

## 5. Environmental Analysis

### 5.16 TRANSPORTATION

This section of the updated Draft Program Environmental Impact Report (PEIR) evaluates the potential for implementation of the City of Santa Ana General Plan Update (GPU) to result in transportation and traffic impacts in the City of Santa Ana and its sphere of influence (plan area). This section presents the existing transportation conditions in the plan area, including the roadway network, bicycle and pedestrian network, transit network, and current intersection and roadway segment operations. This section also discusses the methodology used to evaluate impacts. The analysis in this section is based in part on the following technical report:

- *Santa Ana General Plan Update Traffic Impact Study*, IBI, ~~July~~ October 2020

A complete copy of this study is in the technical appendices (Volume IV, Appendix K).

Note that IBI's traffic impact study (TIA) includes a comprehensive analysis of the potential impact of buildout of the GPU on the level of service (LOS) of 105 area intersections (including several intersections in adjacent cities) and 60 roadway segments. The results of this LOS analysis, however, are not reproduced or summarized in this EIR section because, pursuant to SB 743—passed in September 2013 and incorporated into updated CEQA Guidelines approved in December 2018—LOS and auto delay are no longer metrics to evaluate transportation impacts under CEQA. The updated guidelines codify the switch from LOS to vehicle miles traveled (VMT) as the metric for transportation analysis. VMT refers to the amount and distance of automobile travel attributable to a project. Although the LOS analysis in the TIA is not used to evaluate environmental impacts, the analysis supports the GPU and associated transportation standards of service in the **circulation mobility** element.

#### 5.16.1 Environmental Setting

##### 5.16.1.1 REGULATORY BACKGROUND

The following summarizes the transportation policies, laws, and regulations that would apply to the GPU. These regulations provide the context for the impact discussion related to the proposed GPU's potentially significant effects.

#### State

##### *California Transportation Commission*

The California Transportation Commission (CTC) administers the public decision-making process that sets priorities and funds projects envisioned in long-range transportation plans. The CTC's programming includes the State Transportation Improvement Program, a multiyear capital improvement program of transportation projects on and off the state highway system, funded with revenues from the State Highway Account and other funding sources. The California Department of Transportation (Caltrans) manages the operation of state highways.

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#### *California Department of Transportation*

Caltrans is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. Caltrans approves the planning, design, and construction of improvements for all state-controlled facilities, including I-5, SR-55, SR-22, and the associated interchanges for these facilities in Santa Ana. Caltrans has standards for roadway traffic flow and has developed procedures to determine if state-controlled facilities require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. Caltrans also prepares comprehensive planning documents, including corridor system management plans and transportation concept reports, which are long-range planning documents that establish a planning concept for state facilities.

#### *California Manual of Uniform Traffic Control Devices*

The California Manual on Uniform Traffic Control Devices (California MUTCD) is published by the State and is issued to adopt uniform standards and specifications for all official traffic control devices in California, in accordance with Section 21400 of the California Vehicle Code. Effective March 27, 2020, Caltrans has made edits, referred to as Revision 5 (Rev. 5), to the 2014 California MUTCD (Caltrans 2020).

#### *Senate Bill 743*

On September 27, 2013, SB 743 (Steinberg, 2013) was signed into law. A key element of this law is the potential elimination or deemphasizing of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts in many parts of the state. According to the legislative intent of SB 743, these changes to current practice were necessary to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions (GHG). The Legislature found that with adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce VMT and thereby contribute to the reduction of GHG, as required by the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32. Additionally, AB 1358, described below, requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users.

SB 743 started a process that fundamentally changes transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as the basis for determining significant transportation impacts. As part of the new CEQA Guidelines, the new criteria were designed to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. The Office of Planning and Research (OPR) developed alternative metrics and thresholds based on VMT. The guidelines were certified by the Secretary of the Natural Resources Agency in December 2018, and automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment. Agencies had until July 1, 2020, to adopt new VMT-based criteria.

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The City has developed VMT-based significance criteria and methodology to evaluate the transportation impacts of the GPU as well as future projects in the City's jurisdiction. Section 5.16.1.2 describes existing VMT conditions and averages in the city and county, and Section 5.16.2.2 details the significance thresholds to be applied. Finally, the impact analysis for the GPU following the new VMT metric is in Section 5.16.4.

#### ***AB 1358: California Complete Streets Act of 2008***

The California Complete Streets Act of 2008 was signed into law on September 30, 2008. Beginning January 1, 2011, AB 1358 required circulation elements to address the transportation system from a multimodal perspective. The bill states that streets, roads, and highways must “meet the needs of all users...in a manner suitable to the rural, suburban, or urban context of the general plan.” Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate—including walking, biking, car travel, and transit.

The Complete Streets Act also requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled. For further clarity, AB 1358 tasked OPR to release guidelines for compliance, which were released in December 2010.

#### ***SB 375: Sustainable Communities and Climate Protection Act***

On December 11, 2008, the California Air Resources Board adopted its proposed Scoping Plan for AB 32, the Global Warming Act. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32.

There are five major components to SB 375. First, SB 375 addresses regional GHG emission targets. The Air Resources Board's Regional Targets Advisory Committee guides the adoption of targets to be met by 2020 and 2035 for each metropolitan planning organization (MPO) in the state. These targets, which MPOs may propose themselves, are updated every eight years in conjunction with the revision schedule of housing and transportation elements.

Second, MPOs are required to create a sustainable communities strategy (SCS) that provides a plan for meeting regional targets. The SCS and the regional transportation plan (RTP) must be consistent with each other, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan to meet the target.

Third, SB 375 requires that regional housing elements and transportation plans be synchronized on eight-year schedules. In addition, Regional Housing Needs Assessment allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years.

Fourth, SB 375 provides CEQA streamlining incentives for preferred development types. Residential or mixed-use projects qualify if they conform to the SCS. Transit-oriented developments also qualify if they 1) are at least 50 percent residential, 2) meet density requirements, and 3) are within one-half mile of a transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

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Finally, MPOs must use transportation and air emission modeling techniques consistent with guidelines prepared by the CTC. Regional transportation planning agencies, cities, and counties are encouraged but not required to use travel demand models consistent with the CTC guidelines.

#### *California Fire Code*

The 2019 California Fire Code sets requirements pertaining to fire safety and life safety, including for building materials and methods, fire protection systems in buildings, emergency access to buildings, and handling and storage of hazardous materials (California Code of Regulations Title 24 Part 9).

#### **Regional**

#### *Orange County Fire Authority Fire Prevention Guidelines*

The Orange County Fire Authority’s guideline for “Fire Master Plan for Commercial and Residential Development” (Guideline B-09) is a general guideline pertaining to the creation and maintenance of fire department access roadways, access walkways to and around buildings, and hydrant quantity and placement, as required by the 2019 California Fire and Building Codes and as amended by local ordinance.

#### *Southern California Association of Governments’ Regional Transportation Plan and Sustainable Communities Strategy*

SCAG’s Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range plan that provides a vision for transportation investments throughout the southern California region. The SCS integrates land use and transportation strategies that will achieve California Air Resources Board emissions reduction targets. SCAG is the metropolitan planning organization for a six-county region that includes Santa Ana and 188 other cities. The RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve state GHG emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. The latest RTP/SCS was completed and adopted in May 2020.

#### *South Coast Air Quality Management District, Air Quality Management Plan*

The South Coast Air Quality Management District is the federally mandated agency that is assigned the responsibility for promulgating and enforcing regulations to achieve compliance with national and state air quality standards. The air district’s central mandate is reflected in its 2016 Air Quality Management Plan, which is the region’s blueprint for achieving air quality standards in the South Coast Air Basin. Because of the importance of motor vehicles—the primary source of air pollution—substantial emphasis is placed on reducing motor vehicle travel and increasing transit ridership. The plan relies on regulatory and incentive-based approaches to reducing pollution while eliminating reliance on future uncertain technologies.

#### *Orange County Measure M*

~~Measure M (also called OC Go) was approved by Orange County voters in 1990.~~ Measure M is the half-cent sales tax for transportation improvements first approved by Orange County voters in 1990 and renewed by

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voters for a 30-year extension in 2006 (Measure M2). The combined measures raise the sales tax in Orange County by one-half cent through 2041 to help alleviate traffic congestion. ~~The measure raises the sales tax by one-half cent for 50 years (to 2041) for projects and programs that alleviate traffic congestion. To be eligible for Measure M2 funds, a general plan circulation element must be consistent with Measure M requirements. The element must contain a growth management program that includes LOS standards, monitoring program, development phasing with circulation improvements, and impact fees.~~

~~Key parts of the growth management program—including the standard for traffic circulation as LOS D—are incorporated into the circulation element. To achieve this standard, the City requires that new development pay its fair share of the street improvement costs associated with proposed projects, including improvements for regional traffic mitigation~~ a local jurisdiction must satisfy the following requirements:

- Comply with the conditions and requirements of the Orange County Congestion Management Program (CMP).
- Establish a policy which requires new development to pay its fair share of transportation related improvements associated with their new development.
- Adopt a General Plan Circulation Element consistent with the MPAH.
- Adopt and update a Capital Improvement Program (CIP).
- Participate in Traffic Forums.
- Adopt and maintain a Local Signal Synchronization Plan (LSSP).
- Adopt and update biennially a Pavement Management Plan (PMP).
- Adopt and provide an annual Expenditure Report to OCTA.
- Provide OCTA with a Project Final Report within six months following completion of a project funded with Net Revenues.
- Agree to expend Net Revenues received through M2 within three years of receipt.
- Satisfy Maintenance of Effort (MOE) requirements.
- Agree that Net Revenues shall not be used to supplant developer funding.
- Consider, as part of the eligible jurisdiction's General Plan, land use and planning strategies that accommodate transit and non-motorized transportation.

### *Orange County Transportation Authority Long Range Transportation Plan*

The Orange County Transportation Authority (OCTA) Long Range Transportation Plan (LRTP) outlines the vision and plan for multimodal transportation in Orange County. OCTA prepares the LRTP and submits it to

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SCAG so that county transportation projects will be incorporated into the regional transportation plan and subsequently programmed into the Federal Transportation Improvement Program. For the 2017 update, the LRTP has four goals: 1) deliver on commitments; 2) improve transportation system performance, 3) expand transportation system choices; and 4) support sustainability.

#### *Master Plan of Arterial Highways*

The Master Plan of Arterial Highways (MPAH) was established in 1956 to ensure that a regional arterial highway network would be developed to supplement Orange County's developing freeway system. OCTA is responsible for administering the MPAH, including the review and approval of amendments. The MPAH map is a critical element of transportation planning and operations because it defines a countywide circulation system in response to existing and planned land uses. It is regularly updated to reflect changing development and traffic patterns.

In order to be eligible for Measure M revenues and programs, a city's circulation element must be consistent with the MPAH and maintain the minimum number of lanes on each arterial in the MPAH.

#### *Districts 1 and 2 Bikeways Strategy (2013)*

OCTA's regional bikeways planning expanded the 2009 OCTA Commuter Bicycle Strategic Plan to identify potential regional bikeway improvements. The Districts 1 and 2 Bikeways Strategy identifies 11 regional bikeway corridors that connect to major activity centers, including employment areas, transit stations, and colleges and universities. The corridors include key connections to regional bikeway routes (e.g., Santa Ana River and Coyote Creek trails) and major destinations within the districts. The City's bikeway network builds off OCTA's Strategic Plan by routes that will connect to the regional bikeway network and those proposed by surrounding cities.

#### *OCTA's OC Transit Vision*

The OC Transit Vision is a 20-year plan for enhancing and expanding public transit service in Orange County. Adopted in 2018, the Transit Vision focuses future investments along transit opportunity corridors on major arterials and freeways in and surrounding Santa Ana. The Transit Vision also supports improvements to rail service planned by Metrolink and other partner agencies, including plans to improve station access and reduce the number of at-grade road crossings. The **circulation mobility** element adopts the transit opportunity corridors as part of its transit plan.

### **Local**

#### *Santa Ana Climate Action Plan*

Santa Ana's Climate Action Plan represents the City's commitment to improving quality of life by reducing carbon pollution from its own operations and the community. The climate action plan is intended to comply with State mandates for addressing global warming. The strategies proposed will improve air quality, reduce energy and water use, reduce traffic congestion, and accrue other environmental improvements. A key focus of the transportation and land use goals involves creating more opportunities for walking and bicycling;

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investing in public transit and rail opportunities; and concentrating future housing, commercial, and office development in areas that complement transit improvements.

#### *Santa Ana Vehicle Miles Traveled Analysis Guidelines*

The City's VMT Guidelines are based on the OPR's "Technical Advisory on Evaluating Transportation Impacts in CEQA." A VMT analysis is required for land use and transportation projects that have the potential to increase the average VMT per service population (VMT/SP). The VMT impact thresholds are:

- **Land Use Plans:** A project should be considered to have a significant impact if the project VMT/SP (for the land use plan) is not at least 15 percent below the existing total daily VMT/SP for the county.
- **Transportation Projects:** A significant impact would occur if the project increases the baseline VMT in the city.

#### *Santa Ana Active Transportation Plan*

The active transportation plan includes recommendations meant to support and increase bicycling and walking in Santa Ana, enhance nonmotorized travel infrastructure, and create options to support the existing population. The active transportation plan includes an inventory of existing bike and pedestrian infrastructure, identifies deficiencies, develops and prioritizes improvements, and strengthens pedestrian and bicycle policies in the regional transportation plan (Santa Ana 2019a).

#### *Central Santa Ana Complete Streets Plan*

The Central Santa Ana Complete Streets Plan is a guide to establish a network of "complete streets" to improve bicycling and walking throughout central Santa Ana. Issues in central Santa Ana include high vehicle speeds and traffic volumes, wide roadway crossings, a lack of dedicated bicycle facilities, and a large number of uncontrolled pedestrian crossings. To address these challenges, the City envisioned this Complete Streets Plan to improve access and mobility for all modes, including walking, bicycling, transit, and motor vehicles. The plan looks at complete streets methods and designs to improve these modes within and around central Santa Ana. The City identified 11 corridors as candidates for improvements based on multiple criteria and previous planning efforts (Santa Ana 2018).

#### *Downtown Santa Ana Complete Streets Plan*

The Transit Zone area in Santa Ana is between the Santa Ana Regional Transportation Center and the Downtown (see Figure 3-10). The area is accessible by walking, biking, transit, or automobile, but the commingling of different transportation modes in this area is problematic because of high vehicle speeds and traffic volumes, wide roadway crossings, a lack of dedicated bicycle facilities, and a large number of uncontrolled pedestrian crossings. To address these issues, the City has implemented the Downtown Complete Streets Plan to improve access and mobility for all modes. The plan looks at Complete Streets methods and designs to improve these modes within and around the Downtown (Santa Ana 2016a).

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#### *Santa Ana Safe Mobility Plan*

The Safe Mobility Plan's goal is to substantially increase safe mobility in all areas of the city, achieve zero fatal bicycle/pedestrian collisions, reduce vehicle speeds, and minimize demonstrated collision patterns. Its objectives include:

- Reduce collisions citywide, while focusing capital investments at high collision locations.
- Recommend solutions to evolve the roadway network into one where people can make transportation decisions and unanticipated mistakes without risk of severe injury or death.
- Reject severe and fatal injuries as a necessary by-product of multimodal transportation.
- Prioritize traffic safety over congestion management, accepting that improving safety for all roadway users will in some cases result in unavoidable delay.
- Suggest infrastructure improvements that reduce speeds and separate vulnerable roadway users from moving traffic.
- Provide a balance of engineering, education, and enforcement solutions to shift toward a safety culture. (Santa Ana 2016b)

#### *Santa Ana Municipal Code*

The Santa Ana Municipal Code identifies land use categories, development standards, and other general provisions that ensure consistency between the GPU and proposed development projects. The following provisions focus on transportation and traffic:

- **Chapter 36, Traffic:** Provisions of this chapter define traffic regulations including regulations for pedestrians and bikeway traffic. The chapter also includes standards for traffic control devices and an article on transportation management (Article XIII). The intent of Article XIII is to meet the requirements of:
  - Government Code Section 65089 (b)(3), which requires development of a trip reduction and travel demand element as part of the congestion management program, and Government Code Section 65089.3(b), which requires adoption and implementation of a trip reduction and travel demand ordinance.
  - ~~The Orange County Revised Traffic Improvement and Growth Management Ordinance (approved as Measure M by the voters of Orange County in the general election of November 6, 1990) requirement for the adoption of a transportation system management ordinance or alternative mitigation to reduce single occupancy automobile travel.~~
- **Chapter 33: Streets, Sidewalks and Public Works.** This chapter establishes regulations and procedures for the construction, repair, and reconstruction of streets and alleys.



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### 5.16.1.2 EXISTING CONDITIONS

Santa Ana’s circulation system includes more than 500 miles of roadway and many miles of freeways, railways, and other travelways. The system also includes sidewalks and trails, bicycle routes, transit routes, and associated facilities. Table 5.16-1 and the following sections describe each type of street classification in Santa Ana.

**Table 5.16-1 Street Classifications in Santa Ana**

Street Classification	Description
Major Arterial	A street with six travel lanes and a center median. Typically includes bus transit, pedestrian sidewalks, and bicycle lanes. Example: Bristol Street.
Primary Arterial	Typically a roadway with four travel lanes and a center median. Typically includes pedestrian sidewalks and may include bus transit services and bicycle lanes. Example: 4th Street east of Grand Avenue.
Secondary Arterial	A roadway with four travel lanes and no center median. Typically provides sidewalks and may include bus transit and bicycle lanes. <del>Serves more local traffic than a Primary Arterial.</del> Example: Civic Center Drive east of Bristol Street.
Divided Collector Arterial	Typically a roadway with two travel lanes and a continuous, central two-way left-turn lane, but it may be divided by a raised median as well. Right-of-way typically is 80 feet to accommodate bicycle lanes. Example: Flower Street south of 1st Street.
Collector Street	A roadway with two travel lanes and no center median. Typically includes sidewalks and may include shared bicycle routes. Example: Broadway south of 1st Street.
Local Street	A roadway with two travel lanes serving residences and businesses. Typically includes sidewalks and on-street parking. May include shared bicycle routes.

### Existing Roadway Network

The Master Plan of Streets and Highways (MPSH) is the City’s plan for a roadway network that effectively and safely provides mobility options for bicyclists, pedestrians, vehicles, and transit passengers. This plan offers an integrated system of roadways and connections essential to the city.

Each of the MPSH’s different roadway classifications is designed for a specific purpose, intended use, and volume of travel. The following describes each type of roadway classification, and Figure 5.16-1, *Current Master Plan of Streets and Highways*, illustrates their locations in Santa Ana.

- **Freeways.** A multilane, high-volume, high-speed roadway for regional and interregional vehicular travel. These include I-5, SR-22, SR-55, and SR-57. Access to these facilities is restricted to interchange ramps at selected roadways. Freeways are under the authority of Caltrans.
- **Principal Arterial.** An eight-lane divided roadway, with a typical right-of-way width of 144 feet and a roadway width of 126 feet from curb to curb, including a 14-foot median. A principal arterial is designed to accommodate 45,000 to 67,500 trips daily.
- **Major Arterial.** A six-lane divided roadway with a typical right-of-way width of 120 feet and a roadway width of 100 feet from curb to curb, including a 14-foot median. A major arterial is designed to accommodate 33,900 to 50,600 vehicle trips daily.

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- **Primary Arterial.** A four-lane divided roadway with a typical right-of-way width of 100 feet and a roadway width of 84 feet from curb to curb, including a 14-foot median. A primary arterial is designed to accommodate between 22,500 and 33,800 vehicle trips daily.
- **Secondary Arterial.** A four-lane undivided (no median) roadway with a typical right-of-way width of 80 feet and a roadway width of 64 feet from curb to curb. A secondary arterial is typically designed to accommodate 15,000 to 22,500 vehicle trips daily.
- **Collector and Divided Collector.** A two-lane unrestricted access roadway (divided or undivided) with a typical right-of-way width of 56 feet and a roadway width from curb to curb of 40 feet. ~~A divided collector street is designed to accommodate up to 22,000 vehicle trips daily.~~ Collectors are designed to accommodate an average daily traffic of 7,500 to 11,300 trips and divided collectors are designed to accommodate an average daily traffic of 9,000 to 20,000 trips.

Although not part of the MPSH, the remainder of the city’s roadway system includes public residential streets and a few private streets.

### Existing Traffic Conditions

The VMT analysis was prepared in conformance with the City of Santa Ana VMT Analysis Guidelines. VMT is defined as the total miles traveled by vehicles (within a transportation network). A VMT analysis may be conducted for large-scale projects such as land use plans or individual transportation/development projects. For large-scale projects, it is appropriate to assess VMT impacts based on total VMT per service population for the entire county. Service population consists of the total employees and population that generate the VMT.

VMT was generated with data from the Orange County Transportation Authority Model (OCTAM 5.0).<sup>1</sup> The existing year (2020) VMT was developed through linear interpolation of the OCTAM 5.0 baseline 2016 and 2045 scenarios. Table 5.16-2 presents the VMT analysis results for the existing year (2020) scenario.

**Table 5.16-2 Existing Year (2020) VMT Summary**

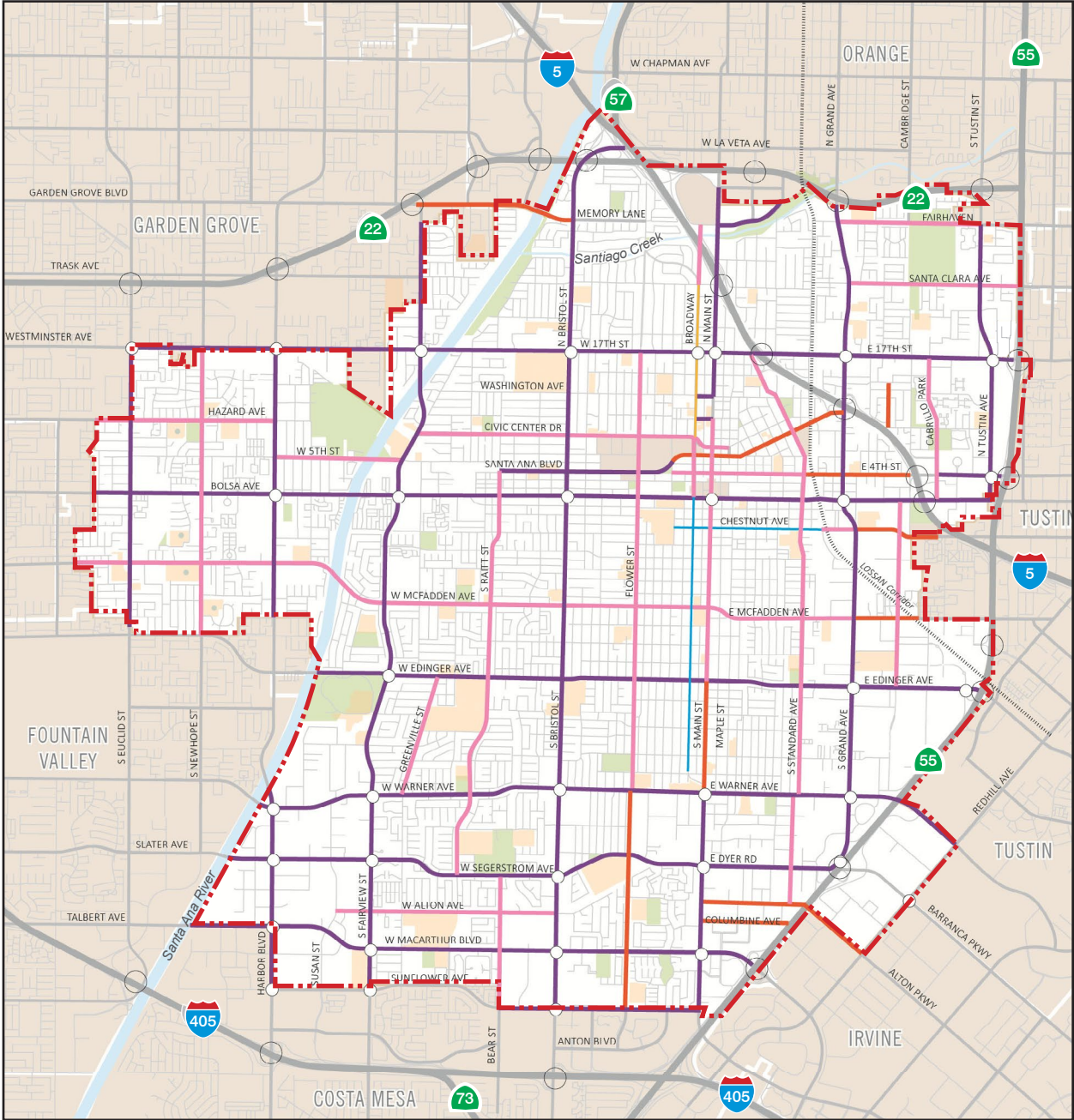
	Total VMT	Service Population <sup>1</sup>	VMT/SP
City	11,407,124	507,904	22.5
County	99,344,141	3,834,949	25.9

Source: IBI 2020.

<sup>1</sup> Service population consists of the aggregate of total employees and population within the County. When aggregating employees and residents, an employee reduction factor was applied to account for overlaps in the two (employees who are also residents). Reduction factors are based on employment data in SCAG’s Local Profiles Reports (2019). The SCAG reports show that 65.3% of employees within the county are also residents of the county.

<sup>1</sup> The Orange County Transportation Authority Model (OCTAM) is OCTA’s regional model that is used to analyze VMT modes of travel: local and express bus transit, urban rail, commuter rail, toll roads, carpools, truck traffic, as well as nonmotorized based on changes in land use types, household characteristics, transportation infrastructure, and travel costs such as transit fares, parking costs, tolls, and auto operating costs.

Figure 5.16-1 - Current Master Plan of Streets and Highways



- - - - - City of Santa Ana
- Freeway
- Secondary Arterial
- Commuter
- Major Arterial
- Primary Arterial
- Local Commercial
- Interchange
- Enhanced Intersections

0 1  
Scale (Miles)



Source: City of Santa Ana, 2019

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#### Public Transportation System

OCTA is the leading transit provider in Orange County, offering a wide range of fixed-route bus service. OCTA has developed an extensive network of transit routes to connect residents and commuters to key destinations. There are five primary types of routes.

- **Local routes** operate on arterials within the grid created by the major routes, but at lower frequencies. Most local routes operate seven days per week, but some operate on weekdays only.
- **Community routes** connect with major destinations but are less direct because they serve neighborhoods and destinations off the arterial grid. Half of the routes operate seven days per week.
- **Stationlink routes** provide connections solely between Metrolink stations and nearby destinations such as job centers. They should operate only during peak periods and in the peak direction to and from stations.
- **Express routes** serve long trips during peak periods, primarily commute trips to job centers. Because they mainly serve commuters who own automobiles, access to these routes is primarily by car.
- **Bravo routes** operate every 15 minutes or better during peak times, seven days a week. Major routes form a grid on arterial streets for the areas with highest transit use. Bravo limited-stop services are included.

OCTA also provides transit services for people who have a disability through OC ACCESS. OC ACCESS buses will pick up disabled residents who live within a quarter mile of an OCTA fixed bus route. This door-to-door service is offered anywhere in Orange County near fixed routes. Services are consistent with all federal Title V requirements. The majority of Santa Ana residential areas are covered by this service.

The Southern California Regional Rail Authority also provides commuter and passenger rail service to Santa Ana. The Metrolink Orange County Line and the Inland Empire-Orange County commuter line travel through Santa Ana, with scheduled stops at the Santa Ana Regional Transportation Center. Amtrak's Pacific Surfliner also provides passenger rail service through Santa Ana, connecting to communities throughout the Los Angeles and San Diego metropolitan regions. Figure 5.16-2, *Current Transit Network*, shows the current local transit routes in Santa Ana.

#### Bikeway Network

Bicycling is encouraged throughout Santa Ana, and the City continues to make fiscal commitments to significantly expand the existing network of bikeways throughout the community.

#### *Bikeway Classifications*

Santa Ana's bikeway network includes four classifications that are tailored to the dimensions of the MPSH. Figure 5.16-3, *Current Bikeway Network*, shows the city's current bikeway routes.

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#### *Class 1 Bicycle Path*

Class 1 bicycle paths are paved rights-of-way for the exclusive use of bicyclists and pedestrians. Bike paths are physically separated from vehicle traffic and are generally built in locations not served by streets or where vehicular crossflows are minimized. Class 1 bike paths include the Santa Ana River Trail and several segments of Alton Avenue/Maple Street, Santiago Creek Trail, Flower Street, Santa Ana Gardens Channel/Bear Street, and MacArthur Boulevard.

#### *Class 2 Bicycle Lane*

Class 2 bicycle lanes are one-way routes denoted by a striped lane on a roadway to delineate the rights-of-way assigned to vehicles and bikes. Bicycle lanes can be striped adjacent to the curb where no parking exists or striped to the left side of on-street parking lanes. Existing Class 2 bike lanes in Santa Ana are provided along Bristol Street, Greenville Street, Memory Lane, and Ross Street. Class 2 bike lanes were recently implemented on Newhope Street between Westminster Avenue and McFadden Avenue. Where bikeways are built on major arterials, they may be Class 2.

#### *Class 3 Bicycle Route*

Class 3 bicycle routes are bikeways where cyclists share the travel lane with motor vehicles. Class 3 bike routes are typically on low-volume roadways, such as local streets in residential neighborhoods, and may be designated by signage or roadway markings (called sharrows). Although not always designated by signage, most streets in low-traffic-volume residential neighborhoods are classified as Class 3 routes.

#### *Class 4 Bicycle Cycle Track*

Class 4 bicycle cycle tracks are local roads that have been enhanced with treatments that prioritize bicycle travel. These treatments might include wayfinding signage, bollards, and traffic-calming features that facilitate safe and convenient bicycle travel, slow vehicle speeds, and minimize vehicular traffic volumes. Bristol Street has a Class 4 cycle. Edinger Avenue between Santa Ana River and Bristol Street has a Class 4 cycle track under construction.

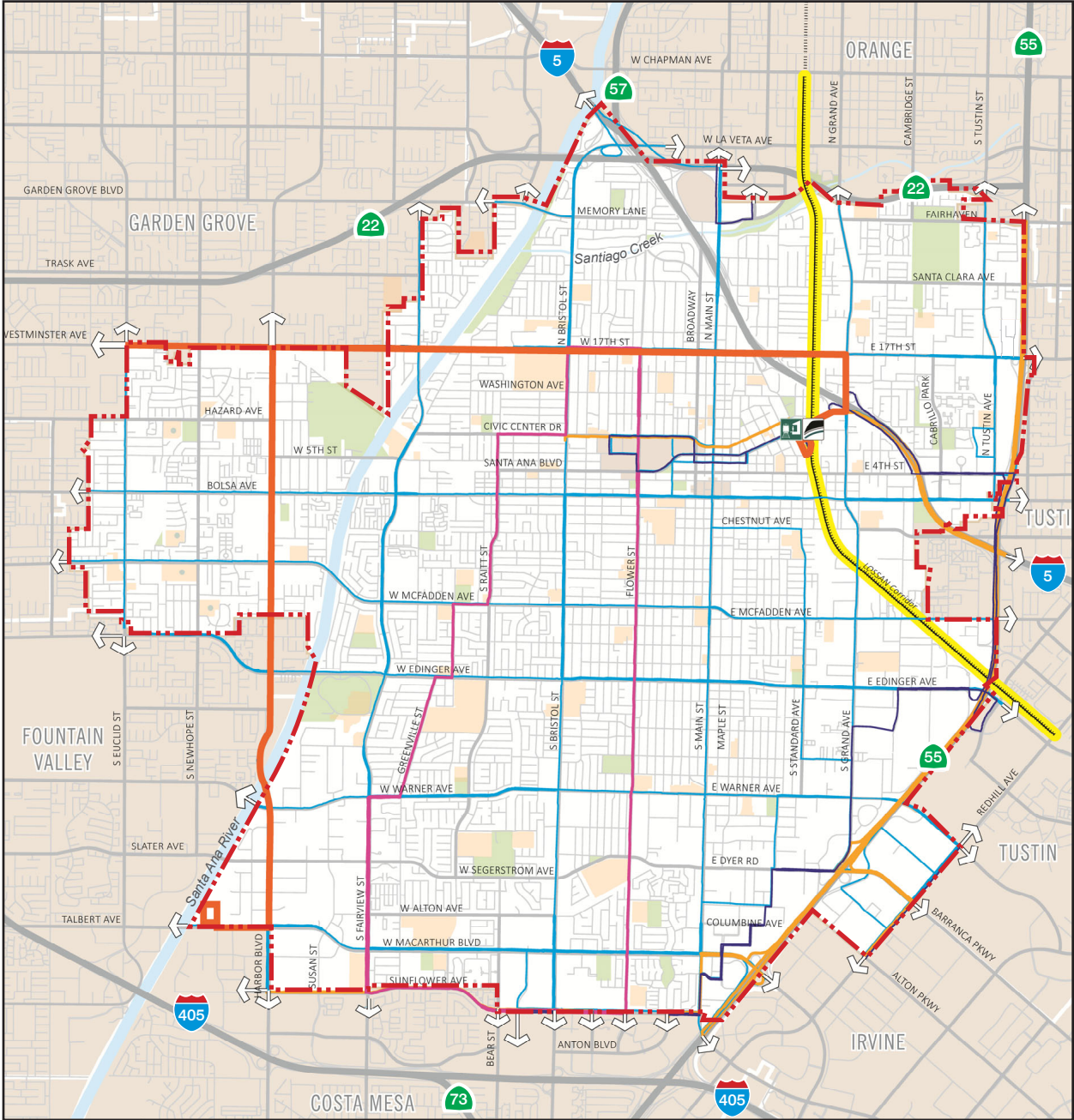
#### *Pedestrian Facilities*

Santa Ana's pedestrian system consists of pathways, sidewalks, and crossings. Existing pedestrian pathways include the Santa Ana River Trail. Sidewalks are provided on both sides of streets throughout most of the city. Pedestrian crossings are provided at most intersections, with a variety of crossing treatments. These treatments include parallel-striped crosswalks at signals, countdown signals, pedestrian-activated signals with audio/visual warnings, bulb-outs, and median refuges that reduce crossing distances.

The foundation of a comfortable and safe pedestrian environment is the sidewalk. As public spaces, sidewalks serve as the front steps to the city and various districts and neighborhoods. Santa Ana has made it a priority to install marked crosswalks at protected (signalized or stop-controlled) intersections if their presence minimizes pedestrian-auto conflicts. The City has also prioritized improving intersections near schools to create safe walking environments under its growing Safe Routes to School program.



Figure 5.16-2 - Current Transit Network



- - - - City of Santa Ana
- Local Bus Route
- Community Bus Route
- Stationlink Bus Route
- Bravo Bus Route
- Metrolink and Amtrak Commuter Rail
- Santa Ana Regional Transportation Center
- Metrolink Station

0 1  
Scale (Miles)



Source: City of Santa Ana, 2019

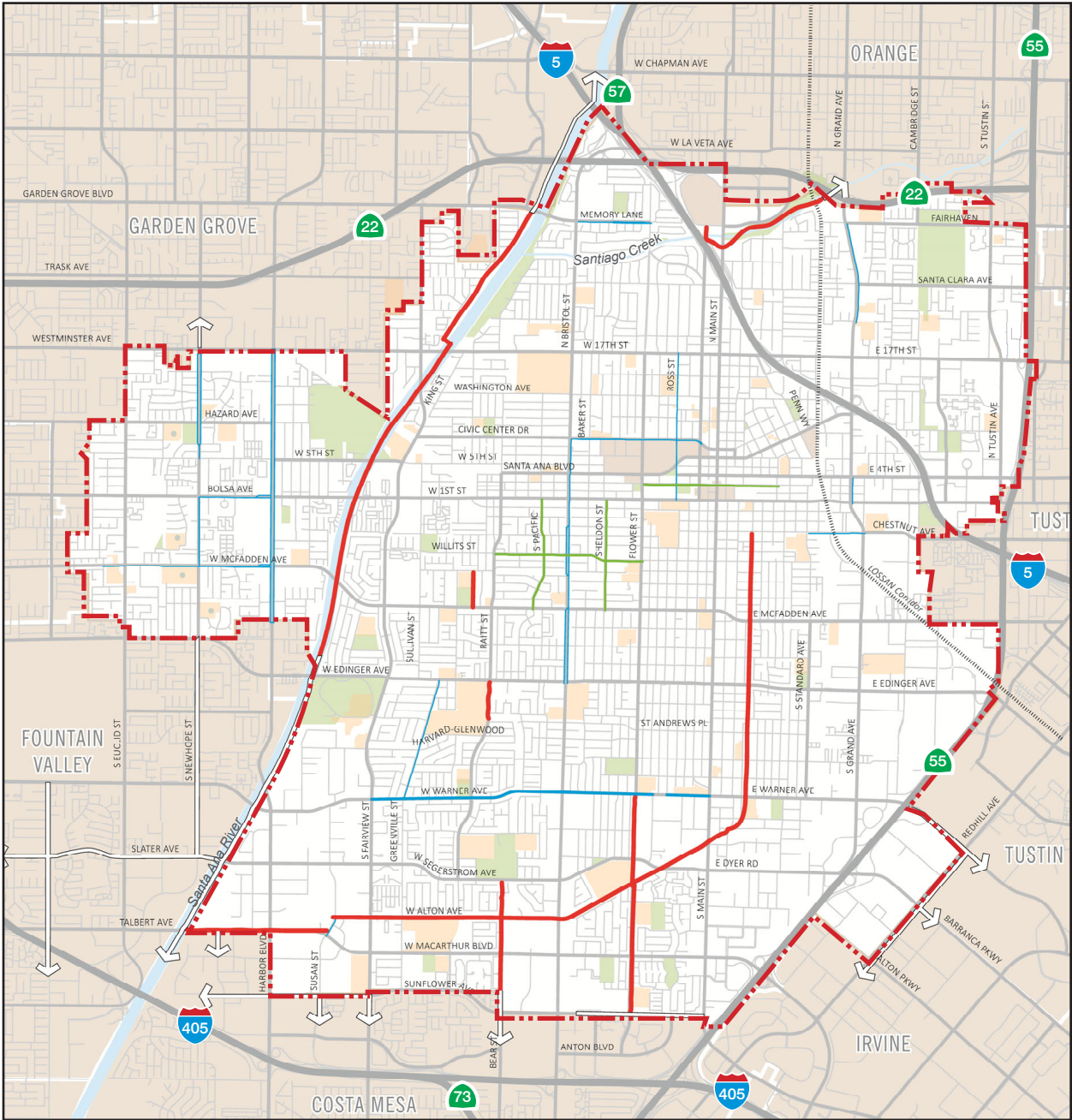
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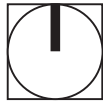
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Figure 5.16-3 - Current Bikeway Network



- - - City of Santa Ana
- Class I Path
- Class II Bike Lane
- Class III Bike Route/Boulevard
- Existing Routes to Adjacent Cities



Source: City of Santa Ana, 2019

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Santa Ana intends to have a continuous pedestrian network that supports active living; provides for safe and healthy transportation; and enables people of all ages and abilities to access jobs, recreation, school, shopping, and transit by foot or bicycle as a part of daily life. To that end, the City is in the process of developing a pedestrian plan that: 1) increases pedestrian safety; 2) creates or reinvents streets and places that promote walking; 3) improves walking to key destinations; and 4) engages the community in creating improvements.

### Truck Routes

#### *National Truck Routes*

The interstate freeway system and California highways across and near Santa Ana provide routes for the movement of goods. These include I-5, SR-22, SR-55, SR-57, and I-405. Access to freeways is restricted to interchange ramps. These freeways and associated ramps are under the authority of Caltrans and part of a statewide and national network of truck routes that carry a vast amount of goods through California.

#### *Local Truck Routes*

The city's street system supports goods movement via designated routes. Truck routes are designated roadways in Santa Ana that allow for the movement of goods on trucks. These routes may include terminal access routes for "super trucks." These routes are often major or primary arterials that connect to freeways. Except for local deliveries, trucks are prohibited from driving on residential streets or low-volume roadways.

### Freight Rail

Santa Ana is served by two Class 1 railroads—the Union Pacific Railroad and the Burlington Northern and Santa Fe Railway. Freight train activity varies daily and depends on demand from commercial and industrial businesses. Both railroad lines serve Santa Ana. These freight lines ship goods and materials throughout the nation as part of the transcontinental network of rail lines. Generally, the volume of goods is low compared to other areas. The two rail providers average approximately 12 trains daily in Santa Ana.

### 5.16.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

T-2 Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

CEQA Guidelines Section 15064.3 (b) provides criteria for analyzing transportation impacts as follows:

1. Land Use Projects: Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed

## 5. Environmental Analysis

### TRANSPORTATION

to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

2. **Transportation Projects:** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
3. **Qualitative Analysis:** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
4. **Methodology:** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

The City has adopted significance thresholds pursuant to these CEQA Guidelines as detailed in the City's Local Guidelines for Implementation of the California Environmental Quality Act (Santa Ana 2019b). The relevant thresholds for the GPU, including the ~~circulation~~ mobility element, are as follows:

1. **Land Use Plans:** A project should be considered to have a significant impact if the project VMT/SP (for the land use plan) is not equal to or less than 15 percent below the existing total daily VMT/SP for the county.
2. **Transportation Projects:** A significant impact would occur if the project increases the baseline VMT.

T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-4 Result in inadequate emergency access.

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### 5.16.3 Regulatory Requirements and General Plan Update Policies

#### 5.16.3.1 REGULATORY REQUIREMENTS

- RR T-1            The City will design and operate a balanced, multimodal circulation system network with all users in mind—including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities in line with the California Complete Streets Act (Assembly Bill 1358).
- RR T-2            Projects pursuant to the General Plan Update will implement fire protection requirements as detailed in the Orange County Fire Authority’s Fire Prevention Guidelines and in the California Fire Code.

#### 5.16.3.2 GENERAL PLAN UPDATE POLICIES

##### **Circulation-Mobility Element**

- **Policy 1.2 Balanced Multimodal Network.** Provide a balanced and equitable multimodal circulation network that reflects current and changing needs.
- **Policy 1.6 Complete Streets.** Transform travelways to accommodate all users through street design and amenities, such as sidewalks, trees, landscaping, street furniture, and bus shelters.
- **Policy 1.7 Proactive Mitigation.** Proactively mitigate potential air quality, noise, congestion, safety, and other impacts from the transportation network on residents and business.
- **Policy 1.9 Regional Consistency.** Ensure the street network is consistent with standards set in the OCTA Master Plan of Arterial Highways and the Congestion Management Program.
- **Policy 2.2 Transit Service.** Work with regional and local entities to provide residents, workers and visitors with safe, affordable, accessible, convenient, and attractive transit services.
- **Policy 2.4 Commuter Rail.** Support the expansion of commuter rail services and Santa Ana’s role as a destination along the Los Angeles–San Diego–San Luis Obispo (LOSSAN) rail corridor.
- **Policy 2.5 OC Streetcar.** Support development and expansion of the OC Streetcar project, connecting neighborhoods, employment centers, and Downtown Santa Ana to activity centers in Orange County.
- **Policy 2.6 High Frequency Transit Corridors.** Work with OCTA to support the improvement of transit opportunity corridors to facilitate high frequency transit (e.g., bus rapid transit and other modes) along designated corridors in Santa Ana.
- **Policy 2.7 Regional Mobility Access.** Enhance access to regional transit, including first and last mile connections, to encourage the use of public transit.

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- **Policy 3.1 Nonmotorized Travelway Network.** Expand and maintain a citywide network of nonmotorized travelways within both the public and private realms that create linkages between neighborhoods, recreational amenities, schools, employment centers, **neighborhood serving commercial**, and activity centers.
- **Policy 3.2 Nonmotorized Travelway Amenities.** Enhance nonmotorized travelways with amenities such as landscaping, shade trees, lighting, benches, crosswalks, rest stops, bicycle parking, and support facilities that promote a pleasant and safe experience.
- **Policy 3.3 Safe Routes to Schools and Parks.** Lead the development and implementation of safer routes to schools **and parks** by partnering with the school district, residents, property owners, and community stakeholders.
- **Policy 3.4 Regional Coordination.** Coordinate development of the City's active transportation and transit network with adjacent jurisdictions, OCTA, and other appropriate agencies.
- **Policy 3.5 Education and Encouragement.** Encourage active transportation choices through education, special events, and programs.
- **Policy 3.6 Transit Connectivity.** Enhance first and last mile connectivity to transit facilities through safe, accessible, and convenient linkages.
- **Policy 3.7 Complete Streets Design.** Enhance streets to facilitate safe walking, bicycling, and other nonmotorized forms of transportation through community participatory design.
- **Policy 3.9 Neighborhood Traffic.** Develop innovative strategies to calm neighborhood traffic, increase safety, and eliminate collisions, **while also maintaining access for emergency response**.
- **Policy 4.1 Intense Development Areas.** Program multimodal transportation and public realm improvements that support new development in areas along transit corridors and areas planned for high intensity development.
- **Policy 4.2 Project Review.** Encourage active transportation, transit use, and connectivity through physical improvements and public realm amenities identified during the City's Development Review process.
- **Policy 4.3 Transportation Management.** Coordinate with OCTA, employers, and developers to utilize TDM (transportation demand management) strategies and education to reduce vehicle trips and parking demands.
- **Policy 4.6 Roadway Capacity Alternatives.** Promote reductions in automobile trips and vehicle miles traveled by encouraging transit use and nonmotorized transportation as alternatives to augmenting roadway capacity.

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- **Policy 5.7 Infrastructure Condition.** Enhance travelway safety by maintaining streets, alleys, bridges, sidewalks, lighting, and other transportation infrastructure in excellent condition.
- **Policy 5.8 Traffic Safety.** Prioritize the safety of all travelway users when designing transportation improvement and related improvement and rehabilitation projects.

### Urban Design Element

- **Policy 1.5 Attractive Public Spaces.** Encourage community interaction through the development and enhancement of plazas, open space, people places, and pedestrian connections with the public realm.
- **Policy 1.6 Active Transportation Infrastructure.** Support the creation of citywide public street and site amenities that accommodate and promote an active transportation-friendly environment.
- **Policy 3.3 Foster Community Building.** Promote a safe environment that facilitates social interaction and improves active transportation along corridors.
- **Policy 5.4 Intersections for all Travel Modes.** Strengthen active transportation connections and amenities at focal intersections to promote a pleasant and safe experience for non-motorized forms of travel.

### Community Element

- **Policy 3.7 Active Lifestyles.** Support programs that ~~create safe routes to schools and other destinations~~ to promote sports, fitness, walking, biking and active lifestyles.

### Conservation Element

- **Policy 1.6 New and Infill Residential Development.** Promote development that is mixed-use, pedestrian-friendly, transit oriented, and clustered around activity centers.
- **Policy 1.8 Promote Alternative Transportation.** Promote use of alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs and emerging technologies.
- **Policy 1.9 Public Investment Alternative Transportation Infrastructure.** Continue to invest in infrastructure projects that support public transportation and alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs, and emerging technologies.
- **Policy 1.12 Sustainable Infrastructure.** Encourage the use of low or zero emission vehicles, bicycles, non-motorized vehicles, and car-sharing programs by supporting new and existing development that includes sustainable infrastructure and strategies such as vehicle charging stations, drop-off areas for ride-sharing services, secure bicycle parking, and transportation demand management programs.



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- **Policy 3.3 Development Patterns.** Promote energy efficient-development patterns by clustering mixed use developments and compatible uses adjacent to public transportation.
- **Policy 3.11 Energy-Efficient Transportation Infrastructure.** Continue to support public and private infrastructure for public transportation such as bus routes, rail lines, and the OC Streetcar.

#### Open Space Element

- **Policy 1.4 Park Distribution Connectivity.** Establish and enhance options for residents to access existing and new park facilities through safe walking, bicycling, and transit routes. Ensure the City residents have access to public or private parks, recreation facilities, or trails in the City of Santa Ana, within a 10- minute walking and biking distance of home. Prioritize provision, programs, and partnerships in park deficient and environmental justice areas.
- **Policy 1.7 Trail Connectivity.** Collaborate with other City agencies, partners, and regional entities to provide, and connect regional and local trails, travelways, and access corridors to support recreation, active transportation, and park and program access. Consider greenways along the OC Streetcar route, flood control channels, and other underutilized sites.
- **Policy 1.5 1.9 New Development Amenities.** Ensure all new development provides open space and effectively integrates parks, open space, and pedestrian and multi-modal travelways to promote a quality living environment. For new development within park deficient and environmental justice areas, prioritize the creation and dedication of new public parkland over the collection of impacts fees.
- ~~Policy 3.2 Linking Development.~~ Promote alternative modes of transportation and active lifestyles through pedestrian and bicycle linkages to bicycle and pedestrian linkages and amenities throughout new and existing development, greenway corridors, and open spaces. to promote use of alternative modes of transportation and active lifestyles.
- ~~Policy 3.4 Greenway Corridors.~~ Coordinate with government and private sector to explore opportunities to incorporate pedestrian, multi modal, and landscape amenities along the OC Streetcar route, flood control channels, and other underutilized sites.

#### Land Use Element

- **Policy 1.6 Transit Oriented Development.** Encourage residential mixed-use development, within the City's District Centers and Urban Neighborhoods, and adjacent to high quality transit.
- **Policy 1.7 Active Transportation Infrastructure.** Invest in active transportation connectivity between activity centers and residential neighborhoods to encourage healthy lifestyles.
- **Policy 2.5 Benefits of Mixed Use.** Encourage infill mixed-use development at all ranges of affordability to reduce vehicle miles travelled, improve jobs/housing balance, and promote social interaction.



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- **Policy 3.6 Focused Development.** Facilitate the transformation of the transit corridors through focusing medium and high-density pedestrian-oriented mixed-use development at key intersections.
- **Policy 4.2 Public Realm.** Maintain and improve the public realm through quality architecture, street trees, landscaping, and other pedestrian-friendly amenities.
- **Policy 4.5 VMT Reduction.** Concentrate development along high-quality transit corridors to reduce vehicle miles traveled (VMT) and transportation related carbon emissions.

### 5.16.4 Environmental Impacts

#### 5.16.4.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.16-1: The General Plan Update is consistent with adopted programs, plans, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. [Threshold T-1]**

---

#### Roadways

The proposed ~~circulation~~ mobility element is consistent with the planning goals established by OCTA in their LRTP, and the City worked with OCTA to ensure that local or regional improvements that benefit Santa Ana are included in the latest LRTP, adopted in 2017.

The proposed GPU ~~circulation~~ mobility element includes reclassification of several arterial roadways, as shown in Figure 3-9, *Proposed Arterial Roadway Reclassifications*. The subject roadways are also listed in Section 3.3.2.2, *Updated Circulation Mobility Element*. These changes are proposed to the City's Master Plan of Street and Highway (see Figure 3-8) and would require an amendment to OCTA's Master Plan of Arterial Highways to achieve consistency with that plan. Consistency between the MPSH and MPAH is essential to maintain a functional regional network and to receive funding for Measure M street improvement projects.

The OCTA administers review and approval of the MPAH, and the City would work with OCTA to process an amendment to the MPAH to achieve consistency with the proposed City MPSH reclassifications. The MPAH includes level of service criteria for its roadway system. Although not a CEQA issue (per SB 743), the roadway segment LOS analysis in the TIA (Appendix K) includes the roadways in the MPAH. To achieve the minimum LOS for some roadway segments at GPU buildout, some improvements may be required. However, this is a planning issue and not a CEQA issue, since auto delay can no longer be considered a significant impact under CEQA.

Additionally, under the Complete Streets Act, general plans of California cities are required to include planning for complete streets—that is, streets that meet the needs of all users of the roadway, including pedestrians, bicyclists, users of public transit, motorists, children, the elderly, and the disabled. The proposed MPSH is

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consistent with the Complete Streets Act because the majority of the roadway reclassifications represent changes to narrower vehicle rights-of-way and reduced vehicle lanes to accommodate bikeway and/or sidewalk improvements. The proposed GPU would also support and be consistent with the City's active transportation plan, the Central Santa Ana Complete Streets Plan, the Downtown Santa Ana Complete Streets Plan, and SCAG's RTP/SCS. The following analysis discusses future improvements for transit, bicycle, and pedestrian travel and how they relate to these adopted programs, plans, and policies. The proposed GPU's consistency with the 2020-2045 SCAG RTP/SCS is detailed in Section 5.10, *Land Use and Planning*.

#### Transit

Transit in the city consists of OCTA bus service, Southern California Regional Rail commuter and passenger rail service, and Amtrak passenger rail. Due to its central location, grid pattern, and high ridership potential, Santa Ana's role as a transit hub continues to increase.

The GPU incorporates policies related to supporting transit facilities in the plan area. These include prioritizing multimodal systems, supporting first/last mile connectivity to transit, implementing additional complete streets improvements when it fits the context of the community, and supporting the improvement of transit opportunity corridors. Policies that promote a transit system that serves as a functional alternative to commuting by car are:

- **Circulation Mobility Element**
  - Policy 1.2 Balanced Multimodal Network.
  - Policy 2.2 Transit Service.
  - Policy 2.4 Commuter Rail.
  - Policy 2.5 OC Streetcar.
  - Policy 2.6 High Frequency Transit Corridors.
  - Policy 2.7 Regional Mobility Access.
  - Policy 3.4 Regional Coordination.
  - Policy 3.6 Transit Connectivity.
  - Policy 4.1 Intense Development Areas.
  - Policy 4.2 Project Review.
  - Policy 4.6 Roadway Capacity Alternatives.
  
- **Conservation Element**
  - Policy 1.6 New and Infill Residential Development.
  - Policy 1.9 Public Investment Alternative Transportation Infrastructure.
  - Policy 3.3 Development Patterns.
  - Policy 3.11 Energy-Efficient Transportation Infrastructure.
  
- **Open Space Element**
  - Policy 1.4 Park Distribution Connectivity.

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- Policy 4.5 1.9 New Development Amenities.
- ~~Policy 3.4 Greenway Corridors.~~

#### ■ Land Use Element

- Policy 1.6 Transit Oriented Development.
- Policy 3.6 Focused Development.
- Policy 4.5 VMT Reduction.

The Master Plan of Transit, shown in Figure 3-10, *Master Plan of Transit*, represents the city's future transit system, including rail. Improvements planned for Santa Ana are described below.

#### *OC Streetcar*

Santa Ana is working with Garden Grove and OCTA to build a fixed guideway system called the OC Streetcar. Expected to begin operations in 2021, the OC Streetcar will link the Santa Ana Regional Transportation Center to a new multimodal hub at Harbor Boulevard/Westminster Avenue in Garden Grove. OC Streetcar will serve historic downtown Santa Ana and Civic Center. Along its four-mile route, OC Streetcar will connect with 18 OCTA bus routes and increase transportation options along Santa Ana Boulevard, 4th Street, the Pacific Electric right-of-way, and Harbor Boulevard.

#### *Transit Opportunity Corridors*

The OCTA has designated 10 transit opportunity corridors for major investments in higher-quality service such as rapid streetcar or bus rapid transit. Studies are underway along the Harbor corridor and should begin on Bristol by 2023. Six transit opportunity corridors cross Santa Ana:

- Harbor Boulevard from CSU Fullerton through Santa Ana
- State College Boulevard/Bristol Street from Brea Mall to UC Irvine
- Main Street from Anaheim Intermodal Center to South Coast Plaza
- 17th Street/Westminster Avenue from CSU Long Beach to Tustin Street
- I-5 from Fullerton Park-Ride to Laguna Niguel/Mission Viejo Station
- SR-55 from the Santa Ana Regional Transportation Center to Hoag Hospital Newport Beach

#### *Regional Express Network*

Recent planning efforts have focused on enhanced system management, including value pricing to better use existing capacity and to offer greater travel choices, particularly during times of traffic congestion. As part of the RTP/SCS, SCAG is proposing an extension of its regional Express/HOT Lane network. In Orange County, Express/HOT Lanes will be built along SR-55 and I-405 and will be accessible to users for a monthly or one-time toll. While these freeway improvements do not directly cross Santa Ana, the City supports these investments as they benefit the region and the city. **OCTA is currently studying express lane options in Orange County and the actual implementation or priority of implementation is being determined.**

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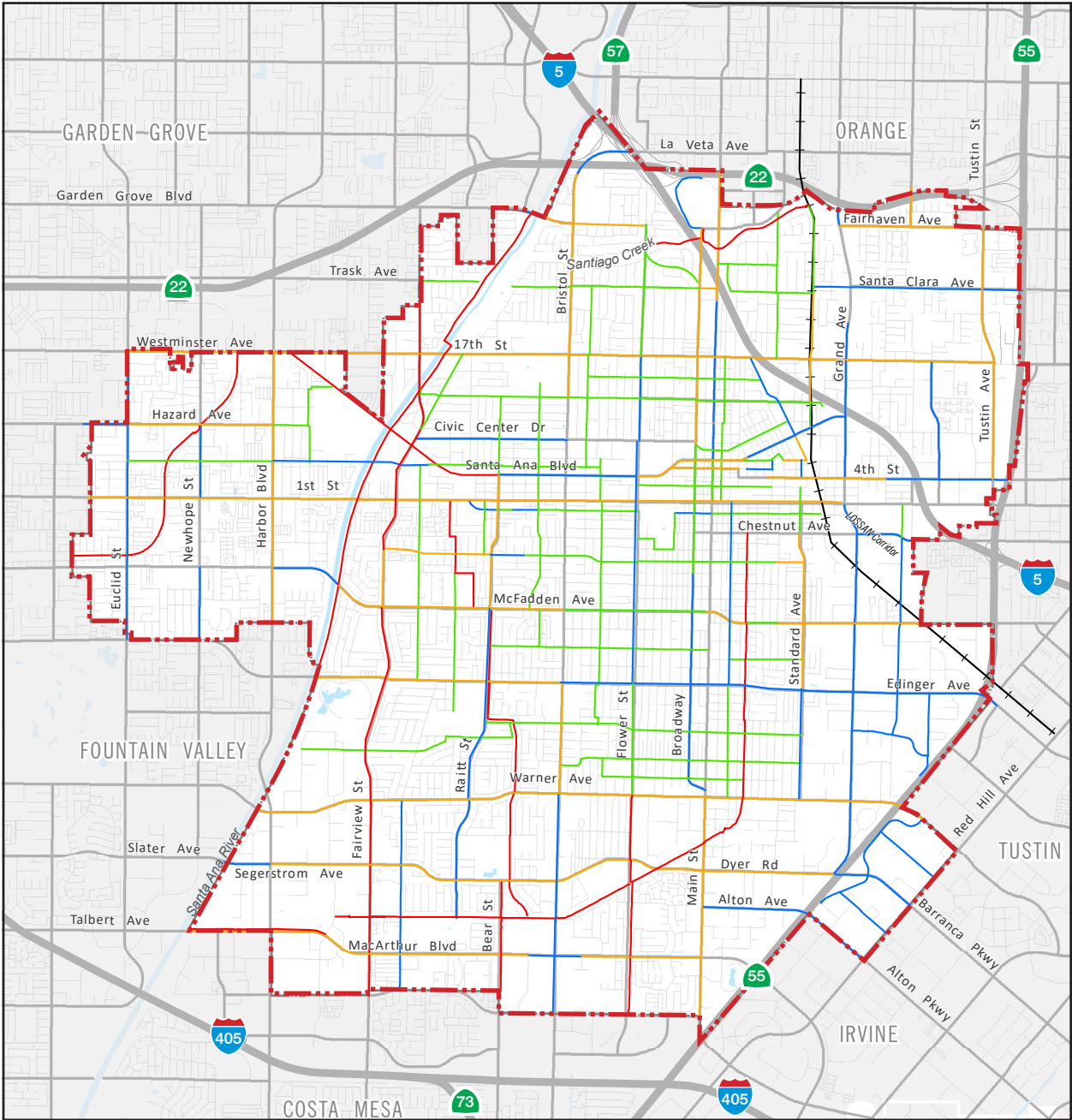
#### Bicycle Facilities

Future bicycle facilities are a mixture of Class I, Class II, Class III, and Class IV facilities. Future bicycle facilities are shown on Figure 5.16-4, *Master Plan of Bikeways*.

The GPU incorporates policies related to supporting bicycle facilities in the plan area. These include prioritizing multimodal systems, maintaining a network of complete streets to provide mobility opportunities for all users, implementing additional complete streets improvements when it fits the context of the community, developing and maintaining local and regional bicycle networks, and promoting bicycle safety when infrastructure improvements are made. Policies that promote a bicycle system that serves as a functional alternative to commuting by car are:

- **Circulation Mobility Element**
  - Policy 1.2 Balanced Multimodal Network.
  - Policy 1.6 Complete Streets.
  - Policy 3.1 Nonmotorized Travelway Network.
  - Policy 3.2 Nonmotorized Travelway Amenities.
  - Policy 3.5 Education and Encouragement.
  - Policy 3.7 Complete Streets Design.
  - Policy 4.1 Intense Development Areas.
  - Policy 4.2 Project Review.
  - Policy 4.6 Roadway Capacity Alternatives.
- **Urban Design Element**
  - Policy 1.5 Attractive Public Spaces.
  - Policy 1.6 Active Transportation Infrastructure.
  - Policy 3.3 Foster Community Building.
  - Policy 5.4 Intersections for all Travel Modes.
- **Community Element**
  - Policy 3.7 Active Lifestyles.
- **Conservation Element**
  - Policy 1.6 New and Infill Residential Development.
  - Policy 1.8 Promote Alternative Transportation.
  - Policy 1.9 Public Investment Alternative Transportation Infrastructure.
  - Policy 1.12 Sustainable Infrastructure.

Figure 5.16-4 - Master Plan of Bikeways



- - - - - City of Santa Ana
- Class I Path
- Class II Bike Lane
- Class III Bike Route/Boulevard
- Class IV Cycle Track

Source: City of Santa Ana, 2020



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- **Open Space Element**
  - Policy 1.4 Park ~~Distribution Connectivity~~.
  - Policy ~~4.5~~ 1.9 New Development ~~Amenities~~.
  - ~~Policy 3.2 Linking Development~~.
  - ~~Policy 3.4 Greenway Corridors~~.
- **Land Use Element**
  - Policy 1.7 Active Transportation Infrastructure.

Santa Ana is planning significant improvements to its bikeway network in an effort to improve opportunities for bicycling and walking. Some of the more notable projects are described below.

#### *OC Loop*

The Orange County (OC) Loop is a vision for 66 miles of bicycling and walking paths that travel from north and central Orange County to local beaches. Currently, the OC Loop contains 54 miles of trails along the San Gabriel River, Coyote Creek, Santa Ana River, and coastal/beach trails. Further use of trails in Santa Ana is constrained by law enforcement. The City is working with appropriate authorities to address safety concerns along Santiago Creek.

#### *Safe Routes to School*

The City is creating a citywide “Safe Routes to School” initiative for every school in Santa Ana. This initiative establishes safe routes to school, proposes specific capital improvements to the streetscapes to improve safety, and contains various programs for education and enforcement of existing traffic laws to improve pedestrian and bicycling safety. A Safe Routes to School plan is being developed to implement the ~~circulation~~ mobility element.

#### *Expanded Bicycle Lanes*

The City is aggressively expanding its existing bikeway network by adding Class 1, 2, 3, and 4 routes throughout the city. This effort is intended to implement the City’s complete street policies and City Council directives to make Santa Ana a more bicycle- and pedestrian-friendly community.

### **Pedestrian**

The ~~circulation~~ mobility element includes potential pedestrian opportunity zones (see Figure 5.16-5, *Pedestrian Opportunity Zones*), areas that currently have high pedestrian activity and areas that have the potential for it once land use densities and/or street and pedestrian improvements are made.

The GPU incorporates policies related to supporting pedestrian traffic in the plan area. These include promoting the development of mixed-use, pedestrian-friendly areas clustered around activity centers; encouraging community interaction through the development and enhancement of plazas, open space, people places, and pedestrian connections with the public realm; and enhancing streets to facilitate safe walking through

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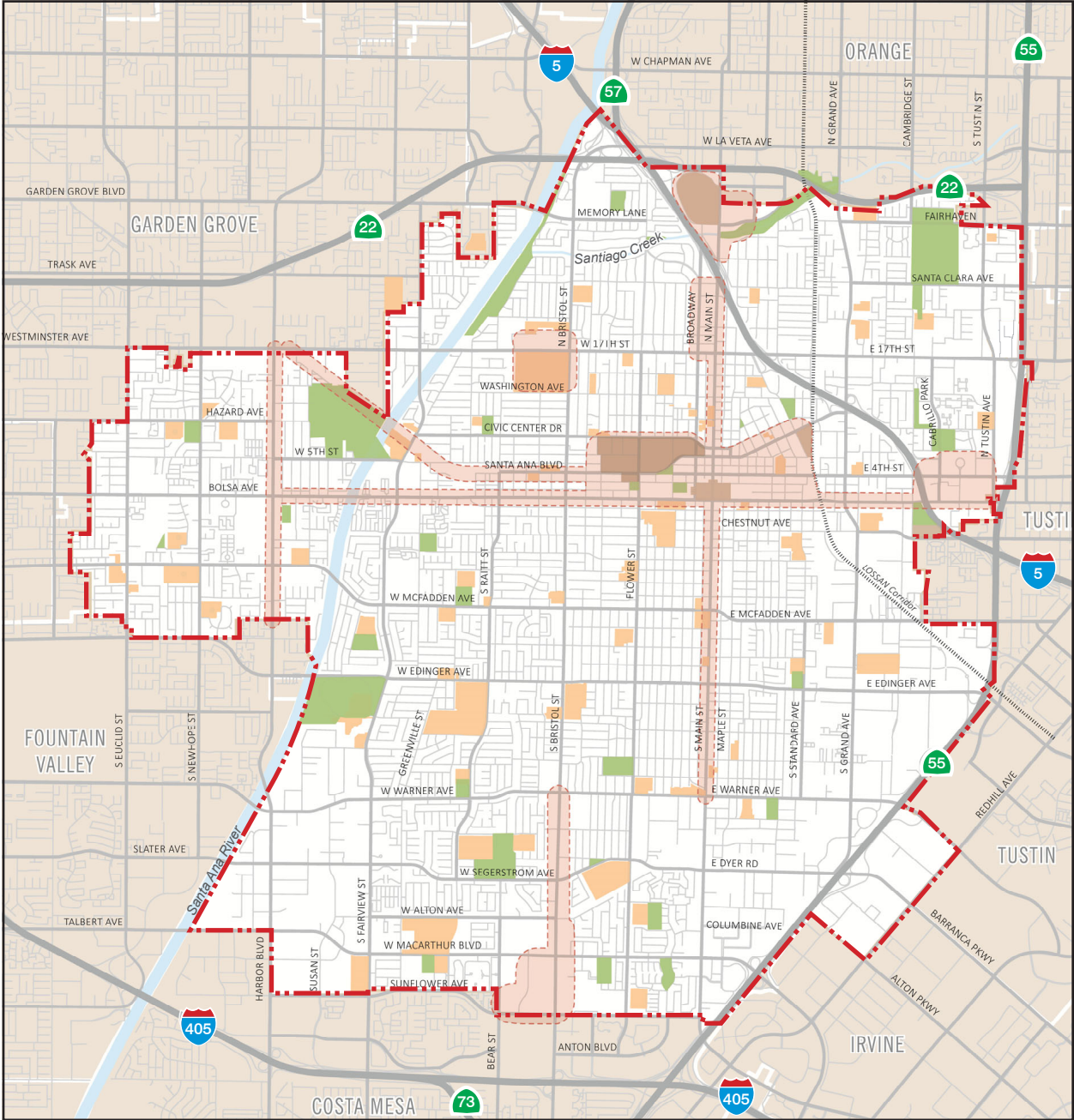
### TRANSPORTATION






community participatory design. Policies that promote a bicycle and transit system that serves as a functional alternative to commuting by car are:

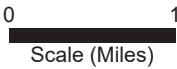
- **Circulation Mobility Element**
  - Policy 1.2 Balanced Multimodal Network.
  - Policy 1.6 Complete Streets.
  - Policy 3.1 Nonmotorized Travelway Network.
  - Policy 3.2 Nonmotorized Travelway Amenities.
  - Policy 3.5 Education and Encouragement.
  - Policy 3.7 Complete Streets Design.
  - Policy 4.1 Intense Development Areas.
  - Policy 4.2 Project Review.
  - Policy 4.6 Roadway Capacity Alternatives.
  
- **Urban Design Element**
  - Policy 1.5 Attractive Public Spaces.
  - Policy 1.6 Active Transportation Infrastructure.
  - Policy 3.3 Foster Community Building.
  - Policy 5.4 Intersections for all Travel Modes.
  
- **Community Element**
  - Policy 3.7 Active Lifestyles.
  
- **Conservation Element**
  - Policy 1.6 New and Infill Residential Development.
  - Policy 1.9 Public Investment Alternative Transportation Infrastructure.
  - Policy 1.12 Sustainable Infrastructure.
  
- **Open Space Element**
  - Policy 1.4 Park ~~Distribution Connectivity~~.
  - Policy ~~4.5~~ 1.9 New Development ~~Amenities~~.
  - ~~Policy 3.2 Linking Development~~.
  - ~~Policy 3.4 Greenway Corridors~~.
  
- **Land Use Element**
  - Policy 1.7 Active Transportation Infrastructure.
  - Policy 4.2 Public Realm.



Figure 5.16-5 - Pedestrian Opportunity Zones



-  City of Santa Ana
-  Pedestrian Opportunity Zone
-  Park/Open Space
-  Landmark
-  School



Source: City of Santa Ana, 2019

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#### Conclusion

In summary, implementation of the GPU will increase demand for public transit, bicycle, and pedestrian facilities, which will require the improvement and expansion of the circulation system. A review of the GPU revealed no potential policy inconsistencies or conflicts with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or the performance or safety of those facilities. The GPU incorporates future networks and policies related to supporting transit, bicycles, and pedestrians in the city. These networks are consistent with regional and local planning efforts supporting these modes of travel. Additionally, the GPU has numerous policies supporting complete streets (providing accessibility for all users of all ages and abilities) and active transportation.

**Level of Significance Before Mitigation:** With the implementation of RR T-1 and GPU policies, Impact 5.16-1 will be less than significant.

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**Impact 5.16-2: General Plan Update implementation would result in a reduction of vehicle miles traveled per service population (VMT/SP) in comparison to existing City conditions, and would achieve a VMT/SP at least 15 percent lower than the countywide VMT/SP. [Threshold T-2]**

---

The VMT analysis for the proposed GPU was prepared in conformance with the City of Santa Ana VMT Analysis Guidelines for land use projects. VMT is defined as the total miles traveled by vehicles (within a transportation network). Service population is described as the population generating the VMT of interest. A VMT analysis may be conducted for large-scale projects such as land use plans or individual transportation/development projects. For large-scale projects, it is appropriate to assess VMT impacts based on total VMT/SP.

VMT was generated with data from OCTAM 5.0 accounting for VMT generated by all internal and external trips. These trip types refer to trips that include an origin and destination within the city (internal trips) and trips that include an origin or a destination in the city (external trips). VMT and VMT/SP was assessed for the existing year (2020) scenario, the Future Year (2045) No Project scenario, and the Future Year (2045) With Project scenario.

The Future Year (2045) No Project scenario was based on the existing 1998 circulation element and the current General Plan as amended. This scenario serves as the baseline for future year (2045) analysis and consists of the following key assumptions:

- Transportation network and socioeconomic data for OCTAM 5.0 Year 2045 Baseline scenario.
- Buildout of roadways consistent with the City of Santa Ana Master Plan MPSH as shown in the circulation element (1998).
- Buildout of the OCTA's MPAH.
- Freeway and transit improvements considered in the Preferred Alternative of OCTA's LRTP.
- Completion of the OC Streetcar.

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- Completion of the Bus Rapid Transit improvements along Harbor Boulevard, Bristol Street, and Westminster Avenue/17th Street.
- Modification of mode split for automobile, bicycle, and pedestrians to reflect new bicycle/pedestrian trips.

The Future Year (2045) With Project (implementation of the GPU) scenario was based on the Future Year (2045) No Project scenario, with modifications to both the transportation network and socioeconomic data. Reclassifications to some roadways are proposed to facilitate the implementation of complete streets throughout the city, as described in Section 3.3.2.2, *Updated Circulation Mobility Element*, of Chapter 3, *Project Description*, and shown in Figure 3-9, *Proposed Arterial Roadway Reclassifications*. These reclassifications are considered in this scenario in addition to the proposed GPU land use buildout.

Table 5.16-3 shows that the projected city's VMT/SP upon buildout of the GPU in 2045 is 20.3, which is less than the defined threshold of 15 percent below existing county VMT/SP (22.0). The impact of the land use plan, therefore, would be less than significant.

**Table 5.16-3 Projected VMT Summary – Land Use Plan**

Metric	2045 – With Project City Total VMT	2045 – with project City Total Service Population	2045 – With Project City VMT/SP	2020 – No Project County VMT/SP	VMT Threshold 15% below 2020 – No Project County VMT/SP	Impact
VMT/SP	11,518,959	566,616	20.3	25.9	22.0	No

Source: IBI 2020.

Furthermore, the GPU includes policies that promote the reduction of VMT. Policy 2.5 of the land use element encourages infill mixed-use development at all ranges of affordability to reduce VMT, and Policy 4.5 aims to concentrate development along high-quality transit corridors. **A high-quality transit corridor is a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.** Policy 4.6 of the ~~circulation-mobility~~ element promotes reductions in automobile trips and VMT by encouraging transit use and nonmotorized transportation as alternatives to augmenting roadway capacity. **Non-motorized transportation includes all forms of travel that do not rely on an engine or motor for movement. This includes walking and bicycle, and using small-wheeled transport (skates, skateboards, push scooters and hand carts).**

**Level of Significance Before Mitigation:** With the implementation of Land Use Policies 2.5 and 4.5 and ~~Circulation-Mobility~~ Policy 4.6, Impact 5.16-2 will be less than significant.

**Impact 5.16-3: Circulation improvements associated with future development that would be accommodated by the General Plan Update would be designed to adequately address potentially hazardous conditions (sharp curves, etc.), potential conflicting uses, and emergency access. [Thresholds T-3 and T-4]**

Buildout of the GPU would involve the alteration, intensification, and redistribution of land uses in the city. The GPU includes circulation network improvements that would be subject to review and future consideration by the City's Public Works engineering staff. An evaluation of the roadway alignments, intersection geometrics,

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and traffic control features would be needed. Roadway improvements would have to be made in accordance with the City's circulation plan and roadway design guidelines and meet design guidelines of the California Manual of Uniform Traffic Control Devices. In addition, the ~~circulation~~ **mobility** element includes policies to improve the safety of all users of the transportation system in the city—Policy 1.7 Proactive Mitigation, Policy 3.9 Neighborhood Traffic, Policy 5.7 Infrastructure Condition, and Policy 5.8 Traffic Safety (see Section 5.16.3). Implementation of the GPU would not result in hazardous conditions, create conflicting uses, or cause a detriment to emergency vehicle access.

***Level of Significance Before Mitigation:*** With the implementation of RR T-2 and ~~Circulation~~ **Mobility** Policies 1.7, 3.9, 5.7, and 5.8, Impact 5.16-3 will be less than significant.

#### 5.16.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.16-1, 5.16-2, and 5.16-3.

#### 5.16.6 Mitigation Measures

No mitigation measures required.

#### 5.16.7 Level of Significance After Mitigation

Impacts are less than significant.

#### 5.16.8 References

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