Center City Corridors: Existing Conditions and Opportunities and Constraints Analysis

*Background Report and Community Context (October 2019)*

**Prepared for:**
City of Anaheim

**Prepared by:**
RRM Design Group
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I. Introduction

Overview and Study Objectives

This Background Research and Analysis Report for the Center City Corridors Existing Conditions and Opportunities Analysis study (Study) is intended to provide an understanding of existing policies and programs related to the Center City Corridors area (Study Area). This includes both local policies and programs as well as those from larger regional and, in some instances, statewide agencies. Study objectives as defined by the Southern California Association of Governments (SCAG) Sustainability Planning Grant include:

1. Engaging with the community and affected agencies;
2. Developing strategies for infill and investment around transit;
3. Enhancing mobility, infrastructure, open space, land use, and urban design;
4. Supporting sustainability and climate action planning;
5. Promoting strategies of the 2016 RTP/SCS (Regional Transportation Plan/Sustainable Communities Strategy)
6. Identifying projects and programs for future implementation (foundation for future grants and funding)

Community Outreach

An initial phase of community outreach was conducted to collect community feedback on a variety of topics related the Study Area. Feedback was obtained during a kickoff community workshop event, stakeholder interviews, pop-up workshops, and an online survey. Feedback themes collected during this initial community outreach phase have been integrated within this document where relevant and informative to the broader discussion.

Study Area Boundary

The Study Area is centrally located within the City of Anaheim, generally along Harbor Boulevard and Anaheim Boulevard north of Interstate 5 (I-5) and includes The Colony and Center City. The Study Area boundaries are generally defined by the SR-91 Freeway and the City of Fullerton to the north; I-5, The Anaheim Resort, and Platinum Triangle to the south; the Metrolink Railroad to the east; and I-5 and West Street to the west. While this area is large in geographic scope, the main focus of this effort is on the primary corridors located within the Study Area. These primary corridors include La Palma Avenue, Lincoln Avenue, Broadway, Ball Road, Harbor Boulevard, and Anaheim Boulevard.

Existing Conditions and Character

The following provides a summary of the existing conditions and characteristics of the primary areas within the Study Area. In general, the existing conditions and character of the Study Area vary greatly due to the large geographic scale and the historical development patterns that have occurred within the City over time.

Primary Corridors

As previously noted, there are six primary corridors within the Study Area. The conditions along these primary corridors vary in terms of right-of-way width and roadway type designation, current conditions, and general streetscape orientation. Generally speaking, the land directly adjacent to the primary corridors contains the majority of the commercial land uses found within the Study Area. However, while
the commercial uses in and around the core of Center City presents itself as more urban in character, commercial land found elsewhere in the Study Area still has a more suburban appearance. Based upon field observations within the Study Area, commercial uses found along the primary corridors in more mid-boulevard locations appear to be underutilized and in transition.

**Center City Core**
The Center City Core portion of the Study Area has seen a renaissance over the last few decades, with new residential, commercial, and other developments and public realm enhancements attracting renewed interest to this area. These improvements are most noticeable in and around where Harbor Boulevard, Lincoln Avenue, Anaheim Boulevard, and Broadway intersect. Entertainment and cultural events have also been a draw to this area, providing even greater citywide and regional attention to the cultural heart of the City of Anaheim.

**Residential**
The major land use comprising the Study Area is within the residential category. Most noticeable is The Colony, a local historic district encompassing the boundaries of the original town of Anaheim. Residents of The Colony are proud of the place they call home and many of the homes are reflective of their original architectural style and character. While much of the residential categories are single-family oriented, the Study Area does contain a number of multiple-family zoned areas which are generally scattered throughout with a larger concentration located to the east of Anaheim Boulevard. The condition and character of these multiple-family developments vary, with some well-maintained and up-kept, while others are showing signs of deterioration.

**Industrial**
Industrial land uses have been slowly converted to other uses within the Study Area. The majority of the remaining industrial land uses within the Study Area are located within the southeast as well as the northeast, adjacent to the OCTA owned and Metrolink operated rail line that defines the eastern boundary of the Study Area, with some smaller pockets remaining just south of the Center City Core. While historically many of the remaining industrial areas were used for heavier industrial related uses, most of have transitioned to lighter industrial uses in recent years.

**Key Themes**
In conducting this initial Background Research and Analysis Report, key themes emerged as part of the literature review related to the Study Area as well as during the initial stakeholder and community outreach phase. Key themes include:

- Lack of clarity for new development or redevelopment to occur, including housing, due to multiple layers of policy and zoning standards across multiple documents;
- Continued reliance on automobile use due to mobility related issues including transit connectivity and bicycle and pedestrian network gaps;
- Secondary environmental health issues related to physical and mental health and healthy food access;
- Deficiencies in park and trail area based on population density; and
- Lack of infrastructure capacity to serve current and future development.
Next Steps
Based upon the findings in this report as well as the feedback received from stakeholders and community members as part of the initial study outreach, an opportunities analysis will be prepared to provide the City with potential strategies to enhance transportation, infrastructure, parks and open space, land use, aesthetics, and economics within the Study Area. Recommendations developed for the opportunities analysis will then be reviewed and prioritized/ranked based upon their ability to be implemented and from a feasibility point of view.

II. Land Use Policy Review

Land Use and Urban Design Goals and Policies
The following section outlines goals and policies from the City’s existing planning documents that are relevant to the Study Area.

General Plan
The General Plan discussion below includes the Land Use, Circulation, Community Design, Economic Development, and Housing Elements of the City as it relates to the Study Area. While discussion on these elements has been completed in a general manner, greater emphasis has been placed on the Land Use Element within this section due to its current and future evolution of the Study Area.

Land Use Element
The Land Use Element designates the distribution and general location of land uses, such as residential, retail, industrial, open space, recreation, and public uses within the City. The Land Use Element also addresses the permitted density and intensity of these various land use designations, as reflected on the City’s General Plan Land Use Map.

As shown in Exhibit 1, current land use designations within the Study Area include:

- Neighborhood Center
- Regional Commercial
- General Commercial
- Commercial Recreation
- Industrial
- Mixed-Use High
- Mixed-Use Urban Core
- Office-Low
- Open Space-Parks
- Open Space-Water Uses
- Public-Institutional
- Low Density Residential
- Low-Medium Density Residential
- Medium Density Residential
- Railroad
Exhibit 1: Land Use Designations (Land Use Element (Nov. 2018) - Figure LU-4)
Citywide

Overarching goals and supporting policies of the Land Use Element that guide the growth and development citywide include those related to neighborhoods, housing opportunities, corridors, compatibility, creating identifiable places, redevelopment and revitalization, and jobs-housing relationship.

Neighborhoods

Goal 1.1: Preserve and enhance the quality and character of Anaheim’s mosaic of unique neighborhoods.

Housing Opportunities

Goal 2.1: Continue to provide a variety of quality housing opportunities to address the City’s diverse housing needs.

Corridors

Goal 3.1: Pursue land uses along major corridors that enhance the City’s image and stimulate appropriate development at strategic locations.

Goal 3.2: Maximize development opportunities along transportation routes.

Compatibility

Goal 4.1: Promote development that integrates with and minimizes impacts to surrounding land uses.

Creating Identifiable Places

Goal 5.1: Create and enhance dynamic, identifiable places for the benefit of Anaheim residents, employees, and visitors.

Redevelopment and Revitalization

Goal 6.1: Enhance the quality of life and economic vitality in Anaheim through strategic infill development and revitalization of existing development.

Jobs-Housing Relationship

Goal 7.1: Address the jobs-housing relationship by development housing near job centers and transportation facilities.

Stakeholders and community members supported many of these larger, citywide goals as they relate to the Study Area. These included enhancing the quality and character of existing neighborhoods, expanding housing variety and quality, revitalizing the primary corridors with strategic infill development, detailing compatibility of new development with surrounding land uses, enhancing the existing and creating new identifiable places, and providing jobs in closer proximity to housing and/or transit facilities.

In addition to providing citywide goals and policies, the Land Use Element also outlines goals and policies focused towards individual neighborhoods, or community policy areas, located within the Study Area. Exhibit 2 portrays the general Study Area with these individual community policy areas.
Exhibit 2: Combined Community Policy Areas and Primary Corridors
North Central Industrial Area

The North Central Industrial Area community area contains older heavy industrial uses that have gradually transitioned to lighter uses as well as La Palma Park that has opportunity for expansion. It is surrounded by residential neighborhoods, including the Historic Palm neighborhood, and continues to have some compatibility issues. Exhibit 3 portrays its extents and location within the Study Area. Goal 12.1 in the Land Use Element specifically relates to this portion of the Study Area:

**Goal 12.1:** Encourage the on-going transition of the North Central Industrial Area into a high-quality light industrial area that is sensitive to adjacent residential neighborhoods.

Supporting policies of Goal 12.1 include:

1) Pursue various neighborhood improvements (e.g., continued undergrounding of utility lines, continuous sidewalks and links to nearby retail centers and transit stops, additional landscaping along arterial streets, enhanced entryways into neighborhoods, etc.) to improve the livability of existing residential areas.

2) Encourage the on-going transition of heavy industrial uses to “cleaner” light industrial uses pursuant to the Zoning Code and General Plan land use designations.

3) Require development standards that provide adequate physical buffers between existing residential uses and expanded or future industrial uses.

4) Support OCTA’s efforts to provide enhanced bus service along La Palma Avenue and intensify land uses in close proximity to Bus Rapid Transit stop(s).

5) Preserve the industrial integrity of the area from encroachment of non-industrial uses in areas designated for industrial uses.

6) Explore opportunities to improve pedestrian access to La Palma Park from the adjacent residential community to the east.

7) Continue on-going City efforts to expand La Palma Park.

8) Continue beautification efforts along the Riverside (SR-91) Freeway to reflect the vision for this area as a high-quality light industrial area.

Other than expanding La Palma Park, stakeholders and community members did not have strong opinions on North Central Industrial Area. Some individuals supported the idea of transitioning the heavy industrial uses to “cleaner” light industrial uses while also continuing to provide adequate buffering between industrial and residential land uses.
The Colony and Downtown

The Colony and Downtown includes many of the City’s historic resources, the downtown, and its civic center. The vision for this community area is to develop Downtown as a mixed-use core, while maintaining historic resources and transitioning older industrial areas to residential neighborhoods. Exhibit 4 portrays its extents and location within the Study Area. Goal 13.1 in the Land Use Element specifically relates to this portion of the Study Area:

Goal 13.1: Continue to enhance Downtown as the cultural, artistic, and civic center of Anaheim.

Supporting policies of Goal 13.1 include:

1) Encourage adherence to the Anaheim Colony Vision, Principles and Design Guidelines for new development in the Colony and Downtown areas.

2) Ensure that Downtown maintains a mix of uses attractive to broad segments of Anaheim’s population and that stimulate activity during day and evening hours, every day of the week.

3) Downtown shall be accessible and connected by multiple modes of transportation including pedestrian, bicycle, transit and automobile.

4) Encourage the preservation and protection of buildings of historical significance.

5) Intensify and revitalize strategically located commercial sites in keeping with the Anaheim Colony Vision, Principles and Design Guidelines.

6) Protect the integrity of historic single-family neighborhoods from incompatible development.

7) Work with homeowners to utilize the Anaheim Colony Historic District Preservation Plan to assist with future home improvements.

8) Replace declining strip commercial areas with residential uses, per the General Plan and Anaheim Colony Vision, Principles and Design Guidelines.

9) Convert Santa Ana Street into a pedestrian-friendly residential neighborhood, including the removal of existing railroad tracks (if feasible).

10) Connect Downtown with The Platinum Triangle using the Olive Street railroad right-of-way for pedestrian, bicycle, and/or transit use.

11) Continue to improve aging multiple-family neighborhoods through the Neighborhood Improvement Program.

12) Explore opportunities to preserve the orange grove on Santa Ana Street near Harbor Boulevard as a community amenity.

13) Encourage the transition of older industrial areas to residential neighborhoods containing a variety of high quality housing.

• Providing tools to historic property owners, including Architectural Style Guides and preservation incentives, such as the Mills Act;
The Colony and Downtown are clearly the heart and soul of the local Anaheim community. Stakeholders and community members participating in the outreach clearly expressed this sentiment during the initial study outreach phase. Their preference is that the uses in this area continue to be oriented towards the needs and desires of the community, rather than an extension of The Anaheim Resort. Individuals appreciated the evolving culture and art scene within the Downtown and supported ways in which to expand these uses within the Study Area. While continued preservation and enhancement of The Colony’s single-family residential neighborhoods was strongly voiced, many participants also brought up the need to transition the uses along the primary corridors within the Study Area to allow for a broader range of uses and housing types – such as along Anaheim Boulevard and Ball Road.
Exhibit 4: The Colony and Downtown (Land Use Element (Nov. 2018) – The Colony and Downtown)
South Anaheim Boulevard

The South Anaheim Boulevard community area serves as the major link between Downtown, Platinum Triangle, and The Anaheim Resort. Land uses within the area include a variety of residential, commercial, industrial, and some office uses. Exhibit 5 portrays its extents and location within the Study Area. Goal 14.1 in the Land Use Element specifically relates to this portion of the Study Area:

**Goal 14.1:** Establish the South Anaheim Boulevard Corridor as a revitalized commercial and residential area that serves as a link between Downtown, The Platinum Triangle, and The Anaheim Resort.

Supporting polices of Goal 14.1 include:

1) Encourage “Boulevard Housing” and neighborhood residential uses north of Ball Road with neighborhood commercial uses at intersections, pursuant to redevelopment plan and South Anaheim Boulevard Corridor Overlay Zone.

2) Ensure that new development does not compromise the livability of existing residential neighborhoods.

3) Promote land uses that build upon and enhance the nucleus created by Western Medical Center.

4) Promote commercial uses between Ball Road and the Santa Ana (I-5) Freeway that take advantage of freeway accessibility and visibility and proximity to The Anaheim Resort and The Platinum Triangle.

5) Ensure quality development through adherence to applicable Zoning Code development standards and the Community Design Element policies and guidelines.

South Anaheim Boulevard was identified by those involved in the initial outreach as having the most opportunity within the Study Area for revitalization based on its central location between Downtown, The Platinum Triangle, and The Anaheim Resort. Stakeholders and community members alike expressed the need to create an appropriate transition of uses from the encroaching Anaheim Resort area in the southern portion of this area towards Downtown, providing a greater variety of commercial/retail uses (as opposed to the current fast food dominance), housing types and variety, and expanding Western Medical Center associated uses.
Exhibit 5: South Anaheim Boulevard (Land Use Element (Nov. 2018) – South Anaheim Boulevard
Community Design Element

The Community Design Element identifies a number of goals and policies that apply broadly to the design aesthetics of various development types within the City as a whole. However, it also identifies goals and policies for more specific portions of the Study Area including the Anaheim Colony Historic District, Downtown Revitalization, and North Central Industrial Area.

As further discussed under The Anaheim Colony – Vision, Principles, and Design Guidelines as well as the Historic Preservation Plan sections of this document, the residential areas of The Colony were identified by stakeholders and community members as highly valued and areas in which the aesthetic and character should continue to be preserved and restored into the future. Moreover, restoring elements of The Colony as well as enhancing the historic character through signage, lighting, landscaping, and other streetscape elements was also desired, as long as the enhancements are consistent with and authentic to the time period in which originally developed.

Stakeholders and community members were split over design of new development along the primary corridors within the Study Area. Both sides agreed that the corridors present opportunities to introduce new housing and other uses within the Study Area, however they disagreed on the design and character of the new development – with some in favor of the architectural character of more recent developments, while others expressing concern for the lack of design references of recent developments to the existing historic residential areas of The Colony. In regards to safety, Crime Prevention Through Environmental Design (CPTED) design direction was identified as needed within the Study Area to enhance community members and visitors perception of safety within the area.

The need to transition the design aesthetic within the South Anaheim Boulevard Area, away from the existing aesthetic of The Anaheim Resort, was also highlighted, as preference was towards expanding the design and character of the Downtown, including branding and signage, as well as incorporating local art in public spaces so as to relate more toward the existing community. Speaking specifically to the North Central Industrial Area, stakeholders and community members identified the need to enhance the entry presence of the City when entering/ exiting the SR-91 Freeway on the northern end of the Study Area.

Examples of existing branding and signage of the Center City Area.
Economic Development Element

The Economic Development Element provides guidance for the City in expanding the local economy, which provides jobs, attracts and retains businesses, supports diverse and vibrant commercial areas, and brings in sufficient revenue to support various local programs and services. It identifies specific goals and policies to ensure a prosperous economic future for the City as a whole as well as more specific areas of the City. Goals and policies touch on business retention, growth, and attraction; redevelopment/revitalization; workforce development – job promotion, training, and career education; public facilities and community services; housing diversity and affordability; and area-specific goals and policies. Goal 6.4 in the Economic Development Element specifically relates to the Study Area:

Goal 6.4: Promote the revitalization of Downtown Anaheim as a pedestrian-oriented and bicycle-friendly civic town center, enhanced with diverse retail, residential, and cultural opportunities.

Supporting policies of Goal 6.4 include:

1) Promote the Anaheim Colony Historic District as a destination for local residents and regional visitors thereby creating a stimulus for economic revitalization.

2) Encourage quality design through implementation of the Anaheim Colony Vision, Principles, and Design Guidelines.

3) Encourage mixed-use development incorporating ground-floor retail and high quality architecture that is consistent with the historic nature of the area.

4) Encourage well-designed, convenient parking structures, distinctive street furniture, and ample bicycle and pedestrian amenities as stimuli to Downtown shopping and commercial activity.

The majority of stakeholders and individuals in the community echoed similar economic development related sentiments, desiring a more pedestrian and bicycle-friendly Downtown, greater diversity in retail and residential living opportunities, and expanding the existing character and culture - currently found in and around the immediate Center City Core area. A number of community members also expressed a desire to increase job opportunities as well as job variety within the Study Area, such as expanding jobs related to the City’s existing art scene and creative professional industries like digital media and graphic arts and/or other newer technology related jobs, such as e-sports and video game design.

Housing Element

The 2014-2021 Housing Element provides for the identification and analysis of existing and projected housing needs and articulates the City’s official policies for facilitating production, conservation and preservation, quality and design strategy, rehabilitation, and affordability of housing within the City. Of note, the Study Area contains a number of opportunity sites that are intended to aid the City in meeting the low income housing needs of the community (see Exhibit 6).
Examples of more recent housing developments within the Study Area.
Exhibit 6: Housing Opportunity Sites (Housing Element (Feb. 2014) – Exhibit B-3)
Housing was a prominent topic brought to light by stakeholders and members of the community. Lack of new housing production, affordability of the housing being produced, quality of the existing housing stock, overcrowding of the existing housing stock, and accommodating the homeless population were all top concerns. While many members of the community were in favor of adding new housing along the primary corridors within the Study Area, compatibility with existing single-family neighborhoods and the character of historic structures were voiced.

**Guide for Development Greater Downtown of Anaheim**

Established in 2007, the Guide for Development Greater Downtown Anaheim provides a series of goals, strategies, and actions to strengthen the visibility of the City’s urban center and The Colony as it relates to urban design, landscape, and traffic and transportation (see Exhibit 7).

Goals related to the City’s Downtown and The Colony include:

- Strengthen the pedestrian realm;
- a mix of uses for sustainable growth;
- the built environment to define street edges and shared public spaces;
- high-quality architecture;
- new development an integral part of the City;
- standards to encourage sustainable and energy-efficient development;
- a larger planning framework with ties to the Platinum Triangle that also looks at future multi-transit connections; and
- to attract new investment.

As noted elsewhere in this report, stakeholders and community members expressed the need to enhance the pedestrian realm along the primary corridors within the Study Area as new development occurs, such as wider sidewalks, new lighting, bicycle racks, trees, and other streetscape elements. A mix of uses within the Study Area as well as ensuring high-quality architecture within new developments were also identified.
Exhibit 7: Greater Downtown Overall Concept Diagram (Guide for Development Greater Downtown Anaheim (Dec. 2007) – Overall Concept Diagram)
The Anaheim Colony – Vision, Principles, and Design Guidelines
The historic Anaheim Colony comprises a large, central portion of the Study Area and The Anaheim Colony – Vision, Principles, and Design Guidelines document represents the policy framework portion of the General Plan Community Design Element for this area of the City. Adopted in 2003, it provides a vision, guiding principles, and design guidelines for the design, preservation, and restoration of existing residential and commercial structures and streetscapes and also applies to new construction.

Guiding principles of this document identify The Colony as:

- The City’s historic and cultural center;
- Its residential areas reflect the City’s diverse architectural heritage;
- The Downtown area encourages a wide variety of activities and uses;
- The streets are designed with the pedestrian in mind;
- Commercial streets have strong, unifying historical design themes;
- Public spaces provide quality gathering places, comfort, and focal points;
- New development respects the historic context; and
- Certain areas outside the boundary should be considered zones of influence of the historic district and subject to its design guidelines.

Many of these guiding principles related to The Colony were echoed by stakeholders and the community. In some instances, community members felt the architectural character and street design themes along the primary corridors within the Study Area could be enhanced to create a unified aesthetic and reflect The Colony as a whole.

Citywide Historic Preservation Plan
The Citywide Historic Preservation Plan contains policies, procedures, and design guidelines related to identifying and preserving historic structures and historic districts within the City. It is intended to assist the City and the community in recognizing the importance of historic resources and to provide a framework for the identification, and potentially the formal designation, of those resources. The Study Area is comprised of a large number of single-family residences, many of which were constructed during the early 1900’s, prior to WWII. The remnants of the City’s original Downtown, much of which was removed for redevelopment during the 1970’s, is also located within the Study Area. As shown in Exhibit 8, three historic districts, 39 Mills Act properties, and an additional 91 historically classified properties are located within the Study Area; most of these designations are associated with single-family residential properties.
Exhibit 8: Historic and Potential Historic Structures in Study Area (Anaheim GIS Dept. (May 2019))
Stakeholders and members of the community strongly supported the past, present, and future preservation of The Colony and other historic resources within the Study Area. These individuals also highlighted the need to increase awareness of these important historic resources by expanding visibility of the Study Area – whether through signage, streetscape improvements, and/or other methods.

**East Center Street Specific Plan**

The East Center Street Specific Plan, located within the Study Area as shown in Exhibit 9, was prepared as the implementing tool for the Lincoln Village Development in 1990. It was adopted as an implementation item of the General Plan at the time of adoption and contains relevant goals and policies pulled from the General Plan from that time period that were relevant to the Lincoln Village Development. The Specific Plan addressed the need at the time to provide new housing opportunities and strategically located commercial/retail space within proximity of the Downtown. The Specific Plan area is built out and includes approximately 390 dwelling units, 6,600 square feet of retail space, and Citrus Park. Citrus Park includes the former Downtown Anaheim train station, which now houses the Anaheim Accessibility Center, providing programs for youth and adults with developmental disabilities.
Zoning Code

The Zoning Code promotes growth of the City in an orderly manner and promotes and protects the public health, safety, peace, comfort, and general welfare in conformance with the General Plan. Current zoning designations within the Study Area include Single-Family Residential 1 (RS-1), Single-Family Residential 2 (RS-2), Single-Family Residential 3 (RS-3), Single-Family Residential 4 (RS-4), Multiple-Family Residential 2 (RM-2), Multiple-Family Residential 3 (RM-3), Multiple-Family Residential 4 (RM-4), General Commercial (C-G), Low Intensity Office (O-L), Industrial (I), Transitional (T), and Public Recreation (PR). In addition, the East Center Street Specific Plan (SP 90-2) is located within the Study Area, which provides the implementing standards for properties located within that area.

In reviewing the location of the above mentioned zones on the City Zoning map (see Exhibit 10), it became apparent that the Study Area is predominantly zoned for single-family and multiple-family residential uses, followed by commercial and industrial. In looking at the geographic distribution of the zones within the Study Area, single-family zones are primarily located away from the primary corridors within the Study Area, although there are occurrences where single-family zones are located on these primary corridors. Multiple-family zones are located throughout the Study Area, generally in relative proximity to commercial zones or along primary corridors. The General Commercial zone is centrally located within the Downtown area and continues along the primary corridors on La Palma Avenue, Lincoln Avenue, and Anaheim Boulevard with some instances occurring along Harbor Boulevard and Ball Road. The Low Intensity Office zone is primarily focused along Harbor Boulevard, although other smaller pockets exist along other primary corridors. Industrial zones are primarily located in the northern and southeastern portions of the Study Area, with some smaller remnant parcels located centrally near Downtown. Transitional zones are located sporadically throughout the Study Area, primarily on or around the Harbor Boulevard corridor. Lastly, the Public Recreation zone represents parks and other publicly accessible spaces and are primarily located in between Harbor Boulevard and Anaheim Boulevard throughout the Study Area but other, smaller pockets of this zone designation are located within the Study Area.
Exhibit 10: Zoning Designations and Overlays (Zoning Title 18 (Jan. 2019) – Zoning Map)
The following tables provide a summary of key development standards for those zoning designations found within the Study Area. In addition to these summarized standards, the Zoning Code also contains additional standards related to parking and loading, landscaping and screening, and signage, among others. In addition, many standards throughout the Zoning Code are tailored to address single-family adjacencies where a different use is directly abutting the single-family residential zones.

**Table 1: Summary of Key Single-Family Residential Standards (M.C. Chapter 18.04)**

<table>
<thead>
<tr>
<th></th>
<th>RS-1</th>
<th>RS-2</th>
<th>RS-3</th>
<th>RS-4</th>
</tr>
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<tbody>
<tr>
<td><strong>Structural Height</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front</td>
<td>35-ft, 2 ½-stories</td>
<td>30-ft, 2-stories</td>
<td></td>
<td>35-ft, 2-stories; 35-ft, 3-stories if located w/in 55-ft of detached SFR use or zone property line</td>
</tr>
<tr>
<td>Side</td>
<td>30-ft or 25% of lot depth, whichever is less</td>
<td>25-ft or 25% of lot depth, whichever is less</td>
<td>15-ft</td>
<td>10-ft</td>
</tr>
<tr>
<td>Street Side</td>
<td>10% of lot width, not to be less than 5-ft or exceed 10-ft; 5-ft; Min. on corner lot or reverse building frontage shall be 9-ft</td>
<td>5-ft to the property line; or 0-ft on one side and 10-ft on the other</td>
<td>Min. on corner lot or reverse building frontage shall be 9-ft</td>
<td></td>
</tr>
<tr>
<td>Rear</td>
<td>25-ft or 25% of lot depth, whichever is less</td>
<td>25-ft, may be reduced to 10-ft if dwellings or accessory structure do not occupy more than 35% of required setback.</td>
<td>15-ft</td>
<td>o 10-ft for single-story; 15-ft for two- and three-story; o 55-ft for three-story within 150-ft of SFR; o 20-ft from 3-story structure to property line of non-single family use.</td>
</tr>
<tr>
<td><strong>Floor Area Ratio (FAR)</strong></td>
<td>1,700 sf</td>
<td>1,225 sf</td>
<td>1,225 sf, but may be modified</td>
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<tr>
<td><strong>Site Coverage</strong></td>
<td>40%</td>
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<td>50%</td>
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### Table 2: Summary of Key Multiple-Family Residential Zoning Standards (M.C. Chapter 18.06)

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<th>RM-3</th>
<th>RM-4</th>
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<td><strong>Structural Height</strong></td>
<td>40-ft, greater than 40-ft or 3-stories permitted by conditional use permit</td>
<td>40-ft; greater than 40-ft or 3-stories may be increased to 4-stories permitted by conditional use permit</td>
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<td><strong>Structural Setbacks</strong></td>
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<td>1-story:</td>
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<tr>
<td>All Building Wall</td>
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<tr>
<td>2-story:</td>
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<tr>
<td>Primary Wall</td>
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<tr>
<td>Secondary Wall</td>
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<td>Blank Wall</td>
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<td>3-story:</td>
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<td>Primary Wall</td>
<td>20-ft</td>
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<td>Secondary Wall</td>
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<td>Blank Wall</td>
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<td>4-story:</td>
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<td></td>
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</tr>
<tr>
<td>Blank Wall</td>
<td>15-ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Additional structural setback requirements for Multiple-Family zones when adjacent to Single-Family Residential Zones. Refer to M.C. Chapter 18.06.090.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Floor Area Ratio (FAR) - for attached single-family, two-family, and multiple-family</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Studio: 550 sf, not to exceed 20% of total units</td>
<td>o Studio: 550 sf, not to exceed 20% of total units</td>
<td>o Studio: 550 sf, not to exceed 20% of total units</td>
<td>See RM-3</td>
</tr>
<tr>
<td>o 1-Bdrm: 750 sf</td>
<td>o 1-Bdrm: 700 sf</td>
<td>o 1-Bdrm: 700 sf</td>
<td></td>
</tr>
<tr>
<td>o 2-Bdrm: 950 sf</td>
<td>o 2-Bdrm: 825 sf</td>
<td>o 2-Bdrm: 825 sf</td>
<td></td>
</tr>
<tr>
<td>o 3-Bdrm: 1,150 sf</td>
<td>o 3-Bdrm: 1,000 sf</td>
<td>o 3-Bdrm: 1,000 sf</td>
<td></td>
</tr>
<tr>
<td>o 4-Bdrm: 1,350 sf</td>
<td>o +3-Bdrm: 1,000 sf, plus 200 sf for each bdrm. over three</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Site Coverage</strong></td>
<td>40%</td>
<td>45%</td>
<td>55%</td>
</tr>
</tbody>
</table>
### Table 3: Summary of Key Commercial, Office, Industrial, Transitional, & Public Recreation Standards (M.C. Chapters 18.08, 18.10, & 18.14)

<table>
<thead>
<tr>
<th></th>
<th>C-G</th>
<th>O-L</th>
<th>I</th>
<th>T</th>
<th>PR</th>
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</thead>
<tbody>
<tr>
<td><strong>Structural Height</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>75-ft; restrictions for stories/height based on distance from SFR zones. See Table 8-F in M.C. Chapter 18.08.</td>
<td>50-ft; restrictions for stories/height based on distance from SFR zones. See Table 8-F in M.C. Chapter 18.08.</td>
<td>w/in 200-ft of any RES. zone boundary shall not exceed ½ distance from building to zone; 20-ft w/in 40-ft of any RES. zone boundary.</td>
<td>30-ft for single-family; ½ distance the boundary to any RES. zone, not to exceed 30-ft</td>
<td>Conform with those imposed on publicly owned land and shall be compatible with surrounding zone standards.</td>
</tr>
<tr>
<td><strong>Structural Setbacks</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front</td>
<td>-</td>
<td></td>
<td>25-ft</td>
<td></td>
<td>Conform with those imposed on publicly owned land and shall be compatible with surrounding zone standards.</td>
</tr>
<tr>
<td>Side</td>
<td></td>
<td>-</td>
<td>10-ft; not &gt;50% of front setback on street side</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rear</td>
<td></td>
<td>-</td>
<td>25-ft</td>
<td></td>
<td></td>
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<tr>
<td>Freeway ROW</td>
<td>10-ft</td>
<td>-</td>
<td>30-ft</td>
<td></td>
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<tr>
<td>Arterial Hwy.</td>
<td></td>
<td>15-ft</td>
<td></td>
<td></td>
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<tr>
<td>Collector St.</td>
<td>-</td>
<td></td>
<td>15-ft</td>
<td></td>
<td></td>
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<tr>
<td>Local St.</td>
<td>10-ft</td>
<td>5-ft</td>
<td></td>
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<tr>
<td>Interior Side, Non-Res.</td>
<td></td>
<td>0-ft</td>
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<tr>
<td>Any Res. Zone Boundary:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1-story</td>
<td>20-ft</td>
<td>20-ft</td>
<td>20-ft</td>
<td></td>
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<tr>
<td>2-story</td>
<td>51-ft</td>
<td>51-ft</td>
<td>51-ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-story</td>
<td>76-ft</td>
<td>101-ft</td>
<td>101-ft</td>
<td></td>
<td></td>
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<tr>
<td>4-story</td>
<td>101-ft</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>5-story</td>
<td>126-ft</td>
<td></td>
<td></td>
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<tr>
<td>6-story</td>
<td>151-ft</td>
<td></td>
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<tr>
<td>Abutting Alley</td>
<td>10-ft</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Floor Area Ratio (FAR)</strong></td>
<td></td>
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</tbody>
</table>
Overlay Zones
The following overlay zoning designations of the Zoning Code are also applicable to the Study Area:

South Anaheim Boulevard Corridor (SABC) Overlay Zone
The purpose of the South Anaheim Boulevard Corridor (SABC) Overlay Zone is to provide supplemental land use options and development standards for the improvement of the South Anaheim Boulevard Corridor. The (SABC) Overlay Zone is not intended to provide for the conversion, reuse or remodeling of existing industrial buildings or other buildings not developed in accordance with the standards of the SABC Overlay Zone.

Downtown Mixed Use Overlay Zone
The purpose of the Downtown Mixed Use (DMU) Overlay Zone is to provide opportunities for development intended to continue downtown revitalization, consistent with the policy direction in the City of Anaheim General Plan.

Mixed Use Overlay Zone
The purpose of the Mixed Use (MU) Overlay Zone is to implement the Mixed Use Mid Density, Mixed Use Medium Density, and Mixed Use High Density General Plan Land Use Designations; and define allowable land uses and property development standards, including intensity of development, for mixed-use areas, in order to produce healthy, safe and attractive neighborhoods within the City of Anaheim, consistent with the policy direction in the Anaheim General Plan.

Residential Opportunity Overlay Zone
The purpose of the Residential Opportunity (RO) Overlay Zone is to provide “by-right” housing development opportunities consistent with a property’s residential General Plan land use designation. This Overlay Zone is intended to be applied to properties that are currently zoned and/or developed with non-residential uses but designated for multiple-family residential uses by the City’s General Plan. Examples of non-residential zones to which the Overlay Zone may be applied include, but are not limited to, the General Commercial (C-G), Transitional (T), and Industrial (I) zones. The Overlay Zone is further intended to serve as an implementation tool of the City’s Housing Element of the General Plan by facilitating residential development on identified “housing opportunity sites.”

Some individuals included as part of the stakeholder and community outreach process expressed frustration with the multiple, overlapping and at times contradictory layers of the current Zoning Code and suggested looking for ways in which to simplify or streamline duplicative regulations found in multiple places, whether the Zoning Code itself or in other existing policy documents.
III. Mobility Review

Both the General Plan Circulation Element and the City’s Bicycle Master Plan identify transportation and mobility related components as well as relevant goals and policies for the Study Area. Additional data, related to accident and collision information within the Study Area obtained from the Statewide Integrated Traffic Records System (SWITRS) and Transportation Mapping System (TIMS) from 2018, were also reviewed. The following section provides an overview of the existing transportation, mobility related components, and collision information within the Study Area.

Roadway Classifications

The Study Area contains a number of roadway classifications that are either existing or planned. These roadways are intended to accommodate current development and future growth, as established by the Land Use Element of the General Plan. Existing roadway classifications located within the Study Area include Major Arterial, Primary Arterial, Collector Street, and Secondary Arterial. These roadway classifications are shown in Exhibit 11 and defined as:

**Major Arterial**
Roadways that connect to freeways and typically have six lanes, a landscaped median, left turn pockets, parking lanes adjacent to each curb and a right-of-way width of 120 feet.

**Primary Arterial**
Roadways that provide for circulation within the City and to its adjacent communities. Primary arterials are typically six lane divided facilities with no parking or four lane divided facilities with left turn pockets and two parking lanes. The typical right-of-way width of a primary arterial is 106 feet.

**Secondary Arterial**
Roadways that provide for circulation within the City. Secondary arterial facilities are four-lane roadways, with two parking lanes, that are undivided. These facilities have a typical right-of-way width of 90 feet.

Classifications for primary roadways traversing the Study Area include:

- **Major Arterial** – Harbor Boulevard;
- **Primary Arterial** – Anaheim Boulevard, La Palma Avenue, Lincoln Avenue, Ball Road; and
- **Secondary Arterial** – Broadway, Lemon Street (north of SR91).
Exhibit 11: Circulation Element Roadway Classifications (Circulation Element (June 2018) – Figure C-1)
It should be mentioned that both Lincoln Avenue and Ball Road are also identified as Truck Routes for the City, including those portions of these roads that traverse through the Study Area.

A number of the primary roadways listed above lack the adequate right-of-way to accommodate the full build out to their identified classifications. For example, portions of both Harbor Boulevard and Lincoln Avenue within the Study Area have not been fully built to their intended dimensions. Stakeholders and members of the public were divided on whether or not these primary roadways should be built out to their ultimate intended dimensions. Roadway design refinements to slow traffic and balance the orientation of the streets to better accommodate pedestrians and bicyclists in the area were also supported. One specific area of roadway was highlighted by community members as needing enhancements — those roadways in and around the Center Street area. Many individuals expressed frustration with the current configuration and access points on all sides of the Center Street area as being a deterrent to visiting this area of Downtown.

Parking
Parking facilities within the Study Area include on-street parking, public and private surface parking, and public and private parking structures. The City oversees a parking permit programs for many individual geographic areas within the Study Area that are given out to residents within those areas. Many stakeholders and community members expressed frustration with the current neighborhood parking permit program, which has created issues in a number of areas within the Study Area. Moreover, residents living within close proximity to the Downtown area expressed frustration with the lack of adequate parking provided for nearby commercial/retail businesses. While the City provides parking in structures, the lack of signage or perceived lack of availability within City parking structures often leads residents and visitors to the Study Area to favor on-street parking.

Transit Network
Orange County Transportation Authority (OCTA) provides an extensive network of fixed-route transit services within the Study Area (see Exhibit 12). Primary roadways within the Study Area that contain existing bus routes include Harbor Boulevard, Lemon Street, Anaheim Boulevard, La Palma Avenue, Lincoln Ave, Broadway, and Ball Road. Many of the bus transit stops within the Study Area contain adequate waiting accommodations (covered, seating, lighting, trash), however others lack adequate accommodations. OCTA has outlined future capital improvements to improve stops and stations including both operational improvements and enhanced passenger amenities.
Exhibit 12: OCTA Transit Routes Through Study Area (OCTA North County Systems Map (2019))
Transit service on Harbor Boulevard in particular has been expanded in recent years to include ongoing Bus Rapid Transit (BRT) service to a number of locations both north and south of the City of Anaheim (see Exhibit 13). As part of OCTA’s 2018 Transit Vision Report, La Palma Avenue is identified as a transit opportunity corridor, with Harbor Boulevard identified for additional corridor-level studies to determine potential transit service enhancements.

Other local transit options within the Study Area include Anaheim Resort Transit (ART) and Free Rides Around the Neighborhood (FRAN). ART operates primarily within The Anaheim Resort but also provides service within the Study Area. FRAN is a more recent local transit option that is being tested by the City, which supports mobility within the Downtown and immediately adjacent Colony areas (see Exhibit 14). FRAN is an app-based on-demand micro transit solution that provides connections between destinations and major parking structures. It is envisioned FRAN service will expand service into the adjacent residential neighborhoods.

Exhibit 14: Existing FRAN Routes and Stops in Downtown (rideart.org/fran (2019) – FRAN Stops)
Stakeholders and members of the community liked the frequent OCTA transit service provided along Harbor Boulevard, however many highlighted the need for more frequent service on Anaheim Boulevard due to its more central location within the Study Area, less auto-centric orientation, as well as perceived safer pedestrian conditions, as opposed to Harbor Boulevard. Moreover, the lack of connections to ARTIC and other regional transit hubs were also of concern to those living within the area. Concerns related to the design and safety of bus transit stops were also discussed as some stops lacked seating or covering from the elements, with others being perceived as unusable by the community as they are often occupied by local homeless and thus a detractor for potential transit users. Many individuals commented on the ease of use of FRAN to get around the Downtown area and desired to see its services expanded to the broader Study Area as a reliable alternative to get around the area without using their automobiles.

Rail Network

The Study Area boundary is defined by an active rail line along its eastern boundary that provides both daily passenger and commuter rail service to the broader Southern California region and is provided by Metrolink and Amtrak. The rail line also accommodates ongoing freight trains, owned by OCTA and operated by Metrolink. While historically the City at one time had a train stop located within the Study Area, today there are no rail stops, the nearest stations being located to the north in Downtown Fullerton as well as to the south at Angel Stadium of Anaheim.

An additional rail spur, owned and operated by Union Pacific Railroad (UPRR) exists within the Study Area along Santa Ana Street traveling east/west before turning onto Olive Street traveling north/south. This rail spur is the primary access for UPRR into Orange County and has regular service two to four times daily. Within the Study Area, this line provides service to adjacent industrial properties.

It should be mentioned that the California High Speed Rail anticipates utilizing the existing rail line along the Study Area’s eastern boundary to accommodate future high speed rail service. While the final alignment(s) have not been determined, conceptual rail crossing improvements have been identified as of 2019 along this stretch of the existing rail line and include both at-grade and grade-separated crossings.

Feedback received from the community highlighted the need for more frequent and easily accessible public transit options providing connections to the Downtown Fullerton station and ARTIC from the Study Area to make rail travel more appealing. While some stakeholders preferred that a new rail stop be incorporated into/adjacent to the Study Area, most rail users were content with utilizing the existing rail stations located in close proximity to the north and south.
Bikeway Network

Anaheim updated its Bicycle Master Plan in 2017. The Plan provides the vision for building out the bikeway network in the City of Anaheim over the next 20 years. The Plan identifies opportunities to close gaps in the existing network, connect to regional routes, parks, employment centers, and multi-modal transportation hubs, and to maximize the implementation of bike lanes within the planned roadway network without removing existing or planned vehicle travel lanes. The Study Area as a whole currently contains a limited and fragmented network of existing Class II bicycle facilities (see Exhibit 15). However, an inventory of existing and proposed bicycle parking facilities portrays a number within the Study Area, specifically the Center City area, with end-of-trip bicycle facilities generally lacking (see Exhibit 16).
Exhibit 15: Bicycle Master Plan
Exhibit 16: Bicycle Parking and Facilities (Bicycle Master Plan (May 2017) – Figure 10)
OCTA also has a number of bicycle related plans that are applicable to the Study Area. These include the 2009 OCTA Commuter Bikeways Strategic Plan and the 2012 Fourth District Bikeways Strategy. These plans identify both existing and planned bicycle routes and identify more regional, priority commuter bicycle routes. For example, OCTA has identified a large portion of the Study Area as a Bikeway Priority Zone, which identifies areas where projects are a greater priority across the County because of their potential to connect bicycle commuters to their work. Moreover, the Fourth District Bikeways Strategy report identifies important regional bikeway corridors traversing or including portions of the Study Area, which includes portions of Anaheim Boulevard, Santa Ana Street, Olive Street, and La Palma Avenue as shown in Exhibit 17 below.
Exhibit 17: OCTA Regional Commuter Bikeway Priorities (OCTA Commuter Bikeways Strategic Plan (May 2012) – Regional Commuter Bikeway Priorities Figure)
Study stakeholders and members of the public who participated in the initial outreach phase have expressed serious concerns regarding the lack of bicycle route connections as well as safety of using bicycles as an alternative, non-motorized mode of mobility within the Study Area due to lack of clearly marked routes. To improve safety and encourage bicycle use, separated or buffered/protected bicycle lanes were preferred by individuals over Class III bicycle lanes with marked sharrows where cyclists have to share the roadways with automobiles.

**Pedestrian Network**

The pedestrian network includes sidewalks, trails, walkways, bridges, and crosswalks located within or connecting to the Study Area. These pedestrian facilities provide non-motorized linkages between the various destinations and modes of motorized travel. While a majority of the Study Area contains an adequate pedestrian network, gaps and disconnects within the existing network are apparent, such as in areas north of La Palma Avenue, along Harbor Boulevard, and south/southeast of Ball Road, that hinder pedestrian activity and walking in these areas. In speaking with a number of stakeholders and community members, concerns with the auto-focused orientation of the primary corridors, such as Harbor Boulevard and Anaheim Boulevard, as well as lack of mid-block crossings to more easily and safely get from one side of the street to the other discouraged people from walking within the Study Area. In general,
outside of the immediate Downtown area, the level of comfort and ease of walking from one location to another was perceived to drop off significantly and in need of improvement. Moreover, some individuals expressed concerns over the perceived safety of walking through some portions of the Study Area at night and suggested new lighting would help to improve these existing conditions.

**Accident and Collision Data**

A review of the intersections and primary street corridors using state level SWITRS and TIMS accident data from the year 2018 revealed a number of more recent collisions within the Study Area. Field observations, discussions with City staff, and discussions with members of the public as part of the Study outreach were also taken into consideration. Four intersections within the Study Area were within the top ten for highest collision citywide. Incident data captures collisions within 250-feet of these intersections and include:

- Harbor Boulevard and La Palma Avenue - 14 collisions
- Harbor Boulevard and Lincoln Avenue - 13 collisions
- Anaheim Boulevard and Lincoln Avenue - 9 collisions
- Anaheim Boulevard and Vermont Avenue - 9 collisions

Moreover, total collision data within the Study Area was also identified and broken out within the following categories:

- Bicycle – 7
- Pedestrian – 6
- Injury – 61
- Alcohol Related – 9
- Motor Vehicle Involved – 53
- Truck - 6

This concern of safety within the Study Area was echoed by stakeholders and members of the public who participated in outreach efforts when discussing pedestrian and bicycle mobility, with some members of the public stating their safety concerns deterred them from walking or bicycling within the Study Area.
IV. Public Health and Community Amenities Review

The City General Plan Green Element, Anaheim Parks Plan, and Anaheim Outdoors: Connectivity Plan identify components related to community amenities and public health. In addition to existing City documents, publicly available health data related to the Study Area was also obtained and reviewed from a number of sources to assess and define the local population’s health indicators, with attention directed to physical and mental health, food and health access, and environmental health.

Public Health

The Study Area contains large swaths of residential neighborhoods, home to several thousand Anaheim residents. An understanding of the demographics, physical and mental health, and environmental characteristics is paramount to properly planning for the community. The large majority of the Study Area falls within the ‘92805’ zip code, and as such, this zip code has been used as a proxy for analyzing the data available on these topics.

Demographics

The Study Area, located in the heart of Orange County, differs from the larger region in many respects. The community within the Study Area is relatively young, with the median age being 29 years old, compared to the overall county median age of 36.2 years old. As reported in the 2010 US Census, it also has a much higher Hispanic or Latino population and a lower Asian population when compared with the County as a whole. Exhibit 18 below illustrates race by census category and Exhibit 19 illustrates the Hispanic or Latino population, each in the Study Area and in the overall County.

Exhibit 18: Race in Study Area and in Orange County (US Census data, 2010)
Beyond US Census reported race and ethnicity, the Study Area is also home to a relatively high proportion of naturalized U.S. citizens and non-citizens compared to U.S. born citizens. According to the 2014 California Health Interview Survey (CHIS) conducted by UCLA, the population in the Study Area over the age of 18 is estimated to be 38% non-U.S. citizen, compared to 18% statewide. See Exhibit 20 for a map of non-U.S. citizen population density in the Study Area and surrounding regional context.

Exhibit 19: Hispanic or Latino population in Study Area and in Orange County (US Census data, 2010)

Exhibit 20: Percentage of the population identified as non-U.S. citizen (CHIS, 2014)
In addition, the Study Area has a greater proportion of people speaking languages other than English as a primary language in their homes relative to neighboring communities. The 2014 CHIS study found that only 25% of all households in the Study Area speak English only at home. Exhibit 21 illustrates how this compares to other parts of the region, with a lower percentage (lighter shade of blue) indicating fewer households that are solely English-speaking, indicating that these communities speak foreign languages other than English at home.

Exhibit 21: Percentage of households speaking only English at home (CHIS, 2014)

In addition to being culturally diverse, the Study Area is less financially advantaged that other areas of the City and County. As reported in the 2017 US Census Community Survey, the median household income in the Study Area is 27% less than the County median ($59,934 in the Study Area versus $81,851 in the County). The Study Area also has a greater share of individuals below the poverty level (20.1% in the Study Area versus 12.1% in the County), and a significant portion of the local population receives supplemental security income (SSI) (33.4% in the Study Area versus 17.7% in the County) (US Census Community Survey, 2017).

Relative financial strain is also evident in the housing market within the Study Area. The median home value in the Study Area is 29% less than the County median ($442,600 in the Study Area versus $620,500 in the County). Homes in the Study Area are more renter-occupied than owner-occupied (59.6% rented versus 40.4% owned), which is almost opposite from the County overall (42.6% rented versus 57.4% owned). The vacancy rate in the Study Area is also lower than the County average (1.7% in the Study Area versus 3.2% across the county), making it more difficult for renters to find adequate housing. Renting in general remains relatively expensive, as 49% of residents in the Study Area report spending 35% or more of their income solely on rent. Lastly, rooms are more commonly shared in the Study Area, with 22.9% of households reporting rooms being occupied by more than one person, compared to 8.9% across the County (US Census Community Survey, 2017).
The method by which individuals commute to work can also greatly impact health and well-being of a local community. Households in the Study Area most commonly drive alone to work (72%), while 16.5% carpool, 4.6% take public transit, 2.5% walk, and only .7% ride a bicycle. The mean commute time to work is 27.7 minutes one-way (US Census Community Survey, 2017).

Physical and Mental Health
An individual’s environment, including access to parks and open space, healthy foods, proper healthcare, and other criteria, can be a major determinant to overall health and well-being. Data on chronic, non-communicable disease can indicate the general overall well-being of a local community. Overall, a significant proportion of residents in the Study Area have a health status of ‘fair’ or ‘poor’ as follows:

- 9.8% of individuals ages 0-17;
- 30.4% of individuals ages 18-64; and
- 45.5% of individuals age 65 or older.

Also, an estimated 26.2% of adults in the community are considered obese with a BMI of 30 or higher. Latinos represent a greater proportion of the overall population considered to be obese than other races and ethnicities. Diabetes and heart disease are also somewhat prevalent within the study area, with 9.2% of respondents in the Study Area having ever been diagnosed with diabetes and 4.1% with heart disease.

Regular physical activity is a critical component in the prevention of non-communicable disease and is more easily achieved in communities with greater access to parks, open space, and sports leagues. As discussed further in the Parks and Recreation section below, the Study Area contains the greatest number of parks within the City. However, it should be noted that this area is also the densest area of the City and areas in both the northern and southern portion of the Study Area have been identified as being park deficient. The CHIS measured physical activity for children by whether or not they engaged in 60 minutes of exercise in the previous week outside of physical education at school. Within the Study Area, only 13.9% of children ages 5-17 met this standard for physical activity. For adults, physical activity was measured by whether or not that individual had walked at least 150 minutes in the previous week, for which only 31.1% of adult respondents met the standard. See Exhibit 22 demonstrating the physical activity of children within the Study Area in a regional context.
Exhibit 22: Percentage of children ages 5-17 who participated in at least 60 minutes of physical activity per week (CHIS, 2014)

Mental health is another aspect of the overall wellbeing of an individual that has been shown to be greatly impacted by one’s surrounding, physical environment. The mental health of the community in the Study Area was found to be better than other areas in the surrounding region. Within the Study Area, a total of 14.1% of respondents reported needing help for mental health problems and 10.4% experienced work impairment due to their mental health in the preceding twelve months per the CHIS 2014 study. This is compared to 15.6% of respondents Countywide needing help for mental health problems and 10.6% who experienced work impairment due to their mental health in the preceding twelve months.

Food and Health Access
Access to healthy food provides greater opportunities for individual to receive adequate nutrition, which creates a foundation for overall physical health. The United States Department of Agriculture (USDA) defines food insecurity as “the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.” Supermarkets in the Study Area include Vons, El Super, and Walmart Neighborhood Market. Smaller grocery/liquor stores include Sohan American Market, M&M Grocery, Quality Market, A1 Market, and Happy Bebe. As calculated by the USDA in 2018, food security is more predominate in both black and Hispanic households across the US. Exhibit 23 illustrates trends in food insecurity in the US from 2001 to 2017 by both race and ethnicity.
Food insecurity within the Study Area for lower income adult respondents was calculated by the 2014 CHIS study. When considering the food insecure households across the US, the Study Area is below the national average but higher in the context of the local Orange County region. See Exhibit 24 for a map of food insecurity of the Study Area in the context of the larger region.
Access to health care is another critical component to healthy living. Access to healthcare includes physical proximity to medical facilities and the ability to pay for it. There are several healthcare facilities in or in close proximity to the Study Area. In the southern portion of the Study Area there is a cluster of medical service buildings, identified as the Anaheim Global Medical Center or Western Medical Center-Anaheim, which includes two urgent care facilities and a hospital. There is also a UCI Family Health Center and Planned Parenthood facility in the center and northern portion of the Study Area. Additionally, just outside the Study Area, to the northwest is the Anaheim Regional Medical Center and several other supporting medical facilities. In the context of health care, health insurance coverage is an important component when considering an area’s ability to pay for healthcare services. Roughly one-third of adults in the Study Area reported not having health insurance, which is greater than the surrounding region pre the CHIS 2014 study (see Exhibit 25 for a map of percent uninsured). Lastly, nearly 20% of respondents reported a delay in receiving medical services or prescription drugs due to not having health insurance.

Exhibit 25: Percentage of adults living without health insurance (CHIS, 2014)

Environmental Health
Air quality, drinking water contaminants, pesticide use, toxic waste exposure, traffic density, proximity to cleanup sites, groundwater contamination, hazardous waste facilities, impaired water bodies, and solid waste sites and facilities can all have environmental health effects on a community. CalEnviroScreen is a screening tool used to determine the burden of pollution in local communities using 19 indicators to characterize an area’s pollution burden. Based on the data available for these indicators, a weighted score is prepared for each U.S. Census tract in California. The pollution burden for the Study Area, as determined by the CalEnviroScreen score is 40.47%, which is relatively high compared to the 25% state average. See Exhibit 26 for a map of the pollution burden of the Study Area in the context of the larger region. Lastly, asthma is one health indicator of the consequences of a high pollution burden on a local community.
Within the Study Area, 14.2% of individuals 17 years or older have been diagnosed with asthma, which is consistent with the overall state.

Exhibit 26: Pollution burden (CHIS, 2014)

Green Element
The Green Element combines all of Anaheim’s open space, conservation, recreation, and landscaping resources into one comprehensive document that is intended to provide goal and policy guidance for expanding public parks and open space amenities; improving the trail and bicycle network; beautifying arterial corridors with landscape plans, edge treatments and gateways; and capitalizing on opportunities to expand open space and recreation within the City.

Natural Resources
The Green Element addresses citywide goals of using natural resources wisely and promoting sustainable growth and development. Goals and policies related to natural open space, water conservation, water quality, air quality, biological resources, mineral resources, energy conservation, waste management and recycling, and green development practices are covered.

While many of these goals and policies included within the Natural Resources section of the General Plan apply more broadly to the City as a whole, a number of themes were highlighted by stakeholders and community members during outreach. For example, reducing single-occupancy vehicles, expanding transit access and efficiency, providing more access to services within walking distance of residences, and providing recreational trails and open space in conjunction with utility easements were all highlighted during the outreach process.

Parks and Recreation
The Green Element identifies three primary types of parks located within the City – pocket, neighborhood, and community. Additional special use parks and facilities are also identified and include mini-parks,
nature parks, recreation centers, and special use facilities. Regional parks are also identified although many are located partially within or directly adjacent to the City boundary.

According to the Green Element, the citywide standard for parkland is to maintain a minimum of two acres of park per thousand residents. The Central Anaheim area identified in the Green Element, which contains the Study Area, has more parks that any other area of the City. However, it should be noted that this area is also the most densely populated area of the City and many of these existing parks are older and in need of more modern upgrades. As shown in Exhibit 27, parks types and more specific totals within the Study Area include:

- Pocket: 6
- Neighborhood: 4
- Community: 2
- Mini: 5
- Recreation Center: 1

Portions of the Study Area are identified as park deficient, mainly in the far northern portion as well as in the east/southeast portion, as seen in Exhibit 28.

While a number of parks exist within the Study Area, stakeholders and community members expressed the need for additional park space, those with both active as well as passive spaces. Maintenance and upkeep, as well as safety of existing park facilities within the Study Area, was also identified as an ongoing concern. Some individuals expressed the need to enhance activity in existing parks, such as more frequent events, introducing new uses, and lighting, among others, as a way to deter undesirable activities.
Exhibit 27: Existing Parks within the Study Area (Green Element (June 2018) – Figure G-4)
Exhibit 28: Existing Park Deficient Areas within the Study Area (Green Element (June 2018)
– Figure G-1)
Trails

No equestrian, riding, or hiking trails are existing within the Study Area. However, a riding/hiking, pedestrian and mountain bike trail study corridor is identified along Santa Ana Street traveling east/west, north/south along Olive Street, and east/west along the utility easement at the southern portion of the Study Area (see Exhibit 29). Additional analysis of this study corridor is needed to determine potential and feasibility.

Exhibit 29: Trail Study Area within the Study Area (Green Element (March 2016) – Figure G-5)
During the initial outreach efforts, many stakeholders and members of the community identified the need for additional buffered/separated pedestrian/bicycle trails within the Study Area to provide safety, connection to/from points outside the Study Area, and to encourage more non-motorized mobility use.

**Anaheim Parks Plan**

The Anaheim Parks Plan was adopted in 2018 and includes guiding principles and plan objectives that were developed to assist in guiding the improvement of the City’s park system until the year 2025. In addition, the Anaheim Parks Plan makes recommendations for the City to implement the 10-Minute Walk Campaign, a nationwide movement led by the Trust for Public Land. This program supports City planning efforts that increase access to high-quality parks within a 10-min walk of residents (equivalent to 1/2 mile). This is in direct alignment with the City of Anaheim’s General Plan which currently identifies “park deficient” areas as those that are more than ½ mile from a park.

The Anaheim Parks Plan identifies a number of proposed improvements to existing parks as well as areas for new parks within the Study Area. Potential new opportunities identified in the plan include youth centers, new parkland, and Family Resource Center at Avon Dakota, pocket parks near Paul Revere, and park use on portions of SCE properties, as well as new pocket park near La Palma Avenue and Pauline Street (see Exhibit 30).

Many of the principles and objectives of the Anaheim Parks Plan aligns with feedback received from stakeholders and community members. These include expanding park areas within walking distance of homes, providing greater maintenance and upkeep of existing parks, and expanding the number of trees and consistency of landscaping within the Study Area.
Exhibit 30: Existing and Proposed Parks (Anaheim Parks Plan (April 2018) – Figure 2)
Anaheim Outdoors: Connectivity Plan

Prepared in 2013, the Anaheim Outdoors Connectivity Plan evaluated nonmotorized connections throughout the City of Anaheim. Key objectives of this Plan are to identify opportunities to create a minimum of 100 acres of new public green space throughout the City and to reduce Green House Gas (GHG) emissions to levels consistent with the California Global Warming Act of 2006. It also includes recommended goals, policies, standards, guidelines, and potential opportunity sites for implementation.

Reducing reliance on automobiles, enhancing the public realm, creating strong pedestrian orientation, increasing park acreage, and promoting public health are all goals of the Anaheim Outdoors Connectivity Plan that were brought up by stakeholders and community members involved in the outreach process. Many members of the community expressed a desire to walk more, rather than drive, within the Study Area but were often deterred due to the perceived uninviting public realm and poor pedestrian orientation of the primary corridors. Expansion of bicycle facilities was also supported within the Study Area.

Community and Cultural Facilities

The Study Area contains a number of existing community and cultural facilities (see Exhibit 31). These facilities are focused on providing historic, entertainment, education, youth activities, cultural events, and/or other services for the community. These facilities include:

- Mother Colony House and Woelke-Stoffel House at Founder’s Park
- Pearson Park Amphitheater
- Downtown Anaheim Community Center
- Downtown Anaheim Youth Center
- Muzeo Museum and Cultural Center
- Anaheim Central Library

Some stakeholders and members of the community expressed support for expanding community and cultural facilities within the Study Area; there was a perception that areas in the north and south of the Study Area were lacking access to these types of facilities. For example, the Northgate Market site on North Anaheim Boulevard was brought up as a potential opportunity site for a new community facility for the northern portion of the Study Area.
Schools
The Anaheim Elementary School District and the Anaheim Union High School District operate public school facilities within the Study Area (see Exhibit 31). Anaheim Elementary Schools District facilities within the Study Area include:

- Paul Revere Elementary
- Orange Grove Elementary
- Olive Street Elementary
- Jefferson Elementary
- Franklin Elementary
- Mann Elementary

For the Anaheim Union High School District, only Anaheim High School is located within the Study Area.

Community members and stakeholders expressed a desire to expand joint-use agreements with the school districts to allow for use of sports fields and playground during off school hours. Moreover, participants brought up the need to address traffic concerns around schools in order to increase safety of children walking or bicycling to school.
Exhibit 31: Schools, Libraries, and Community Facilities (Public Services and Facilities Element (May 2004) – Figure PSF-9)
V. Infrastructure Review

Existing Utility Facilities
The primary objective of the review of the City of Anaheim Center City existing utility facilities is to identify the condition of the existing sewer, storm drainage, and water distribution services within the Study Area. The existing infrastructure, existing zoning, proposed capital improvement projects (CIPs), and proposed developments were reviewed. The identified impacts on the existing utility facilities play a major role in analyzing current and potentially future deficient utility systems.

Existing Studies References
The following references have been reviewed and used to establish the base line understanding of the existing utility facilities in the study area:

- City of Anaheim General Plan (May 2004, as amended through March 5, 2019)
- City of Anaheim Master Plan of Storm Drainage for Anaheim Barber City Channel Tributary Area (June 2009)
- City of Anaheim Master Plan of Storm Drainage for Carbon Creek Channel Tributary Area (September 2010)
- City of Anaheim Master Plan of Storm Drainage for Fullerton Creek Channel Tributary Area (September 2010)
- Central Anaheim Master Plan of Sanitary Sewers (First Revision, December 2017)

Sewer Infrastructure Overview
Sewage is collected by City collector facilities and conveyed to trunk sewers owned and maintained by the Orange County Sanitation District, which then treats the sewage at regional facilities. There are small portions of the City that receive local sewer service from adjacent agencies, including the Stanton County Water District and the Garden Grove Sanitation District. Additional sewer trunks and collectors have been added to accommodate growth. The City currently maintains almost 600 miles of sewer lines.

Existing Sewer System Condition and Performance
Based on previously conducted analysis of the existing sewer system within the Central City Anaheim Area, under peak dry weather flow conditions (PDWF), a total of 14,604 linear feet (LF) of existing deficient pipeline segments were noted and listed based on exceedance of City criteria for allowable depth of flow to pipe diameter ratios. The metric was based on the existing land use condition at the time of analysis.

According to the Central Anaheim Master Plan of Sanitary Sewers (2017), the build-out condition identified an additional 9,173 LF of deficient pipeline bringing the total deficient pipeline to 23,777 LF. This does not consider any future development of the Platinum Triangle and Anaheim Resort areas nor any redevelopment of existing land uses, revitalization projects or the uniform increase of both residential and non-residential areas. Deficient sewer areas are generally located within the central and northern portions of the Study Area, as shown in Exhibits 32 and 33 below.
Exhibit 32: Master Plan of Sewers - Build Out Deficient Lines (Central Anaheim Master Plan of Sanitary Sewers (Dec. 2017) - Figure 3.2)
Exhibit 33: Master Plan of Sewers – 6-inch Operationally Deficient Lines (Anaheim Master Plan of Sanitary Sewers (Dec. 2017) - Figure 3.3)
Existing Sewer Related CIP Projects

The following list identifies and describes the planned or ongoing sewer related CIP projects within the Study Area and includes information on when they are planning to be implemented and how it will affect the existing condition of the utility.

**La Palma and East Street Sanitary Sewer Improvement Project**

This project consists of an 18-inch sewer pipeline installation, removal/abandonment of two existing sewer lines, manhole installation, and construction of new sewer laterals to the new sewer line.

- **Location**: La Palma Avenue from Pauline Street to North East Street
- **Construction End Date**: Summer 2020
- **Effect on Existing Condition**: Increase sewer capacity along La Palma Avenue east of Pauline Street

**Alley Sanitary Sewer Improvements**

This project consists of a sewer pipeline and manhole installation, connection of sewer laterals to the new pipeline, construction of Best Management Practices (BMPs) and improvements to the existing alleyways.

- **Location**: Alley east of Anaheim Boulevard from Wilhelmina Street to Alberta Street
- **Construction End Date**: Spring 2020
- **Effect on Existing Condition**: Increase sewer capacity for Alley east of Anaheim Boulevard

Storm Drainage System Overview

Master Plans of eight primary drainage tributary areas of the City can be accessed and reviewed on the City’s website. These tributary areas flow storm water into the East Garden Grove-Wintersburg Channel, Stanton Channel, Anaheim-Barber City Channel, Carbon Creek Channel, Fullerton Creek Channel, Moody Creek Channel, North-West Santa River and South-East Santa River. The City currently maintains over 150 miles of storm drainage lines.

The Study Area falls within portions of the Anaheim Barber City Channel Tributary Area (ABCCTA), Carbon Creek Channel Tributary Area (CCCTA), and the Fullerton Creek Channel Tributary Area (FCCTA), all of which are owned and maintained by the City. The ABCCTA within this Study Area includes Drainage Areas 19, 20, and 22, the CCCTA includes areas 15, 16, 17, and 18, and the FCTA includes basin 15. Runoff from these Drainage Areas discharges into the ABC Channel, Carbon Creek Channel, and Fullerton Creek Channel. Of note, the City Storm Drainage Manual for Public and Private Drainage Facilities defines the allowable flooded width on local streets and arterials, also known as the flood width criteria. The flood width criteria inform the maximum flooding widths allowed on local streets and arterials.

Existing Storm Drain System Condition and Performance

**Anaheim Barber City Channel Tributary Area**

The following is a summary of the existing storm drainage conditions for the portions of the Study Area located in the ABCCTA. Exhibit 34 below demonstrates the location of the drainage areas located within the ABCCTA in the context of the Study Area.

**Drainage Area 19**

This area drains approximately 643 acres and is generally bounded by East Street on the east, Ball Road and Vermont Avenue on the south, Union Pacific Railroad and Walnut Street on the west, with the
northerly boundary of the Drainage Area meandering along Santa Ana Street, South Street, Lincoln Avenue, and Broadway. According to the analysis in the Sewer Master Plan, the storm drain facilities within the following streets in the Center City area do not meet the City’s flooded width criteria:

- Harbor Boulevard from Santa Ana Street to South Street
- South Street from Harbor Boulevard to Bellevue Drive
- Bellevue Drive from South Street to I-5

**Drainage Area 20**

This area drains approximately 815 acres and comprises of two general areas: a larger eastern portion and a smaller western portion. The larger portion of Drainage Area 20 is located on the east side of the I-5 Freeway and is generally bounded by State College Road on the east, Ball Road on the south, Harbor Boulevard on the west, and has a northern boundary that meanders along Vermont Avenue, South Street, East Street, and Broadway. The smaller portion of the Drainage Area 20 west of the I-5 is generally bounded by the I-5 on the east, Disneyland Theme Park on the south, Walnut Street on the west, and Ball Road on the north. According to the analysis in the Sewer Master Plan, the storm drain facilities within the following streets in the Center City area do not meet the City’s flooded width criteria:

- Ball Road
- Harbor Boulevard
- Turin Avenue
- Avocado Street
- Norman Avenue

**Drainage Area 22**

This area drains approximately 940 acres and is generally bounded by Ball Road and Cerritos Avenue on the north, Lewis Street and the Union Pacific Railroad easement on the east, Katella Avenue on the south, and Ninth Street and Walnut Street on the west. According to the analysis in the Sewer Master Plan, the storm drain facilities within the following streets in the Study Area do not meet the City’s flooded width criteria:

- Allec Street from Cerritos Avenue to approximately 2,100 feet upstream
- Along Palais Road and Claudina Street
- Guinida Lane
- Winston Road
- Palm Street
- Anaheim Boulevard at I-5
Exhibit 34: Anaheim Barber City Channel Tributary Area – Storm Drain Areas 19, 20, and 22 (Master Plan of Storm Drainage for Anaheim Barber City Channel Tributary Area (June 2009) - Figure 1)
Carbon Creek Channel Tributary Area

The following is a summary of the existing storm drainage conditions for the portions of the Study Area located in the CCCTA. Exhibit 35 below demonstrates the location of the drainage areas located within the CCCTA in the context of the Study Area.

Drainage Area 15

This area drains approximately 277 acres and is generally bounded by the 91 Freeway and Discovery Street on the north, Raymond Avenue and East Street on the east, La Palma Avenue on the south, and Swan Street on the west. According to the analysis in the Sewer Master Plan, the storm drain facilities within the following streets in the Center City area do not meet the City’s flooded width criteria:

- Lemon Street
- Olive Street
- Patt Street

Drainage Area 16

This area drains approximately 407 acres and is generally bounded by Romneya Drive, the 91 Freeway and La Palma Avenue on the north, Pauline Street on the east, Sycamore Street on the south, and Harbor Boulevard on the west. According to the analysis in the Sewer Master Plan, the storm drain facilities within the following streets in the Center City area do not meet the City’s flooded width criteria:

- Village Street
- Harbor Boulevard
- North Street
- Citron Street

Drainage Area 17

This area drains approximately 700 acres and is generally bounded by Sycamore Street and Carbon Canyon on the north, State College Boulevard on the east, Broadway on the south, and West Street on the west. According to the analysis in the Sewer Master Plan, the storm drain facilities within the following streets in the Center City area do not meet the City’s flooded width criteria:

- Lincoln Avenue
- Citron Street
- West Street

Drainage Area 18

This area drains approximately 310 acres and is generally bounded by North Street on the north, Harbor Boulevard on the east, South Street on the south, and the I-5 freeway on the west. According to the analysis in the Sewer Master Plan, the storm drain facilities within the following streets in the Center City area do not meet the City’s flooded width criteria:

- Santa Ana Street
- Citron Street
- West Street
Fullerton Creek Channel Tributary Area

The following is a summary of the existing storm drainage conditions for the portions of the Study Area located in the FCCTA. Exhibit 36 below demonstrates the location of the drainage areas located within the FCCTA in the context of the Study Area.

Drainage Basin 15

This area drains approximately 225 acres and is generally bounded by Fullerton Creek Channel and the northerly city limits to the north, Raymond Avenue on the east, the 91 freeway on the south, and Lemon Street on the west. According to the analysis in the Sewer Master Plan, the storm drain facilities within the following streets in the Study Area do not meet the City’s flooded width criteria:

- Orangethorpe Avenue
Exhibit 36: Fullerton Creek Channel Tributary Area – Storm Drain Area 15 (Master Plan of Storm Drainage for Fullerton Creek Channel Tributary Area (Sept. 2010) - Figure 1)

Existing Storm Drainage Related CIP Projects
The following list identifies and describes the planned or ongoing storm drainage related CIP projects within the Study Area and includes information on when they are planning to be implemented and how it will affect the existing condition of the utility.

West Street and Citron Street Sidewalk Gap Closure
This project consists of the construction of new sidewalks, driveways, ADA ramps, drainage facilities, and resurfacing.

*Location*: West Street from North Street to Pearl Street and Citron Street from La Palma Avenue to Sycamore Street
*Construction End Date*: Summer 2019
*Effect on Existing Condition*: Localized drainage improvements on West Street and Citron Street

Water Distribution System Overview
The water system serves the entire City and some unincorporated areas of Orange County. As of March 2019, the system includes approximately 750 miles of water mains, 63,950 active water meters, and over 7,800 fire hydrants, owned and maintained by the City Utilities Department. The system facilities also include eight water connections to the Metropolitan Water District of Southern California (MWD) system, 16 active wells, one 920 million gallon reservoir for untreated water, a water treatment plant, 12 reservoirs for treated water, and nine booster pump stations. The City utilizes two primary sources of
water supply: groundwater produced from City-owned wells and imported water from the MWD. The proportion received from either source varies year-to-year.

**Existing Water Distribution System Condition and Performance**

Updates to the City’s Water Master Plan are currently underway and will analyze and identify City-wide water infrastructure improvements required to provide adequate flow and pressures for fire protection and to accommodate peak demand in order to maintain reliability and affordability.

Under existing conditions, the water distribution system within the Study Area provides adequate peak demand for domestic and fire flow capacity. Any new development that increases the density of the infrastructure may potentially be required to upgrade the water distribution system due to the increase in fire flow requirements.

**Existing Water Related CIP Projects**

The following list identifies and describes the planned or ongoing water related CIP projects within the Study Area and includes information on when they are planning to be implemented and how it will affect the existing condition of the utility.

**Ball Road Rehabilitation**

This project consists of asphalt resurfacing, reconstruction of ADA ramps, curb and gutter, sidewalk, bud pad, adjustments of utility facilities, replacement of traffic striping and pavement markings, and upgrades of potions of water lines and valves at the Disneyland Drive and Harbor Boulevard Intersections.

- **Location:** Ball Road from West Place to Claremont Street
- **Construction End Date:** Fall 2019
- **Effect on Existing Condition:** Localized water distribution facility improvements

**12-in Water Main Replacement in Santa Ana Street at BNSF Railway Crossing**

The City plans to replace existing 12-inch Belgian cast iron water main in Santa Ana Street that crosses under a BNSF Railroad, with a 12-inch ductile iron pipe (DIP) main in a 24-inch casing. The portion of the pipe crossing the railroad needs to be replaced due to its age and the load impacts from the railway traffic. Existing service lines, meters, and appurtenances within the same reach of pipe will be replaced as part of this project.

- **Location:** Santa Ana Street at the BNSF Railroad
- **Construction End Date:** 2020
- **Effect on Existing Condition:** Increased local system reliability.

**12-in Water Main Replacement in Santa Ana Street at BNSF Railway Crossing**

The City plans to replace existing 12-inch Belgian cast iron water main in Santa Ana Street that crosses under a BNSF Railroad, with a 12-inch DIP main in a 24-inch casing. The portion of the pipe crossing the railroad needs to be replaced due to its age and the load impacts from the railway traffic. Existing service lines, meters, and appurtenances within the same reach of pipe will be replaced as part of this project.

- **Location:** Santa Ana Street at the BNSF Railroad
- **Construction End Date:** 2020
- **Effect on Existing Condition:** Increased local system reliability.
**16-in Water Main Replacement in Olive Street, Commercial Street, and Patt Street**

The City plans to replace existing 6-inch and 10-inch CIP mains in Olive Street, Commercial Street, and Patt Street, with a 16-inch DIP main. The existing pipes need to be replaced due to the age and to meet current and future demands in the area. Existing service lines, meters, and appurtenances within the same reach of pipe will be replaced as part of this project.

*Location: Olive Street, Commercial Street, and Patt Street*
*Construction End Date: 2020*
*Effect on Existing Condition: Increased local system reliability.*

**La Palma Pump Station Phase 2 Expansion**

The City plans to expand an existing pump station, located in La Palma Water Complex at 1016 N. West Street, to supply current and ultimate peak water demands in the Central and West Anaheim. The work will involve installation of an additional booster pump in the existing pump station and construction of a new well in the complex. In addition, new water mains will be installed in La Palma Avenue between West Street and Loara Street and in West Street from La Palma Water complex to Autumn Drive to reduce excessive velocities in existing water mains in the immediate vicinity of the expansion and to keep the pressures within the range of their current levels.

*Location: La Palma Water Complex*
*Construction End Date: 2023*
*Effect on Existing Condition: Increased available peak water demands in Central and West Anaheim*

**Electrical Services Infrastructure Overview**

The Anaheim Public Utilities Department provides electricity to City’s citizens and businesses. The distribution system consists of approximately 1,200 circuit miles of transmission and distribution lines, over 700 miles of which are located underground. Thirteen distribution substations are located throughout the City to ensure the safe and efficient transfer of electricity to residences and businesses. The Public Utilities Department currently provides its customer base with more than 568,000 kilowatts and 3.3 billion kilowatt-hours annually.

Anaheim’s electric supply comes from resources located in or near Anaheim and across the western United States. The Public Utility Department’s electric supply is generated by City-controlled resources that includes power purchases and seasonal power exchanges supplemented with market purchases as necessary in order to meet seasonal peak power demands. These resources include two gas-fired generating plants, the Canyon Power Plant and the Kraemer Power Plant within its service territory with a total combined capacity of about 240 MW. These generating resources are used to offset power imported from outside resources during peak load periods and...
both have black start capability to serve City load independent of the grid in the event of a sustained regional blackout. In addition to these power plants, the City also operates an underground electric substation with gas insulated switchgear, with the capacity to provide power to 25,000 residential customers.

**Existing Electric Services System Condition and Performance**

Anaheim Public Utility’s distribution system provides high quality and reliable power service to customers through 121 distribution circuits fed by thirteen distribution substations across 50 square miles. The system is evaluated on an annual basis to ensure it can meet forecasted peak demands in the five year planning horizon, as well as maintain and improve its reliability performance under normal and emergency conditions. To achieve these goals, the City has upgraded and reinforced its electrical infrastructure with a number of on-going programs and capital projects.

Performance metrics are regularly utilized to measure outage duration, number and type of outage events, as well as restoration time. Electric reliability is measured by recording how many times service is interrupted, how long the average customer is interrupted, and how long it takes to restore service once a customer is interrupted. Anaheim Public Utilities is ranked in the top 25% of utilities nationwide when it comes to electric system reliability, which means the City customers have fewer and shorter power outages than the other 75% of utilities nationwide.

The construction of the new Harbor 69/12kV Substation has recently been completed. The Harbor Substation placed in service May 2019 was needed to provide additional transformer capacity in order to serve new hotels and residential/commercial development under construction and planned future developments in the fast growing area, provide loading relief to the adjacent substations, and improve system reliability in the area.

**Existing Electric Services Related CIP Projects**

**Electrical Underground Conversion**

The City’s Underground Conversion Program provides many benefits to residents and businesses including enhanced electric service reliability for customers served by the new underground facilities, upgraded street lighting for improved roadway visibility, as well as aesthetic improvements along Anaheim’s roadways. The following roadways within the Study Area are part of the Program’s Underground Conversion Five-year Plan Projects:

- Olive Street
- Vermont Avenue
- Sycamore Street
- La Palma Avenue

Future underground conversion projects are selected by the Underground Conversion Subcommittee, recommended by the Public Utilities Board, and approved by the City Council.

**Infrastructure Implications Related to Future Development**

A significant portion of the Study Area is designated by the General Plan for lower-density residential land use. These areas are unlikely to significantly change over time due to their established neighborhood characteristics. However, the Study Area also includes underutilized medium density residential, mixed-use, industrial, institutional, and commercial land use opportunities. The City’s General Plan Land Use Element outlines a number of housing-related goals such as facilitating new residential development on vacant or underutilized infill parcels, facilitating new development in and around the Downtown area,
encouraging the development and integration of residential land uses into mixed-use development where appropriate, and encouraging a mix of quality housing opportunities in employment-rich and transit accessible locations.

Additionally, the City’s General Plan Economic Development Element places emphasis on revitalizing Anaheim’s major corridors to provide an attractive setting for the business community, making the Downtown the City’s cultural, civic, and historic center, providing incentives in redevelopment areas to stimulate desired development.

These goals are tied closely with the existing infrastructure evaluation, as not only will improving the City’s facilities be necessary to handle the increased load from the current and future development, but the upgrading of facilities will encourage development in these desired areas. As it relates to new infill development, the major corridors within the Study Area that have been identified as having deficient facilities will be a challenge in implementing with the City’s policy directives that encourage redevelopment within these areas.