Southeastern San Diego

Community Plan Update

EXISTING CONDITIONS REPORT

MARCH 2013

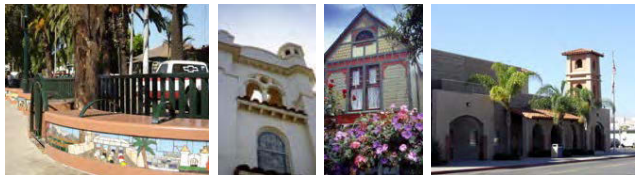
Prepared for

City of San Diego

Prepared by

DYETT & BHATIA
Urban and Regional Planners

Southeastern San Diego



Community Plan Update

EXISTING CONDITIONS REPORT

MARCH 2013

Prepared for

City of San Diego

Prepared by

DYETT & BHATIA
Urban and Regional Planners

Assisted by

Chen/Ryan Associates
Keyser Marston Associates, Inc.
MW Steele Group Inc.
RECON Environmental, Inc.
Spurlock Poirier Landscape Architects
Ninyo & Moore
Page & Turnbull
Dexter Wilson Engineering, Inc.

TABLE OF CONTENTS

1 INTRODUCTION 1-1

1.1 Community Plan Purpose and Process 1-2
1.2 Regional Location and Planning Boundaries 1-3
1.3 Southeastern San Diego Demographic Overview 1-6
1.4 Existing Plans and Efforts Underway 1-7
1.5 Report Organization 1-16

2 LAND USE 2-1

2.1 Existing Land Use 2-2
2.2 Density and Intensity 2-7
2.3 Development Projects 2-10
2.4 Potential Opportunity Sites 2-11

3 MOBILITY 3-1

3.1 Context 3-2
3.2 Pedestrian Network 3-4
3.3 Public Transit Network 3-11
3.4 Bicycle Network 3-18
3.5 Streets and Freeways 3-25
3.6 Parking 3-33
3.7 Airport and Goods Movement 3-35

4 URBAN DESIGN 4-1

4.1 Edges and Neighborhoods 4-2
4.2 Streets 4-4
4.3 Blocks and Lots 4-10

4.4 Buildings 4-13
4.5 Land Form and Natural Features 4-18
4.6 Community Character and Identity 4-18
4.7 Urban Forestry 4-19

5 HISTORIC CONTEXT 5-1
5.1 Historic Setting 5-2
5.2 Historic Sites and Districts 5-11

6 PUBLIC FACILITIES, SERVICES, AND SAFETY 6-1
6.1 Educational Facilities 6-2
6.2 Public Safety 6-4
6.3 Water and Wastewater Infrastructure and Services 6-6
6.4 Parks and Recreation 6-8

7 CONSERVATION, NOISE, AND HAZARDS 7-1
7.1 Physical Setting 7-2
7.2 Environmental Constraints 7-3
7.3 Air Quality 7-7
7.4 Greenhouse Gas Emissions 7-9
7.5 Noise 7-12
7.6 Hazardous Materials 7-15
7.7 Water Quality 7-16

8 PLANNING ISSUES AND IMPLICATIONS 8-1
8.1 Land Use Diversity and Compatibility 8-2
8.2 Community Design and Open Space 8-3
8.3 Community Health 8-5
8.4 Mobility 8-6

LIST OF FIGURES

Figure 1-1: Regional Location 1-4
Figure 1-2: Planning Area Boundary 1-5
Figure 1-3: Community Plan Land Use 1-9
Figure 1-4: Existing Plans and Studies 1-11
Figure 1-5: Zoning Designations 1-15
Figure 2-1: Existing Land Use 2-3
Figure 2-2: Access to Commercial Services (1/2-Mile Radius to Grocery Stores) 2-6
Figure 2-3: Population Density, by Census Block Group 2-8
Figure 2-4: Non-Residential Intensity 2-9
Figure 2-5: Development Projects and Opportunity Sites 2-13
Figure 3-1: Missing Pedestrian Facilities 3-5
Figure 3-2: Percent of Walking Commuters by Census Tract 3-7
Figure 3-3A: Pedestrian Volumes (AM and PM Hours) 3-8
Figure 3-3B: Percent of Walking Commuters by Census Tract 3-9
Figure 3-4: Pedestrian Collisions (July 2007-September 2012) 3-10
Figure 3-5: Existing Transit Routes and Stops 3-12
Figure 3-6: Transit Ridership (Average Daily Boardings and Alightings) 3-13
Figure 3-7: Percent of Transit Commuters by Census Tract 3-15
Figure 3-8: Existing and Planned Bicycle Network 3-19
Figure 3-9: Percent of Bicycle Commuters by Census Tract 3-20
Figure 3-10A: AM Peak Hour Counts 3-22
Figure 3-10B: PM Peak Hour Bicycle Counts 3-23
Figure 3-11: Bicycle Collisions (July 2007-September 2012) 3-24
Figure 3-12: Roadway Network 3-26
Figure 3-13: Existing Roadway Traffic Volumes and Levels of Service 3-28
Figure 3-14: Vehicle Collisions (July 2007 to September 2012) 3-30
Figure 3-15: Observed Noon Peak On-Street Parking Occupancy 3-34

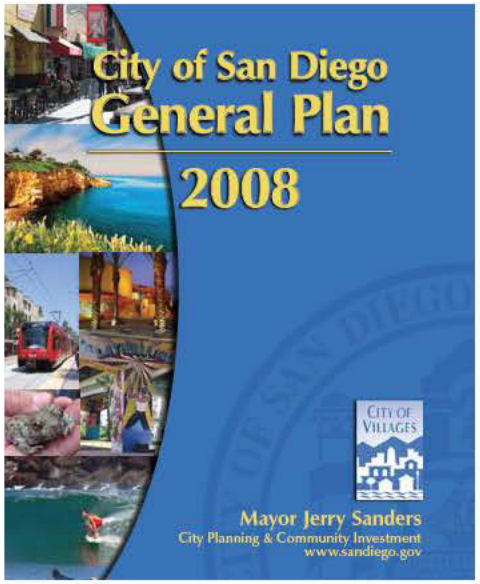
Figure 4-1: Neighborhood Structure 4-3
Figure 4-2: Neighborhood Structure 4-5
Figure 4-3: Block Pattern Details 4-10
Figure 4-4: Block Patterns 4-11
Figure 4-5: Community Anchors and Gateways 4-17
Figure 4-6: Street Tree Matrix 4-20
Figure 4-7: Tree Canopy Coverage 4-25
Figure 4-8: Community Tree Character 4-26
Figure 4-9: Corridor Tree Frequency 4-27
Figure 4-10: Sample Neighborhood Tree Spacing 4-29
Figure 5-1: Residential: Cottages and Bungalows 5-5
Figure 5-2: Commercial 5-7
Figure 5-3: Residential: Apartments and Bungalow Courts 5-7
Figure 5-4: Historic Resources and Historic Districts 5-13
Figure 6-1: Public Facilities (Schools, Libraries, Police, Fire) 6-5
Figure 6-2: Parks and Recreation Facilities 6-9
Figure 6-3: Parks and Recreation Access (1/4 and 1/2 Mile Radius) 6-13
Figure 6-4: Chollas Creek Enhancement Program Improvements 6-15
Figure 7-1: Regional Faults 7-4
Figure 7-2: Environmental Constraints (Fault Lines, Liquefaction, Geological Hazards, Slopes >15%, Creeks, Flood Zones) 7-5
Figure 7-3: Existing Noise Contours 7-13
Figure 7-4: Potential Hazardous Materials 7-17
Figure 8-1: Pedestrian Needs 8-7
Figure 8-2: Transit Needs 8-9
Figure 8-3: Street and Freeway Needs 8-10
Figure 8-4: Bicycle Needs 8-11

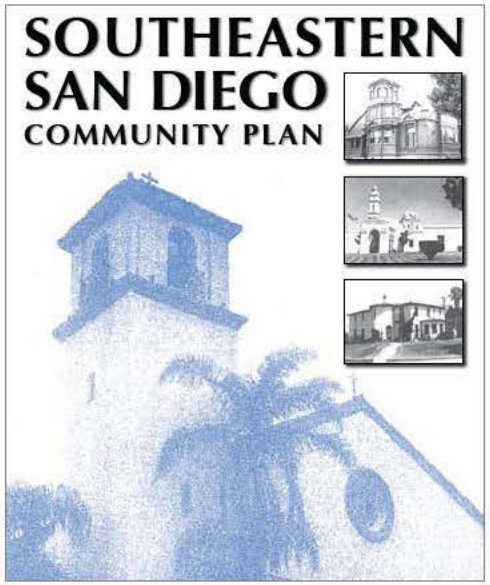
LIST OF TABLES AND CHARTS

Table 1-1: Household Demographic Characteristics (2012) 1-6
Chart 1-1: Race and Ethnicty in Southeastern and San Diego (2012) 1-6
Table 1-2: Existing Southeastern San Diego Community Plan Land Uses 1-7
Table 1-3: Existing Zoning Designations 1-14
Chart 2-1: Existing Land Use in the Planning Area, by Acres and Percent Share 2-2
Table 2-1: Housing Characteristics for the Southeastern Community Plan Area and the City of San Diego 2-4
Table 2-2: Non-Residential Building Area 2-5
Table 2-3: Development Projects 2-10
Chart 3-1: Journey to Work, Southeastern San Diego and Citywide 3-3
Table 3-1: Level of Service Variables, by Mode 3-4
Table 3-2: Pedestrian Level of Service 3-6
Table 3-3: Transit-Auto Cost Comparison 3-16
Table 3-4: Vehicle Collisions on Urban Streets (July 2007 to September 2012) 3-29
Table 3-5: Roadway Comparisons 3-32
Table 4-1: Representative Streets 4-7
Table 4-2: Representative Building Types 4-14
Table 5-1: Historic Places, Landmarks, and Districts 5-12
Table 6-1: School Characteristics in the Planning Area (2010 -2011) 6-2
Table 6-2: Reported Crimes in the Planning Area, by Type (Jan. -Dec. 2011) 6-4
Table 6-3: Parks and Recreation Facilities in the Planning Area 6-11
Table 6-4: Open Space in the Planning Area 6-12
Chart 7-1: California GHG Emissions, by Sector (2008) 7-10
Chart 7-2: San Diego County GHG Emissions, by Sector (2006) 7-11
Table 7-1: Noise Measurements (November 2012) 7-14

1 INTRODUCTION

This report provides a baseline of existing conditions, opportunities, and challenges in the Southeastern San Diego 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 Southeastern San Diego 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 Southeastern San Diego—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 the Southeastern community. 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; 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:

- Southeastern San Diego Community Planning Group meetings
- Community-wide workshops
- Community "audits" (e.g. 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

Located just east of Downtown San Diego, the Southeastern San Diego community is located proximate to major employment and commercial centers in the South Bay and Downtown, as shown in Figure 1-1, and linked to them by trolleys and buses. It is surrounded by several other community planning areas: Golden Hill and City Heights to the north, and Encanto Neighborhoods to the east. It also lies near major recreation facilities in Balboa Park and San Diego Bay. Although the community is divided by its freeways, the access that they provide is a key resource for the community.

Planning Boundaries

The Southeastern San Diego community lies south of State Route 94 (SR-94), between Interstate 5 (I-5) and Interstate 805 (I-805), and north of the city limits of National City, as shown in Figure 1-2. The planning area encompasses 2,950 acres, not including 121 acres of unincorporated San Diego County land in the eastern portion of the planning area. 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 Southeastern boundaries identified here.

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

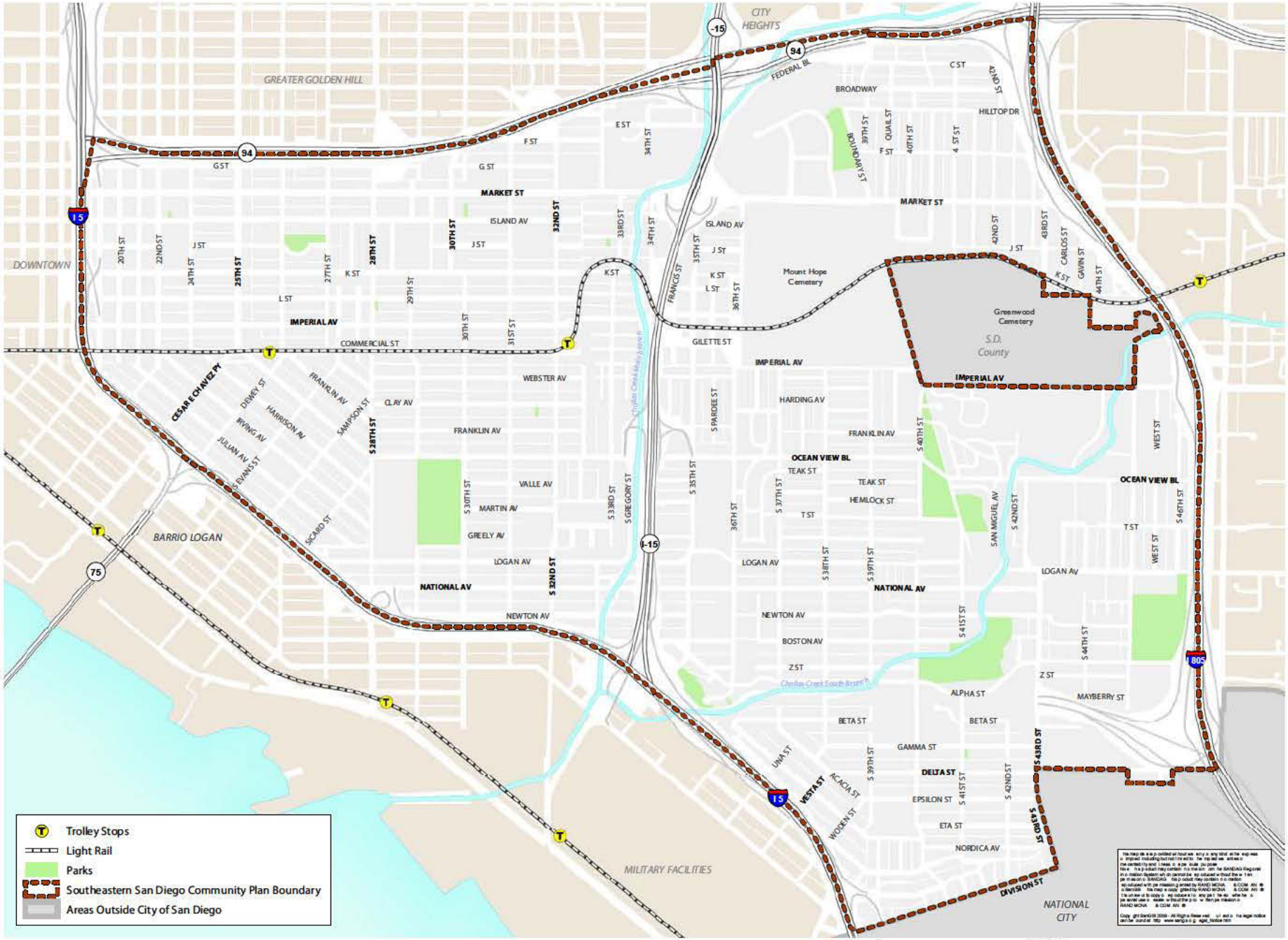


TABLE 1-1: HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS (2012)		
CHARACTERISTIC	**SOUTHEASTERN SAN DIEGO PLANNING AREA**	**CITY OF SAN DIEGO**
Population	57,041	1,321,315
Households	14,477	510,160
Median Age	27	34
Median Household Income (2010)	$33,057	$66,652

Source: SANDAG Regional Warehouse Data, 2012.

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

Source: SANDAG Regional Warehouse Data, 2012.

1.3 Southeastern San Diego 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 Southeastern San Diego Community Planning Area is home to over 57,000 residents. Compared to the city overall, Southeastern San Diego has a somewhat younger population, with a median age of 27 years. In fact, 33 percent of Southeastern's population is under 18 years old. Households in Southeastern also have substantially lower incomes—at $33,000—just half of the citywide median. According to the 2011 American Community Survey (Five-Year Estimates), only 46 percent of the adult population (25 and over) has completed high school.

Chart 1-1 illustrates the breakdown in race and ethnicity. Over 84 percent of residents in Southeastern are Hispanic compared with 29 citywide. Eight percent of residents in Southeastern are Black and four percent are White. According to the 2011 American Community Survey (Five-Year Estimates), 78 percent of the population speaks a language other than English at home (primarily Spanish), including 47 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 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 or Multi-Family Residential. Imperial Avenue and 25th Street are designated as Multiple Use, and the western portion of Market Street as General Commercial or Multiple Use. Commercial Street and eastern portions of Market Street (e.g. Gateway Center) are designated as Industrial. Institutional and Schools/Public Facilities are used somewhat interchangeably to designate 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.

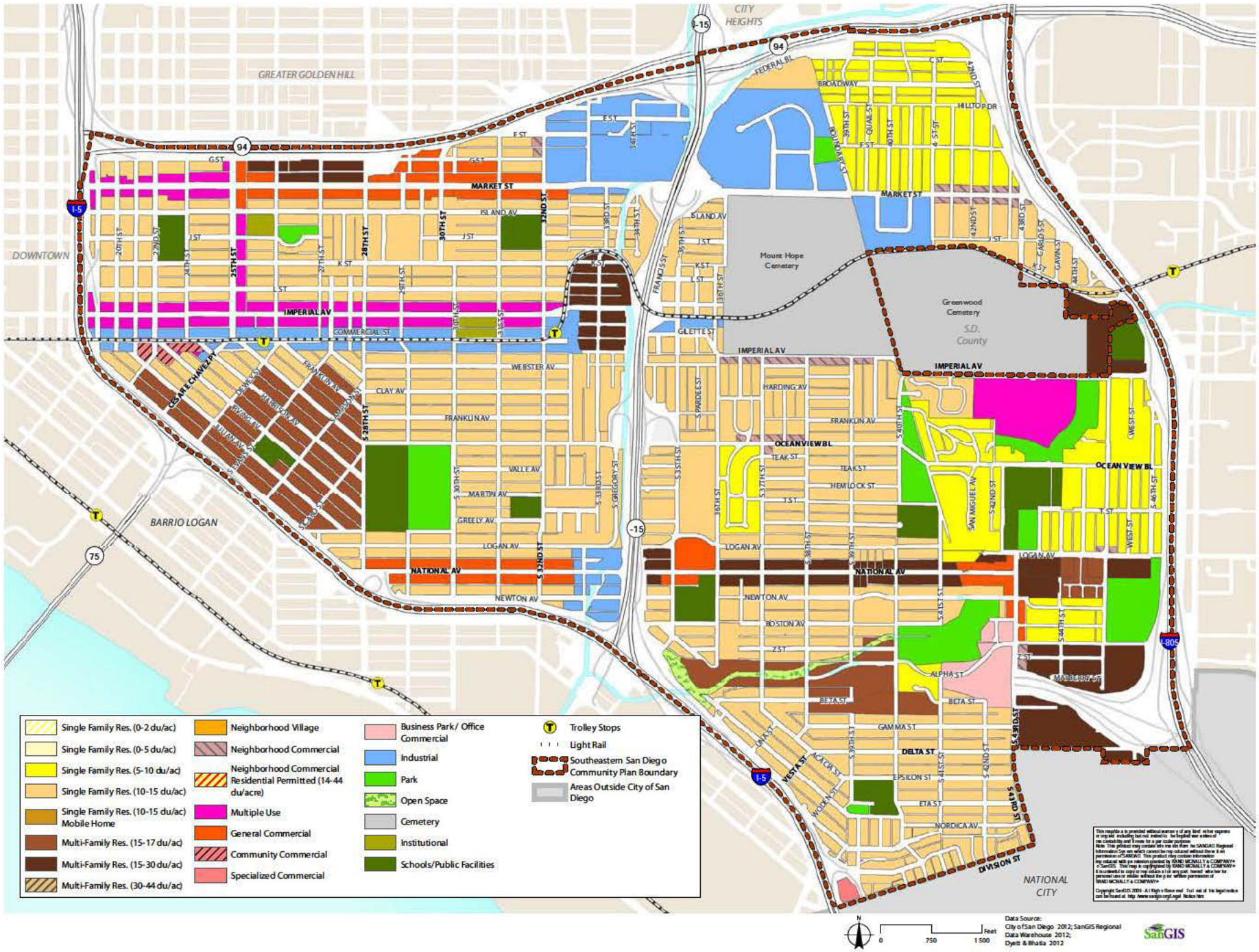
Source: City of San Diego General Plan, 2008; and Southeastern San Diego Community Plan. Adopted 1987. Amended 2009.

Most of the Planning Area is designated as Single-Family Residential. However, homes are designed with a range of sizes and styles, as shown in these examples (left to right) in Sherman Heights, along National Avenue, and in Logan Heights.

Commercial uses are primarily found in Mixed Use and General Commercial areas. These are typically concentrated along corridors—Imperial Avenue (left) and National Avenue (middle)—and in centers, such as Imperial Marketplace (right).

Open spaces and parks, such as Mountain View Park, are also designated land uses in the existing Community Plan.

FIGURE 1-3: Community Plan Land Use



The Commercial/Imperial Corridor Master Plan supports a mix of uses along Imperial Avenue, with pedestrian and bicycle safety and comfort improvement (top, middle). On Commercial Street sidewalks should be installed and landscaping added where feasible (bottom), to improve the pedestrian realm, particularly surrounding the 32nd Street trolley station.

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. Bronze Triangle). These plans are summarized below; boundaries for City plans that have been adopted or are underway are illustrated in Figure 1-4.

Commercial/Imperial Corridor Master Plan (Underway)

Following an extensive community outreach process, a vision for the Commercial/Imperial Corridor emerged to enable a more vibrant future that supports a mix of culturally-relevant uses integrated with transit, streetscape and public space enhancements to promote vitality and neighborhood livability. The public review draft will be released in February 2013 and will be incorporated into the Southeastern Community Plan Update.

Imperial Avenue is envisioned to remain as a mix of residential and commercial uses, but new and revitalized development around the trolley stops will enhance pedestrian safety and comfort. New housing, stores, and restaurants will enhance the vibrancy of the corridor, and focused streetscape and pedestrian improvements—such as wider sidewalks, bulbouts, traffic calming, landscaping, and street furniture—will foster pedestrian comfort.

East of 28th Street, Commercial Street will be retained as industrial and for employment uses. However, west of 28th Street a mix of commercial and residential uses is recommended to capitalize on trolley access. The Master Plan addresses compatibility between industrial and residential uses. Streetscape, sidewalk, and screening/buffering improvements are recommended to improve safety and mobility along Commercial Street and at the trolley stops.

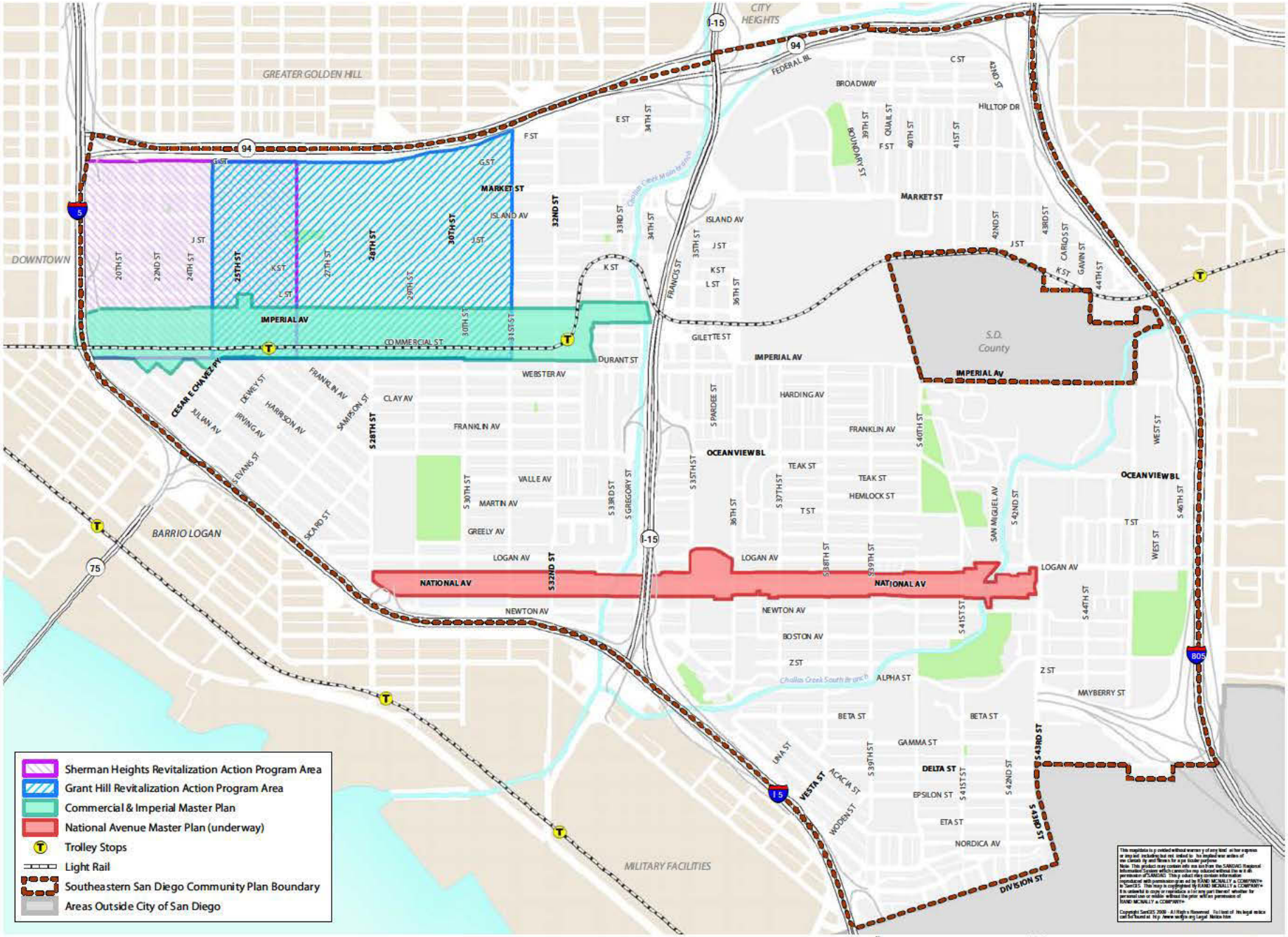
National Avenue Master Plan (Underway)

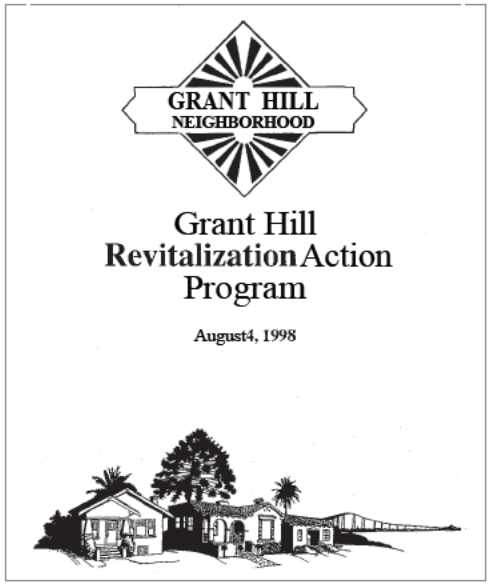
The National Avenue Master Plan has recently been initiated for the segment of National Ave-nue extending eastward approximately 1.8 miles from Interstate 5 to 43rd Street in the South-eastern San Diego Community Planning Area. A major purpose of the National Avenue Master Plan is to recommend an appropriate 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. National Avenue should evolve to become a multi-modal environment that attracts infill development, facilitates walking, biking and transit, and otherwise advances the City's goals and policies to revi-talize this urbanized area in an innovative and sustainable manner. This planning effort is being coordinated with the ongoing Southeastern San Diego Community Plan update, with a more detailed focus on the National Avenue Corridor and its relationship with the surrounding neigh-borhoods of Logan Heights, Mountain View, and Southcrest.

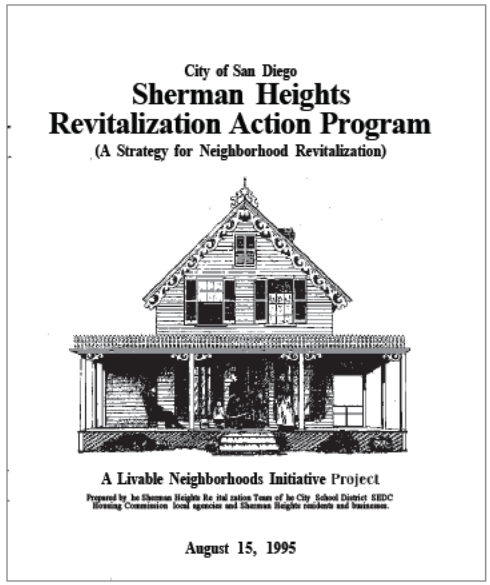
Chollas Creek Enhancement Program

Adopted in 2002, the Chollas Creek Enhancement Program expresses the community's vision for Chollas Creek and detailed policies, funding strategies, and a phasing plan to guide the plan's implementation. Chollas Creek is the natural drainage system that traverses

FIGURE 1-4: Existing Plans and Studies







Adopted plans, including the revitalization plans for Grant Hill and Sherman Heights, will be incorporated and implemented through the Community Plan. Ideas emanating from other recent planning efforts will be folded into the planning process through discussions with community members.

the Planning Area. The main branch runs south parallel to and west of Highway 15, while the South Branch runs from northeast to southwest across the Mountain View and Southcrest neighborhoods, as shown in Figure 1-3.

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 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.

Grant Hill Revitalization Action Program (1998)

Adopted by City Council in 1998, the Grant Hill Revitalization Action Program describes implementation actions to revitalize the historic Grant Hill neighborhood. Specific strategies include traffic calming on heavy-use streets and streetscape improvements on Imperial Avenue, and 25th, 28th and 30th streets. In addition, the program recommends increasing densities and allowing mixed-use development around the trolley stops.

Sherman Heights Revitalization Action Program

Adopted by City Council in 1995, the Sherman Heights Revitalization Action Program identifies strategies and projects to revitalize the historic community of Sherman Heights. Key recommendations include development of an urban plaza around the intersection of Commercial and 25th streets, streetscape improvements, such as lighting and landscaping, façade improvements, traffic calming, community services, housing rehabilitation, and neighborhood policing/defensible space strategies.

Bronze Triangle Master Plan

Encompassing portions of Logan Heights, Grant Hill, and Stockton, the Bronze Triangle Master Plan provides recommendations to addresses concerns identified by the community: gentrification, the abundance of liquor stores and vacant lots, crime, cleanliness, rental prices, lack of programs for families and children/teens, and perceived/actual bank lending challenges.

Recommendations include increased affordable housing, improved landscaping and parks, development of community partnerships and effective public services (e.g. to improve relations with police and eliminate gang violence), business and job development, and ways to reach out to Spanish speakers and youth. The plan also supports development of community and resource centers, signature architecture, elimination of non-conforming uses, emphasis on the arts, and neighborhood improvement events (such as clean up days).

The plan was prepared in March 2003, but is not an adopted City policy.

Greater Logan Heights: Our Next Chapter

The plan envisions greater Logan Heights (defined as Logan Heights, Memorial, Sherman Heights, Grant Hill and Stockton) as a place to stay and grow healthy families and specifies six strategies to achieve this vision. Some example actions are also identified for each strategy.

1. Provide a balance of housing opportunities that offer affordable, diverse, and healthy housing options for renters and homeowners.
    - Encouraging newcomers and development in appropriate locations (such as Commercial Street, Market Street, and Julian Street)
2. Ensure that all residents, young and old, have opportunities to receive a quality education that prepares us for success in life.
    - Adult education and family literacy through partnerships with existing providers
3. Improve the safety and cleanliness of our community.
    - Adding street lights, holding neighborhood clean-ups, improving relationships with the Police Department, reducing homelessness
4. Ensure that our community has access to strong community resources that provide the network of services needed by our residents
- Improve access to healthy and affordable food, build capacity of Town Council, and strengthen network of neighborhood groups
5. Preserve history and foster strong cultural pride.
    - Establish a neighborhood history museum and incorporate art into public and private spaces
6. Increase the economic stability of our community by providing residents with opportunities to earn good wages and increase savings.
    - Partner with providers to expand workforce and youth training and "green" jobs; support local businesses

The plan was prepared in 2009, but is not an adopted City policy.

Municipal Code/Zoning

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.

Planned District Ordinances

The Southeastern San Diego Community Plan land uses are implemented by regulations and development criteria in the city's base zoning districts and the Southeastern and Mount Hope planned district ordinances (Chapter 15, Article 15 and 19 of the City of San Diego Municipal Code). There are 22 zoning designations for the Southeastern area, as shown in Figure 1-5 and Table 1-3.

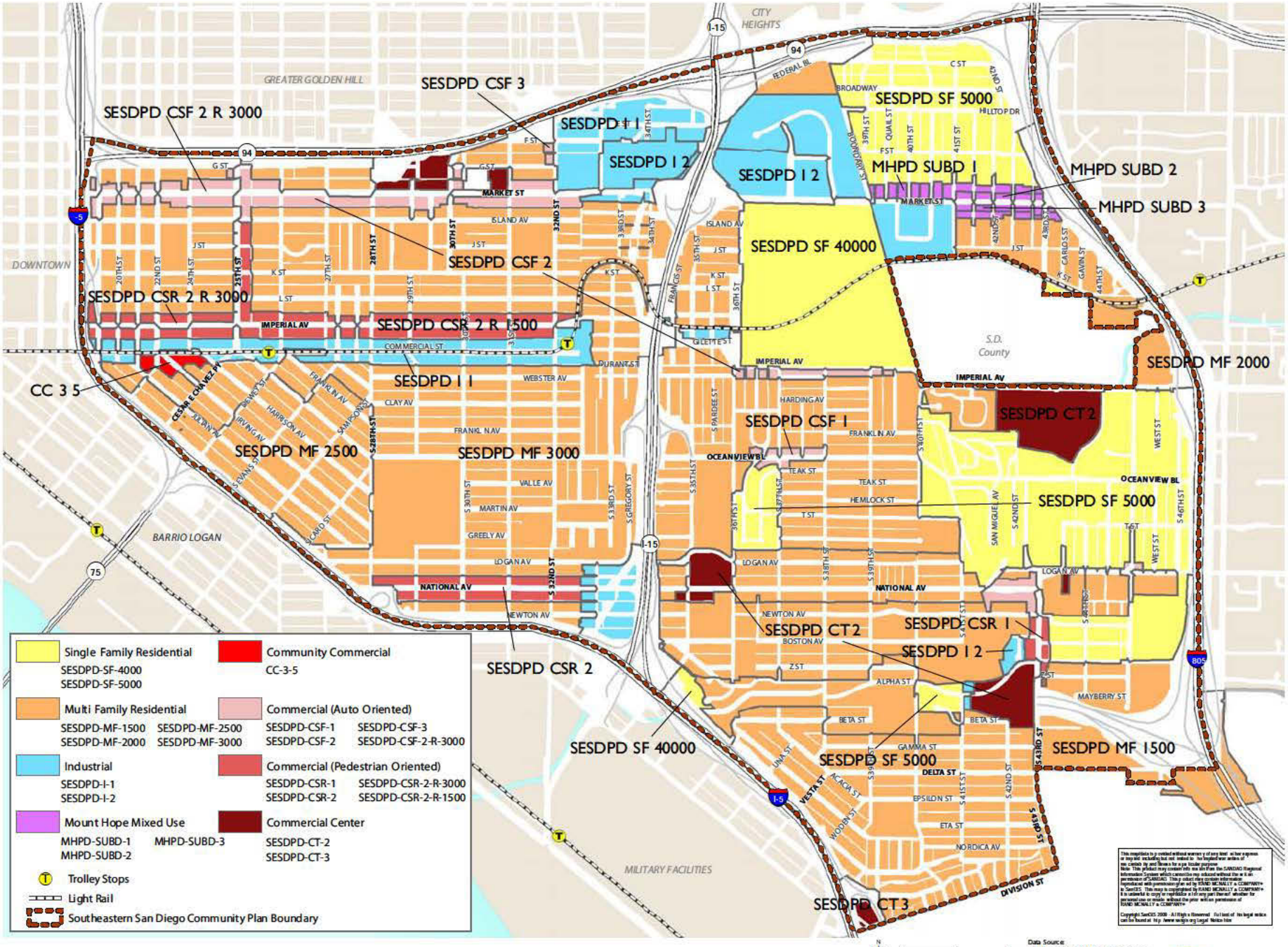
While most uses are designated through the Southeastern Planned District Ordinance, some sites are identified with base zones (Chapter 13) or in the case of the Market Street corridor the Mount Hope Planned Dis-

Zoning regulations control the type of use, bulk, height, landscaping, parking, and signage, that can be found on a site. Regulations can help create streets with consistent heights and setbacks (top). They can also separate uses that may not be compatible, as found on National Avenue and the Commercial/Imperial corridor (middle, bottom).

TABLE 1-3: EXISTING ZONING DESIGNATIONS				
ZONING DESIGNATION	**MAX. DENSITY (DU/AC)**	**MAX. INTENSITY (FAR)**	**MAX. BUILDING HEIGHT (FT.)**	**DESCRIPTION**
CC-3-5	29	2.0	100	Community commercial development with high-intensity, pedestrian orientation
MHPD-SUBD-1	29	1.2	40	Primarily residential, but intended to allow mixed use development on Market Street
MHPD-SUBD-2	none	2.0	none	Primarily commercial, but intended to allow mixed use development (including residential) on Market Street
MHPD-SUBD-3	none	2.0	none	Intended for commercial and manufacturing of goods which are sold on premises. Residential permitted on large sites.
SESDPD-CSF-1	n/a	0.5	30	Neighborhood strip commercial auto-oriented development to accommodate convenience goods and professional services 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-2-R-3000	15	0.5	none	In addition to CSF-2, "-R" signifies that residential is permitted. Mixed uses not permitted.
SESDPD-CSF-3	n/a	0.5	none	Recreational strip commercial auto-oriented development, such as hotel, dining, and entertainment.
SESDPD-CSR-1	n/a	0.75	none	Neighborhood commercial development in a pedestrian-oriented environment.
SESDPD-CSR-2	n/a	0.75	none	Community commercial development in a pedestrian-oriented environment.
SESDPD-CSR-2-R-1500	29	0.75	none	In addition to CSR-2, "-R" signifies that residential is permitted. Mixed uses not permitted.
SESDPD-CSR-2-R-3000	15	0.75	none	
SESDPD-CT-2	n/a	1.0	none	Community commercial centers, with several commercial facilities.
SESDPD-CT-3	n/a	1.0	none	Recreational commercial centers, with several commercial facilities.
SESDPD-I-1	n/a	1.5	none	Light industrial, including manufacturing and heavy commercial uses (e.g. lumber yards)
SESDPD-I-2	n/a	2.0	none	Light industrial uses, typically on larger sites (40,000 sq. ft.+)
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-2000	22	1.0	30	
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-40000	1	0.5	30	

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



trict with its own planned district regulations. Over 63 percent of the total land area is designated for multi-family residential uses.

Additionally, the Transit Overlay Zone which encompasses the Planning Area west of 28th Street, allows for reduced parking requirements in areas receiving a high level of transit service (i.e., near the 25th Street trolley station).

1.5 Report Organization

This report represents one of the first steps toward the development of the Southeastern San Diego 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 Southeastern San Diego Community Planning Area is composed of a series of older residential neighborhoods and commercial corridors, shopping and employment centers, schools and community amenities, framed by the freeway system. The area is directly adjacent to downtown San Diego; however, in contrast to the rapidly changing downtown, Southeastern has seen development only in selected locations in recent years, and services and amenities are locally, rather than regionally-oriented. This chapter analyzes the physical character, land use patterns, and planned and potential development sites in the Planning Area to provide a foundation for preparation of the Southeastern Community Plan land use framework and policies.

The Planning Area is primarily residential, with a mixture of single-family and small-scale multi-family development (top). Imperial Marketplace features large-scale employment and retail uses (middle), and an adjacent portion of Chollas Creek Canyon is preserved open space (bottom).

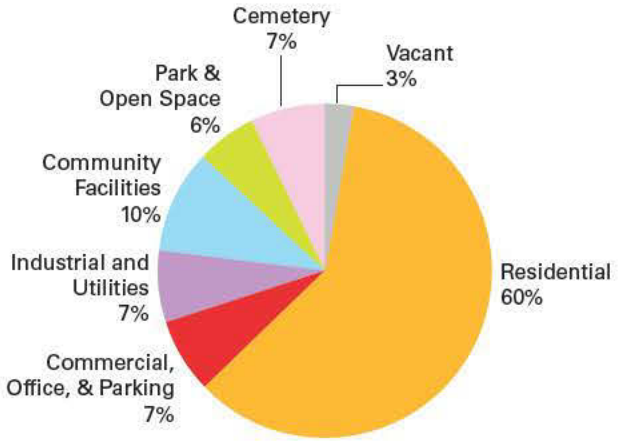
2.1 Existing Land Use

Land Use Pattern

The Planning Area is primarily residential, with a mixture of single-family and multi-family housing in all neighborhoods, as shown in Figure 2-1. Commercial development is concentrated along commercial corridors west of Highway 15 and at shopping centers to the east. Industrial uses are found on both sides of Highway 15 south of Highway 94 (Gateway West and East) as well as along Commercial Street.

Chart 2-1 shows the proportion of land area occupied by different uses in the Planning Area. Southeastern San Diego encompasses 2,950 acres, not including 121 acres of unincorporated San Diego County land in the eastern portion of the Planning Area. Of the 1,867 acres not including streets and public right-of-way, 60 percent, or 1,120 acres, is residential, including 667 acres of single-family and 454 acres of multi-family residential. Community facilities, including schools, churches, community centers, fire and police stations, account for 178 acres, or ten percent. Commercial uses, including offices and parking, comprise 136 acres and industrial uses (including utilities) account for 133 acres, translating to seven percent in each category. Mount Hope Cemetery occupies another seven percent (123 acres) in the Planning Area's eastern section, while parks and other open space account for six percent (111 acres). There are 65 acres of vacant land, accounting for three percent of the total. The City will process a LAFCO action to annex Greenwood Cemetery (the 121-acre County island) with the Southeastern San Diego Community Plan Update.

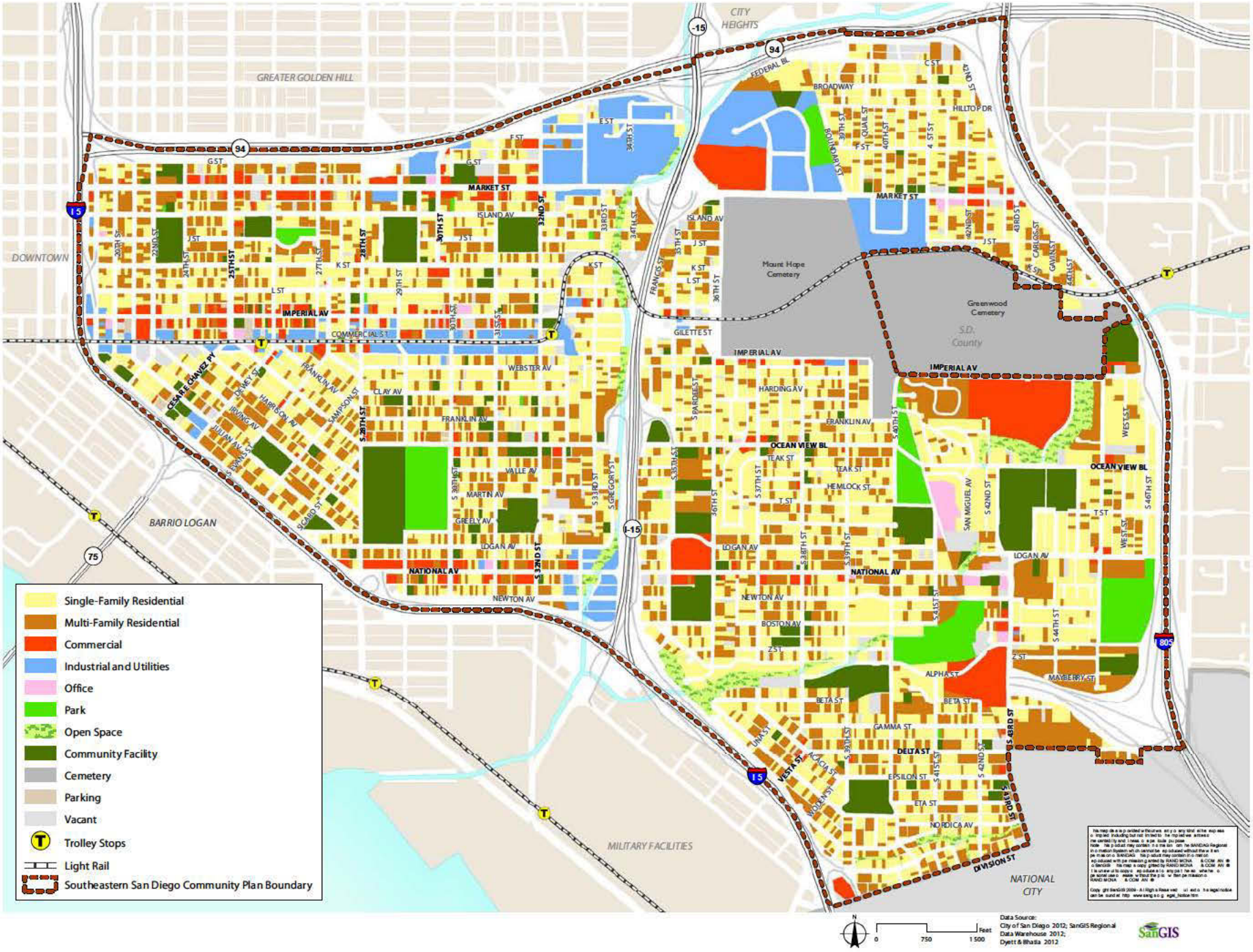
CHART 2-1: EXISTING LAND USE IN THE PLANNING AREA, BY ACRES AND PERCENT SHARE



Note: Cemetery acreage does not include the 121-acre Greenwood Cemetery, which is currently outside City limits.

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

FIGURE 2-1: Existing Land Use



Housing units in Southcrest and Mountain View illustrate the range of housing types found in the Planning Area, including single-family homes, and small- and medium-sized apartment complexes.

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 15,204 housing units in Southeastern San Diego, of which 5,109 were single-family detached (34 percent); 6,058 were single-family, multiple-unit (40 percent); and 4,037 were multi-family (27 percent). The number of households living in the Planning Area (14,477) is slightly smaller than the number of units, due to vacancy. As shown in Table 2-1, the Planning Area has a lower proportion of both detached single-family units and multi-family units than San Diego overall. However, the Planning Area has a substantially higher proportion of single-family, multiple-unit housing. Most multi-family housing in Southeastern is in attached single-family structures or on single-family lots, rather than in larger buildings or complexes. The City's land use data classify housing in only two categories, single-family and multi-family, and show a 37 percent/62 percent split. These data correspond to Figure 2-1.

Housing in Southeastern San Diego is older than in the city as a whole. As Table 2-1 shows, 37 percent of housing units in the Southeastern area were built before 1950, compared to only 12 percent citywide. Close to 70 percent of housing units in the Planning Area are renter-occupied, compared to 50 percent citywide. Households in Southeastern have more persons on average than in San Diego as a whole (3.94 compared to 2.59), and housing units in Southeastern are more crowded (28 percent have more than one occupant per room, compared to six percent in the city as a whole).

TABLE 2-1: HOUSING CHARACTERISTICS FOR THE SOUTHEASTERN COMMUNITY PLAN AREA AND THE CITY OF SAN DIEGO

HOUSING CHARACTERISTICS	SOUTHEASTERN[1]	CITY OF SAN DIEGO
Single-Family Detached	34%	41%
Single-Family Multiple Unit	40%	13%
Multi-Family	26%	45%
Other	0%	1%
Persons per Household	3.94	2.59
Vacancy Rate	5.2%	5.5%
Built Before 1950	37%	12%
Owner occupied	32%	50%
Renter occupied	68%	50%
More than 1 Occupant per Room	28%	6%
Monthly Owner Costs 35% or More of Household Income	49%	34%
Gross Rent 35% or More of Household Income	61%	45%

1 Southeastern Planning Area includes all of Census Tracts 33.01, 33.03, 34.03, 35.01, 35.02, 36.02, 36.03, 39.01, 40, 47, 48, and 49, and parts of 36.01, 39.02, and 41. All but Census Tract 41 are included in this analysis.

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

Households in Southeastern also spend a greater proportion of their income on rent or housing costs: 49 percent of homeowners and 61 percent of renters pay above the 35 percent "cost burden", compared to 34 and 45 percent citywide for owners and renters, respectively.

Non-Residential

There was approximately 6.4 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 over 2.1 million square feet, or one-third of the total. Industrial uses and utilities accounted for slightly less than 2.1 million square feet or 32 percent, mainly in the Gateway East and Gateway West industrial parks. Commercial land uses made up over 1.7 million square feet or 27 percent of the total.

Most of the Planning Area's commercial development is in two basic categories. In the first category are small businesses along the main commercial corridors of Market Street, Imperial Avenue, and National Avenue, with a scattering of businesses on other streets. All of these corridors are long—with commercial uses extending on stretches ranging from 3/4 to 1-1/2 miles in length, but they do not build up a critical mass at any point, and provide a limited range of services. The second category consists of four large commercial centers, all east of State Route 15, including the recently developed Imperial Marketplace that has a combination of larger stores, as well as smaller chain restaurants and cafés.

As Figure 2-2 shows, there are no supermarkets or large grocery stores in the half of the Planning Area west of Highway 15, and only three to the east, leaving large areas more than a half mile from the nearest medium- or large-format grocery store. The Walmart grocery store planned for the Farmers' Market site on Imperial Avenue will add greatly to food access in the western section of the Planning Area, although it would be located almost at the western edge of the Planning Area. In addition, the mixed industrial character of Commercial Street is a poor fit with the Trolley line running on that street, which could support more transit-oriented development.

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

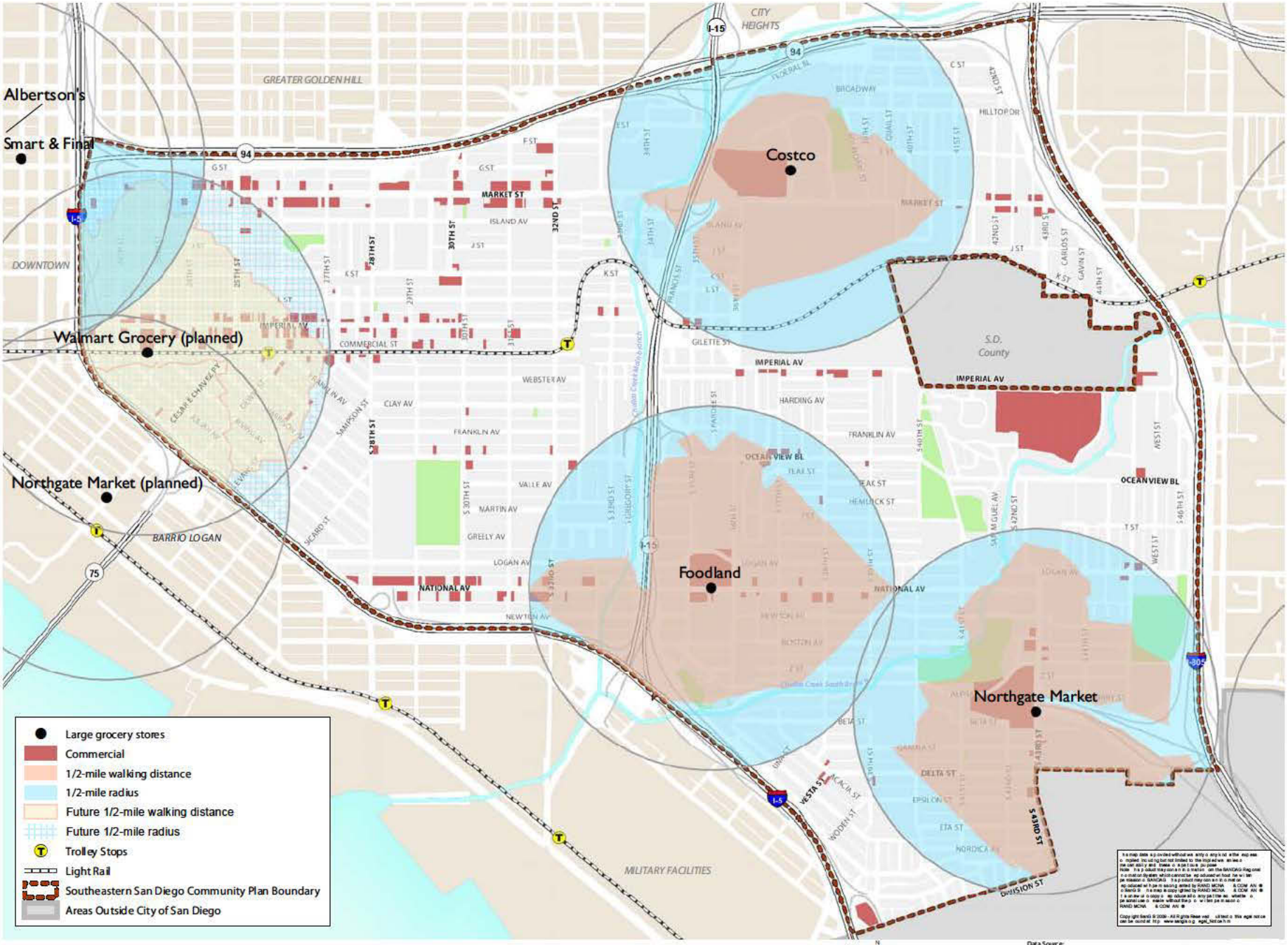
TABLE 2-2: NON-RESIDENTIAL BUILDING AREA

LAND USE	BUILDING SQUARE FEET	PERCENT OF TOTAL NON-RESIDENTIAL SPACE
Commercial	1,754,253	27%
Office	216,018	3%
Industrial and Utilities	2,059,668	32%
Community Facilities	2,117,104	33%
Other	238,559	4%
TOTAL	**6,385,602**	**100%**

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

Community facilities, such as the Education Cultural Complex (top) and industrial and utilities uses, (middle, bottom, along Market Street), represent the largest land areas in terms of overall square footage

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



2.2 Density and Intensity

Residential and Population Density

Housing in the Planning Area has an overall density of over 13 units per acre on residential land. Single-family housing averages 8.4 units per acre, reflecting traditional urban lot sizes of approximately 5,000 square feet. Multi-family housing averages slightly over 20 units per acre.

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 12,500 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 5 to 10 people per acre in parts of the Mount Hope and Mountain View neighborhoods with a mix of housing and commercial or industrial uses, to over 30 people per acre in highly residential areas, with greater density in general in the western neighborhoods, as shown in Figure 2-3. As indicated by the housing characteristics data described above, population density in Southeastern San Diego corresponds with a relatively high level of crowding and cost-burdened households. At the same time, the population does not have ready access to pedestrian-scaled commercial areas or adequate public parks and open space, as discussed in more detail in Chapter 6.

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. Overall, non-residential buildings in the Planning Area have an average FAR of 0.32, with the highest average intensity (0.39 FAR) in the office category and the lowest intensity (0.27) in community facilities, especially schools. Non-residential development intensity is shown in Figure 2-4.

Building Heights

The majority of buildings in the Planning Area are one or two stories. Two-story buildings include single-family houses in neighborhoods like Sherman Heights dating to the early 1900s, and multi-family development built in the last 20 years. The Planning Area contains a very small number of structures that exceed two stories, most notably the Farmers' Market and adjacent industrial buildings.

Housing in the Planning Area has an overall density of over 13 units per acre, higher than the citywide average (top). Non-residential development has an average FAR of 0.32, typical of recent, compact commercial centers (bottom).

FIGURE 2-3: Population Density, by Census Block Group

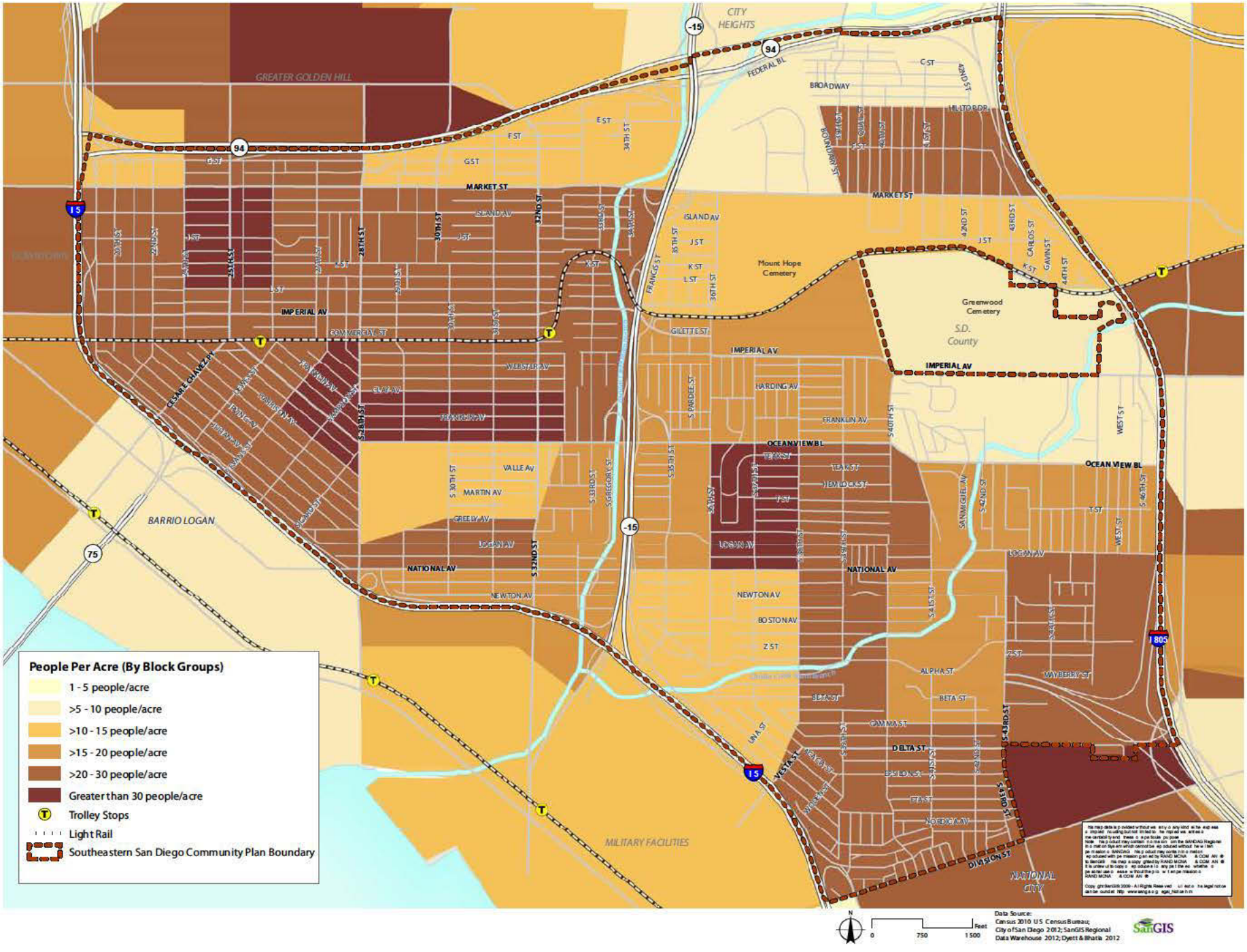
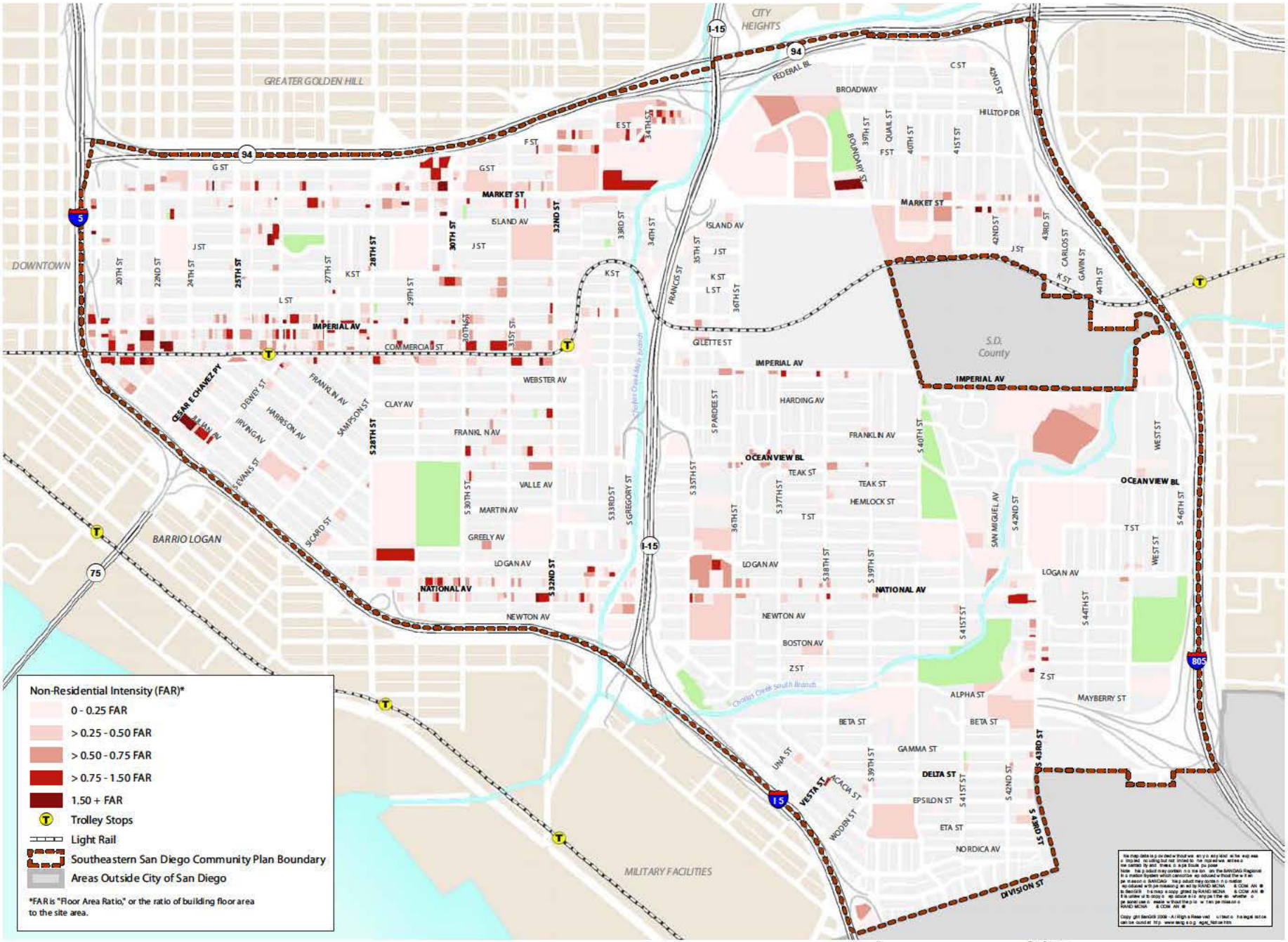


FIGURE 2-4: Non-Residential Intensity



At the western end of the Commercial Street corridor, Comm22 will include 250 housing units as well as community, retail, and office space (image courtesy Civic San Diego and MVE & Partners).

2.3 Development Projects

Nine development projects are currently in the planning stages in Southeastern San Diego, including three residential projects, two commercial projects, two community facilities, one mixed-use development, and one light industrial project. The proposed projects would result in a total of 282 new housing units and approximately 175,000 square feet of new or remodeled commercial and community facility space, as shown in Table 2-3. This amount of development is small in the context of the entire community. Current projects are shown in Figure 2-5 and summarized below.

Mixed Use

The largest current development, known as Comm22, will cover portions of three blocks along the south side of Commercial Street between 21st Street and Harrison Avenue. The proposed project includes four phases, which at completion will include 252 housing units (senior and family affordable rentals, supportive housing, market-rate condos, studios, and live/work lofts), an approximately 5,500-square foot child care facility, 27,800 square feet of commercial retail and office space, and a 355-space underground parking garage. The development would have an overall density of 55 units per acre.

TABLE 2-3: DEVELOPMENT PROJECTS

PROJECT/ADDRESS	TYPE	HOUSING UNITS	NON-RESIDENTIAL (SQ. FT.)	STATUS
Comm22 – 2101 Commercial Street	Mixed-use	252	33,250	Under construction
Heather Ridge – 3980 C Street	Single-family residential	18		In review
40th & Alpha	Affordable residential	6		In review
Market Street Row Homes – 2748 Market St.	Condominiums	6		In review
Walmart Grocery – 2121 Imperial	Commercial retail		46,000	Under construction
99 Cent Store – 2611 Market Street	Commercial retail		14,000	Completed
33rd & E Street	Industrial		7,000	Proposed
Jackie Robinson YMCA – 151 YMCA Way	Community facility		16,000	Proposed
Albert Einstein Academy – 446 & 458 26th Street	School		58,600	In review
TOTAL		**282**	**174,850**	

Source: City of San Diego, 2012.

Residential

An application has been submitted to construct six row-houses on Market Street between 27th and 28th streets, while six small-lot single-family houses are proposed for the vicinity of 40th and Alpha streets in the Southcrest neighborhood. An 18-lot subdivision, Heather Ridge, is proposed at 3980 C Street in the Mount Hope area. These three projects would have densities of 21, 12, and 5 units per acre, respectively.

Commercial and Industrial

Directly across Commercial Street from Comm22, the Farmers' Market building will be rehabilitated as a new, 46,000-square foot Walmart Neighborhood Market. Meanwhile a 14,000-square foot 99 Cent Store has been recently completed on Market Street at 26th Street, and a 7,000-square foot light industrial building will be developed at 33rd and E streets in the Gateway Center West area. These developments have an average intensity of 0.54 FAR.

Community Facilities

The former Doctor and Surgeons hospital across 26th Street from Grant Hill Park is proposed for subdivision leaving the two buildings on adjacent lots. The smaller building to the north is proposed for renovation of reuses as Albert Einstein Academy, charter middle school. The Jackie Robinson YMCA at the eastern end of the Imperial corridor in Southeastern is expected to be completely rebuilt and modernized. These two sites have an average FAR of 0.26.

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

Vacant Land

Vacant parcels are scattered throughout the Planning Area, with clusters in the Mount Hope neighborhood (proposed for development as Heather Ridge); on G Street and Market Street in the Stockton and Grant Hill neighborhoods; in the vicinity of 32nd Street in Logan Heights; and in the vicinity of the South Branch of Chollas Creek in the Mountain View and Southcrest

The Farmers Market building will become a new Walmart Neighborhood Market.

Vacant and underutilized land along the Commercial/ Imperial and National Avenue corridors (top and center) could be redeveloped following the guidance of specific plans. Other opportunities, such as intensification of parking areas (bottom) were identified by the former Redevelopment Agency.

neighborhoods. Vacant land tends to be in edge locations (along creek corridors and freeway frontages) and in small parcels scattered throughout neighborhoods.

There are approximately 65 acres of scattered vacant land in the Planning Area. At typical current development densities and intensities, this land could accommodate an estimated 530 housing units and 266,000 square feet of non-residential development. Much of the development would be expected to be new single-family or small multi-family residential projects. A seven-acre piece of vacant land also exists at the northwest corner of Mount Hope Cemetery, and this could potentially be developed, likely with commercial uses. Development capacity based on future land use will be analyzed in more detail as the community plan moves forward.

Underutilized Land

Underutilized land is concentrated along the Planning Area's main commercial corridors: Commercial Street and Imperial Avenue, National Avenue, Market Street, and 43rd Street. It is also located in industrial parks (Gateway Center West and East) and commercial developments (Imperial Marketplace, Otto Square).

Underutilized land is estimated to account for 141 acres (gross) in the Planning Area. If this land were to be redeveloped at the prevailing intensity of current development, the sites could accommodate an estimated 565 units and 1,668,000 square feet of non-residential development. Given the location of underutilized commercial land along transit-accessible commercial corridors and locations that could function as complete neighborhood centers, higher-intensity and mixed-use development may be anticipated in the future, and supported by the community plan. The 252 Corridor presents a special case of under-utilized land. Approximately 42 acres now used for entrance and exit ramps for the I-805 freeway could be reclaimed for housing, park land and commercial development.

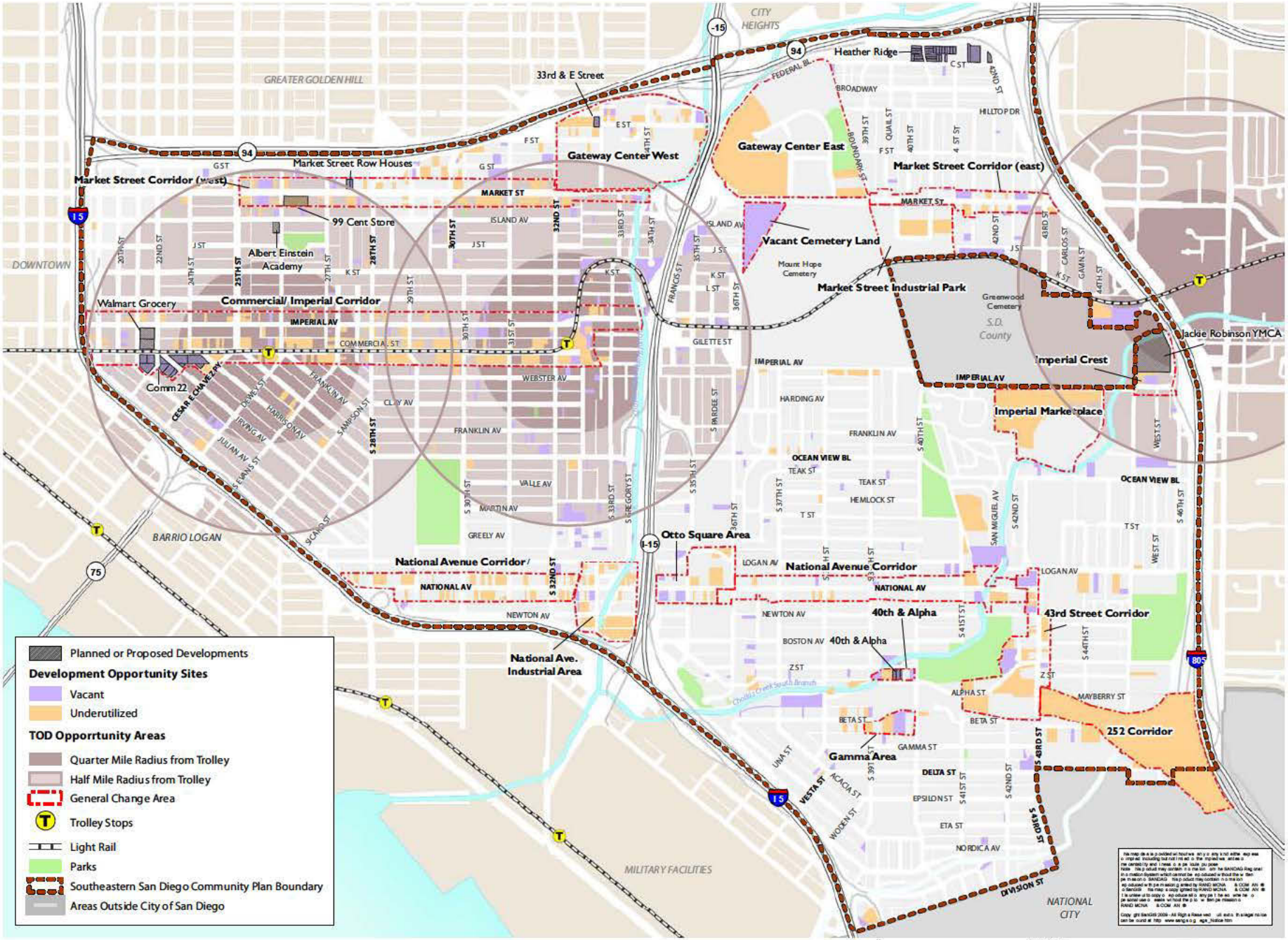
The 252 Corridor presents a special case of under-utilized land. As part of the Interstate 805 Managed Lanes South Project, Caltrans is considering design variations for the I-805/43rd Street interchange. One of these alternatives would remove existing on-ramps and fly-overs and replace them with a reconfigured 47th Street/ Palm Avenue intersection. It would also improve local cir-culation by connecting 43rd Street to Palm Avenue and the reconfigured freeway on- and off-ramps. Such a variation would allow some of the approximately 42 acres now used for entrance and exit ramps for the I-805 freeway to be reclaimed for housing, park land and commercial de-velopment.

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 as vacant or underutilized. The community planning process can help to shape the character of growth in these areas.

The Commercial/Imperial Corridor and National Avenue are currently the subjects of specific planning studies, and are viewed as having the potential for mixed-use infill development and corresponding public realm improvements. This corridor has the potential to grow

FIGURE 2-5: Development Projects and Opportunity Sites



with transit-oriented development along the Trolley line. These areas are evaluated in more detail in documents supporting those plans.

When the Southeastern Economic Development Corporation (SEDC) proposed merging the four redevelopment areas in Southeastern San Diego into one project area, in 2010, it identified "change areas" and their potential buildout characteristics. Since then, SEDC 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. These include:

- Gateway Center West: Infrastructure and further development of job-producing uses in underutilized industrial park.
- Market Street Corridor: Redevelopment with 2- and 3-story mixed use buildings.
- Cemetery Site: Potential development of excess public cemetery land for job-producing uses.
- 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.
- Imperial Marketplace Center: this 40-acre suburban commercial site has parking areas that could be intensified.
- 252 Corridor: this freeway access will be abandoned by Caltrans, freeing land for potential development.
- 43rd Street Corridor: Includes several vacant or underutilized properties, including potential intensification of Southcrest Park Plaza shopping center.
- 40th & Alpha: City-owned property with potential for multi-family residential development.
- "Gamma Area": this vacant area south of Cesar Chavez Elementary School has residential infill potential.

While some of these areas, such as Gateway Center West (industrial) and Imperial Marketplace Center (commercial) appear to have straightforward future development potential, other areas require new planning guidance. In particular, a vision for the Market Street corridor; the potential for development on the Cemetery site; the future design of the Imperial Crest area; and the future character of the 252 corridor, should be considered.

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 potential historic designation) that would preclude their redevelopment. 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.

3 MOBILITY

The Southeastern San Diego 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 contained in Appendix A, Mobility Existing Conditions Report.

Southeastern 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 Downtown 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, San Diego Association of Governments (SANDAG) has adopted a Smart Growth Concept Map (2008) in its *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, which funded the Commercial/Imperial Corridor Master Plan.

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" (SCS) 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 SCS in October 2011, making it the first agency in California to do so.

Commute Patterns

Southeastern San Diego 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.

Southeastern San Diego has a relatively low rate of individuals driving alone to work compared to City of San Diego as whole (63% versus 75%). In addition, Southeastern San Diego has relatively high rates of public transportation usage for the work trip compared with the City as a whole (12% versus 4%), as well as high carpool rates (17% versus 9%). Walk and bicycle rates for Southeastern San Diego are comparable to the city-

wide rates. These rates are illustrated, by mode, in maps in the next sections of this chapter.

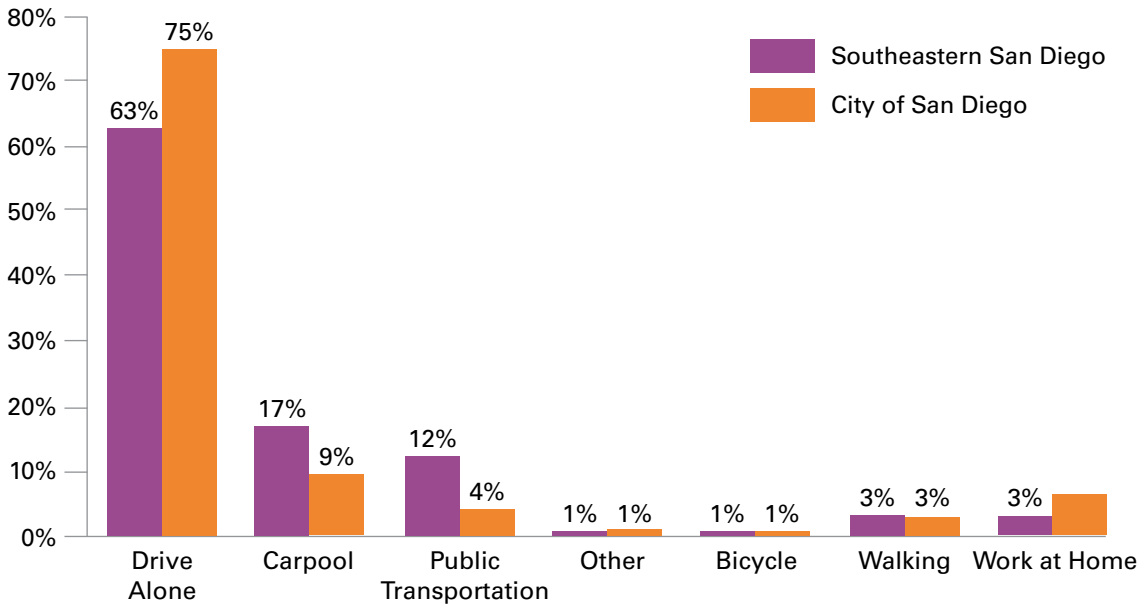
Notably, these data depict commuters traveling to work—about 30 percent of all trips—and do not reflect children and youth walking to school. A Safe Routes to School Program for elementary and middle schools in Southeastern San Diego was funded in 2006 and then expanded in 2009. This program is supporting evaluations 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 Southeastern San Diego 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 multi-modal 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, Southeastern San Diego and Citywide



Source: Census Bureau; 2011 American Community Survey

The network of streets in many parts of the community provide a grid of streets that are safe and convenient for pedestrians, as exemplified in Sherman Heights (top). However, there are several locations where sidewalks and/or curbs are missing, such as portions of Commercial Street (middle) and Imperial Avenue (bottom).

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

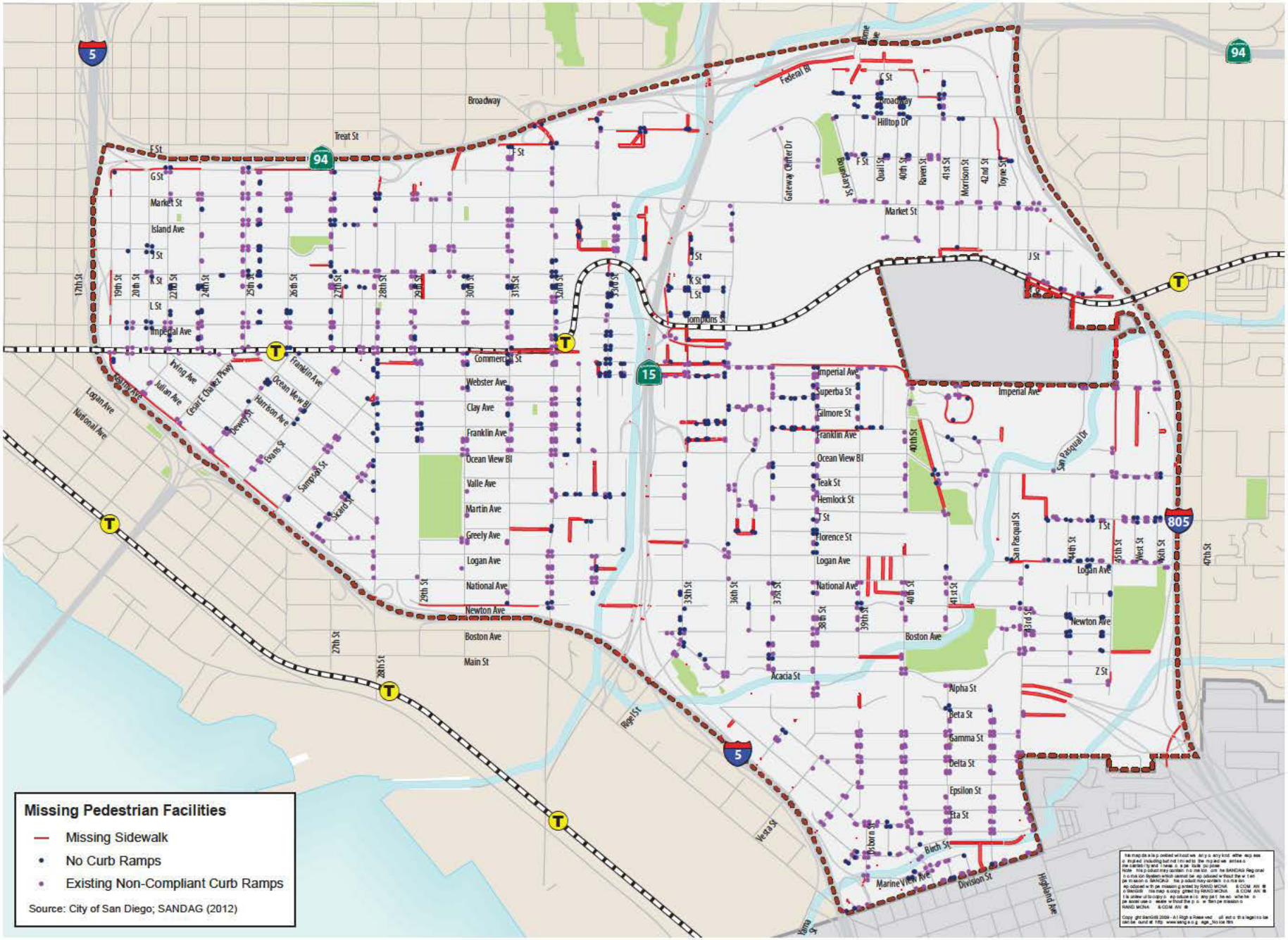
Pedestrian travel is an important mode of travel within Southeastern San Diego. The Orange Line Trolley, Imperial Avenue and the many small commercial destinations within the community, all contribute to a vibrant pedestrian realm. There are also challenges that need to be addressed, such as high speed automobile travel, barriers imposed by freeway ramp intersections, difficult pedestrian crossings, and lack of shading. The following section describes existing facilities, activity levels, level of service results, and safety.

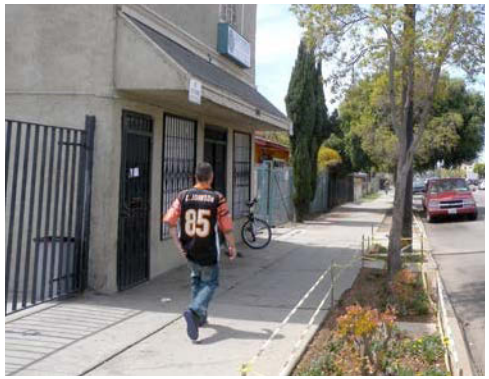
Pedestrian Facilities

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 569 missing curb ramps in Southeastern San Diego, 953 non-ADA compliant curb ramps, and an estimated 87,269 lineal feet of missing sidewalk, reflecting inventory of both sides of the roadway right-of-way.

The four interstate freeways and state routes form barriers to pedestrian travel between Southeastern San Diego and its surrounding communities of Golden Hill, Barrio Logan, Encanto, and National City.

FIGURE 3-1: Missing Pedestrian Facilities





Narrow sidewalk conditions that do not meet Americans with Disabilities Act (ADA) requirements correspond to worse LOS values, such as on Commercial Street (top). Where sidewalks are present and the separation of pedestrians and traffic is adequate, as shown on National Avenue (bottom), pedestrian LOS values are more acceptable.

Pedestrian Volumes and Activity Levels

Pedestrian Journey to Work

Figure 3-2 displays walking rates for journey to work data by census tract for Southeastern San Diego. The highest walking commute rates occurs in the census tract just east of I-5, between Market Street and Commercial Street (14%) in Sherman Heights, likely because of the proximity to jobs Downtown. In addition, the two census tracts just west of I-15 and to the south and north of Commercial Street also have high rates of commuting by walking (both 7%).

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, high pedestrian count locations are currently found near the 25th Street/Commercial Street Trolley Station, along Imperial Avenue, and at 28th Street/Ocean View Boulevard. These findings are similar to those depicted in Figure 3-2, although more pedestrian volumes appear along 25th Street and 43rd Street.

Pedestrian Level of Service

Pedestrian level of service was evaluated for selected corridors 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 signal. Pedestrian LOS, along the urban streets within Southeastern, is at LOS C or better during both the AM and PM peak hour.

Pedestrian Safety

Pedestrian collision data was obtained for the period from 2007 to 2012. During this period there were 155 reported pedestrian-related collisions in Southeastern San Diego, as depicted on Figure 3-4. This includes five pedestrian fatalities over the five year period, an average of one fatality per year. Roughly half of all collisions took place midblock and the other half at intersections. As reported, about two-thirds of the collisions were the fault of the driver—typically unsafe movements. The other one-third of the time, the pedestrian was at fault.

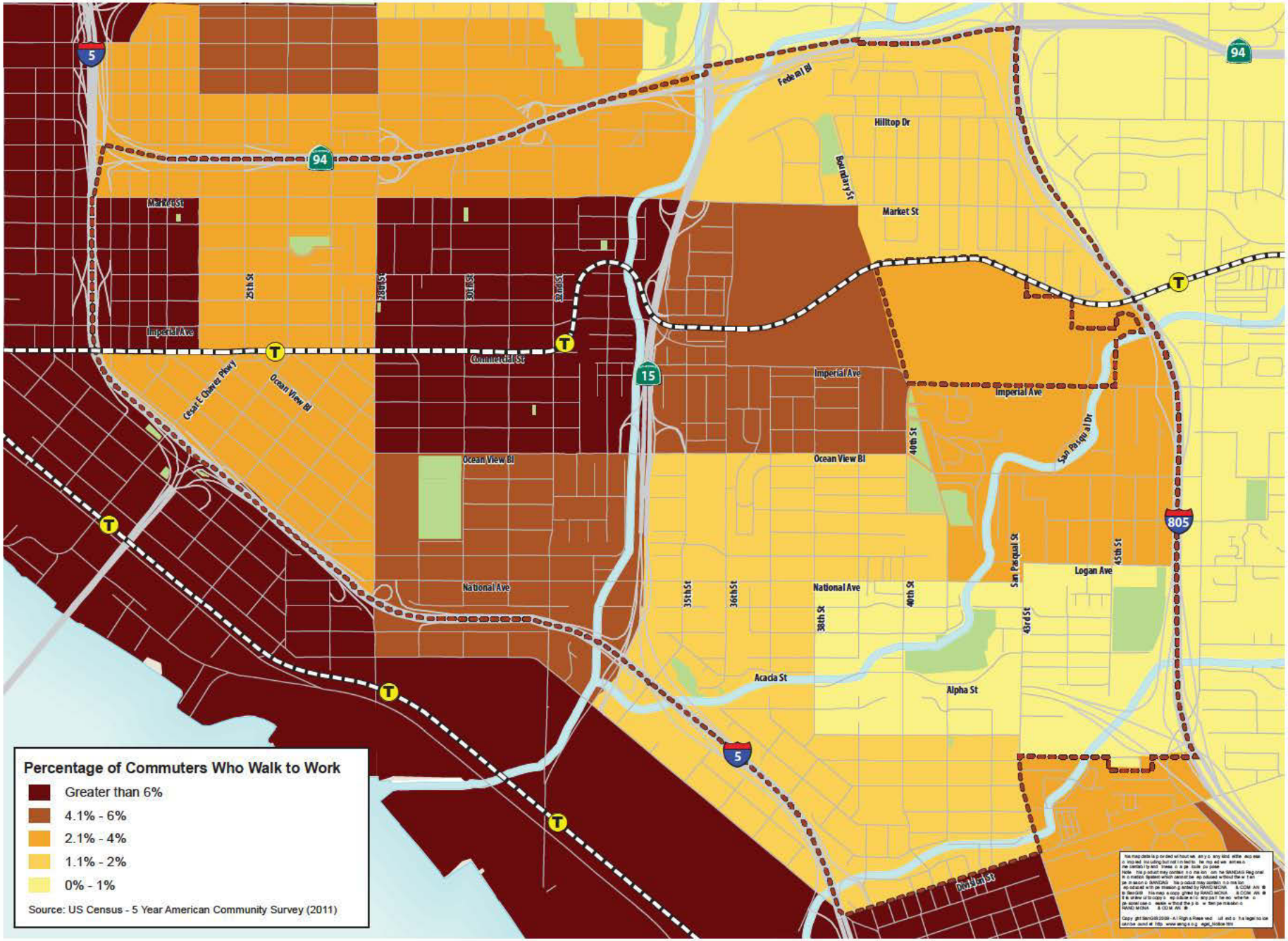
TABLE 3-2: PEDESTRIAN LEVEL OF SERVICE

ROADWAY	AM PEAK		PM PEAK	
	SCORE	LOS	SCORE	LOS
43rd Street	2.98	C	3.03	C
Imperial Avenue	2.77	C	2.83	C
Market Street	2.99	C	3.03	C
National Avenue/ Logan Avenue	2.81	C	2.97	C

Note: lower score numbers correspond to better LOS values.

Source: Chen Ryan Associates, December 2012

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

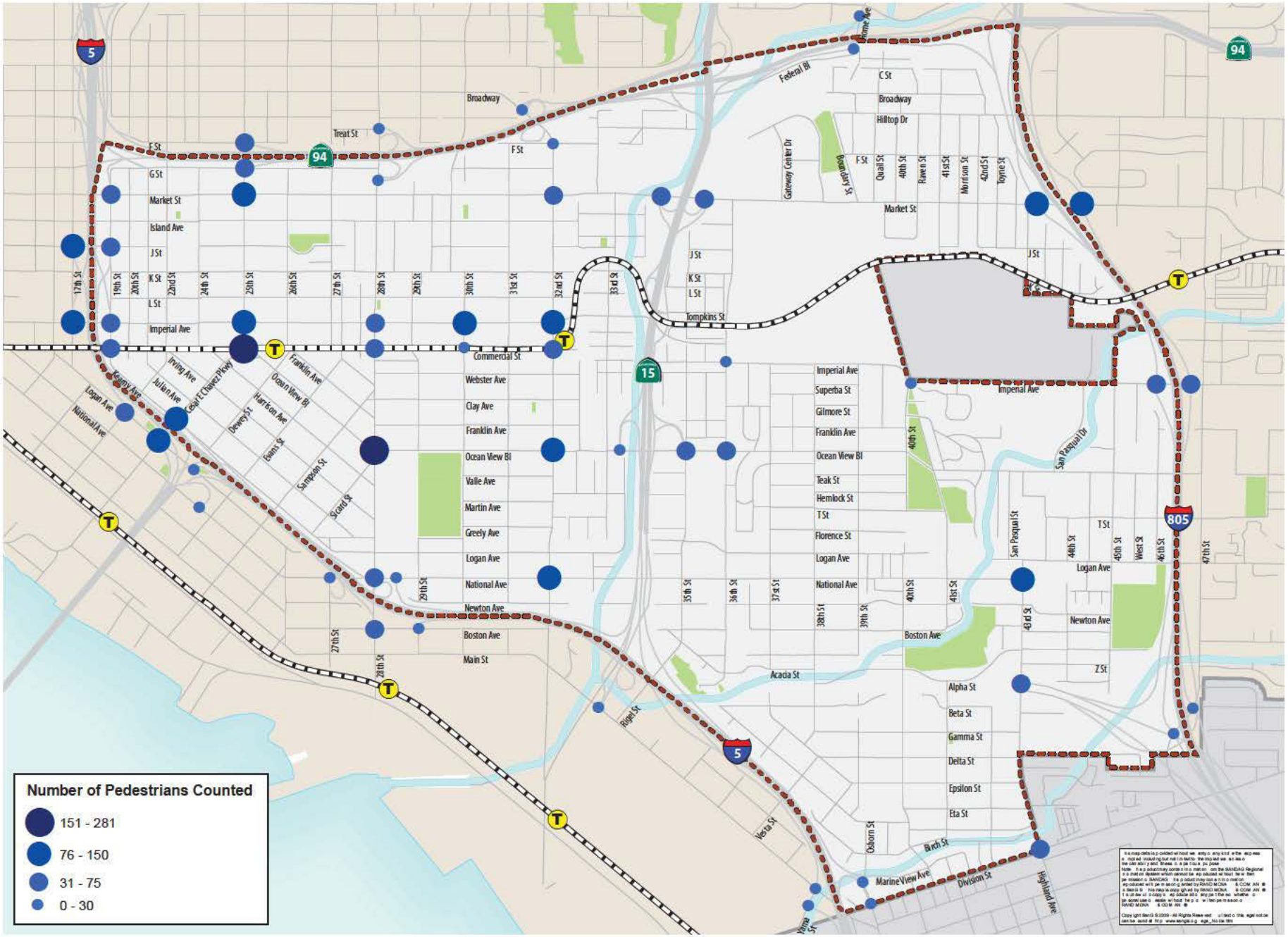


CHEN RYAN

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

SanGIS

FIGURE 3-3A: Pedestrian Volumes (AM and PM Hours)



CHEN RYAN

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

SanGIS

Figure 3-3B: Percent of Walking Commuters by Census Tract

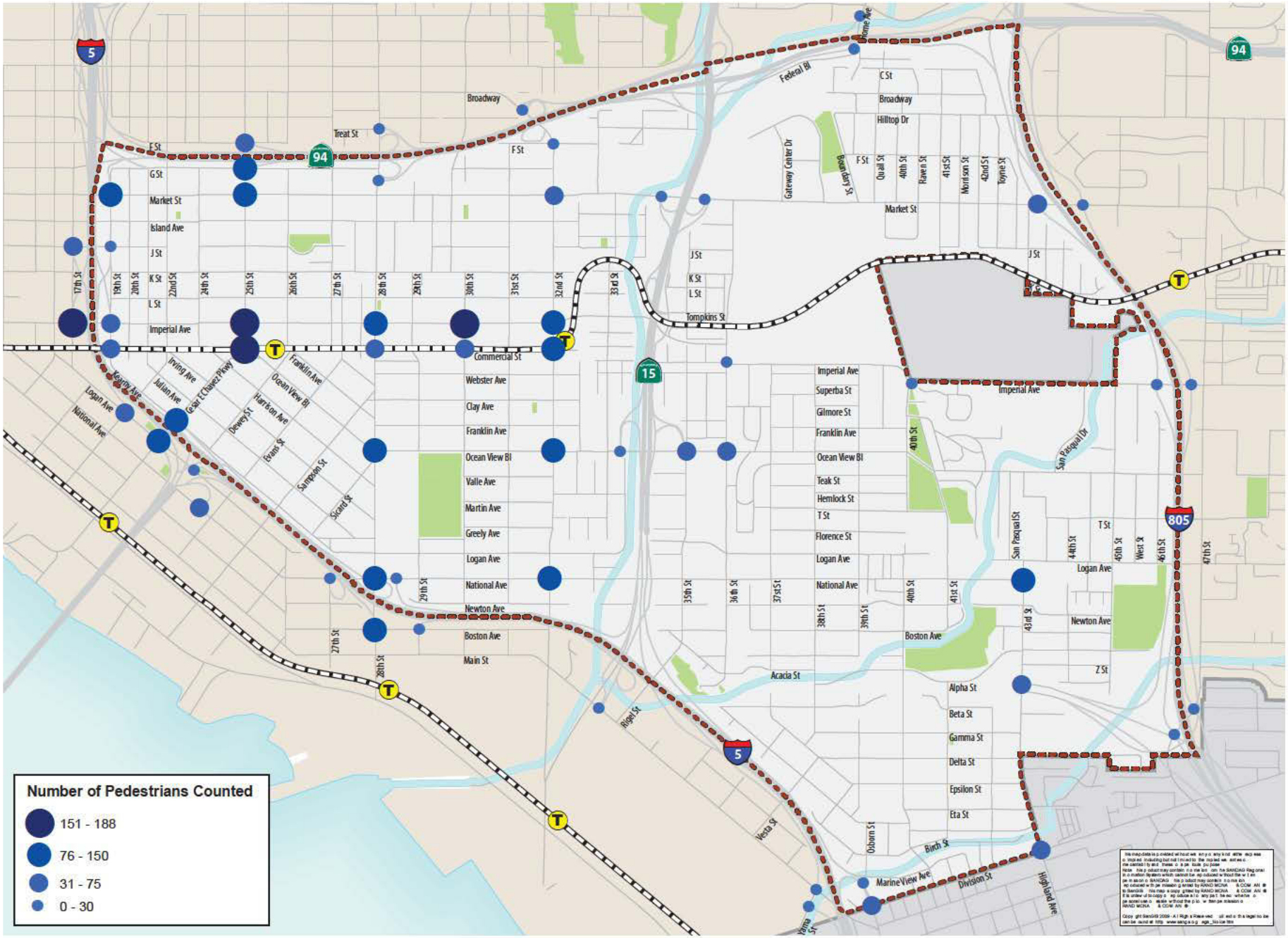
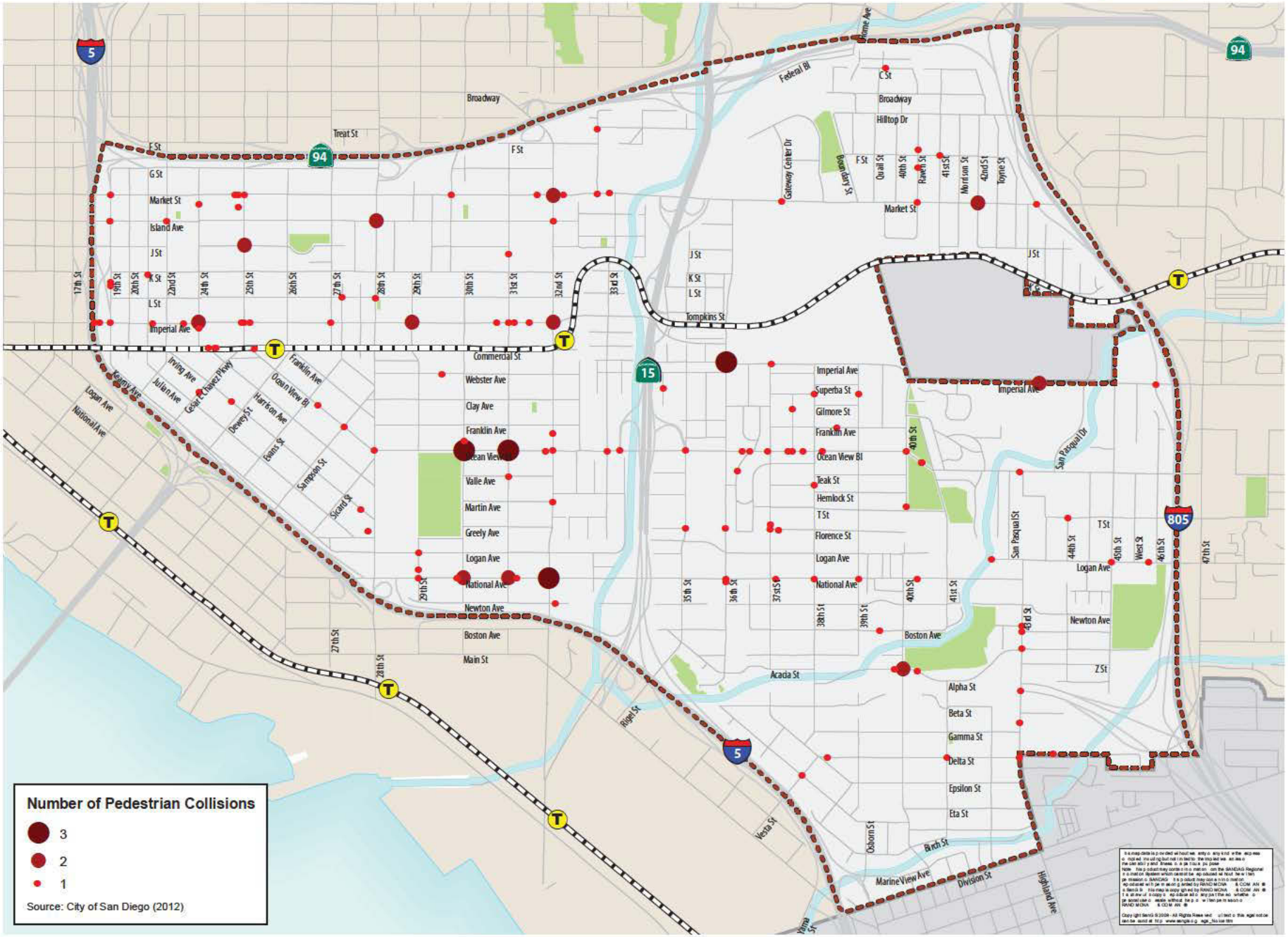


FIGURE 3-4: Pedestrian Collisions (July 2007-September 2012)



3.3 Public Transit Network

Local public transit in Southeastern San Diego 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 Southeastern San Diego, including bus transit stops and routes, as well as the light rail trolley line and stations.

Transit Facilities

Trolley Route and Stops

Southeastern San Diego is served by the San Diego Trolley Orange Line, with two stations located at 25th Street/Commercial Street and 32nd Street/Commercial 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 five bus routes with a total of 162 bus transit stops serving Southeastern San Diego. Buses provide good service in east-west directions and connecting to the 25th Street Trolley station, but few routes serve riders seeking to travel north or south. In addition, very few transit stops in Southeastern San Diego have shelters, and roughly half of the bus stops have benches and trash cans.

Regional Rail

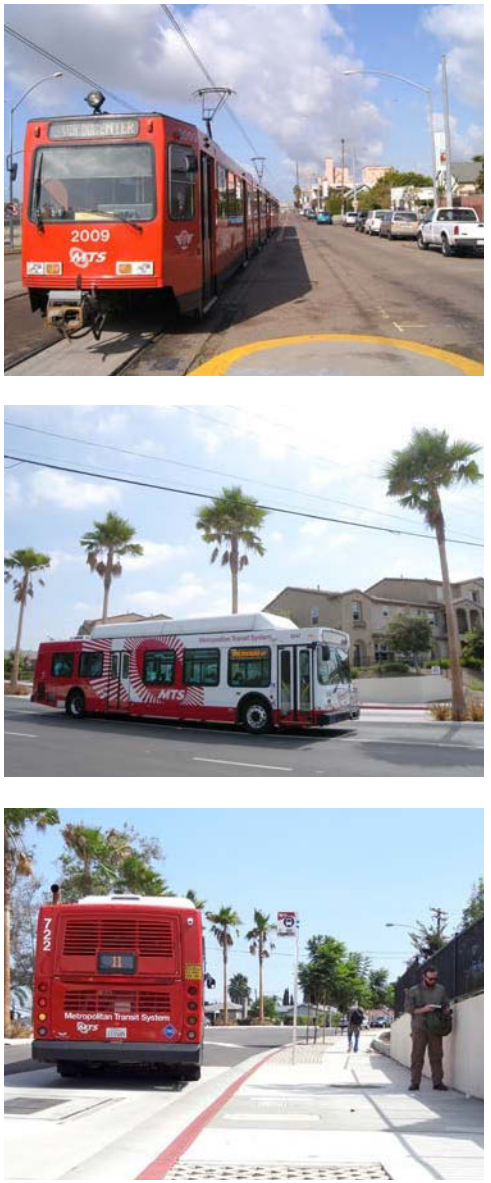
Heavy rail commuter train service, provided by the North County Transit District (called the Coaster) and Amtrak connect downtown San Diego to locations outside the county. Although there is no heavy passenger rail service directly within Southeastern San Diego, the Coaster and Amtrak services are accessible to Southeastern San Diego 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 Southeastern San Diego community for the year 2010. There were approximately 8,931 boardings and 8,867 alightings on a daily basis, for a total 17,798 daily transit trip ends within the community. The four transit stops with the highest daily boardings/alightings were as follows:

- 32nd Street & Commercial Street Station (2,495 boardings/alightings)
- 25th Street & Commercial Street Station (1,921 boardings/alightings)



The two trolley stations have the highest transit ridership rates in the Planning Area (25th Street, top). Bus ridership is highest on National Avenue at 38th Street and 43rd Street (middle, bottom), likely due to the proximity to community facilities.

FIGURE 3-5: Existing Transit Routes and Stops

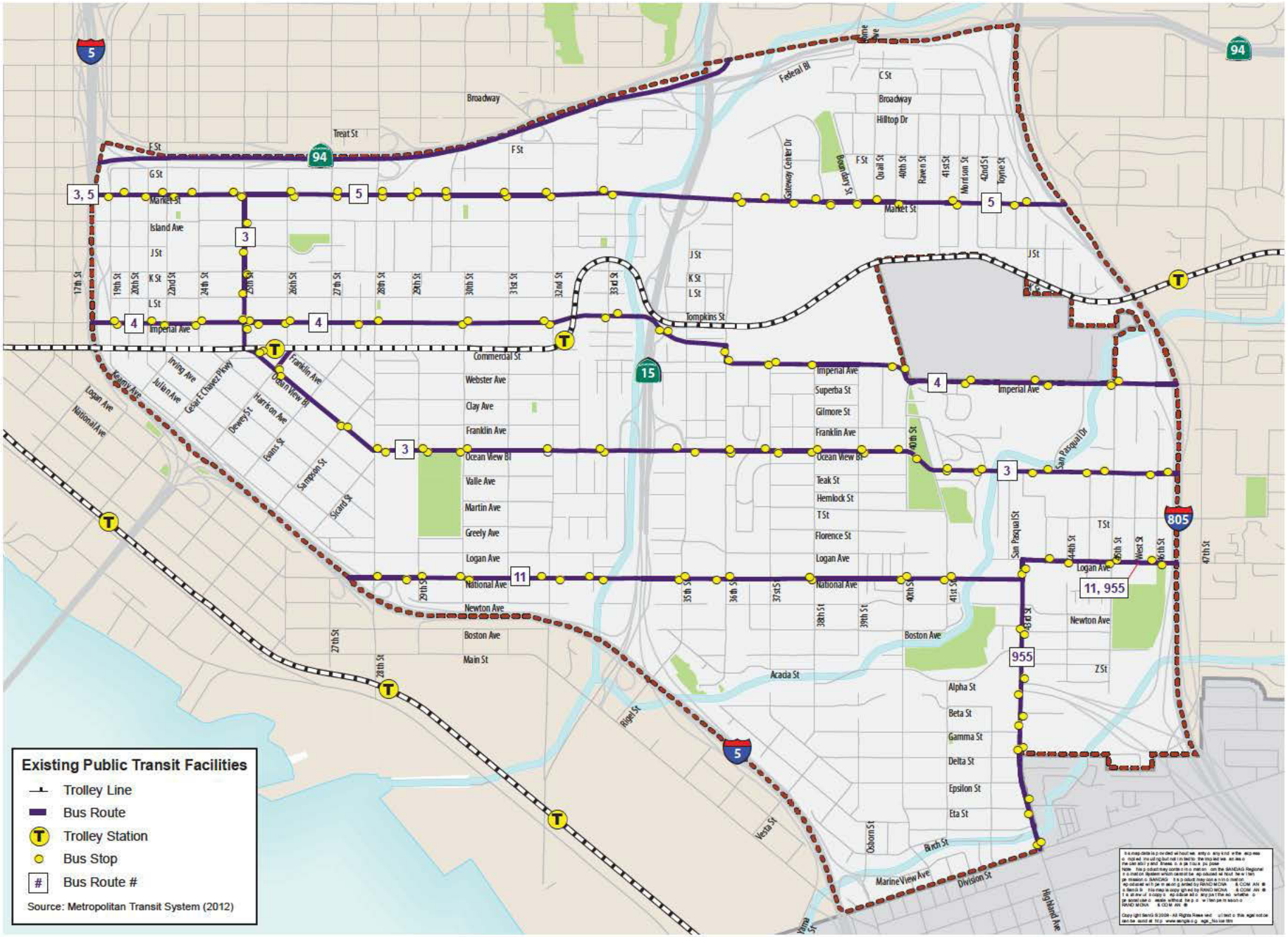
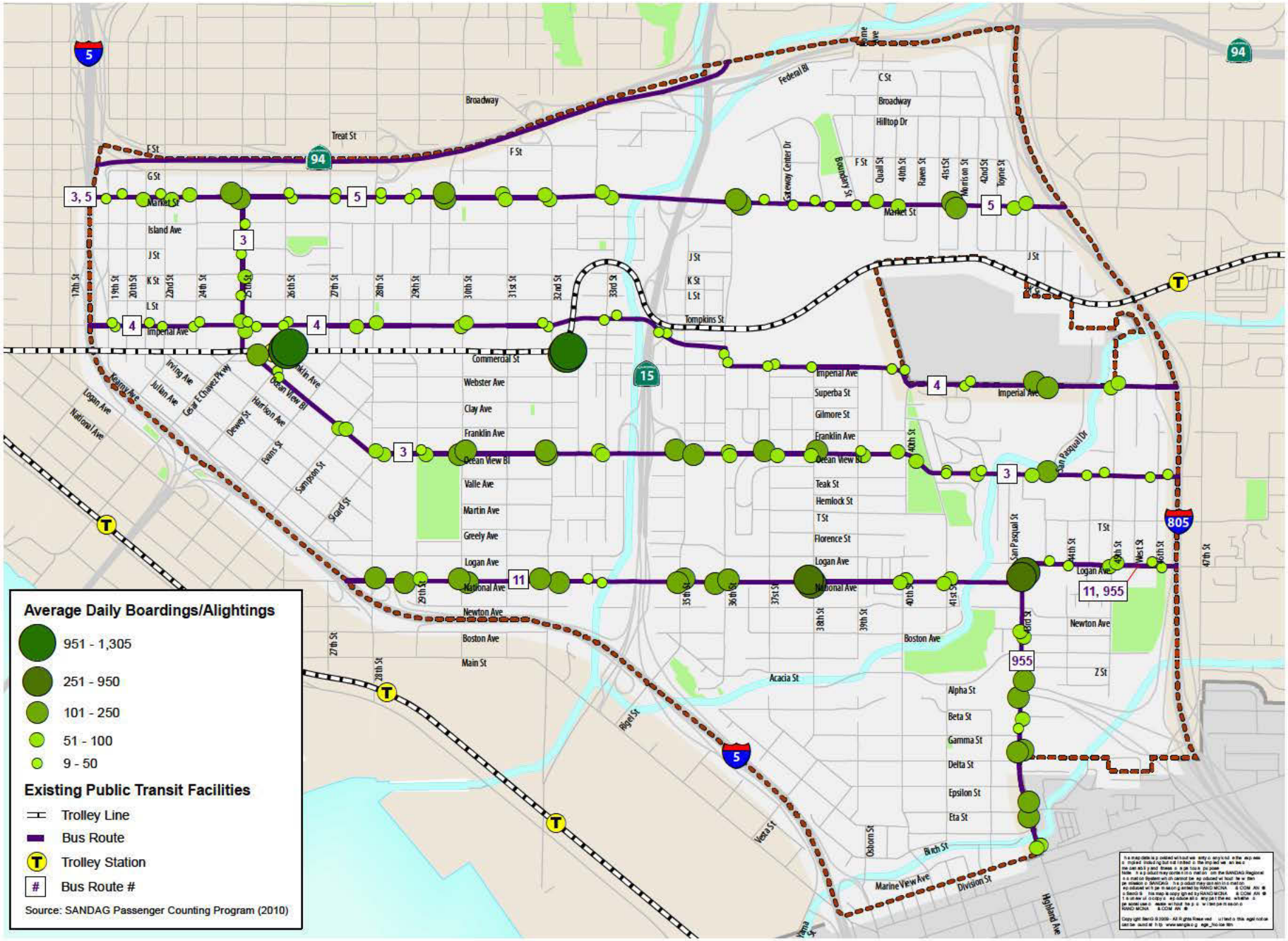


FIGURE 3-6: Transit Ridership (Average Daily Boardings and Alightings)



The transit LOS varies depending on frequency and reliability of service, as well as stop amenities. The trolley station at 32nd Street and 25th Street (top) have amenities, such as seating, trash receptacles, lighting, and shade. Bus stops (National Avenue, bottom) tend to have fewer stop amenities, suggesting that transit riders may feel less comfortable waiting for and using transit.

- 43rd Street & National Avenue (981 boardings/ alightings)
- 38th Street & National Avenue (517 boardings/ alightings)

Figure 3-7 shows the percent of Southeastern San Diego 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 west of I-5 and north of Commercial Street (25%), and in the census tract west of I-5 and south of Commercial Street (21%). The rate of transit usage for work trips among Southeastern San Diego workers is almost triple the citywide rate (12% versus 4%), but these tracts have more than five 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. Findings are as follows:

AM peak hour transit level of service within the Southeastern San Diego community is currently at LOS C or better, with the exception of Imperial Avenue, between 19th Street and the I-805 NB On-Ramps, which is currently providing transit LOS D.

Likewise, PM peak hour transit level of service within the Southeastern San Diego community is currently LOS C or better, with the exception of Imperial Avenue between 19th Street and the I-805 NB On-Ramps, which is currently providing transit LOS D.

Notably, Imperial Avenue has the lowest frequency transit service, with only 30-mintue headways being provided by Bus Route 4.

Transit Versus Auto 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 Southeastern San Diego to nine popular destinations within the region.

Travel time was obtained from using Google Maps directions. Transit costs are based on standard 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.

On average, roundtrip auto travel time is estimated to be approximately one-third that of transit time and the cost of auto travel is 60 percent higher than the cost of using transit.

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

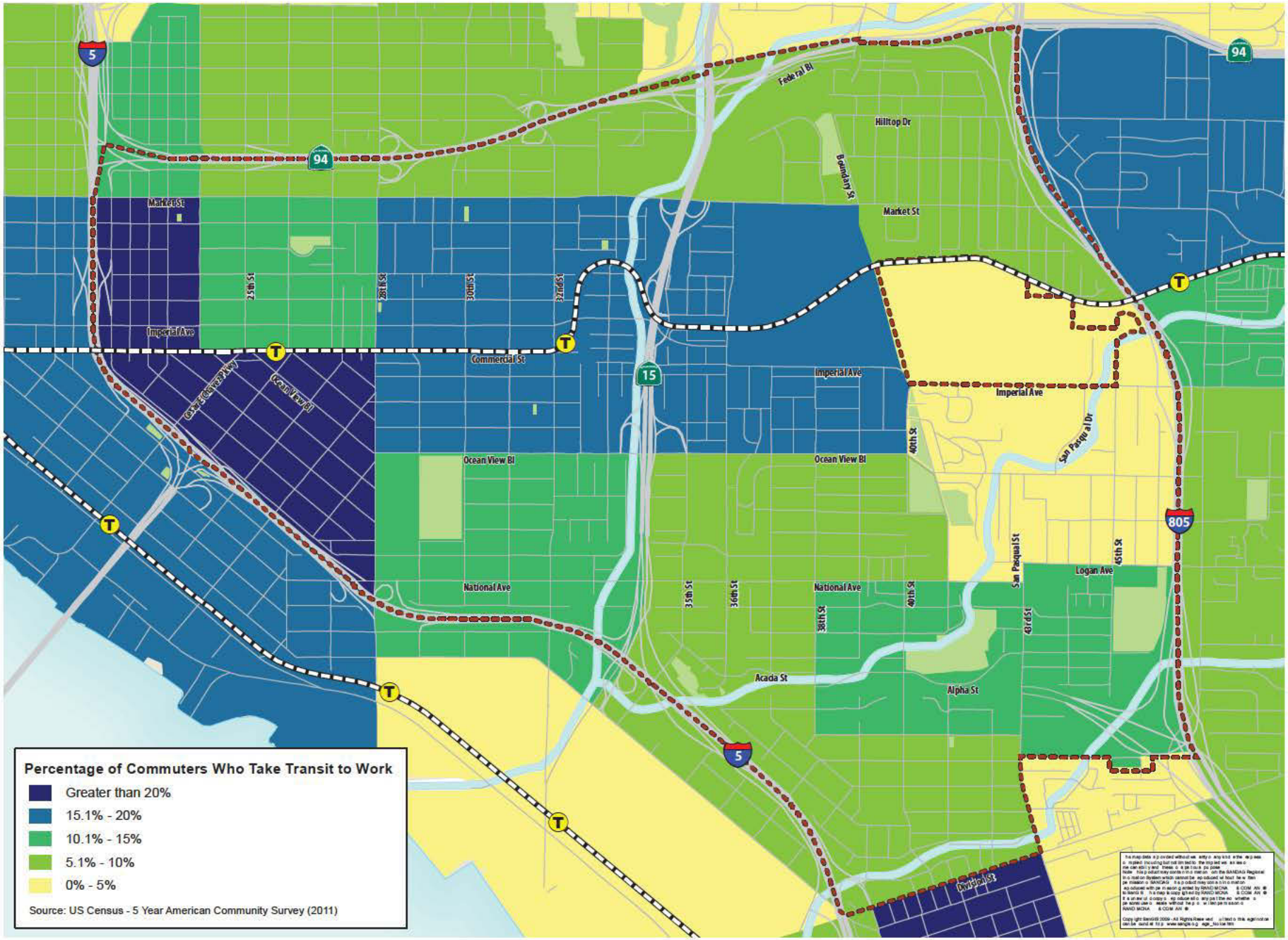


TABLE 3-3: TRANSIT-AUTO COST COMPARISON

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	7.0	13	3.89	7.77	36	4.75	5.00
San Diego State University	9.4	13	5.22	10.43	55	2.50	5.00
Price Center at UCSD	16.5	23	9.16	18.32	61	4.75	5.00
San Diego City Hall	3.1	10	1.72	3.44	17	2.50	5.00
National University at Spectrum Center	10.7	14	5.94	11.88	50	5.00	5.00
General Dynamics NASSCO	2.2	9	1.22	2.44	15	2.50	5.00
Fashion Valley Transit Center	7.1	13	3.94	7.88	39	2.50	5.00
Petco Park	1.9	7	1.05	2.11	12	2.50	5.00
Old Town Transit Station	6.7	13	3.72	7.44	34	2.50	5.00
Average	**7.2**	**12.8**	**3.98**	**7.97**	**35.4**	**3.28**	**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.

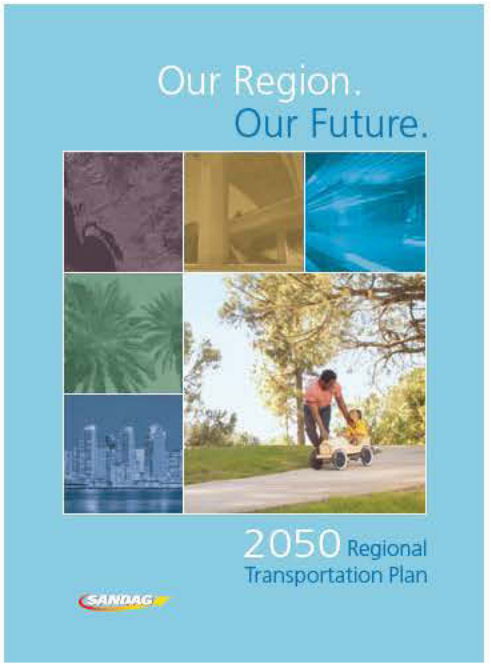
Source: Chen Ryan Associates; December 2012

Transit Planned Improvements

The San Diego Association of Government's *2050 Regional Transportation Plan* identifies several public transit improvements that will affect the Southeastern San Diego 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, 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 Southeastern San Diego 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 conducting a planning study to evaluate potential station design concepts.
- Rapid Bus, Route 11 – between Spring Valley and SDSU via Southeastern San Diego, Downtown, Hillcrest, and Mid-City. The RTP indicates this route will be implemented by the year 2035.
- Rapid Bus, Route 637 – between North Park to 32nd Street Trolley Station via Golden Hill. The RTP indicates this route will be implemented by the year 2035.
- Light Rail Transit, Orange Line – The 2050 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, Southeastern San Diego, 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 service frequencies will be improved to 15-minute headways all day along key corridors (all urban routes) by 2020 with further improvements to 10-minute (all day) frequency by 2030.

In addition to the planned transit improvements identified above, a number of BRT routes throughout the region are also planned with stations in Downtown San Diego. Given the close proximity of Downtown San Diego and Southeastern San Diego, these improvements should be beneficial to residents of the Southeastern San Diego community. It should be noted that SANDAG's Revenue Constrained scenario is based on all existing and reasonably expected revenues, which assumes increased and/or new funding sources.



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 Southeastern San Diego 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 Southeastern San Diego.

Bicycle Facilities

Figure 3-8 displays the location of existing bicycle facilities within the Southeastern San Diego community. As shown, there are currently about 7.9 miles of bicycle facility within Southeastern San Diego, with over half being comprised of Class III Bike Route, which provides cyclists with the lowest level of separation from vehicular travel.

Only 8.3 percent of Southeastern San Diego 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, 12.6 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 Southeastern San Diego. The rate of cycling to work is slightly lower in Southeastern San Diego compared to the City and also compared to the County as a whole. Approximately 133 residents are currently cycling to work, which is 0.6 percent of all workers in Southeastern San Diego. Across the City as a whole, about 0.9 percent of all workers are cycling to work.

The census tract located north of Commercial Street and west of 28th Street has the highest rate of bicycle commuting in the Planning Area at 3.9 percent of workers, which is more than triple the citywide rate of bicycle commuting.

FIGURE 3-8: Existing and Planned Bicycle Network

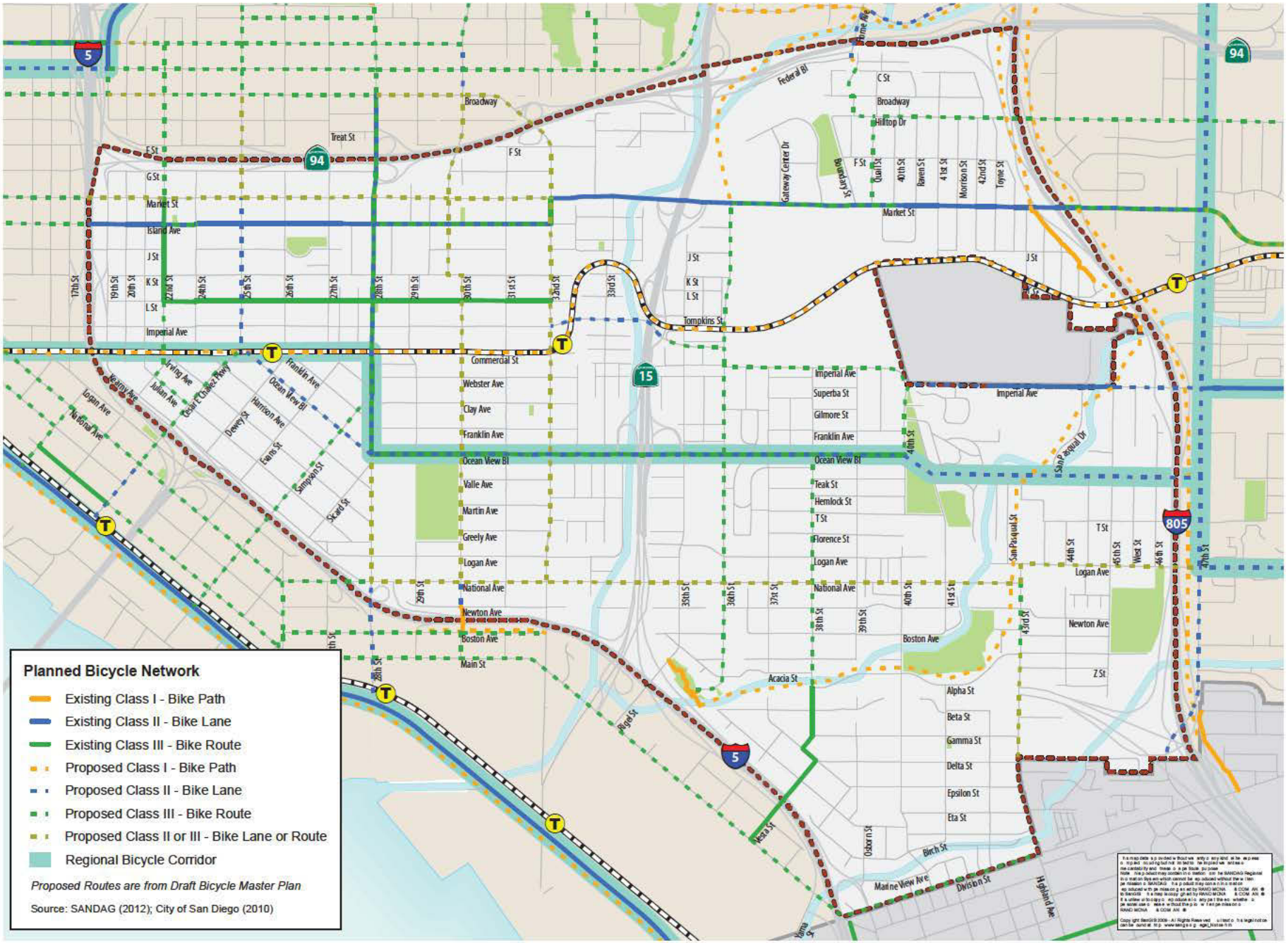
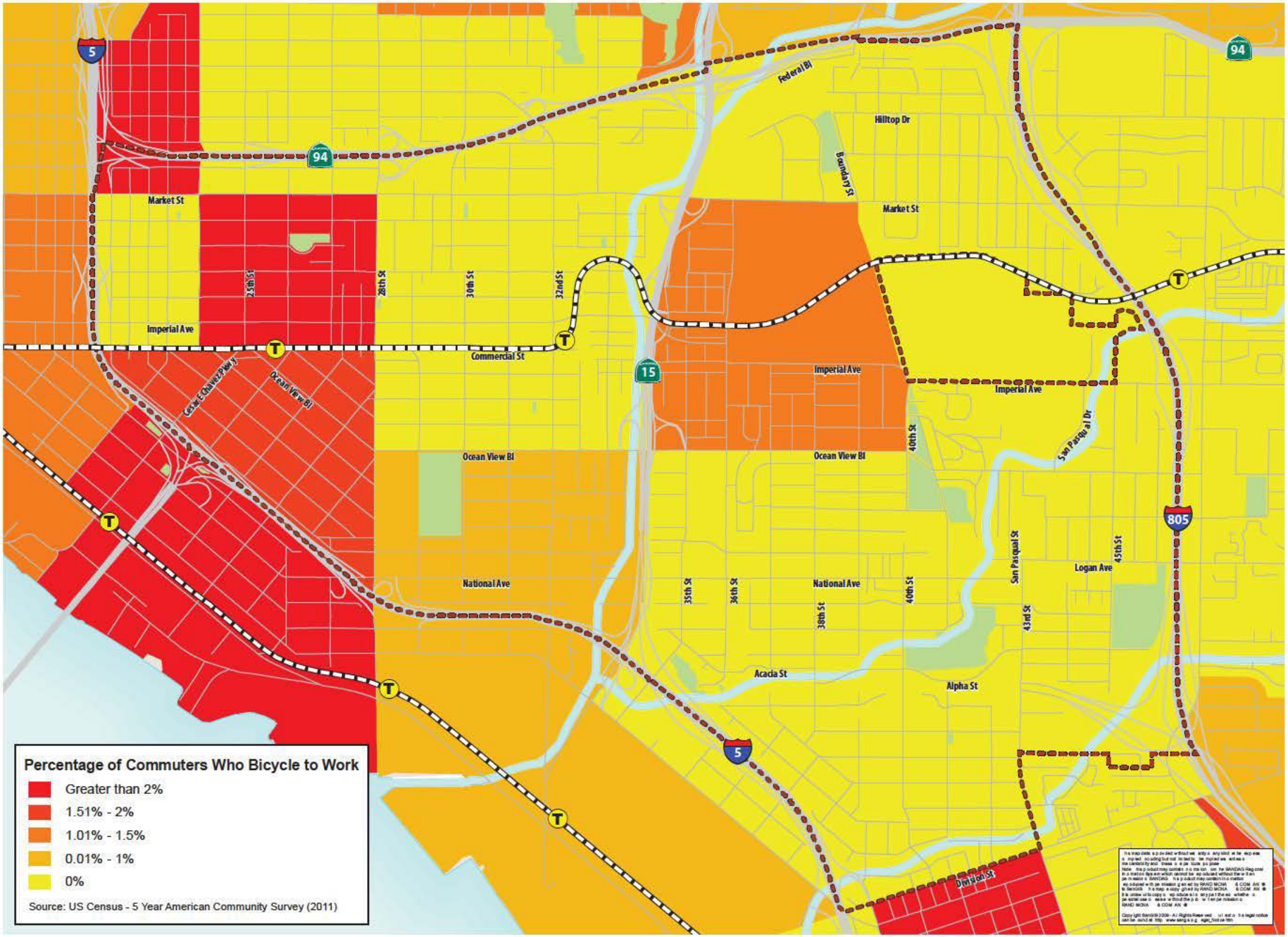


FIGURE 3-9: Percent of Bicycle Commuters by Census Tract



CHEN RYAN

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

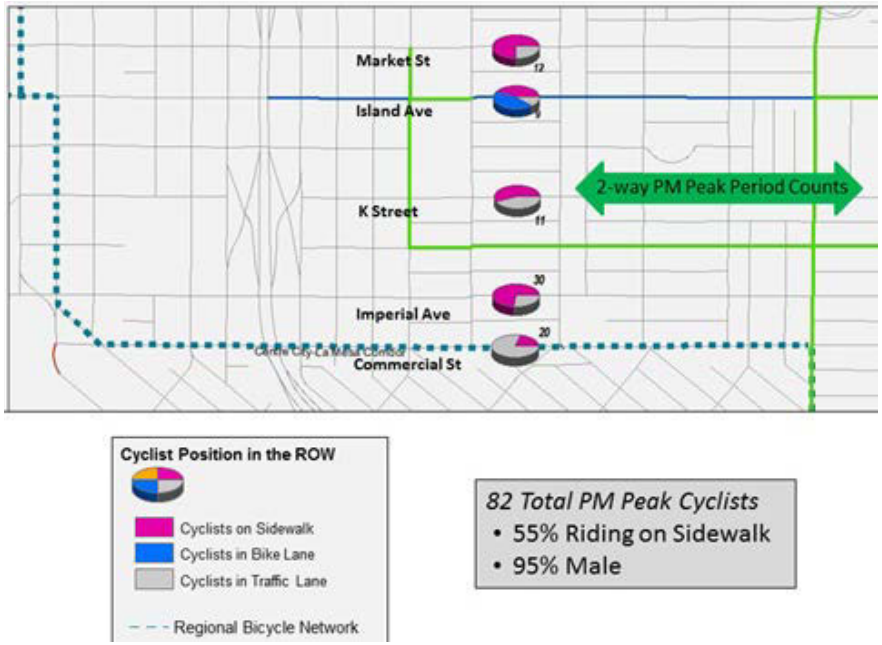
SanGIS

Bicycle Volumes

Bicycle counts undertaken for this project are shown in Figures 3-10. The highest AM peak hour bicycle count (17 AM peak hour cyclists) occurs at the 28th Street/ Imperial Avenue intersection. Two study intersections each show 16 cyclists during the AM peak hour cyclists (19th Street/I-5NB On-Ramp/Imperial Avenue and 25th Street/Imperial Avenue). These two intersections, Imperial Avenue at 19th Street and at 25th Street, also have the highest PM peak hour bicycle count (23 PM peak hour cyclists).

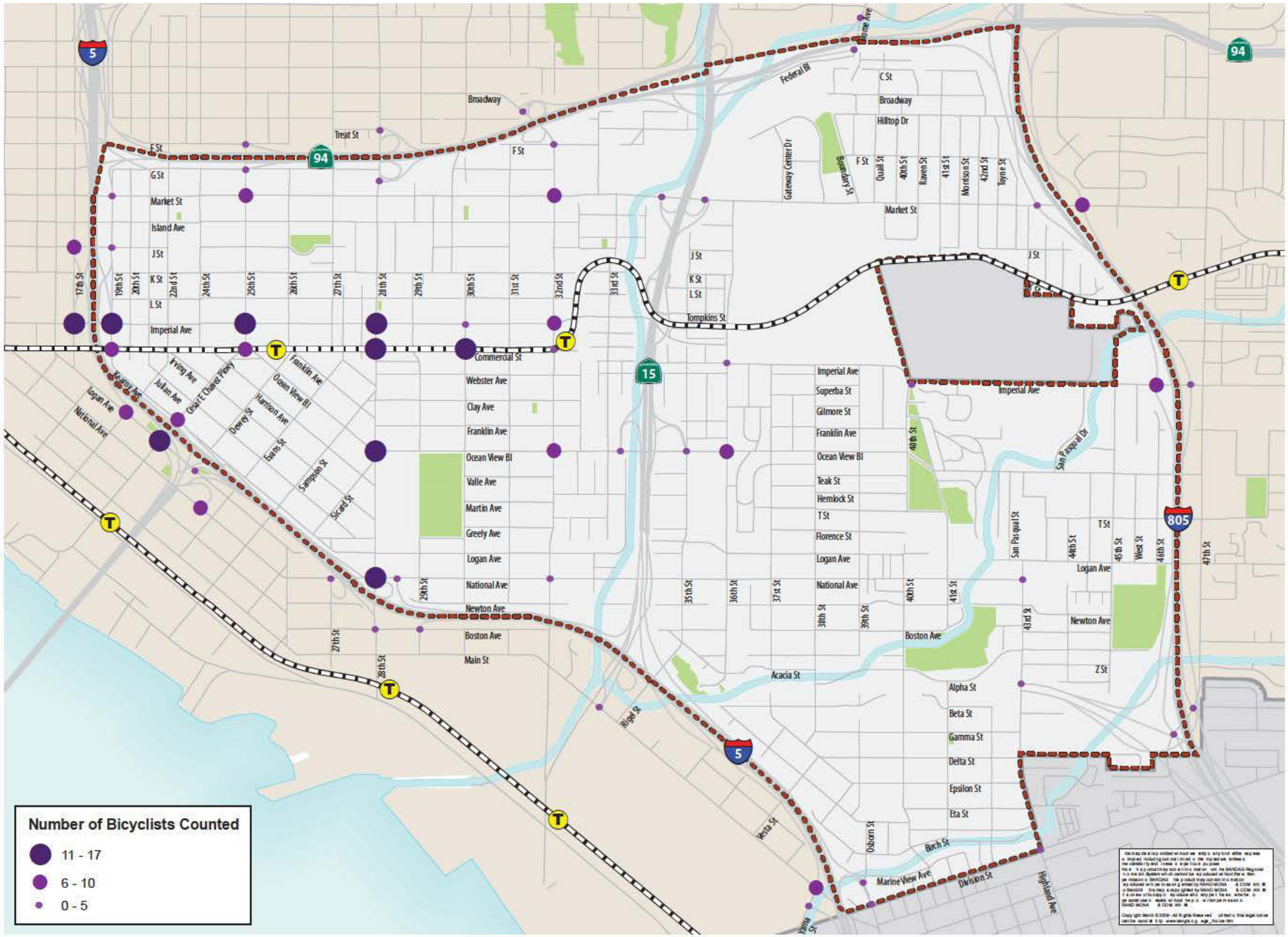
Imperial Avenue serves as a major corridor connecting Southeastern San Diego and downtown San Diego, indicating that cyclists counted during the peak period may be commuting between Southeastern San Diego and downtown San Diego. Cycling along Imperial Avenue however can be dangerous and uncomfortable due to the absence of a facility along this roadway and the need to negotiate high speed vehicle traffic near the I-5 and I-805 freeway ramps.

In fact, peak period bicycle count data collected from 4 P.M. to 6 P.M. by San Diego State University's Active Transportation Research indicates that along the key corridors in Southeastern San Diego serving east-west travel (Market Street, Island Avenue, K Street, Imperial Avenue, and Commercial Street), an average of 55 percent of cyclists are riding on the sidewalk. Similar trends are likely to occur in other locations across Southeastern San Diego. The data reflect a significant, unmet need for separated bicycle facility, and a strong reluctance on the part of Southeastern San Diego cyclists to mix with vehicular traffic.



Source: Active Transportation Research, San Diego State University; 2011

FIGURE 3-10A: AM Peak Hour Counts

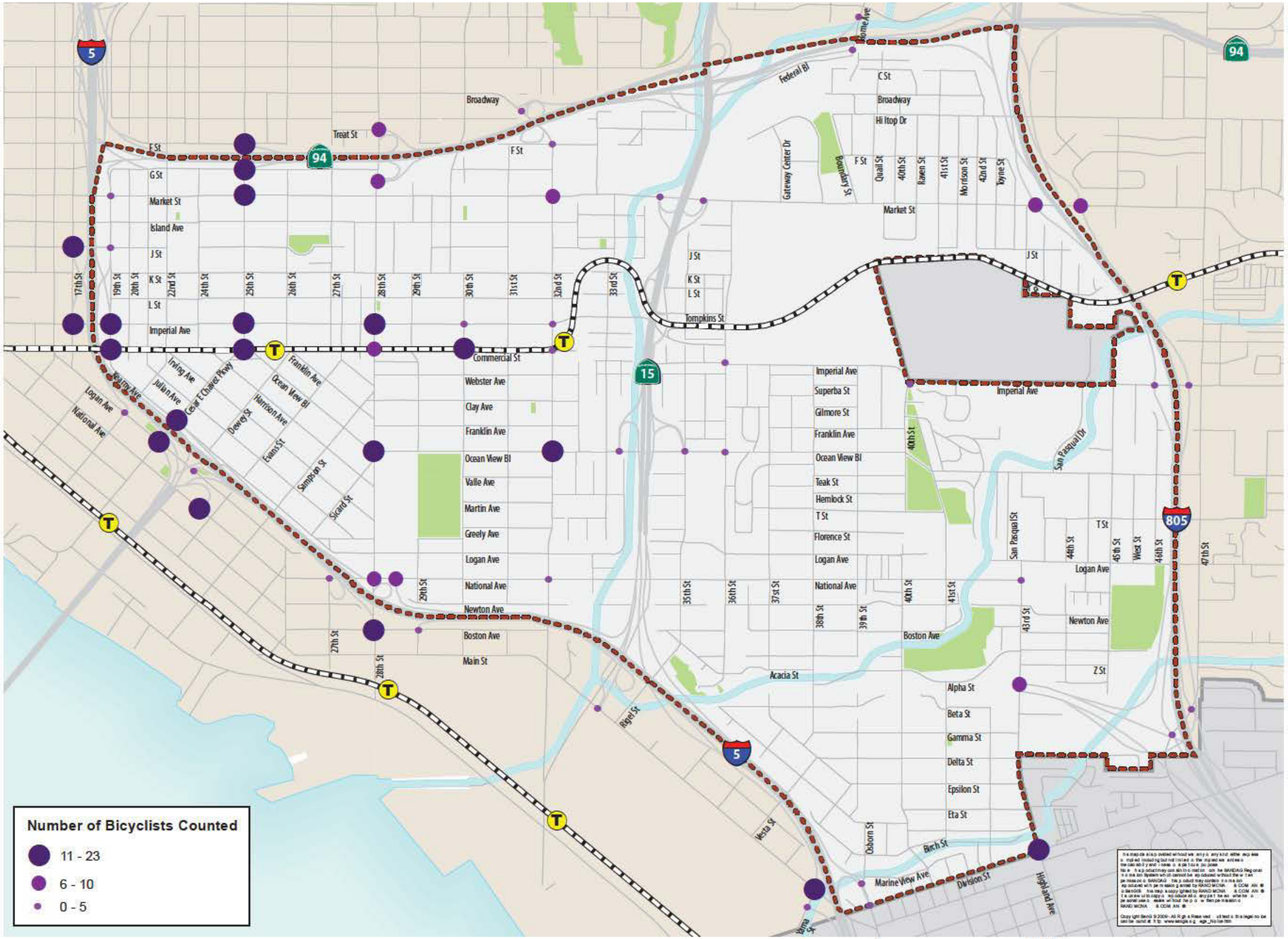


CHEN RYAN

Data Source:
City of San Diego 2012; SanG S Regional Data Warehouse 2012;
Dyett & Bhatia 2012

SanGIS

FIGURE 3-10B: PM Peak Hour Bicycle Counts

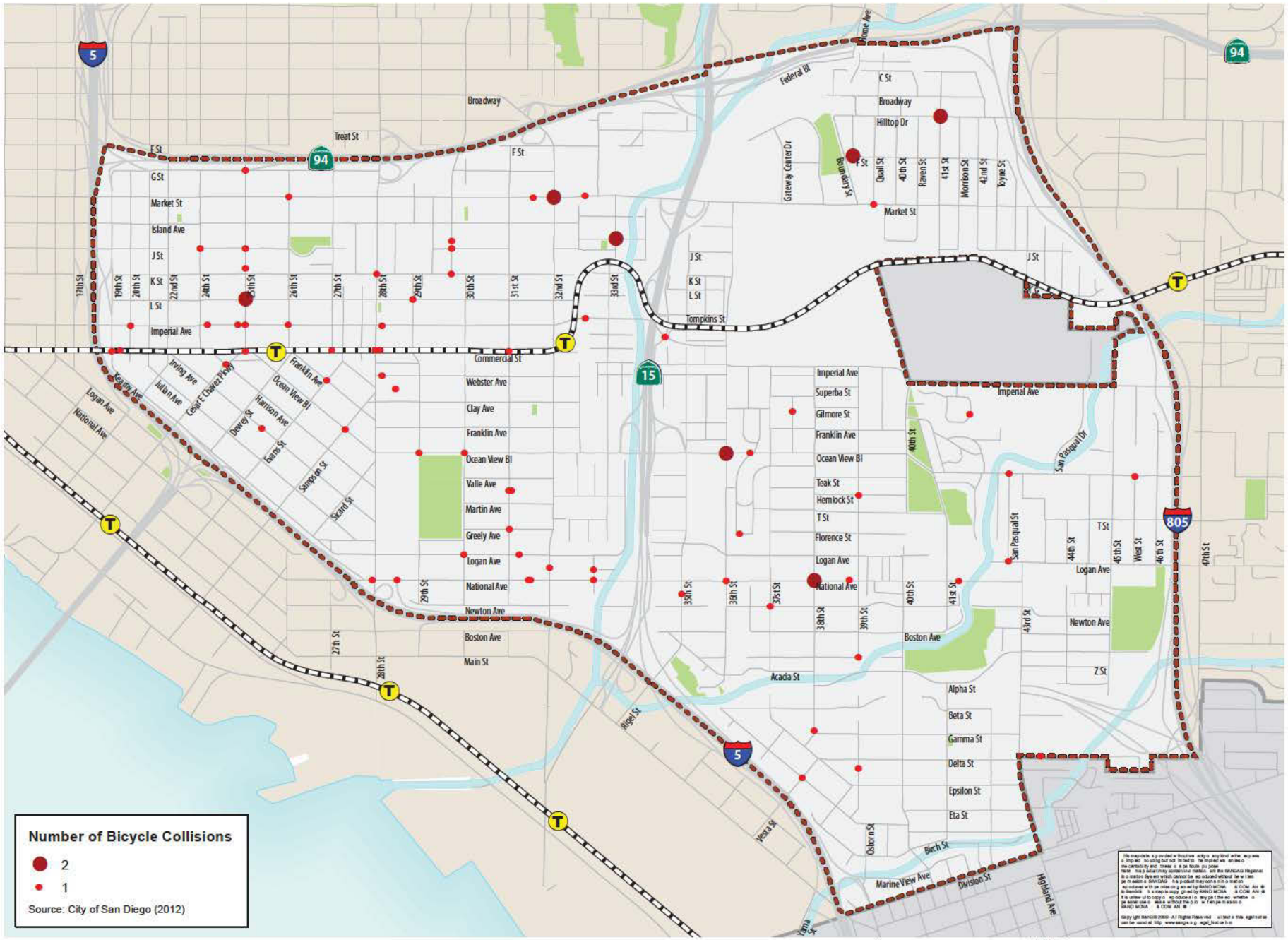


CHEN RYAN

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)



Bicycle Level of Service

Cyclist level of service was evaluated along selected corridors within Southeastern San Diego 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.

The majority of the study segments are providing LOS D for cyclists. In addition, one segment along Market Street, between 32nd Street and the I-15 SB Ramps, is providing LOS F in the eastbound direction and LOS D in the westbound direction, with a combined two-direction LOS E. The low levels of service for the cyclist is largely a reflection of the lack of bicycle facilities, in particularly Class I and Class II facilities, since only 7.3 percent of Southeastern San Diego roadways have bicycle facilities.

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 Southeastern San Diego.

During this period there were a 79 bicycle-related collisions reported within Southeastern San Diego. There were no bicycle-related fatalities during this period, but a majority of the reported collisions resulted in an injury (75 injured out of 79 total collisions). A majority of the collisions involved adult cyclists (54 adult cyclists), rather than children (25 child cyclists).

3.5 Streets and Freeways

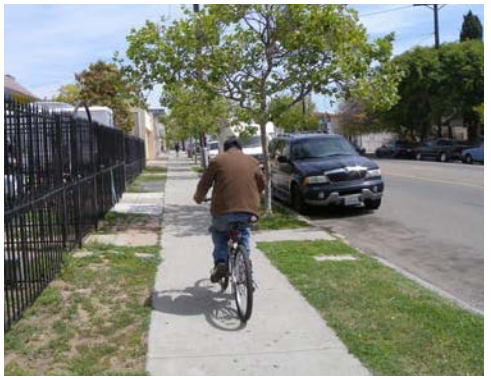
This section identifies key study roadways, intersections, and freeways in Southeastern San Diego, and presents existing level of service conditions associated with these facilities. The roadway network is comprised of regional facilities such as I-5, I-805, I-15, and SR-94, as well as numerous arterials and local streets, as shown in Figure 3-12.

Traffic Volumes and Level of Service

It is common practice to consider existing and future typical 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.

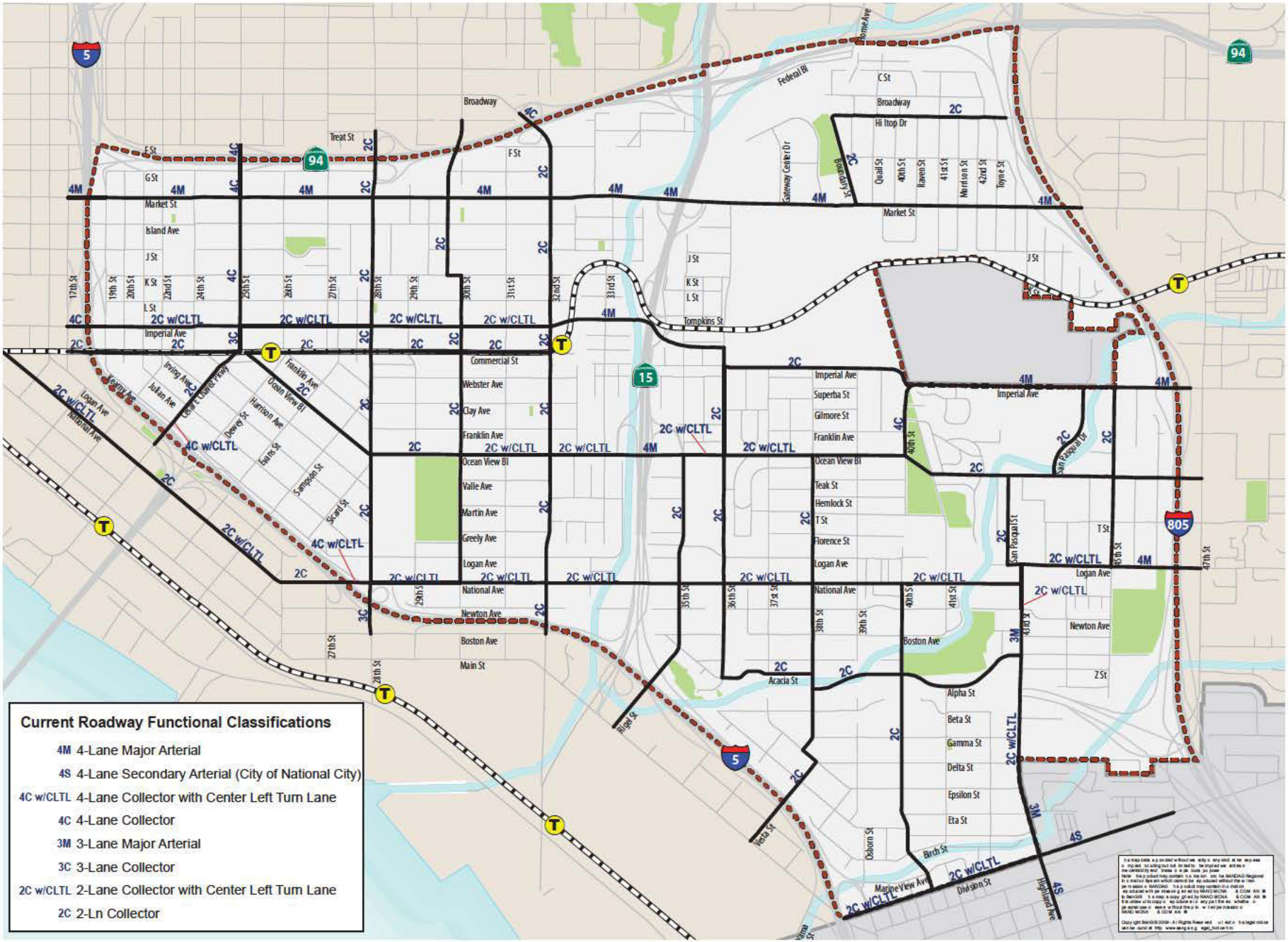
As shown in the figure, while much of the Planning Area is operating at LOS A, B or C, there are currently eleven roadway segments within Southeastern San Diego that are operating at LOS E or F, indicating significant delay:

- Ocean View Boulevard, between 32nd Street and I-15 SB Ramps (LOS E);
- Ocean View Boulevard, between I-15 NB Ramps and 36th Street (LOS E);
- National Avenue, between 28th Street and I-5 NB Ramps (LOS F);
- Division Street, between Main Street and Osborn Street (LOS F);
- 28th Street, between SR-94 WB Ramps and SR-94 EB Ramps (LOS F);



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

FIGURE 3-12: Roadway Network



- 28th Street, between SR-94 EB Ramps and Market Street (LOS F);
- 28th Street, between Market Street and Imperial Avenue (LOS E);
- 28th Street, between Ocean View Boulevard and National Avenue (LOS F);
- 35th Street/Rigel Street, between Ocean View Boulevard and Main Street (LOS E);
- 43rd Street, between Logan Avenue and Newton Avenue (LOS E); and
- 43rd Street, between Beta Street and Delta Street (LOS F).

In addition, there are two segments within the Southeastern San Diego sphere of influence (both in Barrio Logan) that are currently operating at poor LOS E or F, as follows:

- National Avenue, between 26th Street and 27th Street/I-5 SB Off-Ramps (LOS F); and
- 28th Street, between National Avenue and Boston Avenue (LOS E).

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 eight segments:

- I-5, between 17th Street and SR-94 (southbound) – LOS E;
- I-5, between SR-94 and Imperial Avenue (northbound) – LOS F;
- I-5, between 28th Street & I-15 (northbound) – LOS F;
- I-5, between I-15 and Main Street (northbound and southbound) – LOS E;
- I-805, between Home Avenue and SR-94 (northbound and southbound) – LOS F;
- I-805, between SR-94 and Market Street (northbound and southbound) – LOS F;
- I-805, between Imperial Avenue and 43rd Street (southbound) – LOS E; and
- SR-94, between I-805 and 47th Street (westbound) – LOS E.

The freeways represent areas of high volumes where LOS values are often failing, at levels below LOS D.

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

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 1,594 vehicle-to-vehicle collisions occurred over this period within Southeastern San Diego.

Figure 3-14 shows the distribution of automobile collisions across Southeastern San Diego. These collisions resulted in 763 injuries and two fatalities. The most prominent collision causes are "unsafe movements" on the part of the driver, and "unsafe speeds."

Table 3-4 shows a summary of all collisions, including pedestrian, bicycle and automobile collisions, along the "Urban Streets" analyzed using Multimodal Level of Service methods for this project. Citywide collision average rates along similar roadway types range from 0.47 to 0.86 collisions per million vehicle miles, while on the Southeastern San Diego Urban Streets, the collision rates range from 1.13 to 5.59 collisions per million vehicle miles. As shown in the table, all of the Urban Streets within Southeastern San Diego have collision rates significantly higher than the citywide averages.

TABLE 3-4: VEHICLE COLLISIONS ON URBAN STREETS (JULY 2007 TO SEPTEMBER 2012)

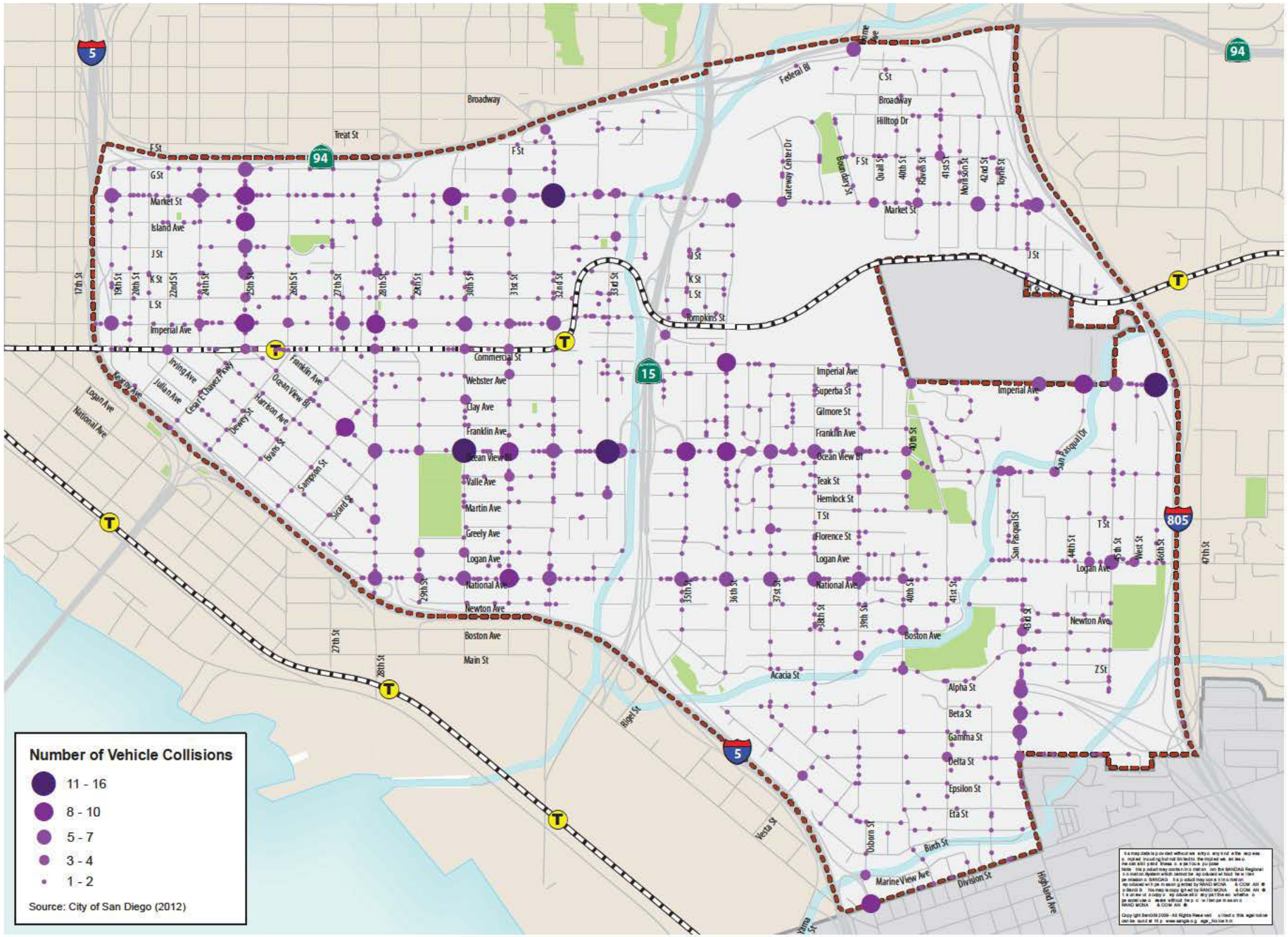
ROADWAY	SEGMENT	WEIGHTED ADT	SEGMENT LENGTH (MILES)	TOTAL # OF COLLISIONS	SEGMENT COLLISION RATE[1]	CITY-WIDE COLLISION RATE[1]
Market St.	I-5 to I-805	15,600	2.85	191	2.35	0.47
Imperial Avenue	I-5 to 32nd Street	5,100	1.36	96	7.58	0.56
	32nd to 36th Street	6,600	0.52	35	5.59	0.47
	36th to 40th Street	7,900	0.55	9	1.13	0.86
	40th Street to I-805	12,100	0.77	45	2.65	0.47
National/ Logan Ave.	28th Street to I-805	11,700	2.27	189	3.90	0.56
43rd Street	Logan Ave. to Division St.	15,500	0.83	60	2.56	0.56

1 The rates are measured in per million vehicle miles.

Source: City of San Diego, Chen Ryan Associates; December 2012

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.

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



Roadway Design, Level of Service, and Vehicle Collisions

The street system in Southeastern San Diego has evolved over the years, and represents a diverse tapestry of street functions and geometries—for example, streets similar in right of way may have different number of lanes or may or may not have a center turn lane, carry bus transit or not. The analysis previously presented portrays transportation information in maps, and raises several policy issues related to safety.

Mid-block left turns enable properties that are to the left of the traffic flow on two-way streets to be directly accessed by vehicles. The need for this access can be highly infrequent—such as in the case of homes along a block—or more frequent in case of commercial properties with higher traffic generation rates, such as a restaurant. In the absence of a mid-block left turn opportunity, vehicles would either have to either make a U turn at a crossing or go around the block.

Where mid-block left turns are desired, a Continuous Left Turn Lane (CLTL) provides greater capacity for traffic flow—in general, the CLTL increases capacity (8,000 vs. 15,000), provide on-street access to fronting properties, as well as improves safety since turning vehicles are out of the travel lanes. The broader issue thus is not whether CLTLs are desirable, but rather what should be the driving criteria when mid-block turns should not be allowed.

Table 3-5 compares a few streets in the Planning Area that share certain characteristics—namely, traffic volumes—but have differences in geometry, functionality, level of service, most importantly, differences in the number of vehicle collisions, as illustrated on Figure 3-14. Two sets of comparable streets are shown:

- **25th and 28th Streets, Near Island Avenue:** Figure 3-14 illustrates a lower number of vehicle collisions on 28th Street. Although it carries roughly the same amount of traffic, compared with 25th Street, 28th Street is narrower, has only one lane in each direction, has a Class III shared bike route, and operates at a lower level of service (LOS E), suggesting that traffic is generally moving slower. On the other hand, 25th Street is wider, has two lanes in each direction, has bus service (which may require cars to shift lanes as buses pull over to pick up passengers), and operates at an acceptable level of service (LOS C), meaning that cars are moving at higher speeds compared with 28th Street.
- **Imperial and National Avenues and Ocean View Boulevard, Near 38th Street:** Figure 3-14 illustrates a lower number of vehicle collisions on Imperial Avenue. While all three streets are 2-Lane Collectors, National Avenues and Ocean View Boulevard both have Continuous Left-Turn Lanes allowing access to the many driveways and destinations along these two streets. This segment of Imperial Avenue, on the other hand, has a cemetery on the north side of the street, with little traffic and few driveways.

TABLE 3-5: ROADWAY COMPARISONS

	COMPARABLE STREET WITH HIGHER NUMBER OF VEHICLE COLLISIONS				COMPARABLE STREET WITH LOWER NUMBER OF VEHICLE COLLISIONS	
Comparison #1						
	25th Street near Island Avenue				28th Street near Island Avenue	
	Similarities • On-street parallel parking • Posted speed limit of 30 mph • Daily Traffic Volumes = 10,900	**Differences** • 4-Lane Collector, No CTL • LOS C • Route 3 Bus Service			**Similarities** • On-street parallel parking • Posted speed limit of 30 mph • Daily Traffic Volumes = 10,000	**Differences** • 2-Lane Collector • LOS E • Class III Bike Route
Comparison #2						
	National Avenue near 38th Street		Ocean View Boulevard near 38th Street		Imperial Avenue near 38th Street	
	Similarities • LOS D • Daily Traffic Volumes = 10,000 • Posted speed limit of 30 mph • Route11 Bus Service	**Differences** • 2-Lane Collector with Continuous Left-Turn Lane • Mixed use area—more driveways and destinations	**Similarities** • LOS D • Daily Traffic Volumes = 13,700 • Posted speed limit of 30 mph • Route 3 Bus Service	**Differences** • 2-Lane Collector with Continuous Left-Turn Lane • Class III Bike Route • Residential area—more driveways	**Similarities** • LOS D • Daily Traffic Volumes = 10,300 • Posted speed limit of 30 to 40 mph • Route 4 Bus Service	**Differences** • 2-Lane Collector • Cemetery on north side—fewer destinations and driveways • On-street parking, one side only

Source: Dyett & Bhatia, Chen/Ryan Associates, 2012.

While this analysis does not determine causality for the variation in the number of collisions, it does help us to understand some of the factors that may account for the variation in the number of collisions, which is important for developing a transportation network that is safe for all users, regardless of mode. While at lower traffic volumes mid-block left turns are not a significant issue, at higher traffic volumes or on streets with bus transit, mid-block left turns may impede traffic, including transit, and potentially result in greater number of accidents. These issues can be exacerbated where both high volumes and buses are present, and raises the issue of whether mid-block left turns are appropriate in these situations. Also, CLTLs take up right of way, and it is difficult in many situations—such as along Imperial Avenue—to accommodate both a CLTL and a dedicated bike lane.

In addition, the general development pattern of development in the Southeastern community is longer blocks in the east-west direction, with these streets providing property access. Thus, virtually all streets with CLTL in the area have an east-west orientation.

3.6 Parking

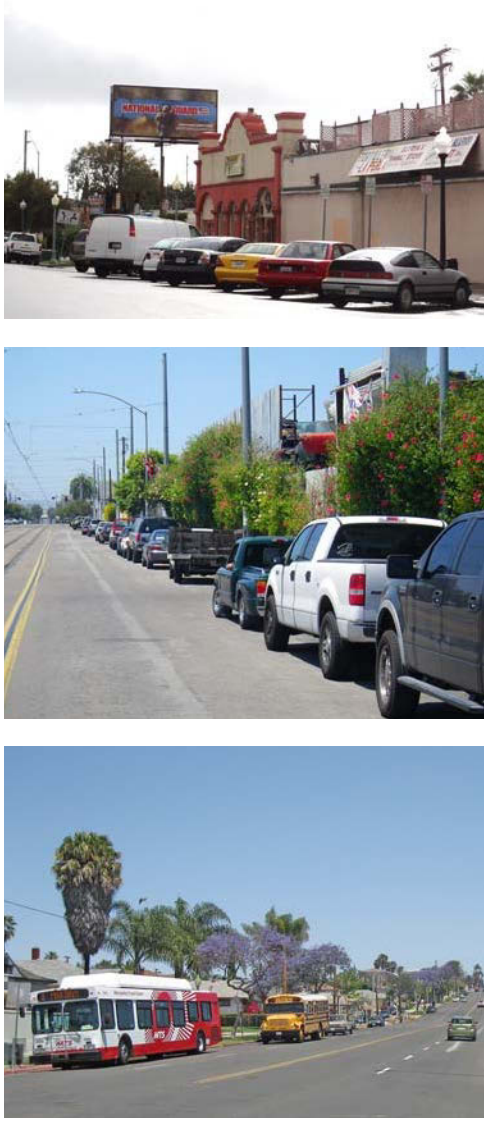
Southeastern San Diego currently has a variety of parking options, including public on-street parking (with and without time restriction), as well as private off-street parking for local businesses.

Occupancy

On-street "drive-by" parking occupancy data was collected on Wednesday, December 5, 2012. Parking occupancy data was collected during periods in the morning (7AM - 9AM), Noon (11AM - 1PM), and evening (6:30PM to 8:30PM), in order to determine the variations in parking demand resulting from the mix of land uses in Southeastern San Diego. The overall peak weekday parking demand period is between 11:00PM and 1:00PM (noon peak). Figure 3-15 shows the observed percent parking occupancy during the noon peak. As shown, there is currently a high demand for on-street parking during the noon peak period at the following locations:

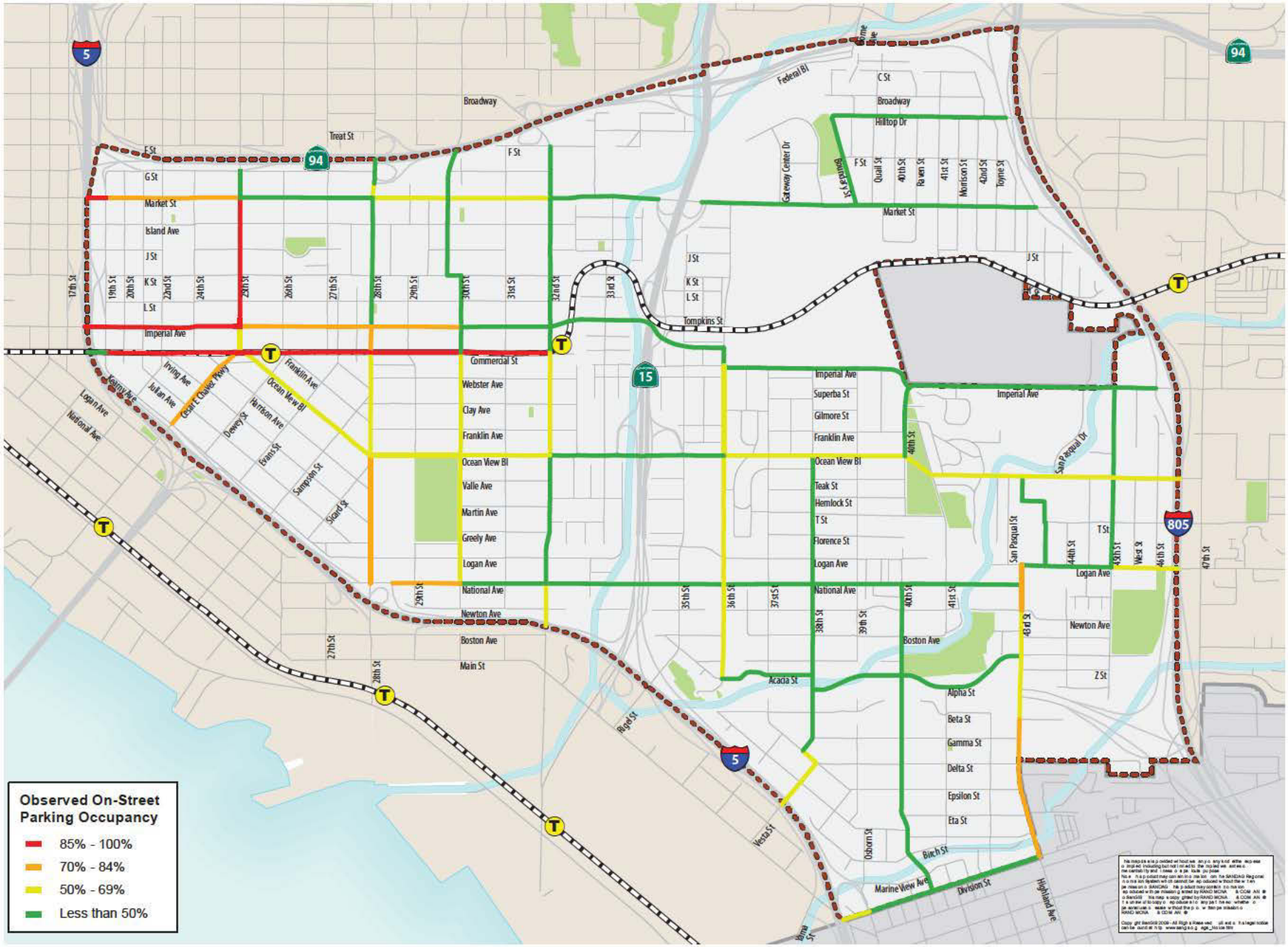
- Commercial Street, between 19th street and 32nd Street
- Imperial Avenue, between 19th Street and 25th Street; and
- 25th Street, between Market Street and Imperial Street

During the morning peak period, the highest demand for parking was seen only along more limited segments of Commercial Street (between 30th and 32nd streets) and Imperial Avenue (between 28th and 30th streets). During the evening peak period, the highest demand was found along 28th Street between Commercial Street



The highest parking occupancy rates were found midday in the Commercial/Imperial corridor (top, middle) and along 25th Street (bottom), likely workers driving to work in the corridor or downtown.

FIGURE 3-15: Observed Noon Peak On-Street Parking Occupancy



CHEN RYAN

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

SanGIS

and Ocean View Boulevard and along Ocean View Boulevard between Commercial and 28th Streets, as well as along 43rd Street and Highland Avenue south of Beta Street. During both the morning and evening peak periods, a high demand for parking was found along San Pasqual Street between Logan Avenue and Ocean View Boulevard, adjacent to the Educational Cultural Complex and the Mountain View Beckworth Library.

3.7 Airport and Goods Movement

San Diego International Airport and the Proposed Intermodal Transit Center

The closest airport serving Southeastern San Diego 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 be served by the ITC.

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. Southeastern San Diego 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 Southeastern San Diego is provided by major freeways, including specifically I-5, I-15, I-805 and SR-94. Within Southeastern San Diego, industrial and commercial destinations occur throughout the community but are more concentrated along Commercial Street. 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 Southeastern San Diego via air freight transport companies such as FedEx, DHL Express and UPS. San Diego International Airport serves as the primary regional airport for freight trans-

ported 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 Orange Line trolley corridor through Southeastern San Diego 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] It also suggests potential for conflict between freight trains and community members who live on or near Commercial Street. The SDIY carried almost 6,000 cars in 2010.

Maritime

There are currently no port cargo facilities located within Southeastern San Diego, 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.

Truck traffic is primarily found on the freeways and major roadways, such as Commercial Street. Freight rail service is present in the early morning hours along the Orange Line trolley tracks and associated rail spurs.

4 URBAN DESIGN

Southeastern is one of the oldest communities in San Diego. Established in the late 19th and early 20th centuries, many of its neighborhoods, streets and buildings reflect a rich cultural and architectural history not seen in most other communities in San Diego. Residential areas, including historic districts, are stable and continue to flourish. This chapter describes the existing urban form of the Planning Area and highlights 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.

Some neighborhoods in the western portion of the Planning Area date to the early 1900s (top). The Commercial/Imperial Corridor and the Trolley run through the center of the western neighborhoods (middle). Freeways bound the Planning Area and bisect it (bottom).

4.1 Edges and Neighborhoods

Edges

The edges of Southeastern are delineated by the highways that surround the community. State Route 94 separates Southeastern from Golden Hill and Mid-City to the north, Interstate 805 forms the easternmost limits and Interstate 5 delineates the western edge and most of the southern boundary with Barrio Logan and National City. Interstate 15 also bisects the community, and serves as a dividing line between the Stockton and Logan Heights neighborhoods to the west and Mount Hope, Mountain View and Southcrest to the east. While the massive infrastructure that forms these edges can overwhelm and divide the area, it also establishes clear boundaries that contribute to a distinct sense of place and a marked identity.

Neighborhoods

Southeastern San Diego consists of nine distinct neighborhoods, as represented in Figure 4-1. Neighborhoods west of I-15 were first established in the early 20th century and have a rich architectural history and character. They are well connected to downtown and Golden Hill, and several locations have spectacular views to downtown, the bay and the mountains. Neighborhoods east of I-15 developed later. They are richer in open space amenities and recreational facilities and have some of the community's largest commercial and employment centers.

The corridor created by State Route 15 and Chollas Creek runs through almost the middle of the Planning Area, resulting in western and eastern sub-areas, as shown on Figure 4-1. These two sub-areas are largely similar in their scale, structure, development patterns, and land uses, with some differences.

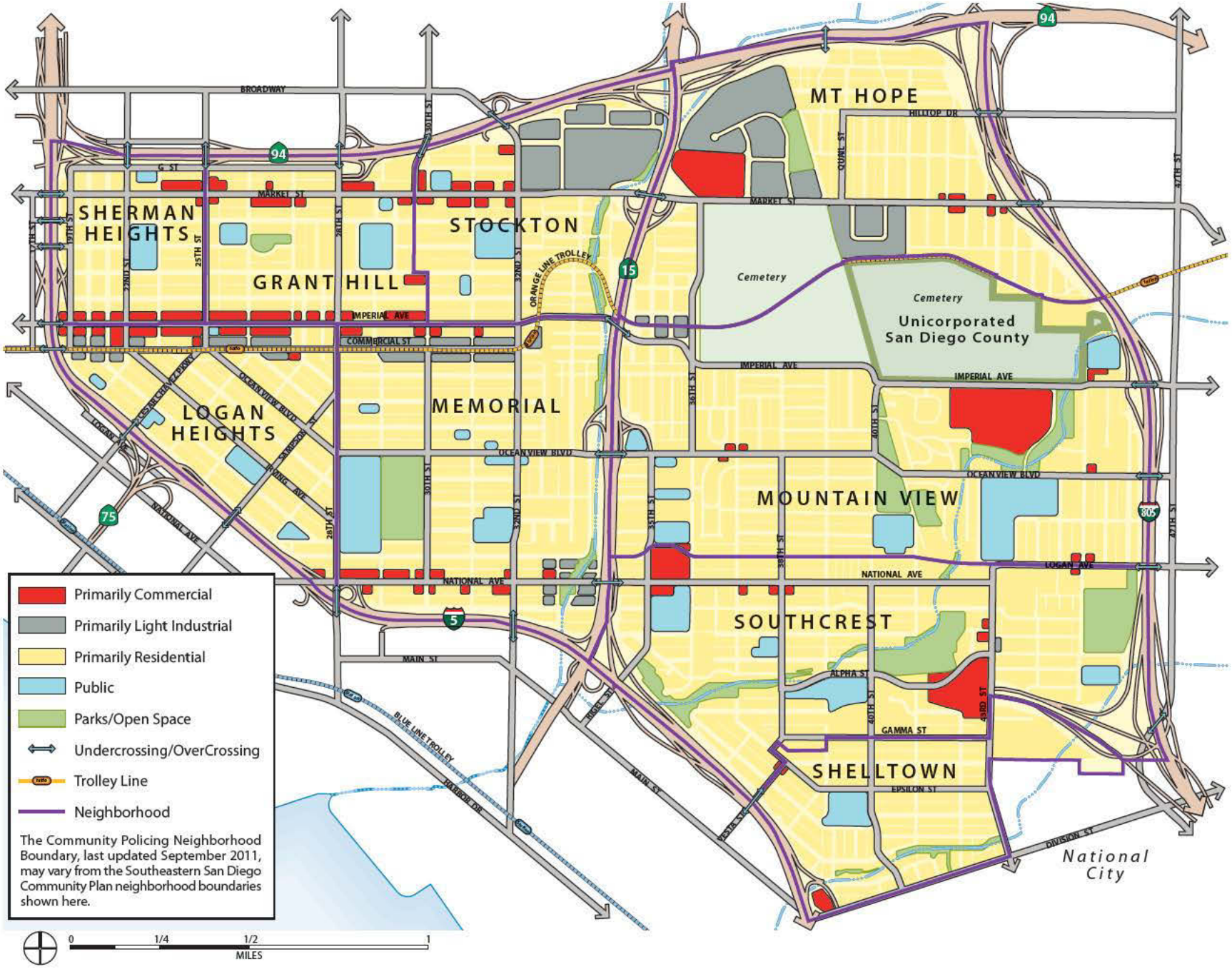
The San Diego Police Department established and maintains the evolving neighborhood boundary lines as part of shift from police "beats" to Neighborhood policing, Neighborhood boundaries and name identification will be part of the community plan update.

Western Neighborhoods

The western portion is comprised of the Sherman Heights, Grant Hill, Stockton, Logan Heights and Memorial neighborhoods. These are older residential neighborhoods with a mix of single- and multifamily housing types, with generally higher densities and a mix of uses. Sherman Heights and Grant Hill are characterized by their historic districts. Gently rolling topography reaches a high point in Grant Hill Park. Memorial Park and the adjacent community center, library, and schools form a community nucleus in the Memorial area. Industrial districts are located in the southeast and northeast corners of this section of Southeastern, along Commercial Street and adjacent to Highway 15.

The Commercial/Imperial corridor, bisecting the area, is home to the greatest mix of uses, including scrap yards, small businesses, and emerging development along the Trolley line. Market Street in the north and National Avenue in the south also have a mix of housing and businesses. These corridors serve as commercial spines for their neighborhoods, providing shopping, services, some jobs, and active street life to the greater community. However, the range of commercial and industrial businesses and their proximity to residential neighborhoods also create potential conflicts—in terms of noise, air quality, and visual impacts—between incompatible uses.

FIGURE 4-1: Neighborhood Structure



Eastern neighborhoods are separated by Mount Hope and Greenwood cemetaries (top) and include the Imperial Marketplace and Gateway Center business park (middle and bottom).

Eastern Neighborhoods

Compared with the western portion of Southeastern, land uses in the eastern neighborhoods are more separated from one another. From north to south the neighborhoods in this area are Mount Hope, Mountain View, Southcrest, and Shelltown. Mount Hope and Greenwood cemeteries occupy a substantial amount of land here, separating the Mount Hope neighborhood to the north from other areas. Neighborhoods to the south include three sizable parks with a recreational emphasis, San Diego Continuing Education's Educational Cultural Complex, and an emerging open space corridor along the South Branch of Chollas Creek.

This section of Southeastern features the Imperial Marketplace, a large commercial center on Imperial Avenue, and the Gateway Center industrial/business park on Market Street adjacent to Highways 15 and 94, both anchored by "big box" retail stores—Costco and Home Depot. Otto Square and Northgate are smaller shopping centers located on National Avenue and on 43rd Street, respectively.

4.2 Streets

Like most communities that surround it, Southeastern is organized by a street grid system with a regular pattern of blocks and orthogonal street arrangements. Streets tend to follow a north-south and east-west direction, with a few exceptions. The most notable is Logan Heights, where the street grid shifts to a 45 degree angle to follow the patterns prevalent in Barrio Logan. The resulting street quadrants are illustrated in Figure 4-2.

Street Types

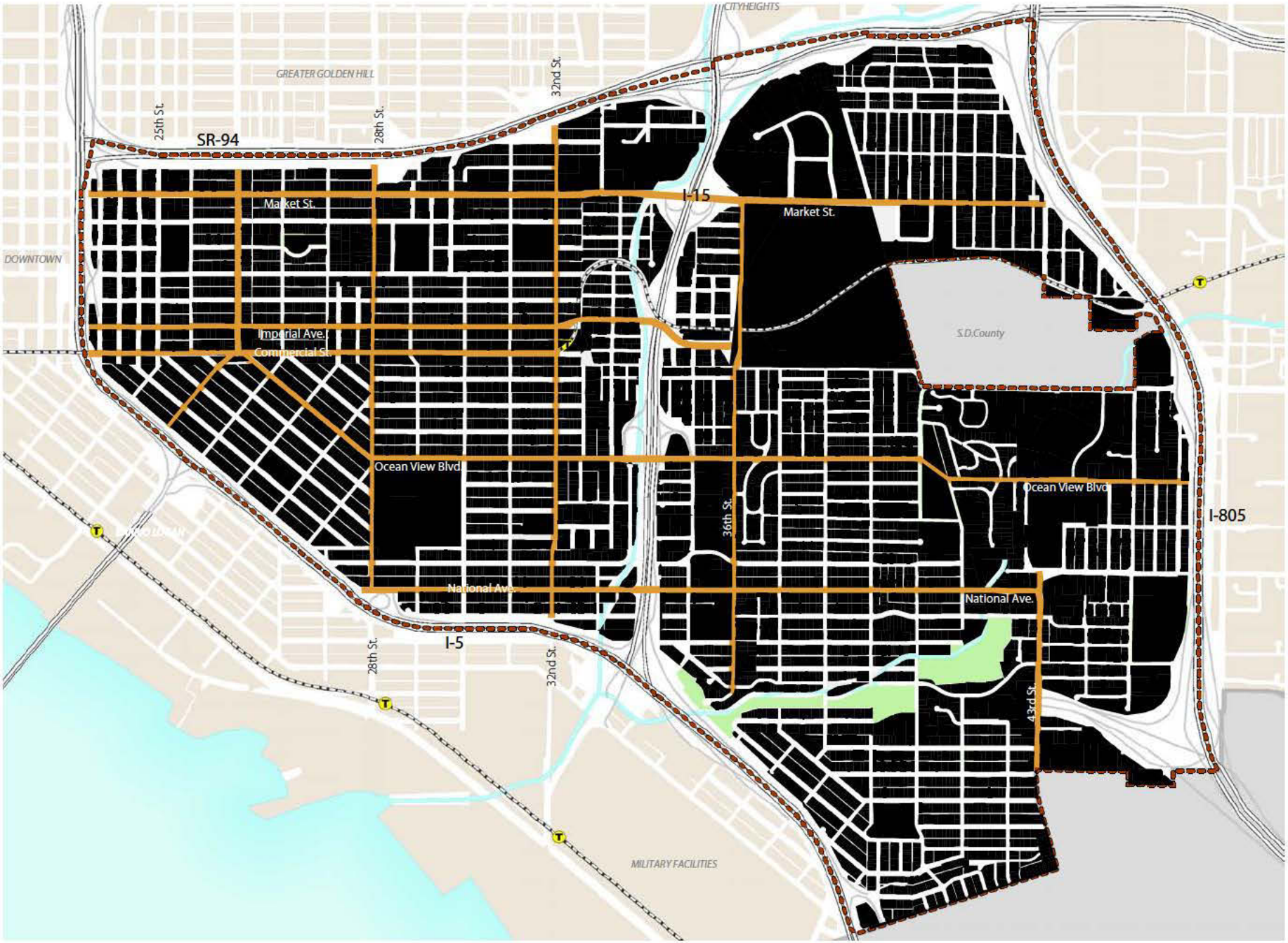
Typical street types are described below and depicted in Table 4-1.

Major Streets

A few major streets connect the neighborhoods to each other and to surrounding communities. In the east-west direction, these are Market Street, Imperial Avenue, Commercial Street, Ocean View Boulevard, and Logan and National avenues. North-south, they are 25th, 28th, 32nd, 36th and 43rd streets. Together, they form a "super-grid" at roughly ½ mile spacing. This is significant because, just as the highways define community boundaries, these major streets often also become the delineating lines between neighborhoods (see Figure 4-1). Neighborhood boundaries in Southeastern are somewhat amorphous, and less distinctive than the Community Plan boundaries.

Some major streets (i.e. Market Street, Imperial Avenue, National Avenue, and 43rd Street) serve as the commercial corridors in the community. They not only traverse the community, but also bring different neighborhoods together as central gathering places and a connective seam of activity.

FIGURE 4-2: Neighborhood Structure



Local Streets

Most streets in Southeastern have a roadway width of approximately 50 feet, with five-foot sidewalks that are separated from the curb with a planting strip or parkway. Landscape and street trees are sporadic along most streets, giving the street environment an informal and varied appearance. Garden walls, gates and fences are predominant throughout the neighborhoods. These are often colorful, in diverse styles and materials, and they form a consistent "street wall" that helps define the edge of the street and adds to the character of the street environment.

Overall, streets in Southeastern have the appropriate scale and richness that make the walking environment pleasant and accessible. More can be done to maintain the roadway, sidewalks and planting areas of streets to make them more pedestrian-friendly and elevate the overall appearance of the neighborhoods.

TABLE 4-1: REPRESENTATIVE STREETS

Market Street (approx. 90')

National Avenue (approx. 80')

28th Street (approx. 50')

Market Street (approx. 90′)

Commercial Street (approx. 80′ to 100′)

Imperial Avenue (approx. 75′)

Imperial Avenue (approx. 75′)

32nd Street (approx. 50′)

40th Street (approx. 50′ to 55′)

Chollas Creek is channelized and access is limited (top). Designated foot path and entrance at Northgate Market Shopping Center (top). Pedestrian bridge across Chollas Creek in Southcrest (bottom).

Access and Mobility

The street pattern facilitates good connectivity and access across the community and from neighborhoods to commercial cores and open spaces, but several barriers to access exist. Most noticeable is the barrier posed by I-15, which divides the west and east neighborhoods of the community. Only four streets connect across I-15. The scale and overpowering presence of the highway overpasses make pedestrian access unpleasant and unsafe. In all but one crossing (at Ocean View Boulevard), the highway towers over the street and creates dark, shaded areas and marginal spaces. Most streets dead end at the highway and houses are set back from and turn their backs on the highway, further widening the gap between the east and west neighborhoods.

Other barriers to access and mobility result from changes in topography and landscape. Mount Hope Cemetery, a major community resource and a large swath of open space, also disconnects the upper northeast section of the community and major employment and commercial uses that flank its corners. Developments around the cemetery do not have a direct and positive frontage toward this unique amenity, in large part due to topographic constraints and land use decisions.

The South Branch of Chollas Creek winds its way through the Southcrest neighborhood and creates many opportunities for views and access to open space, yet sections of the creek remain channelized and culverted and development turns its back on the creek, with fences and gates walling off 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. Plans for Chollas Creek are described in Chapter 1: Introduction and in the discussion of parks in Chapter 6.

Pedestrian Paths and Connections

In addition to the grid system of streets, informal footpaths and crossings exist along canyons, creek corridors and other open spaces. At least two pedestrian bridges connect across the South Branch of Chollas Creek at 36th street and at the Southcrest Community Park. Brightly painted crosswalks are marked at key intersections in the community and major facilities such as schools. Alleys, which exist throughout, serve as important pedestrian links through neighborhoods.

Opportunities remain to establish stronger connections from residential areas to commercial and employment centers, the latter of which are all relatively new. The main commercial and employment centers are introverted and auto-oriented, rather than designed to encourage pedestrian access. One notable exception is the Northgate Market shopping center, which has built into its design several key pedestrian entries and connecting paths, with amenities such as benches and shaded areas to bring neighbors into the development in a safe and pleasant manner. The Southcrest Community Park also offers paths and connection points throughout. More paths and connections like these should be encouraged throughout the community.

Trolley Corridor

Currently, the community has two trolley stops along Commercial Street at 25th and at 32nd Street. Crosswalks are provided to connect adjacent streets with the trolley stops and a pedestrian refuge island exists at the 25th Street station. The confluence of streets that form the "Bronze Triangle" and the strong relationship that buildings have with the trolley make this stop a significant node in the community. There is a richness and diversity to the homes and landscaping as they face the trolley on Commercial Street that enlivens the place and signals a sense of arrival and gateway to the Logan Heights, Sherman Heights and Grant Hill neighborhoods.

The 32nd Street trolley stop is elevated above Imperial Avenue and somewhat tucked away. Stairs are provided from Imperial Avenue to the station to facilitate pedestrian access there. As the trolley curves, a pocket of residential buildings is created that seems disassociated with the remainder of the neighborhood. Most homes have yards that back onto the trolley corridor and a landscape buffer, walls and fences prohibit access to the trolley right-of-way. Commercial Street unceremoniously dead ends at the trolley station, only to resurface as a major east-west arterial in the Encanto community.

As a connective spine, the trolley corridor works best as it passes through neighborhoods west of I-15. Here, the trolley acts more as an urban streetcar, unifying areas to the north and the south of the trolley and contributing to the activity of the Commercial and Imperial Corridor. It is only in this area that the trolley shares the street with other vehicles, pedestrians and cyclists. As it meanders through Mount Hope Cemetery and into the eastern neighborhoods, it loses visibility. From this point eastward, the trolley runs on a dedicated right-of-way, making it less integrated with the urban environment it serves.

25th Street Trolley Station (top). Stairs at 32nd Street Trolley Station (bottom).

Trolley Line through Mount Hope Cemetery at 36th Street.

4.3 Blocks and Lots

Block and Lot Patterns

The size, direction and configuration of blocks and lots in Southeastern help explain the different edge conditions and form the framework for organization of neighborhoods. The dominant structural feature of Southeastern is a grid-network of streets, resulting in consistently-sized 600 x 300 foot blocks, with a 20-foot wide alleyway, resulting in 150-foot deep lots, and enabling buildings to enjoy an advantageous (from sun and heat perspective) north-south orientation.

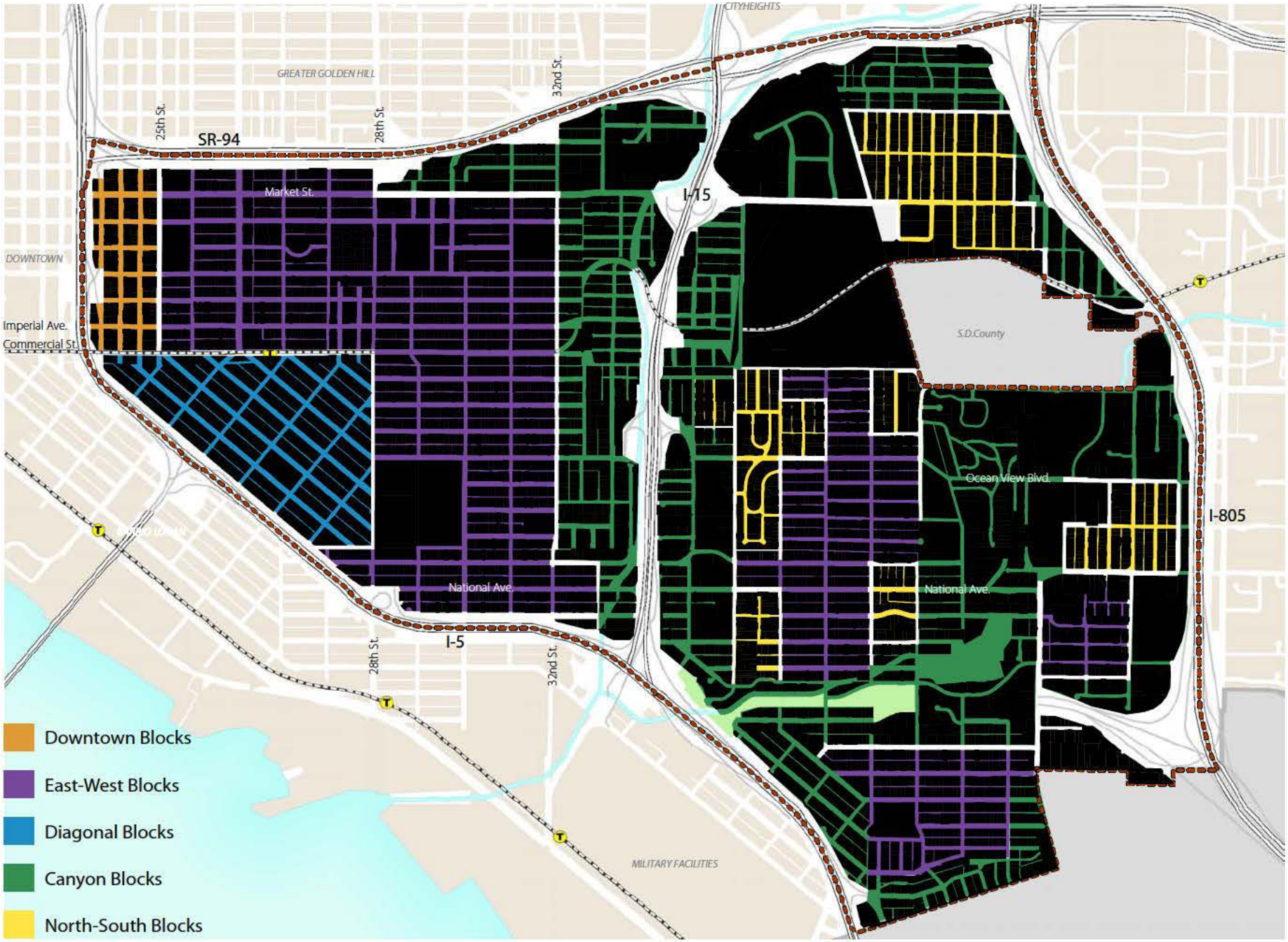
At the edges of neighborhoods, block patterns are established that respond to the patterns seen in adjacent communities and/or to the specific conditions created by the freeways. Like Golden Hill to the north, the first settlement pattern in Southeastern was essentially an extension of the downtown into the hills. Starting with Sherman Heights (one of the earliest neighborhoods to be settled) blocks are smaller and match the predominant block size and orientation seen in downtown San Diego (200x300 feet).

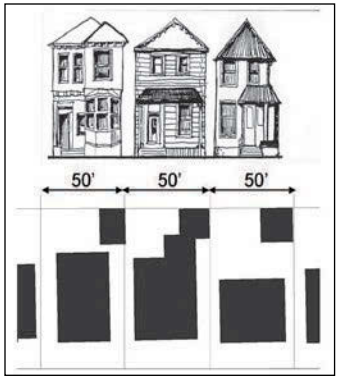
Blocks in the southwestern triangle portion are oriented at 45 degrees to the others to form continuity with the Barrio Logan street grid and its orientation toward the waterfront. Blocks shift orientation again in Sheltown, as they make a transition to the grid patterns of National City. Along Interstate 805, a shift in the direction of blocks from east-west to north-south facilitates a clean break along the highway, even as some blocks begin to "erode" at that edge due to topographic constraints created by the highway corridor. In this way, block patterns not only respond to the unique edge conditions of the community, but they also establish a clear transition from neighborhood to neighborhood and to surrounding communities, even if the highways often interrupt those transitions. See Figures 4-3 and 4-4, showing block patterns in area details and at the communitywide scale, respectively.

FIGURE 4-3: Block Pattern Details

Downtown Blocks | East-West Blocks | Diagonal Blocks | Canyon Blocks | North-South Blocks

FIGURE 4-4: Block Patterns





Lot Patterns (top)
Alley on 24th Street (middle).
Alley on South Evans Street (bottom).

Gateway Center (top)
Otto Square Shopping Center (middle).
Imperial Marketplace (bottom).

Fine-Grain vs Large-Scale Development

Development in Southeastern is mostly of a fine-grain, small scale nature. Blocks in Southeastern generally do not exceed dimensions of about 300 by 600 feet, and most blocks are no wider than 150 feet when alleys are considered. Community facilities, such as schools or large commercial developments, tend to take up more land area and form large "super-blocks" scattered throughout the community. Short blocks coupled with typical 50-foot wide lots, have allowed the community to develop over time in a compact and diverse manner. While some large multi-family developments in the eastern neighborhoods have a uniform look, most residential areas are composed of a variety of individually built and distinct homes. Most properties have multiple structures on the same lot. Some are accessory structures (such as garages, carports, storage sheds and covered patios), but many are secondary living units and "granny flats." Yard space is well appreciated and used.

Alleys allow car access from the rear of the lot for most properties in Southeastern. This encourages the use of the front yard for more active frontages, such as patios, porches and stoops. The lack of driveways allows property owners to put up garden walls and fences along the street front. It also reduces the amount of car traffic on the streets and contributes to a more active and positive street frontage.

Amidst the small, fine-grain neighborhoods, large-scale development is scattered throughout the community. Several large developments were built over the last several decades as auto-oriented strip centers with poor pedestrian access and "big-box" commercial. Gateway Center, planned in 1992, the Imperial Marketplace

(2009) and the older Otto Square Shopping Center are notable examples. These commercial centers are often large development complexes with an internally focused design. 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 the development and few if any pedestrian connections to the development from surrounding neighborhoods. These developments appear out of scale and character with the surrounding compact, fine-grain residential neighborhoods and commercial corridors in the community.

Gaps in Development

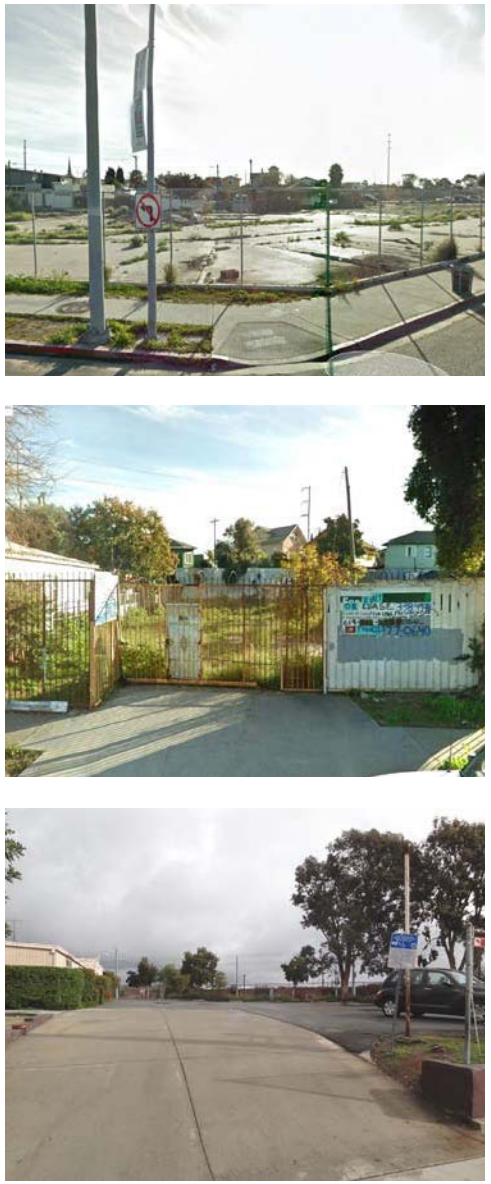
Southeastern San Diego is one of the oldest communities in the city. As such, development has occurred over time and "filled-in" much of the area with stable, well-established neighborhoods and commercial districts. Opportunities remain to develop vacant or under-utilized parcels, mostly along the main commercial corridors in the community. Infill development would both address issues of illegal dumping and negative overall image that vacant lots produce, and support a vibrant and coherent environment that is not fully realized today.

4.4 Buildings

Building Types and Development Trends

Southeastern San Diego has some of the most diverse building stock in the city. From old to new, single-family to multi-family, and neighborhood commercial to "strip" commercial, this community has a balance of different building types and styles. Historic neighborhoods in the western part of the community, such as Sherman Heights and Grant Hill, display a variety of historic structures with rich architectural styles. Several buildings are designated historic structures and historic districts exist in both communities to ensure the preservation and enhancement of historic resources. Most buildings were built prior to the Second World War and have a strong orientation to the street and the pedestrian environment. Chapter 5 describes historic resources and districts in greater detail.

Eastern neighborhoods (especially east of I-15) display more examples of multi-family buildings built after World War Two. These tend to be more auto-oriented, with a greater presence of cars on the street and driveways and garages lining the street frontage. Recent developments, such as the Legacy Walk Townhomes on 43rd Street and National Avenue, reverse that trend, with garage access designed toward the rear of the site and front doors and direct pedestrian paths on the street. Representative building types are illustrated in Table 4-2.



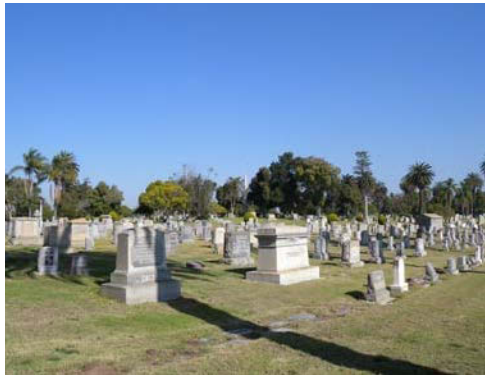
Vacant lots and underused land create gaps in development.

TABLE 4-2: REPRESENTATIVE BUILDING TYPES

Building Type	*Examples*		
Residential Single Family			
	Bungalow	*Tract Home*	*Traditional*
Residential Multi-Family			
	Walk-up Apartments	*Duplex, Triplex & Fourplex*	*Apartment Complex*

TABLE 4-2: REPRESENTATIVE BUILDING TYPES

Building Type	*Examples*		
Commercial			
	Strip Commercial	*Shopping Center*	*Neighborhood Commercial*
Employment			
	Industrial	*Automotive*	*Job Training / Office Park*
Civic/ Institutional			
	Schools	*Public Facilities*	*Religious*



Mount Hope Cemetery is a major community resource and expansive swath of open space (top). The Northgate Market is an important gateway building in Southcrest (bottom).

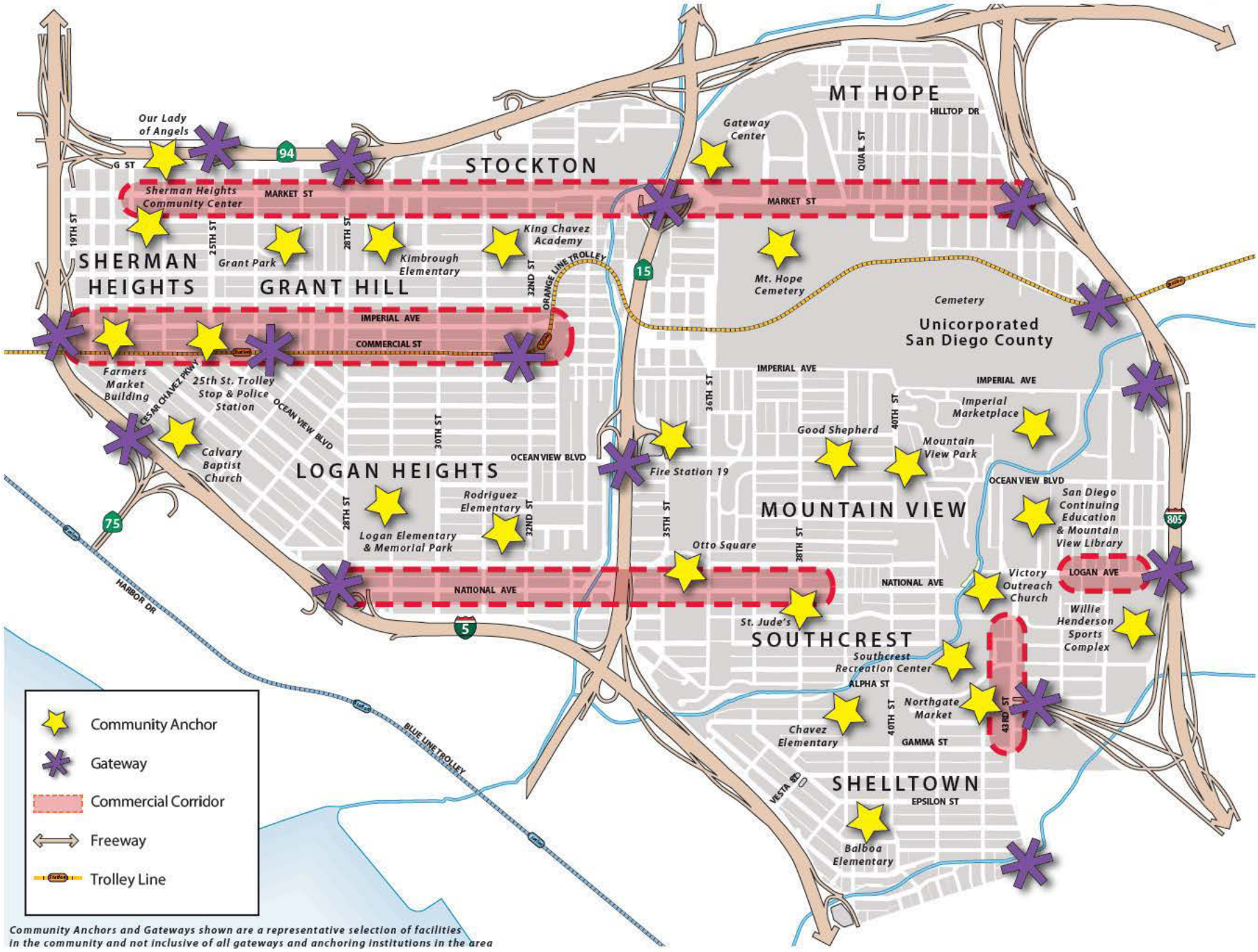
Several new school buildings have been completed across the community, such as Sherman Elementary, which is designed to fit in with the predominantly residential character of the neighborhood. The new Logan Heights Library was recently completed and the Comm 22 project proposed for the Bronze Triangle area is under construction. This new development tends to be focused on creating a strong street presence and activating public spaces within and around the development. New development in Southeastern is also more compact and has a greater mix of uses than existing developments in the community. Warehouse structures are also undergoing renovations and rehabilitations, such as the San Diego Farmers Market building on Commercial and 21st streets.

Community Anchors and Gateways

Southeastern boasts several community-anchoring buildings and uses that serve as landmarks and central gathering spaces for the community, as shown on Figure 4-5. These are parks and recreation centers, such as the Southcrest Community Park and Recreation Center or Memorial Park and Senior Center; large open space areas, such as the Chollas Creek or Mount Hope Cemetery; community centers and churches, such as the Sherman Heights Community Center or St. Jude's; and commercial centers such as the Northgate Market, which attracts community residents and people from outside the community. The rescinded State Route 252 now serves as a key gateway to the community as it terminates at the Northgate Market and marks a significant entrance to the community.

Gateways are identified at major entrances to the community, from freeways and major streets that connect from Downtown, Mid-City and other destinations.

FIGURE 4-5: 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

Dense landscape along Creeks and Canyons are defining elements of the community edge (top). Mural in front of the Northgate Market (middle) and commercial building sign on National Avenue (bottom) help to create community identity.

4.5 Land Form and Natural Features

Land form and natural features in Southeastern contribute to a sense of place and provide views and view corridors to downtown, National City, the mountains and other neighborhoods from several vantage points in the community. Although not as hilly as Encanto, Southeastern is mostly settled on a mesa, with spectacular views. In hilly areas, development steps with the hillside rather than projecting over it or digging into it, and the City grid is maintained.

Chollas Creek weaves through the community, providing a natural link that has not been fully appreciated and used. It has tremendous potential as a habitat and recreational open space corridor, and as a major pedestrian and bicycle connection. Plans for the enhancement of Chollas Creek are further discussed in the Parks section of Chapter 6.

4.6 Community Character and Identity

Southeastern contains a diverse and overlapping collection of uses, building types, styles, land uses and landscapes in close proximity to downtown. Diversity is a defining attribute of the built environment in Southeastern, creating the varied yet consistently rich flavor of the community. Recycling facilities and auto-body shops can be found adjacent to taco shops and Victorian-style homes. At the same time, collocation of these varied uses can result in air quality, noise, and visual impacts.

Perhaps the element that ties these together is a consistent row of fences and garden walls that speak as much about the individual character of each resident as do the buildings. In the main commercial corridors, such as National Avenue, an array of signs and advertisements that seem to try to outdo each other at the same time add to the visual interest and life of the street. Southeastern is a community that has grown over time, adapted to the needs and particular idiosyncrasies of its residents. It is the appropriation of space and the built environment by its residents that makes Southeastern a special place in San Diego.

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 Southeastern San Diego 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.

Southeastern San Diego 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, 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*. 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 Southeastern, 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, the Brazilian Pepper is an invasive species. Palms, yuccas, and junipers do not contribute as much shade, screening or canopy cover as other species, but may still be appropriate in some situations. Existing street trees found in the community are depicted in Figure 4-6, along with a legend explaining the features of the tree (e.g. height, pruning requirements, water needs).

FIGURE 4-6: 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

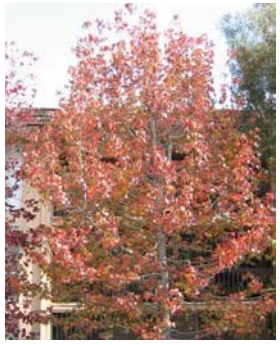
Ficus microcarpa – Indian Laurel Fig

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

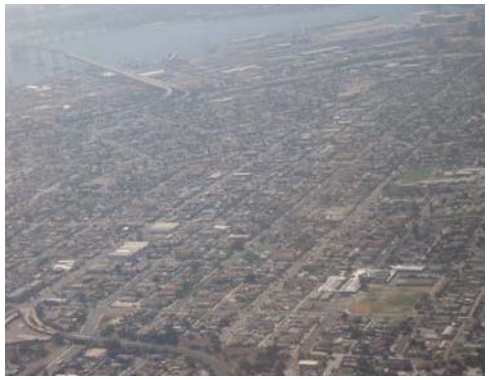
Schinus terebinthifolius – Brazilian Pepper Tree

Syagrus romanzoffianun – Queen Palm

Tristania conferta – Chinese Elm

Washington robusta – Mexican Fan Palm

Yucca gloriosa – Spanish Dagger



Bird's eye views looking southwest. The vast majority of the Planning Area is urban and hardscape.

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 seven percent of the Planning Area is covered by tree canopy, as illustrated in Figure 4-7. This is consistent with the statewide estimate for urban areas and slightly higher than the citywide total of six percent identified by the U.S. Department of Agriculture, though it should be noted that methodologies and data sources are not the same.[1]

Street Trees

As Figure 4-8 shows, most neighborhoods in Southeastern San Diego do not have a dominant tree species. The Mount Hope neighborhood is an exception, with Carrot woods making up roughly 40 percent of the street trees. Other neighborhoods typically contain three to five common species each comprising between five 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.

1 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.

FIGURE 4-7: Tree Canopy Coverage

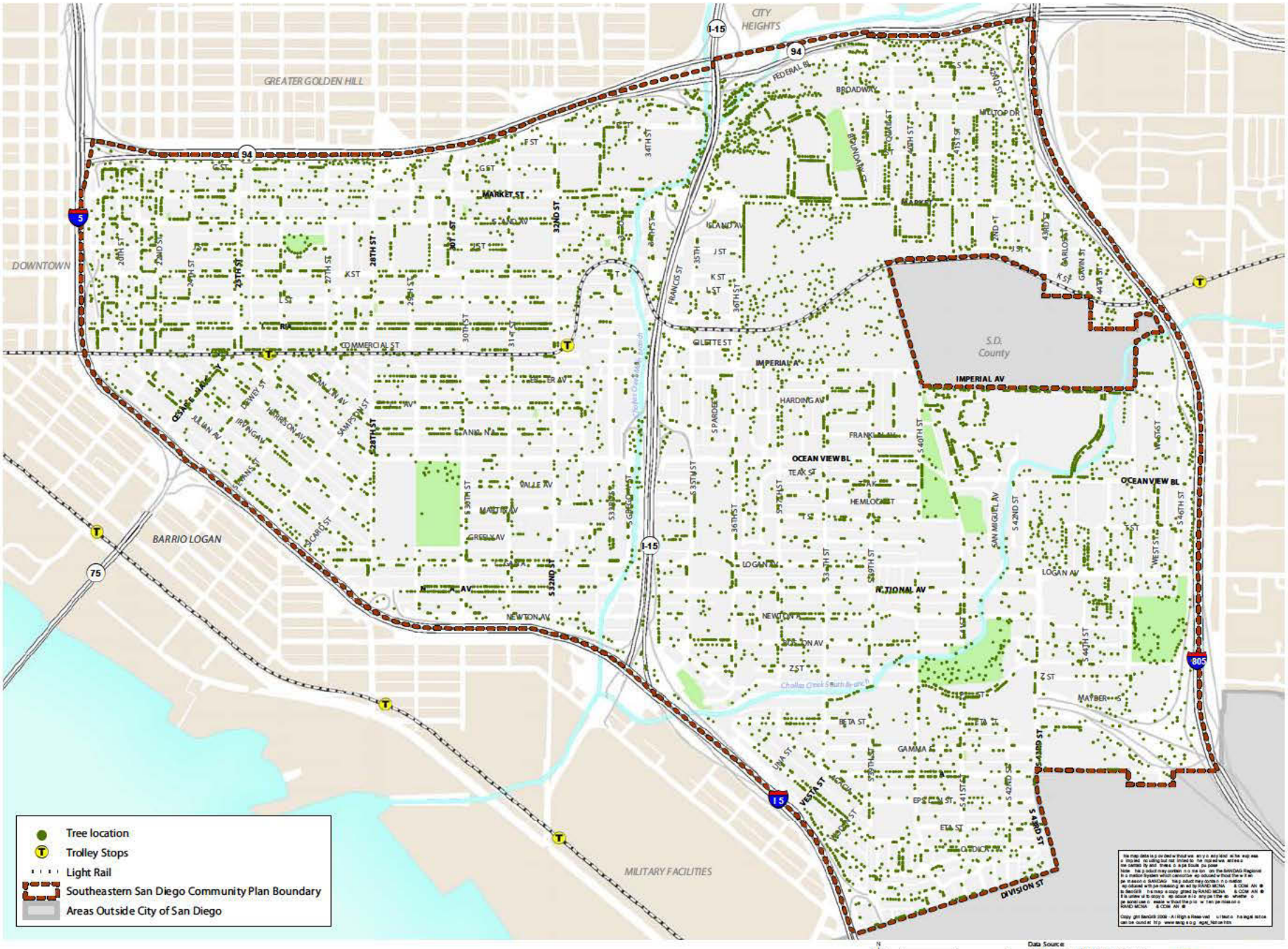


FIGURE 4-8: Community Tree Character

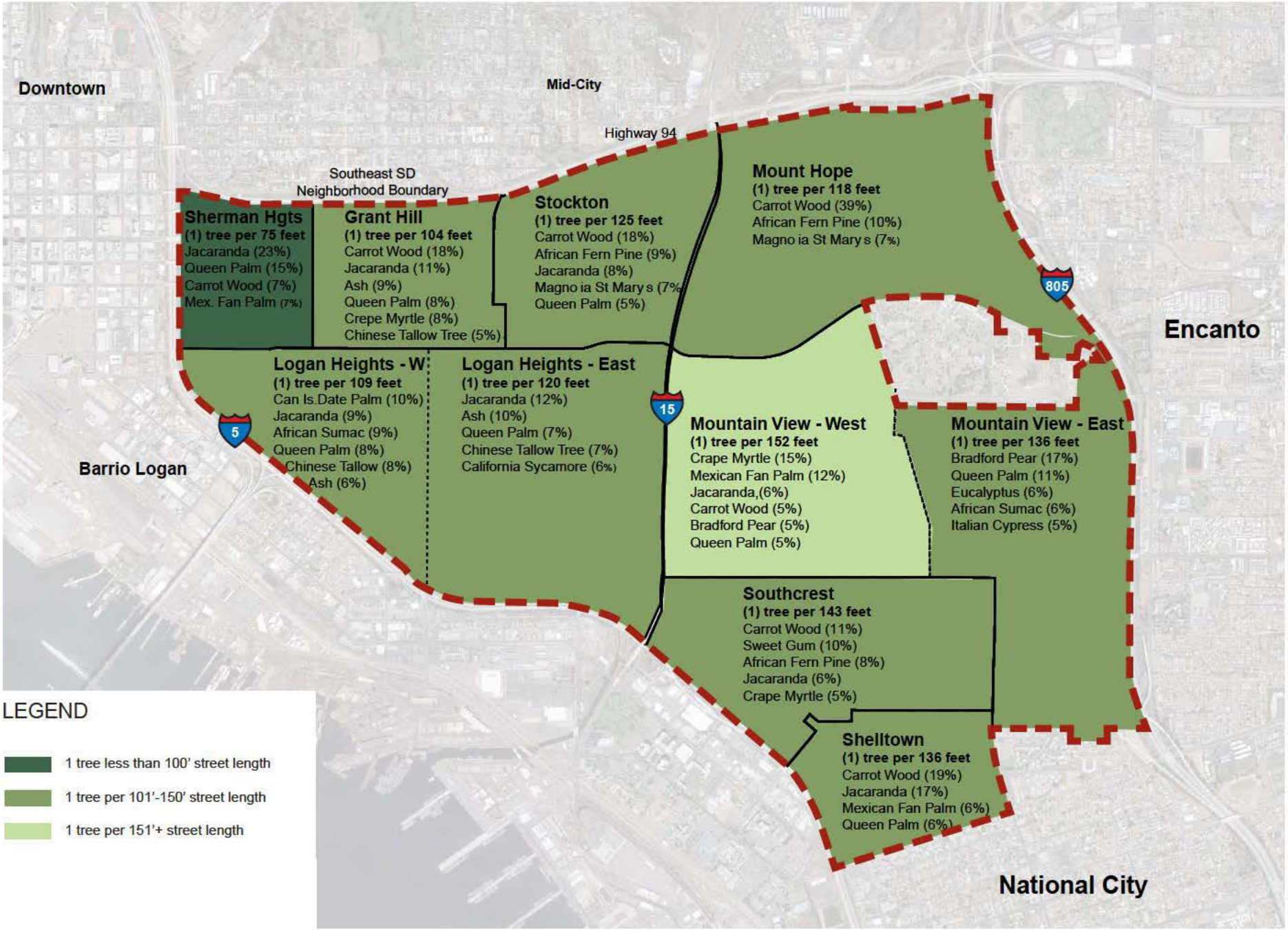
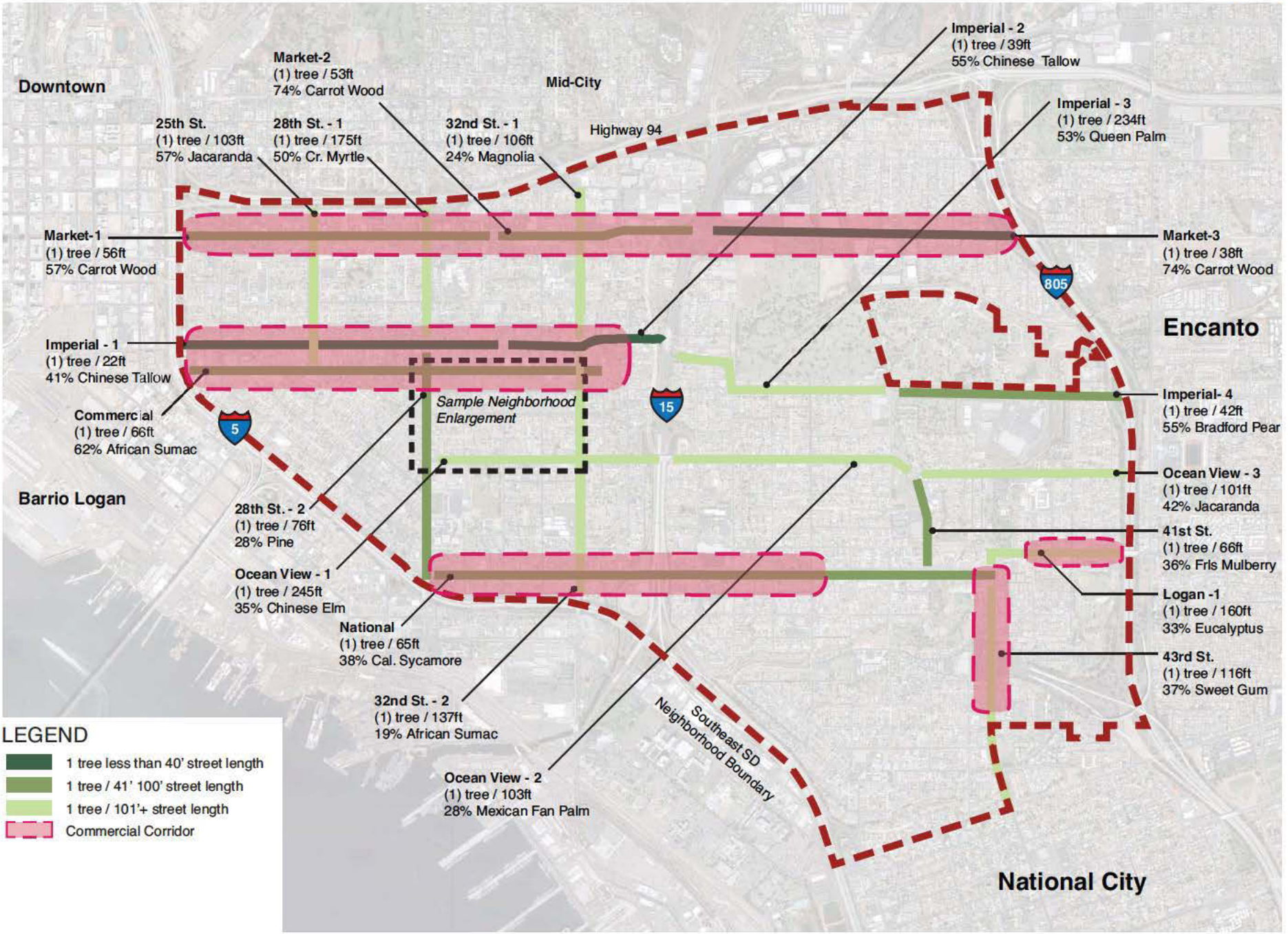


FIGURE 4-9: Corridor Tree Frequency



Street trees can build identity and create beauty (top, Commercial Street at 25th Street). Streets devoid of street trees may feel less hospitable for pedestrians (bottom, Commercial Street at 31st Street).

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.

Imperial Avenue west of Highway 15, and Market Street between Highway 15 and Interstate 805, display the highest concentration of trees, with spacing at 22 and 38 feet on average, respectively. As Figure 4-9 shows, other major corridors in Southeastern San Diego appear to have street trees spaced more infrequently, and are not close to meeting the Municipal Code's landscape regulations requiring a street tree for every 30 feet 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. This standard is only met on a small portion of Imperial Avenue where trees are spaced 22 feet apart.

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. Market Street between Highways 15 and 805 is an exception: here, three quarters of the trees are carrot woods. 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.

Neighborhood Observations

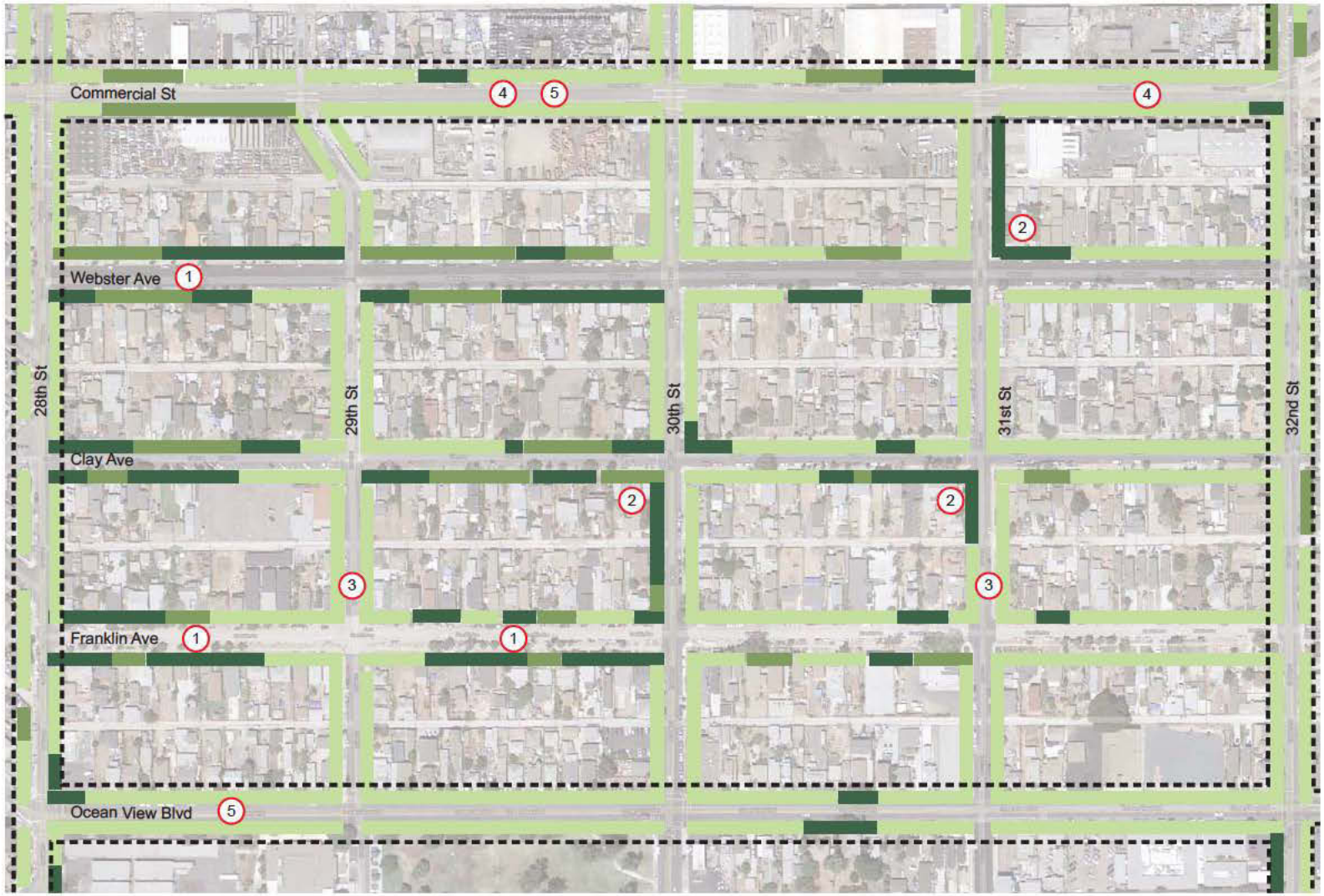
In some areas, like the area between Commercial Street and Ocean View Boulevard, 28th and 32nd Street, as shown on Figure 4-10, there are clusters of several trees on a block while the rest of the block may be bare.

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. For example, the following locations have concentrations of single species in proximity to retail hubs and community facilities:

- Bradford Pears at Imperial Marketplace (Imperial Avenue and San Pasqual Drive);
- Eucalyptus along Imperial Avenue at Messina Way behind the Town & Country Village Apartments;
- Carrot woods along the base of Grant Hill Park on J Street;
- Carrot woods along L Street adjacent to King/Chavez Preparatory Academy;
- Jacarandas on the southern and eastern sides of Kimbrough Elementary School;
- Eucalyptus along Boston Avenue at the southern side of Emerson Bandini Elementary School;
- Crape myrtles trees around St. Jude's Academy on Boston and 38th Street.

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

FIGURE 4-10: Sample Neighborhood Tree Spacing



Southeast San Diego Sample Neighborhood Tree Spacing

LEGEND

- 40' or less spacing
- 41' - 100' spacing
- 101' or greater spacing

Observations in sample area are typical of residential areas in Encanto Community Plan Area

1. Trees are found are clustered in a few areas
2. Trees are clustered at intersections in a few areas; this arrangement can be used as future gateways to key streets
3. North - south streets have fewer trees than east-west streets due to lack of parkway strips in a few blocks
4. Industrial properties, such as those along Commercial, are less likely to have trees due to lack of parkway strips

Neighborhood corridor per "Southeast San Diego Tree Frequency for Corridors" diagram

SOUTHEAST SAN DIEGO COMMUNITY PLAN

SPURLOCK POIRIER
Landscape Architects

1" = 200'
November 21, 2012

NORTH

This page intentionally left balnk.

5 HISTORIC CONTEXT

A 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 below.

5.1 Historic Setting

This section presents an overview of Southeastern San Diego's history with a specific emphasis on describing the historic themes and patterns that have contributed to the neighborhood's physical development. It is intended to support the Southeastern San Diego 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 built environment in Southeastern San Diego had its start with the Mexican land grants in the San Diego area, namely Pueblo Lands and Ex-Mission Rancho de San Diego de Alcalá, which 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 the Planning Area. 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 plan area have already been documented.

Building Southeastern San Diego

Early Pueblo Land Subdivisions

Anticipating the arrival of the railroad, Southeastern San Diego was 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. Block and parcel size varied by subdivision, and some of the street grids did not align.

One of the most important early subdivisions in San Diego was Sherman's Addition, located on Pueblo Lot 1155, encompassing 160 acres bounded by 15th and 24th streets, between Market and Commercial streets.[1]

A large area of land—four Pueblo Lots—in present-day Barrio Logan and Logan Heights was set aside by the city for use as a railroad terminal, but it was never used as such. In 1886, after efforts by two failed railroad companies, the San Diego Land and Town Company, a subsidiary of the California Southern Railroad, purchased the vacant railroad land and subdivided it for settlement.[2]

Wetmore & Sanborn's Addition (1869) and Hoitt's Addition (1870) subdivided several large Pueblo Lots just east of the railroad lands, anticipating a building boom. In 1870, Joseph Manasse and Marcus Schiller subdivided Pueblo Lot 1157, aligning the streets diagonally to take advantage of the views to the bay.[3] The San Di-

1 Sherman Heights Landmark Nomination Form, City of San Diego.

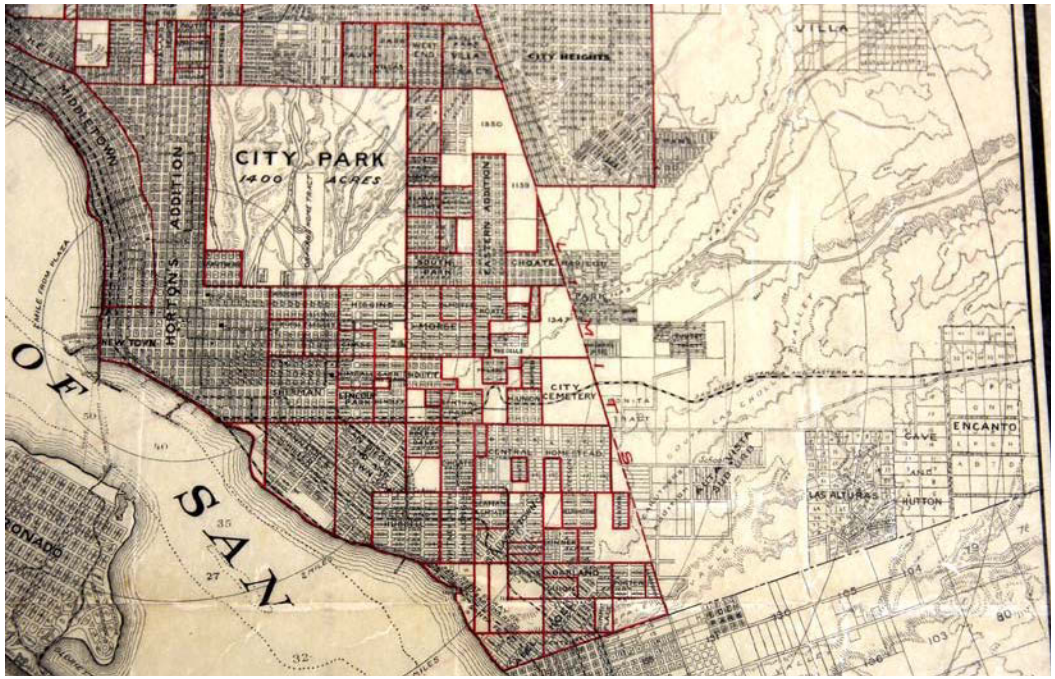
2 http://www.sandiegohistory.org/journal/83winter/logan.htm

3 "Logan Heights," http://www.sandiegohistory.org/journal/83winter/logan.htm

ego Land and Town Company's 1886 subdivision laid its streets diagonally to match the Manasse and Schiller subdivision, but D.C. Reed and O.S. Hubbell's Addition (also 1886) created a grid aligned instead to the cardinal directions, creating the unusual street connections visible today in Logan Heights. By the late 1880s, nearly all of Logan Heights had been subdivided.[4]

Railroads and Streetcars

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 California Southern Railroad tracks ran along the waterfront through what is now Barrio Logan, with a depot at the foot of present-day Beardsley Street. 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. Neighborhoods within a few blocks of the rail and streetcar lines flourished as transportation improvements resulted in a corresponding construction boost, especially in Logan Heights.



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.

4 Barrio Logan Survey, http://www.sandiego.gov/planning/barriologanupdate/documents/pdf/blhistoricalsurveyfull.pdf

San Diego Electric Railway Trolley (n.d.) (San Diego History Center Photo Archive, #10980-1.)

Housing the Working Class

Southeastern San Diego, especially west of 30th Street, was predominantly home to middle- and working-class families. Land was affordable, and the area developed into a small-scale residential area dominated by modest wood-frame cottages and bungalows as shown in Figure 5-1. In the late nineteenth century, these single-family residences were rendered in Folk Victorian, Queen Anne, and Folk National architectural styles; by the 1910s, residences featured simplified Craftsman and Early Prairie styles. Most had an outbuilding or stable at the rear of the property.5

Most single-family cottages were simply built by individual owners or builders, but a few clusters of speculative housing units were constructed in Sherman Heights, Logan Heights, and Grant Hill. Perhaps the most impressive example of speculative housing in the plan area is the group of 15 Craftsman bungalows on the north side of K Street between 26th and 27th streets. In addition to single family residences, more intensive multiple family residences began to be developed in the Planning Area after the turn of the twentieth century.

5 Sanborn Fire Insurance Maps.

FIGURE 5-1: Residential: Cottages & Bungalows

TYPICAL EXAMPLE(S)	CHARACTER-DEFINING FEATURES
  	• Location in an early subdivision, typically west of Interstate 15 (I-15) • Architectural style and form from this period, including Queen Anne, Folk Victorian, Folk National, Craftsman, and Prairie • Set back from lot line • One story (or one story with raised basement) • Gable or pyramidal roof • Wood cladding (shingles or horizontal siding) • Wood sash windows (double-hung or casement) • Wood door (glazed or paneled)

The Mt. Hope and Greenwood cemeteries (top and middle) are significant as cultural landscapes. They also affected development in the surrounding area, stimulating stone cutters and headstone engraving businesses, flower shops, and mortuaries along Imperial Avenue beginning in the 1910s.

San Diego's Elite

Some of the earliest houses in the Planning Area were large estates, especially in Sherman Heights and Grant Hill. Sherman Heights developed as a fashionable neighborhood for wealthier San Diegans because its hilltop location and proximity to downtown San Diego were desirable. The Sherman House (1886) and Villa Montezuma (1887) are among the most impressive residences in the neighborhood.

Commercial Corridors

Because of the close proximity and ease of connection to San Diego's downtown commercial core, the Planning Area remained primarily residential with only scattered neighborhood commercial development. Commercial uses were primarily located along the main transportation corridors linking the neighborhoods together: Imperial Avenue, National Avenue, Logan Avenue, and Market Street. Shops and light industrial uses such as livery stables, breweries, and harness-makers were the primary types of commercial uses in the plan area during this period as shown in Figure 5-2.

Cemeteries

In 1869, Alonzo Horton formed a committee to establish a public cemetery for San Diego. The 169-acre City-owned cemetery was sited at the edge of the Pueblo Lands, along the city-county line—necessarily on the outskirts of town for health purposes. Augusta Sherman named the cemetery "Mt. Hope," and by 1871 it had received its first burials. Mt. Hope Cemetery is notable because from its inception, it was the only cemetery in the city without discriminatory regulations based on color or religious faith.[6] Adjacent to Mt. Hope is the privately-owned Greenwood Memorial Park, founded in 1907 by a group of prominent San Diego businessmen, and opened in 1908.

Schools and Churches

As residential development progressed, schools and churches were constructed to serve the growing community. The locations of schools from this period help to explain the larger residential development patterns, as schools typically indicate a certain concentration of nearby single family homes for families. Although the majority of the original schools are no longer standing, most of these parcels are still used today by modern schools. As with schools, few of these original churches are still in existence today.

Development Expands

New Auto-Oriented Subdivisions

Most of the Planning Area had already been subdivided during the real estate booms of the 1880s and the early 1900s. During the interwar period, construction in existing subdivisions grew. By 1930, 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.

6 http://www.sandiegohistory.org/journal/82fall/cemeteries.htm. San Diego Weekly Reader vol. 29, no. 43 (28 October 2000), in San Diego Public Library Vertical Files.

Bungalow Courts & Apartments

Single-family residences were still the primary property type in the Planning Area during this period, but the size, style, and layout of the houses began to change to reflect newer architectural trends. The introduction of bungalow courts featured clusters of individual units arranged around a central garden or courtyard, allowing sufficient density while still providing greenery and private space. Examples are shown in Figure 5-2. Bungalow courts included detached garages, indicative of the increasing role of the automobile in urban life. Examples still in existence include an Art Deco-style attached bungalow court at 25th and G streets and a six-unit Craftsman style bungalow court at 25th and K streets. Duplexes and apartment buildings also gained popularity during this interwar period of expansion. One of the finest remaining examples in the Planning Area of a 1920s apartment building is the Spanish Eclectic style Alta Vista Apartments at 2002 Market Street in Sherman Heights.

FIGURE 5-2: Commercial

TYPICAL EXAMPLE(S)	CHARACTER-DEFINING FEATURES
	• Commercial use • Location along a commercial corridor such as Imperial Avenue, National Avenue, Logan Avenue, Market Street, or Ocean View Boulevard • Architectural style and form from this period, including Spanish Eclectic, Mission Revival, or Art Deco • Built to front property line • One story • Gable or flat roof with front parapet • Stucco or wood cladding • Wood or metal storefronts, often with clerestory

FIGURE 5-3: Residential: Apartments & Bungalow Courts

TYPICAL EXAMPLE(S)	CHARACTER-DEFINING FEATURES
 	• Location in an early subdivision, typically west of Pueblo Lands boundary line or in Encanto • Architectural style and form from this period, including Craftsman, Spanish Eclectic, Mission Revival, Pueblo Revival, or Art Deco • Apartments are one to three stories and built to the front property line • Bungalow courts are clusters of small one story units organized around a courtyard or garden • Flat or hipped roof, often with parapet • Stucco or wood cladding • Wood sash windows (double-hung or casement) • Wood door (glazed or paneled)

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 Southeastern San Diego: National Avenue, Logan Avenue, Ocean View Boulevard, Imperial Avenue, and Market Street. The 1920 Sanborn Fire Insurance maps show a large garage at Imperial Avenue and 30th Street, as well as many corner gas stations along all the main commercial corridors.[7] Furthermore, personal automobile garages soon became a fixture of the new auto-focused lifestyle in the Planning Area. According to 1940 Sanborn Fire Insurance Maps, well over 75 percent of the single-family dwellings east of 32nd Street included a detached garage at the side or rear of the property.

Ethnic Diversity and Migration

Beginning in the 1920s, ethnic enclaves began to form in the Planning Area, especially in the greater Logan Heights 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 where such restrictions were absent or were not enforced.[8] 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. Additionally, as the automobile opened new lands for settlement, wealthier white residents who had once lived in the neighborhoods close to the downtown commercial core took the opportunity to move further afield beginning in the 1920s, leaving vacancies for minority groups in the inner city.

The Memorial Park neighborhood became a center of San Diego's African-American population in the mid-1920s. By 1926, six of the city's seven black churches were located in the Memorial Park neighborhood, and by 1940, all eight of the city's black churches were located in the neighborhood.[9]

The 1920s saw a dramatic increase in the Mexican-American population in Southeastern San Diego, as large numbers of immigrants fled to the United States after the Mexican Revolution (1910-1920). Additionally, restrictions on European and Asian immigration imposed by the federal government after World War I left many jobs in agriculture, construction, transportation, and mining available for Mexican immigrants.[10] Many Mexican immigrants settled in Logan Heights, which transformed into the largest concentration of Mexican families in the city during the 1920s.[11] The Neighborhood House was founded downtown in 1916, in keeping with the nationwide "settlement house movement" that sought to reach out to poor migrants. Although the organization's services were available to anyone in need, the primary goal of the Neighborhood House was to assist San Diego's Mexican immigrants.

7 Sanborn Fire Insurance Maps, 1920.

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

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

10 Barrio Logan Survey, 43. http://www.sandiego.gov/planning/barriologanupdate/documents/pdf/blhistoricalsurveyfull.pdf.

11 Logan Heights Memory Book, http://www.sandiego.gov/planning/barriologanupdate/documents/pdf/loganhtshistoricalsociety.pdf

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. Naval Station San Diego, at the foot of 32nd Street just south of the Planning Area, was the largest Navy base on the West Coast and the home port of the U.S. Pacific Fleet.[12] The influx of military personnel and defense workers created an immense housing shortage in San Diego. Fifty thousand workers arrived in the city in 1940 alone. In Southeastern San Diego, the "Dells" defense housing project was completed circa 1945 and demolished in 1955.[13] Aerial photos from 1946 also reveal a large housing complex just north of Greenwood Memorial Park (south of Market Street at 43rd Street) labeled as "Market Street Extension Housing." About four blocks of the development still exist today between 43rd Street and I-805.

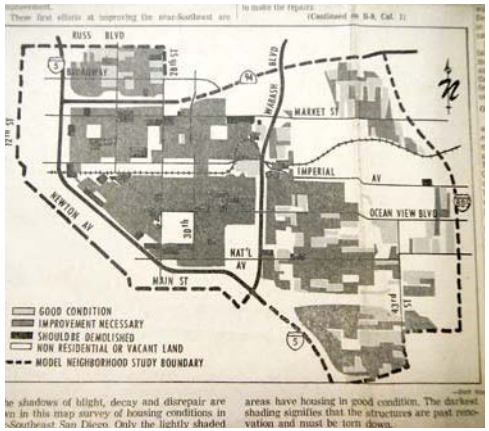
Suburbanization

The postwar era saw the rapid expansion of San Diego: over 2,500 new subdivisions were recorded city wide between 1940 and 1967. With large tracts of rural land available so close to the center city, postwar developers quickly saw the potential to create new suburbs in the valley. A study of San Diego County Assessor's records revealed that subdivisions recorded in the 1950s and 1960s included Ocean View Terrace, on the south side of Ocean View Boulevard between Pueblo Lands boundary and San Pasqual Street (1950).

Aerial view of Chollas Valley, showing postwar subdivisions (September 14, 1957). (San Diego History Center Photo Archive, Kazikowski Collection)

12 http://www.kpbs.org/news/2009/jun/23/military/

13 Greater Logan Heights Study.



A circa 1972 newspaper article about the Model Neighborhoods project presents and describes this map: "The shadows of blight, decay and disrepair are shown in this map survey of housing conditions in near-Southeast San Diego. Only the lightly shaded areas have housing in good condition. The darkest shading signifies that the structures are past renovation and must be torn down." (San Diego Public Library, Vertical Files)

Re-Zoning Logan Heights

In the 1950s, the City of San Diego rezoned the greater Logan Heights area—especially in present-day Barrio Logan—from primarily residential to an industrial or mixed-use classification. This zoning change resulted in major changes to the land use and character of the neighborhood: commercial and industrial businesses were now located adjacent to residences, and noisy, unsightly automotive scrap yards proliferated.[14] This zoning change combined with municipal transportation decisions and post-war migration patterns to created conditions of blight in the Planning Area, especially in greater Logan Heights. As a result, Southeast San Diego (roughly equivalent to the greater Logan Heights area) was one of two neighborhoods in San Diego officially designated as "Model Cities Neighborhoods," under an ambitious federal urban aid program that operated between 1966 and 1974. A comprehensive profile of Southeast San Diego was prepared for the Model Cities Program in 1968,[15] and an action plan for fixing the decay was developed in 1972.[16]

Housing Discrimination and Racial Politics

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.[17]

Passage of the Civil Rights Act of 1964 and the Fair Housing Act of 1968 formally put an end to discriminatory housing practices, but Southeastern San Diego never fully recovered from the declining socioeconomic conditions that had been exacerbated by years of segregated living.

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 as car washes, drive-in restaurants, and drive-in movie theatres were built. Another architectural type exhibited in World War II-era and post-war commercial and light industrial buildings is the prefabricated Quonset hut, developed during World War II. After the war, the corrugated metal buildings were adapted to commercial buildings and warehouses.[18] Examples exist at two auto parts stores at 2828 and 2855 Market Street (primary façades altered). In general, though, the long-standing business districts in Southeastern San Diego reached their height at earlier times, so relatively few examples of postwar commercial properties are observed within the Planning Area today.

14 Barrio Logan Historical Resources Survey (February 2011), 53.

15 San Diego Union (29 April 1968).

16 "Action Scenarios: A Redevelopment Strategy for the Model Neighborhood," in San Diego Public Library Vertical Files.

17 San Diego Reader (3 December 1998).

18 Brian F. Smith and Associates, Historical Resources Survey: Barrio Logan Community Plan Area, San Diego, Cali-fornia (1 February 2011).

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 the Planning Area was heavily affected by these plans. Large swaths of the neighborhood were razed in the 1950s and 1960s to make way for the six- and eight-lane freeways, effectively eliminating the once-fluid edges of the neighborhood.

The freeways not only demolished some of the area's oldest buildings, but also displaced families and businesses and exacerbated social issues. Socioeconomic consequences caused by the freeway construction included segregation of lower-income and ethnic minorities; reduction in existing affordable housing stock; and separation of communities from services such as stores, churches, and schools. For example, Highway 94 was designed to connect San Diego to Lemon Grove, La Mesa, and El Cajon to the east, and was completed in three stages between 1956 and 1958.[19] Everything on the blocks between F and G streets between 17th and 30th streets was demolished.

Modern San Diego

Today, Southeastern San Diego 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 numerous urban infill projects have changed the built environment in the Planning Area. Large areas that exhibit cohesive historic character no longer exist, but there are many individually exceptional properties and smaller clusters of significant houses that tell the important stories of Southeastern San Diego's past.

19 San Diego Union (4 January 1957). San Diego Union (13 May 1956).

5.2 Historic Sites and Districts

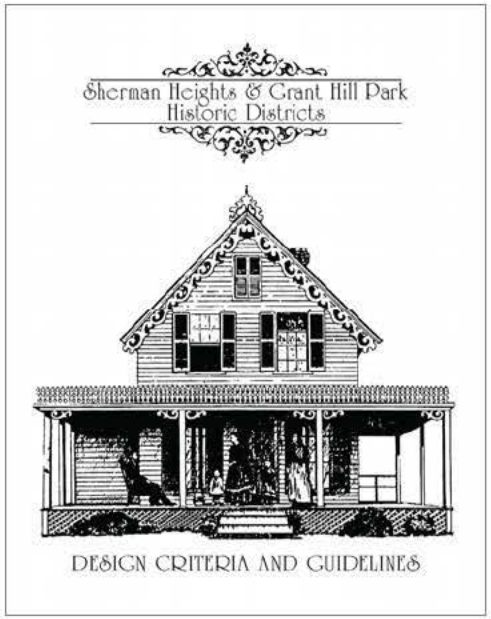
National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's most comprehensive inventory of historic resources. The National Register is administered by the National Park Service and includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. Structures must be at their original location and at least 50 years old to qualify. One historic building in the Planning Area has been listed in the National Register of Historic Places: Villa Montezuma, at 1925 K Street.

Registered San Diego Landmarks

The City of San Diego maintains a Register of Historical Resources, which includes both individual resources and historic districts. Although based on NRHP and CRHR criteria, the City of San Diego designation criteria differ slightly from the federal and state registers. The Historical Resources Guidelines of the Land Development Manual (a supplement to the Municipal Code) states that any improvement, building, structure, sign, interior element, fixture, feature, site, place, district or

Villa Montezuma is listed in the National Register of Historic Places. Photo source: http://www.villamontezuma.org. (top). Hollington House on 21st Street is among twelve properties in Southeastern listed in the San Diego Register of Historical Resources. The property is also in the Sherman Heights historic district. (bottom).



Design criteria and guidelines for the Sherman Heights & Grant Hill Park Historic Districts regulate alterations and rehabilitations of historic sites and potentially contributing structures. Their purpose is to maintain the integrity of the districts and the structures that comprise them.

object may be designated as historical by the City of San Diego Historical Resources Board.

The Planning Area contains twelve properties listed in the San Diego Register of Historical Resources, as shown in Table 5-1 and Figure 5-4.

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.

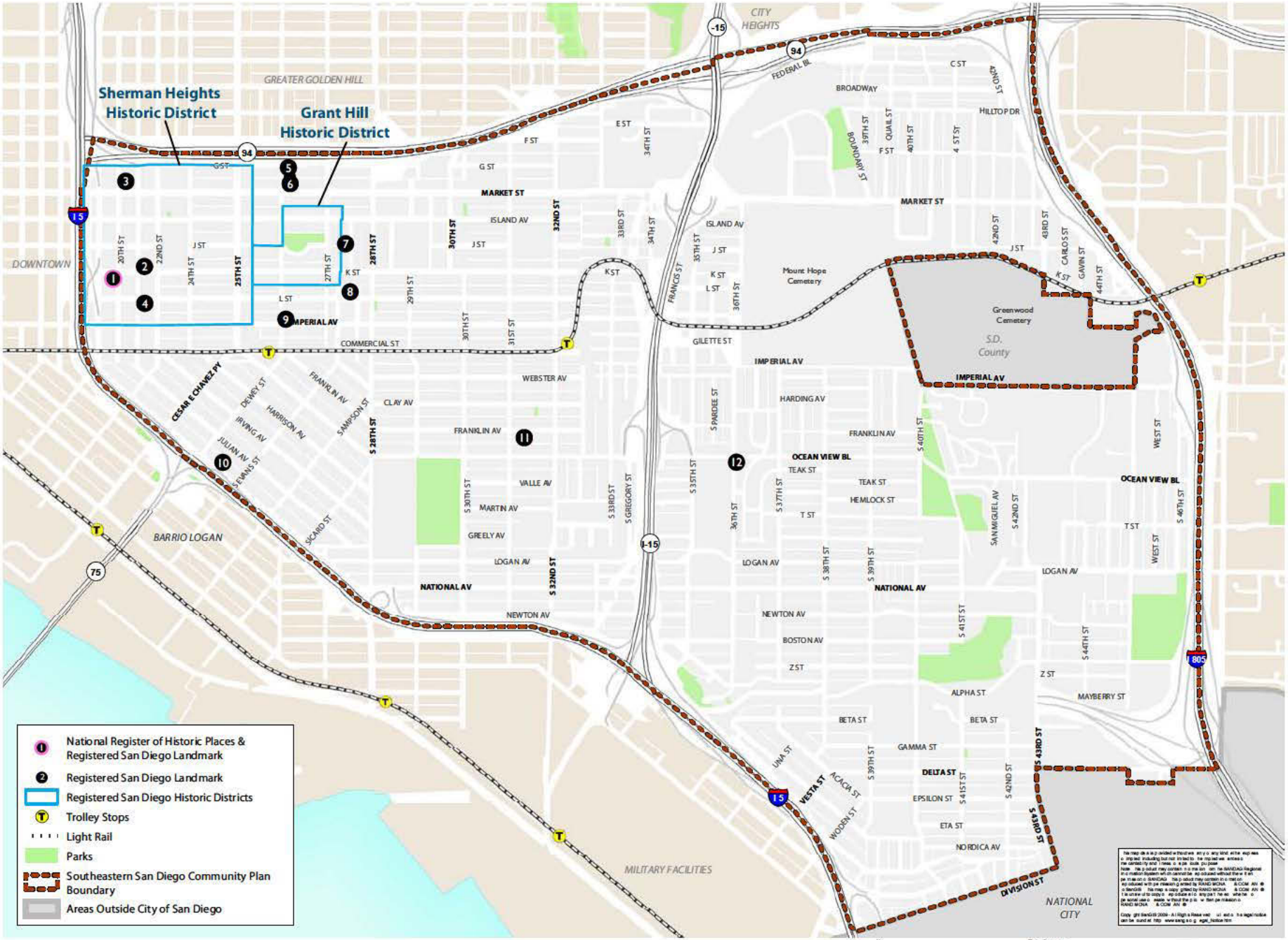
The Planning Area contains two historic districts, Sherman Heights and Grant Hill Park, as shown in Figure 5-4. The Sherman Heights Districts lists 390 contributors and the Grant Hill District lists 48.

TABLE 5-1: HISTORIC PLACES, LANDMARKS AND DISTRICTS

MAP ID	SITE	ADDRESS
National Register of Historic Places		
1	Villa Montezuma	1925 K Street
Registered San Diego Landmarks		
1	Villa Montezuma	1925 K Street
2	Sherman Heights Apartments	2106 K Street
3	Sherman Hearns House	633 20th Street
4	Hollington House	171 21st Street
5	Frank Zinnel House	643 26th Street
6	Newby-Whitney House	629 26th Street
7	Strandlund Family Residence	402 Langley Street
8	Italian Stone Pine	2736 L Street
9	Claus A. Johnson Commercial Building	2602-2608 Imperial Avenue
10	Gorham House	2040-2042 Kearney Avenue
11	Weldon Glasson House (Chateau de Toman)	3139 Franklin Avenue
12	Old Fire Station #19	3601 Ocean View Boulevard

Source: Page & Turnbull, 2012.

FIGURE 5-4: Historic Resources and Historic Districts



This page intentionally left balnk.

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
King-Chavez Primary Academy	K-2	342	85%	100%
Baker Elementary	K-5	418	74%	100%
Burbank Elementary	K-5	401	74%	100%
Kimbrough Elementary	K-5	543	83%	100%
Rodriguez Elementary	K-5	573	82%	100%
Sherman Elementary	K-5	477	81%	100%
Balboa Elementary	K-6	600	69%	100%
Chavez Elementary	K-6	637	76%	100%
Emerson/Bandini Elementary	K-6	640	79%	100%
Logan Elementary	K-8	620	74%	100%
Our Lady's School (Private)	K-8	230	[1]	[1]
St. Jude Academy	PK-8	199	[1]	[1]
King-Chavez Arts Academy	3-5	170	80%	100%
King-Chavez Athletics Academy	3-5	161	86%	100%
King-Chavez Preparatory Academy	6-8	359	58%	100%
Memorial Preparatory	6-8	537	59%	100%
TOTAL/AVERAGE		**6,907**	**76%[2]**	**100%[2]**

1. No data available for private schools.
2. Average for public schools only.

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

Several public and charter school campuses are consolidated next to Memorial Park.

6.1 Educational Facilities

K-12 Schools

Home to many families and school-age children, Southeastern hosts at least 16 public, private, and charter schools that serve as places for student learning, but also centers of the community.

Over 6,900 students attend elementary and middles schools in Southeastern San Diego, as shown in Table 6-1. Remarkably, all public school students are considered economically disadvantaged, qualifying for free or reduced priced lunch, and on average three-quarters of students are English Language Learners. There are no public high schools in the Planning Area, so students must travel outside the community to attend high school. According to SANDAG estimates for 2012, there are 15,942 children between the ages of five and 19 living in Southeastern San Diego, which suggests that many more students are traveling outside the neighborhood to attend school.

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 provide opportunities for learning for students and adults. In addition to the public/quasi-public facilities described below, there are several non-profit agencies and grassroots community groups that provide important services for local residents and workers.

Public Libraries

There are two branch libraries within Southeastern: Logan Heights Library and the Mountain View/Beckwourth Library. 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. Additionally, although not located within the Planning Area, San Diego's new central public library is being constructed at the intersection of Park Boulevard and K Street in downtown, about ¼ mile from the Planning Area, and should be accessible on foot or by trolley for many Southeastern residents. The new library is slated to open summer 2013. The library will also house community gathering spaces, as well as a charter school.

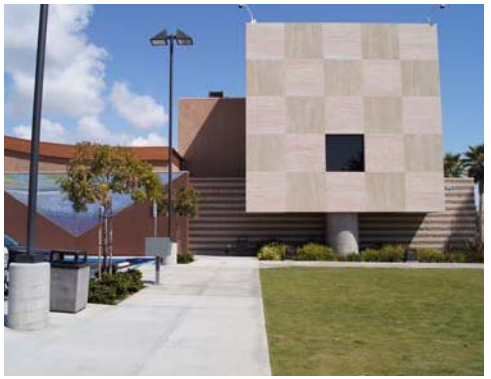
Higher Education

San Diego Continuing Education has an adult education campus on Ocean View Boulevard, providing opportunities for professional development, technical skills training, and college preparation. The school offers a variety of non-credit courses and certificate programs in business, computers, English as a Second Language, GED preparation, health care, and other disciplines. The school serves more than 90,000 students each year at six main campuses around San Diego.

Concorde Career College, located at 4393 Imperial Avenue, offers vocational career training programs in the healthcare field. Courses and certificates include programs in dental, medical assistant administration, physical therapist assistant, respiratory therapy, surgical technology, vocational nursing.

Community Centers

There also several community centers in Southeastern, including the Sherman Heights Community Center and the Mountain View Community Center. These centers provide meeting rooms, education and recreation classes, cultural events, and serve as important centers for children, teenagers, and adults. The non-profit Jackie Robinson Family YMCA also provides a technology center and child care, in addition to fitness and wellness services.



The Mountain View Beckworth and Logan Heights libraries (top, middle) provide literary programs and computer access, in addition to book lending. The San Diego Continuing Education campus has a range of education and training courses for adults.

The new Central Division Police Station, located on Imperial Avenue and 25th Street, manages policing west of I-15. The area east of I-15 is part of the Southeastern Division, which is headquartered in Skyline, outside of the Planning Area.

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 portion of the Planning Area west of I-15 is part of the Central Division which is headquartered within the Planning Area at 2501 Imperial Avenue, as shown in Figure 6-1, and serves over 103,000 residents in Southeastern and surrounding neighborhoods. The area east of I-15 is part of the Southeastern Division; this headquarters is located in the Skyline neighborhood east of the Planning Area and serves a population of over 175,000.[1]

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

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 are two fire stations within or near the Planning Area, as shown in Figure 6-1: Station 19 just east of I-15 on Ocean View Boulevard and Station 7 in Barrio Logan just west of I-5.

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.

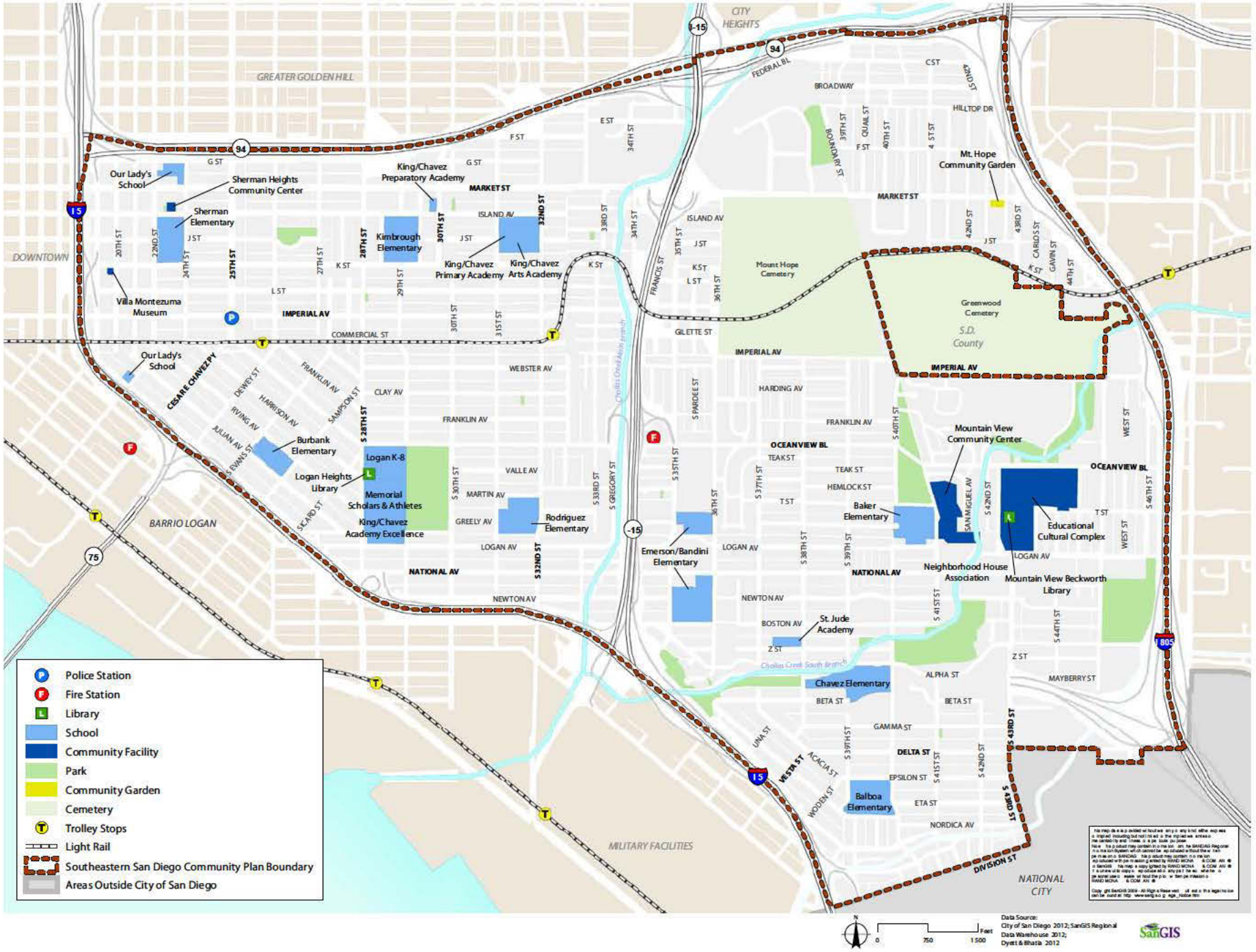
An analysis of reported crimes over a one year period (2011) is shown in Table 6-2. The data show that the

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

TYPE	# REPORTED
Larceny - Theft	420
Aggravated Assault	328
Motor Vehicle Theft	317
Burglary	171
Robbery	100
Rape	18
Murder	5
TOTAL CRIMES	**1,359**

Source: Automated Regional Justice Information System (ARJIS), Reporting Period Jan. 2011 to Dec. 2011. In-cludes the following neighborhoods: Grant Hill, Logan Heights, Mountain View, Mt. Hope, Shelltown, Sher-man Heights, Southcrest, and Stockton.

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



greatest number of incidents come from larceny-thefts, motor vehicle thefts and aggravated assaults, the latter of which is considered a violent crime.

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.

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.

Infrastructure and 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.

The Planning Area can be characterized as being at the end of the water system pipeline. Even so, there are several large diameter transmission mains which are located within the Planning Area and provide water transmission capacity. There are three 30" diameter pipelines including the 28th Street Pipeline, the Bonita Pipeline, and the Commercial Street Pipeline. The remaining piping within the Planning Area is 12" and smaller and provides local water distribution. Lots are generally small and the water distribution system is well interconnected.

Pressure

Adequate pressure is essential for ensuring adequate flows for both daily domestic use and for fire hydrant flow capacities. The Southeast San Diego Community Planning Area is served entirely by City water, specifically the University Heights 390 Pressure Zone. Service by a single pressure zone is achievable because of the small range in topography within the planning area—from 20 feet to 175 feet above mean sea level. The maximum static water system pressure within the planning area ranges from a low of 90 pounds per square inch (psi) to a high of 160 psi. Generally, the water service system for the Planning Area can be rated well because of the available working pressures in the water system.

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 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 near the western edge of the Planning Area 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 Southeastern San Diego Community Plan that affects capacity, but the contribution of the entire service area. Southeastern'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.

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

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 dam-

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

aged drainpipes. Storm drains are designed to handle normal water flow, but occasionally during heavy rain, flooding will occur.

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 Southeastern San Diego are presented in this chapter.

The Community Plan update process 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.

Existing Parks

The Planning Area features a variety of parks, ranging from the 18-acre Memorial Community Park to "mini-parks" of less than one acre. Open space corridors along Chollas Creek and Mount Hope Cemetery are also included in the community's park land inventory, as presented in Table 6-4 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 within the Planning Area are summarized here and shown in Tables 6-3 and 6-4.

FIGURE 6-2: Parks and Recreation Facilities

Dorothy Petway Park (top) is a neighborhood park in Southcrest and the first of a two-phase project that will include Southwest Trails Park along Chollas Creek. The L Street Mini-Park and the Sherman Elementary School Joint-Use Sports Field provide recreational assets in a dense neighborhood (middle and bottom).

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.

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 five neighborhood parks: Grant Hill Park, Dennis V. Allen Park, Mountain View Park, Dorothy Petway Park, and Southcrest Trails Park. These parks each have a somewhat different character. Grant Hill Park is located at a high point and helps to define the surrounding historic neighborhood. Mountain View Park includes a recreation center and a community center. Southcrest Trails Park has an approved General Development Plan, and will provide both recreational facilities and restored natural open space as part of the Chollas Creek open space system, but is currently undeveloped.

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: Memorial Park in the west and Southcrest Park in the east. Both parks include a recreation center, and a combination of ball fields and areas for passive enjoyment Memorial Park also includes a community swimming pool.

Recreation facilities typically include indoor recreation centers, sports complexes including playing fields or courts, and teen or senior centers. They may be located in community parks or as stand-alone facilities. Willie Henderson Sports Complex at the eastern edge of the Planning Area features nearly 17 acres of sports fields and courts.

In addition to the recreation centers at Memorial and Southcrest, recreation centers exist at Mountain View Neighborhood Park and adjacent to King/Chavez Primary Academy. This facility, Stockton Recreation Center, serves the Stockton Neighborhood.

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 typi-

cally under one acre in size and may include the same features as mini-parks, 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 nine 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 Planning Area.

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 population-based park 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. Five school sites within the Planning Area, as shown on Figure 6-2, have joint-use agreements that provide for a sharing of development and operational costs or recreational facilities, and are intended to ensure that facilities are available for community use during non-school hours.

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

NAME	PARK TYPE	ACRES	USABLE ACRES[1]
Memorial Park[3]	Community Park	18.4*	18.4
Southcrest Park	Community Park	17.5	13.8
Willie Henderson Sports Complex	Recreation Facility	16.9	15.8
Dennis V. Allen Park	Neighborhood Park	5.6	5.1
Dorothy Petway Park	Neighborhood Park	2.7	2.5
Grant Hill Park	Neighborhood Park	2.7	1.9
Mountain View Park	Neighborhood Park	14.4	13.5
Southcrest Trails Park	Neighborhood Park	5.8	2.6
30th Street Mini-Park	Neighborhood Park/Pocket Park	0.2	0.2
41st Street Mini-Park	Neighborhood Park/ Pocket Park	0.2	0.2
Clay Avenue Mini-Park	Neighborhood Park/ Pocket Park	0.2	0.2
J Street Mini-Park	Neighborhood Park/ Pocket Park	0.2	0.2
L Street Mini-Park	Neighborhood Park/ Pocket Park	0.2	0.2
Martin Avenue Mini-Park	Neighborhood Park/ Pocket Park	0.1	0.0
Ocean View Mini-Park	Neighborhood Park/ Pocket Park	0.2	0.0
Sherman Mini-Park	Neighborhood Park/ Pocket Park	0.1	0.1
Z Street Mini-Park	Neighborhood Park/ Pocket Park	0.4	0.0
Chavez Elementary[3]	Equivalency/Joint-Use Facility	1.8	1.8
Kimbrough Elementary[3]	Equivalency/Joint-Use Facility	0.9	0.9
King/Chavez Primary Academy[3]	Equivalency/Joint-Use Facility	3.3	3.3
Rodriguez Elementary[3]	Equivalency/Joint-Use Facility	2.5	2.5
Sherman Elementary[3]	Equivalency/Joint-Use Facility	2.5	2.5
POPULATION-BASED PARK LAND		**96.5**	**86.0**

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. Includes a .4 acre ground lease for pool and recreation center with San Diego Unified School District and a ground lease with the Boys and Girls Club.
3. 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, 2013; SanGIS, 2012; City of San Diego General Plan, 2008; Dyett & Bhatia, 2013.

Chollas Creek near Imperial Marketplace provides a sense of open space with views, seating, and a walking path.

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 one area identified as open space (Imperial Marketplace Parkway), along the South Branch of Chollas Creek south of Imperial Market Place. As noted earlier, Southcrest Trails Park is along the same creek corridor and provides both open space and recreation may be more aptly described as open space though it is classified as a neighborhood park. The South Branch of Chollas Creek flows from northeast to southwest across the Mountain View and Southcrest neighborhoods, while the Main Branch flows south parallel and adjacent to State Route 15. Both branches of Chollas Creek present additional open space opportunities, including open space for urban runoff management purposes in the Planning Area.

Cemeteries

Like open space, cemeteries provide valuable visual relief in the urban environment, and can be protected as dedicated parkland. Although the 118-acre Mount Hope Cemetery is a distinctive and well-landscaped feature within the Planning Area and is dedicated park land, it does not provide recreational opportunities for the community. Its open space character is effectively doubled by the adjacent Greenwood Cemetery, which is not incorporated into the City of San Diego and so not technically part of the Planning Area. Open space and cemeteries are detailed in Table 6-4.

TABLE 6-4: OPEN SPACE AND CEMETERIES IN THE PLANNING AREA

NAME	PARK TYPE	ACRES
Open Space		
Imperial Marketplace Parkway	Open Space Park	11.8
Mt. Hope Cemetery[1]	Cemetery	118

1. Mt. Hope Cemetery is dedicated as protected park land, and provides open space qualities but does not provide recreational opportunities for the community.

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

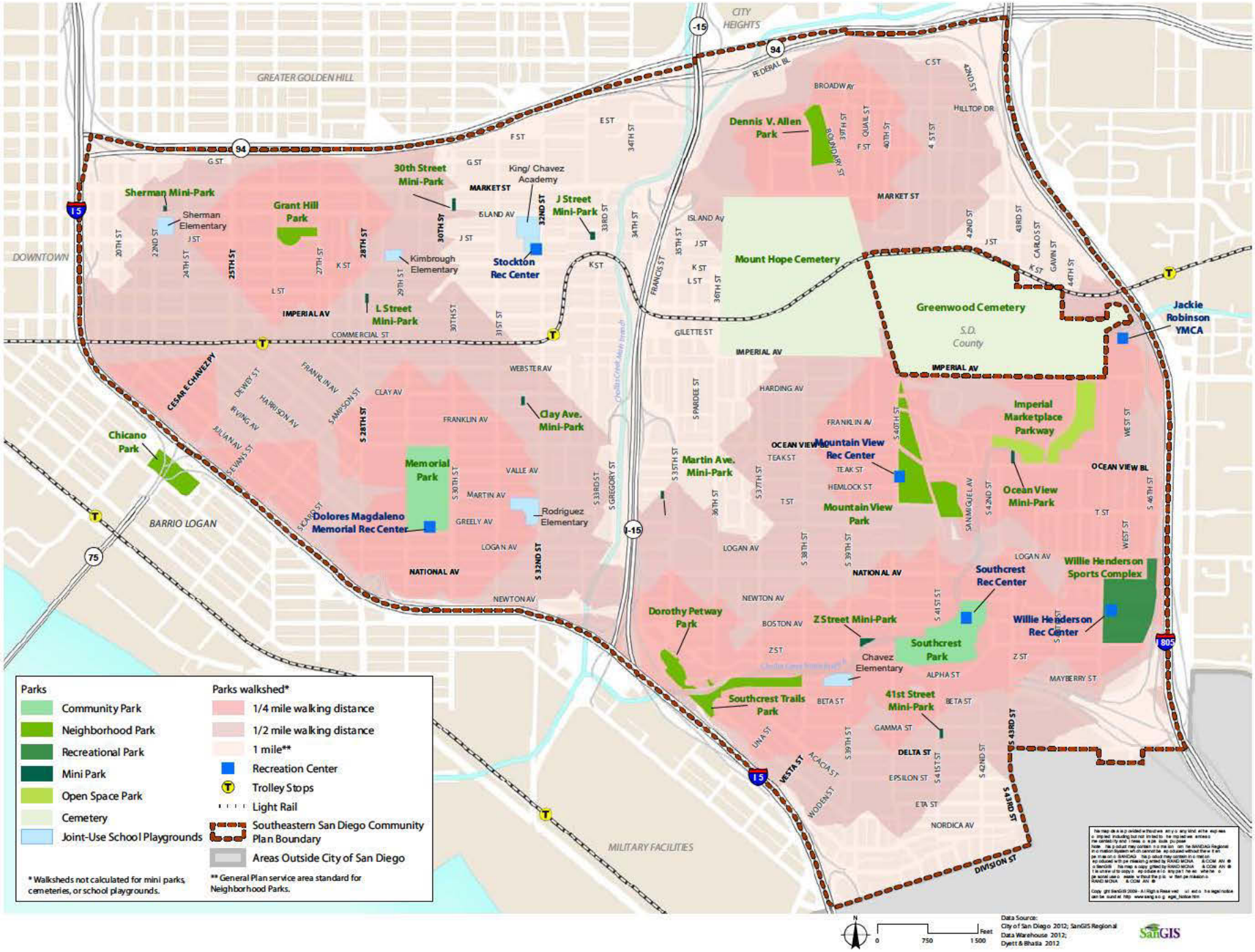
Park Land Acreage and Facility Standards

In summary there are 108 total acres of park land in Southeastern San Diego. The Planning Area features about 35 acres of community park land, 31 acres of neighborhood parks, the 17-acre Willie Henderson Sports Complex, and about 1.8 acres in mini-parks, as well as 12 acres of open space at Imperial Market Place. In addition to these parks maintained by the City's Park and Recreation Department, the City has joint-use agreements with the San Diego School District to use five school facilities totaling 11.4 acres.

Acreage Standards

The General Plan Recreational 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. The Planning Area has approximately 86 acres of usable, population-based park land serving its 57,000 residents, translating to a ratio of 1.4 acres per 1,000 residents. This is half the City's standard.

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



Improvements to Chollas Creek were made as part of the Imperial Marketplace development (top). Planned improvements to the creek segment between Greenwood Cemetery and the YMCA (middle and bottom) are detailed in the South Branch Implementation 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, all of the Planning Area falls within one mile of either a neighborhood park or a community or recreation park. The area's scattered mini-parks provide more immediate access in some neighborhoods.

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. This shows that many parts of Southeastern San Diego are beyond reasonable walking distance to a park with substantial amenities, even if they technically fall within its 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 Southeastern San Diego Planning Area, the South Branch of Chollas Creek generally flows southwesterly across the Mountain View and Southcrest neighborhoods, while the Main Branch flows south along the west side of the Highway 15 corridor. The two branches join just south of Interstate 5, and flow into San Diego Bay. 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 Main Branch comes in later phases).

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 Southeastern San Diego, as shown in Figure 6-4. Since that time, Groundworks San Diego is a consistent advocate for implementing planned creek improvements and maintaining the creek.

Of these segements, improvements to Segment 6 were made following Program guidance, as part of the Imperial Marketplace development. These improvements included bank stabilization, revegetation, landscaping and trails. Enhancement or restoration actions planned or underway for other segments include:

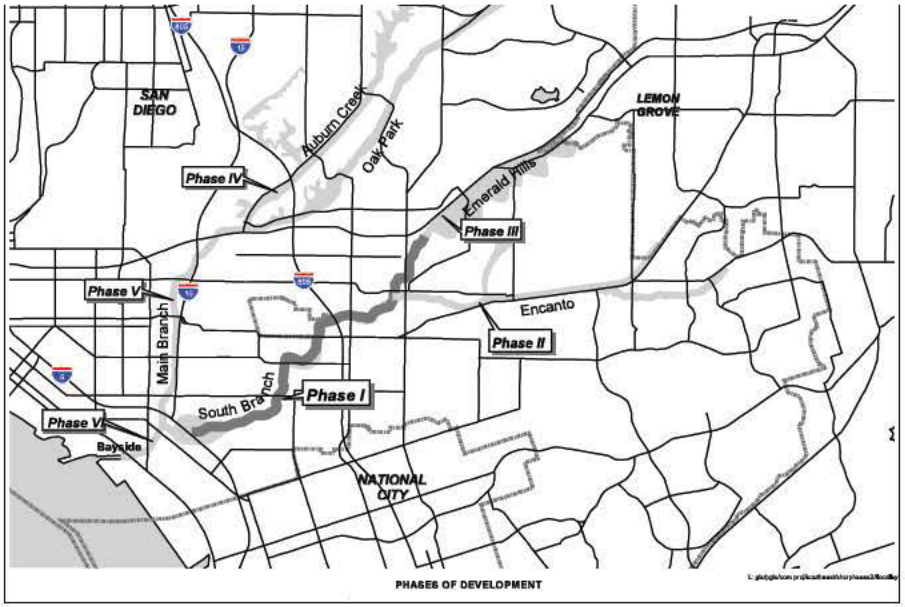
- Segment 5 – Widening and revegetation the channel in the vicinity of the YMCA, north of Imperial Avenue, and creating trails along the channel banks
- Segment 7 – Making streetscape and public art improvements along San Pasqual Street and trail improvements along the creek through Southcrest Park and parallel to Alpha Street (; and
- Segment 8 – Complete development of a linear park in the former 252 corridor (now called Southcrest Trails Park), and comprehensively restoration of the creekbed .

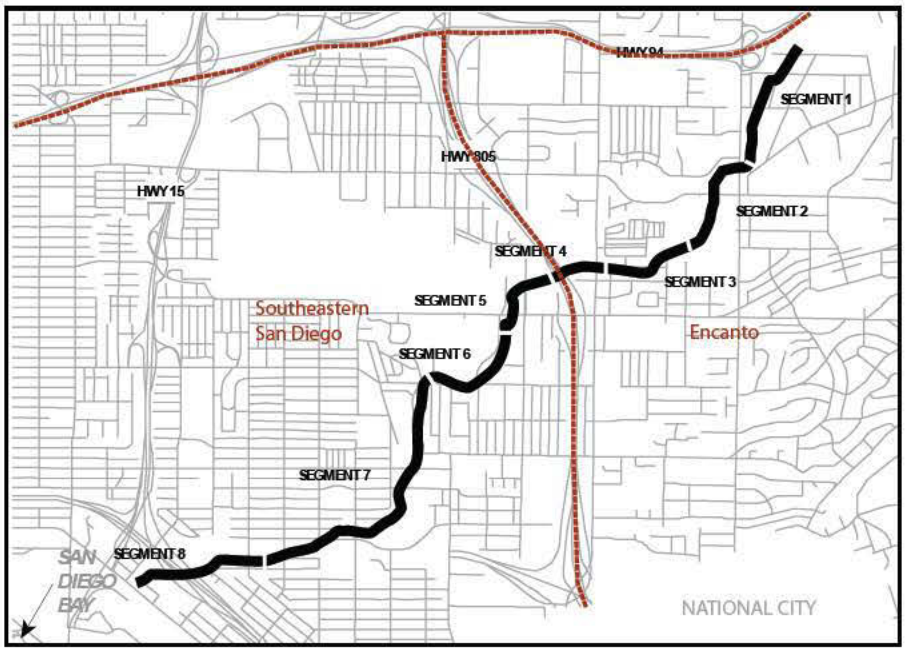
Future Park and Recreation Department Improvements

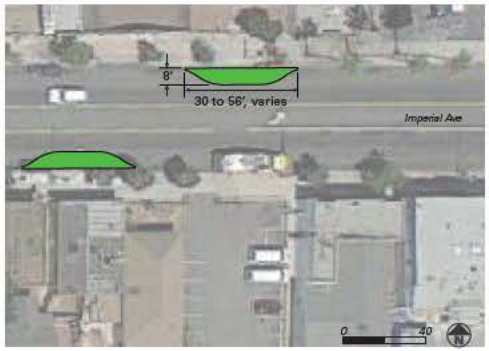
The City maintains a list of projects that have been defined but not yet funded. These include numerous projects in parks in the Planning Area. Projects common to several parks include upgrading security and ballfield lighting; upgrading irrigation systems; adding picnic shelters; repairing sidewalks; upgrading tot lots to meet State and Federal accessibility guidelines; and improving or expanding parking lots. More substantial projects include:

- New 15,000 to 20,000-square foot recreation facility to replace the existing facility in Southcrest Park;
- New swimming pool for Southcrest Park;
- Remodel the recreation center and construct a new indoor soccer area for Willie Henderson Sports Complex;

FIGURE 6-4: Chollas Creek Enhancement Program Improvements







San Francisco Planning Department

Parklets are proposed in the Commercial/Imperial Corridor Master Plan to provide gathering spaces along the street (top, middle). They can include a combination of seating, landscaped buffers and trees, and decorative paving to make urban areas more livable (bottom, San Francisco, CA).

Parks Master Plan

A goal of the City's General Plan Recreation Element is for the development of 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 Southeastern San Diego.

Draft Commercial/Imperial Corridor Master Plan

The draft Commercial/Imperial Corridor Master Plan (underway) recommends a park and public spaces, (not all of which would be considered as an equivalency) that include:

- A new neighborhood/pocket park (at least one acre) providing sun access and opportunities for recreation;
- Urban plazas within ¼ mile of the 25th Street and 32nd Street trolley stops to provide a plaza for transit users and community members;
- Developing an on-street trail on 32nd Street as part of the Chollas Creek linear park system.
- Revitalization of vacant and underutilized lots into plazas and community gardens, installation of green roofs, and parklets (i.e., widened sidewalks or bump-outs that extend into parking lanes) or setbacks along the street to create open spaces for outdoor seating, gathering and landscaping. Notably, neither community gardens nor "parklets" meet the definition of a park equivalency.

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.

Portions of the Planning Area, such as Sherman Heights (top) and Southcrest (bottom), are defined in part by its 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

Southeastern San Diego is comprised of a series of terraces that rise from just a few feet above sea level to over 180 feet above sea level in the northeast. Within the Planning Area, these terraces have been cut by streams into three upland areas. The western portion of the community has a rolling appearance, and contains a prominent knoll at Grant Hill Park. The eastern portion of the community is divided from the western portion by the Main Branch of Chollas Creek, which roughly parallels State Highway 15. This portion has flatter terrain, descending from the lightly rolling highland area in the north to a relatively level area in the south near the confluence of the Main and South Branches of Chollas Creek.

Elevations in Southeastern San Diego range from approximately 180 feet above mean sea level (MSL) at Mount Hope, in the northeastern part of the Planning Area, to approximately 40 feet MSL in the southwestern part of the Planning Area. The regional topography slopes to the southwest (USGS, 2012a & b). Southeastern San Diego is primarily underlain by old and very old paralic deposits and the San Diego Formation. Young alluvium is present in the vicinity of streams.[1]

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

Hydrology

Surface Water

Three creeks are present in the Planning Area. The Main Branch of Chollas Creek flows to the south-southwest along Interstate 15, and the South Branch of Chollas Creek flows southwesterly through the eastern portion of the Planning Area. The branches join just south of the Planning Area, and flow into San Diego Bay. Paleta Creek, which drains into the Seventh Street Channel, flows along the southern portion of the Planning Area. 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 the following hydrologic areas:

- 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).

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 15 feet at the southwestern portion of the Planning Area to greater than approximately 100 feet below ground surface (bgs) in the east. 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 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 are considered Type B faults. Active faults underlie parts of downtown San Diego, and include associated Alquist-Priolo Fault Zone areas. The Alquist-Priolo Earthquake Fault Zoning Act regulates development on or near active fault traces to reduce the hazard of fault rupture and to prohibit the location of most structures for human occupancy across these traces.[2] Surface fault rupture, however, is not necessarily restricted to the area within an Alquist-Priolo Zone.

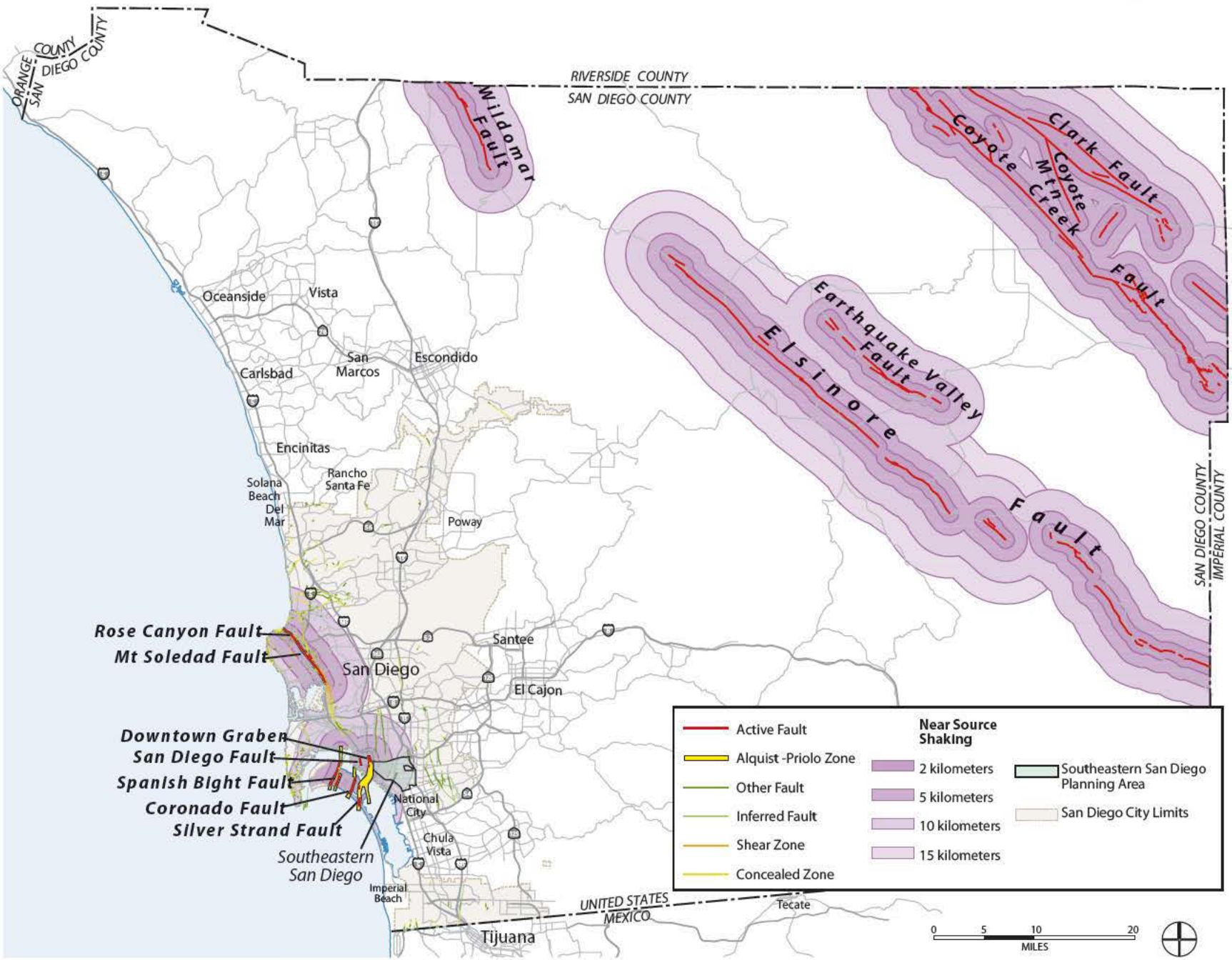
Ground Shaking

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 rela-

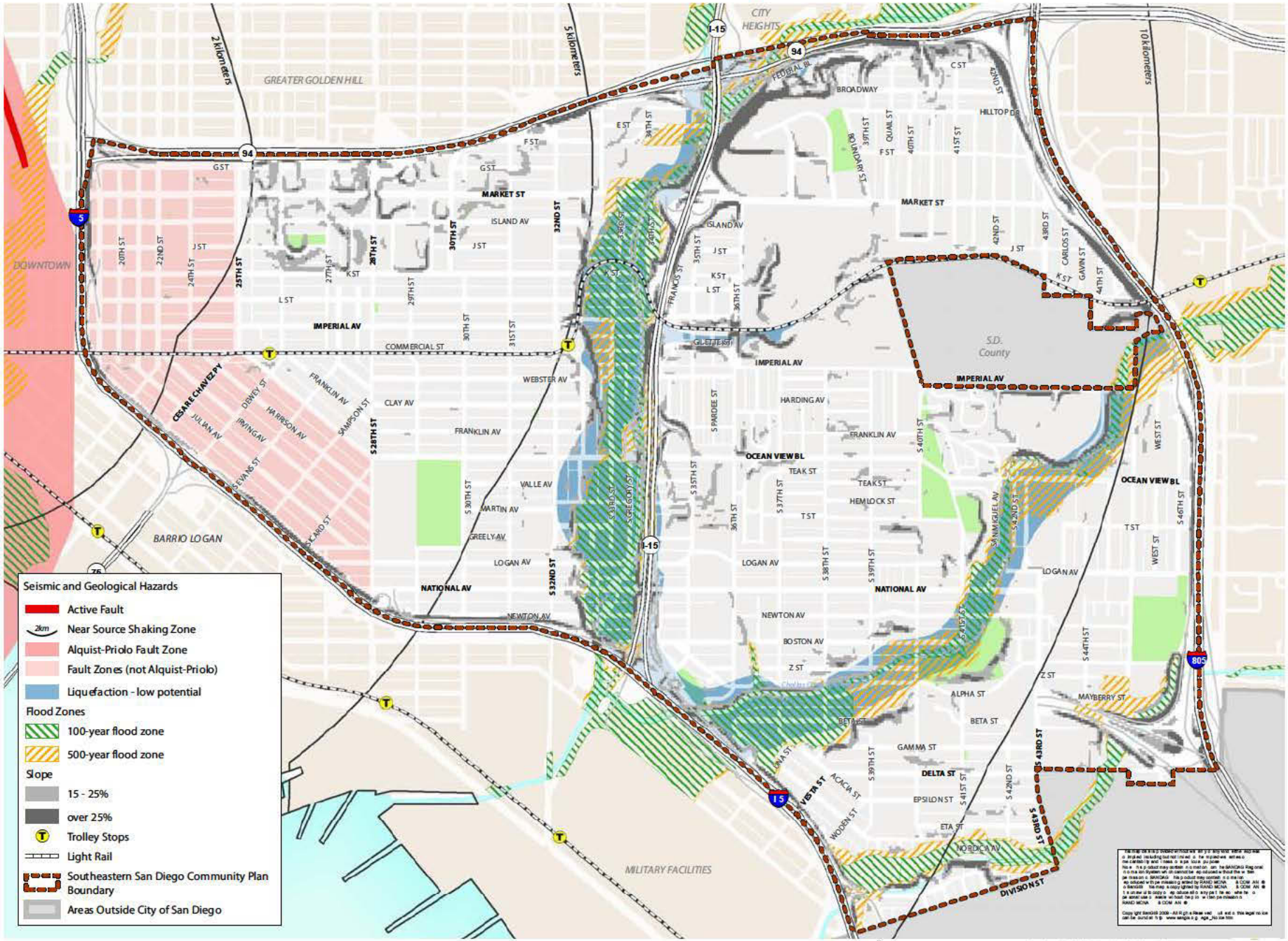
The creeks and surrounding open spaces are a defining feature in the Planning Area, but are threatened by dumping and runoff.

2 A "structure for human occupancy" is defined by the Alquist-Priolo Act as any structure used or intended for supporting or sheltering any use or occupancy that has an occupancy rate of more than 2,000 person-hours per year.

FIGURE 7-1: Regional Faults



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



Branches of Chollas Creek create terraces in the land mass and steep drop-offs, as shown east Bancroft Street.

tively 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 Planning Area's location, directly east of faults located Downtown, places it at 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, nearly all 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 Southeastern San Diego along the Main and South Branches of Chollas Creek, accounting for about 360 acres or 12 percent of the Planning Area, are considered to have some liquefaction potential.

Steep Slopes

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 some steep (15 percent or greater) slopes in the Sherman Heights, Grant Hill, and Stockton neighborhoods. However, none of the Planning Area is considered to have landslide risk.

Other Geologic Hazards

Other than the seismic risks described above, the Planning Area's soils are considered to have a favorable geological structure and low risk. However, there may be other potential geological hazards including soil erosion, expansive soils, settlement and subsidence. These issues 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 Southeastern San Diego along the Main and South Branches of Las Chol-

las Creek 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 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 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.[3] 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.[4]

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 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.

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. This can have negative impacts on sensitive receptors, including seniors and children.

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

4 Ibid.

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 days, 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. 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. These strategies help to prevent impacts on sensitive receptors, such as children, seniors, schools and homes.

The Planning Area consist of various air quality sensitive land uses located in close proximity with commercial and industrial land uses. There are numerous instances where potentially sensitive receptors may be located adjacent to commercial and industrial land uses

(collocation). Toxic air contaminants are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Appropriate setback buffers for known stationary sources and highways are shown in Figure 7-3. The existing mix of land uses and small amount of undeveloped land, limit opportunities for reducing impacts due to collocation.

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

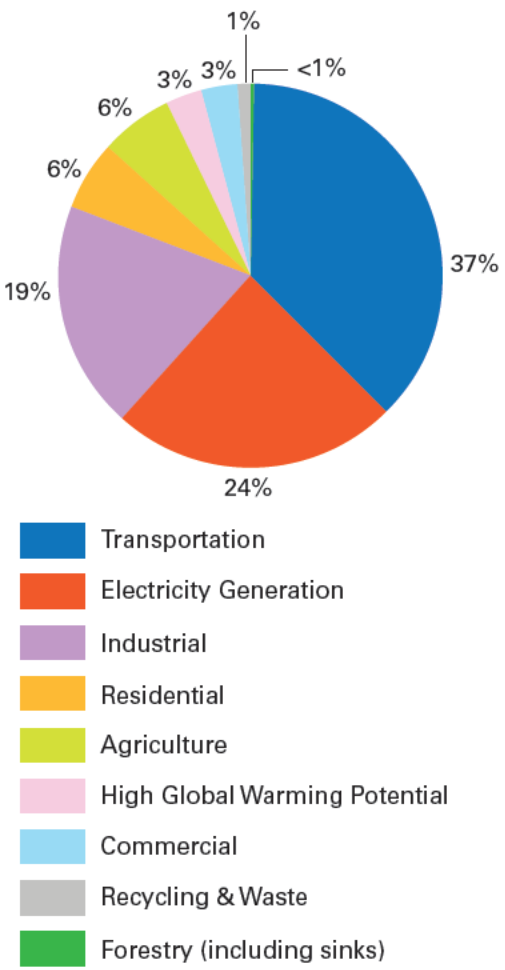
There are numerous GHGs, both naturally occurring (i.e., biogenic) and manmade (i.e., anthropogenic). Each GHG has variable atmospheric lifetime and global warming potential. Although there are dozens of GHGs, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) are the GHGs of primary concern.

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).

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).

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 seven 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 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.

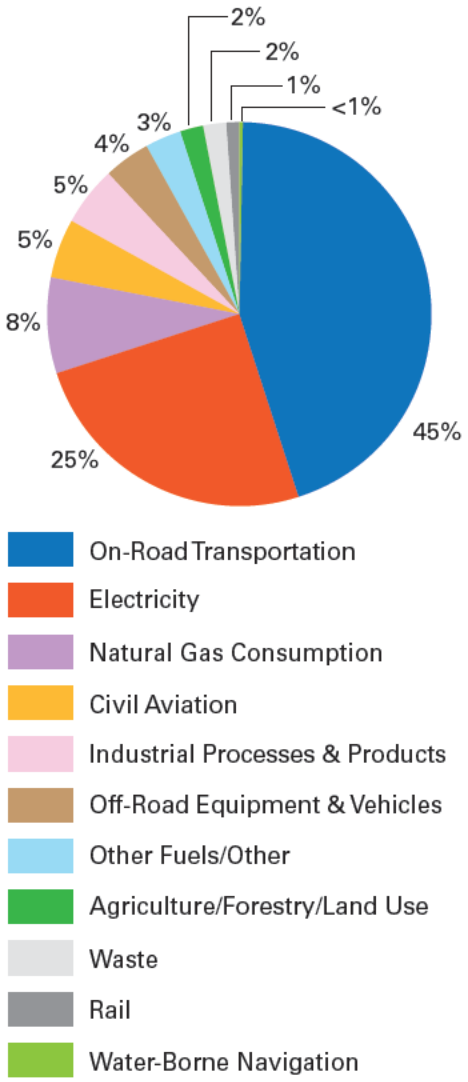
Inventories

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.

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.

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

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.

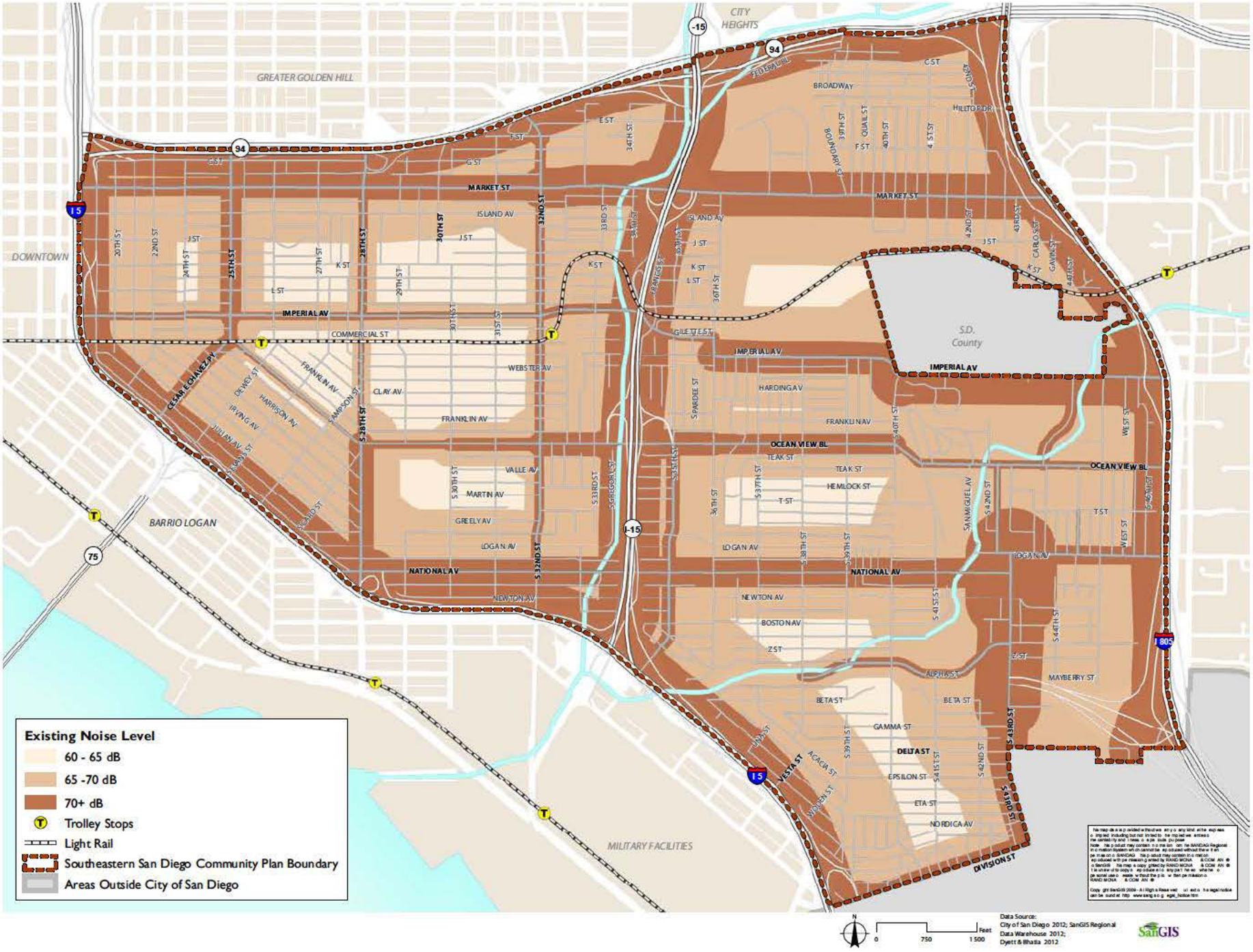
The dominant noise source in the Planning Area is traffic on roadways. Secondary noise sources include light rail transit vehicles, stationary noise sources, and aircraft overflights. The primary issue with stationary noise sources from light industrial and commercial activities is when these land uses 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-5, I-805, SR-15, SR-94, Market Street, National Avenue, Ocean View Avenue, and 43rd Street. The noise contours shown in Figure 7-4 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.)

FIGURE 7-3: Existing Noise Contours



The Orange Line trolley (top) creates intermittent noises in portions of 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.

TABLE 7-1: NOISE MEASUREMENTS (NOVEMBER 2012)

ID[1]	LOCATION	TIME	PRIMARY NOISE SOURCE	VEHICLE SPEED (MILES/HOUR)	L_{EQ}[1]	L_{MAX}
SE-1	Market St. bet. 26th and 27th St.	9:15 AM	Vehicle traffic	30 – 50	62.8	76.2
SE-2	25th St. and Imperial Ave.	5:28 PM	Vehicle traffic	15 – 30	63.0	79.6
SE-3	28th St. bet. Imperial Ave. and Commercial St.	5:05 PM	Vehicle traffic, recycling operations	15 – 25	63.6	63.6
SE-4	Market Street bet. 36th St. and I-15	4:23 PM	Vehicle traffic	0 – 40	63.5	73.4
SE-5	Alpha Street bet. S. 41st St. and S. 43rd St.	3:46 PM	Vehicle traffic	29 – 33	56.8	68.1

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.

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 65 documented release cases within Southeastern San Diego, as shown in Figure 7-5. Of these sites, 15 are considered "open" release cases. Properties with open cases represent a moderate to high risk of encountering impact during potential future redevelopment.

The 50 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).

The Community Plan will address land use compatibility concerns between sensitive receptors and potentially impactful industrial and auto-oriented uses. These issues are particularly important along National Avenue (top) and Commercial Street (bottom).

Permeable pavers and landscape areas installed on Logan Avenue near 43rd Street allow for stormwater infiltration which reduces flooding potential and runoff.

- **Polychlorinated Biphenyl (PCB) Containing Transformers.** Some older (pre-1980) mineral transformers could have been inadvertently 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

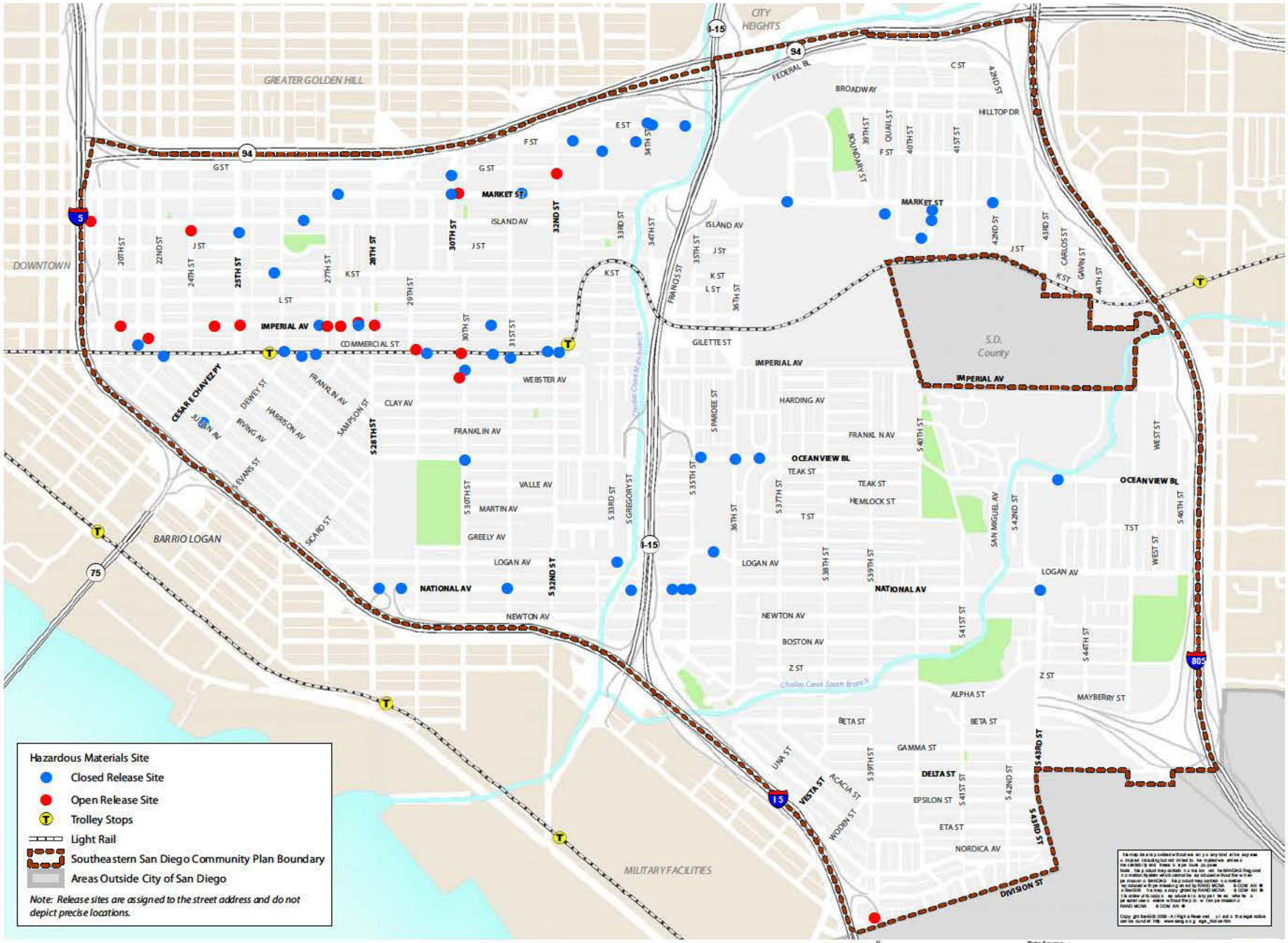
Chollas Creek is an impaired water body on the Clean Water Act Section 303(d) List of Water Quality Limited Segments. It is subject to three Total Maximum Daily Loads (TMDLs) thresholds, which represent the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality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

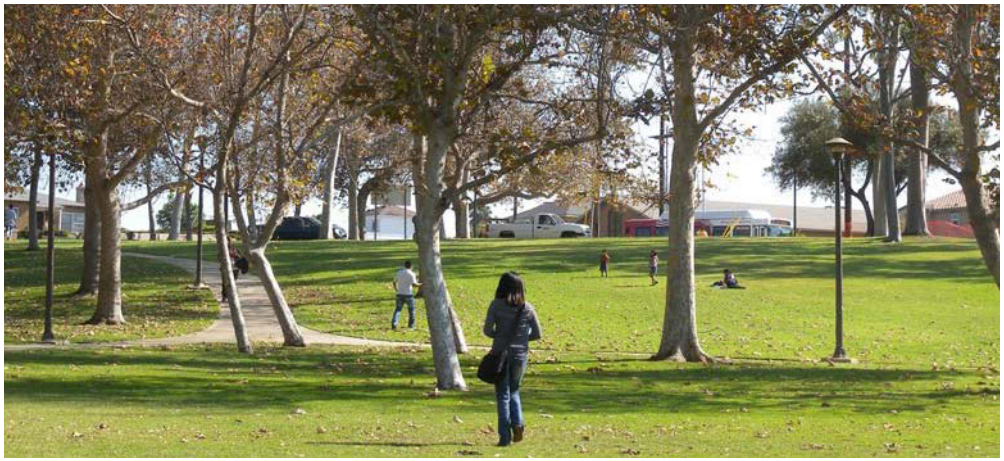
The above TMDL documents are available for review on the Regional Water Quality Control Board's website:

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

FIGURE 7-4: Potential Hazardous Materials



This page intentionally left blank.



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 Compatibility

Responding to Southeastern's Demographic Diversity and Challenges

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

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

- Identifying parks and public facility needs, and including a program for their inclusion the City's Capital Improvements Program or other implementation programs.
- Ensuring that housing policy results in a diversity of product 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 Commercial/Imperial Corridor and along National Avenue. In addition, the Southcrest, Shelltown, parts of Mount Hope and Gateway Centers East and West are former Redevelopment Project Areas. Considerable planning has already been conducted to support redevelopment efforts to create jobs and local services to assist with economic development. With a range of plans and programs having been developed over the years, the Community Plan up-

date 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 the Commercial/Imperial Corridor and National Avenue master 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

Southeastern's commercial corridors, including Market and Commercial streets and National and Imperial avenues, provide essential places for shopping and gathering with neighborhoods. They are supported by existing pedestrian-scale infrastructure that includes sidewalks with parkways, gridded streets and pedestrian scale blocks. Additionally, the Orange Line rail trolley and a network of MTS buses converge on two intermodal transit stops at 25th Street and 32nd Street.

Commercial uses on the corridors are often intermittent, not building to a critical mass at any point, and provide a limited range of services. Neighborhood-serving uses are also often intermixed with uses such as tire stores and auto-repair establishments. The Community Plan should help to create a stronger urban form, with neighborhood centers lined with neighborhood-serving retail, restaurants, and cafés, and places for gathering.

The Commercial/Imperial Corridor Master Plan, for example, seeks development of more intense buildings, similar to Comm22 affordable housing and mixed use community now under construction at key points where there are currently vacant or underutilized sites. Additionally, improvements to the streetscape can help to strengthen the identities of the respective corridors through consistent street trees, improved lighting, and public art.

Strengthening Neighborhoods

Neighborhood structure is relatively strong in some areas, such as in Logan Heights, Sherman Heights, and Mount Hope with a strong community nucleus around community centers, schools, parks and libraries. Some neighborhoods in Southeastern are among San Diego's oldest, and reveal interesting aspects of the city's urban development. Conservation of character and historic preservation are key objectives in the neighborhoods west of SR-15.

Elsewhere where neighborhood structure is less strong, as in Mountain View and Southcrest, the Community Plan should help build it, around existing elements such as the Educational Cultural Complex, Chollas Creek, 43rd and Logan node, and National Avenue. Neighborhood structure should include a center, but may also have elements such as a spine, a gradation of density, or clearly distinct use areas.

Establishing a Vision for Areas of Change and Facilitating Transit Oriented Development

This community is rich in historic and cultural significance with many architecturally and culturally significant homes, neighborhoods and landmark buildings. The historic neighborhoods and landmarks are the fabric of continuity that defines Southeastern San Diego. On the other hand, certain portions of Southeastern are afflicted with frequent occurrences of uninhabited and boarded buildings. These areas have the potential to change significantly and can do so in a way that adds to quality of life for the neighborhoods and existing residents.

Policies and diagrams in the community plan update can shape the future form of development around bus and trolley stops, 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 Southeastern community includes two intermodal transit stops that are 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 TOD Map. Southeastern also shares a planned Regional TOD site, which is identified as an opportunity site. The first of these locations is adjacent to the 25th Street Transit Station and is the current site of a catalyst mixed use development called Comm22. Next to Comm22 is a partial demolition and rebuilding including portions of the Farmer's Market Building for a new Walmart Grocery Store.
- 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 in-line transfer station replacement of the Imperial Avenue overpass, a potential connection of the Chollas Creek trail across Interstate 805. These improvements could tie in with the Jackie Robinson YMCA, proposed for redevelopment
- 252 Corridor: the freeway access from 43rd Street to I-805 will be abandoned by Caltrans, freeing more than 30 acres of land for potential neighborhood development. This abandoned land lies adjacent to the Southcrest Shopping Center and the nearby Keeler Court area, property that remains underutilized and vacant after the previous Caltrans corridor abandonment in the 1980s.
- Mt. Hope Cemetery Site: The vacant northwest corner of Mt. Hope Cemetery has been identified as a potential development site for job-producing uses.

- Former hospital site in Grant Hill.
- The Intersection of 43rd and Logan has been the location of public investment for complete street roadway realignment. This investment using federal American Recovery and Reinvestment Act (ARRA) funding resulted in surplus property.

The Market Demand Report is being prepared in tandem with this report to identify the demand for and feasibility of various uses.

Creative Ways to Provide Gathering Space

As described in Chapter 6, many parts of Southeastern San Diego are beyond reasonable walking distance to a park with substantial amenities. With limited vacant land still available, open space locations will need to be clearly identified in the Community Plan. In addition, the plan should look at alternative and innovative ways to create more open space. This may include:

- Developing open space/trail corridors along the branches of Chollas Creek, consistent with the planning efforts underway.
- Providing incentives for providing publicly accessible, but privately maintained, open space as part of new development.
- Redesigning 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.
- Improving joint-use agreements with schools to ensure that facilities are unlocked, lit at night, and well-maintained by all parties.

8.3 Community Health

Compatibility between Land Uses and Property Upgrades

Although the mix of uses in Southeastern makes for a vital and unique place, it also produces potential conflicts between incompatible uses, such as residential and industrial or auto-oriented commercial. The industrial character of Commercial Street is a poor fit with Trolley line and potential for transit-oriented development, except where substantial job generators are sited. These issues are addressed in greater detail in the Commercial Imperial Corridor Master Plan, which is nearing completion, and will also be addressed in the National Avenue Master Plan, which will begin in January 2013.

Code enforcement will be essential to bring existing properties such as auto-wrecking yards that are open to the sky into compliance. In addition, the Community Plan can support upgrades to properties by identifying standards for screening, landscaping, and façade improvements, and recommending changes to permitted land uses.

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 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.

8.4 Mobility

Connectivity that Accommodates Pedestrians

The clear boundaries defined by highways, street grid of regular blocks, connections to downtown and surrounding communities, and many views and sightlines, create an overall strong sense of place and connected urban form that generally accommodates pedestrians. However, there are several barriers to access, namely the SR-15 freeway, Chollas Creek, and (in some instances) the freight rail tracks. Large commercial and employment centers, especially east of SR-15, are introverted, often with weak pedestrian connections to adjacent neighborhoods.

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. These conditions are shown as they relate to existing land uses, particularly commercial, industrial, and public/park areas that generate pedestrian trips.

The Community Plan should establish ways to strengthen connections from residential areas to commercial corridors, transit, major public facilities, and employment centers, through marked trails, pedestrian-oriented streetscapes, improved lighting, and redesign of commercial and employment centers that are inward facing (designed for cars, not pedestrians).

Pedestrian Safety and Priority Zones

Approximately 70 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 25th Street and Imperial Avenue 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 crosslights 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.

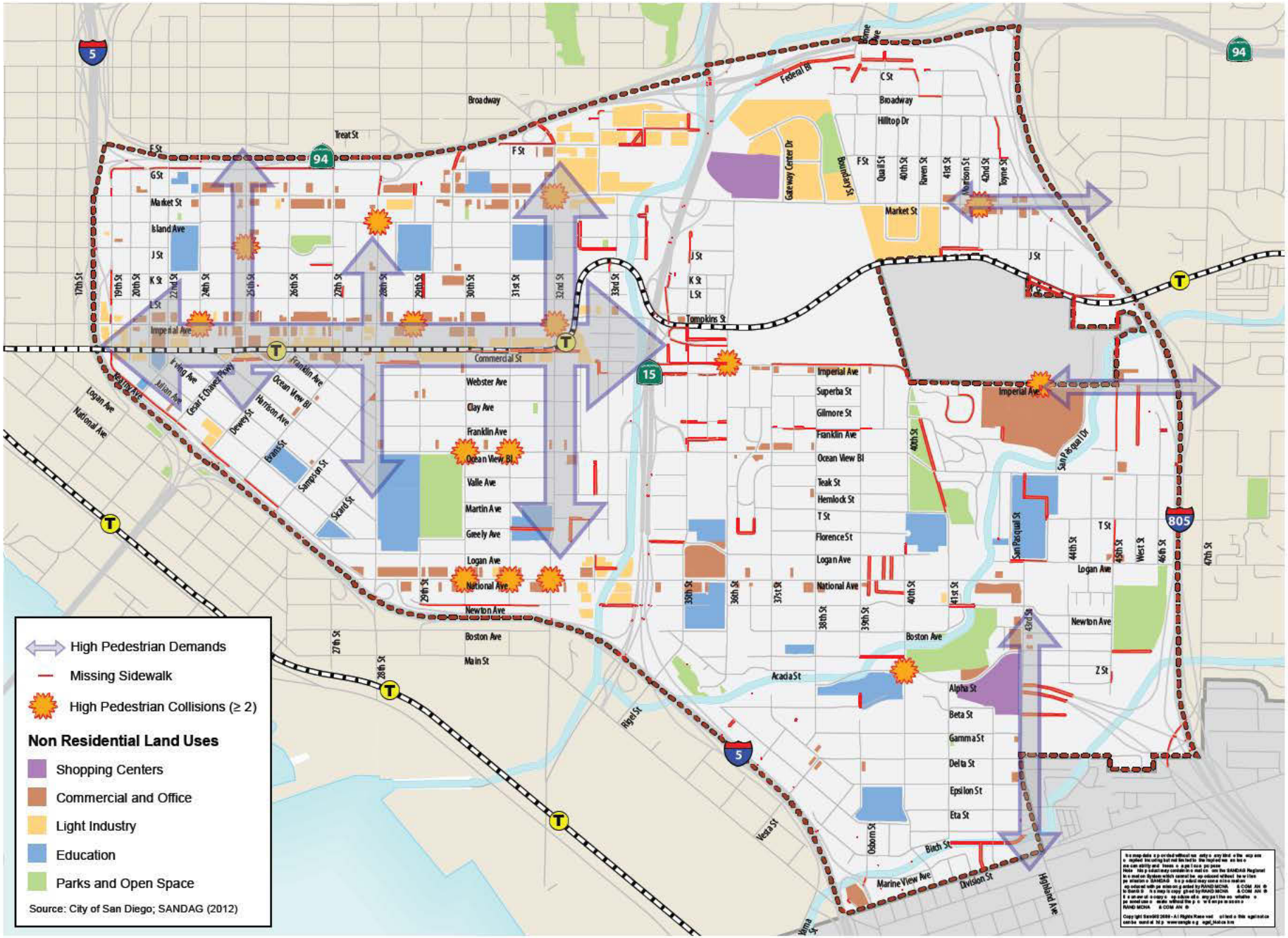
Access to Transit

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 approximately one-third that of transit time but the cost is about 60% higher, making transit a more affordable option for Southeastern residents. Recent census data indicates that approximately 12 percent of Southeastern San Diego residents are currently using transit for the work trip—almost triple the citywide rate.

Nearly all of the community is located within ¼ mile of transit service, 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 numerous transit stops are located along the east-west corridors in Southeastern San Diego, additional bus routes along the north-south streets (such as 28th, 32nd, 36th, and/or 40th streets) could be beneficial to local transit riders. Better integrating the bus and trolley, such as through a bus route that stop at 25th and 32nd Street Intermodal stops, could improve multimodal access and ridership of the trolley by reducing travel time. In addition, a route along 40th Street could better serve the eastern portion of the Planning Area.
- In western neighborhoods, the trolley acts as an urban streetcar, unifying areas to the north and the south and contributing to the activity along Commercial Street and Imperial Avenue. More can be done to improve the trolley's presence in eastern neighborhoods and facilitate greater access to trolley stations.

FIGURE 8-1: Pedestrian Needs



- Bus transit routes in the community generally operate at LOS B or better, except for Imperial Avenue, which operates at a LOS D during both the AM and PM peak hours. Imperial Avenue has the lowest frequency transit service, with only 30-mintue headways being provided by the Route 4, suggesting that the route could benefit from increased headways.
- Field observations indicate very few transit stops have shelters and only about half of the bus stops have benches and trash cans in Southeastern San Diego. Given the high transit usage, better transit stop amenities 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.

Street and Freeway Safety and Mobility

The street network in Southeastern San Diego provides a high degree of connectivity, which allows for shorter travel distances between origins-destinations and greater dispersal of traffic. Users of all modes benefit from shorter trips and multiple route options. However, the existing condition evaluations found 13 roadway segments and eight freeway segments to have below acceptable LOS (E or F) results, as shown in Figure 8-3.

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

- At or near the 32nd Street and Market Street intersection;
- At or near the I-805 SB Ramps and Imperial Avenue intersection;
- At or near the 30th Street and Ocean View Boulevard intersection; and
- At or near the 33rd Street and Ocean View Boulevard intersection.

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

Bicycle Facility Improvements

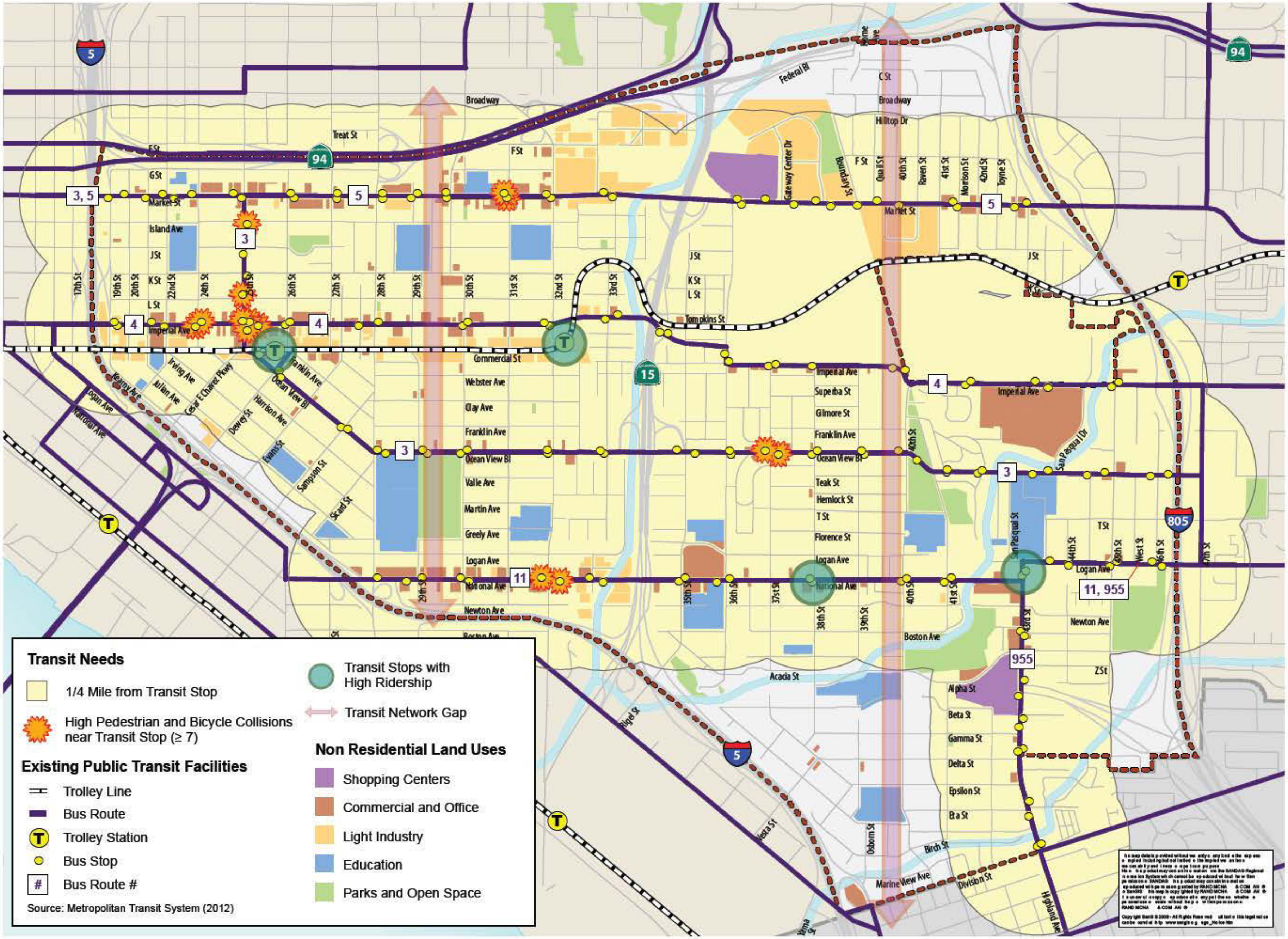
The bicycle network in Southeastern San Diego is extremely sparse, with many bicycle network gaps noted on Figure 8-4 in both the east-west and north-south directions. As noted in Chapter 3, only eight percent of roadways in Southeastern San Diego have bicycle facilities versus nearly 13 percent of City of San Diego roadways. In addition, recent San Diego State University's Active Transportation Research concluded that up to 55 percent of cyclists are riding on the sidewalk in Southeastern San Diego. This is a strong indication of the need and desire for separated bicycle facilities in this community.

Multi-modal LOS and Street "Matching"

Given limited rights of way along most streets and continued need to accommodate increased traffic and provide bike lanes, it will not be possible to accommodate all travel modes on all streets equally well. The traditional street classification system, such as arterial, collector, and local is based on access standards. However, such a classification system often ignores adjacent land uses or street functionality—such as presence of transit. 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. In addition, the Community Plan can assess opportunities to improve the multi-modal efficiency of the transportation system through the use of Intelligent Transportation Systems (ITS) strategies.

FIGURE 8-2: Transit Needs



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

CHEN RYAN

SanGIS

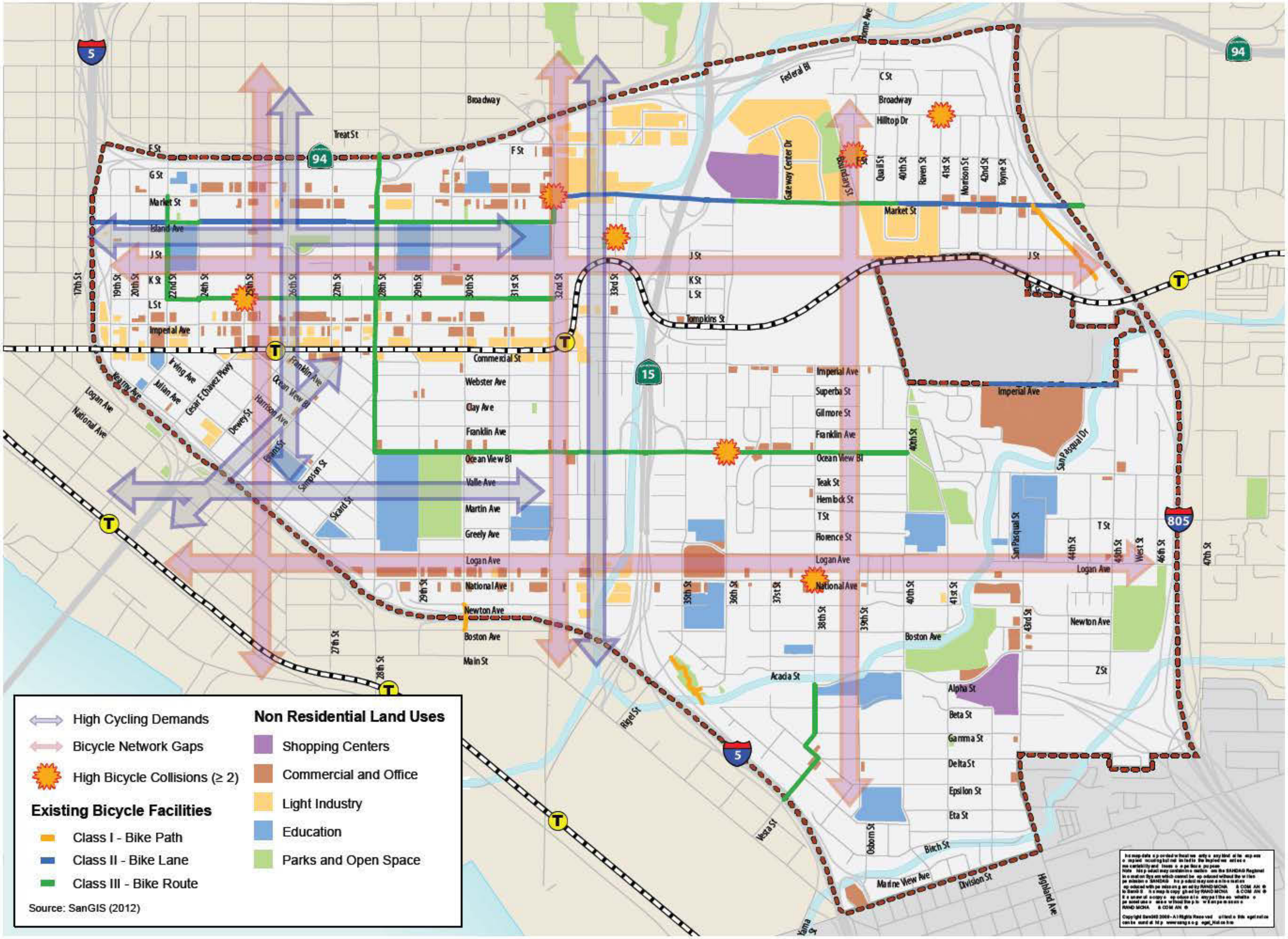
FIGURE 8-3: Street and Freeway Needs

CHEN RYAN

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

SanGIS

FIGURE 8-4: Bicycle Needs



CHEN RYAN

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

SanGIS

This page intentionally left blank.

DYETT & BHATIA
Urban and Regional Planners

755 Sansome Street, Suite 400
San Francisco, California 94111
415 956 4300 415 956 7315