Encanto Neighborhoods



Community Plan Update

EXISTING CONDITIONS REPORT

MARCH 2013

Prepared for

City of San Diego

Prepared by

DYETT & BHATIA
Urban and Regional Planners

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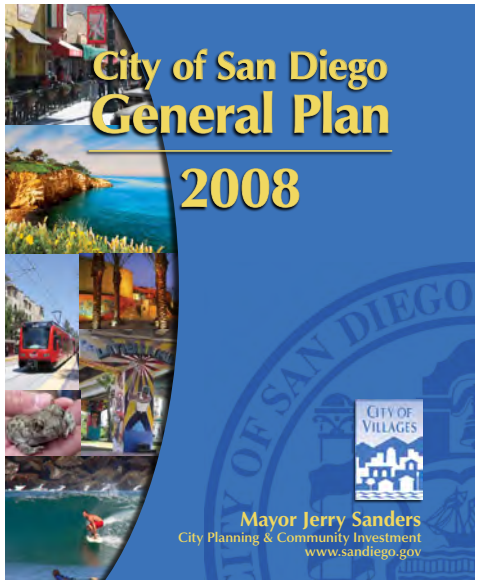
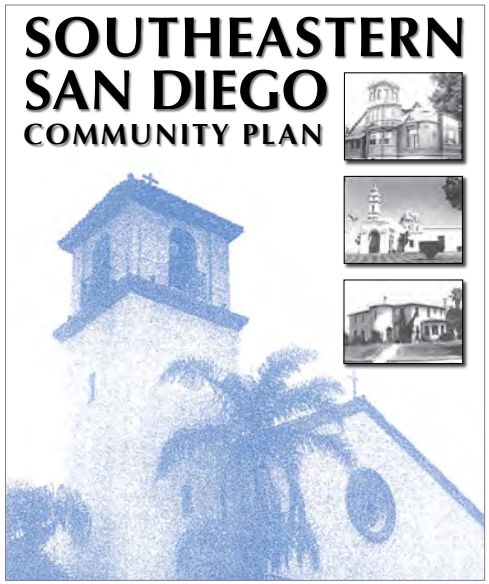
1 INTRODUCTION

This report provides a baseline of existing conditions, opportunities, and challenges in the Encanto Neighborhoods Community Planning Area. It explores a range of issues that affect quality of life, including land use, transportation, urban design, public facilities, and the natural environment. The final chapter synthesizes these findings to identify a set of key issues that will be addressed during the planning process. This report represents a first step in the process of updating the Encanto Neighborhoods Community Plan and will provide input into development of concepts, choices, and ultimately preparation of the Plan update.





The General Plan provides a framework for development citywide. The current Southeastern San Diego Community Plan identifies more detailed land use designations and policies to address community concerns.

1.1 Community Plan Purpose and Process

General Plan Context

The City of San Diego General Plan provides the broad citywide vision and development framework. Detailed land use designations and policies specific to different city districts are provided within the community plans.

The San Diego General Plan, adopted in 2008, is a comprehensive "blueprint" for San Diego's growth over the next 20 years. Central to the plan is the "City of Villages" strategy, which focuses growth into pedestrian-friendly, mixed-use activity centers linked to an improved regional transit system. Infill development is promoted to conserve regional open space, promote transit, and revitalize existing communities. The General Plan identifies over 50 community planning areas in the city—including Encanto Neighborhoods—for which community plans are to be developed or updated to provide more localized policies.

Purpose

The current Southeastern San Diego Community Plan provides a framework to guide development in Southeastern San Diego, including the Encanto Neighborhoods. Originally adopted in 1969, it was comprehensively updated in 1987 and has undergone several amendments in the intervening years. The Community Plan update seeks to bring the plan up-to-date by:

- Taking stock in what has been constructed and implemented;
- Analyzing changes in demographics that may affect land use needs;
- Understanding demand for housing and commercial development;
- Working with community members and stakeholders to determine key issues of concern, desires, and preferences to establish a vision and objectives for the plan update; and
- Ensuring that policies and recommendations remain in harmony with the General Plan and citywide policies.

This update process will result in a new Community Plan for the Encanto Neighborhoods specifically; in instances where existing policies continue to reflect existing community needs, these will be retained.

Process

The Community Plan update process will unfold in five phases:

- **Phase 1** includes evaluation of existing conditions and trends (this report).
- **Phase 2** will include community visioning and issue identification, which will be undertaken collaboratively with community members and stakeholders, and will complement the Phase 1 work.
- **Phase 3** will include land use and transportation alternatives that will explore various ways in which the vision could be achieved.
- **Phase 4** will provide community members the opportunity to compare and contrast alternatives and identify a preferred option. This preferred plan will provide the bridge to development of detailed policies and proposals in the Community Plan.

- **Phase 5** will include preparation of the draft Community Plan, which will be refined with community input before it is presented to the Planning Commission and then City Council for adoption.

Community Outreach for Plan preparation

At the crux of the Community Plan update is public involvement. During each phase of the process, community members are being asked for ideas and input through a variety of activities and forums, including:

- Encanto Neighborhoods Community Planning Group meetings
- Community-wide workshops
- Community "audits" (interactive walking tours)
- Community survey
- Stakeholder interviews
- Project website: http://www.sandiego.gov/planning/community/profiles/southeasternsd/
- Decision-maker workshops/hearings

Meetings and events will allow opportunities for community members to share their ideas, concerns, and preferences. Educational activities will be designed to provide learning opportunities to improve mobility, housing, recreation, access and quality of life issues for residents, businesses and visitors. To ensure that outreach activities reach the broad spectrum of the population, outreach materials will be available in English and Spanish, and bilingual translation will be available at community workshops.

Summaries of each meeting or event that synthesize major themes will be prepared, and provided online to report back to the community and keep a record of community input and policy direction for development of the Community Plan.

1.2 Regional Location and Planning Boundaries

Regional Location

The Encanto Neighborhoods are located east of Downtown, proximate to major employment and commercial centers in the South Bay and Downtown, as shown in Figure 1-1, and linked to them by freeways, trolleys and buses. Encanto is surrounded by several other community planning areas: Mid-City to the north, Southeastern San Diego to the west, and Skyline-Paradise Hills to the southeast. The cities of Lemon Grove and National City share boundaries to the east and south, respectively. The community is surrounded on two sides by freeways, providing good access to local and regional designations.

Planning Boundaries

The Encanto Neighborhoods Community Planning Area lies south of State Route 94 (SR-94) and east of Interstate 805 (I-805). To the southeast, Encanto is distinguished from Skyline-Paradise Hills along Woodman Street. The city limits of Lemon Grove define the northeast boundary of the Planning Area roughly along 69th Street, while the city limits of National City define the western half of the Planning Area's the southern boundary. Plaza Boulevard marks the southern boundary to

The updated Community Plan will address a range of topics, including housing (top), community facilities (middle), and transportation (bottom).

FIGURE 1-1: Regional Location

FIGURE 1-2: Planning Area Boundary

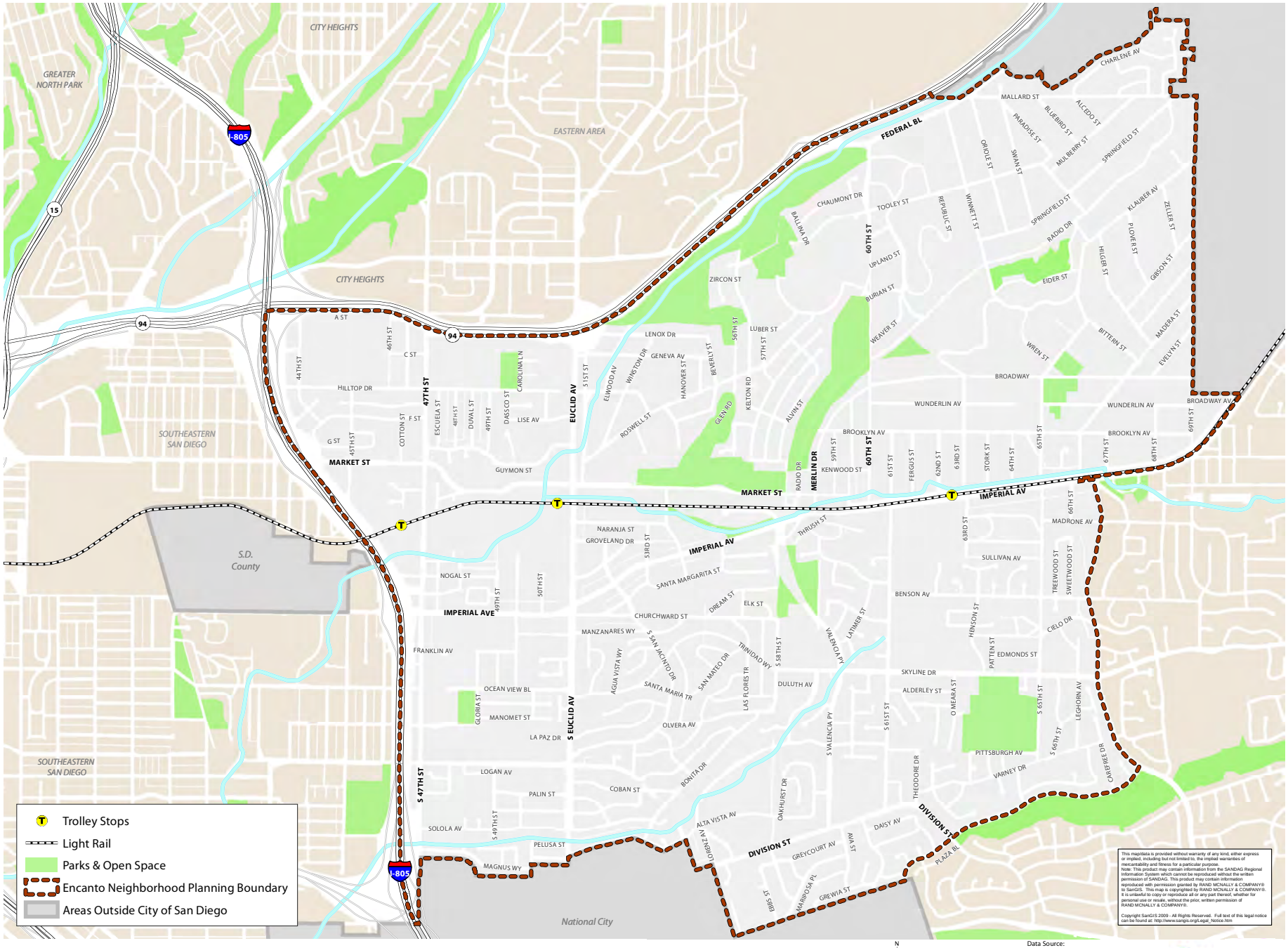
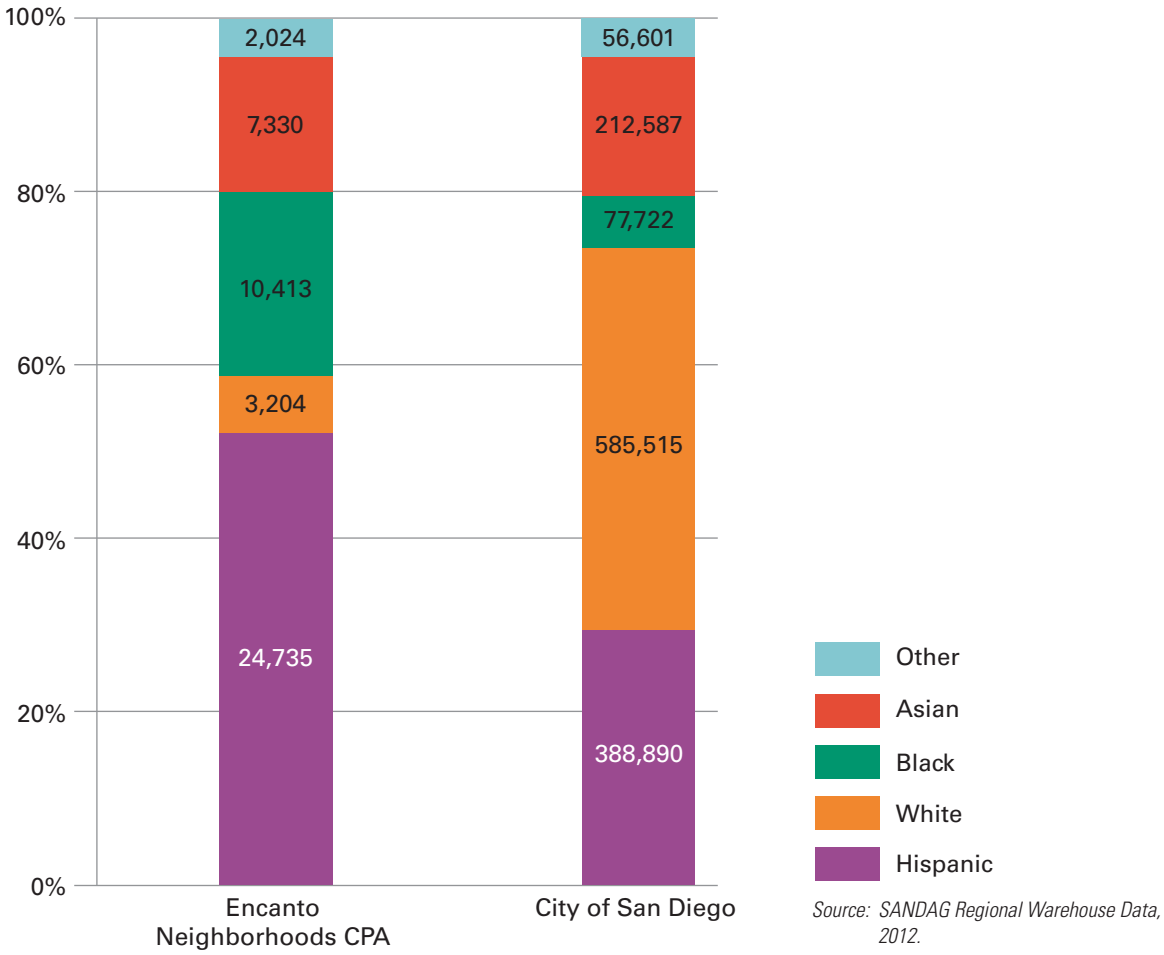


TABLE 1-1: HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS (2012)		
CHARACTERISTIC	**ENCANTO NEIGHBORHOODS DIEGO PLANNING AREA**	**CITY OF SAN DIEGO**
Population	47,706	1,321,315
Households	12,688	510,160
Median Age	30	34
Median Household Income (2010)	$46,678	$66,652

Source: SANDAG Regional Warehouse Data, 2012.

CHART 1-1: RACE AND ETHNICTY IN ENCANTO NEIGHBORHOODS AND SAN DIEGO (2012)



Source: SANDAG Regional Warehouse Data, 2012.

the east, as shown in Figure 1-2. The Planning Area encompasses 3,821 acres. Whereas the current Southeastern San Diego Community Plan is composed of both the Southeastern San Diego and Encanto Neighborhoods Planning Areas, the update will only address the Encanto Neighborhoods boundaries identified here.

1.3 Encanto Neighborhoods Demographic Overview

Table 1-1 provides a snapshot of demographic characteristics in the Planning Area, as well as the city as a whole for comparison purposes. The Encanto Neighborhoods Community Planning Area is home to over 47,000 residents. Compared to the city overall, Encanto Neighborhoods has a somewhat younger population, with a median age of 30 years. Approximately 30 percent of Encanto's population is under 18 years old. Households in Encanto also have substantially lower incomes: less than $47,000 compared to nearly $67,000 citywide. According to the 2011 American Community Survey (Five-Year Estimates), two-thirds of the adult population (25 and over) have completed high school.

Chart 1-1 illustrates the diversity of race and ethnicity in the community. Approximately 52 percent of residents in Encanto are Hispanic compared with 29 citywide; 22 percent of Encanto residents are Black, compared with six percent citywide. Additionally, 15 percent of residents in Encanto are Asian, and seven percent are White. According to the 2011 American Community Survey (Five-Year Estimates), 57 percent of the population speaks a language other than English at home (primarily Spanish), including 32 percent who speak English "less than well."

1.4 Existing Plans and Efforts Underway

Southeastern San Diego Community Plan

The current Southeastern San Diego Community Plan provides a framework to guide development in the Southeastern community. Originally adopted by City Council in 1969 and updated in 1987, the Plan identifies key issues, goals, and implementation actions for the Southeastern San Diego and Encanto Neighborhoods.

The Plan addresses the following "key issues" in the community through its policies and regulations: need for employment opportunities and commercial shopping; concerns about density; community design and appearance; lack of connectively on the street system; adequate public facilities including for recreation and education; and the disproportionate number of assisted living housing projects and social services in the community.

Community Plan land use designations, illustrated in Figure 1-3 and described in Table 1-2, address these issues and seek to promote a balance of land uses. As shown in the figure, the majority of the Planning Area is designated as Single-Family Residential. However, west of Euclid Avenue and along Imperial Avenue, much of the Planning Area is designated for Multi-Family Residential and, to a lesser extent, for commercial uses. Institutional and Schools/Public Facilities are designated for City-owned and other public/quasi-public facilities.

TABLE 1-2: EXISTING SOUTHEASTERN SAN DIEGO COMMUNITY PLAN LAND USES

LAND USE DESIGNATION	DESCRIPTION
Residential	
Single Family (5-10 du/ac)	Intended for residential uses only. Residential designations distinguish between housing type—single-family versus multi-family—and density (measured as dwelling units per acre).
Single Family (10-15 du/ac)	
Multi-Family (15-17 du/ac)	
Multi-Family (15-30 du/ac)	
Non-Residential	
Business Park / Office	Allows office, research and development, and light manufacturing uses.
Community/ General Commercial	Provides for community shopping facilities (e.g. Otto Square)
Neighborhood Commercial	Accommodates local convenience shopping. Housing is only allowed within a mixed-use setting.
Industrial	Intended for industrial uses and office parks.
Specialized Commercial	Accommodates specific commercial uses related to an adjacent use (e.g. cemetery-related services)
Multiple Use	Accommodates commercial or residential uses. Intended to provide a buffer between residential and commercial districts.
Public/Quasi-Public	
Cemetery	Designates the major cemeteries.
Institutional	Designates public or semi-public facilities.
Park	Includes community parks, neighborhood parks, mini-parks, plazas, etc.
Open Space	Provides for preservation of land that has distinctive scenic, natural or cultural features.
Schools/Public Facilities	Designates schools and other education facilities.

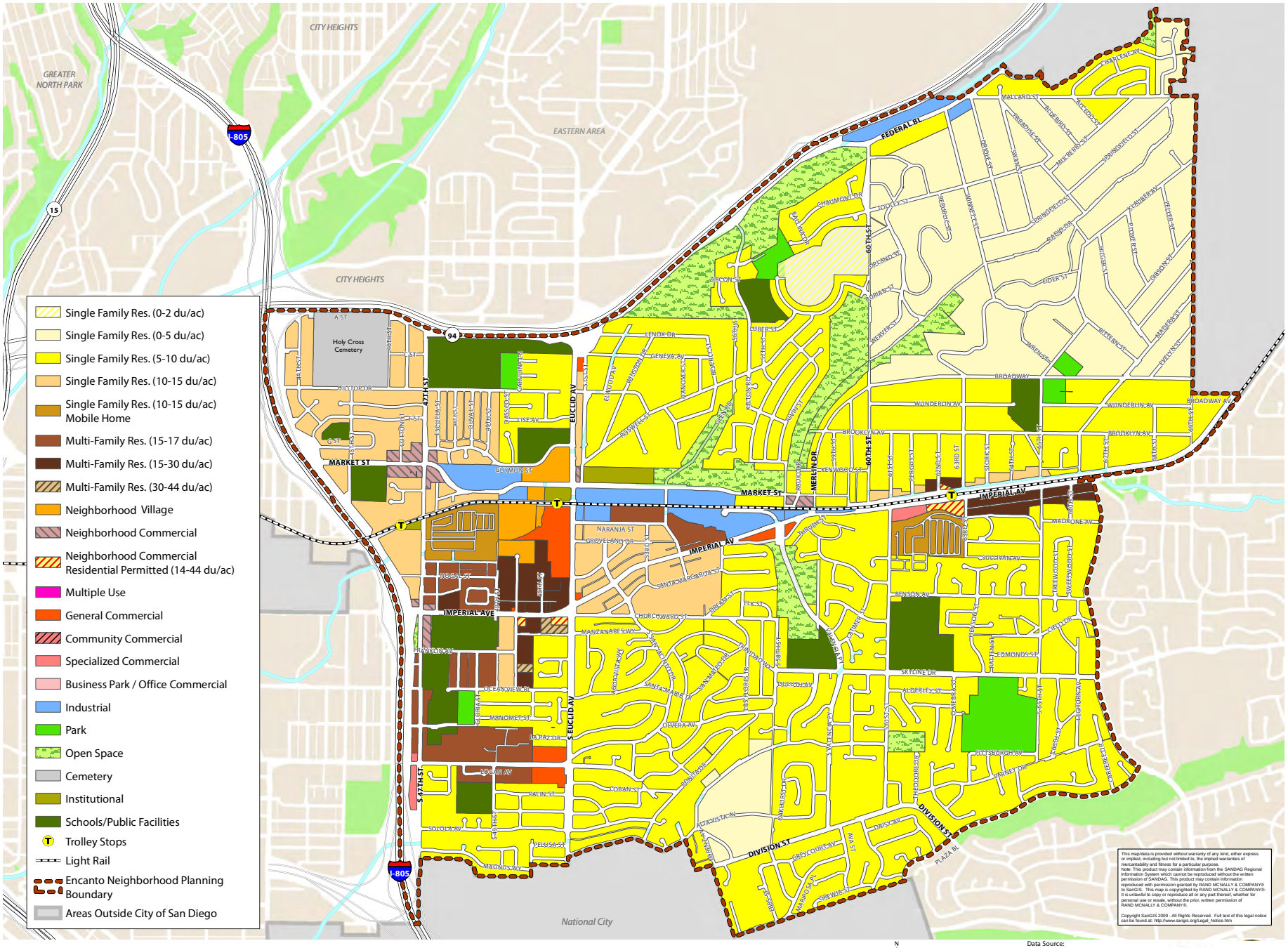
Source: City of San Diego General Plan, 2008; and Southeastern San Diego Community Plan. Adopted 1987. Amended 2009.

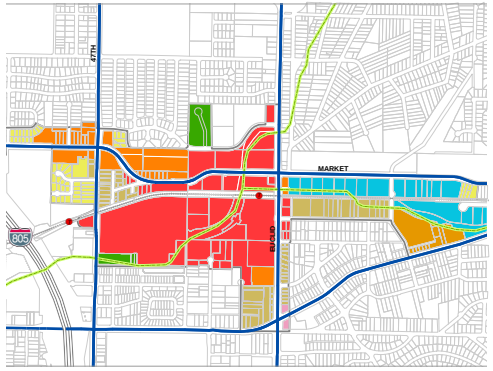
Most of the Planning Area is designated as Single-Family Residential, particularly east of Euclid Avenue (left, middle). Multi-Family Residential designations predominate west of Euclid Avenue and south of the trolley line (bottom).

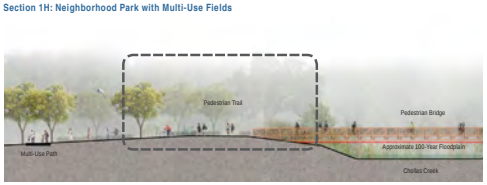
Commercial uses are limited and are concentrated in centers, such as Market and 47th streets (left), Market Creek Plaza (middle), and Imperial Avenue and 62nd Street (right).

Open spaces and parks, such Emerald Hills Neighborhood, are also designated land uses in the existing Community Plan.

FIGURE 1-3: Community Plan Land Use







The Euclid+Market Land Use and Mobility Master Plan identifies a land up plan (top) that balances and distributes a mix of land uses to support a "complete" community. It also illustrates ways to improve trail connections along Chollas Creek and between the creek and community uses (bottom).

Area Plans and Studies

In addition to the current Southeastern San Diego Community Plan, there are several other studies and adopted plans that provide more detail on specific topics (e.g. historic resources) or subdistricts (e.g. Euclid & Market Master Plan). These plans are summarized below; boundaries for City plans that have been adopted or are underway are illustrated in Figure 1-4.

Euclid+Market Land Use and Mobility Master Plan (Underway)

The Euclid + Market Land Use and Mobility Plan (EMLUMP) seeks to promote improved mobility, encourage economic development, and enhance quality of life. The plan will recommend physical and policy actions related to land use and transportation in the 227-acre area in the vicinity of the Village at Market Creek and the 47th Street and Euclid Avenue Trolley Stations. These policies and programs will be included in and implemented by the Encanto Neighborhoods Community Plan. The public review draft was released in February 2013.

Euclid Gateway Master Plan (Underway)

The Euclid Gateway Master Plan has recently been initiated for the segment of Euclid Avenue extending from State Route 94 south to Guymon Street in the Encanto Planning Area. A major purpose of the Euclid Gateway Master Plan is to recommend an appropriate mix of land uses and densities, and balance the needs of all modes of travel along the corridor, resulting in a welcoming roadway that enhances connectivity to residential areas, schools, parks, recreation, shopping and other commercial activities. The Euclid corridor effort is also intended to develop a "gateway" into the transit oriented development center at Euclid and Market, supporting higher-density infill development and otherwise advancing the City's efforts to revitalize this urbanized area in an innovative and sustainable manner.

This planning effort is being coordinated with the ongoing Encanto Community Plan update and concurrent study of traffic safety improvements for the State Route 94 interchange at Euclid Avenue, and is intended to complement recent efforts for the Euclid + Market Land Use and Mobility Plan.

Multi-Family Development Guidelines

Adopted in 2009, the Multi-Family Development Guidelines seeks to enable multi-family residential and mixed-use buildings and outdoor spaces that contribute to a dynamic, environmentally sustainable, and visually rich urban environment that promotes social interaction, fosters community pride, and instills a sense of safety and security. The guidelines address site planning, architecture, and landscaping. They are intended to be used within the context of other regulatory controls, including the General Plan, Community Plan, and Planned District Ordinance. They may be used by property owners, developers, and other project applicants to clarify expectations and exemplify best practices to meet requirements. They may also be used by the Planning Group and community at-large to evaluate project applications.

Chollas Creek Enhancement Program

Adopted in 2002, the Chollas Creek Enhancement Program expresses the community's vision for Chollas Creek and includes detailed policies, funding strategies, and a phasing plan to guide the plan's implementation. Chollas Creek is the natural drainage system that traverses the Planning Area. The Emerald Hills Branch runs along SR-94, the Encanto Branch along Imperial Avenue, and the South Branch from Market Creek Plaza southwest toward Southeastern San Diego.

In most sections, Chollas Creek today is an urban creek with little native vegetation and is armored or channelized with concrete or culverts. However, many creek segments, particularly along the South Branch, run within an earthen channel. During heavy winter storms, areas adjacent areas to the Creek may be subject to flooding as discussed in Chapter 7.

Restoring the creek's natural condition and enhancing its corridors with linear parks and trails has been City policy since the late 1970s. The Enhancement Program envisions a linear park encompassing the system's multiple branches, bicycle and pedestrian linkages, a return to the natural state of the creek where feasible, and development that is integrated with the creek and accessible open space to create attractive sustainable spaces. Market Creek Plaza provides an example of a development project that is designed to protect, highlight, and celebrate Chollas Creek.

Multiple Species Conservation Program, City of San Diego Subarea Plan

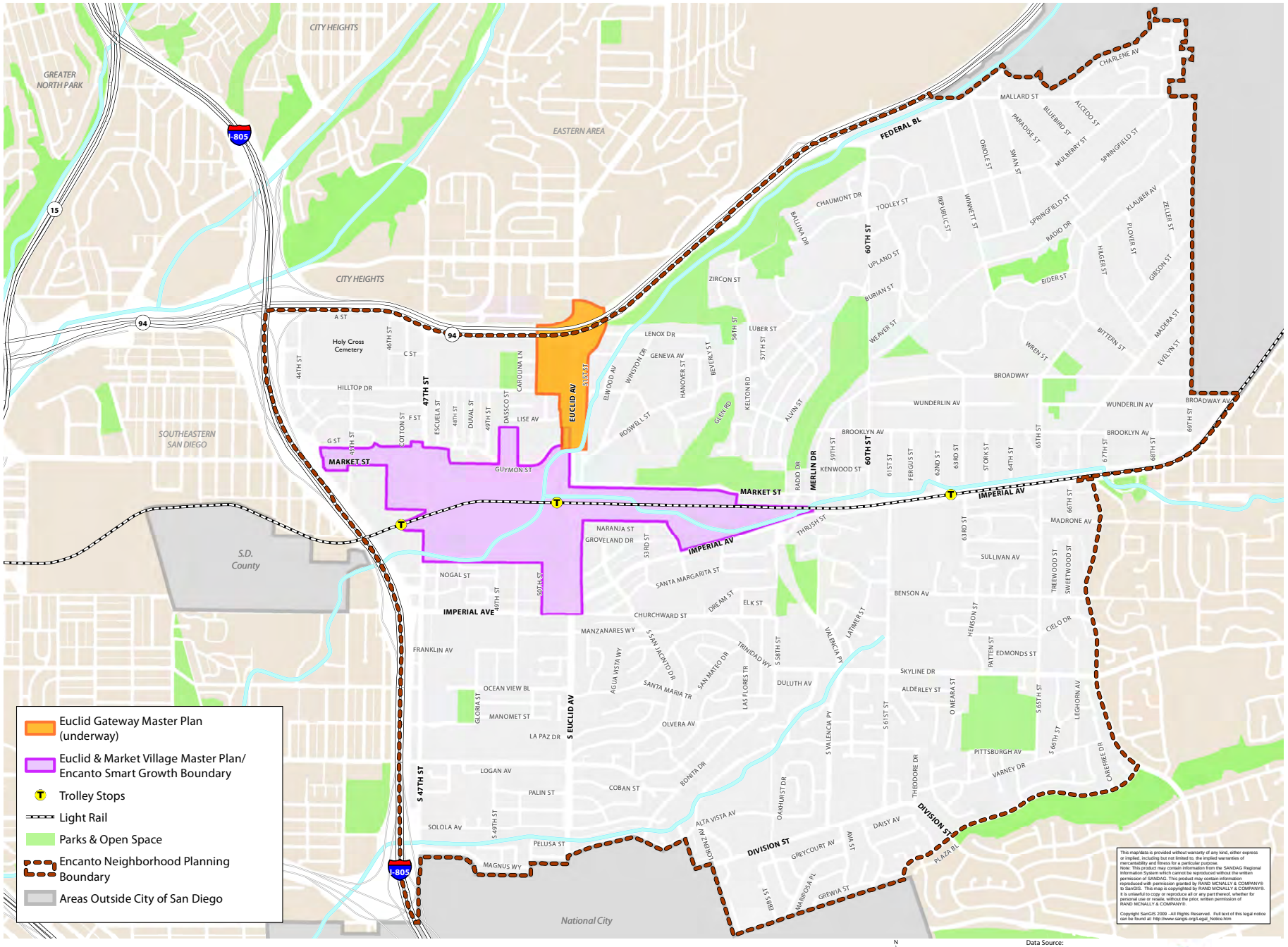
The Multiple Species Conservation Program (MSCP), involving the City of San Diego and other jurisdictions, is intended to support approximately 85 species by conserving core biological resource areas. Local jurisdictions implement their portions of the MSCP Plan through subarea plans. Together, these plans serve as a multiple species Habitat Conservation Plan pursuant to the federal Endangered Species Act, and a Natural Community Conservation Program (NCCP) Plan pursuant to the California NCCP Act of 1991 and the state Endangered Species Act.

The City of San Diego MSCP Subarea Plan, adopted in 1997, covers approximately 56,831 acres, and includes both publicly-owned and private lands. The Plan anticipates that 94 percent of included public lands would be preserved. Some private lands would be completely preserved through agreements. On other private lands included in the Plan, development is limited to 25 percent of the parcel, and directed to areas of lower quality habitat and/or areas considered less important to the long-term viability of the MHPA. Compatible land uses may include passive recreation, utility lines and roads, essential public facilities, and limited low density residential uses.[1]

1 City of San Diego, *City of San Diego MSCP Subarea Plan,* 1997.

Access and amenity improvements to Chollas Creek near Euclid Avenue and Market Street exemplify the types of improvements contemplated in the Chollas Creek Enhancement Program.

FIGURE 1-4: Existing Plans and Studies



Land Development Code

The City's Land Development Code documents the procedures and regulations for development within the city. This includes regulations for base zones, design, landscaping, and signs, among other development standards.

Southeastern San Diego Planned District Ordinance

The Southeastern San Diego Planned District Ordinance (Chapter 15, Article 19 of the City of San Diego Municipal Code) implements zoning in the Encanto Neighborhoods. The ordinance defines 28 zoning designations for the Encanto area, as shown in Figure 1-5 and Table 1-3. While nearly all parcels in the Planning Area are designated through the Planned District Ordinance, some sites are identified with base zones (Chapter 13).

Approximately 78 percent of the total land area is designated for single-family residential uses. Multi-family zones are concentrated west of Euclid Avenue and along Imperial Avenue. A limited amount of commercial development is zoned along Market Street and Euclid and Imperial avenues.

Environmentally Sensitive Lands

Environmentally Sensitive Lands (ESL) are established in Chapter 14, Article 3 of the Municipal Code. These regulations are intended to protect, preserve and, where damaged restore, the environmentally sensitive lands of San Diego and the viability of the species supported by those lands. The regulations aim to foster development that retains biodiversity and interconnected habitats, maximizes physical and visual public access to and along the shoreline, and reduces hazards due to flooding in specific areas while minimizing the need for construction of flood control facilities. They are accompanied by Biology, Steep Hillside, and Coastal Bluffs and Beaches Guidelines to serve as standards for the determination of impacts and mitigation under the California Environmental Quality Act and the California Coastal Act.

The standards implement the Multiple Species Conservation Program (MSCP) by placing priority on the preservation of biological resources within the Multiple Habitat Planning Area, as identified in the City of San Diego Subarea Plan.

Zoning regulations control the type, use, bulk, height, landscaping, and parking, that can be found on a site. They can also separate uses that may not be compatible (top), specify setbacks (middle), and control signage.

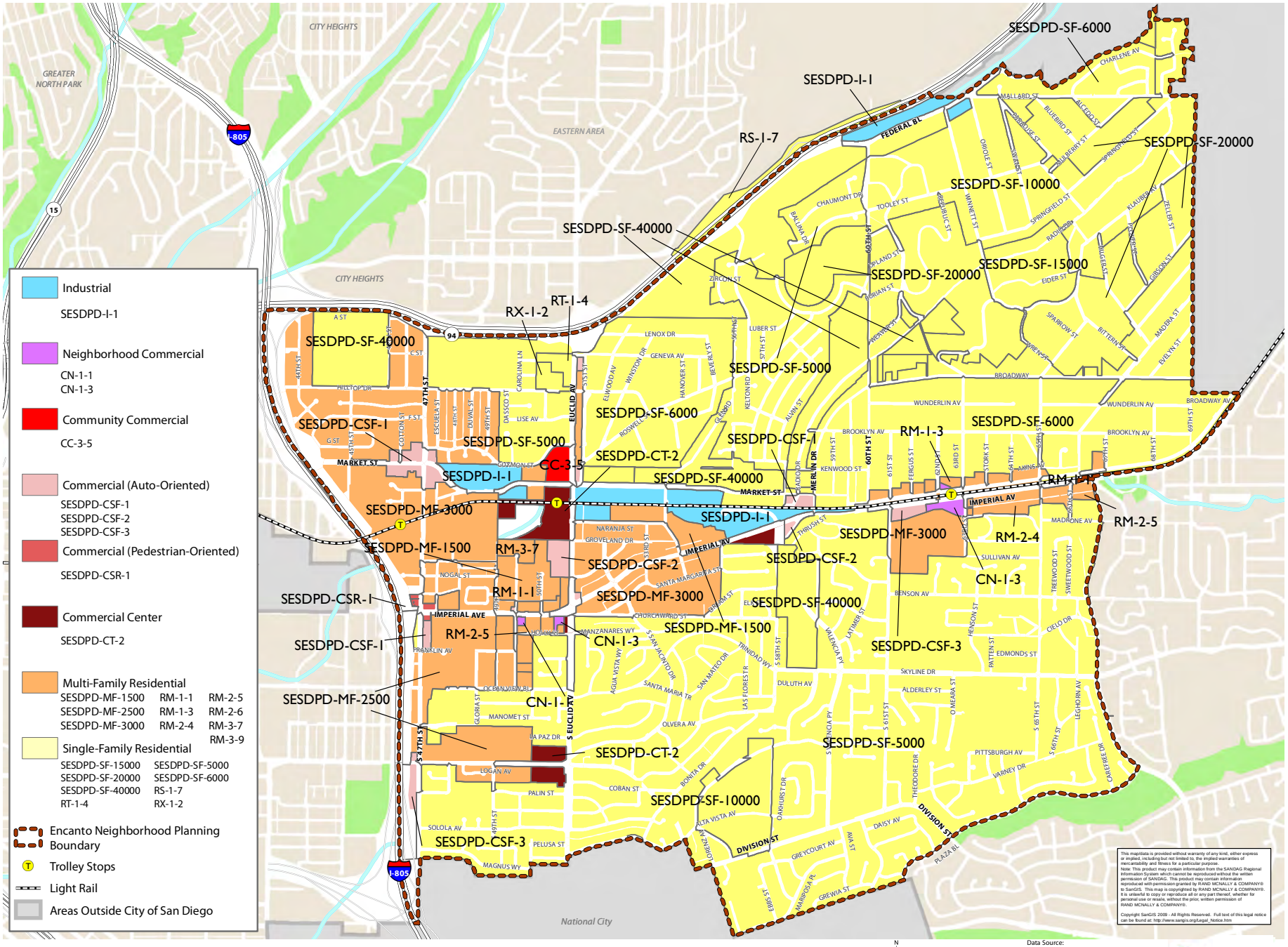
TABLE 1-3: EXISTING ZONING DESIGNATIONS

ZONING DESIGNATION	MAX. DENSITY (DU/AC)	MAX. INTENSITY (FAR)	MAX. BUILDING HEIGHT (FT.)	DESCRIPTION
OP-1-1	n/a	n/a	n/a	Developed public parks and recreation facilities.
SESDPD-CSF-1	n/a	0.5	30	Neighborhood strip commercial auto-oriented development to accommodate convenience goods and professional ser-vices and office.
SESDPD-CSF-2	n/a	0.5	none	Community strip commercial auto-oriented development to accommodate shopping and business, including retail and wholesale.
SESDPD-CSF-3	n/a	0.5	none	Recreational strip commercial auto-oriented development, such as hotel, din-ing, and entertainment.
SESDPD-CSR-1	n/a	0.75	none	Neighborhood commercial development in a pedestrian-oriented environment.
SESDPD-CT-2	n/a	1.0	none	Community commercial centers, with sev-eral commercial facilities.
SESDPD-I-1	n/a	1.5	none	Light industrial, including manufacturing and heavy commercial uses (e.g. lumber yards)
SESDPD-MF-1500	29	1.0	30	Multi-family dwellings (including single-family, duplexes and apartments) with minimum land areas per dwelling unit specified (e.g. 3000).
SESDPD-MF-2500	17	1.0	30	
SESDPD-MF-3000	15	1.0	30	
SESDPD-SF-5000	9	0.5	30	Single-family dwellings, with minimum lot sizes specified (e.g. 5000).
SESDPD-SF-6000	7	0.5	30	
SESDPD-SF-10000	4	0.5	30	
SESDPD-SF-15000	3	0.5	30	
SESDPD-SF-20000	2	0.5	30	
SESDPD-SF-40000	1	0.5	30	

1. Includes bonus for mixed use.

Source: San Diego Municipal Code: Chapter 15, Article 19, Division 3 (Southeastern); Chapter 15, Article 15, Division 3 (Mount Hope) and Chapter 13, Article 1, Division 5 (Base Zones).

FIGURE 1-5: Zoning Designations



1.5 Report Organization

This report represents one of the first steps toward the development of the Encanto Neighborhoods Community Plan. It provides a summary of existing conditions, opportunities, and challenges related to land use, urban design, transportation, the environment, public facilities and infrastructure; and identifies key issues that will be addressed during the planning process. (An analysis of market demand and economic factors will be distributed separately.)

This report is organized as follows:

- **Chapter 1: Introduction** includes an overview of the project, planning area, and discussion of the existing planning context (adopted and ongoing planning efforts and policies).
- **Chapter 2: Land Use** analyzes land use, current development projects, potential opportunity sites, and development potential.
- **Chapter 3: Mobility** describes existing conditions related to streets, vehicles, and parking, as well as bicycles, pedestrians, and public transit.
- **Chapter 4: Urban Design** describes community character and identity and explores urban form, including building types, massing, and street trees.
- **Chapter 5: Historic Context** documents historic districts and structures and the evolution of the community's people, and built environment.
- **Chapter 6: Public Facilities, Services and Safety** describes educational facilities, public safety services, infrastructure systems, and park and recreation facilities in order to understand existing capacity.
- **Chapter 7: Conservation, Noise, and Hazards** analyzes existing conditions of key environmental topics including: air quality, emissions, noise, and hazardous materials.
- **Chapter 8: Planning Issues and Implications** identifies key issues that emerged from this analysis that will need to be addressed by the planning team, the Community Planning Group, and other community members through this planning process.

2 LAND USE

The Encanto Community Planning Area is composed of primarily residential neighborhoods. The commercial core is located on Imperial Avenue and Euclid avenues, the community's primary east-west and north-south corridors. Neighborhoods west of Euclid Avenue are somewhat older and characterized by gridded streets and a mixture of land uses. Neighborhoods to the east are interspersed with hillsides and canyons. Encanto has seen little development in recent years, despite an in-city location and accessibility by the freeway and transit systems. This chapter analyzes the physical character, land use patterns, and potential development sites in the Planning Area.

Seventy percent of land in the Planning Area is residential (top). Community facilities (middle) and parks and open space (bottom) account for 8 and 9 percent of Planning Area land, respectively.

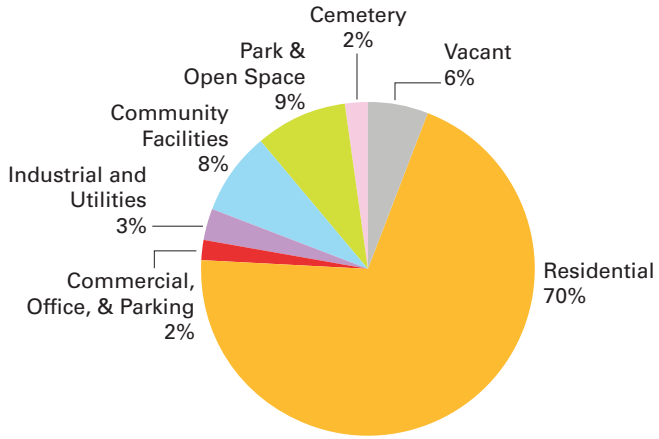
2.1 Existing Land Use

Land Use Pattern

Single-family residential development predominates in the Encanto Planning Area, as shown in Figure 2-1. Neighborhoods west of Euclid Avenue have a greater diversity of land uses, including a commercial and employment core along Euclid, multi-family housing, and large school sites to the south in Lincoln Park and to the north in Chollas View. East of Euclid Avenue, a mix of single-family and small-scale multi-family residential exists along the Imperial Avenue corridor. Employment uses are concentrated along the Market Street corridor.

Chart 2-1 shows the proportion of land occupied by different uses in the Planning Area. The Planning Area includes 3,821 gross acres of land. Of the 2,994 acres not including streets and public right-of-way, 70 percent, or 2,109 acres, is residential, including 1,950 acres of single-family and 159 acres of multi-family residential. Community facilities, including schools, churches, community centers, fire and police stations, account for 248 acres, or eight percent of the Planning Area, while parks and other open space account for 267 acres (nine percent). Commercial uses, including offices and parking, comprise 58 acres (just two percent of the total) and industrial uses and utilities account for 78 acres (three percent of the total). Holy Cross Cemetery occupies 45 acres in the Planning Area's northwest corner. There are 190 acres of vacant land, accounting for six percent of the total.

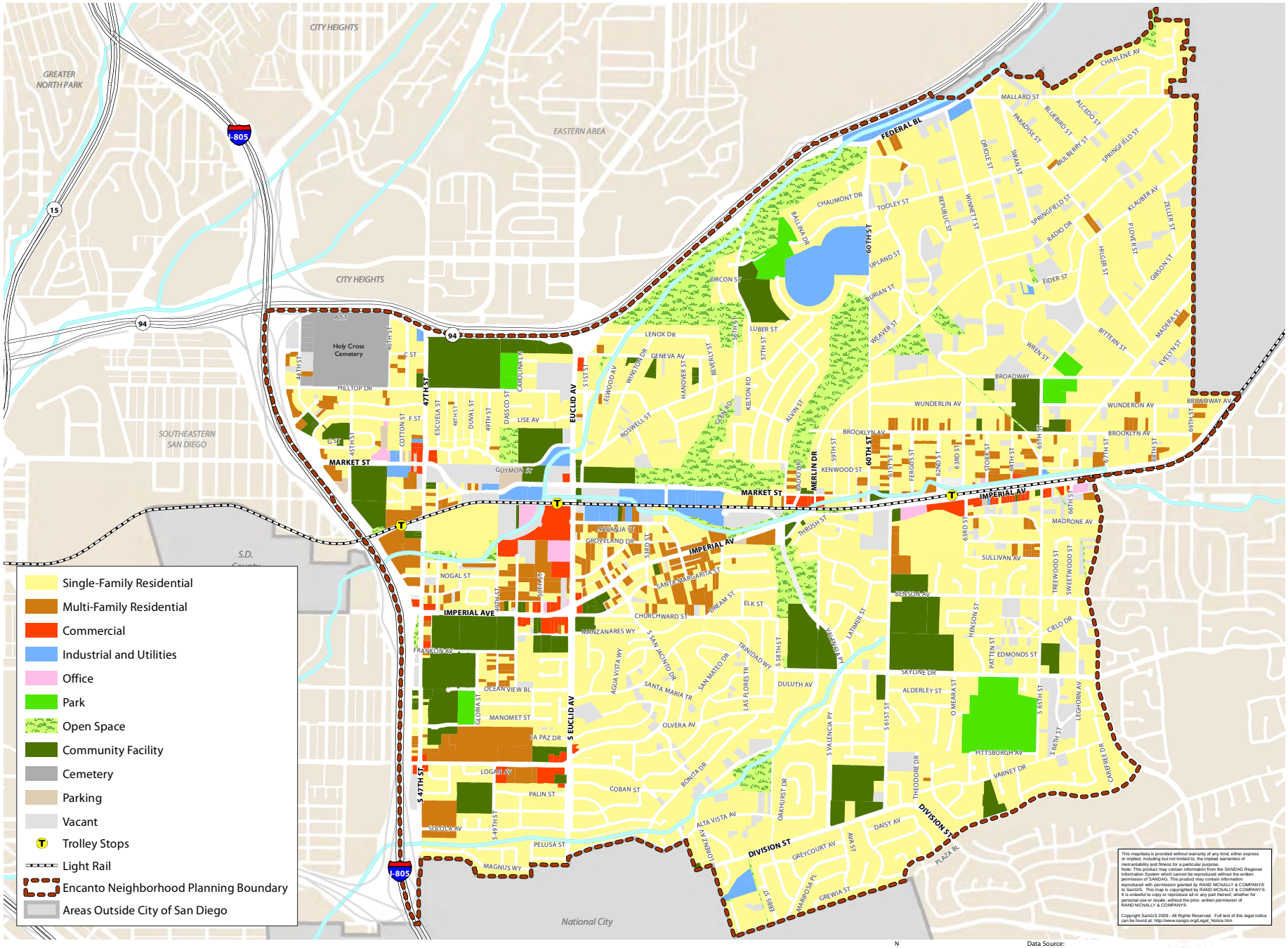
CHART 2-1: EXISTING LAND USE IN THE PLANNING AREA, BY ACRES AND PERCENT SHARE



1. Does not include roads and other rights-of-way.

Source: City of San Diego, 2008; Dyett & Bhatia, 2012.

FIGURE 2-1: Existing Land Use



Encanto has a higher proportion of detached single-family housing and a lower proportion of multi-family housing compared to San Diego as a whole. A selection of housing types present in Encanto is pictured here.

Residential

San Diego Association of Governments (SANDAG), the metropolitan planning organization (MPO) for the San Diego region, finds that as of 2012 there were a total of 13,143 housing units in Encanto. Of these, 8,186 were single-family detached (62 percent); 1,870 were single-family, multiple-unit (14 percent); 2,477 were multi-family (19 percent); and 610 were mobile home or other (five percent). The number of households living in the Planning Area (12,688) is slightly smaller than the number of units, due to vacancy. As Table 2-1 shows, Encanto has a substantially higher proportion of detached single-family housing and a correspondingly lower proportion of multi-family housing compared to San Diego as a whole. Most of Encanto's multi-family housing is located in larger buildings or complexes, but a portion is located in attached structures or on single-family lots with more than one unit. Meanwhile, a portion of the community's residential units are mobile homes; these are concentrated at the El Rey Plaza mobile home park on the east side of 47th Street and Summit Ridge in the Encanto neighborhood. The City's land use data classify housing in only two categories, single-family and multi-family, and show a 75 percent/25 percent split. These data correspond to Figure 2-1.

The Planning Area houses a total population of 47,706 in 2012, with an average household size of 3.94. This is significantly larger than in the 2.59 persons per household average for the City of San Diego overall, as shown in Table 2-1.

TABLE 2-1: HOUSING CHARACTERISTICS FOR THE ENCANTO PLANNING AREA AND THE CITY OF SAN DIEGO

HOUSING CHARACTERISTICS	ENCANTO[1]	CITY OF SAN DIEGO
Single-Family Detached	62%	41%
Single-Family - Multiple Unit	14%	13%
Multi-Family Residential	19%	45%
Mobile Home and Other	5%	1%
Persons per Household	3.76	2.59
Vacancy Rate	4.0%	5.5%
Built Before 1950	9%	12%
Owner occupied	57%	50%
Renter occupied	43%	50%
More than 1 Occupant per Room	15%	6%
Monthly Owner Costs 35% or More of Household Income	38%	34%
Gross Rent 35% or More of Household Income	55%	45%

1 Encanto Planning Area includes Census Tracts 30.01, 30.03, 30.04, 31.01, 31.11, 31.12, 31.13, 33.04, 33.05, and 34.04.

Source: SANDAG, 2012 for housing types, persons per household, and vacancy rate. US Census Bureau, American Community Survey 2006-2010 for other data.

Encanto developed almost entirely since the Second World War, and its housing stock is slightly younger than the City's as a whole. As Table 2-1 shows, just nine percent of housing units in Encanto were built before 1950, compared to 12 percent citywide. A somewhat higher proportion of Encanto's households are owner-occupied than in San Diego as a whole (57 percent compared to 50 percent), and the vacancy rate is lower (4 percent compared to 5.5 percent. Households in Encanto have more persons on average than in San Diego as a whole (3.76 compared to 2.59), and housing units in Encanto are also somewhat more crowded: 15 percent have more than one occupant per room, compared to six percent in the city as a whole. A slightly higher proportion of both owners and renters pay more than 35 percent of their income on housing.

Non-Residential

There was approximately 3.1 million square feet of business and institutional space in the Planning Area as of 2008, as shown in Table 2-2. Community facilities, including schools and churches, represented the largest share of non-residential space, with nearly 1.9 million square feet, or 61 percent of the total. Industrial uses and utilities accounted for about 467,000 square feet or 15 percent, mainly along the Trolley line and Market Street and also including a large telecommunications site in Emerald Hills. Commercial land uses made up about 439,000 square feet (14 percent of the total), while office uses comprised 190,000 square feet (6 percent of the total); both concentrated along Euclid and Imperial avenues.

As Figure 2-2 shows, the Food 4 Less at Market Creek Plaza is currently the Planning Area's only full-service grocery store, and other commercial categories are also very limited, leaving much of Encanto without easy access to basic commercial services. Anecdotally, residents say they leave the Planning Area, for example to Foodland or Wrigley's just north and south of the Planning Area, respectively, or further into Lemon Grove, Southeastern, or other parts of San Diego.

The primary commercial corridors in the western part of the Planning Area—Euclid and Market—are underdeveloped, with a large amount of vacant land. This presents an important growth opportunity, especially at the heart of the community around the Euclid/Market Trolley station. Imperial Avenue is the only commercial location for the eastern neighborhoods, and currently has very limited activity and potential to be a more active spine.

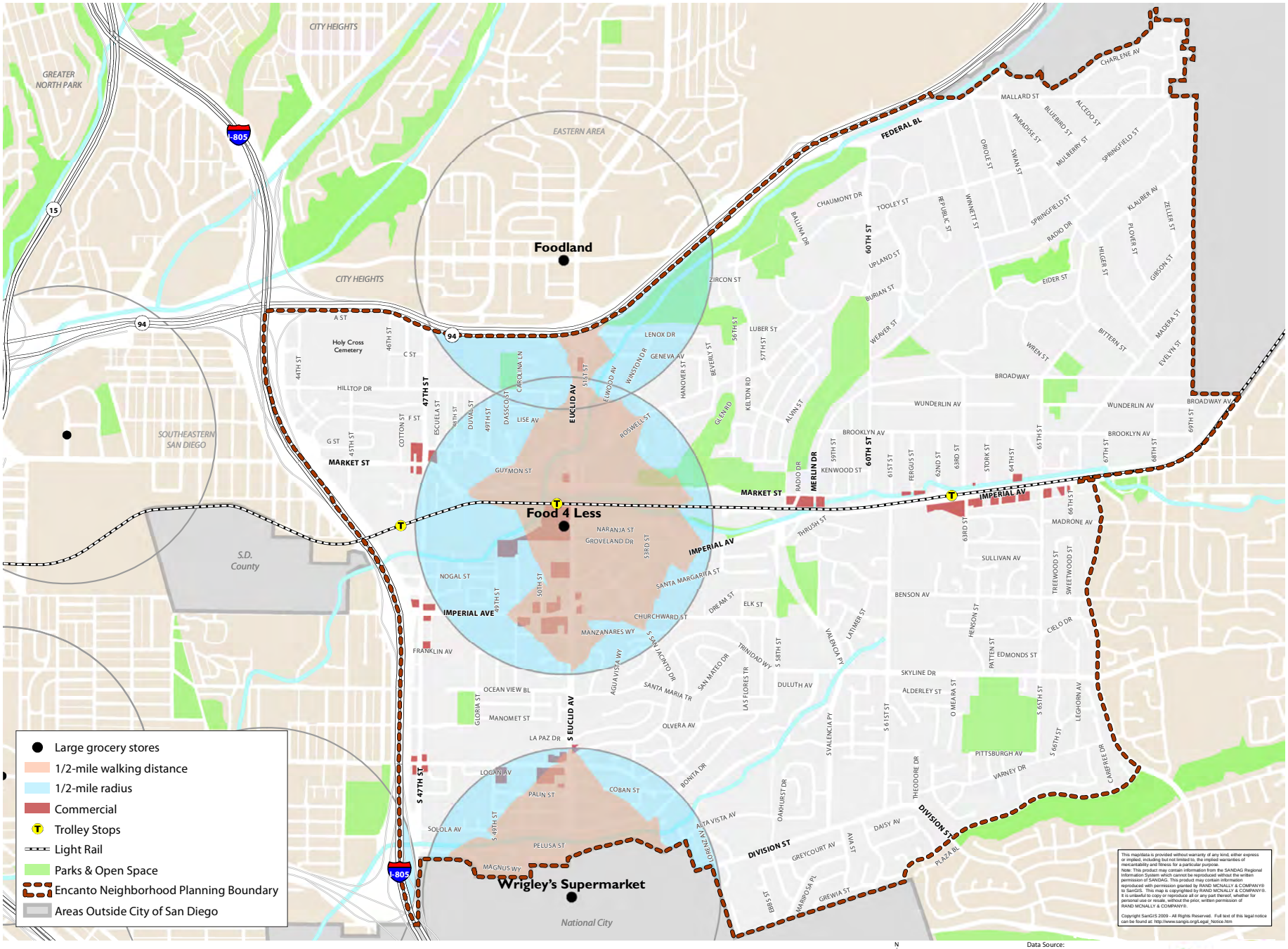
TABLE 2-2: NON-RESIDENTIAL BUILDING AREA

LAND USE	BUILDING SQUARE FEET	PERCENT OF TOTAL NON-RESIDENTIAL SPACE
Commercial	439,023	14%
Office	190,797	6%
Industrial and Utilities	467,048	15%
Community Facilities	1,886,667	61%
Other	130,421	4%
TOTAL	**3,113,956**	**100%**

Source: City of San Diego, 2008; Dyett & Bhatia, 2012.

Community facilities including churches and schools account for the largest share of non-residential space (top). Industrial and commercial uses are concentrated along Market Street (middle) and Euclid Avenue (bottom).

FIGURE 2-2: Access to Commercial Services (1/2-Mile Radius to Grocery Stores)



A more detailed discussion of jobs and employment area is provided in the accompanying Market Demand Study, produced by Keyser Marston Associates.

2.2 Density and Intensity

Residential and Population Density

Housing in the Planning Area has an overall density of 6.2 units per acre on residential land. Single-family housing averages 5.0 units per acre, reflecting a combination of typical urban and suburban lots in the western and central neighborhoods and very low-density lots in the Encanto neighborhood, especially in the northeast. Multi-family housing averages slightly over 20 units per acre. Encanto provides the opportunity for well-located, mixed-use infill development that raises the overall density while providing greater access to services.

The Planning Area is more densely developed than the city as a whole, and its households are larger, resulting in a population density of about 8,000 persons per square mile, compared to approximately 4,000 persons per square mile citywide. (San Diego also has large expanses of open spaces and mesas, which bring down the citywide population density.)

Within the Planning Area, population density varies from less than five people per acre in Broadway Heights and parts of Encanto to between 20 and 30 people per acre in areas on both sides of Euclid Avenue south of the Trolley line. In general, density is highest in the flatter and more gridded western section of the Planning Area, as shown in Figure 2-3.

Non-Residential Intensity

Intensity of non-residential development (office, commercial, and industrial) is measured by Floor Area Ratio (FAR). The FAR measurement describes the ratio of building floor area to lot size. Thus, a two-story building covering 100 percent of a parcel will result in an FAR of 2.0, as will a four-story building covering 50 percent of a parcel. Intensities are fairly low in the Planning Area, as shown in Figure 2-4. Overall, non-residential buildings in the Planning Area have an average FAR of 0.18, with the highest average intensity (0.41 FAR) in the office category and the lowest intensities (0.14 and 0.17) in the industrial and utilities and community facilities categories, respectively.

Building Heights

Building heights affect the character of streets and public spaces in Encanto. Most buildings in the community are limited to one or two stories, with some exceptions for major institutional structures. This change in height enhances the importance of those uses and allows them to serve as landmarks in the community. Where building height is combined with proximity to a slope or the creek, such as in the Jacobs Center, St. Rita's or the Elementary Institute of Science, the effect is quite powerful. However, the predominantly low-rise character of the community coupled with wide streets contributes to the expansive nature of the area.

Housing in the Planning Area has an overall density of 6.2 units per acre, representing a combination of lot sizes and housing types (top and middle).Most buildings are limited to one or two stories, with some exceptions for major institutional structures (bottom).

FIGURE 2-3: Residential Density

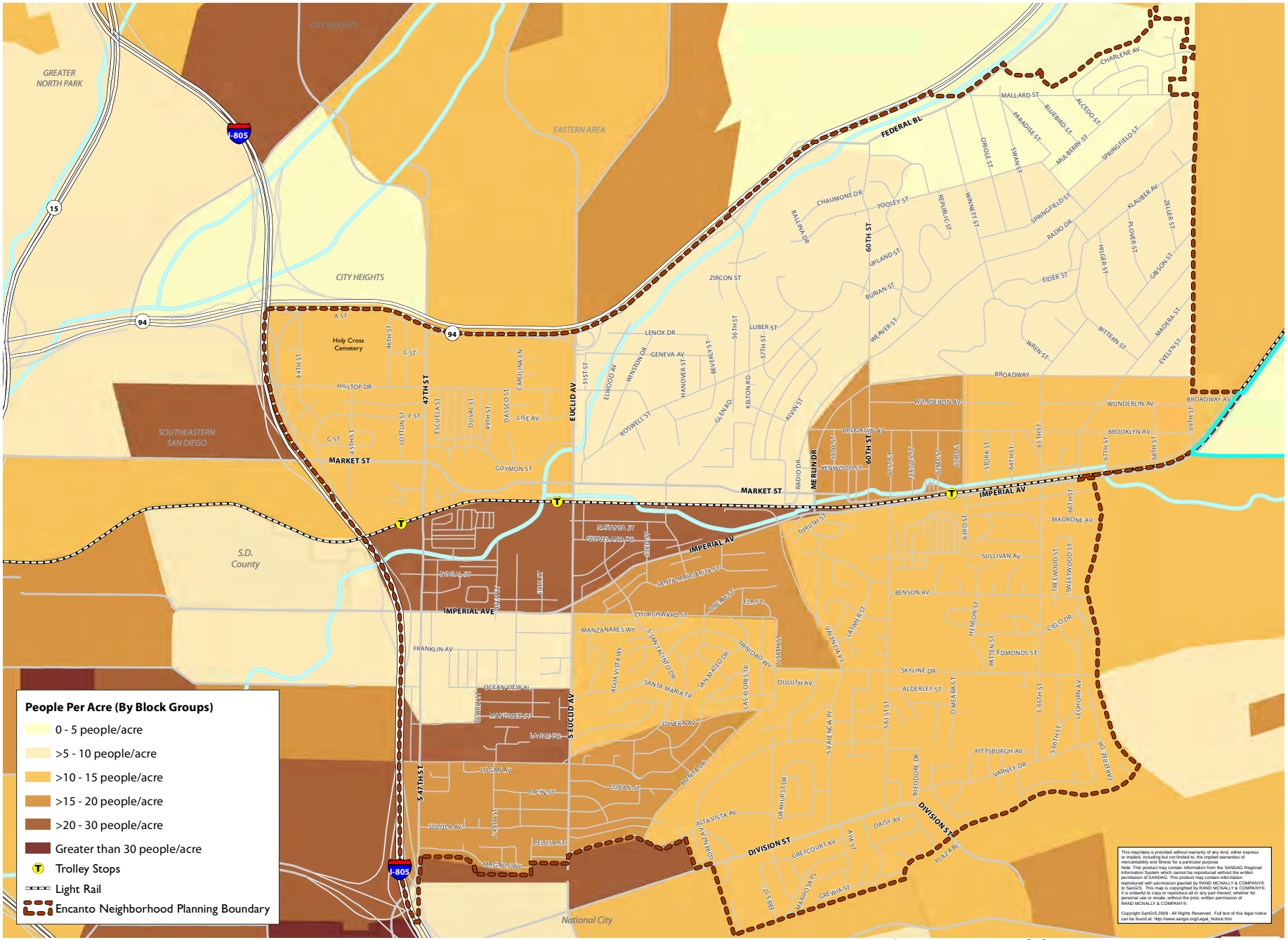
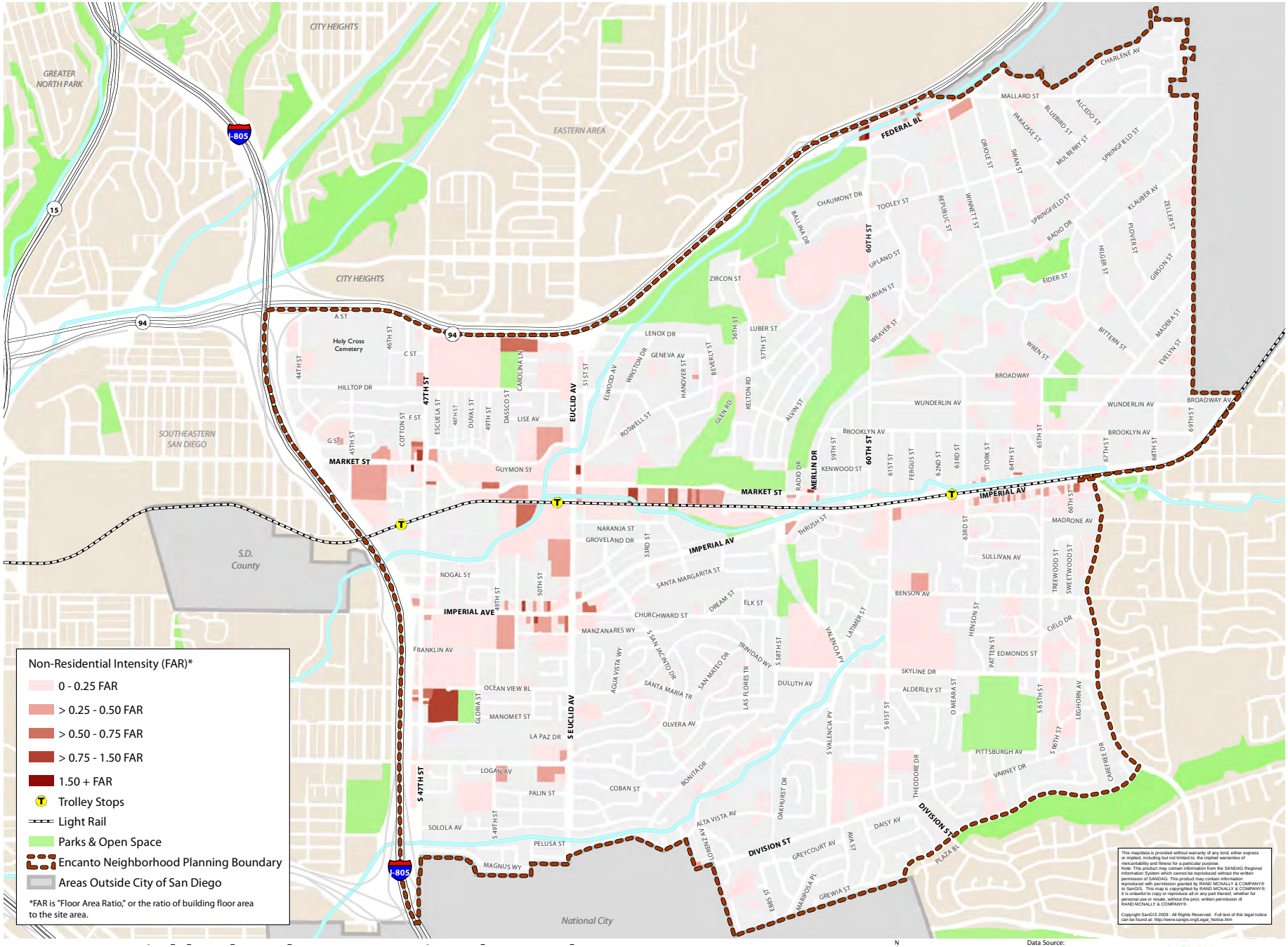


FIGURE 2-4: Non-Residential Intensity



New development in the Village at Market Creek is expected to interact with the public realm (top), emphasize windows, and feature vibrant colors and materials (middle and bottom). (Source: Village at Market Creek Plan, Jacobs Center for Neighborhood Innovation, 2013.)

2.3 Development Projects

Eight development projects are currently in the planning stages in the Encanto community, including four residential projects; two community facilities; one commercial project; and one project whose future uses are not established. The proposed projects would result in a total of at least 295 new housing units and 115,700 square feet of new commercial and community facility space, as summarized in Table 2-3. This amount of development is small in the context of the entire community. As shown on Figure 2-5, the projects are concentrated in the vicinity of the Euclid & Market and 62nd Street Trolley stations.

Residential

The largest current development, known as Northwest Village Residential, will cover about 2.8 acres between Market and Guymon streets west of Euclid Avenue. The project is anticipated to include between 150 and 165 housing units in four multi-family buildings, with the potential for associated mixed use development. Northwest Village would have a density of 53 to 59 units per acre. A second project, known as Trolley Residential, would include 52 units of affordable, multi-family housing on the south side of Market Street west of Euclid Avenue, at about 31 units per acre. Both of these projects are designed to include extensive public space connections to the larger Village at Market Creek transit-oriented development, described in detail below.

Another affordable, multi-family residential development, PRQ@528 63rd Street, is proposed for a 1.7 -acre site on Imperial Avenue between 62nd and 63rd streets, directly adjacent to the 62nd Street Trolley station. The project would develop 85 units and incorporate existing station parking, and would have a density of 50 units per acre. A second project is proposed directly across Imperial Avenue. This project would take place on a site currently occupied by community organizations (Second Chance and the Black Contractors Association); future program elements are still being determined.

Finally, an application has been approved to create a nine-lot subdivision for eight new single-family homes on a 2.85-acre site on Winnett Street in the Encanto neighborhood. The sloping site is near the Planning Area's northern boundary at SR 94. The project has a density of just over three units per acre.

Commercial

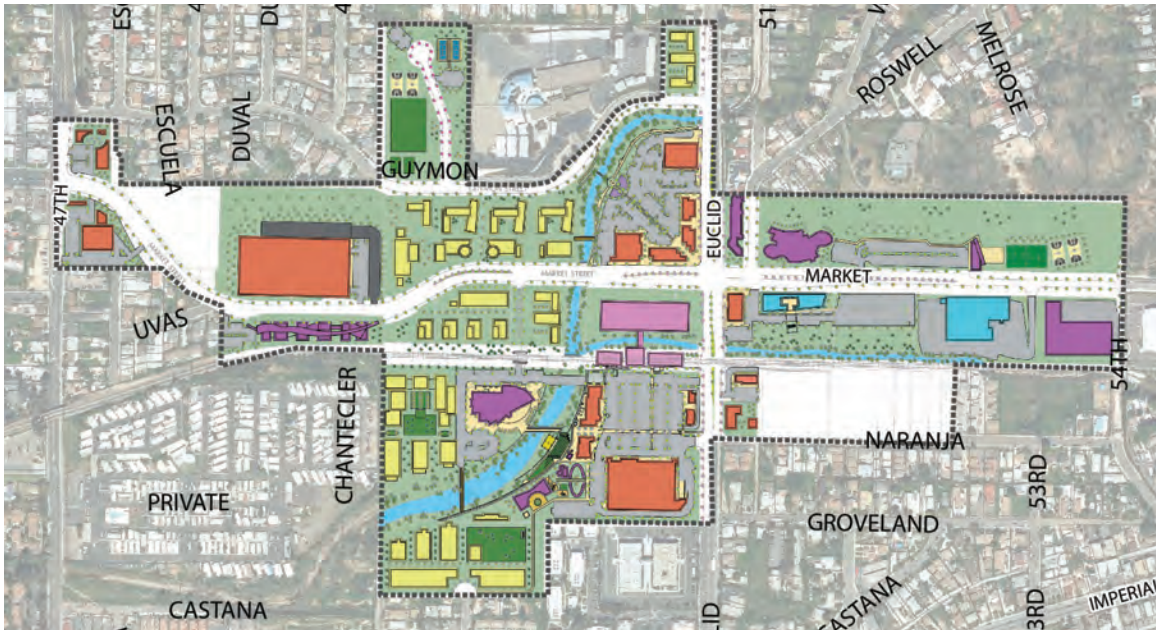
One commercial project is currently in process, as part of the Village at Market Creek. Northwest Village Commercial would be developed at the northwest corner of Euclid Avenue and Market Street, and would include 67,670 square feet of commercial space, together with the enhancement of a section of Chollas Creek, including a new segment of pedestrian path. The small shopping center and restored creek corridor together would have a development intensity of 0.27 FAR.

Community Facilities

Finally, Encanto is home to two new community clinics. King-Chavez Health Center, at 950 South Euclid Avenue, opened in September 2012, while Diamond Family Health Center, at 505 47th Street, is under construction. The two health centers comprise 25,100 and 22,900 square feet, respectively. The clinics would be three stories each, with surface parking, with intensities of 0.57 and 0.40 FAR, respectively.

Village at Market Creek

Three of the projects above are part of the larger "Village at Market Creek" development plan, which would establish a walkable, mixed-use nucleus for the Encanto community. The Village is about 60 acres centered around Euclid Avenue and Market Street. As envisioned, the Village at Market Creek would include approximately 1,000 quality affordable housing units, 645,000 square feet of new commercial space, and at least 400,000 square feet of public space and park land. The development, spearheaded by the Jacobs Center for Neighborhood Innovation, would build on the success of the Market Creek Plaza shopping center and its innovative public space corridor along an enhanced Chollas Creek.



The Village at Market Creek Master Plan (Source, Jacobs Center for Neighborhood Innovation, Village at Market Creek Plan, 2013.)

TABLE 2-3: DEVELOPMENT PROJECTS

PROJECT/ADDRESS	TYPE	HOUSING UNITS	NON-RESIDENTIAL (SQ. FT.)	STATUS
Northwest Village Residential – 4970 Market Street	Mixed Use	150 to 165	–	Proposed
Second Chance / Black Contractors – 6125 - 6145 Imperial Avenue	Not known	Not known	Not known	Proposed
PRQ@528 – 62nd and 63rd Street	Residential	85	–	Proposed
Trolley Residential – 4981 Market St.	Residential	52	–	Approved
Winnett Homes – 2190 Winnett St.	Residential	8	–	Approved
Northwest Village Commercial and Creek Enhancement – 5050 Market St.	Commercial	–	67,700	In review
Diamond Family Health Center – 505 47th Street	Community Facility	–	22,900	Under construction
King-Chavez Health Center – 950 S Euclid Avenue	Community Facility	–	25,100	Constructed
TOTAL		**295 TO 310**	**115,700**	

Source: City of San Diego, 2012.

The 3-story, 25,000-square foot King-Chavez Health Center opened in September 2012.

Vacant parcels are present throughout the Planning Area, including the area where the mixed-use Village at Market Creek is envisioned (top) and scattered in residential neighborhoods (middle). Under-utilized sites are concentrated along the main corridors, such as Market Street (bottom).

2.4 Potential Opportunity Sites

Vacant and underutilized sites can provide strategic opportunities to create new uses, meet community needs, and capitalize on high-quality transit and freeway access and a large local population base. This section describes opportunity sites in the following categories, shown on Figure 2-5:

- Vacant sites;
- Underutilized sites currently occupied by surface parking lots or low-intensity commercial uses; single-family residential uses in commercial areas; or very low-density single-family housing in multi-family districts;
- "Change areas" that include a concentration of potential development sites and may be seen as the areas to focus on in terms of desired future land use character.

As the Encanto Community Plan proceeds, these general categories and land considered to have development potential will be refined to match the City's criteria for environmental review in order to estimate overall development capacity in the Planning Area.

Vacant Land

Vacant parcels are present throughout the Planning Area, in different settings, and comprise 190 acres, or six percent of all land in the Planning Area. The area where the mixed-use Village at Market Creek is envisioned, around the Euclid and Market Trolley station, is one substantial concentration of vacant land, particularly along Market Street. Also notable is a highly-visible vacant site along Euclid Avenue at Hilltop Drive.

Most of the Planning Area's vacant land is scattered in residential portions of the Encanto neighborhood in the eastern part of the Planning Area. Development on these sites would almost certainly be in the form of new single-family houses. Development potential on many of these sites may be constrained by steep slopes.

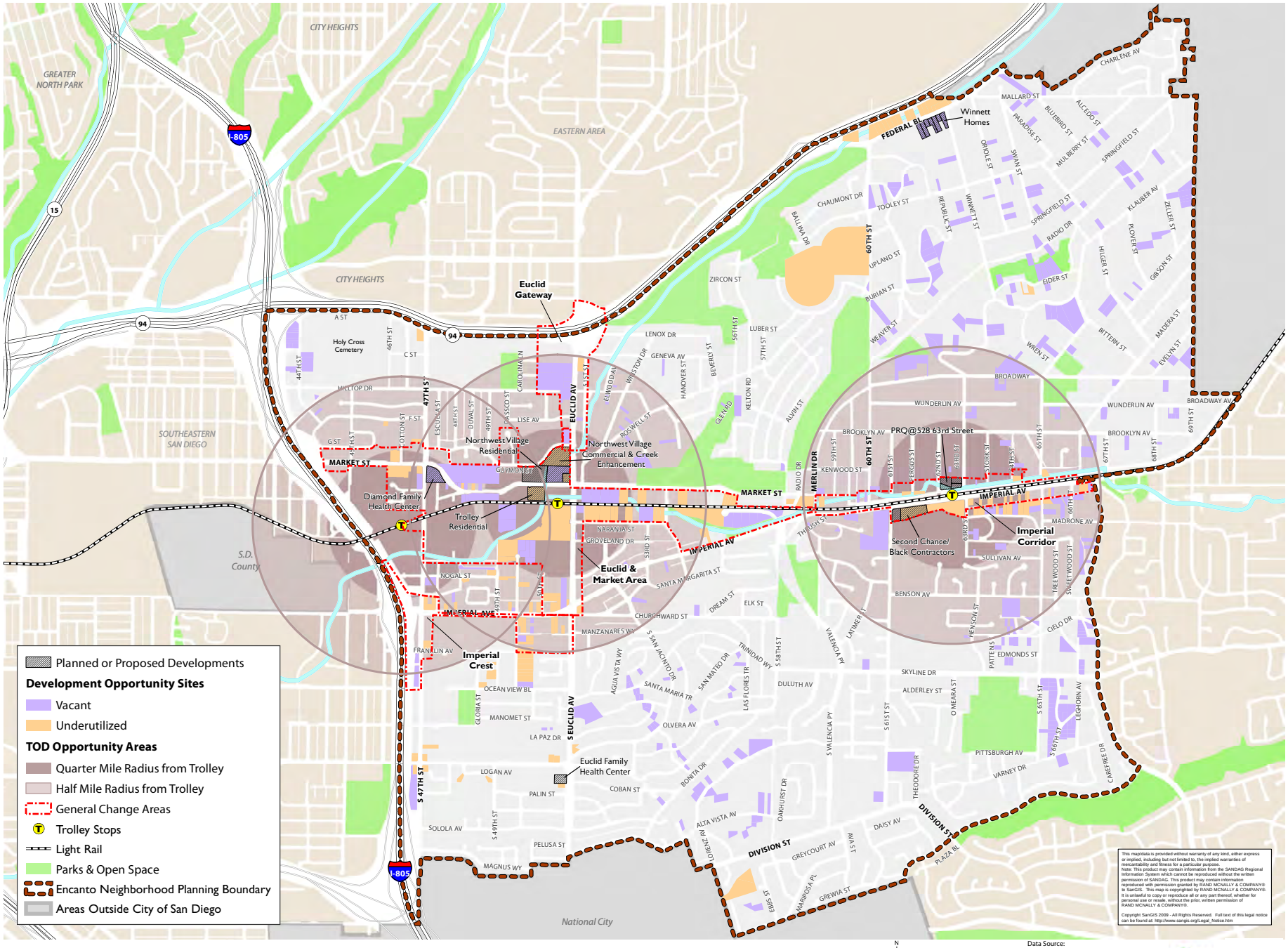
There are approximately 186 acres of vacant land in the Planning Area. At typical current development densities and intensities, this land could accommodate an estimated 946 housing units and 330,400 square feet of non-residential development. However, some of this land could follow a transit-oriented development model and be developed at a higher intensity than is currently present in Encanto. Other vacant land may not develop during the planning period.

Underutilized Land

Underutilized land is concentrated along the Planning Area's primary east-west spine, along Market Street in the west and Imperial Avenue in the east. At the Planning Area's northeaster edge, low-intensity light industrial uses between Federal Boulevard and Highway 94 represent a smaller underutilized corridor.

There is also a cluster of potentially underutilized parcels in the Lincoln Park neighborhood in the vicinity of Imperial Avenue, where high-density zoning would allow multi-family development to take place on sites now occupied by older single-family houses on large lots.

FIGURE 2-5: Development Projects and Opportunity Sites



Much of the vacant and underutilized land is clustered around the Village at Market Creek area (top and middle) and the Imperial corridor (bottom). These transit-accessible areas are expected to change the most during the planning period.

Scattered underutilized land is estimated to account for 78 acres in the Planning Area. If this land were to be redeveloped at the prevailing intensity of current development, the sites could accommodate an estimated 688 units and 536,800 square feet of non-residential development. Given the location of underutilized commercial land along transit-accessible commercial corridors and locations, higher-intensity development may be anticipated in the future.

A 31-acre property in Emerald Hills presents a special case of under-utilized land. The land includes telecommunications towers, but may have the potential to accommodate some amount of additional future development.

Change Areas

Much of the vacant and underutilized land discussed above is clustered in certain parts of the community. These areas may be expected to change the most during the planning period, and land use change may be expected to occur more broadly, and not only on sites identified here as vacant or underutilized. The community planning process can help to shape the character of growth in these areas. The change areas are derived from those identified by the Southeastern Economic Development Corporation (SEDC), which has been merged into the City's redevelopment successor agency, Civic San Diego, to carry out priority projects. The Agency's development ideas may help to guide possible development opportunities. Change areas include:

- The Village at Market Creek area, the largest and most important change area in Encanto, is the subject of extensive planning work by the Jacobs Family Foundation. The area is envisioned to grow into a walkable, transit-oriented, mixed-use center for the community located around the Euclid & Market Trolley station. This area also extends north on Euclid Avenue to include the large, vacant Hilltop property
- Valencia Business Park to Naranja: This area covers the Valencia Business Park and vacant and underutilized land along Imperial Avenue. Commercial or mixed-use development is expected for the business park, while new and revitalized multi-family housing is desired along Imperial Avenue.
- Imperial Avenue Corridor: Mixed use development is envisioned on both sides of Imperial Avenue from 61st to 69th Street, with two- to five-story buildings and densities of up to 60 units per acre.
- Imperial Crest: This area includes the planned regional Orange Line/BRT transfer station and the replacement of the Imperial Avenue overpass, and could also include connection of the Chollas Creek trail across Interstate 805. On the east side of Lincoln High School, the underutilized Holly Drive area has potential for higher-density redevelopment.

While a vision for future development at the Village at Market Creek has been worked out in detail, other areas require new planning guidance. Though all of these areas may not experience development in the coming years, the planning process will help to identify locations for intensification of existing uses, rehabilitation, preservation, and new development. Some potential opportunity sites may have constraints (e.g. hazardous material presence or steep slopes) that would preclude development. Potential environmental constraints are described in Chapter 7.

An analysis of market demand—the other side of the development equation—is provided in the accompanying Real Estate/Market Demand Analysis Report.

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3 MOBILITY

The Encanto Neighborhoods mobility network is comprised of diverse elements, including roadway and freeway systems, public transit, bicycle and pedestrian infrastructure, and local and regional trails. Existing conditions for each of these modes are discussed in the chapter. Additional information and details are included in Appendix A, Mobility Existing Conditions Report.

Encanto residents report higher rates of transit use to get to work compared with the citywide average. The network of buses and trolleys provide good access to schools and surrounding employment areas.

3.1 Context

Existing Policies

Several key planning efforts and legislative actions of the past decade have redefined the way community transportation planning is carried out in San Diego. An important unifying theme is to achieve a more balanced, multi-modal transportation system. Taken together, these developments and associated planning initiatives reflect a growing recognition that our communities should be working to reduce reliance on automobile travel and to increase the ease of walking, bicycling and using transit to support daily life.

Local and Regional Policy

The most noteworthy planning effort and legislative action includes adoption of the City of San Diego's updated General Plan. This document defines a land use-transportation strategy predicated on new growth occurring in already urbanized areas of the city that are served by high-capacity transit and provide high quality pedestrian and bicycle networks.

In addition, SANDAG has adopted a Smart Growth Concept Map (2008) in their *Regional Comprehensive Plan* proposing a land use-transportation strategy whereby new growth is directed to already urbanized areas, in mixed-used high-density nodes served by high capacity transit and including high quality bicycle and pedestrian improvements. SANDAG provides incentives for implementation of these types of strategies within local jurisdictions through grant funding programs like the Smart Growth Incentive Program.

State Legislation

The Complete Streets Act (Assembly Bill 1358) requires that each jurisdiction plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

In addition, the adoption of the 2008 Senate Bill 375 required metropolitan planning organizations in the state to formulate a "sustainable communities strategy" as part of their regional transportation plans, specifically identifying how the region will achieve targeted reductions in greenhouse gas emissions from automobiles and light trucks. SANDAG adopted the region's first Sustainable Communities Strategy as part of the 2050 RTP in October 2011, making it the first agency in California to do so.

Commute Patterns

Encanto already has a fairly high level of multi-modal activity. Journey to work data (commute patterns) from the American Community Survey (2007-2011) are shown in Chart 3-1.

Encanto has a slightly lower rate of individuals driving alone to work compared to City of San Diego as whole (71 percent versus 75 percent). In addition, Encanto has high carpool rates (18 percent versus 9 percent). compared with the City as a whole as well as slightly higher rates of public transportation usage for the work

trip (7 percent versus 4 percent). Walk and bicycle rates for Encanto are lower than the citywide rates. These rates are illustrated, by mode, in maps in the next sections of this chapter.

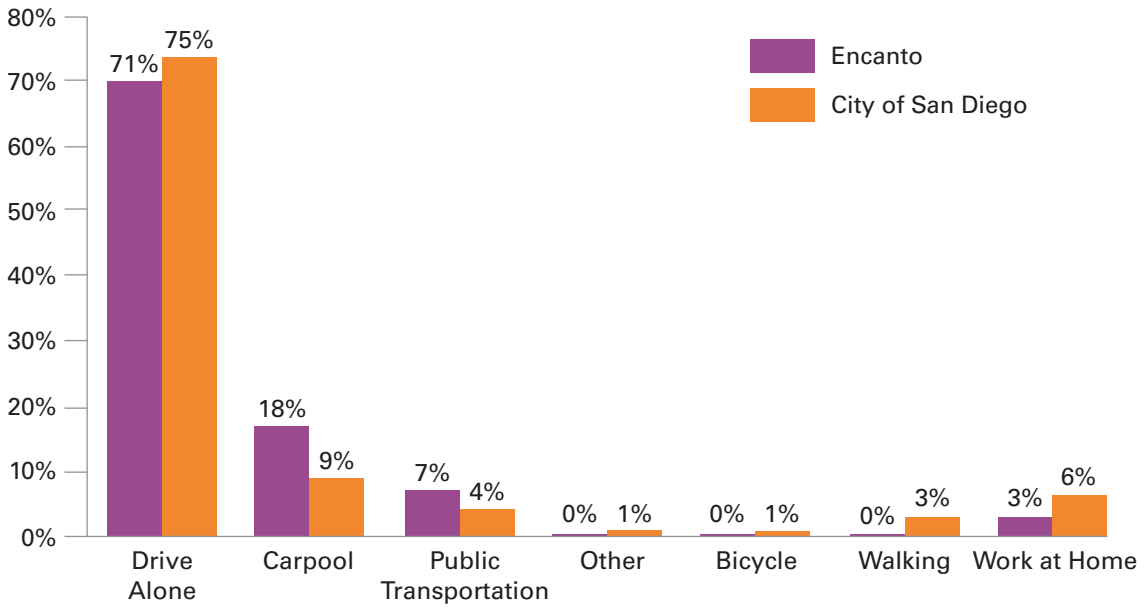
Notably, these data depict commuters traveling to work and do not reflect children and youth walking to school. A Safe Routes to School Program for elementary and middle schools in Encanto was funded in 2006 and then expanded in 2009. This program is supporting evaluation of mode shares for the school trip, bicycle and pedestrian infrastructure deficiencies near schools, and implementing child-oriented encouragement and educational programs for walking and cycling to school. Results of the mode share data collection effort for Encanto schools will not be available until April 2013.

Multi-Modal Metric

The existing conditions presented in this chapter and detailed in Appendix A include a metric to compare the level of service for various facilities and modes which was applied to select streets within the study area. In general, street and freeway system Level of Service (LOS) is based on facility capacity and operations, while multimodal LOS (MMLOS) for pedestrian, transit, auto, and bicycle facilities are evaluated based on the user's perception of the quality of the environment or systems while using these modes, as described in Table 3-1.

The MMLOS analysis method used herein for pedestrian, transit, auto and bicycle evaluates—by mode—the feel, comfort, accessibility and safety of an urban street based upon the design, control and operations of the roadway. LOS A represents the best conditions from the traveler's perspective, while LOS F represents the worst.

CHART 3-1: Journey to Work, Encanto Neighborhoods and Citywide



Source: Census Bureau; 2011 American Community Survey

TABLE 3-1: LEVEL OF SERVICE VARIABLES, BY MODE	
PEDESTRIAN	
• Lateral separation between pedestrians and vehicular traffic • Width of sidewalk • Speed and makeup of the vehicular traffic • Difficulty of crossing arterial • Directional vehicular traffic volumes	• Right-turn on red • Left-turn during "Walk" phase • Delay waiting to cross at signal • Intersection crossing distance • Cross-street vehicular traffic volume and speed • Pedestrian density
TRANSIT	
• Frequency of service • Mean speed • Reliability of service	• Load factors • Quality of pedestrian access to transit stops • Transit stop amenities
AUTO	
• Number of stops per mile • Speed and makeup of the vehicular traffic • Delay at intersection for through traffic	• Length of the segment • Cross traffic per segment
BICYCLE	
• Lateral separation between bicycles and vehicular traffic • Speed and makeup of the vehicular traffic • Pavement conditions	• Directional vehicular traffic volumes • Intersection crossing distance

3.2 Pedestrian Network

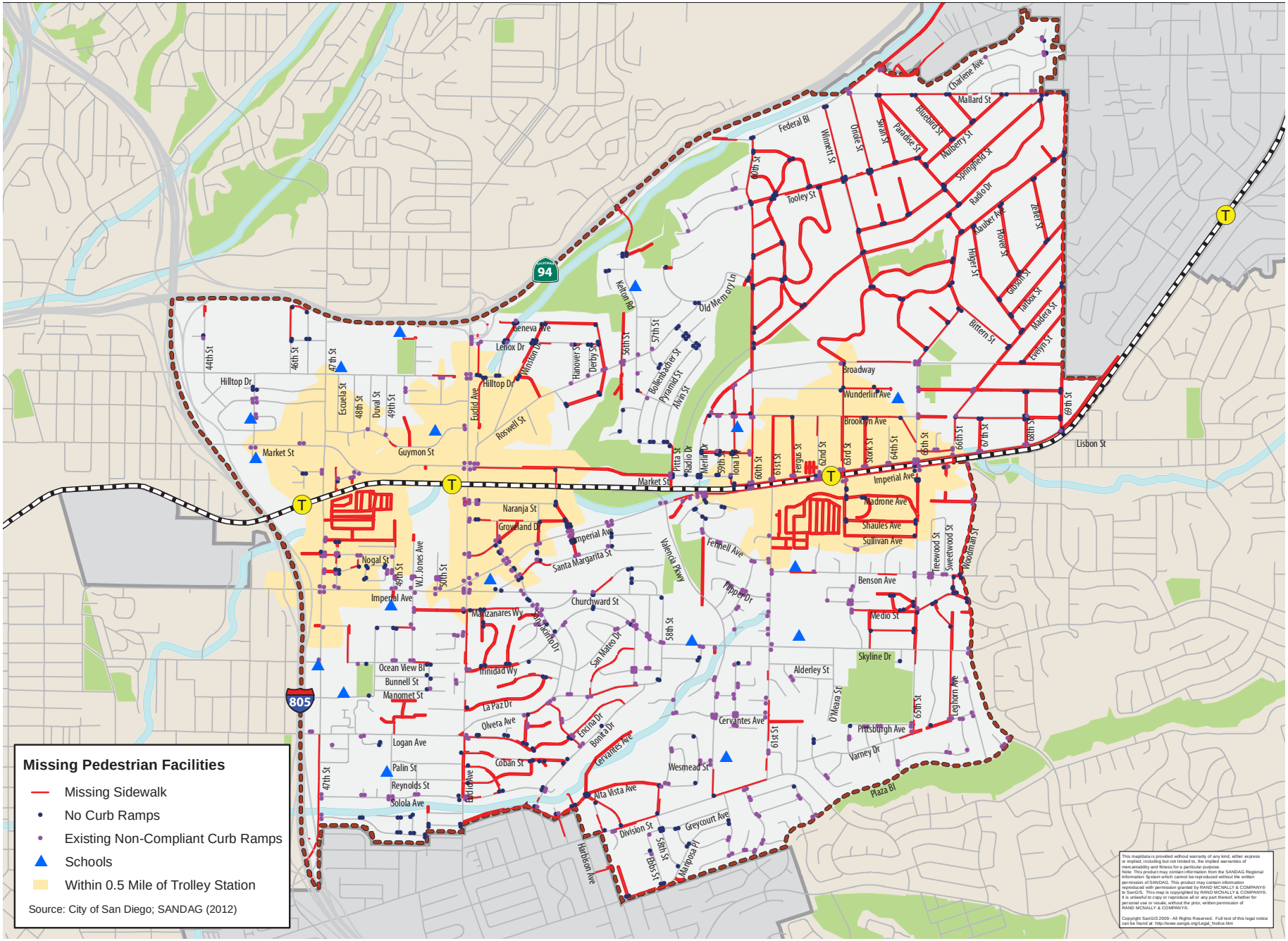
Pedestrian travel is an important mode of travel within the Encanto Neighborhoods. The Orange Line Trolley, Imperial Avenue, the Euclid Avenue and Market Street activity center, and the many small commercial destinations within the community, all contribute to a vibrant pedestrian realm. There are challenges however that need to be addressed, such as high speed automobile travel, barriers imposed by freeway ramp intersections, topography, difficult pedestrian crossings, and lack of adequate buffers, amenities, lighting, and shading. The following subsections describe existing pedestrian facilities, activity levels, pedestrian level of service analysis results, and pedestrian safety analyses within Encanto.

Pedestrian Facilities

Pedestrian facilities include sidewalks, curb ramps, and other amenities such as street trees for shading. Figure 3-1 illustrates study roadway segments with missing sidewalks, missing pedestrian ramps and non-ADA compliant pedestrian ramps within the community. Current inventories indicate that there are approximately 478 missing curb ramps in Encanto, 492 non-ADA compliant curb ramps, and an estimated 377,000 lineal feet of missing sidewalk, reflecting an inventory of both sides of the roadway right-of-way. Missing sidewalks are most prevalent in the northeastern portion of Encanto.

Two freeways, I-805 and SR-94, form barriers to pedestrian travel between Encanto and the surrounding communities of City Heights and Southeastern San Diego.

FIGURE 3-1: Missing Pedestrian Facilities



Missing sidewalks and curb ramps, particularly in the northeast portions of the Planning Area, correspond to worse LOS values.

Pedestrian Volumes and Activity Levels

Pedestrian Journey to Work

Figure 3-2 displays walking rates for journey to work data by census tract for Encanto. Just 83 residents are currently walking to work, which is less than one percent of all workers in Encanto. Across the City as a whole, about three percent of all workers are walking to work. The rate of walking to work in Encanto is lower than for the City as a whole, though these data do not capture workers who are walking to transit. A possible explanation for this finding is that land use patterns within Encanto are relatively low density and homogenous. In addition, Encanto is characterized by relatively rolling topography, which can discourage non-motorized travel. Missing sidewalks could be another contributor to the lower pedestrian activity levels. The highest commute walking rate within Encanto occurs in the census tract just east of Euclid Avenue and south of Churchward Street (1.5 percent).

Pedestrian Volumes

Figures 3-3A and 3-3B display more detailed information about the distribution of peak hour pedestrian volumes for the AM and PM peak hour, respectively, across the Planning Area. As shown in the figures, the highest AM and PM peak hour pedestrian count occurs at the 47th Street/Logan Avenue intersection (142 and 138, respectively), which is near schools and parks, and is served by three different bus routes. Higher volumes are also found along Market Street, Imperial Avenue and Euclid Avenue.

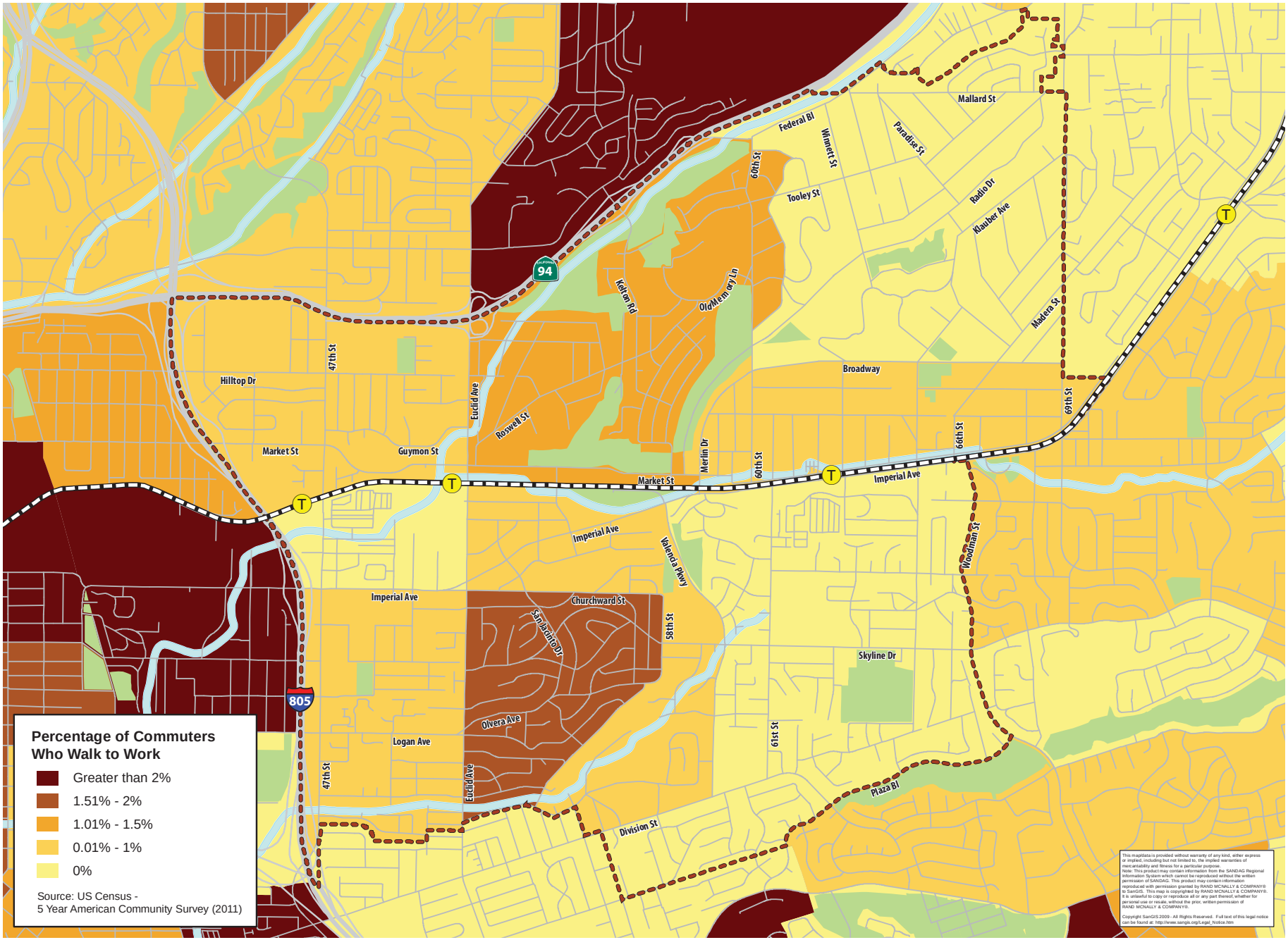
Pedestrian Level of Service

Pedestrian level of service along selected corridors was evaluated using the multi-modal level of service methodology, as described in section 3.1. Table 3-2 describes existing pedestrian level of service along study roadways during the AM and PM peak hours. The LOS reported here is an indication of the pedestrian's experience while traveling along these study corridors. Major variables affecting the walking environment include sidewalk width, lateral separation from traffic, speed and makeup of the vehicular traffic, intersection crossing distance, and the delay waiting to cross at a signal. Pedestrian level of service, along the urban streets evaluated within Encanto, is at LOS C during both the AM and PM peak hour.

Improvement/construction to the missing sidewalks along the urban streets would help better the pedestrian LOS, these locations include:

- Market Street, between Euclid Avenue and Pitta Street
- Imperial Avenue, between Valencia Parkway and 66th Street
- 47th Street, between Logan Avenue and Encanto community boundary
- Euclid Avenue, between Manzanares Way and Trinidad Way
- Euclid Avenue, between Logan Avenue and Solola Avenue

FIGURE 3-2: Percent of Walking Commuters by Census Tract



CHEN RYAN

Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

SanGIS

FIGURE 3-3A: Pedestrian Volumes (AM Peak Hour)

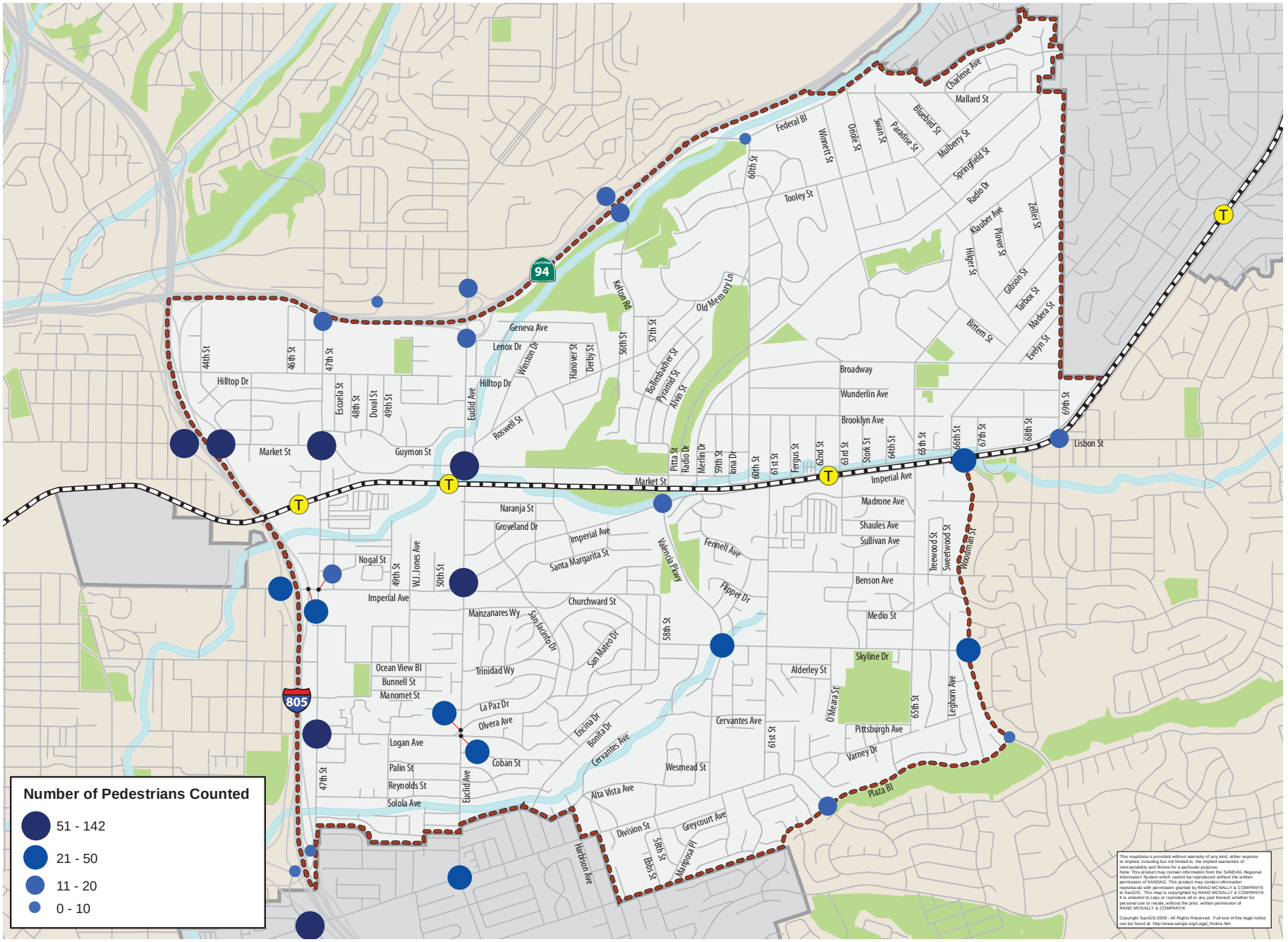
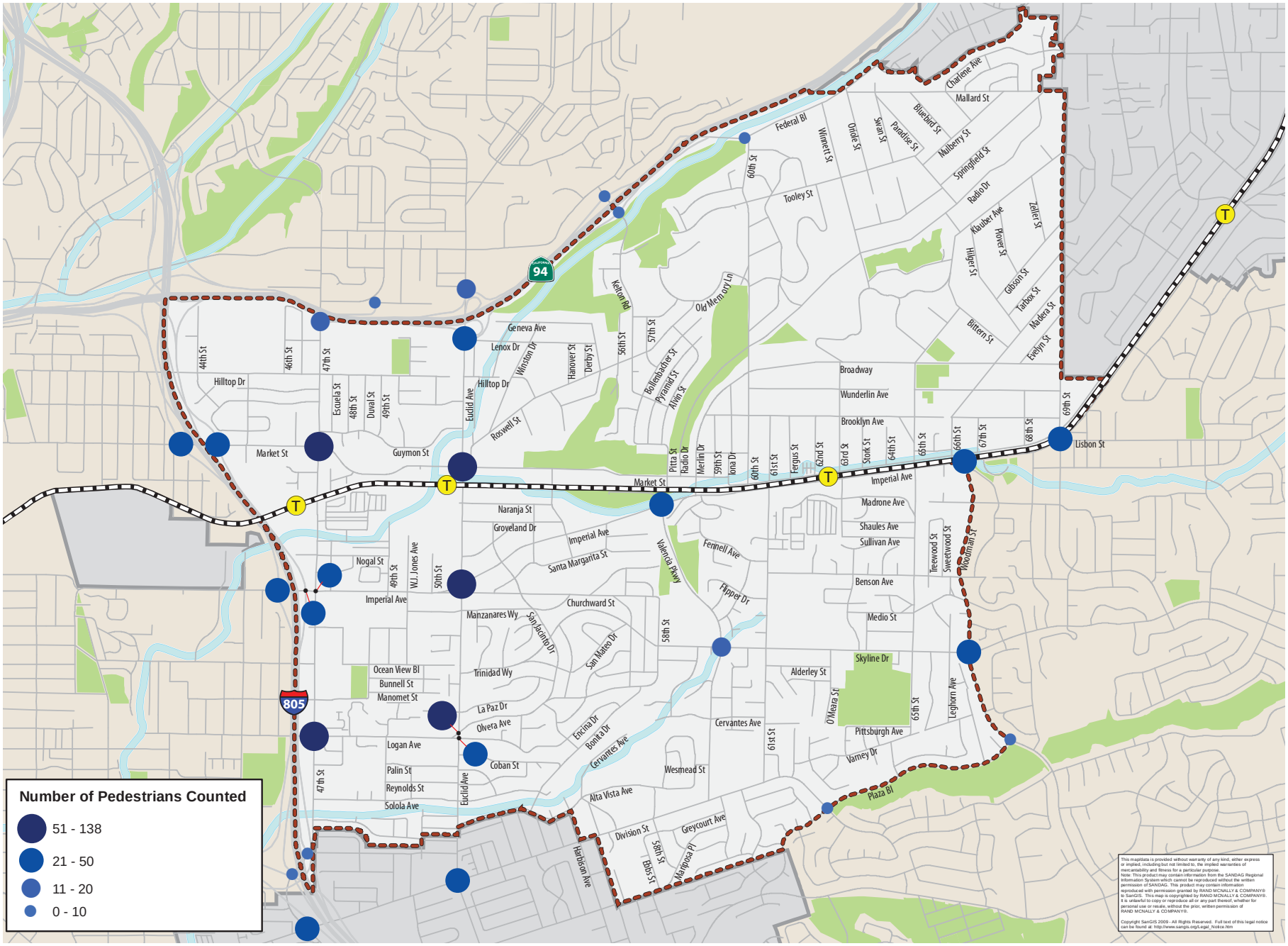


Figure 3-3B: Pedestrian Volumes (PM Peak Hour)

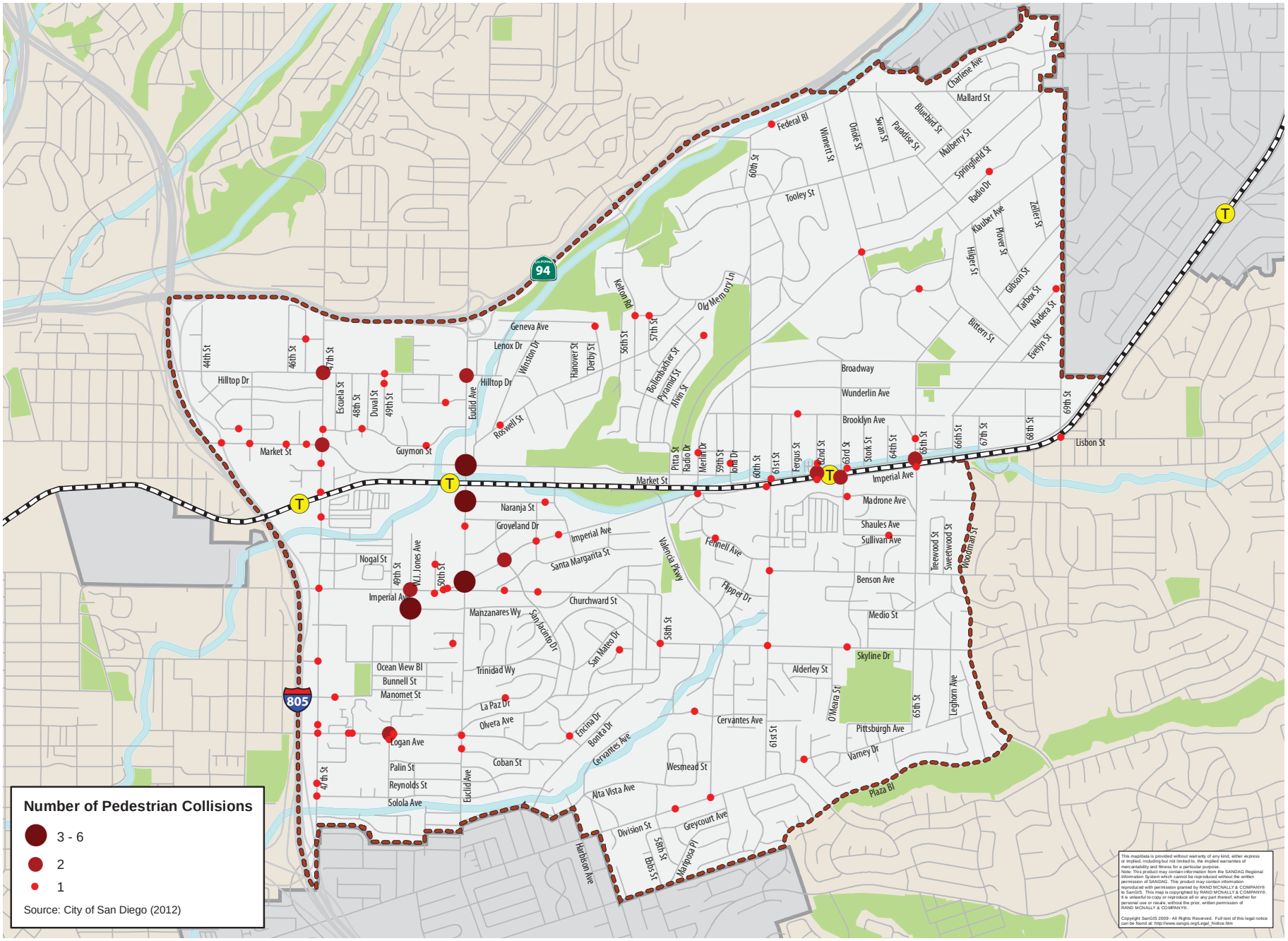


CHEN RYAN

City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012; Dyett & Bhatia, 2012

SanGIS

FIGURE 3-4: Pedestrian Collisions (July 2007-September 2012)



CHEN RYAN

Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

SanGIS

TABLE 3-2: PEDESTRIAN LEVEL OF SERVICE				
ROADWAY	AM PEAK		PM PEAK	
	SCORE	LOS	SCORE	LOS
Market Street	3.18	C	3.20	C
Imperial Avenue	3.08	C	3.12	C
Logan Avenue	2.83	C	2.86	C
47th Street	2.94	C	2.97	C
Euclid Avenue	2.96	C	2.98	C

Source: Chen Ryan Associates, December 2012

In addition, installation of missing curb ramps and/or upgrading substandard curb ramps to ADA requirements would also help with the pedestrian environment.

Pedestrian Safety

Pedestrian collision data was obtained for the period from 2007 to 2012. During this period there were 110 reported pedestrian-involved collisions in Encanto, as depicted on Figure 3-4. This includes four pedestrian fatalities over the five year period, an average of less than one fatality per year. Just under half of all collisions took place midblock and just over half at intersections. As reported, nearly 60 percent of the collisions were the fault of the driver—typically unsafe movements. The other 40 percent of the time, the pedestrian was at fault.

3.3 Public Transit Network

Local public transit in the Encanto Neighborhoods is provided by the Metropolitan Transit System with both bus and Light Rail Trolley services. Figure 3-5 displays existing transit service and facilities within Encanto, including bus transit stops and routes, as well as the light rail trolley line and stations. Nearly all of the community is within 1/4-mile of a transit stop except the single family residential area in the northeast corner.

Transit Facilities

Trolley Route and Stops

Encanto is served by the San Diego Trolley Orange Line, with three stations located at 47th Street, Euclid Avenue, and 62nd Street. The Orange Line is the second trolley line built in the San Diego Trolley system with service beginning in 1986. It initially operated between downtown San Diego and Euclid Avenue, and underwent two major extensions, to Spring Street in La Mesa, then to the Santee Town Center, serving a total of 23 stations.

Bus Routes and Bus Stops

There are currently 10 bus routes with a total of 158 bus transit stops serving the community of Encanto. Very few transit stops in Encanto have shelters and roughly half of the bus stops have benches and trash cans. Given the high transit ridership in Encanto, more complete coverage in terms of transit stop amenities would help improve the quality of experience for transit riders in this community.

The trolley stations have the highest transit ridership rates in the Planning Area (top to bottom: 47th, Euclid, and 62nd).

The transit LOS varies depending on frequency and reliability of service, as well as stop amenities. The trolley stations (62nd Street, top; Euclid Avenue, middle) have amenities, such as seating, trash receptacles, lighting, and shade.

Regional Rail

Heavy rail commuter train service, provided by the North County Transit District (called the Coaster) and Amtrak connect downtown San Diego to locations outside the county. Although there is no heavy passenger rail service directly within the Encanto Neighborhoods, the Coaster and Amtrak services are accessible to Encanto residents via the Orange Line Trolley.

The main Amtrak route serving San Diego is the Pacific Surfliner which provides service between the major coastal cities in California. The Pacific Surfliner stops at Union Station in Los Angeles, which functions as a transfer point to rail services across the country. The main Amtrak station within the City of San Diego is Santa Fe Depot (located downtown); however, on weekends and holidays the Pacific Surfliner service also stops at the Old Town Transit Center.

Transit Ridership

Figure 3-6 shows the average daily boardings and alightings across the Encanto community for the year 2010. There were approximately 12,502 boardings and 12,293 alightings on a daily basis, for a total 24,795 daily transit trip ends within the community. The Euclid Avenue Trolley Station had the highest level of boardings and alightings within the Encanto community.

Figure 3-7 shows the percent of Encanto workers who regularly use transit to commute to work. The highest rates of transit commuting occur in the western portion of the community in the census tract to the east of I-805 and south of SR-94 (16 percent). The rate of transit usage for work trips among Encanto workers is nearly double the citywide rate (7 percent versus 4 percent), but this tract has four times the citywide transit commuting rate.

Transit Level of Service

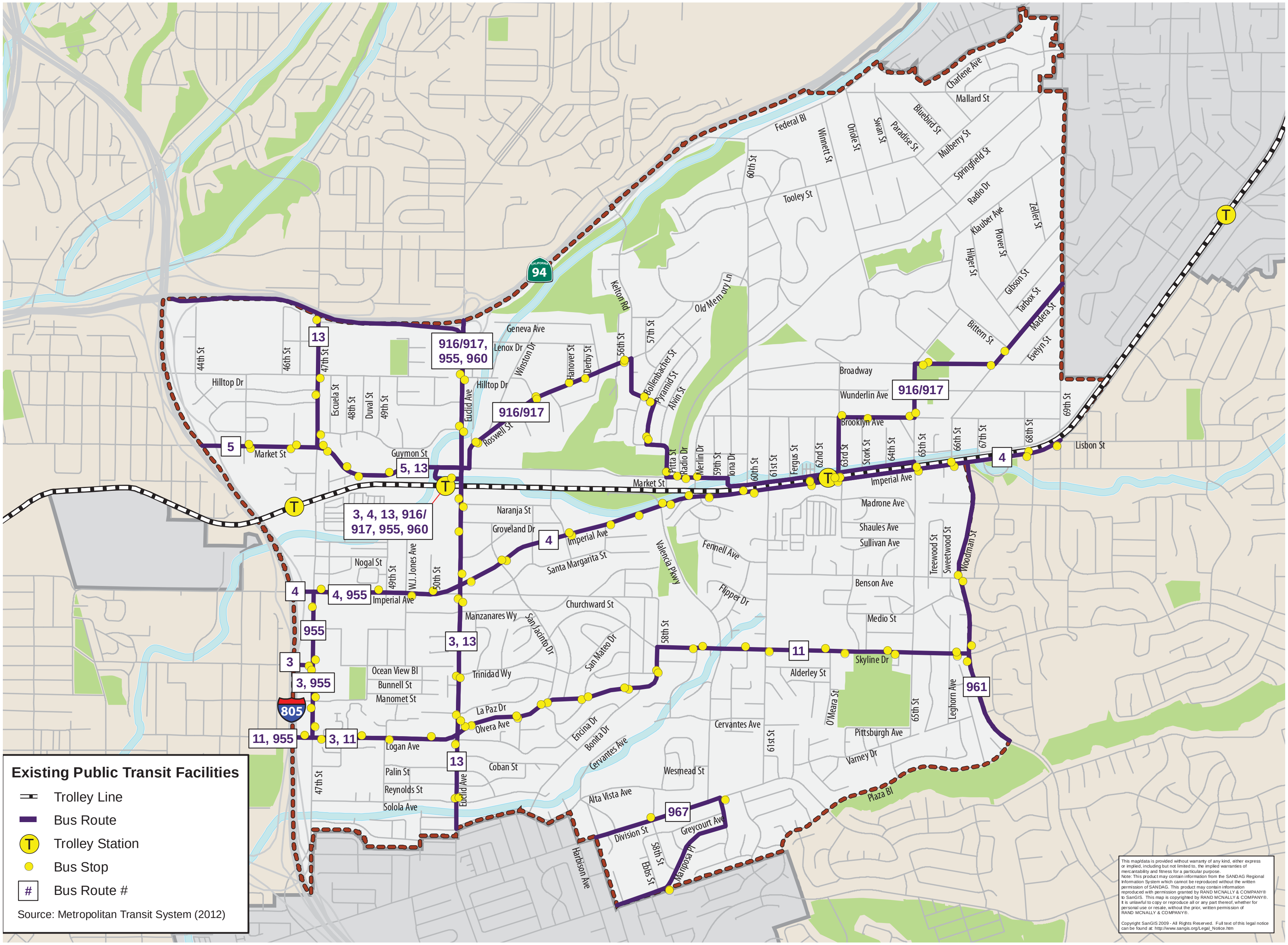
Transit LOS reported here is an indication of the transit rider's experience while using transit facilities along these study corridors. Major variables affecting the transit environment include frequency of service, reliability of service, mean speed, load factors, quality of pedestrian access to transit stops, and transit stop amenities. During both AM and PM peak hours, transit level of service along selected corridors within Encanto is currently at LOS C or better.

Transit Cost

To better understand the dynamics of choosing the mode of travel, a comparison was made between transit cost and time to those using automobiles**.** Table 3-3 compares automobile and transit travel from Encanto to nine popular destinations within the region.

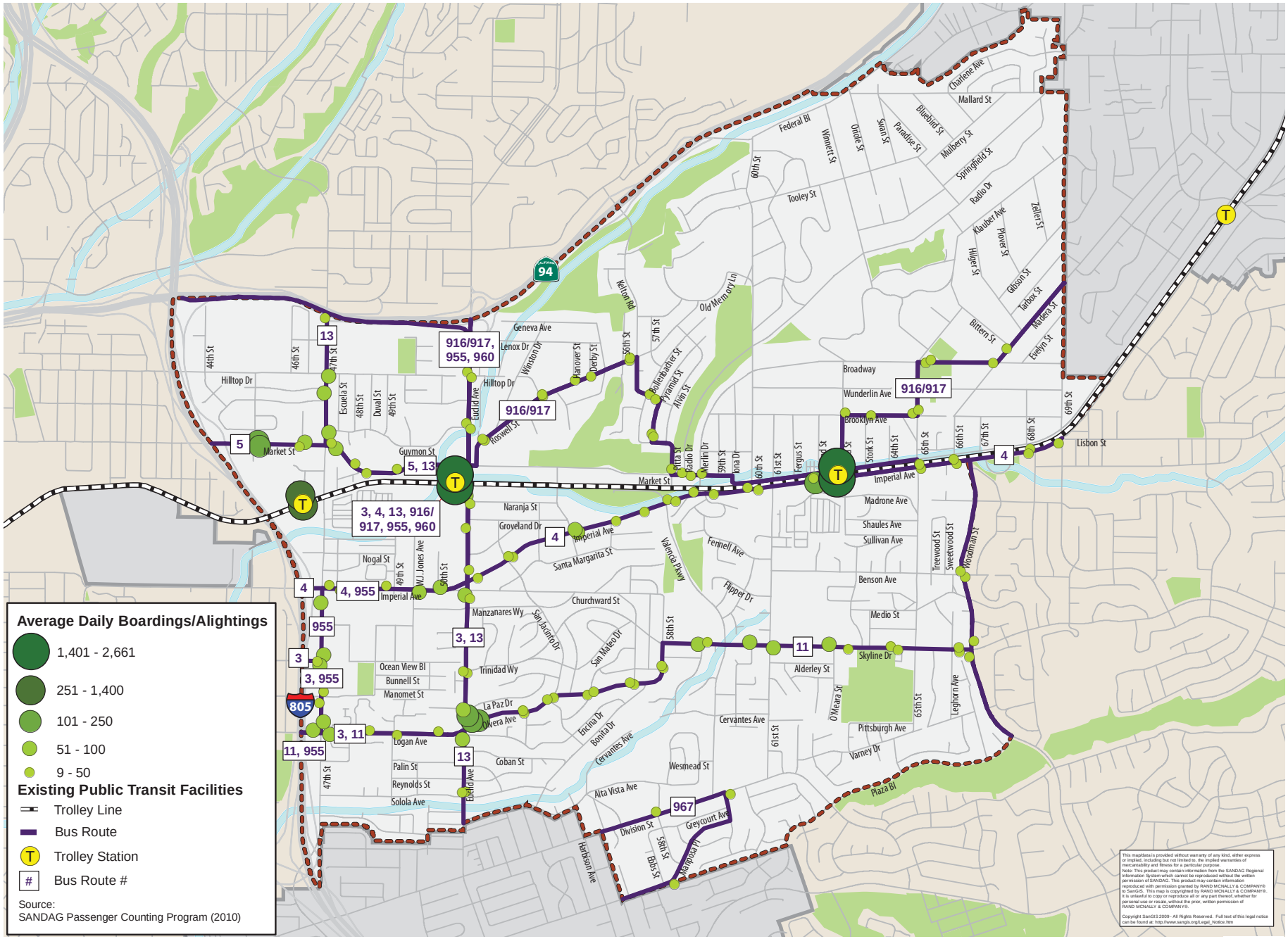
Travel time was obtained from using Google Maps directions. Transit costs are based on stand-ard fare of a one-way ticket and at $5.00 maximum per day (transit daily pass). Auto costs are based on standard business travel reimbursement rates for year 2012, which reflect cost of gas, insurance, and vehicle wear and tear, and are calculated for a round trip to and from the destination. Auto costs do not include parking costs or tolls. Travel estimates were calculated from the 62nd Street Trolley Station.

FIGURE 3-5: Existing Transit Routes and Stops



Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

FIGURE 3-6: Transit Ridership (Average Daily Boardings and Alightings)



CHEN RYAN

Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

SanGIS

FIGURE 3-7: Percent of Transit Commuters by Census Tract

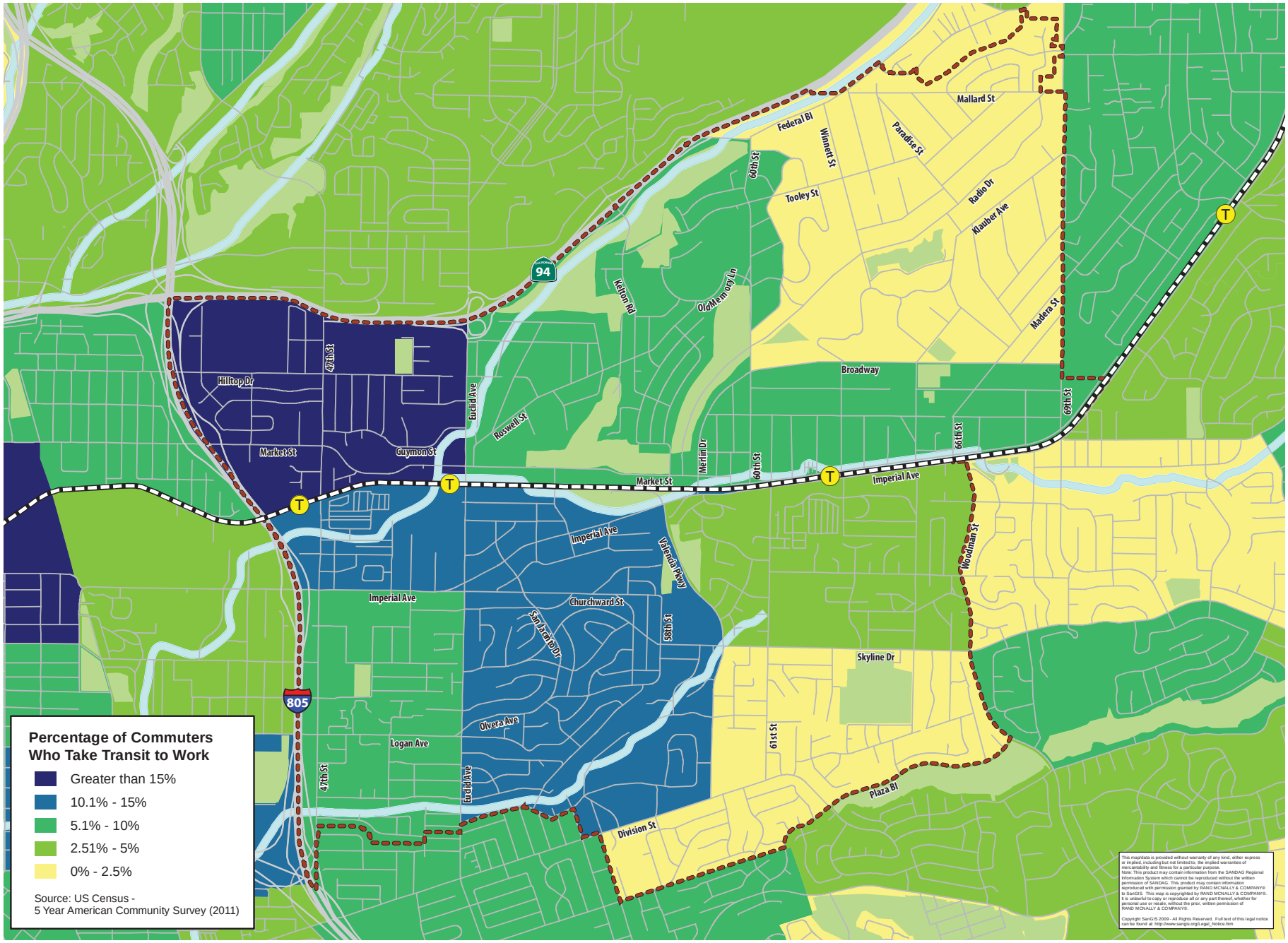


TABLE 3-3: TRANSIT-AUTO COST COMPARISON

DESTINATION	DISTANCE (MILES)	BY AUTO			BY TRANSIT		
		TIME (MIN)	ONE-WAY COST ($)	ROUNDTRIP COST ($)	TIME (MIN)	ONE-WAY COST ($)	ROUNDTRIP COST ($)
San Diego International Airport	9.8	18.0	5.4	10.88	46.0	5.00	5.00
San Diego State University	5.7	17.0	3.2	6.33	38.0	4.50	5.00
Price Center at UCSD	20.9	26.0	11.6	23.20	71.0	5.00	5.00
San Diego City Hall	7.5	15.0	4.2	8.33	26.0	2.50	5.00
National University at Spectrum Center	11.5	17.0	6.4	12.77	53.0	5.00	5.00
General Dynamics NASSCO	7.0	13.0	3.9	7.77	24.0	2.50	5.00
Fashion Valley Transit Center	10.2	17.0	5.7	11.32	39.0	5.00	5.00
Petco Park	7.3	14.0	4.1	8.10	17.0	2.50	5.00
Old Town Transit Station	11.2	17.0	6.2	12.43	43.0	2.50	5.00
Average	**10.1**	**17.1**	**5.62**	**11.24**	**39.7**	**3.83**	**5.00**

Notes:
All travel estimates were originated at the 32nd Street Trolley Station.
"Distance" represents one-way travel distance between the start and end location.
"Time" for the auto trip is estimated based on the free flow speed and delay due to congestion was not included in the estimate.
The auto trip cost was estimated based on the distance between the start and end locations, multiplied by the standard cost per mile that tax regulations allow bus ness to deduct ($0.555/mile in 2012). This cost does not account for tolls, parking fees or variation in gas mileage for different vehicle types.
The transit trip cost is based on actual per trip cost.
Travel time was evaluated using Google Maps direction finding website. For the transit information, departure time was 7:00 a.m.

Source: Chen Ryan Associates; December 2012

On average, roundtrip auto travel time is estimated to be less than half that of transit time and the cost of auto travel is more than double the cost of using transit.

Transit Planned Improvements

The San Diego Association of Government's *2050 Regional Transportation Plan Revenue Constrained Scenario* identifies several public transit improvements that will affect the Encanto community, as follows:

- I-805 BRT, Route 680 – Otay Mesa to Sorrento Mesa via I-805 corridor, Otay Ranch/Millenia, National City, Southeastern San Diego, and Kearny Mesa. A Bus Rapid Transit (BRT) service is planned for San Diego along the Interstate 805 corridor as part of the TransNet program. The BRT will connect the Otay Mesa Port of Entry to Kearny Mesa, Sorrento Mesa, UCSD and UTC, providing access to employment and activity centers in a rapid and reliable manner. The 2050 RTP indicates this route will be implemented by the year 2018. Members of the Encanto community have expressed an interest in having the South Bay BRT service the 47th Street Trolley Station. This was included in the 2050 RTP Unconstrained network and SANDAG is currently studying potential station design concepts.
- Rapid Bus, Route 11 – between Spring Valley and SDSU via Encanto, Downtown, Hillcrest, and Mid-City. The RTP indicates this route will be implemented by the year 2035.
- Light Rail Transit, Orange Line – The RTP indicates the Orange Line will have an increased service frequency by the year 2030 to 7.5 minutes during peak periods and 15 minutes during off-peak periods, and a further increase by 2040 to 7.5 minutes off-peak. An extended linkage to the Airport Intermodal Transit Center is planned by the year 2035.
- Light Rail Transit, Orange Line Express - between El Cajon and downtown San Diego. The 2050 RTP indicates this route will not be implemented until the year 2040.
- Light Rail Transit, New Line - between UTC and San Ysidro via Kearny Mesa, Mission Valley, Mid-City, Encanto, National City/Chula Vista via Highland Avenue/4th Avenue. The RTP indicates this route will not be implemented until the year 2050.
- Local Buses - The RTP also states that local bus services will be improved to 15-minute headways all-day along key corridors (all urban routes) by the year 2020, with further improvements to 10-minute headways all-day by 2035.

The RTP Revenue Constrained Scenario is based on all existing and reasonably expected revenues, which assumes increased and/or new funding resources.

The SANDAG Regional Transportation Plan identifies a range of public transit improvements, including a planned bus rapid transit line along Interstate 805.

Bicycle facilities are classified based on a standard typology:

- **Class I Bikeway (Bike Path)** provides a completely separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized.
- **Class II Bikeway (Bike Lane)** provides a restricted right-of-way and is designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally five feet wide. Vehicle parking and vehicle/pedestrian cross-flow are permitted.
- **Class III Bike Route** provides for a right-of-way designated by signs or pavement markings for shared use with pedestrians or motor vehicles.

3.4 Bicycle Network

Bicycle facilities are an integral component of the Encanto transportation system. Adequate bicycle facilities encourage active transportation, enhance recreational opportunities, and help attract visitors. Bikeways not only provide local opportunities for cyclists, but also offer regional connections. This section discusses existing bicycle facilities, activity levels, level of service analysis results, and safety analyses within Encanto.

Bicycle Facilities

Figure 3-8 displays the location of existing bicycle facilities within the Encanto community. As shown, there are currently about 7.6 miles of bicycle facility within Encanto, with about 30 percent being comprised of Class III Bike Route, which provides cyclists with the lowest level of separation from vehicular travel.

Only 7 percent of Encanto roadways have bicycle facilities, indicating low levels of "complete streets" and the lack of an inter-connected bicycle network in this community. Across the City of San Diego as a whole, 13 percent of roadways have bicycle facilities.

Figure 3-8 also shows existing and planned bicycle facilities consistent with the City's Bike Master Plan Draft Update.

Bicycle Volumes and Activity Levels

Bicycle Journey to Work

Figure 3-9 displays cycling rates for commuters to work for Encanto. The rate of cycling to work is lower in Encanto compared to the City and also compared to the County as a whole, likely due, in part, to the hilly terrain. Approximately 21 residents are currently cycling to work, which is 0.1 percent of all workers in Encanto. Across the City as a whole, about 0.9 percent of all workers are cycling to work.

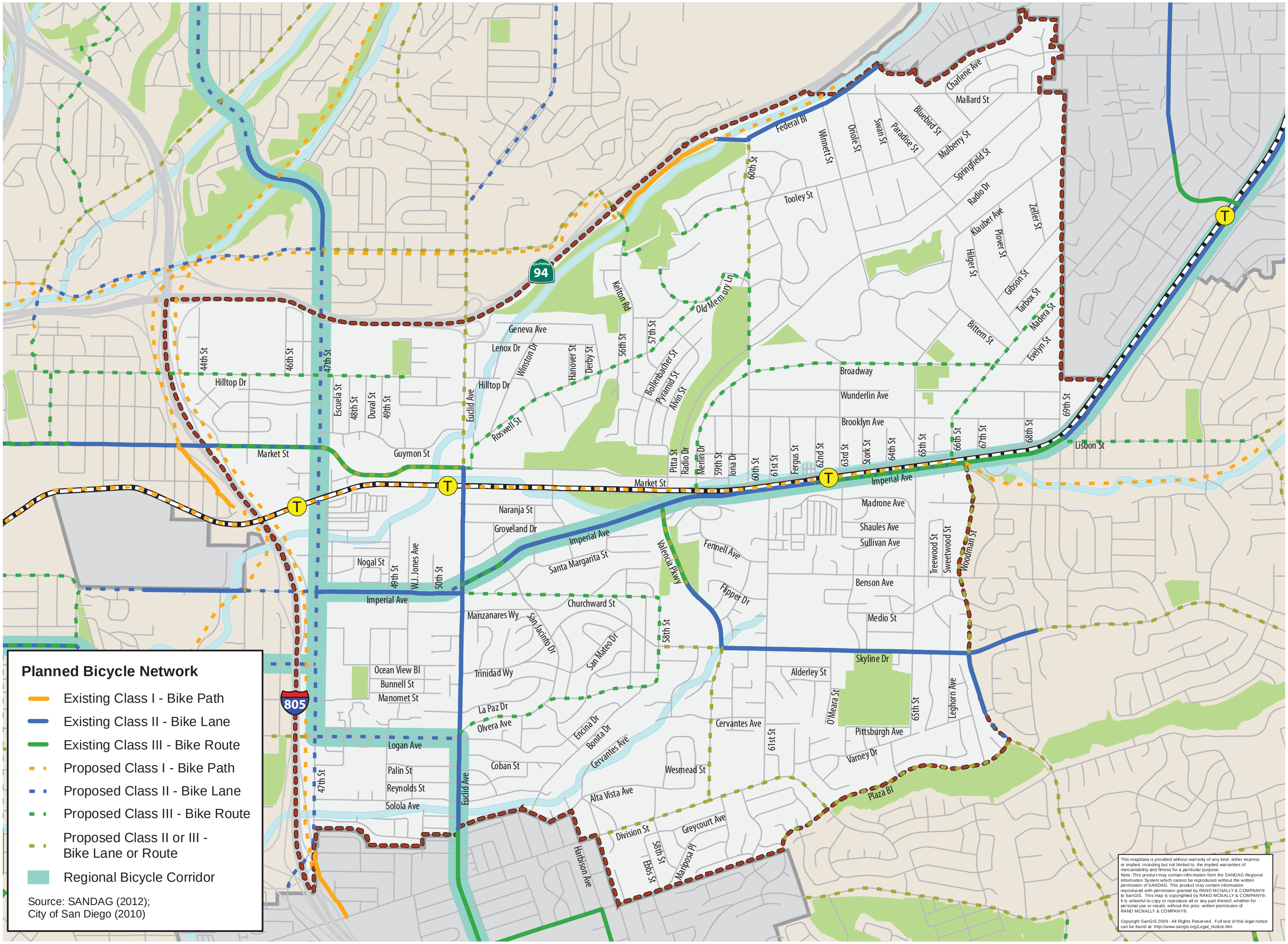
The census tract located in the northeastern corner of the community, east of 60th Street and north of Broadway, has the highest rate of bicycle commuting (0.6%), which is close to the citywide rate of bicycle commuting.

Bicycle Volumes

Bicycle counts undertaken for this project are shown in Figures 3-10A and 3-10B. The highest AM and PM peak hour bicycle count (10 AM peak hour cyclists and 12 PM peak hour cyclists) occurs at Euclid Avenue and Market Street, suggesting potential interactions between cyclists and the light rail transit system via the Euclid Avenue Trolley Station.

Market Street and Euclid Avenue have relatively higher rates of cycling than other major streets in the community. Cycling along Market Street however can be dangerous and uncomfortable due to the provision of only a Class III Bike Route, which does not provide a high level of protection from vehicular traffic.

FIGURE 3-8: Existing and Planned Bicycle Network



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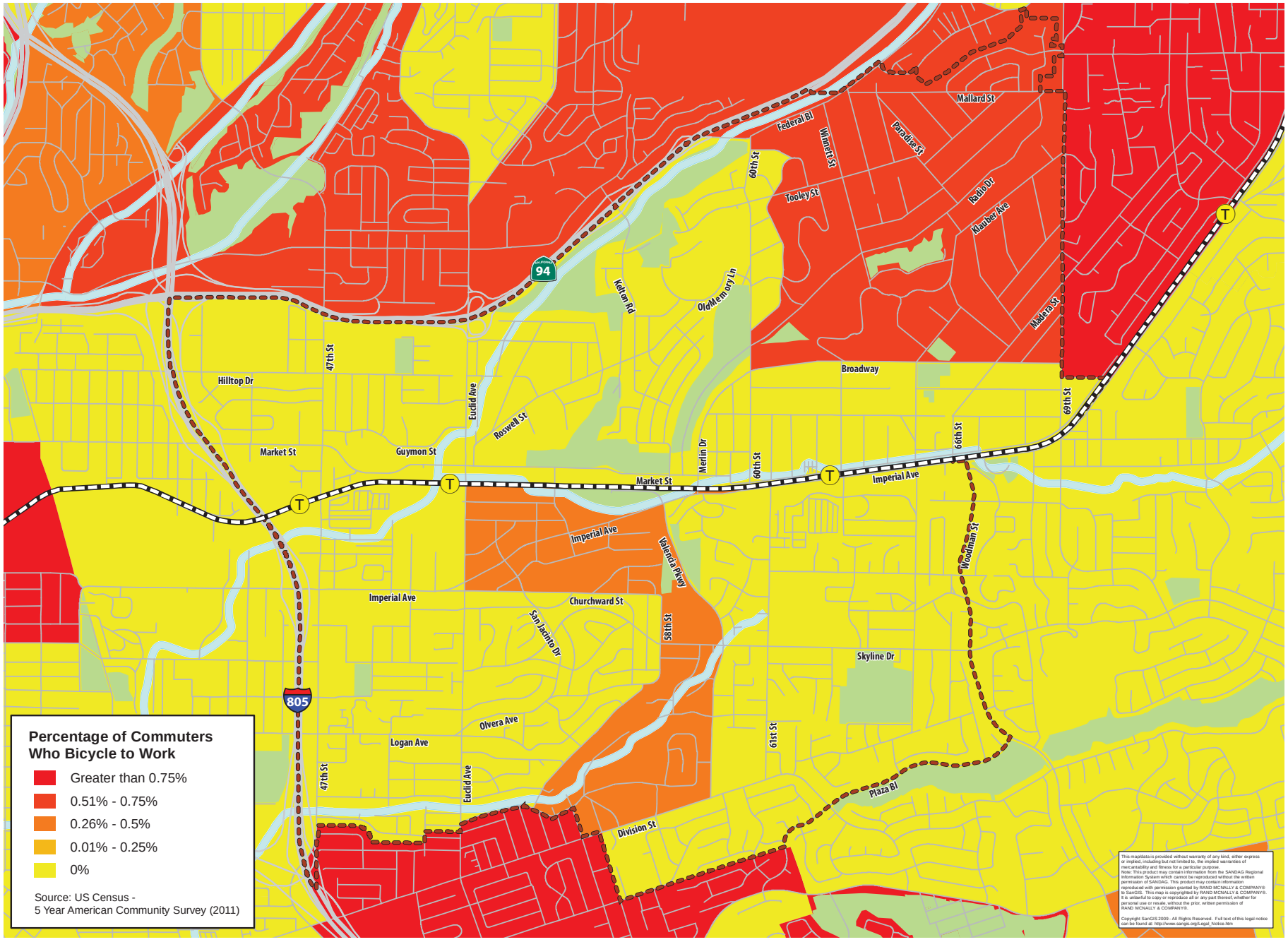
Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

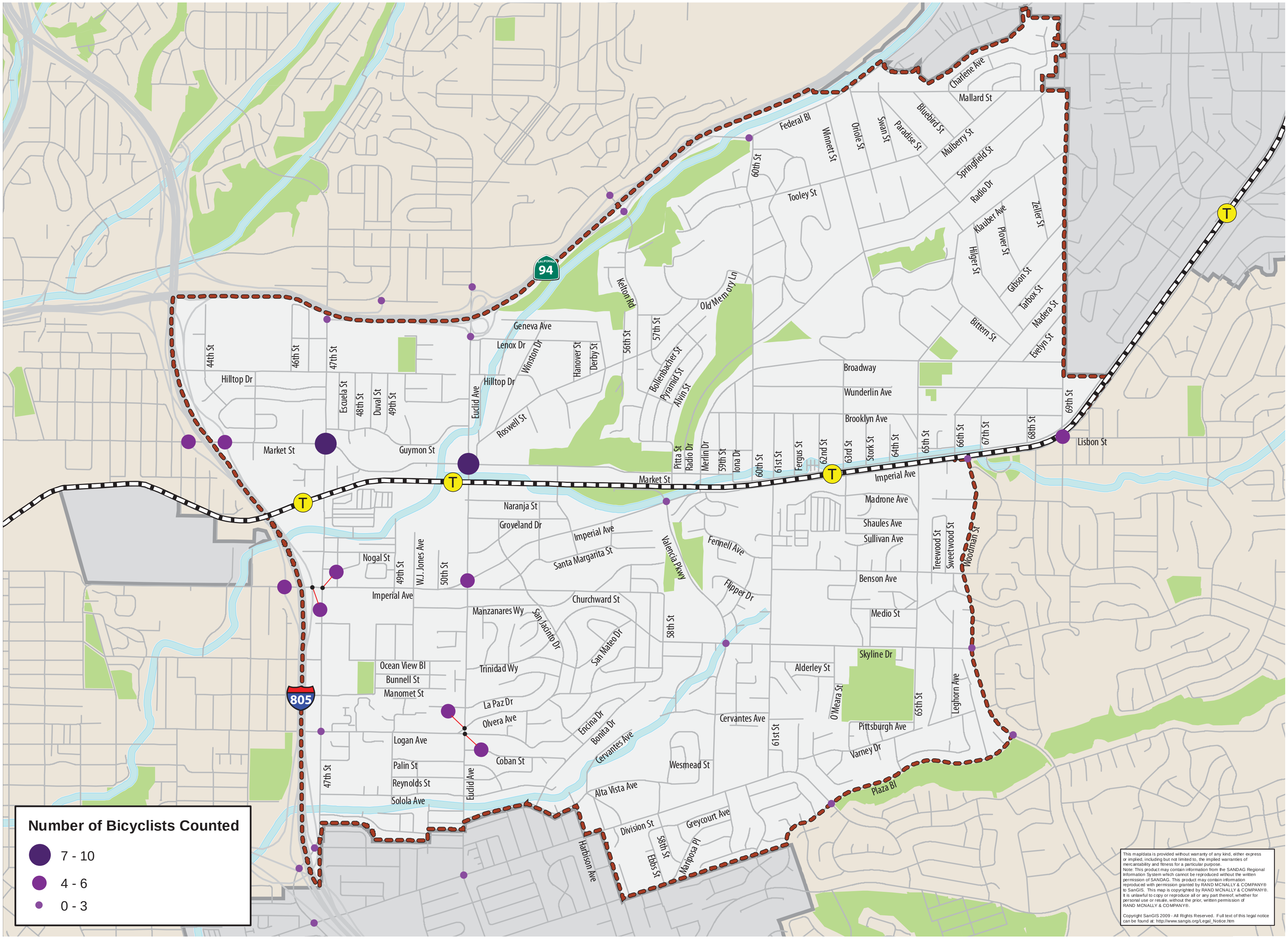
SanGIS

FIGURE 3-9: Percent of Bicycle Commuters by Census Tract



Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

FIGURE 3-10A: AM Peak Hour Bicycle Counts



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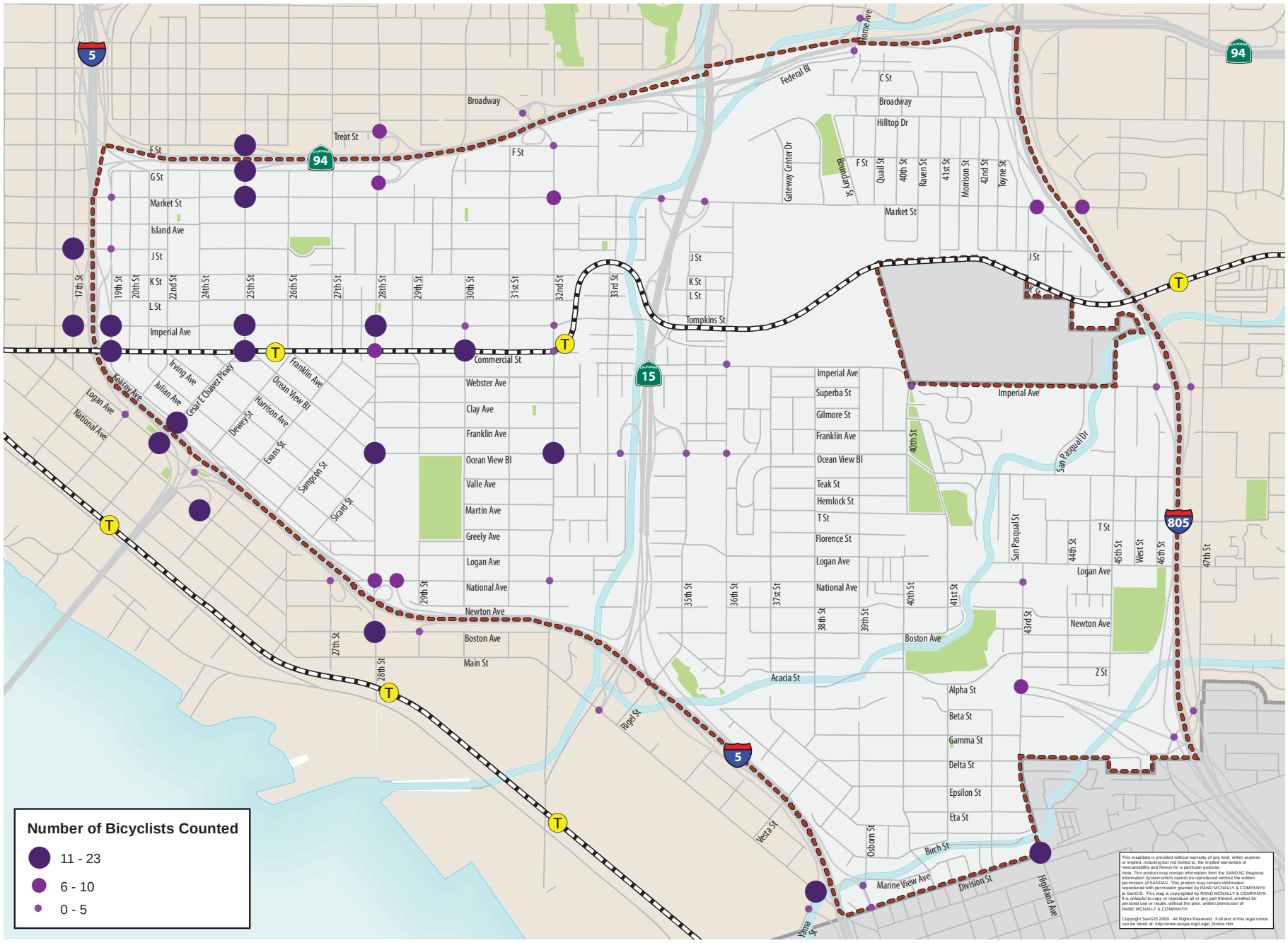
Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

SanGIS

FIGURE 3-10B: PM Peak Hour Bicycle Counts

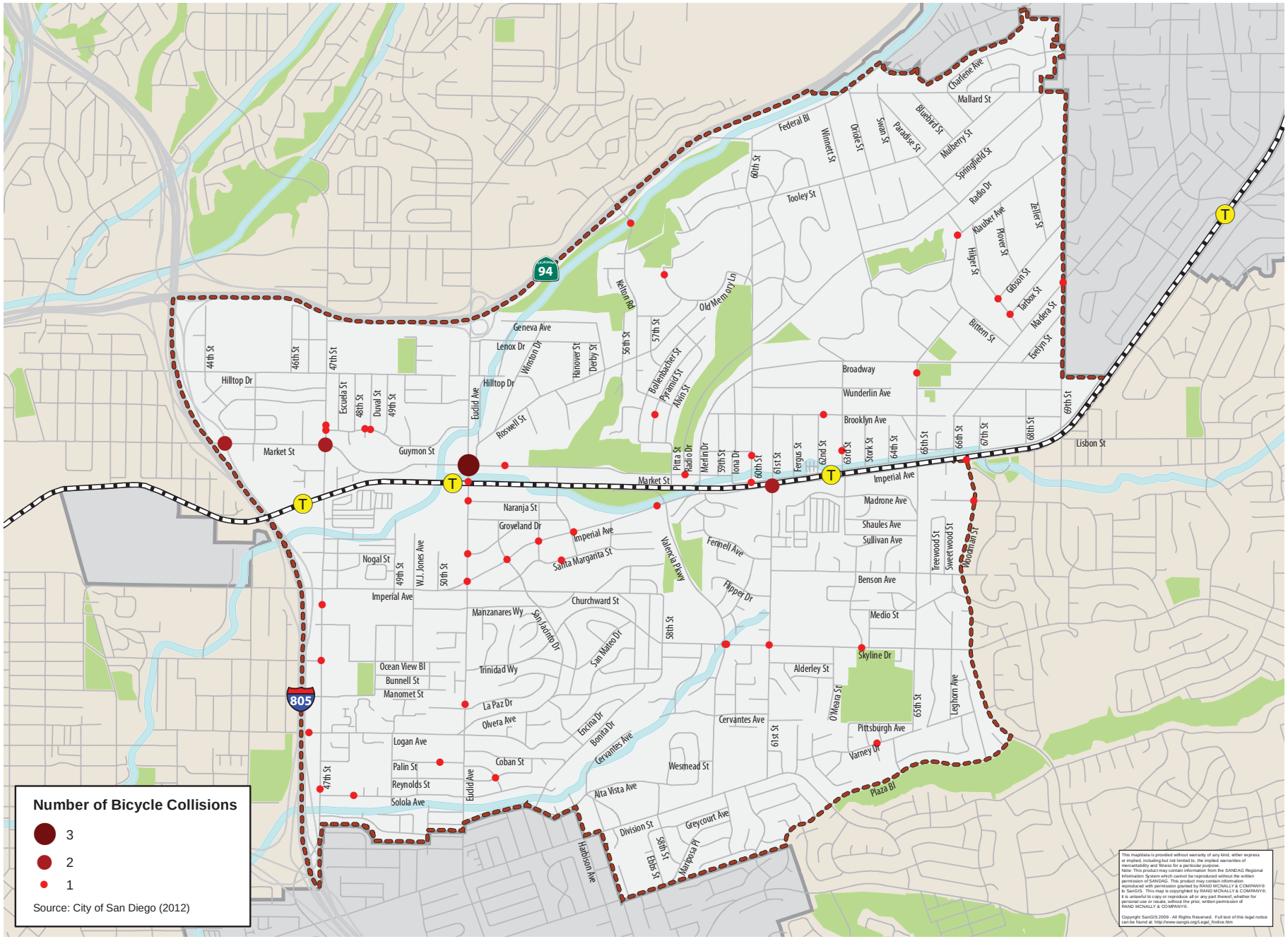


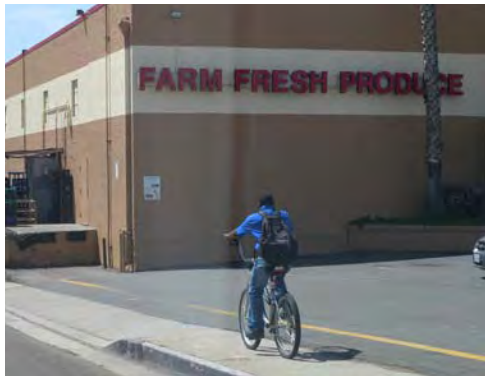
CHEN RYAN

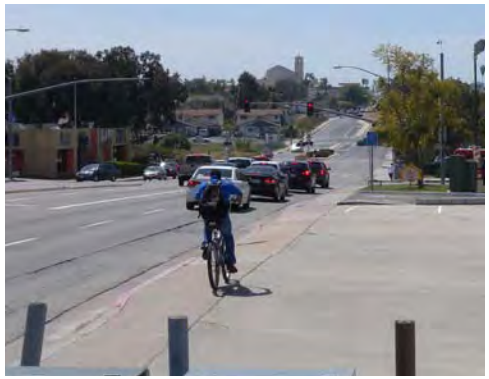
Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012; Dyett & Bhatia, 2012

SanGIS

FIGURE 3-11: Bicycle Collisions (July 2007-September 2012)







The Planning Area lacks on-street bicycle facilities, so bicyclists often choose to use the sidewalk, as shown here on Euclid Avenue.

Bicycle Level of Service

Cyclist level of service was evaluated along selected corridors within Encanto using multi-modal level of service methodology described in Section 3.1. The LOS reported here is an indication of the cyclist's experience while cycling along these study corridors. Major variables affecting the cycling environment include lateral separation from vehicular traffic, speed and makeup of the vehicular traffic, pavement conditions, directional vehicular traffic volumes, and intersection crossing distance. All of the study segments are providing LOS D or better for cyclists during both the AM and PM peak hours.

Bicycle Safety

Bicycle collision data was obtained from the City of San Diego for the period from the period from 2007 to 2012. Figure 3-11 displays the distribution and location of these collisions across Encanto.

During this period there were 51 bicycle-related collisions reported within Encanto. There were two bicycle-related fatalities during this period and the majority of the reported collisions resulted in an injury (46 injured out of 51 total collisions). A majority of the collisions involved adult cyclists (35 adult cyclists), rather than children (16 child cyclists).

3.5 Streets and Freeways

This section identifies key study roadways, intersections, and freeways in Encanto, and presents existing level of service conditions associated with these facilities. The roadway network is comprised of regional facilities such as I-805 and SR-94, as well as numerous arterials and local streets, as shown in Figure 3-12.

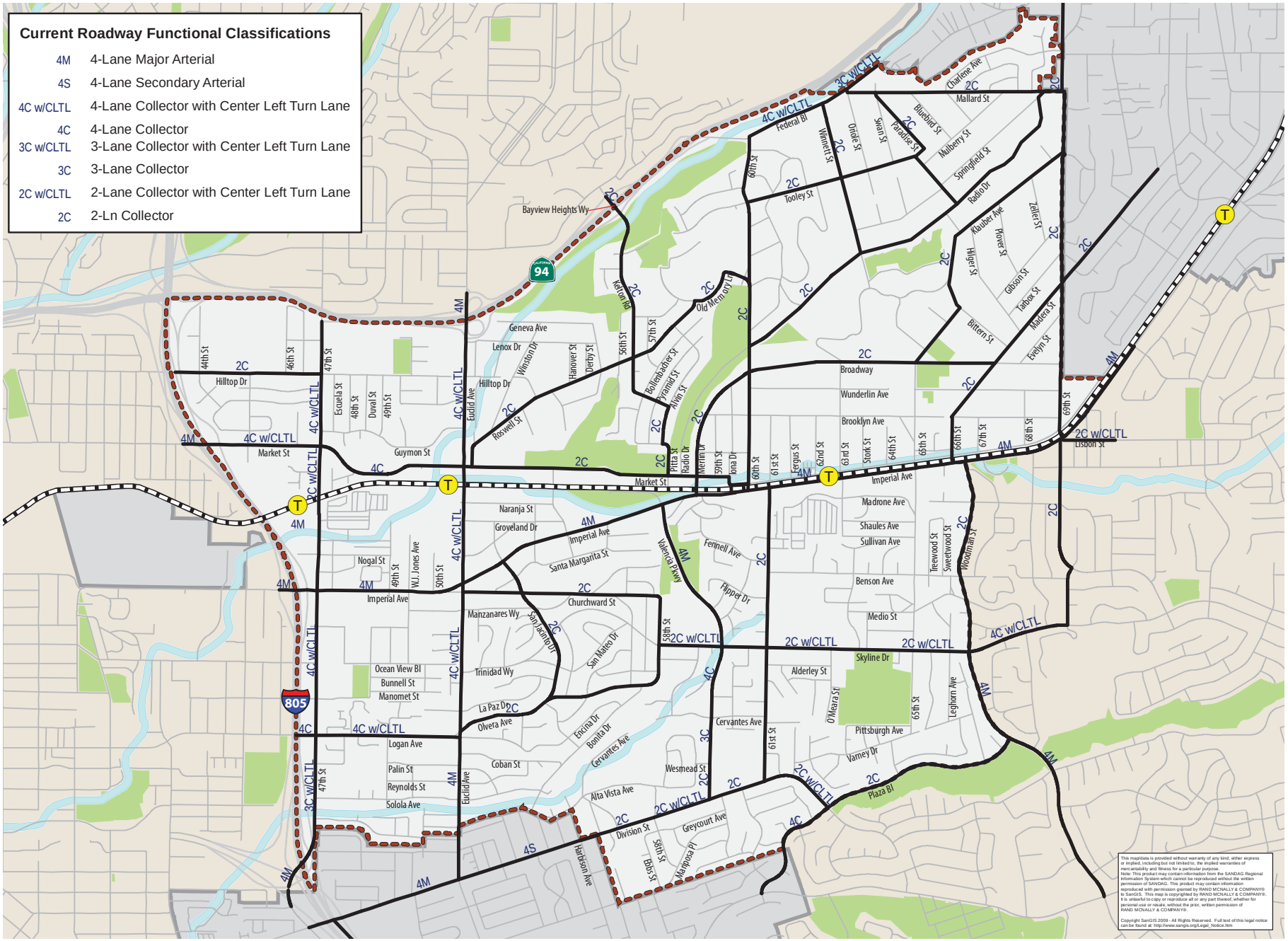
Traffic Volumes and level of Service

It is common practice to utilize typical existing and future weekday traffic volumes when planning for a community's mobility element. Figure 3-13 displays average daily traffic volumes for study roadway segments, along with the current level of service.

As shown in the figure, while most roadway segments in the Planning Area are operating at LOS A, B or C, there are currently six segments within Encanto that are operating at LOS E or F, indicating significant delay:

- Mallard Street, between Federal Boulevard and 69th Street (LOS E);
- Market Street/Akins Avenue, between 51st Street and 60th Street (LOS F);
- Division Street, Harbison Avenue and 58th Street (LOS F);
- Division Street, Valencia Parkway and 61st Street (LOS F);
- Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps (LOS F); and
- Woodman Street, Imperial Avenue and Skyline Drive (LOS E).

FIGURE 3-12: Roadway Network



Ensuring the safety of all users—pedestrians, bicyclists, transit riders, and drivers—will be an essential component of the plan update and a priority in high traffic areas.

In addition, two intersections are currently operating at LOS E or F during the AM and/PM peak hour, as follows:

- Euclid Avenue/SR-94 EB Ramps – LOS E during the AM peak hour and LOS F during the PM peak hour; and
- Euclid Avenue/SR-94 WB Ramps – LOS F during both the AM and PM peak hours.

As shown on Figure 3-13, all freeway segments within the study communities are currently operating at LOS D or better with the exception of the following seven segments:

- I-805, between Home Avenue and SR-94 (LOS F; northbound);
- I-805, between Home Avenue and SR-94 (LOS F; southbound);
- I-805, between SR-94 and Market Street (LOS F; northbound);
- I-805, between SR-94 and Market Street (LOS F; southbound);
- I-805, between Imperial Avenue and 47th Street (LOS E; southbound);
- SR-94, between I-805 and 47th Street (LOS E, westbound); and
- SR-94, between 47th Street and Euclid Avenue (LOS E, westbound)

Auto Safety

Auto Collision Rates

Automobile collision data were obtained from the City of San Diego for the period from 2007 to 2012. The data indicate that a total of 1,193 vehicle-to-vehicle collisions occurred over this period within Encanto.

Figure 3-14 shows the distribution of automobile collisions across Encanto. These collisions resulted in 787 injuries and four fatalities. The most prominent collision causes were "unsafe movements" on the part of the driver and "unsafe speeds".

Citywide collision average rates along similar roadway types range from 0.47 to 0.86 collisions per million vehicle miles, while on the Encanto Neighborhoods Urban Streets, the collision rates range from 1.40 to 5.23 collisions per million vehicle miles (with the exception of the segment of 47th Street between SR-94 and the I-805 northbound ramps).

In general, these collisions are taking place along the segments and at the intersections with the highest traffic volumes in the Planning Area—namely, Imperial Avenue, Euclid Avenue, Market Street, and 47th Street. However, that Encanto's accident rates are higher than citywide rates is disconcerting. This higher rate of accidents could be due to the prevalence of freeways and freeway off-ramps, which may suggest higher speeds, volumes, and turning movements. While this analysis does not determine causality for the variation in accident rates, it does suggest that the Community Plan update process will need to look more closely at roadway safety for all users as the transportation network is developed.

FIGURE 3-13: Existing Roadway Traffic Volumes and Levels of Service

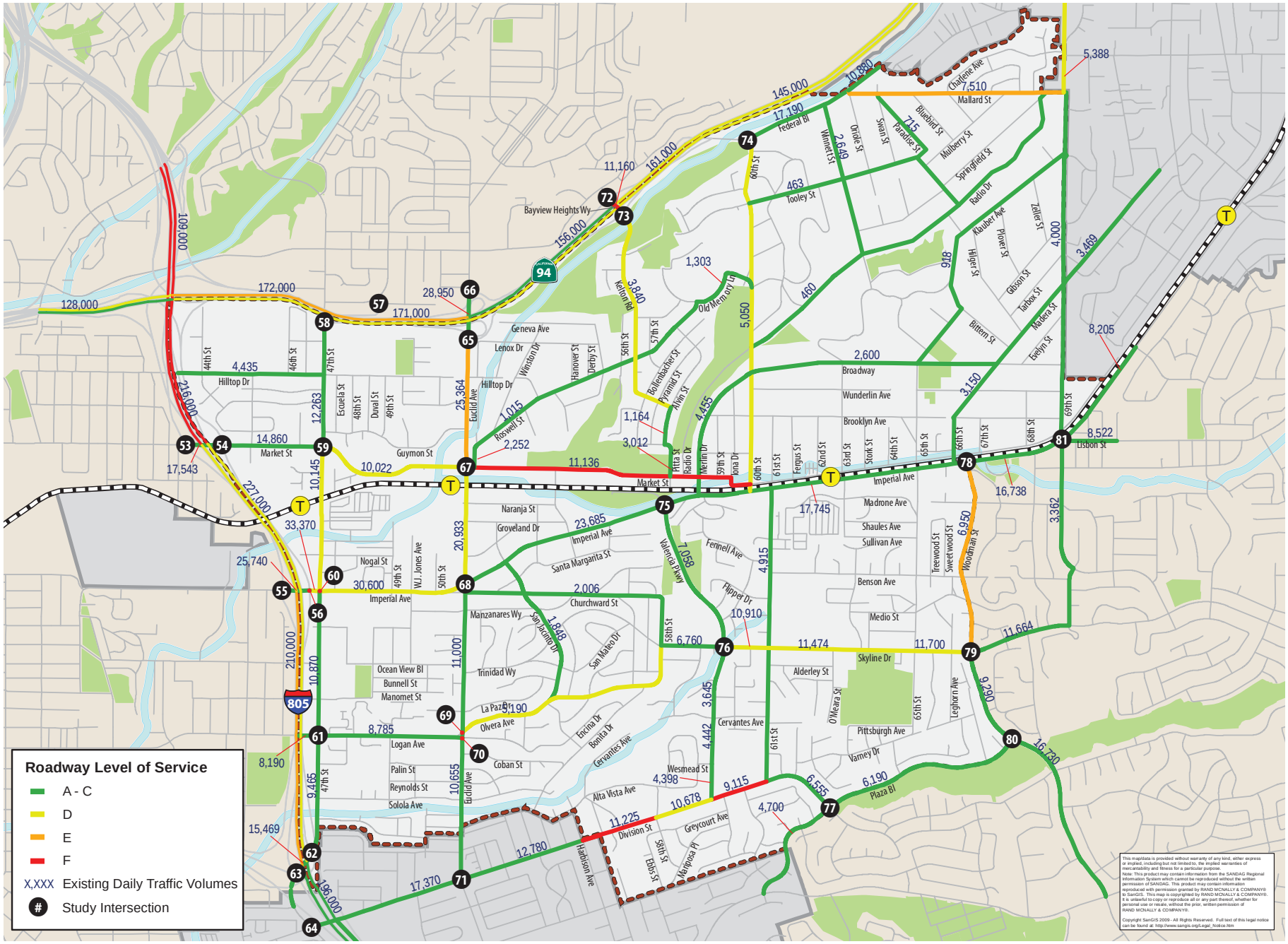
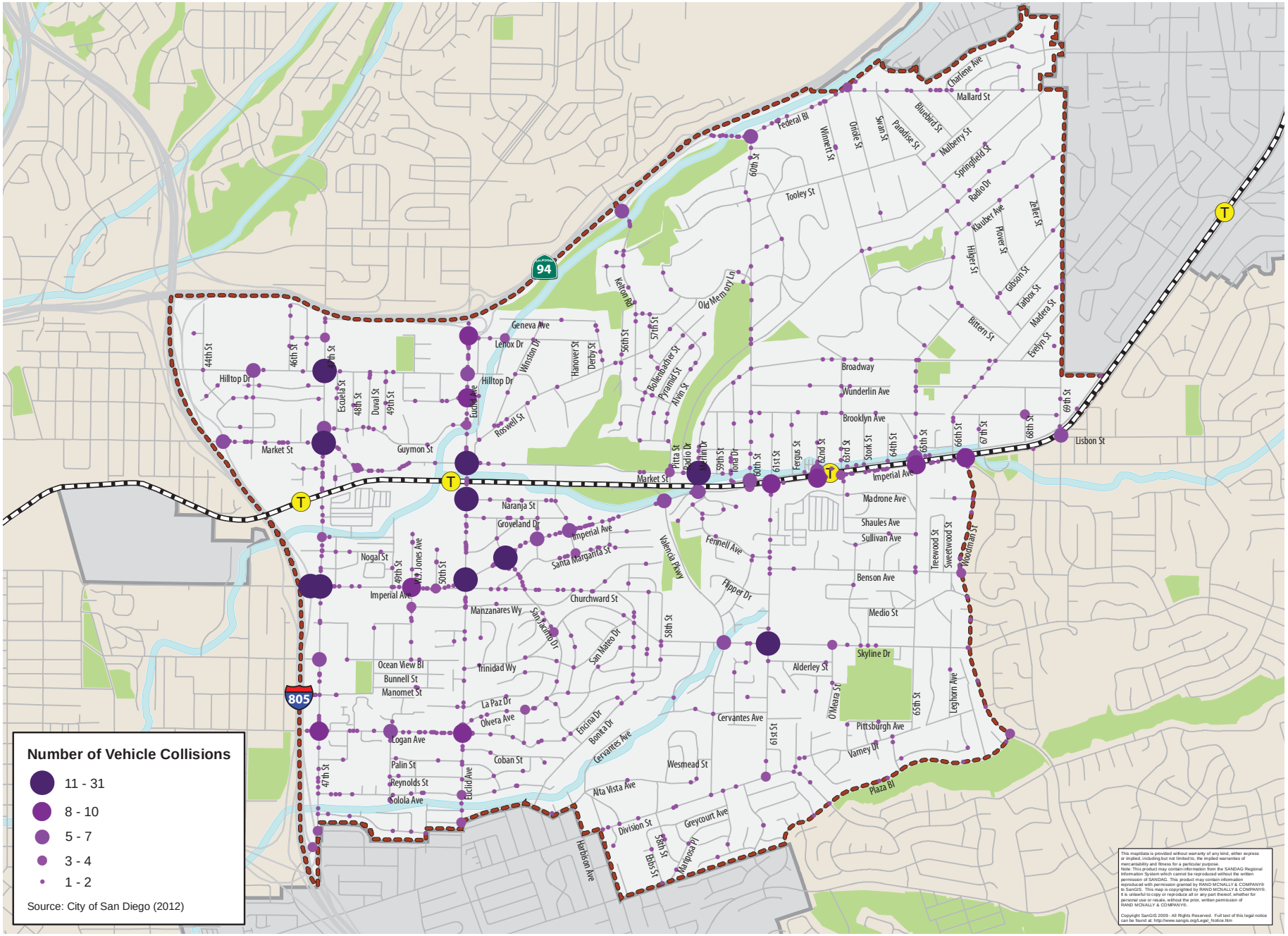


FIGURE 3-14: Vehicle Collisions (July 2007 to September 2012)



CHEN RYAN

Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

SanGIS

3.6 Parking

Encanto currently has a variety of parking options, including public on-street parking (with and without time restriction), as well as private off-street parking for local businesses and residents. Public off-street parking lots are generally not available in the Encanto community with the exception of the three trolley station parking lots located at 47th Street, Euclid Avenue, and 62nd Street.

Parking Occupancy

On-street "drive-by" parking occupancy data was collected on Wednesday, December 5, 2012. Parking occupancy data were collected during periods in the morning (7AM - 9AM), mid-day (11AM - 1PM), and evening (6:30PM - 8:30PM), in order to determine the variations in parking demand resulting from the mix of land uses in Encanto. The peak weekday parking demand period is between 6:30PM and 8:30PM (evening peak).

Figure 3-15 shows the observed percent parking occupancy during the evening peak. (Morning and noon peak are shown in the complete transportation analysis in Appendix A.) As shown, there is currently a high demand for on-street parking during the evening peak period at the following locations:

- Logan Avenue, between I-805 and Euclid Avenue; and
- Merlin Drive, between Imperial Avenue and 60th Street.

A "drive-by" parking occupancy survey was conducted for the three trolley station parking lots (47th Street, Euclid Avenue, and 62nd Street) during the morning, mid-day, and evening peak periods. Overall, all three parking lots were well utilized during the morning and mid-day peak with the Euclid Trolley Station parking lot reaching 80 percent occupancy during the mid-day peak.

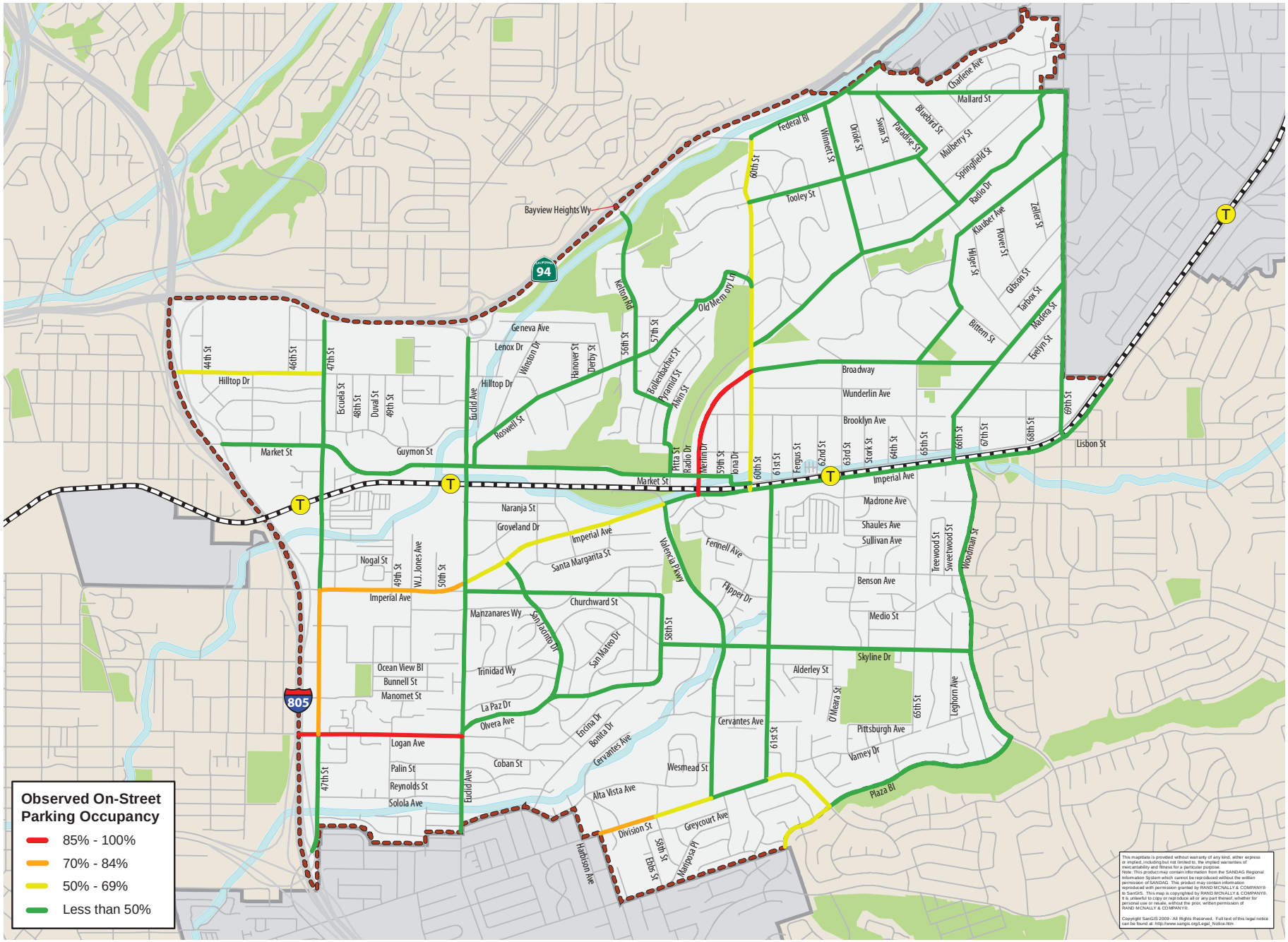
3.7 Airport and Goods Movement

San Diego International Airport and the Proposed Intermodal Transit Center

The closest airport serving Encanto is the San Diego International Airport (Lindbergh Field). The Destination Lindbergh Plan proposes an expanded configuration of the San Diego International Airport that attempts to minimize airport-related traffic impacts to adjacent communities, and improve intermodal access to the airport. The plan recommends improvements to the local and regional roadway network providing access to the airport, as well as a new transit route to serve the airport. The San Diego International Airport Master Plan also outlines several local roadway improvement measures near the airport to expand vehicular capacity and enhance access.

The Intermodal Transit Center (ITC) is proposed as an intermodal hub to facilitate air passengers accessing the airport without driving a single-occupant vehicle. The ITC is planned to be located at the north end of the airport, just south of I-5 between Washington Street and Sassafras Street. Plans indicate that existing trolley lines, the COASTER, Amtrak, new express bus routes, several local bus routes and the planned California High Speed Rail system, will all serve the ITC.

FIGURE 3-15: Observed Peak On-Street Parking Occupancy (Evening Peak)



Goods Movement

The efficient movement of goods is essential for meeting basic consumer demands and requires interaction among various modes of travel. The San Diego region is supported by intermodal goods movement infrastructure consisting of roadways, railways, maritime facilities, and airport facilities. Encanto is located in close proximity to several regionally significant goods movement facilities, including Lindbergh Field, maritime facilities, coastal and inland freight railways, and several regional freeways.

Trucking

Most goods in the San Diego region are transported via trucks along highways and roadways. While the City of San Diego does not have a system of designated truck routes, truck access to Encanto is provided by major freeways, including specifically I-805 and SR-94. Within Encanto, industrial and commercial destinations are generally concentrated along Federal Boulevard, Market Street and Imperial Avenue. Local streets provide access to delivery destinations as well as the transition of freight to rail and ocean transport.

Air Freight

In addition to the transport of freight on roadways, cargo may also move through Encanto via air freight transport companies such as FedEx, DHL Express and UPS. San Diego International Airport serves as the primary regional airport for freight transported via air. Major cargo airlines serving Lindbergh field include FedEx, DHL Express, and UPS. These and other movers of freight may receive and distribute cargo via maritime operations, rail, or trucks.

Rail

Two companies operate freight rail service within San Diego County. The Burlington Northern Santa Fe Railway Company (BNSF) operates freight rail service along the same right-of-way as Amtrak and the Coaster passenger services. BNSF transports freight to points north and east of San Diego County, such as Los Angeles and Arizona. According to the LOSSAN Corridor Strategic Assessment, January 2010 freight rail frequencies within this corridor are expected to double (from four trains a day to eight) over the next 20 years.

The San Diego and Imperial Valley Railroad (SDIY) also operates short-haul freight service in San Diego County along the Blue Line and Orange Line trolley corridors during the early morning hours. This service provides an important connection between the Class I BNSF and freight rail service in Mexico. The railroad's main commodities are petroleum products, agricultural products, and wood pulp. The SD&IV hauled around 6,500 carloads in 2008.[1] The SDIY carried almost 6,000 cars in 2010.

Maritime

There are currently no port cargo facilities located within Encanto, although cargo is transported near the study community, via the modes summarized above, to and from the port cargo facilities located at the nearby 10th Avenue Marine Terminal and at the National City Marine Terminal.

1 Wikipedia.org, referencing "RailAmerica's Empire". *Trains Magazine* (Kalmbach Publishing). June 2010.

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4 URBAN DESIGN

Encanto is a stable residential community, unique for its topography and views, diversity of uses and people, and evolution of building styles and infrastructure development over time. This chapter describes the existing urban form of the Planning Area and highlights some of the opportunities for urban design improvements in the community. The chapter is organized around urban form patterns of mobility and linkages, blocks and lots, building design, and land form and natural features.

The trolley line creates a dividing line between southern (top) and northern (botom) neighborhoods

4.1 Edges and Neighborhoods

The northern and western edges of Encanto are clearly defined by State Route 94 to the north and Interstate 805 to the west. The eastern boundary runs along 69th Street and the southern limits are defined by Paradise Valley Canyon and Division Street, with little physical differentiation between Encanto and adjacent communities around these boundaries. The trolley corridor bisects the Planning Area and serves as a dividing line between the northern and southern neighborhoods. While the freeway infrastructure that forms some of these edges can overwhelm and divide the area, they also establish clear definition boundaries that contribute to a distinct sense of place.

Neighborhoods

Encanto has developed into eight official neighborhoods, as represented in Figure 4-1. Neighborhoods close to I-805 follow a grid pattern of development, which begins to loosen and spread out as one progresses eastward toward the hills. The eastern neighborhoods have an almost rural feel, with curving, disconnected streets and several canyons and pockets of natural open space.[1]

The San Diego Police Department established and maintains the evolving neighborhood boundary lines as part of a shift from police "beats" to neighborhood policing, Neighborhood boundaries and name identification will be part of the Community Plan update.

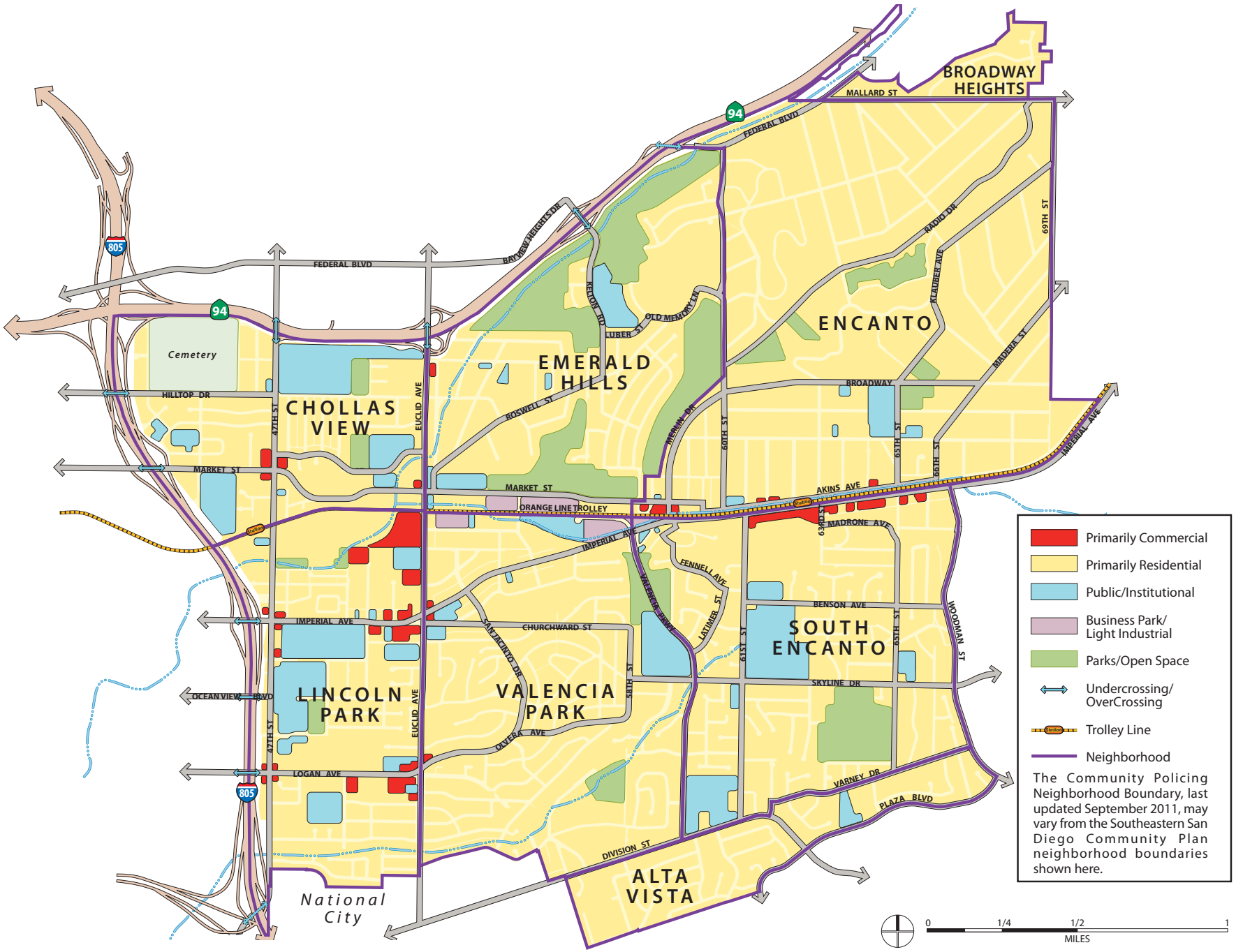
1 For a more detailed description of each neighborhood, see Existing *1987 Southeast San Diego Community Plan.*

Western Neighborhoods

The Chollas View and Lincoln Park neighborhoods are located between I-805 and Euclid Avenue, on the north and south sides of the Trolley line, respectively. The 47th Street and Euclid and Market stations serve these neighborhoods. Chollas View includes large, irregular blocks with a mix of industrial, commercial and residential uses and a significant amount of vacant land along the Market Street corridor. To the north is a primarily single-family residential neighborhood. Holy Cross Cemetery, Gompers Junior High School, Gompers Park, and a large undeveloped property along Euclid Avenue form the northern edge of this neighborhood, which rises in elevation to the north.

The Market Creek Plaza development lies directly south of the Trolley line in the Lincoln Park neighborhood, with additional office and retail uses to the south along Euclid Avenue. West of Euclid between Imperial Avenue and I-805 is a patchwork of multi-family housing, new small-lot single-family development, a mobile home park, and vacant land, with Chollas Creek passing through. On the south side of Imperial Avenue is the recently rebuilt Lincoln High School, along with an elementary school and neighborhood park. Logan Avenue features a concentration of multi-family housing, showing recent investment, with single-family areas to the north and south.

FIGURE 4-1: Neighborhood Structure



Central Neighborhoods

The Emerald Hills and Valencia Park neighborhoods stretch between three-quarters of a mile and a mile to the east of Euclid Avenue, on the north and south sides of the Trolley line, respectively. Emerald Hills was a large post-World War II subdivision and is composed almost entirely of single-family houses and large areas of undeveloped hillside land and land used for communications towers. Steep topography and development patterns effectively separate this neighborhood from much of the Encanto area to the east. A corridor of light industrial uses exists along the Trolley line between Market Street and the Encanto branch of Chollas Creek.

In Valencia Park, a mix of single-family and small-scale multi-family housing is present in the vicinity of Imperial Avenue. The rest of the neighborhood is generally single-family, suburban-style housing on a winding street pattern.

Eastern Neighborhoods

The Encanto and South Encanto neighborhoods make up almost the entire eastern third of the Planning Area. Imperial Avenue is the spine between these neighborhoods, with a Trolley station and small commercial district centered around 63rd Street. There is a scattering of multi-family and duplex housing within a few blocks of Imperial Avenue; beyond, a low-density and informal pattern prevails. The small Broadway Heights and Alta Vista neighborhoods to the far north and far south, respectively, continue this pattern.

4.2 Streets

Street Types

Major Streets

The western part of the Planning Area is bisected by major streets that together form a super-structure of roughly one square mile (see Figure 4-2). Typical street types are depicted in Table 4-1. The major streets that define this “super-grid” are Market Street, Imperial Avenue, Logan Avenue, 47th Street, and Euclid Avenue. East of Euclid Avenue, the grid “super-grid” structure is substantially more irregular, responding to the area’s topography and reflecting a later pattern of development. Major streets east of Euclid include Mallard Street, Broadway, Skyline Drive, 61st and 66th streets. These streets divide the community into distinct sub-areas, often corresponding with neighborhood boundaries. This is significant because the patterns of development evident in each sub-area vary from one area to the next. This is manifested by differences in land use, the direction of blocks and lots, the topography and the scale of development. The main arterial streets in the community are wide, carry fast-moving car traffic and result in large, expansive intersections that are challenging for pedestrian crossing.

FIGURE 4-2: Street Quadrants

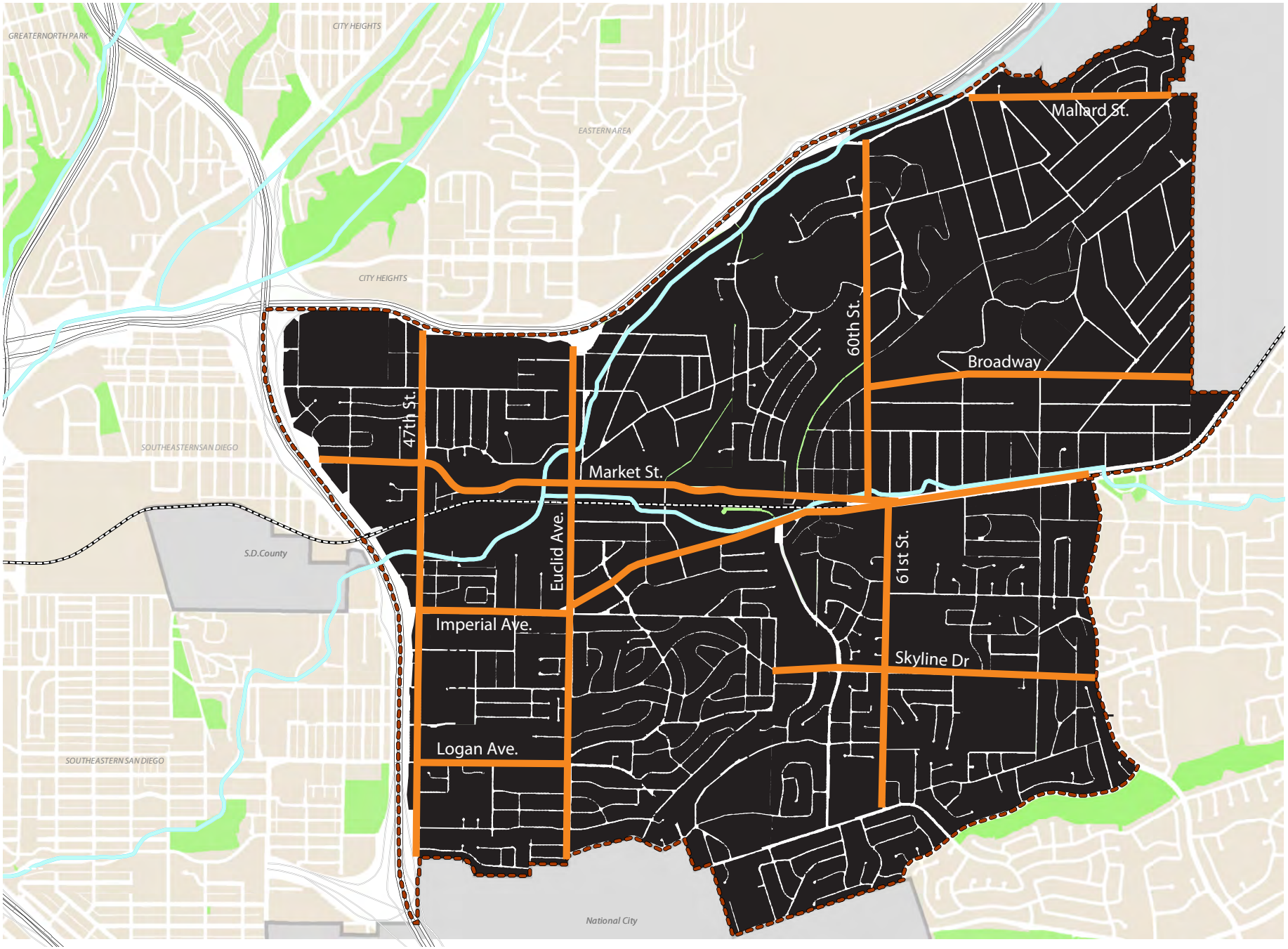


TABLE 4-1: REPRESENTATIVE STREETS

Market Street (approx. 40′ to 80′)

Euclid Avenue (approx. 80′ to 100′)

Imperial Avenue (approx. 75′ to 100′)

47th Street (approx. 60′ to 100′)

Residential Street – Valencia Park (approx. 50′)

Residential Street – Encanto (approx.30′to50′)

Local Streets

Streets in residential areas of Encanto have the appropriate scale for walking, yet more can be done to maintain the roadway, sidewalks and planting areas to make them more pedestrian-friendly and elevate the overall appearance of the neighborhoods. Some neighborhood streets lack sidewalks, street lighting and street trees, making the walking environment unsafe and uncomfortable.

Encanto is characterized by a diversity of street patterns, including loose grids with many interruptions, curvilinear designs, and streets that follow the contours of slopes or the edges of canyons. Connections across major streets are irregular, and in many cases direct routes are not available.

Access and Mobility

Significant barriers restrict access from residential areas to employment and commercial establishments and from the eastern portions to the western side of the Planning Area. The width of major streets such as Market Street, Euclid Avenue, Imperial Avenue and 47th Street makes pedestrian crossing dangerous and unpleasant and causes those streets to divide, rather than unify, the community. In most instances, sidewalks are not separated from the roadway by a landscape strip or buffer, further emphasizing auto dominance, as shown in the photo below.

Dead-end streets are common in the Planning Area, primarily adjacent to Chollas Creek, school sites, steep slopes, the I-805 freeway and major commercial sites (see Figure 4-3). Walls and fences block opportunities to connect multi-family residential with commercial areas, such as Market Creek Plaza. The Planning Area features several schools, yet viable pedestrian and bicycle connections from the schools to transit are lacking. Access to and across Chollas Creek is also restricted.

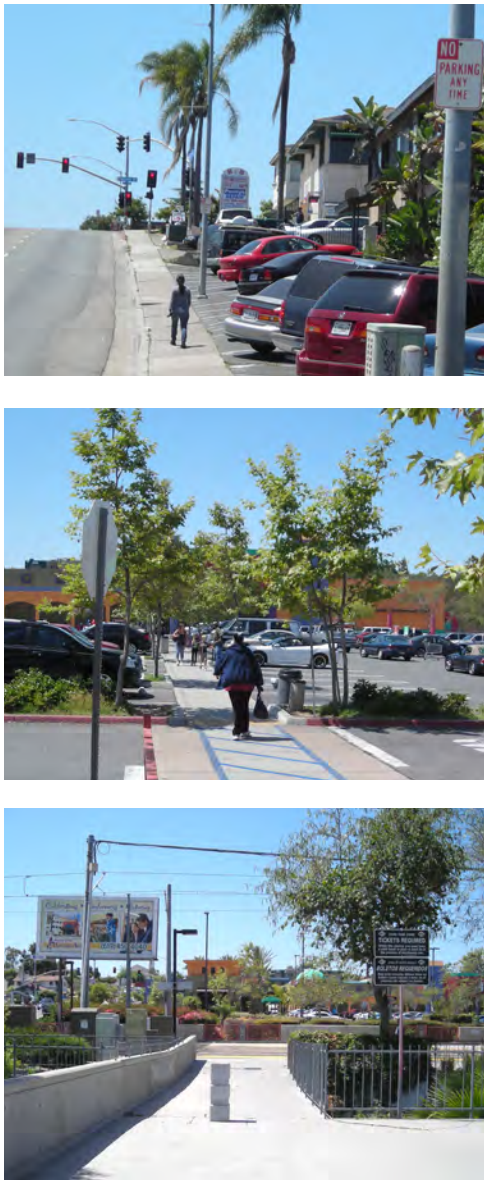
Pedestrian Paths and Connections

Much progress has been made in and around Market Creek Plaza and Jacobs Center, with pedestrian paths that connect across sites, to Market Street and Euclid Avenue, and to the trolley station. The trolley corridor at the Market & Euclid Station is quickly becoming the "heart" of the community. Still, in other parts of the Planning Area, the trolley too often acts as a barrier between neighborhoods to the north and south.

Chollas Creek winds its way through the community and creates many opportunities for views and access to open space. However, sections of the creek are channelized or culverted, and development turns its back on the creek, with fences and gates separating houses from the creek. Although efforts have been made in recent years to restore the creek and build pedestrian connections to and across it, more remains to be done to make this defining piece of landscape a community asset. Instead of walking on major streets (such as Euclid or Market), some residents already prefer to walk along the creek, using informal paths to cross neighborhoods where streets do not connect.

Trolley Corridor

Transit is discussed from a mobility perspective in Chapter 3 and from an urban design perspective here. The trolley corridor bisects the Planning Area, following a natural dip in the topography. The Encanto community has three trolley stops, at 47th Street, Euclid and Market, and 62nd Street. The Euclid and Market sta-



A typical sidewalk without a landscape planting strip is dangerously close to fast-moving automobile traffic (top). Designated foot path across Market Creek Plaza parking lot. (middle). Pedestrian bridge across Chollas Creek into the Trolley station (bottom).

Trolley corridor east of Euclid Avenue (top). Trolley stations at 47th Street. (middle) and 62nd Street (bottom).

tion is highly used and offers several amenities to riders. It is well-connected to the Market Creek Plaza and bus service. The 47th Street station is not as successful. It is elevated from the street and hidden behind a dense tree canopy and an expansive, yet inefficient parking lot. It is surrounded by multi-family residential buildings that do not connect well to the station. The 62nd Street trolley stop is in a small pedestrian refuge island along Akins Avenue. A median also acts as a second refuge island along Imperial. A park and ride parking lot faces the station, as well as a small retail center and a recently built townhome development.

Along most segments of the trolley corridor the tracks divide the community. At Market and Euclid, the trolley acts as a seam that unifies the community. The synergy between the transit station, Market Creek Plaza and the Jacobs Center creates an active, transit-oriented node.

4.3 Blocks and Lots

Block and Lot Patterns

As described in the Streets section, Encanto's "super-grid" of major streets defines sub-areas, which differ from one another in terms of block length and direction, street patterns, and the scale of development. Encanto features a variety of local street patterns, and a variety of block shapes and sizes. Most blocks are 200 to 250 feet wide, but vary in length from 400 to well over 1,000 feet. Block patterns contribute to various neighborhood designs, with a discontinuous orthogonal grid typical west of Euclid Avenue and curvilinear or topography-influenced patterns to the east. See Figure 4-4, showing block patterns in area details.

Fine-grain vs Large-Scale Development

Small single-family residential lots make up most of the community, producing a relatively fine-grained pattern of development in the residential neighborhoods. In contrast, the key commercial areas are made up of large land holdings with industrial warehouses, "big-box" commercial, multi-family and institutional uses with internally focused designs. These large lots are shown on Figure 4-5). Streets and paths within the developments may connect internally, but there is typically only a single point of connection to the larger street system outside of the development.

While these developments provide important attractions, from schools to community centers, libraries, churches, and commercial centers, they contribute to an erosion of the public realm, as each development site is its own "island" with little integration with the larger community.

FIGURE 4-3: Dead End Streets in the Euclid and Market Village Area

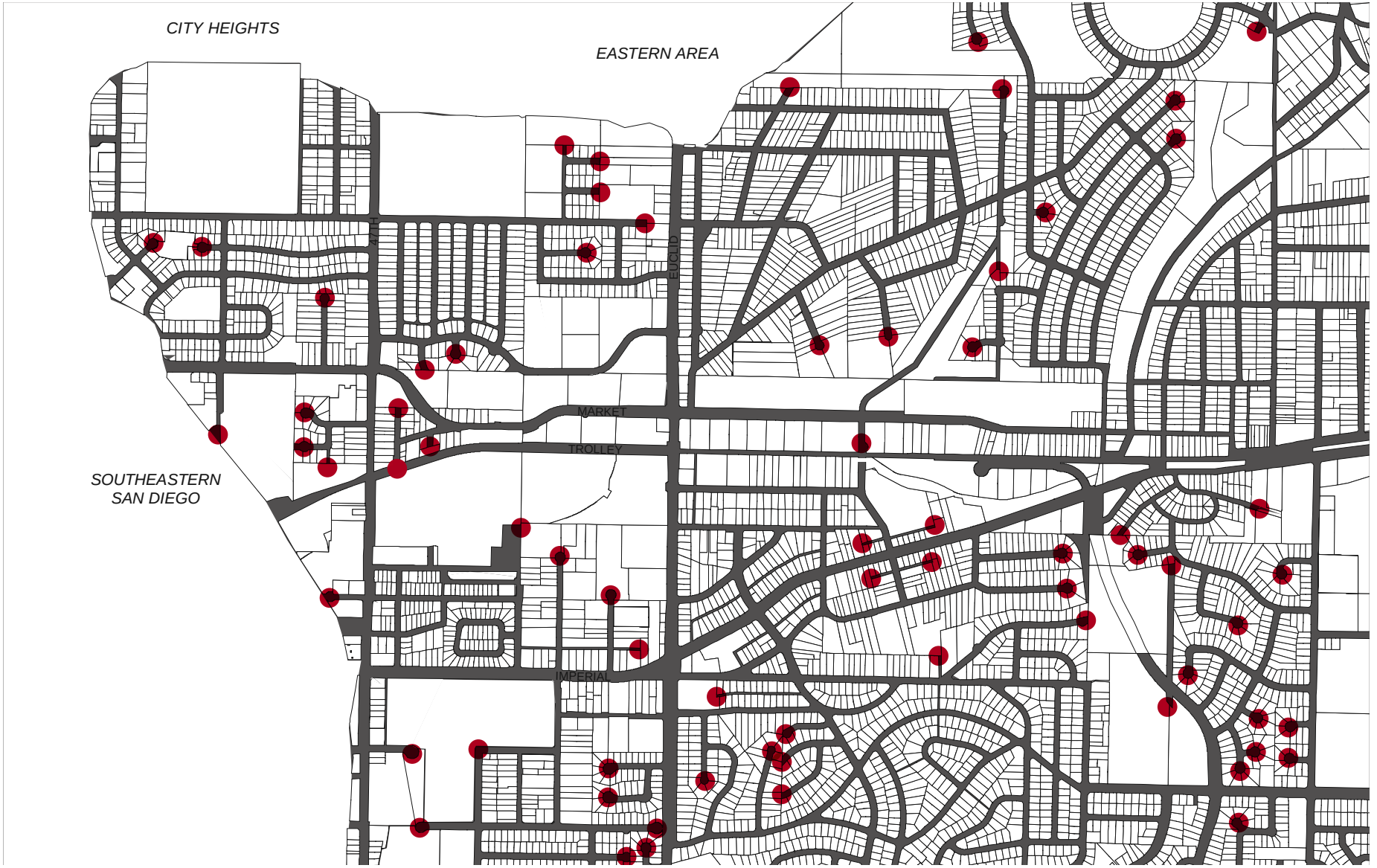
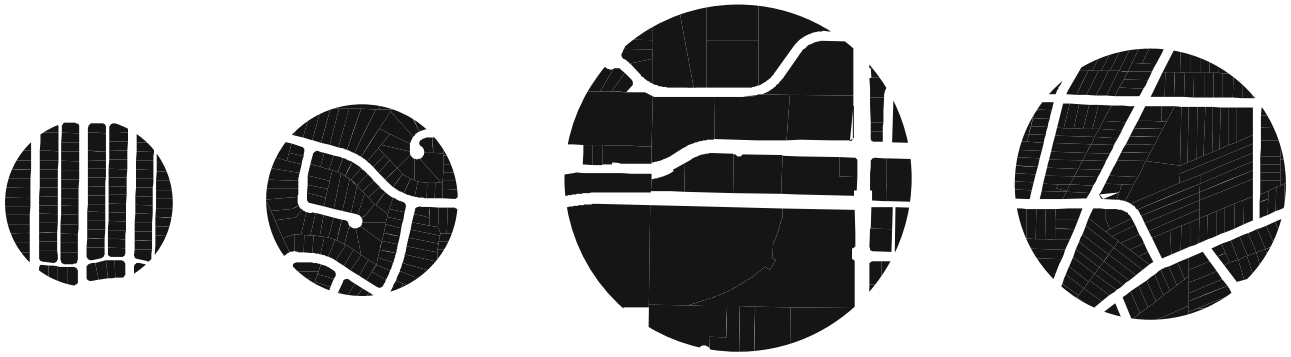


FIGURE 4-4: Block Pattern Details

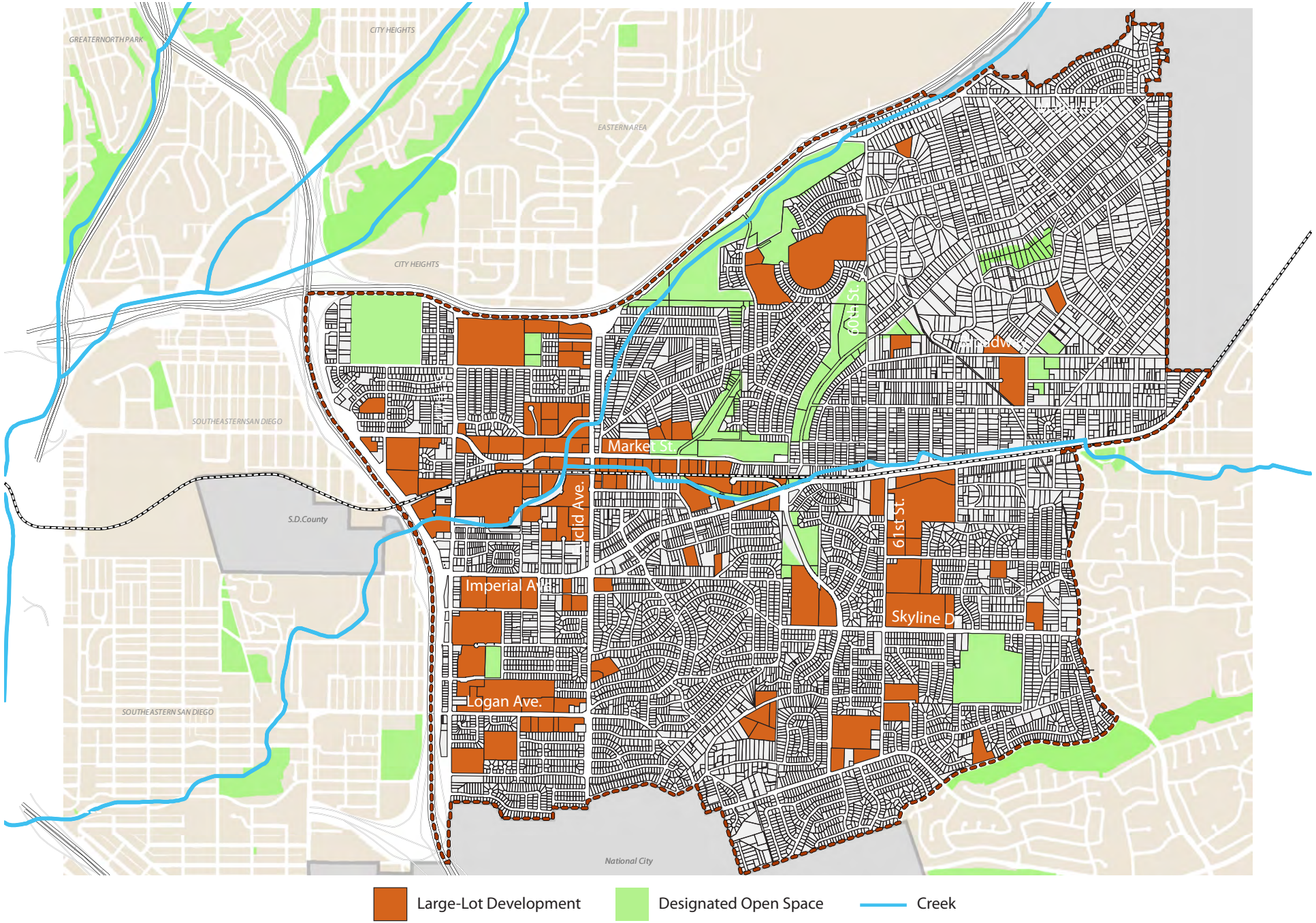


Regular Blocks "Suburban" Blocks Large Commercial Blocks Diagonal Blocks

Single-family residential lots make up most of the community, producing a relatively fine-grained pattern of development in the neighborhoods (left). Cul de sacs (middle) and large land holdings (right) provide desirable features but also limit connections to the larger system.

Large, highly visible vacant sites at Market and 47th streets (left), Euclid Avenue and Hilltop Drive (middle), and Imperial Avenue and 61st Street (right) contribute to an erosion of the public realm.

FIGURE 4-5: Large-Lot Development



Gated apartment complex (top). Elementary Institute of Science is perched above a major intersection (middle). St. Rita's is a prominent landmark in the community at the major intersection of Euclid & Imperial (bottom).

Gaps in Development

Encanto contains several vacant and under-utilized land parcels around the Market and Euclid Village core and along key transportation corridors (such as Imperial Avenue and Skyline Drive). This creates highly visible gaps in development that contribute to an erosion of the public realm. These parcels also tend to be located around major intersections in the community, such as Euclid and Market, Euclid and Imperial and Market and 47th. Coupled with wide streets at these locations, the gaps in development accentuate a sense of expansive open space and a lack of definition, which diminishes a sense of enclosure, interest and place. These elements are important to the development of a successful pedestrian environment and community identity.

4.4 Buildings

Building Types and Development Trends

Representative building types in the Planning Area are shown in Table 4-2. Many single-family residences in Encanto were built in subdivisions developed after the 1950s. The majority have enclosed garages directly facing the street, a typical orientation for homes built in the latter half of the century. The Chollas View neighborhood is a clear exception to this pattern, where older homes were built without garages. Homes in this neighborhood, as well as in the hillier parts of the community (Encanto and South Encanto), tend to have fences, garden walls and gates, rather than driveways, in the street frontage.

The Encanto community also has a significant number of multi-family residential buildings, built in different periods. Some developments, especially recent ones such as the townhomes on 62nd Street and Akins Avenue, have a positive neighborhood presence. Many multi-family buildings are self-contained, gated complexes that offer few amenities to their residents and lack the "eyes on the street," necessary for a safe environment. Others are poorly maintained.

Commercial buildings in the community also tend to be set back from the street with landscaped yards, retaining walls, and parking lots in the street front. Commercial and mixed-use areas would benefit from a more active street presence and a well-defined "street wall."

Growth in recent years has been focused on the Village at Market and Euclid, where mixed-use and transit-oriented development is highly promoted. Investments have been made at Market Creek Plaza, Jacobs Center, Malcolm X Library, at the reconstructed Lincoln High School, and the new Lincoln Park Fire Station. Meanwhile, various public and private entities have been at the forefront of development around the Valencia Business Park, in an effort to recruit new employment uses in that area.

Community Anchors and Gateways

Encanto boasts several community-anchoring buildings and uses that serve as landmarks and central gathering spaces for the community, as shown on Figure 4-6. These are parks and recreation centers, such as Emerald Hills Park and the Martin Luther King Jr. Memorial Park and Recreation Center; civic uses such as the Jacobs Center, schools, and the Malcolm X library; and the commercial center at Market Creek Plaza.

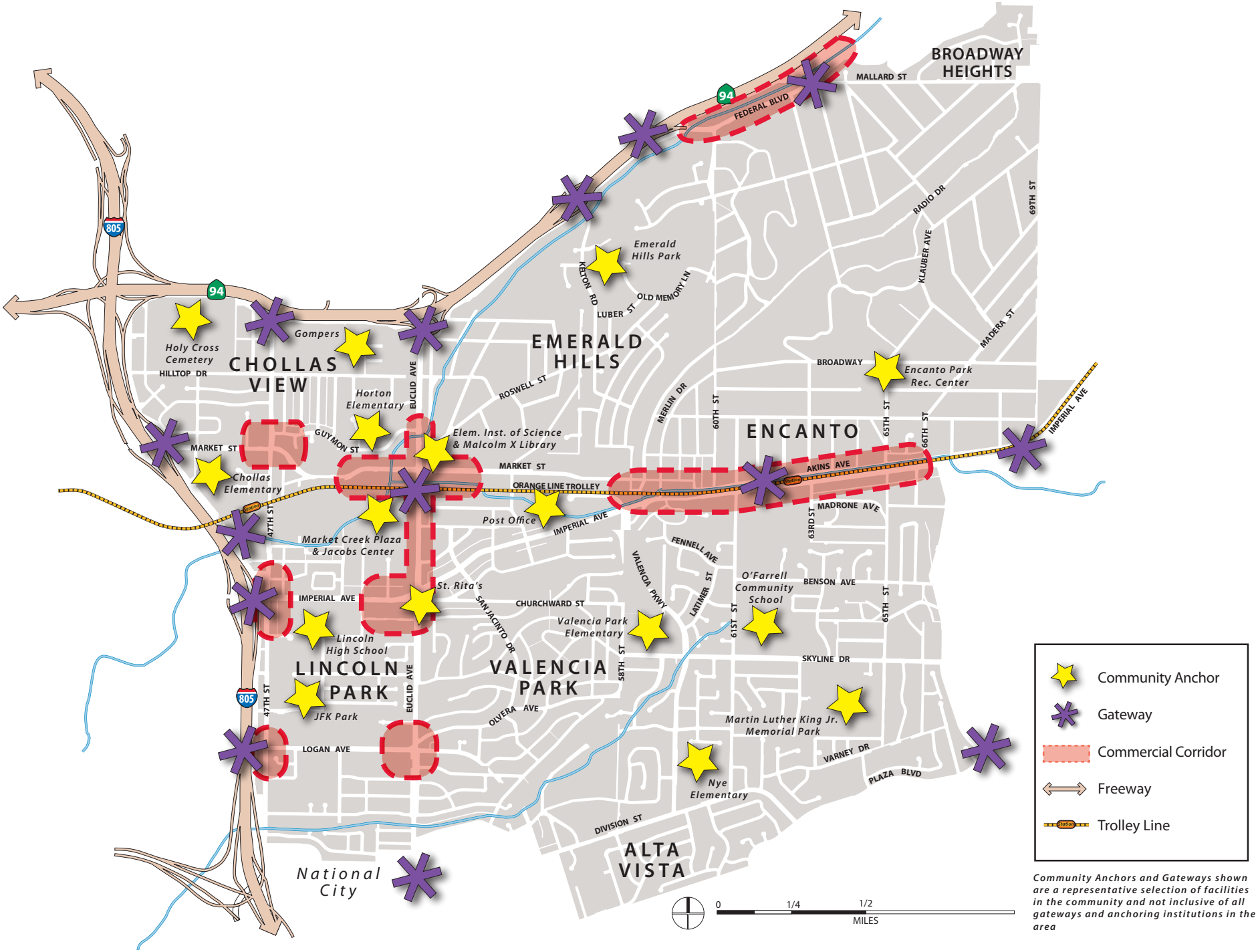
TABLE 4-2: REPRESENTATIVE BUILDING TYPES

Building Type	*Examples*		
Residential Single Family			
	"Rural"	*Tract Home*	*Traditional*
Residential Multi-Family			
	Alley-loaded Townhomes	*Garden Apartments*	*Drive-up Apartments*

TABLE 4-2: REPRESENTATIVE BUILDING TYPES

Building Type	*Examples*		
Commercial			
	Corner Retail	*Shopping Center*	*Strip Commercial*
Employment			
	Business Park	*Industrial*	*Professional / Office*
Civic/ Institutional			
	Schools	*Public Facilities*	*Religious*

FIGURE 4-6: Community Anchors and Gateways



Community Anchors and Gateways shown are a representative selection of facilities in the community and not inclusive of all gateways and anchoring institutions in the area

Mature trees establish physical edges (top). Chollas Creek and the hilly landscape contribute to a strong sense of place (middle). Public art at Market Creek Plaza and the Jacobs Center generate community identity (bottom).

The Encanto community contains several "gateways", such as Euclid Avenue and Market Street, Euclid and Imperial Avenue and Market and 47th Street. The Elementary Institute of Science and Malcolm X Library sit high above Euclid and Market and provide distinguished landmarks for the area. The Jacobs Center is also highly visible as one enters the area from the west. The Euclid Family Health center will anchor the 47th and Market intersection. Opportunities exist for new development to occur at these key intersections, with buildings that mark the main corners and together establish a sense of entry and arrival.

4.5 Land Form and Natural Features

The Encanto area is defined by its hilly topography and its many canyons and creeks. Chollas Creek weaves through the community, providing a natural link that has not been fully appreciated and used, but has tremendous potential as a habitat and recreational open space corridor, and as a major pedestrian and bicycle connection. The creek corridor has been well-integrated with Market Creek Plaza and Jacobs Center. Further plans for the enhancement of Chollas Creek are discussed in the Parks section of Chapter 6.

The area's topography slopes down to the creek, contributing to a sense of place and arrival to the "heart" of the community. The amphitheater adjacent to the Jacobs Center and Market Creek Plaza takes advantage of these natural features and is a central gathering space in the community. Land form and natural features also help define the edges of the community. Large and mature trees accentuate hillsides. Several hills in the Planning Area provide vantage points from which one can gain panoramic views of the community.

4.6 Community Character and Identity

Diversity is a defining attribute of the built environment and community in Encanto. The range of ethnicities, languages, and ages of community members creates a sense of vitality that is expressed in art, signage, schools and other institutions, and the types of businesses and restaurants that can be found in the commercial areas. The evolution of development in the community over time (described further in Chapter 5) allowed for varied and piecemeal development which is reflected in the variety of homes and building types found today.

As described above, the creek and slopes are significant land forms and natural features that contribute to a sense of place and a definition of neighborhood centers and edges. The canyons in the eastern portion of the Planning Area provide opportunities for recreation, beauty, views, and sense of rustic rural character, despite the proximity to Downtown. The creek is a unique natural feature, but has yet to realize its full potential as a community asset.

4.7 Urban Forestry

This section describes urban forestry in the Planning Area, which for our purposes means tree canopy coverage and street tree frequency, as well as the identity and character that these street trees convey. Trees provide shade and beauty, support neighborhood identity, and help balance the density of development with greenery. The Encanto Neighborhoods Community Plan will include a street tree plan and the analysis below seeks to assist community members in understanding the types of trees that may be appropriate for various parts of the Planning Area and where trees are most needed.

Encanto has a diverse range of tree species across its neighborhoods owing to its varied topography, development patterns, and soil types. The variety and irregularity of the street trees create a patchwork effect where there are few moments of consistent and continuous tree canopy. This reflects the community's development diversity, but reduces wayfinding abilities and the potential for street trees to be a defining characteristic of individual streets or neighborhoods. While some streets do have frequent tree coverage many streets lack trees entirely or have sparse tree planting. This increases the urban heat island effect and provides little respite for pedestrians from the sun.

Existing Plans and Guidelines

A number of urban design, streetscape, and street tree plans have been conducted for Southeastern San Diego and the Encanto Neighborhoods, including the *Community Street Tree Master Plan* (1992), *Project First Class Urban Design Guidelines* (c. 1984), *and the Southeast San Diego Commercial Corridor Urban Design Guide* (2009). These previous planning studies were quite complex in nature and each took slightly different approaches to street tree species. Most of the ideas in these studies have not been realized.

The City of San Diego's *Street Tree Selection Guide* lists recommended trees by size of available planting area, providing a useful guide for homeowners. Some trees found in Encanto, such as pepper trees, yuccas, and sweet gums, are not listed in the *Selection Guide*. Typical trees may not be included because they produce leaf litter, are not suitable to soils, are invasive species, or do not adequately shade the public realm. For example, Italian cypresses, palms, yuccas, and junipers do not contribute shade, screening or canopy cover, but may still be appropriate in some situations. Existing street trees found in the community are depicted in Figure 4-7, along with a legend explaining the features of the tree (e.g. height, pruning requirements, water needs).

Community-Level Observations

The analysis in this section is based on the City's GIS resources, observation of aerial photographs, and windshield surveys. Particular attention was paid to corridors that function as arterials or connectors or serve as a boundary between neighborhoods.

Tree Canopy Coverage

Street trees, trees in parks and open spaces, and trees on private property provide much of the green space and natural shade that can be found in the community. Shrubs, yards, flowers, and other landscaping also add to the beauty and livability of the community, but are not described here. Our analysis found that, from a bird's eye view, approximately 7 percent of the Planning Area is covered by tree canopy, as illustrated in Figure 4-8. This is consistent with the statewide estimate urban areas and slightly higher than the citywide total of 6 percent identified by the U.S. Department of Agriculture, though it should be noted that methodologies and data sources are not the same.[2]

2 Nowak, David J.; Greenfield, Eric J. "Urban and community forests of the Pacific region: California, Oregon, Washington." Gen. Tech. Rep. NRS-65. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. Zip file containing State-Level data in Microsoft Excel format.

While there are moments of continuous tree canopy (top), many streets have sparse tree planting (middle) or lack trees entirely (bottom).

FIGURE 4-7: Street Tree Matrix

BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	TYPE	ROOT ZONE	PRUNING	DRAINAGE	LITTER	WATER
Acacia sp.	Acacia	○	○	E/F	◗	◗	●	◗	●
Callistemon citrinus	Lemon Bottle Brush	●	●	E/F	●	◗	●	●	●
Cupaniopsis anacardioides	Carrot Wood	◗	◗	E/F	◗	○	○	◗	◗
Cupressus sempervirens	Italian Cypress	○	●	E	●	●	●	●	●
Eucalpytus deglupta	Mindanao Gum	○	○	E	◗	●	○	○	●
Eucalyptus ficifolia	Red Flowering Gum	◗	◗	E/F	◗	●	○	○	●
Eucalyptus polyanthemos	Silver Dollar Gum	○	◗	E	○	●	○	○	●
Eucalyptus sideroxylon "Rosea"	Red Ironbark	○	○	E/F	◗	●	○	○	●
Eugenia uniflora	Eugenia	●	●	E/F	◗	◗	●	●	◗
Ficus microcarpa	Indian Laurel Fig	○	○	E	○	◗	●	◗	●
Fraxinus oxycarpa	Ash	◗	◗	D	◗	◗	●	◗	◗
Jacaranda mimosifolia	Jacaranda	◗	◗	D/F	●	◗	○	◗	◗
Juniper	Juniper	●	●	E	●	●	●	●	◗
Koelreuteria paniculata	Goldenrain Tree	◗	◗	D/F	○	◗	○	◗	◗
Lagerstroemia indica	Crape Myrtle	●	●	D/F	●	◗	●	●	●
Liquidambar styraciflua	American Sweet Gun	○	●	D	●	◗	○	◗	◗
Lophostemon confertus	Brisbane Box	○	◗	E	◗	◗	○	●	●
Magnolia grandiflora	Evergreen Magnolia	●	◗	E/F	◗	◗	○	○	◗
Melaleuca quinquenervia	Cajeput Tree	◗	◗	E/F	◗	●	○	●	●
Phoenix canariensis	Canary Island Date Palm	○	◗	P	◗	●	●	●	◗
Pinus canariensis	Canary Island Pine	○	●	E	○	●	○	○	●
Platanus Racemosa	California Sycamore	○	◗	D	○	◗	●	◗	◗
Podocarpus gracilior	African Fern Pine	○	●	D	●	◗	●	●	●
Prunus sp.	Flowering Plum	◗	◗	D/F	●	◗	○	◗	◗
Pyrus calleryana	Bradford Pear	◗	◗	D/F	●	◗	○	●	◗
Rhus lancea	African Sumac	◗	●	E	◗	◗	●	●	●
Sapium sebiferum	Chinese Tallow Tree	◗	●	D	◗	○	○	◗	◗
Schinus molle	California Pepper Tree	◗	◗	E/F	○	◗	●	◗	●
Schinus terebinthifolius (invasive)	Brazilian Pepper Tree	◗	◗	E/F	○	◗	●	◗	◗
Syagrus romanzoffiana	Queen Palm	◗	●	P	●	●	●	●	◗
Ulmus parvifolia	Chinese Elm	◗	○	E	●	◗	●	●	●
Washingtonia filifera	California Fan Palm	○	●	P	●	●	●	●	●
Washingtonia robusta	Mexican Fan Palm	○	●	P	◗	●	●	●	●
Yucca gloriosa	Yucca / Spanish Dagger	●	●	E	●	●	●	●	●

TREE MATRIX LEGEND		TYPE
Height	●	> 50 feet tall
	◗	30 - 50 feet tall
	○	< 30 feet tall
Spread	●	> 50 feet wide
	◗	30 - 50 feet wide
	○	< 30 feet wide
Type	D	Deciduous
	E	Evergreen
	F	Flowering
	P	Palm
Root Zone Space Requirement	●	2'-4' parkways or 3'x3' cutout min.
	◗	4'-7' parkways or 5'x5' cutout min.
	○	7'-10' parkways or 40 SF cutout min
Pruning	●	hazard reduction prune
	◗	standard pruning regime
	○	more frequent than standard pruning required
Drainage	●	fast or well draining soil required
	○	accepts poor drainage
Litter	●	minor litter
	◗	flower, fruit, or leaf litter in one season
	○	flower, fruit, or leaf litter continuously
Water	●	drought tolerant
	◗	standard water requirement
	○	high water requirement

EXISTING STREET TREES

Acacia spp. – Acacia Tree

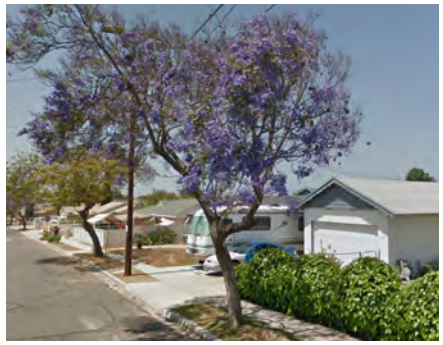
Callistermon citrinus – Lemon Bottlebrush

Cupaniopsis anacardioides – Carrot Wood

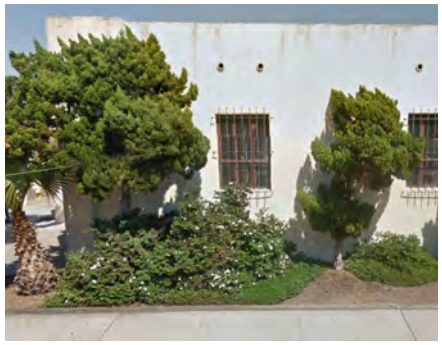
Cupressus sempervirens – Italian Cypress

Ficus microcarpa – Indian Laurel Fig

Fraxinus spp. – Ash species



Jacaranda mimosifolia – Jacaranda



Juniper spp. – Juniper

Lagerstroemia indica – Crape Myrtle

Liquidamber styraciflua – American Sweet Gum

Magnolia grandiflora 'Saint Mary' – Saint Mary's Magnolia

Phoenix canariensis – Canary Island Date Palm

EXISTING STREET TREES

Pinus canariennsis – Canary Island Pine

Platanus racemosa – California Sycamore

Podocarpus gracilor – African Fern Pine

Pyrus calleryana 'Bradford' – Bradford Pear

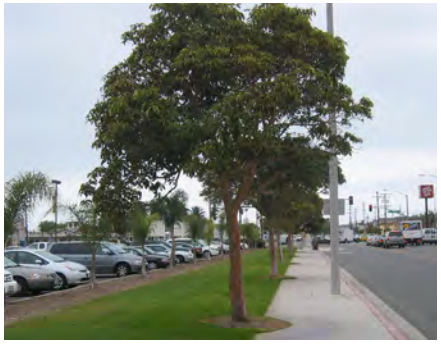
Rhus lancea – African Sumac

Sapium sebiferum – Chinese Tallow

Schinus molle – California Pepper Tree

Schinus terebinthifolius – Brazilian Pepper Tree

Syagrus romanzoffianun – Queen Palm

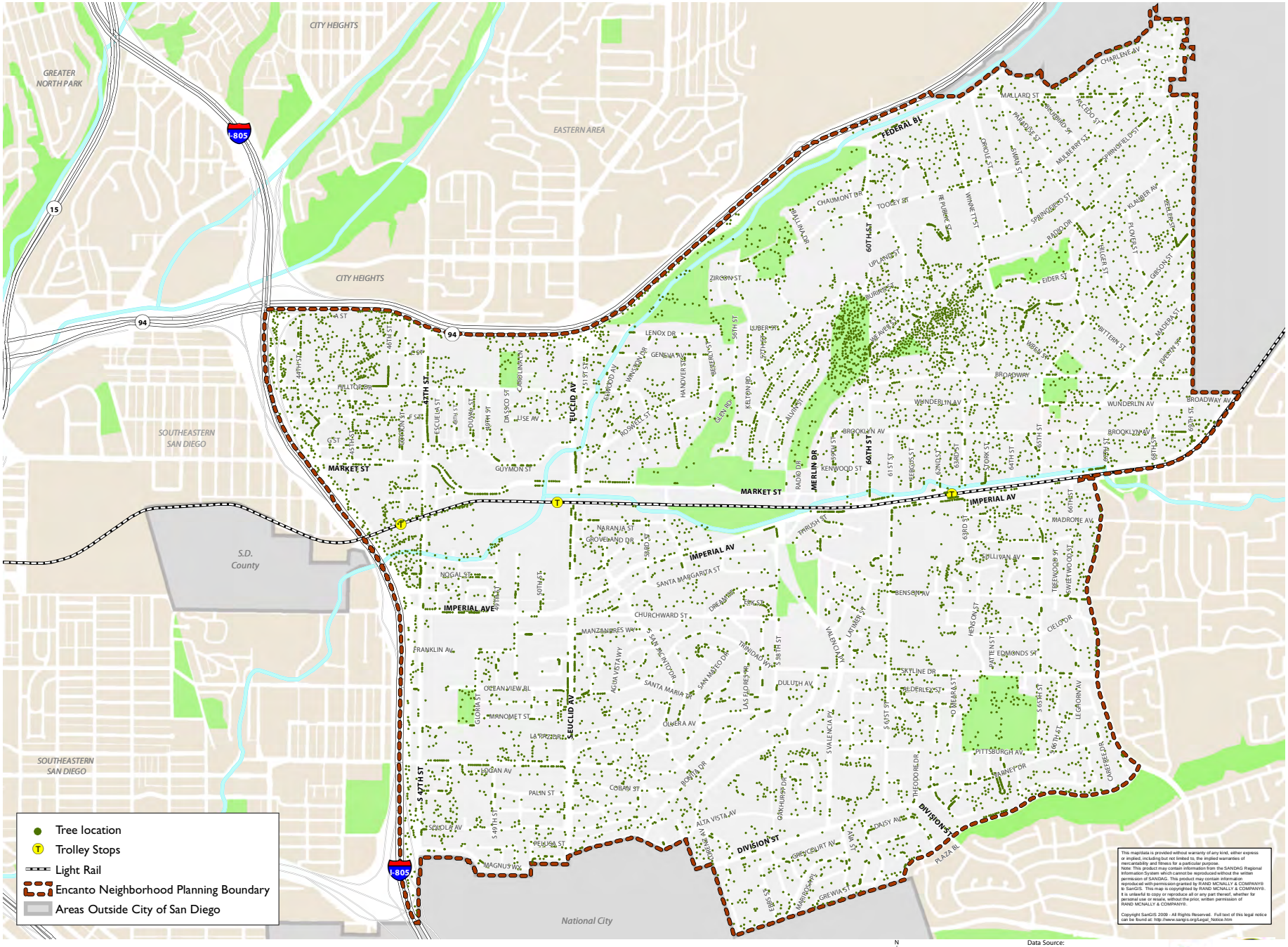


Tristania conferta – Chinese Elm

Washington robusta – Mexican Fan Palm

Yucca gloriosa – Spanish Dagger

FIGURE 4-8: Tree Canopy Coverage



Street Trees

As Figure 4-9 shows, most neighborhoods in Encanto do not have a dominant tree species. The Alta Vista neighborhood is an exception, with Italian cypress making up roughly one-third of the street trees. Other neighborhoods typically contain three to five common species each comprising between 5 and 20 percent of the total. Many of these neighborhoods include a wide variety of single trees species that make up an insignificant percentage of the overall total and likely indicated a situation where trees are planted by individual owners.

The variety and mix of street tree species may reflect inconsistent information by various planning efforts and the lack of a comprehensive street tree plan. Though not intentional, the variety also reflects planting choices based on soil conditions, topography, water availability, microclimate, and spatial constraints within the public rights of way—similar to the "arboretum style" described in planning studies.

Major Street Corridor Observations

The shade, beauty, and identity created by street trees can be most appreciated in active pedestrian areas, such as around commercial corridors and public spaces.

As Figure 4-10 shows, the overall street tree pattern shows a higher concentration of street trees along the community's major commercial corridors—along Market Street, especially near Euclid Avenue, and along Imperial Avenue east of 66th Street. Street trees on the north-south streets—47th and 60th streets, and Euclid Avenue—also appear to be regularly spaced but still are not close to meeting the City of San Diego Municipal Code Landscape regulations requiring a tree every 30' of street frontage. However, even with new construction, meeting this standard can be difficult to achieve due to curb cuts for driveways or other utility or signage conflicts.

As in the neighborhoods at large, several tree species are present within the same block along most major corridors; as a consequence, trees do not help to establish the street identity. The Community Plan update will seek to build on planning efforts to date to develop a street tree plan that reveals the community's identity and creates attractive and functional streetscapes.

FIGURE 4-9: Community Tree Character

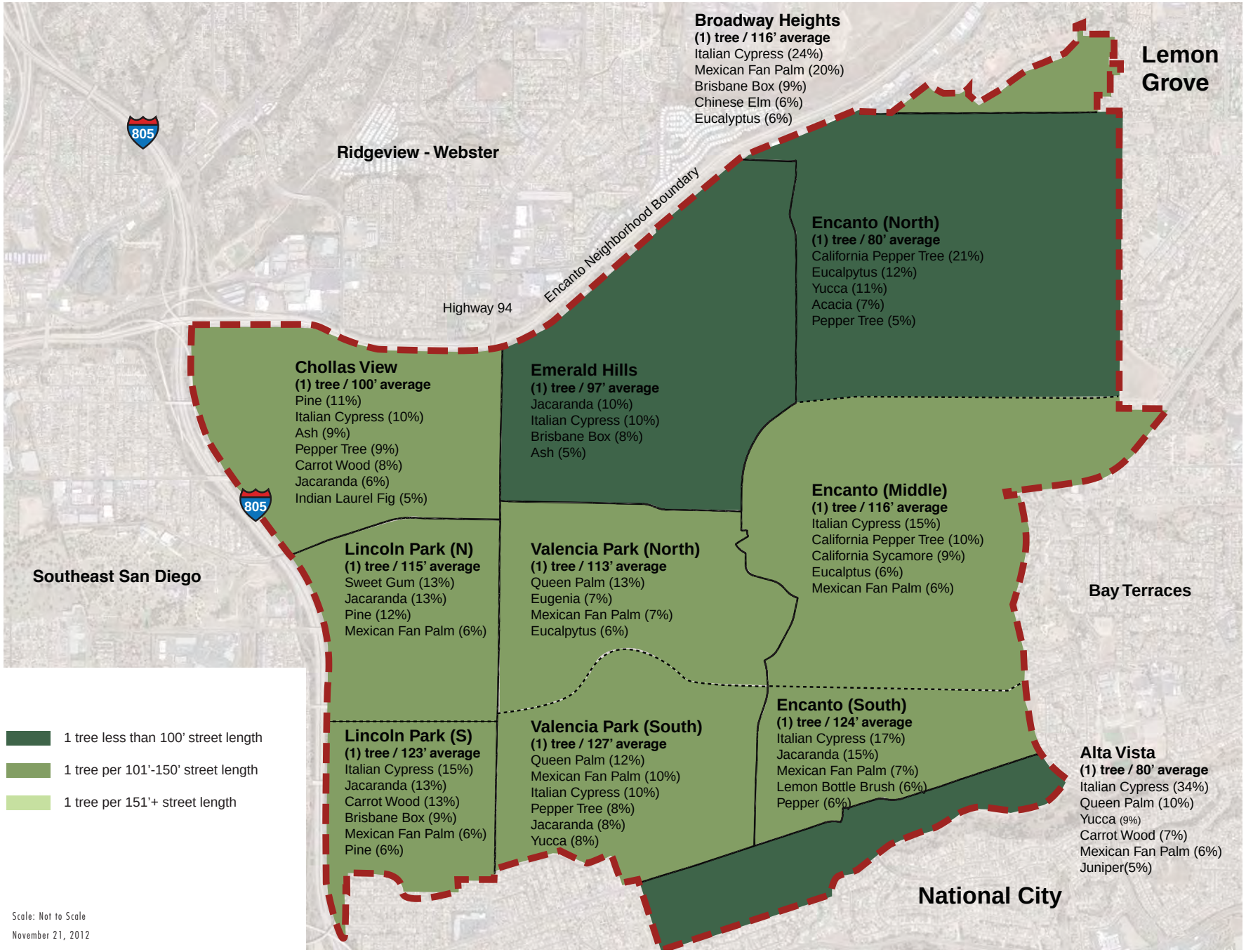
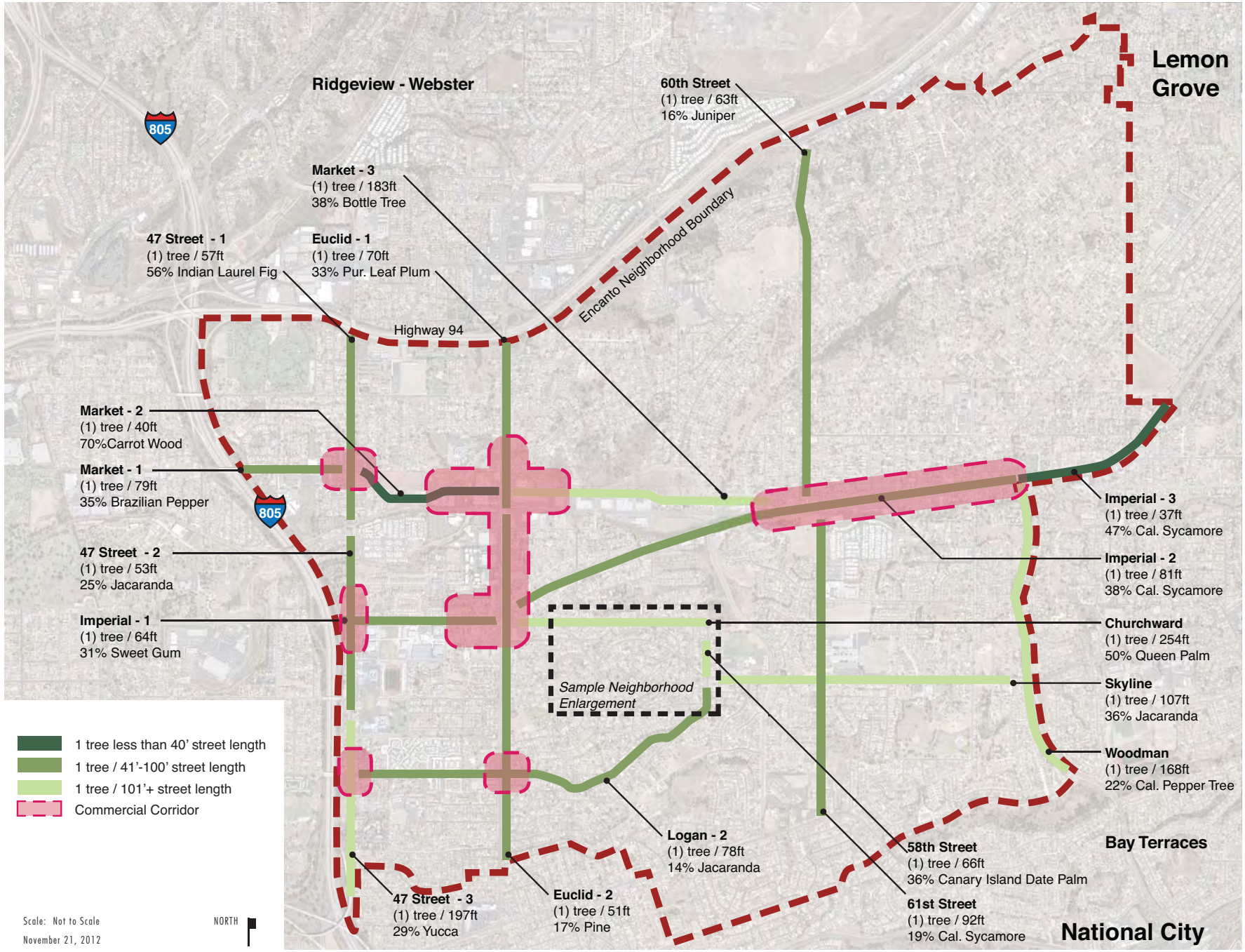


FIGURE 4-10: Corridor Tree Frequency



Where street trees are present and closely spaced, it is often related to individual projects or developments. Jacarandas on Bollenbaches Drive (top), Italian Cypresses along Hilltop Drive (middle), Carrot Woods along 44th Street (bottom).

Neighborhood Observations

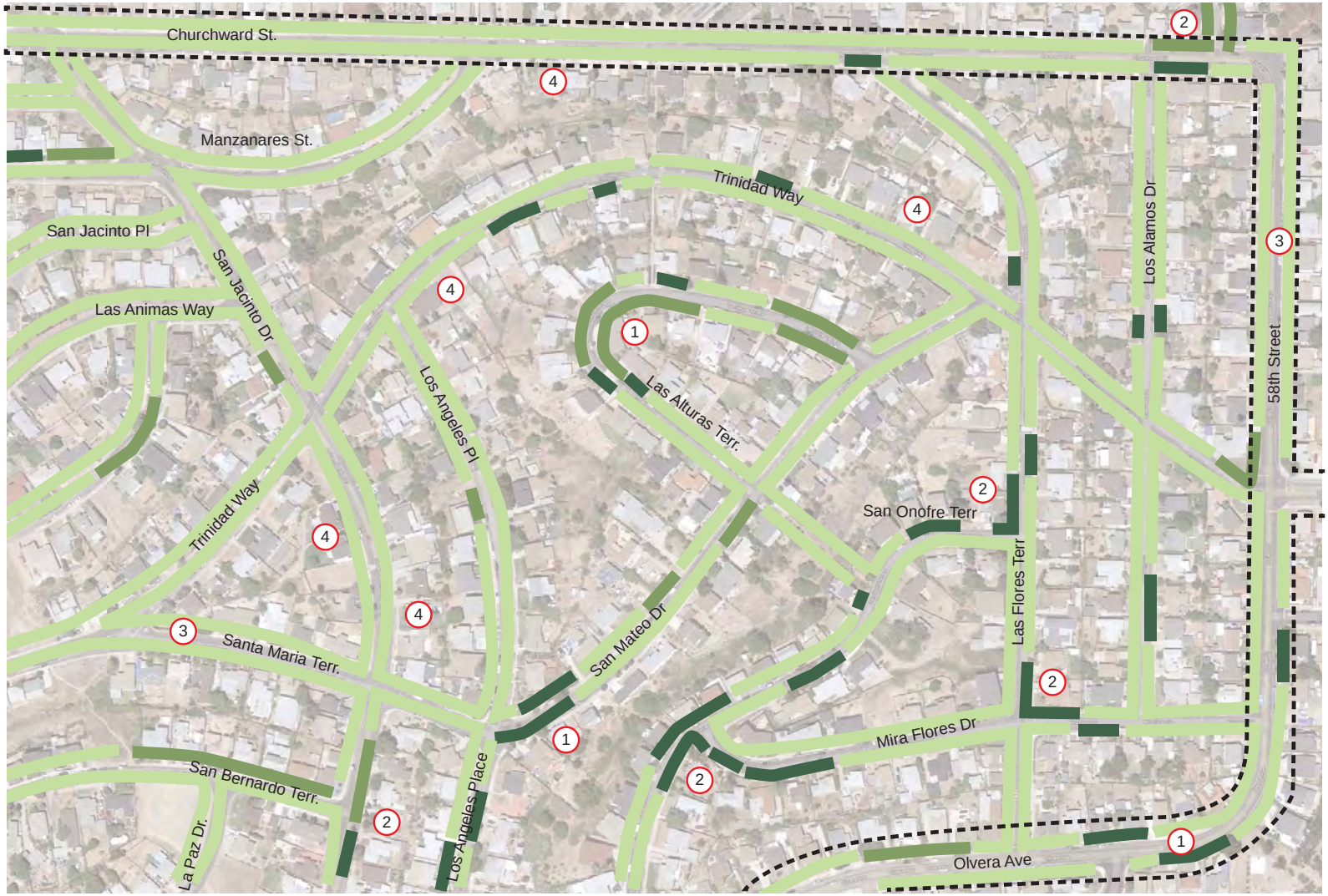
In some areas, like the Valencia Park area between Churchward Street and Olvera Drive, west of 58th Street, as shown on Figure 4-11, there are clusters of several trees on a block while the rest of the block may be bare. The type and frequency of street trees may change within the same block and from one neighborhood to the next.

Where street trees are present and closely spaced, it is often related to larger or recent development projects or community facility improvements. Topographic features such as a canyon, ridges and hills also create strong patterns for street trees. For example, the following locations have major concentrations of single species in a close proximity:

- The jacarandas in the Bollenbacher Street and La Paz Drive subdivisions;
- The jacarandas in the subdivision southeast of the corner of Skyline and 61st;
- The eucalyptus along Scimitar Road knoll
- The Italian Cypresses lining the back side of Holy Cross Cemetery along 46th Street and Hilltop Drive;
- The carrot woods along 44th Street in front of Wat Lao Buddharam of San Diego; and
- The California pepper trees in North Encanto.

This pattern illustrates how future development projects can contribute significantly to the streetscape.

FIGURE 4-11: Sample Neighborhood Tree Spacing



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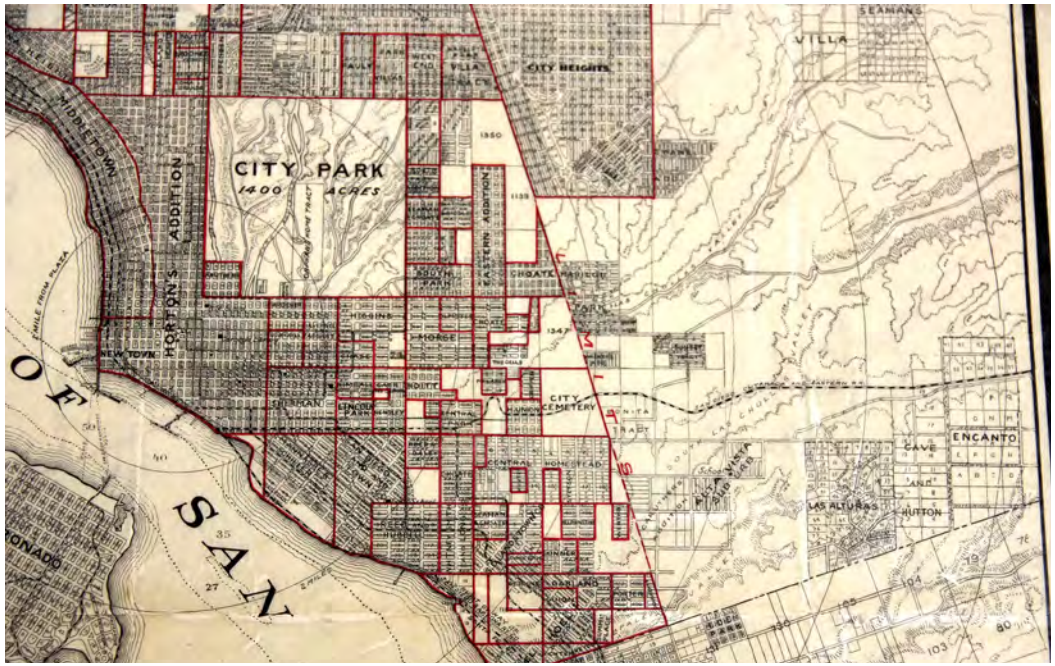
5 HISTORIC CONTEXT

An Historic Context Report was prepared as part of this planning effort to understand the history and evolution of the Planning Area and identify historic resources that still remain today. The Community Plan can create opportunities for preservation, adaptive reuse, and celebration of the community's past. The Historic Context Report is presented in its entirety in Appendix B. A summary is provided in this chapter.



Map of San Diego by T.D. Beasley (circa 1910), showing subdivisions and city limits prior to annexation of Encanto. (San Diego Public Library, California Room)

USGS "San Diego" 7.5-Minute Quadrangle Map (1904), showing extent of actual development. A dashed line indicates the Pueblo Lands boundary.

5.1 Historic Setting

This section presents an overview of San Diego's history with a specific emphasis on describing the historic themes and patterns that have contributed to the Encanto area's physical development. It is intended to support the Encanto Neighborhoods Community Plan Update by providing the framework for the future identification and evaluation of historic properties in the neighborhood.

Pre-History and Early San Diego History

The development of San Diego had its start with the Mexican land grants in the area, namely Pueblo Lands and Ex-Mission Rancho de San Diego de Alcalá. These would serve as the base for all future development in the Planning Area. American settlement of San Diego began in 1850 with the subdivision of "New San Diego," and was solidified in 1867 when Alonzo Horton purchased 800 acres in downtown San Diego and began selling the lots at his real estate office. San Diego city leaders also tried to attract a railroad to further spur development in the city.

No known built resources exist from San Diego's earliest period within Encanto. However, sub-surface archaeological artifacts discovered from this period are likely to yield information about the life and culture of the early Native American, Spanish, Mexican, and early American peoples. These remains are most likely to be found along Chollas Canyon and other waterways, and many archaeological sites in the Planning Area have already been documented.

Building Southeastern San Diego and the Encanto Area

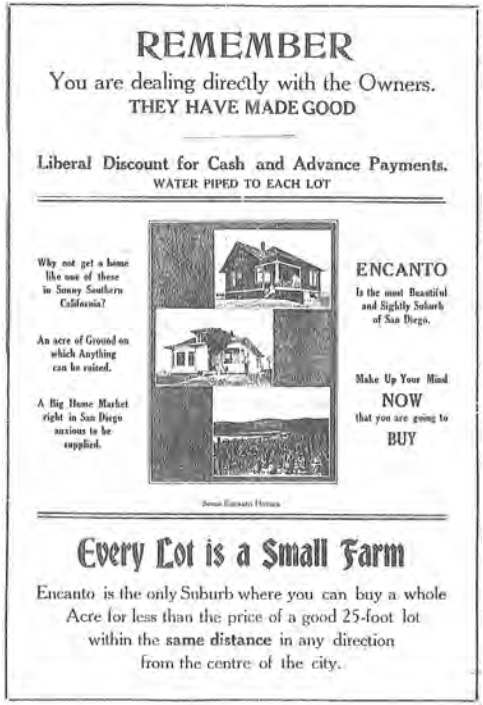
Early Pueblo Land Subdivisions, and Railroads and Streetcars

Anticipating the arrival of the railroad, the Pueblo lands in Southeastern San Diego were becoming a patchwork of subdivisions and additions in the 1870s. It was common practice for entrepreneurs and land speculators to buy one or more blocks of Pueblo Lands and subdivide them into smaller parcels for resale. Outside the city limits, in what are now the outer Southeastern and Encanto areas, a few early subdivisions were registered on the Ex-Mission Rancho Lands.

The arrival of the railroad had a huge impact on the residential growth of Southeastern San Diego in this early period of development. In 1885, the California Southern Railroad, a subsidiary of the Atchison, Topeka and Santa Fe line, established a line between San Diego and National City. The San Diego, Cuyamaca and Eastern Railway was completed in 1889, beginning at 9th and N (now Commercial) streets, traveling along N Street, and winding through Mt. Hope Cemetery and Encanto. The present-day San Diego Trolley runs along this historic route. Beginning in 1887, steam, mule-drawn, and then electric trolleys began serving the area.

Suburban Farms

In contrast with the suburban development of the western portion of the Southeastern San Diego community, Encanto and the South Chollas Valley (formerly part of Ex-Mission Rancho de San Diego de Alcalá, and not part of the San Diego pueblo lands) were decidedly rural in the late nineteenth and early twentieth centuries. Encanto was a self-sufficient town, connected to the city by rail lines but isolated from the wild land speculation that had taken over the rest of the plan area. Encanto was first platted in 1891, with ten-acre lots, and named for the Spanish word for "enchantment" or "charm." In 1907, the Richland Realty Company purchased 1,100 acres in Encanto and re-platted it into one-half, five- and ten-acre lots, calling it Encanto Heights. The new subdivision was the first suburban stop outside of San Diego on the San Diego, Cuyamaca and Eastern Railway line.[1] It was advertised for "suburban homes and small farms," ideal for fruit trees, chicken ranches, and gardening. By 1910 there were five additions to Encanto Heights: Rosemont, Sunny Slope, Highdale, Del Norte, and Empire Additions. Prices for one-half-acre tracts ranged from $50 to $500, and the Company also had a building department in connection with Encanto Heights to build homes for new buyers.[2]



Encanto Heights Advertisement, circa 1910. (San Diego History Center Photo Archive, #86:15853-3)

1 Fifth Amendment to the Central Imperial Redevelopment Plan EIR, 16-17.

2 San Diego Assessor's Maps. "Encanto Advertisements," San Diego History Center Vertical Files.

FIGURE 5-1: Residential – Suburban Farm

TYPICAL EXAMPLE(S)	CHARACTER-DEFINING FEATURES
	• Location in Encanto • Constructed between 1900 and 1916 • Architectural style and form from this period, typically Folk National or Craftsman • Deep setback from lot line • One to two stories • Gable or pyramidal roof • Wood cladding (shingles or horizontal siding) • Wood sash windows (double-hung or casement) • Wood door (glazed or paneled) • Outbuildings such as barns, chicken coops, or utility sheds

Encanto, circa 1915. (San Diego History Center Photo Archive, #4636)

Commercial Corridors

By 1910, Encanto was also developing a commercial center on Imperial Avenue between 63rd and 65th streets. The town's first post office was constructed in 1910, and several feed stores, a general store, a bakery, a barber, and a pool hall were all listed in the 1911 City Directories.[3] A portion of this historic business district remains today on Imperial Avenue, although all the existing buildings from this early period have been considerably altered.

Annexation

The Pueblo Lands formed the boundary of the City of San Diego until the early twentieth century, when the city began annexing communities that had developed in the adjacent Ex-Mission San Diego lands. Encanto was incorporated into the city on April 1, 1916 because Encanto residents desired San Diego's municipal water services.[4]

3 Fifth Amendment to the Central Imperial Redevelopment Plan EIR, 19-20.

4 Fifth Amendment to the Central Imperial Redevelopment Plan EIR, 19.

Sanborn Fire Insurance Map (1920), edited to highlight new city limits after annexation of Encanto.

Valencia Park subdivision, 1928. (San Diego History Center Photo Archive, #8413)

Development Expands

New Auto-Oriented Subdivisions

Parts of Encanto had already been subdivided during the real estate booms of the 1880s and the early 1900s. During this interwar period, construction in existing subdivisions grew. According to the 1930 USGS Quadrangle Map, small-scale residential development now extended all the way to the edge of the Pueblo Lands. A few new automobile-oriented subdivisions were recorded during this time. The automobile granted more flexibility for developers and homeowners, allowing areas farther from the city center to thrive without relying on public transportation. New subdivisions in the 1920s included:

- Las Alturas Extensions (circa 1925): extended the original 1888 "Las Alturas Villas" subdivision south to Churchward Street;
- Valencia Park (1926): large subdivision with curvilinear streets at Imperial and Euclid avenues. Valencia Park was better-advertised than some of the other areas and had a large sign with free-standing letters to encourage buyers.

The street grid expanded to keep pace with these new suburban tracts. Broadway was extended into Encanto in 1927, Market Street was extended beyond Mt. Hope Cemetery and paved in 1928, and Imperial Avenue became a major thoroughfare.

Garages & Automobile-Related Services

The influence of the automobile resulted in new businesses that catered to car owners. Garages and service stations sprang up along the main commercial corridors. In Encanto, roadhouses, service stations, and garages catered to automobile travelers on Imperial Avenue, one of the main highways out to the communities in eastern San Diego County.[5] Furthermore, personal automobile garages soon became a fixture of the new auto-focused lifestyle in the Planning Area.

Ethnic Diversity and Migration

Beginning in the 1920s, ethnic enclaves began to form in the Planning Area. This is attributed primarily to the increased use of restrictive covenants in housing contracts in other neighborhoods of San Diego. Minority groups settled in Southeastern San Diego and Encanto where such restrictions were absent or were not enforced.[6] Other factors likely included proximity to jobs and social institutions such as churches, desire for cultural familiarity amongst others of the same culture, and international events that triggered large-scale population migrations across the country. Encanto was still a rural suburb in the 1920s and 1930s, and attracted an enclave of Japanese farmers who cultivated the rolling hills.[7]

New Municipal Improvements

Ocean View School was constructed between 1920 and 1940 on 47th Street in the Alta Vista suburb. In addition, older schools were remodeled or replaced, includ-

5 Fifth Amendment to the Central Imperial Redevelopment Plan EIR, 28.

6 http://www.sandiegohistory.org/journal/83winter/logan.htm

7 San Diego History Center Vertical Files.

ing the Encanto and Chollas Schools. All these buildings were also demolished and replaced with modern schools after World War II.

Holy Cross Cemetery was opened by the Catholic Diocese in 1919, on 40 acres of land north of Hilltop Drive between 44th and 46th streets. The blue-domed mausoleum was originally constructed circa 1920s, and is now very prominently located adjacent to Highway 94.[8]

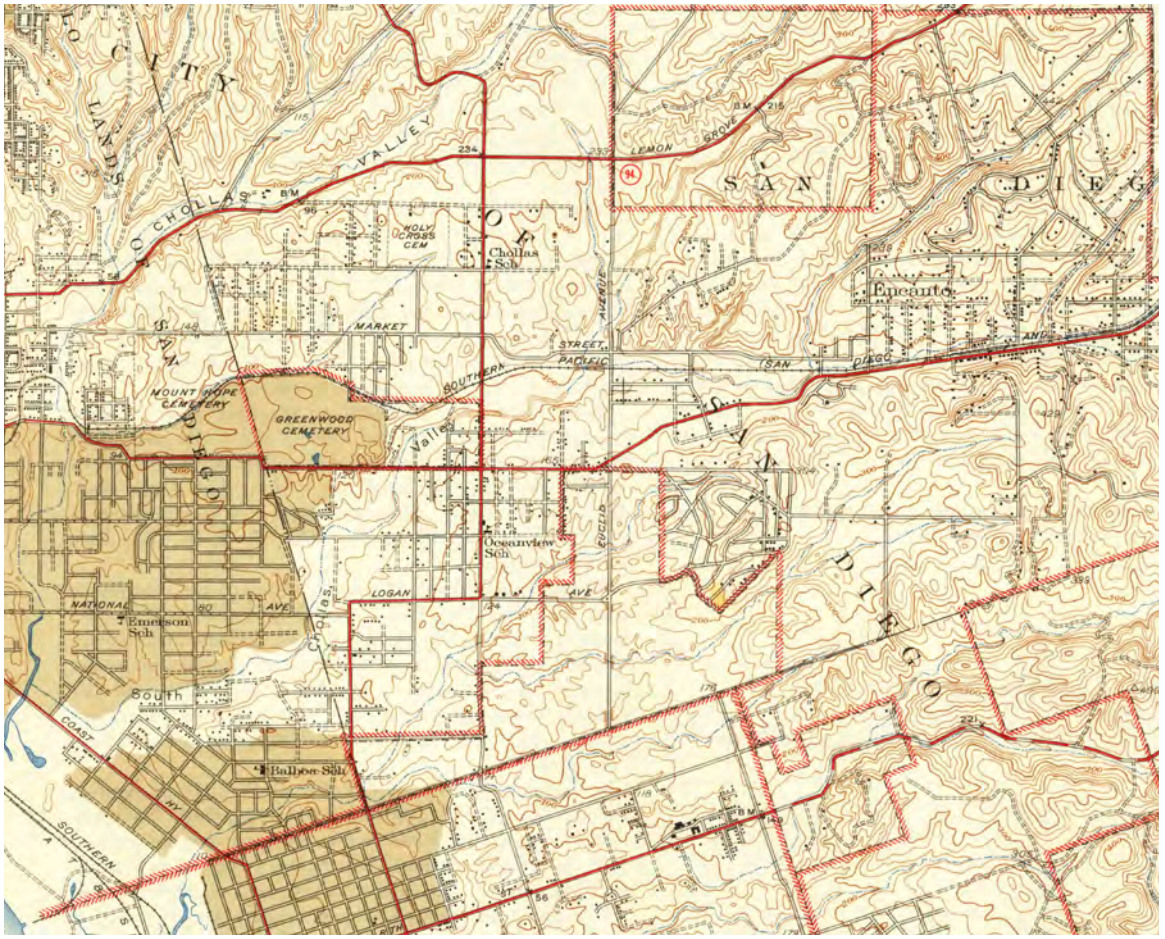
Freeway Era

World War II

San Diego has long had a military presence, but its place as a major military hub was solidified when the United States entered World War II in 1941. The Army, Navy, and Marines all had bases and training facilities in the area. The influx of military personnel and defense workers created an immense housing shortage in San Diego.

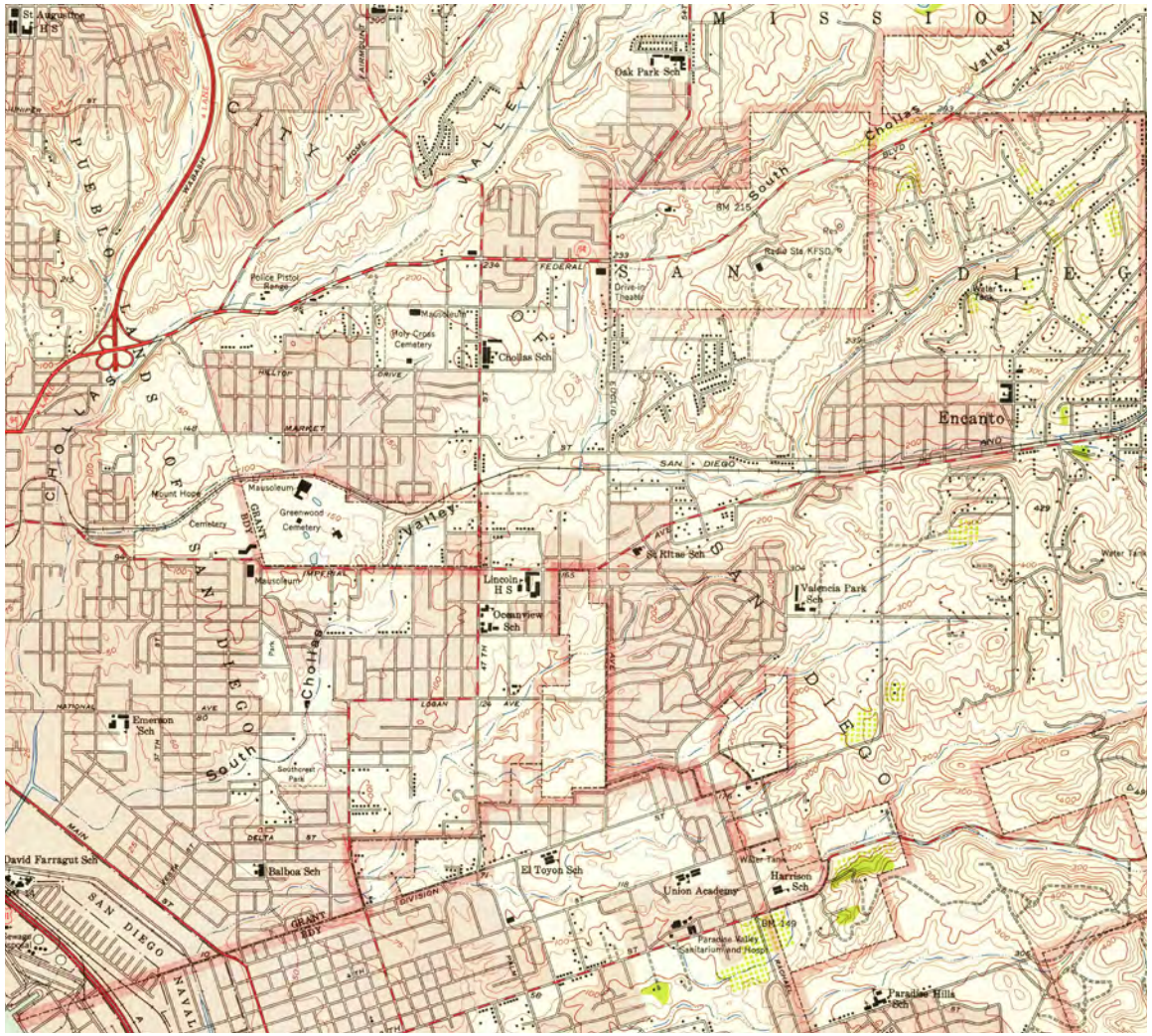
Suburbanization

The postwar era saw the rapid expansion of San Diego: over 2,500 new subdivisions were recorded citywide between 1940 and 1967, including several in Encanto. In 1940, a dairy at 65th and Wunderlin streets was asked to leave because it was in the middle of a built-up area. The city acquired the property, which is now the Encanto Recreation Center. The closure of the dairy signaled a departure from Encanto's rural and agricultural origins and a distinct shift towards typical suburban residential development.



USGS "National City" 7.5-Minute Quadrangle Map, 1944. This map shows settlement in the Chollas Valley at the end of World War II. The shaded areas are completely urbanized, and were largely built out at this time.

8 Southeast San Diego Community Plan, page 245.



This map shows settlement in the Chollas Valley during the postwar era. The shaded areas are completely urbanized, and were largely built out at this time—greatly increased since the previous map.

Many developers constructed speculative housing in their new subdivisions, typically using identical models with a few floor plan variations. Emerald Hills Estates is the best example of this type of housing tract constructed during the postwar period in the Planning Area.

Racial Segregation and Integration

Restrictive zoning and discriminatory covenants in other parts of the city reinforced the segregated living conditions that had begun in the 1920s, and Southeastern San Diego became home to a majority of San Diego's poor and non-white residents during the postwar era. Many African-Americans moved to Encanto and Valencia Park from Logan Heights in the 1950s and 1960s, taking advantage of the first opportunity they had to own homes.[9] Some racial tensions existed and many long-term white residents moved to wealthier, segregated sections of the city when African-Americans moved into the neighborhood, but Encanto was generally praised in the press for its peaceful and inclusive qualities at a time when tensions were rising in Southeastern San Diego to the west.

9 San Diego Reader (3 December 1998).

Aerial view of Emerald Hills Subdivision (July 31, 1957), shortly after construction.(San Diego History Center Photo Archive, Kazikowski Collection)

FIGURE 5-2: Residential – Residential Subdivisions

TYPICAL EXAMPLE(S)	CHARACTER-DEFINING FEATURES
 	• Location in an postwar subdivision, typically in the Chollas Valley or Encanto • Architectural style and form from this period, including Minimal Traditional, Streamline Moderne, and Ranch (Traditional, Contemporary or Cinderella varieties) • One story in height • Integral garage or carport on primary façade • Flat or shallow gable or hipped roofs • Wood or stucco cladding

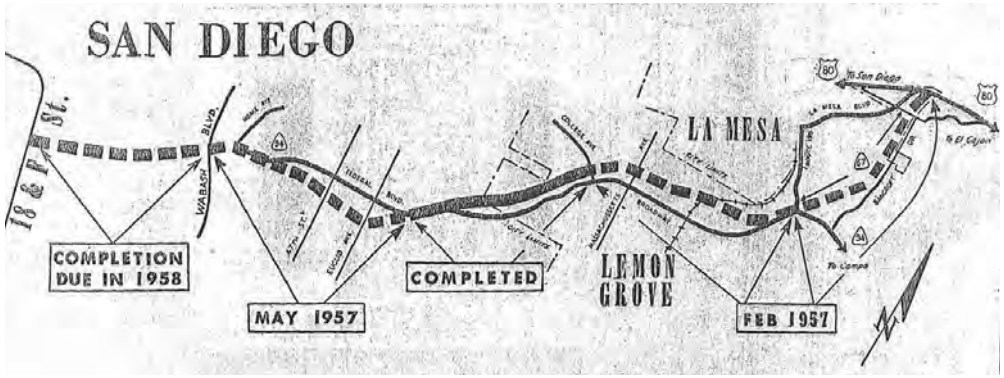
Commercial Development

In the postwar era, "car culture" pervaded Southern California, and commercial development catered to the increasing number of car owners. New property types such car washes, drive-in restaurants, and drive-in movie theatres were built, and new avant-garde roadside architectural styles were developed to catch the eye of drivers. For example, the Johnson Wilshire Gas Station at 4689 Market Street (HRB site #954), built in 1962, embodies the futurist Googie style with a canopy pierced by three diagonal metal supports, much like car wash designs of the period.

Freeway Construction

As the population in Southern California continued to expand after World War II, increasing traffic congestion led city engineers to create a new transportation system to move large volumes of cars quickly without having to pass through congested business districts. In San Diego, master planning for the new freeways began in the early 1950s, and Encanto was heavily affected by these plans.

Aerial view over Euclid Avenue and Highway 94, showing drive-in movie theatre on Federal Boulevard (1958). (San Diego History Center Photo Archive, #92:18835-407)



1956 plans for Highway 9. (San Diego Union,13 May 1956)

FIGURE 5-3: Social/Community – Schools

TYPICAL EXAMPLE(S)	CHARACTER-DEFINING FEATURES
 	• Use as a school • Location in an postwar subdivision, typically in the Chollas Valley or Encanto • Architectural style and form from this period, including International and Contemporary styles • Long, low forms, often with inter-connected classroom wings • One to two stories in height • Flat or shallow gable or hipped roofs • Stucco cladding • Steel or aluminum windows

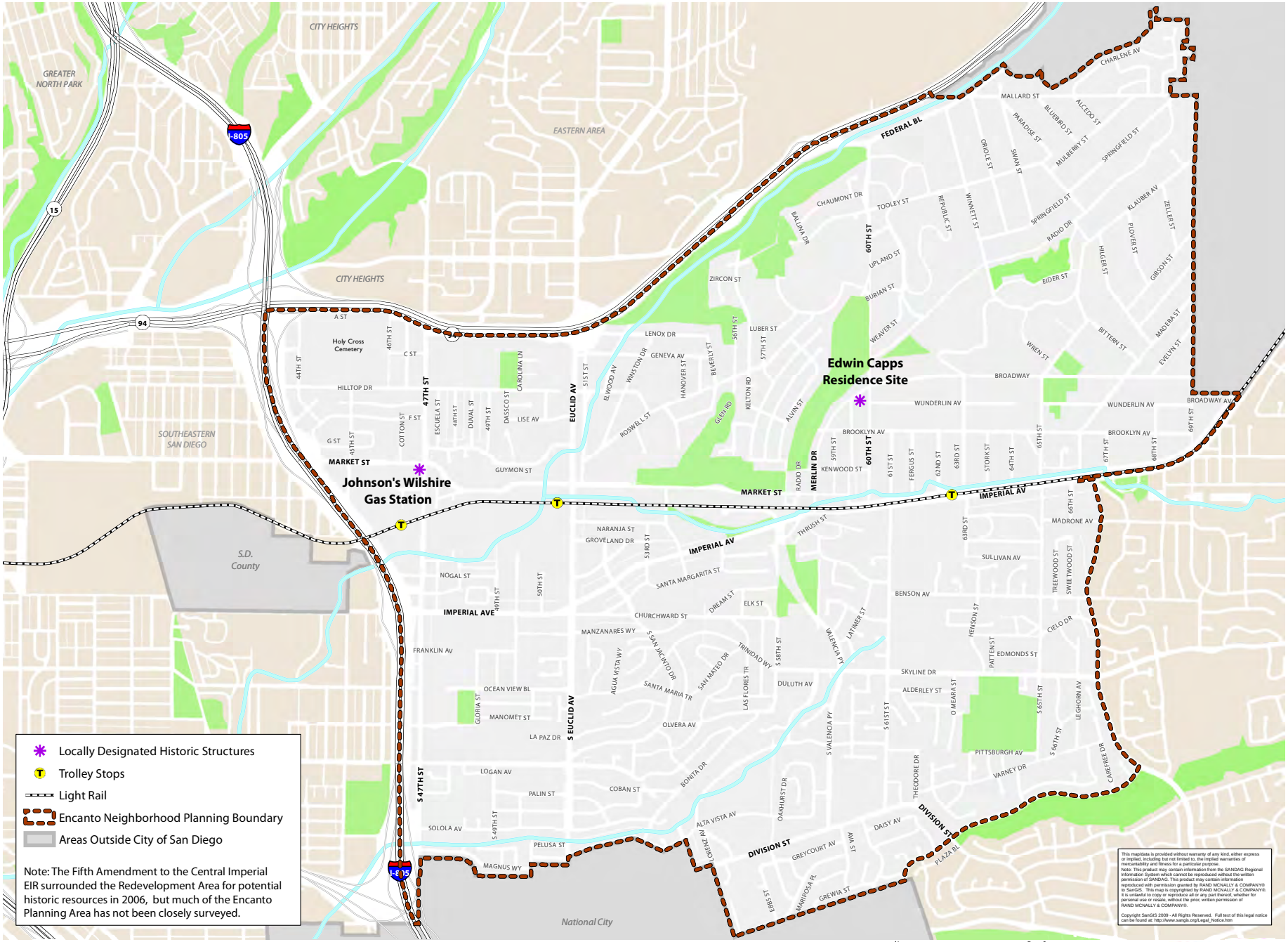
Education and Social Services

Homes in Southeastern San Diego were built so fast during the postwar period that schools struggled to keep up with the demand of the "baby boom." Many schools were first opened in portable buildings, and were replaced later with more permanent construction. Unlike schools from previous periods, these postwar schools still exist and in good condition today. Schools from this period include Valencia Park Elementary School (1951); Gompers Junior High School (1955); Johnson Elementary School (1957); Knox Middle School (1957); Horton Elementary School (1958); and O'Farrell Middle School (1959). In addition to the new schools, existing schools were remodeled and expanded. Schools that still retain their Mid-Century Modern designs from this period include Chollas/Mead Elementary and Encanto Elementary.

Modern San Diego

Today, Encanto remains one of the most ethnically diverse neighborhoods in all of San Diego, continuing the population migration trends that began in the 1920s. In recent years, demolition and deterioration of older housing stock combined with urban infill projects have changed the built environment in the Planning Area.

FIGURE 5-4: Historic Resources and Historic Districts



The historic Johnson's Wilshire Gas Station.

5.2 Historic Sites

Registered San Diego Landmarks and Historic Districts

The City of San Diego maintains a Register of Historical Resources, which includes both individual resources and historic districts. The Encanto Community Planning Area contains two properties listed in the San Diego Register of Historical Resources, as shown on Figure 5-1:

- Edwin Capps Residence Site, 910 60th Street, 543-202-2000
- Johnson's Wilshire Gas Station, 4689 Market Street, 547-221-1400

Edwin Capps served twice as San Diego's city engineer, from 1893 to 1899 and from 1909 to 1915, and twice as the city's mayor, from 1899 to 1901 and 1915 to 1917. He advocated the development of San Diego for tourism, rather than for industry. Capps designed the city's police station and jail in 1911, and the Spruce Street suspension footbridge in 1912. Also that year, he spearheaded the "Capps Plan" to dredge the harbor, fill the shoreline, and erect piers, wharves, seawalls, and warehouses, in anticipation of increased harbor activity following completion of the Panama Canal.

Johnson's Wilshire Gas Station, built in 1962 on Market Street at 47th Street, embodies the distinctive characteristics through the retention of character-defining features of Googie architecture and retains a good level of architectural integrity. The gas station is most notable for its canopy, pierced by three diagonal metal supports, designed to attract the attention of motorists. The supports extend through and upward above the canopy, tapering at the top and bottom and flaring out at the intersection with the canopy.[10]

Historic Resources Inventory for the Fifth Amendment to the Central Imperial Redevelopment Plan

A cultural and historic resources inventory was conducted in 2006 as part of environmental review of the Fifth Amendment to the Central Imperial Redevelopment Plan. The Redevelopment Plan Area generally covers the portion of the Encanto Neighborhoods between Ocean View Boulevard and Market Street from I-805 to Euclid Avenue, as well as the Imperial Avenue corridor from Euclid to approximately 69th Street and the west side of Euclid Avenue between Market Street and SR-94.

The survey found 76 buildings with a recorded construction date prior to 1960 or an estimated age of over 45 years in Central Imperial Redevelopment project area. Buildings were evaluated for potential historic register eligibility. Most of the buildings are located along Imperial Avenue, especially clustered between 63rd and 66th streets, the focal point of the Encanto community from the 1910s into the late 1950s. Many of these may be eligible for listing on the City Register as contributing elements to a proposed Encanto Commercial Historic District. Some, notably 6365 Imperial Avenue, the Art Deco-style red brick building that housed the Encanto Post Office in the 1920s, and 6493 Imperial Avenue, a Mission-style commercial building dating from the 1920s, may also be eligible for listing as an individual

10 Report No. HRB-10-012. City of San Diego Historical Resources Board, March 12, 2010.

resource on the basis of architectural style.[11] Three additional buildings in the Lincoln Park neighborhood were also identified as potentially eligible for individual listing. Much of the Planning Area has not been closely evaluated for potential historic resources.

Historic Districts

Historic districts are not simply collections of individually significant buildings; instead, districts are groups of buildings which are significant as a whole. Boundaries of a historic district are frequently defined by use (i.e. theater district), connection to an event (i.e. World War II defense housing district), or architectural style (i.e. Craftsman Bungalow district). Historic districts will include both contributors and non-contributors, and not all properties need to be of the same historical or architectural quality. The district may include both contextual buildings and stand-outs that help anchor a district. A rule of thumb is that at least two-thirds of the properties within historic district boundaries should be contributing resources, otherwise the district does not hold together with sufficient integrity. The Encanto Community Plan Area does not contain any historic districts.

11 ASM Affiliates, Inc. for Southeastern Economic Development Corporation. Fifth Amendment to the Central Imperial Redevelopment Plan EIR, Appendix E1: Cultural Resources. April 2006.

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6 PUBLIC FACILITIES, SERVICES, AND SAFETY

Public and quasi-public facilities are essential parts of a livable and sustainable community. Schools and training facilities promote student learning and employment skills. Police and fire services protect property and enhance personal safety. Parks and open spaces provide opportunities for recreation, relaxation, walking, and community gathering. The infrastructure system, including wastewater, water supply, and storm water conveyance, ensures that growth and development are responsibly managed and accommodated. This chapter includes an analysis of each of these facilities and services.

TABLE 6-1: SCHOOL CHARACTERISTICS IN THE PLANNING AREA (2010-2011)

NAME	GRADES	ENROLLMENT	% ENGLISH LANGUAGE LEARNERS	% ECONOMICALLY DISADVANTAGED
Encanto Elementary	K-5	614	64%	100%
Johnson Elementary	K-5	529	31%	100%
Nye Elementary School	K-5	593	37%	76%
Valencia Park Elementary	K-5	520	39%	100%
Chollas/Meade Elementary	K-6	737	64%	100%
Horton Elementary	K-6	538	70%	100%
Mt. Erie Christian Academy	K-6	90	[1]	[1]
Nubia Leadership Academy	K-6	261	6%	44%
Porter Elementary	K-6	798	61%	100%
Holly Drive Leadership Academy	K-8	142	32%	100%
St. Rita's School	K-8	232	[1]	[1]
Knox Middle	5-8	400	[2]	100%
Millennial Tech Middle	6-8	516	8%	71%
O'Farrell Charter School	6-9	946	24%	65%
Iftin University Preparatory Charter	9	75	49%	65%
Gompers Charter	6-12	886	62%	100%
Lincoln High	9-12	2,027	29%	100%
TOTAL/AVERAGE		**9,904**	**41%[3]**	**88%[3]**

1. No data available for private schools.
2. Changed to middle school in 2011-2012 school year. Data shown is for 2011-2012. ELL not reported.
3. Average for public schools only.

Source: San Diego Unified School District, School Accountability Report Card, 2010-2011 (Public) and GreatSchools.net (Private).

O'Farrell Charter School (left) and Horton Elementary (right) are two of the many schools in the Planning Area.

6.1 Educational Facilities

K-12 Schools

Home to many families and school-age children, Encanto hosts at least 17 public, private, and charter schools that serve as places for student learning, but also centers of the community.

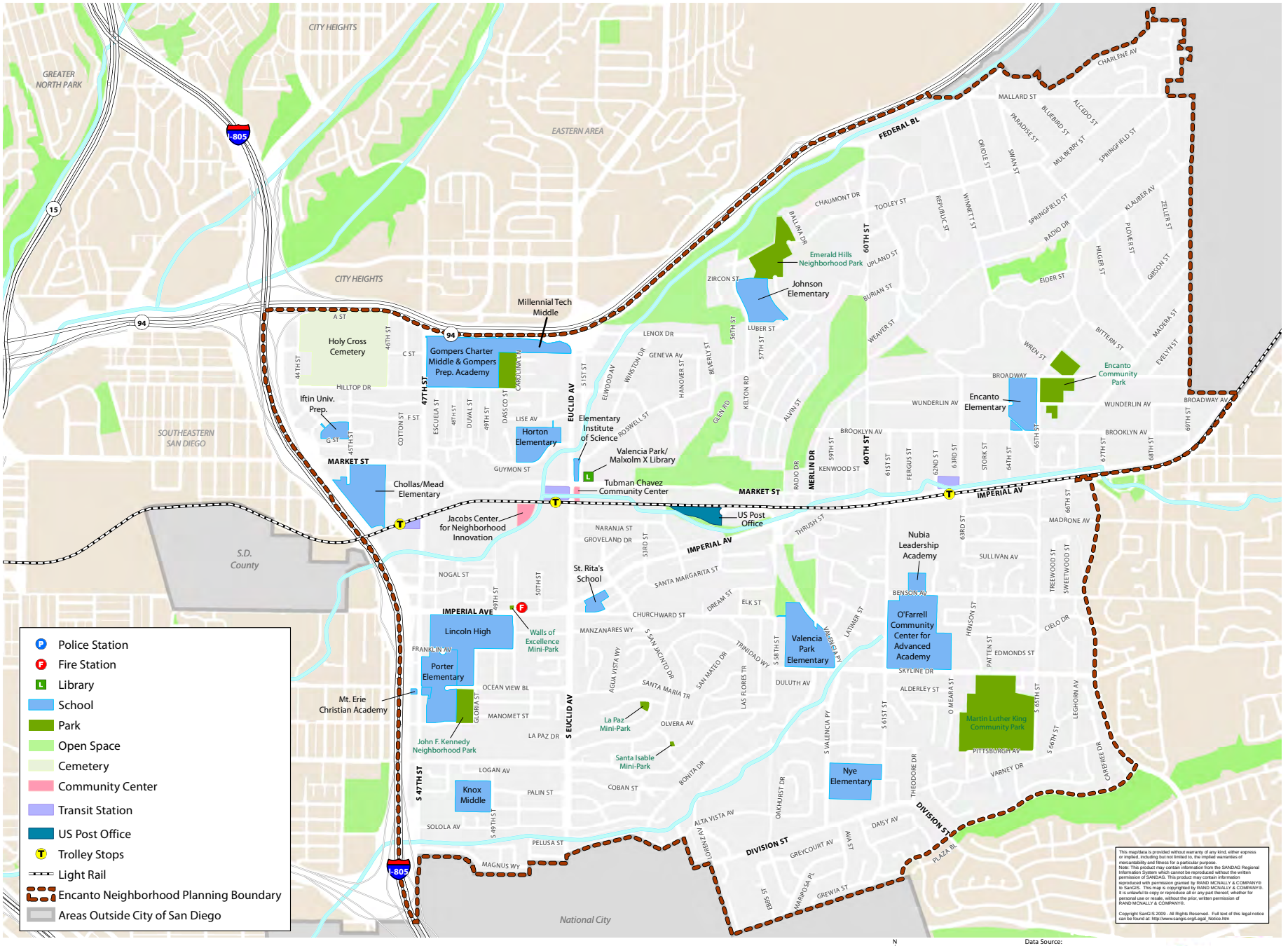
Over 9,900 students attend elementary, middle, and high schools in the Encanto Neighborhoods, as shown in Table 6-1. The vast majority of public school students are considered economically disadvantaged, qualifying for free or reduced priced lunch, and on average 41 percent of students are English Language Learners.

According to the San Diego Unified School District's Long Range Facilities Master Plan, prepared during the 2006-2007 school year, the district anticipated a period of enrollment decline, followed by a period of growth around the year 2012. As sites redevelop and new housing is constructed (particularly multi-family housing which has a higher yield of students), it will be essential to work with the school district to ensure that adequate facilities are available.

Other Community Facilities

Several other community facilities often provide meeting rooms, education and recreation classes, cultural events, and generally serve as important centers for children, teenagers, and adults.

FIGURE 6-1: Public Facilities (Schools, Libraries, Police, Fire)



The Malcolm X Library (top, middle) provides literary and music programs, computer access, and traditional book lending near the Euclid Avenue and Market Street intersection. The Elementary Institute of Science (bottom) provides educational programs for students next door.

Public Libraries

There is one branch library within the Planning Area, Valencia Park/Malcolm X Library, as shown on Figure 6-1, and several more just outside the neighborhood. The San Diego Public Library system provides adult and family literacy assistance through the READ/San Diego program and computer and internet access services in addition to book lending.

Other Facilities

Recreation centers in Encanto, operated by the Parks and Recreation Department, provide health and wellness programs and facilities. The Elementary Institute of Science, adjacent to Malcolm X Library, offers after-school and summer programs for teens and children in science, technology, and the environment. Additionally, the non-profit Jackie Robinson Family YMCA provides a technology center, after-school programming and child care, as well as to fitness and wellness services, just west of the Planning Area. Likewise, the Boys and Girls Club located at 6785 Imperial Avenue provides after-school programs in academics, character development and healthy lifestyles.

Market Creek Events & Venues provides indoor and outdoor meeting and event space at the Joe and Vi Jacobs Center and adjacent outdoor spaces. Celebration Hall features 12,000 square feet of flexible event space supported by break-out rooms. The World Court is a 7,450-square foot outdoor space for social gatherings, entertainment, and dancing. The space can extend into the 19,640-square foot grassy Festival Park. Market Creek Amphitheater can also host musical and theatrical performances.

6.2 Public Safety

Service and Staffing

The San Diego Police and Fire departments manage public safety in the city. As growth and development occur in the Planning Area, fire and police capacity will have to be evaluated to ensure that station locations and staffing levels are adequate to maintain acceptable levels of service.

The Police Department groups neighborhoods in the city into nine divisions. The Planning Area lies in the Southeastern Division which serves a population of over 175,000; the division is headquartered in the Skyline neighborhood, just east of the Planning Area.[1]

The Fire Department provides emergency/rescue services, hazard prevention and safety education to ensure the protection of life, property and the environment. This includes education about managing brush in order to protect properties from wildfires in canyon areas. There is one fire station within the Planning Area, as shown in Figure 6-1: Station 12 just east of I-805 on Imperial Avenue.

Crime and Community Safety

Feeling safe in the community is an essential part of quality of life for residents and economic viability for business. The San Diego Police Department offers a variety of resources related to crime prevention and education, including crime statistics and maps, neighborhood division maps, as well as instructions on reporting emergencies and non-emergencies.

1 San Diego Police Department, http://www.sandiego.gov/police/services/divisions. Accessed November 14, 2012.

An analysis of reported crimes over a one year period (2011) is reported in Table 6-2. The data show that the greatest number of incidents come from larceny-thefts, aggravated assaults, which is considered a violent crime, and motor vehicle thefts.

Crime statistics are one way to analyze community safety. The experience and perspective of residents is a qualitative value that will be explored during the planning process.

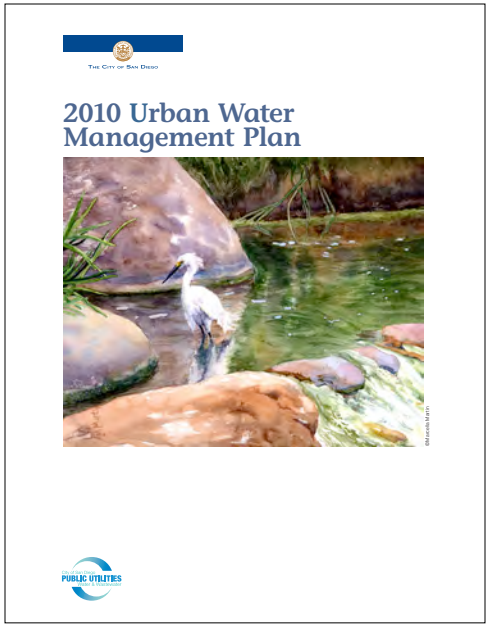
TABLE 6-2: REPORTED CRIMES IN THE PLANNING AREA, BY TYPE (JAN. – DEC. 2011)

TYPE	# REPORTED
Larceny – Theft	286
Aggravated Assault	236
Motor Vehicle Theft	192
Burglary	168
Robbery	71
Rape	10
Murder	4
TOTAL CRIMES	**967**

Source: Automated Regional Justice Information System (ARJIS), Reporting Period Jan. 2011 to Dec. 2011. Includes the following neighborhoods: Alta Vista, Broadway Heights, Chollas View, Emerald Hills, Encanto, Lincoln Park, Valencia Park.

ERICKSON-HALL CONSTRUCTION

Encanto is served by the Southeastern Division of the Police Department, which is headquartered in Skyline, outside of the Planning Area. Fire Station 12 (above) is located on Imperial Avenue, east of Euclid.



The City's Urban Water Management Plan projects water demand and supply every five years.

6.3 Water and Wastewater Infrastructure and Services

Potable Water

This section describes the potable water distribution infrastructure, supply and demand management and pressure to ensure adequate fire flows and domestic use. A complete report, including figures, is provided in Appendix C.

Distribution

Potable water distribution is critical to meeting the domestic and fire protection service needs in a reliable manner. The City of San Diego's water system includes water storage reservoirs in the mountains to the east of the City, water treatment plants which treat the raw water, and transmission piping systems which convey the treated water to local water storage tanks and distribution systems. The City also obtains much of its water from the San Diego County Water Authority. This system of supply sources, transmission pipelines, and distribution piping work together to maintain water delivery to the City's customers. For the Planning Area, the primary water source is the Alvarado Water Treatment Plant which is located adjacent to Lake Murray.

Since the Planning Area is close to the main source of supply of water to this area, the Alvarado Water Filtration Plant, the transmission main sizes running through the Encanto planning area are somewhat large, including 36", 42", and the 48" Otay Second Pipeline. This is a north-south pipeline which can function to transfer water from the Alvarado Water Filtration Plant service area to the Lower Otay Water Filtration Plant service area in South San Diego. The remaining piping within the Planning Area is 6" through 12", well interconnected, and provides local water distribution.

Pressure

Adequate pressure is essential for ensuring adequate flows for both daily domestic use and for fire hydrant flow capacities. The Encanto Neighborhoods Planning Area is served by City water—three different pressure zones due to the variation in topography, from 85 feet to 450 feet above mean sea level. This results in a maximum static pressure range of 65 pounds per square inch (psi) to 165 psi. The maximum pressure of 165 psi exceeds the desirable pressure of 120 psi, but is not a significant concern. Areas with the higher static pressures still provide water system redundancy and reliability. The water service system for the Planning Area can be rated well because of the available working pressures in the water system both for daily domestic use and for fire hydrant flow capacities.

Supply and Demand Management

The Long-Range Planning and Water Resources Division of the City's Public Utilities Department forecasts expected water demand to ensure that adequate sources of water are available to meet the estimated future demand. To that end, the City prepares an urban water management plan every five years. This document addresses:

- Historical and projected water use within the City's service area;
- Efforts for developing local water sources and for water conservation practices among customers;

- Available water supply sources; and
- Policies and programs to ensure that sufficient water supply will be available to meet projected demands for a 20-year study period.

The most recent City of San Diego Urban Water Management Plan (2010), concludes that sufficient water supply is available to meet the projected water demands for the city through the year 2035.

Changes in land use planning in the Planning Area may alter the total water demand projections. Once a preferred plan is selected through this planning process, the planning team will analyze the impacts of land use changes and population growth on water supply.

Wastewater

Service Area

The Wastewater Branch of the City's Public Utilities Department treats the wastewater generated in a 450-square-mile area stretching from Del Mar and Poway in the north, Alpine and Lakeside to the east, and south to the border of Mexico. The Department also operates the Metro Biosolids Center, a state-of-the-art regional biosolids treatment facility which turns waste into dewatered biosolids that are currently used as soil amendments landfill, and landfill cover, but which also may be used to promote growth of agricultural crops.

Capacity and Distribution Infrastructure

The Point Loma Wastewater Treatment Plant on the coast processes approximately 160 million gallons a day of wastewater generated by 2.2 million residents and workers. The plant has a treatment capacity of 240 million gallons per day. Pump Station #1, located on East Harbor Drive, collects all of South San Diego's wastewater. It has an average daily flow of 75 million gallons via the 8-mile South Metro Interceptor pipeline which runs to Pump Station #1 on North Harbor Drive and then on to Point Loma.

Ensuring that adequate sewer capacity is available to meet future needs is an essential part of the community planning process. However, it is not just the Encanto Neighborhoods Community Plan that affects capacity, but the contribution of the entire service area. Encanto's need must be combined with projected needs across the service area to determine if additional capacity is required or if projected demand can be accommodated through other means or technologies. To date, replacement and maintenance of wastewater pipeline and facilities has been taking place on an ongoing basis as identified in the City's Capital Improvements Program.

Stormwater and Drainage

The City of San Diego has over 75,000 storm drain structures and 889 miles of drainage pipe. The Storm Water Department is responsible for inspection, maintenance and repair of the storm drain system in the public right-of-way and in drainage easements. This includes clearing blocked drains, removing debris from storm drain structures, and cleaning and repairing damaged drainpipes. Storm drains are designed to handle normal water flow, but occasionally during heavy rain, flooding will occur.

The Point Loma Wastewater Treatment Plant, located on the Point Loma peninsula, processes all of the City's wastewater.

Appropriate residential landscaping (top) and streetscape planning (bottom) on major roadways can help to increase infiltration and reduce harmful stormwater runoff.

Storm water pollution affects human life and aquatic plant and animal life. Oil and grease from parking lots and roads, leaking petroleum storage tanks, pesticides, cleaning solvents, and other toxic chemicals can contaminate storm water and these contamination can be transported into water bodies and receiving waters.

The Storm Water Pollution Prevention Program is the lead office for the City's efforts to reduce pollutants in urban runoff and storm water. These activities, include but are not limited to, public education, employee training, water quality monitoring, source identification, code enforcement, watershed management, and Best Management Practices development/implementation within the City of San Diego jurisdictional boundaries.

The Storm Water Program represents the City on storm water and National Pollutant Discharge Elimination System (NPDES) storm water permit issues before the principal permittee, the County Department of Environmental Health and the Regional Water Quality Control Board. Compliance with the Permit requirements will be tracked and monitoring by the Storm Water Program and the Regional Board.

6.4 Parks and Recreation

Parks play an important role in sustaining and improving neighborhood quality of life, providing opportunities for social interaction and physical activity, and visual relief in the urban environment. Parks and open space can also provide environmental benefits where they include natural vegetation, restored creeks, or wildlife corridors between larger open spaces systems. Existing parks and recreation facilities, City standards and goals, and challenges and opportunities for Encanto are presented in this chapter.

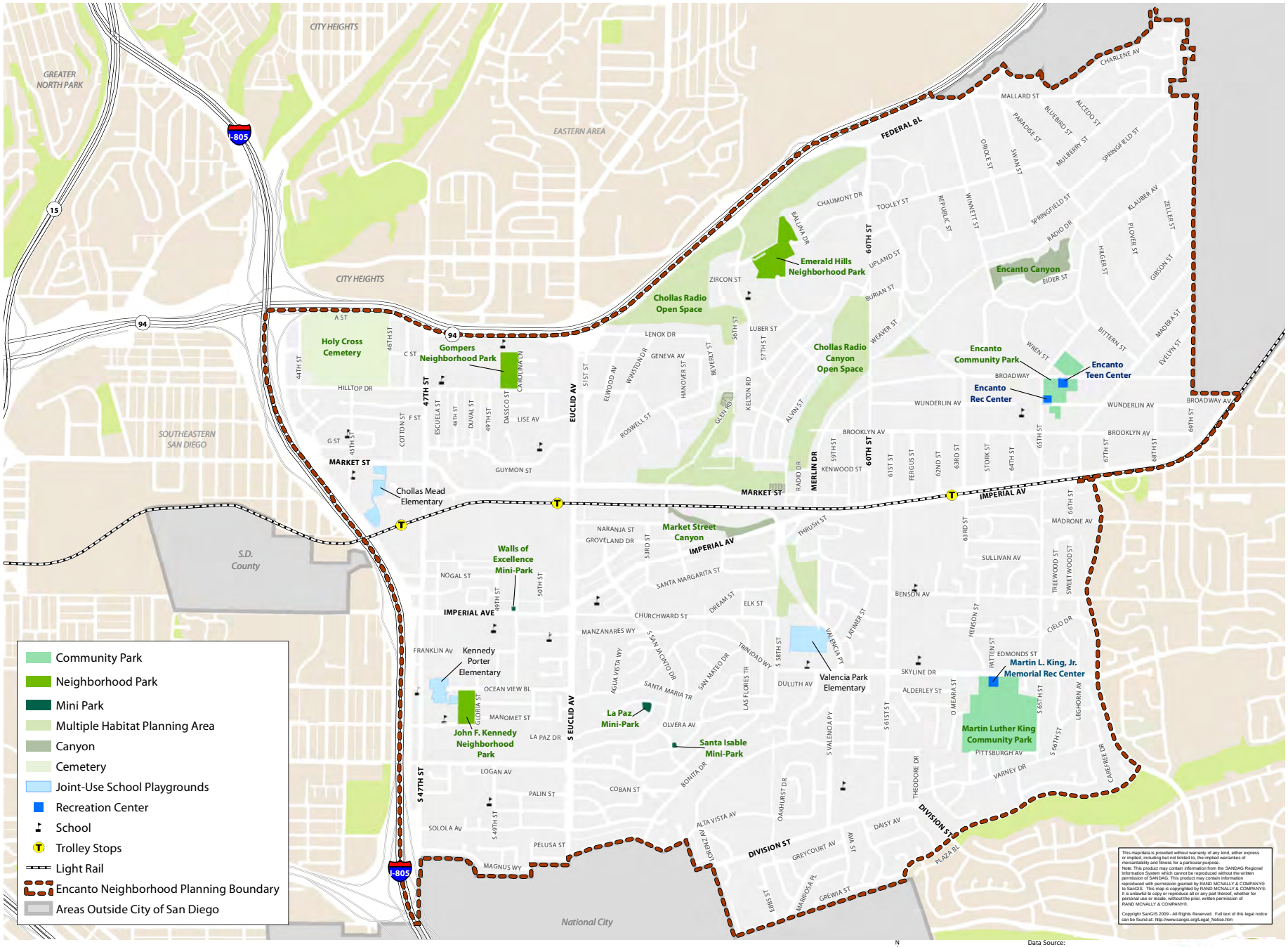
Existing Parks

The Planning Area features a variety of parks, ranging from the 35-acre Martin Luther King, Jr. Community Park to "mini-parks" of less than one acre. Preserved open space in canyons and along ridges are also included in the community's park land inventory, as presented in Table 6-3 and shown on Figure 6-2. The City's General Plan Recreation Element provides three use categories of parks and recreation facilities and programs: population-based, resource-based, and open space. These categories and representative parks in the Planning Area are summarized here and shown in Table 6-3.

Population-Based Parks

Population-based parks are intended to serve the daily needs of the surrounding neighborhood and community. Standards are defined in the General Plan based on park size, population served, and service area radius. Population-based parks include community parks, neighborhood parks, mini-parks, parks with special recreation facilities, and park equivalencies.

FIGURE 6-2: Parks and Recreation Facilities



Martin Luther King Community Park is the largest park in the Planning Area and provides play structures, walking/jogging paths, and recreation facilities.

Neighborhood Parks

The General Plan Recreation Element defines neighborhood parks as having between three and 13 acres, and serving the local population within one mile or an estimated 5,000 people. Neighborhood parks should be accessible on foot or bicycle, and may not require vehicular parking. They typically include multi-purpose turf areas and courts, picnic areas, comfort stations, children's play areas, paths and landscaping. The Planning Area includes three neighborhood parks: Emerald Hills Park, Gompers Park, and John F. Kennedy Park. These parks contain a combination of open play and picnic areas; Gompers Park also includes a playground and Emerald Hills Park features tennis and basketball courts. All three parks are adjacent to schools, and are within walking distance of much of the neighborhoods they serve. Emerald Hills Park is larger, and adjoins the Chollas Radio Open Space.

Community Parks and Recreation Facilities

Community parks typically have a minimum of 13 acres and serve a population of 25,000, who may drive or take transit to reach the park. Community parks may contain a variety of facilities and amenities, including those found in neighborhood parks as well as cultural facilities, recreation and aquatic centers, and sports fields. The Planning Area has two community parks: Encanto Park and Martin Luther King, Jr. Park, both in the eastern part of the Planning Area. Both parks include a recreation center, ball fields, and tennis and basketball courts. Martin Luther King, Jr. Park is the larger of the two, and includes a swimming pool and senior center.

Mini-Parks, Pocket Parks, and Plazas

Mini-parks are defined in the General Plan as one- to three-acre sites that can provide a restful area for a population within a 1/2-mile service area. They may include picnic areas, tot lots, turf areas and landscaping, and multi-purpose courts. Pocket parks or plazas are typically under one acre in size and may include the same features, or may have a more urban character with hardscape, landscaping, public art and other amenities, within a 1/4-mile service area. The Planning Area features three mini-parks and all are considerably less than one acre in size. These mini-parks are the only public open space within walking distance for many residents in the Valencia Park and Lincoln Park neighborhoods.

Park Equivalencies

Joint-use facilities with formal, long-term agreements have "equivalency" status, meaning that they can be considered population-based park resources according to the General Plan. Equivalencies may include joint-use school playfields; trails that provide linkages between parks and open spaces; privately-owned sites with easements for public recreational use; non-traditional park sites such as rooftops and courtyards; and expansion or enhancement (to intensive recreational use) of existing facilities. In all cases, for an equivalency to count as park land for the purposes of meeting standards, it must be easily accessed by the public, provide for public recreational opportunities, and be consistent with a parks master plan or land use plan (such as the community plan).

The City of San Diego has close to 100 agreements for joint-use of recreational facilities. Three school sites in the Planning Area, as shown on Figure 6-2, have joint-use agreements that provide for a sharing of development and operational costs, and are intended to ensure that facilities are available for community use during non-school hours.

Open Space

Open space, as defined in the General Plan, is typically City-owned land in canyons, along creeks, on mesas or other natural landforms. It may include trails, staging areas, picnic areas and viewpoints, while also serving to protect habitat and natural conditions. The Planning Area contains open space lands in canyons, along ridges, and along Chollas Creek, totaling 177 acres.

The General Plan Recreation Element sets policies intended to help the City manage an open space system that preserves natural resources, enhances outdoor recreation opportunities, and protects public health and safety. Open space should preserve the natural terrain and drainage systems, while supporting a system of pedestrian, bicycle and equestrian paths that links open spaces to one another and to communities.

Multi-Habitat Planning Area

Most of the open space in Encanto is classified as "Multi-Habitat Planning Area" (MHPA). These lands are part of a Multiple Species Conservation Program (MSCP) involving the City of San Diego and other jurisdictions, to support approximately 85 species by conserving core biological resource areas. Local jurisdictions implement their portions of the MSCP Plan through subarea plans.

TABLE 6-3: PARKS AND RECREATION FACILITIES IN THE PLANNING AREA

NAME	PARK TYPE	ACRES	USABLE ACRES[1]
Encanto Park	Community Park	8.9	6.2
Martin Luther King, Jr. Park	Community Park	34.3	27.4
Emerald Hills Park	Neighborhood Park	9.6	7.7
Gompers Park	Neighborhood Park	4.8	4.8
John F. Kennedy Park	Neighborhood Park	4.1	4.1
La Paz Mini-Park	Neighborhood Park/Pocket Park	0.5	0.0
Santa Isabel Mini-Park	Neighborhood Park/Pocket Park	0.1	0.0
Walls of Excellence	Neighborhood Park /Plaza	0.1	0.1
Chollas Mead Elementary[2]	Equivalency/Joint-Use Facility	1.3	1.3
Kennedy Porter Elementary[2]	Equivalency/Joint-Use Facility	3.1	3.1
Valencia Park Elementary[2]	Equivalency/Joint-Use Facility	8	6.8
POPULATION-BASED PARK LAND		**74.8**	**61.5**

1. Usable park land, by Plan standards, must have a slope of less than two percent if graded, active use areas, or a slope of less than ten percent for unstructured recreational or passive use areas
2. Joint use school sites count as population-based park land provided an executed long-term joint-use agreement is in place.

Source: City of San Diego, 2012; SanGIS, 2012; City of San Diego General Plan, 2008; Dyett & Bhatia, 2012..

Open space in the Planning Area provides opportunities for views and recreation for residents, as well as habitat for species.

Chollas Radio and Chollas Radio Canyon Opens Spaces provide large swaths of unique open space with some trail access in Emerald Hills.

The City of San Diego MSCP Subarea Plan, adopted in 1997, covers approximately 56,831 acres, primarily within City limits, and includes both publicly-owned and private lands.

In the Planning Area, the MHPA includes about 73 acres in the Chollas Radio Open Space and 36 acres in Chollas Radio Canyon, both defining features of the Emerald Hills neighborhood. These lands are characterized by coastal sage scrub vegetation, and feature well-used trails. Vernal pools are also present here. The MHPA also includes Encanto Canyon and unnamed open spaces on the hillside north of Market Street and on both sides of Valencia Parkway. These areas are characterized as disturbed habitat, but nevertheless provide potential benefits to wildlife, as well as to community residents. The MHPA boundary is in the process of being updated to be consistent with City-owned lands, and MHPA acreages will be revised in the Community Plan after the change is ap-proved by the Wildlife agencies.

Framework Management Plan

The MSCP Subarea Plan establishes priorities for managing MHPA lands, with regard to public access, trails and recreation, as well as other categories having more to do with natural resource management. The Plan calls for signage to clearly identify public access points. Trails, view overlooks, and staging areas are to be located in the least sensitive areas, such as along the edges of urban land uses or the seam between land uses, using existing roads and trails as much as possible. Trail widths should be minimized, and in general, trails should not be paved. Recreational uses should be limited to passive uses such as birdwatching, photography and trail use.

Canyons and Creek Corridors

Other open space not part of the Multi-Habitat Planning program, but found in the planning area include Encanto Canyon—and portions of Chollas Creek, including open space for urban runoff management purposes.

Cemeteries

The approximately 45-acre Holy Cross Cemetery is not public land and is not counted as park land, but nevertheless provides visual relief and other open space values in the Planning Area's northwestern corner. Open space and cemeteries are detailed in Table 6-4.

Park Land Acreage and Facility Standards

In total, there are about 251 acres of park land in the Encanto community (Holy Cross Cemetery is not included). The Planning Area has about 43 acres of community park land, 19 acres of neighborhood and 0.7 acres of mini-parks. In addition to these parks the City has joint-use agreements with the San Diego School District to use three school facilities totaling 12 acres as park equivalencies. There are also approximately 177 acres of open space in canyons and steep slopes that includes 161 acres preserved within the Multiple Habitat Planning Area.

TABLE 6-4: OPEN SPACE AND CEMETERIES IN THE PLANNING AREA		
NAME	**PARK TYPE**	**ACRES**
Open Space		
Chollas Radio Canyon Open Space	Multi-Habitat Planning Area	36.4
Chollas Radio Open Space	Multi-Habitat Planning Area	72.8
Unnamed open space	Multi-Habitat Planning Area	37.2
Unnamed open space	Multi-Habitat Planning Area	3.3
Unnamed open space	Multi-Habitat Planning Area	7.5
Unnamed open space	Multi-Habitat Planning Area	3.5
Encanto Canyon	Canyon	12.0
Market Street Canyon	Canyon	4.6
OPEN SPACE PARK LAND		**177**
Other		
Holy Cross Cemetery[1]	Cemetery	45.6

1. Holy Cross Cemetery is not counted as park land, but does provide open space qualities.

Source: City of San Diego, 2013; SanGIS, 2012; City of San Diego General Plan, 2008; Dyett & Bhatia, 2013.

Acreage Standards

The General Plan Recreation Element establishes a standard of 2.8 acres of usable, population-based park land per 1,000 residents. Usable park land, by Plan standards, must have a slope of less than two percent in graded, active use areas, or a slope of less than ten percent for unstructured recreational or passive use areas. As shown in Table 6-4, of the total park acreage, the Planning Area provides about 34 useable acres of community park land, 17 useable acres of neighborhood parks, and about .1 useable acres as a plaza. In addition to these parks the City has joint-use agreements with the San Diego School District to use three school facilities totaling approximately 11 useable acres as park equivalencies. This equates to approximately 62 acres of usable, population-based park land serving its 47,700 residents, and translates into a ratio of 1.3 acres per 1,000 residents. This is less than half the City's standard,

The amphitheater and trail improvements around Market Creek Plaza provide gathering and event space, views, seating, and walking paths. This section of the creek provides inspiration for further improvements contemplated in the Enhancement Program.

Access to Parks

The General Plan provides specific service area standards for neighborhood parks (1 mile), mini-parks (1/2 mile), and pocket parks and plazas (1/4 mile). Community parks are generally intended to serve an entire community planning area, or 25,000 residents. As Figure 6-3 shows, nearly all of the Planning Area falls within one mile of either a neighborhood park or a community park. The area's scattered mini-parks provide more immediate access in some neighborhoods. Only the Broadway Heights neighborhood north of Mallard Street in the far northeastern corner is out of the one-mile range.

A more precise analysis of the "walksheds" of neighborhood, and community parks is also provided in Figure 6-3. This method uses actual streets to map the walking distance from an accessible park entrance. Walksheds are also shown from two open space parks that receive regular daytime use by local residents. This shows that many parts of Encanto are beyond reasonable walking distance to a park with substantial amenities or an open space trail, even if they technically fall within a park service area. This factor points to the importance of effective joint-use agreements with schools, and to areas where additional park land should be prioritized.

Planned Improvements

Chollas Creek Enhancement Program and South Branch Implementation

The Chollas Creek system extends over 25 miles from Mid-City and Lemon Grove through Encanto and Southeastern San Diego to San Diego Bay. In the Encanto Planning Area, Emerald Hills and Encanto branches of Chollas Creek generally follow Highway 94 and Imperial Avenue corridors, respectively, and join in the vicinity of Euclid and Market, continuing to the southwest as the South Branch of Chollas Creek and crossing I-805 into the Southeastern community. Creek conditions vary from concrete-lined channel, concrete on one bank only, and earthen channel. Certain reaches have intermittent flow, while other sections have water throughout the year.

The Chollas Creek Enhancement Program, adopted in 2002, calls for restoring disturbed areas; avoiding future channelization; integrating vacant land adjacent to the creeks into the open space system; using vegetation appropriate to the wetland or upland location; developing a system of linear trails, access points, and enhanced sidewalks where routes must follow streets; and ensuring that development preserves connections and addresses the corridor with creek-facing windows and outdoor seating areas. The program includes a 20-year phasing schedule, and identifies the South Branch as the first phase, due to its potential for restoration and its exposure to a wide swath of neighborhoods and commercial areas. The Encanto and Emerald Hills branches are in Phases II and III, respectively, and the Program identifies areas for restoration and rehabilitation of natural habitat, and potential sites that need further study.

The City initiated a more detailed program for the South Branch and has proceeded to carry out improvements. The South Branch Implementation Program (2002) identifies eight segments, four of which are within the Encanto community, as shown in Figure 6-4. Groundworks San Diego is an advocate for implementing the planned creek improvements and maintaining the creek.

FIGURE 6-3: Parks and Recreation Access (1/4 and 1/2 Mile Radius)

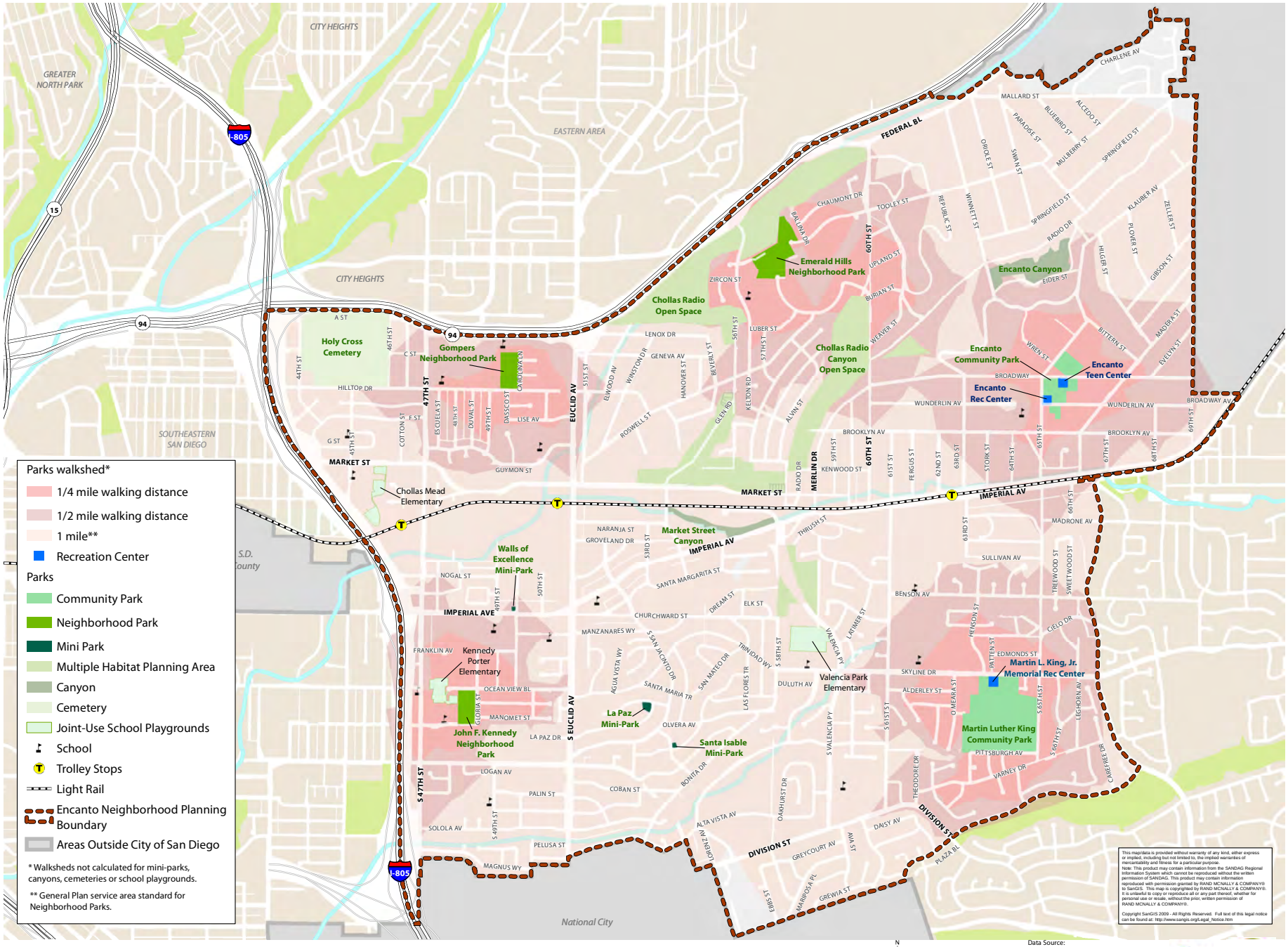
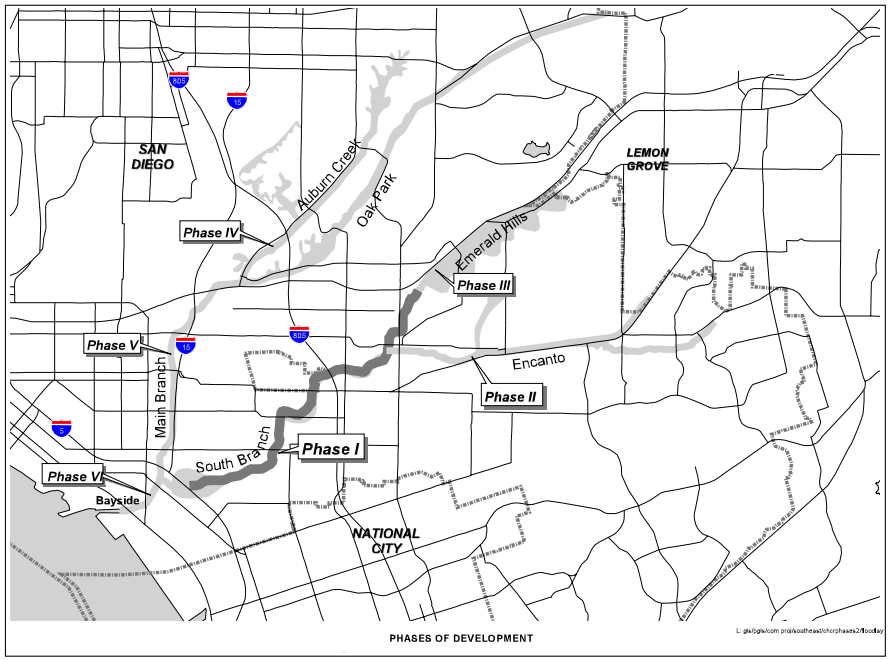
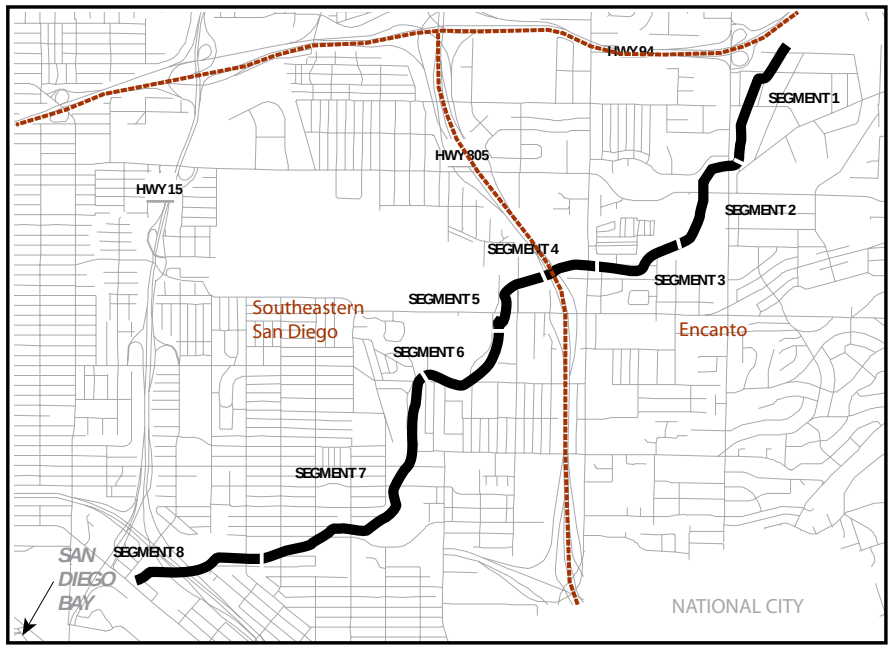


FIGURE 6-4: Chollas Creek Enhancement Program Improvements





Of these four Segments, improvements to Segment 2B have been made as part of the Market Creek Plaza development. Improvements included creek restoration, paved multi-use trails and fencing along the creek channel, a pedestrian bridge, amphitheater/park space, and lighting. Subsequently, the Southeastern Economic Development Corporation (SEDC) installed the North Market Street Pathway, featuring a multi-use trail, benches, and landscaping extending east from Euclid Avenue along the north side of the Encanto branch of Chollas Creek (part of Phase II). Actions planned for other segments include:

- Segment 1 – Trail and public art along the channelized creek segment along 51st Street, and pedestrian linkages to Gompers Learning Laboratory (an outdoor educational project adjacent to Gompers Junior High School); the Multiple Species Conservation Program preserve; and Malcolm X Library.
- Segment 2 – Habitat enhancement and restoration along the channelized but not concrete-lined segment of the creek west of Euclid Avenue and north of Market Street, and creation of a science education center.
- Segment 3 – Trail connection along the creek between Market Creek Plaza and 47th Street, across Water Department land; and
- Segment 4 – Creek restoration, and public trail development and interpretive and arts projects along Imperial Avenue between 47th Street and I-805.

Euclid + Market Land Use and Mobility Plan

The Euclid + Market Land Use and Mobility Plan (EMLUMP) includes a creekside pathway and open space conceptual plan for the Market Creek Village development and surrounding area. The Public Review draft of this document was released in February 2013 and will be integrated into the Community Plan update. The Plan illustrates improvements that will fill gaps in the trail network, and provide recreational opportunities, supporting the land use and mobility concepts of the EMLUMP, while implementing the vision of the Chollas Creek Enhancement Program.

The plan shows a continuous greenway from 47th Street on the west to Merlin Street on the east, along the Encanto Branch, as well as to the north along the Emerald Hills Branch as far as Euclid Avenue. The greenway includes a trail system and a series of park spaces of varying sizes and functions. The most notable of these spaces are the 0.87-acre Festival Park adjoining Market Creek Village, a 1.1-acre area that provides for more active recreational opportunities on the northwest side of the creek south of the El Rey Plaza mobile home park, and smaller park areas, north and south of the creek, that provide for more passive recreational opportunities on the Water District property between 47th and 49th streets.

The Euclid + Market Land Use and Mobility Plan proposes a multi-use path and passive park at Castana Street (top), creekside development and a plaza near Guymon Street (middle), and an active neighborhood park near El Rey Plaza mobile home park (bottom).

Future Park and Recreation Department Improvements

The City maintains a list of projects that have been defined and prioritized, but are not yet funded. These include numerous park projects in the Planning Area. Projects common to multiple parks include upgrading security and ballfield lighting; upgrading tot lots to meet State and federal accessibility guidelines; and refinishing or replacing gym floors. More substantial projects include:

- Design and construction of a new recreation facility for Emerald Hills Park;
- Design and construction of a swimming pool on the south side of Wunderlin Avenue adjacent to Encanto Park; and
- Acquisition of parcel at 60th and Broadway for new park land along Encanto Creek.

Parks Master Plan and Role of the Community Plan Update

A goal of the City's General Plan Recreation Element is to develop a comprehensive parks master plan through a public process. This plan would identify community-specific needs and preferences, develop criteria for the use of "equivalencies," and incorporate adopted plans for the City's open space and resource-based parks such as Mission Bay and Balboa Parks.

The Community Plan update process will be an important basis for the citywide Parks Master Plan. It will explore ways to provide new park facilities, expand and enhance existing parks, identify equivalencies for recreational opportunities, and provide passive recreation within, while protecting, existing natural open space in the Encanto neighborhoods.

7 CONSERVATION, NOISE, AND HAZARDS

This chapter reviews environmental conditions and constraints in the Planning Area that may affect the potential for development and the need for approaches that optimize safety and health and minimize negative impacts on the environment. The chapter begins with a brief description of the Planning Area's physical setting, and geological and hydrological hazards. Next, environmental constraints are presented to understand potential impacts on community members and development opportunity sites. Topics include air quality conditions and regulations; greenhouse gas emissions inventories and reduction strategies; evaluation of the current noise environment; and analysis of hazardous materials and potentially contaminated sites.

Much of the eastern Planning Area, including Emerald Hills (top) and South Encanto (middle, bottom), are defined by rolling hills, which provide opportunities for views from private homes and public places.

7.1 Physical Setting

Recognizing the topography, surface water, and groundwater conditions in the Planning Area provides a foundation for understanding the potential for erosion and flooding and susceptibility to liquefaction, among other potential hazards.

Terrain

The Encanto community is comprised of a series of terraces building up toward steeper slopes and higher elevations in the east. The Encanto Creek drainage bisects the Planning Area into two topographically comparable northern and southern highland areas. Elevations range from approximately 100 feet above mean sea level (MSL) at Solola Avenue in the southwest portion to 460 feet MSL at 69th Street and Klauber Avenue in the northeast. The regional topography slopes to the southwest.

According to the California Department of Conservation Geologic Map of the San Diego 30' x 60' Quadrangle, Southeastern San Diego and the western portion of Encanto are primarily underlain by old and very old paralic deposits and the San Diego Formation. The eastern portion of the Encanto is primarily underlain by the Mission Valley and Otay Formations. Young alluvium is present in the vicinity of streams.[1]

Hydrology

Surface Water

Three creeks are present within or adjacent to the Planning Area. The Emerald Hills and Encanto branches of Chollas Creek flow southwesterly and westerly across the eastern and central neighborhoods of the Planning Area. These branches join in the vicinity of Euclid Avenue and Market Street, and become the South Branch of Chollas Creek, which continues to the southwest and crosses under Interstate 805 into the Southeastern San Diego community and on to San Diego Bay. Paleta Creek flows along the southern portion of the Planning Area toward Seventh Street Channel, and Paradise Valley Creek flows along part of Encanto's southern boundary. The natural channel and floodplain have been significantly altered by urban development, and in some sections the creeks have been culverted or covered. However, many creek segments, particularly along the South Branch, run through an undeveloped channel corridor. Certain reaches have intermittent flow, while other sections have water throughout the year.

Groundwater

- According to the Regional Water Quality Control Board (RWQCB) Water Quality Control Plan for the San Diego Basin, the Planning Area is situated within three hydrologic areas, as follows:
- Chollas Hydrologic Subarea (HSA) of the San Diego Mesa Hydrologic Area, within the Pueblo San Diego Hydrologic Unit (on the northern portion).
- El Toyan HSA within the National City Hydrologic Area and Pueblo San Diego Hydrologic Unit (on the south-central portion).
- Paradise HSA within the National City Hydrologic Area and Pueblo San Diego Hydrologic Unit (on the southeastern portion).

1 Ninyo & Moore, "Hazardous Materials Technical Study, Southeastern San Diego Community Plan Update," November 2012.

The National City Hydrologic Area has existing beneficial use for municipal supply. The San Diego Mesa Hydrologic Area is exempted from municipal supply (RWQCB, 2007). Groundwater is expected to be encountered at depths from in the range of approximately 80 feet to over 100 feet below ground surface (bgs). The direction of regional groundwater flow is west to southwest toward the San Diego Bay.

7.2 Environmental Constraints

This section describes the major environmental constraints that may limit development or require specific mitigation measures in the Planning Area: faults, areas with liquefaction or shaking potential, steep slopes and landslide-prone areas, and flood zones. These conditions are summarized below. An analysis of the Community Plan's environmental impacts will be fully explored during the preparation of the Environmental Impact Report. Any necessary mitigation measures will also be identified and will be incorporated into the Community Plan as policies.

Seismic and Geological Hazards

Southern California is one of the most seismically active regions in the United States, with numerous active faults and a history of destructive earthquakes. Damage to structures and improvements caused by a major earthquake will depend on the distance to the epicenter, the magnitude of the event, the underlying soil, and the quality of construction. Although there are no known active faults within the Planning Area, the area is still subject to potential ground shaking due to faults just outside the Area.

Fault Lines

San Diego is located about 100 miles west of the San Andreas Fault, the predominant earthquake hazard in the state. It is closer to several large active faults capable of producing intense ground shaking (active faults are defined as those known to have been active during Holocene time within the past 11,000 years). These include the San Jacinto, Elsinore, Coronado Bank, and San Diego Trough faults, among others, as shown on Figure 7-1.

Portions of the Elsinore and San Jacinto fault zones are classified as Type A faults, meaning they have the capacity to produce magnitude 7.0 earthquakes or greater and have a high rate of seismic activity. The remaining faults, including those nearest the Planning Area that underlie parts of downtown, are considered Type B faults. Ground shaking effects from either type of fault are discussed below.

Ground Shaking

Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill or unconsolidated alluvial fill. All of Southern California is located within Seismic Zone 4, the highest seismic zone and subject to ground shaking.

The creeks and surrounding open spaces are a defining feature in the Planning Area, but are threatened by dumping and runoff.

FIGURE 7-1: Regional Faults

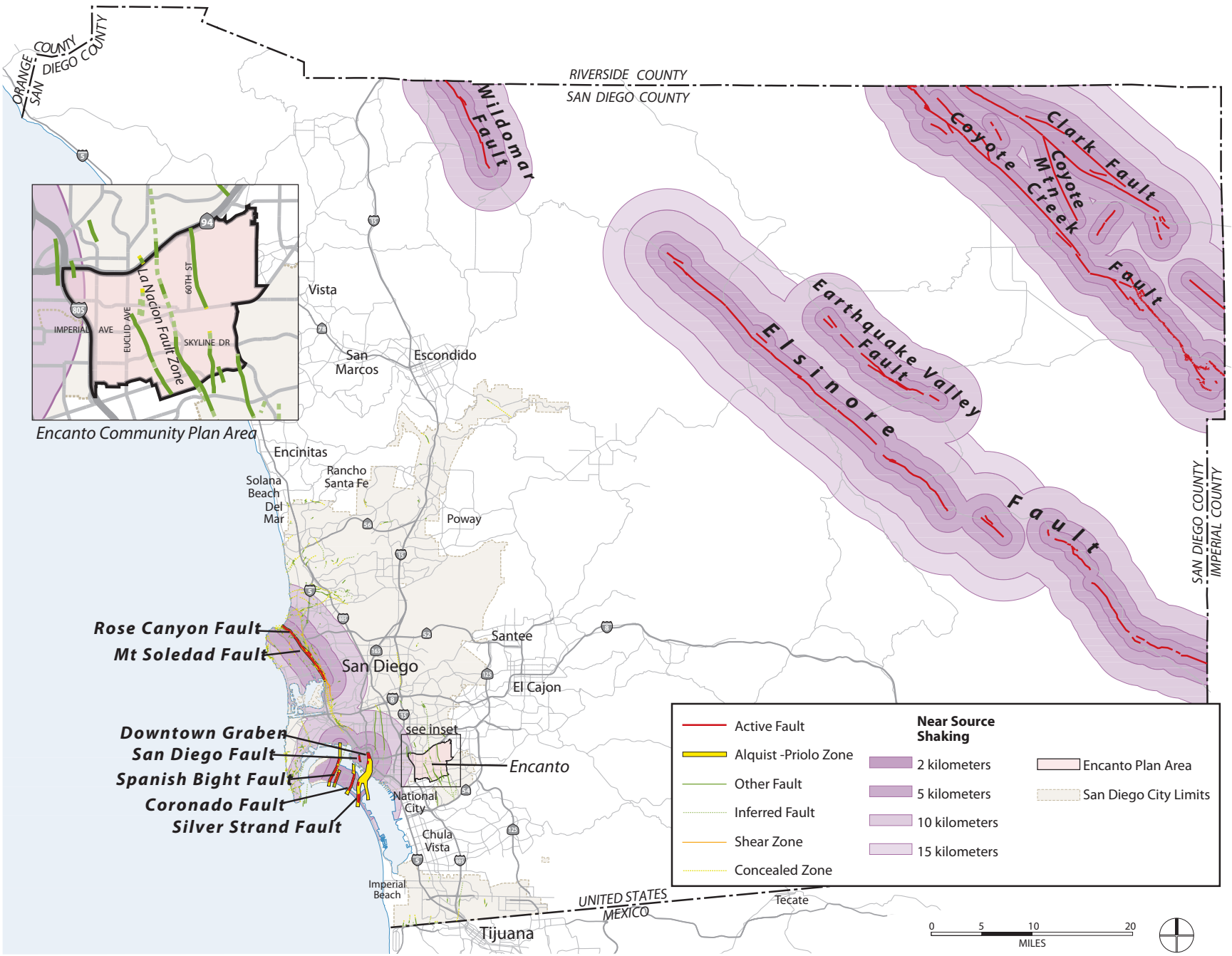
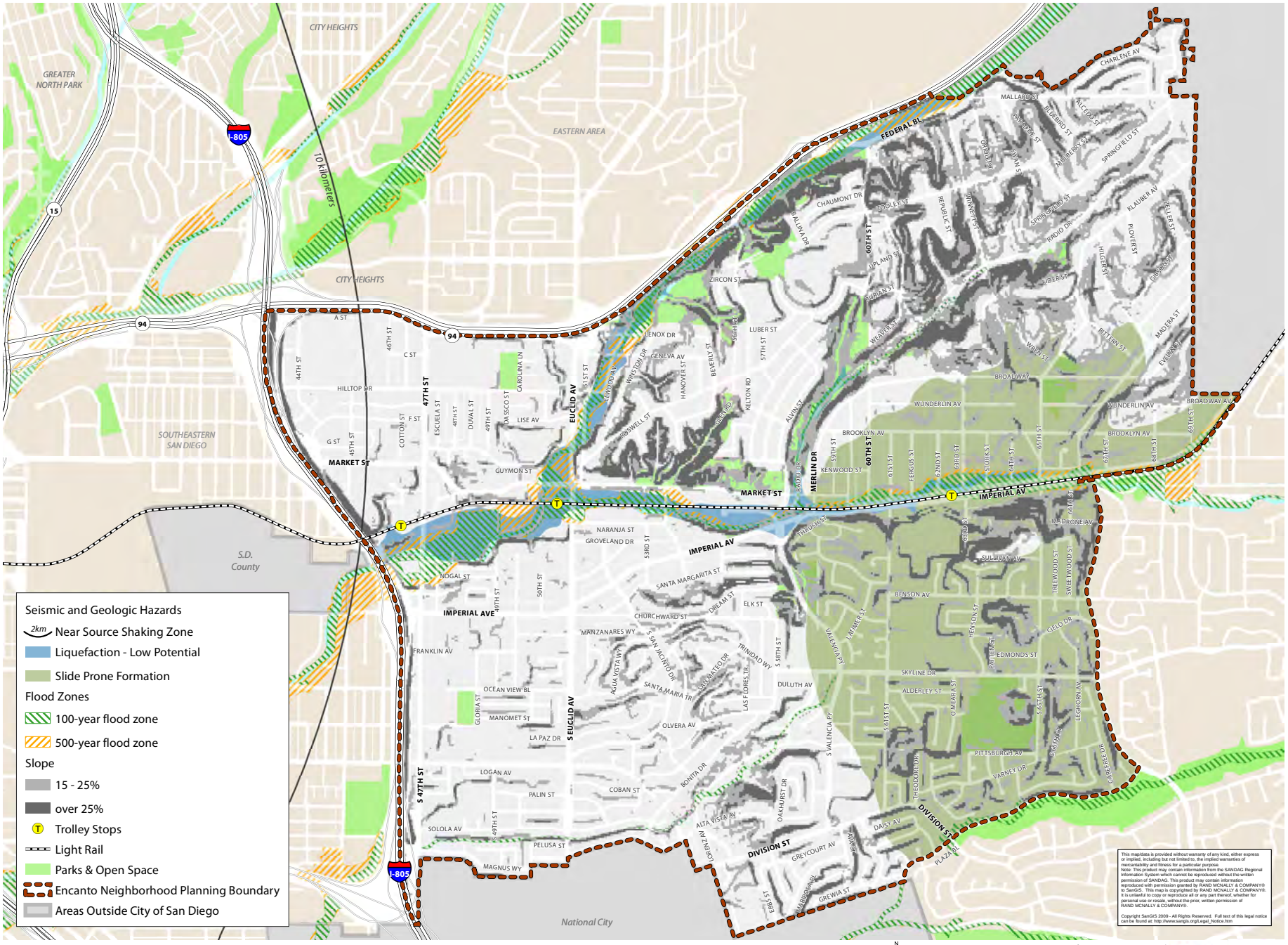


FIGURE 7-2: Environmental Constraints (Fault Lines, Liquefaction, Geological Hazards, Slopes >15%, Creeks, Flood Zones)



Steep slopes in South Encanto create potential for erosion and slides.

Encanto's location places it at some risk of ground shaking. The Uniform Building Code requires that near-source velocity effects need to be considered in the design of buildings within 10 kilometers (approximately 6.2 miles) of a Type B fault, as defined by Near Source Shaking Zones. As shown on Figure 7-2, only the northwestern corner of the Planning Area is subject to this requirement.

Liquefaction

Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Liquefaction more commonly occurs in loose, saturated materials.

Portions of the Planning Area along the South Branch and the Emerald Hills and Encanto branches of Chollas Creek, accounting for about 178 acres or five percent of the Planning Area, are considered to have some liquefaction potential.

Steep Slopes and Landslide Hazards

Steep slopes can introduce the risk of landslides or slope failure. Slope failure is dependent on topography and underlying geologic materials, as well as factors such as rainfall, excavation, or seismic activities which can precipitate slope instability. Earthquake motions can induce significant horizontal and vertical dynamic stresses along potential failure surfaces within a slope.

The Planning Area includes a significant amount of very hilly topography, especially in the northeastern part of the Encanto neighborhood, and on both sides of Imperial Avenue (which follows the canyon through which the Encanto branch of Chollas Creek flows). Areas with slopes of 15 percent or greater are shown in Figure 7-2.

Though steep slopes are more widespread, only the southeastern part of the Planning Area, generally east of Valencia Parkway and south of Broadway, is considered by the Development Services Department to have underlying geology that produces a slide prone formation. This area covers an estimated 917 acres, or 24 percent of the Planning Area.

Other Geologic Hazards

Soils in approximately half of the Planning Area, covering 1,970 acres, are considered to have a favorable geological structure and low risk. The area generally south of Market Street between Euclid Avenue and Valencia Parkway, comprising 743 acres or about 20 percent of the Planning Area, is underlain by soils that are considered to have an unfavorable geologic structure, with low to moderate risk. There may be potential geological hazards including soil erosion, expansive soils, settlement and subsidence that may require further study.

Flood Zones

Flood risk is a consequence of rainfall characteristics, topography, water features, vegetation and soil coverage, impermeable surfaces, and urban stormwater management infrastructure. The Federal Emergency Management Agency (FEMA) creates Flood Insurance Rate Maps that identify the 100-year and 500-year floodplains for the purpose of informing flood insurance necessity.

As Figure 7-2 shows, portions of Encanto along the Emerald Hills, Encanto, and South Branches of Chollas Creek, as well as along Paleta and Paradise Valley Creeks, are located within the FEMA-designated 100-year and 500-year flood plains. The flood zones include undeveloped land along the creeks, as well as parks, schools, residential, commercial, and industrial areas. In these areas, the City must ensure that any new structures are reasonably safe from flooding, by providing that habitable floors are elevated above the base flood level among other measures. Overflow of the stormwater drainage system could also be a potential source of flooding. Therefore, the City must ensure that any proposed development or Las Chollas Creek restoration efforts do not interfere with routine channel maintenance.

7.3 Air Quality

Air pollution may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Understanding the risks from air pollution will help the City and community consider both impacts on existing residents as well as potential locations of new sensitive receptors (e.g., homes, schools, or daycare centers) in light of air pollution sources. This section summarizes existing air quality in the Planning Area, including regulations, sources of air pollution, current conditions, and adopted improvement strategies. A complete report is provided in Appendix D.

Sources and Standards

Motor vehicles are San Diego County's leading source of air pollution.[2] Emission standards for mobile sources are established by state and federal agencies, such as the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA). The State of California has developed statewide programs to encourage cleaner cars and cleaner fuels. Since 1996, smog-forming emissions from motor vehicles have been reduced by 15 percent, and the cancer risk from exposure to motor vehicle air toxics has been reduced by 40 percent.[3]

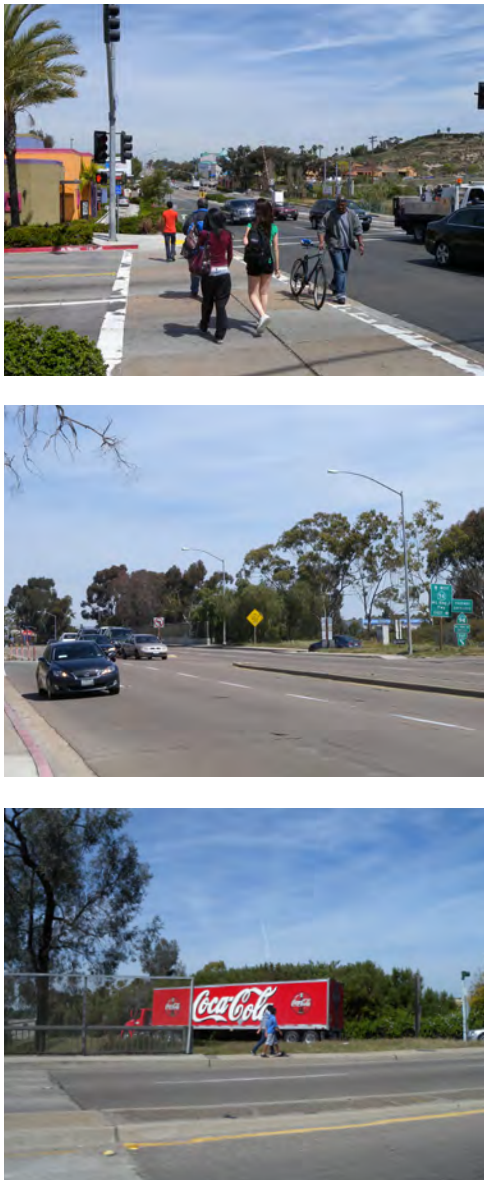
In addition to mobile sources, stationary sources also contribute to air pollution in the San Diego Air Basin (SDAB). Stationary sources include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses. Stationary sources of air pollution are regulated by the local air pollution control or management district, in this case the San Diego County Air Pollution Control District (SDAPCD).

Standards are applied at the federal, State and local levels, as illustrated below:

- Federal Ambient Air Quality Standards represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal Clean Air Act (CAA) enabled the EPA to develop primary and secondary national ambient air quality standards.
- The State of California has developed the California Ambient Air Quality Standards and

2 County of San Diego. "Air Quality in San Diego County." 2007 Annual Report. San Diego Air Pollution Control District. 2008.

3 Ibid.



Vehicles are the leading source of air pollution and have a substantial presence in the Planning Area, with several freeways and major roadways crossing through the community. Air pollution has greater consequences for sensitive receptors, including seniors and children.

generally has set more stringent limits on the six criteria pollutants. The California CAA also requires that pollution control districts implement regulations to reduce emissions from mobile sources through transportation control measures.

- The SDAPCD currently maintains 11 air quality monitoring stations that continuously record air pollutant concentrations and meteorological information. These measurements are then used by scientists to help forecast daily air pollution levels.

Conditions

The SDAB is a non-attainment area for the State ozone standards, the State PM_{10} (inhalable particulate matter) standard, and the State $PM_{2.5}$ (fine particulate matter) standard; in other words the SDAB exceeds the thresholds set by the State for these three pollutants. The air quality monitoring station nearest the Planning Area (at 1110 Beardsley Street) provides more localized information for the years 2007 to 2011 and is compared to findings for the SDAB overall:

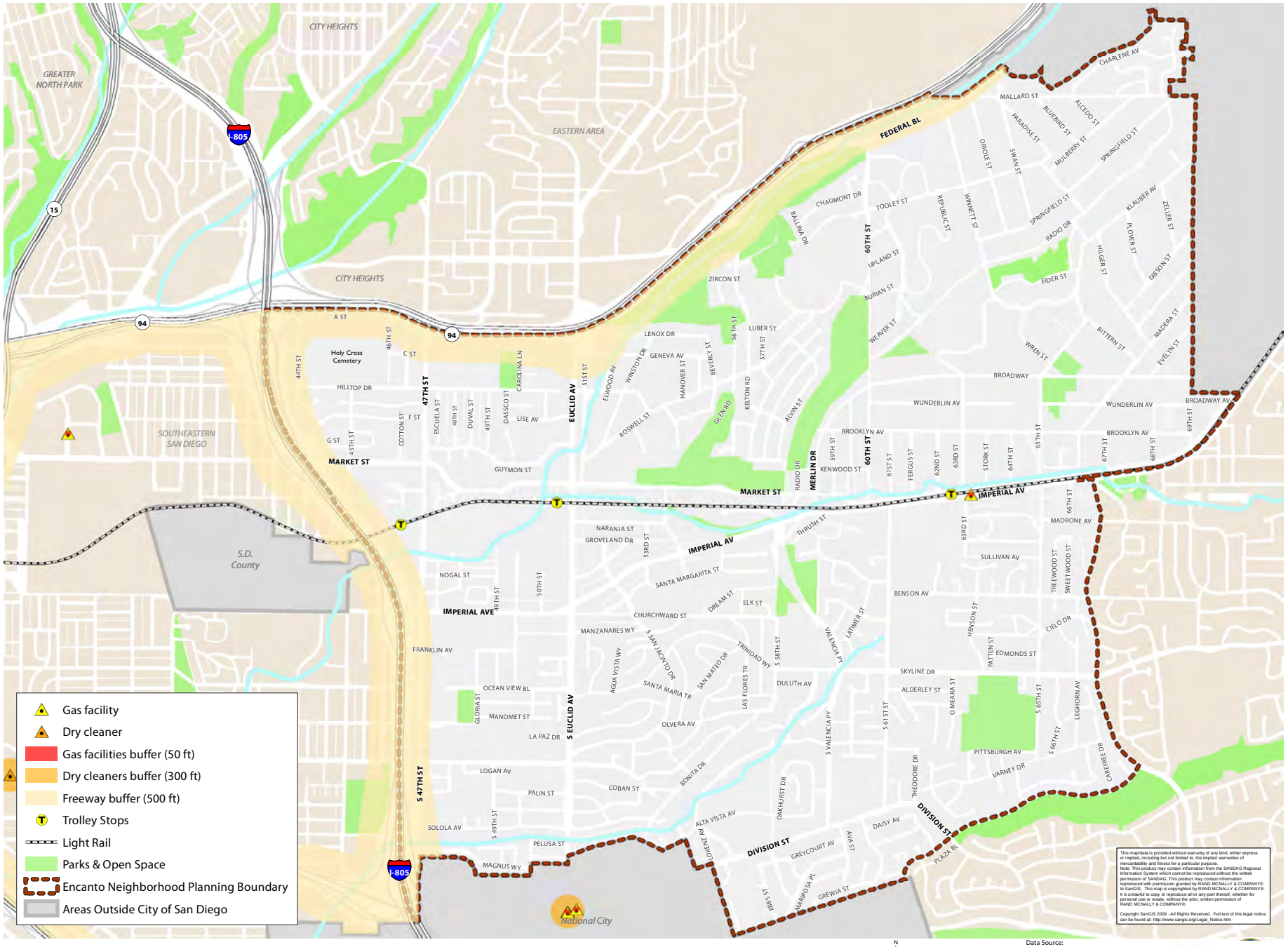
- **Ozone.** In the SDAB overall, during this five-year period, the national eight-hour standard was exceeded 27 days in 2007, 35 days in 2008, 24 days in 2009, 14 days in 2010, and 10 days in 2011, suggesting an improvement over time. The stricter State eight-hour ozone standard was exceeded 50 days in 2007, 69 days in 2008, 47 days in 2009, 21 days in 2010, and 33 days in 2011. However, at the Beardsley Street monitoring station, the national eight-hour standard was not exceeded during this period, but the State standard was exceeded: on one day in 2007 and one day in 2008.
- **PM_{10}.** In the SDAB overall, the stricter State standard was exceeded 159 days in 2007, 163 days in 2008, 146 days in 2009, 136 days in 2010, and 139 days in 2011. At the Beardsley Street monitoring station, the State standard was exceeded approximately 24, 24, 18, 0, and 0 days for 2007, 2008, 2009, 2010, and 2011 respectively.
- **$PM_{2.5}$.** The stricter State $PM_{2.}5$ annual standard was routinely exceeded during this period in the SDAB overall, as well as at the Beardsley Street monitoring station.

Attainment and Improvement Strategies

The City already has a range of strategies in place to improve air quality and achieve attainment with federal, state, and local standards. The attainment planning process is embodied in a regional air quality management plan developed jointly by the SDAPCD and SANDAG. Specifically, the San Diego Regional Air Quality Strategy was developed to identify feasible emission control measures and provide expeditious progress toward attaining the State ozone standards.

In addition to the adopted regulations and programs to address air quality and protect public health, CARB and SDAPCD provide guidance on siting land uses to avoid health risks and avoid nuisances, as shown in Figure 7-3. A common component of such guidance is the recommendation to site sensitive land uses outside specified buffers adjacent to or surrounding major emitters or facilities of concern, such as highways. However, the existing mix of land uses and small amount of undeveloped land, limit opportunities for reducing impacts due to collocation.

FIGURE 7-3: Land Use Siting Buffers



7.4 Greenhouse Gas Emissions

Greenhouse gas emissions are analyzed in order to address their influence on global climate change and to meet the requirements of the California Environmental Quality Act and other regulations required of the Community Plan update. This section defines greenhouse gas (GHG) emissions and their relationship to global climate change; describes existing regulations to reduce emissions; and presents an emissions inventory for the State and San Diego County. A complete report on GHGs is provided in Appendix D.

Global Climate Change

Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation, and temperature. GHGs influence the amount of heat that is trapped in the earth's atmosphere and thus play a critical role in determining the earth's surface temperature. Outgoing infrared radiation is absorbed by GHGs, resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth.

With the Industrial Revolution came an increase in the combustion of carbon-based fuels such as wood, coal, oil, and biofuels, as well as the creation of GHG-emitting substances not found in nature. Such human activities have increased atmospheric GHG levels in excess of natural ambient concentrations. This has led to a trend of unnatural warming of the earth's atmosphere and oceans, with corresponding effects on global circulation patterns and climate. California can expect the climate change effects on water supply, wildfires, food production, sea level, and ecosystems health.

Greenhouse Gases of Primary Concern

There are numerous GHGs, both naturally occurring (i.e., biogenic) and manmade (i.e., anthropogenic). Each GHG has variable atmospheric lifetime and global warming potential. Although there are dozens of GHGs, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) are the GHGs of primary concern.

Regulations

Federal

Although there are no federal laws governing the emission of GHGs, other activities and related legislation have been pursued that address this topic. In April 2007, the U.S Supreme Court ruled that CO_2 is an air pollutant as defined under the CAA, and that the EPA has the authority to regulate GHG emissions. In addition, the U.S. set a goal to reduce its 2002 GHG emissions intensity (which is the ratio of GHG emissions to economic output) by 18 percent by 2012 through various GHG reduction programs, such as the Energy Star program and the Corporate Average Fuel Economy Standards (CAFE).

State

The State has pursued a range of policies and legislation to reduce GHGs and the effects of climate change, several of which are summarized here:

- **Executive Order S-3-05** (2005) established Statewide targets for reducing GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

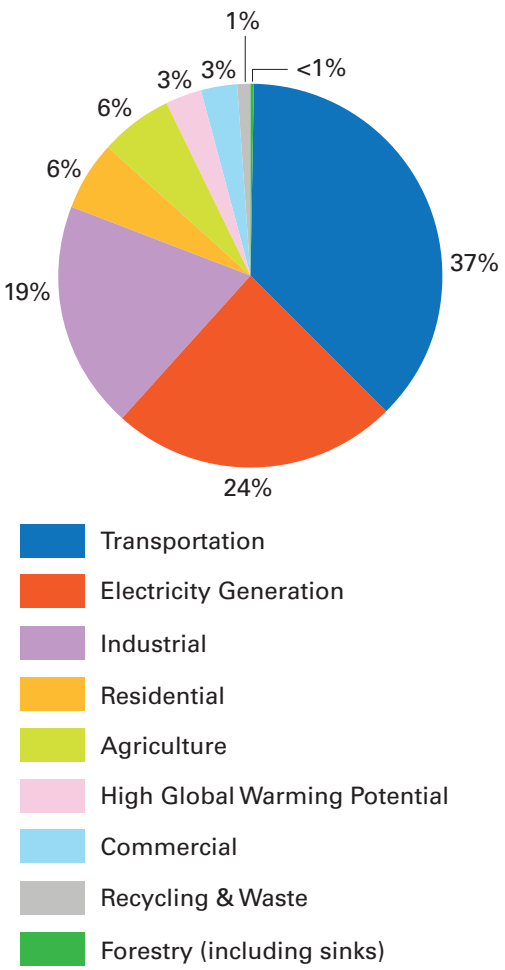
- **Assembly Bill 32** (2006) required CARB to establish an emissions cap and to adopt a Climate Change Scoping Plan indicating how emission reductions to 1990 levels by 2020 would be achieved via regulations, market mechanisms, and other actions.
- A **Climate Change Scoping Plan** (2008) identified the GHG reductions necessary to reduce forecasted business-as-usual (BAU) emissions to 1990 levels by 2020. To achieve reductions, regulations were proposed for the major sources of statewide GHG emissions: transportation and electricity production. Scoping Plan measures have already begun to be enforced as described below:
  - *Pavley I Light-duty Vehicle GHG Emissions Standards* (termed "Pavley I") directed CARB to adopt vehicle standards that lowered GHG emissions from passenger vehicles and light-duty trucks beginning with the 2009 model year.
  - The *Low Carbon Fuel Standard* directed that the carbon intensity of state transportation fuels be reduced by at least 10 percent by 2020, through the development of clean low-carbon transportation fuels.
  - *Regional Transportation-related GHG Targets* identifies policies to reduce transportation emissions through changes in future land use patterns, community design, and public transportation. The San Diego regional GHG reduction targets call for a 7 percent reduction in emissions per capita from automobiles and light duty trucks compared to 2005 levels by 2020, and a 13 percent reduction by 2035, by promoting high-density, mixed-use developments around mass transit hubs.
  - The *Renewables Portfolio Standard* was adopted in 2002 to accelerate the transformation of the electricity sector from fossil-fuel sources to renewable energy sources to a goal of 33 percent by 2020.
  - The *Million Solar Roofs Program* requires publicly owned utilities to adopt, implement, and finance solar-incentive programs to lower the cost of solar systems and help achieve the goal of installing 3,000 megawatts of new solar capacity by 2020.
- **Title 24 – California Building Code** consists of a compilation of several distinct standards and codes related to building construction. Of particular relevance to GHG reductions are the energy efficiency and green building standards which address energy consumption, institute minimum environmental performance standards for all ground-up new construction, and require reductions in indoor water use.

Local

The City has also initiated several policies and programs:

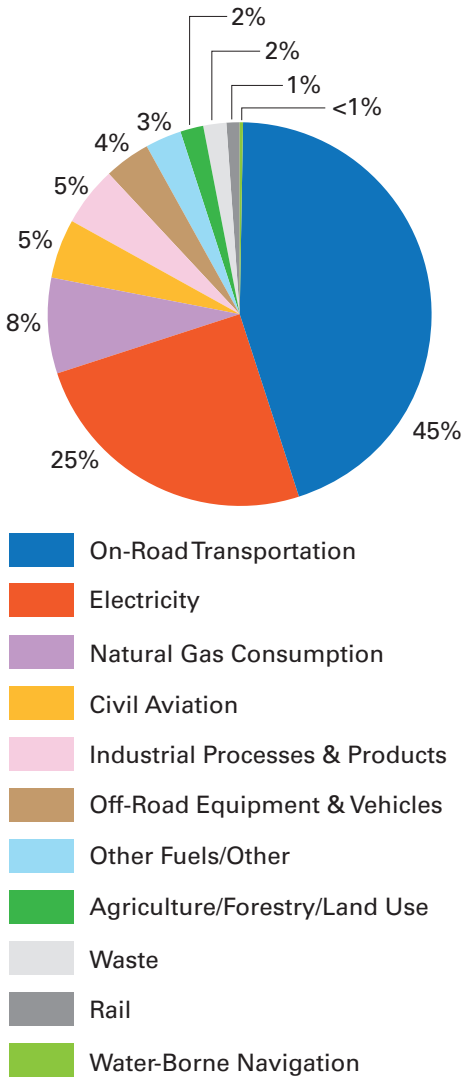
- **Sustainable Building Policies:** In several of its policies, the City aims to reduce GHG emissions by requiring sustainable development practices in City operations and incentivizing sustainable development practices in private development. This includes requiring green building certification

CHART 7-1: CALIFORNIA GHG EMISSIONS, BY SECTOR (2008)



Source: California Air Resources Board, Greenhouse Gas Inventory Data –2008. Obtained from the CARB web-site at http://www.arb.ca.gov/cc/inventory/data/data.htm (last updated May 12, 2010).

CHART 7-2: SAN DIEGO COUNTY GHG EMISSIONS, BY SECTOR (2006)



Source: University of San Diego, 2008. Greenhouse Gas Inventory: An Analysis of Regional Emissions and Strategies to Achieve AB 32 Targets.

for public buildings, providing incentives for solar energy systems, and enacting codes to reduce water and solid waste.

- **General Plan:** The City of San Diego 2008 General Plan includes several climate change-related policies aimed at reducing GHG emissions from future development and City operations and to adapt to climate change. These are achieved through sustainable land use patterns, alternative modes of transportation, energy efficiency, water conservation, waste reduction, and greater landfill efficiency.
- **Climate Mitigation and Adaption Plan:** The City's first Climate Protection Action Plan was approved in 2005 and included measures focused on City operations. While many of its reduction goals were achieved, community-wide GHG emissions continued to increase. A Draft Climate Mitigation and Adaptation Plan (CMAP) has been developed to address issues of growth and climate change and was circulated for public review in late August 2012.

Inventories

Chart 7-1 presents CARB's 2008 GHG inventory for California, which is divided into nine broad sectors of economic activity. Emissions are quantified in million metric tons of CO_2 equivalent ($MMTCO_2E$). Statewide GHG emissions totaled 478 $MMTCO_2E$ in 2008, with the greatest emissions coming from the transportation, electricity generation, and industrial sectors.

A San Diego County regional emissions inventory was prepared by the University of San Diego that took into account the unique characteristics of the region. Their 2006 emissions inventory for San Diego County identified 35 $MMTCO_2E$ which are illustrated by sector in Chart 7-2. The sectors included in this inventory are somewhat different from those in the statewide inventory, but still provide a useful comparison. As in the statewide findings, transportation and electricity (energy use and production) are the primary sources of GHG emissions, accounting for 70 percent of the County's overall emissions.

In the Planning Area, GHGs are being emitted by demolition and construction activity, as well as by ongoing operational-related sources such as vehicle use; on-site fuel combustion for space and water heating of buildings; landscape maintenance equipment; fireplaces; off-site emissions at utility providers associated with electricity demands; and solid waste generation and disposal.

7.5 Noise

Noises are undesirable sounds that vary widely in their scope, source, and volume. In the Planning Area, they range from individual occurrences, such as leaf blower or holiday firecrackers, to regular through intermittent disturbance by aircraft flying overhead and the trolley passing, to the fairly constant noise generated by traffic on freeways and roads. Noise is primarily a concern to sensitive land uses, such as residences and schools. This section describes noise regulations and existing conditions in the Planning Area. A complete report is provided in Appendix D.

Regulations

Federal noise standards include transportation-related noise sources related to interstate commerce (i.e., aircraft, trains, and trucks) for which there are not more stringent state standards. State noise standards are set for automobiles, light trucks, and motorcycles.

Local noise standards are set for industrial, commercial, and construction activities subject to local noise ordinances and general plan policies. For example, the City's Noise Element specifies compatibility standards (maximum noise levels) for different categories of land use. The City's Municipal Code regulates impacts to sensitive receptors generated by activities at a given location. The Noise Ordinance specifies maximum one-hour average sound level limits at the boundary of a property.

Sources and Measurements

Noise sources are typically categorized as mobile or stationary. The majority of mobile sources are transportation related from vehicles operating on roadways, aircraft and airport operations, and railroad activities. Stationary noise sources typically include machinery; fabrication; construction; heating, ventilation, and air conditioning systems; compressors and generators; and landscape maintenance equipment. Another category of stationary sources include various activities such as concerts, outdoor dining, amplified music, public address systems.

The dominant noise source in the Planning Area is traffic on roadways. Secondary noise sources include light rail transit vehicles, stationary noise sources, and aircraft overflights. The primary issue with stationary noise sources from light industrial and commercial activities is when these land uses and operations are adjacent to residential land uses (collocation). The collocation of these land uses is a long-standing concern in the community. Noise impacts generated by construction activities, as well as commercial businesses can periodically generate high levels of noise in the community.

Traffic

The roads generating the greatest noise level in the area are I-805, SR-94, Imperial Avenue, Market Avenue, 47th Street, and Euclid Avenue. The noise contours shown in Figure 7-3 represent the predicted noise level based on roadway volumes, the percent of trucks, speed and other factors. They do not reflect the attenuating effects of noise barriers, structures, topography, or dense vegetation and should not be considered site-specific.

As shown in the figure, existing noise levels often exceed 65 CNEL, which is a generally acceptable level of noise when outdoors. (CNEL, the community noise equivalent level, adjusts for the annoyance of noise in the evening and nighttime hours.)

Freeways, including I-805 (top), and major roadways such as Euclid Avenue (bottom) are the greatest contributors to noise in the Planning Area.

TABLE 7-1: NOISE MEASUREMENTS (NOVEMBER 2012)

ID[1]	LOCATION	TIME	PRIMARY NOISE SOURCE	VEHICLE SPEED (MILES/HOUR)	L_{EQ}[1]	L_{MAX}
EN-1	Division St., east of Ava St.	2:00 PM	Vehicle traffic	30 and 40	61.0	76.0
EN-2	Euclid Ave. and Hilltop Dr.	12:30 PM	Vehicle traffic	25 and 45	65.2	80.2
EN-3	Euclid and Logan Avenues	2:37 PM	Vehicle traffic	30 and 40	62.7	75.2
EN-4	Imperial Avenue, bet. 60th and 61st Streets	1:31 PM	Vehicle traffic	25 and 55	62.6	75.5
EN-5	54th and Market Streets	1:03 PM	Vehicle traffic, trolley and trolley bells	35 and 45	66.3	85.9

1 The equivalent noise level (Leq) also referred to as the time-average sound level, is the equivalent steady state sound level over a stated period of time

Source: RECON Environmental Inc. "Existing Air Quality, Greenhouse Gas Emissions, and Noise Conditions Report for the Southeast San Diego Community Plan Update." 2012.

The Orange Line trolley creates intermittent noises as it bisects the Planning Area.

Rail

Railway noise from the Orange Line trolley consists of noise from the trains and emergency signaling devices. Trolley vehicles are equipped with horns for use in emergency situations and as a general audible warning to track workers and trespassers within the right-of-way as well as to pedestrians and motor vehicles at road grade crossings. Horns on the moving trolley vehicle, combined with stationary bells at grade crossings can generate excessive noise levels that can affect noise sensitive land uses.

The modeled trolley noise levels indicate that existing noise levels range up to approximately 61 CNEL at 50 feet associated with the trolley (without the use of a trolley horn) and 63 CNEL at 50 feet with the use of trolley horns, as shown in Figure 7-4.

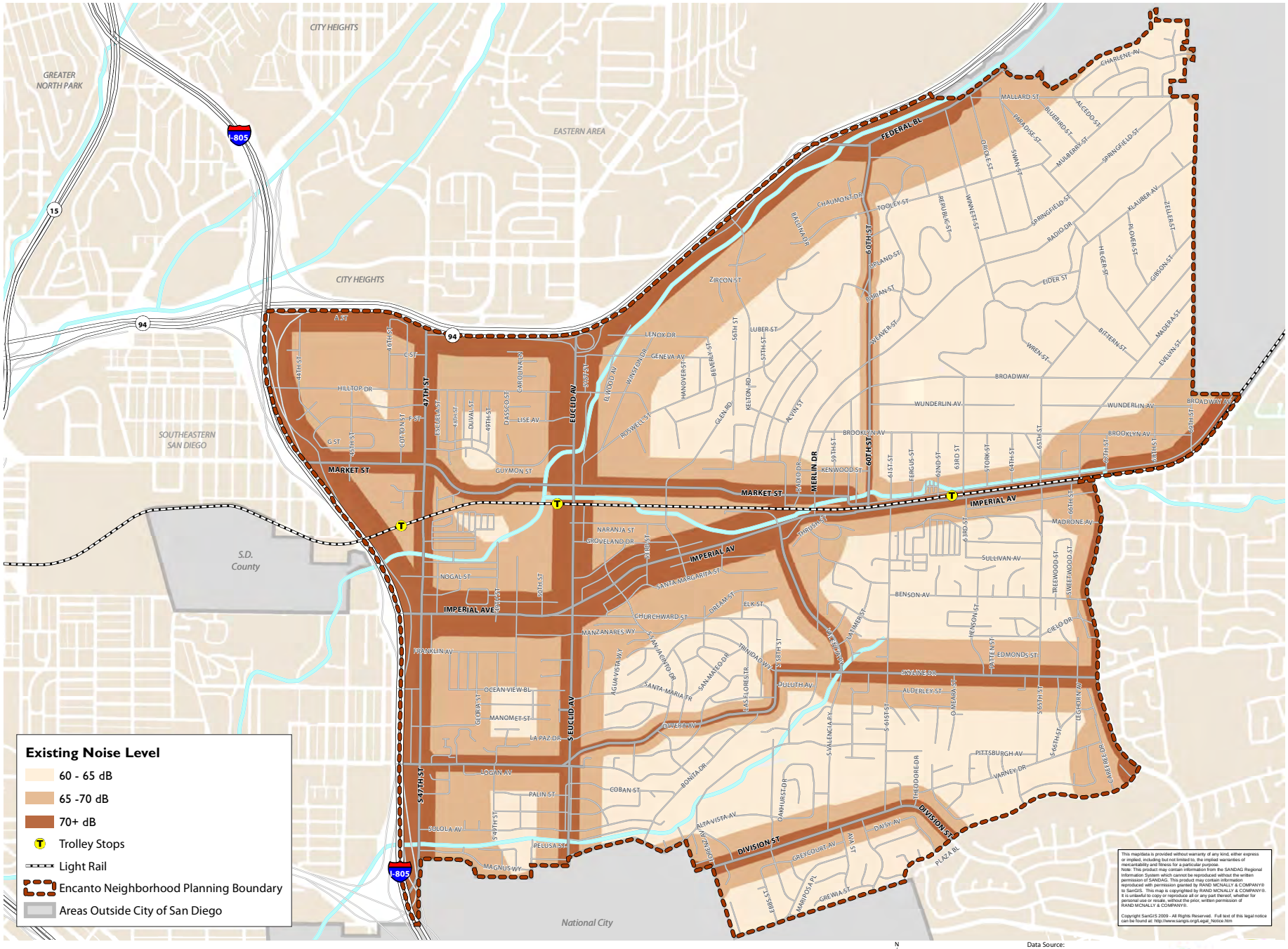
Airport

The Planning Area is located entirely outside of the present and future 65 CNEL noise contour for San Diego International Airport, and therefore, airport operations would not significantly affect the ambient noise environment of the community.

Ambient Noise Levels

Ambient noise levels were measured in the Planning Area to characterize the variability of noise and to assist in determining constraints and opportunities to avoid noise conflicts. Five, 15 minute, daytime noise level measurements were conducted throughout the Planning Area, as shown in Table 7-1.

FIGURE 7-4: Existing Noise Contours



7.6 Hazardous Materials

A hazardous materials technical study, prepared for this community plan update, documents sites which may have been impacted by hazardous materials or wastes; identifies the potential impacts of hazardous materials and wastes; and discusses measures that can be implemented to reduce or mitigate the potential impacts. This analysis demonstrates how the presence of hazardous materials or wastes may affect opportunity sites and future land use changes in the Planning Area. The complete study is provided in Appendix E; a summary is presented on the following pages.

Documented Release Cases

The analysis reviews federal, state, and local databases, online regulatory databases (e.g, Geotracker and Envirostor websites), and other historical resources (e.g., aerial photographs, topographic maps, etc.). These sources identified 31 documented release cases within the Encanto Neighborhoods, as shown in Figure 7-5. Of these sites, eight are considered "open" release cases. Properties with open cases represent a moderate to high risk of encountering impact during potential future redevelopment.

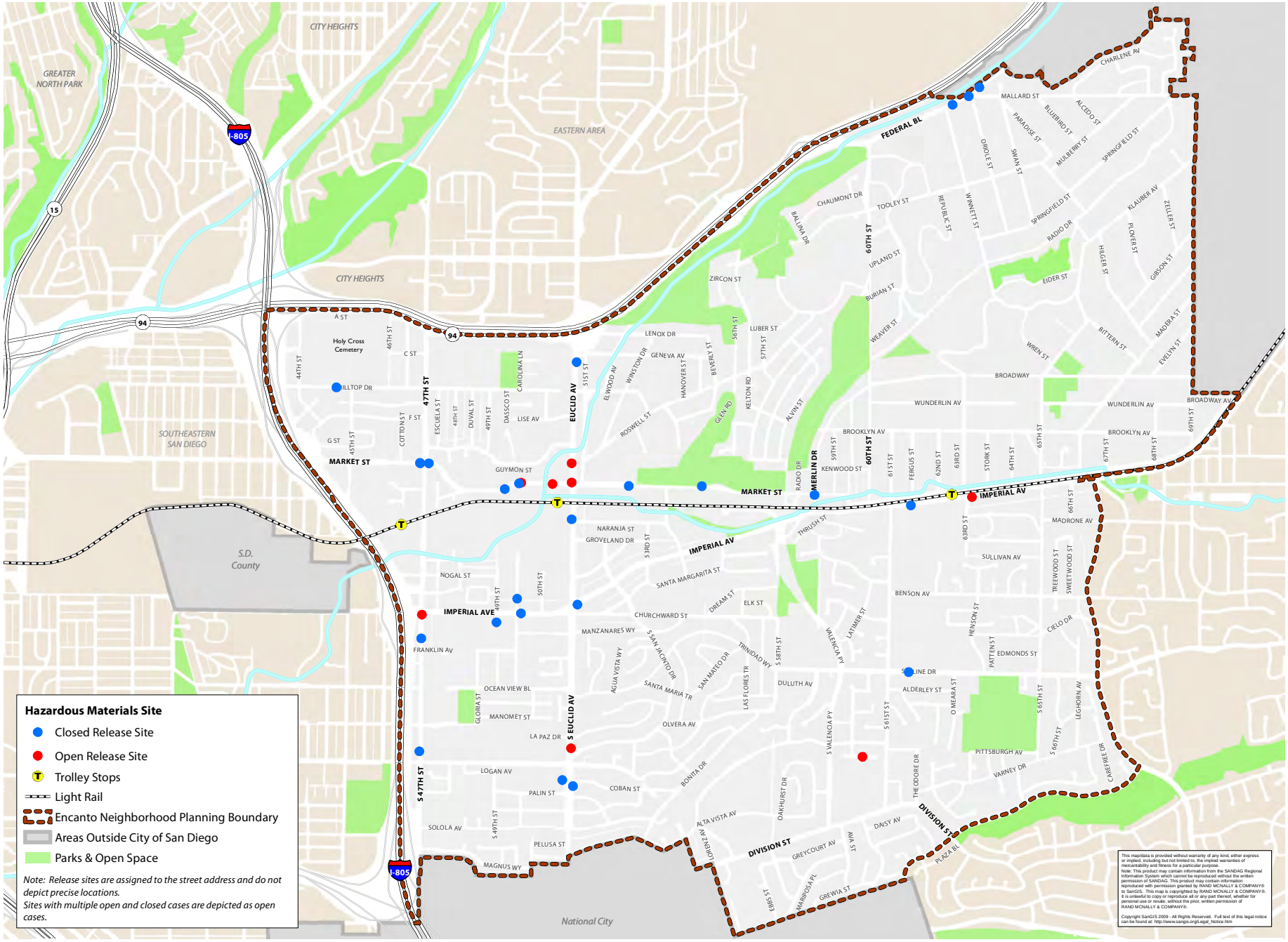
The 23 remaining "closed" release cases represent a moderate to low risk of encountering impact during potential future redevelopment. Many of these closed sites have already completed remediation work. Note, however, that cases which were closed in the 1990s may not meet current standards and may require additional investigation and/or remediation prior to future development. Also, most of these cases were closed under the presumption of continued industrial or commercial usage. Closure conditions may not be appropriate if the future land uses changes (i.e., from industrial to residential use).

Commonly Encountered Conditions

The following sections describe additional environmental conditions that are commonly encountered and may be present in the project area. Further analysis would be needed to assess their presence.

- **Aerially-deposited lead (ADL).** ADL is typically associated with exposed soil near freeway rights-of-way as a result of emissions from vehicular exhaust prior to the elimination of lead from fuels in the mid-1980s.
- **Railroad Components.** Equipment and materials often historically used in association with railroads, such as lead and acid-containing batteries, creosote-treated railroad ties, ballast materials containing steel slag with potential regulated heavy metal concentrations, railroad lubricators utilizing petroleum products, arsenic-based pesticides, and herbicides historically sprayed to prevent the growth of vegetation.
- **Treated Wood.** Wooden railroad ties and other wooden infrastructure (e.g., guardrails, telephone poles, fencing) may be treated with chemical preservatives to prevent rotting due to mold, mildew, and insects, which may leach from the wood into surrounding soil.
- **Asbestos-Containing Materials.** Asbestos-containing building materials may be associated with structures (i.e., residential, commercial, industrial buildings) or infrastructure (i.e., pipeline insulation, cementitious water lines, bridges).
- **Polychlorinated Biphenyl (PCB) Containing Transformers.** Some older (pre-1980) mineral transformers could have been inadvertently

FIGURE 7-5: Potential Hazardous Materials



contaminated with PCBs by the manufacturer. Based on San Diego Gas and Electric's (SDG&E) statistical sampling and testing program, SDG&E states that it is unlikely that its transformers are PCB contaminated.

- **Lead-Based Paint.** The Consumer Product Safety Commission has banned the use of paint containing lead above certain thresholds for residential uses. However, lead-based paint may be used in industrial settings or may be present on older structures (i.e., pre-1980).
- **Miscellaneous Hazardous Materials.** Materials falling under the Universal Waste Rule (UWR) requirements may be present in buildings including, but not limited to: potentially mercury-containing fluorescent light tubes and/or vapor lights, and potentially PCB containing light ballasts.

Land use changes that are likely to be proposed as part of the Community Plan update—such as residential, retail, office, and open space—are not likely to result in increased generation of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or wastes. However, soil and/or groundwater that have been impacted by releases of hazardous materials may be disturbed during future development activities, potentially increasing the exposure of sensitive receptors in residential populations to constituents of concern. Community Plan policies will need to include mitigation measures to maintain community health and safety.

7.7 Water Quality

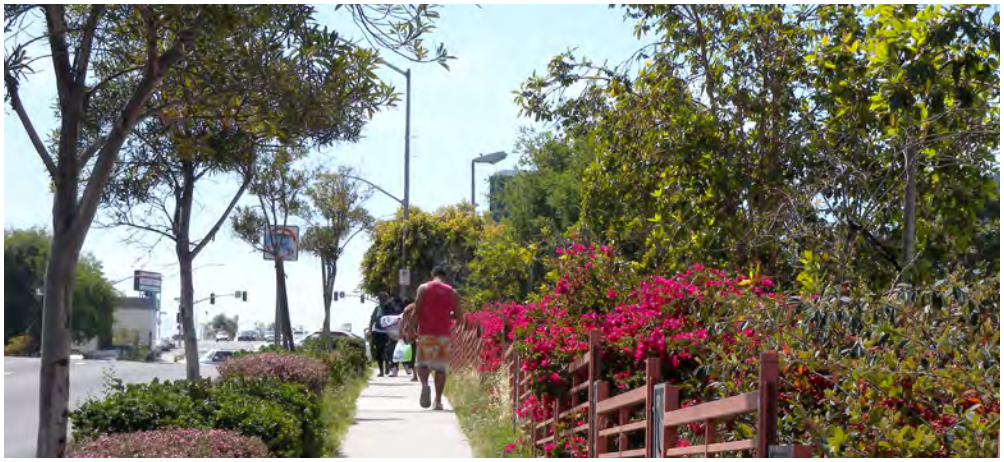
Chollas Creek – Total Maximum Daily Loads

Chollas Creek is an impaired water body on the Clean Water Act Section 303(d) List of Water Quality Limited Segments. It is subject to three Total Maximum Daily Loads (TMDLs) thresholds, which represent the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards. Implementation Plans to improve water quality are underway:

- **Chollas Creek Diazinon TMDL:** adopted by the Regional Water Quality Control Board in August 14, 2002. Diazinon is an organophosphate insecticide common in indoor, residential, landscape and agricultural applications. Urban storm water flows are the primary source of diazinon to Chollas Creek. Pesticides now being monitored.
- **Chollas Creek Copper, Lead, and Zinc TMDLs:** adopted by the Regional Water Quality Control Board in June 13, 2007; metals now being monitored.
- **Indicator Bacteria TMDL:** Revised Project I - Twenty Beaches and Creeks in San Diego Region (including Tecolote Creek) adopted February 10, 2010 (Bacteria)

The above TMDL documents are available for review on the Regional Water Quality Control Board's website:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/tmdls/index.shtml



8 PLANNING ISSUES AND IMPLICATIONS

This chapter reviews key issues raised in the preceding chapters that will need to be addressed through the planning process.

8.1 Land Use Diversity and Compatability

Recognizing the Diversity of Neighborhoods in Planning for the Future

The Encanto neighborhoods exhibit a range of typologies of urban form and therefore have different needs in the Community Plan. West of Euclid Avenue, neighborhoods are older and characterized by gridded streets and a mixture of land uses. Improving connections between residents, schools, parks, and other public facilities, and expanding the range of retail options, will be priorities. To the east, neighborhoods have a more informal quality, with larger lots interspersed within hillsides and canyons. Sidewalks are missing, streets unpaved, and many roads stop abruptly at dead ends, but opinions diverge about whether improvements should be made. While residential neighborhoods are unlikely to change substantially over the next 20 years, uses and connections between neighborhoods may be improved.

Lack of Retail Services

As described in Chapter 2, Encanto has limited retail and grocery stores options within the Planning Area, such that community members must travel outside the neighborhood, and often the city, for their everyday shopping. While the Plan cannot build a grocery store, it can provide incentives and the right land use designations to enable these types of uses to be built in the community.

Responding to Encanto's Demographic Diversity and Challenges

Compared with many other communities in San Diego, Encanto has more families, students, and children who rely on public facilities, such as schools, parks, and transit. In addition, families and households in Encanto also have a greater need for affordable housing with multiple bedrooms, convenient access to daily shopping, and access to social services, libraries, recreation facilities, classes, and job opportunities that provide adequate incomes.

While the Community Plan itself cannot address all of these needs, it can address elements that relate to physical planning and quality of life. These include:

- Ensuring that policy results in a diversity of housing types, especially larger sized (three bedrooms) affordable units; housing with high-quality private open space; and residential units that are adaptable to multi-generational living. Enabling in-law units for existing single-family homes to accommodate growing families and providing an opportunity for rental income may be desirable. New housing may also include higher density rowhouses (single-family attached housing), with private open space, direct access from the street, and "layering" of transitions from public to the private domain (i.e., with a front yard or patio).
- Accommodating employment opportunities through the land use framework that would allow for the types of jobs that may be appropriate for current and future residents. (This topic is explored further in the Market Demand Report.)

- Encouraging small and mid-sized businesses, which are more likely to be locally owned, in additional to larger businesses, by providing supportive land use classifications.
- Providing an opportunity for community members to learn about the City's planning process and take part in planning the future of their neighborhood, giving a voice to residents who may feel disenfranchised.

Integrating Recent Planning Efforts to Date

The City has recently undertaken master plans in the Euclid/Market area and in the Euclid Avenue gateway area north of Hilltop Drive. Southeastern Economic Development Corporation (SEDC) crafted with the partnership of the community the following: Imperial Corridor Master Plan (2005) and the Multifamily Design Guidelines (2009), significant portions of which were incorporated into the Community Plan with the Fifth Amendment to the Redevelopment Plan for Central Imperial in 2009. The Community Plan update needs to both build on the work and visioning that has gone into previous studies, while also allowing for new contributions and updates based on the most recent information. The Community Plan will integrate these maser plans, in a way that relates to surrounding neighborhoods to create a cohesive plan for the community.

General Plan Implementation

The General Plan provides the goals and policy framework for preparing community plans. The General Plan requires that those policies be evaluated and applied through grassroots community input. This local application of General Plan policy is to assure that specific and appropriate programs and regulations unique to the character and history of the various individual neighborhoods are respected and incorporated in their plans for the future. In particular, the following General Plan land use policies should be addressed through the community plan process:

- LU-A.4: Locate village sites where they can be served by existing and planned transit services.
- LU-A.7: Consider the role of the village in the City and region; surrounding neighborhood uses that are lacking in the community preferences and goals.
- LU-A.7: Achieve transit supportive density and design.
- LU-A.10: Design infill projects along transit corridors to enhance or maintain a "main street" character.
- LU-A.11: Design and evaluate mixed use village projects based on goals and objectives in the Urban Design Element.
- LU-I.4: Prioritize and allocate citywide resources to provide public facilities and services to communities in need.
- LU-I-9: Design Transportation projects so that the resulting benefits and potential burdens are equitable.
- LU-I.10: Improve mobility options for non-driving and low income members of the population.
- LU-I.11: Implement the City of Villages concept for mixed use transit oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near work, offering convenient mix of local goods and services and providing access to high quality transit.

8.2 Community Design and Open Space

Strengthening Corridors and Facilitating Transit Oriented Development and Improving other Neighborhood Centers

The areas that exhibit the most potential for positive growth in the community are the areas designated on the General Plan for Village propensity: the Transit Oriented Opportunity areas. The community has three intermodal transit centers at three locations that are designated for higher density development by the City General Plan and SANDAG's 2050 Regional Transportation Plan. While these TOD areas have many of the urban form characteristics and since the 1980s have supported multi-modal transportation, the environment around them remains auto-dominated. Even new development near transit centers is "transit adjacent" versus "transit oriented" due to the placement of buildings behind large parking fields, rather than adjacent to the stations and streets. Pedestrians and alternative vehicles make do out of necessity without a coherent pattern of mixed uses and without proper infrastructure. Inconsistent land uses and vacant and under-utilized lots result in gaps in development that diminish the public realm. Many acres of vacant properties, parking lots, and gaps in development also provide the opportunities for TOD and improved public amenities that the SANDAG Regional Smart Growth Opportunities Map and the City General Plan envision.

The Community Plan should help to create a stronger urban form, including transit oriented development and walkable neighborhood centers with retail, restaurants, and cafés, and places for gathering. Neighborhood structure should include a center, but may also have elements such as a spine, a gradation of density, or clearly distinct use areas and nodes of commercial activity. Improvements to the streetscape can help to strengthen the identities of the respective corridors through consistent and properly located street trees, improved lighting, and public art.

Establishing a Vision for Areas of Change

Certain areas in Encanto have the potential to change significantly and can do so in a way that adds to quality of life in multiple ways. Policies and diagrams in the community plan update can shape the future form of development along the commercial corridors and other "change areas." Chapter 2 identifies locations for potential intensification of existing uses, rehabilitation, preservation, and/or new development, including:

- The Encanto community includes three intermodal transit stations that rely on fixed rail and a system of MTS buses, all designated for consideration for higher density development by the City General Plan Village Propensity Land Use Element Exhibit and by SANDAG on the Smart Growth Opportunity Map.
  - **47th Street Intermodal Transit Station:** This station and the adjacent MTS owned public property is designated in the SANDAG Regional RTP as a regional transit Hub with the goal of linking the Orange Line, and several MTS bus routes to Bus Rapid Transit linking SESD to every major employment center in the region by transit. The Imperial Avenue crossing over I-805 has the potential to become a fusing link between Southeastern and Encanto, aided by many planned and

proposed improvements: the planned regional Orange Line/BRT and MTS transfer station. As part of that opportunity there is study of replacement of the Imperial Avenue overpass with one that could better connect the community across the I-805 divide, a potential connection of the Chollas Creek trail across Interstate 805. These improvements could tie in with the Jackie Robinson YMCA, just outside the Planning Area, and Lincoln High School.

- **Euclid & Market – The Village at Market Creek Area:** This area is served by the most heavily used intermodal station in the MTS network, second only to the international border crossing. Part of the station is the public park and ride, a surface parking lot located at the corner of Market and Euclid, used today for bus staging and turn around, with a coach that sells sandwiches and food parking daily to offer amenities to commuters. This primary commercial core provides an important transit center, gathering and shopping place for Encanto, but is defined by several vacant, irregular and self-contained development sites that are not well-linked in terms of access, building form, or public realm definition. Most buildings do not face directly to the street with positive street frontage or active facades. The Euclid and Market Land Use and Mobility Plan seeks to address many of these concerns in this important hub to better connect people and places and to create new uses. The Village TOD opportunity has been designated by the State of California as one of five top TOD sites in the State, a Gold Level "Catalyst Community" designation which gives it priority ranking when seeking State funding.
- **62nd Street Intermodal Station at Imperial Avenue:** The ½-mile radius surrounding this station provides an essential node and transit link to Downtown. The Imperial Corridor also serves as one of the few through-streets in the Planning Area. But, commercial offerings are limited. Although the area is constrained somewhat by topography and shallow sites, it could provide much-needed retail in the community, as well as housing and mixed use opportunities.

- **Valencia Business Park to Naranja Street:** This area covers the Valencia Business Park and vacant and underutilized land along Imperial Avenue. Commercial or mixed-use development is expected for the business park.
- **Imperial Crest:** The Imperial Avenue crossing over I-805 has the potential to become a fusing link between Southeastern and Encanto (see discussion of the 47th Street Intermodal Transit Station). There are also opportunities at the highlands crest around St. Rita's and the intersection of Euclid and Imperial avenues. These improvements could tie in with the Jackie Robinson YMCA, just outside the Planning Area, and Lincoln High School.

Creative Ways to Provide Open Space and Outdoor Recreation

As described in Chapter 6, the Planning Area has good park and open space access. A focus of the Community Plan update will be on linking these spaces, such as through implementation of the Chollas Creek Enhancement Program to develop trail corridors and improving signage, safety, and trails in the canyons. New gathering space may be also be explored in more non-traditional ways, such as encouraging publicly accessible, but privately maintained, open space as part of new development. In addition, there may be opportunities to redesign streets to take advantage of San Diego's mild weather by providing spaces for gathering through corner and mid-block bumpouts, facilitating sidewalk seating for restaurants, and encouraging periodic street closures for celebrations, strolling, and other events.

8.3 Community Health

Reducing Potential Environmental Impacts and Improving Community Health

The Community Plan update process should also consider ways to improve environmental conditions and community health. The General Plan provides a framework for addressing climate change, noise, hazardous materials and other impacts, while the Community Plan will make site-specific land use and design recommendations, such as:

- Designating high density areas at TOD opportunity sites identified in the General Plan where appropriate and integrated with a multi-modal mobility strategy that reduces the reliance on driving.
- Avoiding siting of new sensitive receptors—schools, homes, and other community facilities—adjacent to freeways, truck distribution centers, dry cleaners, and gas stations.
- Implementing tree planting incentives, ordinances and programs to save energy, sequester carbon, reduce the urban heat island effect, reduce storm water runoff, and foster urban agriculture to increase food system security.
- Requiring development to incorporate site features that promote stormwater infiltration, to protect water quality and reduce flood risk, and increasing conservation and efficiency in water use to reduce reliance on imported water.
- Creating a land use framework that preserves creek corridors as open space and limits potential flooding hazards.

Urban Gardening to Support Community, Health, and Environmental Conditions

A federal urban gardening initiative, part of the American Recovery and Reinvestment Act of 2009, has helped to fund organizations like People's Produce and Project New Village in the Mount Hope neighborhood. These organizations are collaborating with the County Health Services Department and local universities and colleges to develop site suitability analysis and, with the cooperation of property owners, converting vacant and underutilized land into community gardens. In addition, they have started a job training program for urban gardening at the Educational Cultural Complex.

On lots where contamination might be an issue, these organizations have developed practices for above-

ground gardening. Near freeways they are developing technology for sheltered closed-system gardening to prevent air quality and runoff hazards. Urban gardening can have a multitude of benefits. It is a strategy for creating local healthy food systems and fighting chronic obesity related illness. It is also a carbon reduction and stormwater runoff strategy. Lastly, it is a way to productively use underutilized sites and promote interactions between neighbors.

8.4 Mobility

Connectivity that Accommodates Pedestrians

The area is well-connected to the region, with convenient access to I-805 and SR-94 and major arterials, such as Market Street, Euclid Avenue, Imperial Avenue and 47th Street and existing fixed rail trolley and MTS bus service throughout Encanto and centered toward the primary east/west commercial corridor. Barriers to access and connectivity exist at the smaller scale along local streets that often dead end cul de sacs, especially between developments, across the trolley tracks, and across sloping sites and Chollas Creek. For example, along the Imperial Avenue corridor in particular, crossing Akins Avenue, the trolley tracks, and Imperial Avenue is difficult for pedestrians. Figure 8-1 identifies corridors with the greatest needs, based on pedestrian volumes and the City's Pedestrian Master Plan, and opportunities for improvements, evaluated through missing facility and pedestrian-related collisions.

The Community Plan should establish ways to strengthen connections from residential areas to commercial corridors, multi modal transit centers, major public facilities, and employment centers, through marked trails, pedestrian-oriented streetscapes, improved lighting, and redesign of mixed use centers at the TOD opportunity sites and retrofit of commercial centers that are inward facing into pedestrian oriented walkable destinations.

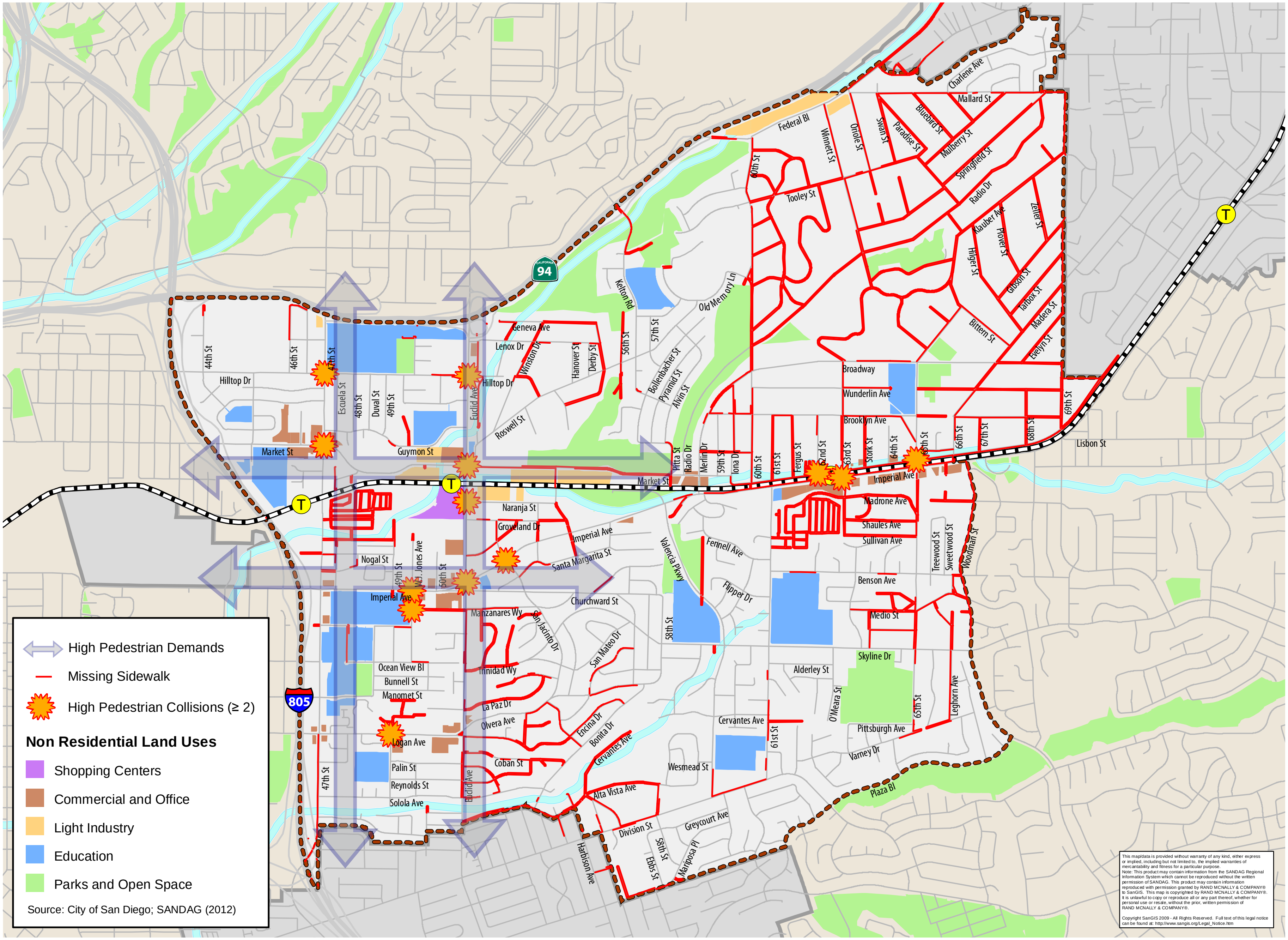
Pedestrian Safety and Priority Zones

Approximately 65 percent of pedestrian accidents occur within 500 feet of a transit (trolley or bus) stop. This does not automatically mean that these areas are less safe for pedestrians than others; a contributing factor may simply be that pedestrian density is greater near transit stops than elsewhere (for example, near Euclid Avenue and Market Street as shown in Figure 8-2). However, it does raise the need for greater pedestrian safety around many of the transit stops. Factors that can enhance pedestrian safety include less roadway width to cross (by providing bulbouts and reducing distances across streets, such as by eliminating continuous left-turn lanes near transit stops), providing clearer signage, and timing cross-lights so pedestrians do not have to wait long. Delineation of pedestrian safety zones around transit stops—as well as near schools and libraries—can help establish mode priority at key pedestrian gathering spots.

Capitalizing on Transit Access and Multi-Modal Potential.

High quality transit service is critical to achieving the City of Village strategy and creating lively, walkable communities. As described in Chapter 3, roundtrip auto travel time is estimated to be less than half that of transit time and the cost of auto travel is more than double the cost of using transit, making transit a more

FIGURE 8-1: Pedestrian Needs

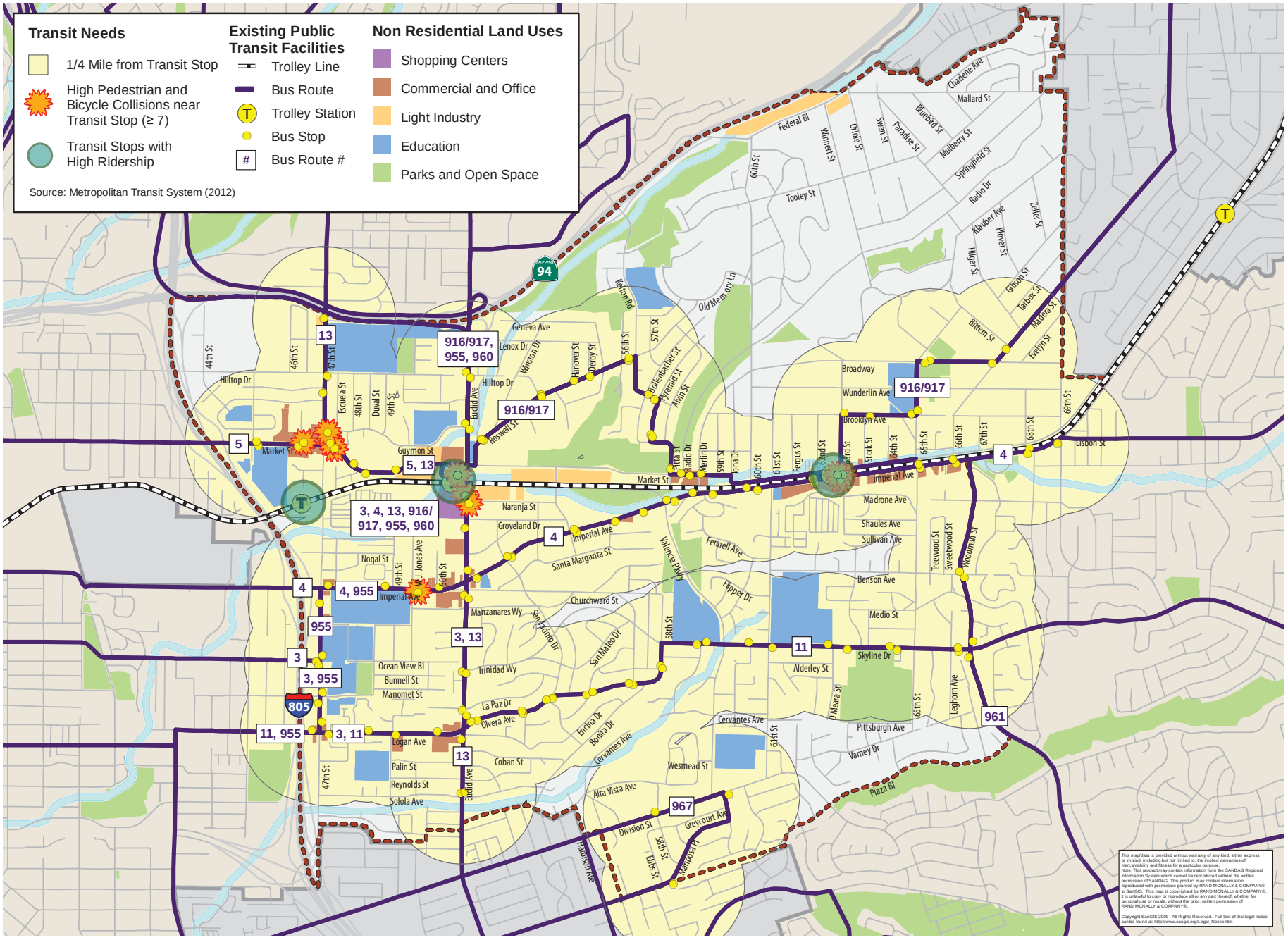


CHEN RYAN

Data Source:
City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012;
Dyett & Bhatia, 2012

SanGIS

FIGURE 8-2: Transit Needs



affordable option for Encanto residents. Recent census data indicates that over seven percent of Encanto San Diego residents are currently using transit for the work trip—nearly double the citywide rate.

Nearly all of the community is located within 1/4-mile of transit service with the exception of the single-family residential area in the northeast corner of Encanto, indicating that a majority of the residents have reasonable walking and cycling access to transit. Still, there are gaps in service, including where bus and trolley transit are not well integrated. Figure 8-2 identifies corridors with the greatest transit demand, locations with relatively high transit boardings and alightings, and areas with high deficiencies, where there are gaps in the transit network, underserved corridors, and transit stop locations with relatively high pedestrian and bicycle-related collisions. Key issues are described below.

While several bus routes provide access to the trolley stops at Euclid Avenue and 62nd Street, there is not bus service to the 47th Street station. Better integrating the bus and trolley could improve access and ridership of the trolley by reducing overall travel time.

Field observation indicates very few transit stops have shelters and only about half of the bus stops have benches and trash cans in Encanto. Given the high transit usage, better transit stop amenities and ADA facilities would help improve the quality of experience for transit riders in this community. Secure bicycle parking should be provided at transit stations in case buses or trains do not have the capacity to allow cyclists to bring their bikes on board. Bicycle parking should be located in high traffic areas to provide natural surveillance by pedestrians and drivers.

More can be done to improve the trolley's presence and facilitate greater access to trolley stations. Several opportunities exist to make station areas and the surrounding uses more pedestrian, bicycle and transit-friendly. This issue is already being explored in the Euclid and Market Land Use and Mobility Plan, which will be included in the Community Plan. At all three multi-modal transit stations, there is potential to build on the foot traffic of transit ridership to expand business opportunities, but also to use the trolley corridor to boost other transportation modes (such as bicycle and pedestrian movement) within the same right-of-way.

Street and Freeway Safety and Mobility

The street network in Encanto is somewhat disconnected due to the three canyons/watersheds that traverse the community—the Chollas Creek, Radio Canyon and Encanto Creek. East-west connectivity is limited mainly to Imperial Avenue, while north-south connectivity is provided mainly by 47th Street and Euclid Avenue. The existing condition evaluations found six roadway segments, two intersections, and five freeway segments to have below acceptable LOS (E or F) results, as shown in Figure 8-3. Still, numerous regional points of access are provided for the community by two major freeway facilities: I-805 and SR-94.

Additionally, as described in Chapter 3, a majority of roadways in Encanto are more prone to collisions than the average street in the City of San Diego. The following ten locations have more than ten vehicle-vehicle collisions over the five-year span from 2007 to 2012:

- At or near the 47th Street and Hilltop Drive intersection;

- At or near the 47th Street and Market Street intersection;
- At or near the Euclid Avenue and Market Street intersection;
- At or near the Merlin Drive and Market Street intersection;
- At or near the Euclid Avenue and Naranja Street intersection;
- At or near the I-805 NB Ramps and Imperial Avenue intersection;
- At or near the 47th Street and Imperial Avenue intersection;
- At or near the Euclid Avenue and Imperial Avenue intersection;
- At or near the San Jacinto Drive and Imperial Avenue intersection; and
- At or near the 61st Street and Skyline Drive intersection.

Chapter 3 begins to explore some possibilities for what may be leading to these high accident rates, but roadway safety should be further considered during the Community Plan update process.

Multi-modal LOS and Street "Matching"

Given limited rights of way along most streets in existing developed areas and continued need to accommodate increased traffic, provide bike lanes, and install street trees with planter strip separating pedestrians from moving vehicles it will not be possible to accommodate all travel modes on all streets equally well using the existing Complete Street Manual of the City. The traditional street classification system–such as arterial, collector, and local– is based on access standards and supports suburban style development well. However, such a classification system often ignores adjacent land uses or street functionality and it was not designed for retrofitting suburban land patterns to transit oriented development. In the absence of LOS for non-automobile transportation modes, this has also led to prioritization of the automobile over other transportation modes. A richer classification system that integrates access, land use, and street functionality considerations can provide a better overall fit with multimodal needs and enable prioritization of modes.

For example, designation of a street as a Bicycle Street would mean that bicycle LOS and operations would be prioritized over automobile needs (such as on-street parking or left turns), where it may not be possible to accommodate both equally well. The bicycle network in Encanto is extremely sparse, with many bicycle network gaps noted in both the east-west and north-south directions. As noted in Chapter 3, only 7 percent of roadways in Encanto have bicycle facilities versus nearly 13 percent of City of San Diego roadways.

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