard interchange, the gas station, restaurants, and shopping center east of I-5 could be affected. At the Leucadia Boulevard interchange, the motel located in the southeast quadrant could be affected. At the La Costa Avenue interchange, the impacts to businesses could include the gas station located in the northwest quadrant.

During construction of the proposed alternatives, a number of incrementally positive economic impacts to businesses in Encinitas and the surrounding region may be realized. For the duration of construction activities, use of local labor and local procurement of materials, goods, and services would result in positive impacts to local employment and business activity. Additionally, tourists, commuters, and the overall general public may utilize Coast Highway 101 as an alternative to the potential traffic interruptions closer to I-5. The potential increase in vehicular traffic may result in an increase in local economic activity in Encinitas. However, no permanent employment or increase in business activity is anticipated as a result of construction activities associated with the proposed alternatives.

Construction activities along I-5 would be located near a number of neighborhoods within Encinitas, including Cardiff, Leucadia, Old Encinitas, and New Encinitas. Depending on the time of day when construction occurs, and the extent and duration of construction activities, residents of these neighborhoods could experience longer wait times as they travel to and from I-5. However, as described above, the Department would implement measures to minimize access and traffic impacts during construction activities.

In addition to the businesses and residential areas mentioned above, public service and recreational facilities within the study area may also experience temporary indirect access impacts. Those facilities within the direct impact area that could be most likely affected include four elementary schools and two high schools. None of these six schools in the direct impact area are located adjacent to I-5, and any potential access impacts would be temporary and indirect in nature. While the Encinitas Sheriff's Station is located outside of the study area, there are three fire stations within the area of direct impacts. Fire Station 2 is located at the I-5/Birmingham Drive interchange closest to construction activity and could be indirectly affected by construction-related detours and congestion. Parks and recreation centers may also be indirectly affected, specifically those located immediately adjacent to the proposed alternatives. The Paul Ecke Sports Park is adjacent to I-5 and may experience secondary proximity impacts that are temporary in nature. No physical impacts are anticipated. Two libraries are located within the area of direct impacts and could also experience temporary access impacts, including the Encinitas branch library and the Cardiff library. Scripps Memorial Hospital is also within the area of direct impacts, located immediately west of I-5 on Santa Fe Drive. The hospital may also experience temporary disruptions to access and circulation; however, as described above, the Department would implement measures identified in the TMP to minimize such impacts.

Construction of the proposed alternatives would unavoidably result in noise and dust generation. Residential neighborhoods and community facilities within the direct impact area, particularly those directly adjacent to I-5, could experience temporary indirect impacts related to construction noise and dust generation. Depending on the placement of staging areas throughout the study area, construction equipment also has the potential to affect views along I-5. If construction occurs after daylight hours, construction equipment that requires lighting could result in adverse visual impacts related to temporary light pollution. Dust generation would be minimized by employing BMPs during construction such as regular watering, covering exposed dirt piles, and construction site maintenance.

3.1.5 Carlsbad

Approximately 7 miles of the proposed alternatives are located in Carlsbad, extending from Batiquitos Lagoon north to Buena Vista Lagoon. The 10+4 alternatives would result in the construction of four HOV lanes (two in each direction) and two GP lanes (one in each direction) on I-5 within Carlsbad. The 8+4 alternatives would have the same HOV configuration, with no GP lanes. The proposed alternatives in Carlsbad include the construction of a DAR at Cannon Road. Five community enhancement features would also be constructed within Carlsbad: Park and Ride enhancement at La Costa Avenue, a trail on the east side of I-5 at Batiquitos Lagoon, a trail on the west side of I-5 at Agua Hedionda Lagoon, a trail on the east side of I-5 at Agua Hedionda Lagoon, and streetscape enhancements on Chestnut Avenue. The proposed alternatives would also necessitate the construction of a number of retaining walls and noise abatement structures.

Various locations within Carlsbad could experience temporary disruptions to existing travel patterns, primarily along I-5, during construction activities. This could result in potentially adverse impacts due to lane restrictions, lane closures, or temporary detours. This could, in turn, affect other major roads within the study area in Carlsbad, specifically I-5 interchanges, including Poinsettia Lane, Palomar Airport Road, Cannon Road, Tamarack Avenue, Carlsbad Village Drive, and Las Flores Drive. Additionally, the construction of the DAR at Cannon Road could interrupt circulation on Cannon Road, as well as other roads in the vicinity of the construction, including those that connect to Legoland and the automobile dealerships nearby.

Public transportation facilities and routes throughout the study area, particularly within the area of direct impacts, may also experience service delays or disruptions. This includes the Coaster rail line, which passes through Carlsbad to the west of I-5. This also includes the Carlsbad Village and Carlsbad Poinsettia Coaster stations, which are both within the area of direct impacts. These disruptions may also delay or detour the regional bus system throughout Carlsbad. This includes the seven routes in Carlsbad that provide service south to Encinitas, east to Vista, and destinations within Carlsbad. These destinations include the Flower Fields and Palomar College. A Park and Ride lot south of Batiquitos Lagoon would likely be used as a construction staging area. Depending on the degree to which this space is used, the lot may experience reduced parking availability and limitations to use by commuters.

Construction of the proposed alternatives may have the potential for temporary indirect economic impacts to a number of businesses as a direct result of disruptions to traffic flow and existing traffic patterns. This is particularly true for those businesses along roads that directly interchange with I-5. Businesses that are heavily dependent upon patrons who travel along the roadways, such as restaurants, lounges, gas stations, convenience stores, and specialty food stores (e.g., ice cream parlors, candy stores, roadside produce stands) could experience economic impacts associated with

decreased visitation resulting from congestion or detours. At the Poinsettia Lane interchange, affected businesses could include the shopping center to the southwest and the hotels in the northwest quadrant of the interchange. At the Palomar Airport Road interchange, businesses affected could include restaurants in the northwest quadrant, a hotel and shopping mall in the northeast quadrant, and restaurants and a gas station in the southeast quadrant. At the Cannon Road interchange, businesses affected could include roadside fruit stands and the auto dealerships in the southeast quadrant. At the Tamarack Avenue interchange, businesses affected could include a gas station and restaurant in the northwest quadrant, and a small shopping center in the southeast quadrant of the interchange. At the Carlsbad Village Drive interchange, the restaurants, specialty retail shops, and the gas stations at the northwest and southeast of the interchange could be affected. Finally, at Las Flores Drive, the businesses affected could be minimal, as offices are the primary land use in this area.

During construction of the proposed alternatives, a number of incrementally positive impacts to businesses in Carlsbad and the surrounding region may be realized. For the duration of construction activities, use of local labor and local procurement of materials, goods, and services would result in positive impacts to local employment and business activity. Additionally, tourists, commuters, and the overall general public may utilize Carlsbad Boulevard as an alternative to the potential traffic interruptions closer to I-5. The potential increase in vehicular traffic may result in an increase in local economic activity in Carlsbad. However, no permanent employment or increase in business activity is anticipated as a result of construction activities associated with the proposed alternatives.

Construction activities along I-5 would be located near a number of neighborhoods within Carlsbad in the northwestern and southwestern quadrant of the city. While not officially defined, neighborhoods within the Carlsbad study area include Mariners Point, Promenade-La Costa, and the Barrio. Depending on the time of day when construction occurs, and the extent and duration of construction activities, residents of these neighborhoods could experience longer wait times as they travel to and from I-5. However, as described above, the Department would implement measures to minimize access and traffic impacts during construction activities.

In addition to the businesses and residential areas mentioned above, public service and recreational facilities within the study area may also experience temporary access impacts. Those within the direct impact area include four elementary schools, one middle school, and two high schools. Those located immediately adjacent to I-5, Discovery Isle Child Development Center, Saint Patrick Parish School, and Buena Vista Elementary, could be most affected by construction activity. Of the two police stations within Carlsbad, one is located within the area of direct impacts. Additionally, Fire Stations 1 and 4, two of the six fire stations within Carlsbad, are in the direct impact area. Parks and recreation facilities may also be indirectly affected, including three lagoons and four city-managed parks that are located, at least partially, within the area of direct impacts. These parks include Hosp Grove Park, Holiday Park, Cannon Park, and Poinsettia Park. Holiday Park is located nearest to the proposed alternatives and would likely experience access and other temporary construction-related impacts. No physical impacts would occur to the park. Additionally, the Harding Community Center, located west of I-5 and south of Carlsbad Village Drive immediately adjacent to I-5, could also be affected if circulation is interrupted in the area.

Construction of the proposed alternatives would unavoidably result in noise and dust generation. Residential neighborhoods and community facilities within the direct impact area, particularly those related to construction directly adjacent to I-5 as defined above, could experience temporary indirect impacts from noise and dust generation. Depending on the placement of staging areas throughout the study area, construction equipment also has the potential to affect views along I-5. If construction occurs after daylight hours, construction equipment that requires lighting could temporarily affect views related to temporary light pollution. Dust generation would be minimized by employing BMPs during constriction such as regular watering, covering exposed dirt piles, and construction site maintenance.

3.1.6 Oceanside

Approximately 3.2 miles of the proposed alternatives are located in Oceanside, from the interchange with SR 78 north to just north of Harbor Drive at Vandegrift Boulevard. The 10+4 alternatives would result in the construction of four HOV lanes (two in each direction) and two GP lanes (one in each direction) on I-5 within Oceanside. The 8+4 alternatives would have the same HOV configuration, with no GP lanes. The proposed alternatives in Oceanside include the construction of a DAR at Oceanside Boulevard. Nine community enhancement features would be constructed within Oceanside: a pocket park and access at California Street; Oceanside Boulevard pedestrian streetscape enhancement, enhancements to the Division Street overpass, enhanced pedestrian overpass connection on Mission Avenue, enhanced pedestrian overpasses connection on Bush Street, a community open space park, a parking/staging area at SR 76, pedestrian underpass improvements at San Luis Rey River, and a regional gateway feature at Harbor Drive. The alternatives would also necessitate the construction of a number of retaining walls and noise abatement structures as described in Section 3.2.6.8.

Various locations within Oceanside could experience temporary disruptions to existing travel patterns, primarily along I-5, during construction activities due to lane restrictions, lane closures, or temporary detours. This could, in turn, affect other major roads within the study area in Oceanside, specifically I-5 interchanges including SR 78, Cassidy Street, California Street, Oceanside Boulevard, Mission Avenue, SR 76, and Harbor Drive. Additionally, the construction of a DAR at Oceanside Boulevard could interrupt circulation on Oceanside Boulevard, as well as other roads in the vicinity of the construction, particularly those that serve the City Center Golf Course. These disruptions could affect local and regional travel patterns depending on the LOS experienced during peak periods.

Public transportation facilities and routes throughout the study area, particularly within the area of direct impacts, may also experience service delays and disruptions. Although the rail line does not cross I-5 and the Oceanside Transit Center Station is not within the direct impact area, the Coaster, Metrolink, and Amtrak lines that travel to stops along the coast between San Diego and Los Angeles may experience patronage impacts due to temporary access disruptions. It is more likely, however, that project construction would interrupt the Sprinter, which passes beneath I-5 on its way to Vista, San Marcos, and Escondido. Disruptions associated with the construction of the proposed alternatives may also delay or detour the 15 fixed bus routes in Oceanside that provide service to San Clemente, MCB Camp Pendleton, La Jolla, UTC, and UCSD. The bus system also connects major destinations within Oceanside, including El Camino North Shopping Center, the Oceanside Senior Center, the Oceanside Municipal Airport, and beach areas. Park and Ride lots at Recreation Park and at the SR 78

interchange would also be used as construction staging areas. Depending on the degree to which these areas are used for staging, parking availability and commuter use of these facilities may decrease.

Construction of the proposed alternatives may have the potential for temporary indirect economic impacts to a number of businesses as a direct result of disruptions to traffic flow and existing traffic patterns. This is particularly true for those businesses along roads that directly interchange with I-5. Businesses that are heavily dependent upon patrons who travel along the roadways, such as restaurants, lounges, gas stations, convenience stores, and specialty food stores (e.g., ice cream parlors, candy stores, roadside produce stands) could experience economic impacts as people deal with congestion or detours. At the SR 78 interchange, the affected businesses could include the restaurant and specialty retail store located in the southwest quadrant of the interchange. At the Cassidy Street interchange, impacts are expected to be insignificant as no commercial or industrial activities are located in the immediate area. Similarly, the California Street interchange is also absent of commercial or industrial activities. At the Oceanside Boulevard interchange, affected businesses could include the retail stores and restaurants located in the northeast quadrant of the interchange, the various commercial businesses located in the southeast of the interchange, and the gas station and motel located in the northwest quadrant of the interchange. At the Mission Avenue interchange, the affected businesses could include retailers in the shopping center in the northwest quadrant of the interchange, as well as restaurants located to the northeast and a gas station located in the southeast. The affected businesses located at the SR 76 interchange include two restaurants and motel. Finally, the affected businesses located at the Harbor Drive interchange include a motel, restaurants, a gas station, and specialty businesses located in the southwest quadrant.

During construction of the proposed alternatives, a number of incrementally positive economic impacts to businesses in Oceanside and the surrounding region may be realized. For the duration of construction activities, use of local labor and local procurement of materials, goods, and services would result in positive impacts to the local employment and business activity. Additionally, tourists, commuters, military personnel, and the overall general public may utilize Coast Highway as an agreeable alternative to the potential traffic interruptions closer to I-5. The potential increase in vehicular traffic may result in an increase in local economic activity in Oceanside. However, no permanent employment or increase in business activity is anticipated as a result of construction activities associated with the proposed alternatives.

Construction activities along I-5 would be located near a number of neighborhoods within Oceanside, including Townsite, South Oceanside, East Side Capistrano, Loma Alta, and Fire Mountain. Depending on the time of day when construction occurs, and the extent and duration of construction activities, residents of these neighborhoods could experience longer wait times as they travel to and from I-5. However, as described above, the Department would implement measures to minimize access and traffic impacts during construction activities.

In addition to the businesses and residential areas mentioned above, public service and recreational facilities within the study area may also experience temporary access impacts. Those within the direct impact area include four public elementary schools, one middle school, and two high schools. Of these schools, Oceanside High School and San Rafael Elementary School in the southern part of Camp Pendleton would likely be most affected by temporary disruption to access. Both Oceanside police stations and three community service centers, with which the police department operates, are also in the area of direct impacts and could be affected by construction-related congestion or detours. Parks and recreation facilities may also be indirectly affected, including six parks that are located, at least partially, within the area of direct impacts. Park and recreation facilities adjacent to the proposed alternatives include the Center City Golf Course and Recreation Park, which includes the Senior Citizens Center. These facilities would be indirectly affected by proximity impacts related to construction. No adverse physical impacts are anticipated.

Construction of the proposed alternatives would unavoidably result in noise and dust generation. Residential neighborhoods and community facilities within the direct impact area, particularly those related to construction directly adjacent to I-5 as described above, could experience temporary indirect impacts related to noise and dust generation. Depending on the placement of staging areas throughout the study area, construction equipment also has the potential to affect views along I-5. If construction occurs after daylight hours, construction equipment that requires lighting could temporarily affect views related to temporary light pollution. Dust generation would be minimized by employing BMPs during construction such as regular watering, covering exposed dirt piles, and construction site maintenance.

3.2 OPERATIONAL IMPACTS

The proposed alternatives have the potential to result in long-term impacts associated with the ultimate operation of four HOV lanes in each direction and one additional GP lane in each direction (only for the 10+4 alternatives), as well as the realigned interchanges, overcrossings and undercrossings, DARs, and community enhancement features. Operational impacts could affect travel patterns, access, and parking; residential and commercial relocations; land use impacts; farmland impacts; impacts to the local economy; community facilities and services impacts; visual impacts; and air quality and noise impacts.

3.2.1 <u>San Diego</u>

3.2.1.1 Travel Patterns, Access, and Parking

The City of San Diego is the southernmost municipality discussed in this CIA and contains within its borders the southern terminus of the I-5 North Coast Corridor. The proposed alternatives within San Diego begin at the La Jolla Village Drive interchange and extend north approximately 6 miles to the Via de la Valle interchange. Within this segment of I-5, the corridor extends through five official community planning areas, including La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley.

Six interchanges provide access to and from local San Diego communities to I-5, including La Jolla Village Drive, Genesee Avenue, Roselle Street/Sorrento Valley Road, Carmel Valley Road/SR 56, Del Mar Heights Road, and Via de la Valle. Prime arterials on this area include Del Mar Heights Road, Carmel Mountain Road, Camino Santa Fe, Torrey Pines Drive, and La Jolla Village Drive, which carry high traffic volumes and provide local and regional circulation. Major arterials in the area include

Sorrento Valley Parkway, El Camino Real, Carmel Creek Road, Carmel Mountain Road, Lusk Boulevard, and North Torrey Pines Road. The proposed alternatives are designed to reduce congestion on the I-5 North Coast Corridor by increasing capacity through the addition of HOV lanes for all four alternatives and GP lanes for the 10+4 alternatives. From La Jolla Village Drive to south of Sorrento Valley, I-5 would be expanded to include one HOV lane in both northbound and southbound directions. A DAR would be created at Voigt Drive, immediately north of La Jolla Village Drive, which would allow traffic direct access from local streets to median HOV lanes without entering main traffic lanes.

The proposed alternatives also include a number of community enhancement projects to be implemented in conjunction with the proposed project. These enhancements would improve pedestrian circulation and access between communities east and west of I-5. Community enhancements within San Diego include:

- Peñasquitos Creek Trail Connection
- Carmel Valley Bicycle/Pedestrian Trail Connection
- Enhanced Park and Ride at Carmel Valley Road
- Pedestrian Overpass Connection North of Del Mar Heights Road

These enhancements include the construction of trails, pedestrian bridges, and streetscape improvements, which could increase alternative transportation use and enhance pedestrian and bicycle circulation. A new Peñasquitos Creek Trail would be constructed as an I-5 undercrossing and would link existing Peñasquitos Creek trails to Sorrento Valley Road to create better pedestrian and bicycle access between the Sorrento Valley Coaster Station and local residential and commercial developments. At SR 56/Carmel Valley Road, a pedestrian and bicycle trail undercrossing would be constructed from an existing Peñasquitos Lagoon trail heading west connecting with the Carmel Valley trail, which ends at the Pacific Ocean. In addition, the existing Park and Ride facility located at the southwest quadrant of the SR 56/I-5 interchange would be improved. Trails leading to and from the Park and Ride lot would be enhanced with paving and landscaping to create a visual buffer between trails and parking area. A scenic overlook would be incorporated at the west side of the Park and Ride to provide views of Peñasquitos Lagoon. Immediately north of Del Mar Heights Road, a new pedestrian and bicycle pathway overcrossing would provide a direct connection between residential areas east of the freeway and the Del Mar Elementary School on the west side.

In addition to the proposed community enhancements, the North Coast I-5 Corridor would also include new and/or upgraded local bicycle facilities. Most new bicycle facilities would be upgraded to Class II or Class III bicycle routes. Under the City of San Diego's bicycle classification system, a Class II bike lane is a bicycle facility featuring a striped lane, or sometimes a slight buffer, on the paved area of a road for preferential use by cyclists. A Class III bike route provides for shared use with pedestrian and vehicle traffic. Within San Diego, Del Mar Heights Road would be upgraded to a Class II bicycle facility.

Improvements to circulation in San Diego along I-5 and at interchanges would likely reduce congestion along other local major roads serving local communities, as motorists would minimize the use of alternate routes. Implementation of the proposed alternatives would result in increased vehicular capacity, especially for the 10+4 alternatives, which include additional GP lanes, and therefore higher ADT volumes on the northbound and southbound I-5 corridor and at interchanges. The increased capacity would likely result in improved LOS and shortened commute times. This increased capacity on the I-5 North Coast Corridor would benefit residents in San Diego communities near I-5, as well as regional commuters.

Implementation of the proposed project, in conjunction with improved links to alternative and public transportation via the community enhancement features, would improve circulation and access to a number of community facilities, residential neighborhoods, and commercial centers. These would improve access to heavily trafficked community facilities including the UTC shopping center, Torrey Pines State Reserve, Torrey Pines Golf Course, Del Mar Heights School, and Crest Canyon Open Space Park at the San Dieguito Lagoon. The proposed DAR at Voigt Drive would result in a new point of entry to the UCSD campus and Medical Center, which would improve community circulation to the campus.

Increased capacity on I-5 may assist in improving emergency response times for local emergency service providers. Several large medical facilities are located in the immediate vicinity of I-5 in this area, including the VA hospital, Scripps Memorial Hospital, and the USCD Medical Center campus complex, which includes Thornton Hospital and several other significant facilities. The addition of HOV lanes and the construction of a DAR at Voigt Drive would improve access to these facilities and, by means of improved LOS, may lead to shorter emergency responses times.

The proposed alternatives are generally located within existing ROW; however, there are several locations along the corridor where the proposed improvements may require widening of the existing ROW, which could have implications for existing development. Conversion of existing uses to ROW could result in a loss of parking. Under the 8+4 with Barrier and both 10+4 alternatives, a parking lot associated with a retail mall is expected to lose approximately 30 marked parking stalls along the western edge of the property. This loss of parking is not considered substantial, however, as the remaining parking appears to be adequate to serve the current land use. Additional parking impacts may occur along Gilman Drive. Under all four alternatives, approximately 0.5 mile of unmarked on-street parking may be displaced by the proposed project. Despite occurring in a residential area, a public parking lot is nearby and it is not likely that there is a high demand for on-street parking. The remaining parking in the area appears to be adequate to serve the current land use. No adverse parking impacts are anticipated for the proposed alternatives within San Diego.

The Park and Ride facility located southeast of the interchange of I-5 and Carmel Valley Road may experience impacts under all proposed alternatives. However, the Park and Ride facility located at Carmel Valley Road would be incorporated into the design of the proposed alternatives through a community enhancement project. Parking would increase from approximately 80 marked stalls to over 200. This is considered a positive effect of the proposed alternatives to parking.

Implementation of the proposed alternatives, including the addition of HOV lanes, GP lanes for the 10+4 alternatives, improvements to freeway interchanges, the DAR at Voigt Drive, and the community enhancement features, would reduce congestion along the I-5 North Coast Corridor and would improve

access to and from adjacent communities. Cross-freeway access of pedestrians and bicyclists (as well as vehicles) would also improve, facilitating movement between communities on either side of the freeway, diminishing to a degree existing impediments to community interaction brought about by I-5 itself.

3.2.1.2 Relocation Impacts

Implementation of the proposed alternatives would remain largely within the existing I-5 footprint. A Draft Relocation Impact Report (DRIR; Caltrans 2007c) was prepared for the project in August 2007 and is attached as Appendix A. As described in the DRIR, no residential or business displacements would occur within the San Diego portion of the alignment for any of the four alternatives, and no adverse relocation impacts would occur.

3.2.1.3 Land Use Impacts

Existing Land Use

Land use within the San Diego portion of the project corridor is primarily urban and includes UCSD, the Sorrento Valley business park area, as well as some residential developments located east of the freeway. Agricultural operations south of San Dieguito Lagoon and east of I-5 would potentially be affected by the proposed alternatives, but encroachments would be limited to the western edge of existing fields and would not preclude continued agricultural activities on the site. There are also scattered open space areas along the corridor located adjacent to these uses, including Los Peñasquitos Canyon Preserve and San Dieguito Lagoon. The proposed alternatives would potentially affect some of these open space areas located directly adjacent to the freeway but would not result in large land use shifts, since these areas are preserved as open space and are not ideal for development due to terrain restrictions. The proposed project would consist of the expansion of an existing established freeway and would be consistent with existing transportation uses.

Development Trends

The area directly adjacent to the project corridor within San Diego is generally urbanized with built-out areas interspersed with agriculture and open space areas designated for preservation. Since agricultural activities could continue on-site, encroachment into adjacent farmlands would not affect development within the area. While some developments are proposed within the study area, such as Pacific Highlands Ranch, these are located outside of the project corridor and would not be affected by the proposed project. The proposed project would expand an existing transportation corridor and is therefore not anticipated to affect development trends in the area.

Future Land Uses

One future planned project representing a potential land use change would be located near the proposed project and therefore could be affected. Development of this project is neither tied to nor dependent upon the proposed project:

- Sorrento Valley Road Reuse Project: This project is the vacation of Sorrento Valley Road between approximately Carmel Mountain Road and Carmel Valley Road and implementation of the "Pedestrian Trail/Multi-Use Path Option" or the "Park Road/Multi-Use Path Option." The first of these options consists of a pedestrian trail and an asphalt multi-use path (for runners, bicyclists, and service/emergency vehicles) along the vacated roadway. The latter option consists of a pedestrian trail and a two-way limited access road from the south closure point to the City sewer pump station No. 65 and a pedestrian trail, Class I bikeway, and northbound park road (limited hours) from the pump station to the north closure point. It is unknown if the project would be completed before the proposed project is completed.

Consistency with Plans and Policies

The City of San Diego General Plan and applicable community plans identify specific goals and policies for the various communities. Policies at the community plan level are most relevant to the proposed project, since the Process Guide and General Plan was developed for the City through 1995, and the General Plan Update is currently in draft form. A more detailed listing of relevant goals and policies and the proposed project's consistency with those policies is provided in Table 3.2-1. The proposed alternatives would not result in any substantial land use changes within the project corridor and would minimize effects to adjacent existing land uses. In addition, encroachment into adjacent open space would be minimized and would not result in fragmentation or displacement of any preserved open space areas. The Mobility Element of the San Diego General Plan explicitly outlines an increase in capacity and a reduction in congestion along the freeway system as a primary goal. Additionally, applicable community plans within San Diego reflect this larger goal of the provision of a transportation system that provides convenient linkages to the rest of the metropolitan region. Therefore the project would be generally consistent with the city and community plans and policies established for the City of San Diego within the project corridor.

Table 3.2-1. Consistency with City of San Diego Community Plans

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
Torrey Hills Community Plan and Local Coastal Program		
Transportation Element Goals: (1) Construct and maintain an adequate community circulation network that is compatible with the regional transportation system; (3) Provide a transportation system that maximizes the opportunities for public transit; (4) Provide a system of bikeways and pedestrian facilities that will encourage bicycling and walking as a means of transportation; and (5) Provide a transportation system that is a convenient linkage to the community's activity centers and to the rest of the metropolitan region. Policies: (9) Development of transportation facilities shall avoid unnecessary encroachment into environmentally sensitive areas.	The proposed project would improve circulation along I-5 by increasing capacity. The proposed project would bring the I-5 into compliance with current safety standards and improve safety through the addition of auxiliary lanes in specified locations, concrete barriers, guard rails/end treatments, crash cushions, and other safety devices. Although the proposed project would not include alternatives to motorized transportation such as bike lanes, implementation of the proposed project would not inhibit any existing alternative modes of transportation and would increase capacity for carpooling and transit.	All four alternatives would be consistent.

Table 3.2-1. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
Open Space and Resource Management Element Goals: (1) Preserve, protect, enhance, and, where possible, restore all natural open space and sensitive resource areas including Los Penasquitos Canyon Preserve, coastal sandstone bluffs and identified wildlife corridors; (2) Prohibit encroachment and impacts of adjacent development, both private and public, on areas designated open space.	The proposed project would include encroachments that may involve the loss of some natural open space and sensitive resources. However, these encroachments would be small and would not affect the overall biological value of the open space areas. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to habitat management plan species or habitat were minimized and/or mitigated to the maximum extent practicable.	All four alternatives would be consistent.
Community Facilities Element Policies: Minimize potential impacts to Penasquitos Lagoon by providing drainage facilities to control runoff, erosion, and sedimentation.	Implementation of the proposed project would include drainage design features to control runoff, erosion, and sedimentation that could affect Penasquitos Lagoon. These design features and appropriate mitigation measures are described in Section 3.X of the EIR/EIS.	All four alternatives would be consistent.
Community Design Element *Landscape Concept* Goals: (1) Develop a landscape design concept which reinforces the community's landform grading concepts; (3) Establish a landscape planting palette which employs drought tolerant, native and naturalized plant materials which are compatible with existing native vegetation, particularly the use of Torrey Pines; (4) Encourage the planting of landscape materials in natural, random freeform groupings in the same manner as existing native plant materials on and around the site;	Landscaping of the edges of the new Department ROW would be consistent with the requirements of the Torrey Hills community plan.	All four alternatives would be consistent.
Coastal Zone Policies *Open Space and Resource Management* (2) No fill or permanent structures shall be permitted within the boundaries of the Carmel Valley Restoration and Enhancement Project unless such development is first authorized by the California Coastal Commission; (3) No development, other than trails and fencing authorized in the approved coastal development permit, shall be constructed within the 50-foot buffer adjacent to the Carmel Valley Restoration and Enhancement Project, unless such development is first authorized by the California Coastal Commission.	Implementation of the proposed project would involve widening of the existing I-5 freeway and would not construct new structures. Implementation of the proposed project would require approval of the CCC.	All four alternatives would be consistent.
La Jolla Community Plan		
No relevant goals or policies.		
Torrey Pines Community Plan		
Resource Management and Open Space Element (1) Ensure long term sustainability of the unique ecosystems in the Torrey Pines community, including all soil, water, air, and biological components that interact to form healthy functioning ecosystems. (2) Conserve, restore, and enhance plant communities and wildlife habitat, especially habitat for rare, threatened, and endangered species. (3) Retain viable, connected systems of wildlife habitat, and maintain these areas in their natural state. (4) Identify, inventory, and preserve the unique paleontological, archeological, Native American, and historic resources of Torrey Pines for their educational, cultural, and scientific values. (5) Preserve, enhance, and restore all natural open space and sensitive resources areas, including Los Penasquitos Lagoon and associated uplands, Torrey Pines State park and Reserve Extension areas with its distinctive sandstone bluffs and red rock, Crest Canyon, San Dieguito Lagoon and River Valley, the Carroll Canyon Wetland/Wildlife Corridor through Sorrento Valley, and all selected corridors providing linkage between these areas. (6) Establish a pedestrian/bicycle pathway system that links all open space areas, from Carroll Canyon in the south to the San Dieguito River Valley in the north. This pathway system shall be provided concurrent with adjacent development, and shall be designed consistent with the design guidelines provided within this Plan.	The proposed project would include encroachments that would result in the loss of open space and vacant land adjacent to the existing I-5 ROW. This open space and vacant land may include trees, plant communities, and wildlife habitat. However, these encroachments would be small and would not affect the overall biological value of the open space and vacant lands. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to environmentally sensitive habitats were minimized and/or mitigated to the maximum extent practicable. Potential impacts to the unique ecosystems of the Torrey Pines community, plant communities, and wildlife habitat and related mitigation measures are described in Section 3.X of the EIR/EIS. The proposed project would potentially increase both the amount of urban pollutants in runoff and the volume of runoff generated along the corridor. The effect of the proposed project on energy consumption is uncertain. Increased capacity for carpooling and transit and increased capacity along the corridor would result in reduced energy consumption. However, reduced energy consumption associated with increased capacity for carpooling and transit and increased capacity could potentially be offset by increased energy consumption associated with increased main travel capacity under two of the alternatives and the ability of solo drivers to use HOV lanes. In addition, the proposed project would have the potential to impact significant paleontological and archaeological resources. Potential impacts to significant paleontological and archaeological resources and appropriate mitigation measures are described in Section 3.X of the EIR/EIS.	All four alternatives would be consistent.
Transportation Element (1) Provide an efficient, safe, and environmentally sensitive transportation system. (2) Ensure that transportation improvements do not negatively impact the numerous open space systems located throughout the Torrey Pines community. (3) Provide a transportation system that maximizes the opportunities for public transit use, especially in Sorrento Valley. (4) Provide a system of bikeways and pedestrian facilities that will encourage bicycling and walking as a means of transportation. (5) Provide a transportation system that provides convenient linkages to the community's activity centers and to	The proposed project would result in the loss of open space and vacant land adjacent to the existing I-5 ROW. This open space and vacant land may include trees, plant communities, and wildlife habitat. However, these encroachments would be small and would not affect the overall biological value of these areas. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to environmentally sensitive habitats were minimized and/or mitigated to the maximum extent practicable.	All four alternatives would be consistent.

Table 3.2-1. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
the rest of the metropolitan region. (6) Provide a safe and environmentally sensitive improvement of the Del Mar Terrace neighborhood streets. (7) Provide a transportation system that encourages the use of mass transit, rather than building and/or widening roads and freeway. (8) Investigate the feasibility of providing seasonal shuttle service.	Potential impacts to the unique ecosystems of the Torrey Pines community, plant communities, and wildlife habitat and related mitigation measures are described in Section 3.X of the EIR/EIS. The proposed project would potentially increase both the amount of urban pollutants in runoff and the volume of runoff generated along the corridor. The effect of the proposed project on energy consumption is uncertain. Increased capacity for carpooling and transit and increased capacity along the corridor would result in reduced energy consumption. However, reduced energy consumption associated with increased capacity for carpooling and transit and increased capacity could potentially be offset by increased energy consumption associated with increased main travel capacity under two of the alternatives and the ability of solo drivers to use HOV lanes. In addition, the proposed project would have the potential to impact significant paleontological and archaeological resources. Potential impacts to significant paleontological and archaeological resources and appropriate mitigation measures are described in Section 3.X of the EIR/EIS.	
University Community Plan		
Overall Urban Design Goals (1) Improve accessibility and use relationships within the community by establishing well-defined, multi-modal linkage systems. (2) Establish standards which give physical design direction to private development and public improvements. (3) Provide for the needs of pedestrians in all future design and development decisions. (4) Ensure that San Diego's climate and the community's unique topography and vegetation influence the planning and design of new projects. (5) Ensure that every new development contributes to the public realm and street livability by providing visual amenities and a sense of place.	The proposed project would improve accessibility by increasing capacity along I-5 within the community. Proposed HOV lanes would improve accessibility and enhance multi-modal linkages by improving the carpooling and transit capacity of the corridor. Additional GP lanes proposed under two of the alternatives would increase main travel capacity along the corridor. The proposed project would not affect the needs of pedestrians, the public realm, or street livability within the community.	All four alternatives would be consistent.
Transportation Element (1) Provide a network of transportation systems that are integrated, complementary and compatible with other citywide and regional goals. The network should take into account the physical, social, economic and environmental conditions of the community, both present and future. (2) Provide a balanced public transportation system to link the entire community to all of its own activity areas and to the San Diego metropolitan areas as a whole. (3) Encourage alternative modes of transportation by requiring developer participation in transit facility improvements, the Intra-Community Shuttle Loop and the LRT. (4) Ensure implementation of Council Policy 600-34, Transit Planning and Development.	The proposed project would not adversely affect the community's desire to provide a network of transportation systems that is integrated, complementary, and compatible with other citywide and regional goals. Increased capacity for transit via the proposed HOV lanes would improve the community's public transportation links to the San Diego metropolitan area. The proposed project would not obstruct implementation of Council Policy 600-34, which places a high priority on public transit and outlines measures to develop public transit in the City.	All four alternatives would be consistent.
Development Intensity Element (1) Create an urban node with two relatively high-density, mixed-use core areas located at the University Towne Centre and La Jolla Village Square areas. (2) Develop an equitable allocation of development intensity among properties, based on the concept of the urban node. (3) Provide a workable circulation system which accommodates anticipated traffic without reducing the Level of Service below "D."	The proposed project does not include any development projects and would adversely affect the community's plans to develop an urban node or equitably allocate development intensity. In addition, the proposed project would not adversely affect Level of Service on the community's circulation system.	All four alternatives would be consistent.
Housing/Residential Element (1) Increase the consumer's freedom of choice in terms of tenure and type of housing available. (2) Assure the retention and development of housing affordable by low- and moderate-income households, especially students and senior citizens. (3) Conserve and improve the quality of housing and prevent neighborhood deterioration. (4) Stabilize, and where possible, reduce housing prices and occupancy costs. (5) Accommodate the City's and the community's fair share of the region's growth by designating adequate residential land at appropriate densities and locations. (6) Prohibit commercial uses in designated residential areas. (7) Protect existing single-family neighborhoods as mandated by the City's Growth Management Program.	No housing would be constructed as a part of the proposed project. Additionally, the proposed project would not result in the take of any housing within the University Community Planning Area.	All four alternatives would not be consistent.
Commercial Element (1) Develop an integrated system of commercial facilities that effectively meets the needs of community residents and visitors as well as assuring that each new development does not impede the economic vitality of other existing commercial areas.	The proposed project would not include any commercial development and would not adversely affect any commercial properties within the community.	All four alternatives would be consistent.
Industrial Element (1) Ensure that industrial land needs as required for a balanced economy and balanced land use are met consistent with environmental considerations. (2) Protect a reserve of manufacturing land from encroachment by non-manufacturing uses. (3) Develop and maintain procedures to allow employment growth in the	The proposed project would not include any industrial development and would not adversely affect any commercial properties within the community.	All four alternatives would not be consistent.

Table 3.2-1. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
manufacturing sector. (4) Encourage the development of industrial land uses that are compatible with adjacent non-industrial uses and match the skills of the local labor force. (5) Emphasize the citywide importance of and encourage the location of scientific research uses in the North University area because of its proximity to UCSD.		
Public Facilities Element (1) Develop and maintain a public school system that will enable all students to realize their highest potential. Pursue the realization of integrated residential neighborhoods to achieve an integrated school system. (2) Provide a high level of service in police and fire protection. (3) Encourage the multipurpose use of existing community and private facilities.	The proposed project would not adversely affect any schools, the level of police and fire protection, or any existing community and private facilities.	All four alternatives would be consistent.
Open Space and Recreation Element (1) Preserve the natural resources of the community through the appropriate designation and use of open space. Major topographic features and biological resources should be preserved as undeveloped open space. (2) Provide a system of population-based parks to meet the community's needs for outdoor recreation. (3) Establish an open space system that will utilize the terrain and natural drainage system to guide the form of urban development, enhance neighborhood identity, and separate incompatible land uses. (4) Promote public health and safety by designating areas with high potential for landslides, earthquake faults or aircraft accidents as open space. (5) Develop a linkage system to connect recreational and natural open space areas throughout the community.	Implementation of the proposed project would not convert any park or recreational opportunities to other uses. In addition, the proposed project would not adversely affect existing or planned linkages between recreational and natural open space areas. However, implementation of the proposed project would result in the loss of open space and environmental resources.	All four alternatives are potentially inconsistent.
Noise Element (1) Minimize and avoid adverse noise impacts by planning for the appropriate placement and intensity of land uses relative to noise sources. (2) Provide guidelines for the mitigation of noise impacts where incompatible land uses are located in a high noise environment.	The proposed project would increase noise along the I-5 corridor. The proposed project would involve the construction of noise barriers, the location, height, materials and other design features of which would be determined by noise studies (see Section 3.X of the EIR/EIS for detailed discussion of noise impacts and mitigation measures).	All four alternatives would potentially be inconsistent pending the results and noise mitigation measures identified in the noise study(ies).
Safety Element (1) Protect the public health and safety by guiding future development so that land use is compatible with identified geologic risks, including seismic and landslide hazards. (2) Ensure that proposed development does not create or increase geologic hazards either on- or off-site. (3) Promote public safety by taking into account aircraft accident potential in the	The proposed project would be designed and constructed to withstand seismic events and geologic hazards in compliance with current standards; therefore, as discussed in Section 3.X of the EIR/EIS, no effect on safety due to seismic events or geologic hazards would occur. Proposed design measures to minimize geologic hazards include the addition or replacement of retaining walls in areas that	All four alternatives would be consistent.

Table 3.2-1. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
placement of structures and activities. (4) Provide for the safe operation of NAS Miramar through the preservation of appropriate departure corridors.	are either relatively steep or have ROW limitations. The proposed project would not adversely affect operations at NAS Miramar.	
Resource Management Element (1) Preserve the community's natural topography, particularly in the coastal zone and in major canyon systems. (2) Protect biological resources through the wise management and use of community's natural open space and parks. (3) Contribute to the maintenance and improvement of regional water quality by controlling siltation and urban pollutants in runoff. (4) Reduce energy consumption by requiring energy efficiency in building design and landscaping and by planning for a self-contained community and energy-efficient transportation. (5) Provide for the identification and recovery of significant paleontological resources. (6) Ensure the effective preservation and management of significant archaeological resources.	The proposed project would potentially adversely affect the community's natural topography, natural open space, and trees in order to accommodate the additional ROW. Potential impacts to the community's natural topography, natural open space and trees and related mitigation measures are described in Section 3.X of the EIR/EIS. The proposed project would potentially increase both the amount of urban pollutants in runoff and the volume of runoff generated along the corridor. The effect of the proposed project on energy consumption is uncertain. Increased capacity for carpooling and transit and increased capacity along the corridor would result in reduced energy consumption. However, reduced energy consumption associated with increased capacity for carpooling and transit and increased capacity could potentially be offset by increased energy consumption associated with increased main travel capacity under two of the alternatives and the ability of solo drivers to use HOV lanes. In addition, the proposed project would have the potential to impact significant paleontological and archaeological resources. Potential impacts to significant paleontological and archaeological resources and appropriate mitigation measures are described in Section 3.X of the EIR/EIS.	All four alternatives would be consistent.
Carmel Valley Community Plan		
Park, Recreation, and Open Space Element 1. In order to promote North City West as a balanced community, a variety of park and recreational facilities will be necessary. The balanced community policy will insure a population representative of all ages, interests, social and economic status in North City West. This population will have different recreational needs. For example, one park may contain playfields and active sports areas while another may offer picnic areas and view points. 3. In order to promote preservation of the natural environment, development of either public or private nature should not be allowed on lands designated for open space unless the proposed development is compatible with open space use. An inventory of the desirable natural features of all property within the study area	The proposed project would include encroachments that would result in the loss of open space land adjacent to the existing I-5 ROW. However, these encroachments would be small and would not affect the overall recreational or biological value of the open space lands. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to biological resources were minimized and/or mitigated to the maximum extent practicable.	All four alternatives would be consistent.

Table 3.2-1. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
together with alternative plans for the conservation of these amenities should be a prerequisite for development.		
Circulation Element 1. In order to promote North City West as a balanced community, a balanced transportation system must be included in initial construction of North City West. Such a system would assure mobility and access to all parts of the community for all residents and therefore facilitate a social balance.	The proposed project would not adversely affect the community's desire to provide a network of transportation systems that is integrated, complementary, and compatible with other citywide and regional goals. The proposed project would improve circulation along I-5 by increasing capacity. The proposed project would bring I-5 into compliance with current safety standards and improve the safety through the auxiliary lanes in specified locations, concrete barriers, guard rails/end treatments, crash cushions, and other safety devices. In addition, the proposed project would increase capacity for carpooling and transit.	All four alternatives would be consistent.

San Diego Association of Governments 2030 RTP and 2006 RTIP

The proposed project is included in SANDAG's 2030 RTP – 2006 Update and 2006 RTIP, as amended. The project is identified in the 2006 RTIP in Chapter 3, on page 26, as the Interstate 5 – HOV Managed Lanes (MPO ID: CAL09) with the following description: "From San Diego to Oceanside – construct HOV/Managed Lanes" (SANDAG 2007). The 2006 RTIP was approved on October 6, 2006, by the USDOT and has been amended six times since this approval. The proposed project is included in Amendment 2, which revised project funding. Federal Regional Surface Transportation Program funds were added. None of the amendments modified the project, CAL09, as described in the 2006 RTIP.

On February 24, 2006, the SANDAG Board adopted the 2030 Revenue Constrained RTP: 2006 Update and its air quality conformity. The USDOT issued its conformity finding on March 29, 2006. On August 4, 2006, the SANDAG Board adopted the 2006 RTIP. On October 6, 2006, the USDOT made a finding of conformity for the 2006 RTIP and a conformity redetermination for the 2030 RTP – 2006 Update.

The proposed alternatives are included under three scenarios in Appendix A, The Plans, of the 2030 RTP. Appendix A of the 2030 RTP contains the projects included in the air quality analysis (SANDAG 2004). In Table A.1, on page 171, the proposed project is included as part of a project to improve I-5, between SR 56 and Vandegrift Boulevard, from 8 GP lanes to 8 GP lanes with 4 managed lanes. Managed lanes include HOV lanes and Value Pricing lanes (SANDAG 2004). In Table A.5, on page 181, the project is included as parts of two projects, with the first improving I-5, between SR 56 and Leucadia Boulevard, from 8 GP lanes to 10 GP lanes with 4 managed lanes, and the second improving I-5, between Leucadia Boulevard and Vandegrift Boulevard, from 8 GP lanes to 8 GP lanes with 4 managed lanes (SANDAG 2004). In Table A.10, the project is included as portions of two projects, with the first improving I-5, between SR 56 and Palomar Airport Road, from 8 GP lanes to 10 GP lanes with 4 managed lanes, and the second improving I-5, between Palomar Airport Road and SR 76, from 8 GP lanes to 8 GP lanes with 4 managed lanes (SANDAG 2004).

As shown, the proposed project is included in SANDAG's 2006 RTIP, as amended, and SANDAG's 2030 RTP – 2006 Update. Both of these documents and the related conformity determinations have been approved by the USDOT.

Natural Communities Conservation Plans: City of San Diego MSCP Subarea Plan

The MSCP Subarea identifies native habitat for multiple species to be conserved in perpetuity, known as the MHPA. The proposed project would encroach into areas preserved by the City's MHPA. However, the proposed project is consistent with the policies in Section 1.4.2 of the MSCP Subarea Plan and therefore is conditionally compatible with the biological objectives of the MSCP.

3.2.1.4 Farmland Impacts

Impacts to farmlands were determined through the analysis of aerial photographs, field visits, and analysis of Important Farmland Maps. The project area is generally considered to be within a developed and urban part of San Diego County; however, there are some portions of isolated agricultural activity located near the proposed alternatives. The majority of actively farmed land along the I-5 North Coast Corridor is designated by the FMMP as Important Farmland. The proposed alternatives would directly impact between 24 and 27 acres of important farmlands that are actively being used for agriculture along the entire I-5 North Coast Corridor. Along the entire I-5 North Coast Corridor, the 10+4 with Barrier Alternative would impact 27 acres, the 10+4 with Buffer Alternative would impact 25 acres, the 8+4 with Barrier Alternative would impact 26 acres, and the 8+4 with Buffer would impact 24 acres.

The proposed alternatives have the potential to result in direct impacts to approximately 2 acres of Farmland of Statewide Importance within San Diego. The area of designated Farmland of Statewide Importance is located directly south of San Dieguito Lagoon and is currently in production. The proposed alternatives would result in encroachment that consists of edge impacts along the existing I-5 corridor and would not preclude agricultural activities on the remainder of the site. As noted in Section 2.1.1.3, an area of Farmland of Local Importance is located east of the I-5/I-805 split, and while containing soils that meet the criteria for Important Farmland, is not currently being farmed. This area would not be affected by the proposed project alternatives. Therefore, encroachment into these areas would not affect current agricultural operations within San Diego and would not be considered adverse.

The assessment of potential impacts to farmland from corridor-type projects is completed on form NRCS-CPA-106, Farmland Conversion Impact Rating for Corridor Type Projects, which rates impacts based on a point scale from zero to 260. This form is dated August 1, 2007, and is attached as Appendix B. Ratings of zero to 160 do not need to be further considered for protection under the FPPA, while those receiving ratings of over 160 to 200 may be required to undergo further evaluation or alternatives analysis. Any sites rated at over 200 are considered as resulting in an adverse effect. The

NRCS-CPA-106 form is based on a soil inventory of important farmland soils and does not exclude those important soils that are developed with urban or other uses.

The total farmland conversion impact rating for the proposed alternatives ranges from 101.73 to 101.81 (Table 3.2-2), and all four alternatives are less than the 160-point threshold established for further evaluation for adverse effects. Therefore, effects on farmlands under the FMMP for the four alternatives are not considered adverse. Impacts to Important Farmlands that would occur within each community are discussed in more detail in those individual sections. No Williamson Act contract lands would be affected by the proposed project.

Table 3.2-2. Farmland Conversion Impact Rating

Alternative	Land Converted (acres)	Prime and Unique Farmland (acres)	Percent of Farmland in County	Farmland Conversion Impact Rating
10+4 with Barrier	1,604	979	1	101.73
10+4 with Buffer	1,616	967	1	101.76
8+4 with Barrier	1,628	976	1	101.74
8+4 with Buffer	1,604	961	1	101.81

Source: Form NRCS-CPA-106 (Farmland Conversion Impact Rating for Corridor-Type Projects

The City of San Diego General Plan addresses agricultural resources within the Conservation Element. While it states a goal of retaining premium agricultural lands within the city, it acknowledges that urbanization pressures within the city may require conversion of productive lands. The proposed project would encroach into an agriculturally productive operation, but impacts would be restricted to the western edge of the operation and would not adversely affect the productivity of the site.

3.2.1.5 Impacts to Local Economy

Implementation of the proposed project may have impacts to certain characteristics of the local economy. This section examines the potential impacts related to local businesses, property values, and tax revenues.

Impacts to Local Businesses

Existing development located at each of the seven interchanges in San Diego along I-5 existing ROW is generally set back enough to allow implementation of the proposed project without displacing any local businesses. Some local businesses including restaurants, retail stores, shopping centers, gas and auto service stations, and hotels may still be indirectly affected, however. Positively affected businesses include restaurants, retail stores, and shopping centers, which may experience an increase in patronage.

Other communities in California with heavy congestion during peak hours have experienced a decrease in local patronage because long wait times and congestion deter individuals from exiting the freeway excessively (Caltrans 2006). The proposed alternatives would lead to increases in ADT and an improvement in LOS, specifically the 10+4 alternatives that include additional GP lanes. Decreased congestion along the I-5 North Coast Corridor has the potential to allow regional patrons, as well as community residents, to access San Diego businesses more efficiently, thereby promoting commerce. This would be especially true for restaurants, retail stores, and shopping centers within the directly impacted area, as they are often automobile trip destinations for residents and visitors.

Implementation of the proposed project would likely have a positive impact to businesses throughout the city, because of the improved access efficiency to other highways and surface streets. This improved access can help San Diego's many commercial centers. Beaches, lagoons, recreation areas, and other tourist attractions may experience increased visitation, resulting in increased patronage at nearby shops. Though one retail center would lose some public parking, it is not anticipated to adversely affect the operation of these businesses, as ample parking is still available.

In addition to the main I-5 improvements, community enhancements have the potential to stimulate the local economy. These projects would create and enhance destinations for residents and visitors, thus drawing people to the area, potentially enhancing commerce.

Impacts to Property Values

Property values in San Diego could be affected by displaced businesses and residences, changes in the visual environment, improved access to community facilities and other residential areas, and nearby community enhancement projects. As discussed in Section 3.2.1.2, there are no residential or business displacements within San Diego that would directly affect property values. Residential properties immediately adjacent to I-5, in addition to those properties that would experience a partial loss of land to the proposed alternatives, may experience indirect effects to property values. Those residential areas that would become closer to I-5 and the proposed retaining walls and sound walls, especially if these walls are built on easements donated by property owners, could experience a decrease in property values. These large built structures could create a more urban feel, as well as affect shade, noise levels, and viewsheds. In contrast, it may also be possible that the proximity to I-5 and installation of sound walls would improve property values, creating an environment with reduced traffic-related noise and a relative separation from the freeway. A number of factors drive property values in the San Diego region, however, such as proximity to coastal areas, school districts, accessibility to public facilities and amenities, neighborhood affiliation, lifestyle, etc. It is likely that this complex set of factors may overwhelm any project-related incremental change. Therefore, impacts to property values associated with the proposed alternatives are not known at this time.

While immediately adjacent individual residential property values may experience some neutral or adverse effects, those businesses neighboring a realigned interchange could experience an increase in economic activity as improved access and an increased capacity on the roadway could increase the number of potential customers. Additionally, the neighborhoods that enjoy the addition of the community enhancement features, such as the improved pedestrian and bicycle corridors and improved trailheads, may experience an increase in property values. These elements of the proposed project would generally improve community cohesion, creating a more inviting neighborhood and improving residential desirability for these places in the study area.

When viewing the proposed project along the entire I-5 North Coast Corridor and the improvements to the region as a whole, property values will likely improve. In addition to a potential regional increase in property values over time as a normal phenomenon of the marketplace, operation of the proposed project may have the effect of improving property values by providing residents with a more efficient and more capable freeway system. In the future, if residents have the perception that commute time along the I-5 North Coast Corridor has improved, residences in the vicinity may become more desirable, thereby indirectly increasing property values.

Impacts to Tax Revenue

Impacts associated with the removal of residential and business property by ROW takes can result in losses to property and sales tax revenue for the local jurisdictions in which the removal takes place. This loss in tax revenue is usually minimal, however, with many homeowners and businesses relocating within the municipality and continuing to pay taxes after resettling. Tax-related impacts usually can only occur if removed businesses and homeowners do not relocate within the local tax jurisdiction, since property is removed from the tax roll, or if businesses cease operation. The partial acquisition of property by a proposed project does not usually affect tax revenue unless the use of the parcel is significantly affected.

According to the DRIR, no properties within the municipality of San Diego would be removed as a result of the proposed project. Thus, no residences or businesses would require relocation within San Diego. Therefore, there are no adverse tax revenue impacts associated with the proposed alternatives in San Diego.

3.2.1.6 Community Facilities and Services Impacts

As described above in Section 2.1, there is one police station and two fire stations located within the San Diego portion of the study area. Several medical facilities at UCSD, including Scripps Green Hospital, Scripps Memorial Hospital – La Jolla, and UCSD Medical Center, are also located in the direct impact area. The proposed alternatives are not expected to displace or relocate any of these service facilities, nor are visual, noise, or air quality impacts likely to adversely affect the community facilities. Operation of the proposed project is not anticipated to adversely affect response times for emergency services associated with these facilities. It is likely that the operation of the additional HOV, the DAR at Voigt Drive, and GP lanes associated with the 10+4 alternatives may incrementally improve response times of emergency services due to increased roadway capacity.

Thirteen schools are present within the entire study area, 6 of which are located within the direct impact area. Del Mar Hills Academy, which is located adjacent to southbound I-5, north of Del Mar Heights Road, is the school closest to the proposed project. Del Mar Hills Academy is not expected to experience any displacement or relocation from the proposed alternatives. Access to the school from the freeway may become more efficient under operation of the proposed project due to higher freeway capacity, a reconstructed interchange, and the DAR at Voigt Drive. Noise levels at Del Mar Hills Academy are anticipated to increase by 3 A-weighted decibels (dBA) as a result of the proposed project. A sound wall near the school is not reasonable due to high construction costs; however, the increased noise is not likely to significantly affect the educational facility in an adverse manner.

The study area within San Diego is composed of a number of different neighborhoods, many of which contain several small parks and open space for recreation. While all parks within this region could potentially benefit from an increase in visitors due to an increased freeway capacity, the parks within the area of direct impact may experience a wider range of impacts (e.g., visual, air quality, noise, etc.) related to the operation of the proposed project. Parks within the direct impact area that could experience indirect benefits from implementation of the proposed project include San Dieguito River Park, Crest Canyon Open Space Park, Solana Highlands Park, Carmel Valley Community Park and Community Center, Los Peñasquitos Canyon Preserve, and the Torrey Hills Neighborhood Park.

All four project alternatives would require ROW takes of publicly owned land at the San Dieguito River Park. The 8+4 with Barrier Alternative would acquire the largest amount of land from the San Dieguito River Park, requiring acquisition of 0.87 acre of publicly owned land (Caltrans 2007b). The land to be acquired by the proposed alternatives includes undeveloped land at the base of the berm constructed as a part of the original I-5 freeway development and a small amount of open water of the San Dieguito River. These portions of land and open water do not possess any features or attributes that, if lost, would impede the ability of the park to function as a publicly owned open space preserve, wetlands restoration area, or regional open space greenway and park system. Therefore, impacts associated with the 8+4 with Barrier Alternative would not adversely affect any of the activities, features, or attributes of the San Dieguito River Park that qualify the resource for protection under 4(f) and would be classified as de minimis. The San Dieguito River Park's function as a publicly owned open space preserve, wetlands restoration area, or regional open space greenway and park system would not be adversely affected by impacts associated with the 8+4 with Barrier Alternative. Impacts from the remaining three alternatives would be similar.

3.2.1.7 Visual Impacts

The landscape units within San Diego defined by the Draft Visual Impact Assessment (DVIA) include La Jolla Hills, Sorrento Valley, Carmel Valley, and Del Mar Heights (Caltrans 2007d). Two key views were analyzed by the DVIA for this part of the study area: views surrounding the proposed Voigt Drive DAR, and views at the interchange of I-5 and Del Mar Heights Road. The existing visual qualities of views at the proposed Voigt Drive DAR are considered to be moderate and would be affected by the proposed DAR structures, overpass widening and realignment, freeway widening, retaining walls up to 46 feet in height, and the loss of most existing freeway landscaping. Views would likely be directed toward the proposed project, which would partially detract from the architectural quality of the immediate UCSD area. The resulting impact to visual resources is considered high and adverse.

The existing visual qualities of views at the intersection of I-5 and Del Mar Heights Road are considered to be moderate and would be affected by retaining walls on both sides of the freeway reaching heights between 0 and 40 feet, with the majority of the walls being 30 to 35 feet in height. Views of landscaped slopes would be obscured, directing attention to the widened freeway. The resulting impact to visual resources is considered moderately high and adverse.

Impacts to views from residences and community areas were not analyzed for this portion of the study area in the DVIA. There is the potential for impacts to views from residences that currently have views of I-5; however, it is unknown how the proposed project would affect views from residences or community areas.

3.2.1.8 Air Quality and Noise Impacts

In addition to general environmental concerns, impacts to air quality and noise levels during operation of the proposed project can greatly affect residents in the surrounding community. Particularly sensitive receptors include nearby homes, schools, hospitals, businesses, and outdoor recreation facilities. An adverse change in air quality can create health concerns for people living nearby and create a living/working environment that is not only unsafe, but generally unpleasant overall. Adverse changes, if left unchecked for too long, can also affect the quality of life for residents. Air quality and noise-related impacts can affect local economic activity by creating a displeasing environment in which to conduct business due to harmful surrounding air quality or bothersome noise levels. If impacts are great enough to a specific area, property values can decrease. The following section discusses air quality and noise-related impacts associated with the operation of the proposed project.

Impacts to local air quality are discussed for carbon monoxide (CO) and particulate matter in the Draft Air Quality Analysis (Caltrans 2007e). CO analysis was conducted at I-5 interchanges that have the potential to affect air quality. Interchanges identified to worsen air quality include those that are likely to increase a percentage of vehicles in cold start mode, those that substantially increase traffic volumes, and those that worsen traffic flow. Two intersections within the San Diego portion of the study area were identified as having adversely affected traffic flow under operation of the proposed project: northbound and southbound ramps at Genesee Avenue, and northbound and southbound ramps at Del Mar Heights Road. According to the Draft Air Quality Analysis, however, no thresholds at either interchange would exceed allowable levels at the AM or PM peak periods. Therefore, air quality impacts in San Diego are considered to be less than significant.

Noise impacts for San Diego, and the location and feasibility of noise abatement structures, are discussed in the Noise Abatement Decision Report (NADR; Caltrans 2007f), which separates the community into five segments. Within the five segments, a total of 15 potential sound walls were evaluated for their effectiveness and feasibility. Adverse noise impacts are considered to occur when projected noise volumes are substantially higher than those experienced currently. In most cases, however, the increase in noise levels would be barely discernable to those nearby.

Of the 15 potential sound walls evaluated in the NADR, 13 were considered infeasible for one or more of the following reasons: cost; environmental impacts; views/opinions of affected residents; noise abatement benefits; public and local agency input; or other social economic, legal, or technological factors. Of the 15 potential sound walls, 2 were recommended; however, these 2 sound walls would require a donation of property to the Department by landowners and are not considered likely. Increases in noise levels are expected to occur along the route at many sensitive receptors, including university housing, multi-family housing, single-family housing, recreation areas, and a school; however, the projected increase in noise (between 1 and 6 dBA) is generally not expected to be discernable. Locations of increased noise would benefit from sound abatement measures, and no adverse impacts to the local communities are anticipated.

3.2.2 Del Mar

3.2.2.1 Travel Patterns, Access, and Parking

Del Mar, the smallest of the six municipalities studied in the CIA, is located on the Pacific coastline and is bordered by San Diego to the south and east, and by Solana Beach to the north. The City is approximately 2 square miles in size. Del Mar's border is located entirely to the west of the I-5 and the freeway does not traverse the city at any point. The nearest point between I-5 and Del Mar is at the city's northern boundary and a portion of the northeastern area of the community falls within the 0.5-mile direct impact area buffer. At the furthest point, at the southern boundary, the freeway and city are approximately 0.75 mile apart.

The primary automobile route within Del Mar is Camino Del Mar. Del Mar Heights Road and Via de la Valle both intersect with Camino Del Mar and provide primary access from Del Mar to I-5. Although no portion of I-5 is located within Del Mar, Del Mar residents, visitors, and emergency service providers would experience benefits from additional HOV lanes, GP lanes for the 10+4 alternatives, and improvements to interchanges at Del Mar Heights Road and Via de la Valle. Travel times from residents as well as visitors, to public facilities and events, including the Del Mar beach areas, the San Diego County Fair, and the Del Mar Racetrack during racing season, would be greatly improved.

In addition, although no community enhancement projects or bicycle facility improvements are proposed within Del Mar, residents and visitors would benefit from community enhancements directly adjacent to their community, including Peñasquitos Creek Trail improvements, a new pedestrian walkway over I-5 north of Del Mar Heights Road, a pedestrian and bicycle trail constructed under I-5 at SR 56/Carmel Valley Road, and improvements to the existing Park and Ride facility located at the SR 56/I-5 interchange.

3.2.2.2 Relocation Impacts

Implementation of the proposed project would remain largely within the existing I-5 footprint. According to the DRIR (Caltrans 2007c), no residential or business displacements would occur within the Del Mar portion of the alignment, and no adverse relocation effects would occur.

3.2.2.3 Land Use Impacts

Existing Land Use

Del Mar has been generally built-out and is primarily made up of residential development with pockets of commercial development focused in the Village Center. Del Mar is not traversed by the proposed project; however, a small northeastern portion of the city is located within the direct impact area. The portion within the direct impact area is located near existing residential development, agricultural areas,

and open space associated with San Dieguito Lagoon. In addition, the Del Mar Fairgrounds and Racetrack is located west of the freeway. No encroachment into existing land uses is proposed in Del Mar under the proposed project; therefore, no shifts in existing land use are anticipated.

Development Trends

Del Mar is nearly entirely developed, with remaining open space areas designated for preservation. There are no anticipated development trends that would shift land uses within Del Mar. The proposed alternatives would not encroach into existing land uses and therefore would not contribute to any unplanned development trends.

Future Land Uses

Planned future land uses are typically in the form of infill development and redevelopment. The proposed project would not shift existing land uses, nor would it affect any future land use trends within Del Mar.

Consistency with Plans and Policies

The proposed project would not directly or indirectly affect land uses within Del Mar. There no specific policies or goals in the Del Mar LCP Land Use Element that pertain to the proposed project.

3.2.2.4 Farmland Impacts

There are no agricultural operations within Del Mar. Additionally, the proposed alternatives would not affect existing or planned land uses in Del Mar. Therefore, there would be no impacts to active farmland or designated soils supporting Important Farmland within Del Mar. Table 3.2-2 shows the Farmland Conversion Impact Ratings for each of the proposed alternatives. All alternatives have ratings less than the 160-point threshold; therefore, no adverse farmland impacts are anticipated.

3.2.2.5 Impacts to Local Economy

Implementation of the proposed project may have impacts to certain characteristics of the local economy. This section examines the potential operational impacts to local businesses, property values, and tax revenues.

Impacts to Local Businesses

As the proposed alternatives do not traverse the city, and only a small portion in the northeast is located within the direct impact area, no direct impacts to local businesses are anticipated. There is, however, the potential for indirect impacts to the Del Mar Fairgrounds and Racetrack, a key economic generator in Del Mar. It is located at the Via de la Valle/ I-5 interchange, which acts as a main conduit for traffic coming into the city. Improved traffic flow in and out of Del Mar could increase more patronage to the racetrack and other business in the city for residents and visitors alike. Improvements on I-5 and Via de la Valle would allow for better access for racetrack visitors and the surrounding retail centers and restaurants. Other roads and interchanges used to access Del Mar, such as Carmel Valley Road and Del Mar Heights Road, would also be improved by the proposed project. These improvements may result in more efficient access to Del Mar, which may result in more patronage to businesses throughout the city.

Impacts to Property Values

As seen in Figure 2.2-12, property values in Del Mar are some of the highest within San Diego County. Though the proposed alternatives would not directly affect these property values, they could be indirectly affected by changes in the visual environment, improved access to community facilities and other residential areas, and nearby community enhancement projects. As discussed in Section 3.2.2.2, there are no residential or business displacements within Del Mar that would directly affect property values. Additionally, no retaining walls or sounds walls would be constructed within Del Mar.

Those businesses immediately adjacent to a realigned interchange, such as the Del Mar Fairgrounds and Racetrack and others, could experience an increase in economic activity as improved access and an increased capacity on the roadway could increase the number of potential customers in the vicinity. Property values for these parcels, and neighboring parcels, could increase.

When viewing the proposed project along the entire I-5 North Coast Corridor and the improvements to the region as a whole, property values would most likely improve. In addition to a potential regional increase in property values over time as a normal phenomenon of the marketplace, operation of the proposed project may have the effect of improving property values by providing residents with a more efficient freeway system. In the future, if residents have the perception that commute times along the I-5 North Coast Corridor have improved, neighborhoods in the vicinity may become more desirable, thereby indirectly increasing property values.

Impacts to Tax Revenue

Impacts associated with the removal of residential and business property due to ROW expansions could result in losses to property and sales tax revenue for the local jurisdictions in which the removal takes place. This loss in tax revenue is usually minimal, however, with many homeowners and businesses relocating within the municipality and continuing to pay taxes. Tax-related impacts usually can only occur if removed businesses and homeowners do not relocate within the local tax jurisdiction, since property is removed from the tax roll, or if businesses cease operation. The partial acquisition of property by a proposed project does not usually affect tax revenue unless the use of the parcel is significantly affected.

According to the DRIR, no properties within Del Mar would necessitate relocation as a result of the proposed alternatives. Thus, no residences or businesses would require relocation. Therefore, there are no adverse tax revenue impacts associated with the proposed project in Del Mar. Due to the distance from I-5, its small size, and built-out conditions, the proposed alternatives are not likely to result in adverse economic impacts within Del Mar.

3.2.2.6 Community Facilities and Services Impacts

As described above in Section 2.2, there are no police stations in Del Mar, and one fire station is located just outside of the area of direct impacts on the grounds of the Del Mar Fairgrounds and Racetrack. No hospitals are located within Del Mar. The proposed alternatives are not expected to displace or relocate any of these service facilities. Air quality and noise operational impacts are not likely to be adverse. Operation of the proposed alternatives are not anticipated to adversely affect response times for emergency services associated with the fire station or outside sheriff's department personnel. It is likely that operation of the additional HOV and GP lanes may incrementally improve response times of emergency services.

The majority of students in Del Mar must commute outside of the municipality, traveling to nearby Del Mar Hills Academy, Solana Highlands Elementary, Carmel Valley Middle School, and Torrey Pines High School. No schools within the municipality of Del Mar are expected to experience adverse impacts related to the operation of the proposed alternatives. Access to schools serving Del Mar may be improved during operation of the proposed project due to higher freeway capacity, reconstructed interchanges, and reengineered underpassings and overpassings.

The study area within Del Mar contains a number of parks, primarily along the coast. Crest Canyon Open Space Park and Torrey Pines State Preserve are located outside of the municipality but are regularly used by Del Mar residents. All parks within this region could potentially benefit from an increase in visitors due to increased freeway capacity and reconstructed interchanges. Del Mar Fairgrounds and Racetrack, a regional community facility, would also likely benefit from improved capacity along the I-5 North Coast Corridor and a reengineered interchange at Via de la Valle. Other impacts related to viewsheds, air quality, and noise are not likely to be significant for recreation areas within Del Mar. The proposed alternatives would not affect 4(f) resources in Del Mar.

3.2.2.7 Visual Impacts

The landscape unit generally within Del Mar used by the DVIA for its analysis is the San Dieguito Valley (Caltrans 2007d). No key views are analyzed by the DVIA for this part of the study area, although partial views of Del Mar are available from the Del Mar Heights Road interchange. Views from the Del Mar Heights interchange, as presented in Section 3.2.1.7, would be affected by the proposed project, and visual impacts are considered moderately high and adverse.

3.2.2.8 Air Quality and Noise Impacts

Impacts to local air quality are discussed for CO and particulate matter in the Draft Air Quality Analysis (Caltrans 2007e). CO analysis was conducted at I-5 interchanges that have the potential to affect air quality. Interchanges identified to worsen air quality include those that are likely to increase a percentage of vehicles in cold start mode, those that substantially increase traffic volumes, and those that worsen traffic flow. An adverse change in air quality can create health concerns for people living nearby and create a living/working environment that is not only unsafe, but generally unpleasant overall. Adverse changes, if left unchecked for too long, can also affect the quality of life for residents. Air quality and noise-related impacts can affect local economic activity by creating a displeasing environment in which to conduct business due to harmful surrounding air quality or bothersome noise levels. If impacts are great enough to a specific area, property values can decrease. As no interchanges are technically within the municipality of Del Mar, although Via de la Valle, Del Mar Heights Road, and Carmel Valley Road provide the primary entrances into the city, no air quality impacts are expected to occur as a result of the proposed alternatives.

Del Mar is not traversed by the proposed alternatives, and no discernable noise increases are anticipated within Del Mar. Therefore, no adverse impacts related to noise are expected in Del Mar.

3.2.3 Solana Beach

3.2.3.1 Travel Patterns, Access, and Parking

Solana Beach is located north of the cities of Del Mar and San Diego, with the northern edge of Solana Beach bordered by San Elijo Lagoon and Encinitas. Within Solana Beach, the proposed alternatives extend from a point just north of the Via de la Valle interchange, through the neighborhood communities of Lomas Santa Fe and Eden Gardens, to San Elijo Lagoon, a distance of approximately 2 miles. The Lomas Santa Fe interchange provides an important route of access for Solana Beach communities to and from I-5 and also provides access to the community of Rancho Santa Fe east of I-5. Another important route of access into Solana Beach is Via de la Valle, which provides access to the southern portion of the city. The prime arterial in Solana Beach is Highway 101. The proposed alternatives are designed to reduce congestion on the I-5 North Coast Corridor by increasing the freeway's capacity through the addition of HOV lanes (and GP lanes for the 10+4 alternatives). Through the entire length of Solana Beach, I-5 would be expanded to include four HOV lanes (two in each direction) and two GP lanes (one in each direction for the 10+4 alternatives only). Operation of either of the proposed alternatives in Solana Beach is not anticipated to affect any public parking lots, including Park and Ride lots.

The proposed alternatives also include a number of community enhancement projects to be implemented in conjunction with the proposed project. These enhancements would improve pedestrian circulation and access between communities east and west of I-5. Community enhancements within Solana Beach include:

- Streetscape Enhancements on Ida Avenue
- Trailhead at Solana Hills Drive

The two community enhancement projects would include the enhancement of local streetscapes to improve aesthetic appearances, and improved pedestrian circulation and access to San Elijo Lagoon Ecological Reserve. The streetscape enhancements for Ida Avenue, which is located on the west side of I-5 within the community of Eden Gardens, would replace the existing irregular street with travel lanes in both directions and would add a new pedestrian sidewalk on the west side of the street. Landscaping would provide a visual buffer between I-5 and Ida Avenue. The implementation of this community enhancement would be consistent with the Eden Gardens Master Plan.

The trailhead at Solana Hills Drive would provide a new trailhead at the south side of San Elijo Lagoon Ecological Reserve. Visitor access would be further facilitated by a new sidewalk and parallel parking for trailhead visitors, a pedestrian drop-off zone at the trailhead, and other trailhead amenities.

Improvements to circulation along I-5 through Solana Beach and at the Lomas Santa Fe interchange would improve traffic flow on Lomas Santa Fe, particularly at peak travel times when traffic is severely congested. The improved flow at interchanges directly north and south of Solana Beach on I-5 (Via de la Valle and Manchester Avenue), as well as along the length of the I-5 North Coast Corridor, would improve regional circulation within the area. The proposed alternatives would likely reduce congestion along other nearby major roads serving local communities, as motorists would minimize the use of alternate routes, including Highway 101. Implementation of the proposed alternatives would result in increased vehicular capacity, and therefore higher ADT volumes on the northbound and southbound I-5 corridor and at interchanges. The increased capacity would likely result in improved LOS and reduced commute times. This increased capacity on the I-5 North Coast Corridor would benefit residents of Solana Beach communities near I-5, as well as commuters from a regional perspective.

Implementation of the proposed alternatives would improve circulation and access to a number of community facilities, residential neighborhoods, and commercial centers in Solana Beach. This would improve access to areas currently experiencing heavy traffic, including the public beaches, commercial areas at the I-5 and Lomas Santa Fe interchange, and local schools including the San Diego Military Academy and Earl Warren Middle School. Increased vehicular flow on I-5 may also assist in improving emergency response times for local emergency service providers. The Solana Beach Fire Department is located on the west side of I-5 on Lomas Santa Fe and the UCSD Medical Center is located south of Solana Beach. The addition of HOV lanes (and GP lanes for the 10+4 alternatives), as well as improvements to the Lomas Santa Fe interchange, would improve access to and from these facilities and, by means of an improved LOS, and may lead to shorter emergency responses times.

The proposed alternatives are generally located within existing ROW; however, there are several locations along the corridor where the proposed improvements may require widening of the existing ROW, which could have implications for existing development. Conversion of existing uses to ROW could result in a loss of parking. In Solana Beach, the two 8+4 alternatives would not likely displace existing parking. However, both 10+4 alternatives would likely affect parking availability at one business office located on Marine View Avenue. Under the 10+4 with Buffer Alternative, lost parking consists of approximately 20 marked stalls. Under the 10+4 with Barrier Alternative, lost parking consists of approximately 25 marked stalls. These impacts could be substantial, depending on the configuration of the remaining available parking on the property. The lost parking could affect the existing land use. Impacts to this parking lot and associated business would be reassessed as project design is finalized. If it is determined that the parking loss cannot be avoided, full acquisition and relocation of that business may become necessary for the 10+4 alternatives.

Additional parking impacts may occur under the proposed 10+4 with Barrier Alternative along Ida Avenue and Marine View Avenue. The loss of unmarked on-street parking would be on approximately 0.16 mile of Marine View Avenue and 0.10 mile of Ida Avenue. However, a high demand for this street parking is unlikely as it is not close to businesses or other land uses typically dependent on street parking. Remaining parking in this area would likely be adequate to support the surrounding land uses, and no adverse impacts are anticipated at this location.

Implementation of the proposed project, including the addition of HOV lanes and GP lanes for the 10+4 alternatives, improvements to freeway interchanges, and the community enhancement features, would reduce congestion along the I-5 North Coast Corridor and would improve access to and from adjacent communities previously separated by I-5.

3.2.3.2 Relocation Impacts

As identified in the DRIR (Caltrans 2007c), the 10+4 with Barrier Alternative would result in the displacement of six condominiums in Solana Beach within the Eden Gardens community (Appendix A). The 10+4 with Buffer and two 8+4 alternatives would not result in residential or business relocations within Solana Beach (Table 3.2-3). The DRIR concluded that adequate relocation opportunities exist for the residents of the six condominiums associated with the 10+4 with Barrier Alternative. Residents and businesses displaced as the result of a given project are potentially eligible to be compensated in accordance with the Uniform Relocation Assistance Act of 1987.

Table 3.2-3. Potential Relocations by Alternative in Solana Beach

Alternative	Residential Relocations	Commercial Relocations
10+4 with Barrier	6 (multi-family apartment/condominium units)	0
10+4 with Buffer	0	0
8+4 with Barrier	0	0
8+4 with Buffer	0	0

3.2.3.3 Land Use Impacts

Existing Land Use

Solana Beach is generally urbanized and encompasses residential development as well as various commercial areas that are primarily focused on Highway 101 and Cedros Avenue, west of the proposed project corridor, and areas along Lomas Santa Fe. Transportation uses associated with the I-5 corridor are located at the eastern boundary of Solana Beach. The proposed project would consist of the expansion of an existing established freeway and would be consistent with existing transportation uses. The displaced condominiums associated with the 10+4 with Barrier Alternative are located immediately adjacent to the I-5 transportation corridor and would be replaced within the community. Though land uses would shift from residential to transportation, it would be consistent with existing land uses, and no adverse impacts are anticipated.

Development Trends

Solana Beach is nearly entirely developed, and future development trends will be primarily associated with redevelopment or infill projects. The proposed project would expand an existing transportation corridor and would not affect long-term development or redevelopment trends.

Future Land Uses

Future land uses are anticipated to consist primarily of infill and redevelopment projects in already urbanized areas of the city and no future projects have been identified in Solana Beach. The proposed project would not affect planned future land uses within Solana Beach.

Consistency with Plans and Policies

The Solana Beach General Plan outlines specific goals and policies for existing and future development within the city. The proposed 10+4 with Barrier Alternative would convert six existing residential parcels to transportation uses; however, this would not substantially affect land uses within Solana Beach. Encroachment into adjacent residential uses would be minimized and would not result in fragmentation or displacement of residential neighborhoods. The proposed project would improve circulation along I-5 by increasing capacity. Although the proposed project would not include alternatives to motorized transportation such as bike lanes, implementation of the proposed project would not inhibit any existing alternative modes of transportation and would increase HOV capacity for carpooling and transit.

Segments of the proposed alternatives would encroach into open space areas and potentially impact natural resources. However, these encroachments would be minimized through design efforts and would not affect the overall biological value of the open space areas. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to natural resources were minimized and/or mitigated to the maximum extent practicable. Therefore, the proposed project would be generally consistent with the City of Solana Beach General Plan. A more detailed listing of relevant goals and policies and the proposed project's consistency with those policies is provided in Table 3.2-4.

Table 3.2-4. Consistency with City of Solana Beach General Plan

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
Land Use (1) To promote development of a well-balanced and functional mix of residential, commercial, industrial, open space, recreational, and industrial land uses. (2) To ensure that development in the city is consistent with the overall community character and contributes positively towards the City's image. (3) To ensure that long-term protection of the environment is given the highest priority in the consideration of development proposals and in the implementation of this general plan.	The proposed project would not involve development of any residential, commercial, industrial, recreational, and industrial land uses and would not alter the existing community character. Implementation of the 10+4 with Barrier Alternative would result in the loss of six residential units but would not adversely affect the overall land use distribution within Solana Beach.	All four alternatives would be consistent.
Housing Element (1) Encourage the adequate provision of a range of housing opportunities that will meet Solana Beach's share of the existing and future housing needs of the region. (2) Minimize governmental constraints to the development, improvement, and maintenance of housing. (3) Maintain and enhance the quality of residential neighborhoods in Solana Beach. (4) Conserve existing affordable housing opportunities. (5) Promote equal opportunity for all residents to live in the housing of their choice.	No housing would be constructed as a part of the proposed project. Although implementation of the proposed project would result in the loss of six residential units under the 10+4 with Barrier Alternative, this loss would not adversely affect the overall housing stock within Solana Beach. Furthermore, adequate replacement housing has been identified in the DRIS.	All four alternatives would be consistent.
Circulation (1) To provide a street network to move people and goods safely and efficiently. (2) To promote a public transportation system that is safe, convenient, efficient, and meets the identified needs of the Solana Beach Community. (3) To promote safe alternatives to motorized transportation that meet the needs of all city residents.	The proposed project would improve circulation along I-5 by increasing capacity. The proposed project would bring I-5 into compliance with current safety standards. Although the proposed project would not include alternatives to motorized transportation such as bike lanes, implementation of the proposed project would not inhibit any existing alternative modes of transportation and would increase HOV capacity for carpooling and transit.	All four alternatives would be consistent.
Noise To protect public health and welfare by eliminating existing noise problems and by preventing significant degradation of the future acoustic environment.	The proposed project would increase noise levels along the I-5 corridor. To address noise level increases, the proposed project would involve the construction of noise barriers; the location, height, materials, and other design features are discussed in Section 3.2.4.8. It is likely that noise levels would still be considered acceptable, and the Department would minimize irritating noise sources to the greatest extent possible.	All four alternatives would be consistent.
Safety Element (1) To minimize hazards to public health, safety, and welfare resulting from natural and man-made phenomena. (2) To provide a safe and secure environment for the City's residents, workers, and visitors.	The proposed project would improve the safety of travel along the I-5 corridor. Further, the proposed project would be designed and constructed to withstand seismic events and geologic hazards in compliance with current standards.	All four alternatives would be consistent.
Open Space and Conservation (1) To protect and conserve the City's natural and cultural resources. (2) To protect and enhance sensitive open space areas and viewsheds. (3) To meet the needs of the entire community by providing an adequate level of parks and recreational opportunities.	Segments of the proposed alternatives would encroach into open space areas and potentially impact natural resources. However, these encroachments would be minimized and would not affect the overall biological value of the open space areas. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to natural resources were minimized to the maximum extent practicable. The proposed project would have the potential to impact cultural resources. Implementation of the proposed project would have the potential to impact existing viewsheds. Potential impacts to existing viewsheds and appropriate mitigation measures are described in Section 3.2.3.7. The proposed alternatives would not convert park or recreational opportunities to other uses.	All four alternatives would be consistent.

Table 3.2-4. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
Economic Development (1) To provide for the long-term economic health of Solana Beach through development of an expanded commercial base. (2) To promote the City's economic health by upgrading its commercial base. (3) To assure continued delivery of adequate public services and facilities to city residents and organizations, within the limits posed by fiscal resources.	The proposed project would not impact existing commercial properties within Solana Beach.	All four alternatives would be consistent.

3.2.3.4 Farmland Impacts

There are no agricultural operations within Solana Beach. Therefore, there would be no impacts to active farmland or designated soils supporting Important Farmland within Solana Beach for any of the four alternatives. Table 3.2-2 shows the Farmland Conversion Impact Ratings for each of the proposed alternatives. All alternatives have ratings less than the 160-point threshold; therefore, no adverse farmland impacts are anticipated.

3.2.3.5 Impacts to Local Economy

Implementation of the proposed project may have impacts to certain characteristics of the local economy. This section examines the potential impacts related to local businesses, property values, and tax revenues.

Impacts to Local Businesses

Solana Beach has one main interchange with the I-5 at Lomas Santa Fe Drive, with Lomas Santa Fe Drive and Via de la Valle serving as other main channels through which residents and visitors alike can access the city. Important commercial centers for visitors and the community at large include the Cedros Design District, shopping along Highway 101, and areas along Lomas Santa Fe Drive, outside of the I-5 transportation corridor. No impacts to local businesses associated with operation of the proposed alternatives are anticipated.

Other communities in California with heavy congestion during peak hours have experienced a decrease in local patronage because long wait times and congestion deter individuals from exiting the freeway (Caltrans 2006). The proposed alternatives would lead to increases in ADT and an improvement in LOS (especially for the 10+4 alternatives that include additional GP lanes). Decreased congestion along the I-5 North Coast Corridor has the potential to allow regional motorists, as well as local residents, to access Solana Beach businesses more efficiently, thereby increasing commerce. This would be especially true for restaurants, retail stores, and shopping centers within the directly impacted area, as they are often destinations for residents and visitors.

Implementation of the proposed alternatives would likely have a positive impact to businesses throughout the city, because of the improved access efficiency to other highways and surface streets. Beaches, lagoons, recreation areas, and other tourist attractions experience increased visitation, resulting in increased patronage at nearby shops. As mentioned, two of Solana Beach's destinations that may benefit from the project include the Cedros Design District and Fletcher Cove. The Cedros Design District offers galleries, boutiques, and antique shops as well as the locally well-known entertainment venue, the Belly Up Tavern, located to the south of Via de la Valle on Highway 101. Fletcher Cove, which is a popular destination for residents and visitors, is accessed at the end of Lomas Santa Fe. Improved access from the I-5 can allow more visitors to these areas of the city.

However, both 10+4 alternatives would likely affect parking availability at one business office located on Marine View Avenue. Under the 10+4 with Buffer Alternative, lost parking consists of approximately 20 marked stalls. Under the 10+4 with Barrier Alternative, lost parking consists of approximately 25 marked stalls. These impacts could be substantial, depending on the configuration of the remaining available parking on the property. The lost parking could affect the existing land use. Impacts to this parking lot and associated business would be reassessed as project design is finalized. If it is determined that the parking loss cannot be avoided, full acquisition and relocation of that business may become necessary for the 10+4 alternatives.

In addition to the main I-5 improvements, community enhancements have the potential to stimulate the local economy. These projects would create and enhance destinations for residents and visitors, thus drawing people to the area, potentially enhancing commerce.

Impacts to Property Values

Property values in Solana Beach could be affected by displaced businesses and residences, changes in the visual environment, improved access to community facilities and other residential areas, and nearby community enhancement projects. As discussed in Section 3.2.3.2, there are six residential parcels along the I-5 in Solana Beach that would be displaced due to implementation of the 10+4 with Barrier Alternative. These parcels are adjacent to the project along Ida Avenue, near the main alignment. For those neighboring homes of displaced residences, property values could decline as a result of this alternative.

Residential properties immediately adjacent to I-5, in addition to those properties that would experience a partial loss of land to the proposed alternatives, may experience indirect effects to property values. Those residential areas that would become closer to I-5 and the proposed retaining walls and sound walls, especially if these walls are built on easements donated by property owners, could experience a decrease in property values. These large built structures could create a more urban feel, as well as affect shade, noise levels, and viewsheds. In contrast, it may also be possible that the proximity to I-5 and installation of sound walls would improve property values, creating an environment with reduced traffic-related noise and a relative separation from the freeway. A number of factors drive property values in the San Diego region, however, such as proximity to coastal areas, school districts, accessibility to public facilities and amenities, neighborhood affiliation, lifestyle, etc. It is likely that this

complex set of factors may overwhelm any project-related incremental change. Therefore, impacts to property values associated with the proposed alternatives are not known at this time.

In contrast to some of the potentially adverse impacts to residences, those businesses neighboring a realigned interchange could experience an increase in economic activity as improved access and an increased capacity on the roadway could increase the number of potential customers. Additionally, the neighborhoods that enjoy the addition of the community enhancement features, such as the improved pedestrian and bicycle corridors and improved trailheads, may experience an increase in property values. These elements of the proposed alternatives would generally improve community cohesion, creating a more inviting neighborhood, and improving residential desirability for these places in the study area.

When viewing the proposed project along the entire I-5 North Coast Corridor and the improvements to the region as a whole, property values would most likely improve. In addition to a potential regional increase in property values over time as a normal phenomenon of the marketplace, operation of the proposed project may have the effect of improving property values by providing residents with a more efficient and more capable freeway system. In the future, if residents have the perception that commute time along the I-5 North Coast Corridor has improved, residences in the vicinity may become more desirable, thereby indirectly increasing property values.

Impacts to Tax Revenue

Impacts associated with the removal of residential and business property by ROW takes can result in losses to property and sales tax revenue for the local jurisdictions in which the removal takes place. This loss in tax revenue is usually minimal, however, with many homeowners and businesses relocating within the municipality and continuing to pay taxes after resettling. Tax-related impacts usually can only occur if removed businesses and homeowners do not relocate within the local tax jurisdiction, since property is removed from the tax roll, or if businesses cease operation. The partial acquisition of property by a proposed project does not usually affect tax revenue unless the use of the parcel is significantly affected.

According to the DRIR, six condominiums would be removed by the 10+4 with Barrier Alternative; however, 21 condominiums are available within Solana Beach for relocation (Appendix A). With ample residential relocation resources, those displaced would likely be able to relocate within Solana Beach. The loss of six condominiums from the tax rolls is considered minor, compared to the total number of housing units in Solana Beach. Thus, the lost tax revenue is considered to be temporary and minor. There are no businesses within Solana Beach that would be completely displaced as a result of any of the four alternatives. Therefore, there are no permanently adverse tax revenue impacts associated with the proposed alternatives in Solana Beach.

3.2.3.6 Community Facilities and Services Impacts

As described above in Section 2.3, there are no police stations located in Solana Beach, with law enforcement and emergency response provided by the San Diego County Sheriff's Department out of the Encinitas Station. One Solana Beach municipal fire station is located within Solana Beach on Lomas Santa Fe Drive, outside of the area of direct impacts. There are no hospitals within the study area in Solana Beach. The proposed alternatives are not expected to displace or relocate the fire station, nor are visual, noise, or air quality impacts likely to be adverse. Operation of the proposed alternatives are not anticipated to adversely affect response times for emergency services associated with the fire station or outside sheriff's department personnel. It is likely that operation of the HOV lanes (and additional GP lanes with the 10+4 alternatives) may incrementally improve response times of emergency services due to increased capacity.

Seven schools are present within the study area of Solana Beach, five of which are located within the direct impact area. Santa Fe Christian High School is located adjacent to the west side of I-5 and the proposed project at Lomas Santa Fe Drive. Santa Fe Christian High School is adjacent to southbound lanes, just south of Lomas Santa Fe Drive. The proposed alternatives would be located closer to the adjacent school; however, it school operations would still continue as in current conditions and would not be adversely affected. Operational traffic noise levels at both schools are anticipated to increase as a result of the proposed alternatives. However, noise impacts would be minimized by a sound wall constructed in the area. Access to area schools from the freeway may become more efficient under operation of the proposed alternatives due to higher freeway capacity and a reconstructed interchange at Lomas Santa Fe Drive. This is especially true for those going to Torrey Pines High School, which is located outside Solana Beach.

The study area within Solana Beach contains three community parks, two beach parks, two community centers, and a portion of San Elijo Lagoon. While all recreational areas within this region could potentially benefit from an increase in visitors due to an increased freeway capacity, the parks within the area of direct impact have the potential to experience a wider range of secondary impacts related to the operation of the proposed alternatives. However, these are proximity impacts and would not result in physical impacts.

Parks within the direct impact area include La Colonia Park, the southern portion of San Elijo Lagoon, and La Colonia Community Center. No recreation areas within Solana Beach are expected to experience physical impacts related to displacement or relocation. The proposed alternatives would not affect 4(f) resources in Solana Beach. Additionally, no visual, air quality, or noise-related impacts are expected for area recreation areas. The community enhancement feature that would add a trailhead at Solana Hills Drive for San Elijo Lagoon Ecological Reserve may create a more welcoming recreation area in Solana Beach, and visitation may increase by those within and without the community. This impact is considered beneficial.

3.2.3.7 Visual Impacts

The landscape unit within Solana Beach defined by the DVIA is the Solana Hills area (Caltrans 2007d). Two key views were analyzed by the DVIA for this part of the study area: views looking north along Ida Avenue, west of I-5; and I-5, looking southwest at Ida Avenue. The existing visual qualities of views along Ida Avenue west of I-5 are considered to be moderate and would be impacted by a large retaining and sound wall up to 42 feet tall and 1,300 feet long. The resulting wall would be the largest

built structure in the area, creating an urban feature in severe contrast to the visual character of the neighborhood. Community enhancement features along this road include a small landscaped slope and the relocation of overhead utility lines underground. The resulting impact to visual resources is considered moderately high and adverse.

The existing visual qualities of southwest views of I-5 at Ida Avenue are considered to be high and would be impacted by the addition of four lanes to the west of the existing shoulder and a sound wall 12 feet high. The walls would block existing views of the coast and Del Mar Fairgrounds and Racetrack, creating an urban feel along the freeway. The resulting impact to visual resources is considered high and adverse.

3.2.3.8 Air Quality and Noise Impacts

In addition to general environmental concerns, impacts to air quality and noise levels during operation of the proposed project can greatly affect residents in the surrounding community. Particularly sensitive receptors include nearby homes, schools, hospitals, businesses, and outdoor recreation facilities. An adverse change in air quality can create health concerns for people living nearby and create a living/working environment that is not only unsafe, but generally unpleasant overall. Adverse changes, if left unchecked for too long, can also affect the quality of life for residents. Air quality and noise-related impacts can affect local economic activity by creating a displeasing environment in which to conduct business due to harmful surrounding air quality or bothersome noise levels. If impacts are great enough to a specific area, property values can decrease. The following section discusses air quality and noise-related impacts associated with the operation of the proposed project.

Impacts to local air quality are discussed for CO and particulate matter in the Draft Air Quality Analysis (Caltrans 2007e). CO analysis was conducted at I-5 interchanges that have the potential to affect air quality. Interchanges identified to worsen air quality include those that are likely to increase a percentage of vehicles in cold start mode, those that substantially increase traffic volumes, and those that worsen traffic flow. No intersections within the Solana Beach portion of the study area were identified as having the possibility of affecting local air quality. Therefore, air quality impacts in Solana Beach are not considered adverse.

Adverse noise impacts are considered to occur when projected noise volumes from a project are substantially higher than those experienced in current conditions. Noise impacts and the location and feasibility of noise abatement structures within Solana Beach, are discussed in the NADR (Caltrans 2007f). A total of eight potential sound walls were evaluated at six locations in Solana Beach, for their effectiveness and feasibility. Of the eight sound walls evaluated, four were determined to be feasible.

- Sound wall near Villa de la Valle would decrease noise levels to benefit six single-family residences.
- Second sound wall near Villa de la Valle would decrease noise levels to benefit 20 multi-family residences, 14 single-family residence, and two schools.
- Sound wall north of Lomas Santa Fe Drive would decrease noise levels to benefit four single-family residences.
- Sound wall south of Manchester Avenue would decrease noise levels to 32 single-family residences.

Construction of the sound walls at these locations would minimize impacts to nearby residences, schools, and other facilities. Increased noise levels would be experienced at other locations along the I-5 North Coast Corridor in Solana Beach where sound walls are not feasible, due to factors such as cost; environmental impacts; views/opinions of affected residents; noise abatement benefits; public and local agency input; or other social economic, legal, or technological factors. However, additional sound abatement measures would be implemented to minimize impacts to the nearby communities. Implementation of recommended sound walls and abatement measures described in the NADR would minimize noise-related impacts to the community, and impacts are not considered adverse.

3.2.4 Encinitas

3.2.4.1 Travel Patterns, Access, and Parking

Encinitas is located north of Solana Beach and south of Carlsbad. Carlsbad and the community of Rancho Santa Fe border the east portion of Encinitas. The proposed alternatives within the Encinitas city limits begin at the Manchester Avenue interchange and extend north approximately 6.75 miles to the La Costa Avenue interchange, which forms the border with Carlsbad. Although a portion of the La Costa Avenue interchange is located in Encinitas, it is discussed in Section 3.2.5.1 for Carlsbad, as the interchange and neighboring La Costa Park and Ride facility are located mainly within Carlsbad.

Within this portion of the proposed project, the I-5 North Coast Corridor extends through the neighborhood communities of Cardiff, Old Encinitas, and Leucadia. Six interchanges provide access to and from these local communities and I-5, including Manchester Avenue, Birmingham Drive, Santa Fe Drive, Encinitas Boulevard, Leucadia Boulevard, and La Costa Avenue. Prime arterials in Encinitas are Encinitas Boulevard, South El Camino Real, Olivenhain Road, and Rancho Santa Fe Road. Major arterials include La Costa Avenue east of El Camino Real, Balour Drive, and Mountain Vista Drive.

The proposed alternatives are designed to reduce congestion on the I-5 North Coast Corridor by increasing capacity through the addition of HOV lanes (and GP lanes for the 10+4 alternatives). From Manchester Avenue north to La Costa Avenue, two HOV lanes (and two GP lanes for the 10+4 alternatives) operating in both northbound and southbound directions would be constructed. A DAR would be also created at Manchester Avenue. In addition, a transit facility would be located at the northeast interchange at Manchester Avenue.

The proposed project also includes a number of community enhancement features to be implemented in conjunction with the proposed project. These enhancements would improve pedestrian circulation and access between communities east and west of I-5. Community enhancements within Encinitas include:

- Manchester Avenue Pedestrian Bridge and Trail
- Villa Cardiff Drive Improvements
- Hall Property Park Trail Connection to Santa Fe Drive
- Trail Connecting Santa Fe Drive to Requeza Street
- Trail Connecting Requeza Street to Encinitas Boulevard
- Union Street Pedestrian Overpass and Trail Connection

These projects include the construction of trails, pedestrian overpass connections, and suspended trails at freeway bridges to enhance pedestrian and bicycle linkages throughout the community. The community enhancement feature at Manchester Avenue includes a new San Elijo Lagoon trail that would be constructed as a suspended bridge undercrossing I-5. It would link to existing trails within the San Elijo Ecological Reserve that are currently disconnected from each other by I-5. Paved trails would also be constructed on the north and south sides of the lagoon. The improvements at Villa Cardiff Drive include the construction of a combined bicycle and pedestrian trail on both sides of Mackinnon Avenue Bridge. The Villa Cardiff Drive and Hall Property Park trails would provide a pedestrian link from neighborhoods east of I-5 to the proposed Hall Property Park west I-5. On Villa Cardiff Drive, which runs parallel to the east side of I-5 and intersects with Mackinnon Avenue, a pedestrian and bicycle trail would be constructed. New pedestrian trails and a linear park created at Santa Fe Drive would provide residents with safer and a more attractive setting in which to access the west side of I-5. A trail would also be created on the east side of I-5 between Santa Fe Avenue and the south side of Requeza Street. Additional trails would be constructed east of I-5 north of Requeza Street through to Encinitas Boulevard. The Union Street enhancements would include a new trail along the west side of I-5, connecting Cottonwood Creek Park to Union Street. In addition, an I-5 overcrossing would provide pedestrian access between the east and west sides of I-5 at Union Street, which is a reestablishment of a connection lost when the freeway was originally constructed. Improvements to bicycle facilities are also proposed as part of the I-5 North Coast Corridor project. Bike lanes along Leucadia Boulevard and Santa Fe Drive would be upgraded too Class II bicycle facilities. Requeza Street and Birmingham Drive would be upgraded to Class III bicycle facilities.

Improvements to circulation along I-5 through Encinitas and at the five interchanges in Encinitas would improve traffic flow within the surrounding communities and would improve circulation in and out of Encinitas, particularly at peak travel times when traffic is severely congested. The improved flow at interchanges directly north and south of Encinitas on I-5 (Lomas Santa Fe Drive and La Costa Avenue, respectively), as well as along the length of the I-5 North Coast Corridor, would improve regional circulation within the area. The proposed alternatives would likely reduce congestion along other nearby major roads serving local communities, as motorists would minimize the use of alternate routes, including Coast Highway 101. Implementation of the proposed alternatives would result in increased vehicular capacity (especially for the 10+4 alternatives that include additional GP lanes), and therefore higher ADT volumes on the northbound and southbound I-5 corridor and at interchanges. The increased capacity would likely result in an improved LOS and reduced commute times. This increased capacity on the I-5 North Coast Corridor would benefit residents of Encinitas communities near I-5, as well as commuters from a regional perspective.

Implementation of the proposed alternatives would improve circulation and access to a number of community facilities, residential neighborhoods, and commercial centers in Encinitas. This would improve access to areas currently experiencing heavy traffic, including the public beaches, recreational areas including San Elijo Lagoon, commercial areas, and local schools including the Cardiff Elementary School. Increased vehicular flow on I-5 may also assist in improving emergency response times for local emergency service providers. Medical facilities located in the immediate vicinity of I-5 in Encinitas include the Scripps Memorial Hospital and Scripps Clinic. A City of Encinitas Fire Station is also located on the west side of I-5 on South Vulcan Lane. The additional HOV lanes (and GP lanes with the 10+4 alternatives), as well as the construction of a DAR at Manchester Avenue, would improve circulation and thereby access to these facilities and, by means of an improved LOS, may lead to shorter emergency responses times.

The proposed alternatives are generally located within existing ROW; however, there are several locations along the corridor where the proposed improvements may require widening of the existing ROW, which could have implications for existing development. Conversion of existing uses to ROW could result in a loss of parking. For all proposed alternatives, a gas station on Manchester Avenue is expected to lose between 5 (for both 8+4 alternatives) and 10 (for both 10+4 alternatives) unmarked parking spaces within its parking lot, which currently accommodates approximately 25 cars. The 8+4 with Barrier, 10+4 with Buffer, and 10+4 with Barrier alternatives are also expected to displace approximately 10 to 13 marked parking stalls at a business along Orpheus Avenue. Finally, an estimated 4 marked parking stalls at a retail mall along Devonshire Drive would be removed by the 10+4 Barrier alternative. For all businesses, the remaining parking appears to be adequate to serve the currently associated land uses, and parking impacts are not considered adverse.

On-street parking within Encinitas is also expected to be affected by the proposed alternatives. For all alternatives, an estimated 3 unmarked on-street parking spaces along Regal Road would be removed. For the two Barrier alternatives, an estimated 0.15 mile of unmarked on-street parking along Orpheus Drive would be removed. Under the 8+4 with Barrier Alternative, an estimated 0.16 mile of unmarked on-street parking along Piraeus Street would be removed. Under both 10+4 alternatives, the parking availability along approximately 1.0 mile of Piraeus Street would be affected. Stratford Drive would also experience a loss in unmarked on-street parking, with approximately 0.07 mile of road affected by the 8+4 with Barrier, 10+4 with Buffer, and 10+4 with Barrier alternatives. Finally, both 10+4 alternatives would affect unmarked on-street parking along approximately 0.1 mile of Devonshire Drive. While impacts to on-street parking in Encinitas are numerous, the losses are relatively minor, with impacts occurring along roads that typically do not experience high demand for on-street parking, or are located in residential areas with ample parking along other, unaffected streets. Thus, parking along roadways is not expected to be substantially affected by the proposed alternatives and surrounding land uses are not likely to be affected.

Other parking affected by the proposed alternatives includes the Park and Ride facility at Birmingham Drive and the viewpoint at Vista Point. Under all proposed alternatives, the Park and Ride at Birmingham Drive is removed, resulting in the loss of approximately 45 marked stalls. Additionally, the existing viewpoint at Vista Point would be realigned. In both cases, enhancements associated with the proposed alternatives would replace the existing facility. For the Park and Ride at Birmingham Drive, a

new Park and Ride would be constructed at Manchester Avenue with over 200 marked parking spots. The viewpoint at Vista Point would also be improved under the proposed alternatives and would contain approximately 16 spots. Both projects are considered to have a positive effect to parking availability.

Implementation of the proposed alternatives, including the addition of HOV lanes and GP lanes for the 10+4 alternatives, improvements to freeway interchanges, the Manchester Avenue DAR, the transit facility at Manchester Avenue, and the community enhancement features, would reduce congestion along the I-5 North Coast Corridor and would improve access to and from adjacent communities previously bisected by I-5.

3.2.4.2 Relocation Impacts

As identified in the DRIR (Caltrans 2007c), the 10+4 with Barrier Alternative would result in the displacement of two single-family residences in Old Encinitas and one commercial business in Leucadia (Table 3.2-5). The 10+4 with Buffer and 8+4 with Barrier alternatives would result in the displacement of one single-family residence. The 8+4 with Barrier Alternative would also displace one business. The 8+4 with Buffer Alternative would result in no displaced businesses or residences. Adequate relocation opportunities have been identified in the DRIR for the residential and business displacements. As discussed in detail in the DRIR, residents and businesses displaced as the result of a given project are potentially eligible to be compensated in accordance with the Uniform Relocation Assistance Act of 1987.

Table 3.2-5. Potential Relocations by Alternative in Encinitas

Alternative	Residential Relocations	Commercial Relocations
10+4 with Barrier	2 (single-family units)	1
10+4 with Buffer	1 (single-family units)	0
8+4 with Barrier	1 (single-family units)	1
8+4 with Buffer	0	0

3.2.4.3 Land Use Impacts

Existing Land Use

Encinitas has experienced rapid growth over the last few decades and is primarily urbanized, similar to the other communities within the project corridor. Land uses generally consist of residential and commercial development, with a number of isolated greenhouse and nursery operations scattered along the corridor. In addition, open space areas surround Batiquitos and San Elijo lagoons. While the proposed alternatives would directly affect a number of greenhouse and nursery operations, as well as the western portion of agricultural fields located east of I-5 and north of Manchester due to the proposed transit facility, the encroachments would not preclude the continuation of agricultural activities on these sites. In addition, the project could lead to the relocation of up to two residences and one other commercial business, as noted in Section 3.2.4.2. These encroachments would not lead to shifts in existing land uses outside of these individual properties, however, and would not be considered an adverse land use effect.

Development Trends

The areas directly adjacent to the project corridor within Encinitas are currently urbanized and generally built-out, with the exception of open space areas designated for preservation, a future park, and agricultural uses. Development trends in Encinitas would largely be in the form of infill and redevelopment, particularly west of I-5. The proposed project would be located within the existing transportation corridor and would not affect future development trends.

Future Land Uses

Future land uses adjacent to I-5 include the Hall Property Park, which is was formerly a greenhouse operation, located immediately adjacent to the west side of I-5 south of Mackinnon Drive. The park has been designed assuming that the proposed project would occur and implementation of the proposed alternatives would not affect the development of the park.

Consistency with Plans and Policies

The proposed project would convert a maximum of two residential units and one commercial unit to transportation uses as discussed in Section 3.2.4.2. However, this would not substantially affect land use patterns within Encinitas. Encroachment into adjacent residential uses would be minimized and would not result in fragmentation or displacement of residential neighborhoods. The proposed project would improve circulation along I-5 by increasing capacity, which is consistent with the Circulation Element.

Segments of the proposed alternatives would encroach into open space areas and potentially impact natural resources. However, these encroachments would be minimized through design efforts and would not affect the overall biological value of the open space areas. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to natural resources were minimized and/or mitigated to the maximum extent practicable. However, as discussed is Section 3.2.4.4 Farmland Impacts, implementation of the proposed project would convert prime farmland to non-agricultural uses. Conversion of this prime farmland would conflict with Goal 12 of the Resource Management Element and the proposed project alternatives would be inconsistent with the agricultural goals of the City of Encinitas General Plan. A more detailed listing of relevant goals and policies and the proposed project's consistency with those policies is provided in Table 3.2-6.

Table 3.2-6. Consistency with the City of Encinitas General Plan and LCP

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
Land Use Element Goal 9: Preserve the existence of present natural open spaces, slopes, bluffs, lagoon areas, and maintain the sense of spaciousness and semirural living within the I-5 View Corridor … (LU-26); Policy 9.1: Preserve … the best natural features and (avoid) the creation of a totally	The proposed alternatives would not involve development of any residential, commercial, industrial, recreational, or industrial land uses within the I-5 view corridor and would not significantly alter the existing community character. The proposed project would increase noise levels along the I-5 corridor. To address	All four alternatives would be consistent.

Table 3.2-6. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
urbanized landscape and maintain I-5 Interchange areas to conform to the specifications of (Goal 9) … (LU-26); Policy 9.2: Encourage the retention of buffer zones such as natural vegetation or earth barriers, bluffs, and canyons to protect adjacent areas of freeway corridor from pollutants of noise, exhaust, and light (LU-26); Policy 9.6: Where it is necessary to construct retaining or noise-attenuating walls along the I-5 corridor, they should be constructed with natural-appearing materials and generously landscaped with vines, trees and shrubbery (LU-27).	noise level increases, the proposed project would involve the construction of noise barriers; the location, height, materials, and other design features would be determined by noise studies (see Section 3.2.4.8). Conversion of natural resources (i.e., wetland habitat) would be minimal and would not affect the overall health of natural resources within the City. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to natural resources were minimized and/or mitigated to the maximum extent practicable.	
Circulation Element Goal 1: Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character (C-3); Policy 1.1: Ensure that the arterial circulation system provides adequate connections across the freeway for convenient circulation and rapid emergency access (C-3); Policy 1.5: Promote maximum utilization or expansion of existing freeways and prime arterials as an alternative to new freeway or highway construction … (C-3); Policy 2.11: Encourage landscaping of freeway medians and freeway unpaved rights-of-way adjacent to the freeway using reclaimed water where available (C-6); Policy 3.5: Encourage development of mass transit and transit access points along the existing I-5 freeway corridor or along the railroad ROW (C-8); Goal 4: The City should make every effort to develop a circulation system that highlights the environmental and scenic amenities of the area (C-9); Policy 4.5: Design and construct attractive bike paths and pedestrian ways along existing freeway overpasses and underpasses. Discourage separate pedestrian overpasses (C-10).	The proposed alternatives would improve circulation along the I-5 corridor by increasing capacity. The proposed project would bring the I-5 into compliance with current safety standards and would not adversely affect circulation or emergency access on existing connections across the freeway. In addition, the proposed project would increase HOV capacity for carpooling and transit and would include community enhancement features to create pedestrian linkages throughout the community.	All four alternatives would be consistent.
Resource Management Element Goal 3: The City will make every effort possible to preserve significant mature trees, vegetation and wildlife habitat within the Planning Area (RM-7); Policy 4.3: The following Vista Points will be maintained as needed, and upgraded as necessary … Existing Vista Point on southbound I-5 … (RM-9); Policy 4.7: The City will designate the following view corridors as scenic highway/visual corridor viewsheds … Interstate 5, crossing San Elijo Lagoon (RM-10); Policy 4.9: … Road Design: Type and physical characteristics of roadways	The proposed alternatives would involve the loss of some mature trees and vegetation along the corridor. However, the proposed project includes the planting of disturbed areas with plant species native to the vicinity. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to natural resources were minimized and/or mitigated to the maximum extent practicable. The portion of the proposed project crossing San Elijo Lagoon would involve expansion of the existing freeway and would be	All four alternatives would be consistent.

Table 3.2-6. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
(within scenic highway/visual corridor viewsheds) should be compatible with natural character of corridor, and with the scenic highway function … (RM-10); Policy 4.10: … Trees and vegetation which are themselves part of the view quality along the public right-of-way will be retained. (RM-11); Policy 10.6: … There shall be no net loss of wetland acreage or resource value as a result of land use or development, and the City's goal is to realize a net gain in acreage and value when ever possible … (RM-18); Policy 10.9: The City will encourage the preservation and the function of San Elijo Lagoon and Batiquitos Lagoon and their adjacent uplands as viable wetlands, ecosystems and habitat for resident and migratory wildlife, by prohibiting actions … which: involve wetland fill or increased sedimentation into wetlands; adversely decrease stream flow into the wetlands; reduce tidal interchange; reduce internal water circulation; or adversely affect existing wildlife habitats (RM-20); Policy 10.11: In acting to maintain and, where feasible, restore the biological productivity and quality of San Elijo Lagoon, the City will limit alternations and uses to minor public facilities; restorative measures; nature study; passive, non-degrading recreational activities; and facilities necessarily adjunct aquaculture uses … (RM-22); Policy 13.3: Encourage the use of buffer zones to separate major thoroughfares from adjacent areas and protect them from pollutants of noise, exhaust, and light. (RM-25); Goal 15: The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels (RM-27).	consistent with the scenic highway/visual corridor viewshed designation. Potential adverse effects to this viewshed and appropriate mitigation measures are described in Section 3.2.4.7. The proposed project has the potential to adversely affect San Elijo Lagoon, Batiquitos Lagoon, and other wetlands. Potential adverse effects to wetlands and appropriate mitigation measures are analyzed in associated technical studies. The Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to natural resources are minimized and/or mitigated to the maximum extent practicable. In addition, the proposed project would conserve energy by increasing capacity and increasing HOV capacity for carpooling and transit. The proposed trails and pedestrian improvements could also promote energy conservation through increased completion of trips by walking or bicycling. However, the proposed project may also increase overall energy consumption through additional capacity for single-occupancy vehicles as well as transit and carpooling vehicles.	
Noise Element Goal 1: Provide an acceptable noise environment for existing and future residents of the City of Encinitas (N-5); Goal 3: Ensure that residents are protected from harmful and irritating noise sources to the greatest extent possible (N-7).	The proposed project would increase noise levels along the I-5 corridor. To address noise level increases, the proposed project would involve the construction of noise barriers; the location, height, materials, and other design features are discussed in Section 3.2.4.8. It is likely that noise levels would still be considered acceptable, and the Department would minimize irritating noise sources to the greatest extent possible.	All four alternatives would be consistent.

Natural Communities Conservation Plans: MHCP

Individual jurisdictions implement their portion of the MHCP plan through the preparation and adoption of citywide subarea plans that describe the specific policies each city will institute for the MHCP.

Encinitas has prepared a public review draft subarea plan. Coordination between the Department and the cities is ongoing to ensure that impacts to sensitive biological species or communities targeted for preservation in the draft subarea plans are minimized, where feasible.

3.2.4.4 Farmland Impacts

The majority of farmlands within Encinitas along the project corridor consist of nurseries or greenhouses that could be affected by the proposed project. These areas, while considered agricultural operations within the city, are not necessarily local soil-dependent. While some greenhouse operations are underlain by important agricultural soils, many are designated as Important Farmland, based on their important contribution to agricultural production, rather than Important Soils. Four agricultural operations could be directly affected by the proposed alternatives, including:

- Farmland east of I-5, adjacent to Manchester Avenue (Prime Farmland)
- Pacific Verde nursery east of I-5 adjacent to Union Street (Unique Farmland)
- Florabunda greenhouse east of I-5 adjacent to Union Street (Unique Farmland)
- An active greenhouse east of I-5 north of Puebla Street (no FMMP designation)

All four alternatives include the proposed transit facility and DAR at Manchester Avenue, which would affect active agricultural fields east of and adjacent to I-5. The proposed transit facility would encroach into prime agricultural land that is actively farmed. The total acreage of the prime farmland is approximately 30.5 acres. The proposed transit facility and DAR, which is a part of all four alternatives, would affect the western portion of the agricultural land on approximately 18.5 acres. There is potential that the remaining 12 acres, which are located on a more eastern slope of the parcel, could continue agricultural production. Coordination between the Department and the land owner would occur to determine the possibility of continuing agricultural operations.

Greenhouse and nursery operations in the three other locations would be potentially affected by the proposed alternatives. These activities are not soil-dependent, however, and could be relocated to other locations in the unlikely event it becomes necessary. In addition, the proposed encroachment into facilities would not affect the majority of the sites, and activities would most likely continue with operation of the proposed project.

The total farmland conversion impact rating for the proposed alternatives ranges from 101.73 to 101.81 (see Table 3.2-2), and all four alternatives are less than the 160-point threshold established for further evaluation for adverse effects. Therefore, effects on farmlands under the FMMP for the four alternatives are not considered adverse. No Williamson Act contract lands would be affected by the proposed project.

Encinitas has established the Encinitas Ranch Planning Area and an Agricultural Zone to protect agricultural uses within the city. The proposed project corridor would not be located within those designated areas and therefore effects would not be considered inconsistent with existing planning policies designed to preserve farmland in the city.

3.2.4.5 Impacts to Local Economy

Implementation of the proposed project may have impacts to certain characteristics of the local economy. This section examines the potential impacts related to local businesses, property values, and tax revenues.

<u>Impacts to Local Businesses</u>

Encinitas has several interchanges with I-5, and much of the ROW is set back enough to allow for implementation of the proposed project. However, as discussed in Section 3.2.4.2, the proposed 10+4 and 8+4 with Barrier alternatives would affect one business. This business is likely to be relocated in the vicinity and therefore no adverse business impacts are anticipated.

Some local businesses including restaurants, retail stores, shopping centers, gas and auto service stations, and hotels may also be indirectly affected. Positively affected businesses may include restaurants, retail stores, shopping centers and tourist attractions like the Quail Botanical Gardens as well as the local beaches, which may experience an increase in patronage as a result of improved circulation.

Other communities in California with heavy congestion during peak hours have experienced a decrease in local patronage because long wait times and congestion deter individuals from exiting the freeway (Caltrans 2006). The proposed project would lead to increases in ADT and an improvement in LOS. Decreased congestion along the I-5 North Coast Corridor has the potential to allow regional motorists, as well as local residents, to reach Encinitas businesses more efficiently, thereby allowing for increased visitation, faster customer turn-around and, consequently, increased revenues. This would be especially true for restaurants, retail stores, and shopping centers within the directly impacted area, as they are often destinations for residents and visitors.

Implementation of the proposed project would likely have a positive impact to businesses throughout the city, because of the improved access efficiency to other highways and surface streets. This improved access can help the many commercial centers throughout Encinitas. Beaches, lagoons, recreation areas, and other tourist attractions like the Botanical Gardens may experience increased visitation, resulting in increased patronage at nearby shops. Additionally, the potential loss of parking associated with the proposed alternatives is not anticipated to adversely affect the operation of businesses in the vicinity.

In addition to the main I-5 improvements, community enhancements have the potential to stimulate the local economy. These projects would create and enhance destinations for residents and visitors, thus drawing people to the area, potentially enhancing commerce. In addition, these community enhancements would increase connectivity throughout the city, making local commerce more accessible to pedestrians.

Impacts to Property Values

Property values in Encinitas could be affected by displaced businesses and residences, changes in the visual environment, improved access to community facilities and other residential areas, and nearby community enhancement projects. As shown in Table 3.2-3, the proposed alternatives have the potential to result in displaced residences or businesses. These displaced properties are located adjacent to the project along the main alignment and at interchanges. For those neighboring homes of displaced residences, property values could decline as a result of the proposed project.

Residential properties immediately adjacent to I-5, in addition to those properties that would experience a partial loss of land to the proposed project, may experience indirect effects to property values. Those residential areas that would become closer to I-5 and the proposed retaining walls and sound walls, especially if these walls are built on easements donated by property owners, could experience a decrease in property values. These large built structures could create a more urban feel, as well as affect shade, noise levels, and viewsheds. In contrast, it may be possible that the proximity to I-5 and installation of sound walls would improve property values, creating an environment with reduced traffic-related noise and a relative separation from the freeway. A number of factors drive property values in the San Diego region, however, such as proximity to coastal areas, school districts, accessibility to public facilities and amenities, neighborhood affiliation, lifestyle, etc. It is likely that this complex set of factors may overwhelm any project-related incremental change. Therefore, impacts to property values associated with the proposed alternatives are not known at this time.

While immediately adjacent individual residential property values may experience some neutral or adverse effects, those businesses neighboring a realigned interchange could experience an increase in economic activity as improved access and an increased capacity on the roadway could increase the number of potential customers. Additionally, the neighborhoods that enjoy the addition of the community enhancement features, such as the improved pedestrian and bicycle corridors and improved trailheads, may experience an increase in property values. These elements of the proposed project would generally improve community cohesion, creating a more inviting neighborhood and improving residential desirability for these places in the study area.

When viewing the proposed project along the entire I-5 North Coast Corridor and the improvements to the region as a whole, property values would most likely improve. In addition to a potential regional increase in property values over time as a normal phenomenon of the marketplace, operation of the proposed project may have the effect of improving property values by providing residents with a more efficient and more capable freeway system. In the future, if residents have the perception that commute time along the I-5 North Coast Corridor has improved, residences in the vicinity may become more desirable, thereby indirectly increasing property values.

Impacts to Tax Revenue

Impacts associated with the removal of residential and business property by ROW takes can result in losses to property and sales tax revenue for the local jurisdictions in which the removal takes place. This loss in tax revenue is usually minimal, however, with homeowners and businesses relocating within the municipality and continuing to pay taxes after resettling. Tax-related impacts usually can only occur if removed businesses and homeowners do not relocate within the local tax jurisdiction, since property is removed from the tax roll, or if businesses cease operation. The partial acquisition of property by a proposed project does not usually affect tax revenue unless the use of the parcel is significantly affected.

According to the DRIR, the 10+4 with Barrier Alternative would result in two residential acquisitions and the two 8+4 alternatives would result in one residential acquisition; however, 16 single-family residential homes are available for purchase, and four single-family residential homes are available for rent, within Encinitas. With ample residential relocation resources, those displaced would likely be able to relocate within Encinitas and lost property tax revenue is considered to be temporary and minor. One retail business within Encinitas is also expected to be removed completely by the 10+4 with Barrier and 8+4 with Barrier alternatives, and potential relocation sites have not yet been identified. However, the one retail business is not expected to require any extraordinary site requirements for relocation, and it is likely that suitable sites for relocation within Encinitas exist. Therefore, there are no permanent adverse tax revenue impacts associated with the proposed alternatives in Encinitas.

3.2.4.6 Community Facilities and Services Impacts

As described above in Section 2.4, law enforcement services for Encinitas are provided by the San Diego County Sheriff's Department, which operates out of a station at Encinitas Boulevard and El Camino Real. The officers and personnel at this station serve Encinitas, Solana Beach, Del Mar, and unincorporated parts of San Diego County. Three Encinitas fire stations are located within the area of direct impacts. One hospital, Scripps Memorial Hospital Encinitas, is located within the study area, at the interchange of Santa Fe Drive with I-5. The proposed project is not expected to displace or relocate any of these facilities, nor are visual, noise, or air quality impacts likely to be adverse. Operation of the proposed alternatives is not anticipated to adversely affect response times for emergency services associated with these facilities. It is likely that operation of the additional HOV lanes (and GP lanes for the 10+4 alternatives), and the DAR at Manchester Avenue may incrementally improve response times of emergency services due to increased capacity.

Six schools are within the area of direct impacts in Encinitas. These include four elementary schools and two high schools. Additionally, Mira Costa Community College is located along Manchester Avenue, just east of the proposed DAR. None of the schools are expected to experience any displacement or relocation from the proposed alternatives. Access to the schools from the freeway may become more efficient under operation of the proposed project due to higher freeway capacity, reconstructed interchanges, and the DAR at Manchester Avenue. Noise levels at the small school associated with Seacoast Community Church are anticipated to increase as a result of the proposed project. This school could experience significant noise impacts if individual abatement measures are not implemented.

Seven parks are located within the direct impact area in Encinitas. Other community facilities in the direct impact area include the Encinitas Ranch Golf Course, Quail Botanical Gardens, the Encinitas Community Center and Senior Center, and two libraries. While all parks within this region could

potentially benefit from an increase in visitors due to increased freeway capacity, the parks within the area of direct impact are likely to experience a wider range of impacts (e.g., visual, air quality, noise, etc.) related to the operation of the proposed project. The San Elijo Lagoon Ecological Reserve includes over 5 miles of hiking trails open to the public. A Nature Center, located at 2710 Manchester Avenue in Encinitas on the northwest side of the reserve, provides county ranger offices, a parking lot, restrooms, drinking water, and a 1-mile loop trail. Three of the four project alternatives would require ROW takes of publicly owned land at the San Elijo Lagoon Ecological Reserve (the 8+4 with Buffer Alternative would not require ROW takes) (Caltrans 2007b). The 10+4 with Barrier Alternative would acquire the largest amount of land from the San Elijo Lagoon Ecological Reserve, totaling approximately 0.14 acre of public land. The affected portions of land do not possess any features or attributes that, if lost, would impede the park's ability to function as an ecological reserve and recreation area. Therefore, impacts associated with the 10+4 with Barrier Alternative would not adversely affect any of the activities, features, or attributes of the San Elijo Lagoon Ecological Reserve that qualify the resource for protection under 4(f) and would be classified as de minimis. The San Elijo Lagoon Ecological Reserve's function as an ecological reserve and recreation area would not be adversely affected by impacts associated with the 10+4 with Barrier Alternative. Impacts from the remaining two alternatives that would impact the San Elijo Lagoon Ecological Reserve would be similar.

The proposed alternatives would also affect the Hall Property Community Park, which is a park planned for construction by the City of Encinitas in the spring or summer of 2008 to alleviate the City's shortage of dedicated park space. The park plan includes a mixture of active and passive uses. Active uses would include softball/baseball fields, a basketball court, multi-use turf fields, a teen center, a dog park, an amphitheatre, a skate park, and possibly an aquatic facility. Passive uses would include gardens, picnic areas, trails, and a scenic overlook. Planning of the Hall Property Community Park was coordinated with the Department to ensure that the park would be compatible with the proposed project. The Department and the City of Encinitas agreed to an easement dedication of land that would provide the Department with the ROW needed to improve I-5. Implementation of the proposed project would not require acquisition of lands planned for the Hall Property Community Park. Therefore, implementation of the proposed project would not affect any of the activities, features, or attributes of the Hall Property Community Park.

3.2.4.7 Visual Impacts

The landscape units within Encinitas defined by the DVIA include San Elijo Valley, Cardiff Bluffs, Encinitas Uplands, and Leucadia Hills (Caltrans 2007d). Seven key views were analyzed by the DVIA within Encinitas: I-5 looking north at Manchester Avenue, Devonshire Drive looking north, the interchange of I-5 and Encinitas Boulevard looking north, Union Street looking east, I-5 near Union Street looking south, and Orpheus Avenue looking north. The existing visual qualities of views at I-5 looking north at Manchester Avenue are considered to be high and would be affected by the proposed DAR structures, a 15-foot retaining wall, and the removal of existing oleanders from the median. The changes would create a suburban atmosphere in contrast to the more rural nature of the area through the introduction of incompatible built forms. The resulting impact to visual resources is considered high and adverse.

The existing visual qualities of northerly views along Devonshire Drive are considered to be moderate and would be affected by a 16-foot sound wall approximately 950 feet in length. Street trees may be planted along this stretch of road. The walls would be twice as high as those allowed by local building codes and would be drastically out of place in the suburban environment and would decrease the feeling of spaciousness put forth as a goal in local planning documents. The resulting impact to visual resources is considered moderate and adverse.

The existing visual qualities of northerly views at the interchange of I-5 and Encinitas Boulevard are considered to be moderate. The visual resources would be affected by a 40-foot retaining wall approximately 3,500 feet in length, with a similar retaining wall adjacent to the southbound ramp. A planting pocket would also be constructed at the northbound shoulder where there is insufficient room for a slope. A third sound wall would be constructed along the southbound off-ramp. The proposed walls would likely be the largest built forms in the area, creating an urban atmosphere that is inconsistent with the city's goals. The resulting impact to visual resources is considered high and adverse.

The existing visual qualities of easterly views along Union Street are considered moderately high. The visual resources would be affected by a freeway pedestrian overpass, which is a part of the proposed community enhancement features. Freeway retaining and sound walls would be visible from this key viewpoint. The proposed project would create an urban element to the viewshed. The resulting impact to visual resources is considered moderately high and adverse.

The existing visual qualities of southerly views along I-5 near Union Street are considered to be moderately high. The visual resources would be affected by a sound wall 16 feet in height and approximately 0.75 mile long, an articulated wall with a planting pocket, the removal of mature trees on side slopes, and the relocation of overhead utility lines underground. The distant scenery views would be interrupted and motorists would feel a sense of enclosure, changing from a semi-rural parkway to an urban freeway. The resulting impact to visual resources is considered high and adverse.

The existing visual qualities of southerly views along Union Street are considered to be moderately high, and the visual resources would be affected by a retaining wall 6 feet in height, a sound wall 16 feet in height, drainage features, and a possible paved access for Department personnel. The resulting urban form would dominate the neighborhood visually as well as create a sense of enclosure. Decreased direct sunlight and air circulation could also affect those closest to the freeway. The resulting impact to visual resources is considered moderately high and adverse.

The existing visual qualities of northerly views along Orpheus Avenue are considered to be moderately low, and the visual resources would be affected by the proposed closure of an existing open channel, the construction of an earthen berm, and the erection of a retaining wall 6 to 8 feet in height. The berm and wall would be softened with some landscape planting; however, the view would still be mainly a monolithic built structure. The resulting impact to visual resources is considered moderate and adverse.

3.2.4.8 Air Quality and Noise Impacts

In addition to general environmental concerns, impacts to air quality and noise levels during operation of the proposed project can greatly affect residents in the surrounding community. Particularly sensitive receptors include nearby homes, schools, hospitals, businesses, and outdoor recreation facilities. An adverse change in air quality can create health concerns for people living nearby and create a living/working environment that is not only unsafe, but generally unpleasant overall. Adverse changes, if left unchecked for too long, can also affect the quality of life for residents. Air quality and noise-related impacts can affect local economic activity by creating a displeasing environment in which to conduct business due to harmful surrounding air quality or bothersome noise levels. If impacts are great enough to a specific area, property values can decrease. The following section discusses air quality and noise-related impacts associated with the operation of the proposed project.

Impacts to local air quality are discussed for CO and particulate matter in the Draft Air Quality Analysis (Caltrans 2007e). CO analysis was conducted at I-5 interchanges that have the potential to affect air quality. Interchanges identified to worsen air quality include those that are likely to increase a percentage of vehicles in cold start mode, those that substantially increase traffic volumes, and those that worsen traffic flow. No intersections within the Encinitas portion of the study area were identified as having the possibility of worsening local air quality. Therefore, air quality impacts in Encinitas are not considered adverse.

Adverse noise impacts are considered to occur when projected noise volumes from a project are substantially higher than those experienced in current conditions. Noise impacts and the location and feasibility of noise abatement structures within Encinitas are discussed in the NADR (Caltrans 2007f). The NADR separates Encinitas into five segments, and a total of 23 potential sound walls were evaluated for their effectiveness and feasibility. Of the 23 potential sound walls, 12 were recommended, although 3 would require voluntary donation from landowners and 1 would require construction of a concrete pad.

- System of sound walls north of Manchester Avenue would decrease noise levels and benefit 50 multi-family residences and one single-family residence.
- Sound wall constructed south of Birmingham Drive would decrease noise levels and benefit 12 single-family residences. However, construction of the sound wall would first require the construction of a concrete pad.
- Sound wall constructed north of Birmingham Drive would decrease noise levels and benefit six single-family residences. While construction is recommended, construction and footing easements would have to be donated by property owners for the wall construction to be reasonable.
- Sound wall north of Birmingham Drive would decrease noise levels and benefit one single-family residence.
- Sound wall south of Santa Fe Drive would decrease noise levels and benefit 20 single-family residences.
- Sound wall on Devonshire Drive south of Requeza Street would decrease noise and benefit 11 single-family residences.
- Sound wall constructed just south of Encinitas Boulevard would benefit 18 single-family residences. Construction is recommended, but easements would have to be donated by property owners for the wall construction to be reasonable.
- Sound wall constructed just north of Encinitas Boulevard would decrease noise and benefit 30 multi-family residences and 1 recreational facility. Construction is recommended, but easements would have to be donated by property owners for the wall construction to be reasonable.
- Sound wall north of Encinitas Boulevard would decrease noise and benefit one park.
- Sound wall north of Encinitas Boulevard would decrease noise and benefit one single-family residence.
- Sound wall or other noise abatement measure south of Leucadia Boulevard would decrease noise and benefit 26 single-family residences.
- Sound wall south of Leucadia Boulevard would decrease noise levels and benefit 10 single-family residences and 1 park.

Construction of the sound walls at these locations would minimize impacts to nearby residences and a recreational facility. Increased noise levels would be experienced at other locations along the I-5 North Coast Corridor in Encinitas where sound walls are not feasible due to factors such as cost; environmental impacts; views/opinions of affected residents; noise abatement benefits; public and local agency input; or other social economic, legal, or technological factors. However, additional sound abatement measures would be implemented to minimize impacts to the nearby communities. Implementation of recommended sound walls and abatement measures described in the NADR would minimize noise-related impacts to the community, and impacts are not considered adverse.

3.2.5 Carlsbad

3.2.5.1 Travel Patterns, Access, and Parking

Carlsbad is located north of Encinitas and south of Oceanside. Batiquitos Lagoon provides the city's southern border and Buena Vista Lagoon the northern border with Oceanside. The proposed alternatives within Carlsbad begin at the Poinsettia Lane interchange and extend north approximately 6.8 miles to the Las Flores Drive interchange.

Six interchanges provide full or partial access to and from local communities to I-5, including Poinsettia Lane, Palomar Airport Road, Cannon Road, Tamarack Avenue, Carlsbad Village Drive, and Las Flores Drive. Prime arterials in Carlsbad include El Camino Real, Rancho Santa Fe Road, Palomar Airport Road, Olivenhain Road, and Melrose Drive, all of which carry high traffic volume and provide local and regional circulation. Secondary arterials include Marron Road, Carlsbad Village Drive, Calle Barcelona,

and Aviara Parkway. The proposed alternatives are designed to reduce congestion on the I-5 North Coast Corridor by increasing capacity through the addition of HOV lanes (and GP lanes for the 10+4 alternatives). Two HOV lanes and two GP lanes for the 10+4 alternatives would be constructed on both the northbound and southbound lanes. A new DAR would also be created at Cannon Road.

The proposed project also includes a number of community enhancement features to be implemented in conjunction with the proposed project. These enhancements would improve pedestrian circulation and access between communities east and west of I-5. Community enhancements within Carlsbad include:

- Park and Ride enhancement at La Costa Avenue
- Trail on the east side of I-5 at Batiquitos Lagoon
- Trail on west side of I-5 at Agua Hedionda Lagoon
- Trail on east side of I-5 at Agua Hedionda Lagoon
- Streetscape enhancements on Chestnut Avenue

These features would include the construction of pedestrian and bicycle trails, and streetscape enhancement designed to improve pedestrian and bicycle circulation. The existing Park and Ride facility at La Costa Avenue at the southern perimeter of Carlsbad would be enhanced to encourage alternative modes of transportation, as well as increase visitation at the adjacent Batiquitos Lagoon. Improvements would include a new visitor center, shaded areas, seating areas, a nature trail to the lagoon, and new trails connecting the La Costa interchange with new lagoon facilities. Enhanced landscaping at the Park and Ride facility would create a more visually pleasing environment. A new suspension bridge trail on the east side of Batiquitos Lagoon north of the proposed visitor center would be created as an east-west I-5 underpass. New trail connections from the west side of Agua Hedionda Lagoon include connections from the Encina Power Station and the construction of pedestrian bridge beside the existing rail bridge that currently spans the mouth of the lagoon. Trail connections from the east side of Agua Hedionda Lagoon include a suspended trail connecting the north side of the lagoon to the south side. The enhancements at Agua Hedionda Lagoon would result in a complete pedestrian circuit of the lagoon. Streetscape enhancements at Chestnut Avenue would include widened sidewalks and landscaping, enhanced safety lighting at the existing underpass, and the potential for the inclusion of art at the undercrossing.

Several Carlsbad bicycle facilities would also be upgraded to Class II bicycle lanes as part of the proposed project. These routes include Las Flores Drive, Carlsbad Village Drive, Chestnut Avenue, Tamarack Avenue, Cannon Road, Palomar Airport Road, and Poinsettia Lane.

Improvements to circulation along I-5 through Carlsbad and at the six interchanges in Carlsbad would improve traffic flow within the surrounding communities and would improve circulation in and out of Carlsbad, particularly at peak travel times when traffic is severely congested. The improved flow at interchanges directly north and south of Carlsbad on I-5 (Vista Way and Leucadia Boulevard, respectively), as well as along the length of the I-5 North Coast Corridor, would improve regional circulation within the area. The proposed project would likely reduce congestion along other nearby major roads serving local communities, as motorists would minimize the use of alternate routes, including Carlsbad Boulevard. Implementation of the proposed project would result in increased vehicular capacity, and therefore higher ADT volumes on the northbound and southbound I-5 corridor and at interchanges. The increased capacity would likely result in an improved LOS and reduced commute times. This increased capacity on the I-5 North Coast Corridor would benefit residents of Carlsbad communities near I-5, as well as regional commuters.

Implementation of the proposed alternatives would improve circulation and access to a number of community facilities, residential neighborhoods, and commercial centers in Carlsbad. This would improve access to areas currently experiencing heavy traffic, including recreational areas including the public beaches, Batiquitos Lagoon, Agua Hedionda Lagoon, Buena Vista Lagoon, Legoland, Cannon Park, and Holiday Park; commercial areas such as the Carlsbad Premium Outlets; and local schools including the La Palma High School. Increased vehicular flow on I-5 may also assist in improving emergency response times for local emergency service providers. The widening of I-5 and the construction of a DAR at Cannon Road would improve access to residential areas and medical facilities and, by means of an improved LOS, (especially for the 10+4 alternatives that include additional GP lanes) may lead to shorter emergency responses times.

The proposed alternatives are generally located within existing ROW; however, there are several locations along the corridor where the proposed improvements may require widening of the existing ROW, which could have implications for existing development. Conversion of existing uses to ROW could result in a loss of parking. This is particularly true for a number of businesses directly adjacent to the I-5 North Coast Corridor. For the 8+4 with Barrier, 10+4 with Buffer, and 10+4 with Barrier alternatives, a hotel is expected to lose approximately 17, 25, and 38 parking spots, respectively. Under both 10+4 alternatives, a retail strip mall is expected to lose approximately 14 marked stalls. The 10+4 alternatives would also affect inventory parking at a car dealership, with approximately 10 spots affected under the Buffer alternative, and 40 spots affected under the Barrier alternative. Additionally, the 10+4 with Barrier Alternative is expected to affect approximately 8 marked parking stalls at one large business near Loganberry Drive. In all cases, however, the reduced parking is not considered a substantial loss and parking lots could be reconfigured to minimize any possible adverse affect. Thus, the remaining parking at these businesses appears to be adequate to serve the current commercial land use.

The 8+4 with Barrier, 10+4 with Buffer, and 10+4 with Barrier alternatives are expected to affect approximately 12 marked parking stalls at an apartment complex on Pine Avenue. Due to the limited amount of available parking, the loss of 12 spots could be a substantial loss to the complex. This impact would be reassessed during design finalization. If it is determined that the parking loss cannot be avoided, full acquisition and relocation of the complex may become necessary.

Residential parking impacts would also be experienced along local roadways, including approximately 3 unmarked spots along Tuttle Street under the 8+4 alternatives. Additional on-street parking that could be displaced under the 8+4 with Barrier, 10+4 with Buffer, and 10+4 with Barrier alternatives includes approximately 2 unmarked spots along Davis Avenue. These three alternatives are also expected to displace approximately 1.0 mile of unmarked on-street parking along Pio Pico Drive. Neighboring land

uses include Holiday Park, which is discussed in detail in the 4(f) evaluation report (Caltrans 2007b) and is identified as having adequate on-site parking to serve patrons and visitors. Finally, the 10+4 Barrier alternative is expected to displace approximately 0.3 mile of unmarked on-street parking along Avenida Encinitas. In all cases, this on-street parking does not seem to be widely utilized and the remaining on-street parking located along adjacent streets would likely be adequate to serve nearby land uses.

3.2.5.2 Relocation Impacts

According to the DRIR (Caltrans 2007c), the proposed alternatives would result in a number of residential and commercial displacements (Table 3.2-7). The 10+4 with Barrier and 8+4 with Barrier alternatives would displace a 47-unit apartment complex and one triplex. These residences are located north of Agua Hedionda Lagoon, directly adjacent to the freeway. In addition to the 47-unit complex, the 10+4 with Barrier would displace an additional 10 residences and the 8+4 Barrier would displace an additional 9 residences. The 10+4 and 8+4 with Buffer alternatives would displace 8 and 6 units, respectively. Adequate relocation opportunities have been determined to exist for the single-family residences and triplex in the DRIR. The apartment complex is comprised of 47 two-bedroom units. With rents estimated at $1,050 a month, it is unlikely that current residents would be able to relocate in Carlsbad. The DRIR suggests that the Department may need to utilize the State's relocation program or Last Resort Housing Program payments to relocate those displaced.

Table 3.2-7. Potential Relocations by Alternative in Carlsbad

Alternative	Residential Relocations	Commercial Relocations
10+4 with Barrier	60 (47-unit complex, 1 triplex unit, and 10 single-family units)	9
10+4 with Buffer	8 (single-family)	7
8+4 with Barrier	59 (47-unit complex, 1 triplex unit, and 9 single-family units)	7
8+4 with Buffer	6 (1 triplex unit and 3 single-family units)	7

In addition to residential displacements, 9 commercial businesses in northern Carlsbad could require relocation as part of the 10+4 with Barrier Alternative, and the remaining three alternatives would relocate 7 businesses. The DRIR has identified adequate relocation opportunities for the majority of these businesses. It may be difficult to locate an appropriate relocation site for the gas and automotive service station, however, due to the requirement of finding a site that allows those services to occur. Residents and businesses displaced as the result of a given project are potentially eligible to be compensated in accordance with the Uniform Relocation Assistance Act of 1987.

3.2.5.3 Land Use Impacts

Existing Land Use

Carlsbad is primarily urbanized within the project corridor and contains both residential development and commercial centers along the I-5 North Coast Corridor. In addition, isolated greenhouses and nurseries, as well as some stretches of farmland (mainly strawberry fields), provide agricultural operations within the city. In addition, the city has a number of open space areas, including Buena Vista, Agua Hedionda, and Batiquitos lagoons. The proposed alternatives would encroach on agricultural operations in the city, including a greenhouse and strawberry fields located south of Agua Hedionda Lagoon. The proposed encroachments would not preclude continued agricultural activities on the affected sites, however, and are not anticipated to shift existing land uses in the area. In addition, the strawberry fields that would be affected are designated for recreation and tourist uses and are not specifically planned for agriculture. A number of single-family and multi-family residences, as well as various commercial businesses, would also be displaced by the project and would require relocation, as discussed in Section 3.2.5.2. These displacements would be isolated to specific parcels along the alignment, however, and would not result in shifts in land use outside of the affected parcels. Additionally, the proposed project would consist of the expansion of an existing established freeway corridor and would be consistent with existing land uses. Therefore, no adverse land use effects would be anticipated as a result of the proposed alternatives.

Development Trends

Development within Carlsbad is monitored through a growth management plan, which requires the development of specific public facilities before growth can occur. Growth is anticipated to primarily consist of infill projects west of I-5 and of new developments on vacant land east of I-5. As noted above, encroachments into individual properties that may require relocation would not affect areas outside the specific parcels. Future development trends are mainly established around the growth management plan and would not be affected by the proposed project. Therefore, the proposed project is not anticipated to affect development trends within the city.

Future Land Uses

No planned future land uses along the corridor would be affected by implementation of the proposed project. While the strawberry fields that would be partially affected are designated for future travel and recreational uses, no specific project has been proposed for that site. Therefore, future proposed uses of the site would be anticipated to develop taking into account the proposed project.

Consistency with Plans and Policies

The proposed alternatives would minimize encroachment into adjacent open space areas along the alignment and would also incorporate measures to avoid indirect impacts to such areas, consistent with the Carlsbad General Plan Land Use Element, Environmental Goal. In addition, while the alternatives would affect agricultural operations, continued agricultural activities on the affected sites would not be precluded. Any future land uses on those sites, such as the strawberry fields designated for future travel and tourist uses, could occur on the remainder of the parcel.

The proposed project would convert a maximum of 60 residential units and 9 commercial units (for the 10+4 with Barrier Alternative) to transportation uses as discussed above in Section 3.2.5.2. However, this would not substantially affect land use patterns within Carlsbad. Encroachment into adjacent residential uses would be minimized and would not result in fragmentation or displacement of

residential neighborhoods. The loss of up to 9 commercial units would not adversely affect Carlsbad's economy.

The proposed project would improve circulation along I-5 by increasing capacity. In addition, the proposed project would increase capacity for carpooling and transit, and include trails, pedestrian overpass connections, and suspended trails at freeway bridges to create pedestrian linkages throughout the community. The proposed project would have the potential to affect natural resources such as Buena Vista, Batiquitos, and Agua Hedionda lagoons. However, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to natural resources were minimized and/or mitigated to the maximum extent practicable.

A more detailed listing of relevant goals and policies and the proposed project's consistency with those policies is provided in Table 3.2-8.

Table 3.2-8. Consistency with the City of Carlsbad General Plan

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
Land Use Element Environmental Goal: A City which protects and conserves natural resources, fragile ecological areas, unique natural assets and historically significant features of the community (including Buena Vista Lagoon, Batiquitos Lagoon, and Agua Hedionda Lagoon) (p. 39).	The proposed alternatives would have the potential to affect natural resources such as Buena Vista, Batiquitos, and Agua Hedionda lagoons. However, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to natural resources were minimized and/or mitigated to the maximum extent practicable.	All four alternatives would be consistent.
Circulation Element *Streets and Traffic Control* A.1: A City with an integrated transportation network serving local and regional needs which accommodates a variety of different travel modes based on safety, convenience, attractiveness, costs, environmental and social impacts (p. 5). *Scenic Roadways* Goal: A City which preserves and enhances the visual, environmental and historical characteristics of the local community through sensitive planning and design of transportation … corridors (p.9). *Implementing Policies and Action Programs* C2: Establish four categories of scenic corridors and designate streets to be included within those categories as follows … Community Scenic Corridors … Interstate 5 (p.9). *Regional Circulation Considerations* Goals: A.1: A City with a transportation system which helps minimize air pollution and traffic congestion and supports commerce and economic development (p.10).	The proposed project would improve circulation along I-5 by increasing capacity. The proposed project would bring the I-5 into compliance with current safety standards. In addition, the proposed project would increase HOV capacity for carpooling and transit, and include community enhancement features designed to create pedestrian linkages throughout the community.	All four alternatives would be consistent.

Table 3.2-8. (continued)

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
Implementation Policies and Action Programs C4: Consider noise impacts in the design of road systems and give special consideration to those road corridors in scenic or noise sensitive areas.		
Noise Element General – A City which is free from excessive, objectionable, or harmful noise. Land Use – A.1: A City where land uses are not significantly impacted by noise. (p.6). Roads – Goal: To provide a roadway system that does not subject surrounding land uses to significantly adverse noise levels (p.8).	The proposed project would increase noise levels along the I-5 corridor. To address noise level increases, the proposed project would involve the construction of noise barriers; the location, height, materials, and other design features are discussed in Section 3.2.5.8. It is likely that noise levels would still be considered acceptable, and the Department would minimize irritating noise sources to the greatest extent possible.	All four alternatives would be consistent.
Open Space and Conservation Element Trail/Greenway System – Goals: A.1: A city with open space areas connected by Greenways; and A.2: A city with a Carlsbad Trail System. Air Quality Preservation – Goal: A city with clean air.	Community enhancement projects associated with the proposed project would include trails at several locations along the lagoons. Implementation of the proposed project would not disrupt access to existing trails. The air quality analysis prepared for the proposed project did not identify any significant regional impacts related to air quality.	All four alternatives would be consistent.

Natural Communities Conservation Plans: MHCP

Individual jurisdictions implement their portion of the MHCP plan through the preparation and adoption of citywide subarea plans that describe the specific policies each city will institute for the MHCP. Carlsbad has adopted a subarea plan under the MHCP (the Carlsbad Habitat Management Plan [HMP]). Coordination between the Department and the cities is ongoing to ensure that impacts to sensitive biological species or communities targeted for preservation in the draft subarea plans are minimized, where feasible. Segments of the proposed alternatives would encroach into areas conserved for their wildlife value as part of the Carlsbad HMP. However, these encroachments would be small and would not affect the overall biological value of the preserve areas. Furthermore, the Department would coordinate with the City and/or wildlife agencies as required to ensure that potential impacts to HMP species or habitat are minimized and/or mitigated to the maximum extent practicable.

3.2.5.4 Farmland Impacts

Agricultural uses in Carlsbad include greenhouses, nurseries, and agricultural fields primarily used for flower and strawberry cultivation. One area within Carlsbad would be directly affected by the proposed alternatives: the strawberry fields northeast of Cannon Road and I-5, which are on approximately 141 acres. These fields are designated as Prime and Unique Farmland by the FMMP. The proposed alternatives, which include the DAR at Cannon Road, would impact the west and south portions of these active agricultural fields. The 10+4 with Barrier Alternative would directly impact an estimated 16.08 acres, 13.99 of which are prime and 2.06 of which are unique. This constitutes an estimated 11

percent of the property. The other three alternatives would result in similar impacts to the agricultural land, including 16.73 acres for the 10+4 with Barrier, 16.05 acres for the 8+4 with Buffer, and 16.14 acres for the 8+4 with Barrier. As an estimated 89 percent of the agricultural land would remain intact, it is assumed that the proposed alternatives would not preclude the continued use of the site for agricultural operations.

The total farmland conversion impact rating for the proposed alternatives ranges from 101.73 to 101.81 (see Table 3.2-2), and all four alternatives are less than the 160-point threshold established for further evaluation for adverse effects. Therefore, effects on farmlands under the FMMP for the four alternatives are not considered adverse. No Williamson Act contract lands would be affected by the proposed project.

Carlsbad has established agricultural preservation policies for designated areas within the city. The area affected by the proposed project is not located in a protected agricultural site. The proposed project would therefore be consistent with the LCP and General Plan policies.

3.2.5.5 Impacts to Local Economy

Implementation of the proposed project may have impacts to certain characteristics of the local economy. This section examines the potential impacts related to local businesses, property values, and tax revenues.

Impacts to Local Businesses

Carlsbad has several interchanges with I-5, and much of the ROW is set back enough to allow for implementation of the proposed project, while still remaining within the existing I-5 corridor. However, as discussed in Section 3.2.5.2, implementation of the proposed project would displace 9 businesses for the 10+4 with Barrier Alternative and 7 businesses for the remaining alternatives. One of the businesses directly affected, a gas and auto service station, is of particular concern due to the lack of available replacement properties that are compatible with this use type.

In addition to potential acquisitions, some local businesses, including restaurants, retail stores, shopping centers, gas and auto service stations, and hotels, could still be indirectly affected by the proposed project. Positively affected businesses include restaurants, retail stores, shopping centers, and tourist attractions like the Flower Fields, Legoland, the Four Seasons Golf Course and Resort, and the local beaches, which may experience increased patronage.

Other communities in California with heavy congestion during peak hours have experienced a decrease in local patronage because long wait times and congestion deter individuals from exiting the freeway (Caltrans 2006). The proposed project would lead to increases in ADT and an improvement in LOS. Decreased congestion along the I-5 North Coast Corridor has the potential to allow passing motorists, as well as local residents, to reach Carlsbad businesses more efficiently, thereby increasing commerce. This would be especially true for restaurants, retail stores, and shopping centers within the directly impacted area, as they are often destinations for residents and visitors.

Implementation of the proposed project would likely have a positive impact to businesses throughout the city, due to the improved access efficiency to other highways and surface streets. Improved access at beaches, lagoons, recreation areas, and other tourist attractions like the Flower Fields, Legoland, and the Four Seasons golf course and resort, could result in increased patronage at surrounding shops.

In addition to the main I-5 improvements, community enhancements have the potential to stimulate the local economy. These projects would create and enhance destinations for residents and visitors, thus drawing people to the area and potentially enhancing commerce. In addition, these community enhancements would increase connectivity throughout the city, making local commerce more accessible to pedestrians.

Impacts to Property Values

Property values in Carlsbad could be affected by displaced businesses and residences, changes in the visual environment, improved access to community facilities and other residential areas, and nearby community enhancement projects. As discussed in Section 3.2.5.2, there are a number of properties along the I-5 in northern Carlsbad that would be displaced due to implementation of the proposed alternatives. These areas are adjacent to the project along the main alignment and at interchanges. For those neighboring homes of displaced residences, property values could decline as a result of the proposed project.

Residential properties immediately adjacent to I-5, in addition to those properties that would experience a partial loss of land to the proposed project, may experience indirect effects to property values. Those residential areas that would become closer to I-5 and the proposed retaining walls and sound walls, especially if these walls are built on easements donated by property owners, could experience a decrease in property values. These large built structures could create a more urban feel, as well as affect shade, noise levels, and viewsheds. In contrast, it may be possible that the proximity to I-5 and installation of sound walls would improve property values, creating an environment with reduced traffic-related noise and a relative separation from the freeway. A number of factors drive property values in the San Diego region, however, such as proximity to coastal areas, school districts, accessibility to public facilities and amenities, neighborhood affiliation, lifestyle, etc. It is likely that this complex set of factors may overwhelm any project-related incremental change. Therefore, impacts to property values associated with the proposed alternatives are not known at this time.

Conversely, those businesses neighboring a realigned interchange could experience an increase in economic activity as improved access and an increased capacity on the roadway could increase the number of potential customers. Additionally, the neighborhoods that enjoy the addition of the community enhancement features, such as the improved pedestrian and bicycle corridors and improved trailheads, may experience an increase in property values. These elements of the proposed project would generally improve community cohesion, creating a more inviting neighborhood, and improving residential desirability for these places in the study area.

When viewing the proposed project along the entire I-5 North Coast Corridor and the improvements to the region as a whole, property values would most likely improve. In addition to a potential regional increase in property values over time as a normal phenomenon of the marketplace, operation of the proposed project may have the effect of improving property values by providing residents with a more efficient and more capable freeway system. In the future, if residents have the perception that commute time along the I-5 North Coast Corridor has improved, residences in the vicinity may become more desirable, thereby indirectly increasing property values.

Impacts to Tax Revenue

Impacts associated with the removal of residential and business property by ROW takes can result in losses to property and sales tax revenue for the local jurisdictions in which the removal takes place. This loss in tax revenue is usually minimal, however, with many homeowners and businesses relocating within the municipality and continuing to pay taxes after resettling. Tax-related impacts usually can only occur if removed businesses and homeowners do not relocate within the local tax jurisdiction, since property is removed from the tax roll, or if businesses cease operation. The partial acquisition of property by a proposed project does not usually affect tax revenue unless the use of the parcel is significantly affected.

According to the DRIR, a number of residential properties, including a 47-unit apartment complex, for the two Barrier alternatives, would be removed by the proposed project. According to the DRIR, 44 single-family residences are available for purchase and 26 single-family residences are available for rent (including 17 apartments), within Carlsbad. With the exception of the 47-unit apartment complex, ample residential relocation resources are available and those displaced would likely be able to relocate within Carlsbad. Therefore, lost tax revenue is considered to be temporary and minor. Nine retail properties for the 10+4 with Barrier Alternative and 7 retail properties for the other three alternatives are expected to require relocation..

The majority of the businesses are expected to be able to relocate within Carlsbad. The gas and auto service station may have difficulty finding another commercial site within Carlsbad that would allow for this kind of land use. The California State Board of Equalization does not disclose sales tax information for individual businesses. However, this business is not expected to provide a significant portion of the approximate $25.4 million in sales tax received by Carlsbad in 2006. As such, impacts related to the relocation or potential loss of this business are not considered to be adverse.

3.2.5.6 Community Facilities and Services Impacts

As described above in Section 2.5, the Carlsbad Police Department provides police protection for Carlsbad. There are two police stations in Carlsbad, with the station on Carlsbad Village Drive located within the area of direct impacts. Of the six fire stations within Carlsbad, Fire Stations 1 and 4 are located within the area of direct impacts, with one other fire station located within the study area. There are no hospitals within the study area in Carlsbad. The proposed alternatives are not expected to displace or relocate any of these facilities, nor are visual, noise, or air quality impacts likely to be significant. Operation of the proposed project is not anticipated to adversely affect response times for emergency services associated with these facilities. It is likely that operation of the additional HOV lanes (and GP lanes for the 10+4 alternatives), and the DAR at Cannon Road may incrementally improve response times of emergency services due to increased capacity.

Seven schools are located within the area of direct impacts in Carlsbad. These include four elementary schools, one middle school, and one high school. None of the schools are expected to experience any displacement or relocation from the proposed project. Access to the schools from the freeway may become more efficient under operation of the proposed project due to higher freeway capacity, reconstructed interchanges, and the DAR at Cannon Road. Noise levels at St. Patrick Parish School, located adjacent to northbound I-5 along Pio Pico Road, are anticipated to increase as a result of the proposed project. A sound wall near the school is recommended, however, and is expected to abate the increase in noise levels.

The study area within Carlsbad contains a number of indoor and outdoor recreation areas, parks, and open spaces associated with the three lagoons in the area and unique topography of Carlsbad itself. While all recreational areas within this region could potentially benefit from an increase in visitors due to an increased freeway capacity, the parks within the area of direct impact have the potential to experience a wider range of secondary impacts related to the operation of the proposed project. However, these are proximity impacts and would not result in physical impacts. These areas include the Buena Vista, Agua Hedionda, and Batiquitos lagoons; Holiday Park; Hosp Grove Park; Poinsettia Park; the Harding Community Center; the Dove Library; and the Cole Library.

All improvements associated with the proposed alternatives near the Batiquitos and Buena Vista lagoons would take place within the existing Department ROW. Therefore, implementation of the proposed project would not affect any of the activities, features, or attributes of these lagoons that qualify the resource for protection under 4(f). A small portion of Agua Hedionda would be affected by the proposed alternatives; however, this portion of land is privately owned and would not constitute a 4(f) impact.

The 10+4 with Barrier Alternative would also result in ROW takes near Holiday Park, which features horseshoe pits, a picnic area, a tot-lot play area, restrooms, and large shade trees. The remaining three alternatives would not affect this park. Implementation of the 10+4 with Barrier Alternative would require acquisition of a 0.73-acre strip of the existing Pio Pico Drive adjacent to the park. Loss of this land would not directly affect Holiday Park; however, it would likely impact park access as Pio Pico Drive currently provides parking for patrons of Holiday Park.

Parking for Holiday Park, including parking on Pio Pico Drive, is not located on the physical property of the park. Therefore, loss of parking for Holiday Park would not result in an impact to the 4(f) resource. Furthermore, loss of parking along Pio Pico Drive would not result in a constructive use of Holiday Park. The loss of parking along Pio Pico Drive would be insubstantial since additional parking exists both adjacent to the park itself, and on the city streets surrounding the park. Three small parking lots exist adjacent to the park itself with approximately 30 parking spaces each, resulting in a net total of approximately 90 parking spaces. Five of these parking spaces are reserved for handicapped parking. Street parking is also allowed on the majority of the streets surrounding the park. Therefore, the loss of parking along Pio Pico Drive associated with the 10+4 with Barrier Alternative would not substantially

reduce parking available for Holiday Park and would not adversely affect any of the activities, features, or attributes of Holiday Park that qualify the resource for protection under 4(f).

3.2.5.7 Visual Impacts

The landscape units within Carlsbad defined by the DVIA include Batiquitos Lagoon, Carlsbad Mesa, Agua Hedionda, Carlsbad Village, and Buena Vista Lagoon (Caltrans 2007d). Four key views were analyzed by the DVIA for Carlsbad: I-5 at the interchange with Carlsbad Village Drive looking north, Holiday Park from Pio Pico Drive, I-5 at the interchange with Carlsbad Village Drive looking south, and Pine Street at I-5 looking south. Potential impacts to residences and community centers were not analyzed; therefore, impacts are not known. The existing visual qualities of northerly views at the interchange of I-5 and Carlsbad Village Drive are considered to be moderately high. The visual resources would be affected by the permanent loss of adjacent planting and a possible sound wall 12 to 16 feet in height. The resulting view would create a sense of enclosure and separation from the surrounding community for motorists and create a more urban feel for the community through which the freeway passes. The resulting impact to visual resources is considered high and adverse.

The existing visual qualities of views at Holiday Park from Pio Pico Drive are considered to be moderately high, and the visual resources would be affected by the proposed narrowing of Pio Pico Drive by 10 feet in width, a retaining wall between 12 to 25 feet in height, and a possible 12- to 16-foot-high sound wall placed upon the retaining wall. The proposed walls would be the largest built form in the immediate area and would create a severe contrast with the small-scale architecture of the community and natural character of the park. The resulting impact to visual resources is considered high and adverse.

The existing visual qualities of southerly views along I-5 at Carlsbad Village Drive are considered to be moderately high. The visual resources would be affected by the loss of all freeway planting and a possible 12- to 16-foot-high sound wall. The existing open views would be blocked, and attention would be focused on the foreground views of the freeway, leading to a sense of enclosure, disorientation, and isolation for motorists. The resulting impact to visual resources is considered high and adverse.

The existing visual qualities of southerly views at Pine Street at I-5 are considered to be moderately low. The visual resources would be affected by the construction of a 20-foot retaining wall, located 6 feet closer to the existing apartment buildings than the existing wall. A sound wall would be placed upon the retaining wall, creating a structure totaling 32 to 36 feet in height. The walls would likely create an undesirable sense of enclosure for residents of the neighboring apartment complex, while also creating a dominating visual presence and accentuating the presence of the freeway. The resulting impact to visual resources is considered moderately high and adverse.

3.2.5.8 Air Quality and Noise Impacts

In addition to general environmental concerns, impacts to air quality and noise levels during operation of the proposed project can greatly affect residents in the surrounding community. Particularly sensitive receptors include nearby homes, schools, hospitals, businesses, and outdoor recreation facilities. An adverse change in air quality can create health concerns for people living nearby and create a living/working environment that is not only unsafe, but generally unpleasant overall. Adverse changes, if left unchecked for too long, can also affect the quality of life for residents. Air quality and noise-related impacts can affect local economic activity by creating a displeasing environment in which to conduct business due to harmful surrounding air quality or bothersome noise levels. If impacts are great enough to a specific area, property values can decrease. The following section discusses air quality and noise-related impacts associated with the operation of the proposed project.

Impacts to local air quality are discussed for CO and particulate matter in the Draft Air Quality Analysis (Caltrans 2007e). CO analysis was conducted at I-5 interchanges that have the potential to affect air quality. Interchanges identified to worsen air quality include those that are likely to increase a percentage of vehicles in cold start mode, those that substantially increase traffic volumes, and those that worsen traffic flow. One intersection within the Carlsbad portion of the study area, the northbound and southbound ramps at Palomar Airport Road, was identified as adversely affecting traffic flow under operation of the proposed project. According to the Draft Air Quality Analysis, however, thresholds at the interchange would not exceed allowable levels at the AM or PM peak periods. Therefore, air quality impacts in Carlsbad are not considered adverse.

Adverse noise impacts are considered to occur when projected noise volumes from a project are substantially higher than those experienced in current conditions. Noise impacts and the location and feasibility of noise abatement structures within Carlsbad, are discussed in the NADR (Caltrans 2007f). The NADR separates Carlsbad into six segments, and a total of 20 potential sound walls were evaluated for their effectiveness and feasibility. Of the 20 potential sound walls, 12 were recommended, although some would require voluntary donation from landowners.

- Sound wall north of Batiquitos Lagoon would decrease noise levels and benefit 12 single-family residences. Construction is recommended, but easements would have to be donated by property owners for the wall construction to be reasonable.
- Sound wall south of Poinsettia Lane, would decrease noise levels and benefit 32 single-family residences and 46 multi-family residences.
- Sound wall north of Poinsettia Lane would decrease noise levels and benefit 36 single-family residences and 56 multi-family residences.
- Sound wall south of Chinquapin Avenue would decrease noise levels and benefit 2 single-family residences and 11 multi-family residences.
- Sound wall south of Tamarack Avenue would decrease noise levels and benefit 3 single-family residences and 13 multi-family residences.
- Sound wall south of Tamarack Avenue would decrease noise levels and benefit 22 multi-family residences.
- Sound wall north of Tamarack Avenue would decrease noise levels and benefit 10 single-family residences, 16 multi-family residences, 2 hotel pools, 1 church, 1 daycare facility, 1 school, and 1 park.

- Sound wall north of Tamarack Avenue would decrease noise levels and benefit 28 single-family residences and 116 multi-family residences.
- Sound wall between Carlsbad Village Drive and Las Flores Drive would decrease noise levels and benefit 17 single-family residences and 34 multi-family residences.
- Sound wall between Carlsbad Village Drive and Las Flores Drive would decrease noise levels and benefit 14 single-family residences and 1 park.
- Sound wall north of Las Flores Drive would decrease noise levels and benefit one single-family residence.
- Sound wall north of Las Flores Avenue would decrease noise levels and benefit three single-family residences.

Construction of the sound walls at these locations would minimize impacts to nearby residences, schools, hotels, daycare facilities, and recreational facilities. Increased noise levels would be experienced at other locations along the I-5 North Coast Corridor in Carlsbad where sound walls are not feasible due to factors such as cost; environmental impacts; views/opinions of affected residents; noise abatement benefits; public and local agency input; or other social economic, legal, or technological factors. However, additional sound abatement measures would be implemented to minimize impacts to the nearby communities. Implementation of recommended sound walls and abatement measures described in the NADR would minimize noise-related impacts to the community, and impacts are not considered adverse.

3.2.6 Oceanside

3.2.6.1 Travel Patterns, Access, and Parking

Oceanside is the northernmost municipality discussed in this CIA and contains within its borders the vast majority of the proposed project not already discussed in the previous sections. The proposed alternatives within Oceanside begin at the SR 78 interchange and extend north for approximately 3.8 miles. The alternatives cross Buena Vista Lagoon and the San Luis Rey River, terminating just north of the Harbor Drive interchange, at Vandegrift Boulevard at Oceanside's northern boundary with MCB Camp Pendleton. Within this segment of the I-5, the corridor extends through five official community planning areas: Townsite, South Oceanside, East Side Capistrano, Loma Alta, Fire Mountain, and Airport.

Seven interchanges provide partial or full access to and from Oceanside communities to I-5, including SR 78, Cassidy Street, California Street, Oceanside Boulevard, Mission Avenue, SR 76, and Harbor Drive. Prime arterials on this segment of road carry high traffic volumes and provide local and regional circulation, and connections to other freeways and roads. They include Oceanside Boulevard east of El Camino Real and El Camino Real south of Oceanside Boulevard. Major arterials are Mission Avenue, College Boulevard, and El Camino Real and Rancho Del Oro north of Oceanside Boulevard. Secondary arterials are Coast Highway, Canyon Drive, River Road, Pala Road, Mesa Drive, and Lake Boulevard.

The proposed project is designed to reduce congestion on the I-5 North Coast Corridor by increasing capacity through the addition of HOV lanes and GP lanes for the 10+4 alternatives. From SR 78 north through to Harbor Drive, I-5 would be expanded to include two HOV lanes in both northbound and southbound directions. GP lanes would be added up to the I-5/SR 78 interchange for the 10+4 alternatives. A DAR would be created at Oceanside Boulevard, which would allow traffic direct access from local streets to median HOV lanes without entering main traffic lanes on I-5.

The proposed project also includes a number of community enhancement features to be implemented in conjunction with the proposed project. These enhancements would improve pedestrian circulation and access between communities east and west of I-5. Community enhancements within Oceanside include:

- Pocket Park and Access to Moreno Way at California Street
- Oceanside Boulevard Pedestrian Streetscape Enhancement
- Enhancements to Division Street Overpass
- Enhanced Pedestrian Overpass Connection on Mission Avenue
- Enhanced Pedestrian Overpass Connection on Bush Street
- Community Open Space Park
- Parking and Staging Area at SR 76
- Pedestrian Underpass Improvements at San Luis Rey River
- Regional Gateway Feature at Harbor Drive

These projects include the construction of pedestrian and bicycle trails, parks, and streetscape improvements, to increase and enhance alternative transportation. The Pocket Park and California Street enhancement is to encourage east-west pedestrian and bicycle movement at existing I-5 overpasses and interchanges. At California Street, an overpass with no direct access to I-5, landscaping of the existing overpass, and a new pocket park west of I-5 would be constructed. North of California Street at Oceanside Boulevard, a new sidewalk undercrossing I-5, as well as improvements to existing sidewalks and landscaping, would be implemented. The existing Division Street overpass bridge would be widened and enhanced with paving and landscaping. At the Mission Avenue overpass, the freeway ramp would be modified to eliminate the conflict between students crossing the ramps and vehicles accelerating towards the freeway. The wider and more direct pedestrian sidewalk would allow for a safe connection to Oceanside High School and would reduce safety concerns facing students. An enhanced Bush Street overpass would include a sidewalk and raised planter areas on the south side of the overpass, and raised community garden plots on the north side.

Other community enhancement features include a new community open space park on the west side of I-5 between Surfrider Way and North Horne Street, which would include paths, shady areas, and plantings and would create open space for the local community and the existing Family Recovery Facility. At SR 76, a new parking area, trailhead staging area, and other amenities would be created on the east side of I-5 to encourage greater utilization of the San Luis Rey bike path. In addition an enhanced pedestrian I-5 undercrossing, at the San Luis Rey River, including stairs to provide a pedestrian shortcut to Riverside Drive, stairs from San Luis Rey Drive to the pedestrian undercrossing,

lighting and possibly art, would improve east-west pedestrian circulation. Lastly a regional gateway feature (sculpture, lighting, and landscaping) at Harbor Drive would provide a visual focus for motorists entering Oceanside from MCB Camp Pendleton.

Several Oceanside bicycle facilities would also be upgraded to Class II bicycle lanes as part of the proposed project. These routes include Cassidy Street, California Street, Mission Avenue, Fourth/Bush Street, Neptune Way/Eighth Street, and Vandegrift Boulevard/Harbor Drive.

Improvements to circulation along I-5 through Oceanside and at the three interchanges in Oceanside would improve traffic flow within the surrounding communities and would improve circulation in and out of Oceanside, particularly at peak travel times when traffic is severely congested. The improved flow throughout Oceanside at interchanges with I-5, as well as along the length of the I-5 North Coast Corridor, would improve regional circulation within the area. The proposed project would likely reduce congestion along other nearby major roads serving local communities, as motorists would minimize the use of alternate routes, including Coast Highway. Implementation of the proposed project would result in increased vehicular capacity, and therefore higher ADT volumes on the northbound and southbound I-5 corridor and at interchanges. The increased capacity would likely result in an improved LOS and reduced commute times. This increased capacity on the I-5 North Coast Corridor would benefit residents of Oceanside communities near I-5, as well as commuters from a regional perspective.

Implementation of the proposed project would improve circulation and access to a number of community facilities, residential neighborhoods, and commercial centers in Oceanside. This would improve access to areas currently experiencing heavy traffic, such as recreational areas including the public beaches, Oceanside Pier, Oceanside Harbor, Ron Ortega Park, and South Oceanside Park; commercial areas such as the downtown Oceanside; and local schools including the Oceanside High School. Increased vehicular flow, the widening of the I-5 corridor, and the construction of a DAR at Oceanside Boulevard would improve access for local emergency service providers and, by means of an improved LOS, could lead to shorter emergency responses times.

An existing Park and Ride facility is located at the intersection of I-5 and SR 78. While no impacts are expected to this particular facility, there are several locations along the corridor where the proposed improvements may require conversion of existing uses to ROW, which could result in a loss of parking. Conversion of existing uses to ROW could result in a loss of parking. It is estimated that one strip mall, across from Oceanside High School, would lose approximately 6 marked parking stalls as a result of all proposed alternatives. These spots are located to the side of the main parking area, however, and are not considered to be a substantial parking loss. Thus, the remaining parking appears to be adequate to serve the current commercial land use, and no adverse impacts are anticipated.

The proposed alternatives would also affect on-street parking at three locations within Oceanside: Soto Street (0.13 mile of unmarked on-street parking), Garfield Street (3 unmarked parking spots), and Buena Street (5 unmarked parking spots). This loss of on-street parking is not considered substantial due to the relatively small number of spaces lost, surrounding land uses, and availability of other on-street parking nearby.

3.2.6.2 Relocation Impacts

The DRIR (Caltrans 2007c) identifies the displacement of residents from 13 single-family and 31 multi-family units in Oceanside (Table 3.2-9). Nine of the single-family units are located in South Oceanside, with 3 single-family units and 31 multi-family units located in Townsite, and 1 single-family unit in East Side Capistrano. One of the single-family residential units in South Oceanside displaced by the four alternatives is an eight-bedroom home. Due to the lack of equivalent housing in the Oceanside area, as described in the DRIR, relocation of this residence could require utilization of the State's relocation program or Last Resort Housing Program. Adequate relocation opportunities exist for the remaining residences, as identified in the DRIR.

Table 3.2-9. Potential Relocations by Alternative in Oceanside

Alternative	Residential Relocations	Commercial Relocations
10+4 with Barrier	44 (26 multi-family apartments/condominiums, 5 duplex units, and 13 single-family units)	3
10+4 with Buffer	44 (26 multi-family apartments/condominiums, 5 duplex units, and 13 single-family units)	3
8+4 with Barrier	44 (26 multi-family apartments/condominiums, 5 duplex units, and 13 single-family units)	3
8+4 with Buffer	44 (26 multi-family apartments/condominiums, 5 duplex units, and 13 single-family units)	3

In addition, three businesses in Loma Alta would require relocation within Oceanside. While adequate relocation opportunities exist for two of these sites, it may be difficult to identify an appropriate relocation site for a specialty sports business that focuses on scuba training, which currently has an on-site pool. Residents and businesses displaced as the result of a given project are potentially eligible to be compensated in accordance with the Uniform Relocation Assistance Act of 1987.

3.2.6.3 Land Use Impacts

Existing Land Use

The portion of Oceanside located along I-5 is highly urbanized with some interspersed open space, similar to the other communities within the project corridor. Residential, commercial, and open space areas associated with the San Luis Rey River are the primary uses along the alignment. No designated agricultural land is located along the freeway; most agricultural operations within Oceanside are located in the northeast portion of the city. While the proposed alternatives would require relocation of single- and multi-family housing, as well 3 of commercial businesses, these effects would be limited to the individual parcels and would not result in land use shifts across a larger part of the city. Additionally, the proposed project would consist of the expansion of an existing established freeway corridor and would be consistent with existing land uses.

Development Trends

Development in Oceanside is likely to be in the form of redevelopment or infill projects west of I-5. Vacant land within the city is concentrated east of the project corridor, much of which is planned for future residential development. The proposed project would not affect land uses outside of the direct project footprint and would therefore not be anticipated to affect these future development trends in the city.

Future Land Uses

Future land uses within the city are expected to continue to increase housing and business opportunities for residents. There are no future planned projects within the project corridor that would be affected by the proposed project; therefore, no effects on future Oceanside land uses are anticipated.

Consistency with Plans and Policies

The proposed alternatives would convert a maximum of 44 residential units and 3 commercial units to transportation uses. However, these relocations would be localized and would not substantially affect land use patterns within Oceanside. Encroachment into adjacent residential uses would be minimized and would not result in fragmentation or displacement of residential neighborhoods. The loss of up to 3 commercial units would not adversely affect Oceanside's economy. Additionally, direct displacements of residents and businesses along the freeway are not anticipated to affect land use outside the project footprint, as noted above.

The proposed alternatives would be consistent with the Circulation Element of the Oceanside General Plan, which seeks to provide an integrated transportation network that allows for the safe and efficient movement of people and goods within and through Oceanside, with minimal disruption to the environment. The proposed project would improve circulation along I-5 by increasing capacity. In addition, the proposed project would increase capacity for carpooling and transit, and would include trails, pedestrian overpass connections, and suspended trails at freeway bridges to create pedestrian linkages throughout the community. Encroachments into adjacent open space at Buena Vista Lagoon and along the San Luis Rey River would be minimized and measures incorporated to avoid indirect effects to water quality. Therefore, the proposed project would be consistent with the City of Oceanside General Plan. A more detailed listing of relevant goals and policies and the proposed alternative's consistency with those policies is provided in Table 3.2-10.

Natural Communities Conservation Plans: MHCP

Individual jurisdictions implement their portion of the MHCP plan through the preparation and adoption of citywide subarea plans that describe the specific policies each city will institute for the MHCP. Oceanside has prepared a public review draft subarea plan. Coordination between the Department and the cities is ongoing to ensure that impacts to sensitive biological species or communities targeted for preservation in the draft subarea plans are minimized, where feasible.

Table 3.2-10. Consistency with the Oceanside General Plan

Relevant Key Goals	Project Considerations	Standards Project Considerations Consistency
Land Use Element 1.14 Noise Control: Objective: To improve the quality of Oceanside's environment by minimizing the negative effects of excessive noise levels.	The proposed project would increase noise levels along the I-5 corridor. To address noise level increases, the proposed project would involve the construction of noise barriers; the location, height, materials, and other design features arediscussed in Section 3.2.6.8. It is likely that noise levels would still be considered acceptable, and the Department would minimize irritating noise sources to the greatest extent possible.	All four alternatives would be consistent.
Circulation Element Goals: (1) Provide an integrated transportation network that provides safe and efficient movement of people and goods within and through the City of Oceanside with minimal disruption to the environment; (2) Consider all modes of transportation, including motor vehicle … mass transit … and non-motorized transportation …; (3) Develop alternative transportation strategies designed to reduce traffic volumes and improve traffic flow.	The proposed project would improve circulation along I-5 by increasing capacity. The proposed project would bring I-5 into compliance with current safety standards. In addition, the proposed project would increase HOV capacity for carpooling and transit and include community enhancement features designed to create pedestrian linkages throughout the community.	All four alternatives would be consistent.
Recreational Trails Element Mission Statement: To provide a safe and efficient system of bicycle, equestrian, and pedestrian trails throughout the City, creating a non-motorized connection to recreational and commuting destinations.	The proposed alternatives would not impact existing access to trails nor physically disrupt existing trails, and would not preclude construction of future trails.	All four alternatives would be consistent.
Noise Element Goal: To minimize the effects of excessive noise in the City of Oceanside.	The proposed project would increase noise levels along the I-5 corridor. To address noise level increases, the proposed project would involve the construction of noise barriers; the location, height, materials and other design features are discussed in Section 3.2.6.8. It is likely that noise levels would still be considered acceptable, and the Department would minimize irritating noise sources to the greatest extent possible.	All four alternatives would be consistent.
Appendix B – Local Coastal Program Policies: (7) The bike path along Highway 76 shall be extended under I-5 and the railroad track to the river mouth on the south side of the San Luis Rey River if and when funds are available to do so.	Implementation of the proposed alternatives would not preclude extension of the bike path along Highway 76.	All four alternatives would be consistent.

3.2.6.4 Farmland Impacts

The majority of active farmland and agricultural soils within Oceanside are located northeast of the project corridor. No designated farmland is located within the project area. There would be no impacts to active farmland or designated soils supporting Important Farmland within Oceanside. Table 3.2-2 shows the Farmland Conversion Impact Ratings for each of the proposed alternatives. All alternatives have ratings less than the 160-point threshold; therefore, no adverse farmland impacts are anticipated.

3.2.6.5 Impacts to Local Economy

Implementation of the proposed project may have impacts to certain characteristics of the local economy. This section examines the potential impacts related to local businesses, property values, and tax revenues.

Impacts to Local Businesses

Oceanside has several interchanges with the I-5, and much of the ROW is set back enough to allow for implementation of the proposed project. However, as discussed in Section 3.2.6.2, implementation of the proposed project in Oceanside would require the acquisition of an underwater training facility. The relocation of this business may be difficult because the business requires a pool to conduct training. A replacement site would require an existing pool or ample space to allow for the construction of one.

Some additional local businesses including restaurants, retail stores, shopping centers, gas and auto service stations, and hotels may, however, also be indirectly affected. Positively affected businesses include restaurants, retail stores, shopping centers, and tourist attractions like the beach or the golf courses located within the city.

Other communities in California with heavy congestion during peak hours have experienced a decrease in local patronage because long wait times and congestion deter individuals from exiting the freeway (Caltrans 2006). The proposed project would lead to increases in ADT and an improvement in LOS. Decreased congestion along the I-5 North Coast Corridor has the potential to allow regional patrons, as well as community residents, to reach Oceanside businesses more efficiently, thereby promoting commerce. This would be especially true for restaurants, retail stores, and shopping centers within the directly impacted area, as they are often automobile trip destinations for residents and visitors.

Implementation of the proposed project would likely have a positive impact to businesses throughout the city, because of the improved access efficiency to other highways and surface streets. This improved access can help Oceanside's many commercial centers. Beaches, lagoons, recreation areas, and other tourist attractions may experience increased visitation, resulting in increased patronage at nearby shops. Potential parking loss would not affect businesses located in the vicinity.

In addition to the main I-5 improvements, community enhancements have the potential to stimulate the local economy. These projects would create and enhance destinations for residents and visitors, thus drawing people to the area and potentially enhancing commerce. In addition, these community enhancements would increase connectivity throughout the city, making local commerce more accessible to pedestrians.

Impacts to Property Values

Property values in Oceanside could be affected by displaced businesses and residences, changes in the visual environment, improved access to community facilities and other residential areas, and nearby community enhancement projects. As discussed in Section 3.2.6.2, there are a number of properties in South Oceanside, Townsite and East Side Capistrano along the I-5 corridor that would be displaced due to implementation of the proposed alternatives. These areas are adjacent to the project along the main alignment and at interchanges. For those neighboring homes of displaced residences, property values could decline as a result of the proposed project.

Residential properties immediately adjacent to I-5, in addition to those properties that would experience a partial loss of land to the proposed project, may experience indirect effects to property values. Those residential areas that would become closer to I-5 and the proposed retaining walls and sound walls, especially if these walls are built on easements donated by property owners, could experience a decrease in property values. These large built structures could create a more urban feel, as well as affect shade, noise levels, and viewsheds. In contrast, it may be possible that the proximity to I-5 and installation of sound walls would improve property values, creating an environment with reduced traffic-related noise and a relative separation from the freeway. A number of factors drive property values in the San Diego region, however, such as proximity to coastal areas, school districts, accessibility to public facilities and amenities, neighborhood affiliation, lifestyle, etc. It is likely that this complex set of factors may overwhelm any project-related incremental change. Therefore, impacts to property values associated with the proposed alternatives are not known at this time.

While immediately adjacent individual residential property values may experience some neutral or adverse effects, those businesses neighboring a realigned interchange could experience an increase in economic activity as improved access and an increased capacity on the roadway could increase the number of potential customers. Additionally, the neighborhoods that enjoy the addition of the community enhancement features, such as the improved pedestrian and bicycle corridors and improved trailheads, may experience an increase in property values. These elements of the proposed project would generally improve community cohesion, creating a more inviting neighborhood and improving residential desirability for these places in the study area.

When viewing the proposed project along the entire I-5 North Coast Corridor and the improvements to the region as a whole, property values would likely improve. In addition to a potential regional increase in property values over time as a normal phenomenon of the marketplace, operation of the proposed project may have the effect of improving property values by providing residents with a more efficient and more capable freeway system. In the future, if residents have the perception that commute time along the I-5 North Coast Corridor has improved, residences in the vicinity may become more desirable, thereby indirectly increasing property values.

Impacts to Tax Revenue

Impacts associated with the removal of residential and business property by ROW takes can result in losses to property and sales tax revenue for the local jurisdictions in which the removal takes place. This loss in tax revenue is usually minimal, however, with many homeowners and businesses relocating within the municipality and continuing to pay taxes after resettling. Tax-related impacts usually can only occur if removed businesses and homeowners do not relocate within the local tax jurisdiction, since property is removed from the tax roll, or if businesses cease operation. The partial acquisition of property by a proposed project does not usually affect tax revenue unless the use of the parcel is significantly affected.

According to the DRIR, up to 44 residential units would be removed by the proposed alternatives. This includes 13 single-family residences, 5 duplex units, and 26 multi-family apartment units. The DRIR also indicates that approximately 550 single-family residences are available for purchase, and 101 single-family residences are available for rent (which includes 43 apartments), within Oceanside. Generally, there are ample residential relocation resources, and those displaced would likely be able to relocate within Oceanside and lost tax revenue is considered to be temporary and minor. The only residence within Oceanside that may experience difficulty relocating within the municipality is an 8-bedroom single-family home. The DRIR suggests that no 8-bedroom homes are currently available within Oceanside, with the closest 8-bedroom homes available in Rancho Santa Fe. These homes, however, far exceed the value of the property. With only one residential unit unlikely to relocate within Oceanside, lost tax revenue from residential units is not considered to be adverse.

Three retail businesses within Oceanside are expected to be removed by the proposed alternatives. Two of the three businesses are not expected to require any extraordinary site requirements for relocation, and it is likely that suitable sites for relocation within Oceanside exist. The third business may find relocation difficult as the current business has a pool onsite. Locating another property that would allow a pool, within Oceanside, may be a challenge. The California State Board of Equalization does not disclose sales tax information for individual businesses; however, this business is not expected to provide a significant portion of the approximate $15.7 million in sales tax received by Oceanside in 2006. As such, impacts related to the relocation or potential loss of this business are not considered to be adverse.

3.2.6.6 Community Facilities and Services Impacts

As described above in Section 2.6, the Oceanside Police Department provides police protection for the municipality of Oceanside, including those places within the study area. The downtown station, the Police Beach Facility, and the Harbor Police Station are located within the area of direct impacts, as are two of the four Community Resource Centers, which work in conjunction with the Oceanside Police Department providing community services. Of the six fire stations in Oceanside, Fire Stations 1 and 2 are located within the area of direct impacts. There are no hospitals within the study area of Oceanside. The proposed alternatives are not expected to displace or relocate any of these facilities, nor are visual, noise, or air quality impacts likely to be significant. Operation of the proposed project is not anticipated to adversely affect response times for emergency services associated with police or fire protection. It is likely that the operation of the additional HOV, GP lanes for the 10+4 alternatives, and the DAR at Oceanside Boulevard may incrementally improve response times of emergency services due to increased capacity.

Seven schools are located within the area of direct impacts in Oceanside. These include four elementary schools, one middle school, and one high school. Oceanside High School is located adjacent to southbound I-5, just south of Mission Avenue. The Mission Avenue overcrossing is heavily used by students accessing Oceanside High School and currently presents a conflict between pedestrians and vehicles. The proposed Mission Avenue community enhancement feature would allow for a safer pedestrian connection and would connect on the north side of Mission Avenue rather than both the north and south sides, thereby eliminating the conflict between crossing pedestrians and vehicles entering the freeway. None of the schools are expected to experience any displacement or relocation from the proposed alternatives. Access to the schools from the freeway may become more efficient under operation of the proposed project due to higher freeway capacity, reconstructed interchanges, and the DAR at Oceanside Boulevard. Noise levels at Oceanside High School are anticipated to increase as a result of the proposed project. A higher sound wall along this portion of I-5 is not recommended; however, an existing sound wall will be replicated as part of the proposed project, and this may be enough to abate the increase in noise.

The study area within Oceanside contains a number of parks and recreation facilities. Of the 24 parks within Oceanside, 9 are located within the study area, with 6 of them within the area of direct impacts. While all parks within this region could potentially benefit from an increase in visitors due to an increased freeway capacity, the parks within the area of direct impacts have the potential to experience a wider range of secondary impacts related to the operation of the proposed project. However, these are proximity impacts and would not result in physical impacts. These parks include Recreation Park, South Oceanside Park, the Center City Golf Course, Capistrano Park, Balderama Park, and Marshall Park. A 14,000-square-foot senior citizen center is also located within the study area, just south of Recreation Park. Other community centers in the study area include the Sunshine Brooks Theatre, the Women's Club Park, two swimming centers, and one library.

The proposed project would impact the Center City Golf Course, also known as Goat Hill because of the hills and valleys located throughout the golf course, an 18-hole golf course open to the public. Implementation of all four project alternatives and the DAR would require acquisition of 0.95 acre of land owned by the City of Oceanside. Of this land, 0.07 acre is located at the southern edge of the golf course northwest of the Ralphs shopping center. This piece of land is located at the edge of the golf course and does not serve as a portion of any of the holes or fairways. The remaining 0.88 acre of land is located adjacent to I-5 along the western edge of the Center City Golf Course's property. Additionally, this portion of land that would be acquired by the proposed project is downhill from the golf course and approximately 300 to 1,000 feet away from the closest holes and fairways at the edge of the golf course. Thus, the impacts associated with all four project alternatives and the DAR would not adversely affect any of the activities, features, or attributes of Center City Golf Course that qualify the resource for protection under Section 4(f) and would be classified as de minimis.

The community enhancement features that would add a pocket park and a community open space park in Oceanside may create two welcoming recreational areas within Oceanside for visitors and residents, alike. Visitation to these areas may increase as a result of these two new recreational areas. This impact is considered beneficial.

3.2.6.7 Visual Impacts

The landscape units within Oceanside defined by the DVIA include Loma Alta Creek, Oceanside Gateway, and the San Luis Rey River (Caltrans 2007d). Two key views were analyzed by the DVIA for Oceanside: along I-5 at the proposed Oceanside Boulevard DAR, looking south, and Mission Avenue at the I-5 interchange looking west. The existing visual qualities of views along I-5 at the proposed Oceanside Boulevard DAR are considered to be moderately high and would be affected by the

proposed increased footprint for the DAR, retaining walls up to 40 feet, a sound wall of 12 feet on the south side of the freeway, the DAR overpassing structure, and retaining walls associated with the DAR access road. The project would introduce large-scale build forms to the area and remove views of skyline trees. This would reduce the feeling of a regional gateway, as described in the DVIA and the resultant impact to visual resources is considered high and adverse.

The existing visual qualities of westerly views at Mission Avenue at the interchange of I-5 are considered to be moderate. The visual resources would be affected by the proposed elimination of the two existing free-flow freeway ramps, the creation of a continuous sidewalk, pedestrian-scaled streetscape features, trees, and benches. The change would improve visual unity, create a sense of security for nonmotorized users, and increase the natural aesthetics of the area. The resulting impact to visual resources is considered to be positive.

3.2.6.8 Air Quality and Noise Impacts

In addition to general environmental concerns, impacts to air quality and noise levels during operation of the proposed project can greatly affect residents in the surrounding community. Particularly sensitive receptors include nearby homes, schools, hospitals, businesses, and outdoor recreation facilities. An adverse change in air quality can create health concerns for people living nearby and create a living/working environment that is not only unsafe, but generally unpleasant overall. Adverse changes, if left unchecked for too long, can also affect the quality of life for residents. Air quality and noise-related impacts can affect local economic activity by creating a displeasing environment in which to conduct business due to harmful surrounding air quality or bothersome noise levels. If impacts are great enough to a specific area, property values can decrease. The following section discusses air quality and noise-related impacts associated with the operation of the proposed project.

Impacts to local air quality are discussed for CO and particulate matter in the Draft Air Quality Analysis (Caltrans 2007e). CO analysis was conducted at I-5 interchanges that have the potential to affect air quality. Interchanges identified to worsen air quality include those that are likely to increase a percentage of vehicles in cold start mode, those that substantially increase traffic volumes, and those that worsen traffic flow. No intersections within the Oceanside portion of the study area were identified as having the possibility of worsening local air quality. Therefore, air quality impacts in Oceanside are considered to be less than significant.

Adverse noise impacts are considered to occur when projected noise volumes from a project are substantially higher than those experienced in current conditions. Noise impacts and the location and feasibility of noise abatement structures within Oceanside, are discussed in the NADR (Caltrans 2007f). The NADR separates Oceanside into four segments, and a total of 16 potential sound walls were evaluated for their effectiveness and feasibility. Of the 16 potential sound walls, 11 were recommended.

- Sound wall between Vista Way and Cassidy Street would decrease noise levels and benefit 16 single-family residences.
- Sound wall between Vista Way and Cassidy Street would decrease noise levels and benefit three single-family residences.
- Sound wall between Cassidy Street and California Street would decrease noise levels and benefit 17 single-family residences and a recreational facility.
- Sound wall north of California Street would decrease noise levels and benefit 10 single-family residences.
- Sound wall between California Street and Oceanside Boulevard would decrease noise levels and benefit 18 single-family residences.
- Sound wall south of Oceanside Boulevard would decrease noise levels and benefit 20 mobile homes and a clubhouse.
- Sound wall south of Mission Avenue would decrease noise levels and benefit one recreational facility. Noise receptors along this stretch are severely impacted.
- Sound wall between Mission Avenue and Civic Center Drive would decrease noise levels and benefit eight single-family residences and two multi-family residences.
- Sound wall between Mission Avenue and SR 76 would decrease noise levels and benefit 6 single-family residences, 14 multi-family residences, and 1 recreation facility.
- Sound wall between SR 76 and Capistrano Drive would decrease noise levels and benefit 11 single-family residences.
- Sound wall between Capistrano Drive and Harbor Drive would decrease noise levels and benefit nine single-family residences.

Construction of the sound walls at these locations would minimize impacts to nearby residences, schools, and recreational facilities. Increased noise levels would be experienced at other locations along the I-5 North Coast Corridor in Oceanside where sound walls are not feasible due to factors such as cost; environmental impacts; views/opinions of affected residents; noise abatement benefits; public and local agency input; or other social economic, legal, or technological factors. However, additional sound abatement measures would be implemented to minimize impacts to the nearby communities. Implementation of recommended sound walls and abatement measures described in the NADR would minimize noise-related impacts to the community, and impacts are not considered adverse.

CHAPTER 4.0
COMMUNITY COHESION

According to guidance from the Department CIA Handbook (Caltrans 1997), community cohesion is the degree to which residents have a "sense of belonging" to their neighborhood; a level of commitment of the residents to the community; or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. Cohesive communities have been regularly linked to certain social characteristics, including high ratios of owner-occupied single-family residences, frequent interpersonal contact, ethnic homogeneity, and shared goals. Neighborhoods with residential stability are also indicative of areas with high community cohesion.

Transportation projects may enhance or diminish community cohesion. In general, major transportation projects tend to be disruptive to cohesive communities by directly affecting pedestrian, bicycle, and vehicular circulation and the travel patterns residents use to interact, as they are typically, by design, intended to serve a larger geography than a single neighborhood or community. Transportation projects can diminish community cohesion through the alteration, relocation, and/or closure of locally important institutions or businesses. Transportation projects can also create physical or psychological barriers or impediments to interaction, dividing cohesive communities. Finally, transportation projects can change access routes and disrupt corridors regularly used by residents to obtain necessary goods and services in a timely manner. Transportation projects are not always disruptive, however, and are a primary means of connecting communities through improved circulation, including improving pedestrian circulation, which can increase community cohesion through the creation or facilitation of new networks of contacts and different types of interactions.

Community cohesion is usually difficult to assess through traditional geodemographic analysis, typically requiring key person interviews, direct observation (preferably over a period of time), and the documentation of a number of qualitative features within the community (e.g., pedestrian activity, children at play, condition of houses and community facilities). Due to the scale and scope of the proposed project, however, long-term qualitative observation and engagement with the communities along I-5 within the study area was not possible. Instead, figures were developed using parcel and U.S. Census data that present three different common aspects of community cohesion spatially. These figures present the presence of owner-occupied homes within each municipality, the length of tenure of householders as of 2000 by block group as a general indicator of residential stability, and the proportion of linguistically isolated households[2] by block group as an indicator of ethnic homogeneity and possible community interrelations. It is assumed that those areas exhibiting concentrations of owner-occupied residential units would exhibit relatively higher levels of community cohesion due to the collective vested interest of area homeowners to create a welcoming, safe, and inviting environment for the safety of their families and the benefit of their property's value. Areas exhibiting longer homeowner tenures are expected to have higher levels of community cohesion due to homeowners being actively engaged in their community for a longer period of time. Areas with high proportions of senior citizens are also indicative of places with elevated community cohesion, as senior citizens generally show higher levels of community and civic involvement than younger residents. For those areas with high proportions of minority residents and/or cultural homogeneity (explored in this document through an analysis of linguistic isolation) relatively high levels of community cohesion can result from a shared ethnic and/or cultural background and the networks of support that form between families in these areas as a way to navigate the culturally unfamiliar larger American society.

It is possible that areas exhibiting traits of high community cohesion can overlap when, in actuality, very little community cohesion is experienced between the two areas. Without further investigation, however, it is difficult to make this distinction in the data. These data are presented along with the possible impacts to circulation within the community (including community enhancements associated with the proposed project), growth, changes in quality of life, and increasing urbanization or isolation.

4.1 SAN DIEGO

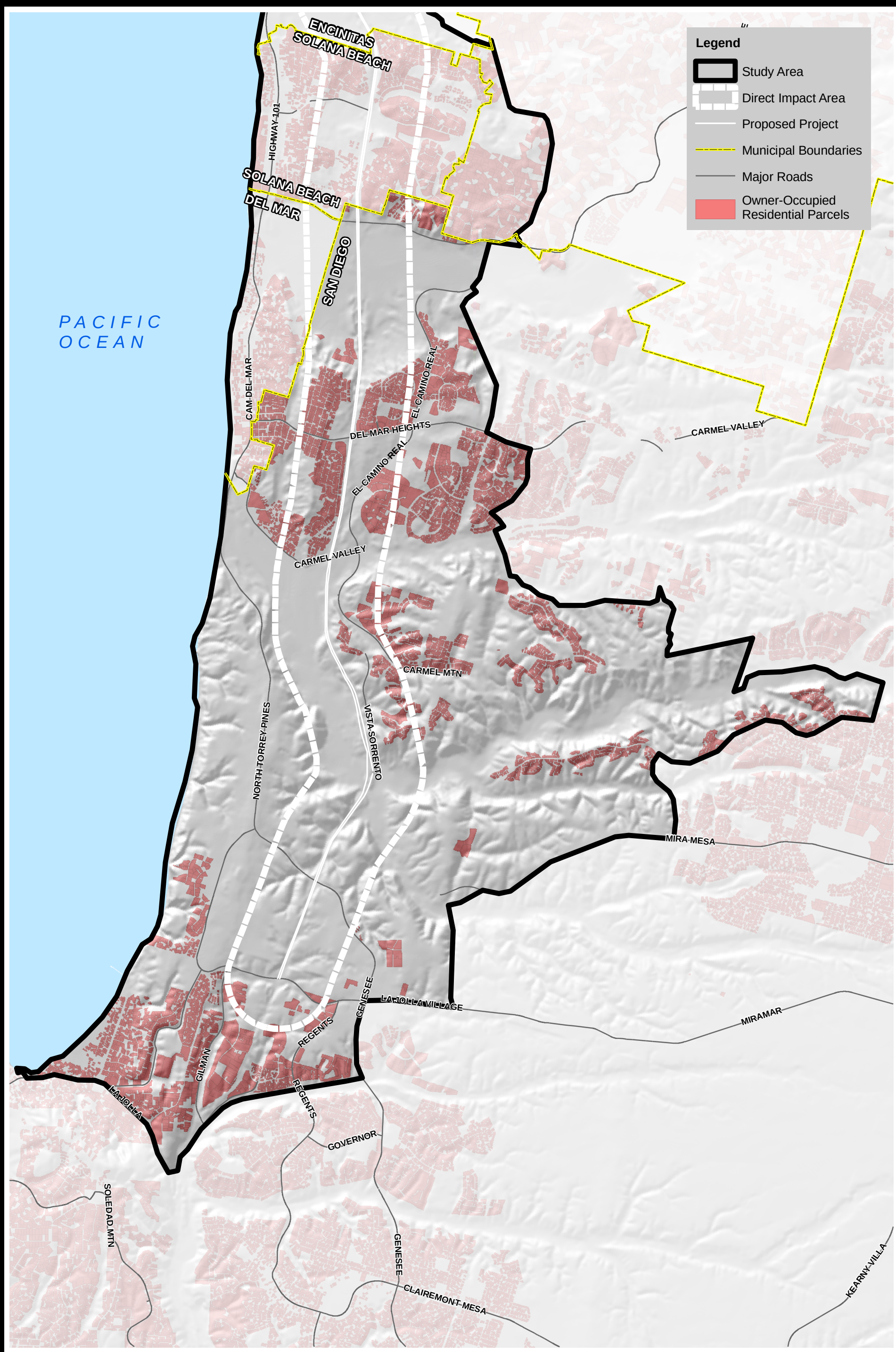
As discussed in Section 2.1, San Diego is the largest municipality in the study area and is composed of a number of communities, including La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley (see Figure 1-6). Primary land uses in the city portion of the study area are residential, commercial, industrial, with some land occupied by UCSD. In contrast to the eastern portion of the city, which exhibits a high proportion of low-density residential and open space, the study area within San Diego is relatively densely populated. Commercial areas are located along major transportation corridors and serve the surrounding residential area.

Figure 4-1 presents the owner-occupied housing, by parcel, for the study area in San Diego. Areas with high proportions of owner-occupied homes include the residential areas south of La Jolla Village Drive, areas east of North Torrey Pines Road, areas along Sorrento Valley Boulevard, areas north of Carmel Valley Road, and residential areas east and west of I-5, north of Carmel Valley Road/SR 56. These areas generally correspond to the neighborhoods of La Jolla, Torrey Pines, and Carmel Valley. Owner tenures for residential areas throughout San Diego are shown in Figure 4-2. As exhibited by length of tenure in 2000, areas with lengthy owner tenures are present in areas west of North Torrey Pines Road and south of La Jolla Village Drive in La Jolla. Residential areas southwest of the interchange of Del Mar Heights Road and I-5 in Torrey Pines also have relatively high tenures. The areas southwest of La Jolla Village Drive also have some of the highest proportions of senior citizens for the San Diego study area, which is likely tied to tenure. Areas with relatively high proportions of households in linguistic isolation are presented in Figure 4-3. They include those block groups southeast of La Jolla Village Drive and I-5 in University, and a residential area south of Del Mar Heights Road in Carmel Valley. These block groups generally have a high proportion of Asian language speakers and can be considered linguistically isolated. A block group in the southern part of the study area also has a total minority proportion of over 50 percent, the majority of whom are Asian.

Impacts to community cohesion for the places that exhibit traits of elevated cohesion levels, some of which overlap with one another, could include impacts to access and circulation, growth, changes in quality of life, and increasing urbanization or isolation. The operation of the proposed project is likely to result in an increase in some trappings of urbanization, including some large retaining walls, sound

[2] Linguistically isolated households are those in which no person over age 14 responded that they speak English at least "very well" to the U.S. Census.

I-5 NORTH COAST CORRIDOR CIA



Source: SanGIS 2006

EDAW | AECOM

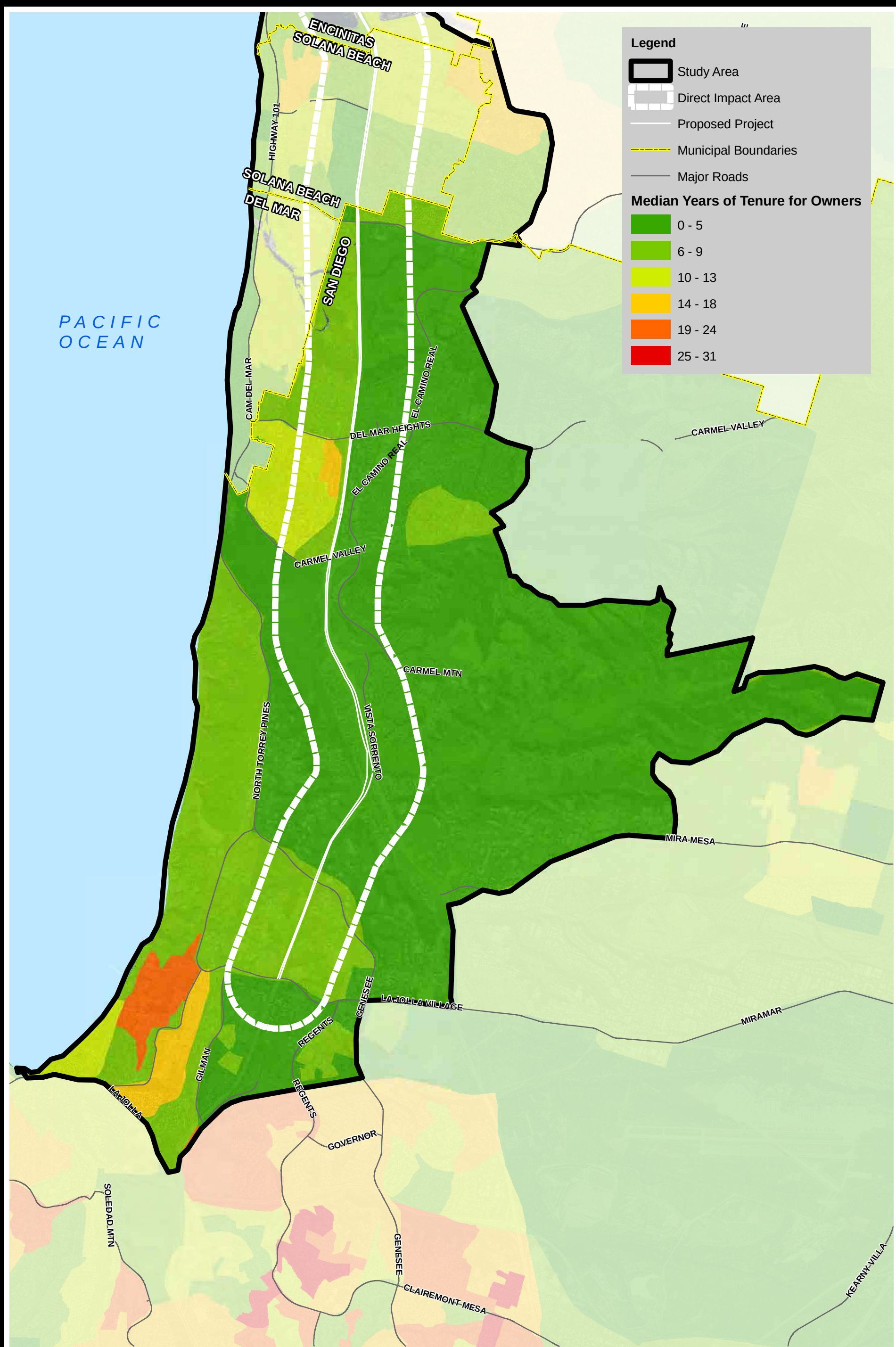
Figure 4-1
SAN DIEGO
Owner-Occupied Residental Units

4,750 0 4,750 Feet

SCALE: 1:57,000 1 inch = 4,750 feet

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:47,000 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; US Census 2000; SanGIS 2006

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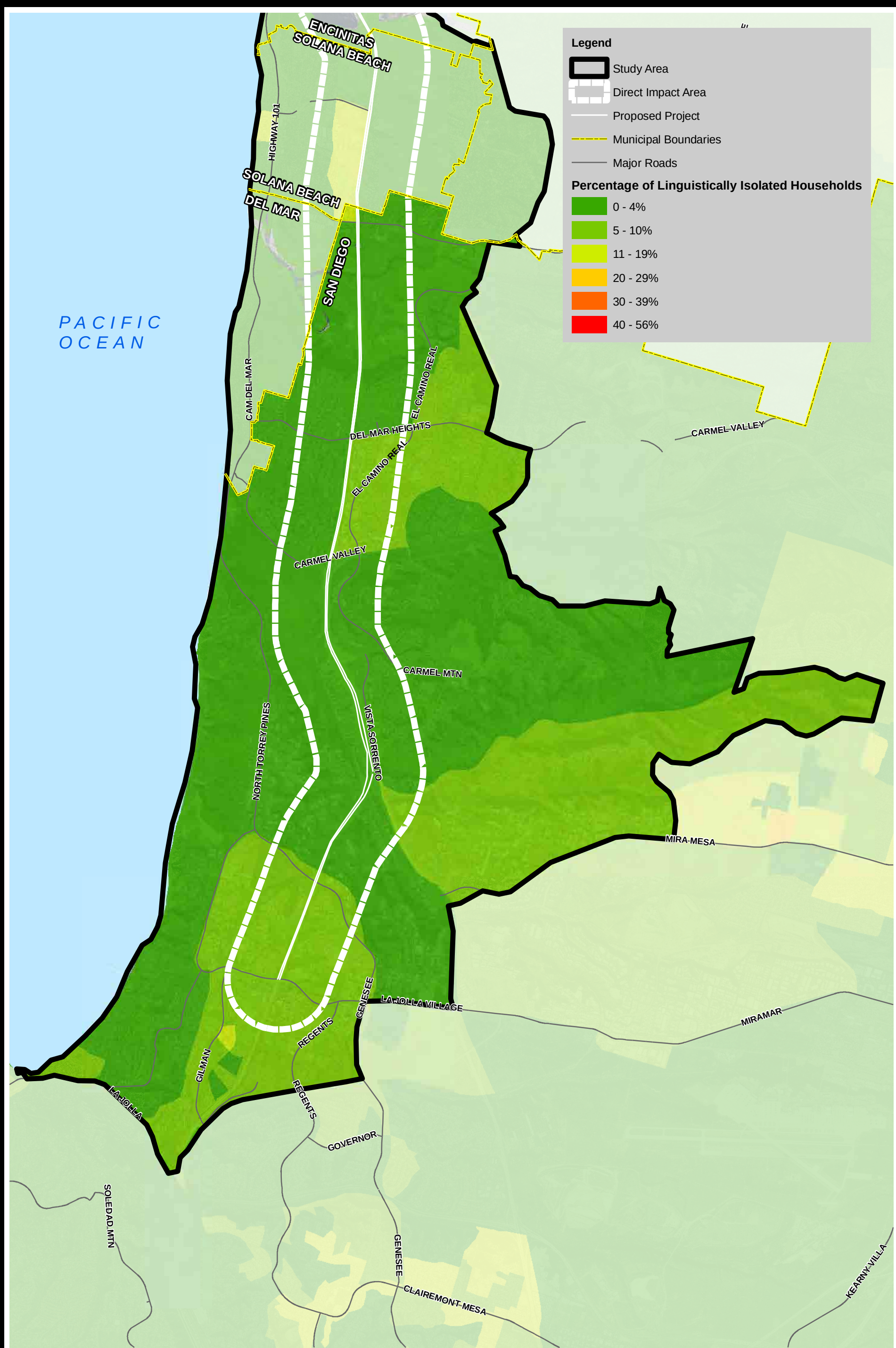
Figure 4-2
SAN DIEGO
Median Length of Tenure for Owners (2000)

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:57,000 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; US Census 2000; SanGIS 2006

EDAW | AECOM

Figure 4-3
SAN DIEGO
PERCENTAGE OF LINGUISTICALLY ISOLATED HOUSEHOLDS BY BLOCK GROUP (2000)

walls, and the potential for higher traffic volumes passing through. However, the proposed project is designed to directly reduce congestion on I-5, indirectly reduce congestion on secondary roads, and improve public access to community facilities for residents by increasing capacity along I-5.

This portion of San Diego within the study area is considered to be largely urbanized. As the proposed project would not remove barriers to future growth or create access to a previously inaccessible area, substantial unplanned growth is not anticipated. Perhaps the greatest impact to community cohesion would be the construction of the community enhancement projects, which include a trail connection at Penesquitos Creek, a pedestrian and bicycle trail connection at Carmel Valley Road, and a pedestrian overpass connection north of Del Mar Heights Road. In addition to the reengineered interchanges, overpasses, and underpasses (all of which would be constructed with pedestrian and bicycle lanes) the proposed community enhancement projects would increase connectivity between neighborhoods east and west of I-5 and provide residents with the ability to reach community facilities with greater ease thereby positively affecting the quality of life. Impacts to community cohesion from operation of the proposed project in San Diego are likely to be positive.

4.2 DEL MAR

As discussed in Section 2.2, Del Mar is the smallest municipality in the study area and is composed of mostly high-end residential areas, which can range from large estates to multi-family residential units. The commercial land uses in Del Mar are generally concentrated along Camino Del Mar, an area known as “Village Center.” This area serves tourists and residents alike.

Figure 4-4 presents the owner-occupied housing, by parcel, for the study area in Del Mar. The residential areas east of Camino Del Mar tend to have more owner-occupied units than those west of Camino Del Mar, but the municipality as a whole has a large concentration of owner-occupied homes. Owner tenures for residential areas throughout Del Mar are shown in Figure 4-5. As exhibited by length of tenure in 2000, areas with lengthy owner tenures are present in block groups east of Camino Del Mar, south of the Del Mar Fairgrounds and Racetrack. A block group east of Camino Del Mar also has the highest proportion of senior citizens in Del Mar. Areas with relatively high proportions of households in linguistic isolation are presented in Figure 4-6. The highest proportion of linguistically isolated households in Del Mar is approximately 1 percent, and these households are not centralized. Additionally, no block groups within Del Mar are considered to have a significant proportion of minorities.

Community cohesion for those residents in Del Mar, specifically those who live east of Camino Del Mar, could be affected by changes to existing access and circulation, growth, changes in quality of life, and increasing urbanization and isolation. Del Mar differs from other municipalities in the study area because the proposed project does not directly traverse the city. As such, many of the urban features of the proposed project (e.g., sound walls, increase traffic volumes, possible noise increases) are not expected to directly affect Del Mar residents.

Del Mar is considered to be largely urbanized. As the proposed project would not remove barriers to future growth or create access to a previously inaccessible area, substantial unplanned growth is not anticipated. No community enhancement projects would be located in Del mar, but residents of Del Mar, many of whom leave the municipality daily for work, school, or errands, would benefit directly from increased capacity on I-5. Improvements to overcrossings, undercrossings, and interchanges in the surrounding municipalities would also improve circulation for those living in Del Mar. These improvements have the possibility of increasing connectivity between neighborhoods in Del Mar with those outside of the municipal boundaries. Therefore, indirect impacts to community cohesion are likely to have positive effects.

4.3 SOLANA BEACH

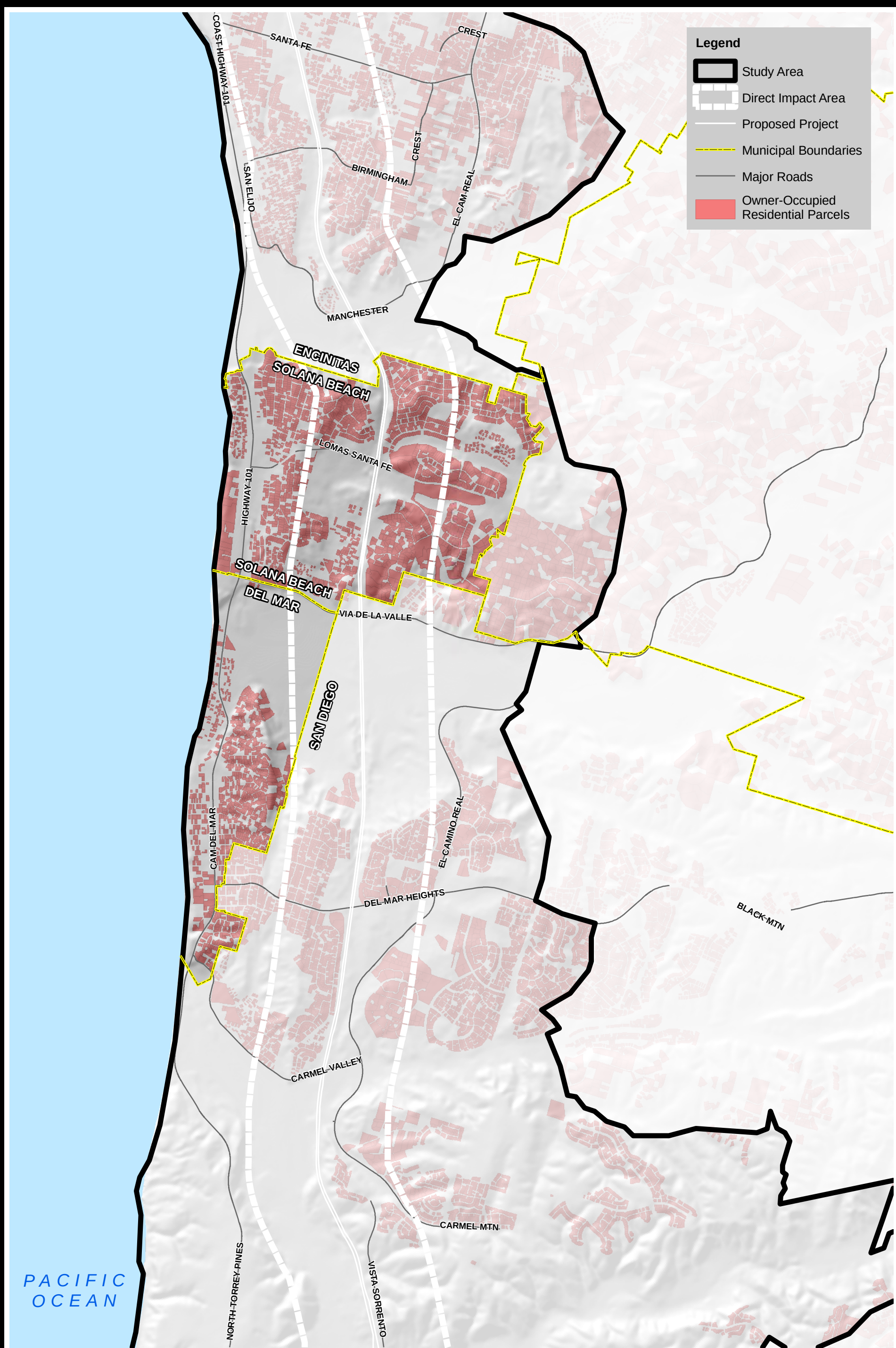
Solana Beach, one of the smallest municipalities in the study area, is almost entirely developed with residential and commercial land uses. Residential lands range from large estates to high-density multi-family housing. Any future development is more likely to occur west of I-5, as areas east of I-5 within Solana Beach have been developed according to a master plan. Commercial uses are along major transportation corridors including Highway 101, Cedros Avenue, Lomas Santa Fe Drive, and Stevens Avenue. Eden Gardens, which is one of the oldest residential areas in Solana Beach, is located to the southwest of Lomas Santa Fe Drive and adjacent to I-5.

Figure 4-4 presents the owner-occupied housing, by parcel, for the study area in Solana Beach. Generally, Solana Beach has a high proportion of housing that is owner-occupied, particularly in areas east of I-5 and west of Highway 101. Residential areas with relatively long owner tenures are shown in Figure 4-5. As exhibited by length of tenure in 2000, areas with lengthy owner tenures are present in areas north of Lomas Santa Fe Drive and east of Highway 101. Other residential areas include those south of Lomas Santa Fe Drive and east of Highway 101, and areas north of Lomas Santa Fe Drive and east of I-5. Areas east of I-5 generally have higher proportions of senior citizens than areas west of I-5. Areas with relatively high proportions of households in linguistic isolation are presented in Figure 4-6. They include a block group immediately adjacent to the coast, and a residential area that corresponds with Eden Gardens. These block groups generally have a high proportion of Spanish language speakers (15 and 11 percent, respectively) who are linguistically isolated. Correspondingly, both of these block groups in Solana Beach have high proportions of minorities.

Community cohesion for those residents in Solana Beach in areas that exhibit traits of elevated community cohesion, specifically those along Highway 101 and in Eden Gardens, could be affected by changes to existing access and circulation, growth, changes in quality of life, and increasing urbanization and isolation. The operation of the proposed project is likely to result in an increase in some trappings of urbanization, including some large retaining walls, sound walls, elevated noise levels, and a potential for increased traffic volumes. However, the proposed project has the possibility to increase circulation and improve public access to community facilities for residents by increasing capacity along I-5.

Solana Beach is considered to be largely urbanized. As the proposed project would not remove barriers to future growth or create access to a previously inaccessible area, substantial unplanned growth is not anticipated. Perhaps the greatest impact to community cohesion would be the construction of the community enhancement projects, which include the construction of a trailhead at Solana Hills Drive, and streetscape enhancements on Ida Avenue. The streetscape enhancements along Ida Avenue would greatly improve the aesthetic quality along this stretch of road that would be

I-5 NORTH COAST CORRIDOR CIA



Source: SanGIS 2006

EDAW | AECOM

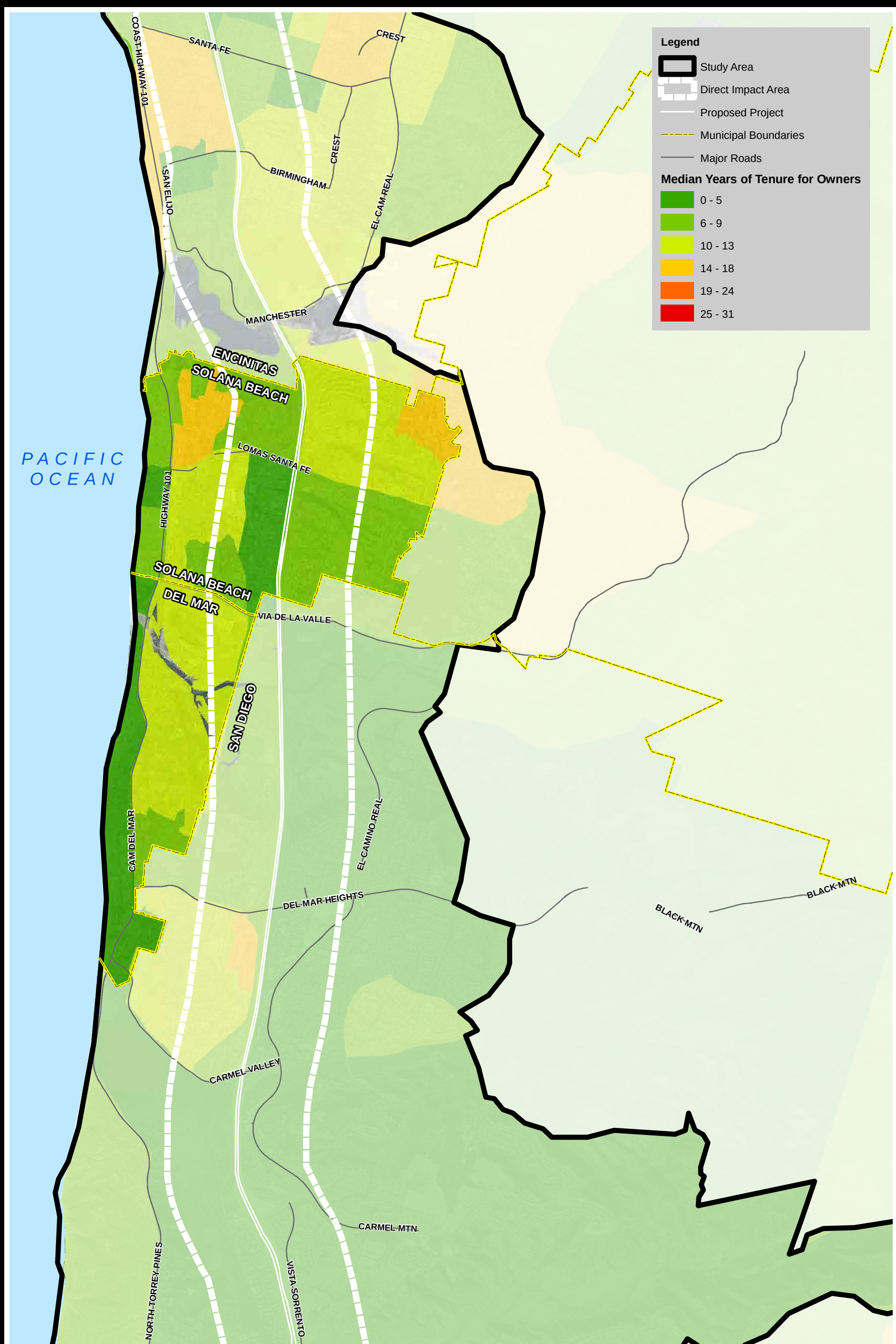
Figure 4-4
SOLANA BEACH & DEL MAR
Owner-Occupied Residential Units

3,500 0 3,500 Feet

SCALE: 1:42,000; 1 inch = 3,500 feet

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; US Census 2000; SanGIS 2006

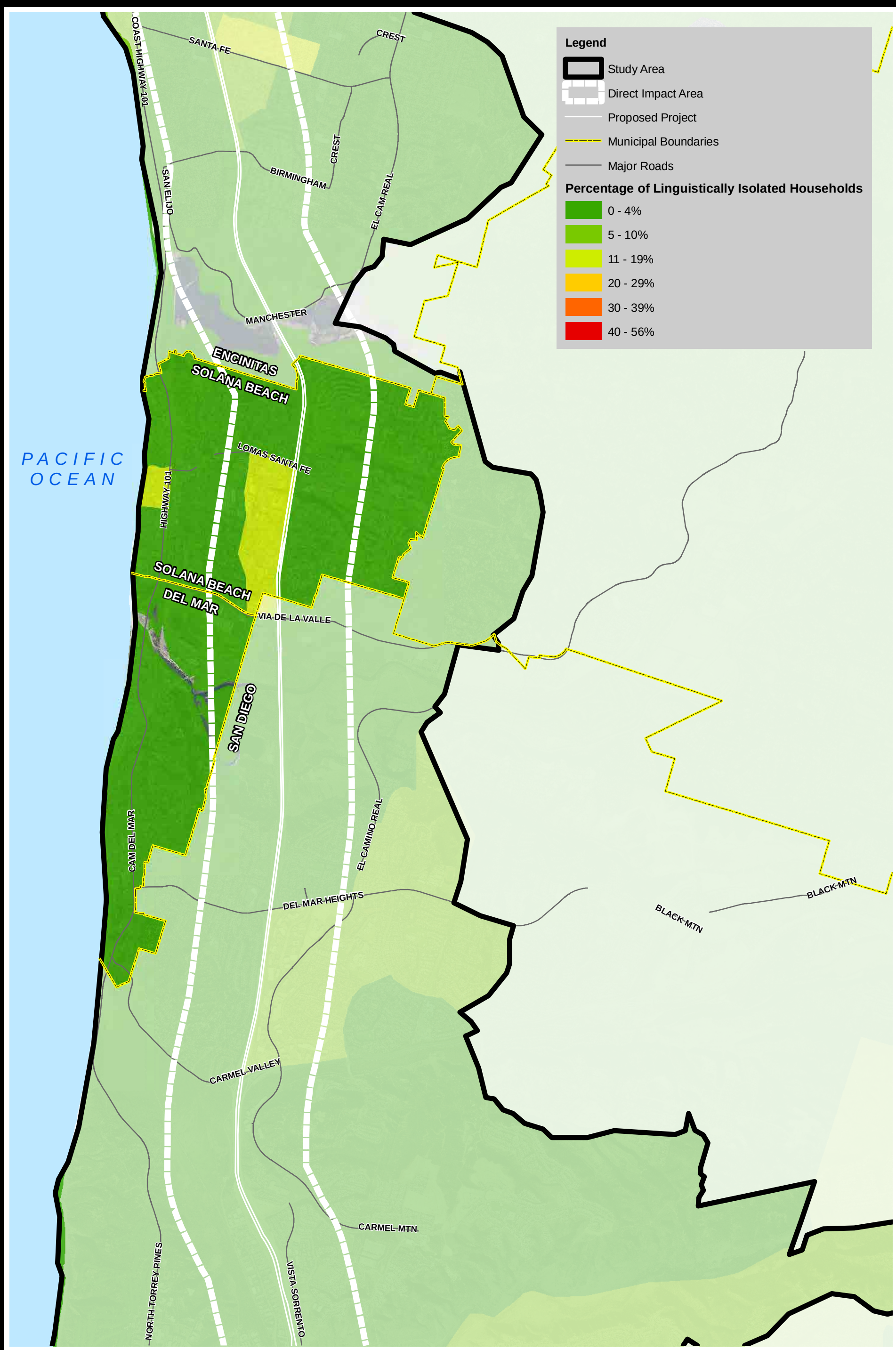
EDAW | AECOM

Figure 4-5
SOLANA BEACH & DEL MAR
Median Length of Tenure for Owners (2000)

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:44,000; 1 inch = 3,500 feet

Feet



Source: AirPhotoUSA 2006; US Census 2000; SanGIS 2006

EDAW | AECOM

Figure 4-6
SOLANA BEACH & DEL MAR
Percentage of Linguistically Isolated Households by Block Group (2000)

visually affected by a large retaining wall. In addition to the reengineered interchanges, overcrossings, and undercrossings (all of which would be constructed with pedestrian and bicycle lanes) the proposed community enhancement projects would greatly increase connectivity between neighborhoods and provide citizens with the ability to reach community facilities with greater ease. Impacts to community cohesion from operation of the proposed project in Solana Beach are likely to be positive.

4.4 ENCINITAS

As discussed in Section 2.4, Encinitas is the third most populous municipality in the study area and is composed of five distinct communities: Leucadia, Old Encinitas, Cardiff-by-the-Sea, New Encinitas, and Olivenhain. Leucadia, Old Encinitas, and Cardiff are located entirely within the study area and are shown in Figure 1-6. These neighborhoods are largely residential, with other land uses being commercial, open space, and some agriculture mainly in the form of greenhouses.

Figure 4-7 presents the owner-occupied housing, by parcel, for the study area in Encinitas. Generally, Encinitas has a high proportion of residents who own their own homes. Areas with high concentrations of owner-occupied homes include those residential areas along South El Camino Real in New Encinitas, and those residential areas both east and west of I-5 north of Encinitas Boulevard, generally in Leucadia. Owner tenures for residential areas throughout Encinitas are shown in Figure 4-8. As exhibited by length of tenure in 2000, areas with lengthy owner tenures are present in areas along the coast and south of Leucadia Boulevard. Residential areas north of Leucadia Boulevard, south of Encinitas Boulevard, and southeast of the interchange of I-5 and Santa Fe Drive also have relatively high tenures. These areas generally correspond to areas within Leucadia, Old Encinitas, and Cardiff. Block groups with high proportions of senior citizens are present throughout the Encinitas study area, with many of them occurring east of I-5. Areas with relatively high proportions of households in linguistic isolation are presented in Figure 4-9. They include those blocks north of Leucadia Boulevard near the coast, block groups at the northeast corner of the interchange between Santa Fe Drive and I-5 in Old Encinitas, and a block group at the end of Santa Fe Drive as it nears the coast. These block groups generally have a high proportion of Spanish language speakers and can be considered linguistically isolated. Block groups with high total proportions of minorities also occur east of I-5 at the interchange with Santa Fe Drive, north of Leucadia Boulevard near the coast, and north of Encinitas Boulevard directly adjacent to northbound I-5.

Community cohesion for those residents of Encinitas in areas that exhibit traits of elevated community cohesion, specifically those in Cardiff, Old Encinitas, and Leucadia, could be affected by changes to existing access and circulation, growth, changes in quality of life, and increasing urbanization and isolation. The operation of the proposed project is likely to result in an increase in some trappings of urbanization, including some large retaining walls, sound walls, increased noise levels, and a potential for higher traffic volumes. These impacts may be more severe in Encinitas than other communities due to its agricultural history. However, the proposed project has the possibility to increase circulation and improve public access to community facilities for residents by increasing capacity along I-5.

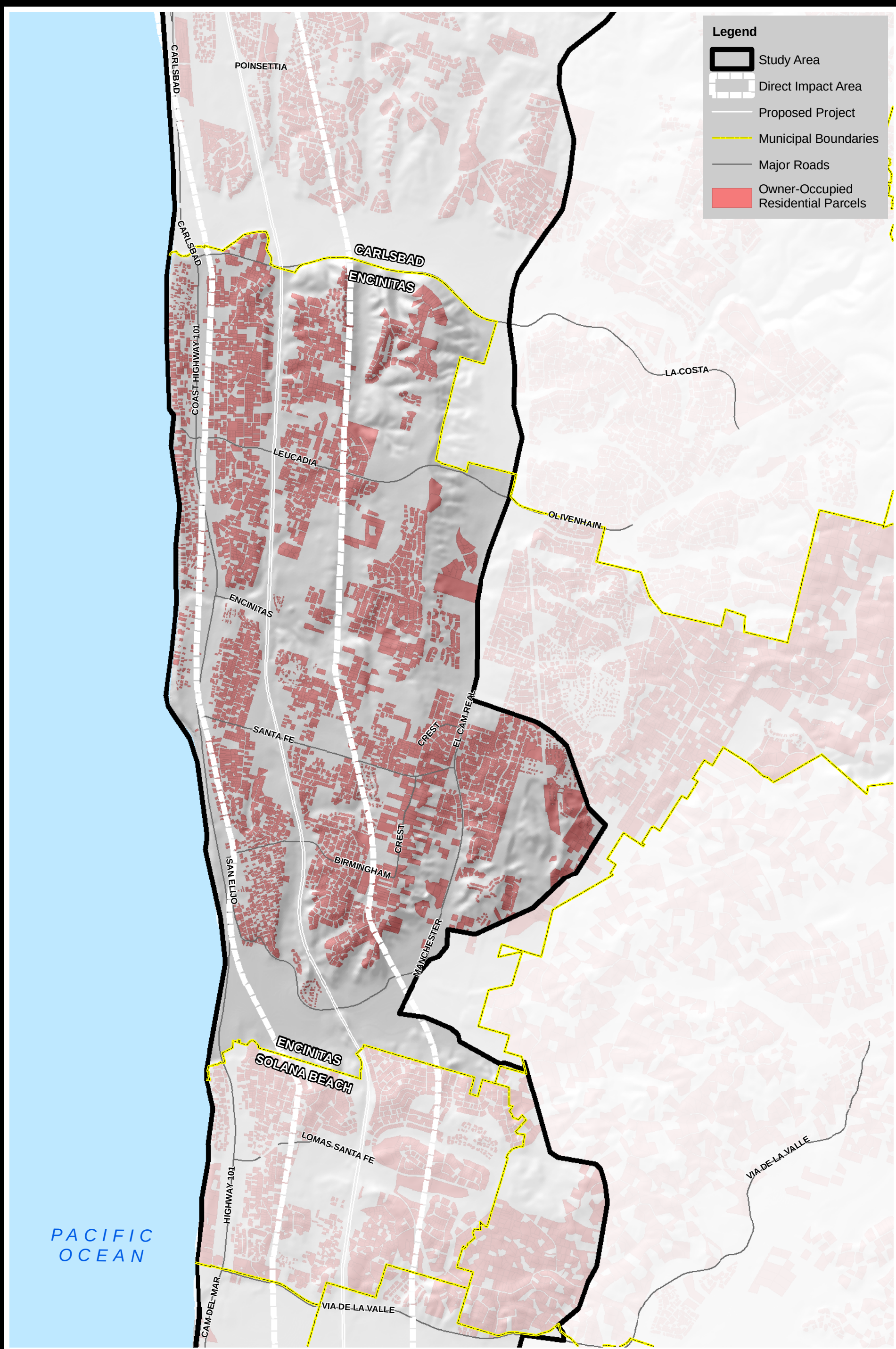
The portion of Encinitas in the study area is considered to be largely urbanized. As the proposed project would not remove barriers to future growth or create access to a previously inaccessible area, substantial unplanned growth is not anticipated. Perhaps the greatest impact to community cohesion would be the construction of the community enhancement projects, which include a pedestrian bridge and trail at Manchester Avenue, improvements to Villa Cardiff Drive, a trail connecting Hall Property Park Trail to Santa Fe Drive, a trail connecting Santa Fe Drive to Requeza Street, a trail connecting Requeza Street to Encinitas Boulevard, and a pedestrian overpass and trail connection at Union Street. In addition to the reengineered interchanges, overpasses, and underpasses (all of which would be constructed with pedestrian and bicycle lanes), the proposed community enhancement projects would greatly increase connectivity between neighborhoods both east and west of I-5 and provide citizens with the ability to reach community facilities on both sides of the freeway with greater ease. The pedestrian overpass at Union Street would serve to connect two neighborhoods on either side of I-5 that were historically divided decades ago by the initial construction of the freeway. Currently, those interested in traversing I-5 are forced to travel north to Leucadia Boulevard or south to Encinitas Boulevard. With a new connection at Union Street, the neighborhoods on either side of the freeway may be able to revive connections lost years ago. Impacts to community cohesion from operation of the proposed project in Encinitas are likely to be positive.

4.5 CARLSBAD

As discussed in Section 2.5, Carlsbad is third-largest city in the study area by land area. Largely urbanized, Carlsbad is comprised of large residential areas and some commercial centers. It also contains a few tourist attractions, including Legoland, the Flower Fields, a large shopping mall, and the Carlsbad Company Stores. The McClellan-Palomar Airport in Carlsbad has become a commercial and industrial center as the airport and associated development restrictions in the immediate vicinity minimize residential development.

Figure 4-10 presents the owner-occupied housing, by parcel, for the study area of Carlsbad. Areas with high proportions of owner-occupied homes include those residential areas south of Palomar Airport Road and east of I-5. Additionally, residential areas with high proportions of owner-occupied homes include areas north of Agua Hedionda Lagoon and east of I-5, as well as some neighborhoods directly near the coast. Owner tenures for residential areas throughout Carlsbad are shown in Figure 4-11. As exhibited by length of tenure in 2000, areas with lengthy owner tenures are present generally along the Pacific Coast. Additionally, block groups with long owner tenures occur north of Agua Hedionda Lagoon and east of I-5, with block groups showing the longest tenure in the Barrio community between Carlsbad Village Drive and Tamarack Avenue adjacent to southbound I-5. Block groups with high proportions of senior citizens are generally located along the Pacific coast. Also, block groups south of Agua Hedionda show higher proportions of senior citizens. Areas with relatively high proportions of households in linguistic isolation are presented in Figure 4-12. They include those block groups south of Carlsbad Village Drive and north of Tamarack Avenue in the Barrio community, adjacent to southbound I-5. This area is a center for the Hispanic community in Carlsbad and is thought to be one of the oldest neighborhoods in Carlsbad. Also, 11 percent of the households in a block group south of Palomar Airport Road on the eastern edge of the study area are linguistically isolated. These block groups generally have a high proportion of Spanish language speakers, with some Asian language speakers, and can be considered linguistically isolated. Block groups with high total proportions of minorities also occur at Carlsbad Village Drive and north of Tamarack Avenue, west of I-5.

I-5 NORTH COAST CORRIDOR CIA



Source: SanGIS 2006

EDAW | AECOM

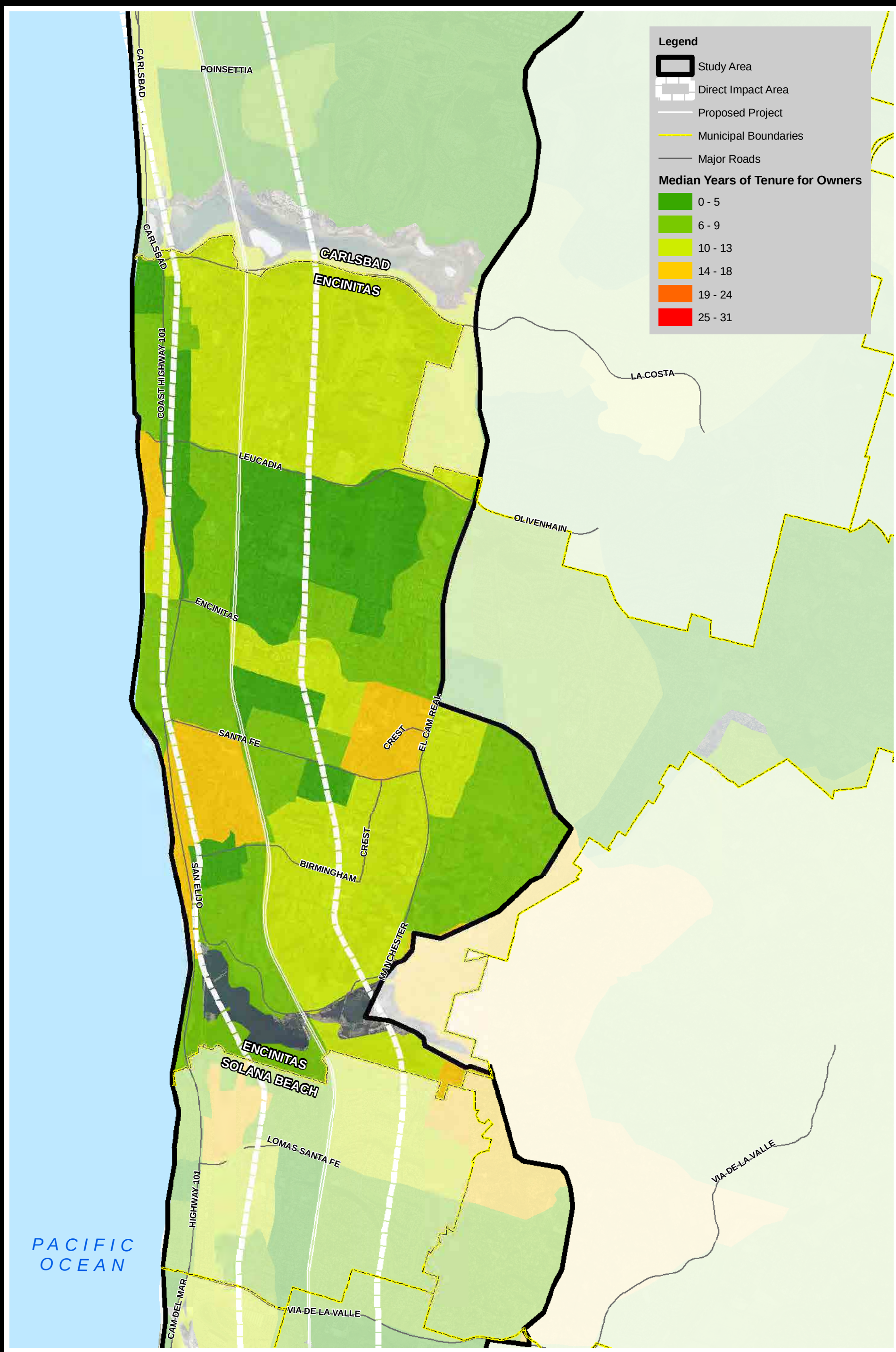
Figure 4-7
ENCINITAS
Owner-Occupied Residential Units

3,500 0 3,500 Feet

SCALE: 1:18,000; 1 inch = 1,500 feet

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



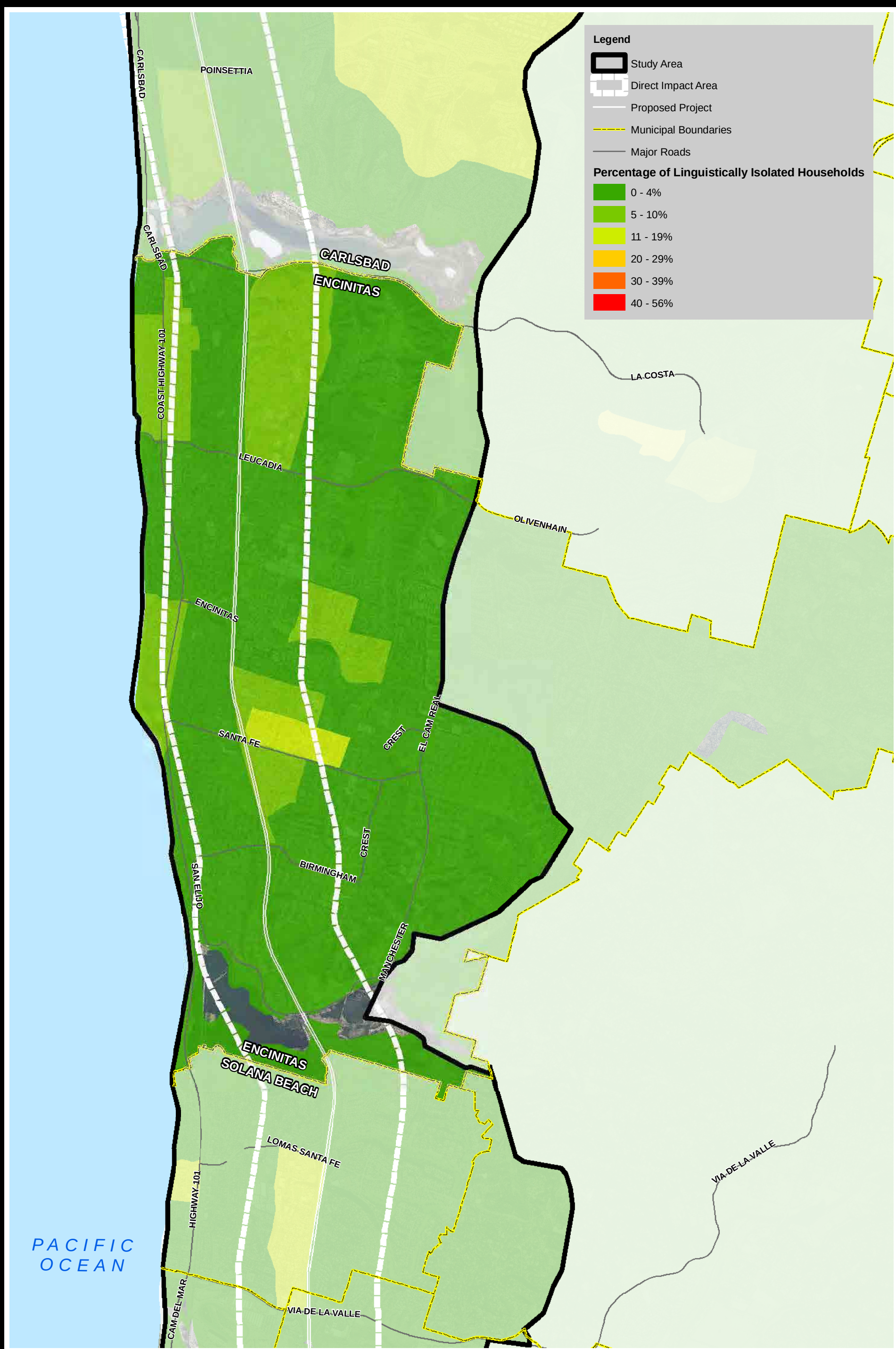
Source: AirPhotoUSA 2006; SanGIS 2006; US Census 2000

EDAW | AECOM

Figure 4-8
ENCINITAS
Median Length of Tenure for Owners (2000)

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



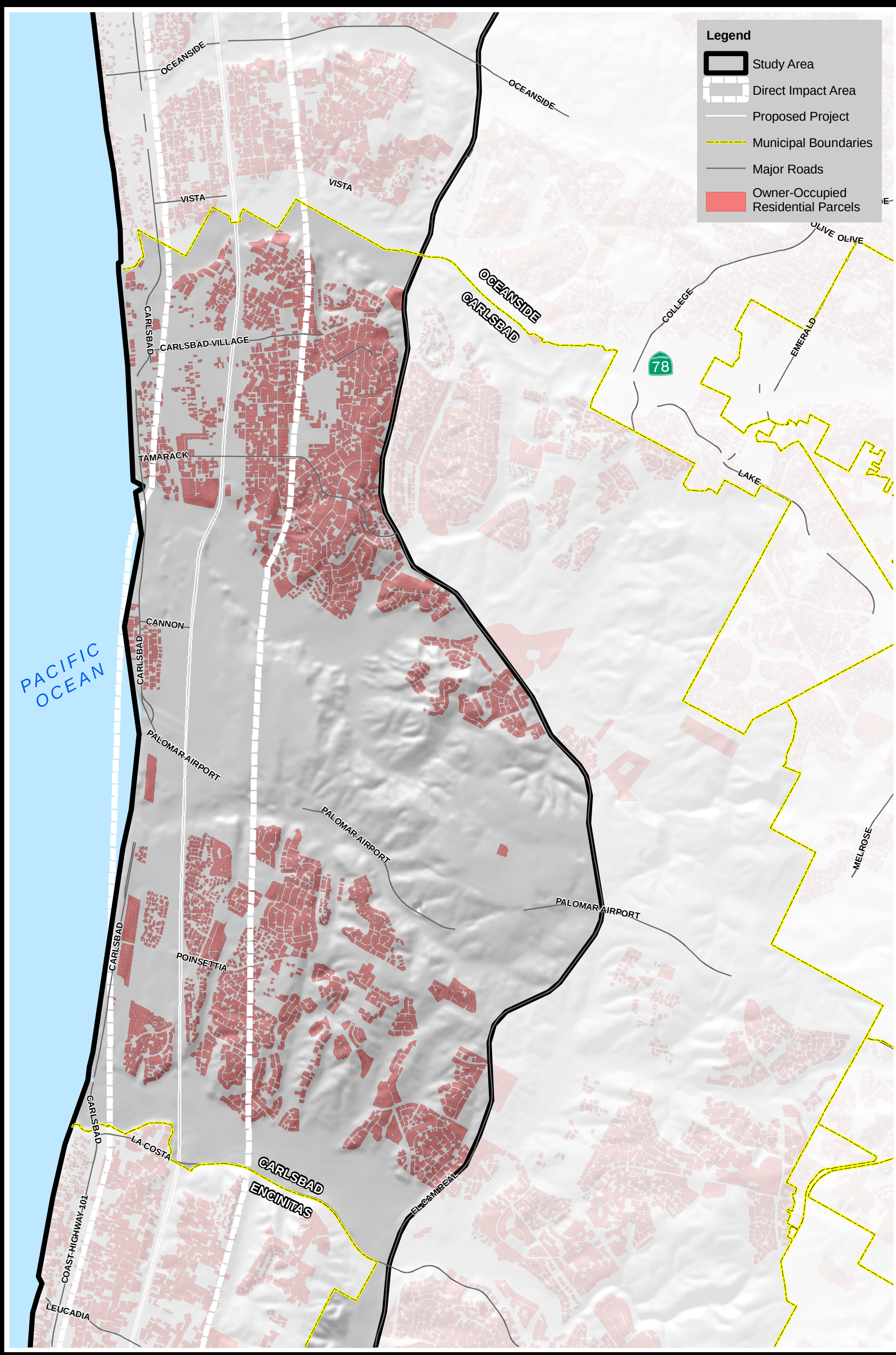
Source: AirPhotoUSA 2006; SanGIS 2006; US Census 2000

EDAW | AECOM

Figure 4-9
ENCINITAS
Percentage of Linguistically Isolated Households by Block Group (2000)

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42;000 1 inch = 3,500 feet



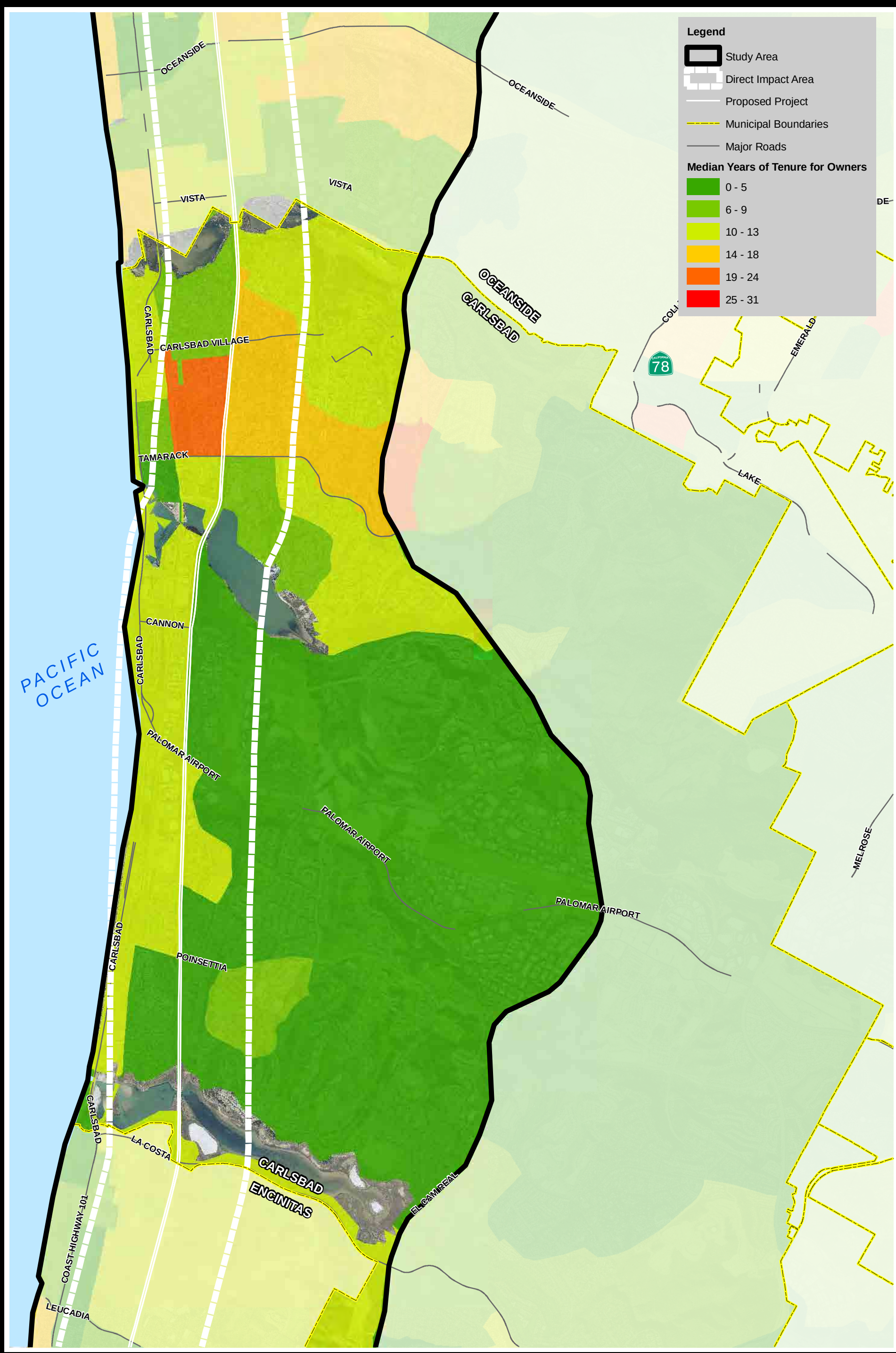
Source: SanGIS 2006

EDAW | AECOM

Figure 4-10
CARLSBAD
Owner-Occupied Residental Units

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000 1 inch = 3,500 feet

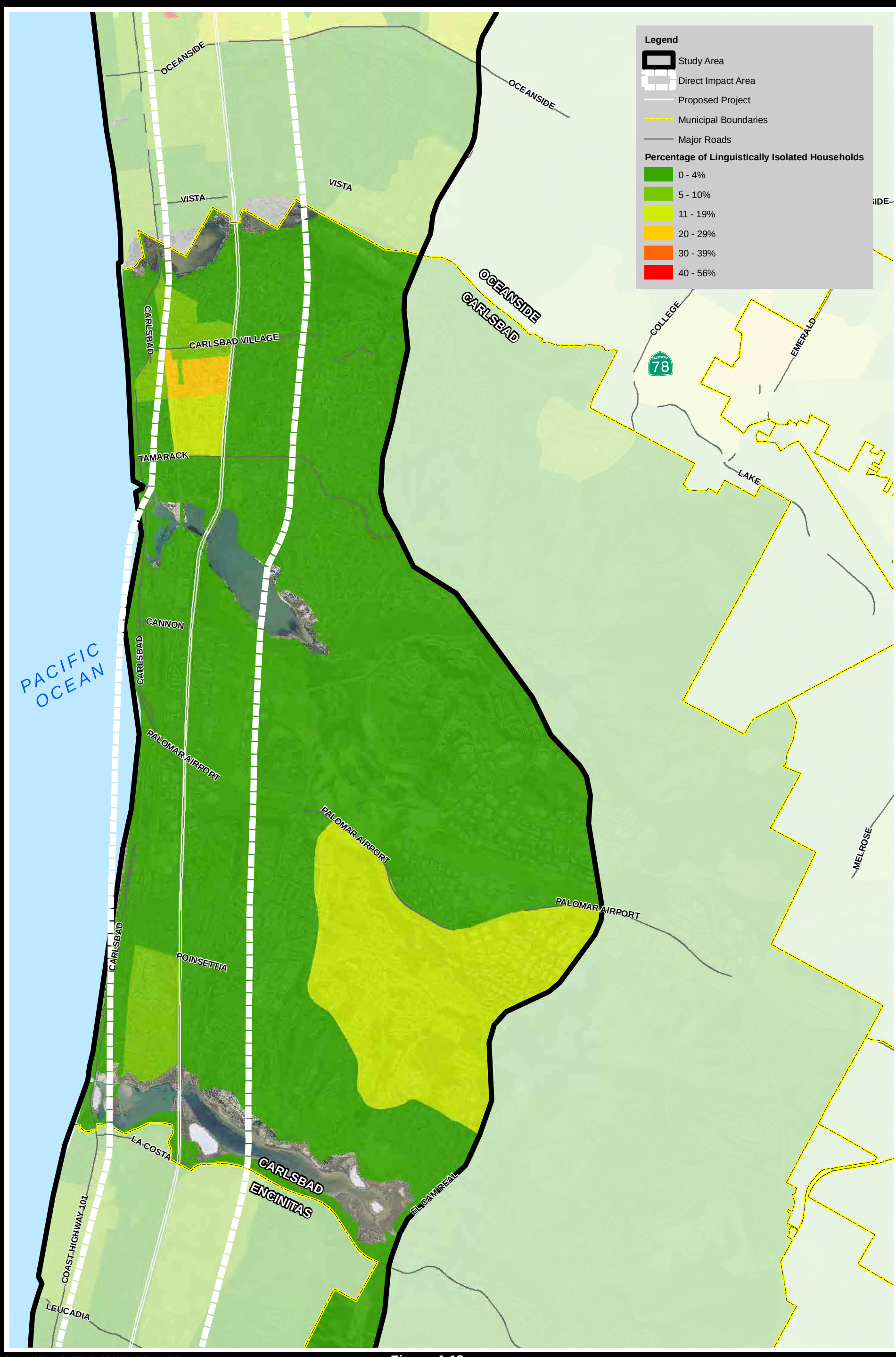


Source: AirPhotoUSA 2006; SanGIS 2006; U.S. Census 2000

EDAW | AECOM

Figure 4-11
CARLSBAD
Median Length of Tenure for Owners (2000)

I-5 NORTH COAST CORRIDOR CIA



Source: AirPhotoUSA 2006; SanGIS 2006; US Census 2000

EDAW | AECOM

Figure 4-12
CARLSBAD
Percentage of Linguistically Isolated Households by Block Group (2000)

3,500 0 3,500

Community cohesion for those residents of Carlsbad in areas mentioned above that exhibit traits of elevated community cohesion, some of which overlap with one another, could be affected by changes to existing access and circulation, growth, changes in quality of life, residential displacements, and increasing urbanization and isolation. Operational impacts of the proposed project are likely to result in an increase in some trappings of urbanization, including some large retaining walls, sound walls, and increased noise levels. However, the proposed project has the possibility to increase circulation and improve public access to community facilities for residents by increasing capacity along I-5.

The portion of Carlsbad in the study area is considered to be largely urbanized. As the proposed project would not remove barriers to future unplanned growth or create access to a previously inaccessible area, substantial unplanned growth is not anticipated. The displacement of a 47-unit apartment complex associated with the two Barrier alternatives would occur in an area identified above as exhibiting traits of elevated community cohesion: namely, a relatively high concentration of linguistically isolated Spanish-speaking households, as well as a high proportion of minority populations. The DRIR states that displaced residents living in these 47 units may be difficult to relocate as the availability of apartments within Carlsbad with similar rental rates is not adequate (Caltrans 2007c). If relocation is not feasible in Carlsbad and up to 47 families are relocated outside of the community, this may adversely impact community cohesion in the area. While adverse impacts to community cohesion exist, community enhancement features include streetscape enhancements along Chestnut Avenue, which are located in proximity to the displaced 47-unit apartment complex. These enhancements would improve community cohesion through the construction of an aesthetically pleasing pedestrian space. The loss of up to 47 families from the community, however, would still affect cohesion in the immediate area.

Places in Carlsbad in proximity to other community enhancement features, such as the proposed trail at Batiquitos Lagoon and the two proposed trails at Agua Hedionda Lagoon, would experience increased access to important community recreational facilities. In addition to the reengineered interchanges, overpasses, and underpasses (all of which would be constructed with pedestrian and bicycle lanes), the proposed community enhancement projects would greatly increase connectivity between neighborhoods and provide citizens with the ability to reach and enjoy community facilities on both sides of the freeway with greater ease. Generally, impacts to community cohesion from operation of the proposed project in Carlsbad are likely to be positive. However, for the community in northern Carlsbad surrounding the displaced 47-unit apartment complex, community cohesion may be adversely affected.

4.6 OCEANSIDE

As discussed in Section 2.6, Oceanside is second to San Diego in area and population of municipalities within the study area. Oceanside has some of the most established residential areas in the study area and is one of the oldest of the six municipalities discussed in this document. Currently, the western portions of Oceanside are relatively urbanized, while the eastern portions are relatively rural. Residences in Oceanside are generally characterized by larger residential developments surrounded by planned open space. Residential densities are greater by the coast, with commercial areas generally located along major transportation corridors.

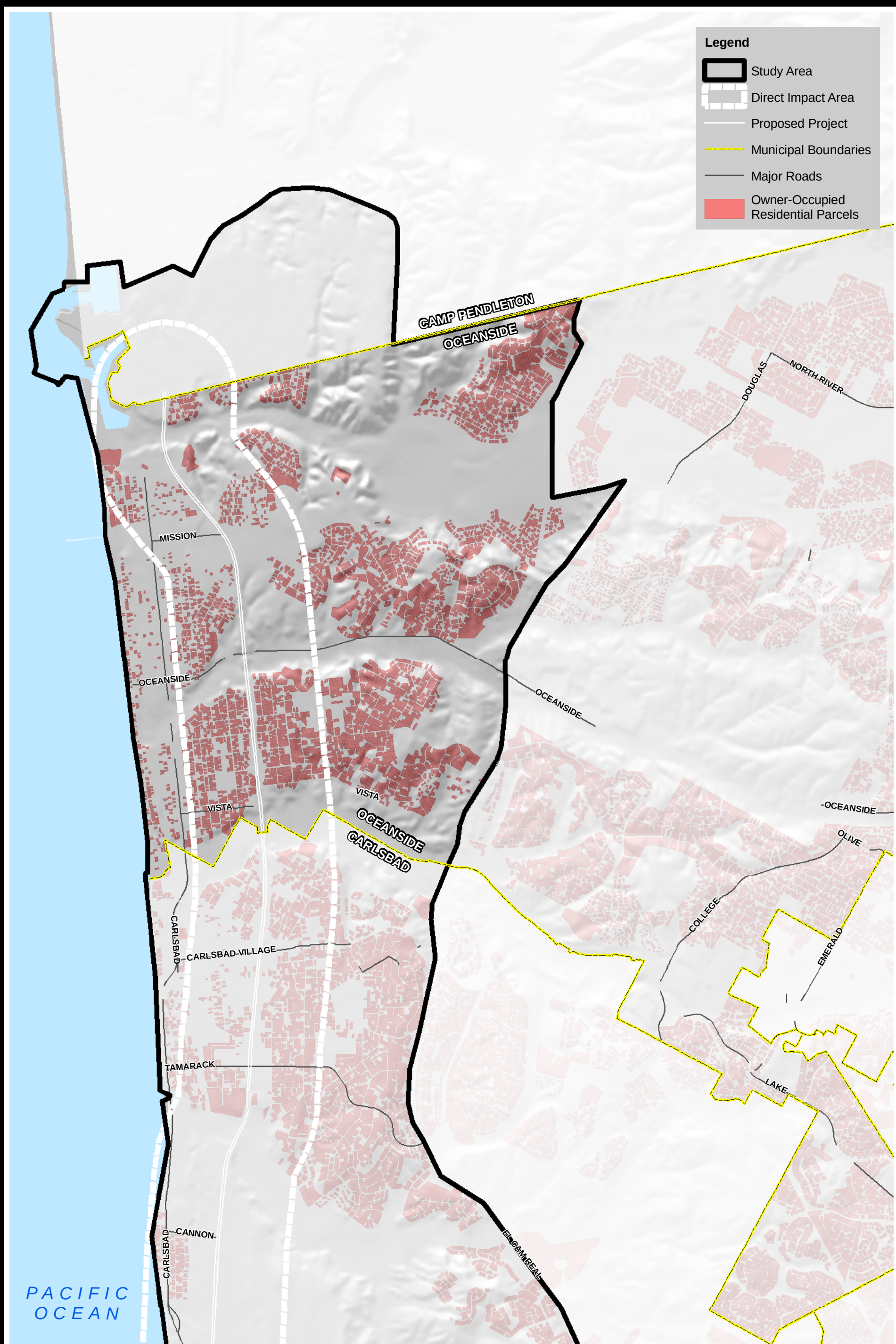
Figure 4-13 presents the owner-occupied housing, by parcel, for the study area of Oceanside. Areas with high concentrations of owner-occupied homes include those residential areas north of Vista Way/SR 78 on both sides of I-5. Additionally, residential areas east of I-5 and adjacent to Mesa Drive also exhibit high concentrations of owner-occupied homes. These areas correspond to the neighborhoods of South Oceanside, Fire Mountain, and Loma Alta. Residential areas with relatively long owner tenures are shown in Figure 4-14. As exhibited by length of tenure in 2000, areas with lengthy owner tenures are present along the Pacific coast at Vista Way, in South Oceanside, and beyond Oceanside to the west, in Townsite. Other areas with relatively long owner tenures include residential areas south of Oceanside Boulevard, areas on both sides of Mesa Drive in the eastern part of the study area, a block group between Oceanside Boulevard and San Luis Rey Drive adjacent to northbound I-5, and a block group centered on Bush Street adjacent to northbound I-5. These areas correspond to places in South Oceanside, Fire Mountain, Loma Alta, and East Side Capistrano. Block groups with high proportions of senior citizens are generally located south of Oceanside Boulevard and east of I-5 in Fire Mountain, and in the northwest corner of the study area near the marina. Areas with relatively high proportions of households in linguistic isolation are presented in Figure 4-15. They include those block groups generally north of Oceanside Boulevard in the neighborhoods of Loma Alta, Townsite, and East Side Capistrano, with one block group exhibiting approximately 54 percent of households being in linguistic isolation in Townsite. The linguistically isolated households in these block groups are almost exclusively Spanish speaking. Many of these same block groups have high total proportions of minorities.

Community cohesion for those residents of Oceanside in areas that exhibit traits of elevated community cohesion, specifically those high minority areas in the northern part of the study area, could be affected by changes to existing access and circulation, growth, changes in quality of life, and increasing urbanization and isolation. The operation of the proposed project is likely to result in an increase in some trappings of urbanization, including some large retaining walls, sound walls, and increased noise levels. However, the proposed project has the possibility to increase circulation and improve public access to community facilities for residents by increasing capacity along I-5.

This portion of Oceanside in the study area is considered to be largely urbanized. As the proposed project would not remove barriers to future growth or create access to a previously inaccessible area, substantial unplanned growth is not anticipated. Perhaps the greatest impact to community cohesion would be the construction of the community enhancement projects, which includes the construction of a park at California Street, pedestrian streetscape enhancements along Oceanside Boulevard, enhancements to the Division Street overpass, an enhanced pedestrian overpass connection on Mission Avenue (which would connect to Oceanside High School), an enhanced pedestrian overpass connection on Bush Street, the construction of an open space park, pedestrian underpass improvements at the San Luis Rey River, and a regional gateway feature at Harbor Drive. Most of these community enhancement features would occur in areas with high total minority proportions and linguistically isolated households, which likely have high levels of community cohesion. In addition to the reengineered interchanges, overpasses, and underpasses (all of which would be constructed with pedestrian and bicycle lanes), the proposed community enhancement projects would greatly increase connectivity between neighborhoods and provide citizens with the ability to reach and enjoy community facilities on both sides of the freeway with greater ease. Public monuments, such as the regional gateway feature and streetscape enhancements can instill a sense of pride in nearby communities and enhance community cohesion. Impacts to community cohesion from operation of the proposed project in Oceanside are likely to be positive.

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000 1 inch = 3,500 feet



Source: SanGIS 2006

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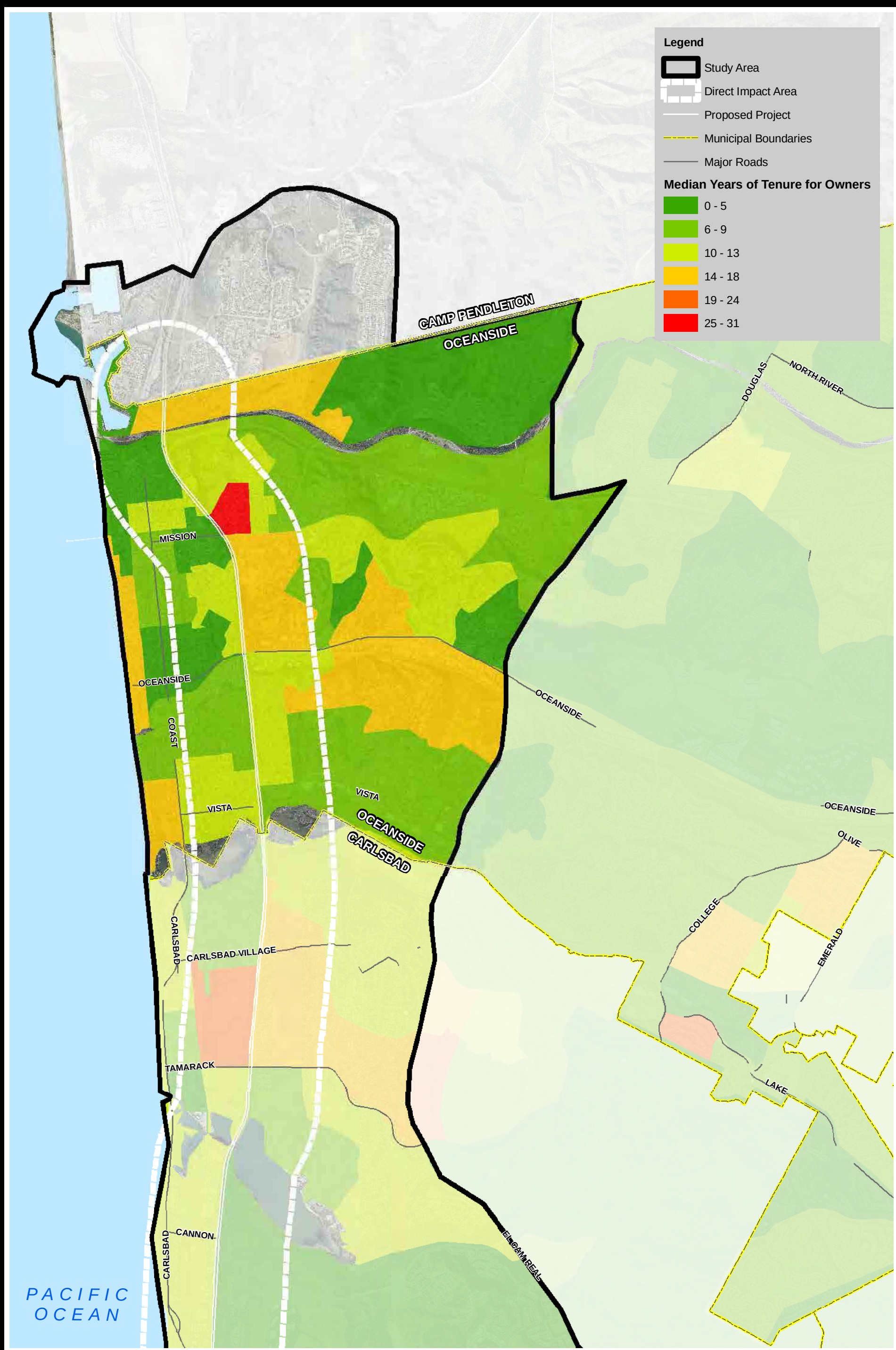
Figure 4-13
OCEANSIDE
Owner-Occupied Residental Units

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; SanGIS 2006; US Census 2000

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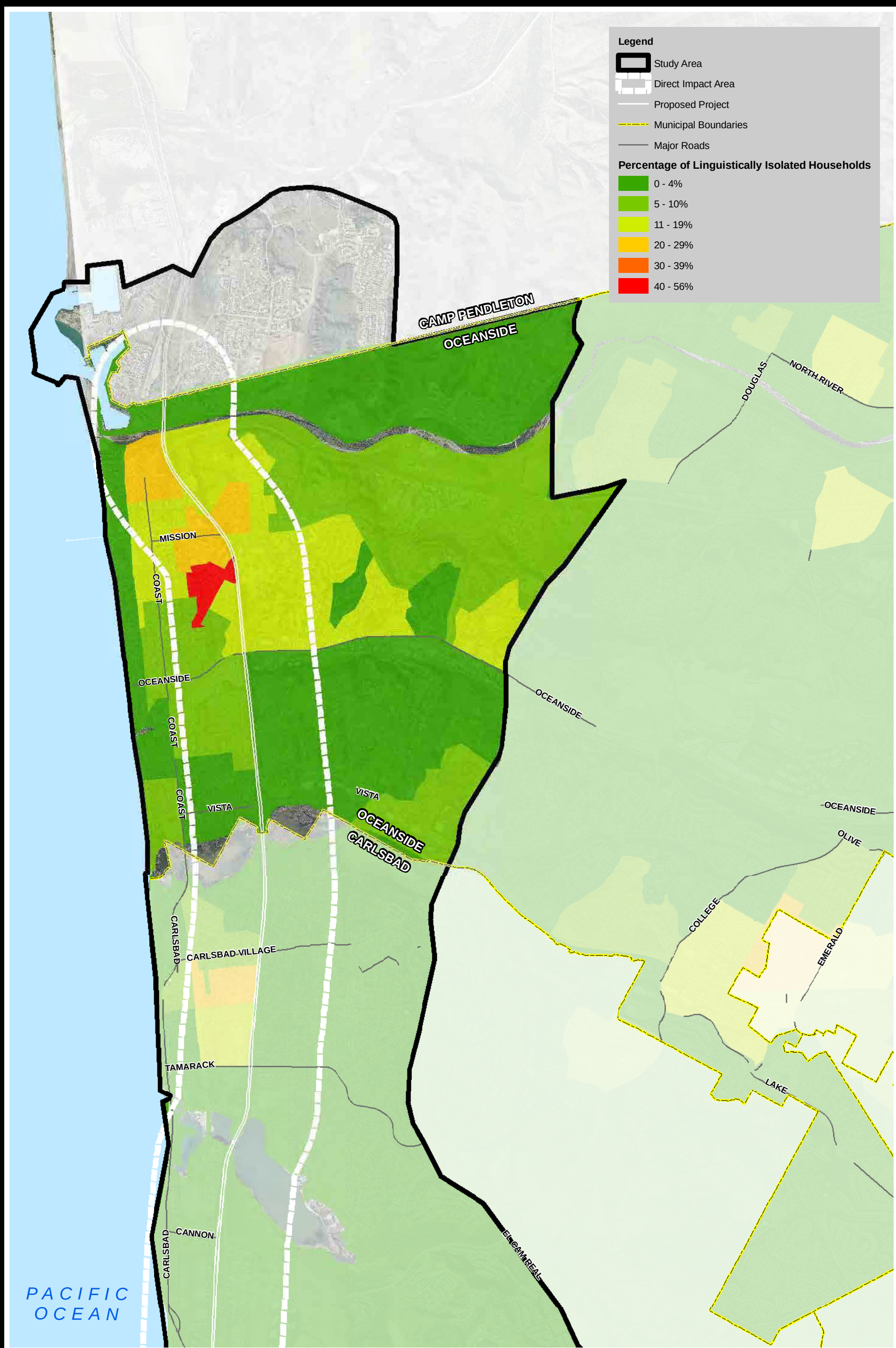
Figure 4-14
OCEANSIDE
Median Length of Tenure for Owners (2000)

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; SanGIS 2006; US Census 2000

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Figure 4-15
OCEANSIDE
Percentage of Linguistically Isolated Households By Block Group (2000)

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CHAPTER 5.0
CUMULATIVE IMPACTS

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative community impacts assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time. Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from the conversion of agricultural uses to urban development. These changes can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

California Environmental Quality Act (CEQA) Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under NEPA can be found in 40 CFR Section 1508.7 of the Council on Environmental Quality (CEQ) Regulations. NEPA requires an analysis of the incremental effects of an action that are cumulatively considerable when viewed in connection with closely related present, planned, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions.

The area of secondary impacts defined in this CIA is also considered to be the general area that has the potential to experience cumulative community impacts. The study area includes the cities of San Diego, Del Mar, Solana Beach, Encinitas, Carlsbad, and Oceanside and spans approximately 27 miles along the largely urbanized coast of north San Diego County. The cumulative effects to the communities in the study area could include a cumulative reduction in accessibility and travel patterns; the relocation of additional residences, key businesses, or key community facilities; contribution to a cumulative economic burden to local businesses; or a cumulative change to the character of each community. This discussion includes cumulative impacts of each jurisdiction in the manner most relevant to each respective community.

Projects that have the potential to cumulatively affect the urban character, community cohesion, access patterns, and economic characteristics of the project vicinity would likely be located within the boundaries of the CIA study area. Table 5-1 lists projects within the study area that have the potential to contribute to cumulative impacts to the community. Approximate locations of cumulative projects are shown in Figure 5-1.

Table 5-1. Cumulative Projects in the Study Area Related to Community Impacts

Map Number/ Project Name	Location	Type of Project	Status of Approval
San Diego			
1. Harmony Grove Village	Harmony Grove Road and Country Club Road	Mixed-use residential village with commercial uses, institutional uses, open space and park areas, recreational uses, and on- and off-site circulation improvements	Approved February 7, 2007
2. San Diego Tech Center	9605 Scranton Road	Subdivision of a 38-acre parcel into 16 lots with 1,324,000 square feet of development and four parking structures	Project in environmental review phase
3. El Camino Real Road/Bridge Widening	El Camino Real & Via de la Valle	Widening El Camino Real between Via de la Valle and San Dieguito Road, replacing the existing bridge over San Dieguito River, and widening Via de la Valle between El Camino Real and El Camino Real North	Unknown at this time
4. Alexandria Technology Center - Sorrento View	Vista Sorrento Parkway and Lusk Boulevard	Commercial and industrial buildings with associated infrastructure improvements	Unknown at this time
5. University North/ South Transportation Corridor Study	Genesee Avenue and Regents Road	Transportation improvements project in University	Unknown at this time
6. Pacific Highlands Ranch Units 17-22A	Carmel Valley Road and Santa Fe Farms Road	677 single-family dwelling units, recreation center, and potential elementary school	Unknown at this time
7. Pacific Highlands Ranch School	Carmel Valley Road and Mill Creek Road	Elementary school	Project in environmental review phase
8. Pacific Highlands Ranch, Units 23-28	South central portion of the Pacific Highlands Ranch Subarea III	999 single-family dwelling units	Unknown at this time
9. Mason/Hage Area Elementary School (aka Jonas Salk Elementary School)	San Diego Unified School District, Parkdale Avenue and Flanders Drive	Elementary school	Construction in progress, opening September 2008 or 2009
10. Sorrento Valley Road Reuse Project	Sorrento Valley Road and Carmel Mountain Road	Vacation of Sorrento Valley Road and implementation of one of two trail options	Unknown at this time
11. Carmel Valley Neighborhood 10, Unit 8	Carmel Valley Road and Stone Haven Way	80 single-family residences	Unknown at this time
12. Miramar Hills Curve Realignment and Second Main Track	NCTD - I-805 and Miramar Road	Realignment of the existing railroad track and addition of 3.1 miles of new second track	Unknown at this time
* California High-Speed Train System	Major California metropolitan areas (not shown in Figure 5-1)	700 miles of a statewide train system	Unknown at this time
Solana Beach			
13. Solana Beach Gateway Resort Project	Highway 101 and E Circle Drive	30-unit hotel development with associated clubhouse, outdoor pool, and spa	Awaiting approval
14. Mixed-Use Solana Beach Train Station	Lomas Santa Fe Drive and North Cedros Avenue	Parking facility and mixed-use, transit-oriented development	Project in environmental review phase

Table 5-1. (continued)

Map Number/ Project Name	Location	Type of Project	Status of Approval
15. 371 Pacific Avenue Seawall	Pacific Avenue and Cliff Street	Tie-back shotcrete seawall and reconstructed upper bluff geogrid slope	Unknown at this time
Encinitas			
16. Hall Property Community Park	Santa Fe Drive and I-5	44 acres of public community park	Project in environmental review phase
17. Beacon's Beach Access Project	Neptune Avenue and Leucadia Boulevard	Improvements to beach access	Unknown at this time
18. Coral Cove Residential Project	Ashbury Street and Vulcan Avenue	69 units on a 10-acre project site	Unknown at this time
19. Rancho Santa Fe New School	Aliso Canyon Road and Via del Charro	Elementary school	Unknown at this time
20. Emergency Water Storage Project	San Diego County Water Authority -Manchester Avenue and El Camino Real	Conversion of approximately 8.7 acres of nonwetland to a structurally diverse native riparian habitat	Unknown at this time
21. The Shoreline Resort	N. Coast Highway 101 and La Costa Avenue	34-unit timeshare resort	Unknown at this time
Carlsbad			
22. Desalination Plant Project	Carlsbad Boulevard and Cannon Road	50-million-gallons-per-day seawater desalination plant	Approved with construction pending
23. North Jetty Restoration	Aqua Hedionda Lagoon	Reconstruction/ seaward extension of existing northern tidal inlet jetty	Unknown at this time
24. Palomar Transfer Station Expansion Project	Orion Street and Faraday Avenue	Expansion of existing trash transfer facility	Unknown at this time
25. Cantarini Ranch/ Holly Springs	Northeast of El Camino Real and College Boulevard	105 single-family lots on 0.5-acre minimum lots and an 80-unit mixed-rate apartment project	Approved with construction pending
26. City of Carlsbad North Agua Hedionda Interceptor (NAHI) - Western Segment	Agua Hedionda Lagoon from 400 feet west of Hoover Street to Cove Drive	Infrastructure improvements	Approved
27. Carlsbad Oaks North Business Park	Melrose Drive	195-acre industrial park consisting of light industrial, office, and auxiliary commercial uses	Approved and in Phase 2 of three-phased grading project
Oceanside			
28. Eternal Hills Cemetery Expansion	El Camino Real and Fire Mountain Drive	20.54-acre expansion of the Eternal Hills Memorial Park cemetery	Project in environmental review phase
29. San Luis Rey Flood Control Project	Benet Road and CA-76	Revision of the vegetation and sediment management portion of the operation and maintenance of the San Luis Rey River flood control channel	Project is in environmental review phase
30. Oceanpointe Project	SR 76 and Stage Coach Road	198 condominium units	Awaiting resubmittal of project plans by applicant
31. Boardwalk Development Project	Eaton Street and South Coast Highway	91-room hotel, 3,326 square foot restaurant, and four detached condominium units	Project is in environmental review phase
32. Pacific Coast Business Park	College Boulevard and Old Grove Road	30-lot industrial subdivision on a 124-acre site	Approved and under construction

Table 5-1. (continued)

Map Number/ Project Name	Location	Type of Project	Status of Approval
33. Oceanside Pier Resort	Pacific Street and Pier View Way	136 timeshare units, 32 hotel units, 4,780 square feet of restaurant space, and 7,730 square feet of retail space	Unknown at this time
34. Windward Villas	Windward Way and Tremont Street	14 single-family detached homes	Unknown at this time
35. Pacific Street Bridge Project	Pacific Street and Harbor Drive South	Bridge over the San Luis Rey River at Pacific Street	Approved and under construction
36. Northeast Valley High School	North River Road and Stallion Drive	High school	Unknown at this time
37. New Venture Christian Fellowship East Campus Expansion Project	Cannon Road and Mystra Drive	School expansion and 30,000-square-foot multi-purpose building	Unknown at this time
38. El Corazon Master Plan Implementation	El Camino Real and Oceanside Boulevard	Golf course, resort hotel, institutional, and open space	Awaiting first screencheck
Department Projects			
39. I-5/Genesee Bridge Widening and Interchange Improvements	City of San Diego at I-5/ Genesee Avenue Interchange	Reconstruction of existing Genesee interchange; add southeast and northwest loops; signalize interchange	Beginning environmental review phase
40. I-5/SR 56	City of San Diego at interchange of I-5 and SR 56	Construct direct freeway to freeway connectors	Beginning environmental review phase; estimated completion 2013
41. I-5/Lomas Santa Fe Interchange	City of Solana Beach at interchange of I-5 and Lomas Santa Fe	Construct Auxiliary lanes and modify existing interchange	In construction; estimated completion in late 2007
42. I-5 HOV Extension	City of Oceanside, City of Carlsbad, City of Encinitas; from San Dieguito River to Manchester Avenue	Extension of HOV lanes	Project is currently on hold
44. I-805/Carroll Canyon Northbound DAR	Carroll Canyon Road to I-5/ I-805 in the City of San Diego	Construct a two-lane HOV facility from I-805 to I-5; construct a DAR at Carroll Canyon Road	Beginning environmental review phase
* Los Angeles to San Diego (LOSSAN) Rail Improvements	From the Los Angeles to San Diego	Double tracking of railroad tracks	Draft programmatic environmental document currently underway

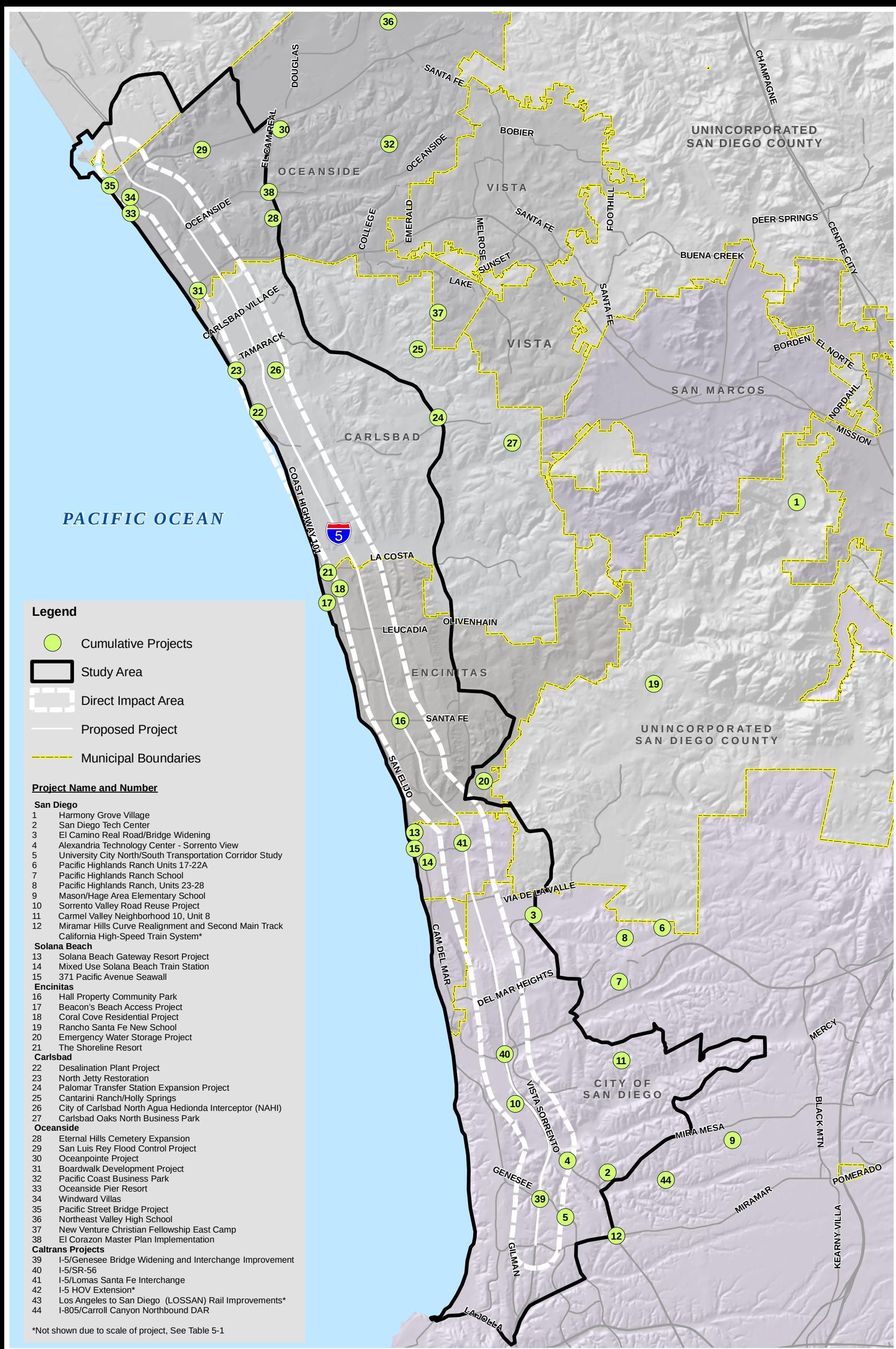
*Not shown in Figure 5-1 due to scale of project.

5.1 SAN DIEGO

The proposed project is located partly within the city of San Diego, defined by the northern San Diego communities of La Jolla, University, Torrey Pines, Torrey Hills, and Carmel Valley. These communities are characterized by primarily residential uses with neighborhood-serving commercial uses and industrial job centers, largely associated with research at UCSD. Open space, much of which has been designated for future urbanization, is also located in the study area. The communities in the northern part of San Diego are representative of much of the coastal portions of San Diego County: urbanized and generally built-out.

A total of 12 cumulative projects are located in San Diego, as well as 4 Department projects. Many of the proposed projects presented in Table 5-1 and shown in Figure 5-1 in the San Diego portion of the study area are related to transportation improvements (8 projects), with 3 residential, 1 mixed-use and

I-5 NORTH COAST CORRIDOR CIA



Source: USGS 2000; SanGIS 2006

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Figure 5-1
Approximate Locations of Cumulative Projects

2 0 2 Miles

SCALE: 1:124,000; 1 inch = 2 miles

1 industrial project. Additionally, there are several special use projects in the study area including two schools and a trail conversion project. The San Diego projects listed in Table 5-1 would result in a cumulative change in travel patterns and increase in population; however, these changes are well within the projections outlined in the community plans. The transportation improvement projects, such as the El Camino Real Road/Bridge Widening, and the proposed Department projects, would likely have adverse impacts during construction but would serve to improve traffic flow between communities upon completion. No new road segments that would separate existing communities are proposed. Environmental analyses for the majority of these projects are currently underway, and the extent of potential impacts to San Diego communities is not known. However, transportation projects in this area are limited to improvement projects and would generally be completed within current ROW limits. In the case of the Sorrento Valley Road Reuse Project plan, the road is actually being removed for conversion of the area to trail use and open space serving as a benefit to local communities.

Residential and mixed-use projects in the San Diego communities are mainly infill in nature and/or are discussed in the community growth plans. The largest residential projects are part of the Pacific Highlands Ranch development, which has been designated for residential uses and a school. The educational facilities, Pacific Highlands Ranch School and Mason/Hage Elementary School, would serve as a benefit to local communities.

None of the proposed projects in the San Diego portion of the study area are known to contribute to significant cumulative community impacts. None of the ongoing or reasonably foreseeable projects in San Diego would divide an established community or adversely affect community character in these communities. The study area in San Diego is largely urbanized and these additional projects would be consistent with the existing character.

5.2 DEL MAR

A portion of the study area includes Del Mar, a small coastal community of urban, high-end residential neighborhoods. As the area is nearly completely built, there are no ongoing or reasonably foreseeable projects within Del Mar, and therefore no cumulative community impacts are anticipated.

5.3 SOLANA BEACH

Land uses within the portion of Solana Beach within the area of direct impacts are mainly a mixture of single-family and multi-family residential developments as well as commercial, light industrial, office, school, and open space land uses. Of the four proposed projects in Solana Beach with potential for cumulative community impacts, there is one commercial project, one mixed-use development, a Department transportation project, and a seawall.

The Solana Beach projects listed in Table 5-1 would have the potential to increase population and traffic; however, the changes are well within the projections outlined in the General Plan. The Solana Beach Gateway Resort project is an infill project that would be consistent with existing commercial development in the area. The Mixed-Use Solana Beach Train Station includes retail and residential uses as well as a performing arts center and a beach replenishment program, both of which would serve as beneficial elements to the local community. The I-5/Lomas Santa Fe interchange project that is currently under construction consists of improvements to an existing interchange. Construction activities will have short-term construction impacts, but no long-term community impacts are anticipated.

The four ongoing and reasonably foreseeable projects in Solana Beach are not anticipated to divide an established community or adversely affect community character and therefore would not contribute to significant cumulative community impacts.

5.4 ENCINITAS

The portion of the proposed project in the city of Encinitas is mainly urban and residential, with each residential area serviced by neighborhood and mixed-use shopping areas, schools, and parks. A total of six cumulative projects are located in Encinitas, as well as a portion of the I-5 HOV extension project that is currently on hold. There are several special use projects in the Encinitas portion of the study area listed in Table 5-1 including a park, a beach access improvement, an elementary school, and an emergency water storage project, as well as one commercial project and one residential project.

These projects would largely serve as improvements to the local community. Hall Property Community Park, at Mackinnon Drive and I-5, would provide benefits to the surrounding community by providing much needed community gathering and recreational space. The Beacon's Beach access project would enhance public access to the public beach, and the Emergency Water Storage Project would meet the needs of the local community. Additionally, the proposed school would also serve to meet local community needs, providing a benefit to the local community. The Coral Cove Residential Project would likely increase population in the area but in a manner that fits current growth trends. The I-5 HOV extension project, though currently on hold, would serve to improve circulation in combination with the I-5 North Coast Corridor Project.

None of the ongoing or reasonably foreseeable projects in this portion of the study area would divide an established community or adversely affect the community character of Encinitas. Conversely, a new park, school, enhanced beach access, and increased water storage, could beneficially affect communities in Encinitas. Implementation of these projects in conjunction with the proposed project could provide beneficial cumulative community impacts.

5.5 CARLSBAD

The portion of Carlsbad that surrounds the proposed project is primarily a mixture of residential, commercial, industrial, agriculture, and public services. A total of six cumulative projects are located in Carlsbad. As described in Table 5-1 and shown in Figure 5-1, proposed projects in Carlsbad include three industrial projects and one residential project. There are two special use projects proposed in Carlsbad, including a jetty restoration and infrastructure improvements at the Agua Hedionda Lagoon. In addition, a portion of the I-5 HOV extension project that is currently on hold would be located in Carlsbad.

Ongoing and reasonably foreseeable projects in Carlsbad could result in a cumulative change in an increase in population in the area; however, these changes are well within the projections outlined in the community plans. The Cantarini Ranch and Holly Springs Subdivisions would likely increase population in the area but in a manner that fits current growth projections. The Carlsbad Oaks North Business Park would provide for an additional job center in Carlsbad that could improve the jobs/housing balance in Carlsbad. The Desalination Plant, waste transfer expansion, and Agua Hedionda improvements would likely result in benefits to the local community. The I-5 HOV extension project, though currently on hold, would serve to improve circulation in combination with the I-5 North Coast Corridor Project.

None of the ongoing or reasonably foreseeable projects would divide an established community or adversely affect community character in these communities. The seven proposed projects in the Carlsbad portion of the study area are not anticipated to contribute to significant cumulative community impacts.

5.6 OCEANSIDE

The northernmost portion of the project area is in Oceanside, which consists largely of high-density residential neighborhoods, as well as neighborhood and visitor-serving commercial uses. A total of 12 cumulative projects have been identified within Oceanside. Several of the proposed projects are residential (2 projects), with 1 commercial, 1 transportation, and 1 mixed-use project. Additionally, there are several special use projects in this section of the study area including 2 school projects and a cemetery expansion. A portion of the I-5 HOV extension project is also located in Oceanside, beginning at the San Dieguito River.

The Oceanside projects listed in Table 5-1 could result in a cumulative change in travel patterns and increase in population; however, these changes are well within the projections outlined in the General Plan. Residential projects (the Oceanpointe Project and Windward Villas) would likely increase population in the area but are consistent with the growth patterns. Both Northeast Valley High School and the New Venture Christian Fellowship Expansion project would serve as a benefit to local communities. The transportation improvement project at Pacific Street Bridge would likely have adverse impacts during construction but would serve to improve traffic flow in the area upon completion. The I-5 HOV extension project, though currently on hold, would serve to improve circulation in combination with the I-5 North Coast Corridor Project. Traffic projects in this area are limited to improvement projects and would be completed within current ROW limits.

None of the ongoing or reasonably foreseeable projects in Oceanside would divide an established community or adversely affect community character. The study area within the city of Oceanside is largely urbanized and these additional projects would be consistent with the existing character. The 12 proposed projects in the Oceanside portion of the study area are not anticipated to contribute to significant cumulative community impacts.

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CHAPTER 6.0
ENVIRONMENTAL JUSTICE

6.1 BACKGROUND

The following analysis is required under Executive Order 12898, Environmental Justice (59 CFR 7629). Under Executive Order 12898, demographic information is used to determine whether minority populations or low-income populations are present in the area potentially affected by the proposed project. If so, a determination must be made whether implementation of the proposed project may cause disproportionately high and adverse human health or environmental impacts on those populations.

The CEQ defines the term "minority" as persons from any of the following U.S. Census categories for race: Black/African American; Asian; Native Hawaiian or Other Pacific Islander; and American Indian or Alaska Native. Additionally, for the purposes of this analysis, "minority" also includes all other nonwhite racial categories that were added in the most recent census, such as "some other race" and "two or more races." The CEQ also mandates that persons identified through the U.S. Census as ethnically Hispanic, regardless of race, should be included in minority counts (CEQ 1997).

Persons living with income below poverty are identified as "low-income," utilizing the annual statistical poverty thresholds established by the U.S. Census and the Department of Health and Human Services (HHS). The HHS guidelines indicate that the nationwide poverty level for a family of four in 2007 is $20,650. According to the Census, the poverty threshold for a family of four in California was $17,029 in 2000. For this particular analysis, U.S. Census data from the 2000 census were used as they are specific to California as opposed to a nationwide estimate, and because the available data used from the U.S. Bureau of the Census are used throughout this report to analyze socioeconomic conditions. The U.S. Census 2000 data are the most comprehensive, most complete, and most customizable data set currently available for all six municipalities within the study area and San Diego County. While the use of more recent poverty thresholds, such as HHS guidelines, may be preferable, the application of these thresholds to post-2000 census or other data would likely result in incorrect low-income areas since the Consumer Price Index has changed over time. Additionally, U.S. Census data are not detailed enough to apply current poverty thresholds, even if constant dollar calculations are applied. In practical terms, it is not likely that low-income population patterns in the study area have shifted dramatically since 2000.

The Interagency Federal Working Group on Environmental Justice guidance states that a minority and/or low-income population may be present in an area if the proportion of the populations in the area of interest are "meaningfully greater" than that of the general population, or where the proportion exceeds 50 percent of the total population. For the purposes of this analysis, minority and low-income populations of individual census block groups (a subunit of a census tract) were compared against the general population of the municipalities as a whole, and the larger region (San Diego County). A meaningfully greater proportion was determined to be twice that of the municipality as a whole or the larger region of San Diego County, whichever was less.

This analysis of potential Environmental Justice impacts identifies meaningfully greater minority populations or low-income populations within each municipality by census block group. It also identifies those block groups that have meaningfully greater proportions of both minority and low-income populations. These meaningfully greater minority and low-income populations are then considered populations of Environmental Justice concern. Environmental and community impacts are then analyzed to determine if those populations of Environmental Justice concern are disproportionately affected by the proposed project.

The final section includes a summary of public involvement and community outreach, a summary of impacts to the general population, and an analysis of potential disproportional impacts to Environmental Justice populations. The analysis is generally structured by block groups with those block groups straddling municipal lines grouped generally by which municipality the centroid was placed by GIS.

6.2 MINORITY POPULATIONS IN THE STUDY AREA

6.2.1 San Diego

Table 6-1 illustrates the racial and ethnic composition of potentially affected census block groups within the study area of San Diego, the city of San Diego, and San Diego County in 2000. The proportions of total minority populations range from 8.8 percent to 50.4 percent in census block groups within the study area. The entirety of San Diego within the study area, when taken as a whole, has a total minority percentage of 34.1 percent. The block group having the highest total minority percentages is 83.43.1. While this block group does not demonstrate a total minority percentage twice as high as the total minority percentage for San Diego County (45.0 percent), this block group does exhibit a total minority percentage over 50 percent and is therefore considered an area of potential Environmental Justice concern. As can be seen in Figure 6-1, this block group is located east of I-5 and west of Genesee Avenue, along Regents Road. This block group is located outside of the 0.5-mile direct impact area. The remaining block groups in this part of the study area demonstrate proportions of total minorities that are not meaningfully greater than those seen within the general population of San Diego County, nor are they over 50 percent. With one block group exhibiting a total minority percentage meaningfully greater than that of the general population or over 50 percent, the study area within San Diego is considered to contain a minority population that would be of potential Environmental Justice concern.

6.2.2 Del Mar

Table 6-2 illustrates the racial and ethnic composition of potentially affected census block groups within Del Mar and San Diego County in 2000. The proportions of total minority populations range from 7.4 percent to 10.1 percent in census block groups for Del Mar. When taken as a whole, Del Mar has a total minority percentage of 9.1 percent. There are no block groups within Del Mar that have either a meaningfully greater percentage of total minority, nor do any block groups within Del Mar exhibit total minority percentages over 50 percent. Therefore, the study area within Del Mar, and hence, the municipality of Del Mar, is not considered to contain minority populations that would be an Environmental Justice concern.

Table 6-1. Race, Ethnicity, and Proportion of Total Minority, by Block Group (2000) – San Diego and San Diego County

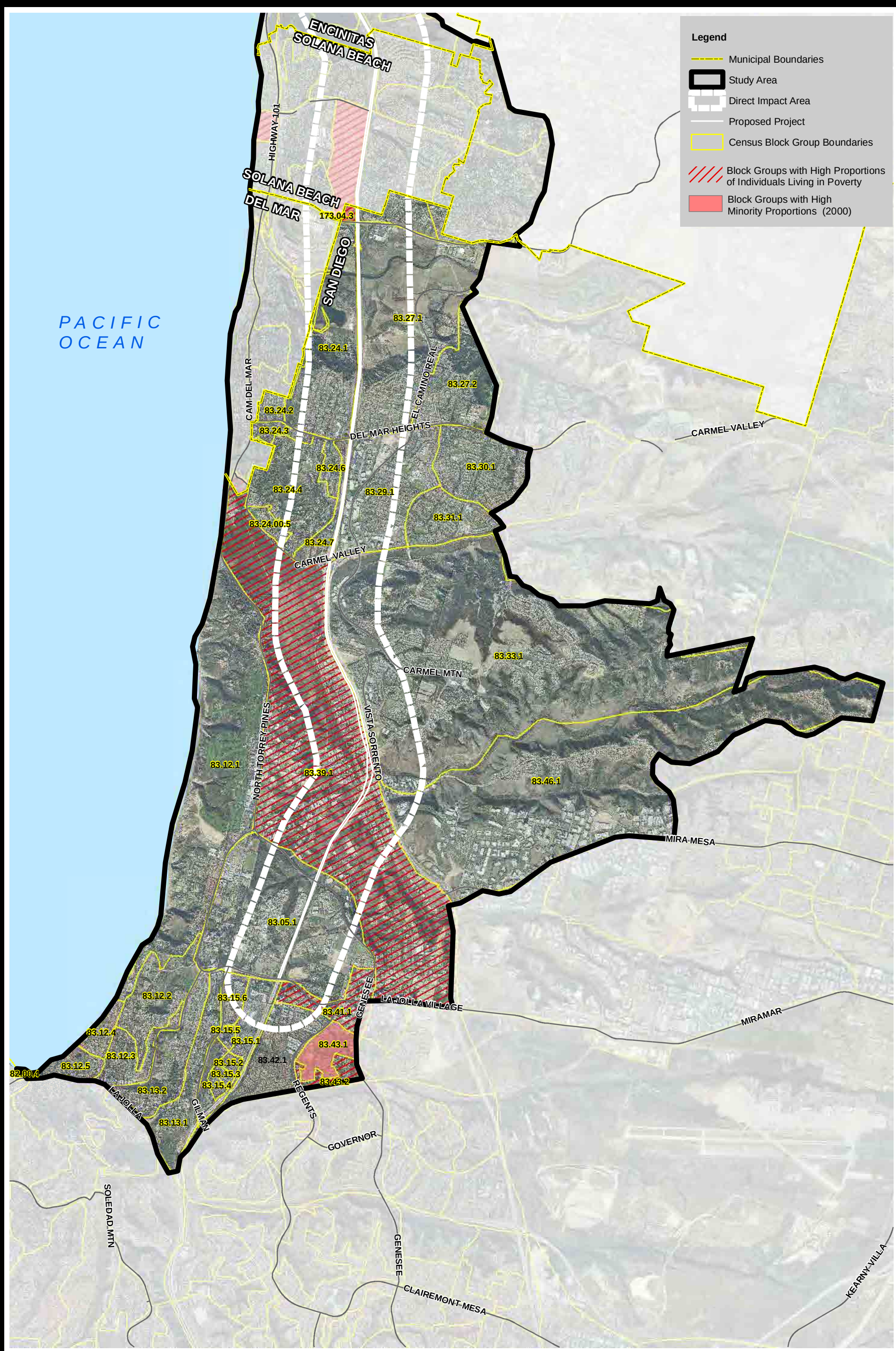
Geographic Area / Block Group	White		Black/African American		American Indian and Alaskan Native		Asian		Native Hawaiian/ Pacific Islander		Some Other Race		Two or More Races		Hispanic		Total Minority	
Study Area within San Diego	69.9%	(52,873)	1.4%	(1,056)	0.2%	(181)	22.1%	(16,724)	0.2%	(127)	2.3%	(1,763)	3.8%	(2,885)	6.8%	(5,151)	34.1%	(25,800)
83.05.1	55.1%	(3,992)	1.4%	(98)	0.2%	(16)	34.1%	(2,469)	0.1%	(10)	4.1%	(299)	4.9%	(356)	8.6%	(624)	48.7%	(3,527)
83.12.1	78.7%	(656)	1.1%	(9)	0.2%	(2)	14.7%	(123)	0.1%	(1)	1.3%	(11)	3.8%	(32)	6.2%	(52)	26.1%	(218)
83.12.2	89.4%	(681)	0.7%	(5)	0.3%	(2)	7.3%	(56)	0.0%	(0)	1.0%	(8)	1.3%	(10)	5.0%	(38)	14.8%	(113)
83.12.3	89.6%	(1,039)	0.7%	(8)	0.3%	(4)	4.7%	(54)	0.0%	(0)	0.9%	(11)	3.8%	(44)	4.7%	(54)	14.0%	(162)
83.12.4	91.0%	(585)	0.6%	(4)	0.3%	(2)	5.1%	(33)	0.6%	(4)	0.9%	(6)	1.4%	(9)	5.0%	(32)	13.1%	(84)
83.12.5	92.9%	(456)	0.2%	(1)	0.0%	(0)	3.5%	(17)	0.2%	(1)	1.0%	(5)	2.2%	(11)	2.6%	(13)	8.8%	(43)
83.13.1	84.7%	(869)	0.6%	(6)	0.1%	(1)	10.4%	(107)	0.0%	(0)	1.8%	(18)	2.4%	(25)	9.8%	(101)	23.3%	(239)
83.13.2	90.8%	(1,049)	0.3%	(3)	0.3%	(3)	4.9%	(57)	0.0%	(0)	1.4%	(16)	2.3%	(27)	7.5%	(87)	15.4%	(178)
83.15.1	77.6%	(1,016)	0.8%	(11)	0.3%	(4)	16.3%	(214)	0.1%	(1)	1.8%	(23)	3.1%	(41)	7.6%	(100)	28.3%	(371)
83.15.2	81.2%	(479)	2.0%	(12)	0.8%	(5)	11.4%	(67)	0.0%	(0)	1.0%	(6)	3.6%	(21)	7.3%	(43)	25.1%	(148)
83.15.3	75.0%	(400)	0.6%	(3)	0.4%	(2)	14.3%	(76)	0.0%	(0)	2.6%	(14)	7.1%	(38)	7.7%	(41)	31.5%	(168)
83.15.4	80.0%	(519)	0.0%	(0)	0.0%	(0)	13.1%	(85)	0.3%	(2)	2.9%	(19)	3.7%	(24)	10.2%	(66)	28.7%	(186)
83.15.5	74.3%	(538)	0.8%	(6)	0.3%	(2)	16.7%	(121)	0.0%	(0)	3.5%	(25)	4.4%	(32)	7.7%	(56)	29.6%	(214)
83.15.6	74.7%	(1,181)	1.6%	(26)	0.3%	(4)	16.1%	(254)	0.1%	(1)	2.6%	(41)	4.6%	(73)	8.2%	(129)	30.3%	(478)
83.24.1	87.1%	(1,616)	0.6%	(12)	0.5%	(10)	7.5%	(140)	0.1%	(2)	1.2%	(23)	2.9%	(53)	4.8%	(90)	16.4%	(304)
83.24.2	92.9%	(394)	0.2%	(1)	0.2%	(1)	4.5%	(19)	0.0%	(0)	0.0%	(0)	2.1%	(9)	3.3%	(14)	9.9%	(42)
83.24.3	89.4%	(590)	0.6%	(4)	0.0%	(0)	7.3%	(48)	0.0%	(0)	0.6%	(4)	2.1%	(14)	4.2%	(28)	13.9%	(92)
83.24.4	89.7%	(1,712)	0.8%	(15)	0.1%	(2)	5.3%	(102)	0.3%	(5)	1.5%	(28)	2.3%	(44)	5.6%	(107)	14.5%	(277)
83.24.5	92.2%	(511)	2.0%	(11)	0.0%	(0)	3.2%	(18)	0.2%	(1)	0.7%	(4)	1.6%	(9)	4.2%	(23)	11.2%	(62)
83.24.6	91.2%	(518)	1.2%	(7)	0.0%	(0)	4.9%	(28)	0.2%	(1)	0.4%	(2)	2.1%	(12)	2.5%	(14)	11.1%	(63)
83.24.7	89.2%	(724)	0.9%	(7)	0.2%	(2)	5.2%	(42)	0.4%	(3)	1.1%	(9)	3.1%	(25)	6.9%	(56)	15.6%	(127)
83.27.1	85.1%	(2,414)	0.4%	(12)	0.0%	(1)	10.3%	(292)	0.1%	(3)	1.0%	(28)	3.0%	(86)	5.2%	(147)	18.5%	(526)
83.27.2	81.2%	(1,769)	0.4%	(8)	0.2%	(4)	14.5%	(316)	0.0%	(0)	1.2%	(27)	2.5%	(55)	5.0%	(110)	22.1%	(482)
83.29.1	82.8%	(3,589)	0.8%	(35)	0.2%	(10)	10.9%	(471)	0.2%	(7)	2.0%	(85)	3.2%	(137)	6.9%	(301)	21.7%	(940)
83.30.1	80.0%	(4,341)	0.2%	(13)	0.1%	(3)	16.4%	(888)	0.1%	(6)	0.9%	(51)	2.3%	(127)	5.2%	(280)	24.2%	(1,313)
83.31.1	82.2%	(2,100)	0.8%	(21)	0.0%	(1)	12.7%	(324)	0.0%	(0)	1.1%	(27)	3.2%	(81)	4.4%	(113)	21.1%	(539)
83.33.1	72.0%	(2,616)	1.7%	(61)	0.1%	(3)	17.9%	(650)	0.2%	(7)	3.4%	(122)	4.8%	(174)	6.6%	(238)	30.6%	(1,111)
83.39.1	63.3%	(1,120)	1.6%	(29)	0.3%	(5)	28.0%	(495)	0.2%	(3)	2.7%	(48)	4.0%	(70)	7.3%	(129)	40.7%	(721)
83.41.1	66.9%	(2,313)	1.4%	(48)	0.3%	(9)	23.6%	(815)	0.4%	(14)	2.5%	(87)	4.9%	(170)	6.3%	(217)	36.6%	(1,265)
83.42.1	65.3%	(5,977)	1.7%	(157)	0.4%	(38)	26.1%	(2,385)	0.1%	(11)	2.3%	(215)	4.0%	(369)	7.4%	(677)	39.2%	(3,585)
83.43.1	**53.1%**	**(1,408)**	**2.7%**	**(72)**	**0.2%**	**(5)**	**34.9%**	**(926)**	**0.0%**	**(1)**	**5.0%**	**(133)**	**4.1%**	**(108)**	**8.8%**	**(233)**	**50.4%**	**(1,336)**
83.43.2	63.4%	(785)	1.5%	(19)	0.3%	(4)	25.1%	(311)	0.4%	(5)	4.4%	(54)	4.9%	(61)	10.6%	(131)	41.7%	(517)
83.46.1	55.4%	(2,398)	1.9%	(82)	0.3%	(12)	37.4%	(1,618)	0.2%	(7)	1.6%	(68)	3.4%	(146)	5.1%	(222)	47.8%	(2,070)
City of San Diego	60.2%	(736,207)	7.9%	(96,216)	0.6%	(7,543)	13.6%	(166,968)	0.5%	(5,853)	12.4%	(151,532)	4.8%	(59,081)	25.4%	(310,752)	50.6%	(619,508)
San Diego County	66.5%	(1,871,839)	5.7%	(161,480)	0.9%	(24,337)	8.9%	(249,802)	0.5%	(13,561)	12.8%	(360,847)	4.7%	(131,967)	26.7%	(750,965)	45.0%	(1,265,000)

Source: U.S. Bureau of the Census 2000

Boldface denotes block groups with a meaningfully greater total minority proportion (over 50%).

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:57,000 1 inch = 4,750 feet



Source: AirPhotoUSA 2006; US Census 2000; SanGIS 2006

EDAW | AECOM

Figure 6-1
SAN DIEGO
Block Groups Containing Populations of Potential Environmental Justice Concern

Table 6-2. Race, Ethnicity, and Proportion of Total Minority, by Block Group (2000) – Del Mar and San Diego County

Geographic Area / Block Group	White		Black/African American		American Indian and Alaskan Native		Asian		Native Hawaiian/ Pacific Islander		Some Other Race		Two or More Races		Hispanic		Total Minority	
Study Area within Del Mar	94.1%	(4,132)	0.3%	(11)	0.3%	(15)	2.9%	(126)	0.1%	(5)	0.6%	(25)	1.7%	(75)	3.9%	(170)	9.1%	(399)
172.00.1	96.5%	(961)	0.0%	(0)	0.4%	(4)	1.4%	(14)	0.0%	(0)	0.3%	(3)	1.4%	(14)	4.4%	(44)	7.5%	(75)
172.00.2	95.9%	(612)	0.6%	(4)	0.0%	(0)	1.7%	(11)	0.3%	(2)	0.5%	(3)	0.9%	(6)	3.9%	(25)	7.4%	(47)
172.00.3	93.3%	(525)	0.2%	(1)	0.5%	(3)	3.6%	(20)	0.2%	(1)	0.4%	(2)	2.0%	(11)	3.9%	(22)	10.1%	(57)
172.00.4	92.8%	(2,034)	0.3%	(6)	0.4%	(8)	3.7%	(81)	0.1%	(2)	0.8%	(17)	2.0%	(44)	3.6%	(79)	10.0%	(220)
City of Del Mar	94.1%	(4,132)	0.3%	(11)	0.3%	(15)	2.9%	(126)	0.1%	(5)	0.6%	(25)	1.7%	(75)	3.9%	(170)	9.1%	(399)
San Diego County	66.5%	(1,871,839)	5.7%	(161,480)	0.9%	(24,337)	8.9%	(249,802)	0.5%	(13,561)	12.8%	(360,847)	4.7%	(131,967)	26.7%	(750,965)	45.0%	(1,265,000)

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater total minority proportion (over 18.2%).

Table 6-3. Race, Ethnicity, and Proportion of Total Minority, by Block Group (2000) – Solana Beach and San Diego County

Geographic Area / Block Group	White		Black/African American		American Indian and Alaskan Native		Asian		Native Hawaiian/ Pacific Islander		Some Other Race		Two or More Races		Hispanic		Total Minority	
Study Area within Solana Beach	87.6%	(12,740)	0.5%	(79)	0.4%	(54)	3.6%	(524)	0.1%	(19)	5.0%	(734)	2.7%	(396)	13.6%	(1,981)	19.9%	(2,899)
173.03.1	88.5%	(1,089)	1.1%	(13)	0.1%	(1)	5.4%	(66)	0.0%	(0)	2.1%	(26)	2.8%	(35)	8.0%	(98)	16.7%	(205)
173.03.2	89.7%	(997)	0.1%	(1)	1.0%	(11)	2.6%	(29)	0.4%	(4)	3.8%	(42)	2.5%	(28)	11.2%	(125)	16.8%	(187)
173.03.3	94.7%	(586)	0.5%	(3)	0.2%	(1)	1.1%	(7)	0.0%	(0)	1.8%	(11)	1.8%	(11)	3.1%	(19)	6.9%	(43)
173.04.1	**68.9%**	**(976)**	**0.2%**	**(3)**	**1.8%**	**(25)**	**2.5%**	**(35)**	**0.2%**	**(3)**	**21.1%**	**(299)**	**5.3%**	**(75)**	**57.6%**	**(816)**	**63.0%**	**(892)**
173.04.2	89.8%	(1,170)	0.3%	(4)	0.4%	(5)	2.7%	(35)	0.1%	(1)	3.2%	(42)	3.5%	(46)	7.0%	(91)	12.7%	(165)
173.04.3	84.6%	(1,465)	1.4%	(24)	0.3%	(5)	2.9%	(50)	0.3%	(5)	7.9%	(137)	2.6%	(45)	14.6%	(253)	20.9%	(362)
173.04.4	**69.9%**	**(404)**	**0.0%**	**(0)**	**0.0%**	**(0)**	**0.9%**	**(5)**	**0.0%**	**(0)**	**22.8%**	**(132)**	**6.4%**	**(37)**	**53.3%**	**(308)**	**56.1%**	**(324)**
173.04.5	91.3%	(651)	0.4%	(3)	0.3%	(2)	4.2%	(30)	0.3%	(2)	0.8%	(6)	2.7%	(19)	7.0%	(50)	14.9%	(106)
173.05.1	91.0%	(1,134)	0.7%	(9)	0.1%	(1)	6.6%	(82)	0.1%	(1)	0.5%	(6)	1.0%	(13)	4.0%	(50)	12.5%	(156)
173.05.2	96.8%	(635)	0.2%	(1)	0.0%	(0)	1.5%	(10)	0.0%	(0)	0.3%	(2)	1.2%	(8)	2.4%	(16)	4.6%	(30)
173.05.3	92.7%	(997)	0.1%	(1)	0.3%	(3)	4.6%	(49)	0.1%	(1)	0.6%	(6)	1.7%	(18)	3.7%	(40)	10.0%	(108)
173.06.1	91.8%	(1,526)	0.4%	(7)	0.0%	(0)	4.0%	(67)	0.1%	(1)	0.9%	(15)	2.8%	(46)	3.0%	(50)	10.2%	(170)
173.06.2	92.1%	(1,110)	0.8%	(10)	0.0%	(0)	4.9%	(59)	0.1%	(1)	0.8%	(10)	1.2%	(15)	5.4%	(65)	12.5%	(151)
City of Solana Beach	87.0%	(11,293)	0.5%	(65)	0.4%	(54)	3.5%	(449)	0.1%	(18)	5.6%	(725)	2.9%	(375)	14.8%	(1,922)	21.0%	(2,729)
San Diego County	66.5%	(1,871,839)	5.7%	(161,480)	0.9%	(24,337)	8.9%	(249,802)	0.5%	(13,561)	12.8%	(360,847)	4.7%	(131,967)	26.7%	(750,965)	45.0%	(1,265,000)

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater total minority proportion (over 42%).

6.2.3 Solana Beach

Table 6-3 illustrates the racial and ethnic composition of potentially affected census block groups within the study area of Solana Beach, a neighboring block group located in unincorporated San Diego County, the city of Solana Beach, and San Diego County in 2000. The proportions of total minority populations range from 4.6 percent to 63.0 percent in census block groups within the study area. The entirety of the study area located in and around Solana Beach has a total minority percentage of 19.9 percent. Those block groups having the highest total minority percentages are 173.04.1 and 173.04.4, at 63.0 and 56.1 percent, respectively. Both of these block groups have total minority percentages twice as high as the total minority percentage for Solana Beach (21.0 percent), as well as being over 50 percent. As can be seen in Figure 6-2, 173.04.1 is located adjacent to the west side of I-5, between Lomas Santa Fe Drive to the north and Via de la Valle to the south, within the direct impact area. Block group 173.04.4 is located west of Highway 101, adjacent to the Pacific Coast, and is outside of the direct impact area. The remaining block groups in this part of the study area demonstrate proportions of total minorities that are not meaningfully greater than those seen within the general population of Solana Beach, nor are they over 50 percent of the total population. With two block groups exhibiting total minority percentages meaningfully greater than that of the general population and over 50 percent, the study area within and surrounding Solana Beach is considered to contain minority populations that would be of potential Environmental Justice concern.

6.2.4 Encinitas

Table 6-4 illustrates the racial and ethnic composition of potentially affected census block groups within the study area of Encinitas, the city of Encinitas, and San Diego County in 2000. The proportions of total minority populations range from 9.6 percent to 57.7 percent within the study area. The entirety of Encinitas within the study area, when taken as a whole, has a total minority percentage of 23.3 percent. Block groups having the highest total minority percentages are 174.04.1, 175.02.3, 176.03.2, and 177.01.5. Three of these block groups demonstrate total minority proportions twice that of the total minority percentage for the city of Encinitas as a whole (21.0 percent). One block group, 175.02.3, exhibits a total minority percentage over 50 percent of the total population. As can be seen in Figure 6-3, three of these block groups are located adjacent to the proposed project within the direct impact area. Two block groups are located on either side of Lomas Santa Fe Drive. Block group 176.03.2 is located east of I-5, between Leucadia Boulevard to the north and Encinitas Boulevard to the south. Block group 177.01.5 is not adjacent to the proposed project but is partially located within the 0.5-mile direct impact area, west of I-5. The remaining block groups in this part of the study area demonstrate proportions of total minorities that are not meaningfully greater than those seen within the general population of San Diego County, nor are they over 50 percent. With four block groups exhibiting total minority percentages meaningfully greater than that of the general population or over 50 percent of the total population, the study area within Encinitas is considered to contain minority populations that would be of potential Environmental Justice concern.

6.2.5 Carlsbad

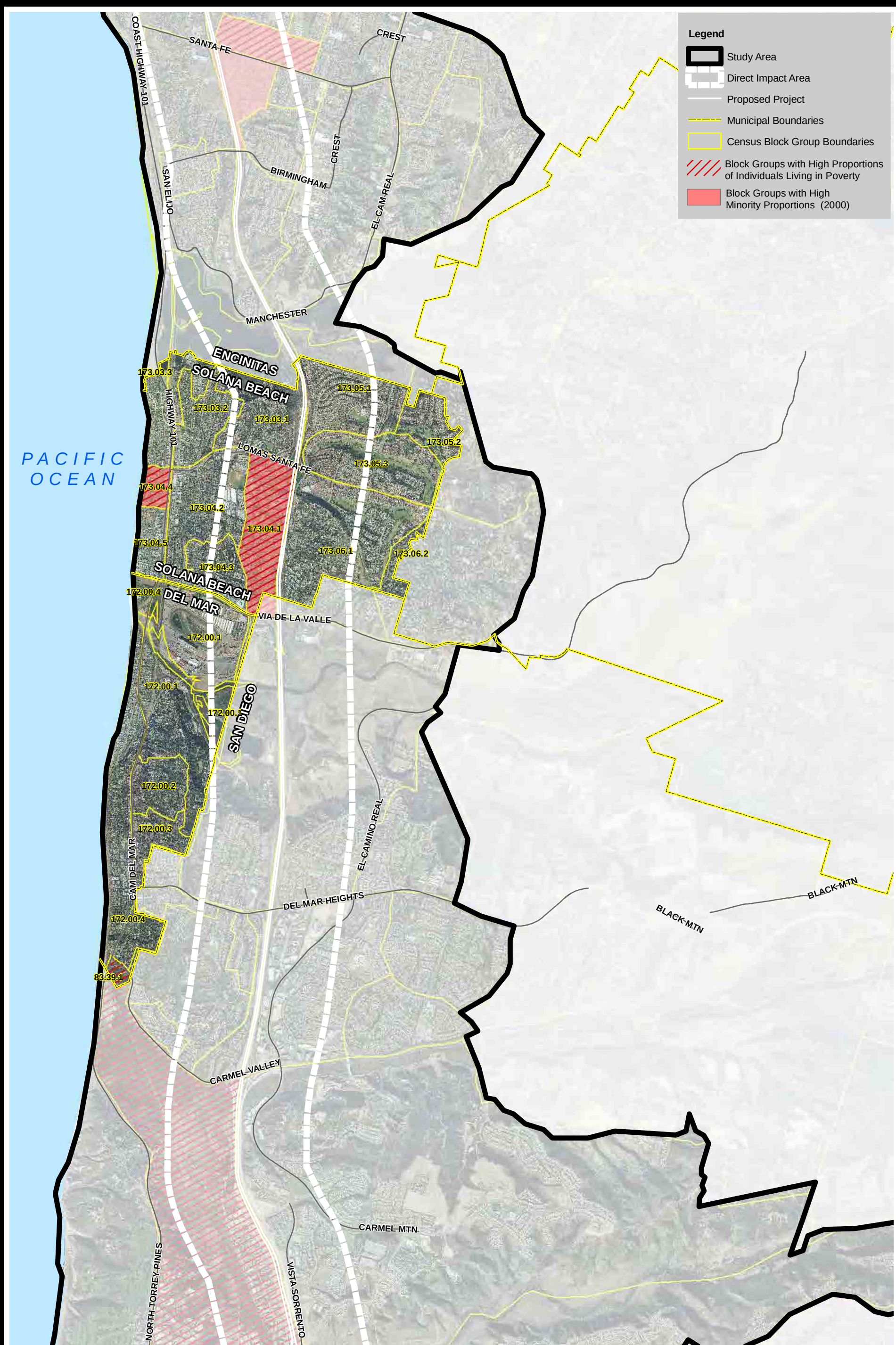
Table 6-5 illustrates the racial and ethnic composition of potentially affected census block groups within the study area of Carlsbad, the city of Carlsbad, and San Diego County in 2000. The proportions of total minority populations range from 6.6 percent to 74.3 percent in census block groups within the study area. The entirety of Carlsbad within the study area, when taken as a whole, has a total minority percentage of 23.4 percent. Those block groups having the highest total minority percentages are 179.00.2, 179.00.3, and 179.00.4. Block group 179.00.2 has a total minority percentage over twice as high as Carlsbad as a whole (19.5 percent), while the other two block groups have total minority percentages higher than 50 percent, at 74.3 and 67.8 percent, respectively. As can be seen in Figure 6-4, these block groups are located adjacent to the proposed project, west of I-5, with Buena Vista Lagoon to the north and Tamarack Avenue to the south. Block groups 179.00.3 and 179.00.4 are completely within the direct impact area, and 179.00.2 is partially within the direct impact area. The remaining block groups in this part of the study area demonstrate proportions of total minorities that are not meaningfully greater than those seen within the general population of Carlsbad, nor are they over 50 percent. With three block groups exhibiting total minority percentages meaningfully greater than that of the general population or over 50 percent, the study area within Carlsbad is considered to contain minority populations that would be of potential Environmental Justice concern.

6.2.6 Oceanside

Table 6-6 illustrates the racial and ethnic composition of potentially affected census block groups within the study area of Oceanside, the city of Oceanside, and San Diego County in 2000. The proportions of total minority populations range from 17.1 percent to 95.2 percent in census block groups within the study area. The entirety of Oceanside within the study area, when taken as a whole, has a total minority percentage of 53.9 percent. Those block groups having the highest total minority percentages are 182.00.1, 182.00.2, 184.00.1, 184.00.2, 184.00.3, 184.00.4, 185.09.1, 185.09.2, 185.09.3, 185.09.4, 185.10.2, 185.11.1, 185.11.4, 186.01.1, 186.03.1, 186.03.2, and 186.03.3. While some of these block groups demonstrate total minority percentages twice as high as the total minority percentage for San Diego County (45.0 percent), all of these block groups exhibit total minority percentages over 50 percent. As can be seen in Figure 6-5, these block groups are generally located on both the west and east sides of the proposed project, from the northern boundary of Oceanside in the north, to Oceanside Boulevard in the south. Block groups 185.09.3, 185.09.4, 185.10.2, 185.11.1, 185.11.4, and 186.03.1 are located most, if not completely, outside of the direct impact area. The remaining block groups in this part of the study area demonstrate proportions of total minorities that are not meaningfully greater than those seen within the general population of San Diego County, nor are they over 50 percent. With 17 block groups exhibiting total minority percentages meaningfully greater than that of the general population or over 50 percent, the study area within Oceanside is considered to contain minority populations that would be of potential Environmental Justice concern.

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; US Census 2000; SanGIS 2006

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Figure 6-2
SOLANA BEACH & DEL MAR
Block Groups Containing Populations of Potential Environmental Justice Concern

Table 6-4. Race, Ethnicity, and Proportion of Total Minority, by Block Group (2000) – Encinitas and San Diego County

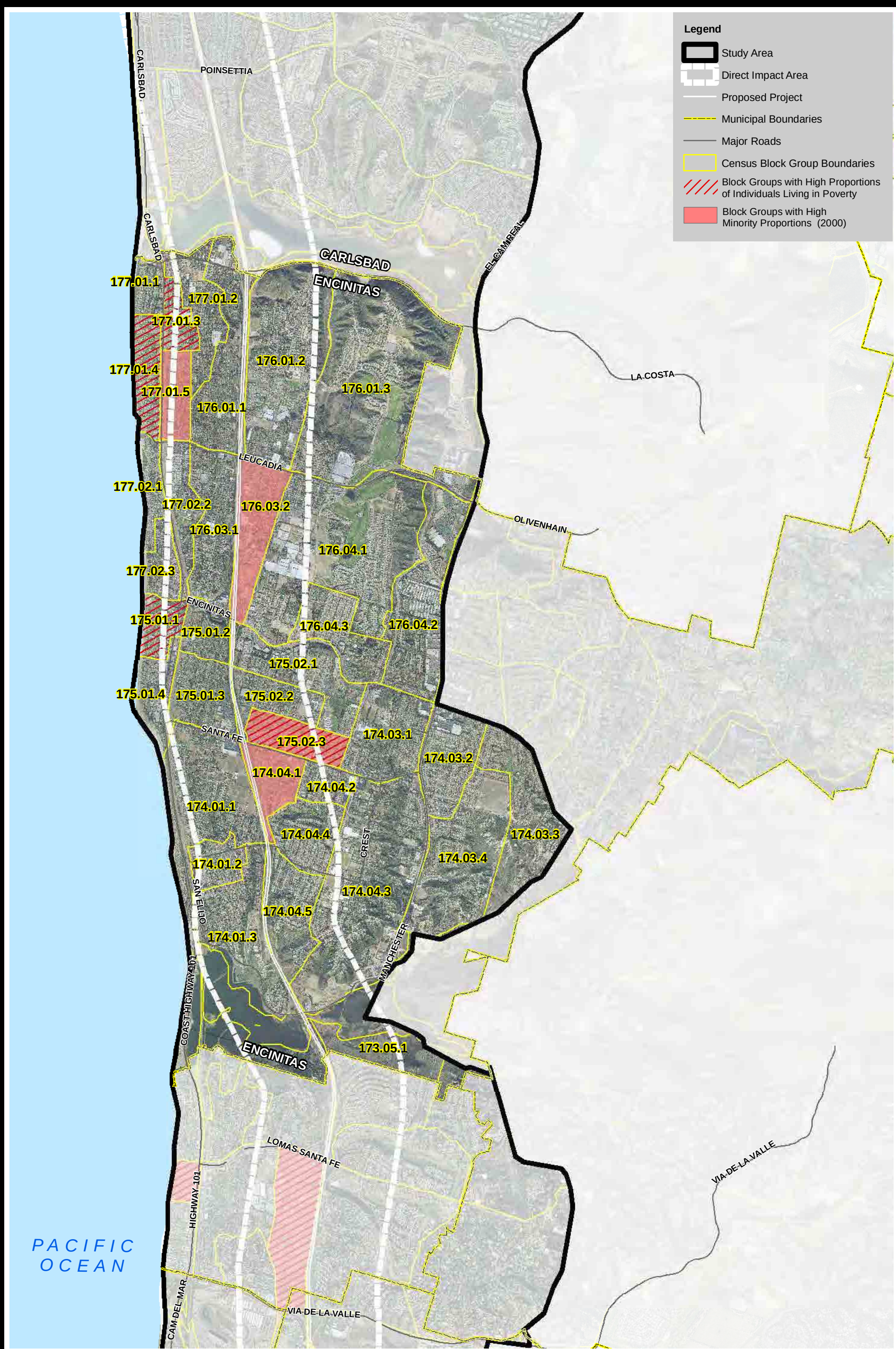
Geographic Area / Block Group	White		Black/African American		American Indian and Alaskan Native		Asian		Native Hawaiian/ Pacific Islander		Some Other Race		Two or More Races		Hispanic		Total Minority	
Study Area within Encinitas	85.2%	(36,511)	0.6%	(271)	0.5%	(202)	2.9%	(1,244)	0.1%	(64)	7.7%	(3,300)	2.9%	(1,251)	17.3%	(7,432)	23.3%	(9,995)
174.01.1	91.7%	(1,428)	0.7%	(11)	0.3%	(4)	2.2%	(34)	0.1%	(1)	2.8%	(43)	2.4%	(37)	7.0%	(109)	12.3%	(191)
174.01.2	85.3%	(1,091)	0.9%	(11)	0.1%	(1)	3.2%	(41)	0.2%	(2)	7.6%	(97)	2.8%	(36)	12.2%	(156)	19.2%	(245)
174.01.3	89.0%	(2,388)	1.0%	(27)	0.4%	(11)	2.6%	(71)	0.1%	(4)	3.4%	(90)	3.4%	(92)	10.8%	(289)	17.8%	(478)
174.03.1	90.5%	(947)	0.5%	(5)	0.1%	(1)	2.2%	(23)	0.0%	(0)	4.8%	(50)	1.9%	(20)	10.1%	(106)	14.4%	(151)
174.03.2	88.2%	(1,307)	0.5%	(8)	0.3%	(5)	4.7%	(69)	0.1%	(1)	2.6%	(38)	3.6%	(54)	8.0%	(118)	16.2%	(240)
174.03.3	94.1%	(1,041)	0.4%	(4)	0.0%	(0)	3.4%	(38)	0.0%	(0)	1.1%	(12)	1.0%	(11)	4.9%	(54)	9.6%	(106)
174.03.4	92.0%	(1,197)	0.5%	(6)	0.0%	(0)	3.2%	(42)	0.0%	(0)	2.0%	(26)	2.3%	(30)	5.1%	(67)	11.1%	(145)
174.04.1	**68.7%**	**(767)**	**0.7%**	**(8)**	**0.5%**	**(6)**	**3.9%**	**(44)**	**0.2%**	**(2)**	**22.2%**	**(248)**	**3.7%**	**(41)**	**41.6%**	**(464)**	**48.8%**	**(545)**
174.04.2	84.2%	(917)	1.6%	(17)	0.8%	(9)	2.1%	(23)	0.0%	(0)	7.6%	(83)	3.7%	(40)	18.9%	(206)	25.2%	(274)
174.04.3	90.8%	(1,671)	0.5%	(10)	0.5%	(9)	3.3%	(61)	0.1%	(1)	2.4%	(45)	2.4%	(44)	7.1%	(131)	12.9%	(237)
174.04.4	87.5%	(1,186)	0.5%	(7)	0.7%	(9)	1.7%	(23)	0.4%	(6)	4.6%	(62)	4.6%	(63)	15.0%	(204)	21.5%	(291)
174.04.5	91.6%	(826)	0.3%	(3)	0.1%	(1)	2.1%	(19)	0.1%	(1)	2.7%	(24)	3.1%	(28)	8.5%	(77)	13.9%	(125)
175.01.1	92.2%	(533)	1.4%	(8)	0.2%	(1)	2.6%	(15)	0.0%	(0)	0.9%	(5)	2.8%	(16)	7.4%	(43)	13.5%	(78)
175.01.2	93.2%	(648)	0.1%	(1)	0.4%	(3)	3.2%	(22)	0.0%	(0)	0.9%	(6)	2.2%	(15)	6.6%	(46)	11.9%	(83)
175.01.3	90.7%	(1,073)	0.5%	(6)	0.3%	(3)	1.6%	(19)	0.2%	(2)	3.9%	(46)	2.9%	(34)	11.1%	(131)	15.5%	(183)
175.01.4	85.6%	(415)	2.1%	(10)	0.4%	(2)	2.3%	(11)	0.2%	(1)	6.8%	(33)	2.7%	(13)	12.6%	(61)	19.6%	(95)
175.02.1	77.0%	(565)	0.5%	(4)	0.4%	(3)	1.2%	(9)	0.0%	(0)	18.5%	(136)	2.3%	(17)	32.6%	(239)	36.4%	(267)
175.02.2	73.9%	(839)	1.1%	(13)	1.1%	(12)	2.6%	(30)	0.6%	(7)	17.8%	(202)	2.9%	(33)	26.9%	(306)	33.5%	(381)
175.02.3	**59.9%**	**(1,013)**	**0.5%**	**(9)**	**1.2%**	**(20)**	**2.4%**	**(40)**	**0.1%**	**(1)**	**31.5%**	**(533)**	**4.4%**	**(74)**	**52.2%**	**(883)**	**57.7%**	**(975)**
176.01.1	93.1%	(952)	0.8%	(8)	0.3%	(3)	1.8%	(18)	0.0%	(0)	2.1%	(21)	2.1%	(21)	8.1%	(83)	12.4%	(127)
176.01.2	89.1%	(1,204)	1.0%	(13)	0.1%	(1)	2.9%	(39)	0.0%	(0)	4.3%	(58)	2.7%	(36)	11.0%	(149)	16.6%	(224)
176.01.3	90.7%	(893)	0.4%	(4)	0.4%	(4)	5.6%	(55)	0.3%	(3)	0.7%	(7)	1.9%	(19)	4.4%	(43)	12.4%	(122)
176.03.1	91.0%	(895)	0.4%	(4)	0.1%	(1)	2.0%	(20)	0.0%	(0)	4.2%	(41)	2.3%	(23)	10.5%	(103)	14.8%	(146)
176.03.2	**78.5%**	**(1,172)**	**0.2%**	**(3)**	**0.9%**	**(14)**	**3.1%**	**(47)**	**0.1%**	**(2)**	**14.3%**	**(214)**	**2.7%**	**(41)**	**37.2%**	**(556)**	**43.6%**	**(651)**
176.04.1	84.5%	(1,548)	1.1%	(20)	0.3%	(6)	5.9%	(109)	0.3%	(5)	5.8%	(106)	2.1%	(38)	11.8%	(216)	21.4%	(392)
176.04.2	86.9%	(1,647)	0.4%	(8)	0.4%	(7)	6.4%	(121)	0.1%	(2)	3.9%	(73)	2.0%	(38)	10.9%	(207)	19.8%	(376)
176.04.3	84.7%	(1,411)	0.4%	(7)	0.5%	(9)	3.2%	(54)	0.4%	(7)	8.3%	(139)	2.3%	(39)	24.3%	(405)	30.6%	(510)
177.01.1	93.6%	(512)	0.9%	(5)	0.4%	(2)	1.3%	(7)	0.5%	(3)	2.6%	(14)	0.7%	(4)	6.4%	(35)	9.9%	(54)
177.01.2	91.4%	(721)	0.0%	(0)	0.6%	(5)	2.8%	(22)	0.1%	(1)	1.0%	(8)	4.1%	(32)	9.3%	(73)	13.4%	(106)
177.01.3	84.6%	(658)	0.4%	(3)	0.3%	(2)	2.1%	(16)	0.1%	(1)	9.6%	(75)	3.0%	(23)	27.5%	(214)	31.9%	(248)
177.01.4	78.1%	(1,299)	0.4%	(6)	0.5%	(9)	1.6%	(27)	0.2%	(3)	15.9%	(264)	3.3%	(55)	32.1%	(533)	36.9%	(613)
177.01.5	**69.0%**	**(1,235)**	**0.7%**	**(12)**	**1.1%**	**(19)**	**1.1%**	**(20)**	**0.3%**	**(5)**	**21.9%**	**(392)**	**5.9%**	**(106)**	**44.2%**	**(790)**	**48.0%**	**(859)**
177.02.1	94.0%	(749)	0.3%	(2)	0.6%	(5)	1.8%	(14)	0.0%	(0)	2.0%	(16)	1.4%	(11)	7.3%	(58)	11.4%	(91)
177.02.2	88.2%	(931)	0.6%	(6)	1.0%	(11)	1.0%	(11)	0.2%	(2)	6.0%	(63)	3.0%	(32)	19.0%	(201)	23.2%	(245)
177.02.3	89.1%	(832)	0.2%	(2)	0.4%	(4)	3.2%	(30)	0.1%	(1)	3.2%	(30)	3.7%	(35)	8.1%	(76)	15.1%	(141)
City of Encinitas	86.6%	(50,241)	0.6%	(340)	0.5%	(267)	3.1%	(1,798)	0.1%	(69)	6.3%	(3,645)	2.9%	(1,654)	14.8%	(8,584)	21.0%	(12,162)
San Diego County	66.5%	(1,871,839)	5.7%	(161,480)	0.9%	(24,337)	8.9%	(249,802)	0.5%	(13,561)	12.8%	(360,847)	4.7%	(131,967)	26.7%	(750,965)	45.0%	(1,265,000)

Source: U.S. Bureau of the Census 2000

Boldface denotes block groups with a meaningfully greater total minority proportion (over 42%).

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000; 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; SanGIS 2006; US Census 2000

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Figure 6-3
ENCINITAS
Block Groups Containing Populations of Potential Environmental Justice Concern

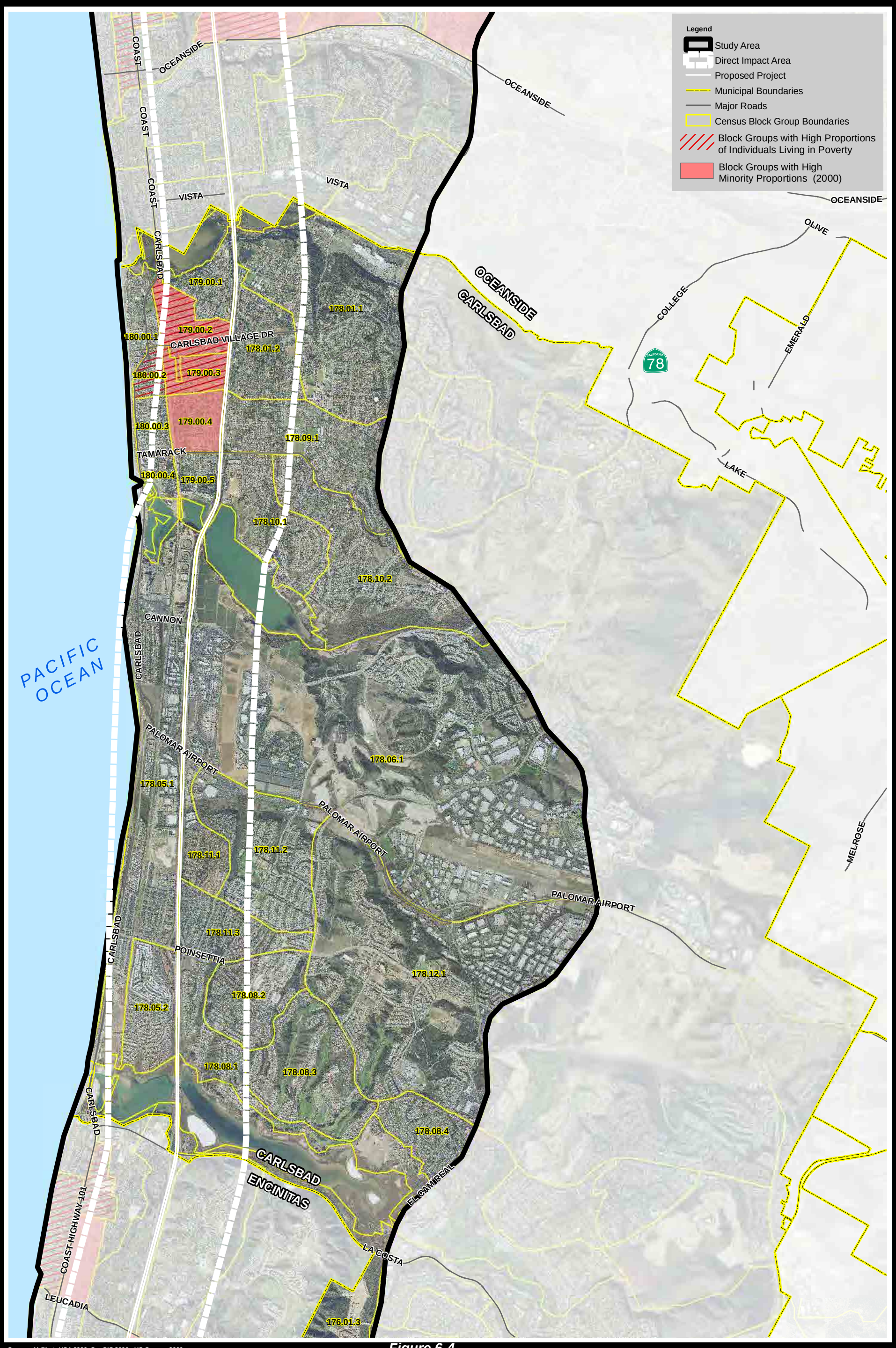
Table 6-5. Race, Ethnicity, and Proportion of Total Minority, by Block Group (2000) – Carlsbad and San Diego County

Geographic Area / Block Group	White		Black/African American		American Indian and Alaskan Native		Asian		Native Hawaiian/ Pacific Islander		Some Other Race		Two or More Races		Hispanic		Total Minority	
Study Area within Carlsbad	84.3%	(35,142)	0.9%	(376)	0.5%	(207)	3.9%	(1,646)	0.2%	(87)	7.0%	(2,907)	3.2%	(1,316)	16.0%	(6,672)	23.4%	(9,746)
178.01.1	83.6%	(4,222)	1.3%	(64)	0.4%	(22)	5.2%	(261)	0.3%	(14)	5.5%	(280)	3.7%	(189)	15.2%	(769)	24.4%	(1,234)
178.01.2	86.9%	(1,243)	0.5%	(7)	0.1%	(1)	2.1%	(30)	0.1%	(1)	6.6%	(94)	3.8%	(55)	17.9%	(256)	22.9%	(328)
178.05.1	92.2%	(1,102)	0.3%	(4)	0.3%	(4)	2.0%	(24)	0.1%	(1)	2.1%	(25)	2.9%	(35)	6.3%	(75)	11.4%	(136)
178.05.2	90.6%	(1,372)	0.3%	(5)	0.2%	(3)	5.5%	(83)	0.0%	(0)	1.6%	(24)	1.8%	(28)	3.9%	(59)	11.6%	(176)
178.06.1	91.9%	(824)	0.4%	(4)	0.2%	(2)	3.8%	(34)	0.0%	(0)	1.8%	(16)	1.9%	(17)	8.0%	(72)	14.2%	(127)
178.08.1	88.9%	(1,110)	1.0%	(13)	0.3%	(4)	6.1%	(76)	0.2%	(3)	1.0%	(13)	2.3%	(29)	3.1%	(39)	12.7%	(158)
178.08.2	92.0%	(1,386)	0.4%	(6)	0.2%	(3)	3.9%	(59)	0.1%	(1)	1.5%	(22)	2.0%	(30)	4.8%	(72)	10.9%	(165)
178.08.3	91.8%	(1,133)	0.6%	(8)	0.2%	(2)	5.8%	(71)	0.0%	(0)	0.5%	(6)	1.1%	(14)	3.5%	(43)	11.2%	(138)
178.08.4	92.0%	(1,365)	0.3%	(4)	0.1%	(2)	4.5%	(66)	0.0%	(0)	1.6%	(23)	1.6%	(23)	4.9%	(73)	11.5%	(171)
178.09.1	91.4%	(2,019)	0.4%	(8)	0.3%	(7)	2.8%	(61)	0.2%	(5)	2.9%	(65)	2.0%	(45)	11.6%	(257)	16.7%	(368)
178.10.1	88.8%	(1,668)	0.6%	(12)	0.5%	(9)	3.1%	(58)	0.4%	(8)	3.6%	(67)	3.0%	(56)	9.4%	(177)	15.4%	(289)
178.10.2	90.8%	(2,535)	0.5%	(14)	0.6%	(16)	2.8%	(78)	0.3%	(9)	1.6%	(46)	3.4%	(94)	7.1%	(197)	13.1%	(366)
178.11.1	93.1%	(911)	0.2%	(2)	0.2%	(2)	3.1%	(30)	0.3%	(3)	0.6%	(6)	2.6%	(25)	3.4%	(33)	9.1%	(89)
178.11.2	86.8%	(1,831)	1.3%	(28)	0.3%	(7)	7.7%	(162)	0.1%	(2)	0.7%	(15)	3.0%	(64)	4.1%	(87)	16.6%	(351)
178.11.3	87.8%	(2,165)	1.4%	(35)	0.3%	(8)	5.0%	(123)	0.3%	(7)	1.8%	(45)	3.4%	(84)	7.5%	(184)	17.1%	(422)
178.12.1	76.4%	(2,371)	2.7%	(85)	0.2%	(5)	6.8%	(210)	0.1%	(3)	8.8%	(272)	5.1%	(158)	17.8%	(554)	30.6%	(951)
179.00.1	81.9%	(1,461)	1.0%	(17)	1.0%	(17)	2.6%	(46)	0.2%	(4)	9.4%	(168)	4.0%	(71)	20.9%	(373)	28.0%	(499)
179.00.2	**68.8%**	**(627)**	**0.4%**	**(4)**	**1.6%**	**(15)**	**2.4%**	**(22)**	**0.5%**	**(5)**	**23.1%**	**(211)**	**3.1%**	**(28)**	**42.8%**	**(390)**	**48.9%**	**(446)**
179.00.3	**55.2%**	**(807)**	**1.6%**	**(24)**	**1.4%**	**(20)**	**1.6%**	**(23)**	**0.5%**	**(7)**	**36.0%**	**(526)**	**3.8%**	**(56)**	**70.6%**	**(1,033)**	**74.3%**	**(1,087)**
179.00.4	**55.6%**	**(1,278)**	**0.4%**	**(9)**	**1.1%**	**(26)**	**1.9%**	**(43)**	**0.3%**	**(6)**	**36.0%**	**(828)**	**4.7%**	**(109)**	**63.2%**	**(1,453)**	**67.8%**	**(1,558)**
179.00.5	86.6%	(665)	0.5%	(4)	0.8%	(6)	2.3%	(18)	0.0%	(0)	6.3%	(48)	3.5%	(27)	18.9%	(145)	24.5%	(188)
180.00.1	95.9%	(583)	0.2%	(1)	0.7%	(4)	1.0%	(6)	0.2%	(1)	1.5%	(9)	0.7%	(4)	4.6%	(28)	6.6%	(40)
180.00.2	90.8%	(711)	0.1%	(1)	0.4%	(3)	1.3%	(10)	0.1%	(1)	3.8%	(30)	3.4%	(27)	8.7%	(68)	13.2%	(103)
180.00.3	88.7%	(1,253)	0.7%	(10)	1.3%	(18)	2.9%	(41)	0.3%	(4)	3.6%	(51)	2.5%	(35)	14.0%	(198)	20.1%	(284)
180.00.4	90.7%	(500)	1.3%	(7)	0.2%	(1)	2.0%	(11)	0.4%	(2)	3.1%	(17)	2.4%	(13)	6.7%	(37)	13.1%	(72)
City of Carlsbad	86.6%	(67,723)	1.0%	(753)	0.4%	(329)	4.2%	(3,315)	0.2%	(155)	4.6%	(3,636)	3.0%	(2,336)	11.7%	(9,170)	19.5%	(15,234)
San Diego County	66.5%	(1,871,839)	5.7%	(161,480)	0.9%	(24,337)	8.9%	(249,802)	0.5%	(13,561)	12.8%	(360,847)	4.7%	(131,967)	26.7%	(750,965)	45.0%	(1,265,000)

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater total minority proportion (over 39%).

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42;000 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; SanGIS 2006; US Census 2000

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Figure 6-4
CARLSBAD
Block Groups Containing Populations of Potential Environmental Justice Concern

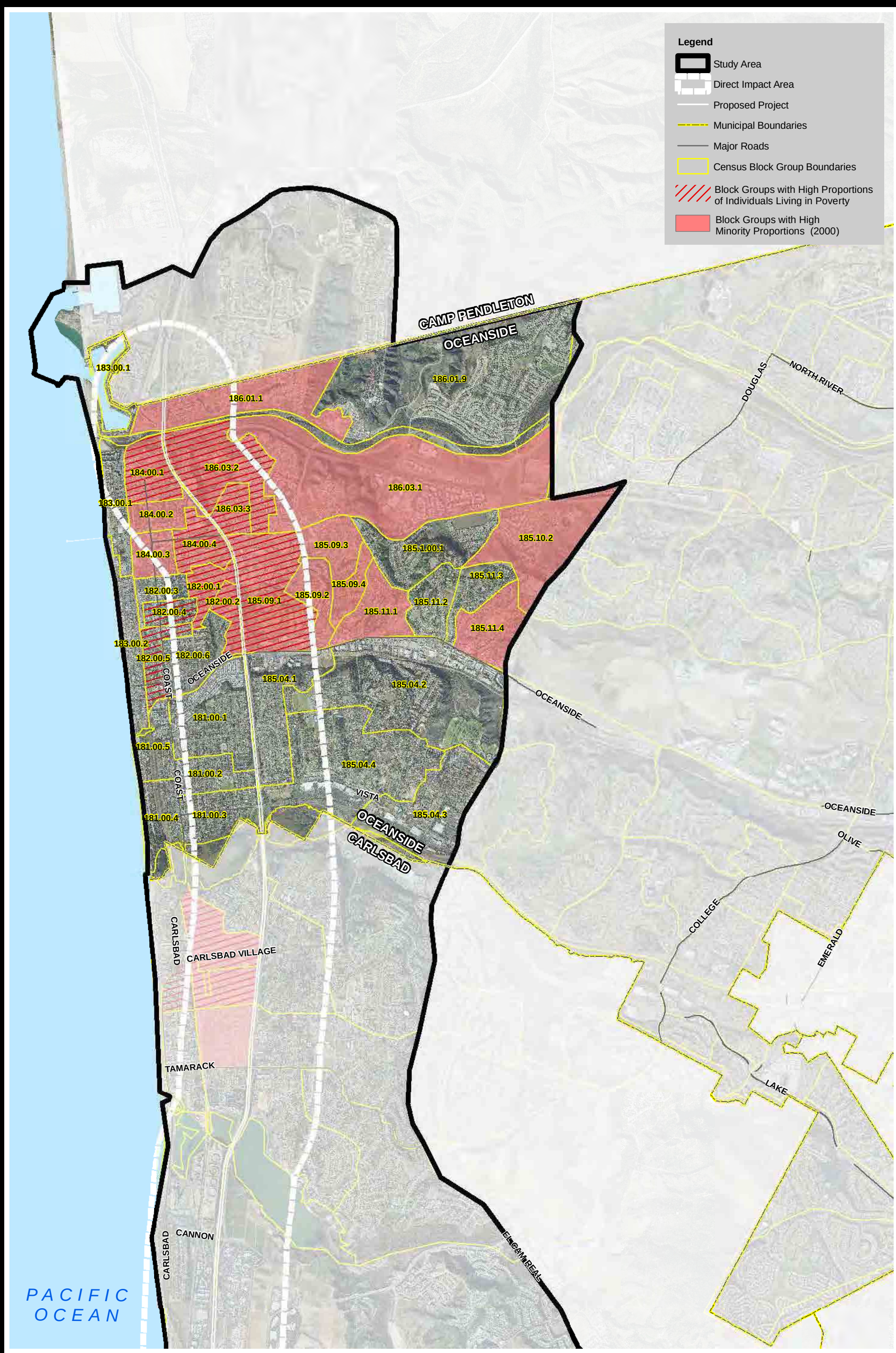
Table 6-6. Race, Ethnicity, and Proportion of Total Minority, by Block Group (2000) – Oceanside and San Diego County

Geographic Area / Block Group	White		Black/African American		American Indian and Alaskan Native		Asian		Native Hawaiian/ Pacific Islander		Some Other Race		Two or More Races		Hispanic		Total Minority	
Study Area within Oceanside	64.0%	(32,472)	5.0%	(2,563)	1.2%	(622)	3.2%	(1,600)	1.0%	(510)	20.4%	(10,376)	5.2%	(2,629)	42.0%	(21,330)	53.9%	(27,391)
181.00.1	77.4%	(2,290)	2.0%	(60)	0.9%	(26)	1.3%	(39)	0.8%	(23)	12.3%	(363)	5.3%	(156)	29.5%	(871)	37.3%	(1,102)
181.00.2	80.7%	(712)	2.7%	(24)	1.7%	(15)	2.5%	(22)	0.5%	(4)	6.2%	(55)	5.7%	(50)	17.8%	(157)	27.6%	(243)
181.00.3	90.1%	(807)	0.7%	(6)	0.4%	(4)	2.3%	(21)	0.6%	(5)	2.7%	(24)	3.2%	(29)	11.7%	(105)	17.2%	(154)
181.00.4	82.3%	(657)	3.3%	(26)	1.1%	(9)	1.9%	(15)	0.4%	(3)	5.6%	(45)	5.4%	(43)	19.0%	(152)	28.8%	(230)
181.00.5	80.6%	(696)	3.0%	(26)	0.3%	(3)	2.9%	(25)	0.7%	(6)	7.3%	(63)	5.2%	(45)	19.4%	(168)	29.4%	(254)
182.00.1	**54.1%**	**(1,782)**	**1.7%**	**(57)**	**1.4%**	**(45)**	**0.3%**	**(10)**	**0.4%**	**(13)**	**37.6%**	**(1,238)**	**4.5%**	**(147)**	**85.1%**	**(2,803)**	**88.4%**	**(2,911)**
182.00.2	**55.6%**	**(911)**	**3.3%**	**(54)**	**1.2%**	**(20)**	**1.4%**	**(23)**	**0.7%**	**(12)**	**33.3%**	**(546)**	**4.4%**	**(72)**	**71.9%**	**(1,177)**	**78.8%**	**(1,290)**
182.00.3	72.3%	(469)	3.1%	(20)	1.2%	(8)	2.6%	(17)	0.3%	(2)	14.2%	(92)	6.3%	(41)	33.4%	(217)	43.3%	(281)
182.00.4	84.0%	(458)	1.8%	(10)	0.9%	(5)	0.7%	(4)	1.1%	(6)	7.0%	(38)	4.4%	(24)	31.7%	(173)	38.2%	(208)
182.00.5	76.0%	(443)	3.9%	(23)	1.7%	(10)	2.6%	(15)	0.5%	(3)	10.5%	(61)	4.8%	(28)	26.2%	(153)	37.6%	(219)
182.00.6	77.9%	(865)	5.0%	(56)	1.0%	(11)	1.8%	(20)	0.2%	(2)	10.8%	(120)	3.3%	(37)	32.2%	(358)	41.4%	(460)
183.00.1	89.2%	(1,110)	1.6%	(20)	1.2%	(15)	2.7%	(33)	0.2%	(2)	1.8%	(23)	3.3%	(41)	10.3%	(128)	17.7%	(220)
183.00.2	83.9%	(1,348)	2.4%	(39)	0.9%	(15)	2.0%	(32)	0.2%	(3)	7.0%	(113)	3.5%	(56)	14.1%	(227)	22.4%	(360)
184.00.1	**71.1%**	**(821)**	**4.3%**	**(50)**	**2.1%**	**(24)**	**1.2%**	**(14)**	**0.6%**	**(7)**	**16.0%**	**(185)**	**4.7%**	**(54)**	**51.6%**	**(596)**	**60.0%**	**(693)**
184.00.2	**58.1%**	**(624)**	**7.9%**	**(85)**	**1.8%**	**(19)**	**1.2%**	**(13)**	**0.1%**	**(1)**	**26.3%**	**(282)**	**4.7%**	**(50)**	**55.6%**	**(597)**	**67.4%**	**(724)**
184.00.3	**53.0%**	**(346)**	**7.4%**	**(48)**	**0.6%**	**(4)**	**3.5%**	**(23)**	**0.0%**	**(0)**	**29.6%**	**(193)**	**6.0%**	**(39)**	**65.5%**	**(428)**	**77.8%**	**(508)**
184.00.4	**55.6%**	**(406)**	**3.6%**	**(26)**	**2.1%**	**(15)**	**4.2%**	**(31)**	**0.8%**	**(6)**	**29.2%**	**(213)**	**4.5%**	**(33)**	**56.0%**	**(409)**	**68.2%**	**(498)**
185.04.1	82.8%	(962)	2.3%	(27)	1.4%	(16)	1.5%	(17)	0.9%	(11)	6.4%	(74)	4.7%	(55)	16.5%	(192)	24.7%	(287)
185.04.2	82.5%	(1,224)	2.6%	(38)	0.6%	(9)	3.8%	(56)	0.8%	(12)	4.2%	(62)	5.5%	(82)	12.8%	(190)	24.7%	(366)
185.04.3	64.6%	(1,350)	10.8%	(226)	1.4%	(29)	3.9%	(81)	1.1%	(24)	11.2%	(235)	6.9%	(144)	27.8%	(580)	47.2%	(986)
185.04.4	87.9%	(1,480)	0.5%	(8)	0.4%	(7)	3.4%	(57)	0.8%	(14)	4.1%	(69)	2.9%	(48)	10.1%	(170)	17.1%	(287)
185.09.1	**43.4%**	**(685)**	**11.2%**	**(177)**	**1.5%**	**(23)**	**4.2%**	**(66)**	**1.5%**	**(24)**	**33.3%**	**(526)**	**4.9%**	**(77)**	**56.7%**	**(894)**	**75.9%**	**(1,197)**
185.09.2	**41.9%**	**(850)**	**7.6%**	**(154)**	**0.8%**	**(16)**	**2.5%**	**(50)**	**0.6%**	**(13)**	**39.8%**	**(809)**	**6.8%**	**(139)**	**62.6%**	**(1,271)**	**74.5%**	**(1,513)**
185.09.3	**62.8%**	**(837)**	**2.3%**	**(31)**	**0.9%**	**(12)**	**1.3%**	**(17)**	**1.6%**	**(21)**	**26.9%**	**(359)**	**4.2%**	**(56)**	**67.1%**	**(894)**	**72.8%**	**(971)**
185.09.4	**53.5%**	**(463)**	**12.7%**	**(110)**	**2.0%**	**(17)**	**2.7%**	**(23)**	**1.6%**	**(14)**	**20.7%**	**(179)**	**6.8%**	**(59)**	**35.7%**	**(309)**	**57.9%**	**(501)**
185.10.1	64.5%	(934)	5.5%	(79)	1.6%	(23)	6.7%	(97)	0.2%	(3)	15.3%	(222)	6.2%	(90)	30.6%	(443)	47.0%	(681)
185.10.2	**54.2%**	**(781)**	**6.0%**	**(86)**	**2.0%**	**(29)**	**6.5%**	**(93)**	**2.9%**	**(42)**	**20.7%**	**(299)**	**7.7%**	**(111)**	**43.7%**	**(629)**	**63.6%**	**(917)**
185.11.1	**65.2%**	**(760)**	**5.8%**	**(68)**	**0.4%**	**(5)**	**3.1%**	**(36)**	**1.0%**	**(12)**	**18.4%**	**(214)**	**6.1%**	**(71)**	**36.4%**	**(424)**	**50.1%**	**(584)**
185.11.2	69.1%	(446)	0.9%	(6)	2.3%	(15)	2.2%	(14)	1.7%	(11)	18.4%	(119)	5.3%	(34)	30.5%	(197)	39.5%	(255)
185.11.3	73.6%	(546)	3.0%	(22)	0.3%	(2)	2.8%	(21)	3.1%	(23)	10.5%	(78)	6.7%	(50)	18.1%	(134)	32.3%	(240)
185.11.4	**52.5%**	**(1,381)**	**8.9%**	**(233)**	**0.8%**	**(20)**	**5.5%**	**(146)**	**1.2%**	**(32)**	**25.4%**	**(667)**	**5.8%**	**(152)**	**47.0%**	**(1,237)**	**65.6%**	**(1,727)**
186.01.1	**64.5%**	**(947)**	**1.6%**	**(23)**	**1.4%**	**(21)**	**3.2%**	**(47)**	**1.0%**	**(14)**	**20.1%**	**(295)**	**8.2%**	**(121)**	**41.1%**	**(604)**	**50.5%**	**(741)**
186.01.9	70.2%	(1,464)	6.9%	(144)	0.7%	(15)	11.3%	(236)	1.9%	(40)	5.2%	(108)	3.8%	(79)	15.6%	(325)	38.6%	(805)
186.03.1	**46.7%**	**(1,494)**	**10.0%**	**(320)**	**1.4%**	**(44)**	**4.4%**	**(140)**	**1.9%**	**(61)**	**30.3%**	**(971)**	**5.3%**	**(170)**	**49.9%**	**(1,596)**	**67.4%**	**(2,157)**
186.03.2	**40.7%**	**(690)**	**7.2%**	**(122)**	**2.2%**	**(37)**	**2.1%**	**(35)**	**1.4%**	**(24)**	**43.2%**	**(732)**	**3.3%**	**(56)**	**78.7%**	**(1,334)**	**90.7%**	**(1,538)**
186.03.3	**32.1%**	**(433)**	**4.4%**	**(59)**	**2.5%**	**(34)**	**0.8%**	**(11)**	**1.3%**	**(17)**	**52.2%**	**(704)**	**6.7%**	**(90)**	**88.1%**	**(1,188)**	**95.2%**	**(1,283)**
City of Oceanside	66.4%	(106,866)	6.3%	(10,189)	0.9%	(1,370)	5.5%	(8,896)	1.3%	(2,042)	14.5%	(23,342)	5.2%	(8,324)	30.2%	(48,691)	46.4%	(74,719)
San Diego County	66.5%	(1,871,839)	5.7%	(161,480)	0.9%	(24,337)	8.9%	(249,802)	0.5%	(13,561)	12.8%	(360,847)	4.7%	(131,967)	26.7%	(750,965)	45.0%	(1,265,000)

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater total minority proportion (over 50%).

I-5 NORTH COAST CORRIDOR CIA

SCALE: 1:42,000 1 inch = 3,500 feet



Source: AirPhotoUSA 2006; SanGIS 2006; US Census 2000

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Figure 6-5
OCEANSIDE
Block Groups Containing Populations of Potential Environmental Justice Concern

6.3 LOW-INCOME POPULATIONS IN THE STUDY AREA

6.3.1 San Diego

Table 6-7 illustrates the median household income, per capita income, and proportion of individuals living below the poverty threshold for potentially affected census block groups within the study area of San Diego, the city of San Diego, and San Diego County in 1999. The proportions of people living in poverty range from 0.0 percent to 40.4 percent in census block groups within the study area. The entirety of San Diego within the study area, when taken as a whole, has a proportion of individuals living in poverty of 10.9 percent. Those block groups having the highest proportions of individuals living below the poverty threshold are: 83.39.1, 83.41.1, and 83.43.2. Each of these block groups exhibits percentages over twice as high as the percentage for San Diego County (12.4 percent). As can be seen in Figure 6-1, block group 83.39.1 covers a large area, and contains within it much of the land adjacent to I-805 and I-5 to the west, from Carmel Valley to the north, to Miramar Road to the south, partially within the direct impact area. Block group 83.41.1 is located at the southeast corner of the intersection of I-5 and La Jolla Village Drive. The remaining block group, 83.43.2, is located west of Genesee Avenue at the extreme southern end of the study area and is outside of the direct impact area. The remaining block groups in this part of the study area do not have meaningfully greater low-income populations, nor are proportions over 50 percent of the total population. It should be noted that block groups 83.15.5 and 83.15.6 both demonstrate large proportions of people living in poverty; however, they are not considered meaningfully greater. Three block groups exhibiting meaningfully greater populations living in poverty within San Diego are considered to be of potential Environmental Justice concern.

6.3.2 Del Mar

Table 6-8 illustrates the median household income, per capita income, and proportion of people living below the poverty threshold for potentially affected census block groups within Del Mar and the entirety of San Diego County in 1999. The proportions of individuals living in poverty range from 1.2 percent to 13.1 percent in census block groups for Del Mar. When taken as a whole, Del Mar has a proportion of individuals living in poverty of 8.7 percent. There are no block groups within Del Mar that have a meaningfully greater proportion of people living in poverty than the general population, nor do any block groups within Del Mar exhibit percentages over 50 percent of the total population. Therefore, the study area within Del Mar, and hence, the municipality of Del Mar, is not considered to contain any low-income populations that would be an Environmental Justice concern.

6.3.3 Solana Beach

Table 6-9 illustrates the median household income, per capita income, and proportion of individuals living in poverty for potentially affected census block groups within the study area of Solana Beach, a neighboring block group located in unincorporated San Diego County, the City of Solana Beach, and San Diego County in 1999. The proportions of individuals living in poverty range from 1.3 percent to 27.9 percent. The entirety of Solana Beach, including the neighboring block group largely located in San Diego County, when taken as a whole, has a proportion of people living in poverty of 6.4 percent.

Table 6-7. Population Below the Poverty Level, by Block Group (1999) – San Diego and San Diego County

Geographic Area / Block Group	Median Household Income	Per Capita Income	Percent Below Poverty Line	Number Below Poverty Line	Total Population
Study Area within San Diego	$28,821 - $130,539	$7,046 - $78,142	10.9%	7,539	69,232
83.05.1	$28,821	$7,046	19.9%	364	1,828
83.12.1	$129,229	$78,142	1.8%	11	595
83.12.2	$102,831	$75,964	6.5%	49	750
83.12.3	$82,136	$70,484	5.9%	59	996
83.12.4	$83,149	$58,250	5.1%	31	611
83.12.5	$83,049	$44,677	18.0%	96	533
83.13.1	$96,489	$57,766	6.5%	67	1,030
83.13.2	$130,539	$60,672	1.2%	15	1,220
83.15.1	$60,417	$33,442	9.9%	139	1,403
83.15.2	$59,444	$39,856	1.5%	8	525
83.15.3	$52,054	$34,634	16.2%	82	506
83.15.4	$64,844	$35,129	8.9%	58	651
83.15.5	$43,274	$35,568	24.2%	185	765
83.15.6	$55,859	$43,583	24.3%	374	1,536
83.24.1	$109,654	$49,489	2.7%	49	1,844
83.24.2	$121,204	$67,851	2.3%	10	433
83.24.3	$127,002	$50,665	2.4%	16	674
83.24.4	$91,862	$57,697	2.6%	49	1,897
83.24.5	$87,051	$45,387	1.6%	9	563
83.24.6	$71,688	$50,541	0.0%	0	571
83.24.7	$83,159	$64,140	1.0%	8	800
83.27.1	$83,254	$47,854	10.4%	295	2,826
83.27.2	$94,725	$43,753	4.9%	98	2,011
83.29.1	$62,888	$39,424	7.2%	294	4,080
83.30.1	$90,386	$41,828	5.0%	268	5,412
83.31.1	$88,217	$37,306	6.2%	154	2,494
83.33.1	$127,271	$50,540	3.5%	126	3,633
83.39.1	**$42,717**	**$21,910**	**31.1%**	**574**	**1,847**
83.41.1	**$51,783**	**$39,209**	**25.7%**	**855**	**3,324**
83.42.1	$46,466	$27,576	17.9%	1,636	9,138
83.43.1	$37,331	$23,474	22.3%	563	2,530
83.43.2	**$30,089**	**$15,931**	**40.4%**	**547**	**1,354**
83.46.1	$99,718	$38,658	2.9%	126	4,337
City of San Diego	$45,733	$23,609	14.6%	172,527	1,181,612
San Diego County	$47,067	$22,926	12.4%	338,399	2,722,408

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater proportion of individuals below the poverty level (over 24.8%).

Table 6-8. Population Below the Poverty Level, by Block Group (1999) – Del Mar and San Diego County

Geographic Area / Block Group	Median Household Income	Per Capita Income	Percent Below Poverty Line	Number Below Poverty Line	Total Population
Study Area within Del Mar	$77,174 - $102,426	$36,660 - $90,243	8.7%	383	4,389
172.00.1	$79,147	$59,137	6.3%	62	977
172.00.2	$83,224	$36,660	13.1%	80	609
172.00.3	$102,426	$90,243	1.2%	7	566
172.00.4	$77,174	$63,838	10.5%	234	2,237
City of Del Mar	$81,001	$62,425	8.7%	383	4,389
San Diego County	$47,067	$22,926	12.4%	338,399	2,722,408

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater proportion of individuals below the poverty level (over 17.4%).

Table 6-9. Population Below the Poverty Level, by Block Group (1999) – Solana Beach and San Diego County

Geographic Area / Block Group	Median Household Income	Per Capita Income	Percent Below Poverty Line	Number Below Poverty Line	Total Population
Study Area within Solana Beach	$31,250 - $189,629	$20,577 - $76,182	6.4%	916	14,353
173.03.1	$61,522	$41,272	8.7%	111	1,278
173.03.2	$78,201	$42,404	1.3%	14	1,072
173.03.3	$94,827	$74,456	1.8%	11	599
173.04.1	**$38,580**	**$20,705**	**13.5%**	**197**	**1,464**
173.04.2	$92,694	$56,988	5.0%	59	1,191
173.04.3	$57,460	$44,976	9.8%	163	1,663
173.04.4	**$31,250**	**$20,577**	**27.9%**	**184**	**660**
173.04.5	$78,962	$72,778	2.7%	18	673
173.05.1	$122,984	$52,169	2.0%	25	1,239
173.05.2	$106,303	$57,302	2.7%	17	631
173.05.3	$62,241	$63,404	2.7%	29	1,055
173.06.1	$111,854	$69,969	3.5%	52	1,478
173.06.2	$189,629	$76,182	2.7%	36	1,350
City of Solana Beach	$71,774	$48,547	6.7%	856	12,793
San Diego County	$47,067	$22,926	12.4%	338,399	2,722,408

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater proportion of individuals below the poverty level (over 13.4%).

Those block groups having the highest proportions of people living below the poverty threshold are 173.04.1 and 173.04.4. Both of these block groups exhibit percentages over twice as high as the proportion of Solana Beach (6.7 percent). As can be seen in Figure 6-2, block group 173.04.1 is located adjacent to the west side of I-5, with Lomas Santa Fe Drive forming the northern border, and Via de la Valle to the south, within the direct impact area. Block group 173.04.4 is located west of Highway 101 and south of Lomas Santa Fe Drive, outside of the direct impact area. The remaining block groups in this part of the study area do not have meaningfully greater low-income populations. Two block groups exhibiting meaningfully greater populations living below poverty levels within San Diego are considered to be of potential Environmental Justice concern.

6.3.4 Encinitas

Table 6-10 illustrates the median household income, per capita income, and proportion of individuals living below the poverty threshold for potentially affected census block groups within the study area of Encinitas, the city of Encinitas, and San Diego County in 1999. The proportions of individuals living in poverty range from 0.0 percent to 27.2 percent. The entirety of Encinitas within the study area, when taken as a whole, has a proportion of individuals living below poverty of 9.0 percent. Those block groups having the highest proportions of individuals living below the poverty threshold are 175.01.1, 175.02.3, 177.01.3, and 177.01.4. These block groups exhibit percentages over twice as high as the proportion for the city of Encinitas (7.3 percent). As can be seen in Figure 6-3, three of the four block groups are not adjacent to the proposed project, being located west of I-5. Of these, block groups 175.01.1 and 177.01.4 are along the coast, generally west of Vulcan Avenue. Only block group, 175.02.3, is adjacent to the proposed project, located at the northeast corner of the Santa Fe Drive entrance to I-5. Three of the four block groups are partially within the direct impact area, with 177.01.4 west of the direct impact area. The remaining block groups in this part of the study area do not have meaningfully greater low-income populations. Four block groups exhibiting meaningfully greater populations living below poverty levels within Encinitas are considered to be of potential Environmental Justice concern.

6.3.5 Carlsbad

Table 6-11 illustrates the median household income, per capita income, and proportion of individuals living below the poverty threshold for potentially affected census block groups within the study area of Carlsbad, the city of Carlsbad, and San Diego County in 1999. The proportions of individuals living in poverty range from 0.7 percent to 40.2 percent. The entirety of Carlsbad within the study area, when taken as a whole, has a proportion of individuals living below poverty of 7.3 percent. Those block groups having the highest proportions of individuals living below the poverty threshold are 179.00.2, 179.00.3, and 180.00.2. These block groups exhibit percentages over twice as high as the proportion for the city of Carlsbad (5.9 percent). As can be seen in Figure 6-4, the three block groups exhibiting high proportions are located in the northern portion of Carlsbad. Two block groups, 179.00.2 and 179.00.3, are located adjacent to the proposed project to the west, on either side of Carlsbad Village Drive. The third block group, 180.00.2, is located directly east of Carlsbad Boulevard and directly south of Carlsbad Village Drive. Block group 179.00.3 is completely within the direct impact area, while the two remaining block groups are partially within the direct impact area. The remaining block groups in

Table 6-10. Population Below the Poverty Level, by Block Group (1999) – Encinitas and San Diego County

Geographic Area / Block Group	Median Household Income	Per Capita Income	Percent Below Poverty Line	Number Below Poverty Line	Total Population
Study Area within Encinitas	$31,675 - $101,476	$13,470 - $53,113	9.0%	3,805	42,352
174.01.1	$76,622	$42,491	5.3%	79	1,500
174.01.2	$59,861	$39,950	12.2%	162	1,332
174.01.3	$61,441	$37,144	5.8%	155	2,673
174.03.1	$87,870	$36,547	5.5%	60	1,100
174.03.2	$101,476	$34,150	7.3%	108	1,477
174.03.3	$39,500	$31,130	2.8%	30	1,060
174.03.4	$86,291	$38,694	3.6%	46	1,292
174.04.1	$57,031	$18,418	8.8%	97	1,107
174.04.2	$53,643	$25,037	6.2%	72	1,167
174.04.3	$68,750	$49,317	6.2%	111	1,792
174.04.4	$65,515	$25,390	2.8%	38	1,350
174.04.5	$80,145	$34,582	9.9%	88	888
175.01.1	**$40,395**	**$27,740**	**27.2%**	**175**	**643**
175.01.2	$86,088	$38,437	2.2%	15	691
175.01.3	$70,353	$34,456	6.9%	82	1,183
175.01.4	$34,762	$31,624	11.0%	50	454
175.02.1	$38,021	$24,254	12.4%	82	662
175.02.2	$42,969	$17,849	12.7%	131	1,030
175.02.3	**$55,592**	**$13,470**	**17.2%**	**280**	**1,629**
176.01.1	$73,688	$42,134	7.0%	79	1,121
176.01.2	$81,033	$31,599	8.4%	106	1,264
176.01.3	$100,000	$53,113	0.0%	0	961
176.03.1	$80,955	$35,942	2.5%	26	1,050
176.03.2	$71,875	$28,048	7.1%	105	1,483
176.04.1	$45,625	$32,398	7.5%	117	1,556
176.04.2	$50,174	$29,565	12.6%	236	1,874
176.04.3	$51,162	$30,744	14.3%	240	1,676
177.01.1	$65,417	$43,780	5.8%	28	479
177.01.2	$76,029	$35,470	9.3%	73	786
177.01.3	**$36,389**	**$17,774**	**16.7%**	**143**	**857**
177.01.4	**$31,675**	**$32,072**	**25.8%**	**384**	**1,488**
177.01.5	$45,000	$18,848	10.6%	197	1,855
177.02.1	$56,049	$35,466	7.9%	69	876
177.02.2	$43,833	$27,309	7.9%	82	1,041
177.02.3	$52,500	$39,502	6.2%	59	955
City of Encinitas	$63,954	$34,336	7.3%	4,220	57,590
San Diego County	$47,067	$22,926	12.4%	338,399	2,722,408

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater proportion of individuals below the poverty level (over 14.6%).

Table 6-11. Population Below the Poverty Level, by Block Group (1999) – Carlsbad and San Diego County

Geographic Area / Block Group	Median Household Income	Per Capita Income	Percent Below Poverty Line	Number Below Poverty Line	Total Population
Study Area within Carlsbad	$24,569 - $128,197	$11,082 - $79,743	7.3%	2,972	40,989
178.01.1	$64,453	$30,882	5.5%	282	5,161
178.01.2	$51,513	$28,206	4.1%	52	1,258
178.05.1	$60,268	$48,717	5.1%	62	1,217
178.05.2	$48,289	$44,797	5.7%	88	1,547
178.06.1	$93,682	$38,240	4.5%	38	843
178.08.1	$94,714	$50,313	3.2%	39	1,207
178.08.2	$94,572	$50,265	3.7%	55	1,492
178.08.3	$128,197	$79,743	0.7%	9	1,246
178.08.4	$85,979	$39,233	4.3%	66	1,522
178.09.1	$60,427	$29,335	4.8%	105	2,208
178.10.1	$56,758	$40,178	6.5%	122	1,864
178.10.2	$73,676	$30,482	2.1%	58	2,757
178.11.1	$43,281	$29,440	2.0%	19	930
178.11.2	$106,179	$42,805	1.1%	25	2,175
178.11.3	$56,154	$36,748	2.8%	68	2,439
178.12.1	$63,977	$32,749	9.0%	269	3,004
179.00.1	$46,071	$24,808	11.2%	167	1,494
179.00.2	**$24,569**	**$19,007**	**25.4%**	**225**	**885**
179.00.3	**$24,770**	**$11,082**	**40.2%**	**673**	**1,676**
179.00.4	$41,500	$14,636	9.0%	205	2,278
179.00.5	$64,844	$34,691	4.1%	28	683
180.00.1	$48,036	$52,192	10.6%	37	349
180.00.2	**$42,961**	**$26,690**	**13.3%**	**121**	**909**
180.00.3	$40,396	$29,754	9.8%	129	1,316
180.00.4	$48,529	$37,991	5.7%	30	529
City of Carlsbad	$65,145	$34,863	5.9%	4,576	77,217
San Diego County	$47,067	$22,926	12.4%	338,399	2,722,408

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater proportion of individuals below the poverty level (over 11.8%).

this part of the study area do not have meaningfully greater low-income populations. It should be noted, however, that block group 180.00.2 has a relatively average proportion of individuals living in poverty when compared to San Diego County, although it is over twice that exhibited by the city of Carlsbad. Three block groups exhibiting meaningfully greater populations living in poverty within Carlsbad are considered to be of potential Environmental Justice concern.

6.3.6 Oceanside

Table 6-12 illustrates the median household income, per capita income, and proportion of individuals living below the poverty threshold for potentially affected census block groups within the study area of Oceanside, the city of Oceanside, and San Diego County in 1999. The proportions of individuals living in poverty range from 0.0 percent to 51.2 percent. The entirety of Oceanside within the study area, when taken as a whole, has a proportion of individuals living below poverty of 19.3 percent. Those block groups having the highest proportions of individuals living below the poverty threshold are 182.00.1, 182.00.2, 182.00.4, 182.00.5, 184.00.1, 184.00.4, 185.09.1, 186.03.2, and 186.03.3. These block groups either exhibit percentages over twice as high as the percentage for the city of Oceanside (11.6 percent) and/or are over 50 percent. As can be seen in Figure 6-5, the block groups are largely concentrated in the northern part of Oceanside, bounded by the San Luis Rey River to the north, and Oceanside Boulevard to the south. Seven of the block groups are directly adjacent to the proposed project, and block groups are present east and west of I-5. Two block groups are located farther to the west, near Coast Highway. All block groups are either contained or partially within the direct impact area. The remaining block groups in this part of the study area do not have meaningfully greater low-income populations. It should be noted, however, that block group 185.11.1 has a relatively large proportion of individuals living in poverty when compared to other block groups, but it is not technically twice as large as what is seen within the general population of Oceanside and is not considered meaningfully greater. Nine block groups exhibiting meaningfully greater populations living below poverty levels within Oceanside are considered to be of potential Environmental Justice concern.

6.4 MINORITY AND LOW-INCOME POPULATIONS IN THE STUDY AREA

While Environmental Justice analysis does not specifically call for the analysis of block groups that share both high proportions of minorities in addition to a high percentage of people living in poverty (the presence of one or the other is sufficient to be included in analysis), the inclusion of a short description can help identify particularly sensitive neighborhoods and areas.

As shown in Tables 6-1 through 6-12, the proportion of meaningful greater total minority and low-income populations is located in 12 block groups. As can be seen Figures 6-1 through 6-5, all but one of these block groups are directly adjacent to the proposed project, with the majority of block groups present in the northern part of Oceanside. San Diego has no block groups that have both a high proportion of total minorities and individuals living in poverty within them, while Solana Beach, Encinitas, Carlsbad, have two, one, and two block groups within their boundaries that do have meaningfully greater proportions of both analytical categories. Seven block groups in Oceanside have both a high proportion of total minorities and individuals living in poverty, generally located north of Oceanside Boulevard on either side of the freeway.

Table 6-12. Population Below the Poverty Level, by Block Group (1999) – Oceanside and San Diego County

Geographic Area / Block Group	Median Household Income	Per Capita Income	Percent Below Poverty Line	Number Below Poverty Line	Total Population
Study Area within Oceanside	$15,159 - $77,307	$8,117 - $40,875	19.3%	9,707	50,182
181.00.1	$36,217	$17,792	15.8%	491	3,099
181.00.2	$43,542	$21,980	15.2%	139	914
181.00.3	$50,625	$25,591	4.9%	39	799
181.00.4	$32,061	$25,372	4.9%	38	768
181.00.5	$33,043	$21,949	13.5%	99	736
182.00.1	**$24,315**	**$8,572**	**51.2%**	**1,702**	**3,327**
182.00.2	**$20,917**	**$8,880**	**32.3%**	**528**	**1,633**
182.00.3	$32,813	$15,987	20.4%	129	632
182.00.4	**$20,000**	**$13,194**	**47.7%**	**264**	**553**
182.00.5	**$38,092**	**$19,174**	**31.0%**	**167**	**539**
182.00.6	$46,667	$24,414	13.1%	142	1,087
183.00.1	$36,167	$40,875	17.1%	204	1,193
183.00.2	$30,472	$20,120	19.4%	301	1,554
184.00.1	**$27,396**	**$12,097**	**29.3%**	**310**	**1,059**
184.00.2	$27,303	$11,651	22.5%	230	1,021
184.00.3	$27,007	$11,527	20.3%	128	630
184.00.4	**$15,156**	**$8,214**	**41.1%**	**345**	**839**
185.04.1	$53,816	$24,791	3.3%	35	1,060
185.04.2	$69,063	$24,023	2.5%	46	1,820
185.04.3	$40,000	$20,537	11.8%	221	1,874
185.04.4	$77,307	$38,886	1.4%	22	1,558
185.09.1	**$22,604**	**$16,807**	**23.9%**	**385**	**1,614**
185.09.2	$38,705	$15,495	20.1%	391	1,946
185.09.3	$50,263	$15,244	20.4%	267	1,308
185.09.4	$40,417	$13,106	16.3%	138	846
185.10.1	$63,100	$21,473	9.2%	136	1,483
185.10.2	$39,125	$14,165	19.7%	279	1,416
185.11.1	$39,167	$17,356	22.2%	282	1,269
185.11.2	$41,019	$18,987	7.9%	45	573
185.11.3	$64,797	$23,301	0.0%	0	722
185.11.4	$28,362	$12,842	18.3%	479	2,615
186.01.1	$45,921	$17,884	7.6%	112	1,477
186.01.9	$70,868	$25,758	4.1%	85	2,052
186.03.1	$31,345	$12,897	19.2%	607	3,154
186.03.2	**$37,644**	**$11,170**	**26.2%**	**435**	**1,659**
186.03.3	**$25,875**	**$8,117**	**35.9%**	**486**	**1,353**
City of Oceanside	$46,301	$20,329	11.6%	18,492	159,599
San Diego County	$47,067	$22,926	12.4%	338,399	2,722,408

Source: U.S. Bureau of the Census 2000
Boldface denotes block groups with a meaningfully greater proportion of individuals below the poverty level (over 23.2%).

6.5 ANALYSIS OF IMPACTS

The following sections discuss the nature of public involvement in the development of the proposed project, as well present an analysis of impacts to minority populations and low-income populations within the study area. This analysis is conducted by identifying those impacts to the general population, if any, that are disproportionately experienced by populations of potential Environmental Justice concern.

Public Involvement and Community Outreach

Public involvement and community outreach began in late 2003 and continued into early 2004 with a number of scoping meetings held along the route of the proposed project. Advertisements for these meetings were published in a number of print media, both English and Spanish, and posted at popular community facilities and businesses. Newspapers in which advertisements were placed include the North County Times, The San Diego Union-Tribune Enlace (a weekly Spanish-language publication), The San Diego Union-Tribune, and the Coast News. Advertisements were also placed within a wide range of businesses and community facilities along the I-5 North Coast Corridor. Department staff also met with multiple stakeholder groups, public entities, homeowners associations, and planning boards throughout the design process. A more thorough, detailed treatment of community outreach efforts is presented in Chapter 8.0.

Impacts to the General Population

As discussed throughout the document, the proposed project would increase capacity and improve traffic flow through five municipalities. Interchanges, overcrossings, and undercrossings along the I-5 North Coast Corridor would be reengineered and renovated in most cases to allow increased pedestrian flow. A number of community enhancement projects are proposed to create and/or improve pedestrian or bicycle corridors, connect pedestrian or bicycle routes with public transit centers, enhance connectivity across I-5, and create trailheads and other recreational opportunities.

Construction impacts in some cases are likely to be adverse, particularly for those businesses near interchanges that will experience disruptions in access. Other construction-related impacts include potential disruptions to residential area access, traffic impacts along roadways near the proposed project, impacts to public transportation routes, and environmental impacts related to air quality and increased noise levels for those residences, businesses, and community facilities in proximity to the proposed project and staging areas. These impacts are likely to be successfully mitigated by the TMP and construction BMPs and are considered temporary.

Under operation of the proposed project, circulation and capacity on I-5 are expected to improve, likely a result of design improvements in access to and from local communities to I-5. Beyond those residences and businesses that would be displaced and/or relocated by the proposed project (which is relatively few, given the scope and scale of the proposed widening), businesses and residences will generally not be adversely affected by this improvement in access. While the freeway will be closer to residences, businesses, and community facilities, air impacts are not expected to be significant. Noise impacts would not be considered adverse to residences, community facilities, parks, schools, and residences due to the inclusion of noise abatement design measures including sound walls. Property values may decrease for those residences adjacent to the freeway, but community cohesion is not likely to be diminished by the proposed project, as the proposed project would not divide existing neighborhoods any more than under the existing conditions, nor would it separate residences from community facilities. It may be reasonably stated that the proposed project, including the community enhancement features, would improve community cohesion by providing better access between neighborhoods across the freeway and would improve access by residents to community facilities in some instances. Additionally, the community enhancement projects would create new parks and enhance a number of streetscapes along the project route. The proposed project is not anticipated to result in substantial growth, as the project is responding to planned growth in the region. Visual impacts along the I-5 North Coast Corridor may create a sense of urbanism or isolation in some parts of the study area; however, mitigation strategies such as the installation of vegetation or textured art attempt to mitigate these impacts. Despite the impacts described above, the general atmosphere of the communities through which the proposed project passes would not be substantially altered or affected.

Disproportionate Impacts to Minority or Low-Income Populations

Impacts associated with the proposed project would accrue to those populations of potential Environmental Justice concern identified above. These include temporary construction-related impacts related to increased noise and dust generation, traffic and disruptions to access routes (particularly public transportation and pedestrian routes), and changes in the visual environment. Businesses that primarily serve populations of concern, if located in the direct impact area, may also experience adverse economic effects from the proposed project. Adverse operational impacts are relatively few, with only those related to visual resources significant in areas with populations of potential Environmental Justice concern. These visual impacts, which include the construction of large retaining walls and sound walls, may create a more urban surrounding environment and, in Encinitas, and Carlsbad, a sense of enclosure and isolation from the surrounding environment.

These impacts, however, are generally not isolated to communities or areas with minority or low-income populations and are present along the entirety of the proposed project through communities and areas that exhibit a wide demographic range. The proposed project is generally not anticipated to disproportionately create high and adverse impacts within Environmental Justice areas. Potential temporary construction-related impacts to public transportation facilities would be minimized through the implementation of a TMP and are not considered measurably worse in areas with populations of concern, nor are these impacts expected to be experienced to a greater degree by minority populations or low-income populations. Operational impacts are also generally not expected to be experienced to a greater degree by minority populations or low-income populations. Additionally, impacts related to the construction and operation of the proposed project within areas with minority populations or low-income populations do not have a magnifying effect on adverse conditions already present in those communities. The proposed project, particularly as it encompasses a range of community enhancement features, generally serves to alleviate some of the impediments to fluid social interaction currently present in the region surrounding the I-5 North Coast Corridor through the creation of more efficient connections between neighborhoods both east and west of I-5 and by providing greater access to recreational areas.

The 10+4 with Barrier Alternative would result in the displacement of six residential units in a Solana Beach neighborhood that is composed in part of block groups containing populations of Environmental Justice concern (both minority populations and low-income populations). The residential units in question are condominiums within a single gated complex located adjacent to the southbound (western) side of I-5. According to the DRIR, ample relocation properties for these displaced residences are available within the immediate area and within the same neighborhood as the displaced residences themselves. While no demographic or economic information is available for the specific individuals or families occupying the relevant units, these residences are not designated as affordable housing (and are valued above the median value for individual housing in San Diego County as a whole), so it is not likely that these residences serve low-income populations. Therefore, given the availability of relocation properties within the same neighborhood (such that it should be possible to find housing in a demographically similar area, if desired) and the apparent lack of confounding variables such as affordable housing designation, impacts related to these residential displacements are not likely to be disproportionately high and adverse to either minority populations or low-income populations.

There is one instance along the I-5 North Coast Corridor where a disproportionately high and adverse impact would accrue to populations of potential Environmental Justice concern (both minority populations and low-income populations). This population is located in block group 179.00.3, located in Carlsbad, south of Carlsbad Village Drive and adjacent to southbound I-5. The 10+4 with Barrier and 8+4 with Barrier alternatives would displace a 47-unit apartment complex. Rent for each two-bedroom unit is approximately $1,050 per month, which is a relatively low rate for a coastal community such as Carlsbad. The DRIR states that the availability of apartments within Carlsbad with similar rental rates is not adequate to relocate 47 two-bedroom apartments, and that it may be necessary to utilize the State's relocation program or Last Resort Housing Program payments to relocate those displaced (Caltrans 2007c). It is highly likely that those people living in this apartment complex, many of whom are likely members of either a minority and/or low-income population, would not be able to relocate within the immediate area. This apartment complex is the only large multi-family residential parcel displaced by the proposed project in any municipality, or in any demographic or income range.

As discussed in Chapter 4.0, the block group containing the apartment complex that would be displaced by the two Barrier alternatives also has a high proportion of Spanish-speaking linguistically isolated households, which can be an identifying trait of an area with high community cohesion. The potential loss of up to 47 families from the community may have a substantial adverse effect on community cohesion in that area. Operational impacts associated with relocations and community cohesion are considered to be disproportionately high and adverse for this block group, which is an Environmental Justice issue. Adverse impacts associated with the displacement of these residences could also adversely affect travel patterns and accessibility for those who both live and work in this community and rely on public transportation or walking to work. Additionally, residents could experience an increase in rent and other cost of living expenses associated with relocation outside of the community. Potential mitigation related to this impact is listed below.

Based upon this analysis, there is no indication that either the construction or operation of the proposed project would result in disproportionately high and adverse impacts to either minority populations or low-income populations relative to the general population of the study area and surrounding region for the vast majority of the alignment. However, the displacement of a 47-unit apartment complex in Carlsbad associated with the 10+4 with Barrier and 8+4 with Barrier alternatives in an area with meaningfully greater proportions of minorities and individuals living in poverty is considered an Environmental Justice impact.

6.6 MITIGATION

Environmental Justice mitigation measures are considered to be a critical opportunity to ensure that environmental and community impacts are addressed, and that equity is achieved among all parties involved. The primary objective in Environmental Justice mitigation is to incorporate measures early in the planning process, throughout construction, and into the operation of the proposed project. This is preferred to avoidance and the implementation of mitigation measures in the final stages of development. The following measures are suggested for the mitigation of Environmental Justice impacts in northern Carlsbad associated with the 10+4 with Barrier and 8+4 with Barrier alternatives, including block group 179.00.3 and the surrounding area:

- Targeted public outreach efforts should be conducted in the area with the specific aim of addressing the concerns of minority residents and low-income residents of the relevant apartment complex and their families. Minority leaders in the community and those who represent low-income residents should be explicitly invited. The formation of a community advisory group should be suggested and supported by the Department.
- Department ROW staff should meet with potential displaced residents to discuss concerns about relocation, including proximity to work, public transportation, and increased rent (Last Resort Housing Program possibilities).
- The Department should make a targeted attempt to include contractors/employees from the surrounding community in the community enhancement feature construction bidding process. A unique opportunity for inclusion may occur in the construction of the streetscape enhancements at Chestnut Avenue, which occur within this community.
- The Department should issue all project-related documents (e.g., construction notices, operational updates, technical reports, environmental documents) to the affected community. These documents should take the form of summaries and should be published in English and Spanish.

CHAPTER 7.0
GROWTH INDUCEMENT

7.1 REGULATORY SETTING

The CEQ regulations, which implement NEPA, require evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations, 40 CFR 1508.8, refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

CEQA also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "… discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment …"

7.2 BACKGROUND AND DEFINITION

This section discusses whether the proposed I-5 North Coast Corridor improvements would result in unforeseen direct, indirect, or secondary growth, or would otherwise influence population growth. This discussion is based on guidance from the Department's SER and the Guidance for Growth-Related Indirect Impact Analyses (August 2007). Examples of potentially growth-influencing projects include those that create access to an area previously inaccessible, or occur within an already developed area and remove barriers to future growth. Growth influence is generally dependent on the presence or lack of existing utilities and municipal or public services. The provision of roadways, utilities, water, and sewer service to a previously unserviced area can induce growth by removing impediments to development. There are many factors that may affect the amount, location, and rate of growth in the region of a project. Such factors include:

- Market demand for housing, employment, and commercial services
- Desirability of the climate and living or working environment
- Strength of the local employment and commercial economy
- Availability of other roadway improvements
- Availability of other services and infrastructure (e.g., schools, water, etc.)
- Land use and growth management policies of the local jurisdictions

Department projects, including the proposed project, are generally "designed to facilitate planned growth in accordance with local and regional plans and policies" (Caltrans 1997). The growth-inducing potential of a project could be considered significant if it fosters growth in excess of what is projected in general plans (land use elements) or in forecasts made by regional planning agencies. Factors affecting growth and its effects tend to be both regional and specific in nature. Therefore, this analysis presents information about the larger region (San Diego County) and the six jurisdictions comprising the study area.

7.3 GROWTH MANAGEMENT PROGRAMS AND POLICIES

SANDAG is the regional agency responsible for preparing population, housing, and employment projections for the San Diego region. SANDAG develops annual demographic estimates and long-range forecasts approximately every 4 years. The forecasts are based on General and Community Plans of each of the region's 19 jurisdictions. The 2030 Regional Growth Forecast Update was accepted for review and use by SANDAG on September 8, 2006. The proposed project is located mainly within an area identified by SANDAG as the North County West Major Statistical Area (MSA), which includes Oceanside, Carlsbad, Encinitas, and Del Mar. The southern portion of the study area is located within the North City MSA, which includes Solana Beach and San Diego.

While the 2030 Regional Growth Forecast Update examines growth from a regional perspective, each of the six jurisdictions has their own individual growth management plans or policies (or variation thereof), often contained within the General Plan, which are summarized below.

7.3.1 <u>San Diego</u>

Overall goals for growth within San Diego are outlined in the Guidelines for Future Development. Goal 1 is to manage the growth of the region through assurance of adequate and timely public facilities to serve the additional population (City of San Diego 1992). In addition, San Diego strives to develop an effective "development management system" that will monitor the distribution and timing of growth in relation to environmental, physical, and public facility and service performance goals (City of San Diego 1992).

7.3.2 <u>Del Mar</u>

Due to the small size and built-out nature of Del Mar, the city does not identify specific policies or goals related to growth management. Future growth within Del Mar would be mainly in the form of redevelopment of existing developed parcels and infill development, and substantial population growth is not anticipated.

7.3.3 <u>Solana Beach</u>

Due to the relatively small size and built-out nature of Solana Beach, the city does not identify specific policies or goals related to growth management. Future growth within Solana Beach would be mainly in the form of redevelopment of existing developed parcels and infill development, and substantial population growth is not anticipated.

7.3.4 <u>Encinitas</u>

As with the majority of coastal cities in southern California, Encinitas has grown at a relatively rapid pace over the last several decades. Accordingly, the Land Use Element of the General Plan addresses

Growth Management and states policies and guidelines so that the City should manage slower, more orderly growth in accordance with a long-term plan that protects and enhances community values. Policy 2.3 states the growth within Encinitas will be managed in a manner that does not exceed the capacity of the city. Encinitas has identified the need to ensure that new development does not occur at the expense of the natural environment or existing development, or before adequate infrastructure and services are in place.

7.3.5 Carlsbad

In 1986, Carlsbad established a Growth Management Program to link future development with the provision of public facilities and services by establishing performance standards, a maximum growth potential (54,600 dwelling units), planning facilities to meet future demand, linking development to performance, and monitoring development. The Growth Management Plan set maximum numbers of units in four established quadrants, defined by the intersections of Palomar Airport Road and El Camino Real.

7.3.6 Oceanside

Oceanside housing Policy 1.16C is designed to ensure that housing is developed in areas with adequate access to employment opportunities, community facilities, and public services. In addition, land use policy 1.11B indicates that the City of Oceanside will monitor the impact and intensity of land use and land use distribution to ensure that the city's circulation system is not overburdened beyond design capacity.

7.4 EXISTING AND HISTORICAL SETTING

The I-5 North Coast Corridor project is considered to traverse a highly urbanized part of northwest San Diego County. The coastal areas typically consist of higher-density and small lot residential developments than is typical farther inland. Northeastern San Diego County has experienced development at a slower (and later) pace, due in part to an early lack of necessary infrastructure and other needs. More recently, San Diego County has been experiencing urbanization of its rural areas, especially on the fringe of the larger urban cities. Development in the eastern parts of the county is in the form of low-density residential developments on larger lots, with ample open space. East of I-5, particularly in Oceanside and Carlsbad (two of the larger jurisdictions in the study area), development of vacant land is ongoing and is anticipated to continue into the future.

The San Diego region has experienced continual growth for an extended period of time. The history and character of each municipality in the study area differ, and the nature of their growth has been varied. Three important events that permitted rapid growth along the coast of northern San Diego County include the completion of the Southern California Railway in 1883; the Navy presence that began in the early 1900s; the dedication of MCB Camp Pendleton, the nation's largest Marine Corps Base, north of Oceanside in 1942; and the construction of I-5 in the 1960s. Older, more urbanized communities such as San Diego and Oceanside (incorporated in 1850 and 1888, respectively) are markedly different than the historically rural character of communities such as Carlsbad and Encinitas (incorporated in 1952 and 1986, respectively); however, all municipalities have experienced prolonged periods of growth and/or expansion. Generally, the most densely populated areas in the county are located within the older communities along the coastal area and the I-5 corridor. However, more recent urbanization of the eastern rural parts of San Diego has expanded the urban population in the county.

The majority of the study area is considered to be developed with urban uses, and there are few vacant developable parcels of land remaining in the immediate vicinity of I-5. As of 2004, an estimated 91 percent of northwestern San Diego County was considered developed, with 5 percent of land available for development and the remaining 4 percent undevelopable (SANDAG 2004b). In general, the Pacific Coast is developed with higher-density residential and other uses, and the main form of growth will likely be in the form of redevelopment and infilling on vacant lots. The eastern parts of the study area however, have more available vacant developable land, and growth will be in the form of larger-scale residential and commercial developments. Table 7-1 shows the remaining developable acres in each of the six jurisdictions and the proportion of that land slated for residential development. Both Oceanside and Carlsbad, which are similar in total area, have an estimated 13 percent of available developable land. Del Mar and Solana Beach have very little land available for future development, and nearly all of that is reserved for residential uses. It is worth noting that while only 6 percent of available land in San Diego is considered suitable for development, it is expected to absorb 35 percent growth from the region as a whole.

Table 7-1. Remaining Developable Acres (as of 2004)

Jurisdiction	Total Acres	Remaining Developable Land	Proportion Planned Residential
Oceanside	26,978	3,493 acres (13%)	1,357 acres (39)%
Carlsbad	25,037	3,368 acres (13%)	1,895 acres (54%)
Encinitas	12,513	843 acres (7%)	644 acres (76%)
Solana Beach	2,178	42 acres (2%)	34 acres (81%)
Del Mar	1,143	52 acres (4%)	44 acres (85%)
San Diego	219,305	13,121 acres (6%)	4,991 acres (38%)
Total	**287,154**	**20,919 acres (7%)**	**8,965 acres (43%)**

Source: SANDAG Data Warehouse 2007

7.4.1 San Diego

The City of San Diego is, and has always been, the most populated within the county, and hosts the residential and economic centers for the region. Development of the San Diego metropolitan area has reflected the rapid population growth and urbanization seen throughout California in recent years. During the 1980s, economic diversification and high job growth in San Diego led to a 35 percent population increase (City of San Diego 1992). Historically, San Diego population growth rates have been relatively high compared with the rest of the nation. The 1990 Census revealed that during the 1980s, San Diego's growth was among the highest in the nation. Manufacturing, military presence, and tourism have been a strong influence in this growth.

7.4.2 Del Mar

Del Mar has been close to a completely developed state since its incorporation in 1986. Del Mar has experienced lower population growth than the region as a whole, which is likely due to low vacancy rates, few multi-family developments, and high property cost (Cotton Beland Associates 2000). The 1999 to 2004 Housing Element of the Community Plan identified the possible construction of 51 residential units throughout the city. Based on development between 1991 and 1999, the City had constructed about seven units annually (Cotton Beland Associates 2000). As Del Mar is extensively developed, future development will most likely involve infill and redevelopment on existing lots.

7.4.3 Solana Beach

When Solana Beach was incorporated in 1986, the population was estimated to total 14,892 persons. The population of Solana Beach as of 2000 totaled 12,979 persons (U.S. Bureau of the Census 2000). In contrast to the larger municipalities to the north, Solana Beach has experienced a prolonged overall decline in population, which has been primarily attributed to an increase in vacancy rates, a decrease in the average household size, and an apparent increase in the number of housing units purchased as second homes (City of Solana Beach 1986). Solana Beach has also been almost entirely developed since its incorporation. Future development trends within the municipality will most likely be in the form of redevelopment and infill development (City of Solana Beach 1986).

7.4.4 Encinitas

Founded over 100 years ago, Encinitas was originally settled on 160 acres at the location of the current Civic Center and divided into 5-acre tracts (City of Encinitas 2005a). I-5 was established through the community of Encinitas in the 1960s and has been a major factor in the growth of the area. During the years preceding I-5, the area was mainly agricultural land, which would later be included as the I-5 corridor. By 1986, when Encinitas was incorporated as a city with five distinct communities, it had experienced rapid growth, which continues today. Continuing a long-standing trend, Encinitas has experienced minimal population growth over the past decade, rising only 5 percent between 1990 and 2000 (from 55,486 to 58,014 persons) (SANDAG 2004a).

7.4.5 Carlsbad

Carlsbad was incorporated as a city in 1952. Since that time, it has grown in land area by approximately 300 percent and increased in population by 700 percent (City of Carlsbad 2005). Continuing a long-standing trend, Carlsbad showed significant population growth over the last two decades, rising 78 percent between 1980 and 1990 (from 35,490 to 63,126 persons), and 25 percent between 1990 and 2000 (SANDAG 2004a). A 2004 estimate indicated a population of 92,995 persons, showing an estimated population growth of 19 percent. As of May 1, 2007, there were a total of 43,801 housing units in Carlsbad, leaving 10,799 units for potential development in the future. An estimated 4,650 (43 percent) of these units would be developed west of El Camino Real, and 6,148 (57 percent) east of El Camino Real.

7.4.6 Oceanside

Since 1970, Oceanside's population has continued to increase at a faster pace than the larger San Diego region. During the 1970s and 1980s, the population of Oceanside grew by 82 percent and 67 percent respectively (City of Oceanside 2002). By 1995, an estimated 75 percent (20,162 acres) of the land in Oceanside was developed. Approximately 10 percent (2,567 acres) of undeveloped land was constrained for future growth by steep slopes, floodplains, wetlands, or public ownership. The remaining 13 percent (3,493 acres) of land in the city was deemed vacant and available for development (City of Oceanside 2002).

7.5 POPULATION PROJECTIONS

Population forecasts published by SANDAG through 2030 suggest that population growth and its associated development will continue in the study area and region. As shown in Table 7-2, the population within each of the six jurisdictions is expected to increase, with growth estimates ranging from 17 percent to 62 percent over the 30-year period from 2000 to 2030. Carlsbad, San Diego, and Oceanside are expected to experience the most growth, with 62, 35, and 29 percent, respectively. Del Mar and Solana Beach, which are the smallest in area, have the lowest projected population growth at 17 and 21 percent, respectively. In comparison to the general population growth trends for the county as a whole, which is forecast to grow by 42 percent, all jurisdictions in the study area with the exception of Carlsbad are expected to grow at a slower pace. This is largely because the majority of Carlsbad is inland from the coast on what is considered the urbanizing fringe.

Table 7-2. Population Growth Projections for Jurisdictions within the Study Area

Municipality	2000	2006	2010	2020	2030	Percent Change 2000-2030
Oceanside	161,029	175,171	186,785	196,482	207,237	29%
Carlsbad	78,247	97,720	109,611	119,095	127,046	62%
Encinitas	58,014	59,037	65,358	68,030	73,170	26%
Solana Beach	12,979	13,327	13,807	14,839	15,761	21%
Del Mar	4,689	4,524	4,661	5,138	5,497	17%
San Diego	1,223,400	1,310,199	1,365,130	1,514,336	1,656,257	35%
County of San Diego	2,813,833	3,066,820	3,245,279	3,635,855	3,984,753	42%

Source: SANDAG 2007

7.6 DEVELOPMENT PLANS AND PROPOSALS

As described in detail in Chapter 5.0, there are a limited number of development plans and proposals along the length of the I-5 North Coast Corridor because the area is largely built out and urbanized. In general, most projects located in the study area are located east of I-5, with the coastal areas nearly completely developed. The ongoing projects in the vicinity of the North Coast Corridor project are presented in detail in Chapter 5.0.

7.7 GROWTH IMPACTS

Implementation of the proposed project has the potential to result in indirect growth. Transportation projects may reduce the time-cost of travel, thereby enhancing the attractiveness of surrounding land available for infill development to developers and consumers, and promoting growth. When the change in accessibility provided by a transportation project facilitates land use change and growth in population and employment, one outcome can be growth-related impacts to environmental resources. Research has shown that although accessibility improvements rarely change the rate of growth of a region (such as a county or metropolitan area) changes in accessibility can influence the direction of growth in a region and the rate of growth in local areas.

The proposed project aims to increase capacity along I-5 within northern San Diego County and maintain or improve existing and future traffic operations along the I-5 North Coast Corridor. This would, in turn, improve the safe and efficient regional movement of people and goods, as forecast for the year 2030. While the proposed project would not result in new access to a previously inaccessible area, it could increase accessibility in the project vicinity by improving circulation along this segment of I-5. This reduction in congestion and improved safety could influence travel behavior, trip patterns, or the attractiveness of some undeveloped areas near I-5 for infill development over others.

However, only 7 percent of land within the six jurisdictions in the study area is considered available for future development, nearly half of which is planned for residential uses (see Table 7-1). Upon review of the few undeveloped properties within the project area, it was determined that much of the vacant land surrounding I-5 is either infill redevelopment projects, approved projects, or open space. Due to the urbanized nature of the study area and limited availability of developable land, there are no known projects in the vicinity that are dependent on implementation of the proposed project. As such, it can be inferred that further growth in the project area and surrounding region is planned and would most likely occur with or without implementation of the proposed project.

The proposed project consists of improvements to an existing highway in an urban area and would not result in accessibility to an otherwise remote area. The likelihood of a highway project causing growth-related impacts in an urban area is typically low because of its built-out land use pattern, policies controlling future growth, and costs associated with redevelopment. In total, there is an estimated 7 percent of remaining developable land in all six jurisdictions combined, which offers limited opportunities for future growth. Local jurisdictions have identified growth forecasts and the anticipated maximum build-out of each municipality, and the proposed project would have a moderate influence on this planned growth. The existing I-5 corridor experiences severe congestion during peak hours and the proposed project would increase the capacity of this portion of the highway to relieve both existing and future congestion, through the design year of 2030. The ultimate design of the project was based on coordination with regional growth forecasts, and because of the cost-effective nature of the project and other environmental constraints, it is not designed with excess capacity that could induce substantial unplanned growth during the 20-year design period.

The addition of HOV lanes or GP lanes is an example of projects that could cause growth-related impacts. However, the built-out nature of the project area, minimal presence of resources of concern, and cost of redevelopment would limit the potential for the proposed project to influence growth. The potential for moderate growth in the project vicinity is inevitable and consistent with local land use plans and current trends. First cut screening analysis indicates that future growth associated with the project is not considered reasonable foreseeable. The reduction in congestion and improved safety associated with the proposed project would not substantially affect the location, rate, type, or amount of growth in the project vicinity, due to other limits on growth, including land use controls within local and regional plans and policies and the highly urbanized nature of the surrounding land uses. The proposed transportation project would have a moderate influence on growth, and there would be no growth-related impacts attributable to the project. Therefore, no adverse effects associated with growth would be anticipated with implementation of any of the alternatives.

CHAPTER 8.0
COMMUNITY OUTREACH AND MITIGATION

8.1 COMMUNITY OUTREACH

The Department is aware of the unique nature of the proposed project in that six distinct municipalities along 27 miles of the I-5 North Coast Corridor, as well as the San Diego County region as a whole, would be affected by improvements to I-5 and a number of community enhancement projects. To avoid, where possible, unnecessary impacts to the community, including its local character, businesses, residents, recreational users, motorists, public transportation uses, and others, the proposed project has been designed with input from the community. The Department has conducted and participated in a number of community outreach meetings with the general public, public entities, and interested stakeholders since 2003 in a comprehensive effort to gather input and comments from the surrounding communities. This section presents a discussion of the level of public involvement achieved by Department personnel. Community outreach will continue throughout the environmental and planning phases, and the Department will continue to coordinate with the surrounding communities throughout the planning process in order to minimize disruptions to the communities.

Public involvement and community outreach began in late 2003, with initial scoping meetings being conducted through early 2004, along the route of the proposed project. Advertisements for these meetings were published in a number of print media, in both English and Spanish languages, and were posted at popular community facilities and businesses. Newspapers in which advertisements were placed include the North County Times, The San Diego Union-Tribune Enlace (a weekly Spanish-language paper), The San Diego Union-Tribune, and the Coast News. The following is a list of businesses and community facilities, by municipality, where advertisements for public scoping meetings were posted or distributed:

<u>San Diego</u>

- Sorrento County Shopping Center

<u>Del Mar</u>

- Golden Spoon Yogurt Shop
- Coin Laundry (Del Mar Heights Shopping Center)
- Del Mar Library
- Del Mar City Hall
- Del Mar Chamber of Commerce

<u>Solana Beach</u>

- Solana Beach Library
- Santa Fe Christian High School
- St. Leo's Mission
- Headstart at St. Leo's Mission

<u>Encinitas</u>

- Encinitas City Hall
- City of Encinitas website
- Encinitas Library
- Cardiff-by-the-Sea Library
- Encinitas Senior and Community Center
- Henry's Marketplace
- Trader Joe's Grocery

<u>Carlsbad</u>

- Carlsbad Village Farmer's Market
- Plaza Camino Real Mall

<u>Oceanside</u>

- Oceanside Farmer's Market
- Chavez Resource Center
- El Chicle
- El Nopalito
- El Torito Market
- Boys & Girls Club
- Oceanside Library

Department representatives also met with a number of groups and public entities on an individual basis to discuss the project and gather input from the community. These groups and public entities include:

- Residents of Playa Riviera
- City of Oceanside
- Crystal Crawford, City of Del Mar Council Member
- American Society of Civil Engineers Young Member Forum Bull Pin
- University Planning Board
- Residents of 709 Santa Florencia
- Solana Beach Council
- Carlsbad Chamber of Commerce
- San Diego North County Economic Development Council

In addition to the above public and private meetings with residents and community leaders, Department personnel have also conducted a number of other miscellaneous outreach activities. These activities include:

- Opportunities and Constraints public meetings
- Homeowner and neighborhood meetings in Solana Beach, Encinitas, and Oceanside
- Homeowner association meetings in Encinitas, Carlsbad, and Oceanside

- Community planning groups in San Diego
- Business committee meetings in Oceanside
- Talks with Agua Hedionda Lagoon Foundation, San Elijo Lagoon Conservancy, Buena Vista Lagoon Foundation, and the Buena Vista Audubon Society

Finally, representatives from the Department and Estrada Land Planning conducted a number of outreach meetings for community enhancement projects throughout the study area. These meetings were with both stakeholder groups and the general public. The following is a list of groups and public entities with which the Department and Estrada Land Planning met during formulation of the community enhancement projects:

San Diego

- City of San Diego staff
- San Dieguito Park Joint Powers Authority
- City of San Diego Parks and Recreation Department
- Torrey Pines State Reserve
- City of San Diego Trails Manager
- Carmel Valley Community Planning Group
- Torrey Hills Community Planning Group
- Carmel Valley Planning Board
- Torrey Hills Planning Board
- Torrey Pines Planning Board
- General community meeting
- Approximately 25 community members at a public meeting

Solana Beach

- City of Solana Beach staff

Encinitas

- City of Encinitas staff
- City of Encinitas City Council members
- Approximately 120 community members at three public meetings

Carlsbad

- City of Carlsbad staff
- City of Carlsbad Trails Manager and Park and Recreation Department
- SDG&E
- Lennar Corporation
- Latitude 33
- Wilson Corporation
- Batiquitos Lagoon Foundation
- City of Carlsbad Council members
- Agua Hedionda Lagoon Foundation
- Approximately 40 community members at a public meeting

Oceanside

- City of Oceanside staff
- City of Oceanside City Council members
- Oceanside High School staff
- Oceanside Superintendent of Schools
- Approximately 80 community members at a public meeting

8.2 MITIGATION MEASURES

The following recommended mitigation measures have been prepared in conformance with the CIA Handbook (Caltrans 1997). Each mitigation measure corresponds to a potentially adverse community impact that has been identified in Chapter 3.0. The measures are designed to minimize potential impacts to the community during construction and operation of the proposed project. Feasibility of the recommended measures will be determined by the Department and may be adopted as part of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the project. In addition to the following recommendations, mitigation measures specified in related technical reports and/or the EIR/EIS for other issue areas could also serve to minimize impacts to the community. Technical reports with additional mitigation measures include but are not limited to the NADR, Air Quality Report, Traffic Reports, Visual Report, and the Community Enhancement Plan. These reports should be referenced for additional information regarding impacts and mitigation related to specific issue areas.

Construction-related Mitigation

- To offset the temporary disruptions during construction, a TMP should be prepared by the Department and implemented throughout the duration of construction activity. The Department shall conduct public outreach to discuss the TMP. The following elements should be included in the TMP:
  - Adverse impacts to circulation and access could be avoided by maintaining as many lanes as possible along I-5 in both directions, and at least two lanes of traffic on interchanges, overcrossings, and underpassings.
  - Construction should be scheduled outside of peak traffic and business hours to minimize delays and potential decreases in patronage to nearby businesses.
  - Pedestrian routes along community road interchanges, overcrossings, and undercrossings should be reestablished and be clearly defined outside of construction zones.
  - To minimize potential impact to public transportation routes, the TMP should include specific locations for relocated bus stops or bus detours. Bus stops should be clearly

identified and accessible to pedestrians through safe walkways and connections to business and residential centers.

  - Park and Ride lots that will be used as staging areas should remain accessible to users during construction and should be clearly identified and accessible. Closure of lots is not recommended and should be offset by an alternate location near rail stops.
  - Economic impacts related to decreased business patronage to businesses at interchanges, overcrossings, and undercrossings should be minimized by locating directional signage to key commercial centers and provide for accessible ingress/egress routes into parking lots.
  - To minimize impacts to residential communities accessed by interchanges, overcrossings, and undercrossings, ingress/egress routes to neighborhoods adjacent to or affected by construction activity would be established, and potential detours would be clearly posted.

- Physical impacts related to construction activity, including increased noise and truck traffic, decreased air quality, and changes in the visual environment from lighting and other construction activity, would be minimized as identified in corresponding technical reports were possible.

Operation-related Mitigation

- The Department and the County would work with local business owners to ensure that all lost parking spaces are reconfigured and/or replaced. If parking cannot be replaced, compensation will be provided to businesses.
- Employment impacts due to relocations would be minimized by providing sufficient time to smoothly transition to the new business locations. Relocation assistance would be provided by the Department. Replacement properties for the potential acquisitions have not been identified at this time. However, relocation assistance payments and counseling will be provided to affected persons and businesses in accordance with the Relocation Assistance Act, as amended.
- Relocation assistance payments and counseling will be provided to persons, businesses, agricultural parcels, or nonprofit organizations in accordance with the Relocation Assistance Act. Additionally, the Department will coordinate with all displaced persons and will initiate special financial and/or advisory services through ROW programs, including buy and lease back programs for businesses subject to displacement, last resort housing, and SANDAG's Board Policy No. 021 (Acquisition of Real Property Interests and Relocation Assistance), for relocating firms to economically viable locations.
- Locations of future elevated noise levels due to traffic on the proposed ROW will be minimized by noise abatement measures that have been recommended in the NADR.
- Potential adverse impacts related to retaining walls and sound walls along the alignment of the proposed project could be minimized by providing trees and other landscaping along the ROW that is consistent with the visual atmosphere, historic architecture, and native vegetation in the area.

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CHAPTER 9.0
SUMMARY

9.1 SUMMARY OF PROJECT IMPACTS

As discussed throughout Chapter 3.0, the proposed project would increase capacity and improve traffic flow through six municipalities, as well as serve as a benefit to the region as a whole by reducing congestion along the I-5 North Coast Corridor. Interchanges, overcrossings, and undercrossings along the I-5 North Coast Corridor would be reengineered to allow for increased traffic and pedestrian flow. A number of community enhancement features within each municipality would create and/or improve pedestrian and bicycle corridors with existing trails, provide linkages and improvements to public transit centers, and create trailheads and other recreational opportunities. Most notably, as discussed in Chapter 4.0, community enhancement features would serve to improve and facilitate connectivity between communities east and west of I-5 in locations that have been previously bisected by the freeway. Increased capacity along I-5 and improved connectivity via the community enhancement features would serve as beneficial impacts to communities located along the I-5 North Coast Corridor.

Construction activity along the I-5 North Coast Corridor would occur in phases in order to minimize disruptions. Construction-related impacts to communities in the vicinity of the proposed project include vehicular and pedestrian access disruptions, increased noise, dust and air quality impacts, visual impacts, and economic impacts. Construction activity would result in disruptions to residents, businesses, and commuters in the vicinity. Any impacts related to these disruptions are considered temporary proximity impacts and are not anticipated to result in physical impacts to residents and businesses along the corridor. As described in Section 3.1, the Department would implement a TMP throughout the duration of construction activities that would be made available to the public. The TMP would serve to minimize project-related construction disruptions and would include traffic mitigation strategies designed in coordination with the local communities.

Under operation of the proposed project, HOV capacity would be increased to two lanes along the length of the corridor for all four alternatives, and an additional GP lane would be operating in each direction along the corridor for the 10+4 alternatives. Circulation and capacity on I-5 would be improved, resulting in increased access to and from local communities to I-5, as well as to and from other important community locations via the community enhancement features. Beyond those residences and businesses that would be displaced and/or relocated by the proposed alternatives, which is relatively few given the scope and scale of the proposed project, adverse impacts to businesses and residences are not anticipated. Proximity impacts, including air quality impacts and noise impacts, are not considered adverse to residences, community facilities, parks, and schools, due to the installation of noise abatement measures including sound walls.

Community cohesion throughout the vast majority of the study area is not likely to be diminished, as the proposed project would not divide existing neighborhoods any more than under the existing conditions, nor would it separate residences from community facilities. It is likely that the proposed project, including the community enhancement features, would improve community cohesion by providing better access between neighborhoods and improve access by residents to community facilities. Additionally, community enhancement features would result in new parks and enhance a number of streetscapes along the I-5 North Coast Corridor. Community cohesion would only be adversely affected by the 10+4 with Barrier and 8+4 with Barrier alternatives in a neighborhood in northern Carlsbad, where a 47-unit apartment complex would be displaced. As the neighborhood has a meaningfully greater minority and low-income population than the surrounding area, and this apartment complex is the only large multi-family residential parcel displaced by the project in any demographic or income range, the impacts associated with the displacement of this apartment complex creates an Environmental Justice concern. The proposed project is not anticipated to result in foreseeable growth due to its location within a highly urbanized region, plans limiting growth, and cost of redevelopment.. Visual impacts along the I-5 North Coast Corridor may create a sense of urbanism or isolation in some parts of the study area; however, mitigation identified in Chapter 8.0, such as the installation of vegetation or textured art would help blend the sound walls with the surrounding environment.

9.2 COMPARATIVE ALTERNATIVES ANALYSIS

As discussed in Section 1.4, the I-5 North Coast Corridor project includes four action alternatives, consisting of two 8+4 alternatives and two 10+4 alternatives. Both the 8+4 and 10+4 alternatives are similar in that they would result in the ultimate operation of four HOV lanes along the entire I 5 North Coast Corridor. The 10+4 alternatives differ from the 8+4 alternatives in that they also include the construction of one GP lane in each direction along portions of the I 5 North Coast Corridor. Table 9-1 below presents, in general terms, potential impacts associated with each of the four alternatives.

Table 9-1. Project Impacts Alternatives Analysis

	10+4 Barrier	10+4 Buffer	8+4 Barrier	8+4 Buffer
Construction-Related Impacts				
Travel Patterns	Impacts are likely to be mitigated by the TMP and are considered to be temporary.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.
Public Transportation	Impacts are likely to be mitigated by the TMP and are considered to be temporary.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.
Local Economy	Impacts to local businesses are likely to be mitigated by the TMP and are considered to be temporary.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.
Residential Access	Impacts are likely to be mitigated by the TMP and are considered to be temporary.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.

Table 9-1. (continued)

	10+4 Barrier	10+4 Buffer	8+4 Barrier	8+4 Buffer
Public Services	Impacts are likely to be mitigated by the TMP and are considered to be temporary.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.
Air Quality and Noise	Impacts would be mitigated by implementation of BMPs during temporary construction.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.
Operation-Related Impacts				
Travel Patterns	Would improve circulation through the ultimate operation of two HOV lanes in each direction and one GP additional lane in each direction.	Would improve circulation through the ultimate operation of two HOV lanes in each direction and one additional GP lane in each direction.	Would improve circulation through the ultimate operation of two HOV lanes in each direction.	Would improve circulation through the ultimate operation of two HOV lanes in each direction.
Relocations	A total of 25 single-family units, 8 duplex/triplex units, 79 multi-family units (112 units total), and 13 commercial properties would require relocation. This includes a 47-unit apartment complex. This alternative would also result in a number of partial takes that do not necessitate relocation.	A total of 22 single-family units, 5 duplex/triplex units, 26 multi-family units (53 units total), and 10 commercial properties would require relocation. This alternative would also result in a number of partial takes that do not necessitate relocation.	A total of 23 single-family units, 8 duplex/triplex units, 73 multi-family units (104 units total), and 11 commercial properties would require relocation. This includes a 47-unit apartment complex. This alternative would also result in a number of partial takes that do not necessitate relocation.	A total of 16 single-family units, 8 duplex/triplex units, 26 multi-family units (50 units total), and 10 commercial properties would require relocation. This alternative would also result in a number of partial takes that do not necessitate relocation.
Land Use	While land use inconsistencies may exist, they are not expected to be adverse, as proposed project is consistent with existing land uses.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.
Farmlands	Direct impacts to an estimated 27 acres of farmland including three greenhouse operations. The Impact Conversion Rating for this alternative is 101.73 and is not considered adverse.	Direct impacts to an estimated 26 acres of farmland including three greenhouse operations. The Impact Conversion Rating for this alternative is 101.76 and is not considered adverse.	Direct impacts to an estimated 25 acres of farmland including three greenhouse operations. The Impact Conversion Rating for this alternative is 101.74 and is not considered adverse.	Direct impacts to an estimated 24 acres of farmland including three greenhouse operations. The Impact Conversion Rating for this alternative is 101.81 and is not considered adverse.
Local Businesses	Beneficial impacts related to economic activity in the study area due to improved circulation.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.

Table 9-1. (continued)

	10+4 Barrier	10+4 Buffer	8+4 Barrier	8+4 Buffer
Property Values	Property values are not likely to be affected by this alternative, due to other market-driven factors.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.
Tax Revenue	Permanently lost tax revenue from displaced 112 residential units and 13 businesses is not expected to be substantial.	Permanently lost tax revenue from displaced 53 residential units and 10 businesses is not expected to be substantial.	Permanently lost tax revenue from displaced 104 residential units and 11 businesses is not expected to be substantial.	Permanently lost tax revenue from displaced 50 residential units and 10 businesses is not expected to be substantial.
Community Facilities Including Park and Recreational Facilities	Access is likely to improve to and from local community facilities and services. Less than 1 acre of the San Dieguito River Park; less than 0.5 acre of San Elijo Lagoon; minor acquisitions of Batiquitos, Agua Hedionda, and Buena Vista lagoons; parking at Holiday Park; and a portion of the Center City Golf Course would be acquired. However, no 4(f) impacts are anticipated.	Access is likely to improve to and from local community facilities and services. Less than 1 acre of the San Dieguito River Park; less than 0.5 acre of San Elijo Lagoon; minor acquisitions of Batiquitos, Agua Hedionda, and Buena Vista lagoons; parking at Holiday Park; and a portion of the Center City Golf Course would be acquired. However, no 4(f) impacts are anticipated.	Access is likely to improve to and from local community facilities and services. Less than 1 acre of the San Dieguito River Park; less than 0.5 acre of San Elijo Lagoon; minor acquisitions of Batiquitos, Agua Hedionda, and Buena Vista lagoons; parking at Holiday Park; and a portion of the Center City Golf Course would be acquired. However, no 4(f) impacts are anticipated.	Access is likely to improve to and from local community facilities and services. Less than 1 acre of the San Dieguito River Park; minor acquisitions of Batiquitos, Agua Hedionda, and Buena Vista lagoons; parking at Holiday Park; and a portion of the Center City Golf Course would be acquired. However, no 4(f) impacts are anticipated.
Visual	Due to the expanded streetscape and removal of vegetation along the visual corridor of I-5, adverse visual impacts are likely.	Due to the expanded streetscape and removal of vegetation along the visual corridor of I-5, adverse visual impacts are likely.	Due to the reduced number of lanes, it is likely that visual impacts would be less than the 10+4 alternatives; however, full details are unknown at this time.	Due to the reduced number of lanes, it is likely that visual impacts would be less than the 10+4 alternatives; however, full details are unknown at this time.
Air Quality and Noise	Air quality impacts would not be adverse. Noise impacts would be mitigated by noise abatement measures.	Air quality impacts would not be adverse. Noise impacts would be mitigated by noise abatement measures.	Air quality and noise impacts for this alternative are not known at this time	Air quality and noise impacts for this alternative are not known at this time.
Community Cohesion	Local communities would likely benefit from the proposed project, particularly those areas near community enhancement features. The loss of the 47-unit apartment complex within a community exhibiting strong community cohesive traits would result in adverse impacts.	Local communities would likely benefit from the proposed project, particularly those areas near community enhancement features.	The loss of the 47-unit apartment complex within a community exhibiting strong community cohesive traits would result in adverse impacts.	Local communities would likely benefit from the proposed project, particularly those areas near community enhancement features.

Table 9-1. (continued)

	10+4 Barrier	10+4 Buffer	8+4 Barrier	8+4 Buffer
Growth Inducement	Foreseeable growth is not anticipated to occur as a result of this alternative.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.
Environmental Justice	An Environmental Justice concern is present in one community, associated with relocation of the 47-unit apartment complex.	No Environmental Justice concerns are present.	An Environmental Justice concern is present in one community, associated with relocation of the 47-unit apartment complex.	No Environmental Justice concerns are present.
Cumulative Impacts	No cumulative projects have been identified that would contribute to cumulative community impacts.	Same for all alternatives.	Same for all alternatives.	Same for all alternatives.

9.3 CONCLUSIONS

The construction of the proposed project would likely be a large undertaking, spanning a period of several years. During this time, construction-related impacts would become a daily part of life and the mitigation measures in the TMP would likely become standard in many of the communities throughout the study area. Upon completion, however, the proposed project would generally improve circulation throughout the study area through an increase in freeway capacity. These circulation benefits would accrue not only to residents within the study area, but for people throughout the region who would use I-5 to travel along the North Coast Corridor and places beyond. Aside from certain localized impacts described above, the project as a whole – regardless of the final alignment – has the potential to beneficially affect the communities along the I-5 North Coast Corridor as well as the larger region, and the general atmosphere of the communities through which the proposed project passes would not be substantially altered or affected.

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CHAPTER 10.0
REFERENCES

Boyd Planning Consultants, Inc. and T& B Planning Consultants, Inc. (Boyd)
1994 *Encinitas Ranch Specific Plan*. September.

California Department of Conservation (CDC)
2002 *The Farmland Mapping and Monitoring Program*. Division of Land Resource Protection.

2004 San Diego County Williamson Act Lands 2004 (map). Lands Enrolled in Williamson Act and Farmland Security Zone Contracts as of 01-01-2003.

California Department of Transportation (Caltrans)
1997 *Environmental Handbook Volume 4, Community Impact Assessment*. June.

2005 "North Coast I-5 HOV/Managed Lane Project." Available at http://www.dot.ca.gov/dist11/facts/5hov.pdf (accessed March).

2006 I-5 North Coast Corridor Project. Technical Report #5. Direct Access Ramps/Traffic Demand Forecasting Report. Draft for Review and Commenting. December.

2007a Draft I-5 North Coast Community Enhancement Plan. March.

2007b 4(f) Resources Study.

2007c Draft Relocation Impact Report.

2007d Draft Visual Impact Assessment.

2007e Draft Air Quality Analysis.

2007f Draft Noise Abatement Decision Report.

California Employment Development Department Labor Market Information (EDD)
2005 Electronic documents available at http://www.calmis.ca.gov/.

Carlsbad Chamber of Commerce
2005 Electronic documents available at http://www.carlsbad.org/.

Carlsbad, City of
1994 *City of Carlsbad General Plan*.

2001 *City of Carlsbad Citywide Trails Program Report*.

2005 Carlsbad historical information available at http://www.carlsbadca.gov/about/chist.html.

Cotton Beland Associates
2000 *City of Del Mar 1999-2004 Housing Element*. December.

Cotton Bridges Associates (Cotton)
2000 *Highway 101 Corridor Specific Plan, Draft* (undated).

Council on Environmental Quality (CEQ)
1997 *Environmental Justice: Guidance Under the National Environmental Policy Act*. December 10.

Del Mar, City of
n.d. *Carmel Valley Precise Plan* (undated).

1976 *The Community Plan for the City of Del Mar*. March.

1993 *City of Del Mar Local Coastal Program*. March 18.

2000 *City of Del Mar Housing Element 1999-2004*. December.

2005 Del Mar historical information available at http://www.delmar.ca.us/Visitors/.

Del Mar Historical Society
2005 Electronic documents available at http://www.delmarhistoricalsociety.org.

Downtown Encinitas Mainstreet Association
2005 Encinitas History and Heritage." Available at http://www.encinitas101.com/Encinitas book.htm.

Encinitas Chamber of Commerce
2005 Electronic documents available at www.encinitaschamber.com.

Encinitas, City of
1989 *City of Encinitas General Plan*.

2003a City of Encinitas Land Use Map.

2003b City of Encinitas General Plan Circulation Element. January.

2005a Encinitas historical information available at http://www.ci.encinitas.ca.us/Visitor/AboutE/EncinitasHP/.

2005b Housing Element Update, Infill Housing Capacity. April. Available at http://www.ci.encinitas.ca.us/NR/rdonlyres/3F9910D4-F01C-4EA0-911D-358F006233A5/0/4InfillHousingCapacity.pdf.

2005c *City of Encinitas Design Guidelines*. April. Available at http://www.ci.encinitas.ca.us/Government/PublicD/CommCharter/.

Federal Highway Administration (FHWA)
2007 Strategic Highway Network (STRAHNET). Available at http://www.fhwa.dot.gov.

Gruen Associates
1985 *City of Oceanside, The Sterling Specific Plan. Draft Specific Plan*. August 1.

Lightfoot & Associates
1985 *Rancho Del Oro Specific Plan*. October 25.

Metropolitan Transit System (MTS)
2005 Available at http://www.sdcommute.com/.

Meyer, Mohaddes, Associates Inc. (Meyer)
2000 *Parking Master Plan Report, Village Center and North Beach Areas*. May.

National Agricultural Statistics Service (NASS)
2002 Census of Agriculture County Profile, San Diego, California.

North County Times
2002 "Eden Gardens of SB: There was nothing here." August 21.

North County Transit District (NCTD)
2005 Information about the Coaster available at http://www.gonctd.com/coaster/coaster.html.

Oceanside Chamber of Commerce
2005 Electronic documents available at http://www.oceansidechamber.com/.

Oceanside, City of
2002 *City of Oceanside General Plan*.

2005 Oceanside historical Information available at http://www.oceanside-ca.com/historic.htm.

PBS & J
2004 *University of California, San Diego Long Range Development Plan Final EIR*.

RBF Consulting
2005 *Ponto Beach Front Village Plan, Draft*. May.

San Diego Association of Governments (SANDAG)
2003 Land Use Categories and Definitions.

2004a *Regional Comprehensive Plan for the San Diego Region*. July.

2004b SANDAG Info: Land Use and Land Ownership in the San Diego Region. November.

2005 Information regarding Smart Growth Incentive Program available at http://www.sandag.org/index.asp?projectid=264&fuseaction=projects. detail.

San Diego Chamber of Commerce
2005 Economic information for San Diego available at http://www.sandiego.gov/economic-development/contacts/chambers.shtml.

San Diego, City of
1987 *University Community Plan*. July.

1989 *City of San Diego Progress Guide and General Plan*. June.

1992 *Guidelines for Future Development*. October 1. Available at http://www.sandiego.gov/cityofvillages/documents/progress-guide/fullversion.shtml.

2002 *Bicycle Master Plan*. May.

2005a San Diego historical information available at www.sandiego.gov/planning/community/profiles/carmelvalley.shtml.

2005b Facts and History. Important Events in the City of San Diego's History. Citizens Assistance Department. Electronic document accessed at http://www.sandiego.gov/citizensassistance/facts/history.shtml#1880s.

2005c Information on Torrey Pines available at www.sandiego.gov/planning/profiles/torreypines.shtml.

San Diego City Schools (SDCS)
2005 School district information available at http://www.sandi.net/about/index.html.

San Diego Daily Transcript
2005 Historical information available at http://sourcebook.sddt.com.

San Diego Historical Society
2005 Timeline of San Diego History. Electronic document accessed at http://www.sandiegohistory.org/timeline/timeline2.htm#1887.

San Diego Union Tribune
2004 "Taking a Shine to Crown Heights." Sunday, September 5.

SanGIS
2005 SanGIS Interactive Map available at http://www.sangis.org/SangisInteractive/viewer/viewer.asp.

Solana Beach Chamber of Commerce
2005 Available at http://www.solanabeachchamber.com.

Solana Beach, City of
1986 *City of Solana Beach General Plan*.

1995 *City of Solana Beach Eden Gardens Master Streetscape Plan*. April.

2005 "The History of Solana Beach." Available at http://www.ci.solana-beach.ca.us/ContentPage.asp?ContentID=89.

U.S. Bureau of the Census
1990 Profiles of Demographic Characteristics, 1990.

2000 Profiles of Demographic Characteristics, 2000.

U.S. Marine Corps (USMC)
2005 Electronic documents available at http://www.pendleton.usmc.mil/impact/population.asp.

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APPENDIX A

DRAFT RELOCATION IMPACT REPORT

DRAFT RELOCATION IMPACT REPORT
FOR THE I-5 NORTH COAST CORRIDOR PROJECT
SAN DIEGO, CALIFORNIA

Prepared for:

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October 2007

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CHAPTER 1.0
SUMMARY OF DRAFT RELOCATION IMPACT REPORT

The proposed Interstate 5 (I-5) North Coast Corridor Project (Project) would extend approximately 27 miles along the I-5 northern San Diego County. The project would extend northerly between La Jolla Village Drive on I-5 in the City of San Diego, ending approximately 1 mile north of I-5 Harbor Drive in the City of Oceanside.

The main purpose of the project is to reduce congestion on I-5. The project would increase capacity along this segment of the corridor through the addition of High Occupancy Vehicle (HOV) lanes for all four alignments, and one main travel (general purpose) lane in each direction for two alignments.

Adequate relocation resources exist for the majority of displacees. However, there are several displacements that may pose some difficulties in finding adequate relocation options. The 10+4 Barrier and 8+4 Barrier alignments would displace a 47-unit apartment complex in Carlsbad. Relocation resources of comparable affordability for residents within the 47-unit apartment complex in Carlsbad may be difficult to find. Additionally, all four alignments would displace an 8-bedroom single-family residence (SFR) in Oceanside. A review of available replacement housing did not find any 8-bedroom houses in Oceanside or any of the other relocation neighborhoods. All four alignments would displace two businesses that would have some difficulties finding adequate replacement sites. A dive shop in Oceanside that would be displaced has a pool onsite. Finding a relocation site with a pool, or a commercial lot configured to allow for pool construction, may be difficult. A gas station/auto service station in Carlsbad would also be displaced. Finding a relocation site that allows those services to take place onsite would be difficult. A review of available replacement business sites did not find any sites that would allow for a gas and car service station. Consequently, it is possible that Caltrans may need to utilize the State's relocation program or Last Resort Housing (LRH) Program options, including LRH payments, to relocate these displacees.

The undersigned has completed this report of the above-referenced project and recommends approval of the report.

Nick Larkin, EDAW, Inc.

The undersigned has reviewed and approved this report.

Rosario Ortega, Senior Right of Way Agent (Relocation Branch Chief)

Janet Schaffer, Deputy District Director-Right of Way

CHAPTER 2.0
SUMMARY AND PROJECT DATA

2.1 PURPOSE OF STUDY

The purpose of this Draft Relocation Impact Report (DRIR) is to provide the California Department of Transportation (Caltrans), local agencies, and the public with information as to what effect a proposed freeway widening project would have on the residential and nonresidential occupants within the proposed project alignments. Specifically, this report is concerned with potential problems that may be caused by the displacement of existing structures and their occupants by the various alternatives.

2.2 LIMITS AND PURPOSE OF PROJECT

The proposed project would extend approximately 27 miles along I-5 within northern San Diego County (Figure 1). The project would extend northerly between La Jolla Village Drive on I-5 in the City of San Diego, ending approximately 1 mile north of I-5 Harbor Drive in the City of Oceanside.

The main purpose of the project is to reduce congestion on I-5. The project would increase capacity along this segment of the corridor through the addition HOV lanes for all four alignments, and one main travel (general purpose) lane in each direction for two alignments.

2.3 DESCRIPTION OF ALIGNMENTS STUDIED (4)

The DRIR analyzes relocation impacts associated with the following alternatives:

- Alignment A: 10+4 Barrier
- Alignment B: 8+4 Barrier
- Alignment C: 10+4 Buffer
- Alignment D: 8+4 Buffer

1. Is there a "core" corridor common to all alternates? Yes ☒ No ☐
   Explanation or comments: All four alignments follow the existing I-5 corridor for the length of the proposed project.

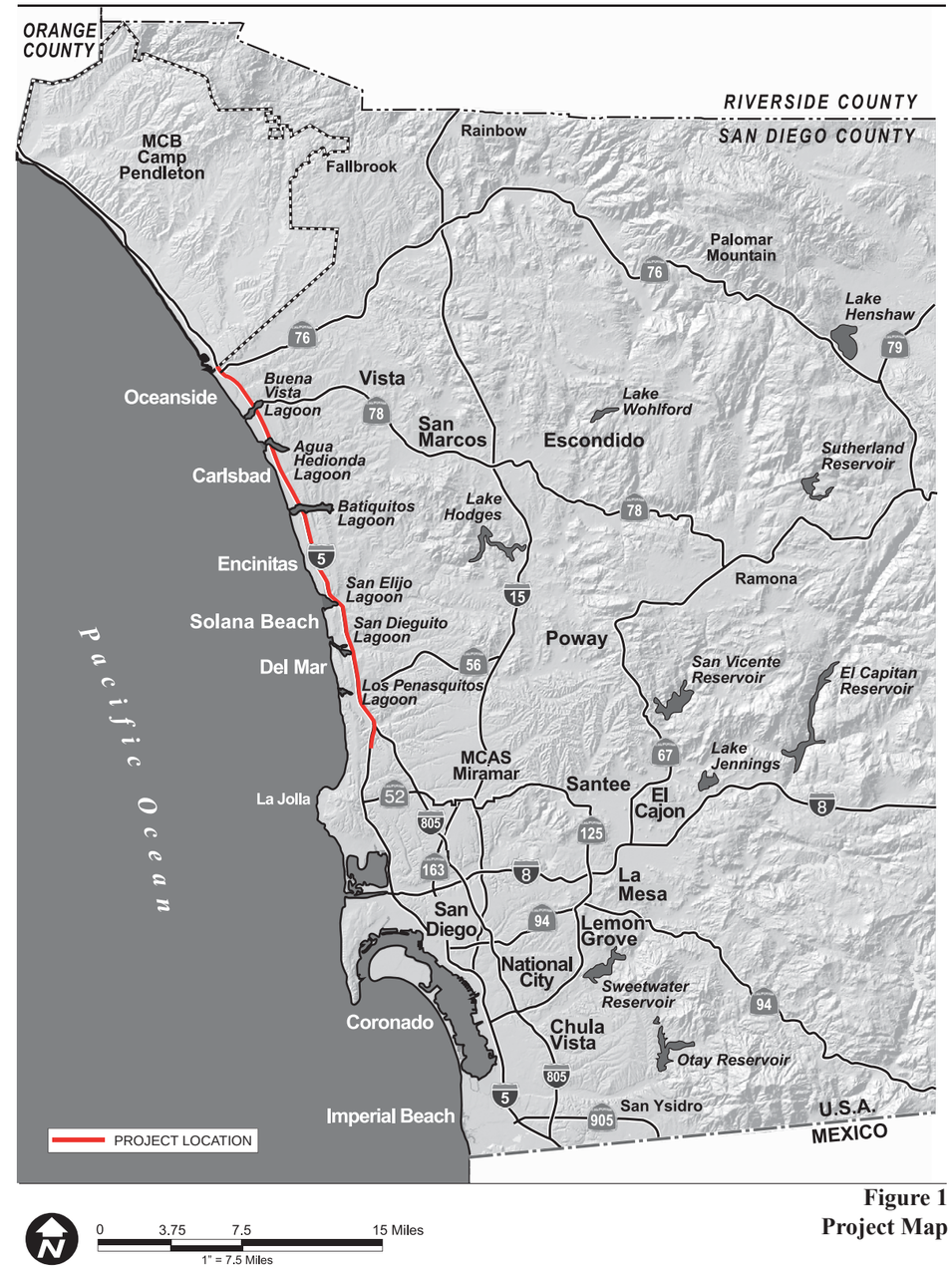

Figure 1
Project Map

Four build alternatives and one no build alternative are under consideration. Common features to all four build alternatives include the construction of Direct Access Ramps (DARs) at Voigt Drive, Manchester Avenue, Cannon Road and Oceanside Boulevard. Auxiliary lanes would also be constructed in various locations along the corridor to facilitate traffic entering and exiting main travel lanes along the freeway. Freeway overcrossings and undercrossings would be widened. Reconfiguration of various interchanges to improve vehicular, pedestrian and bicycle circulation would also occur. Bridges would be widened across the Lagoons, and several would also be lengthened. Other features, such as soundwalls, retaining walls, concrete barriers, guard rails/end treatments, crash cushions, bridge rails, drainage improvements, and signage, would also be installed at specific locations along the corridor. These alternatives are further described as follows:

2.3.1 Alignment A – 10 + 4 with Buffer

- Construct four HOV lanes on I-5 from south of the San Elijo Lagoon in Encinitas to State Route (SR 78) in Oceanside. Two HOV lanes would operate in each direction and would be separated from the general purpose lanes by a 1-to-4-foot buffer.
- Construct four HOV lanes on I-5 from SR 78 north to Harbor Drive/Vandegrift Boulevard in Oceanside. Two HOV lanes would operate in each direction and would be separated from general purpose lanes by a 1-to-4-foot buffer.
- Construct two HOV lanes on I-5 from Interstate 805 (I-805) in San Diego to south of the San Elijo Lagoon in Encinitas. Two HOV lanes would operate in each direction and would be separated from general purpose lanes by striping from I-805 to north of Del Mar Heights Road. Two HOV lanes would operate in each direction and would be separated by a 3-foot buffer from north of Del Mar Heights Road to the San Elijo Lagoon.
- Construct two HOV lanes on I-5 from north of La Jolla Village Drive to south of Sorrento Valley Road in San Diego. One HOV lane would operate in each direction and would be separated from general purpose lanes by striping.
- Construct a two lane HOV viaduct on I-5 from south of Sorrento Valley Road to I-805 in San Diego. One HOV lane would operate in each direction.
- Construct two general purpose lanes on I-5 from south of Via de la Valle in San Diego to SR 78 in Oceanside.

- Construct DARs on I-5 at four locations: Voigt Drive, north of Manchester Avenue, north of Cannon Road, and north of Oceanside Boulevard.
- Construct northbound and southbound auxiliary lanes in various locations.

2.3.2 Alignment B – 10 + 4 with Barrier

- The 10+4 with Barrier Alternative proposes the same features as the 10+4 with Buffer Alternative with the exception of a fixed concrete barrier in lieu of the buffer. Shoulders would also be provided adjacent to either side of the concrete barrier.

2.3.3 Alignment C – 8 + 4 with Buffer

- Construct four HOV lanes on I-5 from south of the San Elijo Lagoon in Encinitas to SR 78 in Oceanside. Two HOV lanes would operate in each direction and would be separated from general purpose lanes by a 1-to-4-foot buffer.
- Construct four HOV lanes on I-5 from SR 78 to north of Harbor Drive/Vandegrift Boulevard in Oceanside. Two HOV lanes would operate in each direction and would be separated from general purpose lanes by a 1-to-4-foot buffer.
- Construct two HOV lanes on I-5 from I-805 in San Diego to south of the San Elijo Lagoon. Two HOV lanes would operate in each direction and would be separated from general purpose lanes by striping from I-805 to north of Del Mar Heights Road. Two HOV lanes would operate in each direction and are separated from general purpose lanes by a 1-to-4-foot buffer from north of Del Mar Heights Road to San Elijo Lagoon.
- Construct two HOV lanes on I-5 from north of La Jolla Village Drive to south of Sorrento Valley Road in San Diego. One HOV lane would operate in each direction and would be separated from general purpose lanes by striping.
- Construct a two lane HOV viaduct on I-5 from south of Sorrento Valley Road to I-805. One HOV lane would operate in each direction.
- Construct DARs on I-5 at Voigt Drive, north of Manchester Avenue, north of Cannon Road, and north of Oceanside Boulevard.
- Construct northbound and southbound auxiliary lanes in various locations.

2.3.4 Alignment D – 8 + 4 with Barrier

- The 8+4 with Barrier Alternative would function similarly to the 8+4 with Buffer Alternative but would have a fixed concrete barrier in lieu of the buffer. Shoulders would be provided to either side of the concrete barrier.

2.4 BASIS OF FINDINGS

The following resources were used as the basis of findings for this report:

- Backpage.com, Craigslist.org, Multiple Listings Service, and Grubb & Ellis / BRE Commercial were used to create an inventory of relocation resources available for residences and businesses displaced by the proposed project.
- The U.S. Bureau of the Census was used to develop a demographic profile of the jurisdictions where displacements would occur.
- The City of Carlsbad Housing and Redevelopment Department website and contact with City of Carlsbad Housing and Redevelopment Department staff were used to ascertain whether any Section 8 Housing or Affordable Housing Resources units would be displaced by the proposed project.

Full citations for each of the sources used are listed in Chapter 7.0 References of this report.

2.5 DESCRIPTION OF THE DISPLACEMENT AREA

The proposed project traverses six municipalities, beginning with Oceanside at the northern end of the proposed project, and ending with the City of San Diego at the project's southern terminus. However, relocation impacts are only likely to occur in Oceanside, Carlsbad, Encinitas, and Solana Beach (Figure 2). Consequently, a brief discussion of the land uses surrounding the proposed project are provided for these four municipalities. Demographic, income, and housing characteristics for these municipalities, the City of San Diego, and the County of San Diego are provided in Tables 1 through 4. Descriptions of the surrounding land uses and relevant demographic, income, and housing characteristics are described in greater detail in the Community Impact Assessment (CIA).

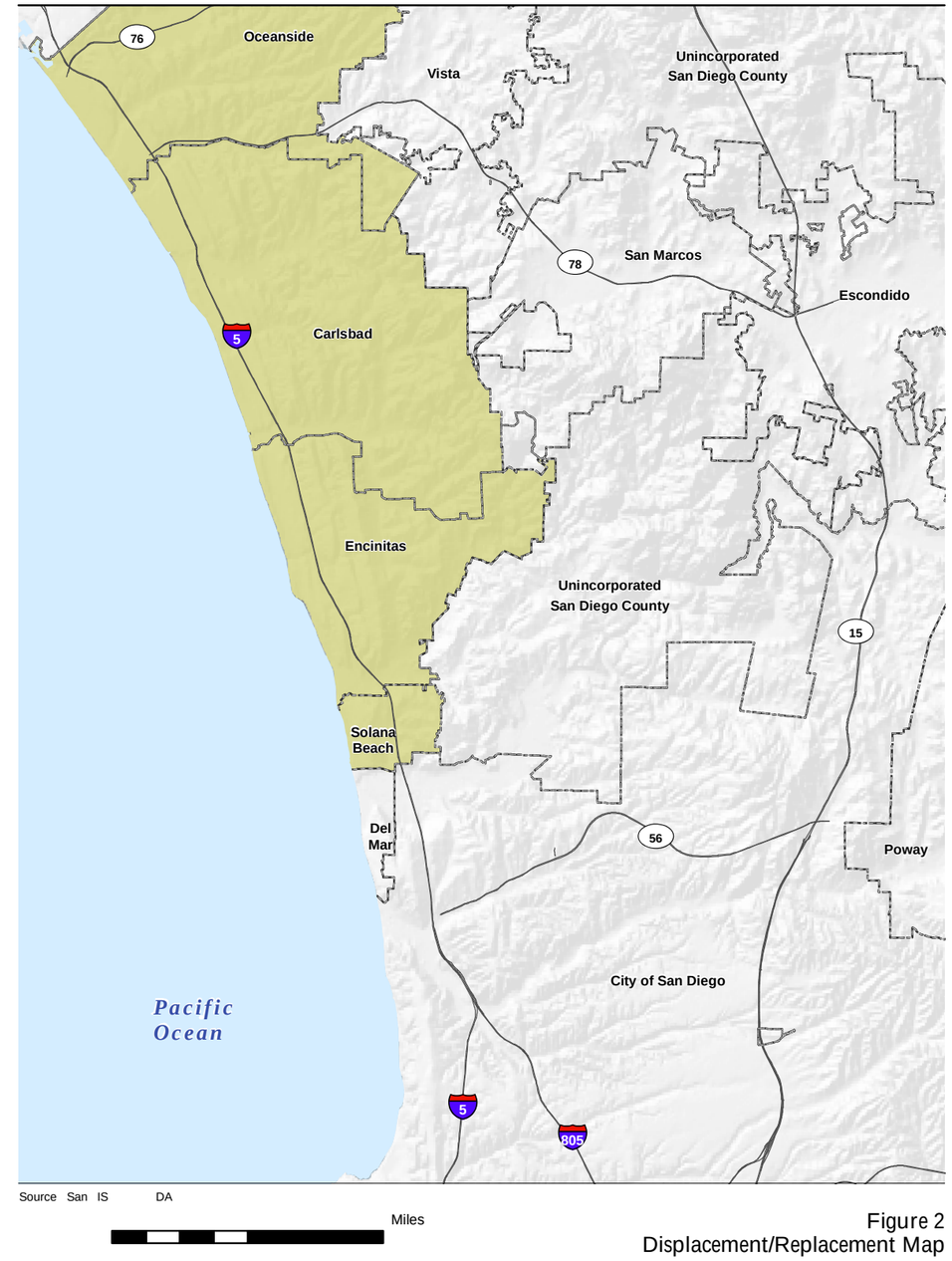

Figure 2
Displacement/Replacement Map

2.5.1 Surrounding Land Uses

Land uses within Oceanside surrounding the proposed project are primarily a mixture of single-family and multi-family residential areas, as well as general and community commercial centers, open space, and light industrial uses. The majority of the land surrounding the proposed project is developed and urban in nature.

Land uses within Carlsbad surrounding the proposed project are primarily a mixture of residential, commercial, industrial, agriculture, and public services. The central portion of Carlsbad, between Agua Hedionda Lagoon and Poinsettia Lane, is comprised primarily of open space, industrial, and commercial uses, while the portions of Carlsbad to the north and south of this area primarily feature residential uses.

Land uses within Encinitas surrounding the proposed project are residential, commercial, office uses, schools, agricultural land, and open space. Residential is the dominant land use, with each residential area serviced by neighborhood and mixed-use shopping areas, schools, and parks.

Land uses in the portion of Solana Beach within the area of direct impacts are mainly a mixture of single-family and multi-family residential developments as well as commercial, light industrial, office, school, and open space land uses. Residential uses are located throughout the direct impact area with single-family residential developments to the north and south, and multi-family residential developments along Lomas Santa Fe Drive as well as in the southern part of the municipality.

2.5.2 Demographic, Income, and Housing Characteristics

Table 1 shows the racial and ethnic compositions of the municipalities impacted by the proposed project in comparison to the City of San Diego and County of San Diego. Table 2 shows the Median Household Income and Per Capita Household incomes of the municipalities impacted by the proposed project in comparison to the City of San Diego and the County of San Diego. Table 3 shows the number of households, owner/renter status, vacancy rates, and average household size of the municipalities impacted by the proposed project in comparison to the City of San Diego and the County of San Diego. Table 4 shows the number of households by structure type of the municipalities impacted by the proposed project in comparison to the City of San Diego and the County of San Diego.

Table 1
Race and Ethnicity

	Oceanside	Carlsbad	Encinitas	Solana Beach	San Diego	San Diego County
Total Population	100% (161,029)	100% (78,247)	100% (58,014)	100% (12,979)	100% (1,223,400)	100% (2,813,833)
White	66.4% (106,866)	86.6% (67,723)	86.6% (50,241)	87.0% (11,293)	60.2% (736,207)	66.5% (1,871,839)
Black/African American	6.3% (10,189)	1.0% (753)	0.6% (340)	0.5% (65)	7.9% (96,216)	5.7% (161,480)
American Indian and Alaskan Native	0.9% (1,370)	0.4% (329)	0.5% (267)	0.4% (54)	0.6% (7,543)	0.9% (24,337)
Asian	5.5% (8,896)	4.2% (3,315)	3.1% (1,798)	3.5% (449)	13.6% (166,968)	8.9% (249,802)
Native Hawaiian/ Pacific Islander	1.3% (2,042)	0.2% (155)	0.1% (69)	0.1% (18)	0.5% (5,853)	0.5% (13,561)
Some other race	14.5% (23,342)	4.6% (3,636)	6.3% (3,645)	5.6% (725)	12.4% (151,532)	12.8% (360,847)
Two or more races	5.2% (8,324)	3.0% (2,336)	2.9% (1,654)	2.9% (375)	4.8% (59,081)	4.7% (131,967)
Hispanic	30.2% (48,691)	11.7% (9,170)	14.8% (8,584)	14.8% (1,922)	25.4% (310,752)	26.7% (750,965)
Total Minority*	46.4% (74,719)	19.5% (15,234)	21.0% (12,162)	21.0% (2,729)	50.6% (619,508)	45.0% (1,265,000)

"Total Minority" = persons of any origin other than non-Hispanic White.
Source: U.S. Bureau of the Census 2000

Table 2
Median Household Income and Per Capita Income

	Oceanside	Carlsbad	Encinitas	Solana Beach	San Diego	San Diego County
Median Household Income	$46,301	$65,145	$63,954	$71,774	$45,733	$47,067
Per Capita Income	$20,329	$34,863	$34,336	$48,547	$23,609	$22,926

Source: U.S. Bureau of the Census 2000

Table 3
Housing Characteristics

	Oceanside	Carlsbad	Encinitas	Solana Beach	San Diego	San Diego County
Total Households[1]	100% (59,498)	100% (33,717)	100% (23,867)	100% (6,449)	100% (469,756)	100% (1,040,149)
Total Occupied[2]	94.8% (56,396)	93.4% (31,486)	95.7% (22,834)	89.2% (5,755)	95.9% (450,682)	95.6% (994,677)
Owner Occupied[3]	62.1% (35,032)	67.3% (21,201)	64.1% (14,644)	62.3% (3,587)	49.5% (223,275)	55.4% (551,489)
Renter Occupied[4]	37.9% (21,364)	32.7% (10,285)	35.9% (8,190)	37.7% (2,168)	50.5% (227,407)	44.6% (443,188)
Vacant[5]	5.2% (3,102)	6.6% (2,231)	4.3% (1,033)	10.8% (694)	4.1% (19,074)	4.4% (45,472)
Average Household Size	2.83	2.46	2.52	2.25	2.61	2.73

[1] Refers to the percent of total housing units within municipality.
[2] Refers to the percent of occupied housing units within municipality.
[3] Refers to the percent of occupied units that are owned within municipality.
[4] Refers to the percent of occupied units that are rented within municipality.
[5] Refers to the percent of vacant units within municipality.
Source: U.S. Bureau of the Census 2000

Table 4
Housing Types

	Oceanside	Carlsbad	Encinitas	Solana Beach	San Diego	San Diego County
Total Households	100% (59,498)	100% (33,717)	100% (23,867)	100% (6,449)	100% (469,756)	100% (1,040,149)
Single-Family Detached	50.8% (30,211)	52.7% (17,777)	55.2% (13,171)	45.1% (2,906)	46.7% (219,303)	51.0% (530,430)
Single-Family Attached	13.8% (8,210)	16.9% (5,711)	19.0% (4,542)	19.6% (1,264)	9.7% (45,772)	9.4% (98,101)
Multiple-Family	29.7% (17,662)	26.5% (8,942)	22.6% (5,384)	34.7% (2,240)	42.2% (198,248)	35.1% (364,679)
Mobile Home	5.6% (3,324)	3.8% (1,281)	3.0% (707)	0.5% (34)	1.3% (5,876)	4.3% (44,234)
Boat, RV, Van, etc.	0.2% (91)	0.0% (6)	0.3% (63)	0.1% (5)	0.1% (557)	0.3% (2,705)
Average Household Size	2.83	2.46	2.52	2.25	2.61	2.73

Source: U.S. Bureau of the Census 2000

2.6 ESTIMATED DISPLACEMENT UNITS BY ALIGNMENT

Displacement Units
by Alignment in Oceanside

	A	B	C	D
Residential				
Owner Occupants of Single-Family Residences	9	9	9	9
Tenant Occupants of Single-Family Residences	4	4	4	4
Owner Occupants of Multiple Unit Residences[1]	1	1	1	1
Tenant Occupants of Multiple Unit Residences[2]	30	30	30	30
Owner Occupants of Mobile Homes	0	0	0	0
Tenant Occupants of Mobile Homes	0	0	0	0
TOTAL RESIDENTIAL UNITS	44	44	44	44
TOTAL PERSONS[3]	125	125	125	125
Nonresidential				
Commercial Businesses	3	3	3	3
Industrial/Manufacturing Businesses	0	0	0	0
Nonprofit Organizations	0	0	0	0
Agricultural/Farms	0	0	0	0
TOTAL NONRESIDENTIAL UNITS	3	3	3	3
TOTAL UNITS	47	47	47	47

[1] Owner Occupants of Multiple Unit Residences includes one unit of a three-unit multi-family residence that was listed as owner occupied. The remaining units of the three-unit multi-family residence are considered tenant occupied.
[2] Tenant Occupants of Multiple Unit Residences includes all multi-family residences that are renter-occupied.
[3] Total persons was calculated by multiplying the number of units impacted within each jurisdiction by the average household size identified in the U.S. Census for each jurisdiction and rounding to the highest number.

Displacement Units
by Alignment in Carlsbad

	A	B	C	D
Residential				
Owner Occupants of Single-Family Residences	9	8	8	3
Tenant Occupants of Single-Family Residences	1	1	0	0
Owner Occupants of Multiple Unit Residences[1]	1	1	0	1
Tenant Occupants of Multiple Unit Residences[2]	49	49	0	2
Owner Occupants of Mobile Homes	0	0	0	0
Tenant Occupants of Mobile Homes	0	0	0	0
TOTAL RESIDENTIAL UNITS	60	59	8	6
TOTAL PERSONS[3]	148	146	20	15
Nonresidential				
Commercial Businesses	9	7	7	7
Industrial/Manufacturing Businesses	0	0	0	0
Nonprofit Organizations	0	0	0	0
Agricultural/Farms	0	0	0	0
TOTAL NONRESIDENTIAL UNITS	9	7	7	7
TOTAL UNITS	69	66	15	13

[1] Owner Occupants of Multiple Unit Residences includes one unit of a triplex that was listed as owner occupied. The remaining units of the triplex are considered tenant occupied.

[2] Tenant Occupants of Multiple Unit Residences includes all multi-family residences that are renter-occupied.

[3] Total persons was calculated by multiplying the number of units impacted within each jurisdiction by the average household size identified in the U.S. Census for each jurisdiction and rounding to the highest number.

Displacement Units
by Alignment in Encinitas

	A	B	C	D
Residential				
Owner Occupants of Single-Family Residences	1	1	1	0
Tenant Occupants of Single-Family Residences	1	0	0	0
Owner Occupants of Multiple Unit Residences	0	0	0	0
Tenant Occupants of Multiple Unit Residences	0	0	0	0
Owner Occupants of Mobile Homes	0	0	0	0
Tenant Occupants of Mobile Homes	0	0	0	0
TOTAL RESIDENTIAL UNITS	2	1	1	0
TOTAL PERSONS[1]	6	3	3	0
Nonresidential				
Commercial Businesses	1	1	0	0
Industrial/Manufacturing Businesses	0	0	0	0
Nonprofit Organizations	0	0	0	0
Agricultural/Farms	0	0	0	0
TOTAL NONRESIDENTIAL UNITS	1	1	0	0
TOTAL UNITS	3	2	1	0

[1] Total persons was calculated by multiplying the number of units impacted within each jurisdiction by the average household size identified in the U.S. Census for each jurisdiction and rounding to the highest number.

Displacement Units
by Alignment in Solana Beach

	A	B	C	D
Residential				
Owner Occupants of Single-Family Residences	0	0	0	0
Tenant Occupants of Single-Family Residences	0	0	0	0
Owner Occupants of Multiple Unit Residences[1]	4	0	0	0
Tenant Occupants of Multiple Unit Residences[2]	2	0	0	0
Owner Occupants of Mobile Homes	0	0	0	0
Tenant Occupants of Mobile Homes	0	0	0	0
TOTAL RESIDENTIAL UNITS	6	0	0	0
TOTAL PERSONS[3]	14	0	0	0
Nonresidential				
Commercial Businesses	0	0	0	0
Industrial/Manufacturing Businesses	0	0	0	0
Nonprofit Organizations	0	0	0	0
Agricultural/Farms	0	0	0	0
TOTAL NONRESIDENTIAL UNITS	0	0	0	0
TOTAL UNITS	6	0	0	0

[1] Owner Occupants of Multiple Unit Residences includes 4 condominiums that are listed as owner occupied.

[2] Tenant Occupants of Multiple Unit Residences includes all multi-family residences that are renter-occupied.

[3] Total persons was calculated by multiplying the number of units impacted within each jurisdiction by the average household size identified in the U.S. Census for each jurisdiction and rounding to the highest number.

Displacement Units
by Alignment for Proposed Project
(all municipalities)

	A	B	C	D
Residential				
Owner Occupants of Single-Family Residences	19	18	18	12
Tenant Occupants of Single-Family Residences	6	5	4	4
Owner Occupants of Multiple Unit Residences[1]	6	2	1	2
Tenant Occupants of Multiple Unit Residences[2]	81	79	30	32
Owner Occupants of Mobile Homes	0	0	0	0
Tenant Occupants of Mobile Homes	0	0	0	0
TOTAL RESIDENTIAL UNITS	112	104	53	50
TOTAL PERSONS[3]	293	274	148	140
Nonresidential				
Commercial Businesses	13	11	10	10
Industrial/Manufacturing Businesses	0	0	0	0
Nonprofit Organizations	0	0	0	0
Agricultural/Farms	0	0	0	0
TOTAL NONRESIDENTIAL UNITS	13	11	10	10
TOTAL UNITS	125	115	63	60

[1] Owner Occupants of Multiple Unit Residences includes 4 condominiums that are listed as owner occupied and one unit of a three-unit multi-family residence and one unit of a triplex that were both listed as owner occupied. The remaining units of the three-unit multi-family residence and triplex are considered tenant occupied.

[2] Tenant Occupants of Multiple Unit Residences includes all multi-family residences that are renter-occupied.

[3] Total persons was calculated by multiplying the number of units impacted within each jurisdiction by the average household size identified in the U.S. Census for each jurisdiction and rounding to the highest number.

2.7 TYPE OF RESIDENTIAL DISPLACEMENTS BY ALIGNMENT

Type of Residential Displacements by Alignment in Oceanside

	A	B	C	D
Single-Family Residence	13	13	13	13
Duplex/Triplex (Multi-Res)	5	5	5	5
Apartments/Condos (Multi-Res) 4 or more	26	26	26	26
Sleeping rooms/Shared Quarters	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	44	44	44	44

Note: Relocation of personal property only should be counted separately and noted whether the items would be moved to the remainder or to a separate site.

Type of Residential Displacements by Alignment in Carlsbad

	A	B	C	D
Single-Family Residence	10	9	8	3
Duplex/Triplex (Multi-Res)	3	3	0	3
Apartments/Condos (Multi-Res) 4 or more	47	47	0	0
Sleeping rooms/Shared Quarters	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	60	59	8	6

Note: Relocation of personal property only should be counted separately and noted whether the items would be moved to the remainder or to a separate site.

Type of Residential Displacements by Alignment in Encinitas

	A	B	C	D
Single-Family Residence	2	1	1	0
Duplex/Triplex (Multi-Res)	0	0	0	0
Apartments/Condos (Multi-Res) 4 or more	0	0	0	0
Sleeping rooms/Shared Quarters	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	2	1	1	0

Note: Relocation of personal property only should be counted separately and noted whether the items would be moved to the remainder or to a separate site.

Type of Residential Displacements by Alignment in Solana Beach

	A	B	C	D
Single-Family Residence	0	0	0	0
Duplex/Triplex (Multi-Res)	0	0	0	0
Apartments/Condos (Multi-Res) 4 or more	6	0	0	0
Sleeping rooms/Shared Quarters	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	6	0	0	0

Note: Relocation of personal property only should be counted separately and noted whether the items would be moved to the remainder or to a separate site.

Type of Residential Displacements by Alignment for Proposed Project (all municipalities)

	A	B	C	D
Single-Family Residence	25	23	22	16
Duplex/Triplex (Multi-Res)	8	8	5	8
Apartments/Condos (Multi-Res) 4 or more	79	73	26	26
Sleeping rooms/Shared Quarters	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	112	104	53	50

Note: Relocation of personal property only should be counted separately and noted whether the items would be moved to the remainder or to a separate site.

2.8 RELOCATION RESOURCES

Adequate relocation resources exist for:	Yes	No
Residential owners[1]	☒	☐
Residential tenants[2]	☒	☐
Mobile Homes	☐ N/A	☐ N/A
Businesses[3]	☒	☐
Nonprofit Organizations	☐ N/A	☐ N/A
Agriculture	☐ N/A	☐ N/A

[1] Adequate relocation resources exist for all residential owner displacees except possibly for an 8-bedroom SFR in Oceanside

[2] Adequate relocation resources exist for all residential tenant displacees except possibly for a 47-unit apartment complex in Carlsbad

[3] Adequate relocation resources exist for all business displacees except possibly for a dive shop in Oceanside and a gas station/auto service station in Carlsbad

1. The replacement neighborhoods studied are Oceanside, Carlsbad, Encinitas, and Solana Beach. These were chosen as the replacement neighborhoods because they are the jurisdictions where the impacts would take place. Relocating displacees within the communities in which they currently reside would reduce the hardship associated with relocation, including community cohesion, commute times, etc.

2. The relocation areas are comparable in terms of amenities, public utilities, and accessibility to public services, transportation and shopping. Yes ☒ No ☐

   Since the relocation neighborhoods selected are the jurisdictions in which the displacees are currently located, the relocation area would be comparable in terms of amenities, public utilities, and accessibility to public services, transportation, and shopping.

3. The relocation resources are affordable to the majority of residential displacees given the use of replacement housing payments as needed to assist displaced persons/households. However, it is possible that relocation resources of comparable affordability for residents within the 47-unit apartment complex in Carlsbad, which is identified as a full take for Alignments A and B, would be difficult to find. Additionally, all four alignments would impact an 8-bedroom SFR in Oceanside. A review of available replacement housing did not find any 8-bedroom houses in Oceanside or any of the other relocation neighborhoods. An expanded discussion of the problems associated with relocating residents within the 47-unit apartment complex in Carlsbad and the 8-bedroom SFR in Oceanside can be found on Section 3.1.

4. There are public projects in the area that would displace other families or make additional housing unavailable concurrently with the subject project. The widening of State Route (SR 76) beginning in Oceanside and proceeding eastward through Bonsall may result in the displacement of existing residences, commercial businesses, and a golf course. The ultimate number of impacts and type of impacts would depend on which alternative is selected.

5. The State's relocation program is adequate to successfully relocate all displacees. Although there may be some difficulty associated with relocating displacees at the 47-unit apartment complex if either Alignment A or B is selected, it is anticipated that State's relocation program is adequate to successfully relocate all displacees.

6. There are special relocation problems associated with this project. As described in response 3 above, it is possible that affordable relocation resources for residents within the 47-unit apartment complex in Carlsbad, which is identified as a full take for Alignments A and B, would be difficult to find. Additionally, the proposed project would impact an 8-bedroom SFR in Oceanside. A review of available replacement housing did not find any 8-bedroom houses in Oceanside or any of the other relocation neighborhoods. An expanded discussion of the problems associated with relocating residents within the 47-unit apartment complex in Carlsbad and the 8-bedroom house in Oceanside can be found in Section 3.1.

7. The LRH Program options, including LRH payments, may be utilized to relocate residential displacees from the 47-unit apartment complex if either Alignment A or B are selected. Additionally, LRH Program options, including LRH payments, may be utilized to relocate the tenants of the 8-bedroom house in Oceanside if any of the four alternatives are selected. These displacements are represented as a percentage of total displacees below.

	A	B	C	D
Percentage of owners[1]	4.2%	4.8%	5.3%	7.1%
Percentage of renters[2]	0.0%	56.0%	0.0%	0.0%

[1] Percentage of owners represents the percentage of owner-occupied units displaced by the proposed project that may require LRH Program options. For example, the 8-bedroom home in Oceanside represents one of the 24 owner-occupied units displaced by the proposed project (1/24 = 4.2%).

[2] Percentage of renters represents the percentage of renter-occupied units displaced by the proposed project that may require LRH Program options. For example, the 47-unit apartment complex in Carlsbad represents 47 of the 84 renter-occupied units displaced by the proposed project (47/84 = 56.0%).

8. The construction of replacement housing under the LRH Program would not be utilized as it is not anticipated that construction of replacement housing under the LRH Program would be necessary.

9. A field office would not be required for this project as the estimated impacts are in various communities. This issue can be further addressed during the final study once the preferred alignment has been selected.

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CHAPTER 3.0
DISPLACEMENT AREA

3.1 RESIDENTIAL DISPLACEMENTS

Table 5 shows residential developments that may be displaced by any of the alternatives. Alignments A and B would displace a 47-unit apartment complex in Carlsbad. Relocation resources of comparable affordability for residents within the 47-unit apartment complex in Carlsbad may be difficult to find. The 47-unit apartment complex is composed of forty-seven 2-bedroom apartments for rent. Contact with the onsite manager indicated that rents at this complex were $1,050 a month for the 2-bedroom units, which is a relatively low rental rate, particularly for a coastal community such as Carlsbad. Although some apartments for rent in Carlsbad were found with comparable rental rates, there were not enough listed to adequately relocate all 47 of the 2-bedroom apartments that may be displaced. Additionally, some 2-bedroom apartments for rent in Oceanside were found with comparable rental rates, but there were not enough listed to adequately relocate the remaining 2-bedroom apartments that may be displaced. Consequently, it is possible that Caltrans may need to utilize the State's relocation program or Last Resort Housing (LRH) options, including LRH payments, to relocate displacees from the 47-unit apartment complex if either Alignment A or B is selected.

The City of Carlsbad Housing and Redevelopment Department website indicated that the 47-unit apartment complex was not a site involved in the City of Carlsbad's Affordable Housing Program (City of Carlsbad 2007). Similarly, contact with the City of Carlsbad Housing and Redevelopment Department indicated that Section 8 Housing in the City of Carlsbad had been discontinued due to budget cutbacks (City of Carlsbad 2007). Therefore, none of the apartments in the 47-unit apartment complex to be displaced by the proposed project would be classified as Section 8 housing or Affordable Housing which require that certain provisions be considered.

All four alignments would displace an 8-bedroom SFR in Oceanside. A review of available replacement housing did not find any 8-bedroom SFRs in Oceanside or any of the other relocation neighborhoods. Three 8-bedroom SFRs were found in Rancho Santa Fe, but the value of these homes far exceeded the value of the 8-bedroom SFR in Oceanside. Consequently, it is possible that Caltrans may need to utilize the State's relocation program or LRH options, including LRH payments, to relocate displacees from this 8-bedroon SFR.

Table 5
Residential Displacements by Alignment

Land Use	10+4 Barrier (Alignment A)	8+4 Barrier (Alignment B)	10+4 Buffer (Alignment C)	8+4 Buffer (Alignment D)
City of Oceanside				
Apartment (5 Units)	X	X	X	X
2-Bedroom SFR	X	X	X	X
Multi Family (3 Units)	X	X	X	X
2-Bedroom SFR	X	X	X	X
3-Bedroom SFR	X	X	X	X
Apartment (7 Units)	X	X	X	X
Apartment (5 Units)	X	X	X	X
Duplex	X	X	X	X
Apartment (9 Units)	X	X	X	X
2-Bedroom SFR	X	X	X	X
3-Bedroom SFR	X	X	X	X
5-Bedroom SFR	X	X	X	X
4-Bedroom SFR	X	X	X	X
3-Bedroom SFR	X	X	X	X
8-Bedroom SFR	X	X	X	X
3-Bedroom SFR	X	X	X	X
4-Bedroom SFR	X	X	X	X
3-Bedroom SFR	X	X	X	X
5-Bedroom SFR	X	X	X	X
City of Carlsbad				
3-Bedroom SFR	X	X	X	
2-Bedroom SFR	X	X	X	
3-Bedroom SFR		X		
3-Bedroom SFR	X	X	X	
2-Bedroom SFR	X	X	X	
2-Bedroom SFR	X	X		
3-Bedroom SFR	X	X	X	
Apartment (47 Units)	X	X		
2-Bedroom SFR	X	X	X	X
2-Bedroom SFR	X	X		
Triplex	X	X		X
4-Bedroom SFR	X		X	X
3-Bedroom SFR	X		X	X
City of Encinitas				
3-Bedroom SFR	X			
2-Bedroom SFR	X	X	X	
City of Solana Beach				
2-Bedroom Condo	X			
2-Bedroom Condo	X			
2-Bedroom Condo	X			
2-Bedroom Condo	X			
2-Bedroom Condo	X			
2-Bedroom Condo	X			

3.2 BUSINESS AND NONPROFIT

1. Number of businesses directly impacted by the project:

	Alignment			
	A	B	C	D
Construction	--	--	--	--
Manufacturing	--	--	--	--
Retail	8	8	8	8
Government	--	--	--	--
Nonprofit	--	--	--	--
Service	5	3	2	2
Total	13	11	10	10

2. Age of business:

	Alignment			
	A	B	C	D
1 - 3 years	2	--	--	--
4 - 7 years	1	1	--	--
8 - 15 years	5	5	5	5
Over 15 years	5	5	5	5

3. Estimates for the number of employees at each business that may be displaced by the proposed project were made during field reconnaissance. The estimates on the total number of employees that may be displaced by each alignment were reached by adding the estimate made for each business that would be impacted by the alignment. All businesses had fewer than 500 employees, and therefore are considered small businesses.

	Alignment			
	A	B	C	D
1 - 20	--	--	--	--
21 - 100	100	80	55	55
101 - 500	--	--	--	--
Over 500	--	--	--	--

4. There are three to five businesses impacted by the project that are assumed to be minority owned. This conclusion was reached based on review of 2000 census data and the assumption that business ownership patterns may mirror overall community demographic patterns. Three businesses within Oceanside would be displaced by the proposed project. Nearly half of the population of Oceanside is composed of racial or ethnic minorities (46.4 percent). Therefore, it is assumed that one or two of the businesses in Oceanside may be minority owned. Similarly, nine businesses within Carlsbad would be impacted by at least one of the alignments of the proposed project. Approximately one-fifth of the population of Carlsbad is composed of racial or ethnic minorities (19.5 percent). Therefore, it is assumed that one or two of the businesses in Carlsbad may be minority owned. One business within Encinitas would be impacted by two of the alignments of the proposed project. Approximately one-fifth of the population of Encinitas is composed of racial or ethnic minorities (21.0 percent). Therefore, based on these assumptions, it is not as likely (but still possible) that the business in Encinitas may be minority owned.

5. Number of the different type of facilities:

	Alignment			
	A	B	C	D
Strip Commercial	7	7	7	7
Small Shop-Center	3	3	3	3
Regional Center	--	--	--	--
Single Structure	--	--	--	--
Mixed Residential	3	1	--	--
Industrial Park	--	--	--	--
Low Rent Area	--	--	--	--

3.3 AGRICULTURAL IMPACT

Implementation of the proposed project would not result in relocations that would affect agricultural areas.

CHAPTER 4.0
REPLACEMENT AREA

4.1 DESCRIPTION OF REPLACEMENT AREA IN RELATIONSHIP TO THE LOCAL TOWN/COMMUNITY AND TO THE DISPLACEMENT AREA

The Replacement Area includes the jurisdiction of Oceanside, Carlsbad, Encinitas, and Solana Beach. These jurisdictions also represent the Displacement Area. These jurisdictions were selected because relocating displacees within the communities in which they currently reside would reduce the hardship associated with relocation, including community cohesion, commute times, etc.

Oceanside

1. Housing stock:
   a. Number of single-family residences: 30,211
   b. Number of multiple-family units: 25,872
   c. Number of mobile homes: 3,324
   d. Total housing units (a+b+c): 59,407

2. Vacancy rate expressed as a percent: For Rent/For Sale
   Census data for vacancy rates were only provided as a percentage of the overall housing stock (5.2%) (Source: U.S. Census 2000). Data on the amount of vacant units for rent and for sale were not available.

3. Housing characteristics (Describe average age, condition and type of housing impacted by the project):
   Housing that would be impacted by at least one of the alternatives includes 13 SFRs, 1 duplex, and 5 apartment complexes. The majority of the housing in Oceanside that would be impacted by the proposed project was built in the 1950s and 1960s, with several units constructed in the decades preceding and following that period. The condition of this housing is characterized as average and good, with more units in good condition than average condition.

4. Average prices of typical single-family homes that are Decent, Safe, and Sanitary (DS&S) for the displacement properties are shown below in Table 6.

Table 6
Residential Relocation Resources

	Oceanside	Carlsbad	Encinitas	Solana Beach
Residential For Sale				
2 Bedroom SFR	36 ($325,000 - $629,000)	16 ($419,000 - $625,000)	N/A	N/A
3 Bedroom SFR	Approx. 300 ($325,000 - $630,000)	18 ($450,000 - $669,000)	16 ($750,000 - $895,000)	N/A
4 Bedroom SFR	Approx.190 ($340,000 - $605,000)	10 ($542,000 - $649,000)	N/A	N/A
5 Bedroom SFR	23 ($475,000 - $700,000)	N/A	N/A	N/A
7 Bedroom SFR	1 ($520,000)	N/A	N/A	N/A
8 Bedroom SFR	None Found	N/A	N/A	N/A
2 Bedroom Condo	N/A	N/A	N/A	21 ($510,000 - $750,000)
Residential For Rent				
2 Bedroom SFR	5 ($1,750 - $2,050 per month)	2 ($2,100 - $2,200 per month)	N/A	N/A
3 Bedroom SFR	25 ($1,350 - $2,550 per month)	N/A	4 ($2,195 - $3,195 per month)	N/A
4 Bedroom SFR	17 ($1,950 - $2,650 per month)	N/A	N/A	N/A
1 Bedroom Apt.	17 ($850 -$1,350 per month)	N/A	N/A	N/A
2 Bedroom Apt.	26 ($950 -$1,650+ per month)	17 ($850 -$1,450 per month)	3 ($1,420 - $1,530)	1 ($1,645 per month)
1 Bedroom Condo	4 ($850 -$1,350 per month)	N/A	N/A	N/A
2 Bedroom Condo	17 ($950 -$1,650+ per month)	7 ($1,050 -$1,650 per month)	N/A	1 ($1,950 per month)

Source: Multiple Listings Service (http://www.sandiegomlsaccess.com/) viewed 6/8/07.
Craigslist.org (http://sandiego.craigslist.org/), viewed 6/8/07, 6/11/07, and 8/27/07.
Backpage.com (http://sandiego.backpage.com/), viewed 6/11/07 and 8/27/07.

Carlsbad

1. Housing stock:
   a. Number of single-family residences: 17,777
   b. Number of multiple-family units: 14,653
   c. Number of mobile homes: 1,281
   d. Total housing units (a+b+c): 33,711

2. Vacancy rate expressed as a percent: For Rent/For Sale
   Census data for vacancy rates were only provided as a percentage of the overall housing stock (6.6%) (Source: U.S. Census 2000). Data on the amount of vacant units for rent and for sale were not available.

3. Housing characteristics (Describe average age, condition and type of housing impacted by the project):
   Housing that would be impacted by at least one of the alternatives includes 11 SFRs, 1 triplex, and 1 apartment complex. The majority of the housing in Carlsbad that would be impacted by the proposed project was built in the 1950s and 1960s. However, three housing units were built in the 1980s. The majority of this housing is characterized as good, with several units in average condition and one in poor/fair condition.

4. Average prices of typical single-family homes that are DS&S for the displacement properties are shown in Table 6.

Encinitas

1. Housing stock:
   a. Number of single-family residences: 13,171
   b. Number of multiple-family units: 9,926
   c. Number of mobile homes: 707
   d. Total housing units (a+b+c): 23,804

2. Vacancy rate expressed as a percent: For Rent/For Sale
   Census data for vacancy rates were only provided as a percentage of the overall housing stock (4.3%) (Source: U.S. Census 2000). Data on the amount of vacant units for rent and for sale were not available.

3. Housing characteristics (Describe average age, condition and type of housing impacted by the project):
   Housing that would be impacted by at least one of the alternatives includes 2 SFRs. One of the housing units that would be impacted by the proposed project in Encinitas was built in 1955 and the other in 1973. Both of these units can be characterized as good.

4. Average prices of typical single-family homes that are DS&S for the displacement properties are shown in Table 6.

Solana Beach

1. Housing stock:
   a. Number of single-family residences: 2,906
   b. Number of multiple-family units: 3,504
   c. Number of mobile homes: 34
   d. Total housing units (a+b+c): 6,444

2. Vacancy rate expressed as a percent: For Rent/For Sale
   Census data for vacancy rates were only provided as a percentage of the overall housing stock (10.8%) (Source: U.S. Census 2000). Data on the amount of vacant units for rent and for sale were not available.

3. Housing characteristics (Describe average age, condition and type of housing impacted by the project):
   Housing that would be impacted by at least one of the alternatives includes six 2-bedroom condominiums. It is estimated that the housing in Solana Beach that would be impacted by the proposed project was built in the 1980s. The condition of this housing is characterized as good.

4. Average prices of typical single-family homes that are DS&S for the displacement properties are shown in Table 6.

4.2 BUSINESS AND NONPROFIT REPLACEMENT

1. Number of business sites that would be available for rent, purchase, or development:

	Alignment			
	A	**B**	**C**	**D**
Construction	N/A	N/A	N/A	N/A
Manufacturing	N/A	N/A	N/A	N/A
Retail/Service	17	17	17	17
Government	N/A	N/A	N/A	N/A
Nonprofit	N/A	N/A	N/A	N/A
Office	20	20	20	20
Total	37	37	37	37

Source: Grubb & Ellis/BRE Commercial (http://www.brecommercial.com/) viewed 6/8/07.

2. Discuss difficulties the businesses may encounter in finding replacement property because of:

   a. Replacement site requirements:
   Two businesses that would be impacted by the proposed project may have some difficulties finding adequate replacement sites. The dive shop in Oceanside that would be displaced has a pool onsite. Finding a relocation site with a pool, or a commercial lot configured to allow for pool construction, may be difficult. A gas station/auto service station in Carlsbad would also be displaced. Finding a relocation site that allows those services to take place onsite would be difficult. A review of available replacement business sites did not find any sites that would allow for a gas station/auto service station. The search for replacement sites for these businesses may need to be expanded to find suitable relocation sites.

   b. Lease rates or purchase price:
   Direct surveys, either by mail or personal contact, were not conducted during this draft study stage. Based on observations during field reconnaissance, it is possible that five businesses in Carlsbad may have difficulty finding comparably affordable relocation sites. It was assumed based on field reconnaissance that these businesses are over 15 years old and located in older commercial buildings that are likely to have below average lease rates. Consequently, it may be difficult for these businesses to find comparable affordable lease rates if they are to relocate.

   c. Financial capacity of the businesses to accomplish the move:
   Direct surveys, either by mail or personal contact, were not conducted during this draft study stage. Therefore, it is unknown if relocation would be financially infeasible for business owners displaced by the proposed project.

   d. Special services that may be needed to assist businesses to relocate (e.g., rezoning, reduced Conditional Use Permit (CUP) costs, advanced payments, construction of replacement site, professional services to plan the move or obtain replacement site, business loans, special consideration by the local agency):

   Two businesses that would be impacted by the proposed project may require special services to assist businesses to relocate. The dive shop in Oceanside that would be displaced has a pool onsite. Relocation of the dive shop may require a construction of a pool onsite as well as a CUP to allow for construction of a pool onsite. A gas station/auto service station in Carlsbad would also be displaced. This business may require professional services to move equipment in the auto service portion of the business, and may require construction of a replacement site if a suitable relocation resources does not exist to allow for a gas station.

3. Discuss issues the employees may have if the business relocates as planned:
   Direct surveys, either by mail or personal contact, were not conducted during this draft study stage. However, it is assumed that the main issue employees may face if their place of employment relocates is transportation to and from the new location. Due to potential constraints on relocation resources in the future, business may need to relocate to other parts of the existing jurisdiction or an entirely new jurisdiction all together. This would increase commute times for employees. This could potentially pose a hindrance for employees who rely on public transportation or walk to work.

4. Discuss issues the employees may have if the business cannot relocate as planned:
   Direct surveys, either by mail or personal contact, were not conducted during this draft study stage. However, it is assumed that the main issue employees may face if their place of employment cannot relocate is that the business would end operations and the employees would have to find new employment. Furthermore, it is unknown how easily these individuals could find employment in their chosen fields within the immediate area of their current place of employment.

4.3 RESIDENTIAL REPLACEMENT

1. Direct surveys, either by mail or personal contact, were not conducted during this draft study stage. Therefore, it is unknown if residents displaced by the proposed project are using Section 8 assistance. However, since Section 8 has been discontinued due to budget cuts in Carlsbad, and the only remaining potentially low-income residents (as defined by Section 8 program participation) are in Oceanside, it is not likely that the proposed project would displace a large number of residents using Section 8 assistance. This issue, however, would need to be reassessed during the final relocation study process.

2. The replacement neighborhood is homogeneous to the displacement area.

3. General condition of displacement neighborhood: Units displaced by the proposed project are similar to other units in the surrounding area, but slightly older than the overall community from which they are being displaced in Oceanside, Carlsbad, and Encinitas, where the median year structures were built was 1980, 1982, and 1977, respectively (U.S. Bureau of the Census 2000). The 47-unit apartment complex in Carlsbad contains forty-seven 2-bedroom apartments that are relatively lower in rent than the rest of the City of Carlsbad. Problems associated with relocating these 2-bedroom apartments are discussed above. The units displaced in Solana Beach are newer compared to the rest of Solana Beach, where the median year that structures were built is 1975.

4. Condition of units being displaced: Very good ☐ Good ☒

5. Compared to condition of units in replacement area: Average ☒ Fair/Poor ☐

6. Number of mobile home parks directly impacted by the project: 0
   Number of mobile homes directly impacted by the project within the park: 0
   Number of mobile homes directly impacted by the project that are not in a mobile home park: 0

4.4 COMPARATIVE DATA

Oceanside	Displacements	Replacement Area[1]
Total Housing Units	45	59,498
% Owner Occupied	24.4%	62.1%
% Renter Occupied	75.6%	37.9%
Total Housing Units Vacant	All potentially impacted units appeared to be occupied during field reconnaissance.	3,102
Vacancy Rate	0.0% based on field reconnaissance.	5.2%
Housing Units for Sale	One SFR was observed to be for sale during field reconnaissance.	See Table 6
Housing Units for Rent	No impacted residential units were observed to be for rent during field reconnaissance.	See Table 6
Persons per Household	2.83	2.83
Median Housing Value	Not Available	$185,400[2]

[1] The DRIR form calls for similar data for the "Project Area." However, appropriate data sources for the "Project Area" were not available since the boundaries of census block groups do not accurately reflect the boundaries of the project area. Therefore, this data has not been included in this analysis.
[2] Median Housing value was taken from 2000 Census. This value may be low relative to existing median housing value due to rising values of housing since 2000.

Carlsbad	Displacements	Replacement Area[1]
Total Housing Units	62	33.717
% Owner Occupied	19.4%	67.3%
% Renter Occupied	80.6%	32.7%
Total Housing Units Vacant	All potentially impacted units appeared to be occupied during field reconnaissance.	2,231
Vacancy Rate	0.0% based on field reconnaissance.	6.6%
Housing Units for Sale	No impacted residential units were observed to be for sale during field reconnaissance.	See Table 6
Housing Units for Rent	No impacted residential units were observed to be for rent during field reconnaissance.	See Table 6
Persons per Household	2.46	2.46
Median Housing Value	Not Available	$308,800[2]

[1] The DRIR form calls for similar data for the "Project Area." However, appropriate data sources for the "Project Area" were not available since the boundaries of census block groups do not accurately reflect the boundaries of the project area. Therefore, this data has not been included in this analysis.
[2] Median Housing value was taken from 2000 Census. This value may be low relative to existing median housing value due to rising values of housing since 2000.

Encinitas	Displacements	Replacement Area[1]
Total Housing Units	2	23,867
% Owner Occupied	50.0%	64.1%
% Renter Occupied	50.0%	35.9%
Total Housing Units Vacant	All potentially impacted units appeared to be occupied during field reconnaissance.	1,033
Vacancy Rate	0.0% based on field reconnaissance.	4.3%
Housing Units for Sale	No impacted residential units were observed to be for sale during field reconnaissance.	See Table 6
Housing Units for Rent	No impacted residential units were observed to be for rent during field reconnaissance.	See Table 6
Persons per Household	2.52	2.52
Median Housing Value	Not Available	$343,500[2]

[1] The DRIR form calls for similar data for the "Project Area." However, appropriate data sources for the "Project Area" were not available since the boundaries of census block groups do not accurately reflect the boundaries of the project area. Therefore, this data has not been included in this analysis.

[2] Median Housing value was taken from 2000 Census. This value may be low relative to existing median housing value due to rising values of housing since 2000.

Solana Beach	Displacements	Replacement Area[1]
Total Housing Units	6	6,449
% Owner Occupied	66.7%	62.3%
% Renter Occupied	33.3%	37.7%
Total Housing Units Vacant	All potentially impacted units appeared to be occupied during field reconnaissance.	694
Vacancy Rate	0.0% based on field reconnaissance.	10.8%
Housing Units for Sale	No impacted residential units were observed to be for sale during field reconnaissance.	See Table 6
Housing Units for Rent	No impacted residential units were observed to be for rent during field reconnaissance.	See Table 6
Persons per Household	2.25	2.25
Median Housing Value	Not Available	$450,000[2]

[1] The DRIR form calls for similar data for the "Project Area." However, appropriate data sources for the "Project Area" were not available since the boundaries of census block groups do not accurately reflect the boundaries of the project area. Therefore, this data has not been included in this analysis.

[2] Median Housing value was taken from 2000 Census. This value may be low relative to existing median housing value due to rising values of housing since 2000.

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CHAPTER 5.0
RELOCATION RESOURCES

5.1 ADEQUATE RESOURCES

Adequate resources (availability, funds, staffing, time) exist for all displacees except (list):

Owner occupied SFR	Y[1]	Tenant occupied multi-res	Y[2]
Owner occupied duplex	Y	Tenant occupied sleeping rooms	Y
Owner occupied multi-res	Y	Mobile homes	Y
Tenant occupied SFR	Y	Nonresidential	Y[3]
Tenant occupied duplex	Y	Nonprofit	Y

[1] Adequate relocation resources exist for all owner occupied SFR displacees except possibly for an 8-bedroom SFR in Oceanside.
[2] Adequate relocation resources exist for all tenant occupied multi-family residence displacees except possibly for a 47-unit apartment complex in Carlsbad.
[3] Adequate relocation resources exist for all business displacees except possibly for a dive shop in Oceanside and a gas station/auto service station in Carlsbad.

Funds and staffing resources should be adequate to relocate these displacees if DS&S housing exists during the relocation phase and/or sufficient lead time is provided to relocate displacees from these locations. Additionally, relocation resources may exist in the displacees neighboring replacement neighborhood as well. Relocation resources for each displacee are not limited to the community in which they are currently located. For example, adequate relocation resources for residents displaced from Carlsbad may be found in Oceanside, Encinitas, or Solana Beach if such resources can not be found in Carlsbad.

5.2 REPLACEMENT AREA FOR RELOCATION RESOURCES

The replacement area chosen and used as a basis for relocation resources includes the jurisdiction of Oceanside, Carlsbad, Encinitas, and Solana Beach. These jurisdictions also represent the Displacement Area. These jurisdictions were selected because relocating displacees within the communities in which they currently reside would reduce the hardship associated with relocation, including community cohesion, commute times, etc.

5.3 MARKET AVAILABILITY

Market availability is expected to remain adequate through the time of displacement. Each jurisdiction is required to prepare housing elements to ensure that adequate housing resources are planned for the future to meet projected housing requirements. However, there is some market volatility within the southern California housing market that makes housing availability somewhat unknown. Nonetheless, it is likely that market availability would remain adequate through the time of displacement.

CHAPTER 6.0
RELOCATION PROBLEMS AND PROGRAMS

6.1 RELOCATION PROBLEMS

Relocation problems are discussed in detail, especially for the following categories. Just because no one fits one of the categories below, does NOT mean you DON'T have a problem.

Elderly[1]	Yes ☐	No ☒	Minorities	Yes ☐	No ☒
Low Income (30%)	Yes ☐	No ☒	Overcrowded Residence	Yes ☐	No ☒
Low Income (Poverty)	Yes ☐	No ☒	Handicapped[1]	Yes ☐	No ☒
Last Resort Housing Const	Yes ☐	No ☒	Minority Business	Yes ☐	No ☒
Marginal Business[1]	Yes ☐	No ☒	Other	Yes ☐	No ☒
Lack of Availability[2]	Yes ☐	No ☒			

[1] Special advisory assistance will be needed.
[2] Adequate relocation resources exist for all owner occupied SFR displacees except for an 8-bedroom SFR in Oceanside. Adequate relocation resources exist for all tenant occupied multi-family residence displacees except for a 47-unit apartment complex in Carlsbad. Adequate relocation resources exist for all business displacees except for a dive shop in Oceanside and a gas station/auto service station in Carlsbad.

6.2 HOUSING IMPACT

This project would not significantly impact the local housing stock for the community except as outlined below. There may be a significant effect on the local community housing stock caused by alignment(s):

A__X____ B__X____ C_____ D_____

Alignments A and B may impact the local housing stock because it may be difficult to find adequate relocation resources for an 8-bedroom SFR in Oceanside and a 47-unit apartment complex in Carlsbad.

6.3 CONCLUSION

Adequate relocation resources exist for the majority of displacees. However, there are several displacements that may pose some difficulties in finding adequate relocation resources. Alignments A and B would displace a 47-unit apartment complex in Carlsbad. Relocation

resources of comparable affordability for residents within the 47-unit apartment complex in Carlsbad may be difficult to find. Additionally, all four alignments would impact an 8-bedroom SFR in Oceanside. A review of available replacement housing did not find any 8-bedroom houses in Oceanside or any of the other relocation neighborhoods. All four alignments would displace two businesses that may have some difficulties finding adequate replacement sites. The dive shop in Oceanside that would be displaced has a pool onsite. Finding a relocation site with a pool, or a commercial lot configured to allow for pool construction, may be difficult. A gas station/auto service station in Carlsbad would also be displaced. Finding a relocation site that allows those services to take place onsite would be difficult. A review of available replacement business sites did not find any sites that would allow for a gas station/auto service station.

In conclusion, Caltrans will need to utilize the State's relocation program, including LRH, to relocate these displacees. Advisory assistance, replacement site availability, and/or payments as applicable under the program, may be needed to effect the relocations. Adequate project funding, staffing and lead-times are also resources that should be available and fully utilized to ensure successful relocations.

CHAPTER 7.0
REFERENCES

Backpage.com

2007 http://sandiego.backpage.com/ viewed 6/11/07.

City of Carlsbad

2007 City of Carlsbad Housing and Redevelopment Department website http://www.carlsbadca.gov/housing/ viewed 6/8/07.

2007 Personal communication with City of Carlsbad Housing and Redevelopment Department staff, 6/8/07.

Craigslist.org

2007 http://sandiego.craigslist.org/ viewed 6/8/07 and 6/11/07.

Grubb & Ellis / BRE Commercial

2007 http://www.brecommercial.com/ viewed 6/8/07.

Multiple Listings Service

2007 http://www.sandiegomlsaccess.com/ viewed 6/8/07.

U.S. Bureau of the Census

2000 Census Data available at http://factfinder.census.gov/home/saff/main.html?_lang=en.

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APPENDIX B

FARMLAND CONVERSION IMPACT RATING

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 7/24/07	4. Sheet 1 of 1
1. Name of Project I-5 North Coast Corridor	5. Federal Agency Involved Federal Highway Administration	
2. Type of Project Highway Improvements Project	6. County and State San Diego, CA	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS 7/24/07	2. Person Completing Form C. Calvert
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated 69,537 / Average Farm Size 80
5. Major Crop(s) Nursery, Flower, Fruit/Nut	6. Farmable Land in Government Jurisdiction Acres: 112,974 % 4	7. Amount of Farmland As Defined in FPPA Acres: 91,812 % 4
8. Name Of Land Evaluation System Used CA - Storie System	9. Name of Local Site Assessment System None	10. Date Land Evaluation Returned by NRCS 7/26/07

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	1,630	1,616	1,628	1,604
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0	0		
C. Total Acres In Corridor	1,630	1,616	1,628	1,604
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	561	551	558	547
B. Total Acres Statewide And Local Important Farmland	418	416	418	414
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	1	1	1	1
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	Data Not Available			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	51.73	51.76	51.74	51.81

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points				
1. Area in Nonurban Use	15	0	0	0	0
2. Perimeter in Nonurban Use	10	5	5	5	5
3. Percent Of Corridor Being Farmed	20	0	0	0	0
4. Protection Provided By State And Local Government	20	20	20	20	20
5. Size of Present Farm Unit Compared To Average	10	0	0	0	0
6. Creation Of Nonfarmable Farmland	25	0	0	0	0
7. Availablility Of Farm Support Services	5	5	5	5	5
8. On-Farm Investments	20	15	15	15	15
9. Effects Of Conversion On Farm Support Services	25	0	0	0	0
10. Compatibility With Existing Agricultural Use	10	5	5	5	5
TOTAL CORRIDOR ASSESSMENT POINTS	160	50	50	50	50
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	51.73	51.76	51.74	51.81
Total Corridor Assessment (From Part VI above or a local site assessment)	160	50	50	50	50
TOTAL POINTS *(Total of above 2 lines)*	260	~~50~~ 101.73	~~50~~ 101.76	~~50~~ 101.74	~~50~~ 101.81

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
This will be determined through the NEPA process	~~24 to 27~~ 1,604 to 1,630		YES ☐ NO ☑

5. Reason For Selection:

The selected alternative will be determined at at later date, based on a thorough analysis of all issue areas, including impacts to wetlands and biological resources, the local community, traffic, air/noise, and others.

Kelly Finn
Signature of Person Completing this Part:

DATE 8/1/07

NOTE: Complete a form for each segment with more than one Alternate Corridor