

- Foster visible cultural and civic amenities, such as urban parks, outdoor dining opportunities, and civic promenades.
- Establish a hierarchy of building forms with greatest densities at key nodes.
- Connect and integrate the bayfront, eastern Chula Vista, and designated focus areas within the urban core.
- Create lively and pedestrian-friendly environments through a concentration of activities in a compact, mixed-use setting.
- Transition new development to minimize impacts on existing residential neighborhoods.
- Provide creative parking strategies, including parking districts, structures, and reductions.
- Define unique identities for focus areas through using individualized streetscape design and public spaces.
- Restore the historic street grid layout in order to maximize transportation choices and increase mobility and circulation opportunities for pedestrians, public transit and automobiles.

In December 2004 the vision plans were presented to the community at a second community workshop. Over the first six months of 2005, the Advisory Committee met monthly to review major components on the UCSP including draft land use matrices, development regulations and standards, development design guidelines, gateway concepts, and public design guidelines. The input at these meetings shaped the eventual drafting of the UCSP which is the subject of this EIR.

## **3.3 Project Objectives**

As the second largest city in the San Diego region, Chula Vista continues to play a significant role in the region's growth and is emerging as the hub of civic and cultural activity in south San Diego County. Chula Vista is one of the most rapidly growing areas in the region with a projected population of approximately 300,000 by 2030, based on GPU population projections (UCSP, Chapter II, page II-5). While much of the City's recent growth has occurred in large master planned communities developing on vacant land in the eastern portion of the City, demographic changes and other influences are bringing about population growth and renewed interests and needs for revitalization and redevelopment in the older, developed western portion of the City.

Considering this renewed interest and need for vibrant urban centers, the General Plan Update (GPU) focused on revitalization and redevelopment within the older, developed western portion of the City. The UCSP follows the direction provided in the City's GPU by establishing a more detailed vision, regulations, and guidelines for future development and beautification of the traditional downtown area. The following are the primary project objectives of the UCSP:

- Create the tools necessary to implement the General Plan Update's vision for the urban core through preparation of a comprehensive set of new zoning classifications and updated development regulations and standards for mixed-use developments.
- Develop updated design guidelines unique to the individual districts in the urban core that implement the urban form and create the active urban environment envisioned by the General Plan Update.
- Establish a Plan implementation program for the provision of community benefits such as public infrastructure, mobility improvements, and urban amenities that enhance the quality of life for the community.
- Facilitate revitalization of the downtown and surrounding commercial and residential areas by increasing certainty and predictability for all stakeholders that assures quality outcomes and streamline the development entitlement process.

## **3.4 Project Characteristics**

The UCSP has been prepared as the neighborhood level planning document which provides updated zoning regulations, development standards, and design guidelines to implement the planned land uses, through the year 2030, as envisioned in the City's General Plan Update. In addition to being a land use regulatory document, the UCSP also outlines the framework for the provision of urban amenities and other public improvements associated with new development.

The intent of the UCSP is to create zoning that facilitates and encourages development and improvements that will help realize the community's vision for the Chula Vista urban core. Based on input received at the community workshops, the community wants the urban core to be a desirable San Diego County destination for both visitors and residents alike, with an identity of its own. The community wants a downtown that is vibrant, forward thinking but respectful of its past, and alive with thriving businesses, attractive housing, and entertainment, cultural and recreational activities.

The UCSP envisions a broad mixture of uses and business opportunities, as well as a wide range of residential housing types. The urban core is envisioned to be the "heart" of the community, where people gather to enjoy special events, farmers markets, street

performances, and outdoor dining. It is a downtown envisioned with a synergistic mix of land uses, attractive streetscapes, and sidewalks full of people, all interconnected with a series of plazas and pedestrian paseos.

### 3.4.1 Projected Buildout and GPU Consistency

The 690-acre UCSP Subdistricts Area encompasses three planning districts, the Village, the Urban Core, and the Corridors. These three districts are refined into 26 smaller planning subdistricts, each with proposed land use mixes, development regulations and standards. The 3 planning districts and 26 subdistricts of the UCSP correspond to the five districts of the GPU's Urban Core Subarea, as shown in Table 3-1.

**TABLE 3-1  
UCSP SUBDISTRICTS AND CORRESPONDING  
GENERAL PLAN UPDATE DISTRICTS**

UCSP District	UCSP Subdistrict	General Plan Update District
Urban Core	UC-1, St. Rose	H Street Corridor
	UC-2, Gateway	
	UC-3, Roosevelt	
	UC-4, Hospital	
	UC-5, Soho	
	UC-6, Chula Vista Center Residential	
	UC-7, Chula Vista Center	
	UC-8, Otis	
	UC-9, Mid H Street	
	UC-10, Chula Vista Center West	Interstate 5 Corridor
	UC-11, Chula Vista Center West Residential	
	UC-12, H Street Trolley	
	UC-13, Mid Broadway	
	UC-14, Harborview	
	UC-15, E Street Trolley	
	UC-16, Broadway Hospitality	
	UC-17, Harborview North	
	UC-18, E Street Gateway	
	UC-19, Feaster School	
Village	V-1, East Village	Downtown Third Avenue
	V-2, Village	
	V-3, West Village	
	V-4, Civic Center	
Corridors	C-1, Third Avenue South	Mid Third Avenue
	C-2, Broadway South	Mid Broadway
	C-3, Broadway North	Interstate 5 Corridor

The new zoning regulations proposed in the UCSP would replace existing Municipal Code zoning classifications for the UCSP Subdistricts Area and introduce new zoning classifications for mixed-use (retail/office), mixed-use with residential, and Urban Core

residential (high-density residential) as anticipated in the GPU. The new regulations would accommodate new growth and revitalization of the Subdistricts Area and would be applied only as new development or redevelopment occurs. Outside of the Subdistricts Area, existing land use designations and zoning would not be changed.

The UCSP anticipates the following projected buildout over the life of the plan consistent with the General Plan Update projections (Table 3-2).

**TABLE 3-2  
URBAN CORE SPECIFIC PLAN  
PROJECTED BUILDOUT**

Land Use	Existing	Net Increase	Total
Multi-family residential	3,700 dus	7,100 dus	10,800 dus
Commercial retail	3,000,000 sf	1,000,000 sf	4,000,000 sf
Commercial office	2,400,000 sf	1,300,000 sf	3,700,000 sf
Commercial-visitor serving		1,300,000 sf	1,300,000 sf

SOURCE: City of Chula Vista, UCSP, Chapter II, Section B, Fg. 2.1, April, 2006.

NOTE: All totals are approximate and may include a combination of new infill development and existing uses.

dus = dwelling units

sf = square feet

The UCSP provides a set of contemporary implementing tools to allow infill development and public improvements to occur over the next 25 years, until the year 2030. The planning tools included in the UCSP to help implement its vision of a vibrant urban core include mobility recommendations, land use and development regulations, development design guidelines and incentives, public realm design guidelines, infrastructure and public facilities improvements, and a community benefits program. These are described in subsequent paragraphs. It should be noted that that the exact extent, timing and sequence of infill development that may occur over the 25-year planning horizon is difficult to ascertain due to a number of factors unique to urban revitalization. These include, but are not limited to:

- viability associated with newer construction which will likely not recycle over the life of the Specific Plan;
- longevity of other existing commercial uses and existing housing stock;
- project specific economics that result in less than maximum buildout on a parcel;
- preservation and/or maintenance of significant historic structures;
- increased development costs associated with acquisition, demolition, and cleanup of urbanized land.

To monitor progress towards implementing the land use goals envisioned by both the General Plan Update and UCSP, a series of checks and balances are proposed. These include review under the Growth Management Ordinance, bi-annual review of amenities and facilities implementation in conjunction with the budget/CIP review cycle, and a five-year assessment of the progress of the UCSP. These elements are discussed in greater detail later in this Chapter in Section 3.4.8, Plan Administration.

## **3.4.2 Mobility Recommendations**

The UCSP mobility recommendations provide a variety of approaches and strategies to “get people from here to there.” These pedestrian, bicycle, transit, automobile, and parking opportunities are addressed in Chapter V, Mobility, of the UCSP. Of the various modes of travel addressed in the UCSP, emphasis is placed on non-motorized forms and public transit, rather than on automobile travel. To this end, various pedestrian-friendly improvements are suggested. The suggested improvements include bulbouts (sidewalk extensions), narrowed travel lanes, reducing the number of travel widths in some areas, special paving at crosswalks, median refuge islands, paseos and walkways, and streetscape landscaping, lighting, and furnishings. Bicycle-friendly recommendations include new and upgraded bicycle paths and facilities throughout the UCSP area.

The UCSP proposes three Transit Focus Areas (TFA) encompassing four subdistricts to provide multi-modal opportunities for both local and regional transit. Two TFAs are proposed to be centered around the existing E and H Street trolley stations just east of I-5 along the western edge of the Subdistricts Area (coinciding with Subdistricts UC-15 and UC-12). These stations provide links to the San Diego trolley’s Blue Line. A third TFA, which accommodates transit service from the eastern portion of the City to the H Street Trolley station, is proposed to be located at H Street and Third Avenue at the east edge of the Subdistricts Area. The third TFA corresponds to two subdistricts, one on each side of Third Avenue (coinciding with Subdistricts UC-1 and UC-2). This TFA along H Street between Third and Fourth Avenues will also accommodate future shuttle service. As a feature of the UCSP, a new shuttle loop system called the West Side Shuttle is proposed to serve the UCSP area and the Bayfront Master Plan area to the west. The shuttle would provide localized service between various uses in western Chula Vista, including several stops within the Subdistricts Area, and provide connections to the regional transit system, including the existing E and H Street trolley stations and the future trolley station proposed at H Street and Third Avenue.

A program of improvements for the main automobile thoroughfares and other streets within the UCSP area are also proposed, and include the reintroduction of the street grid in areas where it has been interrupted. Proposed off-street parking and public parking strategies include parking districts for portions of Third Avenue and strategically located parking structures.

### 3.4.3 Land Use and Development Regulations

Chapter VI of the UCSP describes the permitted land uses, and development regulations and standards for each of the 26 UCSP subdistricts. Permitted land uses are tabulated in a Land Use Matrix and subdistrict development regulations are summarized in subdistrict zoning sheets. The Land Use Matrix is a refinement of the GPU land use designations and will additionally be used to replace the Town Centre I Design Manual of the Town Centre I Redevelopment Plan which overlaps a portion of the UCSP area (see discussion in Section 5.1.1.3.c of this EIR).

Using a form-based approach, the subdistrict development regulations set minimum and maximum floor area ratios (FAR), building heights, lot coverages, setbacks, and street wall frontage. Other regulations such as usable open space and parking standards are also provided. The new zoning regulations would replace existing Municipal Code zoning classifications and introduce new zoning classifications for mixed-use (retail/office), mixed-use with residential, and Urban Core residential (high-density residential) as anticipated by the General Plan Update. The new regulations would accommodate new growth and revitalization of the area and would be applied only as new development or redevelopment occurs within the UCSP Subdistricts Area. Outside of the Subdistricts Area, existing land use designations and zoning will not be changed.

Another important component of Chapter VI includes the special provisions for the Neighborhood Transition Combining Districts (NTCD) and TFAs. The NTCDs and TFAs appear as special provisions on the appropriate subdistrict zoning sheets. The NTCD regulations provide measures such as increased setbacks, stepbacks, lighting, landscaping, and screening measures for future development adjacent to R-1 and R-2 existing single family zones. Of the 26 subdistricts, six are subject to the NTCD special provisions. (Refer to Figure 3-3, Subdistricts Key Map, for locations of the V-3, UC-6, UC-8, UC-11, UC-13, and C-1 Subdistricts which are subject to the NTCD). The requirements of the NTCD are designed to ensure that the character of development within these UCSP subdistricts are compatible with and complementary to surrounding residential areas.

The special regulations for the TFAs include increased setbacks, stepbacks, lighting, landscaping, and screening measures for future multi-modal transit-oriented development. In addition, as part of project design and submittal, developments within TFAs are required to conduct studies to assess the effects of light and solar access, shadowing, and wind patterns on adjacent buildings and areas. Four of the 26 UCSP subdistricts have been designated as TFAs (UC-1, UC-2, UC-12, and UC-15). A lengthier discussion of the NTCD and TFA special provisions is provided in the land use discussion in this EIR in Section 5.1.3.3.d.

Chapter VI also includes provisions for uses such as mixed-use and live work units and establishes the urban amenity development requirements and incentives program. In

order to provide more certainty and orderliness to the provision of urban amenities, the majority of urban amenities are required to be provided as part of future development requirements. There are limited incentives that would allow, on a case-by-case basis, additional development potential or waiver of permit fees in exchange for the provision of certain public amenities or services above and beyond that which would normally be required through the development review process. An Urban Amenities Table is provided in Chapter VI which lists the various amenities and their associated requirements and/or incentives. Of note are the amenities of streetscape improvements, landscaping, paseos, parks, historic preservation, green building, parking, and affordable housing.

### **3.4.4 Development Design Guidelines**

Chapter VII of the UCSP is the Development Design Guidelines. These are comprehensive design guidelines provided for development within the Subdistricts Area, as well as special design guidelines for hotels, mixed-use projects, and green buildings. These form-based guidelines supplement the UCSP development regulations and the City's Zoning Ordinance to create a more attractive, well-designed urban environment. The guidelines apply to new construction, conservation, adaptive reuse, and enhancement of buildings and street scenes. They do not apply to existing structures not undergoing any anticipated improvements. Although no specific architectural style is prescribed, the quality of design is guided by policies addressing site planning, building height/form/mass, building materials and colors, storefront design, landscaping, lighting, parking, circulation, signs, and other development design considerations. The goal of the guidelines is to create a positive image for the urban core and frame the streets and sidewalks with inviting buildings, entrances, awnings, and outdoor dining areas.

The following is a brief summary of the zoning regulations contained in UCSP Chapter VI and the general design principles and concepts embodied in UCSP Chapter VII for each of the three UCSP planning districts: the Village; the Urban Core; and the Corridors. Figure 3-3 provides a locational keymap of the three UCSP planning districts and their 26 subdistricts.



### 3.4.4.1 Village District

The Village District encompasses 125 gross acres and allows mixed uses with residential as well as civic uses associated with the Civic Center. Retail uses are envisioned primarily along Third Avenue, anchored to the east and west with increased residential development. The Village District is divided into four subdistricts that are related through the design objectives for the district. Figure 3-3 shows the location of the four subdistricts within the Village District of the UCSP. Subdistrict V-3 is a Neighborhood Transition Combining District.

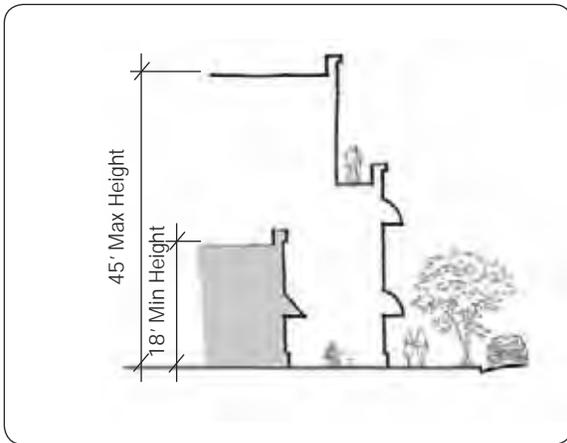
The Village District design goals include promoting sound architectural practices, retaining or repeating traditional façade components, developing a steady rhythm of façade widths, creating a comfortable scale of structures and supporting pedestrian-oriented activity at the sidewalk and amenity areas. While buildings are anticipated to have the street wall and a more urban fashion, building setbacks would be used to accommodate active public uses such as outdoor dining and gathering places, particularly on Third Avenue. Mid-block pedestrian paseos and linkages to parking lots, activity areas, or alleys are encouraged when possible. Parking lots would be located to the rear of buildings, subterranean, or in parking structures.

Figure 3-4 through Figure 3-7 provide the zoning sheets for the four subdistricts within the Village District. (Note that on these and all Subdistrict zoning sheets, notes in the body of the image referring reader to consult remainder of chapter and specific sections relates to the source document, the UCSP Chapter VI, and not this EIR.)

## V-1 East Village

### Urban Regulations

1. **Floor Area Ratio:**  
Min: 1.0      Max: 2.0
2. **Lot Coverage:**  
Min: N/A      Max: 90%
3. **Building Height:**  
Min: 18'      Max: 45'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 0'      Street Max: N/A
7. **Open Space Requirement:** 200 sf/du
9. **Primary Land Uses:**  
Residential: 100%

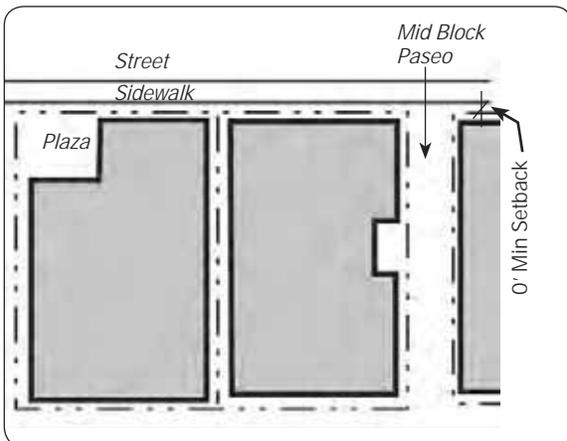


Section View

Fig. 6.8

### Parking Regulations

1. **Parking Locations:**  
Behind /Subterranean/Tuck Under
2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 50%



Plan View

Fig. 6.9

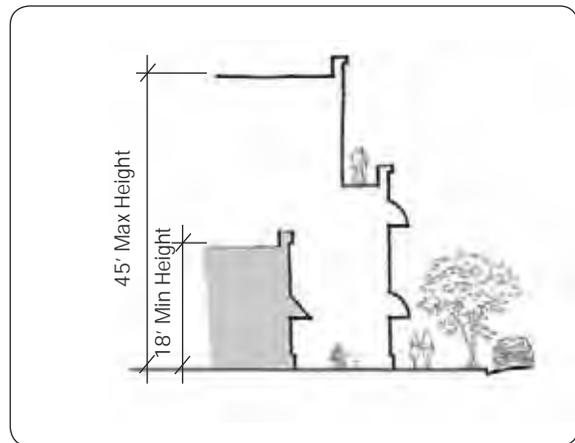
Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

FIGURE 3-4  
Zoning Sheet for Village Subdistrict V-1,  
East Village

## V-2 Village

### Urban Regulations

1. **Floor Area Ratio:**  
Min: 0.75      Max: 2.0
2. **Lot Coverage:**  
Min: 75%      Max: 90%
3. **Building Height:**  
Min: 18'      Max: 45'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 80% Min
6. **Setbacks:**  
Street Min: 0'      Street Max: N/A
7. **Open Space Requirement:** 200 sf/du
8. **Primary Land Uses:**  
Residential: 40% Max (Not allowed on Third Avenue on ground floor, except for access)  
Retail: 40% Max  
Office: 20% Max (Not allowed on Third Avenue on ground floor, except for access)

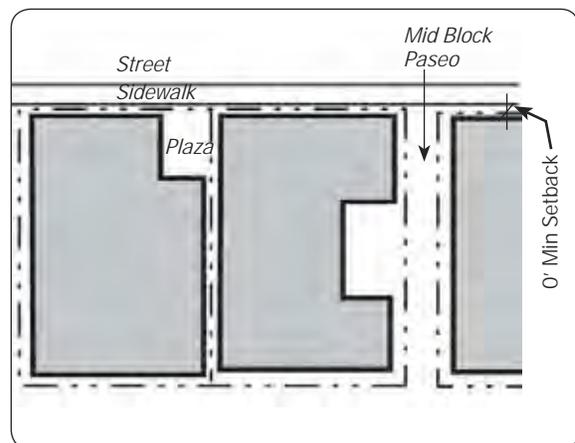


Section View

Fg. 6.10

### Parking Regulations

1. **Parking Locations:**  
Behind/Subterranean/Tuck Under
2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: None
3. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: None



Plan View

Fg. 6.11

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

FIGURE 3-5

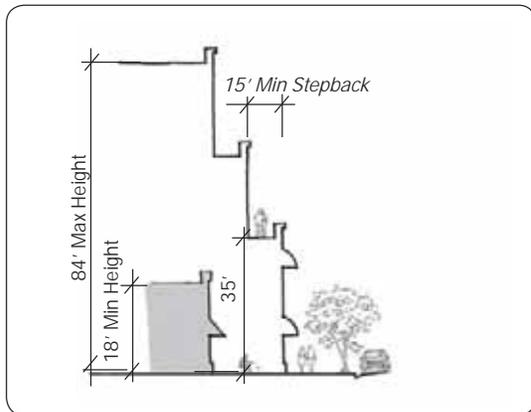
Zoning Sheet for Village Subdistrict V-2, Village

## V-3 West Village

### (Neighborhood Transition Combining District)

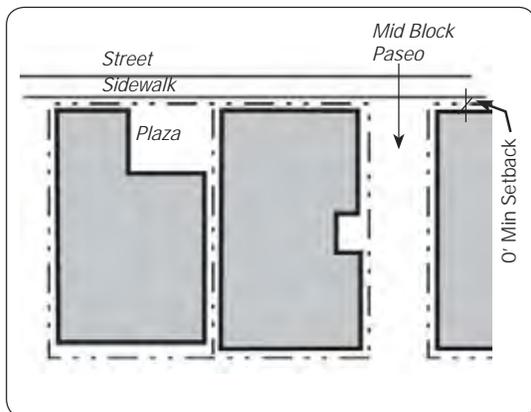
#### Urban Regulations

1. **Floor Area Ratio:**  
Min: 2.0      Max: 4.5
2. **Lot Coverage:**  
Min: 70%      Max: 90%
3. **Building Height:**  
Min: 18'      Max: 84'
4. **Building Stepback:**  
Min: 15'      At Building Height: 35'
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 0'      Street Max: N/A  
*Neighborhood Transition: See Section D. for additional setbacks for parcels adjacent to R-1 and R-2 districts*
7. **Open Space Requirement:** 200 sf/du
8. **Primary Land Uses:**  
*Residential: 100% Max (Not allowed on ground floor of Third Avenue or E Street, except for access)*  
*Retail: 10% Max (North of E Street and west of Landis Avenue - retail only)*  
*Office: 10% Max (Not allowed on ground floor of Third Avenue or E Street, except for access)*



Section View

Fg. 6.12



Plan View

Fg. 6.13

#### Parking Regulations

1. **Parking Locations:**  
Behind/Subterranean/Tuck Under
2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 50%
3. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: None

*Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.*

FIGURE 3-6

Zoning Sheet for Village Subdistrict V-3,  
West Village

## V-4 Civic Center

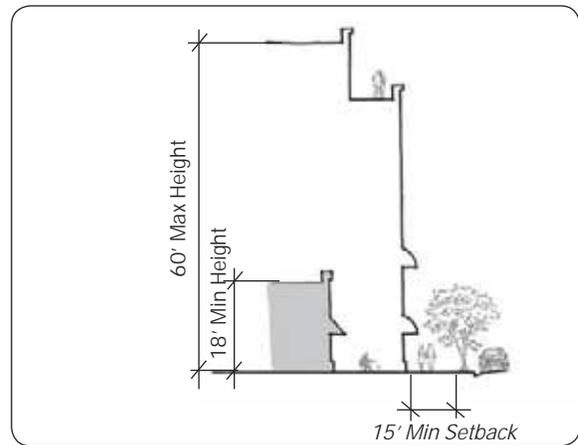
### Urban Regulations

- 1. Floor Area Ratio:**  
Min: N/A      Max: 1.0
- 2. Lot Coverage:**  
Min: 45%      Max: 80%
- 3. Building Height:**  
Min: 18'      Max: 60'
- 4. Building Stepback:** Not mandatory
- 5. Street Wall Frontage:** N/A
- 6. Setbacks:**  
Street Min: 15'      Street Max: N/A
- 7. Open Space Requirement:** 100 sf/du
- 8. Primary Land Uses:**  
Residential: 100% Max  
Office: 100% Max  
Public/Quasi-Public: 100% Max

### Parking Regulations

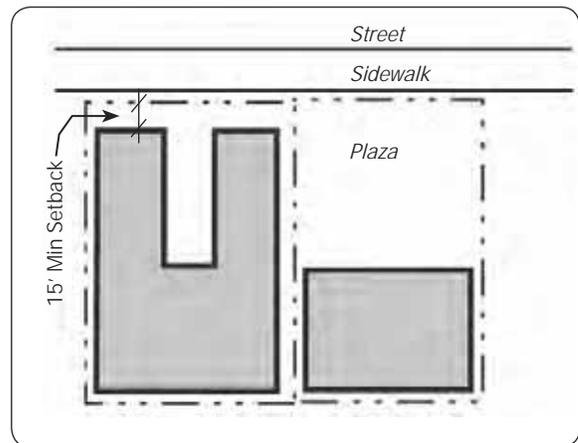
- 1. Parking Locations:**  
Behind/Subterranean/Tuck Under
- 2. Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 50%
- 3. Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: None

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.



Section View

Fg. 6.14



Plan View

Fg. 6.15

FIGURE 3-7  
Zoning Sheet for Village Subdistrict V-4,  
Civic Center

### **3.4.4.2 Urban Core District**

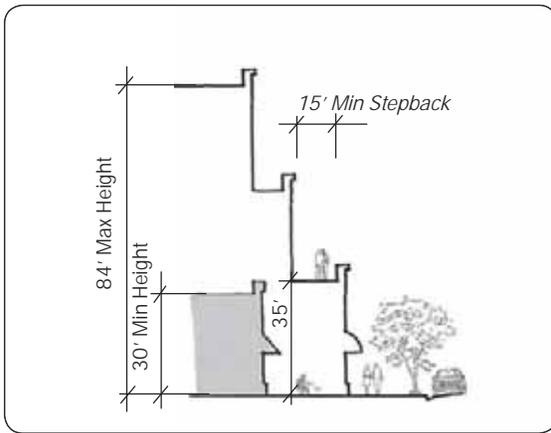
The Urban Core District is located along H Street from Third Avenue to the I-5, along the mid-section of Broadway and along a section of E Street and encompasses 440 gross acres (see Figure 3-3). It is designed to serve as the primary business, commercial and regional center of Chula Vista and includes some of the highest concentrations of residential uses. The district includes four subdistricts with TFA designations where high density mixed use commercial/office, and residential is planned. The district would allow low, mid- and high-rise development (UC-12 and UC-15 only) while encouraging an active street life and providing a comfortable environment for pedestrians to shop, dine, and recreate.

The Urban Core District is divided into 19 subdistricts that are related through the design objectives for the district. The goals for the design of the Urban Core District include creating a comfortable scale of structures, maintaining sunlight exposure and minimizing wind on the street level and distinguishing between upper and lower floors. Buildings should be designed with uniform front façade heights in order to create a continuous streetwall with store fronts and building entries facing the major roadways, Broadway and H Street. Figure 3-8 through Figure 3-26 provide the zoning sheets for the 19 subdistricts within the Urban Core District. The TFA designations occur in four Subdistricts: UC-1 and UC-2 at Third Avenue and H Street, UC-12 (H Street Trolley Station) and UC-15 (E Street Trolley Station). Subdistricts UC-6, UC-8, UC-11, and UC-13 comprise the four Neighborhood Transition Combining Districts within the Urban Core District.

## UC-1 St. Rose (Transit Focus Area)

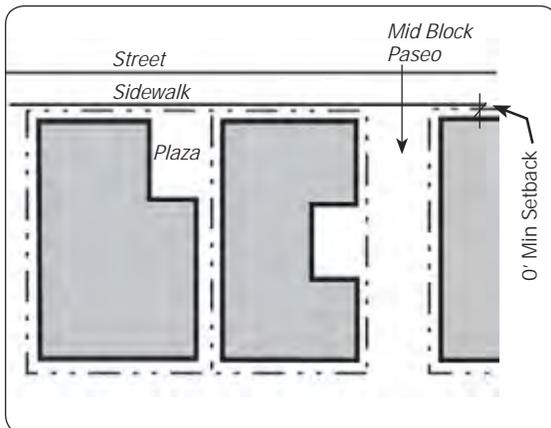
### Urban Regulations

1. **Floor Area Ratio:**  
Min: 2.0                      Max: 4.0
2. **Lot Coverage:**  
Min: 45%                      Max: 80%
3. **Building Height:**  
Min: 30'                      Max: 84'
4. **Building Stepback:**  
Min: 15'                      At Building Height: 35'
5. **Street Wall Frontage: 80% Min**
6. **Setbacks:**  
Street Min: 0'                      Street Max: N/A
7. **Open Space Requirement: 100 sf/du**
8. **Primary Land Uses:**  
Residential: 70% Max (Not allowed on Third Avenue or H Street frontage on ground floor, except for access)  
Retail: 10% Max  
Office: 20% Max



**Section View**

**Fg. 6.16**



**Plan View**

**Fg. 6.17**

### Parking Regulations

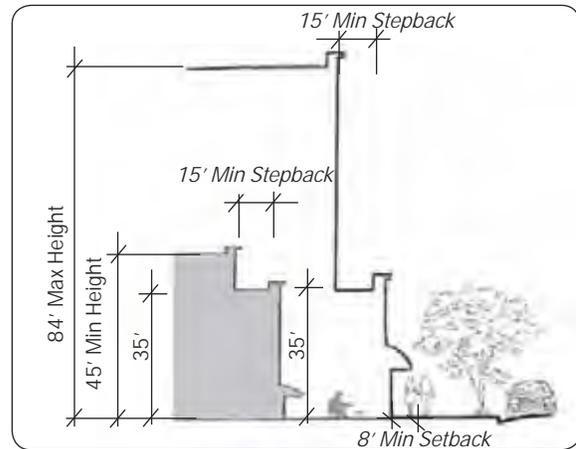
1. **Parking Locations:**  
Structure/Subterranean/Behind/Tuck Under
2. **Residential Parking:**  
Min: 1 space/du  
Guest: 1 space/10 du  
Onsite Min: 50%
3. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: None

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

## UC-2 Gateway (Transit Focus Area)

### Urban Regulations

1. **Floor Area Ratio:**  
Min: 2.5      Max: 5.0
2. **Lot Coverage:**  
Min: 45%      Max: 80%
3. **Building Height:**  
Min: 45'      Max: 84'
4. **Building Stepback:**  
Min: 15'      At Building Height: 35'
5. **Street Wall Frontage:** 80% Min
6. **Setbacks:**  
Street Min: 8'\*      Street Max: N/A  
(\*Along H Street only to provide total of 16' sidewalk)
7. **Open Space Requirement:** 100 sf/du
8. **Primary Land Uses:**  
Residential: 70% Max (Not allowed on Third Avenue or H Street frontage on ground floor, except for access)  
Retail: 10% Max  
Office: 20% Max



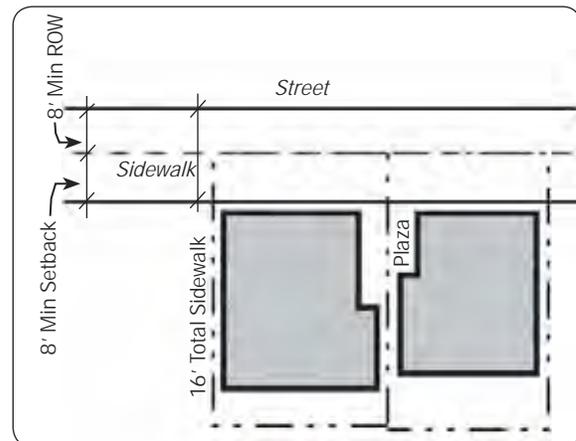
Section View

Fig. 6.18

### Parking Regulations

1. **Parking Locations:**  
Any location except in front of building
2. **Residential Parking:**  
Min: 1 space/du  
Guest: 1 space/10 du  
Onsite Min: 50%
3. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: None

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.



Plan View

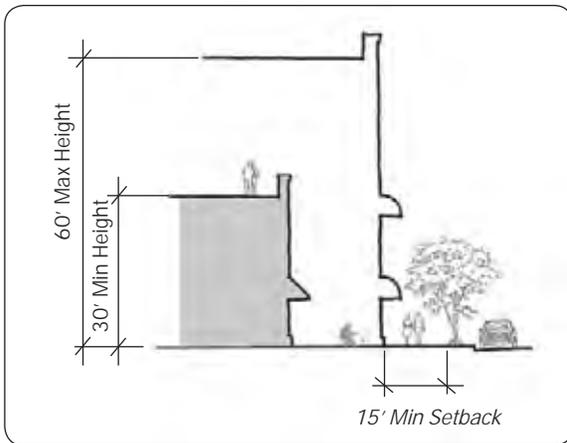
Fig. 6.19

FIGURE 3-9  
Zoning Sheet for Urban Core  
Subdistrict UC-2, Gateway

## UC-3 Roosevelt

### Urban Regulations

1. **Floor Area Ratio:**  
Min: 1.0      Max: 3.0
2. **Lot Coverage:**  
Min: N/A      Max: 70%
3. **Building Height:**  
Min: 30'      Max: 60'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** N/A
6. **Setbacks:**  
Street Min: 15'      Street Max: N/A
7. **Open Space Requirement:** 200 sf/du
8. **Primary Land Uses:**  
Residential: 100% Max

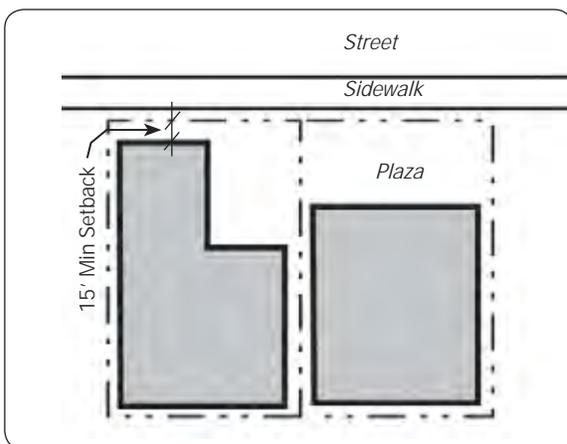


Section View

Fig. 6.20

### Parking Regulations

1. **Parking Locations:**  
Anywhere on-site, except in front of building
2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 100%



Plan View

Fig. 6.21

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

FIGURE 3-10  
Zoning Sheet for Urban Core  
Subdistrict UC-3, Roosevelt

## UC-4 Hospital

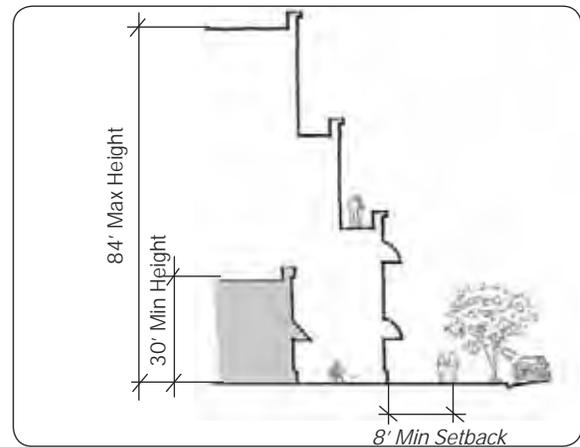
### Urban Regulations

- 1. Floor Area Ratio:**  
Min: N/A      Max: 2.0
- 2. Lot Coverage:**  
Min: 50%      Max: 70%
- 3. Building Height:**  
Min: 30'      Max: 84'
- 4. Building Stepback:** Not mandatory
- 5. Street Wall Frontage:** 50% Min
- 6. Setbacks:**  
Street Min: 8' Street Max: N/A  
(\*Along H Street only to provide total of 16' sidewalk)
- 7. Open Space Requirement:** N/A
- 8. Primary Land Uses:**  
Office: 100% Max

### Parking Regulations

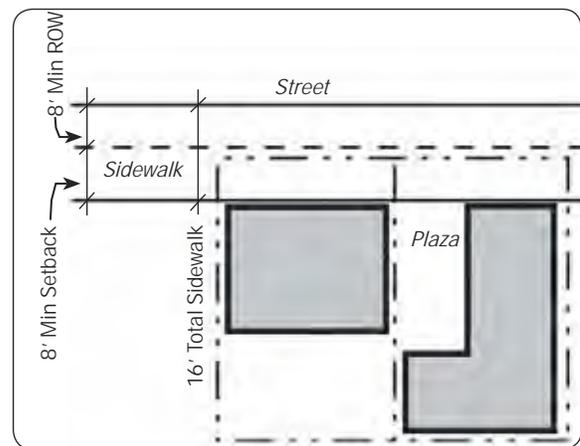
- 1. Parking Locations:**  
Any
- 2. Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 100%

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.



Section View

Fg. 6.22



Plan View

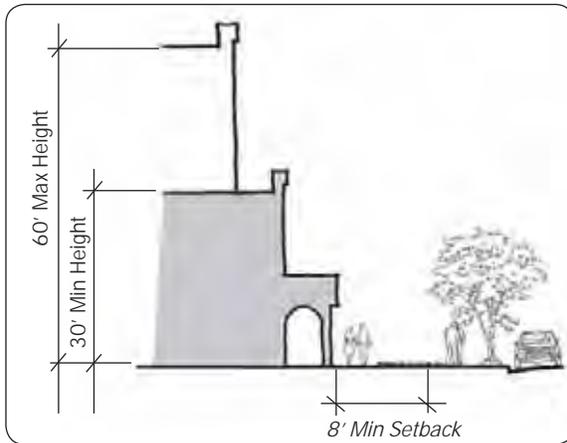
Fg. 6.23

FIGURE 3-11  
Zoning Sheet for Urban Core  
Subdistrict UC-4, Hospital

## UC-5 Soho

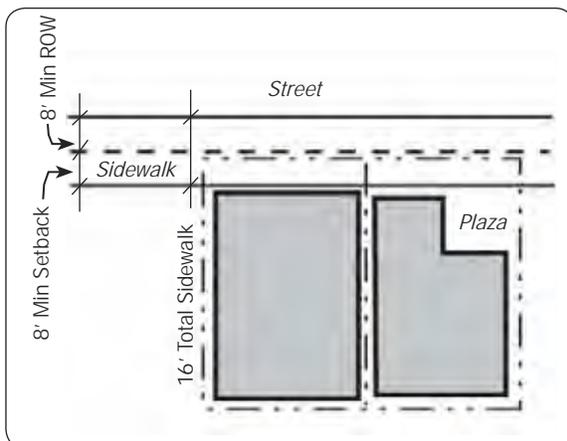
### Urban Regulations

1. **Floor Area Ratio:**  
Min: 1.0 Max: 2.0
2. **Lot Coverage:**  
Min: N/A Max: N/A
3. **Building Height:**  
Min: 30' Max: 60'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 8' Street Max: N/A  
(\*Along H Street only to provide total of 16' sidewalk)
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Retail: 50% Max  
Office: 100% Max



Section View

Fig. 6.24



Plan View

Fig. 6.25

### Parking Regulations

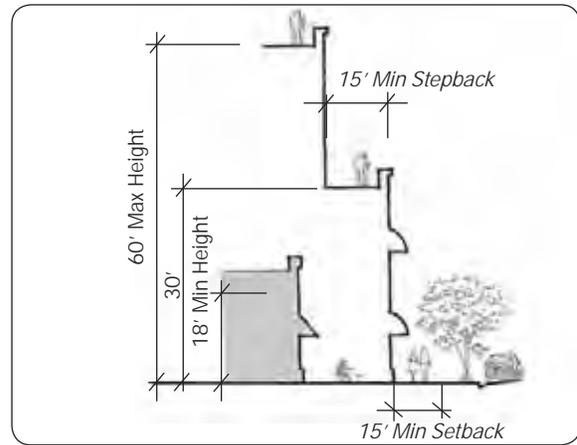
1. **Parking Locations:**  
Any location except in front of building
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 50%

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

## UC-6 Chula Vista Center Residential (Neighborhood Transition Combining District)

### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 2.0
2. **Lot Coverage:**  
Min: N/A      Max: 80%
3. **Building Height:**  
Min: 18'      Max: 60'
4. **Building Stepback:**  
Min: 15'      At Building Height: 30'
5. **Street Wall Frontage:** N/A
6. **Setbacks:**  
Street Min: 15'      Street Max: N/A  
Neighborhood Transition: See Section D. for additional setbacks for parcels adjacent to R-1 and R-2 districts
7. **Open Space Requirement:** 200 sf/du
8. **Primary Land Uses:**  
Residential: 100%

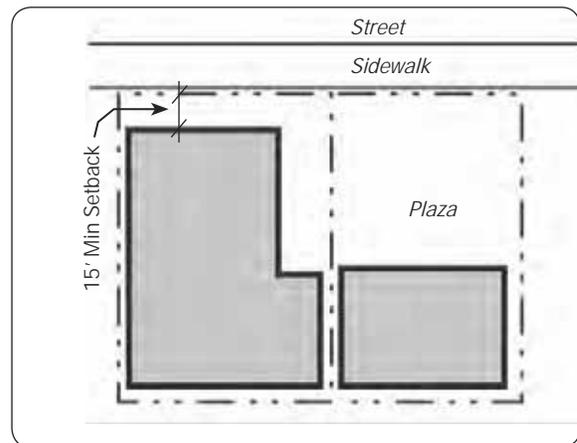


Section View

Fig. 6.26

### Parking Regulations

1. **Parking Locations:**  
Structured
2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 100%



Plan View

Fig. 6.27

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

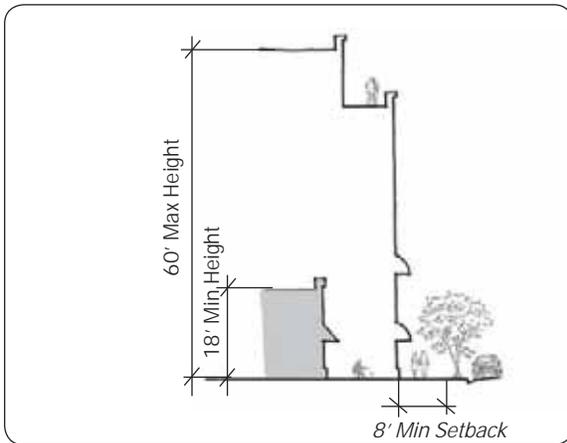
FIGURE 3-13

Zoning Sheet for Urban Core Subdistrict UC-6,  
Chula Vista Center Residential

## UC-7 Chula Vista Center

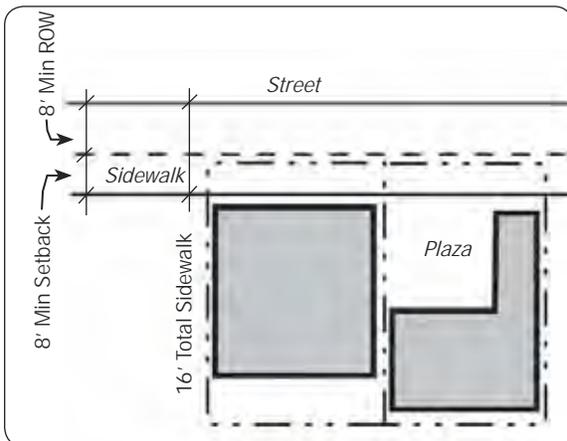
### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 1.0
2. **Lot Coverage:**  
Min: N/A      Max: 70%
3. **Building Height:**  
Min: 18'      Max: 60'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 25% Min
6. **Setbacks:**  
Street Min: 8'\*      Street Max: N/A  
(\*Along H Street only to provide total of 16' sidewalk)
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Retail: 100% Max  
Office: 25% Max (Not allowed on ground floor facade, except for access)



Section View

Fig. 6.28



Plan View

Fig. 6.29

### Parking Regulations

1. **Parking Locations:**  
Anywhere on-site
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 100%

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

## UC-8 Otis

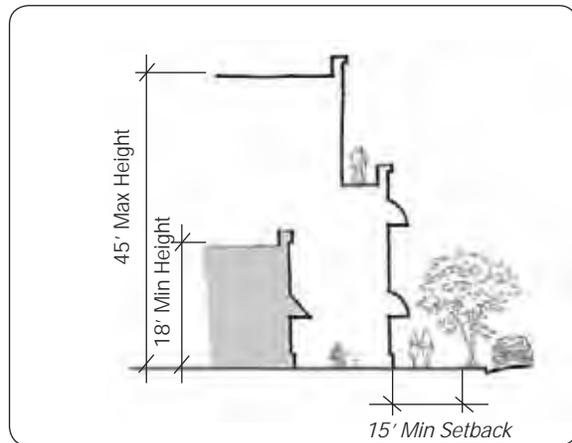
### (Neighborhood Transition Combining District)

#### Urban Regulations

- 1. Floor Area Ratio:**  
Min: N/A      Max: 1.0
- 2. Lot Coverage:**  
Min: N/A      Max: 70%
- 3. Building Height:**  
Min: 18'      Max: 45'
- 4. Building Stepback:** Not mandatory
- 5. Street Wall Frontage:** N/A
- 6. Setbacks:**  
Street Min: 15'      Street Max: N/A
- 7. Open Space Requirement:** 200 sf/du
- 8. Primary Land Uses:**  
Residential: 100% Max

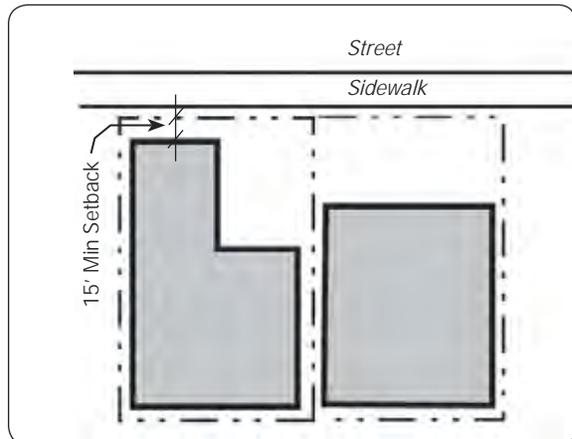
#### Parking Regulations

- 1. Parking Locations:**  
Anywhere on-site except in front of building
- 2. Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 100%



Section View

Fg. 6.30



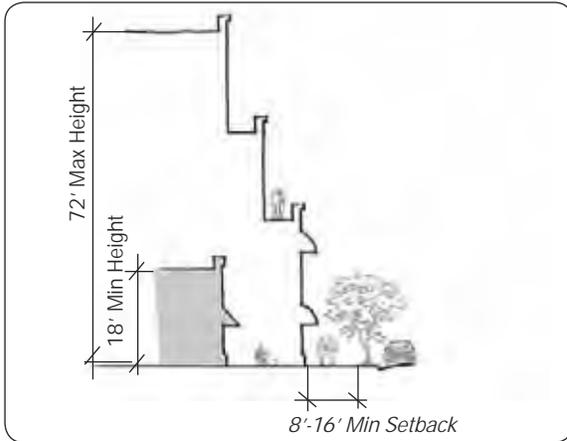
Plan View

Fg. 6.31

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

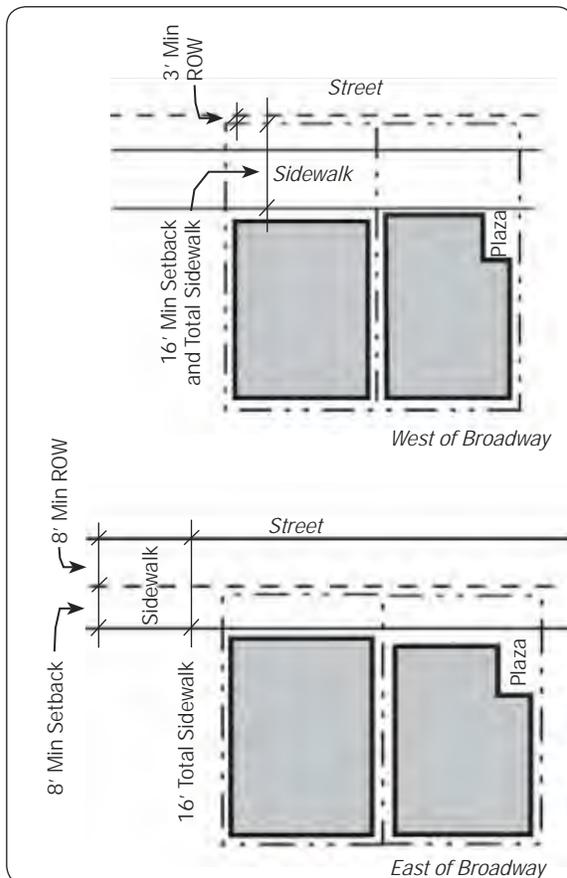
FIGURE 3-15  
Zoning Sheets for Urban Core  
Subdistrict UC-8, Otis

## UC-9 Mid H Street



Section View

Fig. 6.32



Plan View

Fig. 6.33

### Urban Regulations

1. **Floor Area Ratio:**  
Min: 1.0      Max: 2.0
2. **Lot Coverage:**  
Min: N/A      Max: N/A
3. **Building Height:**  
Min: 18'      Max: 72'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 70% Min
6. **Setbacks:**  
H Street East of Broadway  
Street Min: 8' Street Max: N/A  
H Street West of Broadway  
Street Min: 16' Street Max: N/A  
Broadway  
Street Min: 0' Street Max: N/A
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Retail: 100% Max  
Office: 25% Max

### Parking Regulations

1. **Parking Locations:**  
Any, except in front of building
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 50%

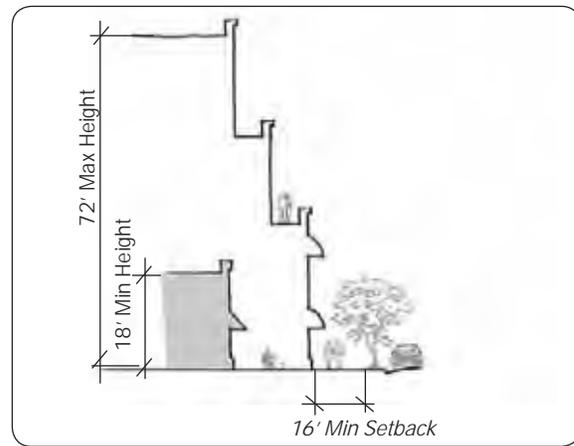
Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

FIGURE 3-16  
Zoning Sheets for Urban Core  
Subdistrict UC-9, Mid H Street

## UC-10 Chula Vista Center West

### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A Max: 1.0
2. **Lot Coverage:**  
Min: N/A Max: 80%
3. **Building Height:**  
Min: 18' Max: 72'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
H Street  
Street Min: 16' Street Max: N/A  
Broadway  
Street Min: 0' Street Max: N/A
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Residential: 20% Max (Not allowed on Broadway or H Street frontage on ground floor, except for access)  
Retail: 100% Max  
Office: 30% Max (Not allowed on ground floor facade, except for access)

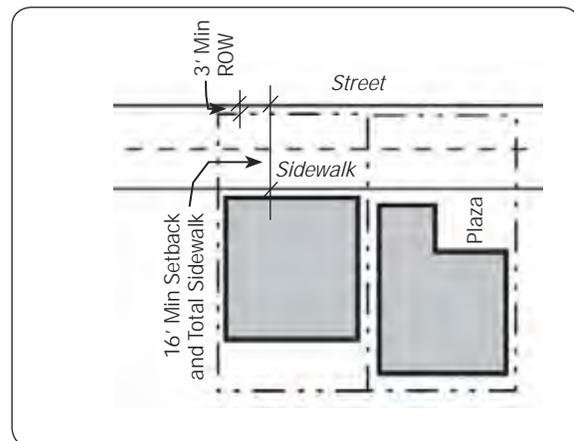


Section View

Fig. 6.34

### Parking Regulations

1. **Parking Locations:**  
Any, except in front of building
  2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 0 spaces  
Onsite Min: 100%
  3. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 100%
- Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.



Plan View

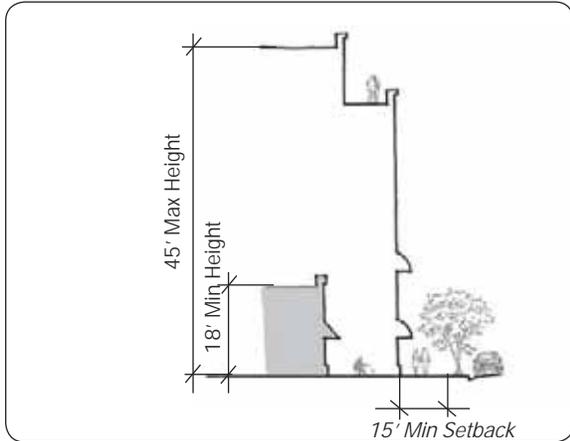
Fig. 6.35

FIGURE 3-17  
Zoning Sheet for Urban Core Subdistrict  
UC-10, Chula Vista Center West

## UC-11 Chula Vista Center West Residential (Neighborhood Transition Combining District)

### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 1.0
2. **Lot Coverage:**  
Min: N/A      Max: 70%
3. **Building Height:**  
Min: 18'      Max: 45'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** N/A
6. **Setbacks:**  
Street Min: 15'      Street Max: N/A  
*Neighborhood Transition: See Section D. for additional setbacks for parcels adjacent to R-1 and R-2 districts*
7. **Open Space Requirement:** 200 sf/du
8. **Primary Land Uses:**  
Residential: 100% Max

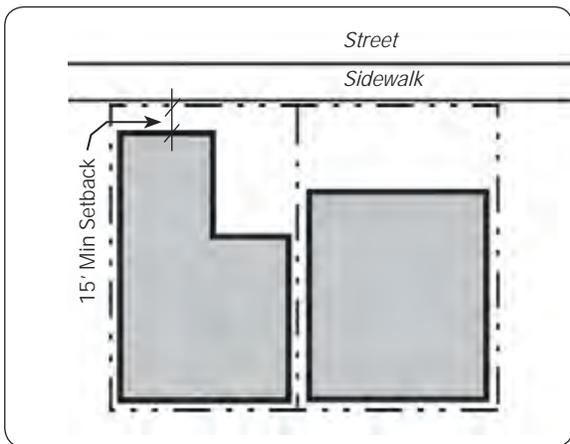


**Section View**

**Fig. 6.36**

### Parking Regulations

1. **Parking Locations:**  
Any, except in front of building
2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 100%



**Plan View**

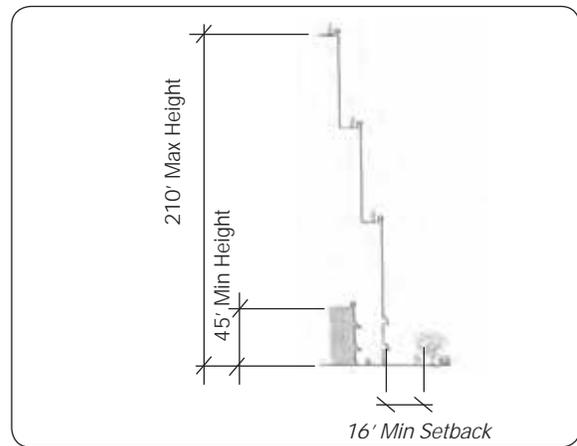
**Fig. 6.37**

*Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.*

## UC-12 H Street Trolley (Transit Focus Area)

### Urban Regulations

1. **Floor Area Ratio:**  
Min: 4.0      Max: 6.0
2. **Lot Coverage:**  
Min: 45%      Max: 60%
3. **Building Height:**  
Min: 45'      Max: 210'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** N/A
6. **Setbacks:**  
H Street  
Street Min: 16'      Street Max: N/A
7. **Open Space Requirement:** 100 sf/du
8. **Primary Land Uses:**  
Residential: 90% Max  
Retail: 1% Min      10% Max  
Office: 10% Max  
Hospitality: 1% Min      10% Max

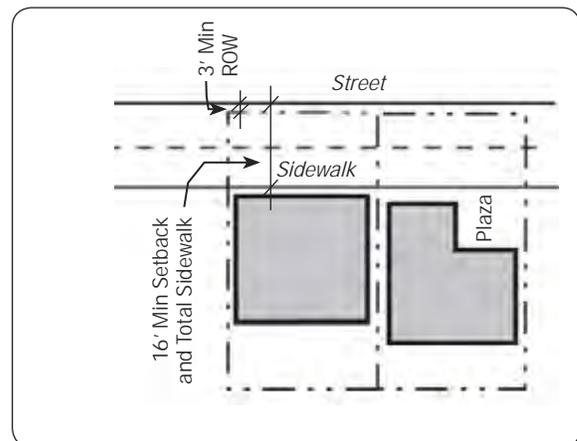


Section View

Fg. 6.38

### Parking Regulations

1. **Parking Locations:**  
Any
2. **Residential Parking:**  
Min: 1 space/du  
Guest: 0 spaces  
Onsite Min: 100%
3. **Non-Residential Parking:**  
Min: 1 space/1,000 sf  
Onsite Min: None



Plan View

Fg. 6.39

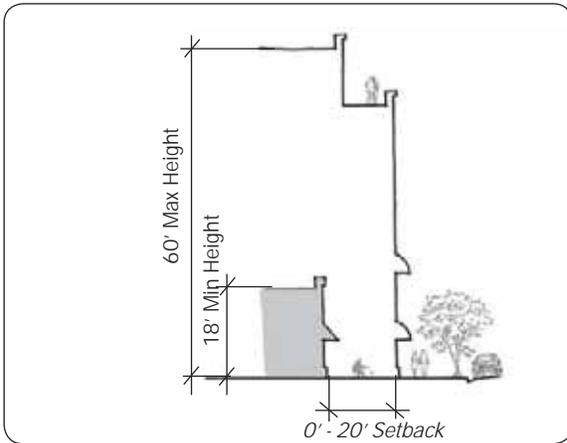
Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

FIGURE 3-19  
Zoning Sheet for Urban Core Subdistrict  
UC-12, H Street Trolley

## UC-13 Mid Broadway (Neighborhood Transition Combining District)

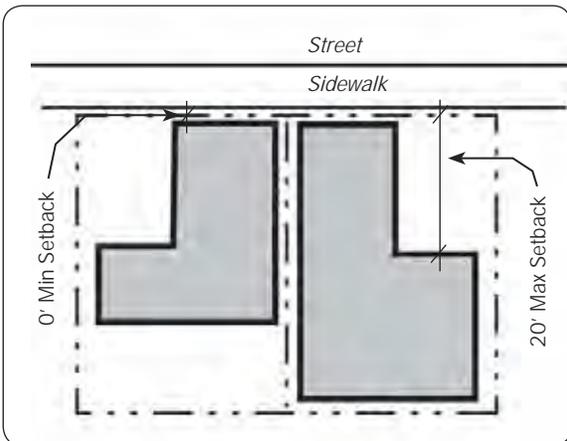
### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 2.0
2. **Lot Coverage:**  
Min: 50%      Max: 70%
3. **Building Height:**  
Min: 18'      Max: 60'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 0'      Street Max: 20'  
*Neighborhood Transition: See Section D. for additional setbacks for parcels adjacent to R-1 and R-2 districts*
7. **Open Space Requirement:** 200 sf/du
8. **Primary Land Uses:**  
*Residential: 70% Max (Not allowed on Broadway or H Street frontage on ground floor, except for access)*  
*Office: 50% Max*  
*Retail/Hospitality: 50% Max*



**Section View**

**Fig. 6.40**



**Plan View**

**Fig. 6.41**

### Parking Regulations

1. **Parking Locations:**  
*Anywhere except in front of building*
2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 50%
3. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 50%

*Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.*

## UC-14 Harborview

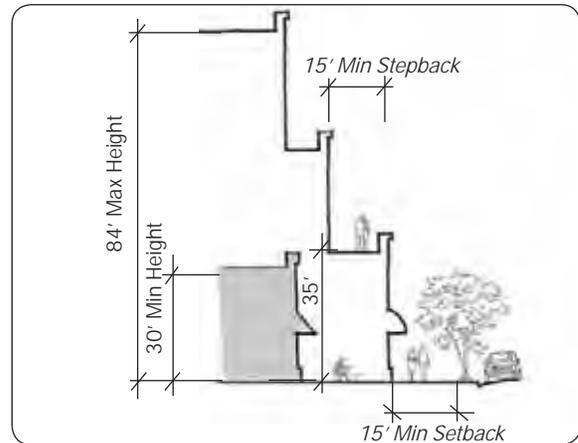
### Urban Regulations

- 1. Floor Area Ratio:**  
Min: 1.5      Max: 3.0
- 2. Lot Coverage:**  
Min: N/A      Max: 80%
- 3. Building Height:**  
Min: 30'      Max: 84'
- 4. Building Stepback:**  
Min: 15'      At Building Height: 35'
- 5. Street Wall Frontage:** N/A
- 6. Setbacks:**  
Street Min: 15'      Street Max: N/A
- 7. Open Space Requirement:** 200 sf/du
- 8. Primary Land Uses:**  
Residential 100% Max

### Parking Regulations

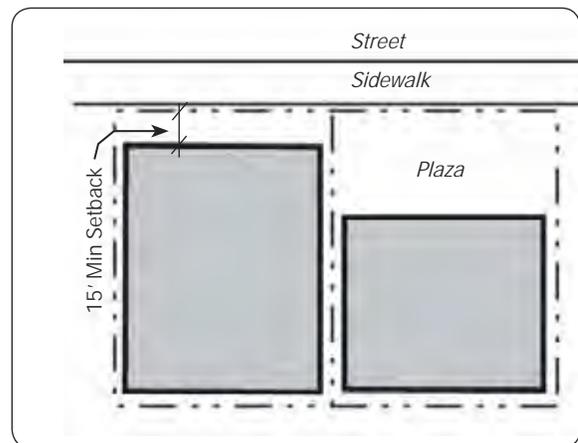
- 1. Parking Locations:**  
Any, except in front of building
- 2. Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 100%

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.



Section View

Fg. 6.42



Plan View

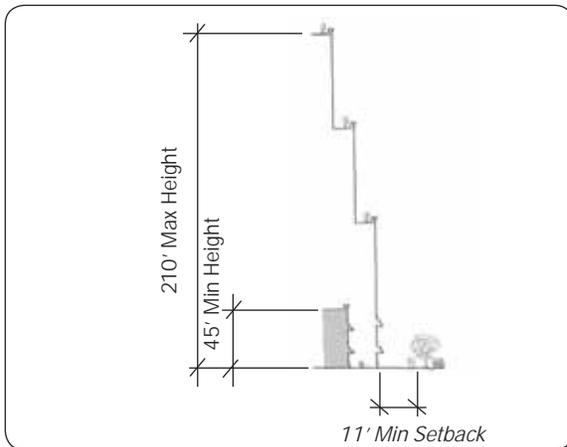
Fg. 6.43

FIGURE 3-21  
Zoning Sheet for Urban Core  
Subdistrict UC-14, Harborview

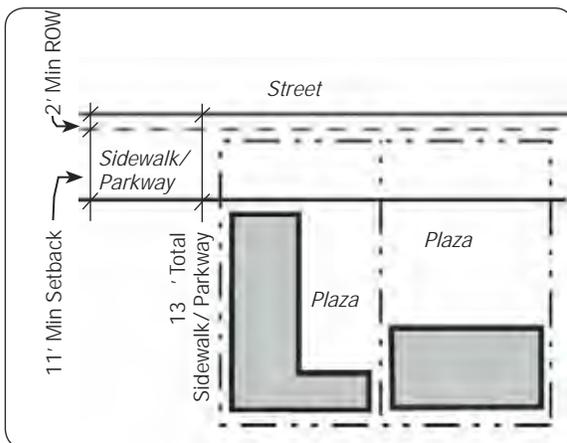
## UC-15 E Street Trolley (Transit Focus Area)

### Urban Regulations

1. **Floor Area Ratio:**  
Min: 4.0                      Max: 6.0
2. **Lot Coverage:**  
Min: 45%                      Max: 60%
3. **Building Height:**  
Min: 45'                      Max: 210'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** N/A
6. **Setbacks:**  
Street Min: 11'\*    Street Max: N/A  
(\*Applies only along E Street between I-5 and 300' east of I-5)
7. **Open Space Requirement:** 100 sf/du
8. **Primary Land Uses:**  
Residential: 90% Max  
Retail: 1% Min                      10% Max  
Office: 10% Max (Not allowed on ground floor facade, except for access)  
Hospitality: 1% Min    10% Max



**Section View**                      **Fig. 6.44**



**Plan View**                      **Fig. 6.45**

### Parking Regulations

1. **Parking Locations:**  
Any, except in front of building
2. **Residential Parking:**  
Min: 1 space/du  
Guest: 0 spaces  
Onsite Min: 100%
3. **Non-Residential Parking:**  
Min: 1 space/1,000 sf  
Onsite Min: None

*Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.*

## UC-16 Broadway Hospitality

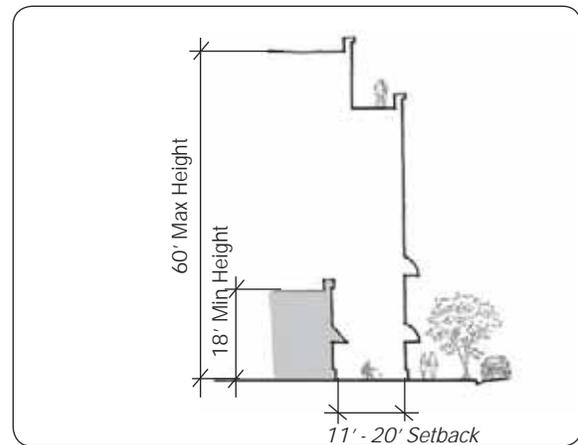
### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 1.0
2. **Lot Coverage:**  
Min: 50%      Max: 70%
3. **Building Height:**  
Min: 18'      Max: 60'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 11'\*    Street Max: 20'  
(\*Along E Street between I-5 and 300' east of I-5)
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Retail: 50% Max  
Hospitality: 100% Max

### Parking Regulations

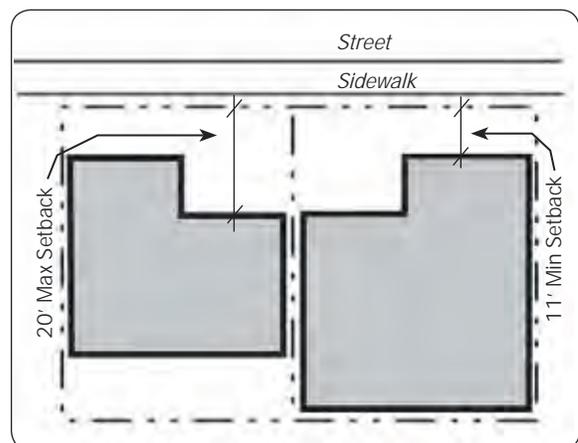
1. **Parking Locations:**  
Any, except in front of building
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 50%

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.



Section View

Fig. 6.46



Plan View

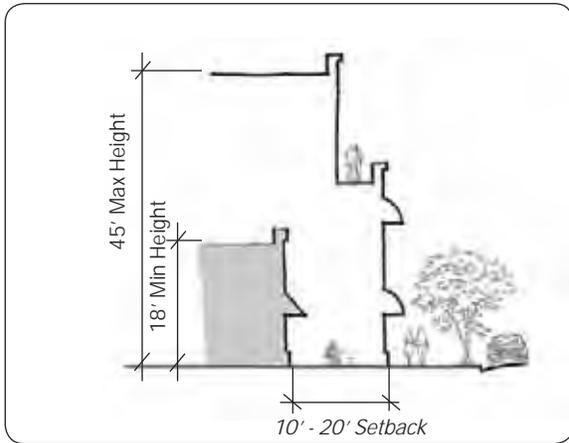
Fig. 6.47

FIGURE 3-23  
Zoning Sheet for Urban Core  
Subdistrict UC-16, Broadway Hospitality

## UC-17 Harborview North

### Urban Regulations

1. **Floor Area Ratio:**  
Min: 1.0      Max: 2.0
2. **Lot Coverage:**  
Min: N/A      Max: 80%
3. **Building Height:**  
Min: 18'      Max: 45'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** N/A
6. **Setbacks:**  
Street Min: 10'      Street Max: 20'
7. **Open Space Requirement:** 200 sf/du
8. **Primary Land Uses:**  
Residential: 100% Max

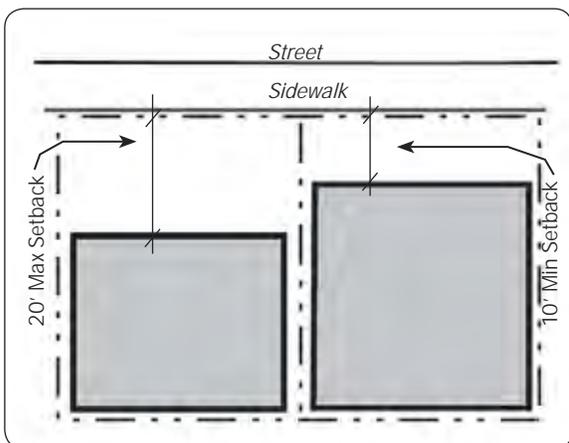


Section View

Fig. 6.48

### Parking Regulations

1. **Parking Locations:**  
Any
2. **Residential Parking:**  
Min: 1.5 space/du  
Guest: 1 space/10 du  
Onsite Min: 100%



Plan View

Fig. 6.49

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

FIGURE 3-24  
Zoning Sheet for Urban Core  
Subdistrict UC-17, Harborview North

## UC-18 E Street Gateway

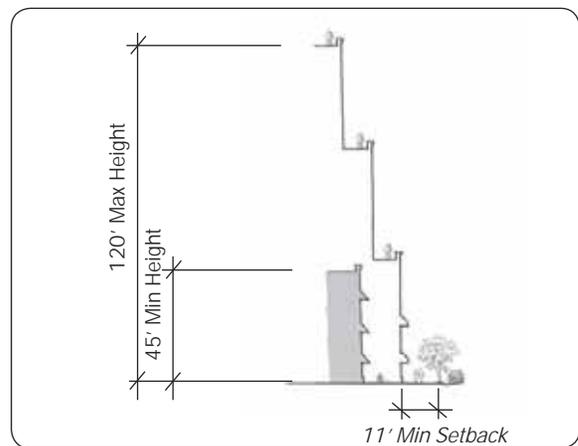
### Urban Regulations

1. **Floor Area Ratio:**  
Min: 1.5      Max: 3.0
2. **Lot Coverage:**  
Min: 50%      Max: 70%
3. **Building Height:**  
Min: 45'      Max: 120'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 11'\*      Street Max: N/A  
(\*Applies only along E Street between I-5 and 300' east of I-5)
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Retail: 20% Max  
Hospitality: 100% Max

### Parking Regulations

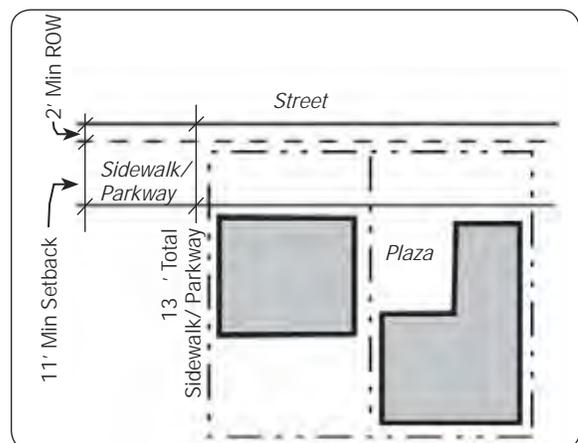
1. **Parking Locations:**  
Any
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 100%

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.



Section View

Fg. 6.50



Plan View

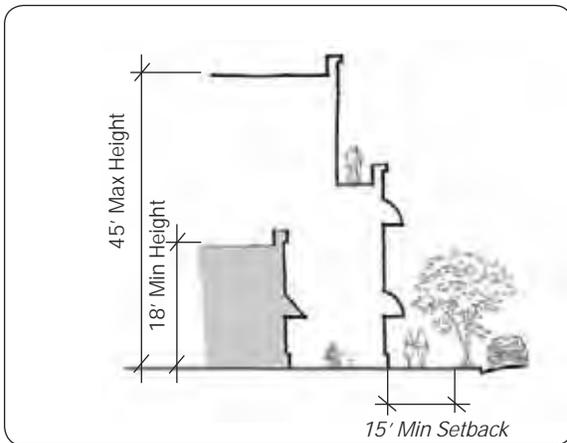
Fg. 6.51

FIGURE 3-25  
Zoning Sheet for Urban Core  
Subdistrict UC-18, E Street Gateway

## UC-19 Feaster School

### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 1.0
2. **Lot Coverage:**  
Min: N/A      Max: 70%
3. **Building Height:**  
Min: 18'      Max: 45'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 15'      Street Max: N/A
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Public/Quasi-Public: 100% Max

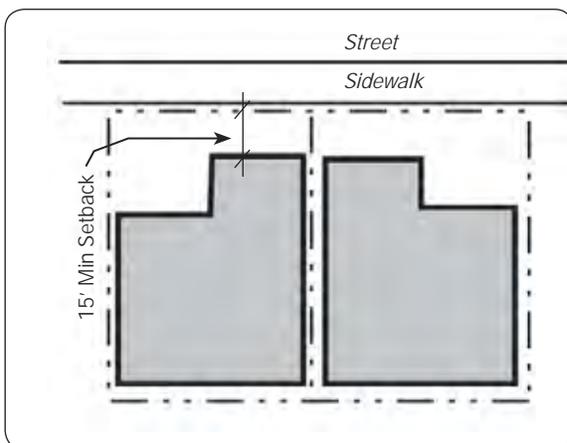


Section View

Fg. 6.52

### Parking Regulations

1. **Parking Locations:**  
Anywhere on-site
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 100%



Plan View

Fg. 6.53

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

## FIGURE 3-26

### Zoning Sheet for Urban Core Subdistrict UC-19, Feaster School

### **3.4.4.3 Corridors District**

In contrast with the Urban Core and the Village Districts, the Corridors District is oriented towards the automobile rather than the pedestrian. The Corridors District is designed to accommodate a high percentage of retail, service, and office development and to promote diverse new commercial and residential development and safe and efficient parking and circulation. The proposed Corridor District consists of 125 gross acres and anticipates revitalization with primarily retail and office uses. The Corridors District is divided into three subdistricts that are related through the design objectives for the district. Subdistrict C-1 is a Neighborhood Transition Combining District. Figure 3-27 through Figure 3-29 provide the zoning sheets for the three subdistricts within the Corridors District.

## C-1 Third Avenue South (Neighborhood Transition Combining District)

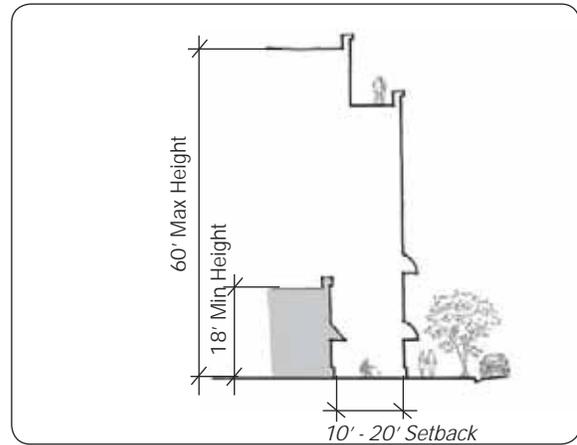
### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 1.0
2. **Lot Coverage:**  
Min: N/A      Max: 70%
3. **Building Height:**  
Min: 18'      Max: 60'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 10'      Street Max: 20'  
Neighborhood Transition: See Section D. for additional setbacks for parcels adjacent to R-1 and R-2 districts
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Retail: 100% Max (West of Third Avenue)  
Office: 100% Max (East of Third Avenue)

### Parking Regulations

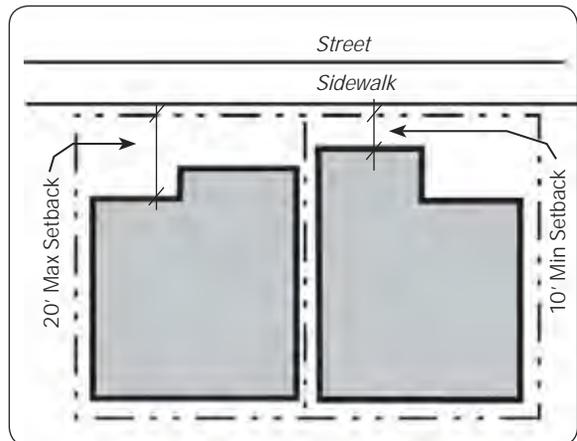
1. **Parking Locations:**  
Anywhere on-site
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 50%

*Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.*



**Section View**

**Fig. 6.54**



**Plan View**

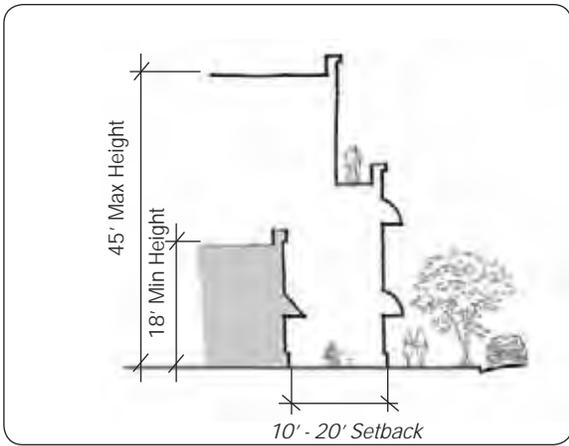
**Fig. 6.55**

**FIGURE 3-27**  
Zoning Sheet for Corridor  
Subdistrict C-1, Third Avenue South

## C-2 Broadway South

### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 1.0
2. **Lot Coverage:**  
Min: 35%      Max: 75%
3. **Building Height:**  
Min: 18'      Max: 45'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 10'      Street Max: 20'
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Retail: 50% Max  
Office: 50% Max

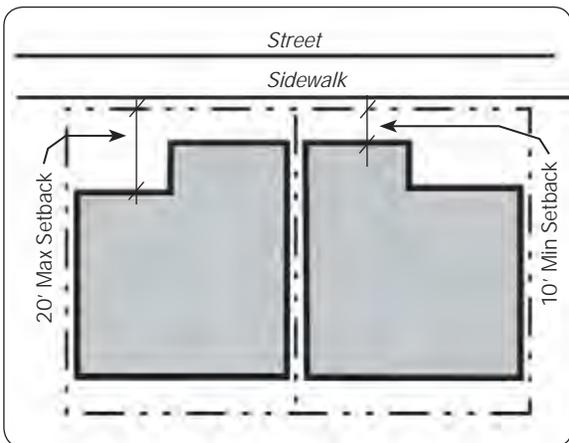


Section View

Fig. 6.56

### Parking Regulations

1. **Parking Locations:**  
Anywhere on-site
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 50%



Plan View

Fig. 6.57

Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.

## C-3 Broadway North

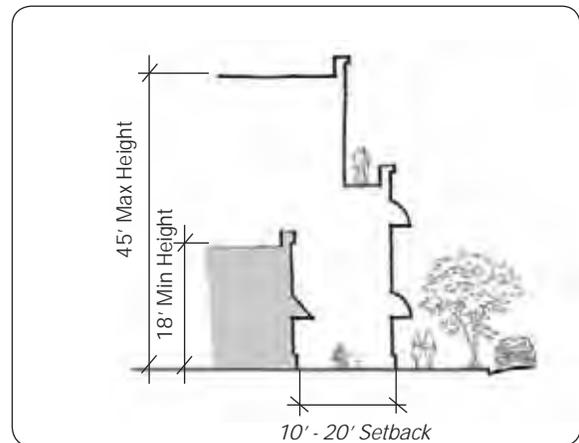
### Urban Regulations

1. **Floor Area Ratio:**  
Min: N/A      Max: 1.0
2. **Lot Coverage:**  
Min: 35%      Max: 75%
3. **Building Height:**  
Min: 18'      Max: 45'
4. **Building Stepback:** Not mandatory
5. **Street Wall Frontage:** 50% Min
6. **Setbacks:**  
Street Min: 10'      Street Max: 20'
7. **Open Space Requirement:** N/A
8. **Primary Land Uses:**  
Retail: 50% Max  
Office: 50% Max

### Parking Regulations

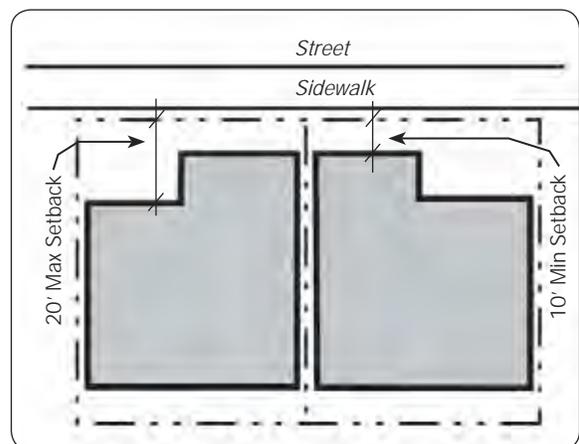
1. **Parking Locations:**  
Anywhere on-site
2. **Non-Residential Parking:**  
Min: 2 spaces/1,000 sf  
Onsite Min: 50%

*Summary sheet does not reflect all regulations that may apply to each property. Please consult the remainder of the chapter for all criteria.*



Section View

Fig. 6.58



Plan View

Fig. 6.59

FIGURE 3-29  
Zoning Sheet for Corridor  
Subdistrict C-3, Broadway North

### **3.4.5 Public Realm Design Guidelines**

Chapter VIII of the UCSP is the Public Realm Design Guidelines. These guidelines focus on ways to create more attractive and pedestrian-friendly public environments and gathering places. Street furniture, landscaping, sidewalks, crosswalks, lighting, paseos, public art, parks and plaza concepts are defined in this chapter. An art-deco inspired design theme is proposed along Third Avenue, building upon the era when much of the original development along the street occurred. A more contemporary theme is proposed for the remaining public realm areas in the urban core. Such gateway treatments are proposed at five locations within the Subdistricts Area, as well as a sixth location outside of the Subdistricts Area (Fourth Avenue and C Street) to welcome people and to reinforce the identity of the area.

### **3.4.6 Infrastructure and Public Facilities**

Chapter IX of the UCSP describes applicable infrastructure and public facilities, including water supply, sewer drainage, solid waste disposal, law enforcement and emergency services, schools, parks and recreational facilities, energy, and telecommunications. Because the UCSP implements the GPU, the infrastructure studies performed during the City's GPU effort and resulting citywide implementation strategies provide the basis of utilities and services needed for the urban core. The UCSP Chapter IX focuses on the GPU policies and criteria that have particular relevance to the UCSP area. (These policies and criteria will be discussed further in the impact analyses for services and utilities, Chapters 5.11 and 5.12 respectively).

### **3.4.7 Plan Implementation and Community Benefits Program**

The goals expressed in the UCSP require investments in streets, transit, parks, plazas, cultural facilities, protection of historic resources, schools, and improvements to City services such as utilities, police, fire, health and human services. Chapter X of the UCSP identifies the implementation programs that will result in the desired mobility improvements, urban amenities, and other community amenities envisioned in the UCSP. Realization strategies include public and public/private partnerships to generate funding and investment in the urban core. Through development and business fees, redevelopment funds, grants, TransNet (a one-half cent tax for transportation projects), and the general fund as funding sources, short-term demonstration projects are proposed to serve as models and redevelopment incentive. A Facilities Implementation Analysis has been prepared for the UCSP to assure that long-term revenues are sufficiently aligned with potential costs of implementing the public infrastructure.

### **3.4.8 Plan Administration**

Chapter XI of the UCSP describes the processes which will be used to consider development applications and the administrative procedures required for amendments and/or modifications to the UCSP.

#### **3.4.8.1 Subsequent Projects Design Review**

The UCSP includes a design review process for future projects within the UCSP Subdistricts Area to ensure consistency with the UCSP development regulations and design guidelines. All subsequent projects require submittal and approval of an Urban Core Development Permit (UCDP). The UCDP design review process is illustrated in Figure 3-30.

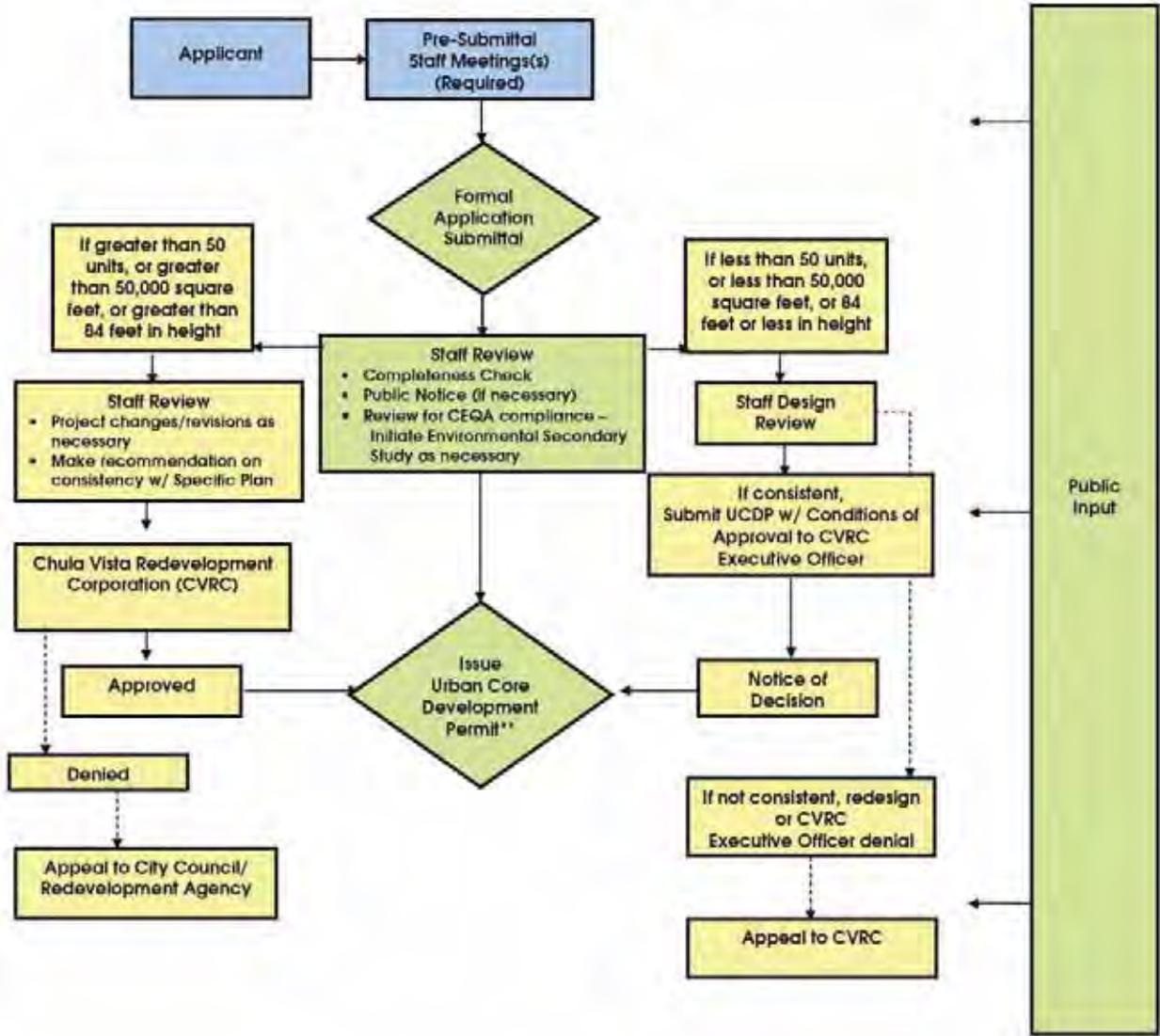
Project size and location determine which one of two design review processes apply. The majority of the UCSP Subdistricts Area lies within a Redevelopment Project Area and the Chula Vista Redevelopment Corporation has been established to assist with implementation and oversight of infill development in these areas. Development outside of a Redevelopment Project Area will be subject to the City's existing design review process. For all projects requiring additional discretionary approvals such as Conditional Use Permits and Tentative Maps, adherence to existing Chula Vista Municipal Code regulations and processes will also be required.

Exemptions to the UCSP design review requirements include minor modifications to existing structures such as painting, maintenance or repair, re-roof, modifications that increase the total building area by 200 square feet or less (within a two-year period), as well as other exceptions and modifications described in Chapter 19.16 of the existing Municipal Code. Nonconforming existing land uses that meet the Municipal Code definition (Chapter 19.64) may also be provided exemption or allowances from the standards contained in the UCSP for new projects and building renovations.

#### **3.4.8.2 Subsequent Projects Environmental Review**

As indicated in Figure 3-30, future projects will also be subject to subsequent environmental review. Approval of a UCDP is a discretionary action requiring CEQA review. As a Program EIR, the Final EIR for the UCSP is intended to be used by the City of Chula Vista when taking action on subsequent permits to allow development in accordance with the proposed UCSP. The Program EIR and subsequent project review process defined in Section 15168 of the CEQA Guidelines allows a Program EIR to serve as the basis for environmental review of subsequent projects. Section 15182 and 15183 of the CEQA Guidelines provide additional review guidance for projects proposed in accordance with an adopted Specific Plan, or consistent with adopted Community Plan, General Plan or Zoning. These CEQA Guidelines will be utilized, as applicable, in

## URBAN CORE DEVELOPMENT PERMIT DESIGN REVIEW PROCESS\*



\*Process pertains to projects in redevelopment areas only  
 \*\* If Redevelopment Agency involvement (e.g. Agreement or Funding) project obtains concurrent Agency Approval

FIGURE 3-30  
Urban Core Development  
Permit Design Review Process

the review of subsequent development projects. Section 2.3.3 in the Introduction of this EIR discusses this process in greater detail.

### **3.4.8.3 Review of Plan Progress**

To monitor progress towards implementing the land use goals envisioned by both the GPU and UCSP, a series of checks and balances are proposed. These include review under the Growth Management Ordinance, bi-annual review of amenities and facilities implementation in conjunction with the budget/CIP review cycle, and lastly a five-year assessment of the progress of the UCSP.

The Growth Management Ordinance (Municipal Code 19.09) includes a program to implement the General Plan Update and ensure that development does not occur unless facilities and improvements are available to support that development. The growth management program incorporates a defined public facilities development phasing policy to appropriately schedule the timing and location of various City improvements. The program additionally incorporates the facility master plans for fire protection, schools, libraries, parks, water, sewer, drainage, traffic and civic centers. The growth management oversight commission annually reviews and reports on the program to the Chula Vista Planning Commission and City Council.

Various improvement projects envisioned in the UCSP will also be subject to ongoing monitoring and priority-setting through the Capital Improvement Program (CIP) processes. Schedule assessments will be made during the bi-annual CIP budget analysis and review of facilities performance. Facing any change in priorities, additions or subtractions from the facilities program will not require amendment of the UCSP provided such changes are not in conflict with this EIR.

Review of the UCSP's progress also assumes financing review. Review of the Facilities Implementation Analysis throughout the life of the UCSP will evaluate financial performance and assess financial resources as they become available or depleted, so as to determine priorities.

UCSP amendment procedures are discussed in Chapter XI of the UCSP. California Government Code (Section 65453) states that a specific plan may be amended as often as deemed necessary by the legislative body. Amendments to the UCSP may be initiated by a developer, any individual property owner, by the Chula Vista Redevelopment Corporation, or by the City. Any amendment proposals must document the need for such changes and indicate the economic, social, or technical issues that generate this need. Depending on the nature of the amendment, supplemental environmental analysis may be necessary. The Chula Vista Community Development Director will review the request and make recommendation to the City Council for approval or denial.

A five-year review cycle has been established in the UCSP to monitor the effectiveness of the plan in responding to the changing landscape of the urban core. A Five-Year Progress Report will be prepared and included as part of budget cycle or strategic plan updates.

### 3.5 Discretionary Actions

Adoption and implementation of the proposed UCSP will require a series of discretionary actions. These actions, the agency responsible for them, and their purpose are identified below in Table 3-3.

**TABLE 3-3  
DISCRETIONARY ACTIONS  
REQUIRED FOR PROJECT ADOPTION AND IMPLEMENTATION**

Action	Agency	Purpose
Urban Core Specific Plan Adoption	City of Chula Vista City Council	To implement the objectives and policies of the recently updated Chula Vista General Plan
Urban Core Specific Plan Final EIR Certification	City of Chula Vista City Council	To comply with State-required environmental review of the proposed Urban Core Specific Plan
Town Centre I Redevelopment Plan Amendments	City of Chula Vista City Council/ Redevelopment Agency	To delete existing land use regulations and instead defer to the land use development and design provisions of the Urban Core Specific Plan
Town Centre I Land Use Policy Repeal	City of Chula Vista City Council/ Redevelopment Agency	To defer regulation of permitted land uses within the Chula Vista urban core to the Urban Core Specific Plan Land Use Matrix
Town Centre I Design Manual Repeal	City of Chula Vista City Council/ Redevelopment Agency	To defer the guidelines for design of development within the Chula Vista urban core to the Development Design Guidelines of the Urban Core Specific Plan

Future development in accordance with the UCSP will require discretionary approval. The Final EIR for the UCSP will be used by the City of Chula Vista for discretionary actions associated with subsequent development and other activities within the UCSP area which require CEQA review. Such future discretionary actions are anticipated to include but not be limited to the following:

- Urban Core Development Permits;
- Conditional Use Permits;

- Tentative Maps;
- Demolition Permits; and
- Grading Permits.

For these future discretionary actions a Secondary Study would be performed, unless otherwise exempt, to determine if the UCSP Final EIR adequately addresses the potential environmental impacts of the proposed activity. If the Secondary Study determines that the EIR does adequately cover the activity, no further review will be required and the EIR will be referenced in approving the discretionary actions. For a complete discussion of the Secondary Study process and subsequent environmental review, refer to Section 2.3.3.

## 4.0 Environmental Setting

A discussion of the environmental setting including location, climate, topography, and other contextual physical characteristics of the UCSP area is provided in this section. A more detailed description of existing environmental conditions is provided at the beginning of each impact issue-specific discussion contained in Section 5.0, Environmental Impact Analysis. The environmental setting and existing conditions addressed throughout this EIR are those which existed when the NOP for the EIR was published, August 2005.

### 4.1 Location

The UCSP project site encompasses an area of approximately 1,700 acres located in the downtown urban core of the City of Chula Vista, California. The UCSP area is located approximately ~~18~~8 miles north of the United States International Border with Mexico and 135 miles south of Los Angeles. The southern boundary of the City of Chula Vista lies approximately 4 miles north of the border. The UCSP area is bounded by Interstate 5 on the west, C Street on the north, Del Mar Avenue on the east, and L Street on the south. Within the 1,700-acre UCSP boundary lies the smaller 690-acre Subdistricts Area which, as described in the previous Section 3.0 Project Description, constitutes the focus area of the UCSP and the area for which UCSP development standards, guidelines, and other implementation programs will guide future new and redevelopment (Figure 4-1).

The UCSP area is the urban core of Chula Vista and is highly urbanized primarily with low-rise structures developed in the 1950s with some mid-rise and high-rise structures developed in the 1970s. The urban core functions as the business, shopping, and government center of Chula Vista and contains the City's oldest established residential neighborhoods. Photographs 4-1 through 4-6 were taken on August 9, 2005 and show representative views of the following locations within the UCSP area:

- Third Avenue at H Street (Photograph 4-1)
- Third Avenue at F Street (Photograph 4-2)
- Fourth Avenue at F Street (Photograph 4-3)
- Broadway at F Street (Photograph 4-4)
- H Street at Third Avenue (Photograph 4-5)
- Broadway at H Street (Photograph 4-6)



-  UCSP Study Area
-  UCSP Subdistricts Area



FIGURE 4-1  
Aerial Photograph of Project



PHOTOGRAPH 4-1  
Third Avenue at H Street, Looking North



PHOTOGRAPH 4-2  
Third Avenue at F Street, Looking South



PHOTOGRAPH 4-3  
Fourth Avenue at F Street, Looking North



PHOTOGRAPH 4-4  
Broadway at F Street, Looking South



PHOTOGRAPH 4-5  
H Street at Third Avenue, Looking West



PHOTOGRAPH 4-6  
Broadway at H Street, Looking North

Photographs 4-1 and 4-2 are representative views of downtown Third Avenue's pedestrian-oriented specialty shops, restaurants, and small businesses that primarily serve local residents. Photograph 4-3 shows a representative view of the area where the City's civic center, central library, and police headquarters are located. Photographs 4-4 and 4-6 are representative views of Broadway's auto-oriented commercial strip malls, auto repair and service uses, and lodging. Photograph 4-5 shows a representative view of H Street near Chula Vista's regional shopping mall.

## **4.2 Climate**

The climate of the region which encompasses the City of Chula Vista is identified as Mediterranean, which is characterized by warm, dry summers and mild, wet winters. Clear skies predominate for much of the year due to a semi-permanent high-pressure cell located over the Pacific Ocean. This high-pressure cell also drives the dominant onshore circulation and helps to create subsidence and radiation temperature inversions. Subsidence inversions occur during the warmer months when descending air associated with the high-pressure cell comes in contact with cool marine air. Radiation inversions typically occur on winter nights when air near the ground cools by radiation and the air aloft remains warm.

An average of 10 inches of rain falls each year from November to early April, while the remainder of the year is typically dry. Measurable rain falls on 20 days per year, with only six of these days experiencing moderate (0.5 inch in 24 hours) rainfall.

## **4.3 Topography**

The UCSP area's topography is relatively flat, with elevations that range from 20 feet above mean sea level (AMSL) to a maximum of 110 feet AMSL. The UCSP area lies approximately two miles east of the southern extent of San Diego Bay. The bay stretches west another half-mile to the Coronado Peninsula which faces open ocean on its west side.

Topographic contours generally trend north-south, roughly paralleling the west and east boundaries of the UCSP area. The lower elevations occur along the western boundary of the UCSP and graduate higher as one proceeds east. Elevations of 60 to 90 feet AMSL cover the central part of the UCSP area and most of the Subdistricts Area. The southeast corner of the UCSP area has the highest elevation, with the area of the Subdistricts Area south of H Street along Third Avenue being the highest at 100 to 110 feet AMSL.

## 4.4 Setting

As can be seen in Figure 4-1, the UCSP area is largely developed, with few vacant parcels remaining. The area serves as the traditional central core of the city and also provides linkages to the Bayfront to the west and newer master planned communities to the east. This highly urbanized setting is sparsely vegetated. Ornamental trees, parkways, lawns, and gardens comprise the area's perennial vegetation.

Retail uses are located primarily along Broadway from E to L Streets, H Street from I-5 to Third Avenue, and along Third Avenue from E to H Streets. The UCSP area has three major commercial streets that offer different types of shopping: (1) Broadway's auto-oriented commercial strip malls, auto repair and service uses, and lodging; (2) H Street's Chula Vista Center (regional shopping mall); and (3) Downtown Third Avenue's pedestrian-oriented specialty shops, restaurants, and small businesses that primarily serve local residents.

The urban core also includes significant areas for civic uses including the Civic Center, Chula Vista Public Library, Fire Station Number 1, and new Police Station; all located at the intersection of F Street and Fourth Avenue. The South County Regional Center, providing courtroom, records, and other administrative functions, is located at the southwest intersection of Third Avenue and H Street.

Residential areas west of Second Avenue and north of I Street along with areas west of Broadway and south of I Street are considered to be in transition, with portions of these areas zoned and developed with a mix of large- and small-scale multi-family residential, as well as commercial office uses. Outside of the UCSP Subdistricts Area boundary, existing residential neighborhoods are considered to be stable.

Streets and freeways account for an estimated 30 percent of the area. Circulation in the UCSP area is primarily provided through the traditional street grid pattern, which was established in the early 1900s and remains almost intact today. Roadways that run east-west are usually 'streets' and roadways running north-south are usually 'avenues.' However, over the years this traditional grid system has been interrupted, especially in the northwest portion of the UCSP area between I-5 and Broadway, disrupting connectivity between neighborhoods.

## 5.0 Environmental Impact Analysis

The following analyses address the potential environmental impacts that may occur as a result of project implementation. Issue areas subject to detailed analysis include those that were identified by the City of Chula Vista as potentially causing significant environmental impacts, and issues which were identified in the initial study and in response to the Notice of Preparation and scoping meeting as having potentially significant impacts. The analysis presented in this section of the EIR identifies potential impacts associated with the project, and develops appropriate mitigation, where possible, for impacts that have been determined to be significant. Each issue section below is formatted to summarize the existing conditions, list the criteria for the determination of significance, analyze any potential impacts, list any required mitigation measures, and summarize the level of significance after mitigation.

For the purposes of CEQA analysis, the UCSP Subdistricts Area is considered the proposed project area. The UCSP Subdistricts Area was a focus of the GPU's "Areas of Change," for which the UCSP proposes new zoning, development standards, and design guidelines to accommodate the anticipated revitalization envisioned in the GPU. The regulatory provisions of the UCSP apply only to the UCSP Subdistricts Area and not to the larger 1700-acre Study Area which surrounds the Subdistricts Area. The following environmental impact analyses focus on the potential environmental effects that would arise within and adjacent to the UCSP Subdistricts Area as a result of redevelopment and new infill development pursuant to the UCSP regulatory provisions. Potential environmental effects are also analyzed for the limited provisions of the UCSP that apply to or affect the broader area surrounding the UCSP, within the UCSP Study Area.

### 5.1 Land Use

Consideration of land use effects fall into two main areas: (1) conformance to, or conflict with established plans, policies, and regulations; and (2) effects on established communities. There are numerous issues associated with land use decisions such as aesthetics, noise, and resource conservation. These issues are addressed in their respective topical discussions.

#### 5.1.1 Existing Conditions

##### 5.1.1.1 Land Use Characteristics

The approximately 690 gross acre Subdistricts Area is primarily comprised of commercial corridors along Broadway, H Street, Third Avenue, and E Street with

residential areas concentrated west of Broadway. The area within the Study Area surrounding the Subdistricts Area consists of single-family homes with some multi-family residences which are, for the most part, stable residential neighborhoods. Figure 5.1-1 provides a reference map showing streets and prominent features in the area. The UCSP Subdistricts Area has three major commercial streets that offer distinct types of shopping: (1) Broadway's auto-oriented commercial strip malls, auto repair and service uses, and lodging; (2) H Street's Chula Vista Center (regional shopping mall); and (3) Downtown Third Avenue's pedestrian-oriented specialty shops, restaurants, and small businesses that primarily serve local residents.

Civic and institutional uses within the Subdistricts Area include the City's civic center, central library, police headquarters, and the South County Regional Government Center which are located in the northeastern portion of the Subdistricts Area along Third and Fourth Avenues. Other community uses within the Subdistricts Area include two urban-style passive parks located between Third and Fourth Avenues north of G Street and the Feaster Elementary School north of E Street, west of Broadway. Two additional elementary schools, one junior high school, and one high school occur in the area surrounding the Subdistricts Area, within the UCSP Study Area.

A variety of housing types are located in the Subdistricts Area, including single-family detached, single-family attached, multi-family apartments and condominiums, and mobile homes. Only a very small portion of the Subdistricts Area is occupied by single-family attached and detached homes and condominiums. A moderately larger quantity of duplexes occur, while the main housing type represented in the Subdistricts Area is multi-family apartments. Mobile home parks occupy moderately large tracts of land in the western portion of the Subdistricts Area, just east of Interstate 5. Most of the residential neighborhoods in the Subdistricts Area are in transition from lower to higher intensity uses, adding multi-family housing in accordance with allowable land use designations or upgrading the existing housing.

Despite having many unique and attractive characteristics, some neighborhoods have experienced decline over the years and blighted commercial and residential areas have been targeted for revitalization through a number of City redevelopment plans.

### **5.1.1.2 Local Regulatory Plans and Policies**

Several relevant planning documents address land use in the Subdistricts Area. These include the City's General Plan Update ("GPU"), the City of Chula Vista Municipal Code - Zoning, the Town Center I Redevelopment Plan, the Merged Redevelopment Plan, the Broadway Revitalization Strategy, and the Historic Preservation Strategic Plan. The regulatory plans and policies discussed in this section are incorporated by reference pursuant to CEQA Guidelines Section 15150 and are available for review at the City of

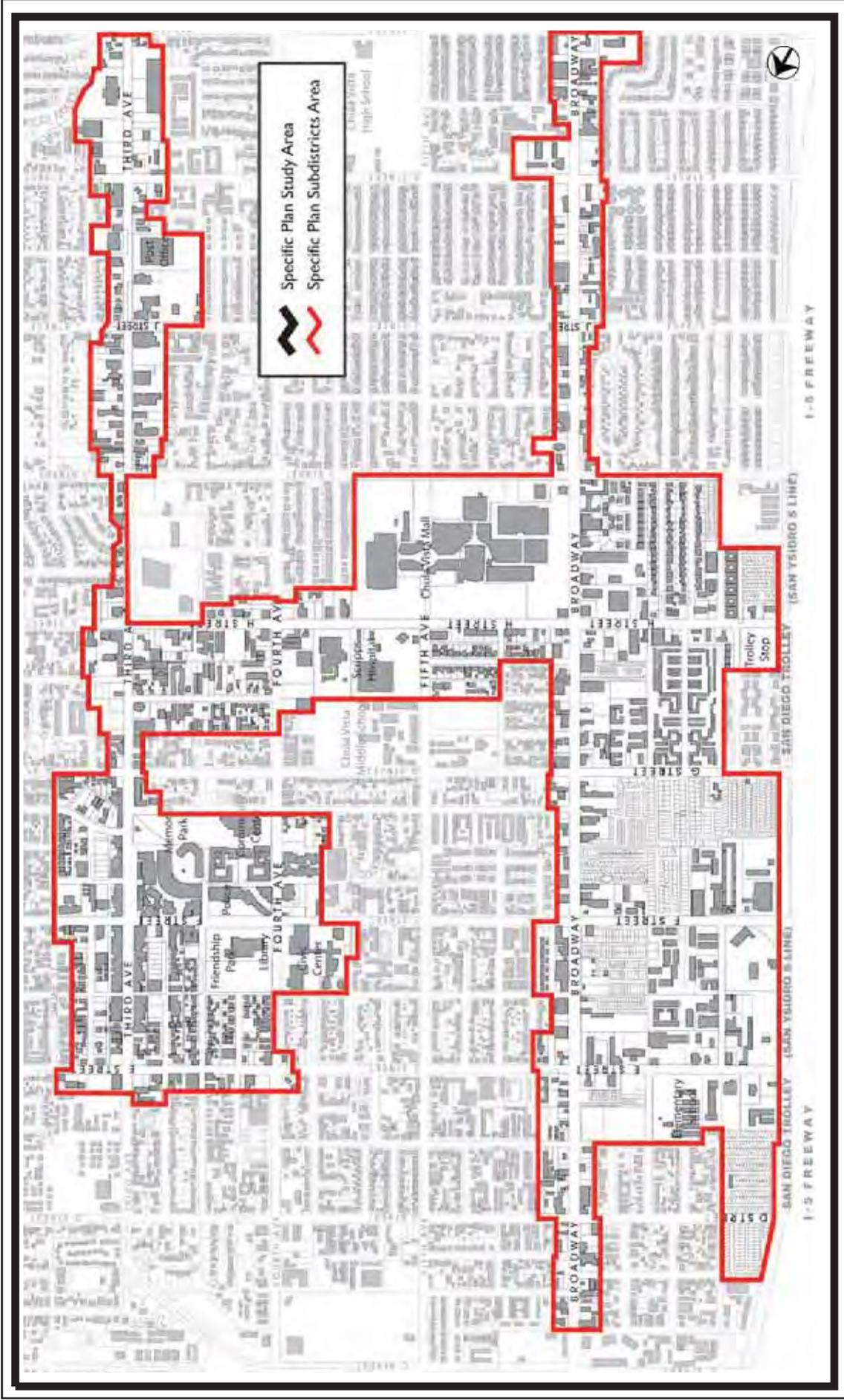


FIGURE 5.1-1  
UCSP Subdistricts Area

Chula Vista Planning and Building, and Community Development Departments at 276 Fourth Avenue.

### **a. Chula Vista General Plan Update**

The Chula Vista General Plan is a comprehensive long-term plan that defines the framework by which the City's physical and economic resources are to be managed and used in the future. The General Plan was updated in 2005, with new goals, policies, and actions designed to implement the community's vision for the City through year 2030. Whereas a previous 1989 General Plan update focused on the newly annexed and developing eastern portions of the City, the 2005 update instead applied key principles of smart growth by focusing planning efforts on the City's currently developed areas. The GPU is the constitution for all future development; therefore, any decision by the City affecting land use and development must be consistent with the GPU. The area defined in the GPU as the Urban Core Subarea of the Northwest Planning Area corresponds with the UCSP Study Area boundary. The GPU Urban Core Subarea is further divided into five planning units: the Downtown Third Avenue District, H Street Corridor District, Mid-Third Avenue District, Mid-Broadway District and Interstate 5 Corridor. These five GPU districts correspond to the UCSP Subdistricts Area. Table 5.1-1 correlates the 26 UCSP subdistricts with the corresponding five GPU districts.

The GPU land use designations for the UCSP Subdistricts Area are shown in Figure 5.1-2. The GPU Land Use Map designates the five districts for primarily mixed-use commercial, mixed-use, and urban core residential uses at buildout under the GPU. The multi-family residential units are proposed in locations where new growth or redevelopment can be accommodated to: create mixed-use urban environments that are oriented to transit and pedestrian activity; allow residential uses in more readily accessible areas along the downtown segments of Third Avenue and E Street in the vicinity of Third and Fourth Avenues; and to allow increased residential and transit-oriented uses in the vicinity of major transit corridors. The GPU land uses within these districts provide a diverse mix of uses in the urban core to facilitate revitalization and are described below.

Chapter 11 (General Plan Implementation) of the GPU identifies the UCSP as a required element to implement the new land use designations, objectives and policies identified for the urban core and specifically referenced in the Northwest Planning Area. The Northwest Planning Area identifies on Figure 5-28 – 5-35 the "Areas of Change" designated for land use change under the GPU. These "Areas of Change" are thus the subject of zoning changes in the UCSP.



**TABLE 5.1-1  
UCSP SUBDISTRICTS AND CORRESPONDING  
GENERAL PLAN UPDATE DISTRICTS**

UCSP District	UCSP Subdistrict	General Plan Update District
Urban Core	UC-1, St. Rose	H Street Corridor
	UC-2, Gateway	
	UC-3, Roosevelt	
	UC-4, Hospital	
	UC-5, Soho	
	UC-6, Chula Vista Center Residential	
	UC-7, Chula Vista Center	
	UC-8, Otis	
	UC-9, Mid H Street	
	UC-10, Chula Vista Center West	Interstate 5 Corridor
	UC-11, Chula Vista Center West Residential	
	UC-12, H Street Trolley	
	UC-13, Mid Broadway	
	UC-14, Harborview	
	UC-15, E Street Trolley	
	UC-16, Broadway Hospitality	
	UC-17, Harborview North	
	UC-18, E Street Gateway	
	UC-19, Feaster School	
Village	V-1, East Village	Downtown Third Avenue
	V-2, Village	
	V-3, West Village	
	V-4, Civic Center	
Corridors	C-1, Third Avenue South	Mid Third Avenue
	C-2, Broadway South	Mid Broadway
	C-3, Broadway North	Interstate 5 Corridor

### ***Downtown Third Avenue District***

The traditional Third Avenue business district consisting of shops and offices and wide sidewalks along Third Avenue, as well as smaller residential housing units in surrounding streets characterizes the Downtown Third Avenue District. The GPU designates mixed-use with residential units along Third Avenue between E Street and H Street within the Downtown Third Avenue District. Buildings along Third Avenue's immediate street frontage would be predominantly low-rise to maintain the traditional character, while the mid-rise apartments and condominiums behind them would be stepped back from the façade. East of Third Avenue, building heights would be stepped down to visually blend with the adjacent existing residential neighborhood.

### ***H Street Corridor District***

The H Street Corridor District includes the Chula Vista Center shopping mall, medical facilities, South County Regional Complex, offices, commercial businesses, and some residential. The GPU designates mixed-use development with offices, shopping, and multi-family housing in a high-intensity, mid-rise transit-oriented development.

A Mixed-Use Transit Focus Area designation for the Third Avenue/H Street transit station includes a mix of office, retail, and residential densities planned for a gross density of up to 60 dwelling units per acre. Building heights for this district are allowed to be primarily mid-rise between Third and Fourth Avenues. The area to the north of the Transit Focus Area is designated for Urban Core residential with a gross density of 40 dwelling units per acre. This area provides a transition to the existing higher density residential area immediately north. Areas south of H Street are designated for mixed-use commercial and office uses.

### ***Interstate 5 Corridor District***

The Interstate 5 Corridor District is characterized by low-rise multi-family housing extending from C to I Streets; mobile home parks between F and G Streets; three roadway connections to the Bayfront (E, F, and H Streets); a lack of accessible park facilities; and poor pedestrian connectivity crossing I-5 to the Bayfront or to Broadway. The GPU designates a mixed-use district, with high density mixed-use residential within a quarter mile of the E and H Street trolley stations; increased commercial, some multi-family housing on Broadway; and visitor-serving uses in select areas. Residential areas west of Broadway are planned for higher density residential due to their proximity to excellent transit services. A pedestrian-oriented F Street Promenade is proposed to link the district to the Bayfront and to the Downtown Third Avenue District. Building form within this district would include low-, mid-, and high-rise buildings, with high-rise building restricted to the Mixed Use Transit Focus Areas.

The Mixed-Use Transit Focus Areas are centered around the E and H Street Trolley Stations and are proposed to function as major transportation corridors with high-intensity transit focus mixed-uses, including higher density residential units, offices, and ground floor retail. Future development in these areas would include mid- to high-rise building. Land uses surrounding these areas include visitor-serving uses, office buildings, and Urban Core multi-family residential.

The Mixed Use Transit Focus Area designation is intended only for areas within approximately ¼ mile of existing and planned transit stations, and is intended for the highest intensity mixed use residential environment. This designation allows a mix of residential, office, and retail uses in an area that is pedestrian friendly, and has a strong linkage to provision of transit. Proposed structures exceeding 84 feet within the Mixed

Use transit Focus Area must be approved before receipt of development permit (GPU LUT 2.4).

### ***Mid-Broadway District***

The existing Mid-Broadway District consists mainly of retail establishments. The GPU designates the Mid-Broadway District for mixed-use, with primarily local-serving ground floor retail and higher density residential units. Building form for the Mid-Broadway District would be primarily low-rise, with some mid-rise buildings.

### ***Mid-Third Avenue District***

The Mid-Third Avenue District consists primarily of professional offices north of J Street and a mix of retail and professional offices uses south of J Street. The GPU designates the Mid-Third Avenue District with primarily office uses, some housing between I and J Streets, and segregated retail and office uses between J and L Streets. Land uses on the west side of Third Avenue, south of J Street, would provide local retail services for adjoining residential neighborhoods, while the east side of Third Avenue would consist of offices. Building form for the Mid-Third Avenue District would be primarily low-rise, with some mid-rise buildings.

The GPU contains specific objectives and policies to preserve the character and retain the quality of the adjacent existing, residential neighborhoods within each of the Urban Core districts. The Land Use and Transportation Element (LUT) of the GPU contains 92 objectives that address actions affecting land use and community character. Of these, 31 general objectives apply throughout the GPU area and 15 objectives apply specifically to the Northwest Planning Area, which includes the UCSP area. An analysis of the UCSP and the objectives and policies of the General Plan is provided in Section 5.1.3.

## **b. Chula Vista Municipal Code (Title 19, Zoning and Specific Plans)**

Title 19 of the City of Chula Vista Municipal Code (Zoning Code) includes descriptions and allowed uses for each of the City's zone classifications. Zone classifications provide for residential, commercial, industrial, and open space uses in conformance to General Plan land use designations as required by law. The Chula Vista Municipal Code Section 19.06.030 requires the implementation of the City's General Plan through adoption of specific plans or other zoning ordinances. The existing zoning for areas within the urban core was established 30 years ago and reflects traditional Euclidian zoning. These zones are shown in Figure 5.1-3 and detailed in Table 5.1-2 which provides the existing zoning by Subdistrict within the UCSP. The existing zones are not consistent with the new land use designations of the GPU, and thus are the subject of rezoning in the UCSP.



TABLE 5.1-2  
UCSP SUBDISTRICTS EXISTING ZONING

Subdistrict	Zone												
	MHP	CV*	R-1	R-2	R-3	CT*	CB	CC*	CO*	PQ	IL		
V-1					X				X				
V-2							X		X				
V-3					X	X			X				
V-4					X				X	X			
UC-1					X				X				
UC-2					X				X				
UC-3					X				X				
UC-4								X	X				
UC-5				X					X				
UC-6									X				
UC-7									X				
UC-8				X									
UC-9				X				X					
UC-10	X	X	X	X	X	X			X				
UC-11			X	X	X								
UC-12		X			X	X							
UC-13						X							
UC-14	X				X	X					X		
UC-15		X			X						X		
UC-16		X			X	X			X				
UC-17	X												
UC-18		X											
UC-19		X			X								
C-1									X				
C-2									X				
C-3									X				

\*Includes Zone Modifying Districts.

The existing Municipal Code zoning classifications found within the UCSP Subdistricts Area include Central Business (CB), Central Commercial (CC), Administrative and Professional Office (CO), Commercial Thoroughfare (CT), Visitor Commercial (CV), Limited Industrial (IL), Mobilehome Park (MHP), Public/Quasi-public (PQ), Single-Family Residential (R-1), One- and Two-Family Residence (R-2), and Apartment Residence (R-3).

The approximate distribution of existing zoning within the Subdistricts Area was determined by the Chula Vista Community Development Department and is provided in Table 5.1-3.

**TABLE 5.1-3  
EXISTING ZONING DISTRIBUTION WITHIN THE UCSP SUBDISTRICTS AREA**

Existing Zoning	Gross Acres (approximate)	Percentage of Total Area
Single-family Residential (R-1)	14	2.0%
One- and Two-Family Residential (R-2)	14	2.0%
Apartment Residential (R-3)	153	22%
Mobile Home Park (MHP)	38	5.5%
Commercial (CB, CC, CO, CV, and CT) and Light Industrial (IL)	466	68%
PQ (Public/Quasi Public)	5	0.5%
Urban Core Total	690.0	100%

As shown in Table 5.1-3, approximately 68% of the Subdistricts Area is currently zoned for commercial or light industrial uses (less than 3%). Another 22% is zoned for high-density residential. Thus, approximately 90% of the Subdistricts Area is zoned either for commercial or high-density residential. Only roughly 4% of the entire Subdistricts Area is zoned for single-family detached residences or duplexes. Public uses are currently zoned for less than 1%. The geographic location of these zones throughout the UCSP Subdistricts Area is illustrated in Figure 5.1-3.

The R-1, Single Family Residence Zone is intended to provide communities primarily for single-family detached homes and the services appurtenant thereto. This zone occurs in two small enclaves in the southwest corner of the UCSP area in Subdistricts UC-10 and UC-11 as indicated on the Existing Zoning Table 5.1-2. These areas make up only approximately 14 gross acres of the larger 690 gross-acre Subdistricts Area and are too small to be visible on the map, Figure 5.1-3. R-1 zones also occur in several locations immediately adjacent to portions of the UCSP Subdistricts Area. These areas, and their significance regarding land use compatibility, will be discussed in the impact analysis

Section 5.1.2. Principal building heights are not to exceed two and one-half stories (28 feet in height).

The R-2, One- and Two-Family Residence Zone permits the lowest density of multiple dwelling units, namely the duplex. The purpose of this zone is to provide a density level commensurate with the density allowable under the most restrictive multiple-family zone but to retain the fundamental characteristics found in the R-1 zone, such as building height, private yards and patios, individual recreational facilities, privately maintained open space, and privacy and self-containment of dwelling units. Areas zoned R-2 occupy roughly 14 gross acres in small areas of the central part of the UCSP Subdistricts Area in the vicinity of H Street and Broadway.

The R-3, Apartment Residential Zone allows apartment house neighborhoods of varying degrees of density, from garden apartments to multistory apartment houses. The regulations of this district are designed to promote and encourage an intensively developed residential environment, with appropriate environmental amenities such as open areas, landscaping and off-street parking. Also permitted are certain retail and service activities intended for the convenience and service of the residents of the district. Height regulations permit structures of two and one-half (28 feet in height) with three and one-half stories (45 feet in height) allowed with approval by the design review committee. In addition, the R-3-H (high-rise) zone requires heights of no less than 46 feet. This zone only applies within the Village District in an area along Fourth Avenue south of F Street in the V-3 Subdistrict. Of the residential zones, the R-3 is the most abundant in the UCSP Subdistricts Area (refer to Table 5.1-2), but its spatial distribution is fairly modest, as shown in Figure 5.1-3.

The MHP, Mobile Home Park Zone provides appropriate locations where mobilehome parks may be established through the Conditional Use Permit (CUP) process. This zone occupies only a small portion of the UCSP Subdistricts Area and coincides with existing mobile home parks in three locations along the west edge of the plan area (refer to Figure 5.1-3).

The regulations of the CO, Administrative and Professional Office Zone, are designed to promote a quiet and professional environment for business administration, financial, medical, and government and other professional activities. The regulations conditionally permit local-serving commercial facilities, such as restaurants, and multi-family residential uses with a CUP. Height regulations limit structures to three and one-half stories or 45 feet in height. Areas zoned CO are located along the Third Avenue and H Street commercial corridors.

The purpose of the CB, Central Business Zone is to protect, stabilize, and improve commercial pedestrian characteristics of the central business area. This zone is considered the most intense of commercial zones and is commonly applied to a city's most urban downtown area. The CB zone allows a wide range of commercial uses, and

residential uses above the ground floor with a CUP. This zone provides no height regulations except that no building shall exceed three and one-half stories or 45 feet in height when located adjacent to any CO or residential zone. No setbacks are required for this district, except when abutting an R district a 15-foot side and 10-foot rear setback is required. The CB zone occupies the traditional business area along Third Avenue between E and G Streets.

The CC, Central Commercial Zone, aims to stabilize, improve and protect the commercial characteristics of the major community business centers. Restaurants, shops, and services are among the permitted uses. Mixed use commercial-residential projects are permitted with a CUP. Building heights are restricted to 45 feet in height with adjustments permitted with a CUP. The CC zone covers large portions of the Subdistricts Area along Third Avenue and H Street.

The purpose of the CT, Commercial Thoroughfare Zone, is to provide for the appropriate locations adjacent to thoroughfares where commercial activities dependent upon or catering to thoroughfare traffic may be established. The CT zones are established for parcels of one acre or larger located only in the immediate vicinity of major thoroughfares. Residential uses are not permitted. No buildings are to exceed 45 feet in height with exceptions allowed by CUP. The CT zone occupies a large portion of the Subdistricts Area in the areas along E Street between Third and Fourth Avenues, and the entire length of Broadway.

The CV, Visitor Commercial Zone, provides for appropriate locations where centers serving the needs of tourists and travelers may be established, maintained and protected. The regulations of this zone are intended to encourage the provision of transient housing facilities, restaurants, service stations and other similar uses. Building heights are restricted to 45 feet in height with adjustments permitted with a CUP. The CV zone occupies small areas in the western half of the UCSP Subdistricts Area .

The purpose of the PQ, Public/Quasi Public Zone, is to provide a zone in appropriate locations which are maintained by public or publicly controlled agencies such as municipal or county agencies, school districts, or utility companies. The PQ zone overlies Friendship Park, a small portion of the Subdistricts Area near the Civic Center on Fourth Avenue.

The IL, Limited Industrial Zone, allows manufacturing, printing, assembling, laboratories, wholesalers, and truck, trailer, boat and mobile home sales establishments. Laundries, auto repair, animal hospitals, and exterminating services are also allowed. Building heights are restricted to 45 feet. The IL zone is limited to a small portion of the eastern Subdistricts Area in an area along the San Diego Trolley line between E and F Streets .

Modifying districts impose special regulations in addition to those otherwise applicable to the zone. The modifying districts appearing within the urban core are the Design Control

and Precise Plan. As shown in Table 5.1-2, the CC, CO, CT, and CV zones are subject to these modifying districts.

### **c. Redevelopment Plans**

The City has adopted two redevelopment projects for the urban core area which overlap a large portion of the UCSP Subdistricts. Establishment of a Redevelopment Plan Project Area, pursuant to California Redevelopment Law, provides the Redevelopment Agency with the powers to take certain actions such as to buy and sell lands within the area covered by the plan, and to use tax increment financing. One of the main reasons for establishing a Redevelopment Plan Project Area is to secure funds that can be used to attract commercial, industrial, and residential development in order to eliminate blight and improve an area.

With tax increment financing (TIF), the property within a Redevelopment Plan Project Area has a certain total property tax value at its initiation. If this total assessed valuation increases over time, most of the taxes that are derived from this increase go to the redevelopment agency. A minimum of 20 percent of TIF funds must be set aside for affordable housing. Chapter 5.6 of the EIR, Population and Housing, describes these allotments in greater detail.

Figure 5.1-4 shows the location of redevelopment plans within the UCSP area.

#### ***Town Centre I***

Efforts to revitalize downtown Chula Vista began with establishment of the 138-acre Town Centre I Redevelopment Area in 1976. The goal of the plan, its Land Use Policy and its Design Manual, is to establish a business, entertainment, civic, and cultural focal point of the city. The area is urbanized and developed with a mixture of public and private land uses, including the South San Diego County Superior Court complex, Norman Park Senior Center and Memorial Park, the 60,000-square-foot Park Plaza commercial center, and a variety of other commercial office, retail, and residential uses (see Figure 5.1-4). The most recent significant redevelopment project is Gateway Chula Vista at the northwest corner of Third Avenue and H Street. When completed, the Gateway project will provide an estimated 347,000 square feet of Class A office space with ground floor retail and restaurant uses and employ up to 1,200 people. Phase I of Gateway was completed in 2003 and Phase II is currently underway. Another important recent project is the City's new Police Station at the southeast corner of Fourth Avenue and F Street, which was completed in early 2004.

#### ***Merged Plan (Town Centre II and Added Areas)***

The Town Centre II Redevelopment Area was established in 1978 and includes the Chula Vista Center, a 65-acre regional shopping mall located in the central portion of the

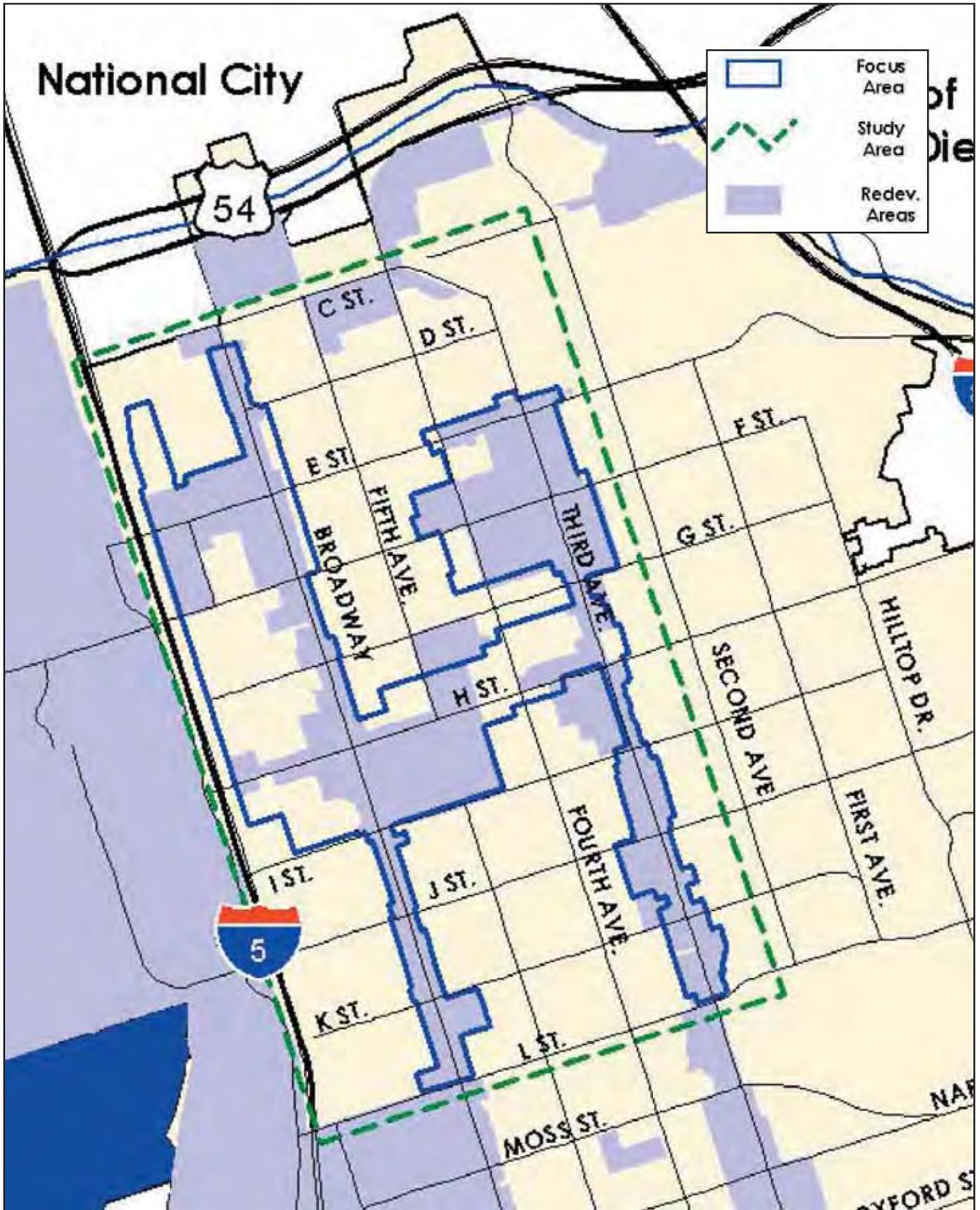


FIGURE 5.1-4  
Redevelopment Plan Areas

Subdistricts Area along H Street. Subsequent amendments added additional areas. In total, Town Centre II comprises 10 non-contiguous sites totaling 76 acres, and includes properties such as the Civic Center, the Chula Vista Main Branch Library, the Old Public Works Yard, Eucalyptus Park, Scripps Memorial Hospital, the Best Buy/Wal-Mart Shopping Center, and various other commercial, public, and residential properties in the City's central core.

Recent revitalization projects in the area include renovation of Chula Vista Center, and improvements that led to the development of the 200,000-square-foot South Bay Marketplace, anchored by Wal-Mart and Best Buy. Plans are currently under consideration for updating and reconfiguring the Chula Vista Center to remain competitive with other regional shopping centers.

Over the last several years, a study of expanding or adding new redevelopment project areas in western Chula Vista was conducted. The resulting Merged Chula Vista Redevelopment Project: Amended and Restated (Merged Plan) was adopted in May 2004. The Merged Plan added new areas for redevelopment and merged these areas with three already existing redevelopment plan areas. The Town Centre II redevelopment plan was included in this merge.

The Merged Plan consists of text, a map of the constituent redevelopment project areas, legal descriptions of the areas, a listing of proposed public facilities and infrastructure improvement projects, and a map of permitted land uses. As shown in Figure 5.1-4, about two-thirds of the UCSP Subdistricts Area is within a redevelopment plan area.

#### **d. Broadway Revitalization Strategy**

The focus area of the Broadway Revitalization Strategy is Broadway from H Street to L Street, with particular attention to the H Street entryway into the City. The primary goal of the plan was to outline measures to reverse deteriorating conditions along the auto-oriented strip and reform the area into a commercially viable and visually pleasing environment. The document outlines proposed broad economic, aesthetic, and circulation improvements along Broadway.

#### **e. Historic Preservation Strategic Plan**

The Historic Preservation Strategic Plan resulted from an effort by the Ad Hoc Historic Preservation Committee to evaluate the City's current historic preservation program and to make recommendations for the future of the City's historic resources. The Committee developed an action plan that could develop Chula Vista's Historic Preservation Program as a method for preserving the important historic resources of the City. Recommendations include becoming a Certified Local Government, establishing a predictable and consistent historic review process, establishing an historic preservation review board, and providing incentives for historic preservation.

### 5.1.1.3 Regional Plans and Policies

The San Diego Association of Governments (SANDAG) functions as a forum for decision-making on regional issues such as growth, transportation, and land use in San Diego County. The agency membership is comprised of representatives from each of the county's local jurisdictions, including the City of Chula Vista. SANDAG programs pertinent to the UCSP and land use decision-making include the Regional Comprehensive Plan (RCP), Regional Transportation Plan (RTP), Congestion Management Program (CMP), Regional Housing Program, and the MTDB/Southbay Transit First Study. These programs are summarized below.

#### a. Regional Comprehensive Plan

The RCP is the long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The RCP establishes a planning framework and implementation actions that increase the region's sustainability and encourage "smart growth while preserving natural resources and limiting urban sprawl." Other programs provide more focused assessment and recommendations addressing regional transportation planning, employment, and housing. Basic "smart growth" principles designed to strengthen land use and transportation integration are summarized as follows:

- Mix compatible land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, natural beauty, and critical environmental areas
- Strengthen and direct development towards existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair, and cost-effective
- Encourage community and stakeholder collaboration in development decisions

#### b. Regional Transportation Plan

MOBILITY 2030 is the County of San Diego's Regional Transportation Plan (RTP), which is intended to be a blueprint to address the mobility challenges created by the region's growth. It is a long-range advisory vision plan for highways, major bus routes, Bus Rapid Transit (BRT), the Trolley, rails lines, streets, bicycle travel, pedestrian traffic, and goods movement. MOBILITY 2030 contains an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system in the San Diego region. MOBILITY 2030 has seven policy goals which are to improve the mobility, accessibility, reliability, and efficiency of the transportation system, as well as promoting livability of communities, sustainability, and ensuring equity.

### **c. Congestion Management Program**

The Congestion Management Program (CMP) is the designated congestion management program for the San Diego region. The CMP is a state-mandated program that provides recommendations to cities and communities to help monitor transportation system performance, develop programs to address near- and long-term congestion, and better integrate land use and transportation planning decisions. In the short-term, the CMP serves as an element of the RTP, focusing on congestion management strategies that can be implemented in advance of the long- range transportation solutions contained within the RTP.

### **d. MTBD/South Bay Transit First Study**

The Transit First Study evaluates potential future transit options for the South Bay. Strategies seek to develop a network of transit services; integrate transit with land use planning; enhance operating speed; and improve the rider's experience. Transit priority treatment options, alternate transit alignments, and potential transit station locations and types, such as mixed flow transit lanes, dedicated transit lanes, freeway HOV/transit lanes, guideways, queue jumpers, and transit priority signals are identified. The Transit First Study is an advisory document and does not pose any requirements that the City must comply with.

### **e. Regional Housing Program**

The Regional Housing Program promotes strategies to increase housing supply and ensure access for all income groups, and provide a variety of housing choices for region residents.

### **f. California State Implementation Plan**

The California SIP was adopted by the California Air Resources Board and Environmental Protection Agency (EPA) to bring non-attainment air basins into compliance with the National Ambient Air Quality Standards (NAAQS). Through Regional Air Quality Standards (RAQS) the SIP contains regulatory requirements. Due to continued violations of NAAQS standards, in the San Diego Air Basin, the San Diego Air Pollution Control District, in conjunction with SANDAG, prepared a RAQS for its portion of the SIP. The proposed UCSP relates to the SIP through land use and growth assumptions that are incorporated into air quality planning documents. Applicability of the SIP to the proposed UCSP is discussed in the Air Quality analysis, Section 5.10 of this EIR.

### **g. Water Quality Control Plan for the San Diego Basin**

The Regional Water Quality Control Board (RWQCB) adopted a Water Quality Control Plan for the San Diego Basin (Basin Plan) that recognizes and reflects the beneficial

uses of the region's ground and surface waters, and local water quality conditions and problems. The plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. The UCSP area is subject to the Basin Plan's ground and surface water quality regulations for the San Diego Bay watershed, the San Diego Formation ground water aquifer, and the Sweetwater River groundwater recharge basin.

## 5.1.2 Criteria for Determination of Significance

According to Appendix G of the CEQA guidelines and the GPU EIR, the proposed project would have a significant impact on land use if it:

- Criterion 1: Conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Criterion 2: Physically divide or adversely affect the community character of an established community.

## 5.1.3 Impacts

### 5.1.3.1 Conformance with Local Plans and Policies

- **Criterion 1: Conformance with Relevant Plans and Policies**

#### a. Chula Vista General Plan Update

The recent GPU largely focused on the revitalization and redevelopment of the western portion of the City. The broad policies and objectives described in the GPU have been refined and described at the neighborhood level in the UCSP. Chapter 11 (General Plan Implementation) of the GPU identifies the UCSP as a required element to implement the new land use designations, objectives and policies identified for the urban core and specifically referenced in the Northwest Planning Area. The Northwest Planning Area identifies on Figure 5-28 – 5-35 the “Areas of Change” designated for land use change under the GPU. These “Areas of Change” are thus the subject of zoning changes in the UCSP.

The UCSP has been prepared pursuant to the GPU as an implementing regulatory document and thus serves as the primary source for policies, guidelines and regulations that implement the community's vision for the urban core.

The GPU is implemented via the UCSP primarily through the following four key chapters:

- Chapter V: Mobility
- Chapter VI: Land Use and Development Regulations
- Chapter VII: Development Design Guidelines
- Chapter VIII: Public Realm Design Guidelines

Chapter V, Mobility, provides a variety of approaches and strategies to “get people from here to there.” Improvements for the main thoroughfares and other streets within the UCSP area are identified and typically address pedestrian, bicycle, transit, automobile and parking opportunities. Traffic calming elements, pedestrian improvements and paseos are introduced to slow traffic and create a more pedestrian-friendly environment. Recommendations for new and upgraded bikeway facilities throughout the area for both recreational and commuting users are also included. Three Transit Focus Areas within the Subdistricts Area provide multi-modal opportunities for both local and regional transit and a new shuttle loop system serving the UCSP area and Bayfront is proposed. Various roadway network and capacity improvements are proposed, especially in areas where the street grid has been interrupted over time and off-street public parking strategies are also proposed within the Subdistricts Area.

Chapter VI, Land Use and Development Regulations, establish three different UCSP Districts – Village, Urban Core and Corridors which are further defined into twenty-six subdistricts, each with customized regulations and standards. Subdistrict regulations shape the building form and intensity, allowable land uses, and parking requirements. Land use regulations are proposed to encourage a mix of pedestrian-oriented commercial uses with higher density residential uses. Development and parking standards encourage locating buildings closer to the street (i.e. with parking behind or tucked under the building). The regulations also stress flexibility and provision of urban amenities such as streetscape improvements, parks, plazas, transit, cultural arts and mixed use. The tallest buildings are allowed only at the transit focus areas at I-5/H Street and I-5/E Street where support by alternative modes of transportation is readily available. Neighborhood Transition Combining Districts (NTCD) have been created for UCSP Subdistricts adjacent to R-1 and R-2 zones to protect and buffer existing residential neighborhoods and ensure compatible, stepped-back building heights and setbacks. In TFAs, additional stepbacks and setbacks are required, as well as special studies to assess effects of light, solar access, shadowing, and wind patterns. Special provisions address live/work units, mixed-uses and parking structures. Zoning incentives are provided to encourage development to provide high performance buildings and urban amenities such as parks and plazas beyond required levels.

Chapter VII, Development Design Guidelines, provide comprehensive design guidelines for development within the three UCSP Districts, as well as special guidelines for hotels, mixed-use projects, multi-family residential projects, sustainability, and for projects adjacent to I-5. The form-based guidelines supplement the UCSP development

regulations to create a more attractive, well-designed urban environment. These guidelines apply to construction, conservation, adaptive reuse, and enhancement of buildings and street scenes. Although no specific architectural style is prescribed, the quality of design is guided by policies addressing site planning, building height/form/mass, building materials/colors, storefront design, landscaping, lighting, parking, circulation, signs and other development considerations. The goal of the guidelines is to create a positive image for the urban core and frame the streets and sidewalks with inviting buildings, entrances, awnings and outdoor dining areas.

Chapter VIII, Public Realm Design Guidelines focuses on ways to create more attractive and pedestrian-friendly public environments and gathering places. Street furniture, landscaping, sidewalks, crosswalks, lighting, paseos, public art, parks and plaza concepts are defined. Two main themes emerge within the UCSP: an art-deco inspired design theme is proposed along Third Avenue, building upon the era when much of the development along the street occurred, and a more contemporary theme is proposed for the remaining public realm areas in the urban core, indicative of a forward-looking Chula Vista. Gateway treatments are proposed at six locations to welcome people to the urban core and to reinforce the identity of the urban core.

Table 5.1-4 references where each of the applicable GPU Land Use and Transportation Objectives are implemented through the various chapters of the UCSP.

### **b. Chula Vista Municipal Code - Zoning**

The existing Municipal Code zoning for the urban core was established 30 years ago and is presently out of conformance with the recently updated GPU. In order to comply with State law and bring zoning into conformance with the GPU, the UCSP proposes new zoning for the Subdistricts Area. The new zoning includes provisions for land uses, building intensity, form, mass, and height as recommended in the GPU. As noted above, existing zoning and land use regulations will not change in the surrounding UCSP Study Area, outside of the Subdistricts Area. The stable residential neighborhoods that comprise the Study Area outside of the Subdistricts Area will continue to be subject to existing residential land use regulations and Municipal Code zoning. In such cases where the UCSP and Municipal Zoning Code conflict, the UCSP development regulations shall apply.

Existing Municipal Code zoning classifications commonly allow only a single land use type on a parcel. This type of zoning is referred to as “Euclidean” zoning and strives to separate uses rather than integrate uses. Under the existing zoning, mixed-use areas are implemented through rezonings, conditional use permits, and general plan changes. This highlights the greatest difference between the existing Municipal Code zoning and the proposed UCSP zoning. The UCSP customizes the standards and regulations found in the Municipal Zoning Code in order to achieve the GPU’s vision for the urban core by introducing new mixed-use zoning classifications and urban core residential

**TABLE 5.1-4  
GENERAL PLAN UPDATE CONSISTENCY TABLE**

Title	General Plan Update Objectives	Applicable UCSP Sub-district			Implementing Mechanism			
		Village	Urban Core	Corridors	Mobility	Development Regulations	Development Design Guidelines	Public Realm Design Guidelines
LUT 1	Provide a balance of development to meet present and future needs and enhance character of the City	X	X	X		X	X	
LUT 2	Limit location of highest development intensity to TFAs	X	X			X		
LUT 3	Development that blends with and enhances physical and social character	X	X	X		X	X	X
LUT 4	Minimize blighting influences and maintain integrity of stable residential neighborhoods	X	X	X		X	X	
LUT 5	Designate mixed-use areas with higher density housing near shopping, jobs and transit	X	X			X		
LUT 6	Ensure compatibility of adjacent land uses	X	X	X		X	X	
LUT 7	Provide appropriate transitions between land uses	X	X	X		X	X	
LUT 8	Create physical features that distinguish neighborhoods, communities and public spaces and enhance image as a pedestrian oriented and livable community	X	X	X	X	X	X	X
LUT 9	Create enhanced gateway features for entry points and other important areas	X	X				X	X
LUT 10	Create attractive street environments and public rights-of-way	X	X	X	X	X	X	X
LUT 11	Ensure well-designed buildings and site improvements that are compatible with surrounding properties and districts	X	X	X		X	X	X
LUT 12	Protect important Historic Resources	X	X	X			X	X

**TABLE 5.1-4  
GENERAL PLAN UPDATE CONSISTENCY TABLE  
(continued)**

Title	General Plan Update Objectives Description	Applicable UCSP Sub-district			Implementing Mechanism			
		Village	Urban Core	Corridors	Mobility	Development Regulations	Development Design Guidelines	Public Realm Design Guidelines
LUT 13	Preserve scenic resources, maintain open space network and promote beautification	X	X	X		X	X	X
LUT 15	Improve transit and transportation connections... between major activity centers	X	X		X	X		
LUT 16	Integrate land use and transportation planning and facilities	X	X		X	X		
LUT 17	Plan and coordinate transit compatible and supportive development	X	X		X	X		
LUT 18	Reduce traffic demand through TDM, increased use of transit, bicycles, walking and other trip reduction means	X	X	X	X	X	X	X
LUT 19	Coordinate state of the art transit system	X	X		X			
LUT 20	Make transit friendly roads a top consideration in land use and development design	X	X		X	X		
LUT 21	Maintain a safe and efficient roadway system with sufficient roadway capacity while preserving character and integrity of communities	X	X	X	X			
LUT 22	Continue planning for enhancements to LRT service along west side of City		X		X	X		
LUT 23	Promote use of alternative mobility modes through system of bike and pedestrian paths	X	X	X	X		X	X
LUT 26	Establish an Urban Core Improvements Program*	X	X	X				X

**TABLE 5.1-4  
GENERAL PLAN UPDATE CONSISTENCY TABLE  
(continued)**

Title	General Plan Update Objectives Description	Applicable UCSP Sub-district				Implementing Mechanism			
		Village	Urban Core	Corridors	Mobility	Development Regulations	Development Design Guidelines	Public Realm Design Guidelines	
LUT 27	Establish program to provide affordable housing, public amenities and community services necessary to support urban development	X	X	X	X	X	X	X	
LUT 28	Consider lot consolidation where appropriate	X	X	X		X			
LUT 29	Allow clustering of residential development to improve amenities for residents	X	X			X	X		
LUT 30	Better utilize parking facilities to reduce parking demand before using public expenditures to add parking	X	X		X	X	X	X	
LUT 31	Provide parking that is integrated with land uses, efficient, accommodates alternative vehicles and reduces parking impacts	X	X	X	X	X	X	X	
LUT 32	Evaluate use and applicability of various strategies to provide parking	X	X	X	X	X	X	X	
LUT 33	Ensure parking facilities are appropriately sited and well-designed	X	X	X	X	X	X	X	
LUT 46	Establish linkages between Urban Core and Bayfront for pedestrians, bicycles and transit	X	X	X	X			X	
LUT 47	Establish roadway classifications in the Urban Core Subarea that respond to more urbanized environment, accommodate slower speeds in ped-oriented areas and facilitate multi-modal design and amenities	X	X	X	X			X	

**TABLE 5.1-4  
GENERAL PLAN UPDATE CONSISTENCY TABLE  
(continued)**

Title	General Plan Update Objectives	Applicable UCSP Sub-district				Implementing Mechanism			
		Village	Urban Core	Corridors	Mobility	Development Regulations	Development Design Guidelines	Public Realm Design Guidelines	
LUT 48	Increase mobility for residents and visitors in the Urban Core	X	X	X	X		X	X	
LUT 49	Encourage balanced and complementary redevelopment, infill, and new development within the Urban Core	X	X	X		X	X	X	
LUT 50	Provide for redevelopment and enhancement of Downtown Third Avenue District	X				X	X	X	
LUT 51	Maintain Downtown Third Avenue as focal point for City	X				X	X	X	
LUT 52	Encourage redevelopment of the Chula Vista Center and north of H Street to reinforce transit and gateway corridor and establish significant public gathering space and mixed-use area		X		X		X	X	
LUT 53	Encourage mixed-use redevelopment along H Street between Third and Fourth Ave.		X			X	X		
LUT 54	Encourage redevelopment of North Broadway Focus Area to establish pedestrian-oriented commercial corridor with housing and local serving commercial		X	X		X	X		
LUT 55	Encourage redevelopment of E Street between I-5 and Broadway with Mixed-Use especially near the E Street Trolley Station with emphasis on visitor-serving uses, office and multi-family residential		X			X	X	X	

**TABLE 5.1-4  
GENERAL PLAN UPDATE CONSISTENCY TABLE  
(continued)**

Title	General Plan Update Objectives	Applicable UCSP Sub-district			Implementing Mechanism			
		Village	Urban Core	Corridors	Mobility	Development Regulations	Development Design Guidelines	Public Realm Design Guidelines
LUT 56	Encourage redevelopment of area between I-5, Broadway, F and G Streets with high-density residential supported by mixed-use on Broadway		X			X	X	
LUT 57	Encourage redevelopment of area between I-5, Broadway, G and H Streets with transit-oriented mixed-use reinforcing gateway and transit boulevard on H Street		X		X	X	X	X
LUT 58	Encourage redevelopment between I-5, Broadway, H and I Streets as transit focus mixed-use area		X		X	X	X	X
LUT 59	Encourage redevelopment of Mid-Broadway District as pedestrian oriented commercial corridor with housing opportunities and neighborhood serving commercial		X		X	X	X	X
LUT 60	Encourage existing land use pattern in Mid-Third Avenue District			X	X	X	X	X

\*Established in UCSP Chp. X: *Plan Implementation and Community Benefits Program*

designations for the Subdistricts Area. The UCSP mixed-use zoning classifications allow for integration of retail and office uses, and in many cases retail, office, and high-density residential uses, in the same block (“horizontal mixed use”) or in the same structure or parcel (“vertical mixed use”). In addition, the new “urban core residential”

land use designation primarily in the area west of Broadway between E Street and H Street is proposed to be implemented through new regulations that provide for greater development potential around transit area than currently allowed under the existing zoning. As anticipated by the GPU, the new zoning regulations would accommodate new growth and revitalization of the urban core and would be implemented only as new development or redevelopment occurs. Although rezonings are proposed for the Subdistricts Areas, existing uses would be allowed to be maintained under the City’s legal non-conforming use provisions described in Municipal Code Section 19.64 and referenced in Chapter 11 of the UCSP.

A comparison of existing Municipal Code zoning and the proposed UCSP zoning is provided below, and illustrates the main feature of the UCSP zoning, the mixed-use integration of different land use types and the intensification of existing land use through greater building heights and mass.

### ***Village District***

As shown in Figure 5.1-3, the existing zoning for the UCSP Village District is comprised largely of commercial zones centered on Third and Fourth Avenues and E Street, with some Public/Quasi Public (PQ) uses on Fourth Avenue and high-density Apartment Residential (R-3) uses zoned in areas east of the Third Avenue commercial corridor and east of Fourth Avenue. The existing CB, Central Business Zone, which occupies the heart of the Village District along Third Avenue, is intended to stabilize and improve the commercial pedestrian characteristics of the central business area. This zone, typically applied in urban centers, allows a wide range of commercial and office uses, and multi-family residential uses (above ground floor retail only) through a CUP. The CC, Central Commercial zone provides for restaurants, shops and services, and allows mixed commercial residential projects with a CUP. The CO, Administrative and Professional Office zone allows a wide range of office uses, and conditionally permits multi-family residential uses and some commercial uses (e.g. restaurants) upon issuance of a CUP. The CT, Commercial Thoroughfare Zone, provides for a broad range of commercial uses dependent on or catering to thoroughfare traffic and does not allow for residential or office uses.

The CB zone provides no height regulations except when located adjacent to CO, Commercial Office or R, residential zones. When a building would be located adjacent to CO or R zones heights are limited to 45 feet. All other heights within the Village District are limited by existing zoning to 45 feet, with height adjustments allowed in the CC and CT zones (located primarily along E Street) with approval of a CUP.

New UCSP zoning for the Village District would allow a mix of commercial retail (ground floor on Third Avenue and E Street) and office and residential uses along Third Avenue and all other areas of the Village District except in the V-1 Subdistrict (refer to Subdistricts Keymap, Figure 3-3) which allows only residential uses. The V-1 Subdistrict along the eastern edge of the Village District would allow only residential uses at a maximum height of 45 feet, the same maximum heights allowed under the existing R-3 and CO zoning for this area. Residential uses would allow a better transition to existing residential uses, outside the Subdistricts Area, than exists today.

The area along Third Avenue which is currently zoned CB and allows unlimited heights, would be limited in the new UCSP V-2 Subdistrict to a height of 45 feet. Uses would be similar to those permitted under existing zoning, however, mixed use with residential would be a permitted use rather than a conditional use. In the V-3 and V-4 Subdistricts, heights up to 84 feet and 60 feet, respectively, would be allowed, while existing zoning limits heights to 45 feet in these areas with height adjustments permitted with a CUP. The V-3 Subdistrict is a NTCD which allows building heights up to 84 feet but contains special setbacks and stepbacks for parcels adjacent to existing R-1 or R-2 zones. The locations of the V-3 Subdistrict parcels which are adjacent to R-1 and R-2 zones are along the northern edge of the V-3 Subdistrict, north of E Street. (Compare Figure 3-3 with Figure 5.1-3 for locations of R-1 and R-2 zones adjacent to UCSP Subdistricts.)

### ***Urban Core District***

The area along H Street in the Urban Core District is currently zoned for commercial (CC, CV, CT) and office uses (CO), in distinct blocks. These zones allow for a wide variety of commercial and office uses. The CC zone allows for mixed commercial residential projects, subject to a CUP. Some residential areas are zoned along the perimeter of H Street, and include multi-family (R-3) and single and two-family (R-1 and R-2) zones. The proposed UCSP zoning for the area along H Street would allow mixed use (residential, office and retail uses), office and retail uses immediately adjacent to H Street, and primarily higher density residential in areas further away from H Street, along Otis Street, Roosevelt Street, "I" Street (UC-3, UC-6, UC-8, and UC-11).

More specifically, the east end of H Street at Third Avenue is bordered by two Transit Focus Areas (Subdistricts, UC-1 and UC-2). New zoning for these Subdistricts would allow multi-modal mixed use opportunities associated with the existing transit and future West Side Shuttle stop at this location. Heights up to 84 feet would be allowed in the UCSP for this area, while current zoning allows commercial offices (CO) west of Third Avenue and apartment residential (R-3) east of Third, at maximum heights of 45 feet. Future development in these TFAs would be subject to special transitional regulations (e.g. setbacks, stepbacks) to minimize effects on areas adjacent to the TFAs (UCSP Chapter VI). Subdistrict UC-3 lies to the north of H Street and would allow only residential with heights up to 60 feet, which provides a transition to the multi-family

zoning further north outside the Subdistricts Area in the R3, multi-family zone (maximum height 45 feet with design review).

Along the central part of H Street, uses would be primarily commercial and office, with residential and mixed use (with residential) projects allowed with a CUP. Allowable heights in the UCSP range from 45 feet to 60 feet and 72 feet. Existing zoning includes maximum heights of 45 feet, in areas zoned CO, and in areas zoned CC, there is no height limit except when a building is adjacent to the CO or residential zone, in which case the height is limited to a maximum 45 feet. The west end of H Street is also currently zoned with a mix of CV, CT and CC. These zones allow for a wide variety of commercial and ancillary office uses. The CC zone also allows for mixed commercial residential projects, subject to a CUP. In the CC zone there is no height limit except when a building is adjacent to the CO or residential zone, in which case the height is limited to a maximum 45 feet. The CT and CV zone includes maximum heights of 45 feet, with adjustments to height allowed with a CUP. In the area of the Urban Core District along Broadway, existing CT zoning allows a wide variety of automobile-focused commercial uses with 45-foot maximum heights or higher permitted with a CUP. The new UCSP zoning for the UC-13, UC-14, and UC-16 Subdistricts which straddle Broadway, allow heights of up to 60 feet (UC-13 and UC-16) and up to 84 feet (UC-14). Subdistrict UC-13, located east and west of Broadway, allows a mix of uses including retail, office and residential (not allowed on ground floor), and retail/hospitality uses. UC-14 located west of Broadway allows only residential, overlapping existing R-3, MHP and CT zones. UC-16, east and west of Broadway, allows retail and hospitality with multi-family residential and mixed use (with residential) with a CUP. The two TFAs located at E Street (UC-15) and H Street (UC-12) trolley stations would allow high rise buildings. Heights in these subdistricts could range between 45 and 210 feet. Existing zoning in the UC-18 subdistrict is CV, under the UCSP commercial and hospitality uses would be allowed, with heights up to 120 feet. Consistent with the policies in the GPU, buildings with heights above 84 feet are required to meet special design review criteria. The UCSP Chapter 11 requires these provisions be met prior to approval of an Urban Core Development Permit (UCDP). The UC-17 subdistrict is currently zoned MHP and the new UCSP zoning would allow high density residential, with heights up to 45 feet. The UC-19 district is currently zoned for CC, commercial uses and is currently developed with an elementary school. The UCSP would allow for public or quasi-public uses, with a maximum height of 45 feet.

### ***Corridors District***

Existing zoning for the Corridors District is zoned for commercial (CO, CC, CT). Primary uses allowed are commercial (CC and CT) and office (CO) with mixed use residential permitted with a CUP in the CC zone, and multi-family residential allowed in the CO zone with a CUP. Maximum heights for these zones are permitted to 45 feet, or

potentially higher in the CC, if not adjacent to the CO or R zones and CT zones with a CUP.

The UCSP C-1 Subdistrict at the south end of Third Avenue is currently zoned CO or CC, which allows for commercial uses and office uses. The proposed zoning would allow either retail and office use depending on what side of Third Avenue a parcel is located, residential uses permitted with a CUP and a maximum height of up to 60 feet. The C-2 Subdistrict at the south end of Broadway would allow mixed use retail and office, and residential or mixed use with residential with a CUP, and a maximum height of 45 feet (same as existing zoning). The C-3 Subdistrict at the north end of Broadway would allow the same retail/office mix, residential uses with a CUP, and maximum 45 foot heights as the C-2 Subdistrict. The proposed maximum heights are the same maximum heights allowed in the existing CT zone, and more restrictive than the existing CC zone which has no height restrictions unless a building is adjacent to the CO or residential zone.

As described above, while the UCSP proposes zoning regulations that differ from existing zone regulations, the primary purpose of the UCSP is to provide updated zoning regulations in conformance with the new GPU.

### **c. Redevelopment Plans**

Redevelopment plans enable a project area to be established to address conditions of blight, allow the ability to use tax increment financing, and describe land use districts. Two redevelopment plans overlap the UCSP area - the Town Centre I Redevelopment Plan and the Merged Plan Summary which comprises a merge of the Town Centre II Redevelopment Plan and several other redevelopment project areas. The UCSP would not affect the boundaries of any of the existing redevelopment plans or their ability to use tax increment financing. However, in terms of land use, the UCSP would potentially be inconsistent with the land use provisions and maps contained in the Town Centre I Redevelopment Plan.

The 1976 Town Centre I Redevelopment Plan (Section 600) includes a general description of land uses allowed within the redevelopment plan area and also refers to a "Plan Diagram" which graphically depicts the projected pattern of land uses envisioned by the Town Centre I Redevelopment Plan. The land uses include a broad category of "central commercial" which is generally applicable to areas currently zoned commercial in Town Centre I, and "residential" which is generally applicable to areas currently zoned for residential use in the Town Centre I. The existing Redevelopment Plan also allows for consideration of residential uses in the central commercial designated areas through a special use permit. While these uses are broadly consistent with the proposed uses in the UCSP, an amendment to the Town Centre I Redevelopment Plan is included as part of the proposed discretionary actions for adoption of the UCSP to avoid inconsistencies between the two plans. The proposed amendments to the Town Centre I

Redevelopment Plan would remove references to permitted land uses and instead refer to the GPU and City's zoning regulations (i.e. UCSP) for permitted land uses within the redevelopment area. This would provide consistency between the GPU as well as the UCSP and remove redundant and outdated land use provisions provided in the 1976 Redevelopment Plan. For this reason, implementation of the UCSP would not conflict with the existing Town Centre I Redevelopment Plan.

Implementation of the proposed UCSP would not affect the boundaries or authorities of the Town Centre II/Merged Plan Redevelopment Plan and thus no amendments of these redevelopment plans are required.

#### **d. Broadway Revitalization Strategy**

The UCSP provides land use and development regulations and design guidelines that engender a pedestrian-oriented, mixed-use environment for the urban core, with thriving businesses and amenable streetscapes. The proposed UCSP is thus consistent with the Broadway Revitalization strategies for reversing deteriorating conditions along the auto-oriented Broadway strip and reforming the area into a commercially viable and visually pleasing environment. The UCSP will implement many of the changes and improvements suggested in the Broadway Revitalization Strategy.

#### **e. Historic Preservation Strategic Plan**

The proposed UCSP implements the strategies of the Historic Preservation Strategic Plan (Strategic Plan). The Strategic Plan identified several measures the City should undertake in order to more effectively achieve its historic preservation goals. Measures included the integration of historic preservation goals into land use planning, inventory of historic resources, and provision of incentives for historic preservation. Throughout the UCSP, provisions are included that address historic resources. The UCSP Land Use and Development Regulations and Design Guidelines contain preservation goals and extensive renovation guidelines for the Village District, as well as private property incentives for acquiring and maintaining historic properties. Further discussion of this issue can be found in Section 5.3, Cultural Resources, of this EIR.

### **5.1.3.2 Conformance with Regional Plans and Policies**

#### **a. Regional Comprehensive Plan**

The proposed UCSP would be consistent with the goals of the Regional Comprehensive Plan. The UCSP proposes to establish a pedestrian-oriented, intense urban core to reduce reliance on the automobile, and promote walking and use of bicycles, buses, and transit. These goals are consistent with the Regional Comprehensive Plan's smart growth strategies. The UCSP would maximize its infill development potential by encouraging multi-story residential, office, and mixed uses in appropriate areas. A

multitude of urban amenities would receive focused investment and serve to attract new businesses as well as residents to the area. Mixed uses would allow residents to enjoy short walking distances to and from employment, housing, shopping, entertainment and different modes of transportation.

### **b. Regional Transportation Plan**

SANDAG's Regional Transportation Plan, or MOBILITY 2030, is based on the long-range population, housing, and employment projections of SANDAG's preliminary 2030 Cities/County Forecast. The Chula Vista GPU was based on these same projections and incorporated appropriate demographic values for the urban core in its objectives and policies.

The proposed UCSP is consistent with the GPU and, by extension, the advisory RTP. The UCSP is consistent in that it facilitates the development of a regional employment and housing center which would maximize density and transit opportunities. Proposed zoning would allow for a concentrated mix of retail, office and high density residential uses around transit centers and along major transportation corridors (H Street and Broadway) that would help to maximize use of transit and reduce long commute trips.

Consistency with the RTP is important to the UCSP in so far as regional discretionary funding will be made available to jurisdictions that implement the MOBILITY 2030 vision. As a result of this consistency, the City will be eligible for additional funding to help achieve the mobility improvement goals identified through the UCSP.

### **c. Congestion Management Program**

The Congestion Management Program (CMP) serves as an element of the RTP, focusing on congestion management strategies that can be implemented in advance of the long-range transportation solutions contained in the advisory RTP. The UCSP is consistent with these strategies and implements several goals and guidelines for reducing automobile congestion and increasing pedestrian, cycling and public transit activity.

### **d. MTBD/South Bay Transit First Study**

The UCSP supports increased public transit usage through location of Transit Focus Areas and other measures. Many of the mobility recommendations made in the UCSP will benefit from the implementation of successful transit projects. Strategies from this advisory report were considered in the UCSP Transportation Impact Analysis and also provided support for the transit intensive design of the UCSP.

Consistency with the South Bay Transit First Study is especially important to the mobility strategy defined in the UCSP such that the UCSP assures that transit supportive land uses will justify future regional transit investments and improvements. As a result, the

City will be better able to achieve the mobility improvement goals identified through the UCSP.

### **e. Regional Housing Program**

Elements of the proposed UCSP are consistent with the Regional Housing Program's (RHP) strategies to increase housing supply and ensure access for all income groups. This consistency is analyzed in greater detail in Section 5.7, Population and Housing, of this EIR. The UCSP proposes to add an additional 7,100 dwelling units to the Subdistricts Area, nearly doubling its current provision of 3,700 dwelling units. Given that much of the redevelopment of the UCSP Subdistricts Area will be market driven, the provision of affordable housing cannot be guaranteed. However, through California Redevelopment Law requirements, tax increment financing would be collected over much of the UCSP Subdistricts Area, with a minimum of 20% set-aside for low- and moderate-income housing options. The increased density allowed in the proposed UCSP would provide increased opportunities for the development of low and moderate income housing with 20% set aside funds generated from new development in designated redevelopment areas. The City's existing inclusionary housing policy would also help facilitate provision of housing for all income groups. While the majority of the UCSP Subdistricts Area already collects tax-increment fees within the boundaries of the existing redevelopment project areas, the UCSP would serve to increase the revenue generated by providing for increased development potential within redevelopment areas. The proposed UCSP is therefore considered to be compatible with the RHP.

### **f. California State Implementation Plan**

The proposed UCSP is consistent with the intent and goals of the California SIP, which are to reduce air pollutant emissions resulting from vehicle traffic. However, the assumptions of the SIP are based on growth trends anticipated by regional land use plans, which are based on jurisdictions' general and community plans. The buildout projected in the UCSP is consistent with the GPU; however the GPU proposed increases in residential and employment populations above that anticipated by the SIP. SIP forecasts were calculated prior to the update of the GPU in 2005 and were based on a preliminary 2030 growth projection not including increases projected in the Chula Vista GPU. However, it may be that the additional regional growth assumed by the SIP would not be substantially different, as growth in accordance with the UCSP would be concentrated in the urban core, thus directing growth away from the less developed eastern portions of the City and region. The UCSP focus on urban revitalization and growth in the urban core would be consistent with the goals of the SIP which seek to promote walkable communities and a variety of transit opportunities. The issue of UCSP consistency with the SIP and RAQS is discussed further in the Air Quality analysis in Section 5.10 of this EIR, and in the Air Quality Technical Report which is appended to this EIR as Appendix F.

### g. Water Quality Control Plan for the San Diego Basin

The UCSP would not conflict with policies of or water quality standards established in the Water Quality Control Plan for the San Diego Basin (Basin Plan). The land uses proposed in the UCSP would not generate substantial impacts to local or regional surface or ground waters. Incentives and guidelines in the proposed UCSP that encourage a more ecological lifestyle (walking, biking) and green building practices (ecologically-designed buildings made with renewable building materials) may potentially serve to improve hydrologic conditions within the UCSP area. Consistency between the proposed UCSP and the Basin Plan is elaborated in section 5.7 of this EIR, Hydrology and Water Quality.

Table 5.1-5 provides a summary of the analyses of the consistency between the proposed UCSP and the regional plans and policies.

**TABLE 5.1-5  
CONFORMANCE OF THE UCSP WITH SANDAG PROGRAMS**

<b>SANDAG Program</b>	<b>Project Conformance</b>
Regional Comprehensive Plan (RCP)	The UCSP provides higher density and higher intensity development into specific areas to protect stable residential neighborhoods and to create compact and pedestrian-friendly urban environments while protecting natural resources.
Regional Transportation Plan (RTP)	The UCSP promotes major bus routes, Bus Rapid Transit (BRT), the Trolley, rail lines, streets, bicycle travel, pedestrian traffic, and goods movement.
Congestion Management Program (CMP)	I-5, located adjacent and to the west of the Urban Core, is the closest CMP roadway to the plan area. The UCSP will be required to comply with strategies and improvements to reduce traffic congestion and improve the performance of a multi-modal transportation system.
Regional Housing Program.	The UCSP project increases the housing stock of the City of Chula Vista by approximately 7,100 multi-family dwelling units; representing an increase in housing supply for the region. Phasing will occur in response to market conditions, which will help to fulfill the demand for housing. In addition, development permitted by land use policies included would provide needed housing for all income levels.
Transit First	A number of future regional transit improvements are planned that will serve the Urban Core area. Many of these lines provide transit stations within the UCSP area and are integrated into the land use and transportation components of the specific plan. In addition, the UCSP promotes a network of transit services which includes pedestrian paths, on-street bicycle paths, BRT, and public transit stops.

### 5.1.3.3 Community Character

- **Criterion 2: Physically divide or adversely affect the community character of an established community.**

The UCSP would apply new zoning to the limited “Areas of Change” identified under the recently adopted GPU and would provide for the envisioned integration of existing neighborhoods while providing for new development along gateways and major transit corridors. The GPU EIR provides an evaluation of the community character impacts associated with the change in land use designations under the GPU and concludes that the policies and objectives outlined in the GPU would limit impacts on community character, but are dependent on future zoning or specific plans. As an implementing document of the GPU, the UCSP would provide the intended development standards, design guidelines, program for urban amenities and design review process which limit impacts on community character. In addition, many of the public realm elements identified in the UCSP Chapters V, Mobility and Chapter VIII, Public Realm Design Guidelines, such as provision of paseos to provide walkable access to neighborhoods, reconnecting the street grid in areas that have been previously disrupted, and linking bikeways, sidewalks and urban plazas throughout the urban core serve to integrate the community rather than to physically divide it.

Implementation of the proposed UCSP would result in the adoption of new zoning for the Subdistricts Area that would permit development or redevelopment of up to 10,800 (or 7,100 net new) dwelling units, 4,000,000 (or 1,000,000 net new) square feet of commercial retail space, 3,700,000 (or 1,300,000 net new) square feet of commercial office space, and 1,300,000 square feet of net new Commercial-Visitor Serving space upon buildout of the plan over the next 25 years. New development/redevelopment would proceed incrementally over the 25-year planning horizon of the UCSP, the exact timing, extent and sequencing of which is difficult to determine. The UCSP proposes new mixed-use zoning classifications to replace existing single-use zoning classifications, in order to allow the integration of residential and commercial uses in the same structure and neighborhood. The new zoning regulations and extensive Development Design Guidelines of the proposed UCSP aim to implement a vision for the Subdistricts Area that is substantially different in intensity and character than existing conditions. The existing community character of the urban core would be substantially affected by implementation of the UCSP. As illustrated in the discussion comparing existing Municipal Code zoning and the proposed new UCSP zoning in Section 5.1.3.1.b above, the projected three-fold increase in population for the Subdistricts Area would be accommodated by substantial intensification of existing land uses. The allowable building heights and FAR included in the UCSP would allow taller and more massive structures to be built, for example the replacement of low-rise (up to 45 feet in height) residential and commercial single-use structures with mid-rise (45 feet to 84 feet in

height) mixed-use structures, and in some areas high-rise structures up to 120 or 210 feet in height (only in Subdistricts UC-12, UC-15, and UC-18).

However, the effects of this land use intensification would not necessarily be adverse, and in accordance with CEQA Guidelines Section 15382 (General Concepts on Significant Effect), it is not enough to conclude significance based on substantial change, but significance must be based upon the physical change being substantial and adverse.

The GPU EIR concluded that the vision portrayed in the GPU, which the proposed UCSP mirrors, would cause an adverse effect on community character because of the lack of specific design standards for the Urban Core. The GPU EIR concluded that until design standards are developed and zoning specifications are implemented, impacts would be considered significant. The GPU did not include design standards for the Urban Core because the development of design standards is a zoning and specific plan effort.

The proposed UCSP provides the zoning and design standards for the Urban Core called for in the GPU. The built environment permitted through the UCSP land use and development regulations (Chapter VI) and development design guidelines (Chapter VII) is one that builds upon the principles of smart growth and new urbanism. These principles emphasize innovative mobility and land use planning tools to create vibrant city centers that are a combination employment/residential/commercial area with transit, recreational and other quality of life amenities that serve to create cohesive neighborhoods. While providing updated infrastructure and community amenities, smart growth principles also strive to preserve and enhance existing community character by building upon existing design themes and incorporating local culturally significant resources into plan design.

### **a. Land Use and Development Regulations**

The proposed UCSP Land Use and Development Regulations (Chapter VI) include form-based specifications that direct the form and allowable use for subsequent development projects within the UCSP Subdistricts. The regulations contained in Chapter VI of the UCSP are summarized in the Project Description of this EIR, Section 3.4.3. The zoning summary sheets for each of the UCSP's 26 planning Subdistricts are also included in Chapter 3. These sheets contain the allowable FAR, building heights, primary land uses, and required setbacks and stepbacks for each Subdistrict. The following is a general description of the potential building form that could result with the proposed land use and development regulations in the UCSP.

### ***Village District***

The Village District, as allowed in the proposed UCSP zoning, would transition from existing mostly low-rise (less than 45 feet in height) commercially zoned blocks along Third Avenue and E Street to mid-rise (up to 45 feet along Third Avenue; up to 60 feet along Fourth Avenue, up to 84 feet along E Street) and mixed-use blocks and mixed-use structures. The existing Municipal Code zoned R-3, Apartment Residential area in the southeast corner of the Village District, would be zoned as Subdistrict V-1 which allows only residential uses at heights up to 45 feet, the same height allowed in the existing R-3 zone. The proposed residential uses and low rise building form in the V-1 Subdistrict would allow a better transition to existing residential uses, outside the Subdistricts Area, than exists today. The northwest corner of the Village District, in Subdistrict V-3, would transition from the existing low and mid-rise CT, Commercial Thoroughfare zone catering to automobile conveniences, to a mixed residential, retail and office use with heights permitted up to 84 feet, subject to the requirements of the NTCD. (Refer to Section 5.1.3.1.b above for a comparison of the existing Municipal Code zoning and the proposed new UCSP zoning for the Village District). These building forms and heights are consistent with the building intensity and heights outlined in the GPU.

### ***Urban Core District***

Section 5.1.3.1.b above includes a District-level comparison of the existing Municipal Code zoning and the proposed new UCSP zoning for the Urban Core District. Four subdistricts are proposed as TFAs in the UCSP for the Urban Core District. Two occur on either side of Third Avenue at H Street, in the location of the future planned West Side Shuttle and trolley stop. Heights in this area (Subdistricts UC-1 and UC-2) would transition from the maximum allowable of 45 feet (or higher with CUP west of Third) to heights of up to 84 feet, comprising a shift from low-rise to mid-rise. Land uses at this location would transition from single-use zones of commercial on the west side of Third and apartments on the east side of Third, to a transit-oriented mix of high-density residential, retail and office use. Similar transitions are allowed in the UCSP zoning for the E Street and H Street Trolley stations, however building heights at these locations (Subdistricts UC-12 and UC-15) would transition from low and mid-rise to mid-rise to high-rise, with maximum heights of up to 210 feet allowed pending design review approval. Elsewhere in the Urban Core District, building heights would transition from low and mid-rise to mid-rise, ranging in heights from 45 feet to up to 84 feet. Subdistrict UC-18 permits retail/hospitality uses and allows heights up to 120 feet pending design review approval. The existing multi-family residential areas west of Broadway (zoned R-3 and MHP, with allowable heights up to 45 feet) would be likewise limited in the UCSP zoning regulations to residential use only; but at greater intensification, with heights up to 84 feet (Subdistrict UC-14). Four NTCDs are located within the Urban Core District, in Subdistricts UC-6, UC-8, UC-11 and UC-13. These Subdistricts are subject to special land use compatibility transitioning provisions for parcels adjacent to existing R-1 and R-

2 zones adjacent to the Subdistricts Area boundary. The existing IL, Limited Industrial zoning for the area along the western boundary of the Urban Core District would transition to become part of Subdistrict UC-14 and part of Subdistrict UC-15 (the E Street Trolley TFA). Subdistricts UC-3, UC-8, UC-6 and UC11 are all located off of H Street and are multi-family residential only subdistricts. The subdistricts provide appropriate land use and edge transitions from the more intense uses planned along H Street to the existing residential neighborhoods, outside of the UCSP Subdistricts Area. (Refer to Section 5.1.3.1.b above for a district-level comparison of the existing Municipal Code zoning and the proposed new UCSP zoning.)

### ***Corridors District***

Refer to Section 5.1.3.1.b for a District-level comparison of the UCSP zoning and the existing Municipal Code zoning for the Corridors District, and associated change in land use. Existing zoning for the Corridors District along the south end of Third Avenue allows low and mid-rise (up to 45 feet; higher with CUP) single-use commercial office (CO) and central commercial (CC) uses, and residential with a CUP. The UCSP Subdistrict C-1 which overlays this area, would allow integration of retail and office uses, and residential with a CUP at a maximum height of 60 feet. Subdistrict C-1 is also a NTCD which would incorporate special setback and stepbacks for the parcels adjacent to existing R-1 and R-2 zones just east of the Subdistricts C-1. The C-2 and C-3 Subdistricts at the south and north ends of Broadway would similarly permit integration of retail and office uses, residential uses with a CUP, and a maximum height of 45 feet (same as the existing zoning). These areas would be allowed to transition from commercial thoroughfare (CT) uses to primarily mixed retail and office.

Also included on the zoning sheets are indications of special provisions for the NTCDs and TFAs which require additional setbacks, stepbacks and other design measures for certain areas in order to assure land use compatibility. A brief discussion of these special provisions was provided in Section 3.4.3. A more detailed description of the special provisions of the NTCDs and TFAs is provided below which outlines the measures proposed to ensure land use compatibility between the UCSP Subdistricts Areas and adjacent residential neighborhoods.

### **b. Neighborhood Transition Combining Districts and Transit Focus Areas**

In Chapter VI of the UCSP, the Land Use and Development Regulations contain special provisions for NTCDs and TFAs to ensure land use compatibility with adjacent land uses. The NTCD is not a District in the same sense of the three planning Districts described above, but are special provisions on the UCSP zoning regulations that serve to ensure that the character of redevelopment within the UCSP Subdistricts will be compatible with and will complement adjacent surrounding residential areas. The NTCD applies to subdistricts adjacent to existing R-1 and R-2 zones, and are noted on the

appropriate subdistrict zoning sheets. TFAs are areas centered around transit facilities that allow mid, and in limited locations, high-rise structures given special requirements. TFAs are also noted on their respective Subdistrict zoning sheets. Subdistricts V-3, UC-6, UC-11, UC-13, and C-1 and TFAs UC-1, UC-2, UC-12 and UC-15, are subject to the following transition requirements:

- Table 5.1-6 details the required side and rear setbacks from the property line that abuts an R-1 or R-2 zone. If the rear and side setback for the underlying district conflicts with the combining district setback, the more restrictive shall be required. Where such yard is contiguous and parallel with an alley, one-half the width of such alley shall be assumed to be a portion of such yard. Within TFAs, a minimum of 15 feet of rear yard setback for structures up to and over 84 feet in height must be provided.

**TABLE 5.1-6  
NTCD REQUIRED SETBACKS FOR REAR/SIDE YARDS**

Structure	Minimum Setback (ft.)
0<45	10
46>55	15
56<65	20
66<75	25
76<85	30
86<95	35
96<105	40

- For every 35 feet in height, the structure shall step back from the property line abutting an R-1 or R-2 district by at least 15 feet. Within TFAs, a building setback of at least 15 feet for every 35 feet in height along property lines abutting residential uses is required. In addition to meeting the setback requirements, no part of the building shall be closer to the property line than a 60-degree plane extending from each stepback line.
- A landscaping plan should include one to three small shade tree(s) for every 3,000 square feet within the rear/side yard and should be located on the site to provide shade/heat gain reduction effect (i.e., trees not to be planted north of the north facing facade of the building.)
- All exterior lighting shall focus internally within the property to decrease the light pollution onto the neighboring properties.
- Screening and/or buffers shall be required to obscure features such as dumpsters, rear entrances, utility and maintenance structures and loading facilities.
- A six-foot solid or decorative metal fence shall be placed on the property line. If the fence is solid, it should be articulated every six to eight feet to avoid presenting a blank wall to the street or adjacent property.

- Building design shall be cognizant of adjacent low density uses (i.e. avoid balconies overlooking rear yards).
- As part of the project design and submittal, developments within TFAs shall conduct studies to assess the effects of light and solar access, shadowing, and wind patterns on adjacent buildings and areas.

### **c. Development Design Guidelines**

The proposed UCSP Development Design Guidelines (Chapter VII) specify requirements for the construction, conservation, adaptive use, and enhancement of buildings and street scenes contained within the Urban Core. The guidelines are intended to assist many users (property owners, merchants, real estate interests, architects, designers and building contractors, vendors and craftsmen, the City of Chula Vista, and other interested persons and organizations) in being responsive to City objectives.

The overarching goals of the Development Design Guidelines are to:

- contribute to a positive physical image and identity of the city;
- promote a visually attractive, safe, and well-planned community;
- create unique identities for each district;
- minimize negative impacts of new development and redevelopment; and
- preserve and maximize the image, character, and history of Chula Vista's Urban Core.

#### ***Village District***

The guidelines for the Village District aim to retain and enhance the small-town, mixed-use ambience of the traditional Village through rehabilitation of older structures and well-designed new development. Like those for the Urban Core District, the guidelines for the Village District stress pedestrian-oriented site planning and building design, including requiring upper floors to step back to allow sunlight to reach the streets below. The Development Design Guidelines also concentrate on preserving the historic fabric of the area, including providing guidance for those who wish to renovate or add on to existing buildings and promoting design compatibility between infill structures and surrounding buildings. The building form, mass, scale and heights proposed under the UCSP have been developed to be consistent with the policies outlined in the GPU which identify low and mid rise building forms in this area.

#### ***Urban Core District***

The Urban Core District will serve as the primary business, commercial, and regional center of Chula Vista. The design guidelines for the Urban Core District focus on

accommodating mid- to high-rise development while encouraging an active street life. Specifically, the design guidelines support the development of continuous ground floor retail uses along Broadway and H Street. Such guidelines help ensure that the Urban Core contains a comfortable environment for pedestrians to shop, dine, and recreate. In light of the intensity of land uses and need for parking in the area, design guidelines for the Urban Core District contains a special section devoted to the design of parking structures. The building form, mass, scale and heights proposed under the UCSP have been developed to be consistent with the policies outlined in the GPU which identify low, mid and high rise building forms in this area of the Urban Core.

### ***Corridors District***

In contrast with the Urban Core and the Village Districts, the Corridors District is oriented towards the automobile rather than pedestrian traffic. Sections of Broadway and Third Avenue are characterized by minimum 10-foot setbacks, one- or two-story structures, and a high percentage of retail, service, and office development. The guidelines in this chapter focus on promoting quality and diversity in new commercial and residential development and safe and efficient parking and circulation. The building form, mass, scale and heights proposed under the UCSP have been developed to be consistent with the policies outlined in the GPU which identify low and mid rise building forms for this area.

In summary, existing community character in the UCSP Subdistricts Area would change from primarily low-rise with scattered mid-rise single-use commercial and office structures, and multifamily residential uses concentrated west of Broadway, to mostly mid-rise and very limited high-rise (UC- 12, 15, and 18) mixed use commercial-retail-residential uses. In most cases, heights would change one step, from low-rise (up to 45 feet) to mid-rise (45 to 84 feet) or from mid-rise to high-rise (85 to 210 feet). Only in the E Street and H Street trolley locations would the existing height increase from low to high-rise. The NTCD and TFA provisions of the UCSP Chapter VI Land Use and Development Regulations, which apply to the taller mid-rise and high-rise structures, would minimize the effects of any transition to neighboring low-rise commercial or residential uses.

While the UCSP largely retains existing single-use residential areas as single-use residential (e.g., in the V-1 and UC-14 Subdistricts), the integration of residential uses throughout the remaining majority of existing commercial areas would create a different character than the one that currently exists. While this change might be considered substantial, it is not considered to be adverse. A mix of residential, retail and office uses, as that proposed in the UCSP, has the potential to create a positive, dynamic community character, one in which different land uses coincide, augment and complement one another. This mix of uses is intended to implement the new mixed use land use designations and building intensity and heights envisioned the GPU.

In addition, many of the public realm elements identified in the UCSP Chapters V, Mobility and Chapter VIII, Public Realm Design Guidelines, such as provision of paseos to provide walkable access to neighborhoods, reconnecting the street grid in areas that have been previously disrupted, and linking bikeways, sidewalks and urban plazas throughout the urban core serve to integrate the community rather than to physically divide it.

Design Guidelines and the requirements for any development within the NTCDs or TFAs listed above would ensure that the UCSP does not result in a significant adverse impact on community character of the existing residential neighborhoods adjacent to the UCSP Subdistricts Area.

#### **5.1.3.4 Land Use Compatibility**

Land use incompatibility may result at the interface of different types and forms of land uses. Some land use types are generally understood to be incompatible, such as heavy industry adjacent to residential. Generally, extremely divergent structural forms are also considered to be incompatible, such as a single-story Craftsman home adjacent to a modern high-rise apartment building.

Potential sources of incompatibility between the proposed UCSP and adjacent land uses are related to mass/scale, noise, shading/lighting, circulation/access, and public safety. The discussion below provides a program-level analysis of these issues for the UCSP by generally outlining the potential impacts and identifying the applicable UCSP regulations and/or guidelines.

##### **a. Mass/Scale**

Mass and scale of adjacent structures should generally be similar or complementary in order to be considered compatible. The previous section 5.1.3.2 addressed many of these structural design issues. Provisions in the UCSP, such as siting requirements, height limitations, setback and stepback requirements of the NTCDs and TFAs, and design guidelines for new development and redevelopment within the UCSP Subdistricts would ensure that new development would not result in construction of structures that are incompatible with existing and/or adjacent structures.

In addition, the UCSP allows only multi-family residential and commercial land uses to occupy the Subdistricts. No industrial uses are permitted within the Subdistricts, except some categories of light industry upon approval of a Conditional Use Permit. Due to the form-based approach of the UCSP land use and development regulations, and the market-driven, incremental nature of anticipated development, it is not possible to predict actual land use configuration in terms of adjacency. However, given the general compatibility of commercial land use with multifamily residential use, and the design guidelines and transition district, it can be concluded that land uses allowed in the UCSP

will be generally compatible with the mass/scale and use of existing and/or adjacent land uses.

### **b. Noise**

Noise incompatibility occurs when noise generators are located near sensitive noise receivers. Examples of sensitive noise receivers include residential units, senior facilities, hospitals, churches and schools. Noise generators are any use which would cause noise levels at common property lines with noise sensitive receivers to exceed the limits established by the City's Noise Ordinance, as described in Section 5.9 Noise, of this EIR. The task of identifying future point-source noise generators is too speculative. However, with some certainty it can be assumed that noise associated with buildout of the UCSP would include noise from construction activities and noise from increased vehicular traffic. Area roadways would experience increased noise levels and sensitive noise receivers in close proximity to some of the UCSP's major roadways would be significantly affected. Noise Mitigation Measures 5.9-1, 5.9-2 and 5.9-3, included in Section 5.9 of this EIR, require demonstration of compliance with applicable exterior and interior noise ordinances and policies prior to issuance of an Urban Core Development Permit. These measures will serve to reduce noise impacts, and any land use incompatibility that may arise from them, to below a level of significance. (Refer to Section 5.9 for a more detailed discussion of noise impacts.)

### **c. Lighting**

Light sensitive activities (e.g. sleeping) could potentially be adversely impacted by light in excess of baseline conditions due to buildout of the UCSP and intensification of land use. Potentially significant lighting impacts could result from decorative lighting of buildings or outdoor security lighting. Provisions in the UCSP development regulations and design guidelines seek to control light sources and ensure that light pollution would be minimal, however significant lighting impacts would need to be assured to be below a level of significance prior to project approval through Mitigation Measure 5.2.5-2 of Section 5.2, Landform Alteration and Visual Quality. For each District, the UCSP contains a set of private and public-sector design guidelines (UCSP Chapters VII and VIII) that include lighting requirements to reduce glare, exposure or brightness, angle and depth of field, and duration. These provisions are contained in the Lighting subsection of the District Design Guidelines for each District included in UCSP Chapter VII, Development Design Guidelines. The special provisions for NTCDs and TFAs, include the requirements that "all exterior lighting shall focus internally within the property to decrease the light pollution onto neighboring properties" (p. VI-40). Many lighting sources are encouraged to be timed or motion-sensitized. Conformance to these guidelines is included in Mitigation Measure 5.2.5-2. Refer to the next chapter for a more detailed discussion of lighting impacts.

#### **d. Shading/Solar Access**

The proposed UCSP would result in greater intensification of land uses in the urban core, mostly through vertical expansion and increased FAR. As new development and redevelopment proceeds within the UCSP, it is probable that in many locations low-rise simple structures will be replaced with complex, multistory, articulated structures. Solar access incompatibility typically results from one structure blocking an adjacent structure's sunshed or line-of-sight to the sun. Interruption of line-of-sight is typically attributed to structure height and mass. Other factors such as sun angle, time of day, and building aspect also contribute to or detract from solar access. Applicable UCSP development regulations and design guidelines include the form-based zoning regulations in Chapter VI for the individual Subdistricts, the height and siting (stepbacks and setbacks) requirements of the Neighborhood Transition Combining District and the Transit Focus Areas in Chapter VI, and the Sustainability Goals of the Special Design Guidelines in Chapter VII. Due to their allowable heights of 84 feet at Third and H Street, and up to 210 feet at the trolley stations, structures within TFAs pose the greatest concern regarding shade and solar access. The NTCD and TFA special provisions (UCSP p. VI-40) include the requirement "As part of the project design and submittal, development within TFAs shall conduct studies to assess the effects of light and solar access, shadowing and wind pattern on adjacent building and areas." Adherence of future development to these requirements and guidelines will potentially avoid or minimize solar access impacts. Future projects within the Subdistricts Area will be subject to discretionary review prior to approval of UCSPs or other development permits.

#### **e. Circulation**

Incompatibility of land use can occur when new land uses create conditions that impair or substantially degrade existing conditions of transport and circulation through an area. The means of getting from one place to another is referred to as "mobility." The UCSP emphasizes pedestrian, bicycling and transit mobility, in that order of priority, over automobile traffic. Many features in the plan enhance pedestrian and cycling opportunities, and several transit features are proposed as well, including new transit stations, a new shuttle service, and new tie-ins to the San Ysidro Trolley. Traffic calming, streetscape improvements, new bike lanes, and new bike storage facilities are features that serve to enhance pedestrian and cycling experience in the Urban Core. An impact analysis of automobile traffic and other modes of transportation is provided in Section 5.8 of this EIR.

The traffic analysis in Section 5.8 identified three roadway segments and 19 intersections within the Subdistricts Area that would experience a decline in level of service to below City threshold as a result of plan implementation. Mitigation Measure 5.8.5.1 regarding intersection improvements, and Mitigation Measure 5.8.5.2 regarding roadway segment improvements would serve to reduce automobile traffic impacts. .

## **f. Public Safety**

Potential incompatibilities may arise when new land uses generate hazards for existing residents of an area. Public safety hazards associated with land use may include use, storage, handling, or disposal of hazardous materials; operation of hazardous machinery; or structural hazards. Structural hazards can be associated with poorly built or damaged structures; however, within the UCSP all subsequent new and re-development projects will comply with existing building codes and seismic retrofitting requirements where necessary. Permitted land uses in the UCSP do not allow operation of hazardous machinery. Design review of Urban Core Development Permits will ensure that suitable and safe land use types are developed. Land uses permitted within the UCSP Subdistricts (as identified in Chapter VII's Land Use Matrix) are mostly commercial and multifamily residential. Some commercial uses may use hazardous materials or generate hazardous waste, such as photography studios, restaurants, medical laboratories, dry cleaners, auto repair shops, print shops, and electronics repair or retail. Were these types of uses to develop within the Subdistricts Area, there would be the potential for hazardous materials impacts. However, these types of non-industrial activities are generally considered to be low-level generators and require special business license permitting and registration of any above ground or underground storage tanks with the County Department of Environmental Health (DEH). The DEH is the local permitting agency for hazardous materials storage, and also conducts monitoring, reporting, investigation, and cleanup of hazardous sites.

Section 5.13 of this EIR addresses hazardous materials and risk of upset. Numerous existing hazardous materials sites of concern were recorded throughout the UCSP area, but concentrated along the Broadway and Third Avenue commercial corridors. Given these existing conditions, new land use development in accordance with the UCSP would not create a significant adverse land use incompatibility.

### **5.1.4 Summary of Significance Prior to Mitigation**

#### **5.1.4.1 Local and Regional Plans and Policies**

The UCSP is consistent with the Chula Vista General Plan Update, the Merged Plan Redevelopment Plan, the Broadway Revitalization Strategy, and the Chula Vista Historic Preservation Strategic Plan (as discussed in Section 5.1.3.1). The UCSP is also consistent with all relevant regional plans, including SANDAG's RCP, RTP, CMP, Transit First Study, and Regional Housing Program. It is also consistent with the intent and the goals of the SIP and RWQCB Basin Plan (as discussed in Section 5.1.3.2).

The UCSP is not consistent with the existing Municipal Code Zoning for the urban core; nor is the UCSP consistent with the land use provisions of the Town Centre I Redevelopment Plan. As a required implementing action of the GPU, the UCSP

proposes to provide new zoning as a replacement for the Municipal Code Zoning for the urban core, and to amend the Town Centre I Redevelopment Plan land use section to bring it into conformance with the GPU and UCSP. For these reasons, there would be no conflict. There are no significant plan conformance impacts associated with the UCSP.

#### **5.1.4.2 Community Character and Land Use Compatibility**

As discussed in Section 5.1.3.3 and 5.1.3.4, existing community character in the UCSP Subdistricts Area would change from primarily low-rise with scattered mid-rise single-use commercial structures, and multifamily residential uses concentrated west of Broadway, to a mix of low rise, mid-rise and some high-rise mixed use commercial-retail-residential uses. In most cases, heights would change one step, from low-rise (up to 45 feet) to mid-rise (45 to 84 feet) or from mid-rise to high-rise (85 to 210 feet). Only in the E Street and H Street trolley locations would the existing height increase from low to high-rise. The NTCD and TFA provisions of the UCSP Chapter VI Land Use and Development Regulations, which apply to the taller mid-rise and high-rise structures, would minimize the effects of any transition to neighboring low-rise commercial or single-family residential. Integration of residential uses throughout the majority of existing commercial areas as proposed in the UCSP would create a different character than the one that currently exists. While this change might be considered substantial, it is not considered to be adverse. A mix of residential, retail and office uses, as that proposed in the UCSP, has the potential to create a positive, dynamic community character, one in which different land uses coincide, augment and complement one another. In addition, many of the public realm elements identified in the UCSP Chapters V, Mobility and Chapter VIII, Public Realm Design Guidelines, such as provision of paseos to provide walkable access to neighborhoods, reconnecting the street grid in areas that have been previously disrupted, and linking bikeways, sidewalks and urban plazas throughout the urban core serve to integrate the community rather than to physically divide it.

The UCSP (Chapter XI, C, Plan Administration) requires subsequent design review of development projects proposed within the UCSP Subdistricts. Individual development projects would be required to be found in compliance with the Land Use and Development Regulations, and consistent with the Design Guidelines contained in the UCSP. Compliance with the UCSP's Land Use and Development Regulations and Development Design Guidelines, which are consistent with the General Plan Update, would ensure that no significant adverse land use adjacency/community character and planning conformance impacts would result from implementation of the UCSP.

### **5.1.5 Mitigation Measures**

No mitigation is required because there are no significant land use impacts.

### **5.1.6 Summary of Significance After Mitigation**

There are no significant land use impacts.

## **5.2 Landform Alteration and Visual Quality**

The following analysis focuses on the potential impacts to landform alteration and visual quality that would result with implementation of the UCSP.

### **5.2.1 Existing Conditions**

#### **5.2.1.1 Physical Environment**

The topography of the UCSP area is relatively flat, with elevations that range from 20 feet above mean sea level (AMSL) to a maximum of 110 feet AMSL. The UCSP area does not contain any significant visual landform features such as rock outcroppings, trees, or mountains. The UCSP area lies approximately two miles east of the southern extent of San Diego Bay. The bay stretches west another half-mile to the Coronado Peninsula which faces open ocean on its west side.

Topographic contours generally trend north-south, roughly paralleling the west and east boundaries of the UCSP area. The lower elevations occur along the western boundary of the UCSP and gradate higher as one proceeds east. Elevations of 60 to 90 feet AMSL cover the central part of the UCSP area and most of the Subdistricts Area. The southeast corner of the UCSP area has the highest elevation, with the area of the Subdistricts Area south of H Street along Third Avenue being the highest at 100 to 110 feet AMSL.

The UCSP area is urbanized and developed with a mixture of public and private land uses, including the South San Diego County Superior Court complex, Norman Park Senior Center, Memorial Park, Friendship Park, Chula Vista Women's Club, the Chula Vista Center, the 60,000-square-foot Park Plaza commercial center, the Chula Vista Civic Center (including Main Branch Library and Central Police Station), and a variety of other office, retail, and residential uses.

#### **5.2.1.2 Visual Character**

The UCSP Subdistricts Area consists largely of commercial corridors along Third Avenue, E Street, H Street and Broadway. Multi-family apartments comprise the primary residential land use type within the Subdistricts Area and are largely concentrated west of Broadway. Several older residential structures also exist within the UCSP Village District surrounding the Third Avenue commercial properties.

Many of the structures within the UCSP area were constructed in the 1960's and 1970s and reflect the low and mid-rise, boxy architecture of that time period. In addition, as discussed in Section 5.3 of this EIR, Cultural Resources, several structures were constructed prior to 1950 and represent the early period of commercial development of the City. Many of the

structures and areas within the UCSP area have become dilapidated or underutilized due to lack of commercial vitality. These blighted areas have been the target of several City redevelopment programs in the past as discussed in this EIR in Section 5.1, Land Use. Redevelopment programs are intended to revitalize older commercial, industrial, and residential areas. Despite past efforts by the City to revitalize urban core neighborhoods, conditions have remained blighted in many areas.

The proposed UCSP Subdistricts Area encompasses three planning districts: the Village District, the Urban Core District, and the Corridors District. For ease of comparison between existing conditions and proposed allowable conditions, the following discussion of existing visual character is grouped by the geographic area corresponding to the UCSP planning districts.

### **a. Village District**

Existing characteristics of the Village District consist of the traditional Third Avenue business district of shops and offices and wide sidewalks along Third Avenue, as well as smaller residential housing units in surrounding streets. The Village District is the traditional core of the City and contains several older mostly low-rise (up to 45 feet in height) commercial and residential structures, some of which are representative of historically interesting architecture. A village archway exists on Third Avenue at G Street marking the entrance to the traditional downtown area.

Photographs 4-1 and 4-2 in Chapter 4 of this Program EIR are representative views of downtown Third Avenue's pedestrian-oriented specialty shops, restaurants, and small businesses that primarily serve local residents. Photograph 4-3 shows a representative view of the area where the City's Civic Center, central library, and police headquarters are located along Third and Fourth Avenues between E and G Streets. The area shown in Figure 4-3 lies within the Town Centre I Redevelopment Plan area and has been the focus of active revitalization efforts in the last decade. (Refer to Figure 5.1-4 for a map of the redevelopment plan areas within the UCSP Subdistricts Area.)

### **b. Urban Core District**

The Urban Core District includes the Chula Vista Center shopping mall, medical facilities, South County Regional Complex, offices, commercial businesses, and some residential. Additionally, the Urban Core District is characterized by low-rise multi-family housing extending from C to I Streets; mobile home parks between F and G Streets; three roadway connections to the Bayfront (E, F, and H Streets); a lack of accessible park facilities; and poor pedestrian connectivity crossing I-5 to the Bayfront or to Broadway.

Along segments of Broadway, current assets, such as the palm-lined streets, accessibility to I-5 and trolley stations, proximity to downtown, and views to the bay, are often overshadowed by negative influences such as deteriorating streetscapes and signage along

the corridor segments. Photograph 4-5 of Chapter 4 of this EIR shows a representative view of H Street near Chula Vista's regional shopping mall. Photographs 4-4 and 4-6 show representative views of Broadway's auto-oriented commercial strip malls, auto repair and service uses, and lodging in the western portion of the District.

Residential areas west of Second Avenue and north of I Street are considered to be in transition with portions of these areas zoned and developed with large- and small-scale multi-family residential. Areas of commercial, industrial, and institutional lands (including parks) establish the remaining areas. Streets and freeways account for an estimated 30 percent of the area.

### **c. Corridors District**

The Corridors District consists mainly of retail establishments and professional offices along Third Avenue south of H Street, along Broadway south of I Street, and north of approximately D Street. Photographs 4-4 and 4-6 of Chapter 4 of this EIR shows representative views of the auto-oriented commercial strip along Broadway. As reflected in Photographs 4-4 and 4-6, the visual character of the commercial strip along Broadway is not very distinctive or thematic and generally reflects that typical of older, automobile-priority commercial streetscapes with repetitive architecture.

## **5.2.1.3 Landform and Visual Policies**

### **a. Chula Vista General Plan Update**

The Land Use and Transportation Element (LUT) of the City's General Plan Update includes the following citywide objectives and policies regarding landform and visual quality:

#### **Objective LUT 13**

Preserve scenic resources in Chula Vista, maintain the City's open space network, and promote beautification of the City.

#### **Policies**

- LUT 13.1: Identify and protect important public viewpoints and viewsheds throughout the planning area, including features within and outside the planning area, such as mountains, native habitat areas, San Diego Bay, and historic resources.
- LUT 13.2: Continue to implement the City's planned open space network.
- LUT 13.4: Any discretionary projects proposed adjacent to scenic routes, with the exception of individual single-family dwellings, shall be subject to design review to ensure that the design of the development proposal

will enhance the scenic quality of the route. Review should include site design, architectural design, height, landscaping, signage, and utilities. Development adjacent to designated scenic routes should be designed to:

- Create substantial open areas adjacent to scenic routes through clustering development;
- Create a pleasing streetscape through landscaping and varied building setbacks, and
- Coordinate signage, graphics and/or signage requirements, and standards.

### **Objective LUT 9**

Create enhanced gateway features for City entry points and important other entries, such as to special districts.

### **Policies**

LUT 9.2: The City will prepare, or cause to have prepared, entryway/gateway master plans for each of the identified entryways/gateways within the City to appropriately guide development within these areas. These master plans will provide design guidelines and standards for public improvements, as well as for private or public development within these designated areas. Examples may include enhanced pavement and/or sidewalk standards, enhanced landscape standards, thematic sign standards, and special architectural standards for buildings or other structures.

The City will prepare a General Plan Implementation Program to assure establishment of these gateway master plans, which Program will also include interim provisions for the processing of any projects within these areas prior to completion and adoption of the according entryway/gateway master plan.

LUT 9.3: As part of the approval process for projects within designated city entryway/gateway areas, the City shall confirm that the design conforms to applicable entryway/gateway design guidelines and standards.

**Objective LUT 8**

Strengthen and sustain Chula Vista's image as a unique place by maintaining, enhancing and creating physical features that distinguish Chula Vista's neighborhoods, communities, and public spaces, and enhance its image as a pedestrian-oriented and livable community.

**Policies**

- LUT 8.1: Develop a program to enhance the identity of special districts and neighborhoods to create variety and interest in the built environment, including such items as signage, monuments, landscaping and street improvements.
- LUT 8.2: Emphasize certain land uses and activities, such as cultural arts, entertainment, specialty retail, or commercial recreation, to enhance or create the identity of specialized districts or Focus Areas in the City.
- LUT 8.3: Ensure that buildings are appropriate to their context and designed to be compatible with surrounding uses and enhance the desired character of their district.
- LUT 8.4: Encourage and require, where feasible, the incorporation of publicly accessible urban open spaces, including parks, courtyards, water features, gardens, passageways, paseos, and plazas, into public improvements and private projects.
- LUT 8.5: Prepare urban design guidelines that help to create pedestrian-oriented development by providing:
- Pedestrian circulation among parcels, uses, transit stops, and public or publicly accessible spaces;
  - Human scale design elements;
  - Varied and articulated building facades;
  - Visual (first floor clear glass windows) and physical access for pedestrians;
  - Ground floor residential and commercial entries that face and engage the street; and

- Pedestrian-oriented streetscape amenities.

- LUT 8.6: Develop a master plan for artwork in public places that would identify the types of art desired and establish appropriate settings for the display of art, including within public rights-of-way and landscape medians.
- LUT 8.7: Ensure that vacant parcels and parcels with unsightly storage uses, such as auto salvage yards, are appropriately screened from the street to reduce their negative visual effects.
- LUT 8.8: Encourage the upgrading, beautification, and revitalization of existing strip commercial areas and shopping centers.

### **Objective LUT 10**

Create attractive street environments that complement private and public properties, create attractive public rights-of-way, and provide visual interest for residents and visitors.

### **Policies**

- LUT 10.1: The City shall create unique landscape designs and standards for medians for each major thoroughfare to distinguish each from the other and to provide a special identity for districts and neighborhoods.
- LUT 10.2: The landscape designs and standards shall include a coordinated street furniture palette including waste containers and benches, to be implemented throughout the community at appropriate locations.
- LUT 10.3: Provide a well-designed, comfortable bus stop for use throughout the City.
- LUT 10.4: Prior to the approval of projects that include walls that back onto roadways, the City shall require that the design achieves a uniform appearance from the street. The walls shall be uniform in height, use of materials and color, but also incorporate elements that add visual interest, such as pilasters.
- LUT 10.5: Require undergrounding of utilities on private property and develop a priority-based program of utility undergrounding along public rights-of-way.

- LUT 10.6: Study the locational requirements of utility, traffic control and other cabinets and hardware located in the public right-of-way to determine alternative locations for these items in less obtrusive areas of the street environment.
- LUT 10.7: Work with utility providers to coordinate the design of utility facilities (e.g., substations, pump stations, switching buildings, etc.) to ensure that the facilities fit within the context of their surroundings and do not cause negative visual impacts.

### **Objective LUT 11**

Ensure that buildings and related site improvements for public and private development are well-designed and compatible with surrounding properties and districts.

#### **Policies**

- LUT 11.1: Promote development that creates and enhances positive spatial attributes of major public streets, open spaces, cityscape, mountain and bay sight lines, and important gateways into the City.
- LUT 11.2: Promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista, and create a vital and attractive environment for businesses, residents and visitors.
- LUT 11.3: The City shall, through the development of regulations and guidelines, ensure that good project landscape and site design creates places that are well-planned, attractive, efficient, safe and pedestrian friendly.
- LUT 11.4: Actively promote architectural and design excellence in buildings, open space, and urban design.
- LUT 11.5: Require a design review process for all public and private discretionary projects (which includes architectural, site plan, landscape and signage design) to review and evaluate projects prior to issuance of building permits to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone or Area Development Plans.

In addition to citywide policies, the following GPU policies address the maintenance and preservation of the existing visual quality of the Urban Core Subarea:

- LUT 49.10: Support the development of public and private recreation and urban parks that include pedestrian-oriented plazas, benches, other streetscape amenities and, where appropriate, landscaped play areas.
- LUT 49.11: Establish locations within focus areas where the permitted heights and densities are greater than in locations adjacent to single-family areas.
- LUT 49.12: Establish standards for transitions in building height that respond to public view corridors and proximity to single-family areas.
- LUT 49.13: Limit high-rise development to the two transit-oriented mixed use areas near the E Street and H Street transit stations.
- LUT 49.14: Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus Corridor between Interstate 5 and Third Avenue, and which will also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings and appropriate amendments to this Plan.
- LUT 49.15: Recognize that different portions of the Urban Core Subarea have a desirable character, and develop specific plans and programs to strengthen and reinforce their uniqueness. Develop land use, density, special design features, and building guidelines for appropriate Focus Areas.
- LUT 49.16: Prepare urban form guidelines and standards for development as part of the Urban Core Specific Plan.
- LUT 49.17: With the adoption of the Urban Core Specific Plan, establish policies, development standards, and/or design guidelines in the Urban Core Specific Plan to address where high-rise buildings should be concentrated, how to establish and/or reinforce pedestrian-scaled development, and how site and building design should respond to public view corridors.
- LUT 49.18: With the adoption of the Urban Core Specific Plan, establish design standards for mixed use development that achieves a high quality pedestrian-scaled environment and promotes side or rear located

parking areas, streetfront windows and entries, and public and private open space.

- LUT 49.19: With the adoption of the Urban Core Specific Plan, create a pedestrian-oriented realm by requiring retail or public uses at the ground floor of buildings.
- LUT 49.20: Encourage the linkage and integration of new development with existing neighborhoods by means of open space areas, parks, and pathways as a means of enhancing pedestrian connections.
- LUT 49.21: Where a park, natural open space, or urban open space exists adjacent to or near a transit-oriented development, these features should be incorporated into the development as open space amenities.
- LUT 49.23: Specific Plans should identify building and site design guidelines for commercial or mixed use areas to include the height above which buildings must step back; the location of the building's horizontal articulation; and other design elements.
- LUT 49.24: Reinforce or encourage the establishment of a strong pedestrian orientation in designated districts, activity centers, and pedestrian-oriented focus areas, so that these areas may serve as a focus of activity for the surrounding community and a focus for investment in the community.

## 5.2.2 Criteria for the Determination of Significance

The proposed project would result in a significant impact to landform alteration/aesthetics if it would:

- Criterion 1: Have a substantial adverse effect on a scenic vista, or substantially damage scenic resources, including, but not limited to, trees, and rock outcroppings and historic buildings within a scenic highway.
- Criterion 2: Result in architecture, urban design, landscaping, or landforms that negatively detract from the prevailing aesthetic character of the site or surrounding area; or that substantially degrade existing visual character or quality of the site (including blue sky views and solar access) and its surroundings.
- Criterion 3: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

## 5.2.3 Impacts

### 5.2.3.1 Scenic Resources and Vistas

- **Criterion 1: Have a substantial adverse effect on a scenic vista, or substantially damage scenic resources, including, but not limited to, trees, and rock outcroppings and historic buildings within a scenic highway.**

The UCSP area does not contain any significant visual landform features such as rock outcroppings, trees, or mountains. A village archway to the traditional downtown area at H Street and Third Avenue comprises the only existing scenic resource within the UCSP area. Chula Vista has several designated Scenic Roadways, where views of unique natural features and roadway characteristics, including enhanced landscaping, adjoining natural slopes, or special design features make traveling a pleasant visual experience. However, there are no Scenic Roadways designated within the UCSP boundary.

While the UCSP area currently contains only the Village archway as a scenic resource, in accordance with the GPU (Objective LUT 9), the UCSP has identified four Primary Gateways within the UCSP Subdistricts Area. In addition, through the planning process of the UCSP, two Secondary Gateways have been identified for the urban core that were not identified in the GPU. Primary and secondary gateways are scenic entrance features which serve to facilitate movement and provide access to the urban core.

#### a. Urban Core Gateways

The UCSP is consistent with the GPU in identifying the four following Primary Gateways in the UCSP Subdistricts Area (UCSP, Chapter VIII).

##### Primary Gateways

Interstate 5 and E Street/Marina Parkway

Interstate 5 and F Street

Interstate 5 and H Street

Third Avenue and E Street

As shown in Figure 5.2-1, the primary gateways are located at three significant entrance points along the I-5 corridor and at the entrance into the Village District. The design of these gateways envisions a grand scale, substantial design imagery, bold display of the City logo, and text describing directions to key locations within the Village and Urban Core Districts.

The secondary gateways proposed in the UCSP are located at H Street and Third Avenue in the Urban Core District, and Fourth Avenue and C Street outside of the Subdistricts Area within the UCSP Study Area (refer to Figure 5.2-1). These secondary entrances are to be smaller in scale, more simple in design, and incur less of a visual impact than primary

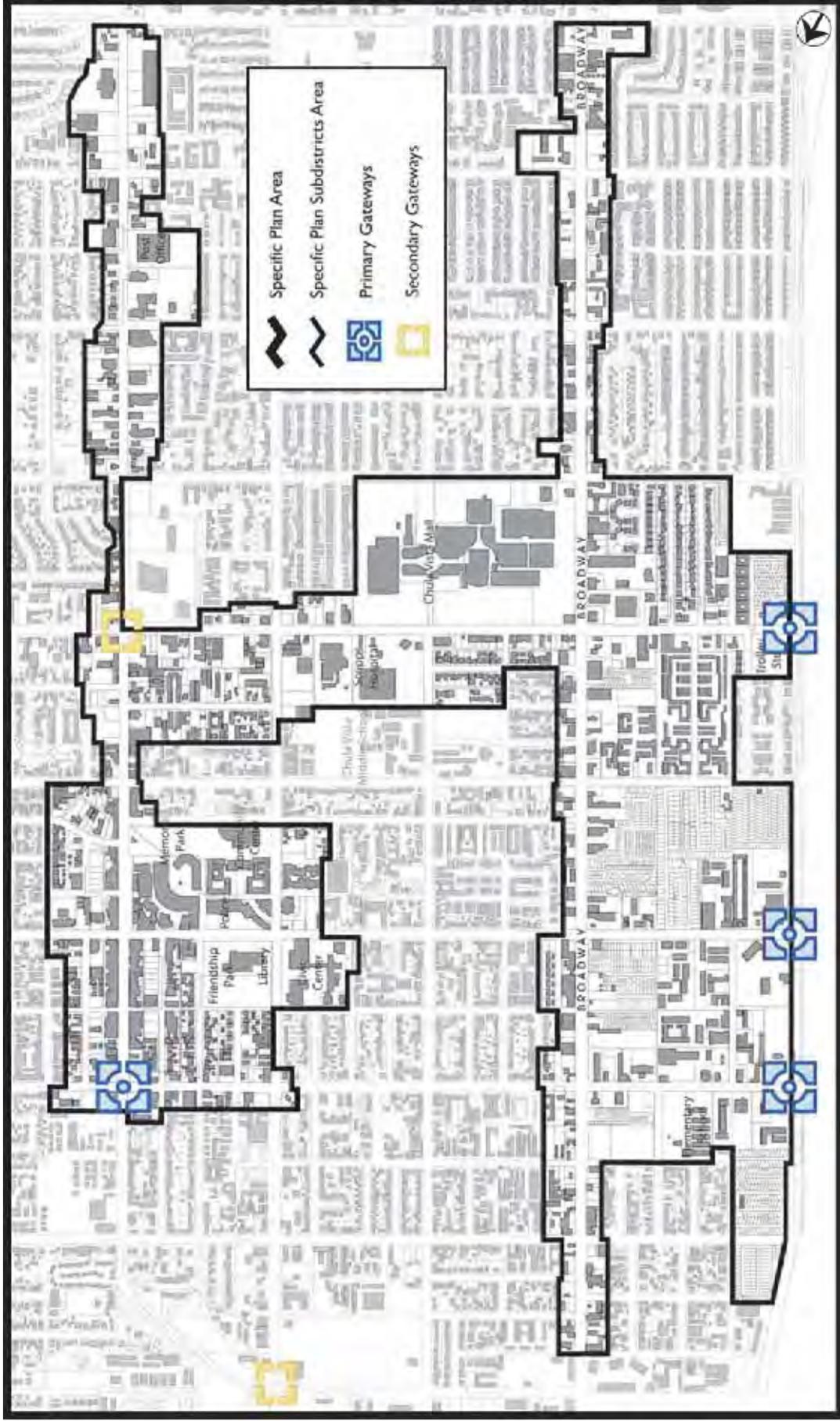


FIGURE 5.2-1  
UCSP Entrypoints and Gateways

gateways, as these areas are located adjacent to residential neighborhoods. The UCSP advises that care should be taken during the design process to ensure that the H Street and Third Avenue entrance feature does not interfere with the existing Third Avenue village archway.

The following guidelines from the UCSP (Chapter VIII, pp. VIII-46-VIII-47) are to be used in developing the exact designs for both the primary and secondary entrance features. The UCSP establishes the use of these special design treatments, which include themed signage, landscape and architectural design enhancements, and other elements to signify arrival into the City and progression to key destinations along these gateway streets. Actual design elements and materials would be consistent although not necessarily exact in design and treatment. These guidelines were developed in conjunction with the Urban Core Advisory Committee and community representatives during the UCSP preparation process:

1. Gateways and entryway areas should assist and enhance the visitors' experience when entering into the Urban Core area. These features serve as landmarks and should be of quality design and materials.
2. Use similar treatment along I-5 gateways and provide a unique tie in and transition to the Bayfront area.
3. Incorporate the pacific flyway theme representing birds, flight, wings, kites, aviation.
4. Explore Chula Vista's early California ranch and lemon groves/citrus history in the design theme.
5. Incorporate the City logo.
6. Design for extended durability, low maintenance, and resistance to vandalism.
7. Gateways can provide an opportunity for architectural features, monuments, public art, banners, signs, and lighting features.
8. The design should incorporate appropriate streetscape design elements, such as special paving, decorative lighting, and landscaping, as recommended for the District in which each gateway is located.
9. Incorporate public art and local artistic expression.
10. The design of entry and way-finding features should be unique to the Urban Core area.
11. Color and design should tie into future marketing materials, banners, etc.
12. The words "Chula Vista" should be the largest font and dominant word on the gateway monument.

Additional guidelines for the Third Avenue and E Street primary gateway in the Village District include the following:

1. Establish an individual/different theme for Third Avenue.
2. Incorporate some Art Deco/Art Moderne influences.
3. Tie in with existing Village branding efforts.
4. The gateway monument design should exemplify a traditional downtown archway to complement the existing archway located at G Street and Third Avenue.

Since there are no scenic vistas or designated Scenic Roadways within the UCSP boundary and the UCSP establishes design standards to enhance the view corridors at the primary and secondary gateways while preserving and complementing the existing Third Avenue archway within the UCSP area, no significant impacts to scenic vistas or scenic resources would result from implementation of the UCSP.

### 5.2.3.2 Visual Character

- **Criterion 2: Result in architecture, urban design, landscaping, or landforms that negatively detract from the prevailing aesthetic character of the site or surrounding area; or that substantially degrade existing visual character or quality of the site (including blue sky views and solar access) and its surroundings.**

The UCSP contains land use and development regulations (UCSP, Chapter VI) and development design guidelines (UCSP, Chapter VII) that outline allowable and recommended parameters for the development of the Subdistricts Area. The permitted uses are outlined in a Land Use Matrix (UCSP, Chapter VI, pp. V-5 – VI-9) and the maximum allowable development is based on the Floor Area Ratios (FAR) and “Use Requirements” provided in the development regulations. In addition, the development regulations set the minimum and maximum building heights, the requirements for setbacks, lot coverage, open space requirements, parking regulations, and minimum and maximum setbacks. Figures 3-4 through 3-29 in the Project Description provide the development regulations (zoning) that would be established with the adoption of the UCSP for each of the 26 subdistricts. The purpose of the development design guidelines, referred to as the Design Manual, is “. . . to specify requirements for the construction, conservation, adaptive use, and enhancement of buildings and street scenes contained within Chula Vista’s urban core” (UCSP, p. VII-1).

The UCSP land use regulatory and design provisions do not apply to existing structures not undergoing any anticipated improvements, nor to areas outside of the Subdistricts Area. The area surrounding the UCSP Subdistricts Area is currently zoned for and occupied by

stable residential neighborhoods. Current Municipal Code residential zoning regulations will continue to apply to this area. The current residential zoning regulations are single-use residential zones that do not permit commercial development or mixed-use. Therefore, the visual character of the area outside of the Subdistricts Area is not expected to change.

The following discussion evaluates the anticipated change in visual character of the three Districts that comprise the UCSP Subdistricts Area, as allowed by the UCSP development standards and design guidelines.

### **a. Village District**

The future visual character of the Village District would be shaped by the UCSP land use and development regulations and development design guidelines. The Village District design goals include promoting sound architectural practices, retaining or repeating traditional façade components, developing a steady rhythm of façade widths, creating a comfortable scale of structures and supporting pedestrian-oriented activity at the sidewalk and amenity areas. Building setbacks would be used to accommodate active public uses such as outdoor dining and building indentations should create small pedestrian plazas along the streetwall, particularly on Third Avenue. Mid-block pedestrian paseos and linkages to parking lots, activity areas, or alleys are encouraged when possible. Parking lots would be located to the rear of buildings, subterranean, or in parking structures.

Multiple-use structures, with retail on lower floors and residential or non-retail commercial on upper floors, are required along E Street and Third Avenue. Building heights will range from low-rise (up to 45 feet in height) in the V-1 and V-2 subdistricts, with taller, mid-rise buildings (up to 84 feet in height) in the V-3 subdistrict. Heights begin to transition again in the V-4 subdistrict (up to 60 feet in height) adjacent to residential areas west of Fourth Avenue. Mid-rise buildings are required to step back at least 15 feet from the streetwall at a minimum height of 35 feet to create a pedestrian scale along major streets. Building heights should vary and enhance public views, and provide adjacent sites with maximum sun and ventilation and protection from prevailing winds (UCSP, p. VII-13).

One of the goals of the design guidelines in the Village District is to retain or repeat traditional façade components. Changes to structures will, and need to, occur over time. The concern is that these changes do not damage the existing traditional building fabric and that the results of building renovation enhance the overall design integrity of the building. Section 6 of the Village District Guidelines, Building Additions and Renovation Guidelines, (UCSP, pp. VII-30 – VII-35), provides guidance for renovation of or additions to existing older commercial buildings in the Village District, and promotes design compatibility between infill structures and surrounding buildings. New infill structures are encouraged to use traditional facade components, such as bulkheads, arches, plazas, and balconies, to create patterns and alignments that visually link buildings within a block, while allowing individual identity of each building.

This vision of the future Village District differs markedly from the existing visual character. While many of the older commercial structures are planned to be retained and rehabilitated, the majority of the Village District will undergo a substantial intensification in land use to accommodate projected residential and commercial growth. The massing, heights and densities of existing land use will generally increase, resulting in a more intensified urban character. Most notably, currently zoned and occupied single-category land uses could be replaced by mixed-use projects that combine commercial/office and high-density residential within the same structure or as components mixed within the same block.

A comparison of existing Municipal Code zoning and the proposed UCSP zoning is provided in section 5.1.3.1.b of this EIR, and a comparison of existing and proposed land use/community character is provided in section 5.1.3.3. These discussions depict the physical changes that would occur with implementation of the UCSP. To summarize, the Village District, would transition from existing mostly low-rise (up to 48 feet in height) commercially zoned blocks along Third Avenue and E Street to low and mid-rise (45 feet along Third Avenue; 60 feet along Fourth Avenue, and up to 84 feet along E Street) mixed-use commercial/office/high-density residential blocks and structures. The existing apartments in the southeast corner of the Village District (Subdistrict V-1), would remain zoned exclusively for residential at the same height allowed in the existing R-3 zone, 45 feet. In the west end of E Street, the special provisions of the NTCD Subdistrict V-3 would ensure compatibility of the proposed mixed commercial/office and high-density residential uses with existing neighboring residential uses through the setbacks, stepbacks, and other criteria contained in the NTCD regulations (UCSP, Chapter VII), as outlined in section 5.1.3.3.b of this EIR.

While these physical changes might be considered substantial, they are not considered to be adverse, given adherence to UCSP development regulations and design guidelines for the Village District. The mix of residential, retail and office uses in accordance with quality architectural design guidelines envisioned in the UCSP, has the potential to create a positive, aesthetically appealing visual character, one in which different visual elements of the landscape coincide, augment and complement one another. However, due to increased building heights and mass, existing blue sky views and solar access may be affected. The changes to blue sky views, sun and wind access would be reduced through provisions in the Village District design guidelines and NTCD regulations that require minimization of obstruction of views, upper-level stepbacks, and articulated and varied roof shape. In addition, the special regulations for mixed-use projects (UCSP, Chapter VI, Section H, p. VI-44) require that all mixed-use projects “minimize the effects of any exterior noise, odors, glare, and other potentially significant effects,” including, shading, loss of light and wind.

In order to demonstrate the potential change in the aesthetic character and illustrate the future UCSP vision of the Village District and other UCSP Districts, a visual analysis was prepared using site photographs and computer-generated three-dimensional project modeling. The resulting photorealistic visual simulations represent how individual projects

within the UCSP could develop. The photosimulations illustrate future conditions with street oriented infill development, increased pedestrian activity, and alternate forms of transportation and portray many improvements over the existing conditions including the redevelopment of existing stores, public street improvements, street trees, benches, new sidewalks, and enhanced pedestrian crossings. The provision of streetscape and other public improvements and amenities are included in Chapters V, VIII and XI of the UCSP, and are discussed in this EIR in section 3, Project Description, and in section 5.8 Traffic and Circulation.

Figure 5.2-2 depicts the intersection of Third Avenue and Davidson Street looking north in the Village District. The existing condition is shown in the top photograph and depicts an area consisting of one-story retail and professional buildings along the frontage of the streets with parking on both sides of Third Avenue. The middle image in Figure 5.2-2 shows an unspecified interim condition with street improvements, improved streetscapes and redevelopment of existing shops. The lower image in Figure 5.2-2 depicts the ultimate vision for the Village District, with additional quality redevelopment in an Art Deco theme. Also depicted in the lower image is a livelier pedestrian environment and stronger sense of neighborhood established by the visual elements and building forms of the area.

The images of future conditions depicted in the photographic simulations are representative of the type of development that may occur. Although the specific types of subsequent development projects are not known at this time, all subsequent development projects will be required to comply with the UCSP regulatory and design provisions prior to issuance of an Urban Core Development Permit or other discretionary permit in order to ensure that the prevailing aesthetic character of the Village District is not adversely and significantly affected.

### **b. Urban Core District**

The goals for the design of the Urban Core District include creating a comfortable scale of structures, maintaining sunlight exposure and minimizing wind on the street level and distinguishing between upper and lower floors. Buildings would be designed with uniform front façade heights in order to create a continuous streetwall with store fronts and building entries facing the major roadways, Broadway Avenue and H Street, while side setbacks would be dedicated to plazas that focus on hardscape rather than landscaping.

Multiple-use structures, with retail on lower floors and residential or non-retail commercial on upper floors are permitted. Buildings over 60 feet are required step back from the streetwall “shoulder” at least 15 feet (UCSP, p. VII-58). The physical design of building façades should vary at least every 300 linear feet. The distinction between upper and lower building levels would be made by maintaining a storefront level with a much greater window area than the upper stories as well as attractive storefront signage, accessories, landscaping, and lighting.



Existing conditions



Public street improvements: street trees, benches, new sidewalks, resurfaced streets, enhanced pedestrian crossings, decorative street lights, outdoor dining. Redevelopment of existing stores.



Art Deco themed redevelopment, pedestrian activity along street, bike travel.

FIGURE 5.2-2  
Intersection of Third Avenue and  
Davidson Street Looking North

The majority of the building heights permitted in the Urban Core subdistricts (16 of 19) range from a maximum height of up to 45 feet (i.e., low-rise structures) to up to 84 feet (i.e., mid-rise structures). The UC-18 subdistrict at the E Street Gateway would allow structures ranging from 45 to up to 120 feet. In two Urban Core subdistricts designated as Transit Focus Areas (UC-12 and UC-15), the building heights could range from 45 feet to 210 feet.

The principal reason for allowing high-rise structures at these two primary gateways (E Street and H Street gateways at Interstate 5) is consistent with the recommendation in the GPU (page LUT-91) of creating “landmarks and skyline for key areas of the City, and punctuate them as vibrant, active and successful community centers”. High-rise buildings would be subject to the additional provisions of TFAs (refer to section 5.1.3.3.b), as well as special design review criteria for buildings in excess of 84 feet in height (UCSP, p. XI-3). The NTCD regulations provide measures such as increased setbacks, stepbacks, lighting, landscaping, and screening measures for future development adjacent to R-1 and R-2 existing single family zones or within TFAs. Of the 19 subdistricts within the Urban Core District, four are subject to the NTCD special provisions (UC-6, UC-8, UC-11, UC-13), which are designed to ensure that the character of development within these subdistricts are compatible with and complementary to surrounding existing residential areas, as described in section 5.1.3.3.b of this EIR.

The special regulations for TFAs include increased setbacks, stepbacks, lighting, landscaping and screening measures for future multi-modal transit-oriented development. In addition, as part of project design and submittal, developments within TFAs are required to conduct studies to assess the effects of light and solar access, shadowing, and wind patterns on adjacent buildings and areas. Four of the 19 Urban Core District subdistricts have been designated as TFAs (UC-1, UC-2, UC-12, and UC-15). The NTCD regulations provide measures such as increased setbacks, stepbacks, lighting, landscaping, and screening measures for future development adjacent to R-1 and R-2 existing single family zones or within TFAs. A lengthier discussion of the NTCD and TFA special provisions is provided in the land use discussion in this EIR in Section 5.1.3.3.b.

The vision of the Urban Core District allowed by the UCSP differs substantially from the existing visual character of the area, primarily due to the intensification of land use (increased heights, mass, and density) and integration of residential with commercial and office uses. The comparison of existing and proposed zoning and land use, provided in sections 5.1.3.1.b and 5.1.3.3, illustrate the physical changes that would occur within the Urban Core District with implementation of the UCSP. Generally, the Urban Core District would transition from single-use commercially zoned blocks along H Street and Broadway to primarily mid-rise mixed commercial/office and residential uses. Two areas currently zoned and occupied by low-rise commercial and light-industrial uses would change to multi-modal transit focused commercial/office/high-density residential uses in structures up to 210 feet in height. Existing low-rise mobile homes and apartment residential areas west of Broadway are allowed in the UCSP to be occupied exclusively by residential uses at higher heights,

mass, and density (permitted heights would increase from 48 feet to 84 feet). Generally, changes in the Urban Core District would result in a more intensified urban visual character.

Due to increased building heights and mass, existing blue sky views and solar and wind access may be affected. The changes to blue sky views, sun and wind access would be reduced through provisions in the Urban Core District guidelines that require projects to “minimize obstruction of views from adjoining structures, and provide adjacent sites with maximum sun and ventilation and protection for the prevailing winds” (UCSP, p. VII-58). Increased corner setbacks, upper-level setbacks, and articulated and varied roof shapes are also encouraged in the Urban Core District Guidelines (UCSP, p. VII-58 – VII-61). Further solar and wind access provisions are required in the NTC and TFA regulations described above (affecting Urban Core subdistricts UC-6, UC-8, UC-11, UC-13 and UC-1, UC-2, UC-12, and UC-15, respectively), which require subsequent development to conduct studies to assess the effects of light and solar access, shadowing, and wind patterns on adjacent buildings and areas (UCSP, p. VI-41).

The intensification of the Urban Core’s urban visual character is illustrated in Figures 5.2-3 and 5.2-4. Figures 5.2-3 and 5.2-4 provide a visual comparison of the existing conditions and resulting photosimulations of future conditions for two street segments in the Urban Core District. Figure 5.2-3 shows the existing conditions on H Street looking east towards Fifth Avenue in the top image. The existing condition in this photo depicts one- and two-story professional offices on the north side of H Street and the Chula Vista Mall parking lot on the south side of H Street. The middle image of interim conditions depicts completed public street improvements (including wider sidewalks, resurfaced streets, decorative street lights, planted medians, and class II bike lanes) as well as new street oriented mid-rise development.

Figure 5.2-4 shows the roadway segment of F Street looking east within the Urban Core District. The existing condition in this area, shown in the top image in Figure 5.2-4, consists of power lines above ground, vacant lots, and businesses with a parking lot in the front of the building. The buildout of this area as envisioned in the UCSP includes possible mid-rise structures with commercial and office uses on the ground floor, with high-density residential on the upper floors (refer to bottom image in Figure 5.2-4). Interim conditions as depicted in the middle image of Figure 5.2-4 show the completion of public street improvements and incremental new street-oriented development.

The proposed mix of residential, retail and office uses permitted for the Urban Core District in accordance with the UCSP’s architectural design guidelines, has the potential to create a positive, aesthetically appealing visual character, albeit one that differs substantially from the existing visual character. The photosimulations of future conditions depicted Figures 5.2-3 and 5.2-4 are representative of the type of development that may occur; however the specific types of subsequent development projects are not known at this time. All subsequent development projects will be required to comply with the UCSP regulatory and design provisions prior to issuance of an Urban Core Development Permit or other



Existing conditions



Public street improvements: street trees, benches, bike racks, public plaza, new wider sidewalks, resurfaced streets, decorative street lights, class II bike lanes, planted street medians, linear park. New street oriented development.



Street oriented infill development, increased pedestrian activity, alternate forms of transportation.

FIGURE 5.2-3  
H Street Looking East Towards Fifth Avenue



Existing conditions



Public street improvements: street trees, benches, bike racks, new wider sidewalks, resurfaced streets, decorative street lights, class II bike lanes, underground power lines. New street oriented development.



Street oriented infill development, increased pedestrian activity, alternate forms of transportation.

FIGURE 5.2-4  
F Street Looking East

discretionary permit in order to ensure that the prevailing aesthetic character of the Urban Core District is not adversely and significantly affected.

### **c. Corridors District**

In contrast with the Urban Core and the Village Districts, the Corridors District contains three separate and distinct areas along Broadway and Third Avenue that are more oriented towards automobile than pedestrian traffic. The district is characterized by low-rise structures with retail, service, office, and residential uses lining the peripheral ends of Broadway and Third Avenue. The design guidelines focus on developing a cohesive blend of high-quality new commercial and residential development.

The heights and setbacks in the Corridor District should vary from adjacent or adjoining buildings to ensure diversity in building type. One-story buildings along Broadway and Third Avenue should be placed close to the sidewalk to reinforce a pedestrian scale. Two-story buildings should be located farther away from the sidewalk and use a plaza as a transition from the right of way to the building. The maximum building height in the Corridor District is 45 feet. Building heights should enhance public views, minimize obstruction of views from adjoining structures, and provide adjacent sites with maximum sun and ventilation and protection from prevailing winds.

The physical changes that would occur in the Corridors District include the change from low and mid-rise single-use commercial office and central commercial uses to mid-rise mixed use, primarily retail and office uses (with limited residential uses with a CUP) at maximum heights of 60 feet at the south end of Third Avenue and 45 feet (same as the existing zoning) at the south and north ends of Broadway in the C-2 and C-3 subdistricts. At the south end of Third Avenue, in the C-1 Subdistrict, the special regulations of the NTCD would ensure compatibility of the proposed mixed retail/office uses with adjacent existing residential uses. (NTCD setbacks, stepbacks, and other criteria are outlined in section 5.1.3.3.b of this EIR. In addition, sections 5.1.3.1 and 5.1.3.3 include further discussion of proposed zoning and land use changes allowed under the UCSP for the Corridors District.)

These physical changes and resulting visual character are represented in the photosimulations depicted in Figure 5.2-5. Figure 5.2-5 shows the intersection of Broadway and D Street looking south, within the north extent of the Corridors District C-3 subdistrict. This view depicts existing single-story buildings with automotive, retail, and commercial uses along Broadway. The photosimulations in the middle and lower images illustrate the future conditions with street oriented infill development with increased pedestrian activity and alternate forms of transportation. The photosimulations portray many improvements over the existing conditions including the redevelopment of existing stores, public street improvements, street trees, benches, new sidewalks, and enhanced pedestrian crossings. Also depicted in the lower image, in the background to the right, are the allowable high-rise structures associated with the Transit Focus Area of the Urban Core District located at the E Street trolley station.



Existing conditions



Public street improvements: street trees, benches, new sidewalks, resurfaced streets, new pedestrian crossings, decorative street lights, power lines underground, class II bike lanes, planted street medians. Infill buildings oriented to street.



Additional infill development along Broadway, increased pedestrian activity, new private development at transit focus areas.

FIGURE 5.2-5  
Intersection of Broadway and D Street  
Looking South

The proposed integration of retail and office uses permitted for the Corridors District in accordance with the UCSP's development regulations and design guidelines, has the potential to create an aesthetically appealing visual environment, albeit one that differs from the existing visual character. Due to increased building heights and mass, however, existing blue sky views and solar and wind access may be affected. The changes to blue sky views, sun and wind access would be reduced through provisions in the Corridors District guidelines that require projects to incorporate building heights that "enhance public views and provide adjacent sites with maximum sun and ventilation and protection for the prevailing winds" (UCSP, p. VII-87). Additional solar and wind access minimization measures in the NTCD regulations for Subdistrict C-1 that mandate additional setback, setbacks, and screening measures for parcels adjacent to existing residential areas.

The type of future development depicted in the photosimulations of interim and future conditions in Figure 5.2-5, are representative of that which may occur. The specific types of subsequent development projects within the Corridors District are not known at this time. All subsequent development projects will be required to comply with the UCSP regulatory and design provisions prior to issuance of an Urban Core Development Permit or other discretionary permit in order to ensure that the prevailing aesthetic character of the Corridors District is not adversely and significantly affected.

#### **d. Design Review Process**

The development standards and design guidelines in the UCSP ensure that development within the UCSP area would not result in architecture, urban design, landscaping, or landforms that negatively detract from the prevailing aesthetic character or quality of the site or surrounding area. Although the specific types of subsequent development projects within are not known at this time, all subsequent development projects in the UCSP Subdistricts Area will be required to comply with the UCSP development regulations (UCSP, Chapter VI) and design guidelines (UCSP, Chapter VII). Compliance with these regulations and guidelines will avoid or reduce potential impacts to a level below significance. (The design review process of the UCSP is discussed further in this EIR in the Project Description.) Accordingly, the proposed project will not result in a significant impact to the prevailing aesthetic character of the UCSP site or surrounding area.

Subsequent development in the UCSP will be reviewed for consistency with the UCSP, in particular the Land Use and Development Regulations and Development Design Guidelines. The design review will be conducted through the design review process established in Chapter XI of the UCSP and summarized in the Project Description of the EIR, Chapter 3. In brief, one of two design review processes is to be followed depending on whether the project area lies within an existing redevelopment plan area. The majority of the UCSP Subdistricts Area lies within a redevelopment project plan area and discretionary review of subsequent projects would require review by the CVRC. For projects outside of a redevelopment plan (but within the Subdistricts Area) design review would follow existing City procedure.

The design review process subjects all private and public discretionary projects to review and evaluation prior to issuance of an Urban Core Development Permits or other building permit, to determine their compliance with the objectives and specific requirements of the UCSP.

### 5.2.3.3 Light and Glare

- **Criterion 3: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

Light sensitive activities (e.g. sleeping) could potentially be adversely impacted by light or glare in excess of baseline conditions due to buildout of the UCSP and intensification of land use. The existing light and glare conditions of the UCSP are those typical of a commercial area with limited nighttime activity. The commercial corridors of Third Avenue, E Street, H Street and Broadway currently exhibit nothing atypical in terms of light and glare. Lighting is limited to ornamental lighting, lighted signage, and security lighting. Glare, resulting from reflective surfaces unshielded from the sun or electric light, are currently minimal.

Existing light-sensitive uses within the Subdistricts Area include residents of multi-family apartments in the Urban Core District west of Broadway and residents of the older single-family residences neighboring the Third Avenue business district. Additional single-family houses, duplexes and apartments surround the Subdistricts Area. These light-sensitive uses would potentially be subject to lighting impacts resulting from new sources of decorative lighting of buildings, parking lot lighting, or outdoor security lighting associated with development in accordance with the UCSP. Residents of future residential units that are to be located within the Subdistricts Area would also be potentially subjected to nuisance glare and lighting. New sources of glare would potentially arise from new infill development and redevelopment of existing structures with extensive glass or other unshielded reflective surfaces.

Various provisions in the UCSP development regulations and design guidelines (UCSP Chapters VI and VII) serve to control light and glare sources and ensure that light pollution and glare would be minimal. The special regulations for mixed-use projects (UCSP, Chapter VI, Section H, p. VI-44) require that all mixed-use projects “minimize the effects of any exterior noise, odors, glare, and other potentially significant effects,” including, presumably, shading, loss of light and wind. For each District, the UCSP contains a set of private development and public realm design guidelines (UCSP Chapters VII and VIII) that include lighting requirements to reduce glare, exposure or brightness, angle and depth of field, and duration. Many lighting sources are encouraged to be timed or motion-sensitized.

These provisions are contained in the Lighting subsection of District Design Guidelines for each District included in UCSP Chapter VII, Development Design Guidelines.

### **a. Village District**

For the Village District the following guidelines relevant to lighting and glare are provided:

- Natural building exterior and roof materials such as brick, stone or stucco and neutral colors are preferred (p. VII-18).
- Use of clear glass (not reflective glass) is required on first floor storefronts (p. VII-19).
- Bright and intense lighting, and the use of bright and intense neon outlining of windows, are strongly discouraged for franchise/corporate architecture (p. VII-23).
- Awnings and canopies are recommended as protection against sun and rain (p. VII-25) but potentially serve the additional purpose of shielding glare from reflective glass windows.
- Aluminum awnings or canopies, or glossy, shiny plastic or similar awning materials are not permitted (p. VI-26).
- Side and rear entrance security lighting should be modest and should focus on the side or rear entry door (p. VII-27).
- Lighting sources should be shielded, diffused or indirect to avoid glare for pedestrians and motorists (p. VII-37).
- Regarding sign illumination: whenever indirect lighting fixtures are used (fluorescent or incandescent), care should be taken to properly shield the light source to prevent glare from spilling over into residential areas and any public right-of-way (p. VII-44).

### **b. Urban Core District**

The following guidelines relating to light and glare are provided in the UCSP for the Urban Core District:

- Building materials color and texture should be simple and subdued (p. VII-60).
- Awnings and overhangs should be used on facades in conjunction with street trees to provide shade for pedestrians (p. VII-58). Storefront awnings should be provided along south and west facing buildings to enhance the pedestrian experience (p. VII-63). Awnings and overhangs would also likely shield storefront windows from emitting glare.
- Use of clear glass (not reflective glass) is required on first floor storefronts (p. VII-64).
- Lighting sources should be shielded, diffused or indirect to avoid glare for pedestrians and motorists (p. VII-66).

- Regarding sign illumination: whenever indirect lighting fixtures are used (fluorescent or incandescent), care should be taken to properly shield the light source to prevent glare from spilling over into residential areas and any public right-of-way (p. VII-74).

### **c. Corridors District**

Relevant guidelines applicable to the Corridors District include the following:

- Clear windows (not reflective) should be provided at storefront locations (p. VII-88).
- Natural building materials, such as brick, stone and copper should be used where applicable (p. VII-90).
- Bright and intense lighting of corporate logos is prohibited (p. VII-91) and the use of bright and intense neon outlining of windows is strongly discouraged (p. VII-91).
- Lighting, particularly at all building entrances, should be adequate but not exceedingly bright (p. VII-92).
- The type and location of lighting should minimize direct glare onto adjoining properties. Lighting should be shielded to confine all direct rays within the property (p. VII-98).
- Lighting should not exceed more than 5 foot-candles of illumination within 50 feet of a property used as or zoned residential (p. VII-98).
- Parking lot lighting fixtures should not exceed 35 feet in height,. When within 50 feet of residentially zoned properties, fixtures should not exceed 20 feet (p. VII-99).
- Lighting should not be animated (p. VII-99).
- Lighting fixtures with exposed bulbs are prohibited (p. VII-99).
- Parking lot lighting should utilize pedestrian-scaled rather than high-mast light fixtures (p. VII-102).
- Parking and circulation lighting systems should be designed for two levels, one during normal operations hours, and another reduced intensity level during late non-operational hours (p. VII-102).
- Regarding sign illumination: whenever external lighting fixtures are used, care should be taken to properly shield the light source to prevent glare from spilling over into residential areas and any public right-of-way (p. VII-107).
- Regarding window signs: lighted signs, flashing signs or any other sign not applied directly to a windowpane are not permitted (p. VII-109).

#### **d. Mixed-Use Project Guidelines**

In addition to the relevant light and glare design guidelines applicable to each District, the Special Guidelines applying to Mixed Use Projects (UCSP Chapter VII, Section 3) include the provisions regarding light and glare. Mixed-use projects are those that combine both commercial/office and residential uses or structures in a single lot or as components or a single development. The following light and glare special provisions for mixed-use development largely serve to shield the residential components of a mixed-use project:

- Residential units should be shielded from illuminated commercial signs (p. VII-116).
- Parking lot lighting and security lighting for the commercial uses should be appropriately shielded so as not to spill over into the residential area (p. VII-117).

#### **e. Public Realm Design Guidelines**

The lighting guidelines of the Public Realm Guidelines (UCSP, Chapter VIII) include the following provisions to reduce glare and lighting:

- Encourage lighting that avoids casting glare onto adjacent streets in such a manner as to decrease the safety of vehicular movement (p. VIII-37).
- Encourage lighting that uses full or partial cut-off lighting fixtures to minimize light pollution and addresses “dark skies” goals (p. VIII-37).
- A dual level-lighting system is required for street lighting in the UCSP area. One level function during normal operating hours and another will project reduced intensity light levels throughout late (1:00 a.m. to daylight) non-operating hours (p. VIII-38).
- For all public parking lot lighting, the style of lighting shall not exceed 25 feet in height, and shall minimize glare into the night sky and adjacent areas (p. VIII-38).

Although the specific types of subsequent development projects are not known at this time, all subsequent development projects in the UCSP Subdistricts Area will be required to comply with these UCSP development regulations and design guidelines. Compliance with these regulations and guidelines will avoid or reduce potential light and glare impacts to a level below significance. Accordingly, the proposed project will not result in a significant light and glare impact.

### **5.2.4 Summary of Significance Prior to Mitigation**

Since there are no scenic vistas or designated Scenic Roadways within the UCSP area and the UCSP establishes design standards to enhance the view corridors at the primary and secondary gateways while preserving and complementing the existing Third Avenue

archway within the UCSP area, no significant impacts to scenic vistas or scenic resources would result from implementation of the UCSP.

The GPU contains policies that require the preparation of urban development guidelines and design standards within the Urban Core. The UCSP contains these regulations and design standards which outlines allowable and recommended parameters for future development of the area. The UCSP Land Use and Development Regulations (UCSP, Chapter VI) establish FARs, lot coverage, stepback requirements, parking requirements, open space requirements, and permitted land uses within the UCSP area. The Development Design Guidelines for the UCSP (Chapter VII) contain standards such as building heights and massing, public view corridors, and circulation linkages that establish mixed-use development and achieve a high quality pedestrian-scaled environment consistent with policies in the GPU.

The development regulations and design guidelines of the UCSP would allow development to occur within the UCSP Subdistricts Area that would change the existing visual character from mostly low-rise (up to 48 feet in height) single-use commercial blocks, surrounded by multi-family residential blocks, to a mix of low-rise (up to 45 feet) and mid-rise (up to 84 feet in height) mixed-use commercial/office and residential blocks, with high-rise structures (up to 210 feet in height) allowed in the areas surrounding the existing E Street and H Street trolley stations. The three-fold increase in population projected for the urban core would be accommodated in the Subdistricts Area through substantial intensification of existing land use, through greater building heights and mass. Existing visual character, blue sky views, solar access, ventilation, and glare/lighting would be affected by this intensification in land use.

All subsequent development projects in the UCSP Subdistricts Area will be required to comply with the UCSP development regulations (UCSP, Chapter VI) and design guidelines (UCSP, Chapter VII) and other relevant provisions of the UCSP, as a part of the design review process, in order to avoid or reduce potential impacts to a level below significance. Accordingly, the proposed UCSP would not result in a significant impact to the prevailing aesthetic character of the site or surrounding area or result in adverse substantial light or glare.

## **5.2.5 Mitigation Measures**

### **5.2.5.1 Visual Character**

To ensure avoidance or reduction of potential visual character impacts in accordance with Criterion 2, all subsequent development projects in the UCSP Subdistricts Area will be required to comply with relevant UCSP provisions, as follows:

#### **Mitigation Measure**

5.2.5-1 All subsequent development projects in the UCSP Subdistricts Area shall comply with UCSP development regulations and design guidelines which are necessary to reduce or avoid potential impacts to landform alteration and visual quality (including blue sky views, solar access, and ventilation), and which may include but not be limited to the special development regulations for mixed-use projects (p. VI-44), the NTCD and TFA regulations (p. VI-40), and the siting and architectural design guidelines for each district (Chapter VII). Prior to approval of a subsequent development project, the Community Development Director or Planning and Building Director of the City shall identify the specific provisions of the UCSP which shall be included in the conditions of approval in order to avoid or to reduce potential impacts to below significance.

### **5.2.5.2 Light and Glare**

To ensure avoidance or reduction of potential light and glare impacts per Criterion 3, all subsequent development projects in the UCSP Subdistricts Area will be required to comply with relevant UCSP provisions, as follows:

#### **Mitigation Measure**

5.2.5-2 All subsequent development projects in the UCSP Subdistricts Area shall comply with UCSP development regulations and design guidelines which are necessary to reduce or avoid potential adverse impacts to light or glare and which may include but not be limited to the provisions included in section 5.2.3.3 a through e of this EIR. Prior to approval of a subsequent development project, the Community Development Director or Planning and Building Director of the City shall identify the specific provisions of the UCSP which shall be included in the conditions of approval in order to avoid or to reduce potential light and glare impacts to below significance.

## **5.2.6 Summary of Significance After Mitigation**

Implementation of Mitigation Measures 5.2.5-1 and 5.2.5-2 would reduce potential significant landform alteration and aesthetics impacts to below a level of significance.

## 5.3 Cultural Resources

The following discussion of historical architectural and archaeological resources is based on information included in the EIR for the City of Chula Vista General Plan Update (Section 5.4), December 2005; the Historic Preservation ~~Strategic Plan~~ Evaluation report prepared by the City of Chula Vista, August 2003; and the Cultural Resources Report for the Evaluation of the Historical and Architectural Significance of 50 Properties Within the Chula Vista Urban Core prepared by Archaeos, September 2005. The first two reports are incorporated into this EIR by reference pursuant to CEQA Guidelines Section 15150, and are available for review in their entirety at the City of Chula Vista Planning Department at 276 Fourth Avenue, the Chula Vista Public Library Civic Center Branch at 365 F Street, and on the City of Chula Vista website documents page at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us). The third report is attached to this EIR as Appendix B.

### 5.3.1 Existing Conditions

#### 5.3.1.1 Historical Overview

Native American cultures have occupied the Otay Valley, including the area that is now the City of Chula Vista, for more than 9,000 years. Early Native American inhabitants included the Yuman-speaking peoples of the Kumeyaay tribe. The Kumeyaay ranged across San Diego County and into Baja California and established settlements, hunted game, and utilized the abundant natural resources along the area's river valleys.

The local indigenous Kumeyaay tribe became subject to colonization by the Spanish starting in 1769 with the arrival of Father Junipero Serra. Serra was sent by Spain to create a chain of missions and assistencias to bring Christianity to the indigenous population and create a foundation for colonization. Serra had military assistance in his quest and the San Diego area came under the control of the Spanish. While under Spanish control, the Chula Vista area became part of a Spanish land grant known as Rancho del Rey (ranch of the king). The ranch was used as grazing land for the vast Spanish herds of horses and cattle and included the areas now named National City, Chula Vista, Bonita, and Sunnyside.

Mexico achieved its independence from Spain in 1821 and Alta California became the northern frontier of Mexico. Over the next decade Mexico began secularization of the Spanish missions and transfer of the former mission lands to the large Mexican families that had settled in the area during the period of Spanish control. Vast ranchos were formed from these lands, creating a cattle based economy which dominated the landscape. Rancho del Rey underwent a name change when the Mexican government was formed and became known as the Rancho de la Nacion (national ranch). In 1845, the ranch was granted to Juan Forster, the ~~son~~ brother-in-law of the last Mexican governor, Pio Pico.

Mexico retained ownership of the territory until the Treaty of Guadalupe Hidalgo in 1848, which signaled the defeat of Mexico and transferred the property to the United States of America. With the discovery of gold shortly after this, over 100,000 people flocked to California to search for gold. The influx of population allowed for the creation of the state of California in 1850. After the Gold Rush ended, thousands of settlers continued to arrive in California to take advantage of the great climate and soil conducive to growing crops and orchards. The transcontinental railroad was created in the 1860s and by the 1880s were bringing people to the state in droves. California was experiencing a land boom and thousands of entrepreneurs flocked to California with various schemes to turn the land into a new form of gold.

Rancho de la Nacion was confirmed as a 26,632-acre land grant to Juan Forster by the United States Land Commission in 1854. Forster operated the ranch for nearly a decade until selling it in the mid-1860s to a French developer who then sold it to the Kimball brothers, Frank, Warren, and Levi, in 1868. The brothers had operated a building and contracting company in northern California and were among the many entrepreneurs who decided to move their operations to the San Diego area.

In 1885, Frank Kimball brought the Santa Fe Railroad to southern California, with its first terminus in National City. Several directors of the Santa Fe Railroad and Colonel W.G. Dickinson, a professional town planner, formed the San Diego Land and Town Company. They began developing the area by subdividing a 5,000-acre portion into five-acre lots. Large Victorian houses surrounded by orchards, known as "orchard homes," comprised the dominant architecture of this time.

In the late 1880s, the Sweetwater Dam was built by the San Diego Land and Town Company to bring water to Chula Vista. A railroad was built to connect Chula Vista and Otay with National City and San Diego. The people coming to Chula Vista grew lemons, and in time, the area became the largest lemon-growing center in the world. One of the new residents to the area, James Schulyer, thought the area was very beautiful and he originated the name "Chula Vista" which means "beautiful view" in Spanish.

The City was incorporated in 1911 with a population of 550. After its incorporation, Chula Vista continued to be a leading lemon-growing center. Other important crops were tomatoes, celery, and salt. At this same time the Western Salt Works began operation on the Chula Vista bay front, west of the UCSP area, and is still in operation today. From 1916 to 1920, Chula Vista had a kelp processing plant that produced potash and acetone to make cordite used by the British to make bombs during World War I. This plant, located on the site known today as Gunpowder Point northwest of the UCSP area, had the largest kelp harvesting fleet and tank farm in the world at the time. Craftsman architecture was the predominant building form during this period. This period of development also saw the development of Chula Vista's downtown on Third Avenue, and the initiation of growth along Broadway.

Just ~~after~~ before World War II, Rohr Aircraft Company, which was started in San Diego in 1940, moved to Chula Vista and established their operations on the bayfront. By the height of World War II they employed 9,000 people and was the largest producer of aircraft power packages in the world. By 1950 the influx of workers to the facility had doubled the population of Chula Vista to over 16,000, resulting in the construction of apartments and tenements in addition to single family homes. The dominant architecture at this time was an eclectic mix of Spanish, French and Tudor.

In the post World War II period, from the 1950s through the late 1960s, the agricultural sector of the Chula Vista economy declined and industrial and commercial/services sectors took ascendance. By the late 1960s, farms or orchards no longer existed within the City limits and the urban core was largely a residential and commercial business district. Modern ranch style homes were the common architectural form and are still present throughout the UCSP study area, within the established residential neighborhoods.

From the late 1970's to the present, the City has plotted a new course with the annexation and subsequent development of large tracts of land on the east side of City, through such landmark developments as Eastlake, Rancho del Rey, and Otay Ranch. These newly developing master planned communities have created new vibrant neighborhoods where agricultural fields once thrived. More recently, with the adoption of the General Plan in 2005, a new blueprint for some of the older declining neighborhoods has been established and will create the next chapter of Chula Vista's history.

### 5.3.1.2 Historic Periods of Significance

Between 1880 and 1960, principal historic themes include those activities associated with commercial development, civic development, religious development, residential development and farming activities. Architectural styles associated with these historic themes include:

1880-1910	Victorian
1910-1930	Craftsman
1920-1940	Eclectic (Spanish, Tudor, French), <u>Art Deco</u>
1940-1960	Modern (Ranch, Minimal Traditional, Art Deco, Contemporary)
Also, vernacular/folk styles of any period	

Based on the above historical overview, the historical "periods of significance" within the confines of the UCSP subdistricts, can best be defined as primarily commercial development occurring along the Third Avenue village from 1910-1930, declining for a time and then resurging again from 1946-1960. In addition, the Broadway commercial corridor's period of significance is defined as 1930-1960. Since that time, the Broadway corridor, although still a thriving commercial corridor has experienced decline in both private and public infrastructure. These periods of significance formed the basis for identifying sites for further historical evaluation of significance as part of this EIR and will also provide the framework for

future evaluations as redevelopment occurs on other sites throughout the UCSP Subdistricts over the long term.

### 5.3.1.3 Historic Preservation Plans, Policies and Standards

The legislative basis for historic preservation in Chula Vista is currently provided in the City's Municipal Code, through designation of resources and participation in the Mills Act Program, and in as objectives and policies of the recently updated General Plan (Update, 2005). CEQA compliance review of individual projects within the City provides additional protection of identified and potentially significant historic resources.

The City is also in the process of developing a Historic Preservation Ordinance and is seeking Certified Local Government designation-status in order to achieve its historic preservation goals.

#### a. Chula Vista Municipal Code

The Chula Vista Municipal Code Chapter 2.32 (Sections 2.32.030 (J), 2.32.070, and 2.32.090) falls under the purview of the City's Resource Conservation Commission (RCC), and more recently within redevelopment areas to the Chula Vista Redevelopment Corporation (CVRC), which advise the City Council on ways to safeguard the City's historic, aesthetic, social, economic, political, and architectural past. As part of this responsibility, the RCC and CVRC recommend to the City Council the designation of any site or structure which it has found to meet the local criteria as an historical site. A site or structure may be listed on the Chula Vista List of Historic Sites if it possesses integrity (of location, design, setting, materials, workmanship, feeling and association), and meets at least one of the following criteria~~The current local designation criteria are as follows:~~

- Is associated with events that have made a significant contribution to the broad patterns of history at the local, regional, state, or national level.
- Is associated with the lives of significant persons in the past on a local, regional, state, or national level.
- Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values.
- Has yielded or may be likely to yield, information important in history or prehistory.
- ~~Bears a relationship to overall heritage on a local, state, or national basis.~~
- ~~Relates to a historic personage who played an important role historically, on a local, state, or national basis. However, the individual need not be known nationally, as long as it was someone who made a significant contribution on a local basis. Ideally, this includes~~

- ~~a site where the individual lived or where a noteworthy historical contribution or achievement took place.~~
- ~~May be a site where an important event took place. This would be an event symbolic of a phase of history that could reach the national level. The site of the signing of a historic document, for example, will satisfy this criterion.~~
  - ~~The site should have distinguishing architectural characteristics that are identifiable. This includes structures of a particular architectural style recognizable today.~~
  - ~~The site may be archaeologically significant in its association with pre-history of the area. A site demonstrating existence of an ancient community (Indians indigenous to the area, for example) could satisfy this criterion.~~
  - ~~Has integrity. This is where the site continues to have evidence of the original features. Enough of the original structure or the site is intact to be distinguishable as having historical value.~~

To date, there are 689 sites/structures that have been determined by the City Council to meet these local criteria and are currently listed on the Chula Vista List of Historic Sites. Six of these sites occur within the boundaries of the proposed UCSP and are described below in Section 5.3.1.4, Historic Sites in the UCSP Area.

### **b. Mills Act Program**

In 2001, the City Council adopted a policy implementing the Mills Act Program, giving the City the authority to enter into Mills Act Contracts with private owners of qualified historic properties. The Mills Act Contract is a legally binding contract between the City and the historic homeowner, with a minimum term of 10 years that specifies what preservation, maintenance and restoration efforts will be made by the property owner in exchange for tax savings. The County Assessor's Office determines what the new assessed value and property tax savings will be. Property tax savings can be substantial and must be used toward the preservation of the historic property. To date the City has entered into more than 252 Mills Act Contracts, comprising nearly one-third of the current 68 locally designated historic sites.

### **c. Chula Vista Historic Preservation Strategic Plan Evaluation Report**

In 2002, the City approved the formation of an Ad Hoc Historic Preservation Committee to develop an historic preservation plan that would coordinate with the General Plan Update. The purpose of the Ad Hoc Preservation Committee was to evaluate the City's existing historic preservation program and make recommendations for an appropriate program for the future that would preserve the important historic resources of the City.

The An Evaluation of Historic Preservation in Chula Vista report Strategic Plan (August 2003) resulted from this effort and recommended several actions, including integrating historic preservation issues into the objectives and policies of the General Plan and area plans, becoming a Certified Local Government, establishing a predictable and consistent historic review process and qualified historic preservation review board, establishing design guidelines for historic resources, and providing incentives for historic preservation.

Since City Council acceptance of the Evaluation of Historic Preservation in Chula Vista report, City staff has been working to develop a multi-faceted historic preservation program aimed at protecting historic resources within the City. The draft Historic Preservation Program that is being developed includes both regulatory and non-regulatory techniques and is modeled after cities with similar size, demographics, age of resources, and which are all Certified Local Governments whose programs are recognized as good models by the State Historic Preservation Office. The draft Historic Preservation Program that City staff is working to finalize over the next several months is comprised of:

- A historic preservation ordinance,
- A qualified Historic Preservation Review Board,
- A recommended historic survey process that delineates and prioritizes areas to be surveyed in phases,
- A certified local government application request,
- A process for the development of design guidelines for historic structures, and
- Incorporation of historic standards within the zoning code update.

The City of Chula Vista is currently researching the requirements for gaining Certified Local Government (CLG) status as recommended in the strategic planevaluation report and in GPU Policy LUT 12.1. The CLG program integrates local government with the national historic preservation program through activities that strengthen decision-making regarding historic places at the local level. The program also provides federal funding and technical assistance and training to local government via the State Historic Preservation Officer for preservation activities.

The City is also in the process of developing a Historic Preservation Ordinance and establishing design standards and other relevant requirements for historic properties per the recommendations of the 2003 strategic planevaluation report and Policy LUT 12.3 of the GPU. Currently, the City of Chula Vista historic preservation program is limited to voluntary historic designation and voluntary participation in the Mills Act as described above.

Every local government in California has the authority to adopt a local ordinance applying regulations to historic properties. A historic preservation ordinance would provide clear

direction for implementing the objectives and policies for historic preservation in Chula Vista as expressed in the GPU. Such an ordinance may:

- Integrate historic preservation with the goals and objectives of the general plan.
- Be based upon the Certified Local Government (CLG) program model.
- Establish a qualified historic review board.
- Provide design guidelines for historic resources.
- Establish a survey and inventory process.
- Explore opportunities for potential historic overlay zones and/or districts.
- Set guidelines that follow the Secretary of Interior's Standards for the Treatment of Historic Properties.
- Establish incentive programs for the preservation of historic resources.
- Require a maintained system of survey and inventory of historic resources.
- Provide opportunities for public outreach and education.

#### **d. Chula Vista General Plan Update**

The General Plan Update (GPU), adopted December 2005, incorporated the recommendations of the 2003 Strategic-Planevaluation report by integrating historic preservation goals into the objectives and policies of the Land Use and Transportation (LUT) element and Environmental Element (EE), as follows:

##### **Objective LUT 12**

Protect Chula Vista's important historic resources.

##### **Policies**

- LUT 12.1: Establish a formalized process for historic preservation by evaluating requirements for certified local government status as defined by the state historic preservation office.
- LUT 12.2: Amend City zoning codes as necessary to implement the recommendations contained in "An Evaluation of Historic Preservation in Chula Vista", and any related subsequent evaluations and studies.
- LUT 12.3: Adopt a Historic Preservation ordinance that implements the goals established by the City Council in February, 2000; the City Council strategic themes of 2003, and the document "An Evaluation of Historic Preservation in Chula Vista."

- LUT 12.4: Conduct an objective, comprehensive city-wide survey of Chula Vista's historical assets for the purpose of establishing a list of buildings appropriate for formal historical designation.
- LUT 12.5: Recognize the inherent public value of historic preservation in contributing to the beauty, character, and sense of place in Chula Vista, and promote and facilitate participation in the Mills Act and other appropriate incentive programs to encourage the preservation of cultural resources.
- LUT 12.6: Through the City's development regulations, acknowledge and recognize those areas of the City that contain historic resources. Examine current and future zoning and development regulations and design guidelines to ensure they support preservation and restoration of designated historic resources, and as appropriate require new development or redevelopment to acknowledge these in context.
- LUT 12.7: Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to historic resources in accordance with the California Environmental Quality Act.
- LUT 12.8: As practicable, the City will support and encourage the rehabilitation of sound historic buildings.
- LUT 12.9: Encourage and promote the adaptive reuse of historic resources and buildings, and where appropriate, the non-historic buildings that embody Chula Vista's cultural or historic character.
- LUT 12.10: Promote the maintenance, repair, stabilization, rehabilitation, restoration, and preservation of historical resources in a manner consistent with federal and state standards.
- LUT 12.11: Prior to the approval of any projects that propose the demolition or significant alteration of a potentially significant historic resource as defined pursuant to applicable state and federal laws, require the completion of an historic survey report to determine significance. If determined to be significant, require appropriate and feasible mitigation pursuant to CEQA Guidelines Section 15064.5.
- LUT 12.12: Require the implementation of an appropriate conservation program in accordance with applicable state and federal laws, in instances where projects may adversely affect significant historic resources.

LUT 12.13: Protect, preserve, and seek to restore publicly-owned historical resources (such as Rohr Manor House and the Chula Vista Women's Club).

### Objective EE 9

Protect Chula Vista's important cultural resources and support and encourage their accessibility to the public.

### Policies

EE 9.1: Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to cultural resources in accordance with the California Environmental Quality Act.

EE 9.2: Support and encourage the accessibility of Chula Vista's important cultural resources to the public for educational, religious, cultural, scientific and other purposes, including the establishment of museums and other facilities accessible to the public where such resources can be appropriately studied, exhibited, curated, etc.

EE 9.3: Conduct a comprehensive survey and establish and maintain an up-to-date inventory of historic properties

EE 9.4: Discourage disruption, demolition, and other negative impacts to historic cultural resources.

#### 5.3.1.4 Historic Sites in the UCSP Area

In 1985, the City of Chula Vista sponsored a local historic resources inventory. The inventory was limited to the area of Trousdale Drive to the north, L Street to the south, Interstate 5 to the west, and Hilltop Drive on the east. As a result, approximately 258 homes were included on the survey list with 42 of the homes being included on the Chula Vista List of Historic Sites. There are 689 sites currently designated as historic by the City of Chula Vista (Chula Vista-2005). These 68 structures have been determined by the City Council to meet the City's historic criteria. There are 69 sites currently designated as historic by the City of Chula Vista (Chula Vista-2005).

The majority of sites currently listed on the City's List of Historic Sites are residential properties in established single-family residential neighborhoods, outside of the UCSP Subdistricts Area. Although Existing land uses within the UCSP Subdistricts Area are consists primarily of commercial retail and office uses along the commercial corridors of Third Avenue, E Street, Broadway and H Street, with some older residences in the Village

District, and post World War II multi- and single family housing west of Broadway between E Street and I Street in the Urban Core District, it does have a rich and diverse inventory of resources that have local significance. The following sections describes ~~six sites that fall within the UCSP Subdistricts area that are designated on the City's List of Historic Sites, other sites of historical interest, and sites that were identified as part of the Cultural Resources Report for the Evaluation of the Historical and Architectural Significance of 50 Properties within the Chula Vista Urban Core and fall within the UCSP Subdistricts Area.~~

### **a. Designated Historic Architectural Sites**

~~Currently there are sSix sites within the boundaries of the UCSP Subdistricts Area that were determined to have met local designation criteria and are currently included on the Chula Vista List of Historic Sites.~~ The locations of these six ~~currently-designated~~ historic sites are shown in Figure 5.3-1 and are described below.

#### ***699 E Street – Former Site of Greg Rogers House***

The Greg Rogers House, also known as "Bay Breeze" was built in 1910 at 699 E Street. The home was constructed by Greg Rogers, one of the founders of the City of Chula Vista and founder of the City's first bank. The 5,700 square foot Craftsman style house had multiple bathrooms and several fireplaces. In 1985, the home was threatened with demolition in its original location and was moved from 699 E Street. The home was eventually relocated to 616 Second Avenue. At this time, the site where the home once stood remains a City designated historical site.

#### ***666 Third Avenue – Our House/Orchard House***

"Our House", a large home in the Queen Anne style, once stood at 666 Third Avenue. However, the structure was destroyed by fire. At this time, the site where the home once stood remains a City designated historical site.

#### ***276 F Street – First Congregational Church***

The First Congregational Church was the first church opened in Chula Vista. The original sanctuary for the church was constructed in 1894 at 276 F Street. Community members raised money to fund the sanctuary construction and the Land and Town Company donated the land. The original structure was torn down in 1951 and a new sanctuary was constructed in its place. The site of the former sanctuary is a City designated historical site.

#### ***301-305 Third Avenue – Melville Block***

The Melville Block was constructed by Edward Melville, one of Chula Vista's first businessmen. The Melville Block consists of a 1911 two-story building in the Eclectic Commercial style architecture. The Chula Vista State Bank originally occupied the corner spaces, followed by the Chula Vista Dry Goods Company. The first story of the building has

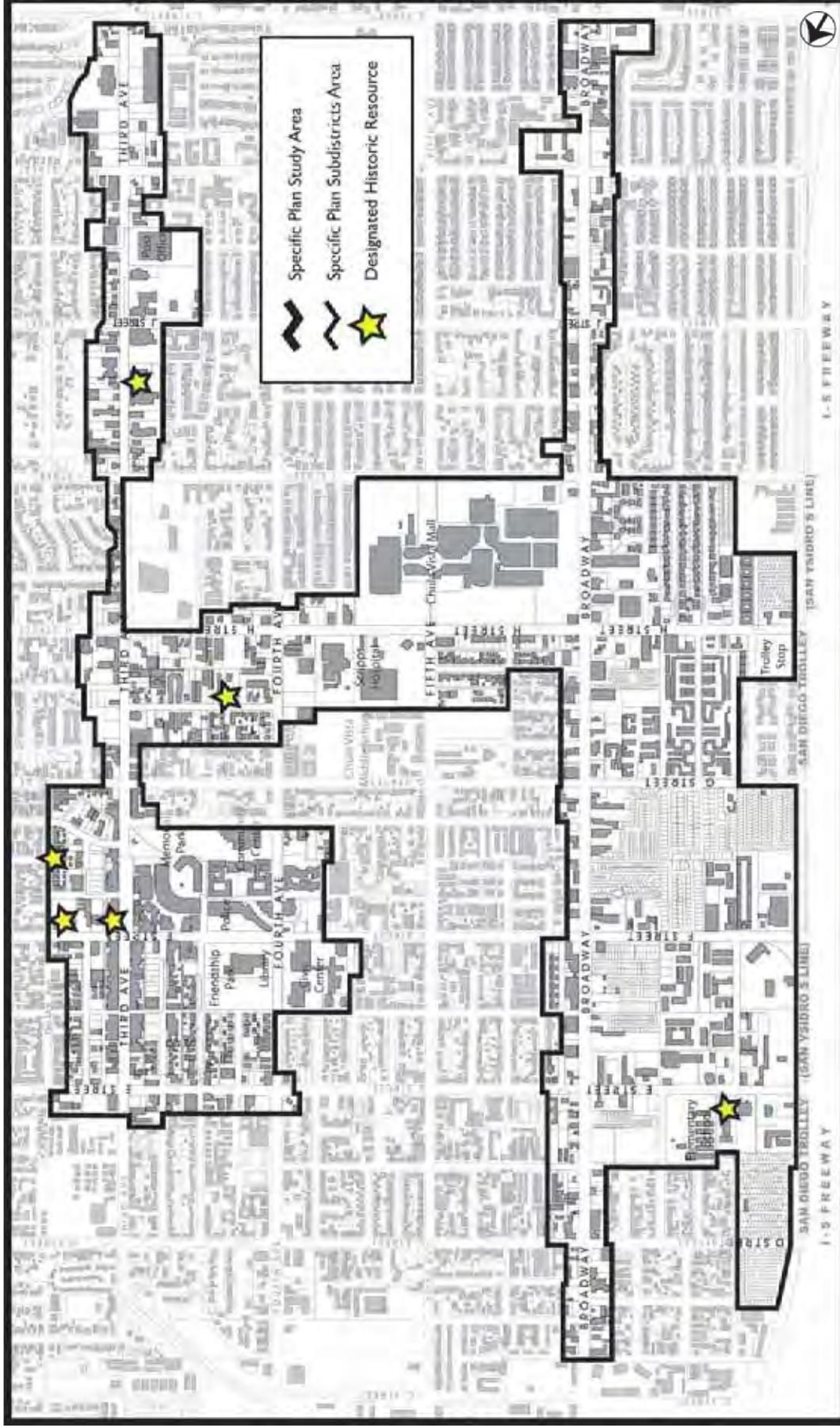


FIGURE 5.3-1  
Designated Historic Architectural Sites

been significantly altered from its original state and many of the original ornamental features have been removed, but overall the building retains its historical value. The structure was recently noted in a guide to San Diego Architecture published by the American Institute of Architects.

### ***374 Roosevelt Street – Mark Skinner House***

Constructed in 1924 by Mark Skinner, a well-known local businessman, this house is a unique variation on the Bungalow style popular in the early part of the twentieth century. The original siding on the house has been replaced but the original design theme remains.

### ***382/384 Del Mar Avenue – The First Women's Clubhouse***

The Women's Club was the first place in the City of Chula Vista for women active in civic affairs to meet and gather. The Club was involved in many community activities, including fund-raising for various events. The Club first convened at 382/384 Del Mar Avenue in the early 1900's and met at this location for many years until the Club eventually outgrew the site and relocated to a larger space at 357 G Street. The building on Del Mar Avenue retains its historical significance as the Women's Club's first meeting site.

## **b. Other Sites of Historical Interest**

In addition to the six designated historic sites, the Urban Core Specific Plan Area consists of other sites of historical interest. These sites include the El Primero Hotel, the Memorial Bowl (A Works Projects Administration project), the Charles Smith Building, the People's State Bank, Leader Department Store, and Security Pacific Bank. These sites/structures, in addition to others, all contribute to the historic fabric of the Urban Core Specific Plan Area. Important historical sites such as these provide the context of the image, character, and history of Chula Vista's urban core that is to inspire and shape future development within the UCSP area.

## **bc. Additional Sites Evaluated for Potential Eligibility as Historic Architectural Sites**

In 2005, the City identified-evaluated 50 properties within the UCSP Subdistricts Area for historic evaluation and determination of eligibility for listing. This evaluation is titled Cultural Resources Report for the Evaluation of the Historical and Architectural Significance of 50 Properties within the Chula Vista Urban Core (Archaeos, September 2005) and is attached to this EIR as Appendix B.

This focused survey augments the 1985 inventory, and is not intended to be representative of a comprehensive survey of the UCSP Subdistricts Area. The area around Third Avenue and F Street is considered to be the historic core of the City and includes important elements of the early residential and business activities of the City and therefore this area within the UCSP Village District was the focus area for historic evaluation.

These structures were selected based on the periods of significance described above under Section 5.3.1.2 and include mostly structures within the Village District along Third Avenue, the City's traditional downtown, and adjacent side streets. The sites are also all located within adopted redevelopment areas and thus have an increased potential to redevelop over the short to mid term. The potential for the existence of other significant historic properties within the UCSP Subdistricts Area is possible given the number of older commercial structures and homes throughout the UCSP Subdistricts Area.

The report detailed the findings of 50 buildings assessed for potential significance based on their eligibility for nomination to the National and California Registers as defined by CEQA. Determination of significance was thus based on assessment of the property within its local historic context and the CEQA Guidelines criteria of historical significance (Section 15064.5(a),(3),(A-D)) as follows~~eligibility for listing in the register(s) under one of four following Criteria for Evaluation:~~

- (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (B) Is associated with the lives of persons important in our past;
- (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

To be eligible for significance under Criterion A, a UCSP property must be associated with one or more historic events or trends defined within the historic context of the urban core area. To be eligible for significance under Criterion B, a UCSP property must be directly associated with persons demonstrably important within the context of the urban core area. To be eligible for significance under Criterion C, a UCSP property must embody the distinctive characteristics of a type, period, or method of construction, and/or represent the work of a master or important, creative individual, and/or possess high artistic values. To be considered significant under Criterion D, a UCSP property must possess the potential for further important research.

Of the 50 properties evaluated, five were determined to meet one or more of the CEQA criteria for significance and the federal and state eligibility criteria. These five buildings are located at 226 Third Avenue, 230 Third Avenue, 250 Third Avenue, 253-257 Third Avenue, and 277-279 Third Avenue and represent historically significant commercial development of the 1920s, 1940s or 1950s. The five buildings found to be significant were each given the status code of "5S2" in the evaluation report, meaning that as individual properties they are

eligible for local listing or designation under local ordinance criteria. The other 45 resources were each given the status code of "6Z", meaning that they were found ineligible for listing in the National Register, and by extension, ineligible for the California Register. Below are descriptions of the five buildings found eligible for local listing within the historic context of the urban core or designation under local ordinance.

### ***226 Third Avenue***

The 226 Third Avenue resource was found to be significant under Criterion A as representative of Chula Vista Urban Core commercial development during the 1940s. This resource is a two-story, symmetrical, rectangular shaped, Art Deco theater building. The building has a concrete foundation, stucco and block walls, and a raised roof with a parapet. The front façade has a recessed entrance area with glass and metal doors. The entrance area includes a square, separate box office with wood siding and glass windows. Two retail spaces are placed on either side of the entrance area and include large plate glass windows. Tile has been added to the front façade. Above the entrance area is a large marquee section which projects forward from the main mass of the building. The second floor façade includes a pair of metal windows placed on either side of the façade. Vertical stripe sections enhance the front façade of the structure and extend from the marquee area to the roofline. The rear of the building includes several entrances with pairs of single wood doors. The building is in fair condition. According to the Chula Vista Heritage Museum files, the Vogue Theater had an innovative air handling system that changed the air every three minutes through giant intake and exhaust channels.

### ***230 Third Avenue***

The 230 Third Avenue resource was found to be significant under Criterion A as representative of Chula Vista Urban Core commercial development during the 1950s. This resource is a two-story structure with both commercial and residential spaces. The Tudor style building has a concrete foundation, symmetrical facade, stucco and wood walls, a mansard roof with shake shingles, faux stone accents, and a clock centered on the second floor facade. The entrance is centered on the front facade and consists of a wood and multilight glass door which is flanked by large rectangular, multilight windows. The first floor of the structure has faux stone accents; the upper portion has wood Tudor style accents. The rear of the structure has faux stone accents, a metal gate, and a staircase that leads to an office/residential unit. The building is in good condition.

### ***250 Third Avenue***

The 250 Third Avenue resource was found to be significant under Criterion A as representative of Chula Vista Urban Core commercial property during the 1940s. This resource is a one-story, asymmetrical, rectangular shaped, Modern style, two unit commercial building. The building has a concrete foundation, stucco walls, a flat roof and a horizontal band motif around the front facade under the roof edge. The building has two

units; one with a recessed entry. Doors are single metal and glass doors. Large plate glass windows are present on the front facade and awnings are present over the windows. The building has a large mural on the north side. The building is in good condition.

### ***253-257 Third Avenue***

The 253-257 Third Avenue resources were found to be significant under Criterion A as representative of Chula Vista Urban Core commercial property during the 1940s. This resource is a two-story, asymmetrical, rectangular shaped, Modern style commercial structure located on a corner. The building has a concrete foundation, concrete walls with a square block motif and faux marble detailing and a flat roof. A narrow roof ledge projects from the main mass of the building over the window units. The three-unit building has large plate glass windows; the end unit includes a bay window projection from the main mass of the structure. Doors are metal and glass, except for the wood and glass door on the end unit (257 Third Avenue). Awnings are present on some windows. The rear of the corner unit (253 Third Avenue) has a side entrance and a rear entrance. The side entrance includes a pair of wood doors with a vertical bar motif over the door area, extending up to the second floor roof area. Vertical bands frame the side entrance. The rear entrance is recessed under the second floor and the corner of the building is supported by a square column. Tile detailing is present. First floor windows are large fixed pane plate glass style windows, some are in three parts. Second floor windows are metal, multilight casement style.

### ***277 & 279 Third Avenue***

The 277-279 Third Avenue resource was found to be significant under Criterion C as a property which embodies the distinctive characteristics of a type and method of Brick Commercial construction in the Urban Core during the 1920s. This resource consists of a one-story, Brick commercial building. Two businesses are identified as operating in the building at 277 and 279 Third Avenue. Square in shape, the building features a flat roof with decorative brick parapet at the center of the roofline. Extensive use of multi-color brick is used in the exterior of the building, including red, white, and tan. The building features brick pilasters which frame two fixed glass storefront sections. One entry, composed of a glass door, exists along the southwest elevation, while another, along the northwest elevation appears to be non-functional. Above the storefront glass, there is plywood which may obscure a transom window band underneath. Overall, the building is in good condition.

A map of the 50 evaluated properties, including the five determined to be eligible for listing, is shown in Figure 5.3-2. All but one of the fifty evaluated properties lie within the UCSP's Village District, along both sides of Third Avenue between E and F Streets, and along E Street between Third and Fourth Avenues and adjacent side streets. Only one of the fifty evaluated properties, the Traveller Inn Suites, lies outside of the Village District, along the west edge of the Urban Core District at E Street west of Broadway. See Appendix B for a complete list of addresses and evaluation results for all of the 50 evaluated properties

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FIGURE 5.3-2  
Eligible Historic Architectural Sites

### c. Archaeological Sites

Native American presence in San Diego County is known to extend back some 9,000 years before the present. The people who are associated with this period left an artifact assemblage that is typified by large flaked stone tools. In the South County region there is evidence to suggest that the most widely represented period of prehistoric site development is the very long La Jolla phase between 7000 and 2000 years ago.

The Late Prehistoric Period, which followed the La Jolla phase, reflects the emergence of populations related to the ethnographic populations of the area as evidenced by the sporadic occurrence of ceramic items at recorded sites and on published records. The presence of ceramics, long considered an indication of Late Prehistoric Period association, is rare in the coastal Chula Vista region in which the UCSP area lies. Significant Late Prehistoric Period sites are known to occur in the Otay River valley and the far eastern portion of the City, east of the Otay Lakes outside of the UCSP area.

The EIR for the 2005 General Plan Update contained a map of areas of prehistoric archaeological resource potential. Areas of the City were mapped as having either high, moderate or low sensitivity levels. As shown, the UCSP Subdistricts Area is considered to have low sensitivity for prehistoric archaeological resources.

### 5.3.2 Criteria for Determination of Significance

According to the CEQA Guidelines Section 15064.5 and Appendix G, adoption and implementation of the proposed UCSP would result in a significant adverse cultural resources impact if the goals, regulations or guidelines established in the UCSP and/or anticipated subsequent development in accordance with the UCSP would:

- Criterion 1: Cause a substantial adverse change in the significance of a historical architectural resource that is listed on, or determined to be eligible for listing on, the National Register of Historic Places or the California Register of Historic Resources; is listed on or determined to be eligible for listing on the Chula Vista List of Historic Sites; or that meets any of the following criteria:
  - Is associated with events that have made a significant contribution to the broad patterns of California's history at the local, regional, state, or national level and cultural heritage;
  - Is associated with the lives of significant persons important in their past on a local, regional, state or national level;
  - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, an important creative individual, or possesses high artistic values; or

- Has yielded, or may be likely to yield, information important in history or prehistory or history; or
- Criterion 2: Cause a substantial adverse change in the significance of an important archaeological resource or disturb any human remains, including those interred outside of formal cemeteries.

### 5.3.3 Impacts

#### 5.3.3.1 Impacts to Historic Architectural Resources

- **Criterion 1: Cause a substantial adverse change in the significance of a historical architectural resource as defined in CEQA Guidelines Section 15064.5.**

A total of eleven sites within the UCSP Subdistricts Area have been locally designated or determined to be eligible for local designation as historically significant. Six of the eleven sites are currently listed on the Chula Vista List of Historic Sites. These six sites comprise the homes or sites of early prominent Chula Vista persons (Greg Rogers House, Orchard House, Mark Skinner House) or the sites of early important civic and business functions (First Congregational Church, the First Women's Clubhouse, the Melville Block). The other five sites were determined by a focused survey to be eligible for local listing in September 2005 by having met the National and California Register eligibility criteria and the CEQA Guidelines criteria of historic significance. These five eligible sites are commercial properties concentrated along Third Avenue in the UCSP Village District and are representative of commercial development of the 1920s, 40s or 50s. A map showing the locations of these eleven significant historic properties as defined by CEQA is provided in Figure 5.3-3. The physical demolition, destruction, relocation or alteration of any of these eleven historic resources or their immediate surroundings such that the significance of an historic resource would be materially impaired under CEQA Guidelines Section 15064.5(b)(2) would constitute a significant and direct impact.

The identification of these 11 historically significant sites is not representative of a comprehensive, UCSP Subdistricts Area inventory, but is reflective of an informed focus evaluation. The area around Third Avenue and F Street is considered to be the historic core of the City and includes important elements of the early residential and business activities of the City. Thus, this area within the UCSP Village District was thea focus area for historic evaluation.

As previously mentioned, ~~t~~The potential for the existence of other ~~as-yet-identified-significant~~ historic properties within the UCSP Subdistricts Area is highly probable ~~considered potentially significant~~ given the number of older commercial structures and homes throughout the UCSP Subdistricts Area. Future development in accordance with the UCSP area could have a significant impact on historic architectural resources through demolition or

substantial alteration of identified or as-yet-unidentified historic resources. Therefore, measures have been proposed in order to mitigate potential impacts to both identified and unidentified cultural and archaeological resources. The significance criteria outlined above under 5.3.2 will be used for future historic evaluations.

The goals, land use and development regulations, and development design guidelines established in the UCSP emphasize the conservation and integration of historic architectural resources into urban core redevelopment. Historic preservation measures contained in the UCSP would minimize impacts to architectural resources that may otherwise have occurred with redevelopment of the area.

The UCSP follows the *Historic Preservation Strategic Plan Evaluation* report and GPU's recommendations through integration of historic preservation goals into the land use and development regulations (GPU Policy 12.6), through inclusion of historic preservation design guidelines (GPU Policies LUT 12.6, LUT 12.8, LUT 12.9, LUT 12.10, & LUT 12.13), and through the provision of incentives for private property owners to acquire and maintain historic properties (GPU Policies LUT 12.5 and LUT 12.8).

The UCSP Existing Conditions (Chapter IV) provides guidance on how historic information will be used as new development is proposed throughout the UCSP Subdistricts Area. Both the 1985 Resources Inventory and the Subdistricts-focused The inventory of existing historical resources lends important reference for new development in the UCSP Subdistricts Area. In addition to identifying the significance of several properties within the urban core, The Cultural Resources Report for the Evaluation of the Historical and Architectural Significance of 50 Properties within the Chula Vista Urban Core (Archaeos 2005) establishes the historical context and periods of significance that will provide the framework for future evaluation of potential historic resources within the UCSP area so that the image, character, and history of Chula Vista's urban core are preserved.

While the plan does not require strict application of traditional historic architectural styles, the context and periods of significance will help identify those historic influences that should be retained, are recommended to and that should be honored and retained wherever possible. Consideration of important historical features is built into the planning process and is an important facet of land use planning and urban design throughout the plan area. The design guidelines encourage the use of building elements and/or features typically found on historical structures. The development standards emulate the form, massing, and relationship of building to sidewalk of these historical structures. The plan is subdivided into various planning districts, each with a special set of planning and design directions. The degree to which historic structures influence the design direction within these districts may vary; however, protection of existing noteworthy structures and respect for the City's heritage is a theme that will guide new development.

The UCSP Land Use and Development Regulations (Chapter VI) provide standards that emulate the form, massing, and relationship of building to sidewalk of existing historical



- UCSP Study Area
- UCSP Subdistricts Area

- Historically Significant Sites/Structures
  - Designated Sites
  - Eligible Historic
  - Surveyed and Found Ineligible



FIGURE 5.3-3

Historically Significant Architectural Sites

structures. The UCSP Urban Amenities and Incentives Table includes an Historic or Architectural Acquisition and Maintenance element. Although this is not a required element, the UCSP identifies an incentive to the property owner which encourages preservation through waiver of the building square footage in the overall development's floor area ratio (FAR). The "FAR waiver" promotes adaptive reuse in individual developments or as part of larger multi-parcel redevelopment.

The UCSP Development Design Guidelines (Chapter VII) encourage the use of building elements and/or features typically found on historical structures. There are eight overarching goals provided at the beginning of the Land Use and Development Regulations chapter that explain the design philosophy expressed in the UCSP Development Design Guidelines. The guidelines that aim to promote a desired level of future quality and sensible development quality in the urban core. Development consideration of historic resources, both identified and unidentified, meets The eighth goal is to "preserve and maximize the image, character, and history of Chula Vista's urban core."

Goals for the UCSP Village District Additionally, include "rehabilitation of older structures as well as well-designed and new development" and "should be encouraged to preserve the historic fabric of the area." The Development Design Guidelines will include providing guidance for those who wish to renovate or add on to existing buildings by and promoting design compatibility between infill structures and surrounding buildings."

Section 6 of the Village District Guidelines, titled Building Additions and Renovation Guidelines, addresses the renovation/restoration of older commercial structures. As stated, "renovation and expansion not only increases property values in the area, but serves as an inspiration to other property owners and designers to make similar efforts." When an applicant proposes a renovation of or addition to an existing structure, "the work should respect the original design character of the structure."

The UCSP states that appropriate design guidelines in this section are to be implemented whenever a structure is to be renovated or expanded. In addition, renovations of all structures of historic significance are to follow the Secretary of the Interior's *Standards for the Treatment of Historic Properties Rehabilitation* and *Guidelines for Rehabilitating Historic Buildings*, published by the US Department of the Interior, National Park Service.

The extensive Building Additions and Renovation Guidelines for the Village District include measures to:

- Preserve traditional features and decoration;
- Remove elements inconsistent with original façade;
- Renovate storefronts;
- Retain, repair or replace windows;
- Retain, repair, refinish, or replace doors;
- Retain, repair or replace awnings;

- Effectively paint, waterproof, repair and clean surfaces/facades; and
- Conceal or carefully integrate any seismic retrofitting.

In addition, the design guidelines recommend infill developments consider potential adjacency effects on designated historic structures.

The UCSP's goals and guidelines for historic preservation, architectural resource protections are provided by the extensive local, state and federal (where applicable) regulatory processes, which serve to avoid adverse impacts to designated architectural resources when feasible. Therefore, the enforcement of local, state and federal regulations aids in ensuring the conservation of significant architectural resources.

### **5.3.3.2 Impacts to Archaeological Resources**

- **Criterion 2: Cause an adverse change in the significance of an archaeological resource or disturb any human remains, including those interred outside of formal cemeteries.**

The UCSP Subdistricts Area is mapped as having low sensitivity for the occurrence of archaeological resources. While the likelihood is low, the potential to encounter archaeological resources in the UCSP area does exist. If important archaeological sites underlie a redevelopment site, construction activities such as subsurface grading and excavation could result in significant impacts.

In developed areas, archaeological resources are difficult to detect prior to construction activities, as they are located underground. The likelihood of encountering archaeological resources is greatest on redevelopment sites that have been minimally excavated in the past and will be more substantially excavated as part of the proposed development (such as subterranean garages). Previously excavated areas are considered to have low potential for archaeological resources, since the soil containing the archaeological resources has been removed.

Once encountered, historic-artifacts associated with an archaeological feature or deposit are required to be documented in place, analyzed in a laboratory setting and prepared for curation in accordance CEQA provisions and local guidelines in accordance with the State Office of Historical Preservation's Guidelines for the Curation of Archaeological Collections (1993). A Collection Management Plan would be required for projects which result in a substantial collection of historical artifacts and must address the management and research goals of the project, the types of materials to be collected and curated, and an acceptable sampling strategy. Within the UCSP Subdistricts Area, adherence of future redevelopment projects to mandatory local and state regulations would ensure the conservation of significant historical resources.

While there are no formal cemeteries or recorded burials in the UCSP Subdistricts Area, prehistoric burials are possible. The potential for encountering human remains during construction activities of future redevelopment is low. Nevertheless, impacts to human remains as a result of the proposed UCSP may occur. Procedures for the disposition of human remains are set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5).

### 5.3.4 Level of Significance Prior to Mitigation

So far, eleven buildings or sites within the UCSP Subdistricts Area are currently have been designated or have been determined to be eligible to be designated as historically significant as defined in the CEQA Guidelines. Without mitigation, demolition or substantial alteration of these buildings as a result of future development in accordance with the proposed UCSP would comprise a significant historical architectural resources impact.

The area around Third Avenue and F Street is considered the traditional heart of the City and includes important elements of the early residential and business activities of the City. The potential for the existence of other as-yet-unidentified historic properties is significant in light of the number of older commercial structures and residential structures throughout the UCSP Subdistricts Area. If significant historic resources occur among these unidentified structures, their loss or substantial alteration would comprise a significant historical architectural resources impact. Therefore, mitigation measures shall be adopted to reduce the impact(s) to a level less than significant.

Although the likelihood of encountering significant archaeological resources and human remains is low, the potential does exist. In the unlikely event that prehistoric cultural materials are found during subsurface disturbance resulting from future developments, there would be a significant archaeological impact.

### 5.3.5 Mitigation Measures

The following measures shall be adopted in order to mitigate potential impacts to cultural and archaeological resources.

#### 5.3.5.1 Architectural Resources

##### Mitigation Measure

- 5.3.5-1 For a structure listed on, or eligible for listing on, the Chula Vista List of Historic Sites or State and Federal historic registers, the project applicant shall retain the structure in-place and maintain, repair, stabilize, rehabilitate, restore, preserve or reconstruct the structure in a manner consistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving,*

*Rehabilitating, Restoring and Reconstructing Historic Buildings* (1995), Weeks and Grimmer ("Secretary's Standards"). Prior to issuance of an Urban Core Development Permit (UCDP) or other discretionary permit, the project applicant shall prepare detailed construction plans under the supervision of a qualified architectural historian or historic architect for review and approval by the Community Development Director. The Community Development Director shall retain, at the project applicant's expense, a qualified historic architect to review the plans and to certify that the project will comply with the Secretary's Standards and would not result in the loss of the structure's listing, or eligibility for listing, on the City, State or Federal register of historic resources.

### **Mitigation Measure**

- 5.3.5-2 Where there is substantial evidence that it is not feasible for a structure listed on, or eligible for listing on the Chula Vista List of Historic Sites or State or Federal historic registers to be retained in-place, the project applicant shall provide for relocation and maintenance, repair, stabilization, rehabilitation, restoration or preservation of the structure in a manner consistent with the Secretary of the Interior's Standards for the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (1995), Weeks and Grimmer ("Secretary's Standards") at a new location subject to the approval of the City. Prior to issuance of an Urban Core Development Permit (UCDP) or other discretionary permit, the project applicant shall prepare detailed relocation plans under the supervision of a qualified architectural historian or historic architect for review and approval by the Community Development Director. The Community Development Director shall retain, at the project applicant's expense, a qualified historic architect to review the plans and to certify that the project will comply with the Secretary's Standards and would not result in the loss of the structure's listing, or eligibility for listing, on the City, State or federal register of historic resources.

### **Mitigation Measure**

- 5.3.5-3 Where there is substantial evidence that it is not feasible, as determined by CEQA Section 15064.5, (b) (4), for a structure listed on or eligible for listing on the Chula Vista List of Historic Sites or State or Federal historic registers to be retained in-place or to be relocated to another location satisfactory to the City, the project applicant shall:

Provide for documentation of the historical structure before it is removed from the development site, including but not limited to photographic documentation of the exterior and interior of the structure, and "as built" drawings of the structure according to the standards of the Historic American Building Survey (HABS, Level

I). Such historical documentation shall be provided to the CVRC or RCC, as applicable, before a demolition permit is issued by the City for the structure.

5.3.5-4 For those structures 45 years or older and not previously evaluated, a determination of historic significance shall be made based on the significance criteria in Section 5.3.2 (and repeated below) prior to the issuance of a demolition permit.

A site or structure may be listed on the Chula Vista List of Historic Sites if it possesses integrity (of location, design, setting, materials, workmanship, feeling and association) and meets at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history at the local, regional, state, or national level and cultural heritage;
- Is associated with the lives of significant persons important in the our past on a local, regional, state, or national level;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in history or prehistory or history.

If a resource is determined by the City to be historically significant pursuant to the above listed criteria, Mitigation Measure 5.3.5-2, 5.3.5-3, or 5.3.5-4 shall be implemented as applicable.

### 5.3.5.2 Archaeological Resources

#### Mitigation Measure

5.3.5-5 The likelihood of encountering archaeological resources is low within the UCSP Subdistricts Area. The following mitigation shall only be applied to projects which involve subsurface excavation to the depth of greater than or equal to six feet, or for any project site that has not had substantial previous excavation. Prior to approval of any construction permits, including but not limited to, the first Grading Permit, Demolition Permit, and Urban Core Development Permit, the Community Development Director shall verify that the requirements for Archaeological Monitoring and Native American monitoring, if applicable, have been noted on the appropriate construction documents.

- The applicant/developer shall submit documentation to the Community Development Director identifying the qualified Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, the areas to be monitored, and a construction schedule indicating when and where monitoring will occur.
- During construction, the monitor shall be present full-time during soil remediation and grading/excavation/trenching activities which could result in impacts to archaeological resources, and shall document field activity and in the case of any discoveries.
- In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the resident engineer or building inspector, as appropriate. The monitor shall immediately notify the PI (unless the Monitor is the PI) of the discovery and the PI and Native American representative, if applicable, shall evaluate the significance of the resource.
- Once encountered, artifacts associated with an archaeological feature or deposit are required to be documented in place, analyzed in a laboratory setting and prepared for curation in accordance with CEQA provisions and local guidelines.
- If human remains are discovered, work shall halt in that area and the procedures set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken.

### **5.3.6 Level of Significance After Mitigation**

The implementation of Mitigation Measures 5.3.5-1, 5.3.5-2, and 5.3.5-4 would reduce potential impacts to historic resources to below a level of significance. In some circumstances, the implementation of Mitigation Measure 5.3.5-3, which provides for documentation of an historic resource, would not mitigate significant impacts to a point where clearly no significant effect on the environment would occur. In that event, a potential impact to historic resources may be significant and unavoidable.

The implementation of Mitigation Measure 5.3.5-5 would reduce potential impacts to archaeological resources to below a level of significance.

## 5.4 Geology and Soils

The following geologic discussion is summarized from the geological reconnaissance survey performed by Ninyo and Moore in 2003 as part of the City of Chula Vista General Plan Update (GPU) process and GPU EIR. Section 5.5 of the GPU EIR pertaining to geology and soils of the GPU area, including the UCSP area, is available for review in its entirety at the City of Chula Vista Planning Department at 276 Fourth Avenue, the Chula Vista Civic Center Library at 365 F Street, or online at the documents page of the City of Chula Vista website at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us). Additional information and mapping refinement was obtained from digital GIS data from the San Diego Natural History Museum and USDA for geologic formations and soils, respectively.

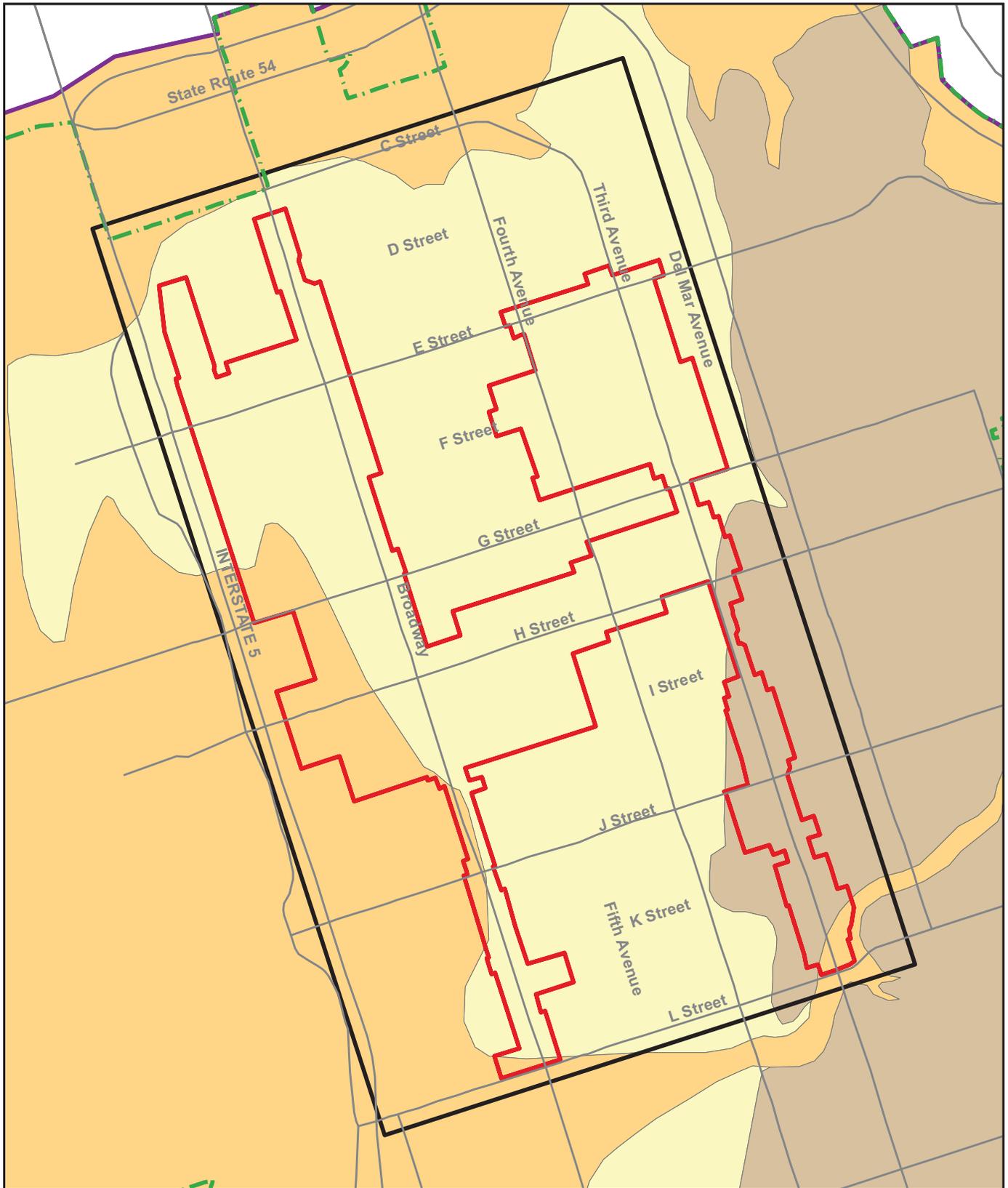
### 5.4.1 Existing Conditions

#### 5.4.1.1 Geologic Setting

The UCSP area is located within the western portion of the Coastal Terraces Geomorphic Province. The general flat topography of this region is largely a factor of deposition at or near sea level in a broad coastal floodplain. For the most part, low topographic relief, extensive residential and commercial development, and widespread native and introduced vegetation characterize the Coastal Terraces Region. The majority of the UCSP area has been previously developed with residential, commercial, and industrial uses. The area is underlain generally by artificial fill, marine terrace deposits (Bay Point Formation and Unnamed Nearshore Marine Sandstone), and materials of the Lindavista Formation. Figure 5.4-1 shows the locations of these geologic formations within the Subdistricts Area.

- ***Artificial Fill (not presented on the Geologic Map)***

Large portions of the western portion of the UCSP Subdistricts Area are underlain by fill material placed during land reclamation projects along San Diego Bay. Large fill areas are located in the vicinity of the west end of H Street. Much of the fill has been placed as hydraulic fill and has not been engineered. It is anticipated that many portions of the Subdistricts Area are underlain by artificial fill placed during the grading of the developments. Due to the scale of the geologic map, fill material was not mapped as a separate unit. Fill materials encountered at specific sites should be evaluated on a case-by-case basis to evaluate the condition of existing fill relative to proposed improvements.



-  UCSP Study Area
-  UCSP Subdistricts Area
-  City of Chula Vista boundary
-  General Plan Update boundary

**Geological Formations**  
(Source: SDNHM, 2004)

-  Qal
-  Qlv
-  Qu



**FIGURE 5.4-1**  
Geologic Formations

- ***Alluvium (map symbol Qal)***

Holocene-age alluvial deposits cover a small portion of the Subdistricts Area from roughly F Street to I Street west of Broadway. Localized deposits of alluvium may also be present beneath the fill in some areas. Alluvial deposits are generally composed of uncemented sand, silt, clay, and gravel with varying amounts of cobbles and gravel. Slope wash/colluvium is generally present along the flanks and base of slopes. These units have not been differentiated from alluvial deposits on the geologic map.

- ***Marine Terrace Deposits (Bay Point Formation, map symbol Qu)***

Quaternary-age terrace deposit sediments, mapped as Bay Point Formation together with an unnamed nearshore marine sandstone, underlie the bulk of the Subdistricts Areas. In general, the marine terrace deposits are composed of yellowish to reddish and light brown, moist to saturated, medium dense to dense, fine to medium sand with varying amounts of silt and clay. The terrace deposits may also be present as weakly cemented sandstone with local fossiliferous or concretion-bearing sandstone beds.

Terrace deposits are generally not susceptible to liquefaction or seismically induced settlement. They commonly possess sufficient bearing capacity to support deep or conventional foundations, and are readily excavatable. Terrace deposits in the plan area generally do not form steep, instability-prone slopes.

- ***Lindavista Formation (map symbol Qlv)***

Materials of the Lindavista Formation are present in the portion of the Subdistricts Area along Third Avenue, south of H Street. Materials of the Pleistocene-age Lindavista Formation are described as consisting generally of reddish brown, moderately cemented, medium- to coarse-grained sandstone, conglomeritic sandstone, and cobble conglomerate. The Lindavista Formation is generally stable and resistant to erosion. This formation possesses good compressibility characteristics, and cut slopes inclined at 2:1 (horizontal:vertical) are generally stable to heights in excess of 50 feet. However, clay and claystone present in the unit may form expansive soils.

#### **a. Soils**

Two main groups of soil types were identified in the GPU EIR as occurring within the Northwest Planning Area, within which the UCSP Subdistricts Area lies. Additional soils data and mapping for the UCSP has identified one main group of soils, the Huerhuero Association, as described below.

### ***Huerhuero Association***

This association is made up of soils that developed on marine terraces. They are generally moderately well drained loams, gravelly clay loams, and cobbly loams that have a subsoil of clay or gravelly clay over a hardpan of cobbly alluvium. They are found on 0 to 50 percent slopes at elevations ranging from sea level to 600 feet AMSL. These soils may be subject to expansion.

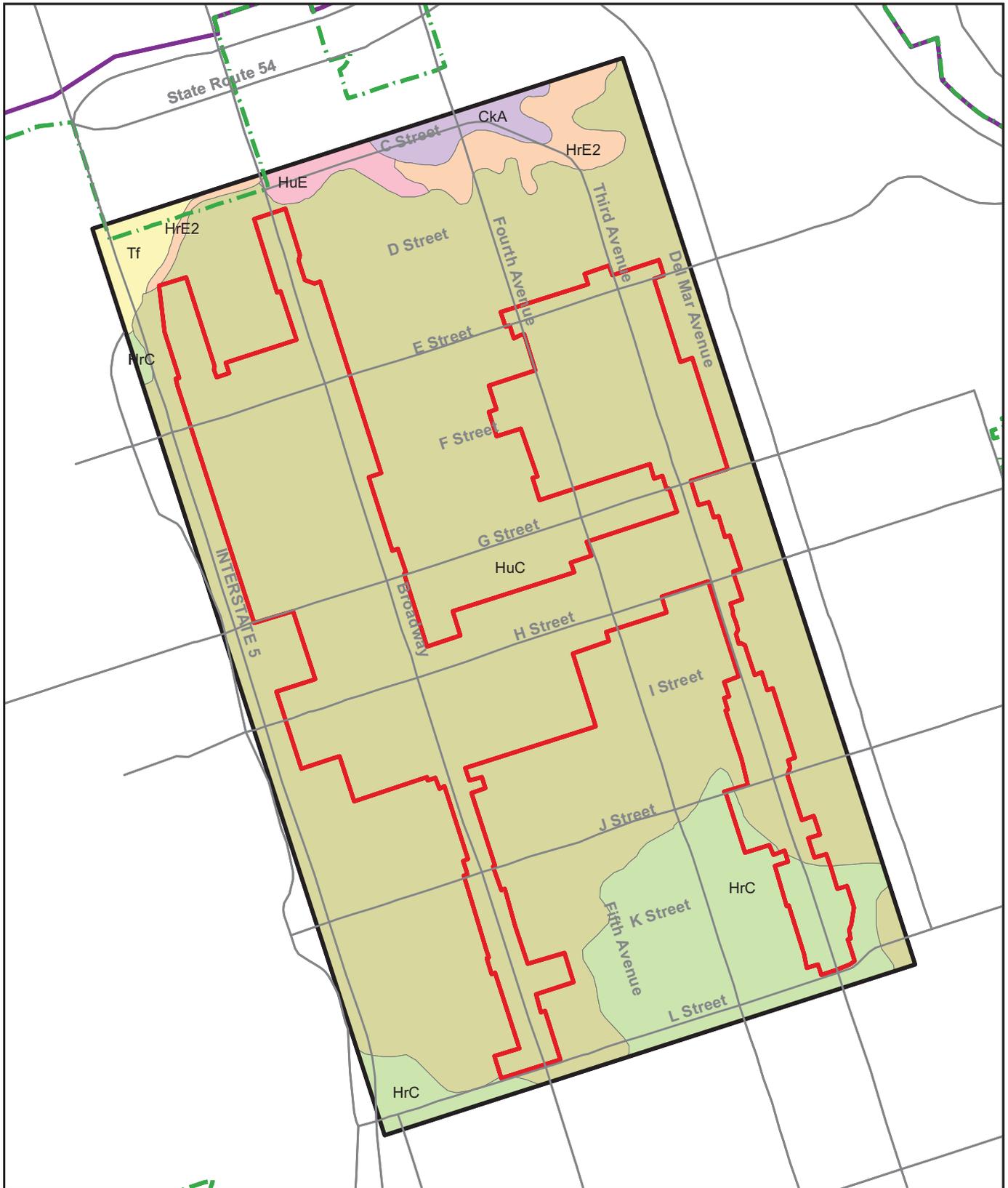
Elevation of the UCSP area ranges from 20 feet AMSL along the western boundary to 90 and 100 feet AMSL in the northeast and southeast corners, respectively. Topographic contours generally trend north and south, roughly paralleling the west and east boundaries of the UCSP boundary. The Huerhuero-Stockpen and Redding-Olivenhain Association soils cover nearly all of the Subdistricts Area, with other soil types occurring in the southeastern tip of the Subdistricts Area along Third Avenue roughly south of K Street.

Figure 5.4-2 shows the approximate locations of these soil types within the Subdistricts Area. This soils mapping was obtained from SANDAG geographic information systems (GIS) and reflects the 1972 U.S. Department of Agriculture (USDA) Soil Survey converted to digital GIS format.

### **b. Faulting and Seismicity**

Chula Vista is situated within a seismically active region. However, the UCSP Subdistricts Area is not underlain by known active fault splays (i.e., faults that exhibit evidence of ground displacement during the last 11,000 years). Ground surface rupture due to active faulting is not considered likely in the plan area due to the absence of any known active faults underlying the plan area. Lurching or cracking of the ground surface as a result of nearby or distant seismic events is also considered unlikely. The Rose Canyon fault, located approximately 14 miles northwest of the UCSP area, is currently classified as "active" by the state of California, and lies within an earthquake fault zone. The Rose Canyon fault has an assigned maximum earthquake magnitude of 6.9 and is most likely to affect the plan area.

Traces of the La Nacion fault zone, considered "potentially active" by the City of Chula Vista and the state of California, are known to exist just east of the Subdistricts Area in a generally north-south direction roughly in the vicinity of I-805. The greatest magnitude earthquake expected on the La Nacion fault is estimated at 6.0. Distances from central Chula Vista to active fault ruptures within 100 kilometers of the site are presented in Table 5.4-1 below.



- UCSP Study Area
- UCSP Subdistricts Area
- City of Chula Vista boundary
- General Plan Update boundary

- Soil Types**
- CkA, Chino silt loam, saline, 0 to 2 percent slopes
  - HrC, Huerhuero loam, 2 to 9 percent slopes
  - HrE2, Huerhuero loam, 15 to 30 percent slopes, eroded
  - HuC, Huerhuero-Urban land complex, 2 to 9 percent slopes
  - HuE, Huerhuero-Urban land complex, 9 to 30 percent slopes
  - Tf, Tidal flats



**FIGURE 5.4-2**  
Soil Types

**TABLE 5.4-1  
DETERMINISTIC SITE PARAMETERS FOR SELECTED ACTIVE FAULTS**

Fault Name	Distance From Site (miles)	Maximum Credible Magnitude	Maximum Credible Site Accelerations (g)
Rose Canyon	10	6.9	0.26
Coronado Bank-Agua Blanca	17	7.4	0.19
Elsinore-Julian	42	7.1	0.06
Elsinore-Coyote Mountain	45	6.8	0.05
Earthquake Valley	46	6.5	0.04
Newport-Inglewood (Offshore)	45	6.9	0.05

SOURCE: Geocon, Inc. 2002, 2003.

g = gravity

Historically, the Chula Vista area has generally been spared a major destructive earthquake. However, based on a search of earthquake databases of the United States Geological Survey (USGS) – National Earthquake Information Center (NEIC), several major earthquakes (Magnitude 5.0 or more) have been recorded within approximately 100 kilometers of the plan area since 1800. Table 5.4-2 summarizes the approximate magnitude and distance to these seismic events.

**TABLE 5.4-2  
HISTORICAL EARTHQUAKES**

Date	Magnitude (M)	Epicentral Distance (Km)
11/22/1800	6.5	48
05/27/1862	5.9	19
02/24/1892	6.7	65
05/28/1892	6.3	96
10/23/1894	5.7	25
11/04/1949	5.7	65
12/22/1964	5.6	93
1/12/1975	5.1	92
7/13/1986	5.8	88

The seismic risk at the Subdistricts site is not considered significantly greater than that of the surrounding developments.

### **c. Groundwater**

The majority of the Subdistricts Area is not expected to be affected by shallow groundwater. Groundwater is expected to occur as relatively shallow in areas mapped as being underlain by fill and unconsolidated alluvial sediments. These areas cover only a small southwestern portion of the Subdistricts Area extending roughly from F to I streets west of Broadway (refer to Figure 5.4-1). The direction of groundwater flow is generally toward the west, with significant local variations. Perched water conditions due to irrigation and runoff may also be present.

#### **d. Liquefaction**

The California Division of Mines and Geology (CDMG) classifies areas with shallow groundwater tables and poorly consolidated granular sediments as having a high potential for liquefaction and seismically induced settlement. As described in the paragraph above, groundwater is likely to be shallow below the existing ground surface in many areas mapped as being underlain by fill and unconsolidated alluvial sediments.

A small portion of the Subdistricts Area contains areas with shallow groundwater tables and poorly consolidated granular sediments potentially subject to hazards associated with seismically induced liquefaction. The liquefaction hazard areas overlay the Subdistricts Area from approximately F to I Streets west of Broadway (refer to Figure 5.4-1).

#### **e. Ground Rupture**

Ground surface rupture due to active faulting is not considered likely in the Subdistricts Area due to the absence of any known active faults underlying the study area. Lurching or cracking of the ground surface as a result of nearby or distant seismic events is also considered unlikely.

#### **f. Landsliding and Lateral Spreads**

Areas of known landslides or areas generally susceptible to landsliding do not occur in the Subdistricts Area.

#### **g. Compressible and Expansive Soils**

Loose compressible soils, including topsoil, colluvium, and alluvium are found over much of the UCSP area and may be subject to expansion. These materials are subject to settlement under increased loads or due to an increase in moisture content from site irrigation or a change in drainage conditions.

#### **h. Tsunamis, Seiches, and Earthquake-Induced Flooding**

The elevation of the Subdistricts Area ranges from 20 to 40 feet AMSL along the western boundary to 90 and 100 feet AMSL in the northeast and southeast corners, respectively. Topographic contours generally trend north to south, roughly paralleling the west and east boundaries of the UCSP area. Elevations of 60 to 90 feet AMSL cover the central part of the Subdistricts Area, with higher elevations of 80 to 100 feet AMSL along Third Avenue.

The Subdistricts Area's elevation as well as its sizable distance inland (approximately two miles from San Diego Bay with an additional one and one-half miles to open ocean) precludes damage wrought by tsunamis (seismically induced waves) or seiches. There

is low potential for earthquake-induced flooding of the Subdistricts Area because the area lacks river tributaries and lakes.

## 5.4.2 Criteria for Determination of Significance

Based on the thresholds identified in Appendix G of the CEQA guidelines, the proposed project would result in a significant impact to geology and soils if it would:

- Criterion 1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - (a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault,
  - (b) Strong seismic ground shaking,
  - (c) Seismic-related ground failure, including liquefaction, or
  - (d) Landslides; or
- Criterion 2: Result in substantial soil erosion or the loss of topsoil;
- Criterion 3: Is located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Criterion 4: Is located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating a substantial risk to life or property; and
- Criterion 5: Has soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for disposal of waste water.

## 5.4.3 Impacts

For ease of discussion, the five significance criteria listed in the previous section have been summarized to one criterion which encompasses all five geologic, soils, and seismic concerns. The criterion is restated as follows:

- **Criterion 1: Expose people or structures to substantial risk or injury or loss of life or destruction of property caused by soils, seismic, or other geologic hazards.**

### **5.4.3.1 Soil Hazards**

#### **a. Expansive Soils**

Expansive soils are potentially present in localized areas throughout the Subdistricts Area. Expansive soils within pavement, foundation, or slab subgrade could heave when wetted, resulting in cracking or failure of these development improvements. The potential for the existence of expansive soils within the Subdistricts Area where future new development and redevelopment would occur comprises a potentially significant impact.

#### **b. Compressible Soils**

Loose or compressible soils are found over much of the UCSP and within the Subdistricts Area. These materials are subject to settlement under increased loads, or due to an increase in moisture content from site irrigation or changes in drainage conditions. Without removal and replacement of compressible soils, new development or redevelopment within the UCSP Subdistricts Area would be subject to potentially significant impacts.

#### **c. Soil Erosion**

Soil erosion or loss of topsoil would be negligible as little existing bare soil exists within the highly urbanized Subdistricts Area. Therefore, soil erosion and loss of topsoil is not a significant impact expected with implementation of the UCSP.

#### **d. Septic Unsuitability**

Soil suitability for septic or alternate waste water systems is not an issue for the Subdistricts Area as sewer systems are available for disposal of wastewater. Soil unsuitability for septic tanks is thus not a significant impact.

### **5.4.3.2 Seismic Hazards**

#### **a. Ground Rupture**

Ground surface rupture due to active faulting is not considered likely in the plan area due to the absence of any known active faults underlying the UCSP area. Lurching or cracking of the ground surface as a result of nearby or distant seismic events is also considered unlikely. Accordingly, there is no potentially significant impact from ground surface rupture.

#### **b. Ground Shaking**

While ground rupture is unlikely, nearby or distant seismic events have the potential to cause ground shaking. The nearest known fault is the Rose Canyon Fault, located

approximately 10 miles northwest of the site. The La Nacion fault zone is potentially active, which means it has not offset geologic formations younger than 11,000 years old and does present a risk to residential and commercial development. The most significant probable seismic event with the potential to affect the Subdistricts Area would be a 6.9 maximum credible magnitude earthquake on the Rose Canyon fault zone, resulting in an estimated peak ground acceleration of 0.26g. While this seismic risk is not considered greater than that of surrounding developments, the potential for damage resulting from possible ground shaking is a potentially significant impact.

### **c. Liquefaction**

Liquefaction is a phenomenon where loose, saturated, and relatively cohesionless soil deposits lose strength during strong ground motions. The alluvial and colluvial deposits underlying the southwestern edge of the Subdistricts Area west of Broadway between F and I Streets, could undergo liquefaction if saturated soils are subjected to ground shaking of sufficient magnitude and duration. This comprises a potentially significant impact.

### **d. Tsunamis, Seiches, and Earthquake-Induced Flooding**

Tsunamis, seiches, and earthquake-induced flooding are not expected to occur in the Subdistricts Area given its distance of over two miles inland and average elevation of 60 to 80 feet above mean sea level. No potentially significant impacts are thus expected as a result of tsunamis, seiches, or earthquake-inducing flooding.

## **5.4.3.3 Other Geologic Hazards**

### **a. Landslides and Lateral Spreads**

Landslides and lateral spreads due to seismic activity or underlying unstable geologic units or soils were not observed within the Subdistricts Area and are not expected to occur. Therefore, there is no potential for significant impacts due to landslides or lateral spreads.

### **b. Groundwater**

Shallow groundwater is likely to occur in areas underlain by fill and unconsolidated alluvial sediments along the northern and western boundary of the Subdistricts Area, west of Broadway between F and I Streets. Shallow groundwater hazards are associated with the potential for liquefaction and seismically induced settlement and its presence in the Subdistricts Area is therefore potentially significant.

### **5.4.4 Summary of Significance Prior to Mitigation**

The UCSP area is potentially subject to strong ground shaking by an earthquake along the active Rose Canyon fault zone, or other active faults in the region. The Subdistricts Area may additionally be subject to liquefaction along its western boundary. Compressible and expansive soils also have the potential to be encountered by future development throughout the Subdistricts Area. Buildout of the UCSP would result in an increase in housing, office space, retail space, and hotels that would be subject to these potentially significant seismic and soils hazards. Therefore, there would be a proportionate increase in personal and property damage as the population within the urban core increases.

Implementation of project-specific mitigation measures as described below would be required to reduce or avoid significant impacts resulting from groundshaking, liquefaction, and compressible and expansive soils.

### **5.4.5 Mitigation Measures**

#### **Mitigation Measure**

5.4.5-1 Prior to the approval of each subsequent development project, the project applicant shall submit a comprehensive soil and geologic evaluation of the project site to the City Engineer and/or Building Official for review and approval. The evaluation shall be prepared by a licensed geotechnical engineer in order to identify site-specific conditions and to determine whether potential soil and geologic hazards exist on the site. The evaluation shall include, but not be limited to, a delineation of specific locations where liquefiable, compressive, and expansive soils would affect structural stability and where graded slopes would expose bedrock susceptible to instability. Liquefiable, expansive, or compressive soils shall be removed from the site and shall be replaced with compacted fill.

#### **Mitigation Measure**

5.4.5-2 Prior to the issuance of a building permit for each subsequent development project, the City Building Official shall verify that the design of all structures proposed for a specific site comply with the requirements of all federal, state and local building codes and regulations governing earthquake safety and structural stability and with the standard practices of the Association of Structural Engineers of California.

### **5.4.6 Summary of Significance After Mitigation**

With application of the above mitigation measures, all potential seismic, geologic, and soils impacts to people and property within the proposed Subdistricts Area would be reduced to below a level of significance.

## 5.5 Paleontology

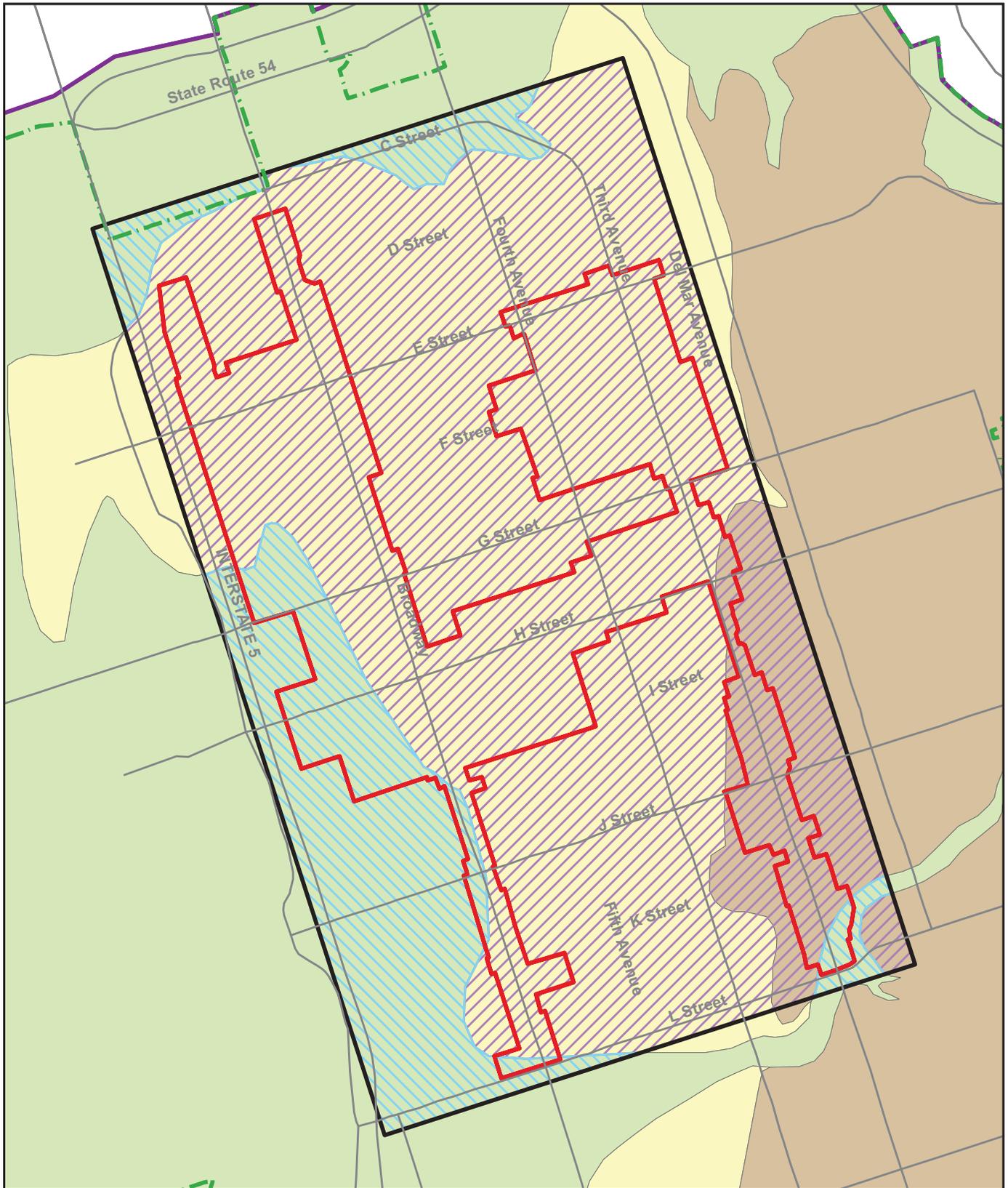
Paleontological resources (fossils) are the remains and/or traces of prehistoric animal and plant life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, leaves, and so on, are found in the geologic deposits (rock formations) within which they were originally buried. Fossil remains are important as they provide indicators of the earth's chronology and history. They represent a limited, nonrenewable, and sensitive scientific and educational resource.

The following discussion of paleontological resources within the UCSP is summarized from information included in the EIR for the City of Chula Vista GPU (Section 5.6) and is available for review in its entirety at the City of Chula Vista Planning Department at 276 Fourth Avenue, the Chula Vista Civic Center Library at 365 F Street, or online at the documents page of the City of Chula Vista website at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us).

### 5.5.1 Existing Conditions

As discussed in Section 5.4, Geology and Soils, the UCSP area is located in the Coastal Terraces Region of Chula Vista. The Coastal Terraces Region of Chula Vista is underlain by a thick accumulation of Pleistocene to recent marine and non-marine sedimentary rocks deposited within a seismically active, fault-bounded, pull-apart basin formed by faults of the Rose Canyon fault zone. These faults generally strike north-south and are responsible for the formation of modern San Diego Bay. The general flat topography of this region is largely a factor of deposition at or near sea level in a broad coastal floodplain. For the most part, the low topographic relief, extensive residential and commercial development, and widespread native and introduced vegetation that characterize the Coastal Terraces Region are also responsible for the limited number of areas where the underlying geology is exposed in outcrop. In turn, this lack of geologic exposure is probably also responsible for the paucity of paleontological collecting sites recorded from the Coastal Terraces Region. These few sites have produced a limited assemblage of terrestrial mammals including fossil species of tapir, horse, and rabbit.

The majority of the UCSP area is underlain with unnamed nearshore marine sandstone (Qu), which is assigned a moderate paleontologic sensitivity rating. Later quaternary alluvium (Qal) and Lindavista Formation (Qlv) additionally occur within the UCSP area and are assigned a low and moderate paleontologic sensitivity, respectively. Figure 5.5-1, Geologic Formations and Paleontologic Sensitivity, shows the location of these formations within the UCSP Subdistricts area. As shown, the Qu geologic formation underlies all of the UCSP Subdistricts area save for a small area of Qal west of Broadway between F and I Streets and a smaller portion of Qlv south of H Street along Third Avenue.



UCSP Study Area

UCSP Subdistricts Area

City of Chula

Vista boundary

General Plan

Update boundary

**Paleontological Sensitivity**

moderate

low

**Geological Formations (draft)**  
(Source: SDNHM, 2004)

Qal

Qlv

Qu



FIGURE 5.5-1

Paleontological Sensitivity

## 5.5.2 Criteria for the Determination of Significance

According to Appendix G of the CEQA Guidelines, impacts to paleontological resources would be significant if the proposed project:

- Criterion 1: Directly or indirectly destroys a unique paleontological resource or site or unique geologic feature.

## 5.5.3 Impact Analysis

### 5.5.3.1 Paleontological Resources/Unique Geologic Features

- **Criterion 1: Directly or indirectly destroys a unique paleontological resource or site or unique geologic feature.**

Nearly all of the UCSP Subdistricts Area is located within Qu and Qlv areas designated as moderately paleontologically sensitive (see Figure 5.5-1). The moderately sensitive areas of the Lindavista Formation (Qlv) with accumulations of colluvial and alluvial deposits and unnamed nearshore marine sandstone (Qu) may be exposed during future grading and construction activities. While no known locations of paleontological resources are available, exposure of these formations would likely result in the unearthing of fossil remains, which could damage the fossils if they were not recovered and salvaged. The occurrence of fossils within the covered bedrock cannot be evaluated prior to exposure. Therefore, grading due to implementation of the UCSP could potentially significantly impact sensitive paleontologic resources.

Buildout of the proposed UCSP may also result in removal of low paleontologically sensitive areas underlain with Quaternary alluvium (Qal). A small area of low paleontologically sensitive Qal is located in the Subdsitricks Area west of Broadway between F Street and I Street. This formation has not yielded any known paleontological resources, and is assigned a low sensitivity rating. Therefore, impacts to this formation would not be considered significant.

Because the UCSP area is fully developed with urban uses, future grading would typically be minimal except in areas with sub-garages and sub-floors. As shown in Table 5.5-1, development proposed in areas of moderate sensitivity (see Figure 5.5-1) that propose to grade in excess of 2000 cubic yards and five feet deep will require mitigation.

**TABLE 5.5-1  
PALEONTOLOGICAL GRADING THRESHOLDS**

Sensitivity Rating	Excavation Volume and Depth Thresholds
High	>1000 cubic yards and >5 feet deep
Moderate	>2000 cubic yards and >5 feet deep
Zero-Low	Mitigation not required

### 5.5.4 Level of Significance Prior to Mitigation

The UCSP area contains a large expanse of moderate paleontological resource sensitivity. Exposure or disturbance of unnamed nearshore marine sandstone and the Linda Vista Formation would potentially significantly impact paleontological resources. Because the UCSP area is fully developed with urban uses, future grading would typically be minimal except in areas with sub-garages and sub-floors. As shown in Table 5.5-1, development proposed in areas of moderate sensitivity (see Figure 5.5-1) that propose to grade in excess of 2000 cubic yards and five feet deep will require mitigation.

### 5.5.5 Mitigation Measures

The following measures will mitigate impacts to paleontological resources resulting from adoption of the UCSP to below a level of significance.

#### Mitigation Measure

5.5-1 Subsequent development projects that propose grading in excess of 2,000 cubic yards and five feet depth in areas of moderate sensitivity for paleontological resources shall be required to implement a pre-construction or construction monitoring program, or both, as a condition of approval. All mitigation programs shall be performed by a qualified professional paleontologist, defined here as an individual with a M.S. or Ph.D. in paleontology or geology who has proven experience in San Diego County paleontology and who is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined here as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.

**Pre-construction mitigation.** This method of mitigation is only applicable to instances where well-preserved and significant fossil remains, discovered in the assessment phase, would be destroyed during initial clearing and equipment movement. The individual tasks of this program include:

1. Surface prospecting for exposed fossil remains, generally involving inspection of existing bedrock outcrops but possibly also excavation of test trenches;
2. Surface collection of discovered fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster jacketing of large and/or fragile specimens or more elaborate quarry excavations of richly fossiliferous deposits;
3. Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;
4. Laboratory preparation (cleaning and repair) of collected fossil remains, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;
5. Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;
6. Transferal, for storage, of cataloged fossil remains to an accredited institution (museum or university) that maintains paleontological collections (including the fossil specimens, copies of all field notes, maps, stratigraphic sections, and photographs); and
7. Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.

**Construction mitigation.** Under this program, mitigation occurs while excavation operations are underway. The scope and pace of excavation generally dictate the scope and pace of mitigation. The individual tasks of a construction mitigation program typically include:

1. Monitoring of excavation operations to discover unearthed fossil remains, generally involving inspection of ongoing excavation exposures (e.g., sheet graded pads, cut slopes, roadcuts, basement excavations, and trench sidewalls);
2. Salvage of unearthed fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster jacketing of large and/or

fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits;

3. Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;
4. Laboratory preparation (cleaning and repair) of collected fossil remains, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;
5. Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;
6. Transferal, for storage, of cataloged fossil remains to an accredited institution (museum or university) that maintains paleontological collections, including the fossil specimens, copies of all field notes, maps, stratigraphic sections and photographs; and
7. Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.

### **5.5.6 Level of Significance After Mitigation**

Compliance with the mitigation measures identified above would reduce potential impacts to paleontological resources to below a level of significance.

## **5.6 Population and Housing**

This section of the EIR addresses potential population and housing impacts from the future growth and development consistent with the UCSP. It should be noted that analyses of citywide population and housing impacts have already been fully evaluated in the GPU EIR and are herein incorporated by reference. The following analysis is intended to focus on the population and housing impacts associated with future infill development within the UCSP Subdistricts Area, which are the areas designated under the GPU to accommodate some of the future planned growth in the City.

### **5.6.1 Existing Conditions**

This section provides an overall discussion of the existing population and housing conditions within the UCSP subdistricts. For the purpose of this discussion, the evaluation of population and housing is based upon 1990 and 2000 U.S. Census data, 2004 SANDAG estimates, 2030 SANDAG projections, and population projections based on the City's recently adopted GPU. The City's GIS database was used to estimate existing housing statistics for the UCSP subdistricts.

#### **5.6.1.1 Population**

According to SANDAG, the total population of the City of Chula Vista, as of January 1, 2004, was approximately 209,436 persons. Since 2000, Chula Vista grew by approximately 20.7 percent or 35,880 persons. By 2030, the City is anticipated to grow by an additional 30 percent or 90,564 persons for a total population of approximately 300,000. 2004 population estimates for the UCSP Subdistricts Area only total approximately 9,546.

#### **5.6.1.2 Housing**

According to SANDAG, the City's total housing stock, as of January 1, 2004, was 71,844. Of this figure, 62 percent (44,732 units) are classified as single family and 33 percent as multifamily (23,314 units).

The majority (i.e. about two-thirds) of existing uses within the UCSP Subdistricts Area are low intensity commercial and office uses, particularly along the major corridors of E Street, Broadway, H Street and Third Avenue. Existing housing stock is estimated to be about 3,700 units and is primarily located between Broadway and Interstate-5, specifically within the UC-14 and UC-10 subdistricts. Housing within these districts is mostly older market rate multifamily units (rental and owner occupied) with mobile homes and limited single-family homes between F and G Streets and south of H Street. In addition, some multi-family and single-family uses are also located in the Village subdistricts, outside of the major corridors of E Street, Fourth and Third Avenue.

Approximately 83% of the existing housing stock in western Chula Vista, including the UCSP Subdistricts Area was built before 1980, indicating that within the 25 year planning horizon of the UCSP substantial rehabilitation or replacement may be needed.

It is estimated that about 55 percent of the existing approximate 3,700 total units are multi-family with single-family homes comprising approximately 18 percent of the total existing housing units. Approximately 27 percent of the existing housing within the UCSP area is comprised of mobile home and trailer parks located within the UCSP Subdistricts Area primarily along the Broadway corridor. The age of the existing housing units in the UCSP Subdistricts Area is generally 40 – 60 years old with some of the existing housing in the Village district dating back to the 1920's and 1930's.

A total of 304 restricted affordable housing units are located within the UCSP Subdistricts Area. These projects have legal covenants restricting occupancy to low income households, and require the units to be preserved as affordable units for a minimum time period. Although some of these housing developments' restrictions may expire during the study horizon of the plan, the City could also extend these restrictions through new agreements. In addition, new units of affordable housing will be created through implementation of the plan in accordance with City policy.

### **5.6.1.3 Plans, Policies, Rules, and Regulations**

There are a variety of existing local and state plans, policies, and regulations that address the City's housing needs and provision of adequate affordable housing. These policies and regulations will be considered, as applicable, as new development occurs in the UCSP Subdistricts Area. The following paragraphs provide brief descriptions of the existing policy and regulatory framework.

#### **a. Housing Element**

The State of California requires a Housing Element as part of a jurisdiction's comprehensive general plan. The Housing Element must address the housing need for all income levels through adequate zoning, policies, and programs. The City of Chula Vista's existing Housing Element (originally created for the 1999-2004 planning cycle) was approved by the State of California in 2000 and then again in 2002.

The 1999-2004 Housing Element contains the following goals and objectives to address a number of important housing-related issues:

- Goal 1: Conserve existing affordable housing opportunities.
- Goal 2: Maintain and enhance the quality of residential neighborhoods in Chula Vista.

- Goal 3: Ensure that an adequate and diverse housing supply is available to meet the City's existing and future needs.
- Goal 4: Increase home ownership opportunities for low- and moderate-income households.
- Goal 5: Enable homeless individuals and families to find permanent housing.
- Goal 6: Encourage energy and waste conservation as an integral part of homes.
- Goal 7: Promote equal opportunity for all residents to reside in housing of their choice.
- Goal 8: Reduction and/or removal to the greatest extent possible of identified constraints to the development, maintenance, and improvement of housing.

The City is in the process of updating the Housing Element to address similar housing needs and policy issues for the 2005-2010 planning cycle. The updated housing needs will be based on the current Regional Housing Needs Assessment (RHNA) approved by SANDAG in 2005. For Chula Vista, the 2005 RHNA establishes a housing goal of approximately 17,000 units citywide in the next 5 year housing cycle to meet housing needs. The total housing needs projections includes goals for all income categories (very low, low moderate and above moderate). One of the primary strategies identified by SANDAG in solving the regional housing needs and creating greater housing opportunities is to promote smart growth land use strategies that encourage construction of multi-family homes and mixed use projects in areas near transit and jobs. This strategy recognizes the near built condition of many of the cities in the region, including Chula Vista, and the need to better utilize the region's scarce land resources.

The following are some of the updated goals and objectives recommended for inclusion in the Housing Element update under preparation for submittal to the State Department of Housing and Community Development (HCD) in May 2006:

1. (2.1) Maintain & Enhance the Quality of Housing and Residential Neighborhoods in the City.
2. (2.2) Support Housing Opportunities to Meet the City's Diverse Needs.
3. (2.3) Fund and Implement Services that Provide Vital Community Resources for Lower Income Residents.
4. (H1) Minimize blighting influences and maintain the integrity of residential neighborhoods.

5. (H3) As required by State law, preserve existing affordable housing opportunities, where feasible and practical, to maintain an adequate supply of affordable housing.
6. (H4) Minimize the impacts associated with the conversion or demolition of rental housing on the housing stock and very low and low income residents.
7. (H5) Encourage the provision of a wide range of housing choices by location, type of unit, and price level, in particular the establishment of permanent affordable housing for low and moderate income households.
8. (H6) Promote the development of varied housing, coupled with appropriate services, to meet the needs of special population groups, those "at-risk" of becoming homeless, persons with physical and/or developmental disabilities, emancipated foster youth, students, athletes at the Olympic Training Center, single-parent households, and seniors.
9. (H7) Facilitate the creation, maintenance, preservation and conservation of affordable housing for lower and moderate-income households through comprehensive planning documents and processes, and the provision of financial assistance and other incentives.
10. (H8) Ensure the availability of housing opportunities to all persons regardless of race, color, ancestry, national origin, religion, sex, disability, marital status, familial status, source of income, or sexual orientation.

### **b. Inclusionary Housing**

Both local City policy and state redevelopment law (Health and Safety Code §§33000 et seq.) set forth inclusionary housing regulations that ensure a balance between affordable and market rate housing opportunities in Chula Vista. New housing developments in accordance with those regulations will provide a net gain of new affordable units to the housing stock in the UCSP area.

- The City's Affordable Housing Policy requires the provision of 10 percent affordable units for new residential developments of 50 units or more.
- Within designated redevelopment project areas, redevelopment law requires at least 15 percent of all new and substantially rehabilitated dwelling units to be available at affordable housing costs to, and occupied by, persons and families of low to moderate income. In addition, whenever low and moderate-income peoples' housing units are destroyed within designated redevelopment project areas, replacement units must be made available. These replacement units

must be made available at an affordable cost for the same income level as that household that was displaced.

## 5.6.2 Criteria for the Determination of Significance

Appendix G of the State CEQA Guidelines outlines the following criteria for determining the significance of impacts to housing and population.

- Criterion 1: Induces substantial population growth in an area, either directly or indirectly;
- Criterion 2: Displaces substantial numbers of existing housing, necessitating the construction ~~or~~ of replacement ~~of~~ housing elsewhere;
- Criterion 3: Displaces substantial numbers of people, necessitating the construction ~~or~~ of replacement ~~of~~ housing elsewhere.

## 5.6.3 Impacts

### 5.6.3.1 Population Growth Inducement

- **Criterion 1: Induces substantial population growth in an area, either directly or indirectly.**

Chula Vista has experienced and is projected to continue to experience significant rates of growth and development over the next 25 years. Between 2004 and 2030, the City's population is expected to increase by over 30 percent, a net gain of approximately 90,564 persons by 2030. Build-out of the UCSP subdistricts over the next 25 years is anticipated to result in a total Urban Core population of 27,864 by 2030, an estimated increase of 18,318 or nearly triple the existing population. This estimate is based on a population generation factor of 2.58 persons per multi-family dwelling unit.

Area	2000	2004	2030	Numeric Change
City	173,556	209,436	300,000	90,564
UCSP		9,546	27,864	18,318

As an implementing document of the General Plan Update, the UCSP is intended to accommodate a portion of the City's projected growth in a logical and deliberate manner that enhances Chula Vista's urban core and augments the City's supply and variety of housing, while addressing and reducing other environmental impacts associated with expanded transportation systems, infrastructure and natural resources. The UCSP would have a beneficial impact on planned population and housing through the implementation of "smart growth" principles, consistent with the GPU, by allowing higher density and intensity development in areas in and around transit and commercial

corridors, and on vacant and underutilized land. The majority of these areas are currently developed with singular commercial, office and residential uses. The UCSP would instead create a mixed used urban environment that is oriented to transit and pedestrian activity while minimizing impacts on stable residential neighborhoods.

The UCSP would induce substantial population growth in the Subdistricts Area, as planned for under the GPU. The UCSP incorporates zoning provisions, development regulations and design guidelines which are intended to accommodate the anticipated population growth. All new development in the Subdistricts Area will be subject to these regulations and guidelines. As a result, the UCSP will not result in a significant adverse impact on population growth. Other potential environmental impacts associated with population growth in the UCSP area (e.g., transportation/traffic, air quality, noise, etc.) are addressed in the relevant sections of this EIR.

### 5.6.3.2 Housing Displacement

- **Criterion 2: Displaces substantial numbers of existing housing, necessitating the construction or replacement of housing elsewhere.**

The 2030 Cities/Counties Forecast developed by SANDAG anticipates that Chula Vista's housing stock will increase by 47 percent to 87,537 units. (Note: These projections do not reflect changes under the General Plan Update). SANDAG also projects that, by 2030, the housing stock will continue to be dominated by single-family homes, but to a lesser degree (58%). Multifamily housing is anticipated to comprise 38 percent of the overall housing stock.

Over the next 25 years, the UCSP is anticipated to increase the housing stock within the urban core subdistricts by up to approximately 7,100 net new dwelling units, for a total of approximately 10,800 units. Using a constant rate of growth, the UCSP could add up to an additional 284 units per year. Depending on the location (i.e. which subdistrict) and size of the subject property, this number of units could reasonably be accommodated within multiple development projects per year.

The additional housing would be created in the form of multi-family dwelling units, and up to 100 percent of the housing units could be multi-family upon complete buildout of the subdistricts, consistent with the UCSP. This would nearly triple the number of existing housing units in the UCSP subdistricts and contribute a significant amount of additional housing to the San Diego and South Bay region that has historically experienced, significant housing deficiencies and escalating housing prices.

The increase in housing is an intended result of the smart growth policies of directing new infill development to areas around transit and commercial corridors, vacant land and underutilized areas. Approximately two-thirds of the existing uses within the Subdistricts Area are low intensity commercial and office uses, particularly along the major corridors

of E Street, Broadway, H Street and Third Avenue. Due to the mixed used nature of planned uses, additional housing would be added to areas that currently may only contain underutilized commercial or office uses as well as areas that are currently developed with lower density housing. This overall increase in the utilization of land resources results in a net increase of housing units.

In addition to adding dwelling units to the City's housing stock, the UCSP's zoning designations and Floor Area Ratios (FARs) will provide for a wide range and variety of housing types throughout the UCSP area. State law and local City policies will also provide for a wide range of affordability in the City and will be considered, as applicable, in conjunction with future development proposals under the UCSP. The UCSP and the City's affordable housing policies and inclusionary requirements will therefore have a beneficial impact on both housing supply and housing affordability within the UCSP area.

While housing may be temporarily displaced during the development of individual project sites, the continuous production of additional housing within the urban core and throughout Chula Vista would ensure the provision of housing within the same area and would not require it elsewhere in San Diego county or neighboring counties. Due to the on-going production of housing in the City, this short-term impact is not considered significant. The UCSP is therefore anticipated to have a beneficial impact on housing supply in a region experiencing significant housing deficiencies and would not necessitate the construction or replacement of housing elsewhere.

### **5.6.3.3 Displacement of People**

- **Criterion 3: Displaces substantial numbers of people, necessitating the construction or replacement of housing elsewhere.**

The UCSP would result in a substantial increase in population over the existing condition. Approximately two-thirds of the existing uses within the Subdistricts Area are low intensity commercial and office uses, particularly along the major corridors of E Street, Broadway, H Street and Third Avenue. As a result, the majority of new development in the UCSP Subdistricts Area is expected to replace these low-intensity non-residential uses with higher intensity, mixed-use development that will provide additional housing units. While people may be temporarily displaced during the development of individual project sites, the continuous production of housing elsewhere within the urban core and throughout Chula Vista would ensure replacement of housing and provide a continuous source of housing options. This additional housing would accommodate the existing and new population and would not require construction of housing elsewhere.

### 5.6.4 Level of Significance Prior to Mitigation

Development under the UCSP would result in a substantial increase in the population of Chula Vista because it would accommodate growth that is planned to occur locally. The UCSP would have a beneficial impact on planned population and housing through the implementation of "smart growth" principles, consistent with the GPU, by directing higher density and intensity development in areas in and around transit and commercial corridors, and on vacant and underutilized land, and would provide housing to help meet the regional housing needs as approved by the State Department of HCD and SANDAG. The development regulations and design guidelines of the UCSP are expected to protect existing, stable residential neighborhoods, reduce urban sprawl, and reduce the direct and indirect impacts of increased population and housing to below a level of significance. The secondary environmental impacts associated with this increased population are discussed in the individual topic sections of this report. Impacts to issues such as traffic, air quality, noise due to population and housing increases consistent with the UCSP are discussed in Sections 5.1 through 5.13 and Chapter 7 of this document.

- **Criterion 1: Induces substantial population growth in an area, either directly or indirectly.**

The UCSP would induce substantial population growth in the Subdistricts Area as planned for in the GPU, by providing development regulations and design guidelines which are intended to direct a portion of the growth which is expected to occur in the City to the Subdistricts Area. The UCSP would have a beneficial impact on planned population and housing through the implementation of "smart growth" principles, consistent with the GPU, by allowing higher density and intensity development in areas in and around transit and commercial corridors, and on vacant and underutilized land. Therefore, the substantial population growth planned for the Subdistricts Area will not result in a significant impact. The secondary environmental impacts associated with this increased population are discussed in the individual topic sections of this report. Impact to issues such as traffic, air quality, noise due to population and housing increases consistent with the UCSP are discussed in Sections 5.1 through 5.13 and Chapter 7 of this document.

- **Criterion 2: Displaces substantial numbers of existing housing necessitating the construction or replacement of housing elsewhere.**

The UCSP will not displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere. The majority of the existing uses in the Subdistricts Area are low intensity commercial and offices uses, particularly along the major corridors of E Street, Broadway, H Street, and Third Avenue. As a result, the majority of new development in the Subdistricts Area is expected to replace these low-intensity non-residential uses with higher intensity, mixed-use development that will substantially increase the number of housing units. Housing that may be removed by

individual projects completed in compliance with the UCSP does not necessitate the construction of housing elsewhere because the overall number of housing units would be accommodated with the UCSP. Therefore, the UCSP will not have a significant impact on the displacement of housing necessitating the construction or replacement of housing elsewhere.

- **Criterion 3: Displaces substantial numbers of people necessitating the construction or replacement of housing elsewhere.**

The UCSP will not displace substantial numbers of people necessitating the construction of replacement housing elsewhere. The majority of the existing uses in the Subdistricts Area are low intensity commercial and offices uses, particularly along the major corridors of E Street, Broadway, H Street, and Third Avenue. As a result, the majority of new development in the Subdistricts Area is expected to replace these low-intensity non-residential uses with higher intensity, mixed-use development that will substantially increase the number of housing units available to people who wish to reside in the project area. Although the removal of existing housing may result in a temporary displacement of some people, the displacement is not considered a significant impact because the numbers of units planned in the UCSP are sufficient to accommodate the affected population. Therefore, the UCSP will not have a significant impact on the displacement of substantial numbers of people necessitating the construction or replacement of housing elsewhere.

### **5.6.5 Mitigation Measures**

No mitigation measures are required.

### **5.6.6 Level of Significance After Mitigation**

Although the UCSP may result in a substantial increase to population and housing in the Subdistricts Area, the increase will not result in significant impacts to population and housing because the UCSP amends existing zoning and provides development regulations and design guidelines which are intended to accommodate the anticipated growth. By directing anticipated growth in the City to the Subdistricts Area, the UCSP may also prevent adverse impacts to population and housing from occurring in other areas of the City which are not designed to accommodate increased growth. See Sections 5.1-5.13 of this EIR for levels of significance after mitigation associated with secondary impacts.

## 5.7 Hydrology and Water Quality

The following analysis of the potential impacts to runoff, flooding, and water quality which may result from the proposed UCSP is summarized from the hydrology study prepared by PBS&J for the GPU EIR. This report is incorporated by reference pursuant to CEQA Guidelines Section 15150 and is available for review in its entirety at the City of Chula Vista Planning Department and Community Development Department at 276 Fourth Avenue, the Chula Vista Public Library Civic Center Branch at 365 F Street, and on the City of Chula Vista website documents page at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us), as Appendix D of the GPU EIR. Additional information was obtained from the San Diego Bay Watershed Urban Runoff Management Program Document prepared by the City of Chula Vista, City of Coronado, City of Imperial Beach, City of La Mesa, City of Lemon Grove, City of National City, City of San Diego, County of San Diego, and the Port of San Diego in January 2003. Further information regarding existing groundwater resources was obtained from the geologic survey conducted for the GPU EIR and summarized in this EIR as Section 5.4, Geology and Soils.

### 5.7.1 Existing Conditions

#### 5.7.1.1 Area Hydrology

The UCSP area is located within the San Diego Bay watershed. The San Diego Bay watershed encompasses a 415-square-mile area that extends north of the border with Mexico, south of Interstate 8, and east from San Diego Bay to the Laguna Mountains. The headwaters of the watershed begin in the unincorporated area of the county and then transect all or portions of seven cities, including Chula Vista.

The San Diego Bay watershed is comprised of three sub-watersheds (or hydrologic units), including the Sweetwater hydrologic unit within which the proposed UCSP area occurs. Covering 230 square miles, the Sweetwater hydrologic unit is the largest of the three hydrologic units encompassing the San Diego Bay watershed. The Sweetwater hydrologic unit is itself divided into three hydrologic areas. The UCSP area occurs within the Lower Sweetwater hydrologic area.

#### a. Surface Water

There are no major surface water bodies within the UCSP area. However, the Sweetwater River and San Diego Bay are two major surface water bodies which occur near the UCSP area. The Sweetwater River occurs approximately a quarter-mile north of and outside the north UCSP boundary. It flows west to the Bay from the Sweetwater Reservoir in the upper reaches of the Sweetwater hydrologic unit roughly 40 miles northeast of the UCSP area. The San Diego Bay lies approximately one and one-half miles west of the west boundary of the UCSP.

San Diego Bay has been extensively developed as a port. Ninety percent of the original mudflats have been filled or dredged for development. Watercourses feeding the Bay have historically included the Sweetwater River, the Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek. However, construction of dams and extensive use of groundwater has reduced input to the Bay from these watercourses by 76 percent. The majority of freshwater input to the Bay comes instead from surface runoff from developed areas and intermittent flow from rivers and creeks during rain events.

The existing quality of runoff in the UCSP area and Sweetwater subwatershed is typical of urban areas. Typical pollutants found in urban runoff include metals, sediments, pesticides, hydrocarbons, nutrients (phosphates and nitrates), surfactants, bacteria and pathogens. Urban runoff comprises the predominant source of water quality degradation in the watershed.

### **b. Groundwater**

Nearly all of the local groundwater basins of the San Diego region have been intensively developed for municipal and agricultural supply purposes. This holds true for the groundwater resources underlying the UCSP area. Historically, groundwater has been used in the City of Chula Vista for drinking water and agriculture; however, due to depletion and degraded water quality it is currently used in limited cases.

Groundwater depths vary throughout the local groundwater basin and UCSP area, depending on topography and underlying geologic formation. Groundwater within the UCSP area is expected to be shallow in the limited, lower elevation areas underlain by fill and unconsolidated alluvial sediments. These areas occur in the UCSP Subdistricts Area, west of Broadway, south of F Street; and at the south end of Third Avenue (refer to Qal in Figure 5.4-1, Geological Formations). Perched water conditions due to irrigation and runoff may also be present. The majority of the UCSP area, however, is expected to have moderately deep groundwater tables.

Recharge to the alluvium is through infiltration of surface flows from streams, rivers, irrigation, precipitation, and groundwater flow from adjacent formations. The UCSP Area overlies the San Diego Formation Aquifer. The San Diego Formation Aquifer is considered to have limited ground water development potential because of poor water quality due to saltwater intrusion from San Diego Bay and low permeability. Most of the groundwater production and recharge occurs within the Sweetwater River Ground Water Basin which lies just outside of the UCSP Area to the north.

### **c. Drainage/Flooding**

Surface watercourses and surface runoff generally flow west, and discharge into the San Diego Bay. The direction of groundwater flow is also generally toward the west, with significant local variations. Urban runoff and stormwater within the San Diego Bay

watershed is conveyed to the Bay via a network of over 200 storm drains. The City of Chula Vista operates and maintains its own drainage and flood control facilities. This system is made up of, among other facilities, improved and unimproved flood control channels, bridge crossings, detention basins, and approximately 312 miles of storm drain pipelines of various sizes. The condition of the overall drainage system is continually monitored for any major deficiencies or problems.

The Federal Emergency Management Agency (FEMA) has mapped zones of anticipated flooding based on base flood elevations for 100- and 500-year flood events, as presented on the Flood Insurance Rate Maps. No areas within the 100-year flood zone are mapped within the UCSP area. The nearest flood hazard areas include potential flooding of the Sweetwater River a half-mile north of the UCSP boundary and potential flooding of the river's mouth at San Diego Bay west of the UCSP boundary approximately one-half mile.

### **5.7.1.2 Regulatory Plans and Policies**

A number of laws, general policies, and regulations govern hydrology and water quality pertinent to the proposed UCSP. This regulatory framework also provides the guidelines and management practices to avoid, minimize, or mitigate adverse impacts to these resources. A description of these regulations is provided below.

#### **a. Clean Water Act**

The Clean Water Act (CWA) is the primary federal law that protects our nation's waters, including lakes, rivers, aquifers, and coastal areas. Section 401 of the CWA requires that any applicant for a federal permit to conduct any activity, including the construction or operation of a facility, which may result in the discharge of any pollutant, must obtain certification from the state. Section 402 of the Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants from point sources. Section 404 of the Clean Water Act established a permit program to regulate the discharge of dredged material into waters of the U.S. Section 303 of the CWA requires states to identify surface waters that have been impaired. Under Section 303(d), states, territories, and authorized tribes are required to develop a list of water quality segments that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology.

California's Porter-Cologne Water Quality Control Act of 1969 (California Water Code §13000 et seq.), provides for aesthetic values, fish and wildlife preservation, water reclamation, and comprehensive planning and regulation to attain the highest "reasonable" water quality in consideration of conflicting demands. The act, which became Division 7 (Water Quality) of the State Water Code, established the responsibilities and authorities of the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs). Each regional board is directed to formulate and adopt a water

quality control plan for all areas within its region. The San Diego RWQCB governs regional water quality issues for the San Diego region, including the City of Chula Vista.

### **b. Point Source Permits (Water Discharge Requirements & NPDES)**

The San Diego RWQCB regulates most point source discharges of waste through the issuance of Waste Discharge Requirements and NPDES permits. As stated above, the CWA Section 402 establishes the framework for regulating storm water discharges from construction, industrial, and municipal point sources under the NPDES. In California, the SWRCB administers the NPDES program through its regional boards. Compliance with these permits requires self-monitoring and reporting to the RWQCB by each individual discharger. All applicable dischargers are required to comply with the conditions of these permits.

### **c. Construction Permit**

All construction activities must comply with all applicable regulations established by the federal EPA NPDES permit requirements for urban runoff and stormwater discharge. Compliance with NPDES includes meeting the requirements of the General Permit for Stormwater Discharges Associated with Construction Activity (General Construction Permit) and filing of a Notice of Intent with the San Diego RWQCB. Compliance with the permit requires that a stormwater pollution prevention plan (SWPPP) be prepared and implemented for any project within the study area. In addition, construction activities must comply with the requirements of the City of Chula Vista's Storm Water Manual, Form 5500.

The Post-Construction Stormwater Management Plan requires that Permanent Best Management Practices (BMPs) be established to prevent the discharge of sediment and other pollutants in stormwater runoff from a completed project. Typical post-development BMPs to treat water quality are concerned with nuisance water and first flush events. This includes the volume of runoff produced from an 85<sup>th</sup> percentile, 24-hour rainfall event.

### **d. The San Diego Municipal Permit**

Under the CWA, municipalities across the nation are issued Municipal NPDES permits (Municipal Permit), which are administered by the SWRCB and RWQCBs. In 1990, under authority of the CWA, but prior to finalization of the NPDES Phase I regulations, the San Diego RWQCB issued its first municipal permit for the San Diego Region (Order 90-42). The Municipal Permit named the 18 municipalities within the county, including the City of Chula Vista, the County of San Diego, and the San Diego Unified Port District as co-permittees. More recently, on February 21, 2001, the San Diego RWQCB adopted Order No. 2001-01, for a new Municipal Permit, which represents the second municipal permit issued to the San Diego County co-permittees.

The minimum requirement of the Municipal Permit is to ensure that pollutants in discharges from storm drain systems owned by the co-permittees are reduced to the maximum extent practicable, and that pollutants in discharges from construction are reduced by employing best available technology. The Municipal Permit outlines the individual responsibilities of the co-permittees including, but not limited to, the implementation of: (1) management programs; (2) BMPs; and (3) monitoring programs.

Each co-permittee is required to implement the requirements of the Municipal Permit across two broad levels of responsibility. Co-permittees have responsibility for the water quality impacts of urbanization within: (1) their jurisdiction, and (2) their watershed(s). The Municipal Permit reflects these two broad levels of responsibility, in that it requires implementation of comprehensive Urban Runoff Management Plans (URMPs) at both jurisdictional and watershed levels.

#### **e. Chula Vista Jurisdictional Urban Runoff Management Program**

At the jurisdictional level, the City of Chula Vista has complied with the condition of the Municipal Permit by producing a Jurisdictional Urban Runoff Management Program (JURMP). The Chula Vista JURMP was submitted to the San Diego RWQCB February, 2002. The JURMP outlines the specific measures the City would take to meet permit requirements including construction, commercial, and industrial site inspections, public education and outreach efforts, dry weather field screening, and enforcement of local stormwater ordinances.

#### **f. San Diego Bay Watershed Urban Runoff Management Program**

The City of Chula Vista, along with seven other municipalities, the County of San Diego, and the San Diego Unified Port District, developed the San Diego Bay Watershed Urban Runoff Management Program (WURMP) to comply with the Municipal Permit's watershed responsibility requirement. The San Diego Bay WURMP identifies and prioritizes watershed water quality problems that can be attributed to urban runoff and provides solutions to mitigate these problems. The San Diego Bay WURMP looks at land use as one component of watershed management and impervious surfaces as a major contributor to water quality degradation.

The San Diego Bay WURMP provides an assessment of the quality of the water of receiving bodies within the watershed and identifies and prioritizes related challenges as well as outlines activities the local jurisdictions will undertake in cooperation with others in order to address the water quality problems that have been identified.

The San Diego Bay WURMP outlines several activities the City of Chula Vista and the other co-permittees have been implementing and will continue to implement over the remaining life of the Municipal Permit. Included in this are four primary objectives which guide watershed management decisions: (1) develop and expand methods to assess and improve

water quality within the watershed; (2) integrate watershed principles into land use planning; (3) enhance public understanding of sources of water pollution within the watershed; and (4) encourage and enhance stakeholder involvement within the watershed. Activities and/or programs developed to achieve these objectives include conducting monitoring programs, enhancing data management, developing education programs aimed at targeting priority pollutants and emphasizing the overall watershed concept, and developing strategies for enhancing inter-jurisdictional planning.

The San Diego Bay WURMP was developed with the input from a diverse set of stakeholders, who will also be an integral part of program implementation. It is the goal of all participating jurisdictions to work cooperatively with other agencies, non-governmental organizations, and private citizens at the watershed level in order to positively affect the water resources of the region and achieve compliance with the Municipal Permit.

#### **g. Chula Vista Development and Redevelopment Projects Storm Water Management Standards and Requirements Manual**

The San Diego Municipal Permit requires co-permittees to develop and implement a program addressing urban runoff pollution issues in development planning for public and private projects. The City of Chula Vista developed the Development and Redevelopment Projects Storm Water Management Standards Requirements Manual (Manual) in November 26, 2002 to address these urban runoff pollution issues. The Manual provides information to applicants for development, redevelopment, and public projects processed through the City on how to comply with permanent and construction storm water requirements. The Manual guides project applicants through the selection, design, and incorporation of storm water BMPs into their projects.

The Manual includes the Standard Urban Stormwater Mitigation Plan (SUSMP), which was developed by the City of Chula Vista to address post-construction urban runoff pollution from new development and redevelopment projects meeting the "priority project" classifications. The primary goal of the SUSMP is to reduce pollutants and runoff flows from all new development and significant redevelopment projects. Additional goals are to develop and implement policies to ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and considers urban runoff flow rates and velocities. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls. The City of Chula Vista developed the SUSMP to identify appropriate BMPs for certain designated project types to achieve this goal. Under the SUSMP, the City of Chula Vista will approve the SUSMP project plan(s) as part of the development plan approval process for discretionary projects, and prior to issuing permits for ministerial projects.

## **h. Chula Vista Growth Management Ordinance Threshold Standard**

The Growth Management Ordinance Threshold Standard for drainage states that storm water flows and volumes shall not exceed City Engineering Standards and that the GMOC shall annually review the performance of the City's storm drain system to determine its ability to meet the goals and objectives above.

## **i. Chula Vista Subdivision Manual**

All development projects are required to adhere to the City of Chula Vista Subdivision Manual. With respect to drainage, the developer of a proposed subdivision is required by this manual to:

1. Accept any drainage entering a proposed subdivision and to provide adequate drainage facilities to convey all drainage on the property to discharge into, or connect to, the drainage facility into which the drainage would naturally flow;
2. Provide on-site storm detention facilities such that post-development flow rate for a given design storm does not exceed the pre-development flow rate at the outlet of the subdivision;
3. Provide on-site erosion protection and de-silting facilities;
4. Provide bonds for the cost of design and construction of any drainage facilities, including but not limited to off-site easements or facilities, necessary to accomplish these responsibilities;
5. Provide all graded pads with adequate drainage facilities as approved by the City Engineer; and
6. Submit plans for all private storm drain systems for review and approval by the City Engineer.

## **5.7.2 Criteria for the Determination of Significance**

Implementation of the proposed UCSP would result in a significant adverse impact to hydrology or water quality if the goals, policies, land use development regulations, or design guidelines of the UCSP would:

- Criterion 1: Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality.
- Criterion 2: Substantially deplete groundwater resources or aquifer recharge areas.

- **Criterion 3:** Substantially alter the existing drainage pattern of the site or area or substantially increase surface runoff in a manner which would result in on- or off-site flooding or exceed capacity of existing drainage systems.

### 5.7.3 Impacts

#### 5.7.3.1 Water Quality Degradation

- **Criterion 1:** Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality.

The WURMP for the San Diego Bay Watershed views land use as a significant component of watershed management and identifies impervious surfaces as being a major contributor to water quality degradation of both surface water and groundwater. The replacement of absorptive land surfaces (such as parks, agriculture, vacant lots, and native habitat) with impervious surfaces typically results in reduced ground absorption and increased surface runoff rates and/or volumes. This may lead to increased soil erosion and sedimentation of receiving waters. Pollutant concentrations of surface runoff also typically increase, as land use is intensified and urbanized.

The UCSP proposes redevelopment of an already highly urbanized built environment. Few vacant lots, parks or other undeveloped surfaces currently exist within the UCSP area. However, the proposed UCSP comprises a three-fold increase in population and associated intensification of existing urban land uses which would likely result in a substantial increase in direct runoff to drainage basins, municipal storm sewer systems, and eventual drainage to surface water and/or the ocean. This runoff will likely contain typical urban runoff pollutants such as sediment, pathogens, heavy metals, petroleum products, nutrients (phosphates and nitrates) and trash. The long-term operational impacts to water quality which may result from buildout of the UCSP could incrementally decrease water quality and impair the beneficial uses of receiving water bodies, thus resulting in a significant impact.

The potential long-term impacts to water quality which may result from implementation of the proposed UCSP would be required to be reduced to acceptable levels through the mandatory controls imposed by local, state and federal regulations described in Section 5.7.1.2. The increase in urban runoff attributed to long-term implementation of the UCSP would be ensured to remain below a level of significance through mandatory adherence of future development to federal, state and local water quality controls (e.g. JURMP, SUSMP, NPDES, SWPP, and City Development and Redevelopment Projects Storm Water Manual). The long-term BMPs required by the SUSMP and Storm Water Manual would protect against long-term significant water quality impacts from future development of the UCSP.

Both the future land development construction drawings and associated reports will be required to include details, notes, and discussions relative to the required or recommended

BMPs. Some site design features that can be incorporated in the planning and design of development projects to mitigate their negative impacts include, but are not limited to the following:

- Minimize impervious footprints
  - Minimize widths of streets and sidewalks without compromising safety and regulatory requirements.
  - Use permeable surfaces for low traffic and pedestrian areas where feasible.
  - Avoid decorative hardscape areas and consider landscaping where feasible.
  - Design driveways with unit pavers or crushed aggregate surfaces or, pave under wheels only
- Conserve natural resources and areas
- Use drought tolerant native plants in landscaping
- Use vegetated swales instead of gutters where feasible
- Minimize directly connected impervious areas
  - Direct runoff from roofs and parking areas to landscaped areas before discharge to underground drainage systems
  - Incorporate vegetated filter strips between impervious areas and drainage systems
- Protect slopes and channels
- Use landscaped areas to act as water quality features by grading to have a slightly concave slope, thereby acting as retention/detention basins.

The type and extent of future projects' design features and incorporated BMPs would be tailored to the individual projects based on site-specific conditions and the planned land uses to be constructed on the site.

Certain elements of the proposed UCSP land use development regulations and design guidelines potentially allow for a more ecologically sophisticated built environment in the urban core: one that prioritizes pedestrian, cycling and public transit over the automobile, creates a mix of uses to meet area needs, and encourages sustainable building practices. A couple of key tenants of sustainable building practices could contribute to a better local hydrology. First, sustainable building design and materials include proven technologies to reduce energy, water, and toxic materials inputs and subsequent waste outputs ([www.usgbc.org](http://www.usgbc.org)). A second hydrologic advantage of sustainable building practices are the application of "green" or "living" roofs which are essentially vegetated sod roofs that have been proven to absorb and filter urban runoff ([www.greenroofs.org](http://www.greenroofs.org)).

These and other "green building" practices are encouraged in the UCSP through its Environmental Sustainability Goals contained in Chapter VII and through provision of incentives to green builders contained in Chapter VI. Chapter VII, Section 5, of the UCSP contains an overview of the techniques and advantages of green building practices, and an outline of the established green building rating systems and guidelines, including at the national level, the US Green Building Council's (GBC) Leadership in Energy and Environmental Design (LEED) green building rating system. The LEED is a voluntary, national standard for developing high-performance, sustainable buildings. The GBC has

four LEED levels, in descending levels of performance: platinum, gold, silver, and certified, which were developed by GBC membership representing every sector of the building industry.

The purpose of UCSP Chapter VII, Section 5, Environmental Sustainability Goals, is to "assure that further commercial and civic development meets the City's sustainability goals by incorporating green building measures into the design, construction, and maintenance of buildings" (p. VI-123). The City of Chula Vista has embraced the goals of LEED by stating that "all newly constructed City sponsored building in the urban core should incorporate sufficient green building methods and techniques to qualify for the equivalent of LEED Silver" (p. VI-129).

Green building practices are not required for private development within the UCSP area. However, the environmental sustainability goals expressed in the UCSP include the statement that "City and staff should work with residents businesses, and other members of the community, including architects, builders, and contractors to encourage private development within the City that uses green building methods and practices" (p. VII-129). In addition, the Urban Amenities Table of the UCSP Chapter VI, Land Use and Development Guidelines, includes the incentives of FAR increases and priority permit review for projects that qualify for LEED certification (p. VI-51). To earn LEED certification, the applicant's project must satisfy all of the prerequisites and a minimum number of points to attain a LEED certified rating level. This certification process includes a LEED Scorecard, which future project applicants will submit to the Community Development Director with their UCDP application. Incorporation of green building design into subsequent individual development projects may additionally serve to reduce potential water quality impacts.

In addition to the potential long-term, buildout effects of the proposed UCSP to water quality described above, short-term construction activities can also potentially contribute to the degradation of a local surface or groundwater regime. Through direct discharge of pollutants (fuels, solvents, surfactants), soil excavation, and through the encountering of shallow groundwater during subfloor grading, construction practices pose potentially significant short-term water quality impacts.

However, construction activities would be subject to specific conformance requirements of the State Water Resources Control Board's General Construction NPDES Permits, including the implementation of an approved SWPPP and monitoring/testing program, with pollution control measures involving the use of best available technology, best conventional pollutant control technology, and/or best management practices pursuant to direction by the SWRCB and the applicable RWQCB office. BMPs required as part of the SWPP would prevent significant water quality impacts during construction. In addition, Waste Discharge Permits required for groundwater discharge and dewatering during construction would avoid significant water quality impacts from this practice.

### 5.7.3.2 Groundwater Depletion

- **Criterion 2: Substantially deplete groundwater resources or aquifer recharge areas.**

Depletion of groundwater resources or aquifer recharge can potentially result from direct withdrawals of groundwater from a productive groundwater basin and/or indirect reduction of groundwater recharge through a decrease in the absorptive ground surface of productive groundwater recharge basins or aquifer recharge areas. As described in Existing Conditions, the UCSP area is underlain by the San Diego Formation Aquifer which is considered to have limited groundwater potential along the coast because of poor quality due to saltwater intrusion from San Diego Bay. The productive portions of this aquifer occur east of the UCSP area, well beyond the Subdistricts Area, in the undeveloped eastern portions of the City. Similarly, the productive Sweetwater River Ground Water Basin lies outside of the Subdistricts Area to the north, along the Sweetwater River.

Potable water supply to the UCSP area is, and will continue to be, provided by the Sweetwater Authority from a combination of a small local supply (obtained from eastern groundwater wells and a desalination facility) augmented by imported water purchased from the Metropolitan Water District, which in turn purchases water rights from the Colorado River. Section 5.12.1 of this EIR contains further discussion of water supply issues including groundwater resources. The Sweetwater Authority has verified availability of future water supplies to serve the proposed UCSP without depletion of groundwater resources (refer to Section 5.12.1). Therefore, impacts to groundwater resources availability resulting from implementation of the proposed UCSP would not be significant.

### 5.7.3.3 Drainage/Flooding

- **Criterion 3: Substantially alter the existing drainage pattern of the site or area or substantially increase surface runoff in a manner which would result in on- or off-site flooding or exceed capacity of existing drainage systems.**

The UCSP area is highly urbanized, largely flat and paved with impervious surfaces, and contains very little vacant land. The physical drainage pattern of the urban core will not be substantially altered through implementation of the UCSP, as the UCSP does not propose changes to the topography of the area. The UCSP does, however, allow for a three-fold increase in population at buildout, and associated intensification of urban land uses, which may substantially increase surface runoff. However, drainage basins serving the UCSP area, the Sweetwater Basins 3 and Central Basin 1/3/4/5 and 2 would be negligibly impacted by implementation of the proposed UCSP. When compared to existing conditions, land use associated with redevelopment and implementation of the UCSP is generally similar in nature from a perspective of hydrologic response. That is, the typical percentage of imperviousness for a given parcel of land is similar between the existing and redeveloped condition. Therefore, within these developed watersheds, implementation of the UCSP will

result in minimal impacts to the existing drainage infrastructure. In addition, proposed improvements to existing curbs, gutters and sidewalks through the streetscape enhancements to E Street, F Street, H Street, Broadway and Third Avenue, as described in Chapter 5 and 8 of the UCSP, will reduce drainage impacts. Thus, the existing drainage capacity would not be exceeded in a manner which would result in on- or off-site flooding, thus impacts to Criterion 3 are not considered significant.

Provisions of the UCSP which will improve the drainage pattern of the area and reduce runoff rates include an increase in park and open space areas and incentives for sustainable building practices which will result in the increase of permeable areas and the reduction of runoff rates. The UCSP's provisions for sustainable building practices are described above in Section 5.7.3.1. In addition to architectural green building and green roofs described above, sustainable building practices also include "bioswales" (vegetated swales) and other stormwater best managements practices that go beyond local code and seek to detain and treat stormwater prior to entering storm drains and/or water bodies (UCSP, Chapter VII, p. VII-132). As described above in Section 5.7.3.1, Green Building practices are not required of subsequent development, but are offered incentives in the form of FAR increases and priority permit review for qualifying projects.

#### **5.7.4 Summary of Significance Prior to Mitigation**

Implementation of the proposed UCSP would allow for a three-fold increase in population and associated intensification of existing urban land uses which will result in an increase in direct runoff to drainage basins, municipal storm sewer systems, and eventual drainage to surface water and/or the ocean. This runoff will contain typical urban runoff pollutants such as sediment, pathogens, heavy metals, petroleum products, nutrients (phosphates and nitrates) and trash. Therefore, this comprises a potentially significant long-term water quality impact.

The construction activities of subsequent individual projects would also potentially cause short-term water quality impacts through direct discharge of pollutants, soil excavation/sedimentation, and through encountering of shallow groundwater during subfloor grading. This comprises a potentially significant short-term water quality impact.

The UCSP area does not overlie a productive groundwater recharge basin or aquifer recharge area. The San Diego Formation Aquifer, which underlies the UCSP area, is of marginal groundwater use because of poor quality due to saltwater intrusion from nearby San Diego Bay. Potable water supply to the UCSP area is, and will continue to be, provided by the Sweetwater Authority from a combination of local supply (obtained from eastern groundwater wells and a desalination facility) augmented by imported water purchased from the Metropolitan Water District. The Sweetwater Authority has verified availability of future water supplies to serve the proposed UCSP without depletion of groundwater resources

(refer to Section 5.12.1). Therefore, impacts to groundwater resources availability resulting from implementation of the proposed UCSP would not be significant.

The physical drainage pattern of the urban core will not be substantially altered by implementation of the UCSP. The UCSP area is highly urbanized, flat, paved with impervious surfaces, and contains very little vacant land. Development in accordance with the UCSP will not substantially alter this existing topography and associated drainage patterns. The three-fold increase in population and associated intensification of urban land uses allowed in the UCSP, will, however, increase surface runoff. Even assuming this increase, when compared to existing conditions, land use associated with redevelopment and implementation of the UCSP is generally similar in nature from a perspective of hydrologic response. Because the typical percentage of imperviousness for a given parcel of land is similar between the existing and redeveloped condition implementation of the UCSP will result in minimal impacts to the existing drainage infrastructure. In addition, proposed pavement improvements combined with sustainable building incentives will reduce drainage impacts. Thus, the existing drainage capacity would not be exceeded in a manner which would result in on- or off-site flooding, and drainage and flooding impacts are thus not considered significant.

### **5.7.5 Mitigation Measures**

Adherence to mandatory existing federal, state, and local regulations governing runoff, drainage and the release of pollutants into surface and ground waters will provide sufficient protection against potential significant hydrology and water quality impacts. As a condition of approval, all subsequent development projects shall comply with these applicable federal, state and local laws, as outlined in the following mitigation measures to ensure that hydrology and water quality impacts are reduced to below a level of significance.

#### **Mitigation Measure**

- 5.7-1 Prior to approval of subsequent individual development projects, compliance with all applicable federal, state and local laws and regulations regarding water quality (e.g. JURMP, SUSMP, NPDES, SWPP, and City Development and Redevelopment Projects Storm Water Manual) shall be demonstrated to the satisfaction of the City Engineer.
- 5.7-2 Prior to approval of subsequent individual development projects, project applicants are required to identify storm water pollutants that are potentially generated and shall demonstrate to the satisfaction of the City Engineer that the proposed on-site storm drain systems fully mitigate drainage impacts and meet all federal, state, and regional water quality objectives and all City standards and requirements. Land development construction drawings and associated required reports, i.e., a hydrology and water quality study, shall include details, notes, and discussions relative to the

required or recommended retention measures and Best Management Practices (BMPs). Permanent storm water BMP requirements shall be incorporated into the project design and all subsequent individual development projects are required to complete the applicable Storm Water Compliance Forms and comply with the City of Chula Vista's Storm Water Management Standards Requirements Manual.

- 5.7-3 The City of Chula Vista requires that all new development and significant redevelopment projects comply with the requirements of the NPDES Municipal Permit, Order No. 2001-01. According to said permit, all projects falling under the Priority Development Project Categories are required to comply with the Standard Urban Storm Water Mitigation Plans (SUSMP) and Numeric Sizing Criteria. Future projects shall comply with all applicable regulations, established by the United States Environmental Protection Agency (USEPA), as set forth in the National Pollutant Discharge Elimination System (NPDES) permit requirements for urban runoff and storm water discharge, and any regulations adopted by the City of Chula Vista pursuant to the NPDES regulations and requirements. Further, the applicant shall file a Notice of Intent (NOI) with the State Water Resource Control Board to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity and shall implement a Storm Water Pollution Prevention Plan (SWPPP) concurrent with the commencement of grading activities. The SWPPP shall include both construction and post-construction pollution prevention and pollution control measures, and shall identify funding mechanisms for the maintenance of post-construction control measures.
- 5.7-4 Prior to issuance of an Urban Core Development Permit or other discretionary permit, all subsequent individual development projects shall demonstrate to the satisfaction of the Community Development Director, conformance with Mediterranean/indigenous landscaping and other relevant design recommendations provided in UCSP Chapter VII Development Design Guidelines.

### **5.7.6 Summary of Significance After Mitigation**

No significant hydrology or water quality impacts would occur with approval or implementation of the proposed UCSP given adherence of subsequent development projects to mandatory federal, state and local regulations governing hydrology and water quality as identified in Mitigation Measures 5.7-1, 5.7-2, 5.7-3, and 5.7-4.

## **5.8 Traffic, Circulation, and Access**

The UCSP is intended to implement the objectives and policies of the GPU for the Urban Core Area, including those objectives and policies set forth in the Urban Core Circulation Element of the GPU. The EIR certified for the GPU included an analysis of potential impacts to transportation and traffic which specifically addressed potential impacts to roadways in the Urban Core Area. The analysis of the UCSP's potential impacts on traffic, circulation and access which follows is based on the analysis of the GPU's potential impacts on transportation and traffic in the Urban Core and the supporting technical analysis prepared by Kimley-Horn and Associates, which are contained in Section 5.10 and Appendix E of the Final EIR for the GPU (EIR #5-01/SCH #2004081066) and which are incorporated here by this reference pursuant to CEQA Guidelines section 15150. The Final EIR and appendices for the GPU are available for review at the City of Chula Vista Planning Department, 276 Fourth Avenue, Chula Vista, at the Chula Vista Public Library (Civic Center Branch), 365 F Street, Chula Vista, and on the City of Chula Vista's website at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us).

Kimley-Horn and Associates, Inc. has prepared an analysis of transportation/traffic impacts (Appendix C), dated October 2005, resulting from buildout of the proposed project. The following discussion provides a summary of this analysis and presents other forms of mobility proposed in the UCSP. Please refer to Appendix C for more detailed technical information.

### **5.8.1 Existing Conditions**

The traffic impact analysis (TIA) prepared by Kimley-Horn and Associates evaluated the potential traffic-related impacts associated with the adoption of the Chula Vista Urban Core Specific Plan. The study defines the appropriate geometric design of the urban arterials, as defined in the Chula Vista General Plan Update. In addition, this study recommends mitigation measures for any potential traffic impacts associated with the project and will serve as the traffic impact analysis for future redevelopment projects consistent with the Urban Core Specific Plan.

#### **5.8.1.1 Regulatory Requirements**

##### **a. City of Chula Vista General Plan Update**

Section 9.4 of the proposed Land Use and Transportation Element presents the following vision of the Urban Core:

The Urban Core Subarea has developed into a vibrant area, with housing, shops, restaurants, entertainment, and activities that attract from eastern Chula Vista and city-wide. Higher density housing, shopping, and job

centers located near existing and planned transit stations give people transportation choices, encourage the use of mass transit, and help to reduce vehicular traffic. A network of linked urban parks and plazas creates pleasant pedestrian routes and provides areas for community activities. Increased population (residents and workers) in the Urban Core Subarea has created opportunities for more shops and a variety of restaurants. Entertainment and cultural arts are housed in new and renovated buildings, offering both day and evening activities. The streets are bustling with shoppers and people enjoying outdoor dining or heading to entertainment venues.

A grade-separated trolley line at E and H Streets has improved the flow of east-west traffic, while a local shuttle provides frequent service between Urban Core Subarea activity centers. The Bus Rapid Transit (BRT) line allows residents in the East Planning Area convenient access to the Urban Core Subarea.

F Street is a pedestrian-oriented promenade that links Third Avenue, the Civic Center, Broadway, the E Street transit center, and the Bayfront Planning Area with themed landscaping and public art. The freeway crossings of Interstate 5 have been widened to accommodate additional pedestrian use, and entryways into the Urban Core Subarea are enhanced and inviting. Chula Vista's Urban Core Subarea has matured into an urban, pedestrian-oriented, active area that continues to be the primary economic, governmental, and social focal point of the south San Diego County region.

The proposed General Plan Update also includes four primary objectives addressing urban mobility, namely Objectives LUT 26, 47, 48, and 49. Objective LUT 47 states:

Establish roadway classifications in the Urban Core that respond to the special operating characteristics of roadways within a more urbanized environment, accommodate slower speeds in pedestrian-oriented areas, and facilitate multi-modal design elements and amenities.

Objective LUT 49 and select associated policies advance urban mobility. Objective LUT 49 states:

Encourage redevelopment, infill, and new development activities within the Northwest's Urban Core Subarea that would provide a balance of land uses, reinforce its identity as Chula Vista's central core, and complement land uses in other planning areas, including the Bayfront and East Planning Areas.

Objective LUT 49 also establishes design policies to assure that Urban Core development follows specific standards. These design policies include:

- LUT 49.15: Recognize that different portions of the Urban Core Subarea have a desirable character, and develop specific plans and programs to strengthen and reinforce their uniqueness. Develop land use, density, special design features, and building guidelines for appropriate Focus Areas.
- LUT 49.16: Prepare urban form guidelines and standards for development as part of the Urban Core Specific Plan.
- LUT 49.17: Establish policies, development standards and/or design guidelines in the Urban Core Specific Plan to address where high-rise buildings should be concentrated, how to establish and/or reinforce pedestrian-scaled development, and how site and building design should respond to public view corridors.
- LUT 49.18: With the adoption of the Urban Core Specific Plan, establish design standards for mixed-use development that achieves a high quality pedestrian-scaled environment and promotes side or rear located parking areas, streetfront windows and entries, and public and private open space.
- LUT 49.19: With the adoption of the Urban Core Specific Plan, create a pedestrian-oriented realm by requiring retail or public uses at the ground floor of buildings.
- LUT 49.20: Encourage the linkage and integration of new development with existing neighborhoods by means of open space areas, parks, and pathways as a means of enhancing pedestrian connections.
- LUT 49.21: Where a park, natural open space, or urban open space exists adjacent to or near a transit-oriented development, these features should be incorporated into the development as open space amenities.
- LUT 49.22: Require that the ground floor of parking structures located along primary street frontages in pedestrian-oriented districts be designed to promote pedestrian activity and, where appropriate, incorporate retail uses.
- LUT 49.24: Reinforce or encourage the establishment of a strong pedestrian orientation in designated districts, activity centers, and pedestrian-oriented Focus Areas, so that these areas may serve as a focus of activity for the surrounding community and a focus for investment in the community.

Mobility policies that are tied to this urban development are addressed in Objective LUT 48. Objective LUT 48 states, "Increase mobility for residents and visitors in the Urban Core Subarea." The policies to achieve this objective include:

- LUT 48.1: Create safe and convenient pedestrian access to, from, and within the Urban Core Subarea.
- LUT 48.2: Provide adequate sidewalk space on heavily traveled pedestrian corridors within the Urban Core Subarea.
- LUT 48.3: Provide mid-block pedestrian crossings and sidewalk curb extensions, where feasible, to shorten pedestrian walking distances.
- LUT 48.4: Locate secure bicycle parking facilities near transit centers and major public and private buildings.
- LUT 48.5: Encourage the establishment of a transit shuttle system that connects the Downtown Third Avenue District to the City's Bayfront Planning Area. Connections with the Civic Center and transit stations on E and H Streets should be considered as priorities.
- LUT 48.6: Design and implement a system of landscaped pedestrian paths that link important features within Downtown, especially an F Street Promenade that will link the Bayfront Planning Area with Broadway and Downtown Third Avenue.

The General Plan Update indicates that in order to help promote pedestrian friendliness, these streets would provide, in varying amounts, the following generalized amenities:

- Way finding maps, grated planters, trash receptacles, and benches strategically located throughout the Urban Core Subarea. Streetscapes should be designed with inviting sidewalks that should be passable without having to maneuver around hedges or other obstacles.
- On-street parking, limited driveway cuts, and landscaping or planting strips, which create a buffer between traffic and pedestrians and provide canopy shade. A well-designed streetscape makes people feel comfortable and invites and motivates residents to walk or bike to destinations, such as shopping or work. Urban Core Subarea street design should include mid-block crosswalks and neighborhood passthroughs to future open space areas and common areas. This helps to create a human scale.
- Behind the sidewalk, easily accessible building entrances with minimum building setbacks, windows at street level, and no blank walls on adjacent buildings.

- Distinctive public transit amenities to increase ease of use and attractiveness of neighborhoods. Transit amenities should include next bus information kiosks, bicycle facilities and interconnections to other routes and bikeways, bike racks, lockers and shower facilities. The objective of this design is to reinforce bikes as a mode of transportation connected to and coordinated with other modes and bus lines, to connect people and places through a complete street network that invites walking and bicycling, thereby providing convenient public access.

Finally, Objective LUT 26 stresses the intent of the City to “Establish an Urban Core Improvements Program for the Urban Core Subarea.” Policies associated with this objective include:

- LUT 26.1: Through the Urban Core Specific Plan, determine an urban framework for streets and gateways, transit accommodation, a network of parks and urban plazas, pedestrian-oriented streets, pedestrian and bicycle linkages, and activity nodes.
- LUT 26.2: Establish an Urban Core Improvements Program that addresses the urban framework elements, implements Urban Mobility techniques and parking strategies, determines what is needed in various areas; and sets priorities for implementation.
- LUT 26.3: Develop methods to finance the Urban Core Improvements Program, including but not limited to Developer Impact Fees, tax increment financing (in redevelopment areas), and/or an incentives program.

As part of achieving improved mobility, the General Plan Update proposes to adopt a transit system that is compatible with the Regional Transit Vision (RTV) established by SANDAG. The RTV includes bus rapid transit (BRT) routes in the City of Chula Vista, as a priority in the MOBILITY 2030 Regional Transportation Plan (RTP). The San Diego Trolley Blue Line passes through the western part of the City of Chula Vista along the east side of I-5, with stations at Bayfront/E Street, H Street, and Palomar Street.

The Urban Core Circulation Element of the GPU, as shown in Figure 5.8-1, promotes the use of revised level of service standards for certain corridors and centers served by transit, alternative ways of measuring level of service for vehicles, and possibly establishing level of service criteria and performance measures for other modes of travel. The following steps were taken to develop the Urban Core Circulation Element in western Chula Vista:

1. **Identification of the following context-specific street classifications.** The following roadway classifications are proposed within the Urban Core and its immediate environs:



FIGURE 5.8-1  
General Plan Update  
Urban Core Circulation Element

- **Gateway Street:** these roadways (segments of Broadway, Fourth Avenue, E Street, H Street, J Street, and L Street) connect the Urban Core to SR-54, I-805, and I-5. These facilities are analogous to six- or four-lane major roads in other parts of the city, but would provide special design features and amenities to encourage access for the full spectrum of travel modes. These streets would be the major entry points to and from the Urban Core, and special landscape and entry treatments would be incorporated into the design. The acceptable capacity for a six-lane Gateway Street is 61,200 average daily traffic (ADT) and for a four-lane Gateway Street is 43,200 ADT.
  - **Urban Arterial:** these roads include portions of E Street, H Street, and Fourth Avenue. In terms of cross section, urban arterials are similar to four-lane major roads in other areas of Chula Vista, but with special features to support multi-modal trip-making, such as wider sidewalks, transit station curb “bulb outs,” and pedestrian amenities. The acceptable capacity for an Urban Arterial is 37,800 ADT.
  - **Commercial Boulevard:** these streets include segments of Broadway and Third Avenue (north of E Street and South of H Street) and would serve existing and future shopping districts. Design would be generally consistent with four-lane majors in other areas, but with special design features reflecting the multi-modal nature of streets in more urban areas. The acceptable capacity for a Commercial Boulevard is 33,750 ADT.
  - **Downtown Promenade:** these roads (including portions of F Street and Third Avenue) would provide access to retail establishments in the heart of the Urban Core. Street cross sections would be similar to a two-lane collector and four-lane collector, but with multi-modal features and amenities that accommodate the surrounding urban context. The acceptable capacity for a Downtown Promenade is 14,400.
2. **Development of capacity standards for the Urban Core Circulation Element.** The capacities for the Urban Core Circulation Element were developed based on Highway Capacity Manual (HCM) procedures. The capacities were obtained from the *Generalized Planning Analysis*<sup>1</sup> method, which provides a method for estimating 24-hour street segment capacity using *Highway Capacity Manual* (HCM) 2000 procedures<sup>2</sup>. Whereas ADT-based thresholds in the City of Chula Vista, and many other communities, have evolved over time, the Generalized Planning Analysis method provides a scientific method to relate peak hour HCM-calculated results to acceptable ADT volumes on certain classes of roads. The acceptable 24-hour volume is adjusted to account for

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<sup>1</sup> Florida Department of Transportation, Updated Jan. 7, 2003

<sup>2</sup> Chapter 15, Urban Streets

design elements that move traffic efficiently. These include traffic signal spacing and timing. The results provided by the method were tailored to Urban Core streets to account for peak hour spreading. Because the Urban Core will become a destination rather than a waypoint, the 24-hour volume will be less concentrated in peak commuting hours.

- 3. Identification of appropriate performance standards for the Urban Core Circulation Element.** The Urban Core Circulation Element would accommodate all modes of travel (vehicular, transit, bicycling, and walking) and a variety of different trip types (shopping, entertainment, dining, as well as commuting). As discussed above, the existing capacities and performance standards used for streets throughout the City of Chula Vista emphasize vehicular commuting trips, and have the unintended effect of limiting the potential for a more urbanized downtown environment. Accordingly, within the Urban Core and its immediate environs (where the Urban Core Circulation Element is located), the minimum performance standard on the Urban Core Circulation Element is LOS D.

The acceptable capacities for these roadways assume implementation of traffic and multi-modal improvements to accommodate all modes of travel (vehicular, transit, bicycling, and walking) and a variety of different trip types (shopping, entertainment, dining, as well as commuting).

### 5.8.1.2 Existing Circulation System

#### a. Intersections and Street Segments

The site area encompasses downtown Chula Vista. Regional access to the UCSP area is provided by I-5. Figure 5.8-2 shows the existing roadways and intersections in the UCSP area. Brief descriptions of the existing major streets in the UCSP area are provided below.

**I-5** is a north-south freeway that originates at the Mexican border and terminates at the California-Oregon border. Local interchanges in the project vicinity are at E Street, H Street, and J Street. I-5 is generally an eight-lane freeway between L Street and C Street with auxiliary lanes present between some interchanges.

**E Street** is an east-west roadway which is classified as a four-lane gateway street between I-5 and I-805. The segment between Broadway Avenue and First Avenue is classified as a four-lane urban arterial. Parallel parking is provided on both sides of the street between Third Avenue and Broadway and sidewalks are provided on both sides of the roadway from Third Avenue to I-5. The posted speed limit is 30 miles per hour (mph).

**F Street** is an east-west roadway, classified as a four-lane, downtown promenade between I-5 and Broadway and a two-lane downtown promenade between Broadway and Third Avenue. F Street is four lanes between Third Avenue and Fourth Avenue, two lanes

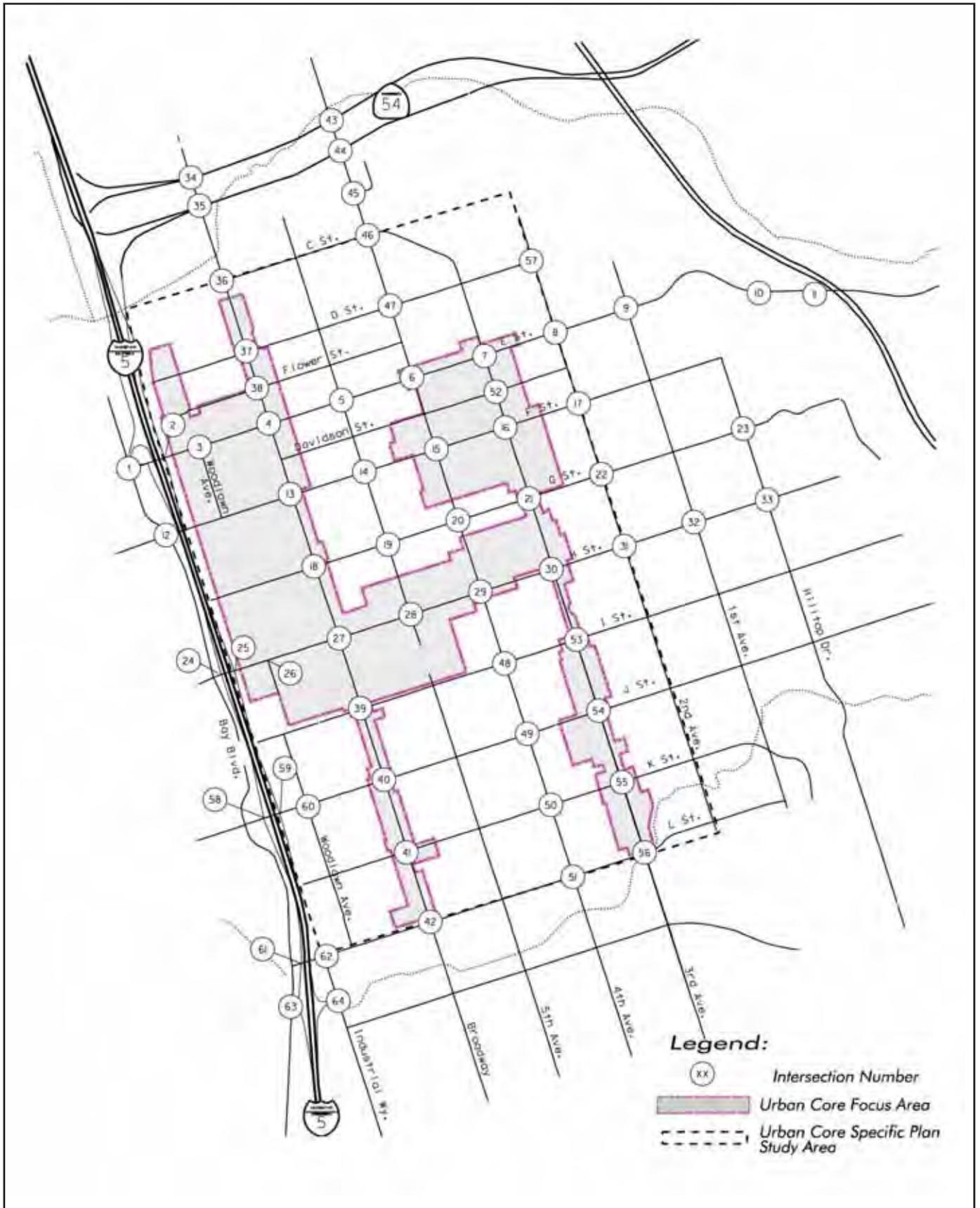


FIGURE 5.8-2  
Existing Roadways and Intersections

between Fourth Avenue and Broadway, and four lanes between Broadway and I-5. Sidewalks are provided on both sides of the roadway. On-street parking is not provided between Third Avenue and Fourth Avenue; however, parallel parking is available on both sides of the street from Fourth Avenue to I-5. The posted speed limit is 30 mph.

**H Street** is an east-west roadway with a center two-way left turn lane. It is classified as a six-lane gateway street between I-5 and Broadway; however, it is not built to its ultimate classification and functions as a four-lane roadway. Between Broadway and Hilltop Drive, H Street is classified as a four-lane urban arterial. Parking is not provided on-street. Sidewalks are provided on both sides of the street. The posted speed limit is 35 mph.

**Broadway** is a north-south roadway. Between SR-54 and C Street, it is classified as a four-lane gateway street and between C Street and L Street it is classified as a four-lane commercial boulevard. Parallel parking and sidewalks are provided on both sides of the roadway. There is a two-way left-turn lane between F Street and H Street. The posted speed limit is 35 mph.

**Third Avenue** is a north-south roadway. Third Avenue is a four-lane commercial boulevard between C Street and E Street and between H Street and L Street and a two/four-lane downtown promenade between E Street and H Street. Third Avenue is two lanes between E Street and F Street and a four-lane roadway with a raised median between F Street and Madrona Street. Angled parking is provided along these two sections. Between G Street and H Street, Third Avenue is a four-lane roadway with a center two-way left-turn lane and parallel parking is provided. Sidewalks are provided on both sides of the street in all three sections. The posted speed limit is 35 mph.

## **b. Freeways**

Each of the freeway segments serving the Urban Core Area were considered in the GPU traffic analysis. These freeways include I-5, I-805, and State Route 54.

### **5.8.1.3 Existing Operations**

#### **a. Intersection Operations**

A total of 64 intersections within the study area were evaluated for traffic impacts. These intersections are shown in Figure 5.8-2. Table 5.8-1 summarizes the existing AM and PM peak hour signalized intersection operations by intersection. All study intersections currently operate at LOS D or better during both peak periods, except the following intersections:

- #34: Broadway at SR-54 westbound ramp (LOS F – AM Peak)
- #61: L Street at Bay Boulevard (LOS F – PM Peak)
- #63: Bay Boulevard at I-5 southbound ramp (LOS E – PM Peak)

**TABLE 5.8-1  
EXISTING CONDITIONS  
PEAK HOUR INTERSECTION LEVEL OF SERVICE SUMMARY**

	Intersection	Peak Hour	Existing Delay*	LOS†
1	Bay Blvd-I-5 SB Ramp @ E Street	AM	10.1	B
		PM	16.6	B
2	I-5 NB Ramp @ E Street	AM	33.2	C
		PM	18.2	B
3	Woodlawn Avenue @ E Street	AM	21.7	C
		PM	15.5	B
4	Broadway @ E Street	AM	16.9	B
		PM	26.3	C
5	Fifth Avenue @ E Street	AM	5.0	A
		PM	6.4	A
6	Fourth Avenue @ E Street	AM	13.5	B
		PM	18.8	B
7	Third Avenue @ E Street	AM	11.9	B
		PM	15.2	B
8	Second Avenue @ E Street	AM	7.3	A
		PM	11.0	B
9	First Avenue @ E Street	AM	6.8	A
		PM	5.5	A
10	Flower Street @ E Street	AM	10.6	B
		PM	12.5	B
11	Bonita Glen Drive @ Bonita Road	AM	12.1	B
		PM	16.5	B
12	Bay Blvd. @ F Street	AM	8.8	A
		PM	14.7	B
13	Broadway @ F Street	AM	16.5	B
		PM	24.1	C
14	Fifth Avenue @ F Street	AM	5.7	A
		PM	8.2	A
15	Fourth Avenue @ F Street	AM	13.5	B
		PM	17.7	B
16	Third Avenue @ F Street	AM	13.9	B
		PM	19.2	B
17	Second Avenue @ F Street	AM	9.7	A
		PM	12.5	B
18	Broadway @ G Street	AM	12.3	B
		PM	14.9	B
19	Fifth Avenue @ G Street	AM	6.3	A
		PM	7.5	A
20	Fourth Avenue @ G Street	AM	8.9	A
		PM	10.3	B
21	Third Avenue @ G Street	AM	8.6	A
		PM	9.2	A
22	Second Avenue @ G Street	AM	14.1	B
		PM	16.3	C
23	Hilltop Drive @ G Street	AM	16.7	C
		PM	14.4	B
24	I-5 SB Ramp @ H Street	AM	28.8	C
		PM	21.1	C

**TABLE 5.8-1  
EXISTING CONDITIONS  
PEAK HOUR INTERSECTION LEVEL OF SERVICE SUMMARY  
(continued)**

	Intersection	Peak Hour	Existing Delay*	LOS†
25	I-5 NB Ramp @ H Street	AM	12.7	B
		PM	14.8	B
26	Woodlawn Avenue @ H Street	AM	38.0	D
		PM	22.3	C
27	Broadway @ H Street	AM	25.7	C
		PM	27.1	C
28	Fifth Avenue @ H Street	AM	10.8	B
		PM	11.3	B
29	Fourth Avenue @ H Street	AM	22.1	C
		PM	29.2	C
30	Third Avenue @ H Street	AM	19.3	B
		PM	23.8	C
31	Second Avenue @ H Street	AM	8.4	A
		PM	11.5	B
32	First Avenue @ H Street	AM	7.6	A
		PM	8.2	A
33	Hilltop Drive @ H Street	AM	32.2	C
		PM	41.3	D
34	Broadway @ SR-54 WB Ramp	AM	82.9	F
		PM	11.8	B
35	Broadway @ SR-54 EB Ramp	AM	3.3	A
		PM	6.3	A
36	Broadway @ C Street	AM	18.1	B
		PM	15.1	B
37	Broadway @ D Street	AM	9.2	A
		PM	10.2	B
38	Broadway @ Flower Street	AM	11.5	B
		PM	14.0	B
39	Broadway @ I Street	AM	16.3	B
		PM	17.3	B
40	Broadway @ J Street	AM	13.6	B
		PM	18.6	B
41	Broadway @ K Street	AM	11.7	B
		PM	13.2	B
42	Broadway @ L Street	AM	15.5	B
		PM	20.4	C
43	Fourth Avenue @ SR-54 WB Ramp	AM	14.7	B
		PM	25.9	C
44	Fourth Avenue @ SR-54 EB Ramp	AM	13.4	B
		PM	27.2	C
45	Fourth Avenue @ Brisbane Street	AM	21.5	C
		PM	27.3	C
46	Fourth Avenue @ C Street	AM	23.2	C
		PM	31.4	C
47	Fourth Avenue @ D Street	AM	9.1	A
		PM	10.5	B
48	Fourth Avenue @ I Street	AM	8.8	A
		PM	10.1	B

**TABLE 5.8-1  
EXISTING CONDITIONS  
PEAK HOUR INTERSECTION LEVEL OF SERVICE SUMMARY  
(continued)**

	Intersection	Peak Hour	Existing Delay*	LOS†
49	Fourth Avenue @ J Street	AM	9.3	A
		PM	15.7	B
50	Fourth Avenue @ K Street	AM	8.5	A
		PM	10.1	B
51	Fourth Avenue @ L Street	AM	24.6	C
		PM	26.6	C
52	Third Avenue @ Davidson Street	AM	9.9	A
		PM	13.2	B
53	Third Avenue @ I Street	AM	10.1	B
		PM	12.2	B
54	Third Avenue @ J Street	AM	18.8	B
		PM	35.9	D
55	Third Avenue @ K Street	AM	9.5	A
		PM	11.0	B
56	Third Avenue @ L Street	AM	18.1	B
		PM	27.0	C
57	Second Avenue @ D Street	AM	14.9	B
		PM	14.9	B
58	J Street @ I-5 SB Ramp	AM	8.9	A
		PM	15.1	B
59	J Street @ I-5 NB Ramp	AM	10.6	B
		PM	8.2	A
60	Woodlawn Avenue @ J Street	AM	11.0	B
		PM	11.9	B
61	L Street @ Bay Blvd	AM	16.8	C
		PM	<b>120.3</b>	<b>F</b>
62	L Street @ Industrial Blvd	AM	18.9	B
		PM	25.4	C
63	Bay Blvd. @ I-5 SB Ramp	AM	22.2	C
		PM	48.6	<b>E</b>
64	Industrial Blvd. @ I-5 NB Ramp	AM	15.4	C
		PM	17.7	C

**NOTES:**

**Bold** values indicate intersections operating at LOS E or F.

\*Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.

At a two-way stop-controlled intersection, delay refers to the worst movement.

†LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 6.0.

## **b. Street Segment Operations**

Table 5.8-2 summarizes the street segment operations under existing conditions. As seen in this table, all Urban Core roadways are calculated to operate at LOS D or better under existing conditions. Existing geometrics of these street segments are described in Figure 5.8-3.

## **c. Transit Services**

The Urban Core of Chula Vista is currently served by 11 Chula Vista Transit (CVT) routes (Routes 701, 702, 703, 704, 705, 706, 707, 708, 709, 711, and 712), two Metropolitan Transit System (MTS) routes (Routes 929 and 932), and the San Diego Trolley's Blue Line. Several CVT transit routes circulate within the Urban Core and Bayfront area; others serve the greater Chula Vista area and provide connections to National City Transit and other transit providers. MTS route 929 runs along Third and Fourth Avenues through the Urban Core and MTS route 932 runs along Broadway. The San Diego Trolley's Blue Line provides service between Qualcomm Stadium and San Ysidro/Tijuana. It extends through the Urban Core parallel to and on the east side of I-5, with stations at Bayfront/E Street and H Street. Service is provided seven days a week with service starting around 5:00 A.M. and ending around 12:00 midnight. During the peak periods, service is provided with 7.5-minute headways and 15 minutes during the off-peak periods. The current transit routes are outlined in Figure 5.8-4.

## **d. Parking**

Existing parking within the UCSP area is primarily provided on-site for individual land uses. For example, commercial and office uses along H Street and Broadway meet their parking demand on-site, and existing residential uses are required to provide on-site parking. In addition, many of the major and neighborhood streets with the Urban Core have on street parking available to the general public.

In addition to on-site parking, a parking district has been established along Third Avenue and abutting streets within the Village District. The parking district through a metered system includes public parking both on Third Avenue, and a series of small to large public parking lots. Within the Village parking district approximately 509 metered spaces are on street and 1,205 spaces are provided in 11 different public parking lot locations. The parking district establishes parking supply for existing and new (permitted) commercial uses in the Village commercial corridor and provides a mechanism for new conditionally permitted commercial uses to pay an in-lieu fee instead of providing new on-site parking spaces, which is often infeasible given the developed condition of the commercial corridor. The district also provides a comprehensive maintenance program of existing parking lots.

**TABLE 5.8-2  
EXISTING CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY**

Street/Segment	Street Classification*	Daily Traffic Volume	Acceptable Volume	Volume To Capacity (v/c)	Daily Segment LOS
<b>E Street</b>					
I-5 - Woodlawn Avenue	4 Lanes Gateway Street	26,924	43,200	0.56†	A
Woodlawn Avenue - Broadway	4 Lanes Gateway Street	21,997	43,200	0.46†	A
Broadway - 1st Avenue	4 Lanes Urban Arterial	17,493	37,800	0.42†	A
1st Avenue - I-805	4 Lanes Gateway Street	17,966	43,200	0.37†	A
<b>F Street</b>					
Bay Boulevard - Woodlawn Avenue	4 Lanes Downtown Promenade	5,336	33,750	0.14†	A
Woodlawn Avenue - Broadway	4 Lanes Downtown Promenade	9,263	33,750	0.25†	A
Broadway - Fourth Avenue	2 Lanes Downtown Promenade	8,574	14,400	0.54†	A
Fourth Avenue - Third Avenue	4 Lanes Downtown Promenade	11,395	33,750	0.30†	A
<b>H Street</b>					
I-5 - Broadway	4 Lanes Gateway Street	33,116	43,200	0.69†	B
Broadway - Third Avenue	4 Lanes Urban Arterial	24,637	37,800	0.59†	A
Third Avenue - Hilltop Drive	4 Lanes Urban Arterial	27,474	37,800	0.65†	A
Hilltop Drive - I-805	4 Lanes Gateway Street‡	40,184	43,200	0.84†	D
<b>J Street</b>					
Bay Boulevard - Broadway	4 Lanes Major Street	19,024	40,000	0.51†	A
<b>L Street</b>					
I-5 - Broadway	4 Lanes Gateway Street†	15,450	43,200	0.32†	A
Broadway - Hilltop Drive	4 Lanes Class I Collector	16,430	22,000	0.60†	A
<b>Woodlawn Avenue</b>					
E Street - F Street	2 Lanes Downtown Promenade	4,900	14,400	0.31†	A
G Street - H Street	2 Lanes Downtown Promenade	2,600	14,400	0.16†	A
<b>Broadway</b>					
SR-54 - C Street	4 Lanes Gateway Street	22,107	43,200	0.46†	A
C Street - E Street	4 Lanes Commercial Boulevard	20,015	33,750	0.53†	A
E Street - H Street	4 Lanes Commercial Boulevard	23,208	33,750	0.62†	B
H Street - K Street	4 Lanes Commercial Boulevard	25,713	33,750	0.69†	B
K Street - L Street	4 Lanes Commercial Boulevard	26,599	33,750	0.71†	C
South of L Street	4 Lanes Major Street	27,053	40,000	0.72	C

TABLE 5.8-2  
EXISTING CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY  
(continued)

Street/Segment	Street Classification*	Daily Traffic Volume	Acceptable Volume	Volume To Capacity (v/c)	Daily Segment LOS
Fourth Avenue					
SR-54 - C Street	4 Lanes Gateway Street‡	36,923	43,200	0.77†	C
C Street - E Street	4 Lanes Urban Arterial	17,812	37,800	0.42†	A
E Street - H Street	4 Lanes Urban Arterial	17,001	37,800	0.40†	A
H Street - L Street	4 Lanes Urban Arterial	16,101	37,800	0.38†	A
Third Avenue					
C Street - E Street	4 Lanes Commercial Boulevard	7,220	33,750	0.19†	A
E Street - G Street	2/4 Lanes Downtown Promenade	14,413	14,400/33,750	0.3†	A
G Street - H Street	4 Lanes Downtown Promenade	18,071	33,750	0.48†	A
H Street - L Street	4 Lanes Commercial Boulevard	23,459	33,750	0.63†	B
South of L Street	4 Lanes Class I Collector	21,814	22,000	0.79	C

\*Street classification is based on the standards provided in the 2005 Chula Vista General Plan, but will be analyzed with existing number of lanes for each respective roadway segment.

†This roadway segment is part of the Urban Core Circulation Element.

‡This roadway segment is classified as a six-lane roadway, but is assumed to function as a four-lane roadway for this scenario.

Street Segment	Total Travel Lanes	Median/Turn Lane	Curb-to-Curb Width	Parking	Bike Lane
E St between I-5 and Woodlawn Ave	4	Two-Way Left Turn Lane	70'	N	N
E St between Woodlawn Ave and Broadway	4	Two-Way Left Turn Lane	70'	N	N
E St between Broadway and 1 <sup>st</sup> Ave	4	N	62'	Y	N
E St between 1 <sup>st</sup> Ave and I-805	4	Two-Way Left Turn Lane	71'	N	Y
F St between I-5 and Woodlawn Ave	4	N	66'	Y	N
F St between Woodlawn Ave and Broadway	4	N	66'	Y	N
F St between Broadway and 4 <sup>th</sup> Ave	2	N	40'	Y	N
F St between 4 <sup>th</sup> Ave and 3 <sup>rd</sup> Ave	4	Raised Median	65'	N	N
H St between I-5 and Broadway	4	Two-Way Left Turn Lane	64'	N	N
H St between Broadway and 3 <sup>rd</sup> Ave	4	Two-Way Left Turn Lane	64'	N	N
H St between 3 <sup>rd</sup> Ave and Hilltop Dr	4	Two-Way Left Turn Lane	64'	N	Y
H St between Hilltop Dr and I-805	4	N	65'	N	N
J St between Bay Blvd and Broadway	4	Raised Median	67'	N	N
L St between I-5 and Broadway	4	Two-Way Left Turn Lane	63'	N	N
L St between Broadway and Hilltop Dr	4	N	64'	Y	N
Woodlawn Ave between E St and F St	2	N	36'	Y	N
Woodlawn Ave between G St and H St	2	N	33'	Y	N
Broadway between SR-54 and C St	4	N	68'	N	N
Broadway between C St and E St	4	Two-Way Left Turn Lane	70'	Y	N
Broadway between E St and F St	4	N	68'	Y	N
Broadway between F St and H St	4	Two-Way Left Turn Lane	82'	Y	N
Broadway between H St and K St	4	Two-Way Left Turn Lane	80'	Y	N
Broadway between K St and L St	4	Two-Way Left Turn Lane	80'	Y	N
Broadway south of L St	4	Raised Median	82'	Y	N
4 <sup>th</sup> Ave between SR-54 and C St	4	Raised Median Extended NB/SB RT Lanes	90'	N	N
4 <sup>th</sup> Ave between C St and E St	4	N	64'	Y	N
4 <sup>th</sup> Ave between E St and H St	4	Two-Way Left Turn Lane	64'	N	N
4 <sup>th</sup> Ave between H St and L St	4	N	63'	Y	N
3 <sup>rd</sup> Ave between C St and E St	4	N	64'	Y	N
3 <sup>rd</sup> Ave between E St and F St	2	N	62'	Y	N
3 <sup>rd</sup> Ave between F St and Madrona St	4	Raised Median	101'	Y	N
3 <sup>rd</sup> Ave between Madrona St and G St	4	N	72'	Y	N
3 <sup>rd</sup> Ave between G St and H St	4	Two-Way Left Turn Lane	66'	Y	N
3 <sup>rd</sup> Ave between H St and L St	4	Two-Way Left Turn Lane	63'	N	N
3 <sup>rd</sup> Ave south of L St	4	Two-Way Left Turn Lane	61'	N	N

FIGURE 5.8-3  
Existing Roadway Geometrics

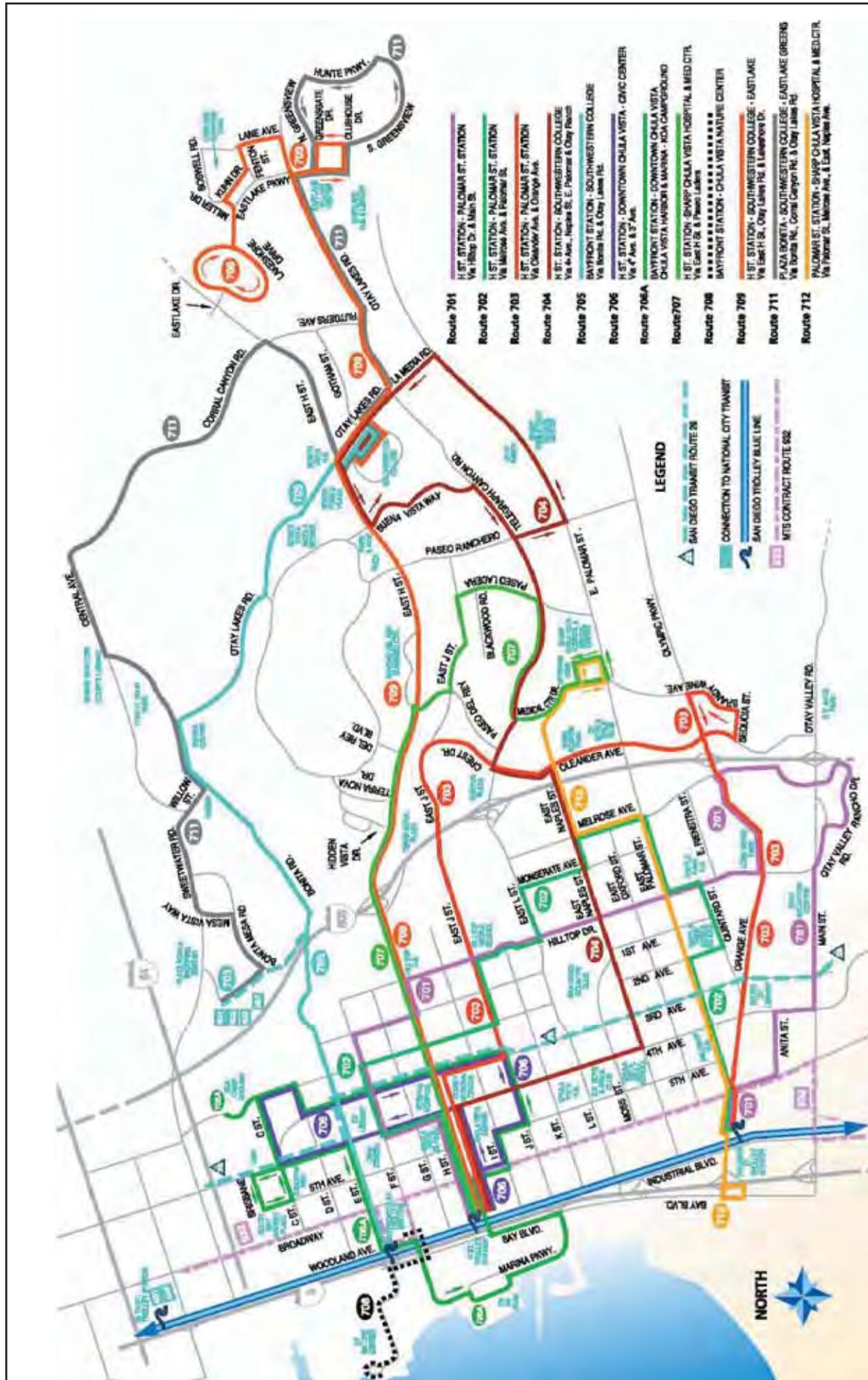


FIGURE 5.8-4  
Existing Transit Routes

### **e. Freeways**

Freeways I-5 and I-805 and State Route 54 were considered in the GPU traffic analysis. Existing LOS of the freeway segments connecting with the Urban Core Area range from LOS C to LOS F. However, since the freeway system is developed and managed by Caltrans, the City has only limited ability to affect the level of congestion on these roadways. As such, only interchanges with these freeway segments were considered in the UCSP traffic study.

## **5.8.2 Criteria for Determination of Significance**

The significance criteria to evaluate the project impacts to intersections are based on the City of Chula Vista's Guidelines for Traffic Impact Studies in the City of Chula Vista, February 13, 2001 and on the City of Chula Vista's adopted General Plan. At intersections, the measurement of effectiveness (MOE) is based on allowable increases in delay. At roadway segments, the MOE is based on allowable increases in the ADT.

### **a. Intersections**

Within the Urban Core of the city of Chula Vista, the goal is to achieve LOS D or better at all signalized and unsignalized intersections.

1. A project-specific impact would occur if the operations at intersections are at LOS E or F and the project trips comprise five percent or more of the entering volume.
2. A cumulative impact would occur if the operations at intersections are at LOS E or F only.

### **b. Roadway Segments**

The impact criteria for Urban Core Circulation Element roadways (Gateway Street, Urban Arterial, Commercial Boulevard, Downtown Promenade) are as follows:

1. A roadway segment that currently operates at LOS D or better and with the proposed changes would operate at LOS E or F at General Plan buildout is considered a significant impact.
2. A roadway segment that currently operates at LOS E would operate at LOS F at General Plan buildout, or which operates at LOS E or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

## 5.8.3 Impacts

### 5.8.3.1 Automotive

Year 2030 traffic volumes at study intersections were calculated by applying growth factors to existing traffic volumes. These growth factors were determined by comparing the Year 2030 ADT by the existing ADT for each respective roadway segment. This growth in traffic varied between a minimum of 10 percent to a more than doubling of traffic on some intersection approaches. In cases where extreme traffic growth was projected, adjustments were made to account for spreading of the peak hour. This spreading presumes that the peak hour may last for more than one hour in the morning or afternoon peak hour.

The traffic associated with the Urban Core has been included in the traffic volumes used for the GPU. The traffic forecasts from the GPU were used for the UCSP transportation analysis because the trip generation for the Urban Core is generally consistent with the GPU land uses associated with projected traffic volumes and distribution patterns. Table 5.8-3 summarizes the trip generation for the UCSP based on land uses identified in the GPU. Approximately 331,100 ADT is expected with the full buildout of the UCSP. This would be an increase of 141,100 ADT over existing conditions. The largest percentage increase in ADT would occur from the residential land use, with an increase of approximately 100 percent.

**TABLE 5.8-3  
TRIP GENERATION SUMMARY**

Land Use	Existing ADT	Net ADT Increase	Total ADT
Residential	22,200	42,600	64,800
Retail	120,000	40,000	160,000
Office	48,000	26,000	74,000
Visitor Serving Commercial	--	32,500	32,500
<b>TOTAL</b>	<b>190,200</b>	<b>141,100</b>	<b>331,100</b>

NOTE: Trip generation values shown above were based on rates referenced in the *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, SANDAG, April 2002. (6 trips/du for residential, 40 trips/1,000 sf for retail, 20 trips/1,000 square feet for office, and 50 percent hotel/50 percent retail for visitor serving commercial)

The UCSP implements the policies and objectives of the GPU to direct a portion of the growth expected to occur in the City over the next 20 years to the UCSP Area, by providing zone changes, development regulations and design guidelines to accommodate future growth. Although these regulatory provisions are intended to attract future development to the Subdistricts Area, the timing, location and extent of subsequent development projects are unknown as this time.

The anticipated build-out under the UCSP is expected to occur on an incremental basis through year 2030. Most roadway segments and intersections in the UCSP area currently operate at acceptable levels. Near term traffic impacts which would result from the incremental development of individual projects during intermediate years will be addressed

by application of the City's existing Traffic Monitoring Program (TMP) and by requiring the preparation of traffic assessments for individual development projects at the time they are proposed. Under this approach, the City has established a 20- to 25-year phased plan for implementing traffic improvements, which has been divided into three tiers that will be based on need and enhancement to the function of the overall street network. The City's existing TMP annually monitors the actual performance of the street system by conducting roadway segment travel time studies in accordance with the City's Growth Management Program and Traffic Threshold Standards. Annual growth that occurs under the UCSP will be reflected in the monitoring results. Results from the City's TMP will be used to provide analysis of roadway segment performance under near-term conditions (0-4 years). The TMP is the City's most reliable tool for tracking roadway volumes and intersection performance. Although it is limited to a four-year horizon, the TMP is conducted annually and the results will be continually updated and serve as the basis of an on-going traffic performance tracking system throughout the implementation of the UCSP. The results of the short term monitoring will be incorporated in the UCSP "Five Year Progress Report", and may form the basis for adjusting the priorities of the phased intersection and roadway improvements as further described below.

The timing, location, and extent of specific development projects which may occur during the UCSP's anticipated build-out period is unpredictable and speculative at this time. Accordingly, the following analysis of the UCSP's potential impacts on traffic and circulation addresses the "worst case" cumulative scenario that would be presented in Year 2030 by full buildout under the UCSP. Figure 5.8-5 summarizes the Year 2030 conditions ADT volumes. Table 5.8-4 summarizes the peak hour intersection operations and Table 5.8-5 summarizes the segment operations evaluated.

### **a. Peak Hour Intersections**

Table 5.8-4 summarizes the peak hour intersection operations. As seen in the table, all study area intersections are calculated to operate at LOS D or better for the 2030 condition except for the following intersections, which are calculated to operate at LOS E or F:

- #1: Bay Boulevard/I-5 SB ramp at E Street (LOS E – AM Peak, LOS F – PM Peak);
- #2: I-5 NB Ramp at E Street (LOS E – AM and PM Peak);
- #13: Broadway at F Street (LOS E – PM Peak);
- #24: I-5 SB Ramp at H Street (LOS F – PM Peak);
- #25: I-5 NB Ramp at H Street (LOS F – PM Peak);
- #26: Woodlawn Avenue at H Street (LOS F – PM Peak);
- #27: Broadway at H Street (LOS F – PM Peak);
- #28: Fifth Avenue at H Street (LOS E – PM Peak);
- #29: Fourth Avenue at H Street (LOS E – PM Peak);
- #33: Hilltop Drive at H Street (LOS E – AM and PM Peak);
- #34: Broadway at SR-54 WB Ramp (LOS F – AM Peak);
- #44: Fourth Avenue at SR-54 EB Ramp (LOS F – PM Peak);
- #45: Fourth Avenue at Brisbane Street (LOS E – PM Peak);

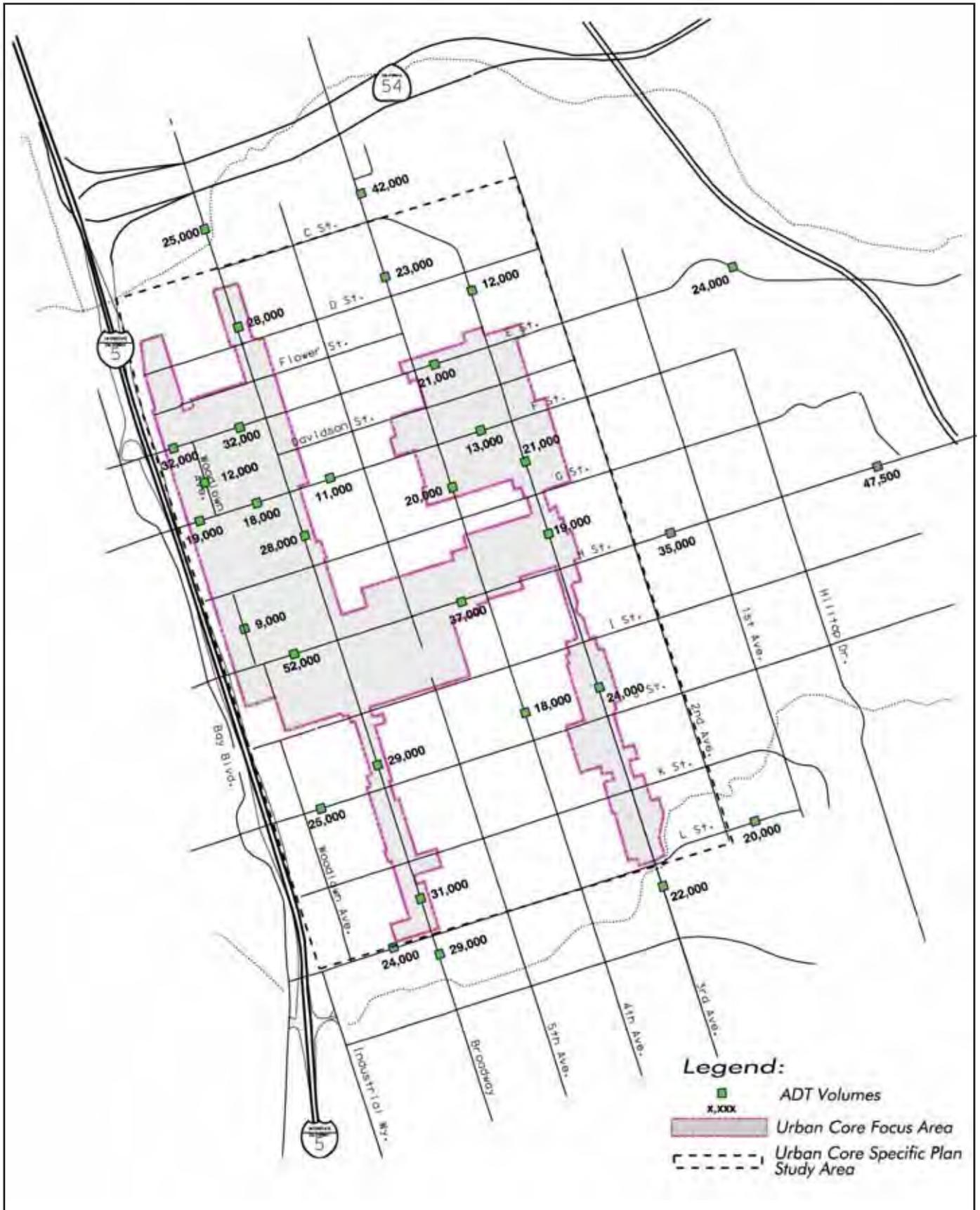


FIGURE 5.8-5  
Year 2030 Conditions ADT Volumes

**TABLE 5.8-4  
YEAR 2030 CONDITIONS  
PEAK HOUR INTERSECTION LEVEL OF SERVICE SUMMARY**

Intersection	Peak Hour	Existing		Year 2030		Increase in Delay	Significant Impact?
		Delay*	LOSt	Delay*	LOSt		
1 Bay Blvd-I-5 SB Ramp @ E Street	AM	10.1	B	58.4	E	48.3	YES
	PM	16.6	B	302.9	F	286.3	YES
2 I-5 NB Ramp @ E Street	AM	33.2	C	60.5	E	27.3	YES
	PM	18.2	B	31.9	C	13.7	NO
3 Woodlawn Avenue @ E Street	AM	21.7	C	25.8	C	4.1	NO
	PM	15.5	B	20.5	C	5.0	NO
4 Broadway @ E Street	AM	16.9	B	30.3	C	13.4	NO
	PM	26.3	C	47.2	D	20.9	NO
5 Fifth Avenue @ E Street	AM	5.0	A	5.6	A	0.6	NO
	PM	6.4	A	7.7	A	1.3	NO
6 Fourth Avenue @ E Street	AM	13.5	B	16.2	B	2.7	NO
	PM	18.8	B	33.3	C	14.5	NO
7 Third Avenue @ E Street	AM	11.9	B	12.9	B	1.0	NO
	PM	15.2	B	24.8	C	9.6	NO
8 Second Avenue @ E Street	AM	7.3	A	15.5	B	8.2	NO
	PM	11.0	B	28.9	C	17.9	NO
9 First Avenue @ E Street	AM	6.8	A	40.6	D	33.8	NO
	PM	5.5	A	10.1	B	4.6	NO
10 Flower Street @ E Street	AM	10.6	B	20.2	C	9.6	NO
	PM	12.5	B	37.1	D	24.6	NO
11 Bonita Glen Dr @ E Street	AM	12.1	B	12.5	B	0.4	NO
	PM	16.5	B	23.0	C	6.5	NO
12 Bay Blvd @ F Street	AM	8.8	A	9.8	A	1.0	NO
	PM	14.7	B	21.4	C	6.7	NO
13 Broadway @ F Street	AM	16.5	B	17.7	B	1.2	NO
	PM	24.1	C	66.1	E	42.0	YES
14 Fifth Avenue @ F Street	AM	5.7	A	6.6	A	0.9	NO
	PM	8.2	A	10.0	A	1.8	NO
15 Fourth Avenue @ F Street	AM	13.5	B	15.3	B	1.8	NO
	PM	17.7	B	23.7	C	6.0	NO
16 Third Avenue @ F Street	AM	13.9	B	15.9	B	2.0	NO
	PM	19.2	B	23.5	C	4.3	NO
17 Second Avenue @ F Street	AM	9.7	A	13.4	B	3.7	NO
	PM	12.5	B	12.7	B	0.2	NO

TABLE 5.8-4  
 YEAR 2030 CONDITIONS  
 PEAK HOUR INTERSECTION LEVEL OF SERVICE SUMMARY  
 (continued)

Intersection	Peak Hour	Existing Delay*	LOST	Year 2030 Delay*	LOST	Increase in Delay	Significant Impact?
18 Broadway @ G Street	AM	12.3	B	14.0	B	1.7	NO
	PM	14.9	B	21.0	C	6.1	NO
19 Fifth Avenue @ G Street	AM	6.3	A	7.7	A	1.4	NO
	PM	7.5	A	8.3	A	0.8	NO
20 Fourth Avenue @ G Street	AM	8.9	A	12.8	B	3.9	NO
	PM	10.3	B	18.0	B	7.7	NO
21 Third Avenue @ G Street	AM	8.6	A	11.8	B	3.2	NO
	PM	9.2	A	10.5	B	1.3	NO
22 Second Avenue @ G Street	AM	14.1	B	22.2	C	8.1	NO
	PM	16.3	C	32.3	D	16.0	NO
23 Hilltop Dr @ G Street	AM	16.7	C	33.7	D	17.0	NO
	PM	14.4	B	24.1	C	9.7	NO
24 I-5 SB Ramp @ H Street	AM	28.8	C	36.7	D	7.9	NO
	PM	21.1	C	84.5	F	63.4	YES
25 I-5 NB Ramp @ H Street	AM	12.7	B	47.6	D	34.9	NO
	PM	14.8	B	138.4	F	123.6	YES
26 Woodlawn Avenue @ H Street	AM	38.0	D	33.7	C	-4.3	NO
	PM	22.3	F	260.6	F	238.3	YES
27 Broadway @ H Street	AM	25.7	C	42.7	D	17.0	NO
	PM	27.1	C	118.1	F	91.0	YES
28 Fifth Avenue @ H Street	AM	10.8	B	15.2	B	4.4	NO
	PM	11.3	B	61.6	E	50.3	YES
29 Fourth Avenue @ H Street	AM	22.1	C	38.6	D	16.5	NO
	PM	29.2	C	59.4	E	30.2	YES
30 Third Avenue @ H Street	AM	19.3	B	23.0	C	3.7	NO
	PM	23.8	C	39.7	D	15.9	NO
31 Second Avenue @ H Street	AM	8.4	A	13.7	B	5.3	NO
	PM	11.5	B	31.4	C	19.9	NO
32 1st Avenue @ H Street	AM	7.6	A	9.8	A	2.2	NO
	PM	8.2	A	12.5	B	4.3	NO
33 Hilltop Dr @ H Street	AM	32.2	C	58.3	E	26.1	YES
	PM	41.3	D	74.2	E	32.9	YES
34 Broadway @ SR-54 WB Ramp	AM	82.9	F	190.6	F	107.7	YES
	PM	11.8	B	16.2	B	4.4	NO
35 Broadway @ SR-54 EB Ramp	AM	3.3	A	10.1	B	6.8	NO

TABLE 5.8-4  
 YEAR 2030 CONDITIONS  
 PEAK HOUR INTERSECTION LEVEL OF SERVICE SUMMARY  
 (continued)

Intersection	Peak Hour	Existing Delay*	LOST	Year 2030 Delay*	LOST	Increase in Delay	Significant Impact?
36 Broadway @ C Street	PM	6.3	A	17.7	B	11.4	NO
	AM	18.1	B	20.1	C	2.0	NO
	PM	15.1	B	18.1	B	3.0	NO
37 Broadway @ D Street	AM	9.2	A	12.1	B	2.9	NO
	PM	10.2	B	14.9	B	4.7	NO
38 Broadway @ Flower Street	AM	11.5	B	12.3	B	0.8	NO
	PM	14.0	B	17.4	B	3.4	NO
39 Broadway @ I Street	AM	16.3	B	16.4	B	0.1	NO
	PM	17.3	B	21.1	C	3.8	NO
40 Broadway @ J Street	AM	13.6	B	15.7	B	2.1	NO
	PM	18.6	B	29.6	C	11.0	NO
41 Broadway @ K Street	AM	11.7	B	14.5	B	2.8	NO
	PM	13.2	B	16.4	B	3.2	NO
42 Broadway @ L Street	AM	15.5	B	17.5	B	2.0	NO
	PM	20.4	C	34.7	C	14.3	NO
43 Fourth Avenue @ SR-54 WB Ramp	AM	14.7	B	23.1	C	8.4	NO
	PM	25.9	C	42.3	D	16.4	NO
44 Fourth Avenue @ SR-54 EB Ramp	AM	13.4	B	37.2	D	23.8	NO
	PM	27.2	C	95.2	F	68.0	YES
45 Fourth Avenue @ Brisbane Street	AM	21.5	C	25.8	C	4.3	NO
	PM	27.3	C	61.5	E	34.2	YES
46 Fourth Avenue @ C Street	AM	23.2	C	24.7	C	1.5	NO
	PM	31.4	C	40.0	D	8.6	NO
47 Fourth Avenue @ D Street	AM	9.1	A	13.5	B	4.4	NO
	PM	10.5	B	12.6	B	2.1	NO
48 Fourth Avenue @ I Street	AM	8.8	A	11.9	B	3.1	NO
	PM	10.1	B	18.0	B	7.9	NO
49 Fourth Avenue @ J Street	AM	9.3	A	12.0	B	2.7	NO
	PM	15.7	B	42.7	D	27.0	NO
50 Fourth Avenue @ K Street	AM	8.5	A	12.7	B	4.2	NO
	PM	10.1	B	20.0	B	9.9	NO
51 Fourth Avenue @ L Street	AM	24.6	C	27.6	C	3.0	NO
	PM	26.6	C	35.3	D	8.7	NO
52 Third Avenue @ Davidson Street	AM	9.9	A	14.7	B	4.8	NO
	PM	13.2	B	19.2	B	6.0	NO

TABLE 5.8-4  
 YEAR 2030 CONDITIONS  
 PEAK HOUR INTERSECTION LEVEL OF SERVICE SUMMARY  
 (continued)

Intersection	Peak Hour	Existing Delay*	LOST	Year 2030 Delay*	LOST	Increase in Delay	Significant Impact?
53 Third Avenue @ I Street	AM	10.1	B	11.6	B	1.5	NO
	PM	12.2	B	18.3	B	6.1	NO
54 Third Avenue @ J Street	AM	18.8	B	22.9	C	4.1	NO
	PM	35.9	D	74.5	E	38.6	YES
55 Third Avenue @ K Street	AM	9.5	A	12.3	B	2.8	NO
	PM	11.0	B	22.4	C	11.4	NO
56 Third Avenue @ L Street	AM	18.1	B	22.9	C	4.8	NO
	PM	27.0	C	44.1	D	17.1	NO
57 Second Avenue @ D Street	AM	14.9	B	31.2	D	16.3	NO
	PM	14.9	B	36.0	E	21.1	YES
58 J Street @ I-5 SB Ramp	AM	8.9	A	17.5	B	8.6	NO
	PM	15.1	B	40.4	D	25.3	NO
59 J Street @ I-5 NB Ramp	AM	10.6	B	135.2	F	124.6	YES
	PM	8.2	A	61.7	E	53.5	YES
60 Woodlawn Avenue @ J Street	AM	11.0	B	16.3	C	5.3	NO
	PM	11.9	B	18.2	C	6.3	NO
61 L Street @ Bay Blvd	AM	16.8	C	22.7	C	5.9	NO
	PM	120.3	F	203.0	F	82.7	YES
62 L Street @ Industrial Blvd	AM	18.9	B	30.9	C	12.0	NO
	PM	25.4	C	52.6	D	27.2	NO
63 Bay Blvd @ I-5 SB Ramp	AM	22.2	C	84.0	F	61.8	YES
	PM	48.6	E	221.2	F	172.6	YES
64 Industrial Blvd @ I-5 NB Ramp	AM	15.4	C	26.0	D	10.6	NO
	PM	17.7	C	66.5	F	48.8	YES

**Bold** values indicate intersections operating at LOS E or F.

\*Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. †At a two-way stop-controlled intersection, delay refers to the worst movement.

†LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 6.0

**TABLE 5.8-5  
YEAR 2030 ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY**

Segment	Street Classification*	Existing Daily Traffic Volume	Year 2030 Daily Traffic Volume	Acceptable Volume	Volume to Capacity (v/c)	Daily Segment LOS	Significant Impact
<b>F Street</b>							
I-5 - Woodlawn Avenue	4 Lanes Gateway Street	26,924	32,000	43,200	0.67†	B	NO
Woodlawn Avenue - Broadway	4 Lanes Gateway Street	21,997	32,000	43,200	0.67†	B	NO
Broadway - 1st Avenue	4 Lanes Urban Arterial	17,493	21,000	37,800	0.50†	A	NO
First Avenue - I-805	4 Lanes Gateway Street	17,966	24,000	43,200	0.50†	A	NO
<b>F Street</b>							
Bay Boulevard - Woodlawn Avenue	4 Lanes Downtown Promenade	5,336	19,000	33,750	0.51†	A	NO
Woodlawn Avenue - Broadway	4 Lanes Downtown Promenade	9,263	18,000	33,750	0.48†	A	NO
Broadway - Fourth Avenue	2 Lanes Downtown Promenade	8,574	11,000	14,400	0.69†	B	NO
Fourth Avenue - Third Avenue	4 Lanes Downtown Promenade	11,395	13,000	33,750	0.35†	A	NO
<b>H Street</b>							
I-5 - Broadway	4 Lanes Gateway Street†	33,116	52,000	43,200	1.08†	F	YES
Broadway - Third Avenue	4 Lanes Urban Arterial	24,637	37,000	37,800	0.88†	A	NO
Third Avenue - Hilltop Drive	4 Lanes Urban Arterial	27,474	35,000	37,800	0.83†	A	NO
Hilltop Drive - I-805	4 Lanes Gateway Street†	40,184	47,500	43,200	0.99†	E	YES
<b>J Street</b>							
Bay Boulevard - Broadway	4 Lanes Major Street	19,024	25,000	40,000	0.67†	B	NO
<b>L Street</b>							
I-5 - Broadway	4 Lanes Gateway Street	15,450	24,000	43,200	0.50†	A	NO
Broadway - Hilltop Drive	4 Lanes Class I Collector	16,430	20,000	22,000	0.73†	C	NO
<b>Woodlawn Avenue</b>							
E Street - F Street	2 Lanes Downtown Promenade	4,900	12,000	14,400	0.75†	C	NO
G Street - H Street	2 Lanes Downtown Promenade	2,600	9,000	14,400	0.56†	A	NO
<b>Broadway</b>							
SR-54 - C Street	4 Lanes Gateway Street	22,107	25,000	43,200	0.52†	A	NO
C Street - E Street	4 Lanes Commercial Boulevard	20,015	28,000	33,750	0.75†	C	NO
E Street - H Street	4 Lanes Commercial Boulevard	23,208	28,000	33,750	0.75†	C	NO
H Street - K Street	4 Lanes Commercial Boulevard	25,713	29,000	33,750	0.77†	C	NO
K Street - L Street	4 Lanes Commercial Boulevard	26,599	31,000	33,750	0.83†	D	NO
South of L Street	4 Lanes Major Street	27,053	29,000	40,000	0.77†	C	NO

TABLE 5.8-5  
YEAR 2030 ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY  
(continued)

Segment	Street Classification*	Existing Daily Traffic Volume	Year 2030 Daily Traffic Volume	Acceptable Volume	Volume to Capacity (v/c)	Daily Segment LOS	Significant Impact
<b>Fourth Avenue</b>							
SR-54 - C Street	6 Lanes Gateway Street	36,923	42,000	61,200	0.62†	B	NO
C Street - E Street	4 Lanes Urban Arterial	17,812	23,000	37,800	0.55†	A	NO
E Street - H Street	4 Lanes Urban Arterial	17,001	20,000	37,800	0.48†	A	NO
H Street - L Street	4 Lanes Urban Arterial	16,101	18,000	37,800	0.43†	A	NO
<b>Third Avenue</b>							
C Street - E Street	4 Lanes Commercial Boulevard	7,220	12,000	33,750	0.32†	A	NO
E Street - G Street	2/4 Lanes Downtown Promenade	14,413	21,000	14,400/33,750	0.56†	A	NO
G Street - H Street	4 Lanes Downtown Promenade	18,071	19,000	33,750	0.51†	A	NO
H Street - L Street	4 Lanes Commercial Boulevard	23,459	24,000	33,750	0.64†	B	NO
South of L Street	4 Lanes Class I Collector	21,814	22,000	22,000	0.80†	C	NO

\*Street classification is based on the standards provided in the 2005 Chula Vista General Plan, but will be analyzed with existing number of lanes for each respective roadway segment.

†This roadway segment is part of the Urban Core Circulation Element.

‡This roadway segment is classified as a six-lane roadway, but is assumed to function as a four-lane roadway for this scenario.

- #54: Third Avenue at J Street (LOS E – PM Peak);
- #57: Second Avenue at D Street (LOS E – PM Peak);
- #59: J Street at I-5 NB Ramp (LOS F – AM Peak, LOS E – PM Peak);
- #61: L Street at Bay Boulevard (LOS F – PM Peak);
- #63: Bay Boulevard at I-5 SB Ramp (LOS F – AM and PM Peak); and
- #64: Industrial Boulevard at I-5 NB Ramp (LOS F – PM Peak).

### **b. Daily Segment Analysis**

Table 5.8-5 summarizes the segment operations. As seen in the table, all study area segments are calculated to operate at LOS D or better for the 2030 condition except the following, which are calculated to operate at LOS E or F.

- H Street from I-5 to Broadway (LOS F)
- Third Avenue from E Street to G Street (LOS F)

It should be noted that the roadway segment of H Street between Hilltop and I-805 was identified in the GPU EIR as LOS F under the existing condition (four-lane Arterial). The GPU amended the classification to the new Urban Core designation of "Gateway Street" and recommended the future configuration as a six-lane Gateway Street. Under the UCSP the classification of this segment was also assumed as a Gateway Street. Although the GPU EIR assumed the future condition as a six-lane Gateway Street and thus concluded an improvement to LOS C, the UCSP has assumed that the existing condition (four lanes) will be maintained due to significant right of way constraints. This segment of H Street is currently developed with many single-family homes and Hilltop High school all of which would not change over the 25-year planning horizon of the UCSP. Therefore, the future function of this segment is considered to be maintained as a four-lane Gateway Street and the UCSP TIA identifies a LOS E. This segment of H Street would be retained in its current condition.

In addition, although there are some segments which experience increases in daily traffic volumes, in no other cases besides the segments identified above will there be a more than two letter grade LOS change in service (i.e., from LOS A to LOS C), meaning that the roadways are of sufficient capacity to handle substantial increase in traffic volume without experiencing a significant drop in service level.

### **5.8.3.2 Transit Services**

A number of future regional transit improvements are planned that will serve the Urban Core area. Many of these lines provide transit stations within the UCSP area and are integrated into the land use and transportation components of the specific plan. Other routes are located with transit stations nearby; these routes could serve the Urban Core area. Figure 5.8-6 shows the future transit routes listed below.

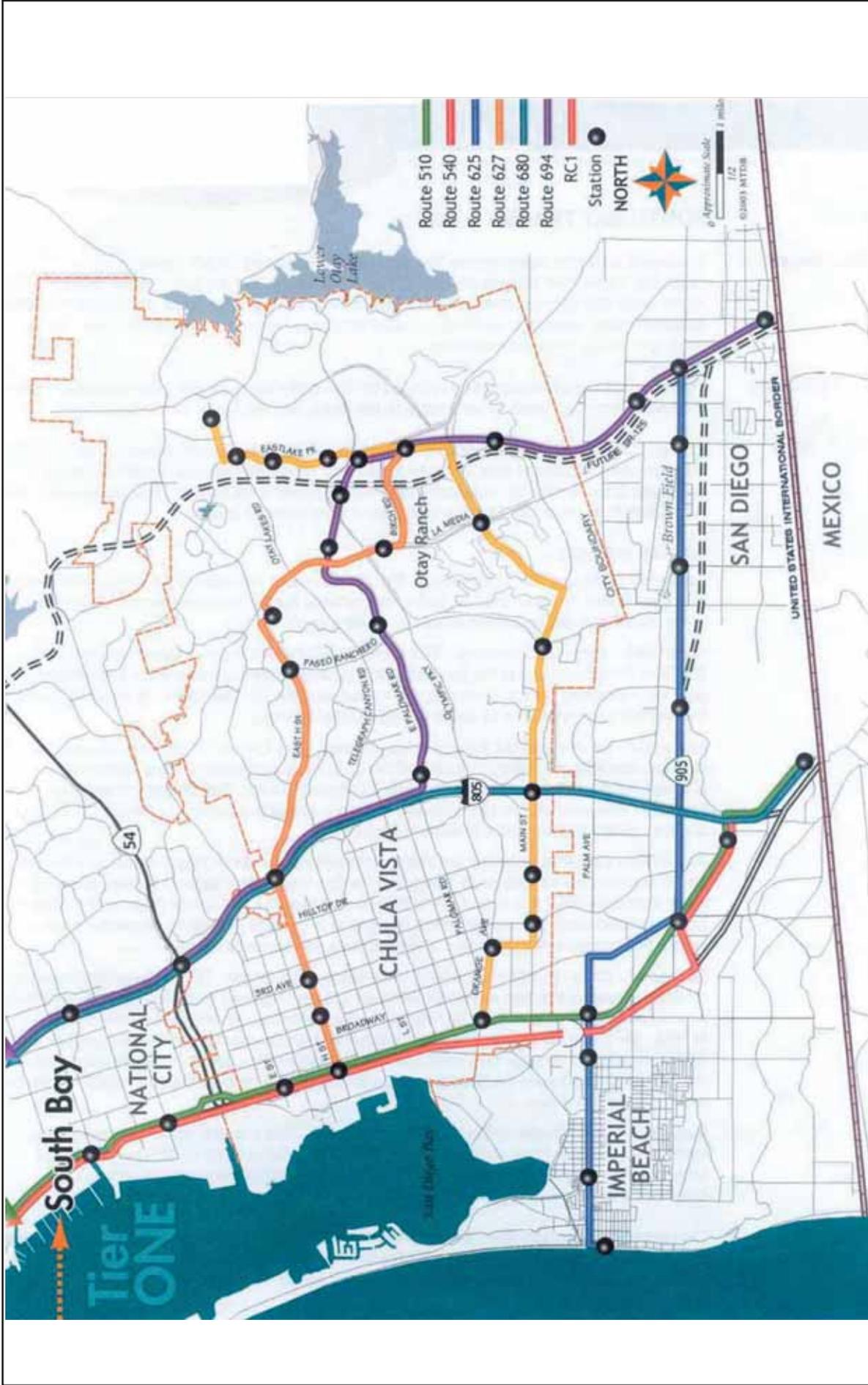


FIGURE 5.8-6  
Regional Transit Routes

**Route 510** (Existing Blue Line Trolley) would have increased frequency of service. Light rail transit (LRT) headways would be reduced from 10 minutes to 5 minutes. In order to achieve this level of transit service, it would be necessary to grade separate the LRT tracks from key surface streets, such as E Street and H Street within the project area.

**South Bay Transit First Project** would provide Regional BRT service between Otay Ranch in eastern Chula Vista and downtown San Diego. The first phase of the project would follow I-805 and SR-94, along with East Palomar Street. Phase 1 of the project could be completed by the Year 2010. The second phase of the project would extend the line to the Otay Border crossing and serve businesses in Otay Mesa.

**Route 540** (I-5 Express Service) would provide Regional BRT service from San Ysidro to downtown San Diego and Old Town. This route would use median lanes in I-5 and would have a transit stop at H Street (with elevators to the H Street overcrossing at I-5). This route would have infrequent stations, which would allow for shorter travel times, as compared to Route 510.

**Route 627 (H Street BRT)** would provide a transit connection between the Chula Vista Urban Core Specific Plan area and Southwestern College and the Eastern Urban Center. This route will connect the major activity centers in the redeveloping areas of western Chula Vista to the rapidly growing areas of eastern Chula Vista.

**Route 680 (Sorrento Valley to San Ysidro International Border)** would provide Regional BRT service between the San Ysidro and Sorrento Mesa along the I-805 corridor. This service would connect Chula Vista to major employment centers in Kearny Mesa and Sorrento Mesa. Transit stations for this route would be located on I-805 at H Street.

These new and better transit connections are planned to more efficiently move people from trolleys to buses and throughout the Urban Core. While implementation of each the above referenced routes is not assured at this time, SANDAG has set aside \$80 million within the first 10 years of the RTP to fund project capital needs. The RTP will complete the area's transit network, and transform it into a robust system with more travel options dedicated to serving the unique travel needs of the Urban Core population.

SANDAG, in coordination with the Metropolitan Transit System, is responsible for allocation of regional funds to transportation projects, programs, and services based on established criteria. These criteria provide priority to implementing smart growth, the Regionally Significant Transportation Network, the Congestion Management Program, and performance monitoring efforts. Determining the transit alignments, identification of station locations, and selection of the appropriate technology, are required for the regional transit services as prioritized in the RTP.

Under buildout of the RTP, transit service headways would be significantly reduced adding additional vehicles to the Urban Core roadways. As a result, roadway segments will

experience minor increases in daily traffic volumes. However, in no case besides the segments identified in Table 5.8-5 above will there be a more than two letter grade LOS change in service (i.e. from LOS A to LOS C), meaning that the roadways are of sufficient capacity to handle a substantial increase in transit volume without experiencing a significant drop in service level.

### **5.8.3.3 West Side Shuttle Service**

West Side Shuttle is a concept proposed to serve both the Urban Core Specific Plan and the Bayfront Master Plan areas in western Chula Vista. This service would complement existing and planned future transit improvements. The shuttle would provide localized service between various uses in western Chula Vista and provide connections to the regional transit system. Figure 5.8-7 depicts the proposed routing of the West Side Shuttle. The shuttle would provide local connectivity with stations serving Route 510 at the existing E Street station, Routes 510, 540 (future service), and 627 (future service) at the existing H Street trolley station, and the future station on H Street near Third Avenue serving future Route 627. In addition, five other stations are planned to serve destinations within the Urban Core Specific Plan, along with three additional stations within the Bayfront Master Plan.

Although MOBILITY 2030 has identified the need for neighborhood level services such as the West Side Shuttle, it has not prioritized funding to implement them. While a West Side Shuttle would compliment the existing local and regional transit system, it is primarily intended to serve the Urban Core Area. As such, it is not likely to be funded through regional sources and at present, an on-going operating revenue source has not been identified. Chula Vista Transit has identified vehicle resources to meet the demands for this route, and future development of the Bayfront may contribute some portion of operating expense.

Due to the longer term nature of implementing the West Side Shuttle, the actual level of ridership and concomitant reduction in automobile trips has not been quantified at this time nor reflected in the TIA prepared for the UCSP. West Side Shuttle service headways would need to be short (i.e., 5 to 10 minutes) in order to attract sufficient customers and will result in some additional vehicles on the Urban Core roadways. Roadway segments are expected to experience minor increases in daily traffic volumes as a result. However, in no case besides the segments identified in Table 5.8-5 above will there be a more than two letter grade LOS change in service (i.e. from LOS A to LOS C), meaning that the roadways are of sufficient capacity to handle a substantial increase in shuttle vehicle volumes without experiencing a significant drop in service level.

### **5.8.3.4 Other Mobility Enhancements**

As discussed in Chapter V, Mobility, and in the urban amenities regulations and guidelines contained in Chapter VII-VIII of the UCSP, the hierarchy of emphasis in the plan is to accommodate pedestrians, bicyclists, public transit, and finally, the automobile. While some



**Note: Route may use E Street or F Street**



**FIGURE 5.8-7**  
West Side Shuttle Proposed Route

intersection and street segment improvements may lower automotive LOS for the segments, they serve to increase alternate forms of mobility by introducing traffic calming elements, pedestrian improvements and paseos. The UCSP and City of Chula Vista Bikeway Master Plan address deficiencies in the bikeway network and makes recommendations for new and upgraded bikeway facilities throughout the area for both recreational and commuting users, as shown in Figure 5.8-8.

### 5.8.3.5 Parking

The UCSP allows for an intensification of development in the Urban Core which will create an increased demand for off-street parking. The Land Use and Development Regulations section of the UCSP identify parking requirements such as the minimum number of parking spaces required per land use and parking locations. Parking standards identified for residential, guest, and non-residential uses are as follows:

- Residential – 1.5 Parking Spaces per Dwelling Unit (1 Parking Space per Dwelling Unit in Transit Focus Areas ONLY)
- Guest (residential requirement only) - 1 Parking Space/10 dwelling units
- Non-Residential – 2 Parking Spaces per 1000 square feet.

As a result, implementation of the UCSP would result in the following additional required parking:

Total Parking Required

Use	Net Increase(sf)	Parking Requirement	Spaces Required
Multi-Family Residential (Dwelling Units)*	7,100	1.5/du	10,650
Residential Guest Parking**	7,100	1/10 du	710
Commercial Retail	1,000,000	2/1000 sf	2,000
Commercial Office	1,300,000	2/1000 sf	2,600
Commercial-Visitor Serving	1,300,000	2/1000 sf	2,600
		<b>Total</b>	<b>18,560</b>

\*Table assumes residential parking requirement of 1.5 spaces per dwelling unit, however parking requirement for Transit Focus Areas is 1 space per dwelling unit.

\*\*Calculated using projected number of residential dwelling units

While the majority of new uses will provide parking on-site, there are specific locations such as within the Village District and transit focus areas that allow some of the parking needs to be met off-site and/or through alternative means such as in lieu fees and shared parking arrangements. Shared parking arrangements must be assured in perpetuity and accessible via a public pedestrian path (e.g. sidewalk).

In addition, a number of other parking improvement strategies are proposed as part of the UCSP. These include:

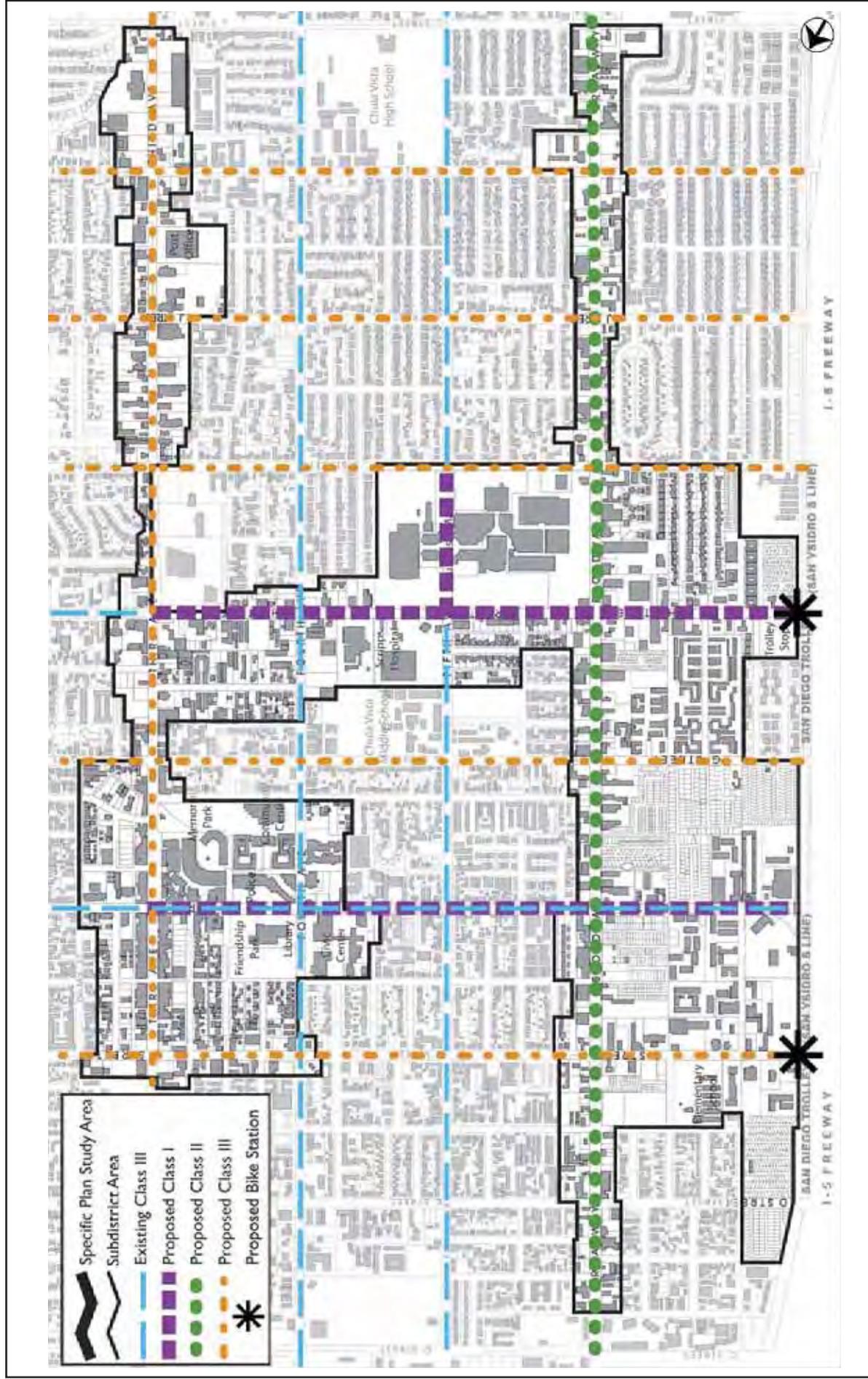


FIGURE 5.8-8  
Existing and Proposed Bikeways

- **Parking Circulation** – Buffers will be created between pedestrians and traffic to induce feeling of safety by pedestrians and to help define crosswalk and outside seating areas.
- **Parking Districts** – Parking districts will be constructed to create more parking, promote efficient use of parking spaces, and to provide a means for allowing shared parking and remote off-site parking for a development site.
- **Parking Structures** – The specific plan recommends parking structures where feasible and in particular within the transit focus areas to encourage the intensification of mixed-use, commercial, office, and residential projects where parking can be provided on-site in a structured format.

### **5.8.3.6 Facilities Implementation Analysis**

As part of the preparation of the UCSP, a Facilities Implementation Analysis (FIA) has been prepared to assess how the identified amenities and improvements, including the recommended cumulative traffic improvements identified below, compare to the anticipated funding sources available to implement the improvements. Available funding sources include existing development impact fees, projected tax increment, scheduled TransNet funding, the City's Capital Improvement Program and state and federal grants that will be pursued over the 20-25 year implementation of the UCSP. Existing development impact fees may be amended as necessary and additional development impacts fees may be proposed to contribute to the costs of recommended traffic improvements. Considering all of these available and potential funding sources, the FIA has determined that overall the level of improvements is sufficiently aligned with a variety of funding sources.

## **5.8.4 Summary of Significance Prior to Mitigation**

Based on the peak hour intersection and segment analyses, the significance of project impacts was determined. Table 5.8-4 summarizes the significant intersection impacts, while Table 5.8-5 summarizes the significant street segment impacts. The traffic analysis reported that during 2030 condition, 19 intersections will operate at LOS E or worse during the peak periods and all but two roadway segments will function at an acceptable LOS.

Potential significant impacts to parking would be reduced to below significance by the incorporation of development regulations and design guidelines as part of the UCSP. All subsequent development projects must comply with the development regulations and design guidelines incorporated as part of the UCSP.

## **5.8.5 Mitigation Measures**

The following mitigation measures shall be implemented to reduce the potential significant adverse impacts of the project on intersections and street segments in the project area:

## Mitigation Measure

### 5.8.5-1 Intersection Improvements

The impacts to the intersections listed in 5.8.3.1(a) above will be mitigated to below significance by the implementation of improvements that have been divided into three tiers for phased implementation based on need and enhancement of the overall street network. Generally, time frames associated with the tiered improvements are anticipated as short-, mid- and long-term. In each tier, the City's existing TMP will determine the order in which projects are implemented during the biannual CIP program review. The Tier 1 improvements would be included in the current CIP and subsequently monitored for improvement within the first five years of implementation of the UCSP. It should be noted that three of the intersections (#7, #16, and #21) are proposed as project features rather than as needed to improve intersection LOS and most likely will be related to and timed with implementation of streetscape improvements along Third Avenue.

The intersection numbers in the improvements described below correspond to the intersection numbering system used in the TIA (Appendix C):

#### a. Tier 1 Improvements

- **#1 Bay Boulevard/I-5 Southbound Ramp/E Street:** Add an eastbound through and right-turn lane, southbound right-turn lane, and northbound right-turn lane. Coordination with Caltrans will be required for this improvement.
- **#2 I-5 Northbound Ramp/E Street:** Add a westbound right-turn lane. Coordination with Caltrans will be required for this improvement.
- **#7 Third Avenue/E Street:** Convert the northbound and southbound shared right-through lane into exclusive right-turn lanes.
- **#16 Third Avenue/F Street:** Separate the southbound shared through-right lane into an exclusive through and right-turn lanes, convert the northbound shared through-right lane into an exclusive right-turn lane.
- **#21 Third Avenue/G Street:** Convert the northbound/southbound shared through-right lane into exclusive right-turn lanes.
- **#24 I-5 Southbound Ramp/H Street:** Add a southbound left, eastbound through and right-turn lanes. Coordination with Caltrans will be required for this improvement.

- **#25 I-5 Northbound Ramp/H Street:** Add a westbound through and right-turn lane and restripe south approach to accommodate dual left-turn lanes. Coordination with Caltrans will be required for this improvement.
- **#26 Woodlawn Avenue/H Street:** Change Woodlawn Avenue to a one-way couplet. This improvement is required to serve the intense redevelopment occurring on both sides of H Street. The couplet improvement is not required mitigation further north toward E Street.
- **#27 Broadway/H Street:** Add an eastbound transit queue jumper lane and westbound through and right-turn lanes.
- **#28 Fifth Avenue/H Street:** Change the northbound/southbound approaches to include protective plus permissive phasing and add a westbound right-turn lane.
- **#29 Fourth Avenue/H Street:** Add an eastbound/westbound right-turn lane.
- **#44 Fourth Avenue/SR-54 Eastbound Ramp:** Add an eastbound right-turn lane. Coordination with Caltrans will be required for this improvement.

**b. Tier 2 Improvements**

- **#34 Broadway/SR-54 Westbound Ramp:** Add a westbound right-turn lane. Coordination with Caltrans will be required for this improvement.
- **#59 J Street/I-5 Northbound Ramp:** Add an eastbound left-turn and westbound right-turn lane. Coordination with Caltrans will be required for this improvement.
- **#61 L Street/Bay Boulevard:** Signalize the intersection, add a southbound left-turn lane, and a northbound right-turn overlap phase to the traffic signal.
- **#63 Bay Boulevard/I-5 Southbound Ramp:** Signalize the intersection. Coordination with Caltrans will be required for this improvement.
- **#64 Industrial Boulevard/I-5 Northbound Ramp:** Signalize the intersection. Coordination with Caltrans will be required for this improvement.
- H Street from four lanes to six lanes from I-5 to Broadway

### c. Tier 3 Improvements

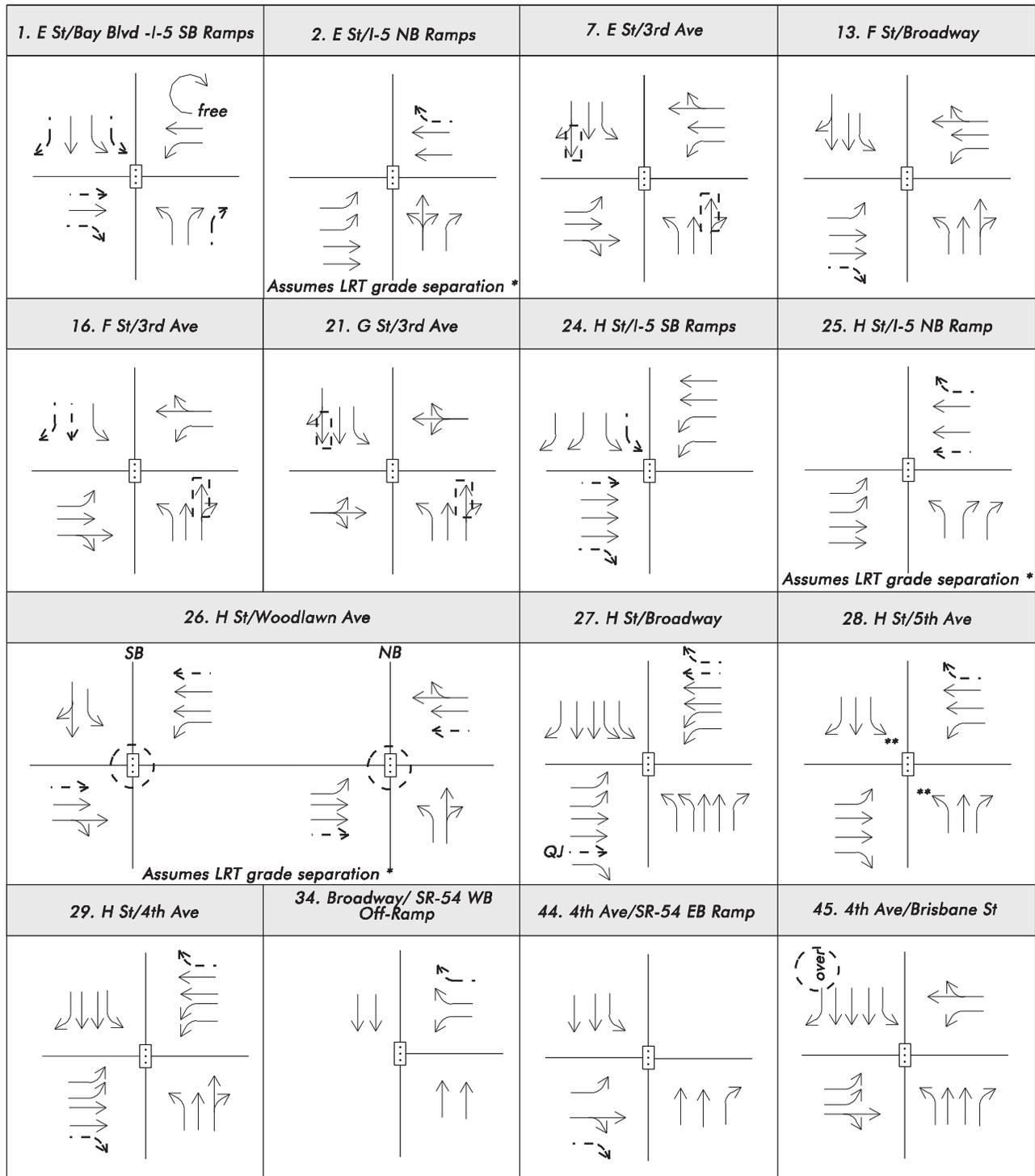
- **#13 Broadway/F Street:** Add an eastbound right-turn lane.
- **#45 Fourth Avenue/Brisbane Street:** Add a southbound right-turn overlap phase to the traffic signal.
- **#57 Second Avenue/D Street:** Convert to an all-way stop controlled intersection.

On an annual basis during build-out of the UCSP, the City shall apply the TMP to monitor actual performance of the street system in the Subdistricts Area by conducting roadway segment travel time studies in accordance with the City's Growth Management Program and Traffic Threshold Standards. The results of the annual study under the TMP will be used by the City to determine the timing and need for implementation of improvements to the nineteen intersections identified above as having potential significant impacts. The City shall implement the intersection improvements in phases based on the results of the annual TMP and on need and enhancement to the function of the overall street network. In addition to determining timing and need, this systems and operations monitoring approach should also be used to further ascertain final design details of the intersection improvements and may include consideration of the effects on traffic flow as well as the impacts/benefits to other travel modes (e.g., pedestrians and bicycles) that are foundational to the successful implementation of the Specific Plan.

The recommended improvements at the study intersections listed above are shown in Figures 5.8-9, 5.8-10, and 5.8-11 show the location of these intersections. It should be noted that the E Street and H Street intersections between the I-5 NB Ramp and Woodlawn Avenue assumes a Light Rail Transit (LRT) grade separation, which would separate vehicular traffic from the trolley. It is recommended that the trolley tracks be grade separated along E and H Streets to improve intersection operations and to accommodate the planned increase in trolley frequency. Implementation of this improvement will have to be coordinated with Caltrans and SANDAG and a combination of local, regional, state, and federal funding will be needed for the grade separation.

Table 5.8-6 displays the LOS analysis results for the study intersections that have assumed improvements under the Year 2030 With Improvements scenario. As shown in this table, all study intersections could operate at LOS D or better during both peak periods with the proposed improvements, except for the following intersections:

- #27 Broadway/H Street
- #33 Hilltop Drive/H Street
- #54 3rd Avenue/J Street



\* The Light Rail Transit Crossings on E Street and H Street will have to be grade separated from the vehicular traffic along E Street and H Street.

\*\* To improve this intersection the left turn phasing from the indicated movements will be changed to protective + permissive.

**Legend:**

Traffic Signal

Stop Sign

Existing lane

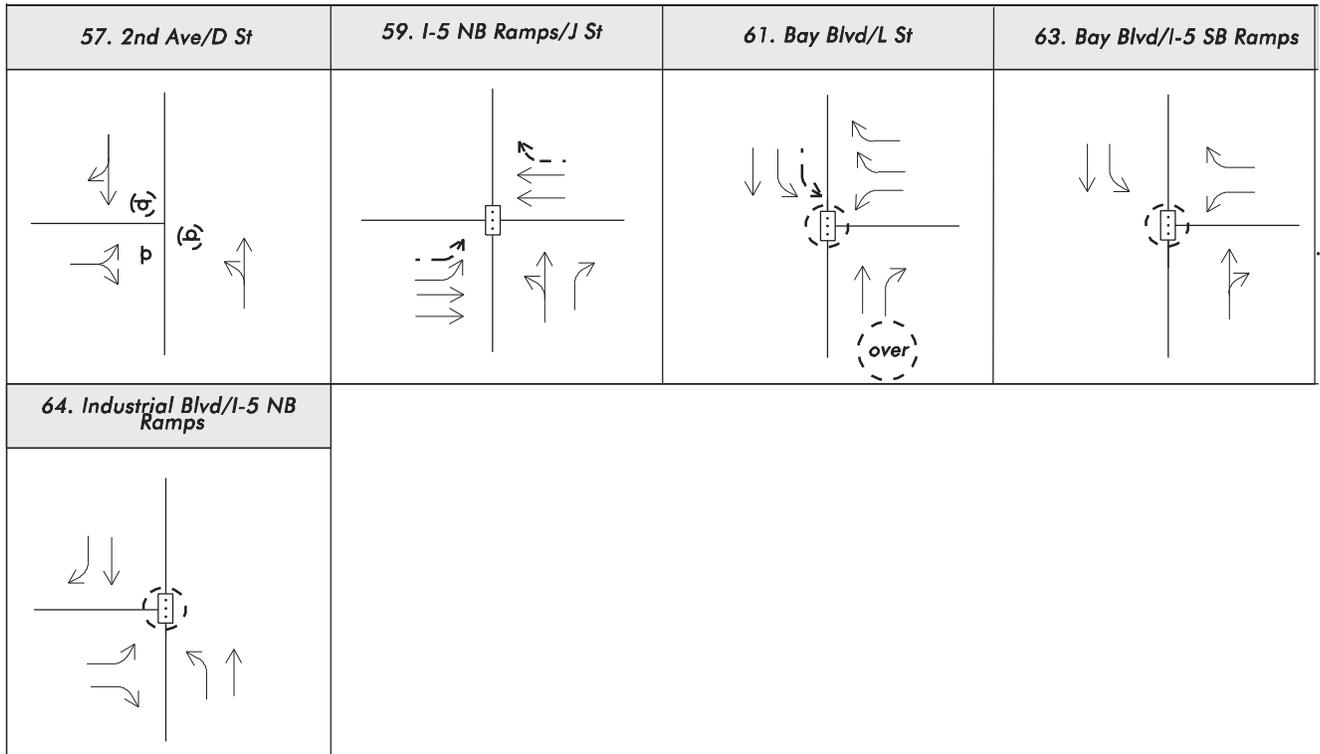
Proposed Improvement

Lane to be "altered"

New Overlap Phase

Queue Jumper

FIGURE 5.8-9  
Year 2030 with Improvements  
Intersections Geometrics



**Legend:**

-  Traffic Signal
-  New Traffic Signal
-  Existing lane
-  Proposed Improvement
-  New Overlap Phase
-  Lane to be "altered"
-  New Stop Sign



**FIGURE 5.8-10**  
Year 2030 with Improvements  
Intersections Geometrics

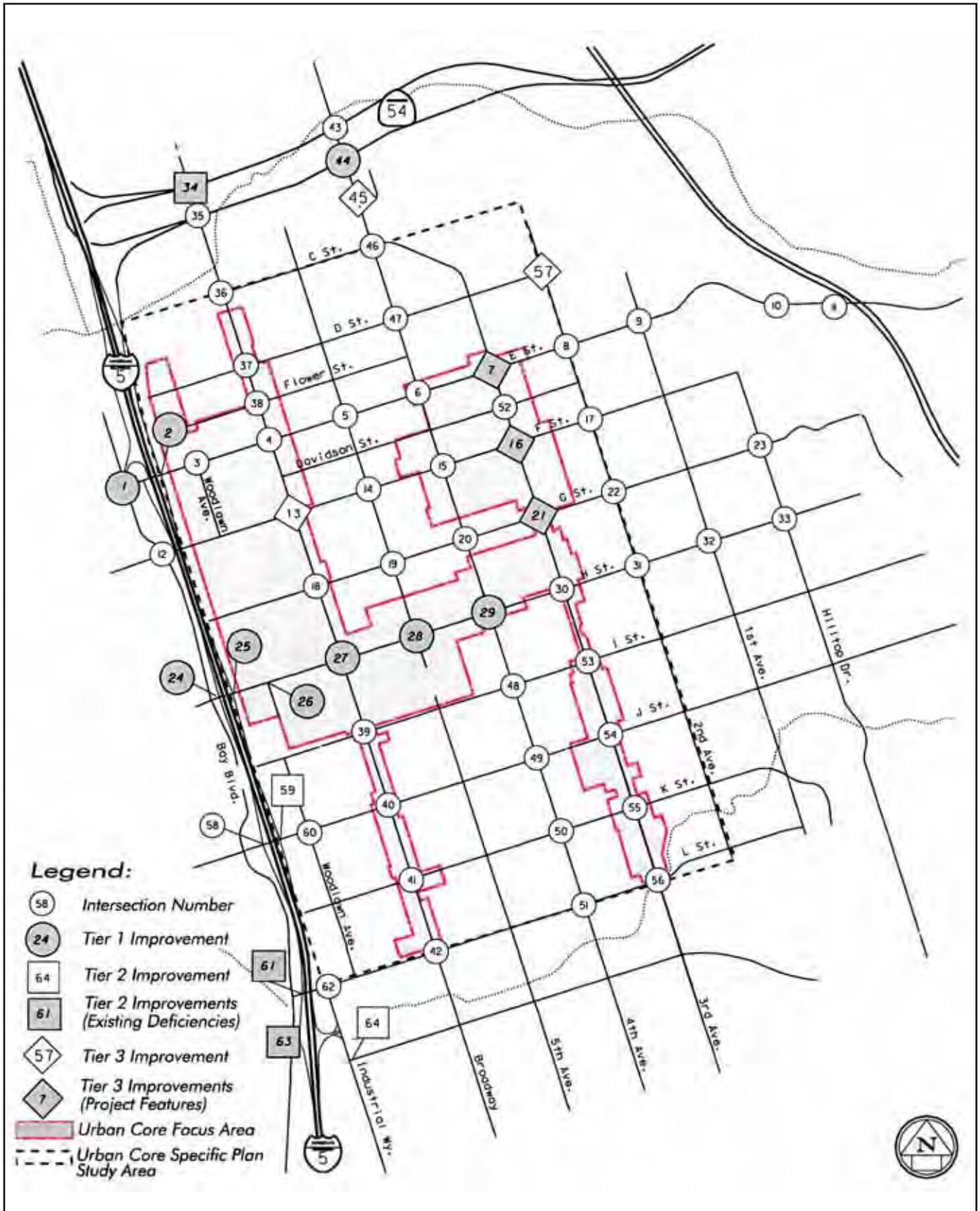


FIGURE 5.8-11  
Project Features/Improvements  
at Study Intersection

TABLE 5.8-6  
YEAR 2030 WITH MITIGATION CONDITIONS PEAK HOUR INTERSECTION LEVEL OF SERVICE SUMMARY

Intersection	Peak Hour	Before Improvements Delay <sup>a</sup>	Before Improvements LOS <sup>b</sup>	After Improvements Delay <sup>a</sup>	After Improvements LOS <sup>b</sup>	Proposed Improvements <sup>c</sup>
1 Bay Blvd-I-5 SB Ramp @ E Street <sup>d</sup>	AM	58.4	E	25.5	C	Add EBT, EBR, SBL, SBR and NBR lanes.
	PM	302.9	F	37.2	D	
2 I-5 NB Ramp @ E Street <sup>d</sup>	AM	60.5	E	26.1	C	Add WBR lane.
	PM	31.9	C	20.6	C	
13 Broadway @ F Street <sup>d</sup>	AM	17.7	B	20.0	B	Add EBR lane.
	PM	66.1	E	39.7	D	
24 I-5 SB Ramp @ H Street <sup>d</sup>	AM	36.7	D	21.5	C	Add SBL, EBT, and EBR lanes.
	PM	84.5	F	27.1	C	
25 I-5 NB Ramp @ H Street <sup>d</sup>	AM	47.6	D	23.1	C	Add WBR, WBT, and restripe south approach to accommodate dual left turns.
	PM	138.4	F	31.7	C	
26 Woodlawn Ave @ H Street <sup>e</sup>	AM	33.7	C	32.2/13.3	C/B	Change Woodlawn Ave. to a one way couplet.
	PM	260.6	F	22.2/28.8	C/C	
27 Broadway @ H Street	AM	42.7	D	36.4	D	Add EBT Queue Jumper Lane, WBT and WBR lanes
	PM	118.1	F	77.0	E	
28 5th Ave @ H Street	AM	15.2	B	19.1	B	Change NB and SB approaches to protective + permissive phasing and add WBR lane.
	PM	61.6	E	52.0	D	
29 4th Ave @ H Street	AM	38.6	D	30.3	C	Add EBR and WBR lanes.
	PM	59.4	E	40.2	D	
33 Hilltop Dr @ H Street	AM	58.3	E	58.3	E	Do nothing due to ROW Constraints.
	PM	74.2	E	74.2	E	
34 Broadway @ SR-54 WB Ramp <sup>u</sup>	AM	190.6	F	45.2	D	Add WBR lane
	PM	16.2	B	14.8	B	
44 4th Ave @ SR-54 EB Ramp <sup>u</sup>	AM	37.2	D	22.6	C	Add EBR lane.
	PM	95.2	F	25.2	C	
45 4th Ave @ Brisbane Street <sup>d</sup>	AM	25.8	C	24.2	C	Add SBR overlap phase.
	PM	61.5	E	50.1	D	
54 3rd Ave @ J Street	AM	22.9	C	22.9	C	Do Nothing due to impacts on Henry's Building.
	PM	74.5	E	74.5	E	
57 2nd Ave @ D Street	AM	31.2	D	27.0	D	Convert to an all-way stop control intersection.
	PM	36.0	E	18.6	C	
59 J St @ I-5 NB Ramp <sup>v</sup>	AM	135.2	F	28.3	C	Add EBL and WBR lanes.
	PM	61.7	E	24.1	C	
61 L St @ Bay Blvd. <sup>w</sup>	AM	22.7	C	18.1	B	Add SBL lane, signalize intersection, and add NBR overlap phasing.
	PM	203.0	F	17.1	B	
63 Bay Blvd @ I-5 SB Ramp <sup>u</sup>	AM	84.0	F	17.7	B	Signalize intersection.
	PM	221.2	F	46.9	D	
64 Industrial Blvd @ I-5 NB Ramp <sup>u</sup>	AM	26.0	D	12.6	B	Signalize intersection.
	PM	66.5	F	20.8	C	

**Bold** values indicate intersections operating at LOS E or F.

ECL= Exceeds calculable limit. At intersections at or over capacity, the calculated delay value becomes unreliable.

EBL = eastbound left-turn lane; EBT = eastbound through lane; EBR = eastbound right-turn lane; NBL = northbound left-turn lane; NBT = northbound through lane; NBR = northbound right-turn lane; WBL = westbound left-turn lane; WBT = westbound through lane; WBR = westbound right-turn lane; SBL = southbound left-turn lane; SBT = southbound through lane; SBR = southbound right-turn lane.

<sup>a</sup>Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

<sup>b</sup>LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 6.0.

<sup>c</sup>See figures 6-21 to 6-21.1 for the proposed improvements at the study intersections.

<sup>d</sup>Coordination with Caltrans will be required for the proposed improvement at this intersection.

<sup>e</sup>The Woodlawn Avenue couplet creates two new intersections. The first number/letter corresponds to the delay/LOS at the west intersection and the second number/letter corresponds to the delay/LOS at the east intersection.

### Mitigation Measure

5.8.5-2 Segment Improvements. During build-out of the UCSP, the City shall apply the Traffic Monitoring Program (TMP) to monitor actual performance of the street system in the Subdistricts Area by conducting roadway segment travel time studies in accordance with the City's Growth Management Program and Traffic Threshold Standards. The results of the annual study under the TMP will be used by the City to determine the timing and need for implementation of improvements to the street segments identified as having potential significant impacts. The City shall implement the following street segment improvements: (1) based on the results of the annual TMP; or (2) based on need and enhancement to the function of the overall street network; and (3) in a manner that efficiently implements with phasing of necessary adjacent intersection improvements.

- 1) H Street between I-5 and Broadway would be reclassified as a six-lane gateway. As a result, the acceptable ADT would increase and result in an acceptable LOS.
- 2) Third Avenue between E Street and G Street would be constructed as a two-lane downtown promenade to facilitate an enhanced pedestrian environment along the traditional commercial village. As a result, the acceptable ADT along the segment would decrease and result in an unacceptable LOS. As such, impacts to Third Avenue will be significant and unavoidable. However, as identified in Table 5.8-4, the Third Avenue corridor intersections at E, F, and G Streets would all operate at an acceptable LOS.

Table 5.8-7 summarizes the Year 2030 With Improvement Conditions LOS analysis for the roadway segments with assumed improvements located in the Urban Core. With regard to traffic impacts, intersection operations are a better indicator of actual traffic flow. The planned improvement to Third Avenue has overriding benefits towards meeting the project objectives of creating a more pedestrian friendly and active streetscape that accommodates multi-modes of transportation rather than just accommodating the automobile. Although the turning volumes from Third Avenue are not very high, turning lanes are proposed to remove turning traffic from the through traffic. Turning vehicles would yield to anticipated high pedestrian traffic volumes and the turn lanes allow these yielding vehicles to pull out of the through travel lanes and allow a right-turn lane and a left turn lane to be provided. The intersection configuration would adequately accommodate future traffic demands along Third Avenue while providing a significantly enhanced pedestrian friendly streetscape.

**TABLE 5.8-7  
YEAR 2030 WITH MITIGATION CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY**

Street/Segment	Daily Traffic Volume	Before Improvements Street Classification*	Acceptable Volume	Daily Segment LOS	After improvements Street Classification (b)	Acceptable Volume	Daily Segment LOS
H Street							
I-5 - Broadway Third Avenue	52,000	4 Lanes Gateway Street 2/4 Lanes Downtown	43,200	F	6 Lanes Gateway Street 2 Lanes Downtown	68,000	D
E Street - G Street	21,000	Promenade	14,400/33,750	A	Promenade	14,400	F

\*Street classification is based on the standards provided in the 2005 Chula Vista General Plan.

†This roadway segment is part of the Urban Core Circulation Element.

**Mitigation Measure**

5.8.5-3 Prior to issuance of an Urban Core Development Permit, subsequent development projects shall prepare a traffic assessment to quantify the projects' potential traffic impacts. Subsequent projects will be required to contribute their fair share to the Tiered Improvements listed above under Mitigation 5.8.5.1. Mitigation may be in the form of:

- 3)1) Payment of Transportation Development Impact Fee (TDIF), as may be established in the future for the western portion of the City;
- 4)2) Payment of existing Traffic Impact Signal Fee;
- 5)3) Construction of improvements within the project boundaries; and/or
- 6)4) Early advancement of improvements beyond the project boundaries, subject to a reimbursement agreement.

The City's TDIF program for the west side of the City, including the Urban Core is anticipated to be developed within the subsequent twelve months following adoption of the UCSP. The TDIF will clearly establish the costs of the improvements identified above as well as the fair share costs to be applied to all subsequent development projects. Once the TDIF has been established, the fee will be consistently applied to all subsequent development projects, until such time that the TDIF is amended or rescinded. In the interim, if subsequent development projects are processed and approved prior to the establishment of a TDIF, a condition of approval will be included that prior to issuance of building permits the project will contribute to the TDIF, as may be established.

**Mitigation Measure**

5.8.5-4 Prior to issuance of an Urban Core Development Permit for subsequent development projects, the traffic assessment prepared to quantify the projects' potential traffic impacts will also identify how alternative modes of transportation will be accommodated. Mitigation may be in the form of:

- 1) Compliance with the development regulations and design guidelines of the UCSP to accommodate pedestrians, bicyclists and public transit; and
- 2) Where applicable, construction of improvements within the project boundaries; and/or
- 3) Early advancement of improvements beyond the project boundaries, subject to a reimbursement agreement.

**Mitigation Measure**

- 5.8.5-5 Prior to issuance of an Urban Core Development Permit, subsequent development projects shall comply with the parking standards set forth in the UCSP development regulations and design guidelines for the type and intensity of development proposed.

**Mitigation Measure**

5.8.5-6 The City shall participate in a multi-jurisdictional effort conducted by Caltrans and SANDAG to assist in developing a detailed engineering study of the freeway right-of-way that will identify transportation improvements along with funding, including federal, state, regional, and local funding sources, and phasing, that would reduce congestion consistent with Caltrans Standards on the I-5 South corridor from the State Route 54 (SR-54) interchange to State Route 75 (SR-75)/Palm Avenue (the "I-5 South Corridor") (hereinafter, the "Plan). Local funding sources may include fair share contributions by private development based on nexus as well as other mechanisms. The Plan required by this mitigation shall include the following:

- 1) The responsible entities (the "Entities") included in this effort will include, but may not be limited to the City, the Port, SANDAG, and Caltrans. Other entities may be included upon the concurrence of the foregoing Entities.
- 2) The Plan will specifically identify physical and operational improvements to I-5, relevant arterial roads and transit facilities (the "Improvements"), that are focused on specific transportation impacts and will also identify the fair share responsibilities of each Entity for the construction and financing for each Improvement. The Plan may also identify other improvements necessary to address regional transportation needs, but for purposes of this mitigation measure, the Improvements included in the Plan need only be designed to mitigate the impacts created by the Proposed Project.
- 3) The Plan will set forth a timeline and other agreed-upon relevant criteria for implementation of each Improvement.
- 4) The Plan will identify the total estimated design and construction cost for each Improvement and the responsibility of each Entity for both implementation and funding of such costs.
- 5) The Plan will include the parameters for any fair-share funding contributions to be implemented, that would require private and/or public developers to contribute to the costs, in a manner that will comply with applicable law.

- 6) In developing the Plan, the Entities shall also consider ways in which the Improvements can be coordinated with existing local and regional transportation and facilities financing plans and programs, in order to avoid duplication of effort and expenditure; however, the existence of such other plans and programs shall not relieve the Entities of their collective obligation to develop and implement the Plan as set forth in this mitigation measure. Nothing in the Plan shall be construed as relieving any Entity (or any other entity) from its independent responsibility (if any) for the implementation of any transportation improvement.
- 7) The City shall seek adoption of the Plan before the City Council upon the completion of the multi-jurisdictional effort to develop the Plan. The City shall report, to their governing bodies regarding the progress made to develop the Plan within six months of the first meeting of the Entities. Thereafter, the City shall report at least annually regarding the progress of the Plan, for a period of not less than five years, which may be extended at the request of the City Council.
- 8) The Plan shall also expressly include each Entity's pledge that it will cooperate with each other in implementing the Plan.

The failure or refusal of any Entity other than the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the City to implement this mitigation measure; however, the City shall use its best efforts to obtain the cooperation of all responsible Entities to fully participate in order to achieve the goals of the mitigation measure.

### **5.8.6 Summary of Significance After Mitigation**

The potential significant impacts to intersections will be mitigated to below significance by implementation of the improvements recommended in Mitigation Measure 5.8.5-1 and shown in Table 5.8-6, with the exception of #27 Broadway/H Street, #33 Hilltop Drive/H Street and #54 Third Avenue/J Street.

The potential significant impacts to street segments will be mitigated to below significance by implementation of the improvements recommended in Mitigation Measure 5.8.5-2 and shown in Table 5.8-7, with the exception of Third Avenue between E and G Streets. The significant and unavoidable impact to this street segment result from the design of the project, which is intended to reduce Third Avenue to a two-lane downtown promenade to facilitate an enhanced pedestrian environment along the traditional commercial village. Although the planned improvements would result in an unacceptable LOS, they would meet the project objectives of creating a more pedestrian friendly and active streetscape that will

accommodate multi-modes of transportation rather than accommodating only the automobile.

Development of alternative modes of transportation to accommodate pedestrians, bicyclists, and public transit, as planned for by the UCSP, will increase alternate forms of mobility by introducing traffic calming elements, pedestrian improvements and paseos. In addition, the reintroduction of the street grid, West Side Shuttle and future regional transit improvements that are planned to serve the Urban Core will serve to offset traffic impacts related to automobile use within the UCSP.

Tables 5.8-6 and 5.8-7 identify the recommended improvements to achieve acceptable levels of service at the majority of impacted intersections and roadway segments over the long-term cumulative buildout of the UCSP. While existing TransNet funding is expected to cover some of the costs of roadway and transit improvements and existing traffic signal fees currently collected as new development occurs would be applied, as appropriate, to identified signal-phasing improvements, the FIA has identified proposed development fees that may be needed to fund some of the recommended traffic improvements. In addition, some of the improvements will require right of way dedications either as part of the development process or concurrent with capital improvements, and/or coordination with Caltrans.

Due to the long-term nature of some of the improvements, the fee program and coordination have either not been implemented or begun, respectively, whereas the right of way exactions would occur with redevelopment. While these improvements are intended to be implemented when necessary and within the Tiers noted above, their long-term implementation cannot be assured at this time. Identified significant impacts will be partially mitigated but due to the lack of funding assurances at this time, future coordination with Caltrans and SANDAG, and future right of way exactions, impacts are considered significant and unmitigated.

Potential significant impacts to parking would be reduced to below significance by the incorporation of development regulations and design guidelines as part of the UCSP. All subsequent development projects must comply with the development regulations and design guidelines incorporated as part of the UCSP. Parking improvements will either be made on-site (i.e. where required of subsequent development projects), or off-site (i.e. in coordination with the City's Parking District or in Lieu Fee program).

Recommendations at intersections 27, 33, and 54 do not improve conditions to an acceptable LOS due to ROW and design constraints. Figure 5.8-12 shows the locations of these intersections that would still remain at LOS E. The following describes the constraints at the three intersections:



FIGURE 5.8-12  
Study Intersections Remaining LOS E

- At the Broadway/H Street intersection (#27), an additional northbound and southbound through lane would be required in order to achieve an acceptable LOS D conditions. However, this improvement would require extensive widening of Broadway and H Street to allow for lane drops. Furthermore, this widening would create longer pedestrian crossings. As such, the recommended improvements of the eastbound queue jumper lane and the additional westbound through and right-turn lanes would improve the intersection from LOS F to LOS E conditions.
- At the Hilltop Drive/H Street intersection (#33), no improvements would be recommended due to ROW constraints. The poor LOS at this intersection is primarily caused by the high traffic volumes in the eastbound/westbound movements. Additional through and/or turn lanes would be required in order to improve this intersection to an acceptable LOS. With no improvements, this intersection would remain at LOS E during both peak periods.
- At the Third Avenue/J Street intersection (#54), the required improvement of an additional southbound right-turn lane would impact the existing commercial building (Henry's Marketplace), which is built adjacent to the sidewalk. Therefore, this improvement is not recommended. As a result, the LOS would remain at LOS E. However, if the property were to redevelop in the future, additional ROW could be obtained for the southbound right-turn lane.

## 5.9 Noise

The following section is based upon the Noise Technical Report for the Urban Core Specific Plan, prepared by RECON in March, 2005 (Appendix D).

### 5.9.1 Existing Conditions

#### 5.9.1.1 Existing Noise Standards

In the City of Chula Vista GPU, noise standards are expressed in terms of the community noise equivalent level (CNEL). The City's exterior noise level standard for noise-sensitive areas, which include residences, school play areas, and outdoor recreational areas, is 65 CNEL. The City's exterior noise standard for office buildings and professional areas is 70 CNEL, and 75 decibels for retail and wholesale commercial areas, restaurants, and movie theaters. Figure 5.9-1 provides the allowable noise levels by land use as identified in the GPU.

The GPU of the City of Chula Vista specifies that residential structures shall be designed to prevent the intrusion of exterior noises such that interior noise levels attributable to exterior sources do not exceed 45 CNEL in noise-sensitive interior rooms. This conforms to Title 24 of the California Administrative Code that requires that multi-family residences' interior noise levels, due to exterior sources, not exceed 45 dB CNEL.

The California Administrative Code further specifies that if the exterior noise level exceeds 60 dB CNEL, an acoustical analysis shall demonstrate that the design would achieve the prescribed interior noise standard. Structural attenuation of noise from the exterior to interior is found in standard construction practices to be 15 dB or higher if windows are closed. With little additional noise reduction design, a noise reduction of 20 dB can be achieved. Exterior levels of up to 65 dB can therefore be accommodated before double-paned windows and other acoustical upgrades may be needed to meet the 45 dB CNEL interior standard.

The City's Municipal Zoning Code, Chapter 19.68 (Noise Control Ordinance), regulates noise generated by on-site activities. This ordinance specifies maximum one-hour average sound level limits at the boundary of a property. These maximum one-hour sound level limits are the maximum noise levels allowed at any point on or beyond the property boundaries due to activities occurring on the property. Where two or more zones adjoin, the more restrictive noise limits shall apply. Table 5.9-1 shows the exterior noise limits of the Noise Control Ordinance. These levels are applied to both environmental and nuisance noise sources as defined by the ordinance.

Land Use	Acceptable CNEL in Decibels					
	50	55	60	65	70	75
Residential	Shaded	Shaded	Shaded	Shaded	White	White
Schools, Libraries, Daycare Facilities, Convalescent Homes, Outdoor Use Areas, and Other Similar Uses Considered Noise Sensitive	Shaded	Shaded	Shaded	Shaded	White	White
Neighborhood Parks, Playgrounds	Shaded	Shaded	Shaded	Shaded	White	White
Community Parks, Athletic Fields	Shaded	Shaded	Shaded	Shaded	Shaded	White
Office and Professional	Shaded	Shaded	Shaded	Shaded	Shaded	White
Places of Worship (excluding outdoor use areas)	Shaded	Shaded	Shaded	Shaded	Shaded	White
Retail and Wholesale Commercial, Restaurants, Movie Theaters	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
Industrial, Manufacturing	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded

**FIGURE 5.9-1**  
 Exterior Land Use-Noise  
 Compatibility Guidelines

**TABLE 5.9-1  
EXTERIOR NOISE LIMITS**

Receiving Land Use Category	Noise Level [dB(A)]	
	10 P.M. to 7 A.M. (Weekdays)	7 A.M. to 10 P.M. (Weekdays)
All residential (except multiple dwelling)	45	55
Multiple dwelling residential	50	60
Commercial	60	65
Light industry – I-R and I-L zone	70	70
Heavy industry – I zone	80	80

**NOTES:**

Environmental Noise –  $L_{eq}$  in any hour.

Nuisance Noise – Not to be exceeded any time.

The noise level limits are specified for two different time intervals: daytime and nighttime hours. The daytime hours are specified as 7 A.M. to 10 P.M. on weekdays and 8 A.M. to 10 P.M. on weekends. The nighttime hours are specified as 10 P.M. to 7 A.M. on weekdays and 10 P.M. to 8 A.M. on weekends.

The City of Chula Vista Noise Control Ordinance restricts times of construction activities from 7:00 A.M. to 7:00 P.M., Monday through Saturday, and prohibits construction on Sundays and holidays. Furthermore, the noise levels from construction activities to residential receptors are not to exceed 75 dB, averaged over a 12-hour period.

### 5.9.1.2 Existing Noise Levels

Residents and visitors to the UCSP area of Chula Vista are exposed to noise from traffic and other local noise sources. The following noise sources exist within the UCSP area:

- Traffic on circulation element roads;
- Traffic on Interstate 5;
- The San Diego Trolley operated by the Metropolitan Transit Development Board;
- Freight service provided by the San Diego & Imperial Valley Railroad; and
- Various commercial operations in the planning area.

Ambient noise conditions were measured in and around the planning area. In order to provide a qualitative assessment of the variability of noise throughout the study area, a series of 10 daytime noise measurements ranging from 15 to 18 minutes in duration were made throughout the study area. The measurement locations are shown in Figure 5.9-2 and were chosen to obtain existing noise levels in order to characterize the existing ambient noise condition. Table 5.9-2 presents the results of the ambient noise measurements. As



 UCSP Study Area  
 UCSP Subdistricts Area

 Short-term Measurement Locations



FIGURE 5.9-2  
Noise Measurement Locations

**TABLE 5.9-2  
EXISTING AMBIENT NOISE MEASUREMENT RESULTS**

Location	Date	Duration (Minutes)	Average Noise Level [dB(A)]	Traffic Noise Sources	Distance from Source	Noise Level at 50 feet from Source [dB(A)]
1	02/25/2005	15	66.4	Trolley	19 feet from center of near trolley tracks	58.0
2	02/25/2005	15	67.2	Bay Boulevard	50 feet from centerline	67.2
3	02/25/2005	15	71.2	Broadway Avenue	50 feet from centerline	71.2
4	02/25/2005	15	66.0	I Street	50 feet from centerline	66.0
5	02/25/2005	18	69.1	Corner of Third Avenue and F Street	50 feet from centerlines of both roadways	69.1
6	02/25/2005	17	63.5	F Street	50 feet from centerline	63.5
7	02/25/2005	18	66.7	C Street	50 feet from centerline	66.7
8	02/25/2005	15	72.6	I-5	N/A	N/A
9	02/25/2005	16	53.2	Third Avenue	N/A	N/A
10	02/25/2005	15	63.4	Fifth Avenue	40 feet from centerline	61.5

seen in the table, the measured short-term noise levels ranged from approximately 53 to 73 dB(A)  $L_{eq}$ , indicating that existing noise standards are currently being exceeded on some occasions.

In addition, existing noise conditions were modeled for receivers adjacent to circulation element roadways. Table 5.9-3 lists roadway segments within the UCSP area and their corresponding traffic volumes and modeled existing noise levels at a reference distance of 50 feet from the roadway centerline. Table 5.9-3 also includes distances from roadway centerlines to the 65 CNEL noise contour, the City's exterior noise threshold for noise-sensitive land uses such as residences, school play areas, and outdoor recreational areas. As indicated in Table 5.9-3, in some locations current distances to the 65 CNEL contour extend onto adjacent properties potentially occupied by noise-sensitive uses. The noise measurement and modeling data and descriptions are contained in the Noise Technical Report (see Appendix D).

## 5.9.2 Criteria for Determination of Significance

The GPU establishes standards for the assessment of potential adverse effects due to noise. Using these standards and the noise limits established by the City's Municipal Code, the proposed project would result in a significant noise impact if it would:

- Criterion 1: Result in exposure of receivers in the UCSP area to exterior noise levels that exceed the levels established by the GPU. These include limits of 65 CNEL in residential areas, 65 CNEL in outdoor use areas, neighborhood parks and playgrounds, 70 CNEL in community parks and athletic fields, 70 CNEL in office and professional areas, or 75 decibels for retail and wholesale commercial areas, restaurants, and movie theaters.
- Criterion 2: Result in interior noise levels that exceed 45 dB CNEL due to exterior sources for habitable rooms in residences; or
- Criterion 3: Result in noise levels that violate the City's Noise Ordinance (Chapter 19.68.010 of the Municipal Zoning Code).

**TABLE 5.9-3  
EXISTING TRAFFIC VOLUMES AND NOISE LEVELS**

Roadway	Segment	Traffic Volume	CNEL at 50 feet [dB(A)]	Speed Limit (mph)	Distance to 65 CNEL Contour (feet)
E Street	I-5 to Woodlawn Ave.	26,924	69	30	130
	Woodlawn Ave. to Broadway	21,997	68	30	106
	Fourth Ave. to Third Ave.	17,493	67	30	87
	East of First Ave.	17,966	67	30	87
F Street	I-5 to Woodlawn Ave.	5,336	62	30	26
	Woodlawn Ave. to Broadway	9,293	65	30	45
	Broadway to Fifth Ave.	7,880	64	30	38
	Fourth Ave. to Third Ave.	10,332	65	30	50
H Street	Woodlawn Ave. to Broadway	33,116	71	35	204
	Fifth Ave. to Fourth Ave.	24,637	70	35	152
	Second Ave. to First Ave.	27,474	70	35	170
J Street	Woodlawn Ave. to Broadway	19,024	69	35	117
L Street	Woodlawn Ave. to Broadway	15,450	68	35	95
	Second Ave. to First Ave.	16,430	68	35	101
Woodlawn Ave.	E St. to F St.	4,900	63	35	30
	G St. to H St.	2,600	60	35	16
Broadway	C St. to D St.	20,015	69	35	123
	F St. to G St.	23,208	70	35	143
	I St. to J St.	25,713	70	35	159
	K St. to L St.	26,599	70	35	164
Fourth Ave.	C St. to D St.	17,812	68	35	110
	F St. to G St.	17,001	68	35	105
	I St. to J St.	16,101	68	35	99
Third Ave.	D St. to E St.	7,200	64	35	44
	F St. to G St.	15,632	68	35	96
	I St. to J St.	23,459	70	35	145

SOURCE: Traffic volumes are from KHA (2006).

## 5.9.3 Impacts

### 5.9.3.1 Exterior Noise

- **Criterion 1: Result in exposure of receivers in the UCSP area to exterior noise levels that exceed the levels established by the GPU. These include limits of 65 CNEL in residential areas, 65 CNEL in outdoor use areas, neighborhood parks and playgrounds, 70 CNEL in community parks and athletic fields, 70 CNEL in office and professional areas, or 75 decibels for retail and wholesale commercial areas, restaurants, and movie theaters.**

Noise levels within the City of Chula Vista's UCSP generally are, and will continue to be, dominated by traffic-generated noise. Other noise sources in the area include the San Diego Trolley, freight service provided by the San Diego & Imperial Valley Railroad and commercial operations in the area.

In order to evaluate the potential for development in accordance with the UCSP to result in a significant impact in accordance with Criterion 1, noise levels were modeled for a series of receivers located throughout the project area to determine the future noise contours over the project site due to traffic on the roadways. The results of this monitoring are provided in Attachment 1 of the Noise Technical Report (see Appendix D).

Year 2030 traffic generated noise contours were estimated for the City's circulation element roadways using projected 2030 traffic volumes and the same traffic distributions, speeds, and mixes used for estimating the existing noise contours. Year 2030 traffic volumes were obtained from the traffic report prepared for this project (see Appendix C). Table 5.9-4 lists roadway segments and their corresponding year 2030 traffic volumes and noise levels at a reference distance of fifty feet from the centerline. Distances from roadway centerlines to the 65 CNEL noise contour, the City's exterior noise threshold for noise-sensitive land uses, are also provided in Table 5.9-4 (far right column). As indicated in the table, year 2030 distances to the 65 CNEL contour would extend, to varying distances depending upon location, onto adjacent properties potentially occupied by noise-sensitive uses.

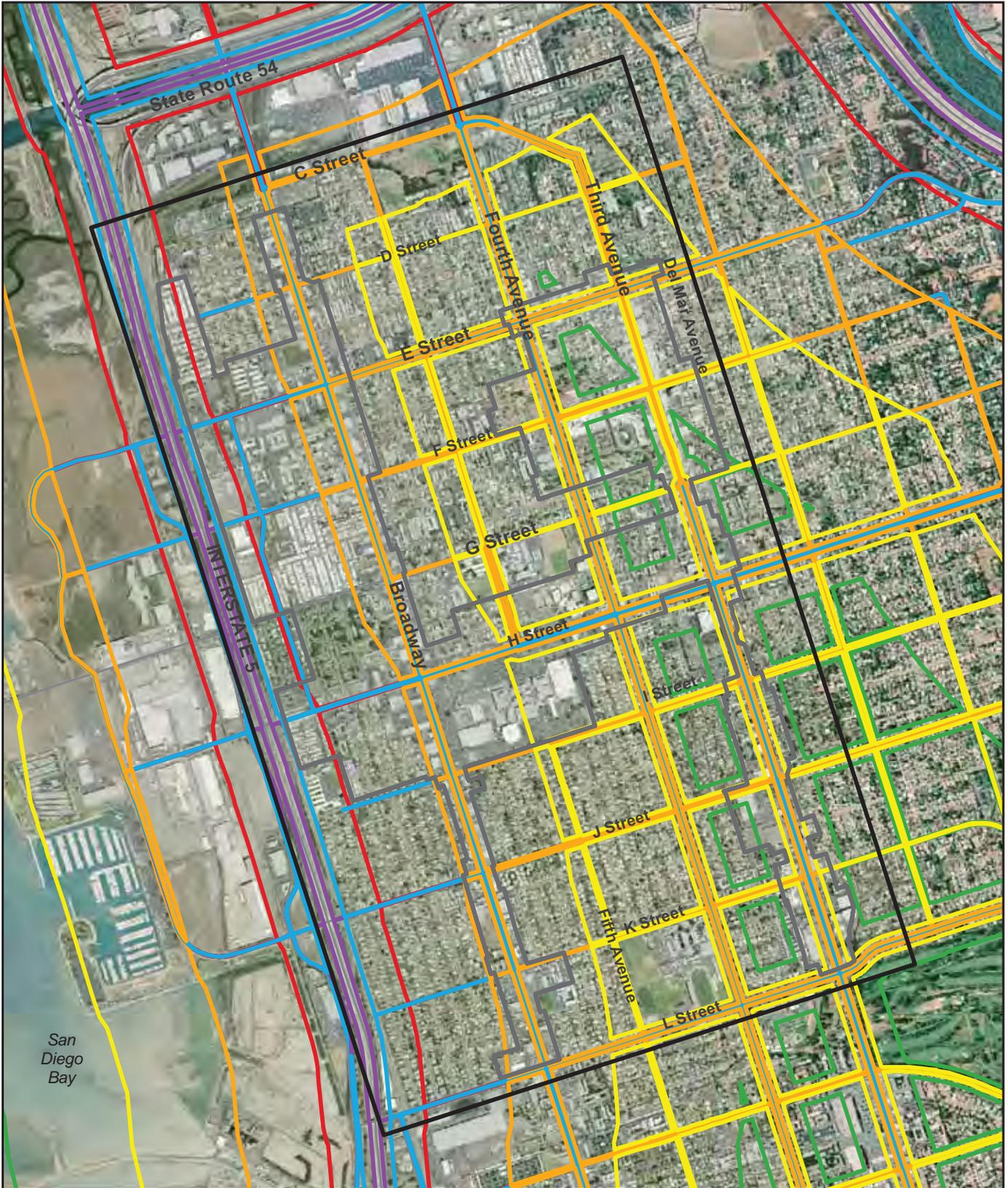
Figure 5.9-3 presents the future noise contours relative to the circulation element roadways throughout the study area, which are based upon the conservative assumption of hard, flat site conditions.

These future noise contours assume a flat site and do not take into account any shielding provided by the proposed buildings, which is the worst-case scenario. As shown, ground-level receivers on lots adjacent to H Street, E Street, Broadway, and Third Avenue could experience future traffic noise levels in excess of 65 CNEL, which is the City's exterior residential standard. Without mitigation, noise impacts from traffic on area roads are considered significant.

**TABLE 5.9-4  
2030 TRAFFIC VOLUMES AND NOISE LEVELS**

Roadway	Segment	Traffic Volume	CNEL at 50 feet [dB(A)]	Speed Limit (mph)	Distance to 65 CNEL Contour (feet)
E Street	I-5 to Woodlawn Ave.	32,000	70	30	155
	Woodlawn Ave. to Broadway	32,000	70	30	155
	Fourth Ave. to Third Ave.	21,000	68	30	102
	East of First Ave.	24,000	69	30	116
F Street	I-5 to Woodlawn Ave.	19,000	68	30	92
	Woodlawn Ave. to Broadway	18,000	67	30	87
	Broadway to Fifth Ave.	11,000	65	30	53
	Fourth Ave. to Third Ave.	13,000	66	30	53
H Street	Second Ave. to First Ave.	6,000	63	30	29
	Woodlawn Ave. to Broadway	52,000	73	35	321
	Fifth Ave. to Fourth Ave.	37,000	72	35	228
J Street	Second Ave. to First Ave.	35,000	71	35	216
	Woodlawn Ave. to Broadway	25,000	70	35	154
L Street	Woodlawn Ave. to Broadway	24,000	70	35	148
	Second Ave. to First Ave.	20,000	69	35	123
Woodlawn Ave.	E St. to F St.	12,000	67	35	74
	G St. to H St.	9,000	65	35	56
Broadway	C St. to D St.	28,000	70	35	173
	F St. to G St.	28,000	70	35	173
	I St. to J St.	29,000	71	35	179
	K St. to L St.	31,000	71	35	180
Fourth Ave.	C St. to D St.	23,000	70	35	142
	F St. to G St.	20,000	69	35	123
	I St. to J St.	18,000	68	35	111
Third Ave.	D St. to E St.	12,000	67	35	74
	F St. to G St.	21,000	69	35	123
	I St. to J St.	24,000	70	35	148

SOURCE: Traffic volumes are from KHA (2006).



UCSP Study Area  
UCSP Subdistricts Area

Traffic Noise Contours (dBA)

- 85
- 80
- 75
- 70
- 65
- 60

0 Feet 2,000 N

FIGURE 5.9-3  
Year 2030 Traffic Noise Contours

In addition to noise resulting from traffic on area roads, noise will also result from rail traffic, both that produced by trolley activity and that resulting from trains. The primary railway operations in the plan area consist of trolley traffic. The current trolley schedule for the Blue Line indicates that there are 123 trolleys during the daytime hours, 20 trolleys during the evening hours, and 44 trolleys during the nighttime hours. It is likely that numbers of trolley trips will increase over the time frame represented by the development of the UCSP.

CNEL for trolley traffic is calculated by extending the noise level for an individual trolley event to all the trips occurring during the 24 hour period and weighting the noise that occurs in the evening and nighttime hours. For estimating the noise due to trolley operations, the Sound Exposure Level (SEL) for an individual trolley pass-by was applied to the weighted equivalent number of operations for a 24 hour period. The following formula provides the equivalent number of trolley operations for a 24-hour period:

$$N_{\text{total}} = N_{\text{day}} + 3 \cdot N_{\text{evening}} + 10 \cdot N_{\text{night}}$$

This results in a total of 623 equivalent trolley operations. Using the SEL measured at the Bayfront/E Street trolley station, the CNEL due to trolley operations was calculated using the following formula:

$$\text{CNEL} = \text{SEL} + 10 \cdot \text{Log}_{10}(N_{\text{total}}) - 49.4$$

Using an SEL of approximately 82 dB(A) that was calculated from the 15-minute measurement data at the Bayfront/E Street Trolley Station, the CNEL due to trolley operations is estimated to be approximately 70 CNEL at a distance of 50 feet. Again, the maximum observed noise levels during the trolley passbys ranged from 77 to 83 dB(A). Table 5.9-5 provides the unobstructed distance from the centerline between the trolley tracks to noise contours resulting from trolley operations.

**TABLE 5.9-5  
DISTANCE FROM CENTERLINE BETWEEN  
TROLLEY TRACKS TO UNOBSTRUCTED NOISE CONTOURS**

	CNEL			
	75	70	65	60
Distance	28 feet	51 feet	90 feet	160 feet

This represents a significant impact if residential uses are placed closer than 90 feet from the trolley line, or professional office or community parks are placed within 51 feet of the tracks. It should also be noted that there is an occasional freight train that uses this alignment. Maximum noise levels of up to 112 dB(A) were observed for the assumed freight operations (RECON 2004). As with the trolley passbys, maximum noise levels due to the freight operations are of relatively short duration (typically less than 30 seconds).

As a result of the analysis conducted for the UCSP, it was determined that noise levels could exceed the standard established by the GPU for areas immediately adjacent to circulation element roadways (at distances recorded in Table 5.9-4), freeways, and train and trolley lines (at distances recorded in Table 5.9-5). Development pursuant to the UCSP would result in exposure of receivers in the UCSP area to exterior noise levels that exceed 65 CNEL in residential areas, if planned exterior use areas are adjacent to those roadways (at distances recorded in Table 5.9-4), and are unshielded by buildings or other barriers. This comprises a significant exterior noise impact. At such time that projects are proposed, specific design review would be needed to assess compliance with the noise limits set by the GPU. These measures are outlined in the discussion of mitigation below.

Office and professional areas immediately adjacent to Interstate 5 would be exposed to noise levels in excess of 70 CNEL, or 75 decibels for retail and wholesale commercial areas, restaurants, and movie theaters. Therefore, impacts are significant.

### 5.9.3.2 Interior Noise

- **Criterion 2: Result in interior noise levels that exceed 45 dB CNEL due to exterior sources for habitable rooms in residences.**

The City of Chula Vista and the California Building Code set an interior noise standard for noise due to exterior sources for residential development. The California Building Code indicates that:

Residential structures to be located within an annual CNEL contour of 60 require an acoustical analysis showing that the structure has been designed to limit intruding noise to the prescribed allowable levels,

and that:

Interior community noise equivalent levels (CNEL) with the windows closed, attributable to exterior sources shall not exceed an annual CNEL of 45 dB in any habitable room.

While the Building Code exempts single family residences from this condition, all residential uses proposed as part of the UCSP would be multi-family and would be required to conform to this 45 dB CNEL standard.

Based on the analysis conducted for the specific plan, all residential uses immediately adjacent to circulation element roadways in the UCSP area would be exposed to exterior noise levels in excess of 60 dB CNEL therefore resulting in a significant impact. As such, the Building Code requires that these projects require an acoustical analysis showing that the structure has been designed to limit intruding noise.

The UCSP represents a significant impact to interior noise levels in accordance with Criterion 2 because exterior noise levels along major transportation facilities will exceed 60 CNEL, resulting in the potential for interior noise levels to exceed 45 CNEL.

### 5.9.3.3 City Noise Control Ordinance Violation

- **Criterion 3: Result in noise levels that violate the City's Noise Control Ordinance (Chapter 19.68.010 of the Municipal Zoning Code).**

In addition to placing receivers in adverse noise areas (per Criteria 1 and 2), there is the potential that the UCSP will allow uses that generate noise. Currently, specific uses at specific locations are unknown within the UCSP area. Much of the project area is considered mixed use, and as such, there is the potential that allowable commercial uses will occur in the same building as residential uses. These commercial uses could encompass noise producing activities, such as live music. To the extent that these activities are conducted within the allowable parameters of the municipal code, adverse noise impacts will not occur. Special provisions identified in Chapter VI of the UCSP indicate that mixed-use projects must comply with design objectives that include the minimization of the effects of any exterior noise, odors, glare, vehicular and pedestrian traffic, and other potentially significant impacts. In addition, they must provide for "internal compatibility between the different uses within the project" (UCSP, VI-44). Until specific uses are identified and "internal compatibility" has been determined, however, conformance to this requirement and to the code cannot be assured. Impacts associated with Criterion 3, therefore, are significant.

## 5.9.4 Summary of Significance Prior to Mitigation

Prior to mitigation, the UCSP would have a significant impact from noise for criteria 1, 2, and 3 because it would result in exposure of receivers in the UCSP area to exterior noise levels that exceed the levels established by the GPU and the City's noise control ordinance. As specified in Criterion 1, these include exterior limits of 65 CNEL in residential areas, outdoor use areas, neighborhood parks, and playgrounds, 70 CNEL in office and professional areas, or 75 decibels for retail and wholesale commercial areas, restaurants, and movie theaters. The adoption of the UCSP would also have a significant noise impact prior to mitigation because it would result in interior noise levels that exceed 45 dB CNEL due to exterior sources for habitable rooms in residences as assessed in Criterion 2. Until specific uses are identified, conformance to the City's noise control ordinance code cannot be assured and impacts associated with Criterion 3 are significant.

For Criterion 1, the siting of future parks has the potential to result in significant impacts. While park sites have not been designated, it is possible that parks could be sited next to circulation element roadways which generate noise in excess of 65 [to 70] decibels. This would be a significant impact and would require mitigation. Mitigating this impact would

require the construction of noise barriers. Required barrier heights may be achieved through the construction of walls, berms, or wall/berm combinations. While noise levels at a park site would be reduced by the construction of noise barriers, these barriers are incompatible with park uses.

### 5.9.5 Mitigation Measures

The following measures will mitigate noise impacts resulting from the adoption of the UCSP to below a level of significance.

#### Mitigation Measure

- 5.9-1 Exterior Noise Mitigation Measure. Prior to the approval of individual development projects, projects within the UCSP area shall demonstrate that required outdoor usable open space areas are adequately shielded from transportation related noise sources so that noise levels fall below the standards set by the General Plan Update (see Figure 5.9-1 and Table 5.9-1) or do not cause an increase of greater than 3 dB(A) on an existing roadway. Noise reduction measures may include building noise-attenuating berms, walls or other attenuation measures. Future development of park facilities shall also, to the extent feasible, incorporate mitigation measures such as siting, berms, walls or other attenuation measures to reduce impacts to acceptable levels of 65-70 CNEL or less. Indication that noise levels fall below this limit shall be made to the satisfaction of the Planning and Building Director, Building Official or Community Development Director.

#### Mitigation Measure

- 5.9-2 Interior Noise Mitigation Measure. Prior to the approval of subsequent individual development projects, for any residential use immediately adjacent to a circulation element roadway, trolley or rail line, or Interstate 5, an acoustical analysis shall be completed demonstrating to the satisfaction of the Planning and Building Director, Community Development Director or Building Official, that interior noise levels due to exterior sources are 45 CNEL or less in any habitable room. For residential projects where interior noise levels due to exterior noise sources exceed 45 CNEL, architectural and structural considerations such as improved window and door acoustical performance, shall be identified.

#### Mitigation Measure

- 5.9-3 Interior Noise Mitigation Measure. Prior to the approval of individual development projects, projects where it is necessary for the windows to remain closed to ensure that interior noise levels meet the City's and the Building Code interior standard of 45 CNEL shall demonstrate that the design for these units includes a ventilation or air

conditioning system which provides a habitable interior environment with the windows closed.

### **Mitigation Measure**

- 5.9-4 Noise Mitigation Measure. Prior to the approval of individual development projects, commercial uses that may involve noise producing activities shall demonstrate compliance with the existing performance standards provided in the City's Noise Ordinance (Chapter 19.68.010 of the Municipal Zoning Code). Prior to project approval, subsequent projects shall also demonstrate compliance with the mixed-use provisions of Chapter VI of the UCSP that include minimization of the effects of any exterior noise impacts and provision of "internal compatibility between the different uses within the project" (UCSP, VI-44).

## **5.9.6 Summary of Significance After Mitigation**

With the implementation of Noise Mitigation Measures 5.9-1 through 5.9-4, significant noise impacts resulting from the approval of the UCSP will be mitigated to less than significant for criteria 2 and 3. However, for criterion 1, because the only mitigation available to reduce exterior noise impacts to parks resulting from roadway traffic is the insertion of a barrier between the source (traffic) and receiver (park), and because parks are intended to remain open (i.e., not surrounded by walls) to the community, criterion 1 impacts cannot be mitigated. There are no feasible mitigation measures available to mitigate for the potential for parks that are to be sited next to circulation element roadways which generate noise in excess of 65-70 CNEL. Therefore, criterion 1 impacts remain significant and unmitigated.

## **5.10 Air Quality**

The following analysis of the potential air quality impacts which may result from implementation of the proposed UCSP is summarized from the Air Quality Report for the Urban Core Specific Plan, prepared by RECON in March 2006, which is appended to this EIR as Appendix E. In addition to the air quality assessment of construction and operation-related air pollutant emissions, this report contains a health risk assessment (Chapter 6.0) that considered the potential effects of placement of residential uses within 500 feet of Interstate 5. The Air Quality Report is available for review in its entirety at the City of Chula Vista Community Development Department at 276 Fourth Avenue, the Chula Vista Public Library Civic Center Branch at 365 F Street, and on the City's website at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us).

### **5.10.1 Existing Conditions**

#### **5.10.1.1 Meteorology/Climate**

The UCSP area is in the coastal plain physiographic province and experiences the semiarid steppe climate conditions typical of San Diego County coastal areas. This area is characterized by cool, dry summers and mild, wet winters. The area is strongly influenced by the subtropical high pressure of the north Pacific. In the fall and winter, this pressure system can shift inland sometimes centering over Nevada, resulting in winds from the east, referred to as Santa Anas. These winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or breakdown of these conditions, or if the Santa Ana is weak, air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin to the north are blown out over the ocean, and low pressure over Baja California draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterlies reassert themselves and send this cloud of contamination ashore in the San Diego Air Basin. When this impact does occur, the combination of transported and locally produced contaminants produces the worst air quality measurements recorded in the basin.

On-shore flow of air provides the driving mechanism for both air pollution transport and dispersion. The interior valleys of San Diego County also have numerous temperature inversions that control the vertical extent through which pollutants can be mixed. These inversions allow for good local mixing, but act like a giant cover over the larger area. A second inversion type forms when cool air drifts into lower valleys at night and pools on the valley floor. Because coastal areas experience fresh breezes during the daytime, areas like Chula Vista generally do not experience the same frequency of air pollution problems found in some areas east of San Diego. Unhealthful air quality may occur at times in summer during limited localized stagnation, but occurs mainly in conjunction with the occasional intrusion of polluted air from the Los Angeles Basin (South Coast Air Basin) into the County.

Except for the occasional interbasin transport, air quality in the project vicinity is expected to be good.

### 5.10.1.2 Air Quality Standards

Ambient Air Quality Standards (AAQS) 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) was enacted in 1970 and amended in 1977 and 1990 [42 U.S.C. 7506(c)] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the Clean Air Act, the EPA developed primary and secondary national ambient air quality standards (NAAQS). Six pollutants of primary concern were designated: ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead and suspended particulates (PM<sub>10</sub>). The current state and federal ambient air quality standards are presented in Table 5.10-1. Table 5.10-2 presents a brief discussion of the principal sources of each criteria pollutant and the health effects associated with exposure to them.

While emission-control programs have created a substantial improvement in regional air quality within the last several decades, clean air standards are still often exceeded in parts of the San Diego Air Basin (SDAB). The nearest air quality measurements to the project site are made at the monitoring station at 80 East J Street east of downtown Chula Vista by the San Diego County Air Pollution Control District (APCD), the agency responsible for air quality planning, monitoring, and enforcement in the SDAB. A review of the last seven years of published monitoring data from the Chula Vista (80 East J Street) air quality monitoring station reveals that progress toward cleaner air is seen in almost every pollution category. Table 5.10-3 provides a summary of measurements of ozone (O<sub>3</sub>), carbon monoxide (CO), and 10-micron particulate matter (PM<sub>10</sub>) taken at the Chula Vista air quality monitoring station from 1999 through 2003. If an air basin is not in federal attainment for a particular pollutant, the basin is classified as marginal, moderate, serious, severe, or extreme (there is also a marginal classification for federal non-attainment areas).

The State Implementation Plan (SIP) is the document that sets forth the state's strategies for achieving the air quality standards. The San Diego Air Pollution Control District is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The San Diego APCD adopts rules, regulations, and programs to attain state and federal air quality standards, and appropriates money (including permit fees) to achieve these objectives.

In order to meet federal air quality standards in California, CARB required each air basin to develop its own strategy for achieving the NAAQS. The SDAPCD prepared the 1991/1992 Regional Air Quality Strategy (RAQS) in response to the requirements set forth in AB 2595. The draft was adopted, with amendments, on June 30, 1992 (County of San Diego 1992). Attached, as part of the RAQS, are the transportation control measures (TCM) for the air

**TABLE 5.10-1  
 AMBIENT AIR QUALITY SUMMARY – SAN DIEGO AIR BASIN**

Pollutant	Average Time	California Ambient Air Quality Standards <sup>a</sup>	National Ambient Air Quality Standards <sup>b</sup>	Attainment Status	Maximum Concentration						Number of Days Exceeding State Standard												
					1999		2000		2001		2002		1999		2000		2001		2002				
					2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001			
O <sub>3</sub>	1 hour	0.09 ppm	0.12 ppm	N	0.12	0.12	0.14	0.12	0.13	0.13	0.13	0.13	0.13	27	24	29	15	23	0	0	2	0	1
O <sub>3</sub>	8 hours	N/A	0.08 ppm	N/A	0.10	0.11	0.12	0.10	0.10	0.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17	16	17	13	6
CO	1 hour	20 ppm	35 ppm	A	9.9	9.3	8.5	8.5	12.7	12.7	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
CO	8 hours	9.0 ppm	9 ppm	A	6.0	5.9	5.1	4.7	10.6	10.6	0	0	0	0	0	0	0	1	0	0	0	0	1
NO <sub>2</sub>	1 hour	0.25 ppm	N/A	A	.172	.117	.148	.126	.148	.148	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
NO <sub>2</sub>	Annual	N/A	0.053 ppm	N/A	.026	.024	.022	.022	.021	.021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO <sub>2</sub>	1 hour	25 ppbm	N/A	A	8.4	5.8	6.0	4.4	3.6	3.6	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
SO <sub>2</sub>	24 hours	4 ppbm	14 ppbm	A	1.7	1.4	1.6	1.2	1.1	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0
SO <sub>2</sub>	Annual	N/A	3 ppbm	A	0.3	0.4	0.4	0.4	0.5	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PM <sub>10</sub>	24 hours	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	N	121	139	107	130	280	280	19	18	21	29	24	24	24	24	0	0	0	0	2
PM <sub>10</sub> <sup>c</sup>	Annual	20 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>	N	52	45	49	55	52	52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PM <sub>2.5</sub>	24 hours	N/A	65 µg/m <sup>3</sup>	N/A	64.3	66.3	60.0	53.6	239	239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	1	0	0	2
PM <sub>2.5</sub> <sup>c</sup>	Annual	12 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>	N/A	18.0	15.8	17.7	16.0	15.5	15.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SOURCES: SDAPCD and CARB 2002; <http://www.sdapcd.co.san-diego.ca.us> and <http://www.arb.ca.gov>.

<sup>a</sup>California standards for ozone, carbon monoxide (except at Lake Tanoa), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, and PM<sub>10</sub> are values that are not to be exceeded. Some measurements gathered for pollutants with air quality standards that are based upon 1-hour, 8-hour, or 24-hour averages, may be excluded if the CARB determines they would occur less than once per year on average.

<sup>b</sup>National standards other than for ozone and particulates, and those based on annual averages or annual arithmetic means are not to be exceeded more than once a year. The 1-hour ozone standard is attained 0, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one.

<sup>c</sup>On June 20, 2002, the Air Resources Board approved staff's recommendation to revise the PM<sub>10</sub> annual average standard to 20 µg/m<sup>3</sup> and to establish an annual average standard for PM<sub>2.5</sub> of 12 µg/m<sup>3</sup>. These standards will take effect upon final approval by the Office of Administrative Law, which is expected in May 2003. Information regarding these revisions can be found at <http://www.arb.ca.gov/research/aqqs/std-rs/std-rs.htm>.

<sup>d</sup>A-attainment, N-non-attainment, U-unclassifiable, N/A-not applicable or not available.

ppm-parts per million, ppbm-parts per hundred million, µg/m<sup>3</sup>-micrograms per cubic meter.

**TABLE 5.10-2  
CRITERIA POLLUTANTS - SOURCES AND HEALTH EFFECTS**

Pollutant	Characteristics	Major Sources	Health Effects
Ozone (O <sub>3</sub> )	A highly reactive photochemical pollutant that is formed at ground level from emissions of volatile organic compounds (VOC) and nitrogen oxides (NOx) in the presence of sunlight. Ozone is a major component of photochemical smog.	Combustion sources such as engines in automobiles and factories, and evaporation of solvents and fuels.	<ul style="list-style-type: none"> <li>• Eye irritation</li> <li>• Respiratory function impairment</li> </ul>
Carbon Monoxide (CO)	An odorless, colorless and poisonous gas. It is formed during the incomplete combustion of fuels.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.	<ul style="list-style-type: none"> <li>• Increase of carboxyhemoglobin - Impairment of oxygen transport in the bloodstream</li> <li>• Aggravation of cardiovascular disease</li> <li>• Impairment of central nervous system function</li> <li>• Fatigue, headache, confusion, dizziness</li> <li>• Can be fatal in the case of very high concentrations in enclosed places</li> </ul>
Sulfur Dioxide (SO <sub>2</sub> )	A colorless gas with a pungent, irritating odor.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.	<ul style="list-style-type: none"> <li>• Aggravation of chronic obstruction lung disease</li> <li>• Increased risk of acute and chronic respiratory disease</li> </ul>
Nitrogen Dioxide (NO <sub>2</sub> )	Reddish-brown gas that discolors the air. It is formed during combustion.	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants	<ul style="list-style-type: none"> <li>• Increased risk of acute and chronic respiratory disease</li> </ul>
Particulate Matter (PM <sub>10</sub> & PM <sub>2.5</sub> )	Solid and liquid particles of dust, soot, aerosols, and other matter that are small enough to remain suspended in the air for a long period of time.	Combustion, automobiles, field burning, factories, and unpaved roads. Diesel engines for PM <sub>2.5</sub> . Also a result of photochemical processes.	<ul style="list-style-type: none"> <li>• Aggravation of respiratory effects like asthma and emphysema</li> <li>• May cause heart and lung problems</li> <li>• May carry toxic materials deep into the respiratory system</li> </ul>
Lead (Pb)	A toxic heavy metal found in dust and soils.	Lead gasoline additives, metal refineries, manufacture of lead storage batteries, paint	<ul style="list-style-type: none"> <li>• Brain and other nervous system damage</li> <li>• Carcinogenic</li> <li>• Digestive and other health problems</li> </ul>

**TABLE 5.10-3  
SUMMARY OF AIR QUALITY MEASUREMENTS RECORDED  
AT THE CHULA VISTA MONITORING STATION**

Pollutant/Standard	1999	2000	2001	2002	2003
<b>Ozone</b>					
Days State Standard Exceeded (0.09 ppm)	4	0	2	1	0
Days National Standard Exceeded (0.12 ppm)†	0	0	0	0	0
Max. 1-hr (ppm)	0.105	0.091	0.102	0.115	0.075
<b>Carbon Monoxide</b>					
Days State 1-hour Standard Exceeded (20 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (35 ppm)	0	0	0	0	0
Max. 1-hr (ppm)	5.4	5.8	5.6	4.3	6.9*
Max. 8-hr (ppm)	3.04	3.35	4.64	2.61	5.4*
Max. Summer 1-hr (ppm)	2.2	2.7	1.9	1.9	2.3
Max. Summer 8-hr (ppm)	1.6	1.943	1.314	1.45	1.5
<b>PM<sub>10</sub></b>					
Calculated Days State Standard Exceeded ( $\mu\text{g}/\text{m}^3$ )**	N/A	N/A	12	6	12
Sampled Days State Standard Exceeded ( $\mu\text{g}/\text{m}^3$ )	1	4	2	1	2
Days National Standard Exceeded ( $\mu\text{g}/\text{m}^3$ )†	0	0	0	0	0
Max. Daily ( $\mu\text{g}/\text{m}^3$ )	59.0	52.0	64.0	50.0	75.0
<b>PM<sub>2.5</sub></b>					
Sampled Days National Standard Exceeded ( $\mu\text{g}/\text{m}^3$ )	0	0	0	0	1
Max. Daily ( $\mu\text{g}/\text{m}^3$ )	47.1	40.5	41.0	41.0	239.2

SOURCE: CARB 2002: <http://www.arb.ca.gov>.

\*The measurement was taken on October 27, 2003 during the San Diego County forest fire and, therefore, is not an accurate representation of ambient conditions.

\*\*Calculated days - Measurements are typically collected every six days. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

†"National Standard" refers to the primary federal standard. In the case of ozone and PM<sub>10</sub>, the secondary federal standards are the same as the primary federal standards. There are no secondary federal standards for carbon monoxide.

Lead concentrations in the SDAB have not exceeded the state or federal standard during at least the past 10 years.

quality plan prepared by the San Diego Association of Governments (SANDAG) in accordance with AB-2595 and adopted by SANDAG on March 27, 1992, as Resolution Number 92-49 and Addendum. The required triennial updates of the RAQS and corresponding TCM were adopted in 1995, 1998, and 2001. The RAQS and TCM plan set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

The San Diego APCD has also established a set of rules and regulations initially adopted on January 1, 1969, and periodically reviewed and updated. The rules and regulations define requirements regarding stationary sources of air pollutants and fugitive dust. These rules and regulations are available for review on the agency's website ([www.sdapcd.co.san-diego.ca.us](http://www.sdapcd.co.san-diego.ca.us)).

Local agencies can control neither the source nor the transportation of pollutants from outside the SDAB. The San Diego APCD's policy, therefore, has been to control local sources effectively enough to reduce locally produced contamination to clean air standards. Through the use of air pollution control measures outlined in the RAQS, the San Diego APCD has effectively reduced ozone levels in the SDAB.

#### **a. Ozone**

Ozone is the primary air pollution problem in the SDAB. Currently, about 60 percent of smog-forming emissions in the SDAB come from mobile sources. These mobile sources consist mainly of cars, trucks, and buses, but also include construction equipment, trains, and airplanes. Emission standards for mobile sources are established by state and federal agencies such as the California Air Resources Board (CARB) and the EPA.

Ozone pollution, or smog, is mainly a concern during the daytime in summer months because sunlight plays an important role in its formation. Nitrogen oxides and hydrocarbons (reactive organic gases) are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone. The SDAB is currently designated a state "serious" non-attainment area for ozone. Ozone concentration measurements recorded in the SDAB dating back to the late 1970s show a distinctive downward trend with occasional peaks due primarily to meteorological influences (County of San Diego 2001). More strict automobile emission controls including more efficient automobile engines have played a large role in why ozone levels have steadily decreased.

As indicated, not all of the ozone within the SDAB is derived from local sources. Under certain meteorological conditions, such as during Santa Ana wind events, ozone, and other pollutants are transported from the Los Angeles Basin and combine with ozone formed from local emission sources to produce elevated ozone levels in the SDAB. According to SANDAG, on average, approximately 42 percent of the days that have ozone concentrations over state standard between 1987 and 1994 were attributable to pollution transported from Los Angeles (SANDAG 1994:249-250).

More recent data suggests that this percentage is even higher. According to the San Diego APCD, ozone transported into the SDAB from the South Coast Air Basin (Los Angeles area) was the primary cause for the SDAB exceeding national ozone thresholds on 27 of a total of 33 days from 1994 to 1998 (County of San Diego 2000). The San Diego APCD further explains that the two days in which the national one-hour standard was exceeded in the SDAB in 2001 (see Table 5.10-3) were both caused by ozone-rich air transported from the Los Angeles Basin (County of San Diego 2003).

In 1997, the EPA promulgated a new eight-hour ozone standard of 8 parts per hundred million (pphm) to replace the existing one-hour standard of 12 pphm. For areas in attainment of the one-hour standard, the eight-hour standard replaced the one-hour standard. However, the existing one-hour standard continued to apply in each non-attainment area until attainment of the one-hour standard was achieved. After attainment of the one-hour standard, the standard is revoked, leaving only the eight-hour standard (County of San Diego 1999).

On April 15, 2004 the EPA issued its final 8-hour designation. San Diego County is considered a non-attainment area for Ozone based on this standard. The San Diego APCD then has three years (2007) to formulate a strategy for reaching attainment of the eight-hour standard. The strategy must then be approved by the EPA. Based on the severity of the non-attainment status (i.e., marginal, moderate, serious, severe, or extreme), the attainment dates in which the APCD must demonstrate attainment of the standard range from 2007 to 2021.

Using the discretion provided by Section 172(a)(1) of the CAA, the EPA has chosen not to classify the basin (e.g., moderate, serious, etc.). For areas subject to Subpart 1, consistent with Section 172(a)(2)(A) of the CAA, the period of attainment will be no more than 5 years from the effective date of designation (EPA 2004b). Consequently, the SDAB must demonstrate attainment by June 14, 2009. If warranted, the EPA may grant an extension of the attainment date to no more than 10 years after designation (June 14, 2014).

Actions that have been taken in the SDAB to reduce ozone concentrations include:

- **TCMs if vehicle travel and emissions exceed attainment demonstration levels.** TCMs are strategies that will reduce transportation-related emissions by reducing vehicle use or improving traffic flow.
- **Enhanced motor vehicle inspection and maintenance program.** The smog check program monitors the amount of pollutants automobiles produce. One focus of the program is identifying “gross polluters” or vehicles that exceed two times the allowable emissions for a particular model. Regular maintenance and tune-ups, changing the oil, and checking tire inflation can improve gas mileage and lower air pollutant emissions. It can also reduce traffic congestion due to preventable breakdowns, further lowering emissions.

- **Old car buy-back and retrofit programs.** The old car buy-back program is an incentive program offered by the San Diego APCD to purchase older, more polluting vehicles (1985 and older) and scrap them, thereby getting them off the road. Old car sellers are paid \$600 for vehicles built prior to 1975 and \$500 for 1975-1985 cars and trucks. There is also a retrofit program designed to retrofit 1975-1980 vehicles with a new technology upgrade kit that reduces smog-forming emissions.
- **Clean-fuel vehicle program.** Cleaner vehicles and fuels will result in continued reductions in vehicle pollutant emissions despite increases in travel.

### **b. Carbon Monoxide**

The SDAB is classified as a state and federal attainment area for carbon monoxide (CO) (County of San Diego 1998). No violations of the state standard for CO have been recorded in the SDAB since 1991 and no violations of the national standard have been recorded in the SDAB since 1989.

Small-scale, localized concentrations of carbon monoxide above the state and national standards have the potential to occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as "CO hot spots" and are a concern particularly during winter months when automobile engines burn fuel less efficiently and their exhaust contains more CO.

### **c. Particulates**

Particulate matter is a complex mixture of very tiny solid or liquid particles composed of chemicals, soot, and dust. Sources of  $PM_{10}$  emissions in the SDAB consist mainly of urban activities, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere. The national standards for  $PM_{10}$  have never been exceeded in the SDAB since the standards were established. The EPA has designated the SDAB unclassifiable for  $PM_{10}$ . The more strict state standards for  $PM_{10}$  are currently not being met. As a result, the SDAB is designated a state non-attainment area for  $PM_{10}$ .

Particles classified under the  $PM_{10}$  category are mainly emitted directly from activities that disturb the soil including travel on roads and construction, mining, or agricultural operations. Other sources include windblown dust, salts, brake dust, and tire wear (County of San Diego 1998). For several reasons hinging on the area's dry climate and coastal location, the SDAB has special difficulty in developing adequate tactics to meet present state particulate standards.

Airborne, inhalable particles with aerodynamic diameters of 2.5 microns or less ( $PM_{2.5}$ ) have recently been recognized as an air quality concern requiring regular monitoring. Federal regulations required that  $PM_{2.5}$  monitoring begin January 1, 1999 (County of San Diego

1999). Monitoring data is being collected in order to make a determination as to whether the  $PM_{2.5}$  standard is currently being met in the SDAB. Preliminary data from the first few years of  $PM_{2.5}$ -data collection indicates that the SDAB will be close to meeting the new  $PM_{2.5}$  standard.

A list of recommended designations was due to the EPA by February 15, 2004. The CARB supplied monitoring data for the years 2000 through 2002 to the EPA on February 11, 2004. The EPA reviewed the designation recommendations, made some modifications, and on January 5, 2005 listed the final designations in the Federal Register (EPA 2004c). These designations became effective April 5, 2005.

That portion of the SDAB containing the project site has been designated a non-attainment area for the  $PM_{2.5}$  standard (U.S. EPA 2004c). Attainment of the  $PM_{2.5}$  standards must be achieved five years after the designation date. Consequently, the SDAB must demonstrate attainment by April 5, 2010. If warranted, the EPA may grant an extension of the attainment date to no more than 10 years after designation (April 5, 2015).

#### **d. Other Pollutants**

The national and state standards for  $NO_2$ ,  $SO_2$ , and lead are being met in the SDAB and the latest pollutant trends suggest that these standards will not be exceeded in the foreseeable future.

The San Diego APCD is the primary agency that handles industrial odor and dust complaints. As a part of their nuisance complaint program, the San Diego APCD responds to citizen complaints concerning air pollution problems, such as smoke odors, and dust from permitted and unpermitted operations. State and local regulations prohibit air pollution discharges which may cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or the public, or which cause or have the tendency to cause injury or damage to business or property. These regulations, which are referred to as the public nuisance laws, do not apply to odors from agricultural operations in the growing of crops, or raising of fowls or animals, or to composting facilities (County of San Diego 2001).

The City has included a Growth Management Element (GME) in its GPU. One of the stated objectives of the GME is to have active planning to meet federal and state air quality standards. This objective is incorporated into the GME's action program. In addition, the City's Growth Management Ordinance requires an Air Quality Improvement Plan (AQIP) be prepared for all major development projects (50 dwelling units or greater) as part of the SPA plan process.

The AQIP must provide an analysis of air pollution impacts resulting from the project, demonstrate the best available design to reduce emissions from the project, and address the action measures contained in the Chula Vista Carbon Dioxide Reduction Plan. In order to meet the AQIP requirements, developers can either participate in the Chula Vista Green

Star Building Efficiency Program or evaluate the project using the Chula Vista CO<sub>2</sub> INDEX model, including any necessary site plan modifications.

## 5.10.2 Criteria for the Determination of Significance

Based on the thresholds identified in Appendix G of the CEQA guidelines, the proposed project would result in a significant impact to air quality if it would:

- Criterion 1: Conflict with or obstruct implementation of the applicable air quality plan;
- Criterion 2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Criterion 3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). The City of Chula Vista uses the following South Coast Air Quality Management District (SCAQMD) thresholds to assess the significance of air quality impacts (SCAQMD 1993) (Table 5.10-4):

**TABLE 5.10-4  
SCAQMD THRESHOLDS**

Pollutant	Project Construction	Project Operation
Carbon Monoxide	24.75 tons/quarter	550 pounds/day
Reactive Organic Compounds	2.5 tons/quarter	55 pounds/day
Oxides of Nitrogen	2.5 tons/quarter	55 pounds/day
Oxides of Sulfur	6.75 tons/quarter	150 pounds/day
PM <sub>10</sub>	6.75 tons/quarter	150 pounds/day

- Criterion 4: Expose sensitive receptors to substantial pollutant concentrations such as ozone or respirable particulates (PM<sub>10</sub>);
- Criterion 5: Create objectionable odors affecting a substantial number of people.

## 5.10.3 Impacts

### 5.10.3.1 Air Quality Plan

- **Criterion 1: Conflict with or obstruct implementation of the applicable Air Quality Plan.**

#### a. SIP/RAQS

As noted above, the SIP is the document that sets forth the state's strategies for achieving air quality standards. The San Diego APCD is the agency that regulates air quality in the

SDAB and is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The RAQS and TCM plan developed by the San Diego APCD and SANDAG set forth the steps needed to accomplish attainment of state and federal ambient air quality standards. The San Diego APCD adopts rules, regulations, and programs to attain state and federal air quality standards, and appropriates money (including permit fees) to achieve these objectives.

In order to meet federal air quality standards in California, the CARB required each air district to develop its own strategy for achieving the NAAQS. The San Diego Air Pollution Control District prepared the 1991/1992 RAQS in response to the requirements set forth in AB 2595. Attached as part of the RAQS is the TCM plan prepared by SANDAG. The RAQS and TCM plan set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

The basis for these plans is the distribution of population in the region as projected by SANDAG. Growth forecasting is based in part on the land uses established by the General Plan. The current RAQS are based on the General Plan that was in effect when the RAQS were adopted in 1992 and updated through 2001, and not the recently adopted GPU (December 2005). Therefore, the proposed land uses under the adopted GPU and proposed UCSP are not consistent with the RAQS.

The UCSP includes measures to lessen air quality impacts. The UCSP has been prepared using the smart growth principles foundational to the GPU such as providing a mix of compatible land uses; locating highest density near transit, utilizing compact building design and creating walkable communities; providing a range of infill housing opportunities; and increasing travel choices. In particular, the UCSP focuses new development at key transit nodes and enhances alternative modes of travel by promoting walkability with enhanced pedestrian paths, augmenting existing bicycle paths, and making public transit more accessible and desirable with new and expanded public transit stops.

However, because the land uses proposed in the UCSP (and GPU) are inconsistent with the former General Plan (1989) upon which the RAQS was based, the GPU and UCSP would not conform to the current RAQS. If a project is inconsistent with the City's former General Plan (1989), it cannot be considered consistent with the growth assumptions in the RAQS. The RAQS are updated every three years, and will be updated again in 2007. Consequently, the proposed UCSP would conflict with the adopted air plan. This is a significant impact.

#### **b. AQIP**

As described above, the City's Growth Management Ordinance requires preparation of an Air Quality Improvement Plan (AQIP) for all major development projects (50 dwelling units or greater) as part of the SPA plan process. In order to meet the AQIP requirements, subsequent project developers can either participate in the Chula Vista Green Star Building Efficiency Program or evaluate the project using the Chula Vista CO<sub>2</sub> INDEX model,

including any necessary site plan modifications. The proposed UCSP would not obstruct implementation of an AQIP.

### 5.10.3.2 Air Quality Standards

- **Criterion 2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.**

There are no existing or projected air quality violations in the UCSP area. Furthermore, there are no toxic air emitters proposed as part of the UCSP. As such, the proposed project will not contribute to an existing or projected air quality violation.

All proposed land uses are either multi-family residential, commercial, retail or public uses, and no industrial uses are proposed. The results of the criteria air pollutant emissions modeling conducted for the Air Quality Report, which included both mobile and area source emissions projections, indicate that emissions resulting from buildout of the UCSP are anticipated to be below those that would occur under existing conditions due to improvements in mobile source emissions (refer to Table 5.10-7 in Section 5.10.3.3 below). Thus, operation of the UCSP is not anticipated to have a significant air quality impact when compared to the existing condition.

Furthermore, the GPU of the City of Chula Vista includes Policy EE 6.4 that prohibits major toxic air emitters within 1,000 feet of a sensitive receiver unless a health risk assessment has been performed demonstrating an incremental cancer risk of less than 10 in 1,000,000 and a chronic and acute total health hazard index (THI) of less than 1.

### 5.10.3.3 Cumulative Net Increase in Criteria Pollutants

- **Criterion 3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State Ambient Air Quality Standard.**

The region is in attainment for all criteria pollutants except ozone,  $PM_{10}$ , and  $PM_{2.5}$  (see Table 5.10-1). The SDAB is non-attainment for the 8-hour federal ozone standard. Because ozone is not emitted directly but forms in the atmosphere, it is more a regional concern than it is a direct effect of individual projects. As noted above, ozone pollution, or smog, is mainly a concern during the daytime in summer months because sunlight plays an important role in its formation. Nitrogen oxides and hydrocarbons (reactive organic gases) are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone. For  $PM_{10}$ , the region has a federal designation of Unclassifiable and is non-attainment of the State standard, while the region is designated non-attainment for state  $PM_{2.5}$  standards.

The proportional increase in multi-family units to single-family units and resulting decrease in number of vehicle trips per unit and the anticipated improvement in motor vehicle emissions result in an expected decrease in pollutants over existing conditions for all pollutants except SO<sub>2</sub> and PM<sub>10</sub> (refer to Table 5.7 below.) Since the region is not in compliance with the PM<sub>10</sub> standard, and because the average daily emission is anticipated to increase, impacts are considered significant, until the region is in compliance.

Potential cumulative increases in any criteria pollutant for which the SDAB is not in attainment has the potential to result from long-term emissions of air pollutants generated by both stationary and mobile sources within the UCSP area. Stationary source pollutant emissions include those generated by the consumption of natural gas and electricity for space and water heating and the burning of wood in residential fireplaces. Vehicle travel would generate mobile source emissions including carbon monoxide, nitrogen oxides, and hydrocarbons. Construction of projects that conform to the UCSP would also potentially contribute to cumulative air quality impacts. Analysis of construction and operation-related air quality impacts are discussed below.

#### **a. Construction**

Air pollutants generated by the construction of projects that conform to the proposed UCSP would vary depending upon the number of projects occurring simultaneously, and the size of each individual project. Pollutants result from dust raised during demolition and grading, emissions from construction vehicles, chemicals used during construction, and ultimately emissions generated during operation of approved uses.

Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Construction operations are subject to the requirements established in Regulation 4, Rules 52 and 54, of the San Diego APCD's rules and regulations.

The exact number and timing of all development projects that could occur under the proposed UCSP are unknown. However, given the predominantly developed nature of the urban core area, it can be assumed that the UCSP Subdistricts Area would experience relatively small projects in terms of land area, most of which would involve the demolition of existing structures and improvements.

To illustrate the potential air quality effects from projects that could occur in the UCSP Subdistricts Area, a speculative project was evaluated. This hypothetical project includes a one-acre multi-family residential project that may be typical in the Urban Core. The one-acre multi-family development is assumed to consist of the demolition of an existing structure with a volume of approximately 50,000 cubic feet and the construction of a 40-unit multi-family

structure. Construction emissions were calculated using the using the URBEMIS2002 computer program (Yolo-Solano Air Quality Management District 2003).

Table 5.10-5 shows the anticipated emissions from each 40-unit multi-family project assuming that the duration of construction is 12 months.

**TABLE 5.10-5  
YEARLY CONSTRUCTION EMISSIONS  
(tons/year)**

Pollutant	Small Multi-Family Project
ROG	1.66
NO <sub>x</sub>	6.03
CO	5.73
SO <sub>2</sub>	0
PM <sub>10</sub> – total	0.3
PM <sub>10</sub> – exhaust	0.24
PM <sub>10</sub> – fugitive dust	0.06

To estimate the effects of such projects over the 25-year horizon of the UCSP it was assumed that an average of approximately five projects equivalent to the 40-unit multi-family project could occur yearly.

The City of Chula Vista uses the South Coast Air Quality Management District (SCAQMD) quarterly construction thresholds shown in Table 5.10-6 to assess the significance of air quality impacts. Table 5.10-6 shows the average quarterly emissions using the above assumptions.

**TABLE 5.10-6  
AVERAGE QUARTERLY EMISSIONS  
(tons/quarter)**

Pollutant	Small Multi-Family Project	Five Small Multi-Family Projects	Threshold†
ROG	0.42	2.05	2.5
NO <sub>x</sub>	1.5	7.5	2.5
CO	1.43	7.15	24.75
SO <sub>2</sub>	0	0	6.75
PM <sub>10</sub> – total	0.08	0.4	6.75
PM <sub>10</sub> – exhaust	0.06	0.3	--
PM <sub>10</sub> – fugitive dust	0.02	0.1	--

†Threshold for individual projects.

As seen from Table 5.10-6, small individual projects are not expected to exceed the thresholds of significance. If the smaller projects were considered as a single project they might exceed the quarterly thresholds.

The SDAB is not in attainment for Ozone and  $PM_{10}$ . There is the potential for future projects that would conform to the UCSP to contribute to cumulatively considerable construction-related emissions should multiple projects be implemented simultaneously. Should five projects equivalent to 200 dwelling units per acre be initiated in any given year, it is anticipated that the construction of those projects would result in a potentially cumulatively considerable short-term increase in criteria air pollutant emissions.

### **b. Operation**

For comparative purposes, an assessment of the anticipated air emissions resulting from buildout of the proposed UCSP in the year 2030 was prepared using the URBEMIS2002 computer program (Yolo-Solano Air Quality Management District 2003). The URBEMIS2002 program is a tool used to estimate air emissions resulting from land development projects in the State of California. The model generates emissions from three basic sources: construction sources, area sources (e.g., fireplaces, natural gas heating, etc.), and operational sources (e.g., traffic).

Inputs to URBEMIS2002 include such parameters as the air basin containing the project, land uses, trip generation rates, trip lengths, vehicle fleet mix (i.e., percentage autos, medium truck, etc.), trip distribution (i.e., percent home to work, etc.), season, and ambient temperature, as well as other parameters. A detailed description of the URBEMIS2002 model and its use may be found in the URBEMIS2002 User's Guide that may be obtained from the CARB web site at <http://www.arb.ca.gov/planning/urbemis/urbemis2002/urbemis2002.htm>.

Using the land use designations for the UCSP, along with trip generation rates provided by Kimley-Horn, as well as URBEMIS2002 defaults for other parameters, average daily emissions were estimated using URBEMIS2002 assuming buildout of the UCSP in the year 2030. The results of the modeling, which include both mobile and area source emissions, are shown in Table 5.10-7. As seen in Table 5.10-7, emissions are anticipated to be below those that would occur under existing conditions due to improvements in mobile source emissions. As such, operation of the UCSP is not anticipated to have a significant air quality impact when compared to the existing condition.

#### **5.10.3.4 Sensitive Receptors**

- **Criterion 4: Expose sensitive receptors to substantial pollutant concentrations such as ozone or respirable particulates ( $PM_{10}$ ).**

Although there are no major toxic air emitters within the UCSP area, there is one energy generation facility in the vicinity of the UCSP area, and one other potentially significant source of air pollution. The South Bay Power Plant is located in the Bayfront Planning District, west of the freeway, approximately 4,800 feet southwest of the intersection of

**TABLE 5.10-7  
AVERAGE DAILY EMISSIONS TO THE SAN DIEGO AIR BASIN  
RESULTING FROM BUILDOUT OF THE UCSP  
(pounds per day)**

Season/Pollutant	Existing Condition (2005)			Urban Core Specific Plan (2030)			Change		
	Mobile Sources	Area Sources	Total <sup>1</sup>	Mobile Sources	Area Sources	Total <sup>1</sup>	Mobile Sources	Area Sources	Total <sup>1</sup>
<b>Summer</b>									
CO	23,116	34.9	23,151.2	5,796	64.08	5,860.2	-17,320	+29.2	-17,291
NOx	2,353	82.8	2,435.6	503.6	151.6	655.2	-1,849	+68.8	-1,780
ROG	1,771	252.7	2,023.6	512.5	537.1	1,049.7	-1,259	+284.4	-973.9
SO <sub>x</sub> <sup>2</sup>	20.50	0.00	20.50	16.87	0.00	16.9	-3.6	0.0	-3.6
PM <sub>10</sub>	2,007	0.15	2,006.7	2,949	0.28	2,949.6	+942	+0.13	+942.9
<b>Winter</b>									
CO	25,746	34.07	25,779.7	5,968	62.7	6,030.6	-19,778	+28.6	-19,749
NOx	3,573	82.8	3,655.9	754.6	151.6	906.2	-2,818	+68.8	-2,750
ROG	2,098	252.6	2,350.8	531.9	537.0	1,068.9	-1,566	+284.4	-1,282
SO <sub>x</sub> <sup>2</sup>	20.39	0.00	20.39	16.55	0.00	16.6	-3.8	0.0	-3.8
PM <sub>10</sub>	2,007	0.15	2,006.7	2,949	0.28	2,949.6	+942	+0.13	+942.9

<sup>1</sup>Totals may differ due to rounding.

<sup>2</sup>Emissions calculated by URBEMIS2002 are for SO<sub>2</sub>

Interstate 5 and H Street on the east edge of the Subdistricts Area. The Goodrich industrial facility is located about 1,000 feet due west of this intersection. These HRAs are hereby incorporated by reference pursuant to CEQA Guidelines Section 15150 and are available for review in their entirety at the City of Chula Vista Planning Department at 276 Fourth Avenue and the Chula Vista Public Library Civic Center Branch at 365 F Street.

While both facilities are further than 1,000 feet from the proposed project, each has had a health risk assessment prepared previously. Both of these assessments have demonstrated that the incremental cancer risk in the specific plan area from these facilities is below 10 in 1,000,000 and thus do not comprise a significant health risk to the UCSP area.

Evaluation of Criterion 4 also involved the completion of a health risk assessment (HRA) for the effects of diesel particulates emitted from traffic on Interstate 5 as well as CO hot spot modeling for select intersections. The results of the health risk assessment as it pertains to Criterion 4 are provided in the section on the HRA below. The following discussion presents the result of the hot spot modeling for select intersections.

#### **a. CO Hot Spot Modeling**

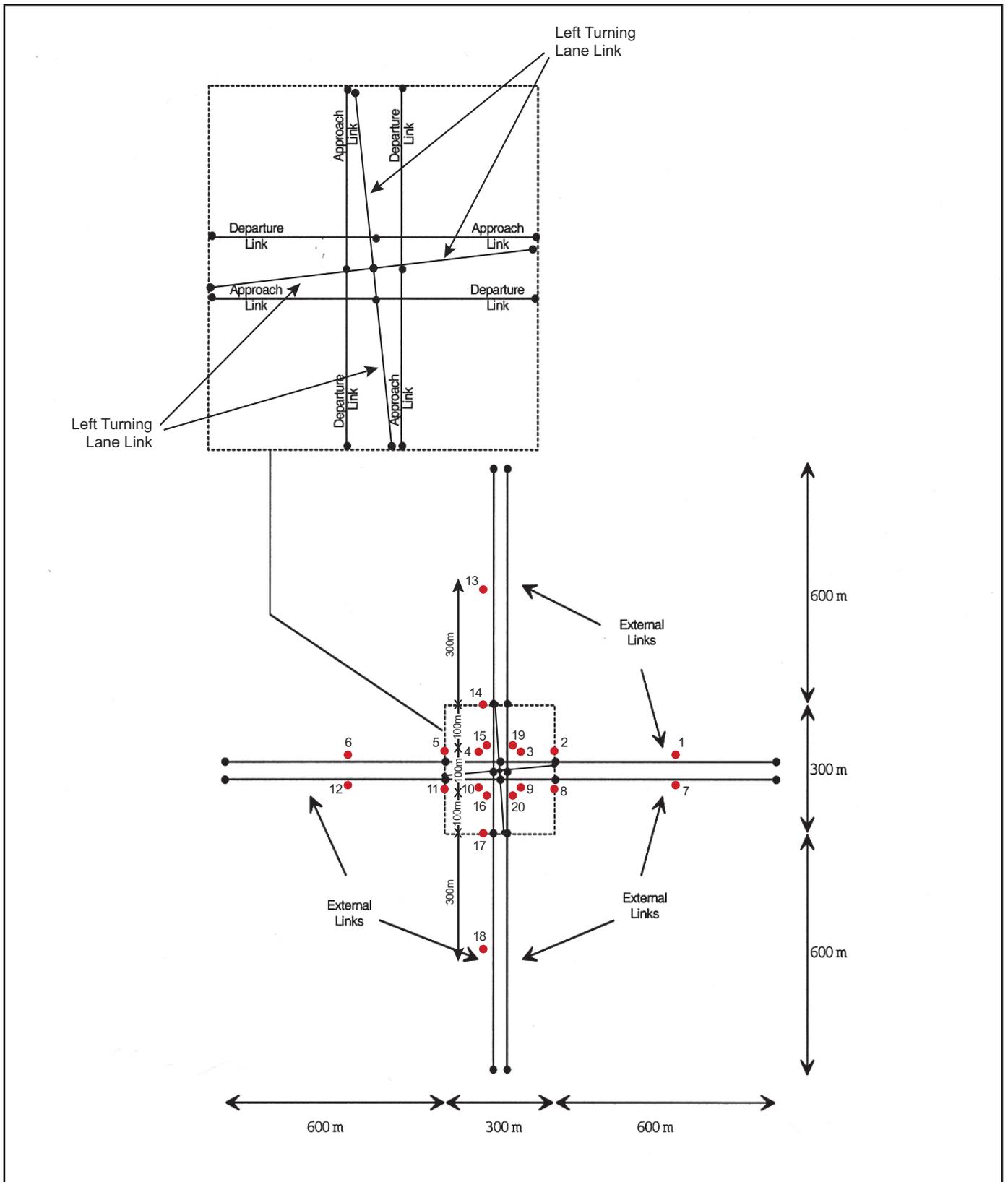
A carbon monoxide (CO) hot spot model was conducted for the four key intersections identified below. The model addresses CO concentrations at street intersections resulting from roadway traffic circulating through the intersections, and was prepared in accordance with the Transportation Project-Level Carbon Monoxide Protocol established by Caltrans (1997). Typically, an intersection experiences increased concentrations, or "hot spots", of CO as vehicles are slowed or idling due to traffic stops. The procedure followed is detailed in Appendix B of that protocol.

Four intersections were modeled. The intersections include:

- Broadway and H Street
- H Street and Third Avenue
- Third Avenue and E Street
- Fourth Avenue and F Street

These intersections were selected as representative examples of typical intersections in the UCSP area. The traffic volumes, intersection configuration, and cruise speeds were provided by Kimley-Horn. Concentrations were calculated for 20 receptors for each intersection. The basic configuration of the intersections and the receptor locations for a typical intersection is illustrated in Figure 5.10-1.

The detailed CO modeling assumptions and results are provided in Appendix E. The results of the calculations are presented in the following tables. Table 5.10-8 provides the modeled CO concentration from intersection for a winter condition. Table 5.10-9 combines the



● Receptors at 3m from edge of roadway and 1.8m high

● Link end point

**FIGURE 5.10-1**  
Link and Receptor Network For a Single Intersection with Dedicated Left Turn Lanes

**TABLE 5.10-8  
MODELED WINTER CO CONCENTRATIONS DUE TO TRAFFIC**

Receivers	Broadway Avenue/H Street		H Street/Third Avenue		Third Avenue/E Street		Fourth Avenue/F Street	
	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
1	0.5	0.40	0.4	0.32	0.3	0.24	0.2	0.16
2	0.8	0.64	0.6	0.48	0.4	0.32	0.2	0.16
3	0.8	0.64	0.6	0.48	0.3	0.24	0.3	0.24
4	0.8	0.64	0.6	0.48	0.3	0.24	0.3	0.24
5	0.8	0.64	0.6	0.48	0.3	0.24	0.2	0.16
6	0.6	0.48	0.4	0.32	0.3	0.24	0.2	0.16
7	0.6	0.48	0.4	0.32	0.3	0.24	0.2	0.16
8	0.8	0.64	0.6	0.48	0.4	0.32	0.2	0.16
9	0.8	0.64	0.6	0.48	0.4	0.32	0.3	0.24
10	0.8	0.64	0.6	0.48	0.4	0.32	0.3	0.24
11	0.8	0.64	0.6	0.48	0.4	0.32	0.3	0.24
12	0.5	0.40	0.4	0.32	0.3	0.24	0.2	0.16
13	0.5	0.40	0.4	0.32	0.2	0.16	0.3	0.24
14	0.8	0.64	0.5	0.40	0.3	0.24	0.4	0.32
15	0.8	0.64	0.5	0.40	0.3	0.24	0.4	0.32
16	0.8	0.64	0.6	0.48	0.3	0.24	0.4	0.32
17	0.8	0.64	0.6	0.48	0.4	0.32	0.5	0.40
18	0.5	0.40	0.4	0.32	0.3	0.24	0.3	0.24
19	0.7	0.56	0.6	0.48	0.3	0.24	0.4	0.32
20	0.7	0.56	0.6	0.48	0.3	0.24	0.4	0.32

**TABLE 5.10-9  
TOTAL WINTER CO CONCENTRATIONS AT MODELED RECEIVERS**

Receivers	Broadway Avenue/H Street		H Street/Third Avenue		Third Avenue/E Street		Fourth Avenue/F Street	
	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
1	6.3	5.04	6.2	4.96	6.1	4.88	6.0	4.80
2	6.6	5.28	6.4	5.12	6.2	4.96	6.0	4.80
3	6.6	5.28	6.4	5.12	6.1	4.88	6.1	4.88
4	6.6	5.28	6.4	5.12	6.1	4.88	6.1	4.88
5	6.6	5.28	6.4	5.12	6.1	4.88	6.0	4.80
6	6.4	5.12	6.2	4.96	6.1	4.88	6.0	4.80
7	6.4	5.12	6.2	4.96	6.1	4.88	6.0	4.80
8	6.6	5.28	6.4	5.12	6.2	4.96	6.0	4.80
9	6.6	5.28	6.4	5.12	6.2	4.96	6.1	4.88
10	6.6	5.28	6.4	5.12	6.2	4.96	6.1	4.88
11	6.6	5.28	6.4	5.12	6.2	4.96	6.1	4.88
12	6.3	5.04	6.2	4.96	6.1	4.88	6.0	4.80
13	6.3	5.04	6.2	4.96	6.0	4.80	6.1	4.88
14	6.6	5.28	6.3	5.04	6.1	4.88	6.2	4.96
15	6.6	5.28	6.3	5.04	6.1	4.88	6.2	4.96
16	6.6	5.28	6.4	5.12	6.1	4.88	6.2	4.96
17	6.6	5.28	6.4	5.12	6.2	4.96	6.3	5.04
18	6.3	5.04	6.2	4.96	6.1	4.88	6.1	4.88
19	6.5	5.20	6.4	5.12	6.1	4.88	6.2	4.96
20	6.5	5.20	6.4	5.12	6.1	4.88	6.2	4.96

intersection contribution with the maximum concentration as measured at the Chula Vista monitoring station. The summer concentrations for these conditions are provided in Tables 5.10-10 and 5.10-11.

The maximum predicted one-hour CO concentration occurred in the winter and is 6.6 ppm. The maximum predicted eight-hour concentration is 5.3 ppm and also occurs in the winter. These concentrations do not exceed the California or federal ambient air quality standards for carbon monoxide, and demonstrate that future traffic volumes can operate without exposing people to substantial CO concentrations. The hot spot analysis conducted for this report is based on traffic parameters projected for buildout conditions. The potential for hot spot impacts resulting from future conditions will depend upon the specific conditions at a given time. The actual future performance of an intersection will depend upon the timing of development and the timing of roadway and intersection improvements.

### **b. Health Risk Assessment**

Consistent with General Plan Update Policy EE 6.10, a health risk assessment was performed to consider the potential effects of placement of sensitive uses (e.g., residential uses) within 500 feet of Interstate 5. The HRA is included as Chapter 6.0 of the Air Quality Report (see Appendix E). The HRA included the calculation of potential cancer risk and a chronic health hazard index resulting from exposure to diesel particulates. The calculation involved an iterative generation of a composite emissions factor rate for diesel particulates using the Emfac2002 program. The calculation of individual emission factors for every type of vehicle assumed the default parameters for the San Diego Air Basin provided by the model. Using the individual emissions factors, a composite emissions rate was then generated, which assumed 5 percent of traffic as diesel-emitting. An assumption of 5 percent of traffic on the freeway being diesel-emitting was based on recent counts of diesel emitting vehicles conducted by Caltrans for the segment of Interstate 5 adjacent to the project. Emission factors were calculated for both summer and winter conditions.

These emission factors were then applied to the vehicles using the freeway, and dispersed using the Caline4 dispersion model. A future Interstate 5 traffic volume of 8,566 vehicles per hour was obtained from SANDAG's 2030 projections. This model results in concentrations at locations along the roadway. The Caline4 model is a line source model that does not specifically address topographic variability or intervening structures. It should be noted that the Interstate 5 freeway is up to 30 feet lower in elevation than those adjacent areas currently developed with uses and proposed for new mixed-use residential and high-density residential uses. The proposed scale of the new development may also include structures that are mid to high rise (at trolley stations) unlike the low scale one-two story structures that exist today. Based on these concentrations, a cancer risk measured in terms of number of cancers per million was determined.

**TABLE 5.10-10  
MODELED SUMMER CO CONCENTRATIONS DUE TO TRAFFIC**

Receivers	Broadway Avenue/H Street		H Street/Third Avenue		Third Avenue/E Street		Fourth Avenue/F Street	
	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
1	0.7	0.56	0.5	0.40	0.4	0.32	0.2	0.16
2	1.0	0.80	0.7	0.56	0.5	0.40	0.3	0.24
3	1.0	0.80	0.7	0.56	0.4	0.32	0.3	0.24
4	1.0	0.80	0.7	0.56	0.4	0.32	0.3	0.24
5	1.0	0.80	0.7	0.56	0.4	0.32	0.3	0.24
6	0.7	0.56	0.5	0.40	0.4	0.32	0.2	0.16
7	0.7	0.56	0.6	0.48	0.4	0.32	0.3	0.24
8	1.0	0.80	0.8	0.64	0.5	0.40	0.3	0.24
9	1.0	0.80	0.8	0.64	0.5	0.40	0.3	0.24
10	1.0	0.80	0.8	0.64	0.5	0.40	0.3	0.24
11	1.0	0.80	0.8	0.64	0.5	0.40	0.3	0.24
12	0.7	0.56	0.5	0.40	0.4	0.32	0.3	0.24
13	0.6	0.48	0.5	0.40	0.3	0.24	0.4	0.32
14	1.0	0.80	0.7	0.56	0.4	0.32	0.6	0.48
15	1.0	0.80	0.6	0.48	0.4	0.32	0.5	0.40
16	1.0	0.80	0.7	0.56	0.4	0.32	0.5	0.40
17	1.0	0.80	0.7	0.56	0.4	0.32	0.6	0.48
18	0.7	0.56	0.5	0.40	0.3	0.24	0.4	0.32
19	0.9	0.72	0.7	0.56	0.4	0.32	0.5	0.40
20	0.9	0.72	0.7	0.56	0.4	0.32	0.5	0.40

**TABLE 5.10-11  
TOTAL SUMMER CO CONCENTRATIONS AT MODELED RECEIVERS**

Receivers	Broadway Avenue/H Street		H Street/Third Avenue		Third Avenue/E Street		Fourth Avenue/F Street	
	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
1	3.4	2.72	3.2	2.56	3.1	2.48	2.9	2.32
2	3.7	2.96	3.4	2.72	3.2	2.56	3.0	2.40
3	3.7	2.96	3.4	2.72	3.1	2.48	3.0	2.40
4	3.7	2.96	3.4	2.72	3.1	2.48	3.0	2.40
5	3.7	2.96	3.4	2.72	3.1	2.48	3.0	2.40
6	3.4	2.72	3.2	2.56	3.1	2.48	2.9	2.32
7	3.4	2.72	3.3	2.64	3.1	2.48	3.0	2.40
8	3.7	2.96	3.5	2.80	3.2	2.56	3.0	2.40
9	3.7	2.96	3.5	2.80	3.2	2.56	3.0	2.40
10	3.7	2.96	3.5	2.80	3.2	2.56	3.0	2.40
11	3.7	2.96	3.5	2.80	3.2	2.56	3.0	2.40
12	3.4	2.72	3.2	2.56	3.1	2.48	3.0	2.40
13	3.3	2.64	3.2	2.56	3.0	2.40	3.1	2.48
14	3.7	2.96	3.4	2.72	3.1	2.48	3.3	2.64
15	3.7	2.96	3.3	2.64	3.1	2.48	3.2	2.56
16	3.7	2.96	3.4	2.72	3.1	2.48	3.2	2.56
17	3.7	2.96	3.4	2.72	3.1	2.48	3.3	2.64
18	3.4	2.72	3.2	2.56	3.0	2.40	3.1	2.48
19	3.6	2.88	3.4	2.72	3.1	2.48	3.2	2.56
20	3.6	2.88	3.4	2.72	3.1	2.48	3.2	2.56

Calculations were made for receivers along the freeway at distances of 150, 300, and 500 feet from the center of the freeway. Wind direction was taken into account based on a wind rose obtained from the San Diego Air Pollution Control District for Chula Vista. This information included direction and strength. A copy of the wind rose is included in Figure 5.10-2. For each 22.5 degree wind angle, a particulate concentration was calculated, weighted for the duration of the wind and combined into a cancer exposure. This was done for each of the three sets of receivers and for summer and winter conditions. Table 5.10-12 provides the angles and duration of the wind used in the analysis.

Runs were completed for both winter and summer conditions, with temperatures of 7.2 C and 27.2 C, respectively. The results do not vary because the pollutant is PM<sub>10</sub> and not affected by temperature. A traffic volume of 8566.3 vph/1 hour was used and obtained from KHA traffic study prepared for the UCSP. An emission factor of 0.0032 g/mi hour<sup>1</sup> was used. Because the emission factor is so low, as applied to the total vph, a 100x magnification was used to allow the results to be displayed. Resulting data were thus divided by 100 to provide actual values.

**TABLE 5.10-12  
WIND DIRECTION AND RELATIVE DURATION**

Wind Direction	Angle	Average Wind Speed (meters/second)	Relative Duration
N	0.0	0.89	0.029
NNE	22.5	0.89	0.029
NE	45.0	1.16	0.045
ENE	67.5	0.85	0.050
E	90.0	1.16	0.083
ESE	112.5	1.21	0.063
SE	135.0	1.30	0.038
SSE	157.5	2.00	0.031
S	180.0	1.34	0.041
SSW	202.5	1.74	0.045
SW	225.0	1.88	0.078
WSW	247.5	2.41	0.185
W	270.0	2.30	0.142
WNW	292.5	2.10	0.055
NW	315.0	1.21	0.029
NNW	337.5	0.94	0.027

The results of the cancer risk are provided in Table 5.10-13. The calculated risk ranges from a high of 230 in 1,000,000 at some receptors 150 feet from the source to a low of 71 in 1,000,000 at 500 feet from the road. It should be noted that incremental cancer risk is calculated assuming a 24 hour per day 70 year lifetime exposure. The assessment also does not account for significant mobile source emission reductions mandated to occur by state and federal regulations over the next 5-15 years.

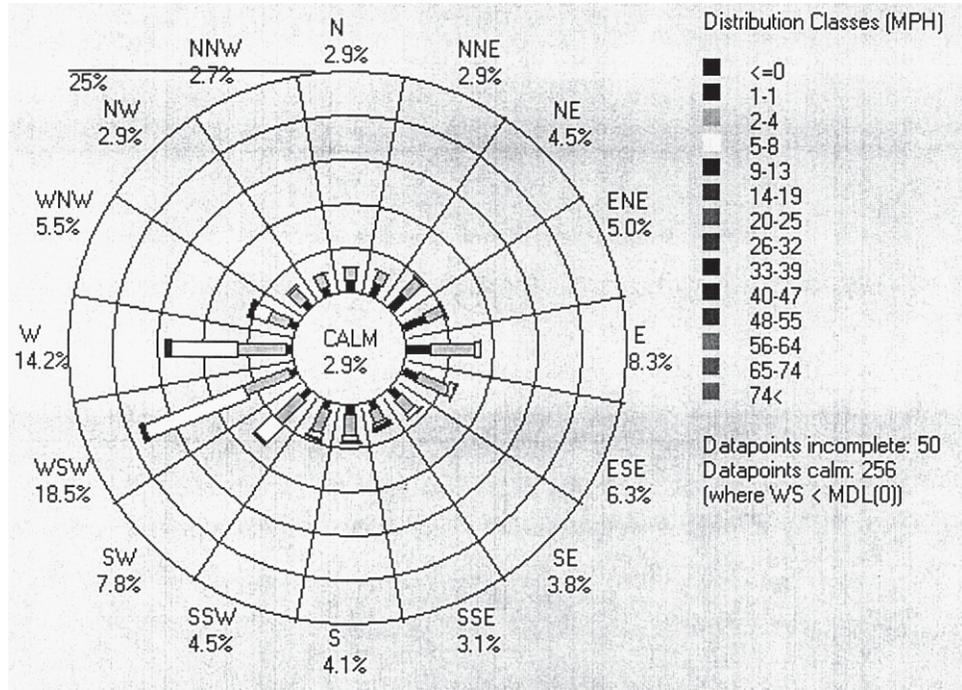


FIGURE 5.10-2  
 Windrose for Chula Vista

TABLE 5.10-13  
INCREMENTAL CANCER RISK

150 Receptors Receiver	Wind Direction																Total
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
1	2.55E-06	0.00E+00	1.16E-05	2.10E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.27E-04						
2	4.74E-06	0.00E+00	1.15E-05	2.10E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.29E-04						
3	5.92E-06	0.00E+00	1.12E-05	2.10E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.30E-04						
4	6.81E-06	0.00E+00	1.10E-05	2.10E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.30E-04						
5	7.06E-06	0.00E+00	1.07E-05	2.10E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.30E-04						
6	7.40E-06	0.00E+00	1.02E-05	2.10E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.30E-04						
7	7.64E-06	0.00E+00	9.61E-06	2.10E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.29E-04						
8	7.85E-06	0.00E+00	8.39E-06	2.10E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.28E-04						
9	8.01E-06	0.00E+00	7.24E-06	2.12E-05	3.06E-05	6.73E-05	4.97E-05	2.00E-05	1.14E-05	1.26E-05	2.26E-04						
10	2.44E-06	0.00E+00	4.02E-06	4.02E-06	2.39E-05	5.14E-05	3.75E-05	1.44E-05	7.99E-06	9.62E-06	1.51E-04						
11	4.64E-06	0.00E+00	1.15E-05	1.84E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.75E-04						
12	5.81E-06	0.00E+00	1.13E-05	1.84E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.76E-04						
13	6.50E-06	0.00E+00	1.11E-05	1.84E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.76E-04						
14	6.95E-06	0.00E+00	1.08E-05	1.84E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.76E-04						
15	7.27E-06	0.00E+00	1.05E-05	1.84E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.76E-04						
16	7.53E-06	0.00E+00	1.01E-05	1.84E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.76E-04						
17	7.73E-06	0.00E+00	9.45E-06	1.84E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.75E-04						
18	7.89E-06	0.00E+00	8.22E-06	1.84E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.75E-04						
19	7.92E-06	0.00E+00	1.85E-06	1.85E-05	2.40E-05	4.79E-05	3.40E-05	1.42E-05	8.91E-06	1.10E-05	1.72E-04						
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-06	2.20E-05	4.43E-05	3.11E-05	1.19E-05	6.83E-06	8.89E-06	1.29E-04	

300 Receptors Receiver	Wind Direction																Total
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
1	3.48E-06	0.00E+00	4.70E-06	1.15E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.36E-06	1.29E-04						
2	5.22E-07	0.00E+00	4.51E-06	1.15E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.91E-06	1.29E-04						
3	1.24E-06	0.00E+00	4.31E-06	1.15E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.92E-06	1.30E-04						
4	1.79E-06	0.00E+00	4.05E-06	1.15E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.92E-06	1.30E-04						
5	2.19E-06	0.00E+00	3.73E-06	1.15E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.93E-06	1.30E-04						
6	2.50E-06	0.00E+00	3.31E-06	1.15E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.93E-06	1.30E-04						
7	2.74E-06	0.00E+00	2.64E-06	1.15E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.93E-06	1.30E-04						
8	2.93E-06	0.00E+00	1.57E-06	1.16E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.93E-06	1.29E-04						
9	3.10E-06	0.00E+00	1.97E-07	1.24E-05	1.82E-05	3.97E-05	2.96E-05	1.18E-05	6.75E-06	6.93E-06	1.29E-04						
10	3.27E-06	0.00E+00	1.49E-07	1.55E-05	3.58E-05	2.60E-05	9.92E-06	5.97E-06	6.87E-06	1.03E-04							
11	3.48E-06	0.00E+00	4.69E-06	1.12E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.18E-04						
12	5.22E-07	0.00E+00	4.50E-06	1.12E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.18E-04						
13	1.24E-06	0.00E+00	4.29E-06	1.12E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.19E-04						
14	1.78E-06	0.00E+00	4.03E-06	1.12E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.19E-04						
15	2.19E-06	0.00E+00	3.71E-06	1.12E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.19E-04						
16	2.50E-06	0.00E+00	3.30E-06	1.12E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.19E-04						
17	2.73E-06	0.00E+00	2.63E-06	1.12E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.19E-04						
18	2.93E-06	0.00E+00	1.57E-06	1.12E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.18E-04						
19	3.09E-06	0.00E+00	1.97E-07	1.21E-05	1.68E-05	3.56E-05	2.62E-05	1.06E-05	6.25E-06	6.17E-06	1.18E-04						
20	3.26E-06	0.00E+00	1.49E-07	1.49E-05	3.34E-05	2.38E-05	9.06E-06	5.56E-06	6.68E-06	9.68E-05							



In April 2005, the California Air Resources Board (CARB) published the "Air Quality and Land Use Handbook: A Community Health Perspective." The handbook makes recommendations directed at protecting sensitive land uses while balancing a myriad of other land use issues (e.g. housing, transportation needs, economics). It notes that the handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. As reflected in the CARB handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Although there is no adopted standard for mobile sources, such as the freeway, the effects detailed in Table 5.10-13 are considered to be cumulatively significant. The only means of reducing these effects is the implementation of source controls. The CARB has worked on developing strategies and regulations aimed at reducing the risk from diesel particulate matter. The overall strategy for achieving these reductions is found in the "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" (State of California 2000). A stated goal of the plan is to reduce the cancer risk statewide arising from exposure to diesel particulate matter 75 percent by 2010 and 85 percent by 2020. A number of programs and strategies to reduce diesel particulate matter that have been or are in the process of being developed include the Diesel Risk Reduction Program which aims to reduce diesel particulate emission over the next 5 to 15 years through improved automobile design and alternative fuel efficiency (State of California 2005a, <http://www.arb.ca.gov/diesel/dieselrrp.htm>). These programs are outside of the jurisdiction of the City of Chula Vista.

However, in recognition of the guidance provided in the CARB handbook, the UCSP Development Design Guidelines (Chapter VII, Section G.5) have incorporated site design measures to be considered by future redevelopment adjacent to I-5, where possible, to help minimize effects. These measures include siting residential uses away from the freeway to the extent possible, tiering residential structures back from the freeway, and incorporating mechanical and structural measures into the building design. While these measures may serve to reduce the severity of diesel particulate emissions impacts, implementation of diesel vehicles source control measures by State authorities would be required to reduce cumulative impacts to below significance.

### 5.10.3.5 Objectionable Odors

- **Criterion 5: Create objectionable odors affecting a substantial number of people.**

There are no odor generators proposed by the UCSP, and the plan does not place sensitive receivers adjacent to an odor source.

### 5.10.4 Level of Significance Prior to Mitigation

- **Criterion 1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan**

Measures have been incorporated into the project design to lessen air quality impacts. The UCSP has been prepared using the smart growth principles foundational to the General Plan Update such as providing a mix of compatible land uses; locating highest density near transit; utilizing compact building design and creating walkable communities; providing a range of infill housing opportunities; and increasing transportation choices. In particular, the UCSP focuses new development at key transit nodes and enhances alternative modes of travel by promoting walkability with enhanced pedestrian paths, augmenting existing bicycle paths, and making public transit more accessible and desirable with new and expanded public transit stops.

However, since the GPU is inconsistent with the former General Plan upon which the goals and objectives of the RAQS were based, and the proposed UCSP conforms to the GPU, adoption of the proposed UCSP would result in significant conflict with an applicable air quality plan.

- **Criterion 2: Violate any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation**

There are no existing or projected air quality violations in the UCSP area. Furthermore, there are no toxic air emitters proposed as part of the UCSP. All proposed land uses are either multi-family residential, commercial, retail or public uses, and no industrial uses are proposed. Therefore, there will not be a significant contribution to an existing or projected air quality violation, and no significant impact relative to Criteria 2.

- **Criterion 3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard**

As shown on Table 5.10-7, the proportional increase in multi-family units to single-family units and resulting decrease in number of vehicle trips per unit and the anticipated improvement in motor vehicle emissions result in an expected decrease in pollutants over existing conditions for all pollutants except SO<sub>2</sub> and PM<sub>10</sub>. Since the region is not in compliance with the PM<sub>2.5</sub> and PM<sub>10</sub> standard, and because the average daily emission is anticipated to increase, impacts are considered significant, until the region is in compliance.

- **Criterion 4: Expose Sensitive Receptors to Substantial Pollutant Concentrations such as Ozone or Respirable Particulates (PM<sub>10</sub>)**

Although there is no adopted standard for sensitive receivers adjacent to Interstate 5, it was determined that air quality impacts from diesel particulates emanating from the freeway would be cumulatively significant given current basin-wide noncompliance with particulate standards and projected future levels of diesel particulates emanating from Interstate 5.

The project area is not exposed to an incremental cancer risk of greater than 10 in 1,000,000 from a major toxic emitter. Furthermore, CO concentrations do not exceed the California or federal ambient air quality standards for carbon monoxide, and predictive modeling demonstrates that future traffic volumes can operate without exposing people to substantial CO concentrations. The analysis conducted for the UCSP indicates that there will not be CO hotspots as a result of the buildout of the UCSP. Conformance to Policy LUT 13.2 of the GPU requiring the optimization and maintenance the performance of the traffic signal system and the street system, to facilitate traffic flow and to minimize vehicular pollutant emission levels will ensure that intersections operate at an adequate level of service to avoid potential CO concentrations in excess of adopted standards. Projected CO levels are thus considered to be not significant.

- **Criterion 5: Create Objectionable Odors Affecting a Substantial Number of People**

The UCSP does not propose uses that would create a significant odor impact, nor does it place a sensitive user in an area exposed to objectionable odors.

## **5.10.5 Mitigation**

### **5.10.5.1 Air Quality Plan**

A significant air quality impact stems from an inconsistency between the land uses envisioned in the currently adopted GPU and the former General Plan upon which the RAQS were based. The only measure that can lessen this Criterion 1 impact is the revision of the RAQS based on the recently adopted GPU. This effort is the responsibility of SANDAG and San Diego APCD and is outside the jurisdiction of the City. Nonetheless, mitigation measure 5.10.5-1 is provided as an advisory measure.

#### **Mitigation Measure**

5.10.5-1 The City of Chula Vista shall recommend to SANDAG to update the RAQS in the next triennial cycle to incorporate the increased land use densities of the GPU and UCSP.

### 5.10.5.2 Air Quality Standards

Conformance to Mitigation Measure 5.10.5-2 will reduce Criteria 3 and 4 air quality impacts which may result from implementation of the UCSP.

#### Mitigation Measure

5.10.5-2 Prior to issuance of an Urban Core Development Permit or other discretionary permit, all subsequent individual development projects shall demonstrate to the satisfaction of the Community Development Director, conformance with the relevant land use and development regulations (UCSP, Chapter VI) and development design guidelines (UCSP, Chapter VII) of the UCSP which support smart growth principles such as providing a mix of compatible land uses; locating highest density near transit; utilizing compact building design and creating walkable communities; providing a range of infill housing opportunities; and increasing transportation choices.

In addition, special design guidelines are provided in the UCSP Development Design Guidelines (Chapter VII, Section G.5) to be considered by future redevelopment adjacent to I-5, where possible. These site design measures would help to minimize effects and include siting residential uses away from the freeway to the extent possible, tiering residential structures back from the freeway, and incorporating mechanical and structural measures into the building design. While these measures may serve to reduce the severity of diesel particulate emissions impacts, implementation of diesel vehicles source control measures by State authorities would be required to reduce cumulative impacts to below significance.

### 5.10.5.3 Cumulative Net Pollutant Increase

Since the region is not in compliance with the  $PM_{2.5}$  and  $PM_{10}$  standard and because the average daily emission is anticipated to increase, impacts to Criterion 3, which addresses cumulative net increases in criteria pollutants, are considered significant.  $PM_{10}$  emissions result from construction of projects and from daily operations in the Urban Core project area. The latter is primarily a result of vehicle traffic on area roads. Mitigation is achievable for fugitive dust from construction activities, but the only measures that would reduce those emissions from daily operations are those that reduce miles traveled on area roads. As noted in the above analysis, the UCSP includes measures aimed at promoting alternative modes of travel including enhanced pedestrian and bicycle activity, use of transit and reducing trip lengths by siting highest density adjacent to key transit nodes. Implementation of the following Mitigation Measure 5.10-3 will ensure that conformance to these provisions of the UCSP is satisfied prior to issuance of subsequent project development permits.

**Mitigation Measures**

5.10.5-3 Prior to issuance of an Urban Core Development Permit or other discretionary permit, all subsequent individual development projects shall demonstrate compliance with relevant land use and development regulations contained in the UCSP to minimize air pollutant emissions. These include, but are not limited to: measures aimed at promoting pedestrian activity (Chapter V, pp. V-2- V-5); bicycle activity (Chapter V, pp. V-5 – V-7, V-9 – V-10); public transit facilities (Chapter V, pp. V8 – V-9), including the West Side Shuttle (Chapter V, pp. V-11 – V-12); and reintroduction of the traditional street grid (Chapter V, pp. V-16 – V-19).

5.10.5-4 Prior to issuance of construction permits, including but not limited to, the first Grading Permit, Demolition Permit, and Urban Core Development Permit, the Community Development Director shall verify that the following active dust control practices are to be employed during construction.

1. All unpaved construction areas shall be sprinkled with water or other acceptable San Diego APCD dust control agents during dust-generating activities to reduce dust emissions. Additional watering or acceptable APCD dust control agents shall be applied during dry weather or windy days until dust emissions are not visible.
2. Trucks hauling dirt and debris shall be properly covered to reduce windblown dust and spills.
3. A 20-mile-per-hour speed limit on unpaved surfaces shall be enforced.
4. On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.
5. On-site stockpiles of excavated material shall be covered or watered.
6. Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the City and/or APCD to reduce dust generation.
7. To the maximum extent feasible:  
  
Heavy-duty construction equipment with modified combustion/fuel injection systems for emissions control shall be utilized during grading and construction activities.

Catalytic reduction for gasoline-powered equipment shall be used.

8. Equip construction equipment with prechamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of nitrogen oxide, to the extent available and feasible.
9. Electrical construction equipment shall be used to the extent feasible.
10. The simultaneous operations of multiple construction equipment units shall be minimized (i.e., phase construction to minimize impacts).

With the application of these measures, significant impacts resulting from projected  $PM_{10}$  impacts from construction would be mitigated. Impacts resulting from daily operation would remain significant until the region is determined to be in compliance with the standard.

### **5.10.6 Level of Significance After Mitigation**

Implementation of Mitigation Measures 5.10.5-1 through 5.10.5-4 would reduce significant impacts which may result from implementation of the UCSP but not to below a level of significance. Until such time that revisions are made to the RAQS to incorporate updated land uses, that the region is in attainment of the Ozone,  $PM_{10}$ , and  $PM_{2.5}$  standards, and that diesel vehicles source control measures by State authorities are implemented, impacts would remain significant and unmitigated.

## 5.11 Public Services

Public services consist of law enforcement, fire protection, schools, libraries, and parks and recreation. This section discusses the availability of public services for the proposed UCSP.

The goals expressed in the UCSP require improvements to City services such as police, fire, schools, libraries, and parks. Because the UCSP implements the GPU, the infrastructure studies performed during the City's GPU effort and resulting citywide implementation strategies provide the basis of utilities and services needed for the urban core. Chapter IX of the UCSP focuses on the GPU infrastructure and public facilities policies and criteria that have particular relevance to the UCSP area. Chapter X of the UCSP identifies the implementation programs that will result in the desired improvements. Realization strategies include public and public/private partnerships to generate funding and investment in the urban core through development and business fees, redevelopment funds, grants, TransNet (a one-half cent regional sales tax dedicated to transportation projects), and the general fund as funding sources.

In January 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Development Impact Fee (DIF) to pay for various public facilities within the City of Chula Vista (Chula Vista Municipal Code, Chapter 3.50). The general intent of this ordinance is to require that adequate public facilities be available to accommodate increased population created by new development within the City. The City determined that new development contributes to the cumulative burden on existing public facilities, which must be mitigated by the financing and construction of new facilities. The City determined that a reasonable means of financing the public facilities is to charge a fee on all development in the City. The resulting fee schedule has been adopted in accordance with Government Code Section 66000. Subsequent projects developed under the UCSP will be subject to the payment of development impact fees at the rate in effect at the time building permits are issued. The Municipal Code includes provisions that require the City to use the development impact fees to construct needed improvements and to ensure that adequate funds are available in the impact fee account to build the needed improvements.

School services are additionally addressed in State Senate Bill 50. Senate Bill 50 was enacted to obtain support from the Building Industry Association for school bond issues and prohibits local governments from requiring extra fees or the establishment of a Mello Roos from new development to finance schools. The legislation provides that statutory fees are the exclusive means of considering as well as mitigating school impacts.

A Facilities Implementation Analysis is being prepared concurrent with the UCSP to evaluate ongoing, long-term improvement projects and determine whether long-term projects revenues are sufficiently aligned with long-term potential costs of public infrastructure. Monitoring of the progress of the UCSP in reaching its infrastructure and public facilities

goals will include review under the Growth Management Ordinance, bi-annual review of amenities and facilities implementation in conjunction with the budget/CIP review cycle, and a five-year assessment of the progress of the UCSP. To monitor the effectiveness of the UCSP in responding to the changing landscape of the urban core, a Five-Year Progress Report will be prepared and included as part of budget cycle or strategic plan updates.

The Growth Management Ordinance (Municipal Code 19.09) includes a program to implement the GPU and ensure that development does not occur unless facilities and improvements are available to support that development. The growth management program incorporates a defined public facilities development phasing policy to appropriately schedule the timing and location of various City improvements. The program additionally incorporates the facility master plans for fire protection, schools, libraries, parks, water, sewer, drainage, traffic and civic centers. The Growth Management Oversight Commission annually reviews and reports on the program to the Chula Vista Planning Commission and City Council.

Various improvement projects envisioned in the UCSP will also be subject to ongoing monitoring and priority-setting through the Capital Improvement Program (CIP) processes. Schedule assessments will be made during the bi-annual CIP budget analysis and review of facilities performance. Facing any change in priorities, additions or subtractions from the facilities program will not require amendment of the UCSP provided such changes are not in conflict with the this EIR.

The City Council adopted the Threshold Standards Policy for Chula Vista in November 1987, which established "quality of life" indicators for the five public service topics addressed in this section. Each topic was addressed in the Policy in terms of a goal, objective(s), a threshold, and implementation measures. These standards are intended to preserve and enhance the environment and City residents' quality of life as growth occurs.

## **5.11.1 Law Enforcement**

### **5.11.1.1 Existing Conditions**

Police protection for the City of Chula Vista is provided by the Chula Vista Police Department. There is one central police station within the city located at 315 Fourth Avenue, within the UCSP Village District. All police operations are based out of this one central facility. The department averages 1.17 sworn employees per 1,000 residents. The Department is recruiting new officers and has approximately 15 officers in training.

The UCSP Subdistricts area is within Patrol Beats 11, 12, and 13, which are served by at least one patrol car 24 hours a day. Officers respond to calls citywide. The beat strength does not include traffic units, school resource officers, roving patrol officers, patrol sergeants, and investigative division units that service the city as needed. Beats within sectors take into account call volumes and natural geographic or manmade boundaries.

The Chula Vista Police Department response times are guided by the Growth Management Oversight Commission's (GMOC) Quality of Life Threshold Standards. These standards are used to determine whether there are adequate facilities, staff, and equipment to provide police protection throughout the City of Chula Vista. On May 28, 2002, these threshold standards were adjusted by the City Council with the adoption of Ordinance 2860 to correct a technical error made in the original threshold calculation.

For emergency response, police units must respond to 81 percent of Priority One emergency calls within seven minutes and maintain an average response time of 5.5 minutes or less. Priority One calls include felony crimes in progress, life-threatening situations, and injury to property. For Priority Two Urgent calls, the police units must respond to 57 percent of the calls within seven minutes with an average response time to all Priority Two calls within 7.5 minutes or less. Priority Two calls include misdemeanor crimes in progress, non-life-threatening situations, possible injury to property, and emergency public services such as traffic signal failure. The GMOC 2005 Annual Report concluded that the Chula Vista Police Department is not meeting the threshold standard for Priority Two calls.

Despite increasing population and traffic volumes, emergency response in the city has improved over the last year. During the most recent reporting period, 82.1 percent of emergency calls (Table 5.11-1) and 48.4 percent of urgent calls were responded to within seven minutes. Additionally, the city has experienced an 8 percent decline in crime rates over the last five years.

**TABLE 5.11-1  
RESPONSE TIMES  
EMERGENCY CALLS FOR SERVICE**

Fiscal year	Call Volume	Percent of Call Response within Seven Minutes	Average Response Time
Emergency Response Threshold		81.0	5:30
2004	1,322 of 71,000	82.1	4:52
2002-03	1424 of 71268	80.8	4:55
2001-02	1539 of 71859	80.0	5:07
2000-01	1734 of 73977	79.7	5:13
1999-00	1750 of 76738	75.9	5:21
CY 1999*	1890 of 74405	70.9	5:50

\*The 1998-99 Fiscal Year report used calendar year (CY) 1999 data due to implementation of new CAD system mid-1998.

Response time is just one measure of how police services are keeping pace with growth. The City has implemented measures to improve police response time. These measures range from maintaining full staffing to technological improvements.

GPU policy PFS 5.4 requires that the City provide adequate law enforcement staff and equipment equivalent to the existing ratio of police officers to population to meet established service standards. GPU policy GM 1.1 calls for the city to maintain a set of threshold

standards which are policy based quantitative level of service measures as a tool to assess the impact of new service demands.

### **5.11.1.2 Criteria for Determination of Significance**

Adoption of the UCSP would have a significant impact on police services if it would:

- **Criterion 1:** Result in the inability of the City to provide an adequate level of law enforcement service in accordance with the adopted standards and thresholds as follows:

For emergency response, police units must respond to 81 percent of Priority One emergency calls within seven minutes and maintain an average response time of 5.5 minutes or less.

For Priority Two Urgent calls, the police units must respond to 57 percent of the calls within seven minutes with an average response time to all Priority Two calls within 7.5 minutes or less.

### **5.11.1.3 Impacts**

- **Criterion 1: Adequate Level of Law Enforcement Service.**

The Police Department currently meets the City threshold for responding to Priority One calls within seven minutes but does not meet the City threshold for Priority Two calls. The Police Department currently responds to 82.1 percent of Priority I calls and 48.4 percent of Priority II calls within the seven-minute response threshold.

The land uses allowed in the UCSP would result in an increase in calls for police service within the Subdistricts Area. Increased traffic congestion as a result of growth in the urban core would hinder timely responses to emergency calls. Adherence to police protection standards would be necessary to ensure that adequate levels of service are maintained. The facility at Fourth and F Streets in the City to Chula Vista would meet the law enforcement needs created by increased demand from new development in the region, including the proposed project. However, in order to maintain response times, more police officers will be needed. The exact number of additional personnel is difficult to forecast and will be determined as growth occurs in the UCSP over the next 25 years. The 7,100 additional residential units and 3.6 million square feet of commercial space permitted in the UCSP would place substantial demands on existing law enforcement services. Although the exact number of staff required to serve the project is undetermined, according to the Chula Vista Police Department, "regardless of the size of the development, the City would make staffing changes based upon any increases in calls for service (Chew, pers. Com. 2005). Adjustments to personnel will continue to be made as part of the City's budget cycle. Impacts to the provision of law enforcement services would be significant if provision of

additional personnel does not coincide with the anticipated population growth and increased demand for law enforcements services.

The Police Department is anticipating meeting the challenges of overall growth in the city with technological upgrades to equipment. These upgrades could include a computer-aided dispatch system integrated with in-car global positioning system (GPS) systems, MDC mapping capabilities in every car, and the ongoing efforts to reduce false alarms. The department is also seeking support for research into alternative call management options to correctly prioritize calls and improve deployment tactics including revised beat configurations, bike patrol units, and a possible aerial component.

The UCSP includes an assessment of enhancements to police protection services in relation to projected buildout of the UCSP over the 25-year project horizon (Chapter IX). . Through the Growth Management and Police Master plans, the City will continue to monitor law enforcement services needs. As part of the City's annual budget cycle review, the need for new law enforcement personnel would be assessed, funded and added as necessary to maintain threshold standards. Public Facilities Development Impact Fee programs will provide capital funding for additional facilities. These facilities will include the kinds of specialized equipment to serve the form of development within the urban core, mid to high-rise structures

#### **5.11.1.4 Summary of Significance Prior to Mitigation**

Development of the proposed project would result in a significant impact to law enforcement services because of the anticipated increase in calls for service and the additional travel time required to answer these calls. While the police facility at Fourth and F Streets is sufficient to meet the increased demand resulting from development, more police officers will be needed in order to maintain response times. Significant impacts would result if timing of these provisions does not coincide with projected increase in demand for services and population growth.

#### **5.11.1.5 Mitigation Measures**

The following measure will mitigate impacts to the provision of adequate law enforcement services resulting from the adoption of the UCSP to below a level of significance.

**Mitigation Measure**

- 5.11.1-1 Subsequent development projects shall demonstrate that significant impacts to police services resulting from an individual project are addressed prior to approval of an Urban Core Development permit or other discretionary approval. As part of project review, subsequent development projects shall be evaluated for adequate access for police vehicles (pursuant to GPU Policy PFS 6.1) and integration of Crime Prevention Through Environmental Design (CPTED) techniques (pursuant to GPU Policy PFS 6.3).
- 5.11.1-2 As a condition of project approval, individual developers shall pay the public facilities development impact fees at the rate in effect at the time building permits are issued.
- 5.11.1-3 As part of the annual budgeting process, the City will assess the need for additional police personnel to provide protection services consistent with established City service levels and commensurate with the increase in population.

**5.11.1.6 Summary of Significance After Mitigation**

Project-related impacts to police protection would be reduced below a level of significance with implementation of the mitigation measures 5.11.1-1 through 5.11.3 for the proposed project.

**5.11.2 Fire Protection and Emergency Medical Services****5.11.2.1 Existing Conditions**

Fire protection for the City of Chula Vista is provided by the Chula Vista Fire Department. Fire stations are positioned throughout the City to satisfy the service levels established by these threshold standards. Fire Station No. 1 is located at ~~477~~447 F Street within the UCSP Subdistricts Area. The Fire Department follows the Growth Management Oversight Committee Quality of Life Threshold Standards for fire protection established by the City of Chula Vista. The threshold standards require properly equipped and staffed fire and medical units to respond to calls citywide within seven minutes for 80 percent of the cases.

The Fire Station Master Plan (City of Chula Vista 1997) evaluates the planning area's fire coverage needs and recommends a nine-station network at GPU buildout to maintain compliance with the threshold standard. Currently, the City is served by seven fire stations within the city limits, plus an additional station located in the Bonita-Sunnyside Fire Protection District. The current Fire Station Master Plan, which calls for nine fire stations citywide, is being updated to reflect changes to GPU land uses and to respond to a revised

set of performance criteria as proposed in the Fire Department Strategic Plan. Therefore, the number and locations of future fire stations along with how they are equipped may change.

The Chula Vista Fire Department maintains approximately 126.75 permanent full-time employees. The department currently serves a population of approximately 209,200 people in an area over 50 square miles and responds to more than 12,000 calls annually. Fire Station No. 1 located at 447 F Street serves the UCSP area and plans are being developed for a new and larger Station No. 1, allowing for additional response units to be housed.

According to the GMOC 2005 report, emergency response times were not met during the July 2003 to June 2004 reporting period. Approximately 85 percent of the Department's priority calls for service are in the emergency medical services area. As indicated on Table 5.11-2, 72.9 percent of emergency calls were responded to within seven minutes during the most recent reporting period, compared with the 80 percent requirement in the threshold standard.

**TABLE 5.11-2  
FIRE/EMS EMERGENCY RESPONSE TIMES**

Year	Call Volume	Percent of Calls Responded to within Seven minutes
Emergency Response Threshold		80.0
2004	8,420	72.9
2002-03	8,088	75.5
2001-02	7,626	69.7
2000-01	7,128	80.8
1999-00	6,654	79.7
CY 1999	6,344	77.2
CY 1998	4,119	81.9
CY 1997	6,275	82.4
CY 1996	6,103	79.4
CY 1995	5,885	80.0
CY 1994	5,701	81.7

Emergency medical services to the proposed project area are currently provided by American Medical Response, which provides contract emergency medical services for the city of Chula Vista. There are two American Medical stations that provide paramedics with emergency medical training to the City of Chula Vista exclusively.

### **5.11.2.2 Criteria for Determination of Significance**

The proposed project would have a significant impact on fire protection services if it:

- Criterion 1: Results in the inability for the City to provide an adequate level fire protection service in accordance with the adopted standards and threshold:

For calls citywide, fire units must respond within seven minutes for 80 percent of emergency calls.

### 5.11.2.3 Impacts

- **Criterion 1: Adequate Level of Fire Protection Service.**

The Chula Vista Fire Department does not currently meet the threshold standards established for response time which requires properly equipped and staffed fire and medical units to respond to calls citywide within seven minutes for 80 percent of the cases. However, the 2005 GMOC Report indicated that during the latest reporting period that travel time component has improved as has dispatch and that increased response time is attributable to turnout time. Response time in the UCSP area is better than the citywide average, due to the traditional street grid pattern, increased density, and flat terrain; which all decrease response time.

The land uses proposed for the UCSP project would increase the demand for fire protection services by increasing development densities in the UCSP Subdistricts Area. Because of the need to respond to calls within the current seven-minute response threshold time, or other applicable threshold standard(s) which may be established in the future, regardless of land use, it is anticipated that additional fire protection personnel will be needed to ensure compliance with the applicable threshold standard(s). Impacts to fire and emergency medical services would be significant if provision of additional personnel does not coincide with the project's anticipated population growth and increased demand for services.

The UCSP includes an assessment of enhancements to fire protection services in relation to projected buildout of the UCSP over the 25-year planning horizon (Chapter IX). Through the Growth Management and Fire Master plans, the City will continue to monitor fire protection and emergency medical services needs. Public Facilities Development Impact Fee programs will provide capital funding for additional facilities. These facilities will include the kinds of specialized equipment to serve the mid to high-rise development proposed within the UCSP Subdistricts Area. The updated Fire Master Plan, anticipated to be completed by mid-2006, has indicated that sufficient facilities will exist to serve the proposed UCSP, but to attain threshold service level, additional personnel would be required. Although the exact number of staff required to serve the project is undetermined, adjustments to personnel will continue to be made as part of the City's budget cycle. Impacts to the provision of law enforcement services would be significant if provision of additional personnel does not coincide with the anticipated population growth and increased demand for fire protection and emergency medical services.

### 5.11.2.4 Summary of Significance Prior to Mitigation

The Chula Vista Fire Department does not currently meet the threshold standard for response time for the City, including the UCSP Subdistricts area. Buildout of the UCSP would increase demand for fire protection services. However, as population growth in the service area warrants, additional fire protection personnel and fire protection equipment and facilities would be provided. These provisions would help ensure adequate service within

the requirements of the GMOC threshold standards. Significant impacts would result if timing of these provisions does not coincide with projected increase in demand for services and population growth.

### **5.11.2.5 Mitigation Measures**

The following measure will mitigate impacts to the provision of adequate fire protection services and facilities resulting from the adoption of the UCSP to below a level of significance.

#### **Mitigation Measure**

- 5.11.2-1 Prior to approval, subsequent individual development projects in the UCSP shall demonstrate provision of adequate access and water pressure for new buildings.
- 5.11.2-2 As a condition of project approval, individual developers shall pay the public facilities development impact fees at the rate in effect at the time building permits are issued.
- 5.11.2-3 As part of the annual budgeting process, the City will assess the need for additional fire personnel to provide protection services consistent with established City service levels and commensurate with the increase in population.

### **5.11.2.6 Summary of Significance After Mitigation**

With the implementation of Fire Protection Services Mitigation Measures 5.11.2-1, significant impacts to the provision of fire protection services resulting from the approval of the UCSP will be mitigated to less than significant.

## **5.11.3 Schools**

### **5.11.3.1 Existing Conditions**

School services are addressed in the City's Threshold Standard that states that the City shall provide the two local public school districts with an annual report which includes a 12- to 18-month growth forecast; and the District shall provide the City's Growth Management Oversight Commission with an evaluation of their ability to accommodate that growth.

The Chula Vista Elementary School District (CVESD) serves the proposed project area for grades kindergarten through sixth grade (K-6) students and the Sweetwater Union High School District (SUHSD) serves the area middle school (grades 7-8) students and high school (grades 9-12) students.

CVESD operates kindergarten through sixth grade. There are 34 CVESD-operated schools in the city. Established in 1892, CVESD is the largest kindergarten through sixth grade school district in California. CVESD serves approximately 25,600 students and employs approximately 2,600 people districtwide.

In addition to traditional instruction, Family Resource Centers are located on the sites of four schools. These centers offer services which include case management, counseling, emergency food, assistance with health insurance and other applications and forms, job search help, and employment internships. The District also has a Professional Development School, Model Technology Schools, Pre-service Bilingual Teacher Training Center, Dual Language Acquisition Program, State-funded Preschool Programs, and Extended Day Child Care.

The UCSP area contains three CVESD schools: Feaster-Edison located at 670 Flower Street, Vista Square located at 540 G Street, and Mueller located at 715 I Street. Feaster-Edison is currently slightly under its enrollment capacity of 1,224 with 1,089 students presently enrolled. Vista Square and Mueller also have some excess capacity, with Vista Square currently having an enrollment of 675 and current capacity of 816, and Mueller currently having an enrollment of 877 and a current capacity of 991.

SUHSD operates junior and senior high schools and ancillary programs. There are 18 SUHSD-operated schools in the city. SUHSD, the largest secondary school system in California, serves approximately 36,000 students in junior and senior high schools combined and approximately 34,000 adult learners in south San Diego County, including Chula Vista. SUHSD has identified the need for one additional high school site in the west and expanded facilities of existing high schools and middle schools.

In addition to traditional middle school and high school curriculum, adult education classes are available at over 70 locations throughout South County. These classes include U.S. citizenship and English as a Second Language (ESL) programs, vocational- and professional-skills development, as well as literacy and other general education courses that help students prepare for a high school diploma or General Education Development (GED) equivalency certificate. The District also provides parent education and personal development courses.

Chula Vista High School and Chula Vista Middle School serve the junior and senior high school student population of the UCSP area.

Provision of school facilities is the responsibility of the school district when additional demand warrants. School services are addressed in the City's Growth Management Threshold Standards and State Senate Bill 50. Senate Bill 50 was enacted to obtain support from the Building Industry Association for school bond issues and prohibits local governments from requiring extra fees or the establishment of a Mello Roos from new development to finance schools. The legislation provides that statutory fees are the

exclusive means of considering as well as mitigating school impacts. This legislation does not just limit the mitigation that may be required, but also limits the scope of review and the findings to be adopted for school impacts. Once the statutory fee is imposed, the impact will be mitigated because of the provision that the statutory fees constitute full and complete mitigation (Government Code Section 65996). Therefore, payment of project development fees in compliance with statutory requirements reduce significant impacts to school districts below a level of significance.

**5.11.3.2 Criteria for Determination of Significance**

Adoption of the UCSP would have a significant impact on educational facilities if it would:

- Criterion 1: Result in the inability of the public school system to provide adequate schools and fail to meet current student/teacher and facilities ratios established in the Chula Vista Elementary School District and Sweetwater Union High School District standards and thresholds.

**5.11.3.3 Impacts**

- **Criterion 1: Adequate Level of Educational Facilities.**

The estimate of the number of students to be generated by the proposed project upon buildout was based on the current student generation factors used by each of the school districts. At buildout, the UCSP is expected to generate a net increase of approximately 3,877 students between elementary, middle school, and high school grades (Table 5.11-3). It should be noted that potentially fewer students may result from UCSP buildout or interim conditions due to the nature of the allowable development under the UCSP. New residents of the intensified urban environment of mid- to high-rise mixed uses may likely be single or potentially childless young couples, or empty nesters. Therefore, the identified impacts may be overstated. Monitoring of these trends will be necessary to accurately plan for new student enrollment.

**TABLE 5.11-3  
STUDENT GENERATION RATES FOR THE PROPOSED PROJECT**

Grade	Generation Rate	Dwelling Units		Total Students Generated
		SF	MF	
K-8	MF = 0.35	--	7,100	2,485
9-12	MF = 0.196	--	7,100	1,392
<b>Total Students Generated</b>				<b>3,877</b>

SOURCE: Chula Vista Elementary School District; Sweetwater Union High School District 2004.

SF = Single-family; MF=Multi-family

The land uses proposed for the UCSP would result in increased population and demand for schools would continue to increase as the population of the city increases. Increasing the

number of elementary school students would have a significant impact on existing elementary schools since they are already at or near capacity. Using every available classroom seat, the new development would require at least 59 additional elementary school classrooms (Fahle, written communication, 03/22/06). Increasing the number of middle and high school students would not be significant as the SUHSD has identified the need for one additional high school site in the west and expanded facilities of existing high schools and middle schools which would be adequate to meet the needs of the proposed project.

The CVESD does not have current plans for expansion at the UCSP school sites. Nor do they have current plans for new school construction in the western Chula Vista area. However, the school district is aware that additional demands may be placed on their school facilities by the addition of new residential developments, and is in the process of identifying properties that can be purchased as school sites.

GPU policies PFS 9.1 through PFS 9.5 address issues related to school facilities in the Urban Core, including coordination with local school districts to identify needs, school sites, sources of funding for school expansion, new approaches to accommodate enrollment, and review of land use issues requiring discretionary approval to provide adequate school facilities.

In conformance with the goals of the GPU, the UCSP addresses improvements to school facilities in relation to projected buildout of the UCSP over the 25-year planning horizon (Chapters IX and X). Through the Growth Management Oversight Commission and Capital Improvement Program process, the City will schedule and monitor public educational services improvements in coordination with the school districts. School mitigation fees will provide capital funding for needed facilities.

#### **5.11.3.4 Summary of Significance Prior to Mitigation**

The land uses proposed for the UCSP would result in a significant impact to schools unless construction of facilities coincide with student generation and associated service demands.

#### **5.11.3.5 Mitigation Measures**

Provision of school facilities is the responsibility of the school district when additional demand warrants. Senate Bill 50 and Government Code Section 65996, as described above, provides that the statutory fees are the exclusive means of considering as well as mitigating for school impacts. It does not just limit the mitigation that may be required, but also limits the scope of review and the findings to be adopted for school impacts. Once the statutory fee is imposed, the impact will be mitigated because of the provision that the statutory fees constitute full and complete mitigation [Government Code §65995(b)].

Therefore, the following measure would reduce the impact to schools to below a level of significance:

**Mitigation Measure**

- 5.11.3-1 Prior to approval, subsequent development projects in the UCSP shall demonstrate that significant impacts to public educational services resulting from the individual project have been addressed. As a condition of project approval, individual developers shall pay the statutory school impact fees at the rate in effect at the time building permits are issued.

**5.11.3.6 Summary of Significance After Mitigation**

With implementation of the above mitigation measure, project impacts to educational facilities and services would be less than significant for the proposed project.

**5.11.4 Library Service****5.11.4.1 Existing Conditions**

There are currently three full-service libraries in the City of Chula Vista: the Civic Center Branch, the South Chula Vista Branch, and the EastLake Branch. The three facilities comprise a total of 102,000 square feet of library space, including 14,000 square feet of administrative facility space. Based on estimates generated in the GPU, the total library square footage required to meet City library service standards equals 103,944. This represents a current shortfall of approximately 1,944 square feet of library facilities based on The City currently does not meet the 3.0 books/capita criteria established by the Public Facilities Element of the GPU.

In addition to the three full service libraries, the Chula Vista Heritage Museum is part of the Chula Vista Public Library System and a Chapter of the Friends of the Library. The Library Facilities Master Plan calls for the construction of a 30,000 square foot full-service library in Rancho del Rey by fall 2007, and construction has recently commenced.

The Civic Center Branch Library, located in the UCSP area, is 27 years old and considered the city's main library. The 41,000 square feet of library space is 54 percent of the existing library space. The library is crowded and frequently public passageways are congested. It should be noted that approximately 14,000 square feet at the Civic Center Library is used to house non-public service, system-wide administrative and support functions. The library has reached its capacity with regard to materials.

The Chula Vista Heritage Museum, located at 360 Third Avenue, is also in the UCSP area. Although not formally counted as part of the library system, the Civic Center Branch oversees the operation of this approximately 500-square-foot museum. The mission of the museum is to locate, collect, display, preserve, and record materials of local historic interest to the South San Diego Bay communities. The museum collection has expanded beyond

the current available square footage and uses the Civic Center Branch basement to store and process photos and memorabilia.

#### **5.11.4.2 Criteria for Determination of Significance**

Adoption of the UCSP would have a significant impact on library services and facilities if it would:

- Criterion 1: Result in the inability of the City to provide an adequate level of library services and facilities in accordance with adopted City standards and thresholds as follows:

500 square feet of library facilities per 1,000 population for new development.

3.0 books per person for new development.

#### **5.11.4.3 Impacts**

- **Criterion 1: Adequate Level of Library Services and Facilities.**

Implementation of the UCSP may potentially result in significant impacts to library services in the UCSP Subdistricts Area and citywide if City plans for library capacity development are not realized. Existing library service conditions in the City are inadequate and not in compliance with City standards. Additional library capacity is planned by 2007 however, through construction of the 30,000 square foot Rancho Del Rey Library. In the absence of this or other new library construction, any additional demand on library services would comprise a significant impact. Buildout of the UCSP may require additional library space in order to meet and maintain the City criteria of 500 square feet per 1,000 population for new development. Based on the expected net increase in population of 18,318 with buildout of the UCSP, increased demand on existing library services would amount to approximately 9,159 square feet of library facilities and 54,954 books

As described in the library facilities existing conditions section, the City of Chula Vista library system is currently operating at a deficit of 1,944 square feet of library space and with an inadequate number of books per person citywide. To ameliorate these conditions, the Chula Vista Library Facilities Master Plan calls for the construction of an additional 30,000 square feet of library space by 2007 in the form of the Rancho Del Rey Library. This additional library capacity is sufficient to serve the current deficit as well as the increased demand for 8,946 square feet of library space resulting from implementation of the UCSP.

The UCSP addresses improvements to library facilities in relation to buildout of the UCSP over the next 25 years. Through the Growth Management Oversight Commission, Capital Improvement Program process, and long-term implementation of facilities (UCSP, Chapter X), the City will schedule, evaluate and monitor public library services improvements

to coordinate timing of new facilities with new development. Public Facilities Development Impact Fee programs will provide capital funding for needed facilities.

While there is currently insufficient library space in the City to meet the 500 square feet per 1,000 population standard, new development will be required to adhere to the City's threshold standards policy requiring 500 sq. ft. per 1000 population

#### **5.11.4.4 Summary of Significance Prior to Mitigation**

A significant impact would result from the development of the UCSP if construction of new library facilities and provision of additional documents does not coincide with project implementation and associated population growth.

#### **5.11.4.5 Mitigation Measures**

The following measure will mitigate library impacts resulting from the adoption of the UCSP to below a level of significance.

##### **Mitigation Measure**

- 5.11.4-1 Prior to approval, subsequent individual development projects in the UCSP shall demonstrate that significant impacts to the provision of library services resulting from individual projects have been addressed. As a condition of project approval, individual developers shall pay the public facilities development impact fees at the rate in effect at the time building permits are issued.

#### **5.11.4.6 Summary of Significance After Mitigation**

Implementation of mitigation measure 5.11.4-1 would reduce project impacts to library facilities and services below a level of significance for the proposed project.

### **5.11.5 Parks and Recreation**

#### **5.11.5.1 Existing Conditions**

Citywide, Chula Vista currently has 42 community parks, neighborhood parks, urban parks, and mini-parks. In 2005, Chula Vista provided approximately 1.95 acres of parkland per 1,000 residents as shown in Table 5.11-4 below. For the Subdistricts Area, this number is substantially less, with 0.75 acres of parkland per 1,000 residents.

In addition to the park acreage shown in Table 5.11-4, the City of Chula Vista contains over 9,433 acres of regional parks within its planning area. These incorporate substantial portions

of the Sweetwater and Otay River valleys, as well as the Upper and Lower Otay Reservoirs, and make up a significant portion of the Chula Vista Greenbelt.

**TABLE 5.11-4  
CITY PARK ACREAGE PER POPULATION (YEAR 2005<sup>1</sup>)**

Planning Area	Park Acres	Population	Park Acres/1,000 Population
Bayfront	26.77	0	-
Northwest <sup>2</sup>	42.72	56,931	0.75
Southwest	57.92	53,562	1.08
East	279.95	98,707	2.84
<b>TOTAL</b>	<b>407.36</b>	<b>209,200</b>	<b>1.95</b>

<sup>1</sup>Acreages reflect corrections to 2000 census-based results by City of Chula Vista, Landscape Architecture Division.

<sup>2</sup>The Northwest Planning Area contains the UCSP Subdistricts area and surrounding areas in an area north of Lower Otay River, south of Sweetwater River, east of San Diego Bay, west of I-805.

In addition to parks, Chula Vista also has golf courses: one public and four private. However, none of them occur within the Subdistricts Area. The city currently owns one golf course in the City, leased to and managed by American Golf Corporation. Four other privately owned courses occur in the east, suburban areas of the City.

Currently, there are three neighborhood parks in the UCSP Subdistricts Area: Chula Vista Memorial Park, Friendship Park, and Norman Park, located in the northeast portion of the Subdistricts area in the vicinity of City Hall and the Police headquarters. Together these parks total approximately 13.32 acres and have a variety of amenities including open green space, play equipment, and picnic areas. This area also has the recreation complex, Parkway Gymnasium, Parkway Center, Parkway Pool, and Norman Park Senior Center.

New development in the City of Chula Vista is required to provide public parkland, improved to City standards and dedicated to the City or the payment of a fee in lieu thereof. Chula Vista Municipal Code 3.50 addresses funding and construction of recreation centers through collection of recreation facility development impact fees. In addition, parkland dedication requirements are specified in Section 17.10.040 of the Chula Vista Municipal Code which states that "the amount of parkland dedication required, in accordance with CVMC 17.10.010 through 17.10.110, is based on a standard of three acres per 1,000 people." The area to be dedicated shall be as follows:

- Single-family dwelling units, including single-family detached homes and detached condominiums, 3.52 persons per dwelling unit, 460 square feet per unit, or one acre per 95 units;
- Multiple-family dwelling units, including attached condominiums, townhouses, duplexes, triplexes and apartments, 2.61 persons per dwelling unit, 341 square feet per unit, or one acre per 128 units;

- Mobilehomes, 1.64 persons per dwelling unit, 214 square feet per unit, or one acre per 203 units;
- Residential and transient motels/hotels, 1.50 persons per dwelling unit, 196 square feet per unit, or one acre per 222 units.

While the above standards are currently adopted, an update of this standard is being evaluated as part of the Growth Management Oversight Commission's reassessment of Quality of Life thresholds for the areas west of I-805.

### **5.11.5.2 Criteria for Determination of Significance**

Adoption of the UCSP would have a significant impact on park and recreation services if it would:

- Criterion 1: Result in the inability of the City to provide an adequate level of park and recreation service and facilities in accordance with the adopted standard of three acres per 1,000 people; or as modified by the Growth Management Ordinance.

### **5.11.5.3 Impacts**

- **Criterion 1: Adequate Level of Park and Recreation Service and Facilities.**

The Chula Vista Parks and Recreation Master Plan, adopted 2002, states that at buildout of the GPU, with implementation of existing goals and policies, the city will have over 700 acres of parkland available for recreational use to meet the needs of the community. The system is planned to be comprised of a minimum of nine Community Parks, 46 Neighborhood Parks, and several Regional Parks.

The adopted Parks and Recreation Master Plan includes a demand analysis for parks and recreation facilities, which concludes that demand for active recreational facilities currently exceed available supply for areas west of I-805. Regulatory limitations on the ability of the City to exact parkland and improvements may continue to create challenges in providing available parkland. The City of Chula Vista is currently preparing an update to the Parks and Recreation Needs Assessment (PRNA). The information gathered from the updated PRNA will be used in the upcoming "Parks and Recreation Master Plan Update and the Western Chula Vista Parks Implementation Plan.

City local park requirements include a variety of park types such as community parks and neighborhood parks. As identified in the Parks and Recreation Master Plan, neighborhood parks are generally located within walking distance (approximately one-half to three-quarter mile) of residents. Community park sites serve more than one neighborhood and area distributed throughout the City's park system.

New development in the City of Chula Vista is required to provide public parkland, improved to City standards and dedicated to the City. Parkland dedication requirements are specified in Section 17.10.040 of the Chula Vista Municipal Code as identified above in the Existing Conditions discussion. The Parkland Dedication Ordinance requires three acres of neighborhood and community parks per 1,000 residents for all new development. Buildout of the entire UCSP area could result in an estimated net increase population of 18,318. Therefore, applying the 3 acres per 1,000 resident parkland requirement full buildout of the UCSP would be required to provide up to approximately 55 acres of new parkland. This additional parkland would be required incrementally and commensurate with new development.

The UCSP proposes meeting the parkland requirement by establishing an urban system of parks, plazas, paseos, pedestrian promenades, and bike boulevards (Figure 5.11-1). These improvements include improving and expanding existing park space to optimize use of the space and facilities.

The UCSP identifies potential park sites which will be located as specified in the updated parks master plan and will contain facilities required by the plan. The following are the recommended park facilities that should be developed in the UCSP area:

1. One park of approximately 12-15 acres, or several parks with an aggregated total of approximately 12-15 acres, should be provided west of Broadway between H Street and E Street. This facility should include formal areas for sports, informal multi-use field space, picnic areas, children's play equipment, walking trails and paths, a fountain, plazas, benches, shade trees, ornamental landscaped areas, i.e. a rose garden, community garden, restroom facility, park office and storage, and urban features such as a pond or other water feature. Program elements are to be determined by the proposed Park Master Plan update process.
2. A community park between 15-20 acres should be provided in the Northwest Planning Area in the area of "Lower Sweetwater". This community park is intended to serve the residents of the urban core. This facility should include all elements identified in the proposed Parks and Recreation Master Plan update.
3. Existing City parks should be evaluated to assess optimum use of the facilities. Potential future park components will be identified in the proposed Parks and Recreation Master Plan update.

Map Source: City of Chula Vista, UCSP, April, 2006

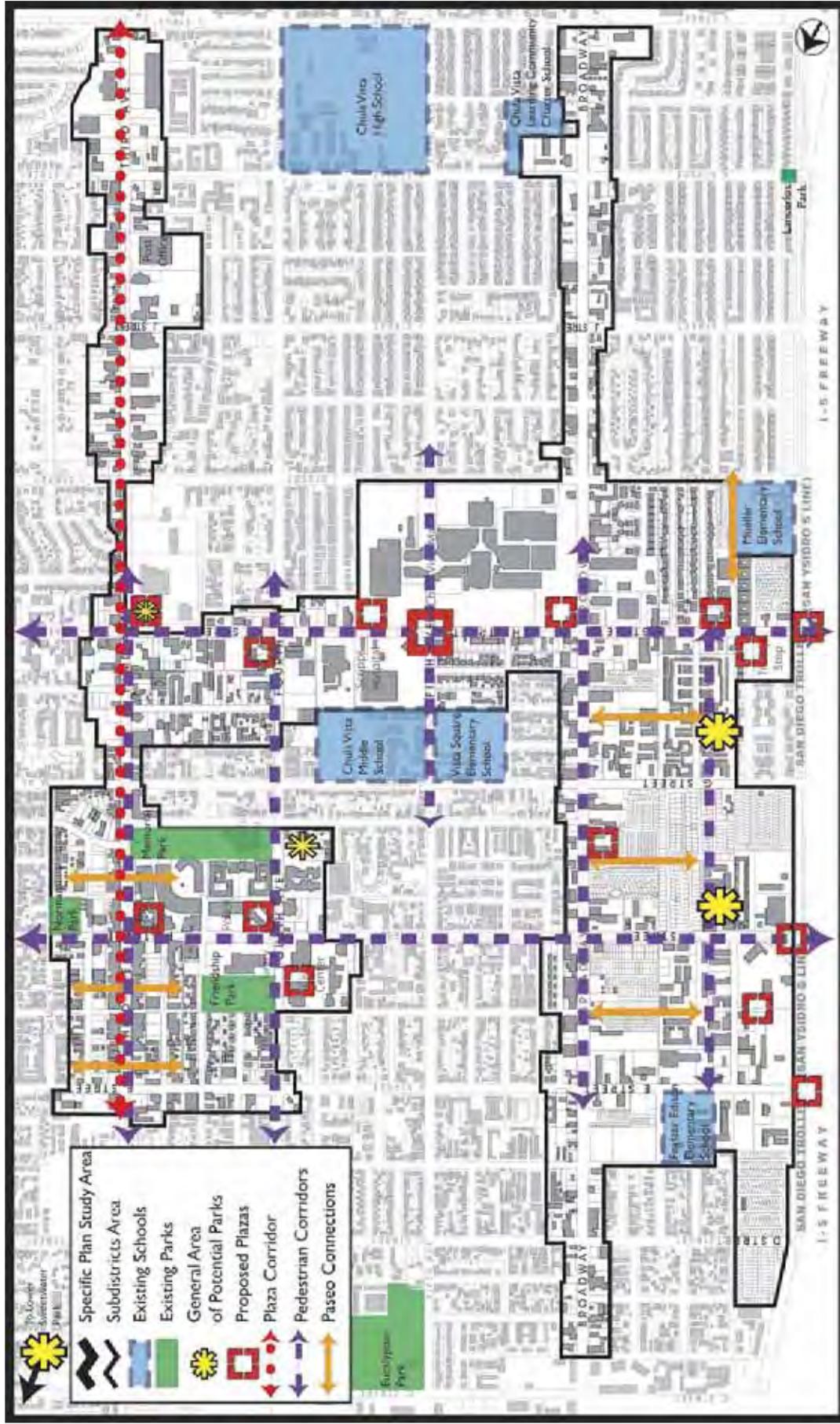


FIGURE 5.11-1  
Parks, Plazas, Paseos and Public Spaces

4. Memorial Park should be expanded by between 3-5 acres and upgraded such that the park is made more usable and attractive to area residents. A small plaza along the Third Avenue frontage should be considered in the redesign. Connections and relationship to the expanded civic center should also be considered. Potential future park components would be identified in the proposed Parks and Recreation Master Plan update.

Additionally, the UCSP identifies numerous plaza improvement projects with various amenities which will be developed in conjunction with new development. The following are generalized vicinities of plaza locations that should be developed in the Specific Plan area:

1. The southwest corner of Third Avenue and F Street.
2. Adjacent to the Third Avenue street frontage at existing Memorial Park.
3. The southwest corner of Third Avenue and H Street adjacent to the County Courthouse (enhance use of existing urban plaza).
4. The south side of H Street across from Scripps Hospital.
5. The intersection of H Street and Fifth Avenue.
6. The southeast corner of H Street and Broadway.
7. The south side of H Street at the intersection of Woodlawn Avenue.
8. The west side of Broadway between E Street and H Street.
9. The overcrossings of I-5 at E Street, F Street, and H Street. The plaza at the F Street overcrossing should be more extensive than plazas at the E Street and H Street overcrossings, as F Street provides a significant connection to the Bayfront for pedestrians and bicyclists.
10. The three transit focus areas: on H Street between Third Avenue and Fourth Avenue; H Street Trolley; E Street Trolley.

#### **5.11.5.4 Summary of Significance Prior to Mitigation**

Implementation of the proposed project would generate increased demand for parks and recreation facilities. The Chula Vista Municipal Code, Section 17.10 (the Park Development Ordinance – PDO) applies a standard of 3 acres of parkland for every 1,000 people to all new development. A significant impact could result if dedication of parkland and construction of new facilities does not coincide with project implementation and project population growth. Full buildout of the UCSP would be required to provide up to approximately 55 acres of new parkland. This additional parkland would be required incrementally and commensurate with new development.

### **5.11.5.5 Mitigation Measures**

The following measure will mitigate impacts to the provision of park and recreation services and facilities resulting from the adoption of the UCSP to below a level of significance.

#### **Mitigation Measure**

- 5.11.5-1 Prior to approval of an Urban Core Development Permit, each subsequent project shall establish to the satisfaction of the Community Development Director that the project meets the City's parkland dedication requirement. As a condition of project approval, individual developers shall provide required parkland and facilities on-site, if possible and consistent with potential site locations identified in the UCSP and Parks Master Plan; or pay the applicable parkland acquisition and parkland development fee and recreation facility development impact fees at the rate in effect at the time building permits are issued

### **5.11.5.6 Summary of Significance After Mitigation**

Implementation of mitigation measure 5.11.5-1 would reduce the impacts to parks and recreation facilities from development of the proposed project to below a level of significance.

## 5.12 Public Utilities

This section discusses the availability of public utilities for the proposed UCSP area, including water, wastewater, waste, and energy.

The goals expressed in the UCSP require improvements to City utilities. Because the UCSP implements the GPU, the infrastructure studies performed during the City's GPU effort and resulting citywide utilities implementation strategies provide the basis of utilities and services needed for the urban core. Chapter IX of the UCSP focuses on the GPU infrastructure and public facilities policies and criteria that have particular relevance to the UCSP area. Chapter X of the UCSP identifies the implementation programs that will result in the desired improvements. Realization strategies include public and public/private partnerships to generate funding and investment in the urban core through development and business fees, redevelopment funds, grants, TransNet (a one-half cent tax for transportation projects), and the general fund as funding sources.

A Facilities Implementation Analysis is being prepared concurrent with the UCSP to evaluate ongoing, long-term improvement projects and determine whether long-term projects revenues are sufficiently aligned with long-term potential costs of public infrastructure. Monitoring of the progress of the UCSP in reaching its infrastructure and public facilities goals will include review under the Growth Management Ordinance, bi-annual review of amenities and facilities implementation in conjunction with the budget/CIP review cycle, and a five-year assessment of the progress of the UCSP. To monitor the effectiveness of the UCSP in responding to the changing landscape of the urban core, a Five-Year Progress Report will be prepared and included as part of budget cycle or strategic plan updates. Facing any change in priorities, additions or subtractions from the facilities program will not require amendment of the UCSP provided such changes are not in conflict with the this EIR.

The Growth Management Ordinance (Municipal Code 19.09) includes a program to implement the GPU and ensure that development does not occur unless facilities and improvements are available to support that development. The growth management program incorporates a defined public facilities development phasing policy to appropriately schedule the timing and location of various City improvements. The program additionally incorporates the facility master plans for fire protection, schools, libraries, parks, water, sewer, drainage, traffic and civic centers. The Growth Management Oversight Commission annually reviews and reports on the program to the Chula Vista Planning Commission and City Council.

The City Council adopted the original Threshold Standards Policy for Chula Vista in November 1987, which established "quality of life" indicators for water and sewer services and facilities. These topics were addressed in the policy in terms of a goal,

objective(s), threshold, and implementation measures. More recently, GPU Policy GM 1.1 calls for the City to maintain a set of quantitative level of service measures (growth management threshold standards) as a tool to assess the relative impact of new facility and service demands created by growth and apply those standards as appropriate to approval of discretionary projects. Policy GM 1.11 also establishes the authority to withhold discretionary approval for projects out of compliance with those standards.

In addition to the City's Growth Management Ordinance, the City collects development impacts fees and sewer capacity fees to fund and construct needed utilities. Municipal Code Chapter 3.50 requires the collection of public facilities development impacts fees (PFDIF) from new development within the City to fund and construct needed citywide improvements and ensure that adequate funds are available in the impact fee account to build them. The general intent of this ordinance is to require that adequate public facilities be available to accommodate increased population created by new development within the City. The City determined that new development contributes to the cumulative burden on existing public facilities, which must be mitigated by the financing and construction of new facilities. The City determined that a reasonable means of financing the public facilities is to charge a fee on all development in the City. The resulting fee schedule has been adopted in accordance with Government Code Section 66000 and future development projects will be subject to the payment of the fee at the rate in effect at the time building permits are issued.

## **5.12.1 Water**

The following discussion of water supply and water treatment facilities is based primarily on the *Water Supply Assessment for the UCSP* prepared by the Sweetwater Authority, June 2005. This report is attached to this EIR as Appendix F. Additional information was obtained from the Sweetwater Authority Urban Water Management Plan (UWMP, 2000) and Water Distribution Master Plan (2002) which are available for review at the City of Chula Vista Planning Department at 276 Fourth Avenue, the Chula Vista Civic Center Library at 365 F Street in the City of Chula Vista and on the City of Chula Vista website documents page at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us). Water quality issues are addressed in Chapter 5.7 of this EIR, Hydrology and Water Quality.

### **5.12.1.1 Existing Conditions**

Water imported to the San Diego region comes from two primary sources, the Colorado River through the 240-mile Colorado River Aqueduct, and the State Water Project from Northern California through the Sacramento-San Joaquin River Delta and the 444-mile-long California Aqueduct. These sources deliver water to The Metropolitan Water District of Southern California (MWD), which then distributes water supplies to water agencies throughout the Southern California region including the San Diego County Water Authority (CWA). The CWA is comprised of 23 member agencies and receives

purchased water by gravity through two aqueducts containing five large-diameter pipelines. These pipelines then supply the three member water agencies which serve the City of Chula Vista. The Sweetwater Authority is the public water system for the area in which the City's UCSP is proposed.

Three water suppliers or districts serve water consumers within the City of Chula Vista. The Sweetwater Authority supplies the majority of the established western portion of the City, including the proposed UCSP. The Sweetwater Authority service area covers 36.5 square miles and contains approximately 33,928 service connections (Sweetwater Authority, WSA, 2005, p. 3). In addition, the system has emergency interconnections to three other water agencies. The Sweetwater Authority receives their water as a part of the Joint Powers Agency with the City of National City and the South Bay Irrigation District. They receive treated water from the CWA through Pipeline Number 4, and raw water from the CWA Pipeline Number 3, which is then treated at their own Perdue Water Treatment Plant. Additional sources of water are Sweetwater and Loveland Reservoirs, the Reynolds Demineralization Facility and the National City Wells. These "local" sources can at times of wet weather provide up to 100 percent of the needed annual demand.

The existing water demands for the UCSP Subdistricts Area are shown in Table 5.12-1. Summing the various water users within the UCSP area, the current total demand for water amounts to 1.96 million gallons per day (MGD).

**TABLE 5.12-1  
URBAN CORE SPECIFIC PLAN  
EXISTING WATER DEMANDS**

Description	Acres	Water Duty	Average Water Demand (MGD)
Residential	5,035 units	125.0 gpcd <sup>1</sup>	1.89
Commercial retail	192.39 acres	1.5 ac-ft/ac/yr	0.04
Commercial office	81.20 acres	1.5 ac-ft/ac/yr	0.01
Commercial visitor	8.30 acres	8.0 ac-ft/ac/yr	0.01
Civic	32.04 acres	2.0 ac-ft/ac/yr	0.01
Miscellaneous	20.49 acres	2.0 ac-ft/ac/yr	0.01
<b>TOTAL DEMAND</b>			<b>1.96</b>

SOURCE: Water Supply Assessment, City of Chula Vista UCSP, June 2005, Table 4.

NOTE: All totals are approximate and may include a combination of new infill.

<sup>1</sup>gallons per capita per day.

Water demands are met in the Sweetwater Authority service area by using water from various sources including local groundwater, a brackish groundwater desalination facility, surface water and water imported from the Colorado River and the State Water Project. The imported water is delivered by the SDCWA and then purchased by Sweetwater Authority. Since 1955, local sources have met 40.6 percent of the water needs within Sweetwater Authority service area while the 59.4 percent balance has been

met with imported water. The percentage of local to imported water varies greatly with time due to local rainfall amounts. Within the total Sweetwater Authority service area, existing annual water demands total 23,501 acre-feet per year (Sweetwater Authority, WSA, p.7).

### **a. Applicable Plans and Policies**

#### ***Water Code***

SB 610 and SB 221, approved October 9, 2001, addressed the provision of water as specified in Water Code Section 10912. Both of these bills place water supply requirements on individual projects, and require consideration of whether there is an adequate supply of water to support the project. SB 610 requires that a water supply assessment be included in the environmental review for projects specified in Water Code Section 10912. These include, among others, residential projects of more than 500 units, shopping centers of more than 500,000 square feet, and industrial facilities having more than 650,000 square feet of floor area.

SB 221 requires the City to verify that there is a sufficient water supply as a condition of approval of residential subdivisions of 500 or more dwelling units. Proof of a sufficient water supply is based on a written verification from the appropriate water agency.

In accordance with these two bills, the Sweetwater Authority prepared a Water Supply Assessment (WSA) in June 2005 that assessed water demand and water supply for the UCSP. This assessment is discussed further in the Impacts Analysis section below.

#### ***Sweetwater Authority Urban Water Management Plan 2000***

In accordance with Water Code Sections 10610 through 10656 of the Urban Water Management Planning Act, Sweetwater Authority prepares a UWMP every five years. The Act requires urban water suppliers to file plans with the California Department of Water Resources (DWR) describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities.

The *Sweetwater Authority Urban Water Management Plan 2000* (UWMP) assesses the Authority's water demands, conservation and public affairs program, water supply and management, water pricing and rate structures, and drought and emergency management through 2020. The UWMP identifies the following existing sources of water for the Authority: National City Wells #2 and #3 which draw from the San Diego Formation aquifer from wells in the eastern portion of the City; Richard A. Reynolds Desalination Facility which treats brackish water drawn from groundwater; and the Sweetwater and Loveland Reservoirs, which capture runoff during periods of wet weather and are also utilized to store water imported from the CWA. Imported water from the CWA comprises the largest contributor to local water deliveries.

The UWMP states that because there are no recycled water transmission mains in the Authority's service area, the capital costs provide recycled water is prohibitively high; however, the UWMP states that the Authority will continue to work with the local agencies to review potential recycled water projects within their service area.

As required by law, Sweetwater's UWMP includes projected water supplies required to meet future demands. The UWMP concludes that if projected imported and local supplies are available as indicated, no shortages are anticipated within the Authority's service area in an average/normal year through 2020 and in the dry year scenarios analyzed in the UWMP. The UWMP acknowledges that during drought conditions, even with the Authority's reliance on imported water being reduced and the ability to store water in times of drought, there is always vulnerability when relying on an external source to provide water supply. The UWMP states that the Authority plans to continue implementation of conservation measures as referenced in the Authority's 2000 urban water conservation best management practices report, which is contained in the UWMP.

The adopted 2000 UWMP did not account for water demands associated with the City's GPU, and by extension, the proposed UCSP. Therefore, the 2005 WSA, which is discussed in 5.12.1.3 below, included in its current projections, a discussion with regard to whether Sweetwater's total projected water supplies will meet the projected water demand associated with the proposed UCSPS, in addition to existing and UWMP planned future uses.

### ***Sweetwater Authority Water Distribution System Master Plan 2002***

The *Sweetwater Authority Water Distribution System Master Plan 2002* (Master Plan) updated the 1979 and 1989 Water System Master Plans and the 1993 Water System Master Plan Update and addresses a comprehensive evaluation of the transmission, distribution, storage, pumping system, and water main life expectancy. The Master Plan identifies \$23 million of remaining improvements to meet current standards and \$30.6 million for continued effort to remove the older metallic pipelines within the Authority's system. In addition, the Master Plan identifies other essential improvements that were not identified in the previous master plans, estimated to cost \$4 million. The Master Plan also addresses the replacement of the system's newer pipelines due to life expectancy. Based upon a life expectancy of 100 years for new pipelines (previous material life was 50-60 years), it was concluded that the Authority needs to escalate the replacement program to four miles per year from the then current two miles per year at a cost of almost \$4 million per year compared to the then current cost of \$1.8 million. The Master Plan also acknowledges that the Authority is also faced with the ever-changing requirements and escalating costs to treat water at its three sources of supply.

The conclusions and recommendations of the Master Plan include the following: (1) based upon the projected service area maximum day demand of 35.4 million gallons per day (mgd) in 2020, no expansion of the Perdue Plant is recommended, unless

arrangements with neighboring water agencies requesting alternative sources of supply are executed; (2) construct remaining water storage tanks to comply with storage requirements based on maximum day plus fire flow demand for each individual system without added system redundancy; (3) the Authority should continue to prepare a new Water Distribution System Master Plan every ten years, and an interim Master Plan Update every five years; (4) the Authority's comprehensive pipeline replacement and rehabilitation program should be continued until all aging and leaking water mains are replaced; (5) eliminate nitrification and low disinfectant levels by strategically placing chemical injection points at selected water storage tanks; (6) further economic analysis on pipeline replacement due to life expectancy is needed in order to plan for future budgets; and (7) continue with a minimum of \$3.5 million annually (escalated for inflation) for Master Plan and metallic pipeline replacement projects.

Similar to the adopted UWMP, the 2002 Master Plan projections did not account for water demands associated with the City's 2005 GPU, and by extension, the proposed UCSP. The WSA, which was prepared to satisfy SB 610 and SB 221 and provide verification of sufficient water supply, recalculated service area projections to include the UCSP. The WSA is discussed below in 5.12.1.3.

### ***Chula Vista Growth Management Ordinance /Water Conservation Plan***

The City of Chula Vista Growth Management Ordinance, Municipal Code Section 19.09.050C, requires the preparation of a Water Conservation Plan (WCP) for all major development projects with water demand equal to that of a residential project of 50 or more dwelling units. The WCP Guidelines specify that commercial projects of 12 or more acres have a water demand equivalency equal to that of 50 dwelling units.

The WCP must provide an analysis of water usage requirements of the proposed project, in addition to a detailed plan of proposed water conservation measures, use of recycled water, and other means of reducing water consumption within the project as well as defining a program to monitor compliance. Developers choose from a menu of indoor and outdoor water conservation measures.

#### **5.12.1.2 Criteria for Determination of Significance**

The proposed UCSP would result in a significant impact to water supply and distribution if it would:

- Criterion 1: Result in insufficient supplies of potable water to meet the potential demands represented by the implementation of projects completed in conformance to the UCSP.

- Criterion 2: Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

### 5.12.1.3 Impacts

#### a. Water Supply

- **Criterion 1: Result in insufficient supplies of potable water to meet the potential demands represented by the implementation of projects completed in conformance to the UCSP.**

Potable water in the western portion of the city of Chula Vista is supplied by the Sweetwater Authority. The Sweetwater Authority receives their water as a part of the Joint Powers Agency with the City of National City and the South Bay Irrigation District. They receive treated water from the SDCWA through Pipeline Number 4, and raw water from the SDCWA Pipeline Number 3, which is then treated at their own Perdue Water Treatment Plant. Additional sources of water are Sweetwater and Loveland Reservoirs, the Reynolds Desalination Facility and the National City Wells. These "local" sources can at times of wet weather provide up to 100 percent of the needed annual demand.

Sweetwater prepared a Water Supply Assessment (WSA, June 2005) which assessed average water demand and water supply for the UCSP, and pursuant to SB610 and SB 221, verified that there is a sufficient supply of water available to serve the projected needs of the proposed UCSP. Sweetwater has not prepared any previous water supply assessments that consider the future demands associated with the City's UCSP. Therefore, these demands have not been specifically included in any SDCWA or MWD planning document. In the March 2003 Report, MWD identified a potential reserve or system replenishment supply that can also be used to meet demands in cases where the identified growth had not been included in the SANDAG regional growth forecast. It is intended that the additional demand associated with buildout of the UCSP will be met through purchase of imported water from MWD's reserve supply.

The Water Supply Assessment estimated that at buildout of the UCSP the average water demand within the UCSP would be 3.54 mgd (Sweetwater Authority, WSA, 2005, p. 6). It further indicates that there will be sufficient water supplies to meet the projected demands of buildout of the UCSP and the existing and planned development projects within Sweetwater's service area in both normal and dry year forecasts. An adequate supply is further confirmed by MWD's March 2003 Report, which identifies reserve supply and states that MWD will have adequate supplies to meet dry-year demands within its service area over the next 25 years.

Sweetwater, MWD, and the SDCWA are implementing plans that include projects and programs to help ensure that the existing and planned water users within Sweetwater's

service area have an adequate supply. Projects include expansion of the Reynolds Desalination Facility from a capacity of 4 mgd to 8 mgd plus five new production deep wells by 2008. Table 5.12-2 shows the annual forecasted water demands compared with projected supplies within Sweetwater's service area, including the proposed UCSP. This demonstrates that with implementation of the existing and planned development projects within Sweetwater's service area there will be adequate water supplies to serve the UCSP along with existing and future uses. Matching supply and demand quantities in Table 5.12-2 reflect the Authority's protocol of supplementing local supply with purchases of imported water in volumes sufficient to meet projected demand, beyond what can be supplied locally.

**TABLE 5.12-2  
PROJECTED WATER SUPPLY AND DEMAND  
DURING NORMAL YEAR FOR PERIOD 2005 TO 2030  
(acre-feet per year)**

Supply Source	Year					
	2005	2010	2015	2020	2025	2030
Imported Water	10,963	9,794	10,394	10,913	11,454	11,998
Sweetwater Reservoir	8,375	7,700	7,700	7,700	7,700	7,700
National City Wells	1,979	2,400	2,400	2,400	2,400	2,400
Reynolds Desalination	2,184	7,200	7,200	7,200	7,200	7,200
Total Available Supply	23,501	27,094	27,694	28,213	28,754	29,298
Total Projected Demand	23,501	27,094	27,694	28,213	28,754	29,298

SOURCE: Sweetwater Authority, WSA, 2005, Table 6, p.7.

The WSA Report demonstrates and verifies that with development of the resources identified, there will be sufficient water supplies to meet the projected demands of the proposed UCSP and the existing and planned development projects within Sweetwater Authority's service area.

The findings of the WSA verify that there is a sufficient water supply to serve the proposed UCSP. Since there will be adequate water supplies to serve the UCSP along with existing and future uses, no significant water supply impacts will result from adoption of the UCSP.

## **b. Water Treatment**

- **Criterion 2: Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**

Buildout of the UCSP would place demands on the water supply system, both in the need to provide adequate supply, as discussed above, and in the need to improve and develop water treatment and distribution facilities. The UCSP proposes to increase development potential which may require corresponding improvements to treatment and distribution facilities. However, the Sweetwater Authority, in its WSA (discussed above)

verified the supply of future water to the UCSP given planned construction of five deep production wells and expansion of the Reynolds desalination facility. The Sweetwater Authority has a capital improvement program for completion of these required infrastructure improvements, and is responsible for assessing specific potential environmental impacts that might arise from their construction. Significant impacts could occur as a result of the construction of capital improvement projects needed to supply treated water to the UCSP. Analysis of the physical changes that might occur from these future water treatment construction projects would be too speculative at this time and is thus not required, pursuant to CEQA Guidelines Section 15145. Construction of new water treatment facilities would, however, be subject to independent environmental analysis pursuant to CEQA at the time the new facility is planned for construction.

#### **5.12.1.4 Level of Significance Prior to Mitigation**

Sweetwater has indicated in its 2005 Water Supply Assessment for the UCSP that it has sufficient water supplies to meet the estimated average demand for the Subdistricts Area of 3.54 mgd at buildout of the UCSP. Since there will be adequate water supplies to serve the UCSP along with existing and future uses, no significant water supply impacts will result from adoption of the UCSP.

Buildout of the UCSP would place demands on the water supply system which would require improvements to treatment and distribution facilities. There is the potential for a significant impact to occur as a result of the completion of these projects. Pursuant to Section 15145 of CEQA, analysis of the physical changes which might occur from a future water improvement project would be too speculative and further analysis is not required in this EIR. Construction of new water supply facilities would, however, be subject to independent environmental analysis pursuant to CEQA at the time the new facility is planned for construction.

#### **5.12.1.5 Mitigation Measures**

No mitigation measures are required.

#### **5.12.1.6 Summary of Significance After Mitigation**

No significant water supply impacts were identified.

### **5.12.2 Wastewater**

The following analysis of wastewater impacts is summarized from the *Wastewater Master Plan for the City of Chula Vista* prepared by PBS&J in May 2005. The report is hereby incorporated into this EIR by reference, and available for review in its entirety at the City of Chula Vista Planning Department at 276 Fourth Avenue, the Chula Vista Civic

Center Library at 365 F Street in the City of Chula Vista and on the City of Chula Vista website documents page at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us) as Appendix I to the GPU EIR.

### **5.12.2.1 Existing Conditions**

The City's Wastewater Master Plan (WMP) was completed in May 2005 and addressed wastewater issues relating to the City's long-range land use plan as determined through the GPU process. The WMP also identified facility improvements needed to sustain development through buildout of the City in accordance with the GPU.

Chula Vista relies on the City of San Diego Metro Sewage System for treating and disposing of wastewater generated within the City. The Metropolitan Wastewater Department (Metro) adopted the Metropolitan Wastewater Master Plan in November 2003, which identifies future treatment facilities needed to meet anticipated demands within the Metro service area.

The City of Chula Vista currently operates and maintains a citywide sanitary sewer collection system consisting of approximately 430 miles of sewer pipelines ranging in size from 6 inches to 48 inches in diameter. It also includes an extensive network of manholes, metering stations, and pump stations. In addition to maintaining the existing systems and replacing outdated or damaged components the City must also address upgrading and expanding the current systems to accommodate new sewer connections. Existing facility data is summarized in Table 5.12-3.

#### **a. System Capacity**

The major trunk lines in the collection system on the western portion of the City, including the UCSP, are mostly adequate. The City has budgeted four Capital Improvement Program projects to address existing constraints in that portion of the collection system. These projects are currently in the design phase and should be completed within the next two years. With the completion of these improvements, no other major improvements will be required other than the annual maintenance projects.

At the regional level, the City of Chula Vista is part of the Metropolitan Wastewater District. The City entered into an agreement with the City of San Diego, and currently has purchased 19.843 mgd of capacity rights in the Metro Collection System. The City currently discharges approximately 17.5 mgd into the Metro Interceptor (PBS&J, WMP, 2005, p. E-4).

#### **b. Sewer Basins**

The City of Chula Vista's wastewater collection system consists of eight major sewer basins: Sweetwater, G Street, Telegraph Canyon, Main Street and Date/Faivre, Bay

**TABLE 5.12-3  
EXISTING CITYWIDE WASTEWATER FACILITY DATA**

Type of Facility	Quantity
6-inch Pipe	8.56 miles
8-inch pipe	286.54 miles
10-inch pipe	13.22 miles
12-inch pipe	17.77 miles
14-inch pipe	0.62 miles
15-inch pipe	13.64 miles
18-inch pipe	6.30 miles
20-inch pipe	0.12 miles
21-inch pipe	1.46 miles
24-inch pipe	0.20 miles
30-inch pipe	0.13 miles
36-inch pipe	1.6 miles
42-inch pipe	4.4 miles
48-inch pipe	1.78 miles
Other pipe	16.70 miles
Manholes	7,635
Drop Manholes	4
Manhole Dead-end/Cap-ends	552
Manhole Clean-outs	138
Force Main Clean-outs	54
Other Manhole facilities (miscellaneous)	162
Metering Stations	12
Pump Lifts and Lift Stations	12
Commercial/Industrial Sewer Laterals	2,300
Residential (SF, MF, and Mobile Home) Sewer Laterals	53,700

Front, Salt Creek, Wolf Canyon Basin, and Poggi Canyon. Three of the eight major sewer basins are located within the UCSP and are described below:

### ***Sweetwater Sewer Basin***

Wastewater from the Sweetwater Sewer Basin, located in the northern portion of the city, gravity flows via pipelines into the Spring Valley Sewer Interceptor. This pipeline is owned and operated by the Spring Valley Sanitation District. The city of Chula Vista currently has capacity rights within this line. This pipeline terminates at a connection to the City of San Diego Metro Interceptor near Sea Vale Street. Based on recent flow metering data, Chula Vista discharges approximately 3.73 mgd of sewage into the Spring Valley Sewer Interceptor.

### ***G Street Sewer Basin***

Wastewater generated in the G Street Sewer Basin, located in the upper portion of central Chula Vista, is transported to the Metro Interceptor via the G Street Trunk Sewer. The G Street Trunk Sewer receives tributary sewage flows from the area bounded by D Street south to H Street. This trunk sewer terminates at a metered connection to the Metro Interceptor located on G Street just west of Bay Boulevard. Recent meter data indicate that approximately 2.3 mgd is being generated in this Basin.

### ***Telegraph Canyon Sewer Basin***

The Telegraph Canyon Sewer Basin serves lower central and eastern Chula Vista from H Street south to Naples Street, which includes the lower portion of the UCSP area. The Telegraph Canyon Trunk Sewer is located in J Street and Telegraph Canyon Road. The Telegraph Canyon Sewer Interceptor begins at the easterly end on Otay Lakes Road near Eastlake Drive and ends at a metered connection to the Metro Interceptor. Recent meter data indicate that approximately 6.17 mgd is being generated in this Basin.

## **5.12.2.2 Criteria for Determination of Significance**

The proposed project would have a significant impact on sewer service if it:

- Criterion 1: Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate planned capacity to serve projected demand in addition to the provider's existing commitments.

### 5.12.2.3 Impacts

#### a. Wastewater Treatment Capacity

- **Criterion 1: Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate planned capacity to serve projected demand in addition to the provider's existing commitments.**

The following discussion of impacts to the City's wastewater collection system is based on the recently updated Wastewater Master Plan. This study covered the entire GPU area; however, because the acreages and intensities of land use are consistent with those identified in the GPU for the urban core area, the same conditions apply.

#### b. Collection System

The City of Chula Vista continually monitors and reviews both existing facilities and proposed projects to consistently meet current and anticipated demand. Current and planned improvements to the citywide wastewater collection system include a number of improvements that are needed to improve citywide conditions for wastewater collection. Four projects that are within or near the Subdistricts Areas include:

- Colorado Street between J Street and K Street
- G Street Pump Station Improvements
- Sewer Rehabilitation Projects
- Center Street between Fourth Avenue and Garrett Avenue

These wastewater improvements were identified as part of the Wastewater Master Plan Update, along with other recommended improvements.

Because of the general nature of planned land uses, an analysis of smaller sewer collectors is not possible. Such an analysis should be performed after more detailed building or redevelopment plans have been developed. Depending on the proposed land use changes, 8-inch diameter sewer lines serving new development in the northwest and southwest areas of the City may be impacted by the additional loading.

#### c. Metro Capacity

The City currently discharges approximately 17.5 mgd of sewage and has capacity rights in the Metro system (comprised of conveyance, treatment, and disposal facilities) equal to 19.843 mgd. At the time the agreement with Metro was signed, the 19.843 mgd capacity allocation seemed adequate to meet the City's needs for several years. Based

on the results of the analysis performed as part of the Wastewater Master Plan update, it is now estimated that by the year 2030, the City will be generating approximately 26.3 mgd of sewage (based on current data) at buildout under the GPU. Therefore, the City would need to acquire an additional 6.4 mgd of capacity rights by the year 2030 in order to meet projected demand. Of this citywide volume, 0.88 is calculated to be generated from the proposed UCSP (UCSP, Chapter IX, p. IX-4). This information has been conveyed to Metro in order to initiate the process of acquiring additional capacity and to assist Metro in the planning process.

Metro is in the process of completing the system capacity re-rating process to distribute additional capacity rights to participating agencies. This followed the completion of the South Bay Treatment Plant, which resulted in an additional 15 mgd treatment capacity to the Metro regional system. While the allocation process has not yet been finalized, the City of Chula Vista's share of the additional allocation is currently estimated at 1.027 mgd (which would bring the city's total capacity rights to 20.870 mgd). There is currently sufficient reserve capacity in the system to accommodate Chula Vista's current short-term needs requirements, as well as demands from other jurisdictions.

Additional capacity rights are allocated to each participating agency in proportion to their total Metro expenditure over a five year period (1996-2001). The exact amount would be determined upon completion of the audit process by City of San Diego staff. Furthermore, based on the technical analysis performed as part of the Wastewater Master Plan Update, there is sufficient capacity to serve the City until 2010. The City has already begun discussions with City of San Diego to identify a mechanism for the provision of additional capacity to the City of Chula Vista in accordance with the terms of the agreement between the City of San Diego, the City of Chula Vista and the other participating agencies. The primary focus at this time is the purchase or lease of additional capacity. Concurrent with that effort, staff is also exploring other options including the construction of a wastewater reclamation facility as an independently owned or joint facility (i.e. with a water agency) which will negate the need for the purchase of additional capacity rights.

#### **5.12.2.4 Level of Significance Prior to Mitigation**

Chula Vista owns capacity in the Metro system, which provides conveyance of city wastewater flows. Increasing population will place additional demand on sewer services. While it is the intent of the City to ensure that services are provided concurrent with need, the provision of sewer services is not solely within its authority. Although the City is in the process of acquiring additional capacity from Metro, that acquisition has not yet been finalized. As stated above, based on current projections, the City will be generating approximately 26.2 mgd of wastewater citywide, under buildout of the GPU. Therefore, the City would need to acquire additional 6.4 mgd of capacity rights by the year 2030 in order to meet citywide projected demand. Of this total, 1.57 mgd are projected to be

generated in western Chula Vista, including a projected generation of 0.88 mgd for the UCSP Subdistricts Area.

Therefore, impacts to the provision of sewer service are considered significant.

### **5.12.2.5 Mitigation Measures**

Development projects within the UCSP Subdistricts Area would require the approval of an Urban Core Development Permit established through the Design Review Process which would include the following mitigation measure to reduce wastewater impacts to below a level of significance:

- 5.12.2-1 Prior to the approval of subsequent individual development projects, project plans shall demonstrate that there is sufficient wastewater capacity available to serve the proposed project. Conditions of approval may require sewer capacity fees to be contributed to mitigate project-related impacts.

### **5.12.2.6 Level of Significance After Mitigation**

Implementation of mitigation measure 5.12.2-1 would reduce wastewater impacts to below a level of significance.

## **5.12.3 Integrated Waste Management**

### **5.12.3.1 Existing Conditions**

While control and siting of disposal sites falls under the jurisdiction of agencies other than Chula Vista, including the County of San Diego and State of California, the City has the ability to control waste production within the UCSP area. It is the goal of Chula Vista to take action appropriate to its population and resources to promote reductions in solid waste production and plan for adequate disposal.

Control of solid waste collection and disposal for the UCSP area fall under several jurisdictions. The San Diego County Solid Waste Division of the Department of Public Works administers regional planning and management for San Diego County's solid wastes. This agency is responsible for revising and updating the "Regional Solid Waste Management Plan" (RSWMP) which reviews current solid waste collection and disposal practices, predicts future waste generation trends and reviews the possible means for accommodating future collection and disposal needs. This document is the major planning tool for the County and includes solid waste planning for the cities within the County.

Enacted by Assembly Bill 939 and signed into law in 1990, the California Integrated Waste Management Act (IWMA) established an integrated system of solid waste management in the state whereby each city and county is required to develop and implement plans consistent with the mandated diversion rates of 25 percent by 1995 and 50 percent by 2000. Under IWMA, the county has prepared a Countywide Siting Element and Summary Plan describing areas to be developed as disposal or waste management facilities (PRC §41700). The Act further requires each city to prepare and implement the following solid waste management elements:

- Source Reduction and Recycling Element (SRRE) (PRC §41000) to:
  - Identify the constituents of solid waste by volume, type of material and source;
  - Describe the methods, including recycling and composting, by which the city will reduce the amount of solid waste being generated;
  - Identify and describe projected costs, revenues, and revenue sources necessary to implement the element; and
  - Describe existing handling and disposal practices for special wastes such as asbestos and sewage sludge.
- Household Hazardous Waste Element (PRC §41500) to identify a program for the safe collection, treatment, and disposal of hazardous wastes generated by residences that should be separated from the rest of the solid waste stream.
- Non-Disposal Facility Element (NDFE) (PRC §41730) to describe any new solid waste facilities and expansions of existing solid waste facilities needed to implement the jurisdiction's source reduction and recycling element. Facilities that will recover or recycle at least five percent of the total volume of materials they receive need not be included in the element.

In 2003, approximately 182,148 tons of solid waste generated in Chula Vista required landfill disposal (Hellman 2004). Existing solid waste disposal facilities in the area include the Otay Landfill and several recycling facilities in proximity to the landfill. The Otay Landfill accepts approximately 98 percent of the non-hazardous municipal waste collected in the City. The remaining two percent is delivered to the Sycamore and Miramar Landfills (Meacham 2003). The Otay Landfill is expected to be in operation until 2028 based upon current waste generation rates.

### **5.12.3.2 Criteria for Determination of Significance**

Pursuant to CEQA Guidelines Appendix G, the proposed UCSP would result in significant impacts to integrated waste management if it would:

- Criterion 1: Be served by landfills with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

### 5.12.3.3 Impacts

#### a. Landfill Capacity

- **Criterion 1: Be served by landfills with insufficient permitted capacity to accommodate the project's solid waste disposal needs.**

The UCSP Subdistricts Area would be served by the Otay Landfill, which has adequate capacity to accommodate waste generated by proposed project. The Otay Landfill currently accepts an average daily rate of disposal of 2,260 tons, with a permitted maximum disposal rate of 5,000 tons and has a permitted remaining capacity of 31,336,166 tons. The UCSP would generate an estimated net increase in population at buildout of approximately 18,318 people. Assuming the additional development at buildout of UCSP and no additional recycling programs are implemented, the Otay Landfill currently has sufficient capacity to accommodate the increased waste disposal demands from the proposed UCSP.

Beginning in 1997, the City of Chula Vista implemented a curbside recycling program that reduces the amount of waste reaching the landfill. Participation in the curbside recycling program is mandatory and has helped the City reach the 50 percent solid waste reduction goal established by Assembly Bill 939. The Solid Waste Local Enforcement Agency (LEA) is currently processing a revision to the permit for the landfill that modifies the closure date. Based on this information from the LEA, revisions to the permit will increase the maximum allowable daily disposal rate to 5,830 tons and therefore, the rate at which the available capacity is filled (McNeil, pers. com. 2005). While LEA is in the process of updating the permit for the landfill, this action has not yet been approved and is therefore considered too speculative. The current permitted capacity is thus the appropriate volume to consider.

The Otay Landfill has sufficient capacity to accommodate projected population at buildout of the UCSP and no significant impact to integrated waste management services would occur.

### 5.12.3.4 Level of Significance Prior to Mitigation

The UCSP area is served by the Otay Landfill. Using the average rate of daily disposal and assuming the additional population at buildout of the UCSP and no additional recycling programs are implemented, the Otay Landfill has sufficient capacity for approximately 25 years. Since there is sufficient capacity to accommodate projected population at buildout of the UCSP, there is no significant impact to integrated waste management services.

### **5.12.3.5 Mitigation Measures**

No mitigation measures are required.

### **5.12.3.6 Level of Significance After Mitigation**

No significant integrated waste management impacts were identified.

## **5.12.4 Energy**

### **5.12.4.1 Existing Conditions**

#### **a. Electricity**

San Diego Gas & Electric Company (SDG&E) is the owner and operator of electricity transmission, distribution, and natural gas distribution infrastructure in San Diego County. Power generation and power use are not linked geographically. In other words, power generated within Chula Vista is not dedicated to users in Chula Vista. Electricity generated is fed into the statewide grid and is generally available to any users statewide.

There is one major power plant in Chula Vista: the South Bay Power Plant. There are also two co-generation facilities in or near the city and a number of smaller generating plants in San Diego County that are used as backup during times of peak power demand.

#### **b. Natural Gas**

Natural gas imported into southern California originates from any of a series of major supply basins located from Canada to Texas. Although the San Diego region has access to all of these basins by interstate pipeline, the final delivery into the SDG&E system is dependent on just one Southern California Gas Company (SoCalGas) pipeline.

#### **c. Energy Use**

The discussion of energy use is presented in two main sections: fixed uses, such as homes and businesses, and mobile uses, primarily cars and trucks.

##### ***Fixed Uses***

Electricity consumption in the San Diego region varies greatly by sector (residential, commercial, industrial, and agriculture). In 1999, the City of Chula Vista consumed about 700 million kilowatt-hours (kWh) or \$62 million of electricity (City of Chula Vista 2001:45). As is the case for the San Diego region, the largest electricity consumption in

Chula Vista comes from commercial uses, followed by residential, industrial, and agriculture.

In 1999, about 150 million therms, or \$24 million of natural gas, were consumed in Chula Vista, approximately two-thirds of which was attributable to the South Bay Power Plant (City of Chula Vista 2001).

Natural gas consumption by sector varies somewhat each year. In general, power plants account for the highest percentage of natural gas consumption in the San Diego region. Residential consumption of natural gas is the second highest percentage, followed by cogeneration, commercial consumption, industrial consumption, and natural gas vehicles.

### **Mobile Uses**

The primary mobile use of energy is motorized vehicle travel. Table 5.12-4 presents the 24-hour total vehicle miles of travel on a typical weekday. There were approximately 353.6 miles of roads in the city of Chula Vista in 2000. As Table 5.12-4 shows, approximately 3,223,000 miles were traveled on a typical weekday in the city in 2000. According to the U.S. Department of Energy's Energy Information Administration, the average fuel consumption for all motorized vehicles including passenger cars, vans, pickup trucks, sport utility vehicles, trucks, motorcycles, and buses was approximately 17 miles per gallon in 2000 (U.S. Department of Energy 2001). Using this average, motorized vehicles in Chula Vista consumed approximately 190,000 gallons daily in 2000.

**TABLE 5.12-4  
POPULATION TRAVEL AND FUEL USE 1995-2030 – CITY OF CHULA VISTA**

Year	1995	2000	2010	2020	2030
Population	149,791	174,319	244,332	269,529	282,664
Per Person VMT	18.49	18.49	18.49	18.49	18.49
Per Day VMT	2,769,000	3,223,000	4,517,000	4,984,000	5,226,000
Daily Gallons Used	163,000	190,000	266,000	293,000	307,000

SOURCE: SANDAG 2001; VMT = vehicle miles of travel.

Table 5.12-2 presents the estimated population, vehicle miles of travel (VMT), and vehicle fuel consumption in Chula Vista from 1995 to 2030, as calculated by SANDAG. Projected daily vehicle miles of travel for 1995, 2010, 2020, and 2030 are based on 2000 VMT. This mileage rate was then applied to population figures provided by SANDAG to calculate VMT in other years. An estimate for the amount of vehicle fuel used per day was calculated by dividing the daily VMT by the estimated fuel consumption rate of 17

miles per gallon. By using this estimate, it is assumed that the fuel consumption rate in the future will remain nearly the same as it was in the year 2000.

#### **5.12.4.2 Criteria for Determination of Significance**

The proposed UCSP would result in a significant impact to energy if it would:

- **Criterion 1: Result in the available supply of energy to fall below a level considered sufficient to meet the City's needs or cause a need for new and expanded facilities.**

#### **5.12.4.3 Impacts**

##### **a. Energy Supply**

- **Criterion 1: Result in the available supply of energy to fall below a level considered sufficient to meet the City's needs or cause a need for new and expanded facilities.**

Implementation of the proposed land uses identified in the UCSP has the potential to result in impacts to energy supply as a result of anticipated growth. Direct impacts could occur if, as a result of plan implementation, a substantial energy resource is reduced or eliminated, or if future demand outstrips available supply.

It is the intent of the UCSP to create pedestrian-friendly destinations in the urban core with a decreased focus on automobile travel. Although mobility in many forms is encouraged and needed throughout the Subdistricts Area the hierarchy of emphasis is pedestrian, bicycle, transit, and lastly the automobile. The UCSP additionally contains basic design principles and tools for designing and building sustainably "to minimize the use of energy, water and other natural resources" (UCSP Chapter VII Design Guidelines, Special Guidelines, Environmental Sustainability Goals). The City of Chula Vista participates in the LEED (Leadership in Energy and Environmental Design) Rating System and as stated in the UCSP "all newly constructed City-sponsored building in the Urban Core shall incorporate sufficient green building methods and techniques to qualify for the equivalent of LEED Silver." Private developments are also strongly encouraged to utilize green building practices through the support of City staff and through guidelines and incentives contained in the UCSP.

Because the proposed action is the adoption of a plan and does not specifically address any particular development project, impacts to energy resources can only be addressed generally, based on planned growth. Depending on the types of future uses, impacts may need to be addressed in greater detail at the time specific projects are proposed. Implementation of the energy policies contained in the adopted GPU that seek to reduce energy consumption by optimizing traffic flow, directing higher density housing within walking distance of transit facilities, promoting use of non-polluting and renewable

alternatives to vehicular travel and generally reducing vehicle trip length through improved community design will reduce effects based on demand, and are consistent with the City's Energy Strategy Action Plan.

The Energy Strategy Action Plan addresses demand side management, energy efficient and renewable energy outreach programs for businesses and residents, energy acquisition, power generation, and distributed energy resources and legislative actions (SDREO 2002). There are also a number of other plans, projects, and actions that have been developed by the City of Chula Vista to help reduce energy use and costs for the city and the community, including the CO<sub>2</sub> Reduction Plan.

Although these programs and policies will decrease the overall per capita energy use in the City, they do not insure that energy supplies will be available when needed. Because there is no assurance of a long-term supply of energy in the future, the increase projected energy demand results in a significant impact.

#### **5.12.4.4 Level of Significance Prior to Mitigation**

Impacts to energy are considered significant because there is no long-term assurance that energy supplies will be available at buildout of the UCSP. Avoidance of energy impacts cannot be assured regardless of land use designation or population size. Although changes to planned land uses in the city would continue to implement the Energy Strategy Action Plan, San Diego Regional Energy Plan and Transit First Plan, implementation of the proposed land uses identified in the UCSP has the potential to result in impacts to nonrenewable or slowly renewable energy resources as a result of anticipated growth.

#### **5.12.4.5 Mitigation Measures**

The following mitigation measure will lessen the extent of energy impacts that could result from the approval of the UCSP. Because conventional energy resources are slowly renewable or non-renewable, there is no long-term assurance that energy supplies will be available through buildout of the proposed project, regardless of land use designation or population size, avoidance of energy impacts cannot be assured and impacts remain significant.

##### **Mitigation Measure**

- 5.8-1 The City shall continue to implement the Energy Strategy and Action Plan, that addresses demand side management, energy efficient and renewable energy outreach programs for businesses and residents, energy acquisition, power generation, and distributed energy resources and legislative actions, and continuing implementation of the CO<sub>2</sub> Reduction Plan will lessen the impacts from energy.

#### **5.12.4.6 Level of Significance After Mitigation**

While implementation of the above mitigation measure reduces energy related impacts, because there is no assurance that energy resources will be available to adequately serve the projected increase in population resulting from adoption of the UCSP, the impact remains significant.

The environmental sustainability measures (described above) of the UCSP may serve to reduce energy consumption associated with construction and occupation of structures within the UCSP area.

## 5.13 Hazards/Risk of Upset

The following discussion is based on Ninyo & Moore's limited site reconnaissance and hazardous materials database queries conducted on January 25, 2003 as part of the GPU EIR (Section 5.15). This analysis covered the entire GPU area, including the Urban Core Subarea whose boundaries comprise that of the proposed UCSP Study Area. Because the acreages and intensities of land use proposed in the UCSP are consistent with those identified in the GPU for the urban core, the same conditions and conclusions apply. The findings of the analysis are summarized below. The analysis can be read in its entirety at the City of Chula Vista Planning Department at 276 Fourth Avenue, the Chula Vista Civic Center Library at 365 F Street, or online at the documents page of the City of Chula Vista website at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us) and is hereby incorporated by reference.

### 5.13.1 Existing Conditions

The UCSP area is currently developed with residential, retail, office, and civic uses. The types of businesses in the plan area that are likely to store hazardous substances and petroleum products or generate waste include the following: gasoline service stations, automobile repair facilities, dry cleaning facilities, chemical facilities, photograph developing facilities, and medical and dental facilities.

#### 5.13.1.1 Sites of Potential Environmental Concern

A computerized environmental information database search of the subject site and surrounding areas was performed by Ninyo and Moore through *Environmental FirstSearch™* (*FirstSearch*). The *FirstSearch* included search of federal, state, and local databases. A summary of the environmental databases searched and number of noted sites of environmental concern is presented below. The raw database results, including addresses of reported sites, is not included in the City of Chula Vista GPU EIR but is available for viewing in the Hazardous Materials chapter of the Chula Vista Baseline Studies at the City of Chula Vista Planning Department, 276 Fourth Avenue. The databases identify locations of known hazardous waste sites, landfills, and leaking underground storage tanks, permitted facilities that utilize underground storage tanks, and facilities that use, store, or dispose of hazardous materials.

Note that some of the facilities listed on these databases and discussed below may be duplicate records (a duplicate record is defined as one or both of the following: (1) more than one facility is listed at the same street address on the same database; and/or (2) one facility is listed at the same address on the same database more than one time).

Figure 5.13-1 shows the combined results of the database search. As shown, the locations of sites of potential environmental concern are concentrated along the major commercial streets of Broadway, Third Avenue, and E Street. Figures 5.13-2 through 5.13-8 indicate approximate locations of properties that may pose environmental concerns per each respective database query.

#### **a. Multiple Agency, Leaking Underground Storage Tank (LUST) List**

The Leaking Underground Storage Tanks (LUST) Information System is maintained by the California State Water Resources Control Board, pursuant to Section 25295 of the Health and Safety Code. In addition, there are facilities in San Diego County that fall under the jurisdiction of the Local Oversight Program for unauthorized releases by the County of San Diego, Department of Environmental Health (DEH) (County LUST). 33 properties reported to be in the UCSP Subdistricts Area appear on the LUST list. Dozens more are mapped in close proximity. Refer to Figure 5.13-2 for the approximate locations of these properties.

#### **b. United States Environmental Protection Agency, Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)**

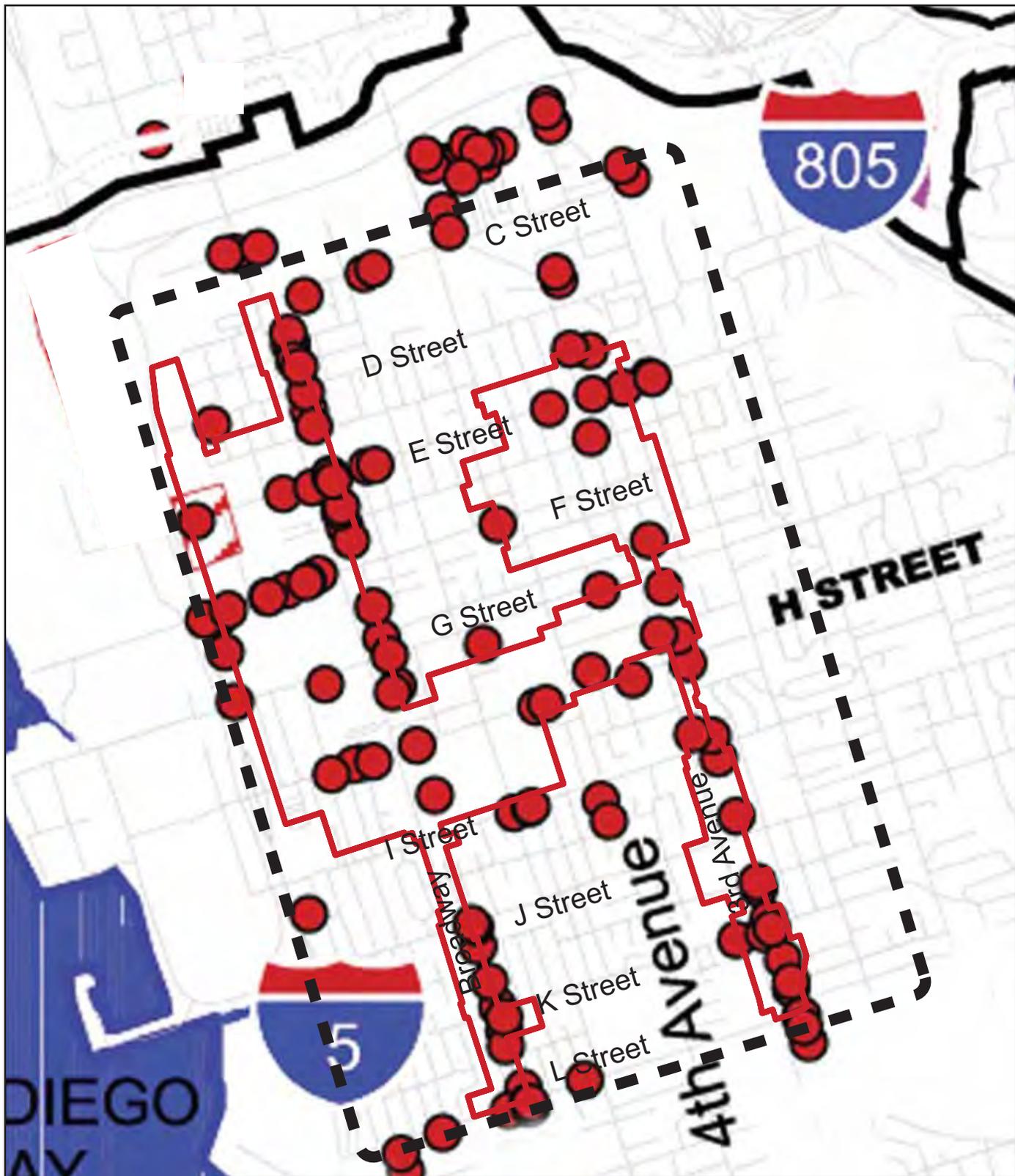
The CERCLIS database contains properties that are either proposed for listing or listed on the National Priorities List (NPL), and properties that are in the screening and assessment phase for possible inclusion on the NPL. Properties identified by the USEPA that may have the potential for releasing hazardous substances into the environment are listed in this database. Two properties reported to be in the UCSP Subdistricts Area appear on the CERCLIS list. These properties are located just east of I-5 between E and F Streets as shown on Figure 5.13-3.

#### **c. United States Environmental Protection Agency, Emergency Response Notification System (ERNS)**

The ERNS is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities, including the USEPA, the United States Coast Guard, the National Response Center, and the Department of Transportation. The ERNS list contains records dating from October 1986. Eight properties reported to be in the UCSP Subdistricts Area appear on the ERNS list. Refer to Figure 5.13-4 for the approximate locations of these properties.

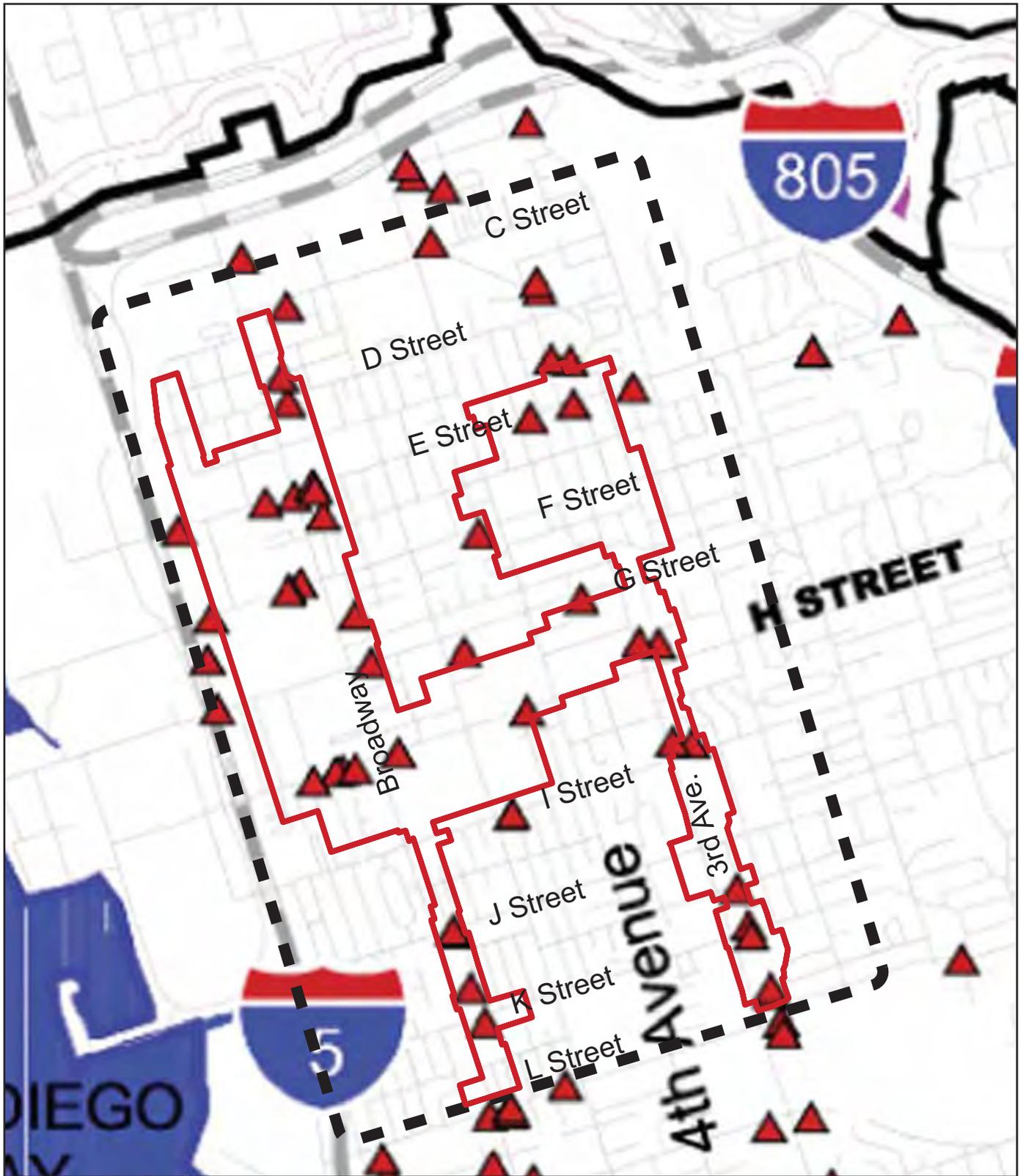
#### **d. State Water Resources Control Boards, SLIC (SPILLS) Lists**

The state's nine Regional Water Quality Control Boards (RWQCBs) each maintain reports of sites that have records of spills, leaks, investigation, and cleanups for areas in



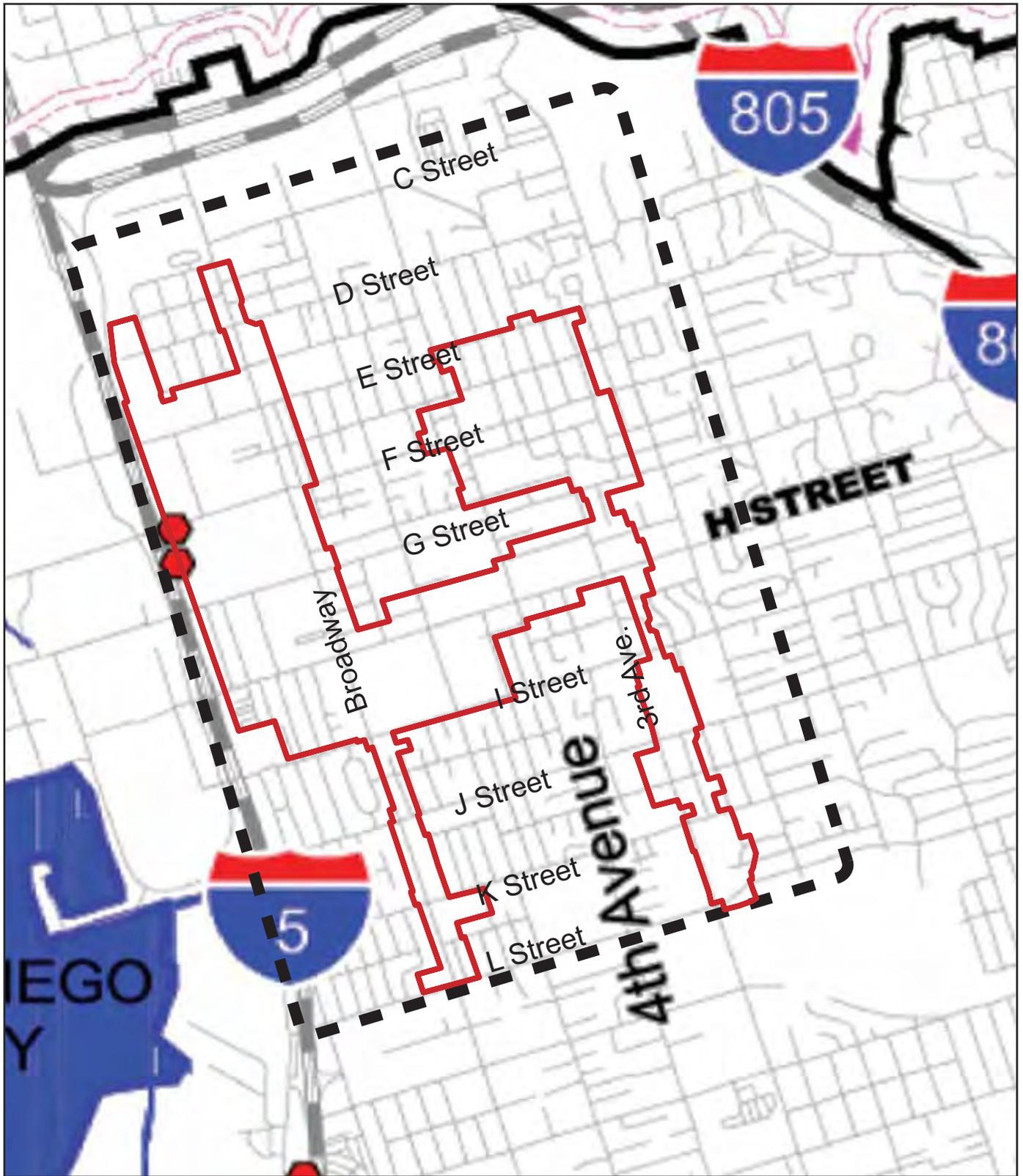
- Site of Potential Environmental Concern as Identified by an Environmental Database Search
- ▨ Landfill Site of Potential Environmental Concern as Identified by an Environmental Regulatory Agency
- - - - UCSP Study Area
- UCSP Subdistricts Area

FIGURE 5.13-1  
Sites of Potential Environmental Concern  
within the UCSP Boundary



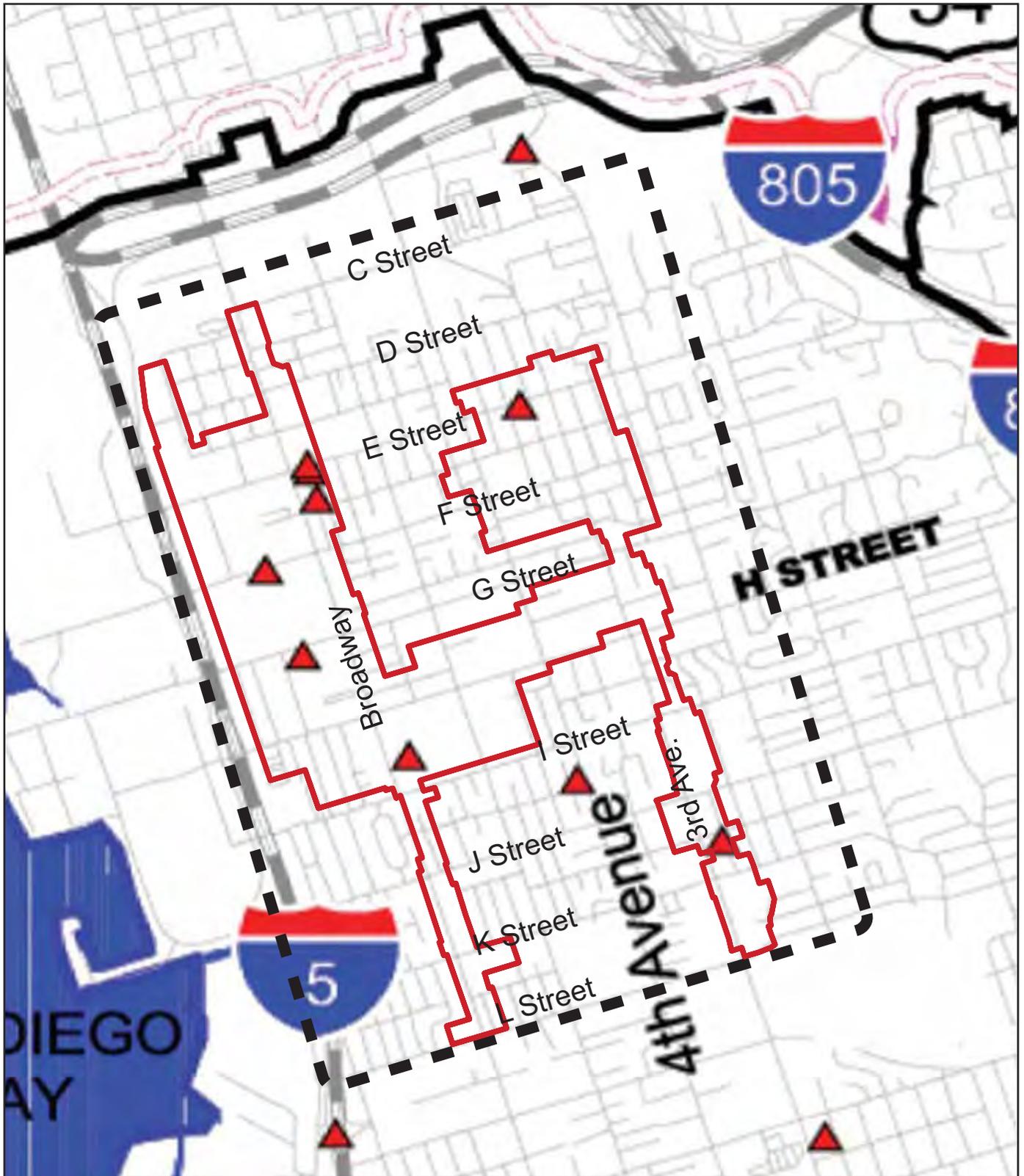
- ▲ LUST (Leaking Underground Storage Tank) Site of Potential Environmental Concern
- USCP Study Area
- USCP Subdistricts Area

FIGURE 5.13-2  
Leaking Underground Storage Tank (LUST)  
Sites of Potential Environmental Concern



-  CERCLIS (Comprehensive Environmental Response Compensation and Liability Information System) Site of Potential Environmental Concern
-  USCP Study Area
-  USCP Subdistricts Area

FIGURE 5.13-3  
Compensation and Liability Information System (CERCLIS) List  
Sites of Potential Environmental Concern



-  ERNS (Emergency Response Notification System) Site of Potential Environmental Concern
-  USCP Study Area
-  USCP Subdistricts Area

FIGURE 5.13-4

United States Environmental Protection Agency,  
Emergency Response Notification System (ERNS)  
Sites of Potential Environmental Concern

their jurisdictions. Three properties reported to be in the UCSP area appears on the RWQCB, Region 9 Spills, Leaks, Investigation and Cleanup (SLIC) (SPILLS) list. One or perhaps two of these properties lie within the Subdistricts Area, as mapping and address information locates the site according to the reported address and not the actual location of the spill or leak event. These three properties are located between E and G Streets, west of Broadway, near Interstate 5. Refer to Figure 5.13-5 for the approximate locations of these properties.

#### **e. United States Environmental Protection Agency, CORRACTS List**

The CORRACTS list identifies facilities that are undergoing "corrective action" subject to the Resource Conservation and Recovery Act (RCRA). A "corrective action order" is issued pursuant to RCRA when there has been a release of hazardous waste into the environment from a RCRA facility. Refer to Figure 5.13-6 for the locations of the approximately 34 properties in the UCSP Subdistricts Area that appear on the RCRA CORRACTS list.

#### **f. Department of Toxic Substances Control, State Sites (DTSC) List**

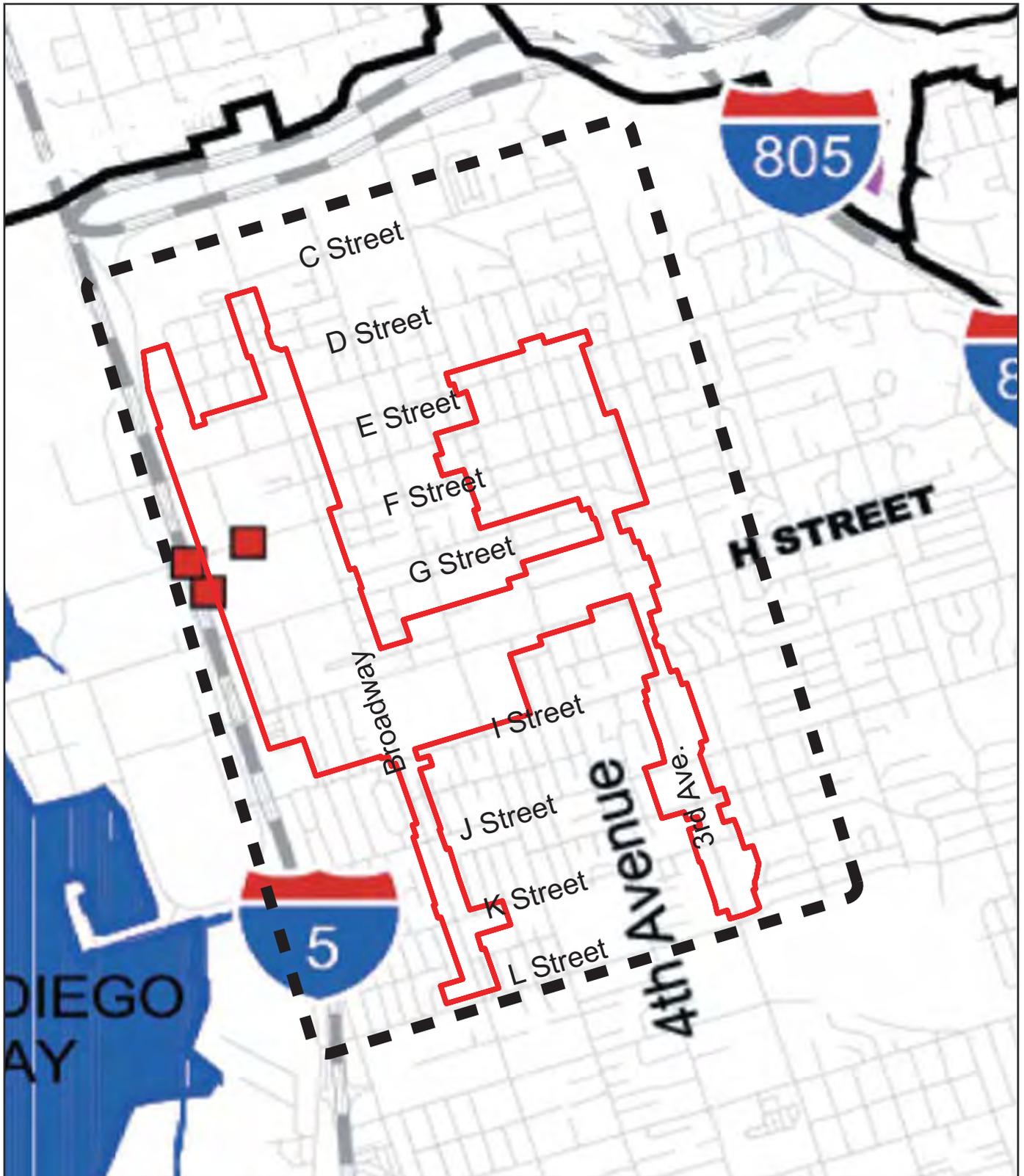
The California EPA Department of Toxic Substances Control (DTSC) maintains a database of information on properties in California where hazardous substances have been released, or where the potential for such release exists. Two properties reported to be in the UCSP Subdistricts Area appear on the State Sites list. One property is located along I-5 roughly between F and G Streets, and the second is located along Broadway between K and L Streets (see Figure 5.13-7).

#### **g. Multiple Agency, State of California Solid Waste Landfill (SWL) List**

As legislated under the Solid Waste Management and Resource Recovery Act of 1972, the California Integrated Waste Management Board (CIWMB) maintains the Solid Waste Information System (SWIS) that lists active solid waste disposal sites, inactive or closed solid waste disposal sites, and transfer facilities. Three properties reported to be located in the Subdistricts Area appear on the Solid Waste Landfill (SWL) list of sites of potential environmental concern. A fourth site is mapped immediately adjacent to the northwest boundary of the Subdistricts Area and a fifth is in fairly close proximity to the southwest. Figure 5.13-8 shows the approximate locations of these four facilities.

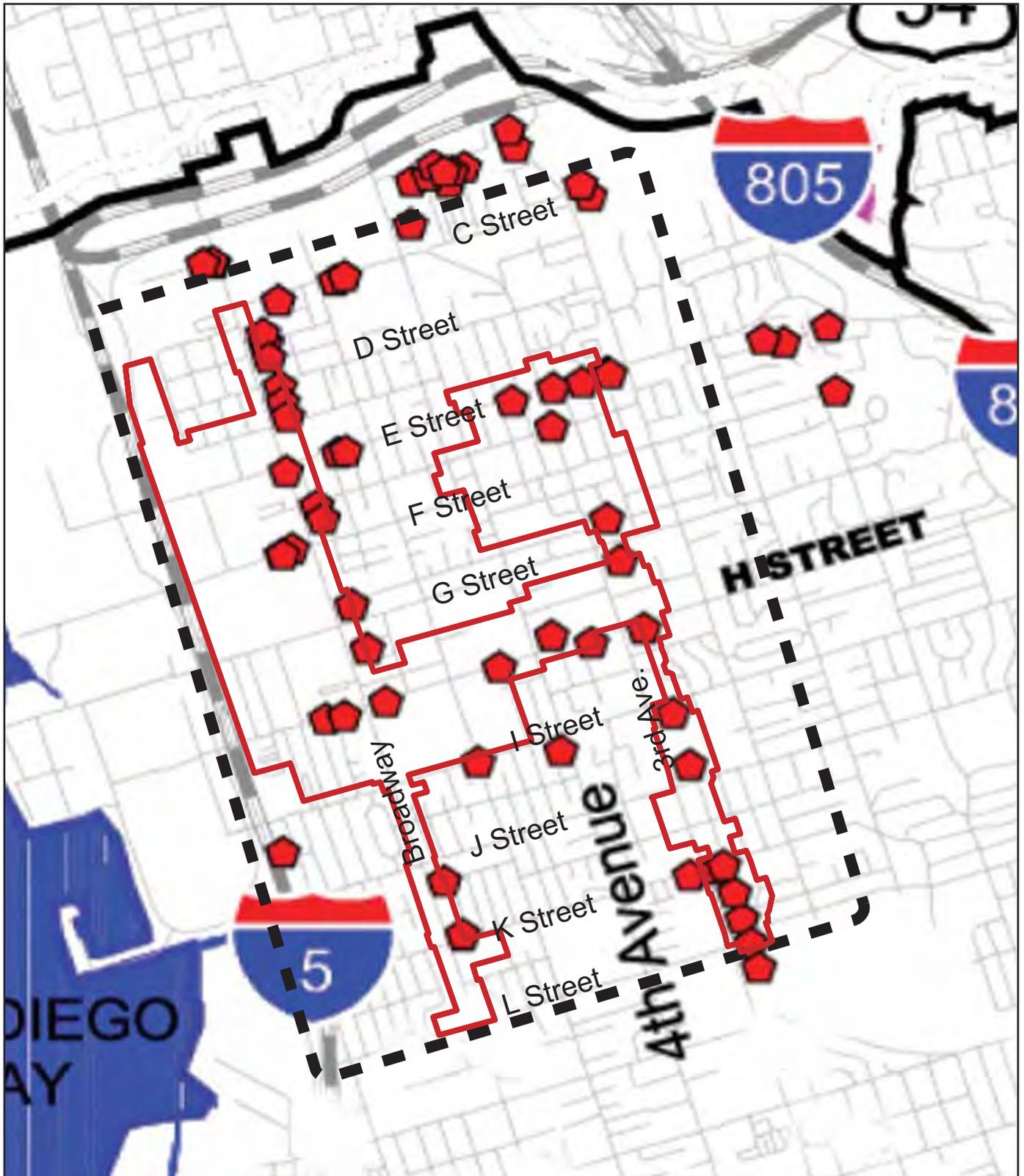
#### **h. Multiple Agency, Underground Storage Tank (UST) List**

According to the environmental database search, approximately 36 registered underground storage tank (UST) facilities are located within the UCSP area. The UST list consists of properties that have registered tanks, and are not necessarily indicative of sites where a release of hazardous substances has occurred. The properties listed in this database that have also experienced an unauthorized release of hazardous substances are shown



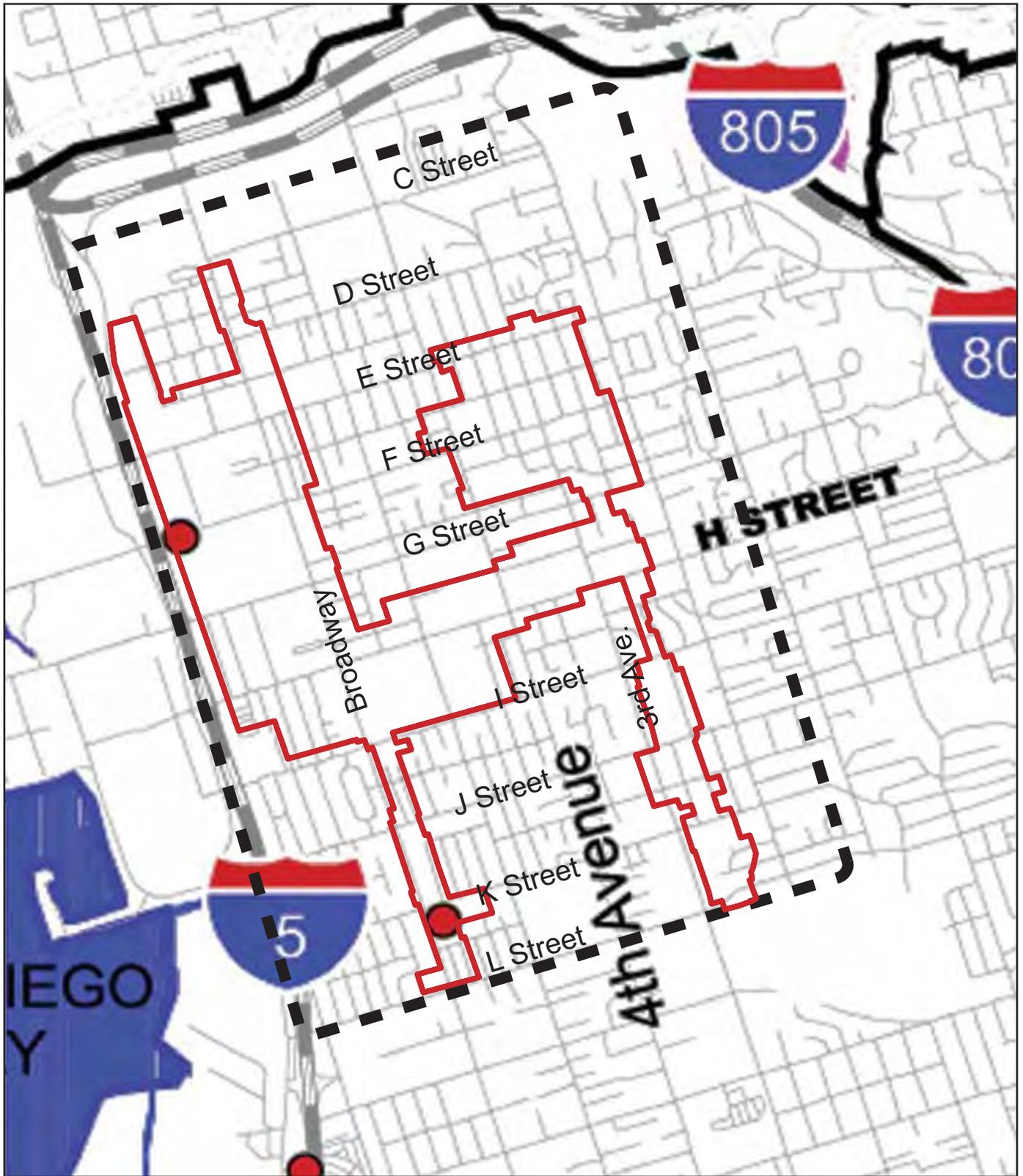
- Spills Site of Potential Environmental Concern
- USCP Study Area
- USCP Subdistricts Area

FIGURE 5.13-5  
State Water Resources Control Board (SWRCB)  
Spills, Leaks, Investigation, and Cleanups (SLIC)  
(SPILLS) Lists Sites of Potential Environmental Concern



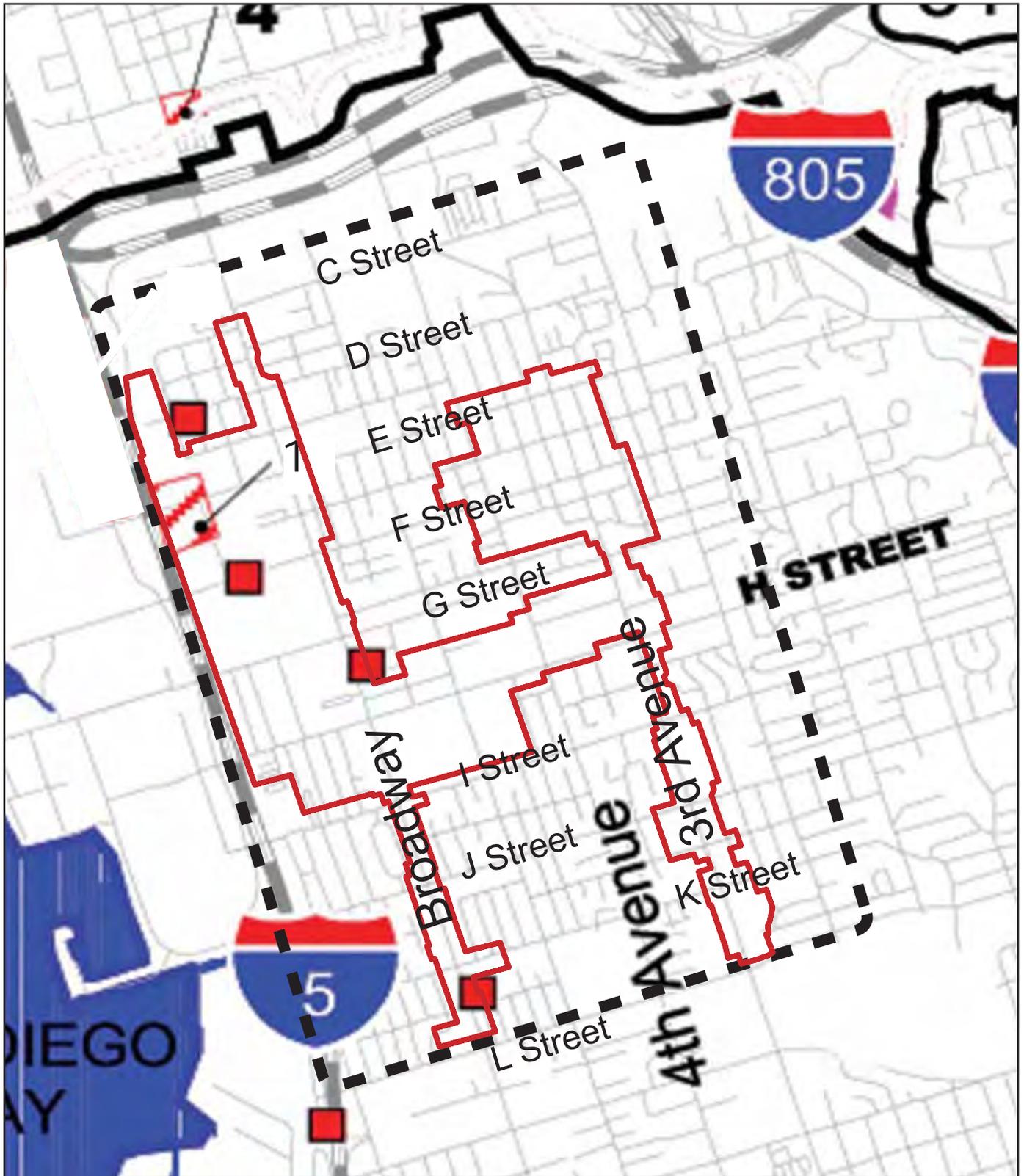
- RCRA CORRACTS \* Site of Potential Environmental Concern
- USCP Study Area
- USCP Subdistricts Area

**FIGURE 5.13-6**  
United States Environmental Protection Agency,  
Resource Conservation and Reclamation Act (RCRA)  
(Corrective Action) CORRACTS List Sites of  
Potential Environmental Concern



- State Site of Potential Environmental Concern
- - - USCP Study Area
- USCP Subdistricts Area

FIGURE 5.13-7  
California Department of Toxic Substances Control (DTSC) List  
Sites of Potential Environmental Concern



1) Former Bayscene Landfill

-  Landfill Site of Potential Environmental Concern as Identified by an Environmental Regulatory Agency
-  Landfill Site of Potential Environmental Concern as Identified by an Environmental Database Search

 USCP Study Area

 USCP Subdistricts Area

FIGURE 5.13-8

Multiple Agency, State of California Solid Waste Landfill (SWL)  
List Sites of Potential Environmental Concern

on Figure 5.13-2 as LUST cases. The remaining properties that appear on the UST list (i.e., properties that do not appear on any list that reports unauthorized releases of hazardous substances) are not shown on a figure, as there is a low likelihood that these properties present an environmental threat to the subject site at the present time (Ninyo & Moore 2003).

### **5.13.1.2 Area Reconnaissance**

The 2003 Ninyo and Moore reconnaissance involved a "windshield" survey of properties of significant potential environmental concern (e.g., large-quantity generators; treatment, storage, and disposal facilities; inactive landfills) identified during the regulatory agency database review and through interviews with regulatory agency representatives. Site reconnaissance activities were performed from public rights-of-way. Exteriors of individual properties were surveyed only to the extent that access was available to the general public. Interiors of individual facilities were not accessed.

#### **a. Incompatible Land Use**

One area of possible incompatible land use in the vicinity of operational and closed waste disposal facilities was identified from the reconnaissance. This property is presently occupied by Bayscene Mobile Home Park at 100 Woodlawn Avenue. According to information obtained through the local enforcement agency (LEA), this mobile home park may be located on land that was used as a disposal area for burn ash excavated and hauled from a residential development project in Coronado. In addition, the properties adjacent to the mobile home park on the north, south, and east are occupied by residences, which may also represent an incompatible land use. No additional obvious incompatible land uses were observed in the immediate vicinity of the sites visited.

#### **b. Former Bayscene Landfill**

This former landfill reportedly is located in the vicinity of the western terminus of Flower Street, between Woodlawn Avenue to the east, I-5 to the west, and D Street to the north. Currently, residences border the property to the north, south, and east. A short, steep slope borders the property on the west, leading to the trolley tracks below. Burn ash, reportedly from land on which the Coronado Cays project subsequently was constructed, was deposited at this location. (Reportedly, during construction of the Coronado Cays residential development project, burn ash was excavated and hauled to various locations throughout San Diego County.)

Soil and groundwater sampling has not been performed to date at the Bayscene Landfill. However, lead and other metals are expected to be present in this area at elevated concentrations. In addition, based on previous burn dump investigations, low levels of total recoverable petroleum hydrocarbons or low to no detectable levels of semi-volatile

organic compounds (SVOCs), PCBs, dioxins, and furans may also be present in burn ash. Bayscene Mobile Home Park, located at 100 Woodlawn Avenue, presently occupies the property.

### **c. Hazardous Building Materials**

The UCSP Study Area and Subdistricts Area contain numerous older residences and other structures. If a structure was built prior to 1960, it is highly likely that there is lead paint present on selected surfaces. Asbestos is also likely to occur in boiler coverings and elbows, vinyl asbestos floor tile, roofing materials, cooling tower panels. Lead and asbestos are fairly safe if left undisturbed, however disruption of lead-painted surfaces or asbestos-laden products can potentially release hazardous materials that can be ingested or inhaled through dust and friable fibers.

### **d. Wildfire Hazards**

The potential wildfire risk zones are areas that have steep slopes, limited precipitation, and plenty of available fuel. The Urban Core area is not located in a designated wildfire hazard area as defined by the California Department of Forestry and Fire Prevention.

## **5.13.1.3 Regulations and Legislation**

### **a. Local Regulations/ Chula Vista General Plan Update**

Sections 3.4.3 and 3.4.4 of the Chula Vista General Plan Update (GPU) address the siting and managing of facilities that use, store, and handle hazardous materials and waste.

The Environmental Element of the GPU contains the following policies:

#### **Policies**

- EE 19.1: Special design features and/or on-site emergency services may be required where deemed necessary to facilitate the adequate handling of hazardous materials accidents.
- EE 20.2: Through the environmental review of proposed developments in accordance with the California Environmental Quality Act, the City shall ensure that significant and potentially significant adverse effects from facilities using, storing, and handling hazardous materials and waste to existing and planned surrounding land uses will be avoided.
- EE 20.3: Prior to the renewal of business licenses for businesses involving hazardous materials and/or generating hazardous waste, the city shall continue to require licensees to prepare and submit an acceptable

Business Plan and Risk Management Prevention Program to the County Department of Environmental Health, as applicable, and to obtain all other necessary licenses and permits.

### **b. Regional, State, and Federal Regulations**

Numerous federal, state, and local laws and regulations regarding hazardous substances have been developed with the intent of protecting public health, the environment, surface water, and groundwater resources. Over the years the laws and regulations have evolved to deal with different aspects of the handling, treatment, storage and disposal of hazardous substances. Relevant laws and regulations include:

- 1972 Federal Water Pollution Control Act (also referenced as the Clean Water Act [CWA]). This act established a federal framework for the regulation of water quality.
- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, also known as "Superfund," and the Superfund Amendments and Reauthorization Act (SARA) of 1986 (amended CERCLA, SARA Title III). CERCLA, SARA Title III provide a federal framework for setting priorities for cleanup of hazardous substances releases to air, water, and land. This framework provides for the regulation of the cleanup process, cost recovery, response planning, and communication standards.
- Federal Resource Conservation and Recovery Act (RCRA) of 1976. This act established the authority of the United States Environmental Protection Agency (U.S. EPA) to develop regulations to track and control hazardous substances from their production, through their use, to their disposal.
- Title 40 Code of Federal Regulations (CFR), Part 257, establishes criteria for the classification of solid waste disposal facilities and practices (Sections 257.1 to 257.30). The U.S. EPA has the authority under RCRA to authorize states to implement RCRA, and California is a RCRA authorized state.
- Title 40 California Code of Regulations (CCR), Part 290 establishes technical standards and corrective action requirements for owners and operators of Underground Storage Tanks (USTs) under RCRA.
- Porter-Cologne Water Quality Act (California Water Code, Section 13000 et seq.) established the authority of the State Water Resources Control Board (SWRCB), and provided the RWQCB with the primary responsibility of the control of water quality in the state of California.
- California Health and Safety Code establishes legal requirements for the control and management of hazardous wastes, aboveground storage tanks (ASTs), and USTs.

- CCR Title 22, Division 4.5 provides state requirements for the classification, management, and cleanup of hazardous waste sites.
- CCR Title 27, Division 3, Chapter 15 establishes minimum requirements for proper waste management treatment, storage, or disposal in landfills, surface impoundments, waste piles, and land treatment facilities.
- CCR Title 23, Division 3, Chapter 16 establishes requirements regarding the management of USTs for the protection of waters of the state from discharges of hazardous substances. Furthermore, all owners and operators of underground storage tanks containing hazardous substances as defined in Section 25316 of the California Health and Safety Code are required to obtain a permit from the San Diego County DEH, Hazardous Materials Management Unit (HMMU). Secondary containment and leak detection and monitoring system requirements must be met before permit issuance.
- The California Division of Occupational Safety and Health Administration (OSHA) and federal OSHA define and enforce worker safety standards. Section 29 Code of Regulation (CFR) Part 1910.120 and Title 8 California Code of regulations, Section 5192 (et. seq) require A Site Health and Safety Plan for workers within certain defined zones.
- Asbestos containing materials are regulated as a hazardous air pollutant under the Clean Air Act and by Cal-OSHA. The San Diego Air Pollution Control District, through the authority of CARB and CalEPA, are primarily responsible for enforcing asbestos regulations.
- Water Quality Control Plan ("Basin Plan") for the San Diego region establishes policies and requirements for the protection of groundwater and surface water quality in the region. The Basin Plan also summarizes drinking water standards as specified in the California Department of Health Services, the California Inland Surface Waters Plan (SWRCB 1991), and Title 40 CFR Part 131, which establishes federal water quality standards under the CWA.

Table 5.13-1 below provides a matrix of regulatory agency responsibility.

**TABLE 5.13-1  
MATRIX OF REGULATORY AGENCY RESPONSIBILITY**

Law	Purpose	Federal	State	County	City
CAA	Restore Air Quality	U.S. EPA	Air Resources Board (ARB)	Air Pollution Control District (APCD)	--
CWA	Restore Water Quality	U.S. EPA	Water Resources Control Board (WRCB)	Regional Water Quality Control Board (RWQCB)	--
RCRA	Hazardous Waste Regulation	U.S. EPA	Department of Toxic Substances Control (DTSC)	Department of Environmental Health (DEH)	Fire Department
CERCLA	Clean up of Hazardous Waste Sites	U.S. EPA	DTSC	--	
SARA III	Community Right-to-Know	U.S. EPA	Office of Emergency Services (OES)	Regional OES	

**NOTES:**

CAA = Clean Air Act

CWA = Clean Water Act, including the State Water Code (e.g., Porter-Cologne Act)

RCRA = Resource Conservation and Recovery Act

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act "Superfund"

SARA III = Superfund Amendments and Reauthorization Act, Title III

Portions of the State Health &amp; Safety Code govern various actions of the ARB, WRCB, and DTSC.

### 5.13.2 Criteria for Determination of Significance

The proposed UCSP would result in a significant hazards/risk of upset impact if it would:

- Criterion 1: Create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials;
- Criterion 2: Place potential emitters of hazardous or acutely hazardous materials or substances in close proximity to sensitive receivers or be located in close proximity to a site which is included on a list of hazardous materials site pursuant to Government Code Section 65962.5; or
- Criterion 3: Impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

### 5.13.3 Impacts

#### 5.13.3.1 Hazardous Materials Transport, Use, Disposal or Release

- **Criterion 1: Create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials.**

Hazardous materials which occur within the UCSP area pose significant public health and safety risks during construction or long-term use of proposed development if they occur in concentrations that exceed state and/or federal standards. Exposure to hazardous materials can occur through contact with contaminated soil or groundwater through ingestion, skin contact or the inhalation of vapors or dust. An approximate total of 103 sites that are of potential hazardous concern have been identified within the Subdistricts Area and surrounding land uses.

During construction, workers may come in contact with hazardous or potentially hazardous materials during demolition of buildings or excavation activities. Demolition of buildings may expose workers to asbestos and lead paint as well as chemicals stored in or leaking from underground storage tanks (UST). Inhalation of friable asbestos fibers can cause lung cancer and asbestosis. Similarly, inhalation of lead-containing dust may cause acute or chronic toxicity. Exposure to persons other than construction workers would be minimized by the exclusion of non-authorized personnel in areas determined to contain hazardous or potentially hazardous materials.

Grading and excavation would disturb soils and possibly cause contaminants to become airborne. Excavation below the groundwater table or dewatering could also bring construction workers in contact with contaminants through skin contact, ingestion or inhalation. Construction workers could potentially encounter hazardous materials in buried drums or underground storage tanks.

State and federally-mandated property-specific Phase II Environmental Assessments are required prior to development and would identify areas most likely to contain such materials prior to construction, enabling appropriate actions to be taken to control risk exposure. The first phase of construction of an individual redevelopment activity would involve carrying out remedial measures necessary to remove or clean contaminated buildings, soil or groundwater, as necessary. As with excavation, remedial measures which disturb contaminated buildings, soil or groundwater have the potential to expose construction workers to hazardous material via contact, ingestion or inhalation. Additionally, trucks transporting materials offsite could potentially impact residents, employees, and motorists on the route traveled. All remediation activities are anticipated

to take place prior to construction. However, it is possible that additional contamination may be encountered during construction.

Although it is not likely, it is possible that after construction is complete, residual soil and groundwater contaminants could pose a health and safety risk to UCSP residents, employees, and visitors. The risk of exposure would be greatly reduced as the chances of encountering groundwater would be low and the majority of the soil would be covered by structures or pavement.

In addition to risks posed by pre-existing hazardous materials, potential risks are associated with the individual redevelopment activities themselves. Long-term implementation of the proposed land uses identified in the UCSP has the potential to result in the routine transport, use, disposal, or accidental release of hazardous materials. The UCSP does not propose specific land uses that are anticipated to transport, use, dispose, or release hazardous materials. However, herbicides and fertilizers associated with the landscaping of a redevelopment activity have the potential to pose a health risk if not properly managed. Similarly, proposed retail, restaurant, office and hotel uses may also involve the use or storage of materials which may be considered hazardous if not properly managed. These risks would be managed to a level below significant through the implementation of existing mandatory federal, state and local regulations described below.

#### **a. Mandatory Regulations and Remedial Measures**

The potential health risks during and after construction of individual redevelopment activities located on a site with hazardous materials remediation needs would be reduced through the mandatory controls imposed by State and Federal regulations described in 5.13.1.1.b. In accordance with these laws and regulations, all hazardous materials/wastes and petroleum products will have to be removed and remediated prior to, or during construction, to the standards set by the various federal, state, and local regulations. The type and extent of the remediation activities would be tailored to the individual properties based on the amount of hazardous materials/wastes and petroleum products identified by subsequent site-specific Phase I and II Environmental Assessments, and the planned land uses to be constructed on the site.

Although specific remediation needs or subsequent remediation activities have not been determined for future individual redevelopment activities within the UCSP Subdistricts Area, proven soil remediation technologies are described in the following paragraphs. Not all remediation activities would be conducted at all sites. Both soils containing no measurable contaminants and soils containing contaminants at concentrations below the remediation goals and not classified as hazardous by Title 22 of the California Code of Regulations may be used as backfill on future activity sites.

**No Action**

Based on the nature, concentration, and distribution of the contaminant, distance to potential receptors (including groundwater and San Diego Bay), and the intended site land use, the DEH may not require any soil or groundwater remediation activities to occur.

**Soil Remediation**

If the contaminants in soil are judged to pose a potential unacceptable risk to human health or the environment, the DEH will likely require remedial activities to take place to reduce the potential risk. Typically, the soil is remediated either in place (*in situ*), or after it has been excavated (*ex situ*). The following is a summary of the methods that may be used to treat soil in the UCSP area.

***In situ* Methods**

In many cases, it is possible to remediate soil without having to excavate the soil. Although there are several *in situ* methods available, the two most common ones are vapor extraction and air sparging. Natural attenuation and free product removal are other effective *in situ* methods.

The vapor extraction method involves the installation of vapor extraction wells which are connected to a vacuum source. Contaminant-laden vapors are removed from the soil and treated prior to being discharged to the atmosphere. Typically, the contaminant-laden vapors are treated using activated carbon or oxidation systems. This method typically works best to treat volatile compounds such as gasoline and solvents in highly permeable soil.

Air sparging is typically used in conjunction with vapor extraction. Air sparging involves the injection of compressed air into the soil. The compressed air assists in the biological and chemical degradation of contaminants in the soil. This method typically works best to treat volatile compounds such as gasoline and solvents in highly permeable soil.

Natural attenuation allows contaminated soils or groundwater to remain in place when the DEH concurs that a contaminant plume is stable (e.g., not migrating) and the concentrations of the contaminant have been shown to be decreasing over time. In most cases, the method is used for residual contamination remaining in the subsurface after other types of remediation activities have been performed to remove the source of contamination, and usually requires long periods of monitoring activities to establish the stability and decreasing trends of the contaminant plume. This method is typically used for fuels, oils, and other organic chemicals.

The removal of phase-separated product (known as free product removal) may be accomplished by vapor extraction, as previously discussed, or by either passive or active

skimmers, or by hand-bailing. These methods are most effective with light non-aqueous phase liquids (LNAPLs) such as petroleum products (oils, fuels, and petroleum-based solvents such as mineral spirits and Stoddard solvent).

### ***Ex-situ Methods***

Based on the contaminant type and the permeability of the soil, it may not be possible to treat soil in place. Therefore, the soil is excavated and treated. The excavated soil can be treated onsite or transported to an offsite treatment facility. If the soil is treated onsite, it can either be used onsite, or disposed at an offsite location.

The ex-site vapor extraction method is similar to the vapor extraction previously described, except that it is conducted after the soil is excavated. This method can be used when the permeability of the soil is too low to be feasible to conduct in situ vapor extraction. In this method the soil is excavated and piled onsite. Piping is placed in the soil stockpiles for the vapor extraction. This method typically works best to treat volatile compounds such as gasoline and solvents.

Bioremediation involves the addition of nutrients, water, oxygen, and possibly bacteria to excavated soil. The nutrients, water, and oxygen will increase the indigenous or added bacteria populations. The bacteria use the selected contaminants as a food source. Bioremediation has been proven successful in the treatment of many contaminants including fuels, oils, and other organic chemicals.

Fixation involves the addition of chemicals (cement is typically used) to the excavated soil to reduce the potential for the contaminant to be mobile. This method is typically used to treat inorganic compounds such as metals.

Thermal desorption is a method that involves heating the excavated soil to cause the contaminant to volatilize and migrate from the soil as a vapor. The vapor is then treated, using activated carbon or by a catalytic oxidation unit, and discharged to the atmosphere. This method is typically used to treat organic compounds such as fuels, oils, and solvents. A portable unit is placed adjacent to or on the site where the contaminated soils are being excavated or stockpiled. Alternatively, the contaminated soils can be excavated and transported to an offsite facility for treatment. The soil is then transported back to the site for use as backfill or transported elsewhere for use or disposal.

Off-site incineration involves heating the excavated soil to cause the contaminant to volatilize and oxidize. The exhaust is treated by conventional methods (e.g., air scrubbers, catalytic oxidation units, etc.) prior to being released into the atmosphere. This method is typically used to treat organic compounds such as fuels, oils, and solvents.

Off-site bioremediation/soil washing is a process similar to onsite bioremediation described above except that the excavated soil is transported to an offsite facility where nutrients, water, oxygen, and possibly bacteria are added to the excavated soil. The nutrients, water, and oxygen will increase either the indigenous or added bacteria populations. The bacteria are able to use selected contaminants as a food source. Bioremediation has been proven successful in treating many contaminants including fuels, oils, and other organic chemicals.

### 5.13.3.2 Sensitive Receivers

- **Criterion 2: Place potential hazardous emitters or materials in close proximity to sensitive receivers or be located in close proximity to a hazardous materials site.**

Due to the nature of historic and current land uses located throughout the UCSP area, there is a high potential for encountering hazardous materials sites identified on registers compiled pursuant to Government Code Section 65962.5. However, significant impacts to human health and the environment would be avoided through compliance with mandatory federal, state, and local regulations described previously.

State law requires the mapping of "general areas" within which hazardous waste facilities might be established. Proposed hazardous waste facilities will be considered only if they are within the industrial zoned general areas. Policy EE 19.1 of the General Plan Update addresses the siting of potentially hazardous materials and provides that development proposals for hazardous waste storage, collection, treatment, disposal, and transfer facilities will only be considered if they are located within a designated "general area" as shown in Figure 9 of the City's General Plan Update and meet specific siting, design and operating criteria established by the Chula Vista Zoning Code and pursuant to the established City siting criteria guidelines. The proposed UCSP does not contain any "general areas" or propose any industrial uses, and does not propose uses that would place potential emitters of hazardous or acutely hazardous materials or substances in close proximity to sensitive receivers. Therefore, no significant impact would result.

### 5.13.3.3 Emergency Response

- **Criterion 3: Impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**

There are no land uses proposed for the UCSP that would interfere with or impair implementation of an adopted emergency response or evacuation plan. In addition, the land uses identified in the proposed UCSP would not physically interfere with any known adopted emergency plans. Therefore, no significant impact would result.

As redevelopment proceeds in the UCSP Subdistricts Area, urbanization would intensify. As intensification increases, the potential for impacts of man-made or natural disaster could also increase. The ongoing implementation and updating of the DEH Emergency Response Management Program and Chula Vista Fire Code would assure adequate response to unforeseeable emergencies within the UCSP.

### **5.13.4 Summary of Significance Prior to Mitigation**

The UCSP area contains numerous known and listed hazardous sites of potential environmental concern. Approximately 103 sites of potential environmental concern were identified through recent database research. Future development consistent with the proposed UCSP may result in significant impacts if such development allows greater contact between humans and hazards.

### **5.13.5 Mitigation Measures**

The following measures will mitigate impacts resulting from the adoption of the UCSP to below a level of significance.

#### **Mitigation Measure**

- 5.13-1 Prior to approval of subsequent individual development projects, any project plans that propose land uses which use, transport, store, and dispose of hazardous materials shall be conducted in compliance with the relevant regulations of federal, state, and local agencies, including the EPA, California Department of Health Services (DHS), and California Department of Transportation.
- 5.13-2 A risk assessment shall be performed at all sites within the study area where contamination has been identified or is discovered during future construction activities, and at which soil is to be disturbed, to address risks posed by any residual contamination, and to establish appropriate mitigation measures (e.g., natural attenuation, active remediation, engineering controls) that would be protective of human health and the environment. All assessment and remediation activities shall be conducted in accordance with a Work Plan that is approved by the regulatory agency having oversight of the activities.
- 5.13-3 A hazardous building materials survey should be performed at buildings in the study area prior to demolition or renovation activities. This type of survey typically addresses lead-based paint (LBP), asbestos-containing materials (ACMs), PCBs in electrical equipment, mercury switches, and heating/cooling systems. Such a survey should be conducted under the direct supervision of a State of California Certified Asbestos Consultant and EPA lead assessor. Prior to demolition or renovation work that would disturb identified ACMs,

LBP, or other hazardous materials, a licensed abatement removal contractor should remove and properly dispose of the hazardous material(s) in accordance with applicable local, state and federal regulations. A California certified consultant should prepare a bid specification document, and perform abatement project planning, site and air monitoring, oversight activities, and reporting activities.

### **5.13.6 Summary of Significance After Mitigation**

With the implementation of Hazards/Risk of Upset Mitigation Measures 5.13-1, 5.13-2 and 5.13-3, significant impacts resulting from the approval of the UCSP will be mitigated to less than significant.

## 6.0 Cumulative Impacts

The State CEQA Guidelines (Section 15355) define a cumulative impact as “an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts.” The Guidelines further state that “an EIR should not discuss impacts which do not result in part from the evaluated project.”

Section 15130(a) of the State CEQA Guidelines requires a discussion of cumulative impacts of a project “when the project’s incremental effect is cumulatively considerable.” Cumulatively considerable, as defined in Section 15065(c), “means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.”

The evaluation of cumulative impacts is required by Section 15130(b)(1) to be based on either (a) “a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those impacts outside the control of the agency,” or (b) “a summary of projections contained in an adopted plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.” This analysis relies on regional planning documents, in accordance with Section 15130(b)(1)(B), to serve as a basis for the analysis of the cumulative effects of the proposed UCSP.

Pursuant to Section 15130(d), cumulative impact discussions may rely on previously approved land use documents such as general plans, specific plans, and local coastal plans and may be incorporated by reference. In addition, no further cumulative impact analysis is required when a project is consistent with such plans, where the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have already been adequately addressed in a certified EIR for that plan.

In addition, Section 15130(e) states that an EIR “should not further analyze a cumulative impact if it was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan.”

The cumulative impacts assessment in this section primarily relies on the cumulative impact determinations in the Chula Vista GPU EIR. The following issues were identified as cumulatively significant in the GPU EIR: landform alteration/aesthetics; cultural resources; paleontological resources; transportation; noise; potable water; energy; and housing and population. Where the UCSP would add incremental effects to the issues identified above, the effects associated with the UCSP are also considered cumulatively significant.

Other regional plans used to assess cumulative impacts in this section include: the Chula Vista General Plan; the SANDAG Regional Comprehensive Plan (RCP); the Chula Vista MSCP; the Water Quality Control Plan for the San Diego Basin; the San Diego APCD RAQS; and the Regional Water Facilities Master Plan. These plans are discussed in the Environmental Impact Analysis, Section 5.0, of this EIR, and are incorporated by reference in the cumulative analysis below. These documents are on file at the City of Chula Vista and are available for review at the Chula Vista Planning Department at 276 Fourth Avenue and the Chula Vista Civic Center Library at 365 F Street in the City of Chula Vista.

On July 23, 2004, the SANDAG Board of Directors adopted the RCP for the San Diego region. The RCP serves as the long-term planning framework for the San Diego region. It provides a broad context in which local and regional decisions can be made that move the region toward a sustainable future; a future with more choices and opportunities for all residents of the region. The RCP integrates local land use and transportation decisions and focuses attention on future growth. The RCP contains an incentive-based approach to encourage and channel growth into existing and future urban areas and smart growth communities.

The goal of the RCP is to ensure a high quality of life for current and future generations and to work toward a society that has resolved its housing shortage, transportation problems, and energy issues, and provides healthy, desirable environments for people and nature.

The basis for determining the direct impacts of the adoption of the UCSP assumes the GPU growth projections for the area outside of the UCSP area. The GPU provides the basis for the cumulative analysis presented in this section. The growth projections used in the GPU are consistent for each of the issues evaluated. Since the GPU uses worst-case environmental assumptions, the GPU assumptions were used for the cumulative analysis. The cumulative discussion evaluates the proposed project for conformance to the GPU and identifies those areas where the UCSP may differ from that plan. In addition, the potential effect of the development was considered.

A broad examination of cumulative impacts involves considering the project together with growth of the City. Development pursuant to the GPU would occur in accordance with the land use designations and development intensities identified in the Land Use and Transportation Element. These designations promote the redevelopment of underused land to higher uses, compact development, mixed-use development to promote a pedestrian-friendly environment, an improved balance between employment and housing, and protection of Chula Vista's natural resources.

The land uses and the associated potential development designated in the GPU correlates to regional growth estimates made by SANDAG. SANDAG estimates anticipated growth for the 18 cities and the unincorporated areas within San Diego County for the purpose of allocating growth to specific areas and identifying regional transportation infrastructure needed to support regional growth.

The population growth projected to occur by 2030 would necessitate augmentation of the City's current housing stock, infrastructure, and public services. Cumulative impacts would occur as a result of multiple projects developed by 2030. The proposed GPU strategy is to anticipate the cumulative effects of growth and plan for it in a manner that is balanced in its approach. The focused growth strategy addresses future growth as a whole, and proposes policies to avoid impacts on a cumulative basis.

## **6.1 Land Use, Planning, and Zoning**

SANDAG forecasts significant population growth for the region. By 2030, the City of Chula Vista was projected by SANDAG to reach a population of 280,000. City of Chula Vista GPU projections forecast an even greater number, with a projected population of 300,000 by the year 2030. The City's GPU, in consideration of smart growth principles and recognition of demographic trends toward city center revitalization, seeks to direct such growth to the already developed, western portion of the City; the traditional urban core of the City. This is in marked contrast to the earlier General Plan update in 1989 which sought to accommodate population growth in the undeveloped eastern portion of the City. To this end, the City has developed the UCSP in order to implement the vision of the urban core included in the GPU. The City is also currently planning the Chula Vista Bayfront Master Plan for the bayfront area west of the UCSP, which will complement the land use plans and goals of the UCSP and urban core area.

The proposed UCSP is consistent with the goals and policies of the GPU and serves as the implementing document to realize the GPU vision for the urban core. Through land use development regulations (zoning) and development design guidelines, the UCSP, in conformance with the GPU, provides for the orderly growth of the City. The land use regulatory provisions of the UCSP apply only to the UCSP Subdistricts Area, while existing Municipal Code zoning regulations will continue to apply in the surrounding study area; thereby promoting more intense residential and commercial land uses in the Subdistricts Area while preserving the existing lower density residential uses in the study area.

The proposed UCSP, in conjunction with redevelopment and greater utilization of existing land within western Chula Vista, would contribute to an overall increase in urban density within this area. According to the GPU, the number of multi-family units within the UCSP Subdistricts Area would increase at buildout from 3,700 existing units to 10,800 units through in-fill and limited redevelopment. The City's GPU has anticipated these cumulative effects associated with a more urban and dense redevelopment environment and created specific design and planning standards, which are mirrored in the UCSP, to ensure an effective use of land within the UCSP area. Planned increases in urban density could have concomitant increases in density driven cumulative environmental impacts, such as traffic, noise, air quality, public services, and public utilities. However, because these effects were anticipated and planned for in the GPU, and the proposed UCSP is in

conformance with the GPU, no cumulative land use and planning impacts would occur with implementation of the UCSP.

## **6.2 Landform and Visual Aesthetics**

The cumulative assessment of landform alteration/aesthetics impacts relies on SANDAG's Regional Comprehensive Plan and the analysis of cumulative landform alteration/aesthetics impacts in the certified EIR for the GPU. Development in the UCSP Subdistricts area would occur in previously developed locations. The aesthetic effects of the proposed UCSP are focused on the bulk and mass represented by the designated land uses. The potential for an adverse effect is contingent upon the design and location of future buildings.

Future growth has the potential to impact the visual environment through fundamental changes in land use. Adoption of the UCSP would result in increased density within the UCSP Subdistricts Area which would result in increased building heights and mass. The UCSP contains regulations and design standards which outline allowable and recommended parameters for the development of the Subdistricts Area. The design guidelines for the UCSP contain standards such as building heights and massing, protection of public view corridors, and circulation linkages, that establish mixed-use development and achieve a high quality pedestrian-scaled environment.

The change in visual quality within the UCSP area would contribute incrementally to cumulative impacts with regards to aesthetics. However, design controls placed on subsequent projects by the City would ensure that development occurs in accordance with the City's goals and design objectives for this area; therefore, the project would not result in cumulative negative aesthetic impacts.

## **6.3 Cultural Resources**

The cumulative assessment of cultural resources impacts relies on SANDAG's Regional Comprehensive Plan and the analyses of cumulative cultural resources impacts in the certified EIR for the GPU. The continued pressure to develop or redevelop areas would result in incremental impacts to the historic record in the San Diego region. Regardless of the efforts to avoid impacts to cultural resources, the more that land is converted to developed uses the greater the potential for impacts to cultural resources. While any individual project may avoid or mitigate the direct loss of a specific resource, the effect is considerable when considered cumulatively.

The RCP concluded that the loss of historic or prehistoric resources from the past, present, and probable future projects in the Southern California/Northern Baja California, Mexico areas would contribute to cumulatively significant impacts to cultural resources. The EIR for the GPU indicated that Implementation of the proposed general plan, in conjunction with

other future projects, would result in a significant cumulative impact to cultural resources. The GPU EIR established mitigation measures for western Chula Vista which require that an archaeological survey shall be completed for any development project that includes previously undisturbed acreage and that any future development that has not been previously examined shall be subject to a cultural resources survey to identify any specific resources that could be potentially affected by the proposed project. These mitigation measures would reduce incremental cumulative impacts associated with the GPU adoption, but it would not reduce the cumulative impact to cultural resources to below a level of significance due to the RCP conclusion that any loss of cultural resources would be significant. The proposed UCSP conforms to the mitigation measures of the GPU through incorporation of Mitigation Measures 5.3.5-1 through 5.3.5.5 in this EIR, and to the analysis completed for the GPU EIR. The cumulative effect on cultural resources resulting from the adoption of the UCSP, in conformance with the GPU is therefore significant and unmitigated.

## **6.4 Paleontological Resources**

The cumulative assessment of paleontological resources impacts relies on SANDAG's Regional Comprehensive Plan and the analyses of cumulative paleontological resources impacts in the certified EIR for the GPU. The GPU EIR concluded that impacts to paleontological resources, similar to cultural resources, would be cumulatively significant. Mitigation measures that incorporated a grading threshold and pre-construction and construction monitoring protocol were included in the GPU EIR and were concluded to reduce impacts to below a level of significance. The proposed UCSP conforms to the analysis completed for the GPU EIR and the mitigation measures of the GPU EIR through incorporation of Mitigation Measure 5.5-1 in this EIR.

As discussed in Section 5.5, Paleontological Resources, the majority of the UCSP area overlies geologic formations assigned a moderate sensitivity rating. Based on the excavation activities associated with development, the UCSP has the potential to impact subsurface paleontological resources. Mitigation measures have been identified to reduce potential impacts to below a level of significance. Future projects would be required to implement similar mitigation measures if they would result in the potential for significant impacts to important paleontological resources. Therefore, implementation of the mitigation measures 5.5-1 through 5.5-4 would reduce cumulative impacts to paleontological resources to below a level of significance.

## **6.5 Hydrology and Water Quality**

The cumulative assessment of hydrology and water quality resources impacts relies on the analyses of hydrology and water quality resources impacts in the certified EIR for the GPU.

The GPU EIR concluded when compared to existing land uses, buildout of the UCSP would not introduce substantially increased amounts of impermeable surfaces to the project site. However, the project's increase in impermeable surfaces may reduce the amount of infiltration occurring at the project site and increase storm water runoff. When considered with other development projects within the region, this alteration to natural hydrology and drainage could cumulatively impact downstream water resources. As discussed in Section 5.7, Hydrology and Water Quality, mitigation has been identified to reduce impacts to hydrology, drainage, and water quality which mirror the mitigation measures identified in the GPU EIR. Future projects would be required to implement these mitigation measures for specific projects as well as adhere to the City's National Pollutant Discharge Elimination System (NPDES) permit, the City's Urban Runoff Management Plan, and prepare project specific Storm Water Pollution Prevention Plans. Implementation of these requirements would reduce cumulatively significant impacts to below a level of significance.

## **6.6 Transportation, Circulation, and Access**

The cumulative assessment of transportation impacts relies on the analyses of transportation impacts in the certified EIR for the GPU. The GPU EIR concluded that implementation of the GPU proposed Urban Core Roadway system was not significant, because policies in the GPU provided for the establishment of an Urban Core Improvement Program that would provide adequate urban amenities and would facilitate multimodal transportation systems. No further mitigation was required in the GPU EIR.

The long-term traffic analysis conducted for the proposed UCSP has employed the regional traffic database and modeling used by SANDAG and assumed 2030 buildout conditions under the GPU. As such, it included the projected growth for the region, including both growth in regional trips and anticipated expansion of the circulation system. Traffic effects identified in Chapter 5.8 of this EIR are significant. Nineteen intersections and three roadway segments within the UCSP area would operate at unacceptable levels of service. The traffic analyses included mitigation measures to reduce significant cumulative traffic impacts. However, not all impacts would be mitigated to below a level of significance. Therefore, significant and unmitigated cumulative traffic impacts are noted for the street network. The mitigation measure presented in Section 5.8 of this EIR would reduce some of the incremental cumulative impacts associated with the proposed UCSP; however, these measures would not reduce the cumulative traffic impacts to below a level of significance.

## **6.7 Air Quality**

The cumulative assessment of air quality impacts relies on SANDAG's Regional Comprehensive Plan and the analyses of air quality impacts in the certified EIR for the GPU. The cumulative assessment of air quality impacts relies on the current Regional Air Quality

Strategy (RAQS). In order to meet federal air quality standards in California, the California Air Resources Board (CARB) required each air district to develop its own strategy for achieving the NAAQS. The San Diego Air Pollution Control District (San Diego APCD) prepared the 1991/1992 RAQS in response to the requirements set forth in Assembly Bill (AB) 2595. The RAQS set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

The current RAQS are based on the former General Plan. Because the significant air impact stems from an inconsistency between the General Plan Update and the former General Plan upon which the RAQS were based, the only measure that can lessen this impact is the revision of the RAQS based on the General Plan Update. This effort is the responsibility of SANDAG and San Diego APCD and is outside the jurisdiction of the City. The City recommends that SANDAG and the San Diego APCD incorporate the changes in the GPU and UCSP in their triennial review and revision of the RAQS to eliminate the present inconsistency. In addition, the development regulations and design guidelines of the UCSP shall be applied to all subsequent development projects to ensure they do not obstruct implementation of applicable air quality plans.

The San Diego Air Basin is in non-attainment for federal and state ozone standards, federal and state  $PM_{2.5}$  standards, and state  $PM_{10}$  standards. An increase in air emissions would be roughly proportional to an increase in population. While commercial and industrial sources would contribute to these emissions, proportional increase in residential units can serve as a general indicator of the potential for population growth and related air quality effects. The GPU EIR included a mitigation measure to address  $PM_{10}$  that required active dust control during construction. This same measure has been incorporated into this EIR in section 5.10. Because the air basin is in non-attainment for ozone,  $PM_{2.5}$ , and  $PM_{10}$ , the potential increase in residential units and the activities associated with population growth, even as mitigated by the City in its  $CO_2$  Reduction Plan and Growth Management Program, represents a cumulatively considerable and significant air quality impact.

Although there is no adopted standard for sensitive receivers adjacent to Interstate 5, it was determined that air quality impacts from diesel particulates emanating from the freeway would be cumulatively significant given current basin-wide noncompliance with particulate standards and projected future levels of diesel particulates emanating from Interstate 5.

## 6.8 Noise

The cumulative assessment of noise impacts relies on SANDAG's Regional Comprehensive Plan and the analyses of noise impacts in the certified EIR for the GPU. Cumulative noise impacts would generally be attributed to increases in traffic volumes. Because all jurisdictions have land use guidelines for placement of future sensitive land uses in noise impact areas, future development would not result in significant impacts. As discussed in

Section 5.9, Noise, of this EIR, the traffic volumes used in the noise report are based on the cumulative effects of traffic. As such, the noise analysis is a cumulative analysis. With the implementation of Noise Mitigation Measures 5.9-1 through 5.9-4, significant noise impacts resulting from the approval of the UCSP will be mitigated to less than significant.

## **6.9 Public Services and Utilities**

The cumulative assessment of public services and utilities relies on SANDAG's Regional Comprehensive Plan and the analyses of public services and utilities impacts in the certified EIR for the GPU.

### **6.9.1 Water**

Cumulative impacts to water supply associated with ongoing development on a regional scale are anticipated. The UCSP would require water service from the Sweetwater Authority. Development of the UCSP would contribute incrementally to the impacts on water services required for the region.

The UCSP, as well as future development, would be required to adhere to the City's Threshold Standards Policy. This policy requires the City to provide the San Diego County Water Authority, the Sweetwater Authority, and the Otay Municipal Water district with a 12- to 18-month development forecast and request an evaluation of their ability to accommodate the forecast and continuing growth.

As discussed in Section 5.12.1, Public Utilities, the Water Supply Assessment prepared by the Sweetwater Authority indicates that there will be sufficient water supplies to meet the projected demands of buildout of the UCSP and the existing and planned development projects within Sweetwater's service area in both normal and dry year forecasts. Therefore, impacts are less than significant.

### **6.9.2 Wastewater**

As identified in Section 5.12, Public Utilities, the UCSP would increase the expected sewage load on the G Street Trunk sewer basin, the Industrial Avenue Trunk sewer basin, and the Main Street Trunk sewer basin. When added to other past, existing, and future planned development, the development of the UCSP would contribute incrementally to impacts to sewer systems serving the region.

The proposed project, as well as future development, would be required to adhere to the City's Threshold Standards Policy. This policy requires the City to provide the San Diego Metropolitan Sewer Authority with a 12- to 18-month forecast and request confirmation that the projection is within the City's purchased capacity rights and an evaluation of their ability

to accommodate the forecast and continuing growth. Adherence to the City policies would ensure that cumulative impacts are less than significant.

### **6.9.3 Integrated Waste Management**

Buildout of the UCSP, in conjunction with past, present, and future projects, would increase the amount of solid waste generated within the region. The nearest landfill to the project site is the Otay Landfill, which has adequate capacity through 2030. Additionally, as required by the City of Chula Vista, all development completed under the UCSP would implement programs and policies related to solid waste management, which include curbside recycling programs. Present and future development would be required to implement similar waste management programs that would ensure that cumulative solid waste impacts are less than significant.

### **6.9.4 Energy**

Buildout of the UCSP would increase the demand for both electricity and natural gas. Impacts to energy are considered significant because there is no long-term assurance that energy supplies will be available at buildout of the UCSP, avoidance of energy impacts cannot be assured regardless of land use designation or population size. Although changes to planned land uses in the City would continue to implement the Energy Strategy Action Plan, San Diego Regional Energy Plan and Transit First Plan, implementation of the proposed land uses identified in the UCSP has the potential to result in impacts to energy resources as a result of anticipated growth. The mitigation measures identified in Section 5.12.5, Public Utilities, would reduce significant energy impacts. While the mitigation measure presented in Section 5.12.5 of this EIR would reduce some of the incremental cumulative impacts associated with the proposed UCSP, these measures would not reduce the cumulative energy impacts to below a level of significance because future energy supplies cannot be assured.

### **6.9.5 Law Enforcement, Fire Protection, and Emergency Medical Services**

The overall population growth would substantially increase demands on law enforcement, fire protection, and emergency medical services. The cumulative impact would be potentially significant. The projected three-fold increase in residential and commercial population of the UCSP area would substantially increase demand for law enforcement. While not specifically quantified, staffing and new facilities would be required to adequately accommodate the population increase expected at buildout. A public facilities development impacts fee would be collected at the time of subsequent individual development proposals, as part of the citywide program (Municipal Code Chapter 3.50) to fund and construct needed public infrastructure. The provision of future law enforcement personnel would be

scheduled and funded through the City's annual budget review and through the Fire Master Plan. Public infrastructure would be provided incrementally but concurrent with need. With the development of master plans for fire service, law enforcement, and emergency, the cumulative impacts would be reduced to a level below significance.

### **6.9.6 Schools**

Development of the UCSP would result in 7,100 net new multi-family units, which would add to the regional, cumulative demand for elementary, middle, and high schools to serve its population. The proposed UCSP would contribute to the cumulative need for additional Chula Vista Unified School (CVESD) school facilities by adding 2,485 new K-8 students, and would contribute to the cumulative need for Sweetwater Unified High School District (SUHSD) resources by adding 1,392 new students. Based on the generation rates discussed in Section 5.11, Public Services, the CVESD schools that serve the Urban Core area are currently at or near capacity and would require 59 or more additional classrooms to serve the proposed UCSP. The SUHSD has indicated that planned construction of a new high school and expansion of existing middle schools in western Chula Vista would be adequate to serve the UCSP. Implementation of Mitigation Measure 5.11.3-1 would assist in school impact fees that would lead to future construction of new facilities to serve the anticipated student population growth. Similarly, present and future development would be required to contribute to school impact fees. Contribution of these fees would ensure that cumulative impacts are less than significant.

### **6.9.7 Library Services**

Development of the UCSP would create a demand for library services to serve its residents and contribute to the regional, cumulative demand for library services. When considered with past, present, and future developments, the project would contribute an incremental demand on libraries. Based on the expected net increase in population of 18,318 with buildout of the UCSP, increased demand on existing library services would amount to approximately 9,159 square feet of library facilities and 54,954 books.

However, development completed in conformance with the UCSP would contribute development fees that would be used towards library facilities within the City, in accordance with the City's Growth Management Ordinance. Similarly, present and future development would be required to contribute fees towards development of library facilities within the City. Contribution of these fees would ensure that cumulative impacts are less than significant. The Municipal Code (Chapter 3.50) includes provisions that require the City to use the public facilities development impact fees to construct needed improvements and to ensure that adequate funds are available in the impact fee account to build the needed improvements.

## 6.9.8 Parks and Recreation

Cumulatively, the proposed and approved projects in the region would place substantial demands on neighborhood, community, and regional parks. Buildout of the entire UCSP area could result in an estimated net increase population of 18,318. Applying the 3 acres per 1,000 resident parkland requirement results in full buildout of the UCSP would be required to provide up to approximately 55 acres of new parkland. This additional parkland would be required incrementally and commensurate with new development.

The cumulative impacts on local and regional park and recreational facilities would be potentially significant. New development in the City of Chula Vista is required to provide public parkland, improved to City standards and dedicated to the City. Parkland dedication requirements are specified in Section 17.10.040 of the Chula Vista Municipal Code. The Parkland Dedication Ordinance requires three acres of neighborhood and community park per 1,000 residents.

The UCSP proposes meeting the parkland requirement resulting from development by establishing an urban gathering network in the form of parks, plazas, paseos, and informal pedestrian spaces. These improvements include improving and expanding existing park space to make the spaces more usable. A parks master plan is currently underway for the Urban Core area, which will identify park facility needs, potential locations, connections with the surrounding community, and conceptual designs for parks. The parks master plan will inventory City-owned sites and consider joint use of other public facilities within the UCSP area. Implementation of the Mitigation Measure 5.11.5-1 would generate park and recreation impact fees that would lead to future construction of new facilities to serve the anticipated population growth. The UCSP establishes a Community Benefit Program that includes enhancements to park and recreation facilities in relation to projected buildout of the UCSP over the 25-year project horizon. As a condition of project approval, individual developers shall pay the public facilities fees at the rate in effect at the time building permits are issued. Similarly, present and future development would be required to contribute development fees. The Municipal Code (Chapter 3.50) includes provisions that require the City to use the public facilities development impact fees to construct needed improvements and to ensure that adequate funds are available in the impact fee account to build the needed improvements. Contribution of these fees would ensure that cumulative impacts are less than significant.

## 6.10 Hazards/Risk of Upset

The cumulative assessment of hazards/risk of upset relies on the analyses hazards impacts in the certified EIR for the GPU. As discussed in Section 5.13, Hazards/Risk of Upset, the UCSP does not propose specific land uses that are anticipated to transport, use, dispose, or release hazardous materials. However, during the reconnaissance survey several

properties of environmental concern were identified that use, store, and transport hazardous materials. Development in accordance with the UCSP has the potential to place people adjacent to these sites, and, therefore, has the potential to expose people to hazards. The majority of hazardous sites identified within the UCSP area coincide with commercial and light industrial land uses. Similar land uses throughout western Chula Vista would also likely contain numerous hazardous materials and thus the UCSP hazardous sites comprise a cumulative contribution to the regional inventory. Mitigation measures have been identified to reduce potential impacts to below a level of significance. Future projects would be required to implement similar mitigation measures if they would result in the potential for significant impacts. Therefore, implementation of the mitigation measures 5.13-1 would reduce cumulative impacts related to hazards/risk of upset to below a level of significance.

## **6.11 Geology and Soils**

The major geologic hazards associated with the proposed UCSP and future development are related to landslides, liquefaction, and earthquakes. The increase in population would occur with buildout of the UCSP and the City's General Plan would combine with other population growth in the county that would expose more people to similar risks.

As discussed in Section 5.4, Geology and Soils, no significant adverse impacts have been identified regarding the geology and soils of the Urban Core. Potential impacts to future development would be reduced to below a level of significance through implementation of remedial measures identified in the geotechnical investigations, which are required by the Grading Ordinance, for all new development within the City. In addition, conformance to building construction standards for seismic safety with the Uniform Building Code (UBC) would assure that new structures would be able to withstand anticipated seismic events within the City. Therefore, implementation of the UCSP and associated future development would not contribute to cumulative impacts related to geology and soils.

## **6.12 Housing and Population**

The cumulative assessment of housing and population relies on the analyses of housing and population impacts contained in the certified EIR for the GPU. The GPU EIR concluded that cumulative housing and population impacts would not be significant and therefore no mitigation measures were required. The proposed UCSP conforms to the analysis completed for the GPU EIR. The UCSP would contribute a net increase of 7,100 multi-family dwelling units to the housing stock within the City. Thus, the project would contribute cumulatively to housing opportunities within the City, contributing to an increase in the City's population. Population growth associated with the UCSP would not exceed City growth projections, and thus, such an increase in population is included with the City's buildout

population. The project is not expected to induce development of other areas, and no cumulative impacts to population or housing would occur.

## **6.13 Biological Resources**

The majority of the land area within the UCSP area has been previously developed with residential, commercial, and industrial uses. The potential for significant biological resources to be present in the UCSP area is low. Implementation of the UCSP would not result in significant impacts to biological resources. When considered with past, present, and future development in the region, development of the UCSP would not contribute incrementally to a cumulatively significant impact to biological resources.

## **6.14 Agriculture**

There are no agricultural lands within the Urban Core or central Chula Vista. Additionally, there are no lands zoned for agriculture within this area. When considered with past, present, and future development in the region, development of the UCSP would not contribute incrementally to a cumulatively significant agricultural impact.

## **6.15 Mineral Resources**

The UCSP area is underlain with Quaternary Terrace Deposits. The majority of western Chula Vista, including the UCSP area, has been previously developed so the potential for significant mineral resources is considered low. No regionally significant MRZ-2 aggregate resource areas are designated within this update area. Implementation of the UCSP would not result in significant impacts to mineral resources. When considered with past, present, and future development in the region, development of the UCSP would not contribute incrementally to a cumulatively significant impact to mineral resources.

## 7.0 Growth Inducement

State CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the growth-inducing impact of the proposed project. The Guidelines require that the EIR, “Discuss ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas).”

SANDAG is the agency responsible for forecasting regional growth. They indicate that population grows in two ways: (1) natural increase, which results from the number of births over deaths; and (2) net migration, which is primarily based on the condition of the local economy (SANDAG 2003). SANDAG forecasts significant growth for the region and the City of Chula Vista over the next 25 years. The Chula Vista GPU was developed in response to anticipated growth. While growth in the recent past was accommodated in previously undeveloped land in the eastern portion of the City, the GPU aims to direct growth toward the already urbanized western portions of the City.

The proposed UCSP provides the land use development zoning and design guidelines necessary to implement the vision of the GPU and to accommodate growth in the urban core area. Based on principles of smart growth, the UCSP serves to reduce sprawl by focusing future growth in the City core through redevelopment and new/infill development, emphasizing pedestrian-friendly design and mixed use development. The proposed UCSP is specifically intended to provide for the orderly growth of the city of Chula Vista, define the limits to that growth, and act as a mechanism to accommodate and control future growth. Development permitted would provide needed housing, create compact and pedestrian-friendly urban development, and protect natural resources. The UCSP would result in a more inclusive community, maintain a balance between housing and employment, and foster a stable economic base and diverse employment opportunities.

The UCSP does not propose to increase capacities of utilities and infrastructure within the Urban Core. The plan does recognize that infrastructure capacities will have to be increased to accommodate projected growth, but does not propose to make those improvements at this time. As discussed in the services and utilities chapters of this document, provision of utilities will require specific project level information and will be reviewed on an individual project basis.

The proposed UCSP would accommodate an increase in population within the Urban Core. Table 7-1 summarizes the increase in population and housing units over the existing condition. These figures are derived from the projections for the GPU. That analysis indicated that there would be 10,800 units in the urban core at buildout and that there are

currently 3,700 existing units. Using the population generation rate provided in the GPU of 2.58 people per unit for multi-family units, a population of 18,318 people is projected for the Urban Core. New residents would locate in Chula Vista because of the diverse employment base and proposed new housing developments.

**TABLE 7-1  
INCREASE IN POPULATION AND HOUSING UNITS  
OVER EXISTING CONDITIONS**

Population Increase Over Existing Condition	Increase in Housing Units Over Existing Condition
18,318	7,100

The proposed UCSP would accommodate additional growth beyond existing conditions. As such, people may choose to live in Chula Vista rather than elsewhere in the San Diego region. In addition, the increased population in the area of Chula Vista may foster economic growth in the area by increasing demand for local serving retail, and increased employment opportunity. Because no specific use is identified, any effect resulting from this indirect economic growth on other areas in the region would be speculative.

The growth effects of the UCSP result from people electing to live and work in Chula Vista, rather than elsewhere in the region and beyond. Because the UCSP establishes land uses that can accommodate growth, thereby removing a barrier to growth in the city, it is growth inducing. The issues discussed in the Environmental Impact Analysis section of this EIR address the direct and indirect effects of this growth. Since there are impacts resulting from issues associated with this growth, the growth-inducing impacts of the proposed UCSP are considered significant. The mitigation measures for the growth-inducing impacts are set forth in sections 5.1 through 5.12 of this EIR and are contained in the development regulations and design guidelines of the UCSP, which are intended to accommodate anticipated growth in the City in the Subdistricts Area.

## 8.0 Significant Irreversible Environmental Changes

Section 15126.2(c) of the CEQA Guidelines requires that an EIR consider significant irreversible environmental changes that would result from the proposed actions should they be implemented. According to the CEQA Guidelines:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvements which provide access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Nonrenewable resources generally include biological habitat, agricultural land, mineral deposits, water bodies, and some energy sources. As will be discussed in Chapter 9.0, approval of the proposed UCSP will not have any significant irreversible impacts on biological, agricultural, or mineral resources. The UCSP area is the urban core of the City of Chula Vista. It is highly urbanized and contains no native biological habitat. No agricultural soils occur within the UCSP area, and being urbanized, it would not be conducive to agricultural production. No significant mineral deposits underlie the UCSP area. No water bodies occur within the UCSP area and mandatory state and federal water quality control measures would minimize any potential urban runoff pollutant concerns.

Energy resources would be consumed during construction of future projects in conformance with the UCSP. Implementation of the proposed UCSP would result in the short-term commitment of nonrenewable and/or slowly renewable energy resources as well as natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, and water due to construction activities. Use of these resources would represent an incremental effect on the regional consumption of these commodities.

Energy would also be consumed to provide operational lighting, heating, cooling, and transportation for future development. Both residential and non-residential development would require the long-term commitment of energy resources in the form of natural gas and electricity generated by coal, natural gas or hydroelectric power. Increased motor vehicle travel would result in the long-term commitment of fossil fuels unless alternative fuel vehicles ultimately replace the internal combustion engine on a broad scale. The availability of mass transit and encouragement of other non-motorized modes of transport provided in the development standards, design guidelines, and public realm and community benefit

programs of the UCSP may serve to reduce consumption of gasoline associated with commute trips.

The UCSP additionally contains basic design guidelines and resources for designing and building sustainably “to minimize the use of energy, water and other natural resources” (UCSP Chapter VII Design Guidelines, Special Guidelines, Environmental Sustainability Goals, p. VII-123). The City of Chula Vista participates in the LEED (Leadership in Energy and Environmental Design) Rating System and as stated in the UCSP “all newly constructed City-sponsored building in the Urban Core shall incorporate sufficient green building methods and techniques to qualify for the equivalent of LEED Silver.” The LEED is a voluntary, national standard developed by the US Green Building Council (GBC for developing proven, high-performance, sustainable buildings. The GBC has four LEED levels, in descending levels of performance: platinum, gold, silver, and certified; and several programs and design criteria for different types of structures, including commercial, residential, infill development, new construction, and renovations to existing structures. Chapter VII of the UCSP contains an overview of these programs and design criteria, plus an outline of the advantages of green building practices. Further elaboration of the LEED programs and certification requirements can be obtained from the US Green Building Council’s website at [www.usgbc.org](http://www.usgbc.org).

To earn LEED certification, a project applicant project must satisfy all of the prerequisites and a minimum number of points to attain a LEED certified rating level. This application process includes a LEED Scorecard which future project applicants will submit to the City of Chula Vista Community Development Director along with their Urban Core Development Permit application. In addition, development projects may qualify for FAR increases and priority permit review (as specified in UCSP Chapter VI, Urban Amenities Table) if a LEED certified rating is achieved. As higher building performance is achieved (i.e. silver, gold or platinum), increased levels of FAR incentives are available.

While green building practices are not required for private development within the UCSP area, a completed LEED scorecard is required with every Urban Core Development Permit application. Private developments are also strongly encouraged to utilize green building practices through the support of City staff and through the guidelines and incentives contained in the UCSP. Incorporation of green building design into subsequent individual development projects may serve to reduce irreversible water, energy and building materials consumption associated with construction and occupation of structures within the UCSP area.

## **9.0 Effects Found Not to Be Significant**

### **9.1 Mineral Resources**

The majority of western Chula Vista, including the UCSP area, has been previously developed, so the potential for significant mineral resources extraction is considered low. The UCSP area is underlain with Quaternary Terrace Deposits which are not considered to have a high potential for mineral resources. No regionally significant MRZ-2 aggregate resource areas are designated within the UCSP area.

Implementation of the UCSP would not result in significant impacts to mineral resources.

### **9.2 Biological Resources**

The UCSP area is the urban core of the City of Chula Vista and has been developed with residential, commercial, and industrial uses since the early twentieth century. This highly urbanized setting is almost entirely lacking in native vegetation and its associated wildlife. The only perennial vegetation within the urban core includes ornamental trees, parkways, lawns, and gardens. The value of these ornamentals to native wildlife are insignificant in their present location. Implementation of the UCSP would not result in significant impacts to biological resources.

### **9.3 Agriculture**

There are no agricultural zoned lands nor any land under agricultural use or appropriate for agriculture in the UCSP area. The area within the UCSP has been previously developed with residential, commercial, and industrial uses. No lands designated as prime agricultural soils by the Soils Conservation Service nor prime farmlands designated by the California Department of Conservation occur within the UCSP area. Nor is the UCSP area near a Williamson Act Contract pursuant to Section 51201 of the California Government Code.

Implementation of the UCSP would not result in significant impacts to agricultural resources.

## 10.0 Alternatives

In order to fully evaluate the environmental effects of proposed projects, CEQA mandates that alternatives to the proposed project be analyzed. Section 15126.6 of the State CEQA Guidelines requires the discussion of “a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project” and the evaluation of the comparative merits of the alternatives. The alternatives discussion is intended to “focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project,” even if these alternatives would impede to some degree the attainment of the project objectives. The project objectives are enumerated in Section 3.3 of this EIR.

Three project alternatives in accordance with the requirements of CEQA were evaluated for this project. They include the No Project Alternative, the Reduced Project Alternative, and the Automobile Priority Alternative. Each major issue area included in the detailed impact analysis of this EIR (Chapter 5) has been given consideration in the alternative analysis.

As required under Section 15126.6 (e)(2) of the CEQA Guidelines, the EIR must identify the environmentally superior alternative. Pursuant to the CEQA Guidelines, if the No Project Alternative is determined to be the most environmentally superior project, then another alternative among the alternatives evaluated must be identified as the environmentally superior project. The most environmentally superior alternative, as identified in the analyses below, would be the Reduced Project Alternative. Both the Reduced Project Alternative and the No Project Alternative, in comparison with the proposed UCSP, would lessen impacts to landform/aesthetics, transportation, air quality, noise, and public services and utilities due largely to lesser population and land use intensification within the UCSP Subdistricts Area. Because the potential footprint of impact area is roughly the same for all scenarios, impacts to cultural and paleontological resources, geology and soils, ~~population and housing~~, and hazardous materials risks would be roughly equivalent for the proposed UCSP and the No Project and Reduced Project alternatives. Land use impacts would be greater in the No Project Alternative than in the Reduced Project Alternative or proposed UCSP due to existing zoning being out of conformance with the adopted GPU. All issue areas impacts would be identical in the Automobile Priority Alternative to the proposed UCSP except for the issue of transportation, which would incur less of an impact in the Automobile Priority Alternative than in the proposed UCSP, but still greater than the transportation impacts identified for the No Project and Reduced Project alternatives.

## 10.1 No Project Alternative

The No Project alternative would continue to implement the current adopted Municipal Code Zoning in the Subdistricts Area of the UCSP. The current zoning conforms to the former General Plan, rather than the currently adopted General Plan Update (GPU). California law requires zoning ordinances to be consistent with the adopted GPU. Therefore, the No Project Alternative would result in the zoning for the Subdistricts Area of the UCSP being inconsistent with the GPU.

Table 5.1-2 in the Land Use section of this Program EIR lists the existing zoning for the UCSP Subdistricts Area. The location of these zones within and surrounding the UCSP Subdistricts Area is illustrated in Figure 5.1-3. Under the No Project Alternative, it is estimated that approximately 1,000 additional residential units could be built in the 690 acre Subdistricts Area. This number was estimated from the GPU EIR No Project alternative (Final EIR page 617) which identified capacity for approximately 1,429 additional residential units allowed under the “former” 1989 General Plan when compared to the existing condition. This remaining residential capacity related to the Urban Core Subarea of the Northwest Planning Area. The extent of the UCSP Subdistrict Area is approximately 67 percent of the larger Urban Core Subarea described in the GPU EIR as 1,031 acres. In addition, the No Project Alternative is anticipated to allow additional commercial and office growth compared to the existing condition, considering the underutilized extent of many of the commercially zoned properties throughout the UCSP Subdistricts Area.

Existing Municipal Code Zoning within the UCSP Subdistricts Area includes the zones and approximate acreages listed below in Table 10-1. The acreages represent approximations determined by the Chula Vista Community Development Department.

**TABLE 10-1  
EXISTING ZONING DISTRIBUTION WITHIN THE UCSP SUBDISTRICTS AREA**

Existing Zoning	Gross Acres (approximate)	Percentage of Total Area
Single-family Residential (R-1)	14	2.0%
One- and Two-Family Residential (R-2)	14	2.0%
Apartment Residential (R-3)	153	22%
Mobile Home Park (MHP)	38	5.5%
Commercial (CB, CC, CO, CV, and CT) and Light Industrial (IL)	466	68%
PQ (Public/Quasi Public)	5	0.5%
Urban Core Total	690	100%

### 10.1.1 Land Use

Impacts to land use resulting from implementation of the No Project Alternative would be greater than those identified for the proposed UCSP because of inconsistency of existing Municipal Code Zoning with the adopted GPU.

As shown in Table 10-1 above, approximately 68 percent of the Subdistricts Area is currently zoned for commercial or light industrial uses. Another 22 percent is zoned for high-density residential. Thus, approximately 90 percent of the Subdistricts Area is zoned either for commercial or high-density residential. Only roughly 4 percent of the entire Subdistricts Area is zoned for single-family detached residences or duplexes. Public uses are currently zoned for approximately 1 percent of the total.

As noted in Section 5.1.3 of this EIR, existing zoning within the UCSP Subdistricts Area allows primarily low-rise (up to 45 feet in height) single-use commercial blocks to occupy the commercial corridors along Third Avenue, E Street, H Street, and Broadway, with low-rise multi-family residential uses (apartments and mobile homes) permitted on the periphery of the commercial areas and in the area west of Broadway. Taller building heights are permitted in several of the commercial zones given issuance of a Conditional Use Permit (CUP). In addition, the portion of Third Avenue north of H Street and south of F Street, zoned CB, (central business) is allowed unrestricted building height. Presently, no buildings within this area exceed three stories (low-rise). Additional capacity as described above would be possible given the underutilized extent of many of the commercially zoned properties and the estimated residential capacity as identified in the GPU EIR.

In comparison with the proposed UCSP, the No Project Alternative represents less residential development in areas currently restricted to commercial business and retail use along the downtown segments of Third Avenue, along E Street in the vicinity of Third and Fourth Avenues, and decreased residential and transit-oriented uses in the vicinity of major transit corridors. The proposed UCSP permits increased density to allow for a greater degree of mixed-use development in key locations promoting pedestrian and transit-oriented development. The proposed UCSP zoning permits greater building heights and mass for most of the Subdistricts Area. Heights would be permitted to extend to mid-rise (45 feet to 84 feet in height) for many of the areas currently zoned for low-rise (45-foot) heights. In addition, the proposed UCSP would allow building heights up to 210 feet for two Transit Focus Areas centered on the E Street and H Street trolley stations. These areas are currently zoned for height limits of 45 feet except with a CUP.

The No Project alternative would continue to implement the current adopted Municipal Code Zoning in the Subdistricts Area of the UCSP. The current zoning conforms to the former General Plan, rather than the plan established by the currently adopted GPU. California law requires zoning ordinances to be consistent with the adopted GPU. Therefore, the No Project Alternative would result in the zoning for the Subdistricts Area of the UCSP being inconsistent with the GPU. This comprises a significant impact because the No Project

Alternative conflicts with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project which is a CEQA significance criterion.

### **10.1.2 Landform Alteration/Aesthetics**

Impacts to aesthetics and visual character resulting from implementation of the No Project Alternative would be less than those identified for the proposed UCSP. Under the No Project Alternative, the visual character of the UCSP area pursuant to existing zoning would be similar to what exists today, with some exceptions. In the area around Third Avenue in the north of the UCSP area, the existing visual character consists of low-rise pedestrian-oriented specialty shops, restaurants, and small businesses that primarily serve local residents, with wide sidewalks along Third Avenue. Small residential housing units occupy the surrounding streets. The central portion of the UCSP Subdistricts Area is characterized by primarily low-rise, with some mid-rise single-use commercial uses along the E Street, H Street and Broadway commercial corridors. Low-rise multi-family housing extending from C to I Streets and mobile home parks between F and G Streets comprise the concentration of residential uses within the Subdistricts Area. Along segments of Broadway, current conditions, such as the palm-lined streets, accessibility to I-5 and trolley stations, proximity to downtown, and views to the bay, are often overshadowed by negative influences such as deteriorating streetscapes and signage along the corridor segments, lack of accessible park facilities, and poor pedestrian connectivity crossing I-5 to the Bayfront or to Broadway. Building heights are limited by existing zoning throughout the Subdistricts Area to 45 feet in height unless approved by Conditional Use Permit or unless coincident with the CB zone which allows unrestricted heights. The CB zone occurs along Third Avenue north of G Street, south of roughly F Street. Current building heights in this area are primarily low-rise.

In comparison with the proposed UCSP, the No Project Alternative represents a less intensified urban environment, with generally shorter building heights and less structural mass and density. The No Project Alternative also differs substantially from the proposed UCSP in that it allows the continuance of single-use zoned and occupied parcels, where commercial uses are restricted to certain blocks, offices to another, and residential to others. It also permits less residential development in the UCSP Subdistricts Area as a whole, by restricting residential uses to areas outlying the single-use commercially zoned corridors. The No Project Alternative could result in continued visual quality impacts associated with the growth permitted under the existing zoning in the absence of design guidelines for enhanced gateways, and other urban amenities as envisioned by the GPU and proposed by the UCSP.

The No Project Alternative does not reduce the footprint or location of development or change the nature of the projects that could be permitted within in the UCSP area. However, the No Project Alternative would lessen the aesthetic effects relative to the UCSP because of the lower densities, buildings heights and mass allowed with this alternative.

### **10.1.3 Biological Resources**

There are no biological resources within the UCSP area, therefore, no impacts would occur by adoption of the proposed UCSP or the No Project Alternative.

### **10.1.4 Cultural and Paleontological Resources**

Impacts to cultural and paleontological resources resulting from implementation of the No Project Alternative would be similar to those identified for the proposed UCSP. As with the proposed UCSP, implementation of the No Project Alternative would result in potentially significant impacts related to cultural and paleontological resources. The UCSP area contains several known and designated historic architectural resources (sites and structures). In addition, the UCSP area potentially contains additional as yet unidentified historically significant resources as defined by CEQA significance criteria. Demolition or substantial alteration of these historically significant architectural resources as a result of future development or redevelopment of the area (as allowed by existing underlying Redevelopment Plans and existing zoning) would comprise a significant cultural resources impact. In addition, future construction activities involving grading to depths equal to or greater than six feet may impact significant archaeological resources. In the unlikely event that prehistoric cultural materials are found during subsurface disturbance resulting from future developments, there would be a significant archaeological impact.

The UCSP area contains a large expanse of moderate paleontological resource sensitivity. Exposure or disturbance of soils greater than 5 feet in depth and at volumes in excess of 2000 cubic yards would require mitigation. These grading thresholds are likely to be exceeded under the No Project Alternative as existing buildings are replaced or redeveloped over time in accordance with underlying Redevelopment Plans and existing zoning. This comprises a significant paleontological impact.

The No Project Alternative and the proposed UCSP both allow development over roughly the same geographic area. As such, both the UCSP and the No Project Alternative have a roughly equivalent potential for impacting cultural and paleontological resources. Potential cultural and paleontological impacts resulting from future development and redevelopment in the UCSP area would be reduced below a level of significance through pre-construction monitoring, implementation of a construction mitigation program, and, for architectural resources, preservation, rehabilitation, relocation or historical documentation prior to demolition according to local, state, and federal standards.

### **10.1.5 Geology and Soils**

Impacts to geology and soils resulting from implementation of the No Project Alternative are roughly equivalent to those identified for the proposed UCSP. As with the UCSP, implementation of the No Project Alternative has the potential to result in significant impacts

related to geology and soils. Future development would be exposed to geological hazards associated with seismic events, liquefaction, and expansive soils. Potential impacts resulting from geologic hazards would be reduced below a level of significance through project-specific design measures, including compliance with applicable building codes (e.g., Title 24 of the California Code of Regulations, and the UBC). Additionally, a comprehensive, site-specific soil and geologic evaluation would be conducted for all future development projects to determine potential hazards and site conditions. The proposed UCSP and the No Project Alternative both allow development over roughly the same area. As such, both the UCSP and the No Project Alternative have a roughly equivalent potential for impacting geological resources.

### **10.1.6 Agriculture**

There are no agricultural resources within the UCSP area, therefore no impacts to agricultural resources would occur by either the proposed UCSP or the No Project Alternative.

### **10.1.7 Hydrology and Water Quality**

Impacts to hydrology and water quality resulting from implementation of the No Project Alternative would be less than those identified for the proposed UCSP. As with the proposed UCSP, implementation of the No Project Alternative has the potential to result in significant impacts related to water resources and quality. Future development within the Subdistricts Area would increase runoff by increasing the impermeable surface area. Future development that intensifies land use over existing conditions, would increase direct runoff to drainage basins, municipal storm water systems, and ultimately to receiving surface and ground water bodies. This runoff will likely contain typical urban runoff pollutants such as sediment, pathogens, heavy metals, petroleum products, nutrients, and trash.

While the proposed UCSP and the No Project Alternative both allow development of similar land use types (commercial and residential) over roughly the same geographic area, the No Project Alternative allows fewer total units and lower density, building heights and mass. Compared to the three-fold increase in residential units and commercial square footage allowed in the proposed UCSP, the No Project Alternative would allow an increase in both commercial/office development and some undeveloped residential capacity. Without project specifics it cannot be determined with certainty whether or not the greater intensification proposed under the UCSP would result in a larger amount of impermeable surface area compared to the No Project Alternative, or would result in a roughly equal amount of impermeable surface area due to intensification being realized in extruded building heights.

However, based strictly on the increase in allowable number of dwellings and commercial square footage proposed in the UCSP over the No Project Alternative, it can be concluded that the No Project Alternative would have less of an impact on water quality than the proposed UCSP. In either case, significant impacts to water quality resulting from future

development would be similarly mitigated through compliance with all applicable federal, state and local laws and regulations regarding water quality (e.g. JURMP, SUSMP, NPDES, SWPP, and City Development and Redevelopment Projects Storm Water Manual).

### **10.1.8 Transportation**

Impacts to transportation resulting from implementation of the No Project Alternative would be less than those identified for the proposed UCSP. As with the proposed UCSP, implementation of the No Project Alternative has the potential to result in significant traffic and circulation impacts. Future development within the Subdistricts Area in accordance with existing zoning would potentially allow additional commercial uses, some residential development and would not provide for the benefits of mixed use and compact development which concentrates development at transit stations, and reduces long commute trips. Currently, all existing roadway segments and all except three existing intersections within the UCSP area operate at acceptable levels of service. The three-fold increase in residential and commercial population as projected in the proposed UCSP would result in two roadway segments and 19 intersections dropping below acceptable levels of service. While not quantifiable given the lack of available data, it can be assumed that the potential increase in the residential and commercial population of the UCSP area, as allowed by existing zoning, would also result in several roadway segments and intersections decreasing in levels of service. As such, both the UCSP and the No Project Alternative would result in significant traffic impacts; however, the No Project Alternative would likely have less of an impact in terms of number of roadways and intersections affected.

In regard to future demands for public transit services, a similar conclusion can be drawn. While both the proposed UCSP and the No Project Alternative would allow future development that would place greater demand on local and regional transit services, the lesser number of allowable residential units and commercial square footage resulting from existing zoning would create less of a future impact on area roadways and intersections and less of a demand on public transit services. In either case, significant impacts to transportation would require mitigation in the form of roadway and intersection improvements.

### **10.1.9 Air Quality**

Air quality emissions resulting from implementation of the No Project Alternative would be potentially greater than those identified for the proposed UCSP. For comparative purposes, an assessment of the anticipated air emissions resulting from Year 2030 buildout of the former General Plan and the recently adopted GPU was prepared for the GPU EIR using the URBEMIS2002 computer program (Yolo-Solano Air Quality Management District 2003).

Using the land use designations for the former General Plan (which the existing Municipal Code Zoning implements) and the adopted GPU, along with trip generation rates developed by SANDAG (SANDAG 2002), and URBEMIS2002 defaults for other parameters,

average daily emissions were estimated using URBEMIS2002 assuming buildout of the plans in the year 2030.

The results of the modeling concluded that with the exception of reactive organic gases, the emissions resulting from the adopted GPU, including NO<sub>x</sub> compounds, are anticipated to be less than those that would occur under the former General Plan. In addition, the former General Plan shows an increase in PM<sub>10</sub> and SO<sub>x</sub> relative to the existing condition.

Air quality impacts resulting from inconsistency with the SDAB RAQS would be less with implementation of the No Project Alternative than with implementation of the proposed UCSP. Because the No Project Alternative is consistent with the growth assumptions of the RAQS, implementation of the No Project Alternative would comply with the SANDAG TCM Plan and, therefore, would not result in significant air quality impacts. The proposed UCSP and the GPU is not in compliance with the SANDAG TCM Plan and as such is considered a significant impact. The No Project Alternative conforms to the program and does not represent a significant air plan impact.

### **10.1.10 Noise**

Noise impacts resulting from implementation of the No Project Alternative would be less than those identified for the proposed UCSP. As with the proposed UCSP, development of the No Project Alternative has the potential to result in significant noise impacts. Development under the No Project Alternative, as with the proposed UCSP, would result in an increase in allowable density along highways and major arterials and adjacent to rail, thereby exposing potentially sensitive receptors (residential and park users) to noise levels in excess of applicable thresholds. However, given that the No Project Alternative allows less of an increase in allowable development compared to the three-fold increase allowed under the proposed UCSP, the noise impacts resulting from the No Project Alternative would be less than those incurred under the proposed UCSP. The proposed UCSP also allows a greater number of sensitive receptors to be placed adjacent to the San Diego Trolley line and Interstate 5, through increased density and building heights in these areas over existing zoning. As with the proposed UCSP, all future projects with the potential to be exposed to noise in excess of specified limits shall be required to complete applicable exterior and interior noise analyses and demonstrate to the satisfaction of the City Planning and Building Director, Community Development Director, or Building Official, that project-specific design includes measures to reduce any noise impacts to below a level of significance.

### **10.1.11 Public Services and Utilities**

Impacts to public services and utilities resulting from implementation of the No Project Alternative would be less than those identified for the proposed UCSP. The No Project Alternative would allow an increase in the residential and commercial population of the

UCSP Subdistricts Area. This increase in population and land use intensity would result in an associated increase in demands for law enforcement, fire protection, educational services, libraries, and parks, as well as increased demands on supply and distribution of potable water, wastewater, solid waste and energy utilities. Impacts to the provision of these public services and utilities would be significant if provision of additional facilities, personnel or other resources does not coincide with the anticipated population growth and increased demand for these services and utilities. The No Project Alternative represents a decrease in potential population relative to the proposed UCSP, thus reducing the future demand for services and utilities.

The City of Chula Vista currently implements a public facilities development impact fee program that requires all new development within the City to contribute their fair share to the funding and construction of needed public infrastructure improvements. In addition, the City imposes various other levies (recreational facilities development impact fees, statutory school impacts fees) and programs (Growth Management Ordinance, Capital Improvement Program) that annually review, reprioritize and schedule needed citywide public infrastructure. Subsequent projects developed under the No Project Alternative (or the proposed UCSP) will be subject to the payment of applicable development impact fees at the rate in effect at the time building permits are issued in order to mitigate significant impacts to public services and utilities.

### **10.1.12 Population and Housing**

Population and housing impacts resulting from implementation of the No Project Alternative would be equivalent to those identified for the proposed UCSP. As with the proposed UCSP, development of the No Project Alternative would not result in significant population and housing impacts. The No Project Alternative (and the proposed UCSP) would induce population growth and allow new development and redevelopment to accommodate growth that is already planned to occur locally. Development in accordance with the existing zoning of the No Project Alternative would not displace substantial numbers of existing housing or people necessitating the construction or replacement of housing elsewhere. Housing that may be removed by future individual projects (due to construction/redevelopment) would not necessitate the construction of housing elsewhere because the overall number of housing units allowed by the Project would be sufficient within the UCSP area to accommodate the affected population.

The proposed UCSP and the No Project Alternative both allow development over the same geographic area. As such, both the UCSP and the No Project Alternative have an equivalent potential for affecting population and housing, with both scenarios resulting in effects considered to be not significant. The UCSP would provide greater opportunity for new housing that would be more responsive to the regional housing needs as projected by SANDAG and the State Department of Housing and Community Development.

### **10.1.13 Hazards/Risk of Upset**

Hazardous materials impacts resulting from implementation of the No Project Alternative would be the same as those identified for the proposed UCSP. The UCSP area contains numerous known and listed hazardous sites of potential environmental concern. Approximately 103 sites of potential environmental concern were identified in the UCSP Subdistricts Area through recent database research. In addition, the UCSP Subdistricts Area contains several older buildings which may contain hazardous building materials (lead, asbestos, PCBs) that could be exposed during demolition or renovation. Future development consistent with the No Project Alternative, as with the proposed UCSP, may result in significant impacts if such development allows greater contact between humans and hazards. In either case, significant hazardous materials impacts would be similarly mitigated through compliance with all applicable federal, state and local laws and regulations regarding hazardous materials siting, assessment and remediation. In addition, a risk assessment would be required at all sites within the UCSP area where contamination has been identified or is discovered during future construction activities; and a hazardous building materials survey would be conducted at all buildings in the UCSP area prior to demolition or renovation activities.

## **10.2 Reduced Project Alternative**

The Reduced Project Alternative represents less residential development than the proposed project in areas currently restricted to retail use along the downtown segments of Third Avenue, along E Street in the vicinity of Third and Fourth Avenues, and decreased residential and transit-oriented uses in the vicinity of major transit corridors, over the proposed UCSP. The Reduced Project Alternative would result in a 25 percent reduction in the projected buildout of the proposed UCSP through 2030. This alternative does not change the proposed land uses, nor affect land use density. Under this alternative, a total of 9,025 residential units could be built in the UCSP Subdistricts Area rather than the 10,800 projected under the GPU and implemented by the proposed UCSP. This would result in a net increase of 5,325 residential units within the UCSP Subdistricts Area, compared to the net increase of 7,100 allowed in the proposed UCSP. Table 10-2 provides a comparison of projected buildout under the Reduced Project Alternative and the proposed UCSP. The purpose of this alternative is to reduce the impacts that would result from the adoption of the proposed plan as they relate to intensity of use. This alternative would specifically reduce impacts to traffic, air quality, noise, and public utilities and services (Table 10-2).

**TABLE 10-2  
COMPARISON OF PROJECTED BUILDOUT FOR  
REDUCED PROJECT ALTERNATIVE AND PROPOSED UCSP**

Land Use	Existing	Net Increase	Total
<b>Reduced Project Alternative Projected Buildout</b>			
Multi-family residential	3,700 dus	5,325 dus	9,025 dus
Commercial retail	3,000,000 sf	750,000 sf	3,750,000 sf
Commercial office	2,400,000 sf	975,000 sf	3,375,000 sf
Commercial-visitor serving		975,000 sf	975,000 sf
<b>Proposed UCSP Projected Buildout</b>			
Multi-family residential	3,700 dus	7,100 dus	10,800 dus
Commercial retail	3,000,000 sf	1,000,000 sf	4,000,000 sf
Commercial office	2,400,000 sf	1,300,000 sf	3,700,000 sf
Commercial-visitor serving		1,300,000 sf	1,300,000 sf

NOTE: All totals are approximate and may include a combination of new infill development and existing uses.

dus = dwelling units

sf = square feet

## 10.2.1 Land Use

Impacts to land use resulting from the Reduced Project Alternative would be the same as those identified for the proposed UCSP. The Reduced Project Alternative would implement the same zoning as the proposed UCSP. The zoning conforms to the adopted GPU. The proposed UCSP proposes changes in zoning to increase density and to allow for a greater degree of mixed-use development in key locations promoting pedestrian and transit oriented development. As identified in the Land Use section 5.1 of this EIR, future development's compliance with the UCSP's Land Use and Development Regulations and Development Design Guidelines, which are consistent with the adopted GPU would ensure that no significant land use adjacency/community character and planning conformance impacts would result from implementation of the UCSP.

The Municipal Code requires that the City implement the General Plan through zoning classifications. Because the Reduced Project Alternative would result in the same land use regulations as the proposed project, it would not result in the Urban Core planning area being out of compliance with the Municipal Code. Therefore, it would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

## 10.2.2 Landform Alteration/Aesthetics

Impacts to landform and aesthetics resulting from the Reduced Project Alternative would be less than those identified for the proposed UCSP. Adoption of the UCSP would result in substantial changes to visual quality throughout the UCSP area. Increased density within

the UCSP Subdistricts would result in increased number of buildings and greater building heights and mass than what exists today. By reducing the overall use of the area by 25 percent, these effects would be lessened. The development standards and design guidelines which outline allowable and recommended parameters for the development of the Subdistricts Area that are proposed as part of the proposed UCSP would also occur under this alternative. Compliance with these standards and guidelines ensure that development within the UCSP area would not result in architecture, urban design, landscaping, or landforms that negatively detract from the prevailing aesthetic character of the site or surrounding area. The Reduced Project Alternative does not reduce the footprint or location of development or change the nature of the projects that could be permitted within the Subdistricts Area; however, this alternative would lessen the aesthetic effects relative to the proposed UCSP because development intensity would be less (reduced by 25 percent) under this alternative.

Since individual project specifics are not known at this time, the extent to which they will conform to the UCSP development regulations and design guidelines cannot be determined. Without assurance of conformance with the UCSP, this impact remains significant, and will remain significant under the Reduced Project Alternative. Therefore, conditions of approval shall be required on a project by project basis to ensure development is consistent with the UCSP.

### **10.2.3 Biological Resources**

There are no biological resources within the UCSP Subdistricts area, therefore, no impacts would occur by adoption of the proposed UCSP or the Reduced Project Alternative.

### **10.2.4 Cultural and Paleontological Resources**

Impacts to cultural and paleontological resources resulting from the Reduced Project Alternative would be the same as those identified for the proposed UCSP. As noted in Section 5.3.4 of this EIR, 11 buildings or sites within the UCSP Subdistricts Area are currently designated or eligible to be designated as historically significant. Demolition or substantial alteration of these buildings as a result of future development in accordance with the proposed UCSP would comprise a significant cultural resources impact. The Reduced Project Alternative does not change this potential. As with the proposed UCSP, the loss or substantial alteration of as-yet unknown historically significant architectural resources or prehistoric and historic archaeological resources due to development of the Reduced Project Alternative would comprise a significant cultural resources impact.

While the likelihood of encountering significant archeological resources and human remains is low, future construction activities in accordance with the UCSP or the Reduced Project Alternative may impact such resources. Both the proposed UCSP and the Reduced Project

Alternative have an equivalent potential for affecting archaeological resources and human remains. This would comprise a significant archaeological impact.

Mitigation measures 5.3.5-1 through 5.3.5-5 detailed in Section 5.3.5 would be required to mitigate these impacts from the implementation of the Reduced Project Alternative. Preservation, adaptive reuse, rehabilitation, or relocation of a listed/eligible historic resource consistent with the Secretary of the Interior's Standards and Guidelines would reduce impacts to said historical structures to below a level of significance. If on a project-specific basis, these actions are demonstrated to be infeasible and the resource would be demolished documentation, of the resource per HABS Level I may not be sufficient to reduce impacts to below a level of significance. In that case, impacts to architectural resources may be significant and unmitigated.

## **10.2.5 Geology and Soils**

Geology and soils impacts resulting from the Reduced Project Alternative would be the same as those identified for the proposed UCSP. As with the proposed UCSP, implementation of the Reduced Project Alternative has the potential to result in significant impacts related to geology and soils. Future development would be exposed to geological hazards associated with seismic events, liquefaction, and expansive soils. Potential impacts resulting from geologic hazards would be reduced below a level of significance through project-specific design measures, including compliance with applicable building codes (e.g., Title 24 of the California Code of Regulations, and the UBC). Additionally, a comprehensive, site-specific soil and geologic evaluation shall be conducted for all future projects to determine potential hazards and site conditions. The proposed UCSP and the Reduced Project Alternative both forecast development over roughly the same area. As such, both the proposed plan and the Reduced Project Alternative have an equivalent potential for impacting geological resources.

## **10.2.6 Agriculture**

There are no agricultural resources within the UCSP area; therefore, no impacts to agricultural resources would occur by either the proposed UCSP or the Reduced Project Alternative.

## **10.2.7 Hydrology and Water Quality**

Impacts to hydrology and water quality resulting from the Reduced Project Alternative would be roughly the same as those identified for the proposed UCSP. As with the proposed UCSP, implementation of the Reduced Project Alternative has the potential to result in significant impacts related to water resources and water quality. Future development would increase runoff by increasing the impermeable surface area. The proposed UCSP and the Reduced Project Alternative both forecast development over roughly the same area. As

such, both the proposed UCSP and the Reduced Project Alternative have roughly equivalent potential for impacting water quality. Significant impacts to water quality resulting from future development would be mitigated through compliance with all applicable federal, state and local laws and regulations regarding water quality (e.g. JURMP, SUSMP, NPDES, SWPP, and City Development and Redevelopment Projects Storm Water Manual).

### **10.2.8 Transportation**

Impacts to transportation resulting from the Reduced Project Alternative would potentially be less than those identified for the proposed UCSP. As with the proposed UCSP, implementation of the Reduced Project Alternative has the potential to result in significant traffic and circulation impacts. Future development within the Subdistricts Area in accordance with the proposed UCSP would result in two roadway segments and 19 intersections dropping below acceptable levels of service. While not quantifiable given lack of available data, it can be assumed that the Reduced Project Alternative, which comprises a 25 percent reduction of the proposed UCSP, would also result in several roadway segments and intersections dropping below acceptable levels of service. As such, both the UCSP and the Reduced Project Alternative would result in significant traffic impacts; however, the Reduced Project Alternative would likely have less of an impact in terms of number of roadways and intersection affected.

In regard to future demands for public transit services, a similar conclusion can be drawn. While both the proposed UCSP and the Reduced Project Alternative would allow future development that would place greater demand on local and regional transit services, the lesser number of allowable residential units and commercial square footage resulting from the Reduced Project Alternative would create less of a future impact on area roadways and intersections and less of a demand on public transit services. In either case, significant impacts to transportation would require mitigation in the form of roadway and intersection improvements.

### **10.2.9 Air Quality**

Air quality Impacts resulting from the Reduced Project Alternative would be less than those identified for the proposed UCSP. For comparative purposes, an assessment of the anticipated air emissions resulting from buildout of the GPU in the year 2030 under various alternative scenarios was prepared for the GPU EIR using the URBEMIS2002 computer program (Yolo-Solano Air Quality Management District 2003). Using the land use designations for the adopted and preferred alternative General Plans, along with trip generation rates developed by SANDAG (SANDAG 2002), and URBEMIS2002 defaults for other parameters, average daily emissions were estimated using URBEMIS2002 assuming buildout of the plans in the year 2030. The results of this analysis are shown in Table 10-3 below.

**TABLE 10-3  
AVERAGE DAILY EMISSIONS TO THE SAN DIEGO AIR BASIN  
(pounds per day)**

Season/Pollutant	Urban Core Specific Plan (2030)			Reduced Project Alternative (2030)		
	Mobile Sources	Area Sources	Total <sup>1</sup>	Mobile Sources	Area Sources	Total <sup>1</sup>
Summer						
CO	5,796.00	64.08	5,860.20	5233.58	49.26	5282.84
NOx	503.60	151.60	655.20	454.59	116.05	570.65
ROG	512.50	537.10	1,049.70	451.71	450.40	902.11
SO <sub>x</sub> <sup>2</sup>	16.87	0.00	16.90	15.23	0.00	15.23
PM <sub>10</sub>	2,949.00	0.28	2,949.60	2662.42	0.22	2662.64
Winter						
CO	5,968.00	62.70	6,030.60	5,387.86	48.15	5436.01
NOx	754.6.0	151.60	906.20	681.18	116.03	797.21
ROG	531.90	537.00	1,068.90	480.20	450.24	930.47
SO <sub>x</sub> <sup>2</sup>	16.55	0.00	16.60	14.94	0.00	14.94
PM <sub>10</sub>	2,949.00	0.28	2,949.60	2,662.42	0.22	2662.64

<sup>1</sup>Totals may differ due to rounding.

<sup>2</sup>Emissions calculated by URBEMIS2002 are for SO<sub>2</sub>.

The results of the modeling concluded that with the exception of reactive organic gases, the emissions resulting from the Reduced Project Alternative will be less than those that would occur under the proposed UCSP.

As seen from Table 5.10-6 of Section 5.10 of this EIR, small individual projects are not expected to exceed the thresholds of significance. If the smaller projects were considered as a single project they might exceed the quarterly thresholds. The effects of projects such as those discussed in Section 5.10, would occur under the Reduced Project Alternative as well as the proposed UCSP. Emissions for both the proposed UCSP and the Reduced Project Alternative are anticipated to be below those that would occur under existing conditions due to improvements in mobile source emissions. As such, implementation of either alternative is not anticipated to have a significant air quality impact when compared to the existing condition. The Reduced Project Alternative represents an improvement in air quality over both the proposed UCSP and the existing condition.

Because the region is not in attainment for ozone and PM<sub>2.5</sub> and is unclassifiable for PM<sub>10</sub>, there is the potential for future projects that would conform to the UCSP to contribute to cumulatively considerable emissions should multiple projects be implemented simultaneously. Should multiple projects equivalent to 200 dwelling units per acre be initiated in any given year, it is anticipated that the construction of those projects would result in a potentially cumulatively considerable increase in criteria air pollutant emissions.

Because there is a reasonable potential for multiple projects occurring at the same time, construction impacts are considered significant under the Reduced Project Alternative.

Furthermore, because the Reduced Project Alternative is not consistent with the growth assumptions of the RAQS, implementation of the adopted plan would not comply with the SANDAG TCM Plan and, therefore, would result in significant air quality impacts. Cumulatively significant impacts associated with sensitive receptors adjacent to the Interstate 5 Freeway would also remain under this alternative. However, given that the Reduced Project Alternative comprises a 25 percent reduction of the proposed UCSP and by extension 25 percent fewer units, the air quality impacts to the Reduced Project Alternative would be potentially less than those incurred under the proposed UCSP. As with the proposed UCSP, mitigation for mobile source reductions of diesel particulates is the responsibility of state and federal agencies, therefore the impact would be significant and unmitigated.

### **10.2.10 Noise**

Noise impacts resulting from implementation of the Reduced Project Alternative would potentially be less than those identified for the proposed UCSP. As with the proposed UCSP, development of the Reduced Project Alternative has the potential to result in significant noise impacts. Development under the Reduced Project Alternative, as with the proposed UCSP, would result in an increase in allowable density along highways and major arterials and adjacent to rail, thereby exposing potentially sensitive receptors (residential and park users) to noise levels in excess of applicable thresholds. However, given that the Reduced Project Alternative comprises a 25 percent reduction of the proposed UCSP and by extension 25 percent fewer residents, the noise impacts resulting from the Reduced Project Alternative would be potentially less than those incurred under the proposed UCSP.

As with the proposed UCSP, all future projects allowed in the Reduced Project Alternative with the potential to be exposed to noise in excess of the specified limits shall be required to complete applicable exterior and interior noise analyses and demonstrate to the satisfaction of the City Planning and Building Director, Community Development Director, or Building Official, that project-specific design includes measures to reduce any noise impacts to below a level of significance.

### **10.2.11 Public Services and Utilities**

Impacts to public services and utilities resulting from the Reduced Project Alternative would be less than those identified for the proposed UCSP. The Reduced Project Alternative represents a decrease in potential population relative to the proposed UCSP, thus reducing the demand for services and utilities. While the Reduced Project Alternative would reduce the demand for public services and utilities resources compared to the proposed UCSP, the same approach to upgrading facilities would need to be implemented.

The City of Chula Vista currently implements a public facilities development impact fee program that requires all new development within the City to contribute their fair share to the funding and construction of needed public infrastructure improvements. In addition, the City imposes various other levies (recreational facilities development impact fees, statutory school impacts fees) and programs (Growth Management Ordinance, Capital Improvement Program) that annually review, reprioritize and schedule needed citywide public infrastructure. In addition, the proposed UCSP and Reduced Project Alternative include a Facilities Implementation Analysis that evaluates ongoing, long-term improvement projects and determines whether long-term projects revenues are sufficiently aligned with long-term potential costs of public infrastructure. Subsequent projects developed under the Reduced Project Alternative (or the proposed UCSP) will be subject to the payment of applicable development impact fees at the rate in effect at the time building permits are issued in order to mitigate significant impacts to public services and utilities.

### **10.2.12 Population and Housing**

Impacts to population and housing resulting from the Reduced Project Alternative would be the same as those identified for the proposed UCSP. As with the proposed UCSP, development of the Reduced Project Alternative would not result in significant population and housing impacts. While the Reduced Project Alternative would also induce substantial population growth it would allow new development and redevelopment that would accommodate growth that is already planned to occur locally. Development in accordance with the Reduced Project Alternative would not displace substantial numbers of existing housing or people necessitating the construction or replacement of housing elsewhere. Housing that may be removed by future individual projects would not necessitate the construction of housing elsewhere because the overall number of housing units allowed by the Reduced Project Alternative would be sufficient within the UCSP area to accommodate the affected population. The proposed UCSP and the Reduced Project Alternative both forecast development over roughly the same area. As such, both the proposed UCSP and the Reduced Project Alternative have a roughly equivalent potential for affecting population and housing, with both scenarios resulting in effects considered to be not significant.

### **10.2.13 Hazards/Risk of Upset**

Hazardous materials impacts resulting from the Reduced Project Alternative would be roughly identical to those identified for the proposed UCSP. The UCSP area contains numerous known and listed hazardous sites of potential environmental concern. Approximately 103 sites of potential environmental concern were identified in the UCSP Subdistricts Area through recent database research. In addition, the UCSP Subdistricts Area contains several older buildings which may contain hazardous building materials (lead, asbestos, PCBs) that could be exposed during demolition or renovation. The proposed UCSP and the Reduced Project Alternative both forecast development over roughly the

same area. As such, both the proposed plan and the Reduced Project Alternative have an equivalent potential for encountering hazardous materials.

Future development consistent with the Reduced Project Alternative, as with the proposed UCSP, may result in significant impacts if such development allows greater contact between humans and hazards. In either case, significant hazardous materials impacts would be similarly mitigated through compliance with all applicable federal, state and local laws and regulations regarding hazardous materials siting, assessment and remediation. In addition, a risk assessment would be required at all sites within the UCSP area where contamination has been identified or is discovered during future construction activities; and a hazardous building materials survey would be conducted at all buildings in the UCSP area prior to demolition or renovation activities.

### **10.3 Automobile Priority Alternative**

The Automobile Priority Alternative involves the design and designation of area roadways such that the adverse traffic effects identified for the proposed UCSP would be lessened and traffic flow would take priority over pedestrian oriented design. Under this alternative, land use densities and intensities would be the same as with the proposed UCSP, but certain pedestrian-oriented streetscape design features would be eliminated in order to maximize traffic flow. The only impacts that would change in this alternative would be related to traffic flow.

The proposed UCSP identifies roadway improvements that would result in UCSP intersections and street segments operating at LOS D or better. As indicated in the traffic analysis conducted for the UCSP, even with the suggested improvements, the roadway segment of Third Avenue between E and G Streets and three intersections would operate at LOS E. These intersections include:

- Broadway/H Street
- Hilltop Drive/H Street
- Third Avenue/J Street

Additional traffic improvements to mitigate decline in the LOS for these intersections and street segment was not included in the proposed UCSP because of conflicts with plan objectives and right-of-way constraints. Guiding principles of the UCSP are based on smart growth strategies, SANDAG's Regional Transportation Plan (or MOBILITY 2030), and SANDAG's Congestion Management Program, which advise new development to maximize density, reduce automobile congestion by increasing pedestrian, cycling, and public transit activity, and allow residents to enjoy short walking distances to and from employment, housing, shopping, entertainment, and different modes of transportation. In order to fully mitigate traffic impacts within the Subdistricts Area, the UCSP would have had to implement

a traffic mitigation measure that conflicts with the plan's primary objective, thus sacrificing pedestrian-friendly design for automobile-preferred design. In addition, some of these improvements could require additional right-of way that is currently developed with existing commercial and residential uses, which could not be assured at this time.

At the Broadway/H Street intersection (Int. #27), an additional northbound and southbound through lane would be required in order to achieve an acceptable LOS D conditions. However, this improvement would require extensive widening of Broadway and H Street to allow for lane drops. The Automobile Priority Alternative would include this widening. It would, as a result, create longer pedestrian crossings.

At the Hilltop Drive/H Street intersection, the proposed UCSP includes no improvements due to right-of way constraints. The poor LOS at this intersection is primarily caused by the high traffic volumes in the eastbound/westbound movements. Additional through and/or turn lanes would be required in order to improve this intersection to an acceptable LOS. The Automobile Priority Alternative would include this improvement.

At the Third Avenue/J Street intersection, the proposed UCSP includes no improvements due to right-of way constraints. The required improvement is an additional southbound right-turn lane. The Automobile Priority Alternative would include this improvement.

### **10.3.1 Land Use**

Effects to land use resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. The Automobile Priority Alternative would implement the same zoning as the proposed UCSP. The zoning conforms to the adopted General Plan. Because the Automobile Priority Alternative would result in the same land use regulations as the proposed project, it would not result in the UCSP area being out of compliance with the GPU. Therefore, it would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

### **10.3.2 Landform Alteration/Aesthetics**

Effects to visual character of the UCSP area resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. Adoption of the Automobile Priority Alternative would result in substantial changes to visual quality throughout the UCSP area. The projected three-fold increase in residential and commercial population within the UCSP Subdistricts Area would be accommodated through increased density, building heights and mass, as in the proposed UCSP. This intensification of existing land use would be substantial. The existing visual character of low-rise single-use commercial and residential blocks of the UCSP would change to a mix of primarily low rise and mid-rise, with some high-rise, mixed-uses where commercial, office, and high-density residential uses are integrated within the same structure or block. The development

standards and design guidelines which outline allowable and recommended parameters for the development of the Subdistricts Area that are proposed as part of the UCSP would also occur under this alternative. Conditions of approval shall be required on a project by project basis to ensure development is consistent with the UCSP development standards and design guidelines. .

At the Broadway/H Street intersection, the Automobile Priority Alternative would include an additional northbound and southbound through lane. This improvement would require extensive widening. This widening of Broadway and H Street would allow for lane drops, however, it would create longer pedestrian crossings and would result in a less pedestrian friendly environment. While it would avoid the identified traffic impact, it would not meet the goals of the proposed project to enhance pedestrian movement. This change in the Automobile Priority Alternative over the proposed UCSP would result in a negligible difference in the visual quality of this intersection.

At the Hilltop Drive/H Street intersection, the Automobile Priority Alternative would include additional through and/or turn lanes in order to improve this intersection to an acceptable LOS. The poor LOS at this intersection is primarily caused by high traffic volumes in the eastbound/westbound turning movements. The additional through and/or turn lanes needed to improve this intersection were not included in the proposed UCSP due to right-of way constraints. These additional improvements would not result in a noticeable difference in the visual quality of the UCSP area compared to the proposed UCSP.

At the Third Avenue/J Street intersection the Automobile Priority Alternative would include an additional southbound right-turn lane. This improvement would also address Third Avenue traffic congestion between E and G Streets. The additional southbound right turn-lane would impact the Henry's Marketplace building, which is built adjacent to the sidewalk. By comparison, the proposed UCSP proposes the narrowing of the travel way on Third Avenue; one of the through lanes along Third Avenue in each direction would be converted to an exclusive right-turn lane. The purpose of this narrowing is to create a friendlier pedestrian atmosphere in accordance with the goals of the GPU. Provision of the widening and maintenance of the current designated lane configuration would adversely affect the nature of the community at this intersection and represents a significant aesthetic impact.

The resulting difference in visual character arising from the intersection and street segment improvements provided in the Automobile Priority Alternative, but not the proposed UCSP, would be negligible, and the effects to visual character of the UCSP area resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP.

### **10.3.3 Biological Resources**

There are no biological resources within the UCSP area; therefore, no impacts would occur by adoption of the Automobile Priority Alternative.

### **10.3.4 Cultural and Paleontological Resources**

The Automobile Priority Alternative does not change the potential for impacts to cultural and paleontological resources as described in Sections 5.3 and 5.5 of this report. Effects to cultural and paleontological resources resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. As with the proposed UCSP, the loss or substantial alteration of as-yet unknown historically significant architectural resources or prehistoric and historic archaeological resources would comprise a significant cultural resources impact.

Mitigation measures 5.3.5-1 through 5.3.5-5 and 5.5-1 detailed above would be required to mitigate these impacts from the implementation of the Automobile Priority Alternative. If on a project-specific basis, these actions are demonstrated to be infeasible and the resource would be demolished documentation of the resource per HABS Level I may not be sufficient to reduce impacts to below a level of significance. In that case, impacts to architectural resources may be significant and unmitigated.

### **10.3.5 Geology and Soils**

Impacts to geology and soils resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. As with the proposed UCSP, implementation of the Automobile Priority Alternative has the potential to result in significant impacts related to geology and soils. Future development would be exposed to geological hazards associated with seismic events, liquefaction, and expansive soils. Potential impacts resulting from geologic hazards would be reduced below a level of significance through project-specific design measures, including compliance with applicable building codes (e.g., Title 24 of the California Code of Regulations, and the UBC). Additionally, a comprehensive, site-specific soil and geologic evaluation shall be conducted for all future projects to determine potential hazards and site conditions. The proposed UCSP and the Automobile Priority Alternative both forecast development over the same area. As such, both the proposed plan and the Automobile Priority Alternative have an equivalent potential for impacting geological resources.

### **10.3.6 Agriculture**

There are no agricultural resources within the UCSP area; therefore, no impacts to agricultural resources would occur by the adoption of the Automobile Priority Alternative.

### **10.3.7 Hydrology and Water Quality**

Hydrology and water quality effects resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. As with the proposed UCSP, implementation of the Automobile Priority Alternative has the potential to result in significant

impacts related to water resources and water quality. Future development would increase runoff by increasing the impermeable surface area in the City. Adherence to water quality control measures required under the San Diego County Municipal Permit would avoid potential water quality impacts. The proposed UCSP and the Automobile Priority Alternative both forecast development over the same area. As such, both the proposed plan and the Automobile Priority Alternative have an equivalent potential for impacting water quality.

### **10.3.8 Transportation**

Transportation impacts resulting from the Automobile Priority Alternative would be less than those identified for the proposed UCSP. The Automobile Priority Alternative would mitigate impacts to the roadway segment of Third Avenue between E and G Streets and the following three intersections by resulting in improvements that would allow them to operate at LOS D or better.

- Broadway/H Street
- Hilltop Drive/H Street
- Third Avenue/J Street

With inclusion of the improvements identified for this alternative, there would be no significant impacts to UCSP intersections. All mitigation measures identified for the proposed UCSP would be required in conjunction with the Automobile Priority Alternative.

Additional traffic improvements to mitigate decline in the LOS for these intersections and street segment was not included in the proposed UCSP because of conflicts with plan objectives and right-of-way constraints. In order to fully mitigate traffic impacts within the Subdistricts Area, the UCSP would have had to implement traffic mitigation measures that conflict with the plan's objectives to enhance pedestrian movement. The acquisition of additional of right-of-way was not considered feasible due to the existing built condition at the affected intersections.

### **10.3.9 Air Quality**

Air quality impacts resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. Because there is a reasonable potential for multiple projects occurring at the same time, construction impacts are significant under both the Automobile Priority Alternative and proposed UCSP. Furthermore, because the Automobile Priority Alternative and the proposed UCSP are not consistent with the growth assumptions of the RAQS, implementation of this alternative would not comply with the SANDAG TCM Plan and, therefore, would result in significant air quality impacts. Cumulatively significant impacts associated with sensitive receptors adjacent to the Interstate 5 Freeway would also remain under this alternative. As with the proposed UCSP,

mitigation for mobile source reductions of diesel particulates is the responsibility of state and federal agencies, therefore the impact would be significant and unmitigated.

### **10.3.10 Noise**

Noise effects resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. As with the proposed UCSP, development of the Automobile Priority Alternative has the potential to result in significant noise impacts. Development under the Automobile Priority Alternative would result in an increase in allowable density along highways and major arterials, and adjacent to rail. All future projects with the potential to be exposed to noise in excess of the specified limits would be required to complete applicable exterior and interior noise analyses and demonstrate to the satisfaction of the City Planning and Building Director, Community Development Director, or Building Official, that project-specific design includes measures to reduce any noise impacts to below a level of significance.

### **10.3.11 Public Services and Utilities**

Implementation of the Automobile Priority Alternative would result in significant demands for public services and utilities identical to those identified for in the proposed UCSP. Automobile Priority Alternative does not change the project population relative to the proposed UCSP. As such, it does not reduce the demand for services and utilities.

### **10.3.12 Population and Housing**

Impacts to population and housing resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. As with the proposed UCSP, development of the Automobile Priority Alternative would not result in significant population and housing impacts. While the Automobile Priority Alternative and the proposed UCSP would induce substantial population growth they would allow new development and redevelopment that would accommodate growth that is already planned to occur locally. Development in accordance with the Automobile Priority Alternative and the proposed UCSP would not displace substantial numbers of existing housing or people necessitating the construction or replacement of housing elsewhere. Housing that may be removed by future individual projects would not necessitate the construction of housing elsewhere because the overall number of housing units allowed by the proposed UCSP and Automobile Priority Alternative would be sufficient within the UCSP area to accommodate the affected population. Both the UCSP and the Automobile Priority Alternative have an equivalent potential for affecting population and housing, with both scenarios resulting in effects considered to be not significant.

### **10.3.13 Hazards/Risk of Upset**

Effects from hazardous materials resulting from the Automobile Priority Alternative would be identical to those identified for the proposed UCSP. The UCSP area contains numerous known and listed hazardous sites of potential environmental concern. Approximately 103 sites of potential environmental concern were identified in the UCSP Subdistricts Area through recent database research. In addition, the UCSP Subdistricts Area contains several older buildings which may contain hazardous building materials (lead, asbestos, PCBs) that could be exposed during demolition or renovation. Future development consistent with the Automobile Priority Alternative, as with the proposed UCSP, may result in significant impacts if such development allows greater contact between humans and hazards. In either case, significant hazardous materials impacts would be similarly mitigated through compliance with all applicable federal, state and local laws and regulations regarding hazardous materials siting, assessment and remediation. In addition, a risk assessment would be required at all sites within the UCSP area where contamination has been identified or is discovered during future construction activities; and a hazardous building materials survey would be conducted at all buildings in the UCSP area prior to demolition or renovation activities.

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The following documents were used, referenced, or relied on in preparing this EIR, and the documents are available for public review and inspection of the City of Chula Vista, Community Development Department at 276 Fourth Avenue, and the Chula Vista Civic Center Library at 365 F Street in the City of Chula Vista. Some documents are additionally available for review on the City of Chula Vista website documents page at [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us). These documents are incorporated by reference in this EIR.

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## 12.0 EIR Preparation

This environmental impact report was prepared by the City of Chula Vista. The City was assisted by RECON, located at 1927 Fifth Avenue, San Diego, CA 92101. The following professional staff participated in the preparation of the EIR:

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# CHULA VISTA URBAN CORE SPECIFIC PLAN MITIGATION MONITORING REPORTING PROGRAM

## Introduction

This mitigation monitoring reporting program (MMRP) was prepared for the City of Chula Vista Urban Core Specific Plan to comply with Public Resources Code section 21081.6, which requires public agencies to adopt such programs to ensure effective implementation of mitigation measures. This monitoring program is dynamic in that it will undergo changes as additional mitigation measures are identified and additional conditions of approval are placed on the project throughout the project approval process. Pursuant to Public Resources Code section 21081.6(a)(2), the City of Chula Vista designates the Environment Review Coordinator and the City Clerk as the custodians of the documents or their material which constitute the record of proceedings upon which its decision is based.

This monitoring program will serve a dual purpose of verifying completion of the mitigation identified in the EIR and generating information on the effectiveness of the mitigation measures to guide future decisions. The program includes the following:

- Monitor qualifications
- Specific monitoring activities
- Reporting system
- Criteria for evaluating the success of the mitigation measures

The proposed project is the adoption of the Chula Vista Urban Core Specific Plan (UCSP). The UCSP would govern the development and revitalization of the urban core of the City of Chula Vista. The UCSP includes land use objectives, development regulations (zoning), and development design guidelines to implement the adopted General Plan vision for the urban core. The UCSP's planning horizon is the year 2030.

The City of Chula Vista is located in southern San Diego County, between National City and the southernmost portion of the City of San Diego which abuts the U.S.-Mexican border. The UCSP area occupies 1,700 acres in the northwest portion of the City. A smaller, 690-gross-acre Subdistricts Area was determined to be most in need of revitalization and is the focus of all the regulatory land use provisions of the UCSP. The new zoning, development standards, and design guidelines proposed in the UCSP will apply only to the Subdistricts Area of the UCSP. Existing zoning and land use regulations will not be changed in the remaining portion of the UCSP study area outside the Subdistricts Area. The UCSP Subdistricts Area comprises the traditional downtown area east of I-5, west of Del Mar Avenue, north of L Street, and south of C Street.

Under the proposed Chula Vista Urban Core Specific Plan, the urban core would be organized into three planning districts (Urban Core, Village, and Corridors) and 26 subdistricts.

The proposed Chula Vista Urban Core Specific Plan is described in the Environmental Impact Report (EIR) text. The EIR, incorporated herein as referenced, focused on issues determined to be potentially significant by the City of Chula Vista. The issues addressed in the EIR include land use, landform alteration/aesthetics, cultural resources, geology and soils, paleontological resources, population and housing, hydrology and water quality, traffic circulation and access, noise, air quality, public services, public utilities, and hazards/risk of upset. The environmental analysis concluded that for all of the environmental issues discussed, some of the significant and potentially significant impacts could be avoided or reduced through implementation of recommended mitigation measures. Potentially significant impacts requiring mitigation were identified for landform alteration/aesthetics, cultural resources, geology and soils, paleontological resources, water quality, traffic circulation and access, noise, air quality, public services, public utilities (energy), and hazards/risk of upset.

Public Resources Code section 21081.6 requires monitoring of only those impacts identified as significant or potentially significant. The monitoring program for the Urban Core Specific Plan therefore addresses the impacts associated with only the issue areas identified above.

#### Mitigation Monitoring Team

The monitoring activities would be accomplished by individuals identified in the attached MMRP table. While specific qualifications should be determined by the City of Chula Vista, the monitoring team should possess the following capabilities:

- Interpersonal, decision-making, and management skills with demonstrated experience in working under trying field circumstances;
- Knowledge of and appreciation for the general environmental attributes and special features found in the project area;
- Knowledge of the types of environmental impacts associated with construction of cost-effective mitigation options; and
- Excellent communication skills.

#### Program Procedural Guidelines

Prior to any construction activities, meetings should take place between all the parties involved to initiate the monitoring program and establish the responsibility and authority of the participants. Mitigation measures that need to be defined in greater detail will be

addressed prior to any project plan approvals in follow-up meetings designed to discuss specific monitoring effects.

An effective reporting system must be established prior to any monitoring efforts. All parties involved must have a clear understanding of the mitigation measures as adopted and these mitigations must be distributed to the participants of the monitoring effort. Those that would have a complete list of all the mitigation measures adopted by the City of Chula Vista would include the City of Chula Vista and its Mitigation Monitor. The Mitigation Monitor would distribute to each Environmental Specialist and Environmental Monitor a specific list of mitigation measures that pertain to his or her monitoring tasks and the appropriate time frame that these mitigations are anticipated to be implemented.

In addition to the list of mitigation measures, the monitors will have mitigation monitoring report (MMR) forms, with each mitigation measure written out on the top of the form. Below the stated mitigation measure, the form will have a series of questions addressing the effectiveness of the mitigation measure. The monitors shall complete the MMR and file it with the MM following the monitoring activity. The MM will then include the conclusions of the MMR into an interim and final comprehensive construction report to be submitted to the City of Chula Vista. This report will describe the major accomplishments of the monitoring program, summarize problems encountered in achieving the goals of the program, evaluate solutions developed to overcome problems, and provide a list of recommendations for future monitoring programs. In addition, and if appropriate, each Environmental Monitor or Environmental Specialist will be required to fill out and submit a daily log report to the Mitigation Monitor. The daily log report will be used to record and account for the monitoring activities of the monitor. Weekly and/or monthly status reports, as determined appropriate, will be generated from the daily logs and compliance reports and will include supplemental material (i.e., memoranda, telephone logs, and letters). This type of feedback is essential for the City of Chula Vista to confirm the implementation and effectiveness of the mitigation measures imposed on the project.

#### Actions in Case of Noncompliance

There are generally three separate categories of noncompliance associated with the adopted conditions of approval:

- Noncompliance requiring an immediate halt to a specific task or piece of equipment;
- Infraction that warrants an immediate corrective action but does not result in work or task delay; and
- Infraction that does not warrant immediate corrective action and results in no work or task delay.

There are a number of options the City of Chula Vista may use to enforce this program should noncompliance continue. Some methods commonly used by other lead agencies include “stop work” orders, fines and penalties (civil), restitution, permit revocations, citations, and injunctions. It is essential that all parties involved in the program understand the authority and responsibility of the on-site monitors. Decisions regarding actions in case of noncompliance are the responsibility of the City of Chula Vista.

#### SUMMARY OF PROJECT IMPACTS AND MITIGATION MEASURES

The following table summarizes the potentially significant project impacts and lists the associated mitigation measures and the monitoring efforts necessary to ensure that the measures are properly implemented. All the mitigation measures identified in the EIR are recommended as conditions of project approval and are stated herein in language appropriate for such conditions. In addition, once the Chula Vista Urban Core Specific Plan has been approved, and during various stages of implementation, the designated monitor, the City of Chula Vista, will further refine the mitigation measures.

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>LANDFORM/ALTERATION AND AESTHETICS</b>			
<p><b>Aesthetics/Visual Character.</b> To accommodate a three-fold increase in population projected for the urban core by the year 2030, redevelopment and new development within the UCSP Subdistricts Area would change the existing visual character from mostly low-rise (up to 48 feet in height) single-use commercial blocks surrounded by multi-family residential blocks, to a mix of low-rise (up to 45 feet in height) and mid-rise (up to 84 feet in height) mixed-use commercial/office and residential blocks, with high-rise structures (up to 210 feet in height) allowed in the areas surrounding the existing E Street and H Street trolley stations. Potentially significant changes to existing visual character, blue sky views, solar access, and ventilation conditions would result from this intensification in land use.</p> <p>To ensure avoidance of potentially significant visual character impacts, all subsequent development projects in the UCSP Subdistricts Area will be required to comply with relevant UCSP provisions, as outlined in Mitigation Measure 5.2.5-1.</p>	<p>5.2.5-1: All subsequent development projects in the UCSP Subdistricts Area shall comply with UCSP development regulations and design guidelines which are necessary to reduce or avoid potential impacts to landform alteration and visual quality (including blue sky views, solar access, and ventilation), and which may include but not be limited to the special development regulations for mixed-use projects (p. VI-43), the NTCDD and TFA regulations (p. VI-40), and the siting and architectural design guidelines for each district (Chapter VII). Prior to approval of a subsequent development project, the Community Development Director or Planning and Building Director of the City shall identify the specific provisions of the UCSP which shall be included in the conditions of approval in order to avoid or to reduce potential impacts to below significance.</p>	<p>Prior to the approval of Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>LANDFORM/ALTERATION AND AESTHETICS (cont.)</b>			
<p><b>Light and Glare Effects.</b> Light sensitive activities (e.g. sleeping) could potentially be adversely impacted by light or glare in excess of baseline conditions due to buildout of the UCSP and intensification of land use. However, various provisions in the UCSP development regulations and design guidelines (UCSP Chapters VI and VII) serve to control light and glare sources and ensure that light pollution and glare would be minimal.</p> <p>To ensure avoidance of potential light and glare impacts, all subsequent development projects in the UCSP Subdistricts Area will be required to comply with relevant UCSP provisions as outlined in Mitigation Measure 5.2.5-</p>	<p>5.2.5-2: All subsequent development projects in the UCSP Subdistricts Area shall comply with UCSP development regulations and design guidelines which are necessary to reduce or avoid potential adverse impacts to light or glare and which may include but not be limited to the provisions included in section 5.2.3.3 a through e of this EIR. Prior to approval of a subsequent development project, the Community Development Director or Planning and Building Director of the City shall identify the specific provisions of the UCSP which shall be included in the conditions of approval in order to avoid or to reduce potential light and glare impacts to below significance.</p>	<p>Prior to the approval of Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>
<p>2.</p>			

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>CULTURAL RESOURCES</b></p> <p><i>Architectural Resources.</i> So far eleven buildings or sites within the UCSP Subdistricts Area have been locally designated or determined to be eligible to be designated as historically significant as defined in the CEQA Guidelines. Six of the eleven sites are currently listed on the Chula Vista List of Historic Sites. The other five sites were determined by a focused survey in September 2005 to be eligible for local listing. Without mitigation, demolition or substantial alteration of any of these eleven historic resources as a result of future development in accordance with the proposed UCSP would comprise a significant historical architectural resources impact.</p> <p>The area around Third Avenue and F Street is considered the traditional heart of the City and includes important elements of the early residential and business activities of the City. The potential for the existence of other unidentified historic properties is highly probable given the number of older commercial and residential structures throughout the UCSP Subdistricts</p>	<p>5.3.5-1: For a structure listed on, or eligible for listing on, the Chula Vista List of Historic Sites or State and Federal historic registers, the project applicant shall retain the structure in-place and maintain, repair, stabilize, rehabilitate, restore, preserve or reconstruct the structure in a manner consistent with the Secretary of the Interior's <i>Standards for the Treatment of Historic Properties</i> with <i>Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings</i> (1995), Weeks and Grimmer ("Secretary's Standards"). Prior to issuance of an Urban Core Development Permit (UCDP) or other discretionary permit, the project applicant shall prepare detailed construction plans under the supervision of a qualified architectural historian or historic architect for review and approval by the Community Development Director. The Community Development Director shall retain, at the project applicant's expense, a qualified historic architect to review the plans and to certify that the project will comply with the Secretary's Standards and would not result in the loss of the structure's listing, or eligibility for listing, on the City, State or Federal register of historic resources.</p>	<p>Prior to the approval of Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>CULTURAL RESOURCES (cont.)</b>			
<p>Area. If significant historic resources occur among these unidentified structures, their loss or substantial alteration would comprise a significant historical architectural resources impact.</p> <p>Implementation of Mitigation Measures 5.3.5-1, 5.3.5-2 and 5.3.5-4 would reduce potential impacts to historic resources to below a level of significance. In some circumstances, implementation of Mitigation Measure 5.3.5-3, which provides for documentation of an historic resource, would not mitigate significant impacts to a point where clearly no significant effect on the environment would occur. In that event, a potential impact to historic resources may be significant and unavoidable.</p>	<p>5.3.5-2: Where there is substantial evidence that it is not feasible for a structure listed on or eligible for listing on the Chula Vista List of Historic Sites or State or Federal historic registers to be retained in-place, the project applicant shall provide for relocation and maintenance, repair, stabilization, rehabilitation, restoration or preservation of the structure in a manner consistent with the Secretary of the Interior's <i>Standards for the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings</i> (1995), Weeks and Grimmer ("Secretary's Standards") at a new location subject to the approval of the City. Prior to issuance of an Urban Core Development Permit (UCDP) or other discretionary permit, the project applicant shall prepare detailed relocation plans under the supervision of a qualified architectural historian or historic architect for review and approval by the Community Development Director. The Community Development Director shall retain, at the project applicant's expense, a qualified historic architect to review the plans and to</p>	<p>Prior to the approval of Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>CULTURAL RESOURCES (cont.)</b>	<p>certify that the project will comply with the Secretary's Standards and would not result in the loss of the structure's listing, or eligibility for listing, on the City, State or Federal register of historic resources.</p> <p>5.3.5-3: Where there is substantial evidence, as determined by CEQA Guidelines Section 15064.5 (b) (4), that it is not feasible for a structure listed on or eligible for listing on the Chula Vista List of Historic Sites or State or Federal historic registers to be retained in-place or to be relocated to another location satisfactory to the City, the project applicant shall:</p> <p>Provide for documentation of the historical structure before it is removed from the development site, including but not limited to photographic documentation of the exterior and interior of the structure, and "as built" drawings of the structure according to the standards of the Historic American Building Survey (HABS, Level I). Such historical documentation shall be provided to the CVRC or RCC, as applicable, before a demolition permit is issued by the City for the structure.</p>	<p>Prior to the approval of Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>CULTURAL RESOURCES (cont.)</b></p>	<p>5.3.5-4: For those structures 45 years or older and not previously evaluated, a determination of historic significance shall be made based on the significance criteria in Section 5.3.2 (and repeated below) prior to the issuance of a demolition permit.</p> <p>A site or structure may be listed on the Chula Vista List of Historic Sites if it possesses integrity (of location, design, setting, materials, workmanship, feeling and association), and meets at least one of the following criteria:</p> <ul style="list-style-type: none"> <li>• Is associated with events that have made a significant contribution to the broad patterns of history at the local, regional, state or national level.</li> <li>• Is associated with the lives of significant persons in the past on a local, regional, state or national level.</li> <li>• Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values.</li> </ul>	<p>Prior to the approval of Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>CULTURAL RESOURCES (cont.)</b>			
	<ul style="list-style-type: none"> <li>Has yielded or may be likely to yield, information important in history or prehistory.</li> </ul> <p>If a resource is determined by the City to be historically significant pursuant to the above listed criteria, Mitigation Measure 5.3.5-2, 5.3.5-3, or 5.3.5-4 shall be implemented as applicable.</p>		
<p><b>Archaeological Resources.</b> The UCSP Subdistricts Area is mapped as having low sensitivity for the occurrence of archaeological resources. Although the likelihood of encountering significant archaeological resources and human remains is low, the potential does exist. In the unlikely event that prehistoric cultural materials are found during subsurface disturbance resulting from future developments, there would be a significant archaeological impact.</p>	<p>5.3.5-5: The likelihood of encountering archaeological resources is low within the UCSP Subdistricts Area. The following mitigation shall only be applied to projects which involve subsurface excavation to the depth of greater than or equal to six feet, or for any project site that has not had substantial previous excavation. Prior to approval of any construction permits, including but not limited to, the first Grading Permit, Demolition Permit, and Urban Core Development Permit, the Community Development Director shall verify that the requirements for Archaeological Monitoring and Native American monitoring, if applicable, have been noted on the appropriate construction documents.</p>	<p>Prior to the approval of any construction permits, including but not limited to the first Grading Permit, Demolition Permit, and Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>CULTURAL RESOURCES (cont.)</b>	<ul style="list-style-type: none"> <li>The applicant/developer shall submit documentation to the Community Development Director identifying the qualified Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, the areas to be monitored, and a construction schedule indicating when and where monitoring will occur.</li> <li>During construction, the monitor shall be present full-time during soil remediation and grading/excavation/trenching activities which could result in impacts to archaeological resources, and shall document field activity and in the case of any discoveries.</li> <li>In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the resident engineer or building inspector, as appropriate. The monitor shall immediately notify the PI (unless the Monitor is the PI) of the discovery and the PI and Native American representative, if applicable, shall evaluate the significance of the resource.</li> </ul>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>CULTURAL RESOURCES (cont.)</b>	<ul style="list-style-type: none"> <li>Once encountered, artifacts associated with an archaeological feature or deposit are required to be documented in place, analyzed in a laboratory setting and prepared for curation in accordance with CEQA provisions and local guidelines.</li> <li>If human remains are discovered, work shall halt in that area and the procedures set forth in the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken.</li> </ul>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>GEOLOGY/SOILS</b>			
<p><b>Geologic Hazards.</b> The UCSP area is potentially subject to strong ground shaking by an earthquake along the active Rose Canyon fault zone, or other active faults in the region. The UCSP Subdistricts Area may additionally be subject to liquefaction along its western boundary. Compressible and expansive soils also have the potential to be encountered by future development throughout the Subdistricts Area. Buildout of the UCSP would result in an increase in housing, office space, retail space, and hotels that would be subject to these potentially significant seismic and soils hazards. Therefore, there would be a proportionate increase in personal and property damage as the population within the urban core increases.</p>	<p>5.4.5-1: Prior to the approval of each subsequent development project, the project applicant shall submit a comprehensive soil and geologic evaluation of the project site to the City Engineer and/or Building Official for review and approval. The evaluation shall be prepared by a licensed geotechnical engineer in order to identify site-specific conditions and to determine whether potential soil and geologic hazards exist on the site. The evaluation shall include, but not be limited to, a delineation of specific locations where liquefiable, compressive, and expansive soils would affect structural stability and where graded slopes would expose bedrock susceptible to instability. Liquefiable, expansive, or compressive soils shall be removed from the site and shall be replaced with compacted fill.</p>	<p>Prior to the approval of any building permits, including but not limited to the Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>GEOLGY/SOILS (cont.)</b></p> <p>Implementation of project-specific mitigation measures would be required to reduce or avoid significant impacts resulting from groundshaking, liquefaction, and compressible and expansive soils.</p> <p>Construction on liquefiable soils could result in injuries or loss of property during ground shaking of sufficient magnitude and duration. Expansive soils within pavement, foundation, or slab subgrade could heave when wetted, resulting in cracking or failure of these development improvements. Development on compressible soils could potentially settle under increased load and damage structures, roads, and property.</p>	<p>5.4.5-2: Prior to the issuance of a building permit for each subsequent development project, the City Building Official shall verify that the design of all structures proposed for a specific site comply with the requirements of all federal, state and local building codes and regulations governing earthquake safety and structural stability and with the standard practices of the Association of Structural Engineers of California.</p>	<p>Prior to the approval of any building permits, including but not limited to the Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PALEONTOLOGICAL RESOURCES</b>			
<p><b>Paleontological Sensitivity.</b> The UCSP area contains a large expanse of moderate paleontological resource sensitivity. Exposure or disturbance of unnamed nearshore marine sandstone and the Linda Vista Formation would potentially significantly impact paleontological resources. Because the UCSP area is fully developed with urban uses, future grading would typically be minimal except in areas with sub-garages and sub-floors. Development proposed in areas of moderate sensitivity that propose to grade in excess of 2000 cubic yards and five feet deep will require mitigation.</p>	<p>5.5-1: Subsequent development projects that propose grading in excess of 2,000 cubic yards and five feet depth in areas of moderate sensitivity for paleontological resources shall be required to implement a pre-construction or construction monitoring program, or both, as a condition of approval. All mitigation programs shall be performed by a qualified professional paleontologist, defined here as an individual with a M.S. or Ph.D. in paleontology or geology who has proven experience in San Diego County paleontology and who is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined here as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.</p>	<p>Prior to the approval of any construction permits, including but not limited to the first Grading Permit, Demolition Permit, and Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PALEONTOLOGICAL RESOURCES (cont.)</b>	<p>Pre-construction mitigation. This method of mitigation is only applicable to instances where well-preserved and significant fossil remains, discovered in the assessment phase, would be destroyed during initial clearing and equipment move-on. The individual tasks of this program include:</p> <ol style="list-style-type: none"> <li>1. Surface prospecting for exposed fossil remains, generally involving inspection of existing bedrock outcrops but possibly also excavation of test trenches;</li> <li>2. Surface collection of discovered fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster jacketing of large and/or fragile specimens or more elaborate quarry excavations of richly fossiliferous deposits;</li> <li>3. Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;</li> </ol>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PALEONTOLOGICAL RESOURCES (cont.)</b>			
	<p>4. Laboratory preparation (cleaning and repair) of collected fossil remains, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;</p>		
	<p>5. Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;</p>		
	<p>6. Transferal, for storage, of cataloged fossil remains to an accredited institution (museum or university) that maintains paleontological collections (including the fossil specimens, copies of all field notes, maps, stratigraphic sections, and photographs); and</p>		
	<p>7. Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PALEONTOLOGICAL RESOURCES (cont.)</b>	<p>Construction mitigation. Under this program, mitigation occurs while excavation operations are underway. The scope and pace of excavation generally dictate the scope and pace of mitigation. The individual tasks of a construction mitigation program typically include:</p> <ol style="list-style-type: none"> <li>1. Monitoring of excavation operations to discover unearthed fossil remains, generally involving inspection of ongoing excavation exposures (e.g., sheet graded pads, cut slopes, roadcuts, basement excavations, and trench sidewalls);</li> <li>2. Salvage of unearthed fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits;</li> <li>3. Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;</li> </ol>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PALEONTOLOGICAL RESOURCES (cont.)</b>			
	<p>4. Laboratory preparation (cleaning and repair) of collected fossil remains, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;</p>		
	<p>5. Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;</p>		
	<p>6. Transferal, for storage, of cataloged fossil remains to an accredited institution (museum or university) that maintains paleontological collections, including the fossil specimens, copies of all field notes, maps, stratigraphic sections and photographs; and</p>		
	<p>7. Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>HYDROLOGY/WATER QUALITY</b>			
<p><b>Surface and Ground Water Quality.</b> Implementation of the proposed UCSP would allow a three-fold increase in population and associated intensification of existing urban land uses which would likely result in a substantial increase in direct runoff to drainage basins, municipal storm sewer systems, and eventual drainage to surface water and/or the ocean. This runoff will likely contain typical urban runoff pollutants such as sediment, pathogens, heavy metals, petroleum products, nutrients (phosphates and nitrates) and trash. This comprises a potentially significant long-term water quality impact.</p> <p>The potential long-term impacts to water quality which may result from implementation of the proposed UCSP would be required to be reduced to acceptable levels through the mandatory controls imposed by local, state, and federal regulations.</p>	<p>5.7-1: Prior to approval of subsequent individual development projects, compliance with all applicable federal, state and local laws and regulations regarding water quality (e.g. JURMP, SUSMP, NPDES, SWPP, and City Development and Redevelopment Projects Storm Water Manual) shall be demonstrated to the satisfaction of the City Engineer.</p>	<p>Prior to the approval of any construction permits, including but not limited to the first Grading Permit, Demolition Permit, and Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>HYDROLOGY/WATER QUALITY (cont.)</b>			
<p>Selected provisions of the UCSP that allow and encourage native plant landscaping and sustainable building practices (water input and waste efficiencies, living roofs, bioswales, etc.) would potentially lessen future runoff volumes, flow rate and pollutant concentration.</p> <p>The construction activities of subsequent individual projects would also potentially cause short-term water quality impacts through direct discharge of pollutants, soil excavation/sedimentation, and through encounering of shallow groundwater during subfloor grading. This comprises a potentially significant short-term water quality impact.</p>	<p>5.7-2: Prior to approval of subsequent individual development projects, project applicants shall demonstrate to the satisfaction of the City Engineer that the proposed on-site storm drain systems fully mitigate drainage impacts and meet all federal, state, and regional water quality objectives and all City standards and requirements. Land development construction drawings and associated reports shall include details, notes, and discussions relative to the required or recommended Best Management Practices (BMPs). Permanent storm water BMP requirements shall be incorporated into the project design and all subsequent individual development projects are required to complete the applicable Storm Water Compliance Form and comply with the City of Chula Vista's Storm Water Management Standards Requirements Manual.</p>	<p>Prior to the approval of any construction permits, including but not limited to the first Grading Permit, Demolition Permit, and Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>HYDROLOGY/WATER QUALITY (cont.)</b></p>	<p>5.7-3: The City of Chula Vista requires that all new development and significant redevelopment projects comply with the requirements of the NPDES Municipal Permit, Order No. 2001-01. According to said permit, all projects falling under the Priority Development Project Categories are required to comply with the Standard Urban Storm Water Mitigation Plans (SUSMP) and Numeric Sizing Criteria. Future projects shall comply with all applicable regulations, established by the United States Environmental Protection Agency (USEPA), as set forth in the National Pollutant Discharge Elimination System (NPDES) permit requirements for urban runoff and storm water discharge, and any regulations adopted by the City of Chula Vista pursuant to the NPDES regulations and requirements. Further, the applicant shall file a Notice of Intent (NOI) with the State Water Resource Control Board to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity and shall</p>	<p>Prior to the approval of any construction permits, including but not limited to the first Grading Permit, Demolition Permit, and Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>HYDROLOGY/WATER QUALITY (cont.)</b>			
	<p>implement a Storm Water Pollution Prevention Plan (SWPP) concurrent with the commencement of grading activities. The SWPP shall include both construction and post-construction pollution prevention and pollution control measures, and shall identify funding mechanisms for the maintenance of post-construction control measures.</p>		
5.7-4:	<p>Prior to issuance of an Urban Core Development Permit or other discretionary permit, all subsequent individual development projects shall demonstrate to the satisfaction of the Community Development Director, conformance with Mediterranean/indigenous landscaping and other relevant design recommendations provided in UCSP Chapter VII Development Design Guidelines.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>TRAFFIC/CIRCULATION</b></p> <p><b>Road Segments and Intersections Level of Service.</b> A substantial increase in traffic on area roadways and at area intersections will result from planned population growth in the urban core area over the next 25 years. Without the intersection and roadway improvements envisioned in the proposed UCSP, by year 2030 conditions, 2 road segments and 19 intersections would operate at unacceptable LOS E or worse during peak traffic periods. This comprises a significant traffic impact prior to mitigation.</p> <p>The significant impacts to intersections will be mitigated to below significance by implementation of the improvements recommended in Mitigation Measure 5.8.5-1, with the exception of #27 Broadway/H Street, #33 Hilltop Drive/H Street and #54 Third Avenue/J Street. Impacts to these 3 intersections would remain significant and unmitigated.</p>	<p>5.8.5 -1: Intersection Improvements. Impacts to the 19 affected intersections will be mitigated to below significance by the implementation of improvements that have been divided into three tiers for phased implementation based on need and enhancement of the overall street network. Generally, time frames associated with the tiered improvements are anticipated as short-, mid- and long-term. In each tier, the City's existing TMP will determine the order in which projects are implemented during the biannual CIP program review. The Tier 1 improvements would be included in the current CIP and subsequently monitored for improvement within the first five years of implementation of the UCSP. It should be noted that three of the intersections (#7, #16, and #21) are proposed as project features rather than as needed to improve intersection LOS and most likely will be related to and timed with implementation of streetscape improvements along Third Avenue.</p>	<p>Three-tiered phasing of implementation based on need. Tier 1, short-term, improvements are to occur within the first five years of implementation of the UCSP or as may be modified by results of the annual Traffic Monitoring Program (TMP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>TRAFFIC/CIRCULATION (cont.)</b></p> <p>Recommendations at intersections #27, #33, and #54 do not improve conditions to an acceptable LOS due to ROW and design constraints. The following describes the constraints at the three intersections:</p> <ul style="list-style-type: none"> <li>At the Broadway/H Street intersection (#27), an additional northbound and southbound through lane would be required in order to achieve an acceptable LOS D conditions. However, this improvement would require extensive widening of Broadway and H Street to allow for lane drops. Furthermore, this widening would create longer pedestrian crossings. As such, the recommended improvements of the eastbound queue jumper lane and the additional westbound through and right-turn lanes would improve the intersection from LOS F to LOS E conditions.</li> </ul>	<p>The intersection numbers in the improvements described below correspond to the intersection numbering system used in the TIA (Appendix C of this EIR):</p> <ol style="list-style-type: none"> <li>Tier 1 Improvements <ul style="list-style-type: none"> <li>#1 Bay Boulevard/I-5 Southbound Ramp/E Street: Add an eastbound through and right-turn lane, southbound right-turn lane, and northbound right-turn lane. Coordination with Caltrans will be required for this improvement.</li> <li>#2 I-5 Northbound Ramp/E Street: Add a westbound right-turn lane. Coordination with Caltrans will be required for this improvement.</li> <li>#7 Third Avenue/E Street: Convert the northbound and southbound shared right-through lane into exclusive right-turn lanes.</li> <li>#16 Third Avenue/F Street: Separate the southbound shared through-right lane into an exclusive through and right-turn lanes, convert the northbound shared through-right lane into an exclusive right-turn lane.</li> </ul> </li> </ol>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			
<ul style="list-style-type: none"> <li>At the Hilltop Drive/H Street intersection (#33), no improvements would be recommended due to ROW constraints. The poor LOS at this intersection is primarily caused by the high traffic volumes in the eastbound/westbound movements. Additional through and/or turn lanes would be required in order to improve this intersection to an acceptable LOS. With no improvements, this intersection would remain at LOS E during both peak periods.</li> <li>At the Third Avenue/J Street intersection (#54), the required improvement of an additional southbound right-turn lane would impact the existing commercial building (Henry's Marketplace), which is built adjacent to the sidewalk. Therefore, this improvement is not recommended.</li> </ul>	<ul style="list-style-type: none"> <li>#21 Third Avenue/G Street: Convert the northbound/southbound shared through-right lane into exclusive right-turn lanes.</li> <li>#24 I-5 Southbound Ramp/H Street: Add a southbound left, eastbound through and right-turn lanes. Coordination with Caltrans will be required for this improvement.</li> <li>#25 I-5 Northbound Ramp/H Street: Add a westbound through and right-turn lane and restripe south approach to accommodate dual left-turn lanes. Coordination with Caltrans will be required for this improvement.</li> <li>#26 Woodlawn Avenue/H Street: Change Woodlawn Avenue to a one-way couplet. This improvement is required to serve the intense redevelopment occurring on both sides of H Street. The couplet improvement is not required mitigation further north toward E Street.</li> <li>#27 Broadway/H Street: Add an eastbound transit queue jumper lane and westbound through and right-turn lanes.</li> </ul>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>TRAFFIC/CIRCULATION (cont.)</b></p> <p>As a result, the LOS would remain at LOS E. However, if the property were to redevelop in the future, additional ROW could be obtained for the southbound right-turn lane.</p> <p>While existing TransNet funding is expected to cover some of the costs of roadway and transit improvements and existing traffic signal fees currently collected as new development occurs would be applied, as appropriate, to identified signal-phasing improvements, the Facilities Implementation Analysis (FIA) has identified proposed development fees that may be needed to fund some of the recommended traffic improvements. In addition, some of the improvements will require right of way dedications either as part of the development process or concurrent with capital improvements, and/or coordination with Caltrans.</p>	<ul style="list-style-type: none"> <li>• #28 Fifth Avenue/H Street: Change the northbound/southbound approaches to include protective plus permissive phasing and add a westbound right-turn lane.</li> <li>• #29 Fourth Avenue/H Street: Add an eastbound/westbound right-turn lane.</li> <li>• #44 Fourth Avenue/SR-54 Eastbound Ramp: Add an eastbound right-turn lane. Coordination with Caltrans will be required for this improvement.</li> </ul>		
	<p>b. Tier 2 Improvements</p> <ul style="list-style-type: none"> <li>• #34 Broadway/SR-54 Westbound Ramp: Add a westbound right-turn lane. Coordination with Caltrans will be required for this improvement.</li> <li>• #59 J Street/I-5 Northbound Ramp: Add an eastbound left-turn and westbound right-turn lane. Coordination with Caltrans will be required for this improvement.</li> </ul>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			
<ul style="list-style-type: none"> <li>#61 L Street/Bay Boulevard: Signalize the intersection, add a southbound left-turn lane, and a northbound right-turn overlap phase to the traffic signal.</li> </ul>			
<ul style="list-style-type: none"> <li>#63 Bay Boulevard/I-5 Southbound Ramp: Signalize the intersection. Coordination with Caltrans will be required for this improvement.</li> </ul>			
<ul style="list-style-type: none"> <li>#64 Industrial Boulevard/I-5 Northbound Ramp: Signalize the intersection. Coordination with Caltrans will be required for this improvement.</li> </ul>			
<ul style="list-style-type: none"> <li>H Street from four lanes to six lanes from I-5 to Broadway</li> </ul>			
c. Tier 3 Improvements			
<ul style="list-style-type: none"> <li>#13 Broadway/F Street: Add an eastbound right-turn lane.</li> </ul>			
<ul style="list-style-type: none"> <li>#45 Fourth Avenue/Brisbane Street: Add a southbound right-turn overlap phase to the traffic signal.</li> </ul>			
<ul style="list-style-type: none"> <li>#57 Second Avenue/D Street: Convert to an all-way stop controlled intersection.</li> </ul>			

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			
	<p>On an annual basis during buildout of the UCSP, the City shall apply the TMP to monitor actual performance of the street system in the Subdistricts Area by conducting roadway segment travel time studies in accordance with the City's Growth Management Program and Traffic Threshold Standards. The results of the annual study under the TMP will be used by the City to determine the timing and need for implementation of improvements to the nineteen intersections identified above as having potential significant impacts. The City shall implement the intersection improvements in phases based on the results of the annual TMP and on need and enhancement to the function of the overall street network. In addition to determining timing and need, this systems and operations monitoring approach should also be used to further ascertain final design details of the intersection improvements and may include consideration of the effects on traffic flow as well as the impacts/benefits to other travel modes (e.g., pedestrians and bicycles) that are foundational to the successful implementation of the Specific Plan.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>TRAFFIC/CIRCULATION (cont.)</b></p> <p>The potential significant impacts to street segments will be mitigated to below significance by implementation of the improvements recommended in Mitigation Measure 5.8.5-2, with the exception of Third Avenue between E and G Streets. The significant and unavoidable impact to this street segment result from the design of the project, which is intended to reduce Third Avenue to a two-lane downtown promenade to facilitate an enhanced pedestrian environment along the traditional commercial village. Although the planned improvements would result in an unacceptable LOS, they would meet the project objectives of creating a more pedestrian friendly and active streetscape that will accommodate multi-modes of transportation rather than accommodating only the automobile.</p>	<p>5.8.5-2: Segment Improvements. During build-out of the UCSP, the City shall apply the Traffic Monitoring Program (TMP) to monitor actual performance of the street system in the Subdistricts Area by conducting roadway segment travel time studies in accordance with the City's Growth Management Program and Traffic Threshold Standards. The results of the annual study under the TMP will be used by the City to determine the timing and need for implementation of improvements to the street segments identified as having potential significant impacts. The City shall implement the following street segment improvements: (1) based on the results of the annual TMP; or (2) based on need and enhancement to the function of the overall street network; and (3) in a manner that efficiently implements improvements with phasing of necessary adjacent intersection improvements.</p>	<p>Timing of implementation based on (1) results of the annual Traffic Monitoring Program (TMP); (2) need and enhancement to the function of the overall street network; and (3) in a manner that efficiently implements with phasing of necessary adjacent intersection improvements.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			
1) H Street between I-5 and Broadway would be reclassified as a six-lane gateway. As a result, the acceptable ADT would increase and result in an acceptable LOS.			
2) Third Avenue between E Street and G Street would be constructed as a two-lane downtown promenade to facilitate an enhanced pedestrian environment along the traditional commercial village. As a result, the acceptable ADT along the segment would decrease and result in an unacceptable LOS. As such, impacts to Third Avenue will be significant and unavoidable. However, the Third Avenue corridor intersections at E, F and G Streets would all operate at an acceptable LOS.			

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>TRAFFIC/CIRCULATION (cont.)</b></p> <p>Due to the long-term nature of some of the improvements, the fee program and coordination have either not been implemented or begun, respectively, whereas the right of way exactions would occur with redevelopment. While these improvements are intended to be implemented when necessary and within the Tiers noted above, their long-term implementation cannot be assured at this time. Identified significant impacts will be partially mitigated but due to the lack of funding assurances at this time, future coordination with CALTRANS and SANDAG, and future right of way exactions, impacts are considered significant and unmitigated.</p>	<p>5.8.5- 3: Prior to issuance of an Urban Core Development Permit, subsequent development projects shall prepare a traffic assessment to quantify the projects' potential traffic impacts. Subsequent projects will be required to contribute their fair share to the Tiered Improvements listed above under Mitigation 5.8.5.1. Mitigation may be in the form of:</p> <ol style="list-style-type: none"> <li>1. Payment of Transportation Development Impact Fee (TDIF), as may be established in the future for the western portion of the City;</li> <li>2. Payment of existing Traffic Impact Signal Fee;</li> <li>3. Construction of improvements within the project boundaries; and/or</li> <li>4. Early advancement of improvements beyond the project boundaries, subject to a reimbursement agreement.</li> </ol>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			

The City's TDIF program for the west side of the City, including the Urban Core is anticipated to be developed within the subsequent twelve months following adoption of the UCSP. The TDIF will clearly establish the costs of the improvements identified above as well as the fair share costs to be applied to all subsequent development projects. Once the TDIF has been established, the fee will be consistently applied to all subsequent development projects, until such time that the TDIF is amended or rescinded. In the interim, if subsequent development projects are processed and approved prior to the establishment of a TDIF, a condition of approval will be included that prior to issuance of building permits the project will contribute to the TDIF, as may be established.

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			
<p><b>Pedestrian, Bicycling and Public Transit.</b> The three-fold increase in population projected for the UCSP Subdistricts Area by 2030 would place greater demands on public transit services. However, provisions of the UCSP serve to benefit, rather than to deteriorate, mobility conditions for pedestrians, bicyclists and public transit users. Additionally, the UCSP does not conflict with any adopted plans or programs supporting alternative transportation.</p> <p>Impacts to alternative forms of transportation as a result of the proposed UCSP would not be significant nor adverse given adherence of subsequent projects to relevant regulations and guidelines of the UCSP as outlined in Mitigation Measure 5.8.5-4.</p>	<p>5.8.5-4: Prior to issuance of an Urban Core Development Permit for subsequent development projects, the traffic assessment prepared to quantify the projects' potential traffic impacts will also identify how alternative modes of transportation will be accommodated. Mitigation may be in the form of:</p> <ol style="list-style-type: none"> <li>1) Compliance with the development regulations and design guidelines of the UCSP to accommodate pedestrians, bicyclists and public transit; and</li> <li>2) Where applicable, construction of improvements within the project boundaries; and/or</li> <li>3) Early advancement of improvements beyond the project boundaries, subject to a reimbursement agreement.</li> </ol>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			
<p><b>Parking.</b> A projected total of 18,560 parking spaces would be required to serve future development of the proposed UCSP at buildout.</p> <p>Potential significant impacts to parking would be reduced to below significance by the incorporation of these development regulations and design guidelines into subsequent development projects, as required as part of the UCSP design review process. Parking improvements will either be made on-site (i.e. where required of subsequent development projects), or off-site (i.e. in coordination with the City's Parking District or in Lieu Fee program). A number of other parking improvement strategies are included in the UCSP including raking buffers, parking districts and parking structures.</p>	<p>5.8.5-5: Prior to issuance of an Urban Core Development Permit, subsequent development projects shall comply with the parking standards set forth in the UCSP development regulations and design guidelines for the type and intensity of development proposed.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			
<p><b>Multi-Jurisdictional Efforts.</b> The proposed UCSP will result in both direct and cumulatively significant traffic impacts to study area freeway segments and ramps. As described above under Road Segments and Intersections Level of Service, the following freeway interchanges would be significantly impacted by the proposed UCSP:</p> <ul style="list-style-type: none"> <li>• #1: Bay Boulevard/I-5 SB ramp at E Street (LOS E – AM Peak, LOS F – PM Peak);</li> <li>• #2: I-5 NB Ramp at E Street (LOS E – AM and PM Peak);</li> <li>• #24: I-5 SB Ramp at H Street (LOS F – PM Peak);</li> <li>• #25: I-5 NB Ramp at H Street (LOS F – PM Peak);</li> <li>• #34: Broadway at SR-54 WB Ramp (LOS F – AM Peak);</li> <li>• #44: Fourth Avenue at SR-54 EB Ramp (LOS F – PM Peak);</li> </ul>	<p>5.8.5-6: The City shall participate in a multi-jurisdictional effort conducted by Caltrans and SANDAG to assist in developing a detailed engineering study of the freeway right-of-way that will identify transportation improvements along with funding, including federal, state, regional, and local funding sources, and phasing, that would reduce congestion consistent with Caltrans Standards on the I-5 South corridor from the State Route 54 (SR-54) interchange to State Route 75 (SR-75)/Palm Avenue (the “I-5 South Corridor”) (hereinafter, the “Plan”). Local funding sources may include fair share contributions by private development based on nexus as well as other mechanisms. The Plan required by this mitigation shall include the following:</p> <p>1) The responsible entities (the “Entities”) included in this effort will include, but may not be limited to the City, the Port, SANDAG, and Caltrans. Other entities may be included upon the concurrence of the foregoing Entities.</p>	<p>To coincide with multi-year planning effort that began June 2005, is ongoing and scheduled to conclude in three to five years.</p>	<p>City of Chula Vista (CCV), in cooperation with other jurisdictions.</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>TRAFFIC/CIRCULATION (cont.)</b>			
<ul style="list-style-type: none"> <li>• #59: J Street at I-5 NB Ramp (LOS F – AM Peak, LOS E – PM Peak);</li> <li>• #63: Bay Boulevard at I-5 SB Ramp (LOS F – AM and PM Peak); and</li> <li>• #64: Industrial Boulevard at I-5 NB Ramp (LOS F – PM Peak).</li> </ul>	<p>The monitoring of traffic as stipulated by Mitigation Measure 5.8.5-1 will assist in establishing the need and timing for transportation improvements, including freeway-related improvements, serving the UCSP area. In addition, Mitigation Measure 5.8.5-3 requires subsequent development projects to prepare a traffic assessment to quantify the project's potential traffic impacts. Subsequent projects will also be required to contribute their fair share to the Tiered Improvements listed above under Mitigation 5.8.5.1.</p>	<p>2) The Plan will specifically identify physical and operational improvements to I-5, relevant arterial roads and transit facilities (the "improvements"), that are focused on specific transportation impacts and will also identify the fair share responsibilities of each Entity for the construction and financing for each Improvement. The Plan may also identify other improvements necessary to address regional transportation needs, but for purposes of this mitigation measure, the Improvements included in the Plan need only be designed to mitigate the impacts created by the Proposed Project.</p>	
	<p>3) The Plan will set forth a timeline and other agreed-upon relevant criteria for implementation of each Improvement.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>TRAFFIC/CIRCULATION (cont.)</b> Mitigation of impacts will require development and regional acceptance of a feasible program to improve freeway segments and ramps in the Urban Core area. The City, along with Caltrans, and SANDAG will continue to pursue and promote improvement of the I-5 freeway facilities adjacent to the UCSP area. The concept of promoting/requiring "fair-share" contributions on the part of developers for improvements to the freeway system will need to be addressed as part of the implementation of an acceptable program to improve freeway segments and ramps. As such, the specification of such requirements cannot be determined at this time. Mitigation Measure 5.8.5-6 was developed to ensure the continued participation in regional transportation planning efforts by the City, Caltrans, SANDAG, and other entities as may be identified.</p>	<p>4) The Plan will identify the total estimated design and construction cost for each improvement and the responsibility of each Entity for both implementation and funding of such costs.</p> <p>5) The Plan will include the parameters for any fair-share funding contributions to be implemented, that would require private and/or public developers to contribute to the costs, in a manner that will comply with applicable law.</p> <p>6) In developing the Plan, the Entities shall also consider ways in which the improvements can be coordinated with existing local and regional transportation and facilities financing plans and programs, in order to avoid duplication of effort and expenditure; however, the existence of such other plans and programs shall not relieve the Entities of their collective obligation to develop and implement the Plan as set forth in this mitigation measure. Nothing in the Plan shall be construed as relieving any Entity (or any other entity) from its independent responsibility (if any) for the implementation of any transportation improvement.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>TRAFFIC/CIRCULATION (cont.)</b>                      The City of Chula Vista shall continue to work with SANDAG and Caltrans on an ongoing basis to identify sources and obtain funding for a variety of transportation system improvements. Future residential growth in the Urban Core will be subject to the Regional Transportation Congestion Improvement Program, as stipulated by the Transnet legislation and will provide additional funds for improvement of the regional arterial system.</p>	<p>7) The City shall seek adoption of the Plan before the City Council upon the completion of the multi-jurisdictional effort to develop the Plan. The City shall report, to their governing bodies regarding the progress made to develop the Plan within six months of the first meeting of the Entities. Thereafter, the City shall report at least annually regarding the progress of the Plan, for a period of not less than five years, which may be extended at the request of the City Council.</p>		
	<p>8) The Plan shall also expressly include each Entity's pledge that it will cooperate with each other in implementing the Plan.</p> <p>The failure or refusal of any Entity other than the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the City to implement this mitigation measure; however, the City shall use its best efforts to obtain the cooperation of all responsible Entities to fully participate in order to achieve the goals of the mitigation measure.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>NOISE</b>			
<p><b>Exterior Noise.</b> The UCSP would result in a significant exterior noise impact because it would result in exposure of receivers in the UCSP area to exterior noise levels that exceed the levels established by the GPU and the City's noise control ordinance. The noise threshold include exterior limits of 65 CNEL in residential areas, outdoor use areas, neighborhood parks, and playgrounds, 70 CNEL in office and professional areas, or 75 decibels for retail and wholesale commercial areas, restaurants, and movie theaters.</p>	<p>5.9-1: Exterior Noise Mitigation Measure. Prior to the approval of individual development projects, projects within the UCSP area shall demonstrate that required outdoor usable open space areas are adequately shielded from transportation related noise sources so that noise levels fall below the standards set by the General Plan Update (see Figure 5.9-1 and Table 5.9-1) or do not cause an increase of greater than 3 dB(A) on an existing roadway. Noise reduction measures may include building noise-attenuating berms, walls or other attenuation measures. Future development of park facilities shall also, to the extent feasible, incorporate mitigation measures such as siting, berms, walls or other attenuation measures to reduce impacts to acceptable levels of 65-70 CNEL or less. Indication that noise levels fall below this limit shall be made to the satisfaction of the Planning and Building Director, Building Official or Community Development Director.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>NOISE (cont.)</b></p> <p>The siting of future parks has the potential to result in significant impacts. While park sites have not been designated, it is possible that parks could be sited next to circulation element roadways which generate noise in excess of 65 [to 70] decibels. This would be a significant impact and would require mitigation. Mitigating this impact would require the construction of noise barriers. Required barrier heights may be achieved through the construction of walls, berms, or wall/berm combinations. While noise levels at a park site would be reduced by the construction of noise barriers, these barriers are incompatible with park uses.</p>	<p>Because the only mitigation available to reduce exterior noise impacts to parks resulting from roadway traffic is the insertion of a barrier between the source (traffic) and receiver (park), and because parks are intended to remain open (i.e., not surrounded by walls) to the community, exterior noise impacts cannot be fully mitigated. There are no feasible mitigation measures available to mitigate for the potential for parks that are to be sited next to circulation element roadways which generate noise in excess of 65-70 CNEL. Therefore, exterior noise impacts remain significant and unmitigated.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>NOISE (cont.)</b></p> <p><b>Interior Noise.</b> The adoption of the UCSP would have a significant noise impact prior to mitigation because it would result in interior noise levels that exceed 45 dB CNEL due to exterior sources for habitable rooms in residences.</p>	<p>5.9-2: Interior Noise Mitigation Measure. Prior to the approval of subsequent individual development projects, for any residential use immediately adjacent to a circulation element roadway, trolley or rail line, or Interstate 5, an acoustical analysis shall be completed demonstrating to the satisfaction of the Planning and Building Director, Community Development Director or Building Official, that interior noise levels due to exterior sources are 45 CNEL or less in any habitable room. For residential projects where interior noise levels due to exterior noise sources exceed 45 CNEL, architectural and structural considerations such as improved window and door acoustical performance, shall be identified.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>
	<p>5.9-3: Interior Noise Mitigation Measure. Prior to the approval of individual development projects, where it is necessary for the windows to remain closed to ensure that interior noise levels meet the City's and the Building Code interior standard of 45 CNEL shall demonstrate that the design for these units includes a ventilation or air conditioning system which provides a habitable interior environment with the windows closed.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>NOISE (cont.)</b>			
<p><b>City Noise Ordinance.</b> Until specific uses are identified, conformance to the City's noise control ordinance code cannot be assured and impacts associated with this criterion are significant.</p> <p>The UCSP would result in a significant noise impact because it would result in exposure of receivers in the UCSP area to exterior noise levels that exceed the levels established by the City's noise control ordinance. These include exterior limits of 65 CNEL in residential areas, outdoor use areas, neighborhood parks, and playgrounds, 70 CNEL in office and professional areas, or 75 decibels for retail and wholesale commercial areas, restaurants, and movie theaters.</p>	<p>5.9-4: Noise Ordinance Mitigation Measure. Prior to the approval of individual development projects, commercial uses that may involve noise producing activities shall demonstrate compliance with the existing performance standards provided in the City's Noise Ordinance (Chapter 19.68.010 of the Municipal Zoning Code). Prior to project approval, subsequent projects shall also demonstrate compliance with the mixed-use provisions of Chapter VI of the UCSP that include minimization of the effects of any exterior noise impacts and provision of "internal compatibility between the different uses within the project" (UCSP, VI-44).</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>AIR QUALITY</b>			
<p><b>Air Quality Plan Consistency.</b> The land uses proposed in the UCSP conform to the adopted GPU and are inconsistent with the former general plan upon which the State Implementation Plan (SIP) and Regional Air Quality Standards (RAQS) were based. By changing land use designations in certain areas, the recently adopted GPU failed to conform with the growth projections used by SANDAG in their generation of the air quality management plan. This is a significant adverse impact.</p> <p>Because the significant air impact stems from an inconsistency between the land uses envisioned in the currently adopted GPU and the former general plan upon which the RAQS were based, the only measure that can lessen this impact is the review and revision of the RAQS based on the recently adopted GPU. The RAQS are updated every three years, and will be updated again in 2007. This effort is the responsibility of SANDAG and the APCD.</p>	<p>The only measure that can lessen this impact to a level below significance is the review and revision of the RAQS based on the recently adopted GPU. Since the updating of the air plan is outside of the authority of the City, no mitigation is available to the City to avoid this impact. Nonetheless, the City will cooperate with SANDAG and APCD in developing updated RAQS to insure their conformance with the adopted GPU and mitigation measure 5.10.5-1 is provided as an advisory measure.</p> <p>5.10.5-1: The City of Chula Vista shall recommend to SANDAG to update the RAQS in the next triennial cycle to incorporate the increased land use densities of the GPU and UCSP.</p>	<p>To coincide with SANDAG's 2007 update of the RAQS.</p>	<p>City of Chula Vista (CCV) in cooperation with SANDAG.</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>AIR QUALITY (cont.)</b>			
<p><b>Cumulatively Considerable Net Increase.</b> Cumulative increases in emissions in criteria pollutants for which the SDAB is not in attainment, would result from short-term construction of projects in conformance with the UCSP and from long-term emissions generated by both stationary and mobile sources within the UCSP area. Since the region is not in compliance with the PM<sub>2.5</sub> and PM<sub>10</sub> standard, and because the average daily emission is anticipated to increase, impacts are considered significant, until the region is in compliance.</p> <p>Stationary source pollutant emissions would include those generated by the consumption of natural gas and electricity and the burning of wood in residential fireplaces. Vehicle traffic on area roads would generate mobile source emissions including carbon monoxide, nitrogen oxides, and hydrocarbons.</p>	<p>5.10.5-2: Prior to issuance of an Urban Core Development Permit or other discretionary permit, all subsequent individual development projects shall demonstrate to the satisfaction of the Community Development Director, conformance with the relevant land use and development regulations (UCSP, Chapter VI) and development design guidelines (UCSP, Chapter VII) of the UCSP which support smart growth principles such as providing a mix of compatible land uses; locating highest density near transit; utilizing compact building design and creating walkable communities; providing a range of infill housing opportunities; and increasing transportation choices.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>AIR QUALITY (cont.)</b>	<p>5.10.5-3: Prior to issuance of an Urban Core Development Permit or other discretionary permit, all subsequent individual development projects shall demonstrate compliance with relevant land use and development regulations contained in the UCSP to minimize air pollutant emissions. These include, but are not limited to: measures aimed at promoting pedestrian activity (Chapter V, pp. V-2- V-5); bicycle activity (Chapter V, pp. V-5 – V-7, V-9 – V-10); public transit facilities (Chapter V, pp. V8 – V-9), including the West Side Shuttle (Chapter V, pp. V-11 – V-12); and reintroduction of the traditional street grid (Chapter V, pp. V-16 – V-19).</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>AIR QUALITY (cont.)</b>			
<p>Mitigation is achievable for fugitive dust from short-term construction activities, but the only measures that would reduce those emissions from long-term daily operations are those that reduce vehicle miles traveled on area roads. The UCSP includes measures aimed at promoting alternative modes of travel including enhanced pedestrian and bicycle activity, use of transit and reducing trip lengths by siting highest density adjacent to key transit nodes. Implementation of mitigation measures will ensure that conformance to these provisions of the UCSP is satisfied prior to issuance of subsequent project development permits.</p>	<p>5.10.5-4: Prior to issuance of construction permits, including but not limited to, the first Grading Permit, Demolition Permit, and Urban Core Development Permit, the Community Development Director shall verify that the following active dust control practices are to be employed during construction:</p> <ol style="list-style-type: none"> <li>1. All unpaved construction areas shall be sprinkled with water or other acceptable San Diego APCD dust control agents during dust-generating activities to reduce dust emissions. Additional watering or acceptable APCD dust control agents shall be applied during dry weather or windy days until dust emissions are not visible.</li> <li>2. Trucks hauling dirt and debris shall be properly covered to reduce windblown dust and spills.</li> </ol>	<p>Prior to the approval of any construction permits, including but not limited to the first Grading Permit, Demolition Permit, and Urban Core Development Permit (UCDP).</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>AIR QUALITY (cont.)</b>	<ol style="list-style-type: none"> <li>3. A 20-mile-per-hour speed limit on unpaved surfaces shall be enforced.</li> <li>4. On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.</li> <li>5. On-site stockpiles of excavated material shall be covered or watered.</li> <li>6. Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the City and/or APCD to reduce dust generation.</li> <li>7. To the maximum extent feasible heavy-duty construction equipment with modified combustion/fuel injection systems for emissions control shall be utilized during grading and construction activities and catalytic reduction for gasoline-powered equipment shall be used.</li> </ol>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>AIR QUALITY (cont.)</b>	<p>8. Equip construction equipment with prechamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of nitrogen oxide, to the extent available and feasible.</p> <p>9. Electrical construction equipment shall be used to the extent feasible.</p> <p>10. The simultaneous operations of multiple construction equipment units shall be minimized (i.e., phase construction to minimize impacts).</p> <p>With the application of these measures, significant impacts resulting from projected PM<sub>10</sub> impacts from construction would be mitigated. Impacts resulting from daily operation would remain significant until the region is determined to be in compliance with the standard.</p>		

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>AIR QUALITY (cont.)</b>			
<p><b>Sensitive Receptors.</b> The Health Risk Assessment prepared for the proposed UCSP identified cumulatively significant particulate emissions for sensitive receptors adjacent to Interstate 5. (See cumulative air quality discussion above).</p> <p>Although there is no adopted standard for sensitive receivers adjacent to Interstate 5, it was determined that air quality impacts from diesel particulates emanating from Interstate 5 would be cumulatively significant given current basin-wide noncompliance with particulate standards and projected future levels of diesel particulates emanating from I-5.</p>	<p>Cumulatively significant diesel particulate impacts would be reduced through mitigation measures 5.10-5-2 and 5.10.5-3 above, but not to below a level of significance.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PUBLIC SERVICES</b>			
<p><b>Law Enforcement.</b> Future development in accordance with the proposed UCSP would result in a significant impact to law enforcement services because of the anticipated increase in calls for service and the additional travel time required to answer these calls. While the police facility at Fourth Avenue and F Street is sufficient to meet the law enforcement needs created by increased demand resulting from development, more police officers will be needed in order to maintain response times. Significant impacts would result if timing of these provisions does not coincide with projected increase in demand for services and populations growth.</p> <p>Implementation of mitigation measures 5.11-1-1 through 5.11.1-3 would mitigate impacts to the provisions of adequate law enforcement services resulting from the adoption of the UCSP to below a level of significance.</p>	<p>5.11.1-1: Subsequent development projects shall demonstrate that significant impacts to police services resulting from an individual project are addressed prior to approval of an Urban Core Development permit or other discretionary approval. As part of project review, subsequent development projects shall be evaluated for adequate access for police vehicles (pursuant to GPU Policy PFS 6.1) and integration of Crime Prevention Through Environmental Design (CPTED) techniques (pursuant to GPU Policy PFS 6.3).</p> <p>5.11.1-2: As a condition of project approval, individual developers shall pay the public facilities development impact fees (PFDIF) at the rate in effect at the time building permits are issued.</p> <p>5.11.1-3: As part of the annual budgeting process, the City shall assess the need for additional police personnel to provide protection services consistent with established City service levels and commensurate with the increase in population.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p> <p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p> <p>Needs assessed during annual City budget review.</p>	<p>City of Chula Vista (CCV)</p> <p>City of Chula Vista (CCV)</p> <p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PUBLIC SERVICES (cont.)</b>			
<p><b>Fire Protection.</b> The Chula Vista Fire Department does not currently meet the threshold standard for response time for the City, including the UCSP Subdistricts Area. Buildout of the proposed UCSP would increase demand for fire protection services. However, as population growth in the service area warrants, additional fire protection personnel and fire protection equipment and facilities would be provided to help ensure adequate service within the requirements of the GMOG threshold standards. Significant impacts to fire protection services would result if timing of these provisions does not coincide with projected increase in demand for services and population growth.</p> <p>With the implementation of mitigation measures 5.11.2-1 through 5.11.2-3, significant impacts to the provision of fire protection services would be mitigated to less than significant.</p>	<p>5.11.2-1: Prior to approval, subsequent individual development projects in the UCSP shall demonstrate provision of adequate access and water pressure for new buildings.</p> <p>5.11.2-2: As a condition of project approval, individual developers shall pay the public facilities development impact fees at the rate in effect at the time building permits are issued.</p> <p>5.11.2-3: As part of the annual budgeting process, the City will assess the need for additional fire personnel to provide protection services consistent with established City service levels and commensurate with the increase in population.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p> <p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p> <p>Needs assessed during annual City budget review.</p>	<p>City of Chula Vista (CCV)</p> <p>City of Chula Vista (CCV)</p> <p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
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Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PUBLIC SERVICES (cont.)</b>			
<p><b>Schools.</b> The proposed UCSP will result in a three-fold increase in population within the Subdistricts Area at buildout and an associated increase in demand for schools. At buildout, the UCSP is expected to generate a net increase of approximately 3,877 students between elementary, middle school, and high school grades. The generation of approximately 2,485 additional elementary students would have a significant impact on existing elementary schools serving the area because they are already at or near capacity. New students generated by the UCSP would require at least 59 additional elementary school classrooms.</p> <p>However, potentially fewer students may result from UCSP buildout or interim conditions due to the intensified urban environment of the UCSP, with new mid- to high-rise mixed uses likely to be occupied by single or childless young couples, or empty nesters. Therefore, the impacts may be overstated and will be monitored to accurately plan for new student enrollment.</p>	<p>5.11.3-1: Prior to approval, subsequent development projects in the UCSP shall demonstrate that significant impacts to public educational services resulting from the individual project have been addressed. As a condition of project approval, individual developers shall pay the statutory school impact fees at the rate in effect at the time building permits are issued.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>PUBLIC SERVICES (cont.)</b></p>			
<p><b>Libraries.</b> Buildout of the UCSP may require additional library space in order to meet and maintain the City criteria of 500 square feet per 1,000 population and 3 books per person for new development. Based on the expected net increase in population of 18,318 with buildout of the UCSP, increased demand on existing library services would amount to approximately 9,159 square feet of library facilities and 54,954 books. Existing library service conditions in the City are inadequate and not in compliance with City standards. Additional library capacity is planned by 2007, however, with the construction of the 30,000-square-foot Rancho Del Rey Library. In the absence of this or other new library construction, any additional demand on library services would comprise a significant impact.</p>	<p>The following mitigation measure will mitigate library impacts resulting from the adoption of the UCSP to below a level of significance.</p> <p>5.11.4-1: Prior to approval, subsequent individual development projects in the UCSP shall demonstrate that significant impacts to the provision of library services resulting from individual projects have been addressed. As a condition of project approval, individual developers shall pay the public facilities development impact fees at the rate in effect at the time building permits are issued.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PUBLIC SERVICES (cont.)</b>			
<p><b>Parks and Recreation.</b> Implementation of the proposed UCSP would generate increased demand for parks and recreation facilities. Full buildout of the UCSP would be required to provide up to approximately 55 acres of new parkland (incrementally and commensurate with new development) in order to meet the Chula Vista Municipal Code, Park Development Ordinance standard of 3 acres of parkland for every 1,000 people. A significant impact could occur if dedication of parkland and construction of new facilities does not coincide with project implementation and project population growth.</p> <p>Implementation of mitigation measure 5.11.5-1 would reduce impacts to the provisions of park and recreation services and facilities resulting from the adoption of the UCSP to below a level of significance.</p>	<p>5.11.5-1: Prior to approval of an Urban Core Development Permit, each subsequent project shall establish to the satisfaction of the Community Development Director that the project meets the City's parkland dedication requirement. As a condition of project approval, individual developers shall provide required parkland and facilities on-site, if possible and consistent with potential site locations identified in the UCSP and Parks Master Plan; or pay the applicable parkland acquisition and parkland development fee and recreation facility development impact fees at the rates in effect at the time building permits are issued.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>PUBLIC UTILITIES</b>			
<p><b>Wastewater Treatment Capacity.</b> Based on buildout projections, impacts to the provision of sewer service would be significant. Chula Vista owns capacity in the Metro system, which provides conveyance of City wastewater flows. Increasing population will place additional demand on sewer services. While it is the intent of the City to ensure that services are provided concurrent with need, the provision of sewer services is not solely within its authority. Although the City is in the process of acquiring additional capacity from Metro, that acquisition has not yet been finalized. Based on GPU buildout projections, the City will be generating approximately 26.2 mgd of wastewater citywide by 2030 and would need to acquire additional 6.4 mgd of capacity rights by the year 2030 in order to meet citywide projected demand. Of this total, 1.57 mgd are projected to be generated in western Chula Vista, including a projected generation of 0.88 mgd for the UCSP Subdistricts Area.</p>	<p>5.12.2-1: Prior to the approval of subsequent individual development projects, project plans shall demonstrate that there is sufficient wastewater capacity available to serve the proposed project. Conditions of approval may require sewer capacity fees to be contributed to mitigate project-related impacts.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>PUBLIC UTILITIES (cont.)</b></p> <p><b>Energy.</b> Impacts to energy are considered significant because there is no long-term assurance that energy supplies will be available at buildout of the UCSP. Avoidance of energy impacts cannot be assured regardless of land use designation or population size. Although changes to planned land uses in the City would continue to implement the Energy Strategy Action Plan, San Diego Regional Energy Plan and Transit First Plan, implementation of the proposed land uses identified in the UCSP has the potential to result in significant impacts to nonrenewable and slowly renewable energy resources as a result of anticipated growth.</p> <p>The environmental sustainability measures of the UCSP(Chapter VI, G.) may further serve to reduce energy consumption associated with construction and occupation of structures within the UCSP area.</p>	<p>5.12.4-1: The City shall continue to implement the Energy Strategy Action Plan that addresses demand side management, energy efficient and renewable energy outreach programs for businesses and residents, energy acquisition, power generation, and distributed energy resources and legislative actions, and continue to implement the CO<sub>2</sub> Reduction Plan to lessen the impacts on energy.</p> <p>While implementation of the above mitigation measure reduces energy related impacts, because there is no assurance that energy resources will be available to adequately serve the projected increase in population resulting from adoption of the UCSP, the impact remains significant.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<b>HAZARDS/RISK OF UPSET</b>			
<p><b>Hazardous Materials Transport, Use Disposal or Release.</b> Hazardous materials occur within the UCSP area and pose significant public health and safety risks during construction or long-term occupation of proposed development. Exposure to hazardous materials that exceed state and/or federal standards can occur through contact with contaminated soil or groundwater, through ingestion, skin contact or the inhalation of vapors or dust.</p> <p>An approximate total of 103 sites of potential hazardous concern have been identified from various federal, state and local databases as occurring within the Subdistricts Area.</p>	<p>5.13-1: Prior to approval of subsequent individual development projects, any project plans that propose land uses which use, transport, store, and dispose of hazardous materials shall be conducted in compliance with the relevant regulations of federal, state, and local agencies, including the EPA, California Department of Health Services (DHS), and California Department of Transportation.</p> <p>5.13-2: A risk assessment shall be performed at all sites within the study area where contamination has been identified or is discovered during future construction activities, and at which soil is to be disturbed, to address risks posed by any residual contamination, and to establish appropriate mitigation measures (e.g., natural attenuation, active remediation, engineering controls) that would be protective of human health and the environment. All assessment and remediation activities shall be conducted in accordance with a Work Plan that is approved by the regulatory agency having oversight of the activities.</p>	<p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p> <p>Prior to the approval of an Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p> <p>City of Chula Vista (CCV)</p>

**URBAN CORE SPECIFIC PLAN MITIGATION MONITORING AND REPORTING PROGRAM  
(continued)**

Potential Significant Impact	Mitigation Measures	Time Frame of Mitigation	Monitoring Reporting Agency
<p><b>HAZARDS/RISK OF UPSET (cont.)</b></p> <p>Due to the presence of numerous pre-1960s structures in the area, there is a potential that during construction or demolition, workers may come into contact with hazardous building materials( asbestos and lead). Future development consistent with the proposed UCSP would result in significant impacts if such development allows greater contact between humans and hazards.</p>	<p>5.13-3 A hazardous building materials survey should be performed at buildings in the study area prior to demolition or renovation activities. This type of survey typically addresses lead-based paint (LBP), asbestos-containing materials (ACMs), PCBs in electrical equipment, mercury switches, and heating/cooling systems. Such a survey should be conducted under the direct supervision of a State of California Certified Asbestos Consultant and EPA lead assessor. Prior to demolition or renovation work that would disturb identified ACMs, LBP, or other hazardous materials, a licensed abatement removal contractor should remove and properly dispose of the hazardous material(s) in accordance with applicable local, state and federal regulations. A California certified consultant should prepare a bid specification document, and perform abatement project planning, site and air monitoring, oversight activities, and reporting activities.</p>	<p>Prior to the approval of any demolition or renovation activities or construction permits, including but not limited to the first Grading Permit, Demolition Permit, and Urban Core Development Permit (UCDP) or other discretionary permit.</p>	<p>City of Chula Vista (CCV)</p>

## **APPENDIXES**

**(bound under separate cover)**