RANCHO SANTA MARGARITA
2025 CIRCULATION ELEMENT

Adopted May 14, 2025

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CIRCULATION ELEMENT

INTRODUCTION

The City of Rancho Santa Margarita strives to maintain and support high quality of life, community satisfaction, and safety for residents. Determining existing and future traffic and circulation conditions and identifying and addressing potential concerns will further the City's overall goal to provide a safe and enjoyable environment for its citizens, employees, and visitors.

Purpose of the Circulation Element

The purpose of the Circulation Element is to provide the goals, policies, and actions to support the provision of a safe, efficient, and adequate multi-modal circulation system for the City. The Circulation Element identifies and addresses transportation and circulation features or characteristics that currently affect Rancho Santa Margarita and recommends a network of multi-modal transportation facilities to accommodate existing and future travel patterns. This Element addresses the following key issues related to circulation, and establishes goals and policies to regulate existing and future circulation conditions throughout the City:

1) Local Circulation System
2) Regional Circulation System
3) Complete Streets
4) Bicycle and Pedestrian System
5) Public Transportation System

Scope and Content of the Circulation Element

The Circulation Element satisfies the requirements of State of California planning law and is a mandated component of the General Plan. Government Code Section 65302(b) identifies the required components of the Circulation Element, which include:

- Existing and Proposed Roadway Network
- Truck Routes
- Transit Network
- Bicycle and Pedestrian Networks

The Circulation Element is comprised of three sections:

1) Introduction
2) Issues, Goals, and Policies
3) Circulation Plan

The Introduction provides an overview of the Circulation Element. The Issues, Goals, and Policies section identifies issues pertaining to circulation and transportation that could potentially affect the City and establishes related goals and policies. These goals are overall statements of the City's desires and consist of broad statements of purpose and direction pertaining to the community's circulation. The policies serve as guidelines for creating a balanced multi-modal transportation network. The Circulation Plan section explains how the circulation issues are addressed within the community and how the goals and policies will be achieved and implemented.

RELATED PLANS AND PROGRAMS

The regulatory setting for the 2024 Update of the City of Rancho Santa Margarita General Plan Circulation Element includes the following:

- California Assembly Bill (AB) 32 (2006)
- California Senate Bill (SB) 32 (2016)
- SB 375 (2008)
- SB 743 (2013)
- AB 1358 California Complete Streets Act (2008)
- Office of Planning and Research (OPR), California Government Code Section 65302(b)
- AB 747 (2022)
- SB 99 (2022)
- AB 1409 (2022)
- Southern California Association of Governments (SCAG)'s Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy)
- Orange County Transportation Authority (OCTA) Congestion Management Program (CMP)
- OCTA Master Plan of Arterial Highways (MPAH)
- OCTA Long Range Transportation Plan (LRTP)

Assembly Bill 32, Senate Bill 32, and Senate Bill 375

Assembly Bill (AB) 32, also known as the Global Warming Solutions Act of 2006, committed California to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. In 2016, Senate Bill (SB) 32 updated statewide emissions to 40 percent below 1990 levels by 2030. SB 375 from 2008 provides guidance for curbing emissions from cars and light trucks to help California comply with AB 32, including through developing GHG emission targets to be met by each metropolitan planning organization (MPO) in the state.

Senate Bill 743 (SB 743)

On September 27, 2013, SB 743 was signed into law to promote the reduction of greenhouse gas emissions, the development of multi-modal transportation networks, and a diversity of land uses. Previously, California Environmental Quality Act (CEQA) transportation analyses of individual projects were focused on the determination of impacts in the circulation system in terms of roadway capacity and vehicles. SB 743 changed transportation impact analysis as part of CEQA compliance, replacing the determination of impacts based on roadway and intersection operating conditions to vehicle miles traveled (VMT). SB 743 went into effect on July 1, 2020.

Complete Streets Act (AB 1358)

Originally passed in 2008, California's Complete Streets Act took effect in 2011 and requires that local jurisdictions plan for land use and transportation policies that reflect a "complete streets" approach to mobility. "Complete streets" comprises a suite of policies and street design guidelines which provide for the needs of all road users. From 2011 onward, any local jurisdiction—county or city—that undertakes a substantive update of the Circulation Element of its general plan must consider "complete streets" and incorporate corresponding policies and programs. Special attention should be paid to ensure that all transportation facilities are designed to be safe, accessible, and connected for all users. Users are defined in statute as "bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors."

California Government Code (CGC) Section 65302(b)

Per California Government Code (CGC) Section 65302(b), the Circulation Element must include the location and extent of existing and proposed major thoroughfares, transportation routes, terminals, military airports and ports, and public utilities and facilities. The CGC requires that any revision of Circulation Elements after January 1, 2011, must plan for a "balanced, multi-modal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan." The Circulation Element must identify funding for capital, operations, and maintenance of planned additions to the transportation network, additions that would be triggered by policies in the element, and the existing network. The following elements shall be addressed in a Circulation Element:

- **Major Thoroughfares**: The Circulation Element shall address the development and improvement of major thoroughfares, including future acquisitions and dedications, based on proposed land use patterns and projected demand. Cities and counties should consider the location and design of major thoroughfares in new developments, as well as street patterns, multi-modal use and safety, coordination with other infrastructure such as utilities, and relationships between destinations and transportation systems.

- **Transportation Routes**: The transportation system consists of means to transmit vehicles and people (e.g., roads, sidewalks), docks to station vehicles at their destination (e.g., parking lots, ports), and the vehicles themselves (e.g., buses, bicycles, cars). In updating the General Plan, the City shall consider its overall objectives and develop policies for each of these three components that support those objectives.

- **Roads**: The Complete Streets Act of 2008, as well as recent changes in the CEQA and congestion management law, highlight a need for Circulation Elements to have a broader focus that includes other modes of transportation for different users of roadways.

- **Transit**: Policies, such as increasing density around transit corridors and increased transit infrastructure, can promote and prioritize high quality transit, aligned with housing and economic development policies, which in turn increases efficiency of the overall transportation system. Promotion of equitable access to transit, through the analysis of available data to make decisions, can help ensure all community members have access to core destinations, such as employment centers, schools, and retail, and contribute to fulfillment of environmental justice requirements. Many of the Housing Element future residential development sites were chosen due to their proximity to Santa Margarita Parkway and bus service, in order to promote widespread and convenient transit usage among residents, visitors, and others.

- **Active Transportation - Bicycle and Pedestrian Networks**: The Complete Streets Act (2008) requires cities and counties to plan for the development of multi-modal transportation networks in the Circulation Element. The updated Circulation Element should promote equitable distribution of active transportation networks that link residents to key destinations and ensure equitable allocation of infrastructure investments and maintenance.

Evacuation Planning (AB 747, SB 99, and AB 1409)

New policies were introduced since the adoption of the 2014 Circulation Element, including AB 747, SB 99, and AB 1409. These policies require evacuation routes and locations in cities and represent substantive changes related to the Safety Element of the General Plan. The Circulation Element provides an overview of the transportation needs of the City and will therefore incorporate these new policies related to circulation.

- AB 747, which went into effect January 1, 2022, requires cities to evaluate route capacity, safety, and viability under a range of emergency scenarios.

- SB 99, which went into effect January 1, 2022, requires cities to identify residential developments in hazard areas that do not have at least two emergency evacuation routes.

- AB 1409, which went into effect January 1, 2022, requires cities to identify evacuation locations by policies in the Element, and the existing network. AB 1409 provides no guidance for determining appropriate evacuation.

Southern California Association of Governments (SCAG)

SCAG is a federally designated Metropolitan Planning Organization (MPO) and is made up of six counties and 191 cities. SCAG develops long-range regional transportation plans including sustainable communities' strategies and growth forecast components, regional transportation improvement programs, regional housing needs allocations, and a portion of the South Coast Air Quality Management Plans.

On April 4, 2024, SCAG's Regional Council adopted Connect SoCal 2024 (2024 - 2050 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]). The plan is a long-range visioning document that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern in Southern California. Connect SoCal identifies Priority Development Areas (PDAs), which are areas within the SCAG region where future growth can be located in order to help the region reach mobility and environmental goals. PDAs include Transit Priority Areas, Neighborhood Mobility Areas (NMAs), Livable Corridors and Spheres of Influence. In particular, Neighborhood Mobility Areas (NMAs) focus on creating, improving, restoring, and enhancing safe and convenient connections to schools, shopping, services, places of worship, parks, greenways, and other destinations. These areas have robust residential to non-residential land use connections, high roadway intersection densities, and low-to moderate traffic speeds. The RTP/SCS describes NMAs further below:

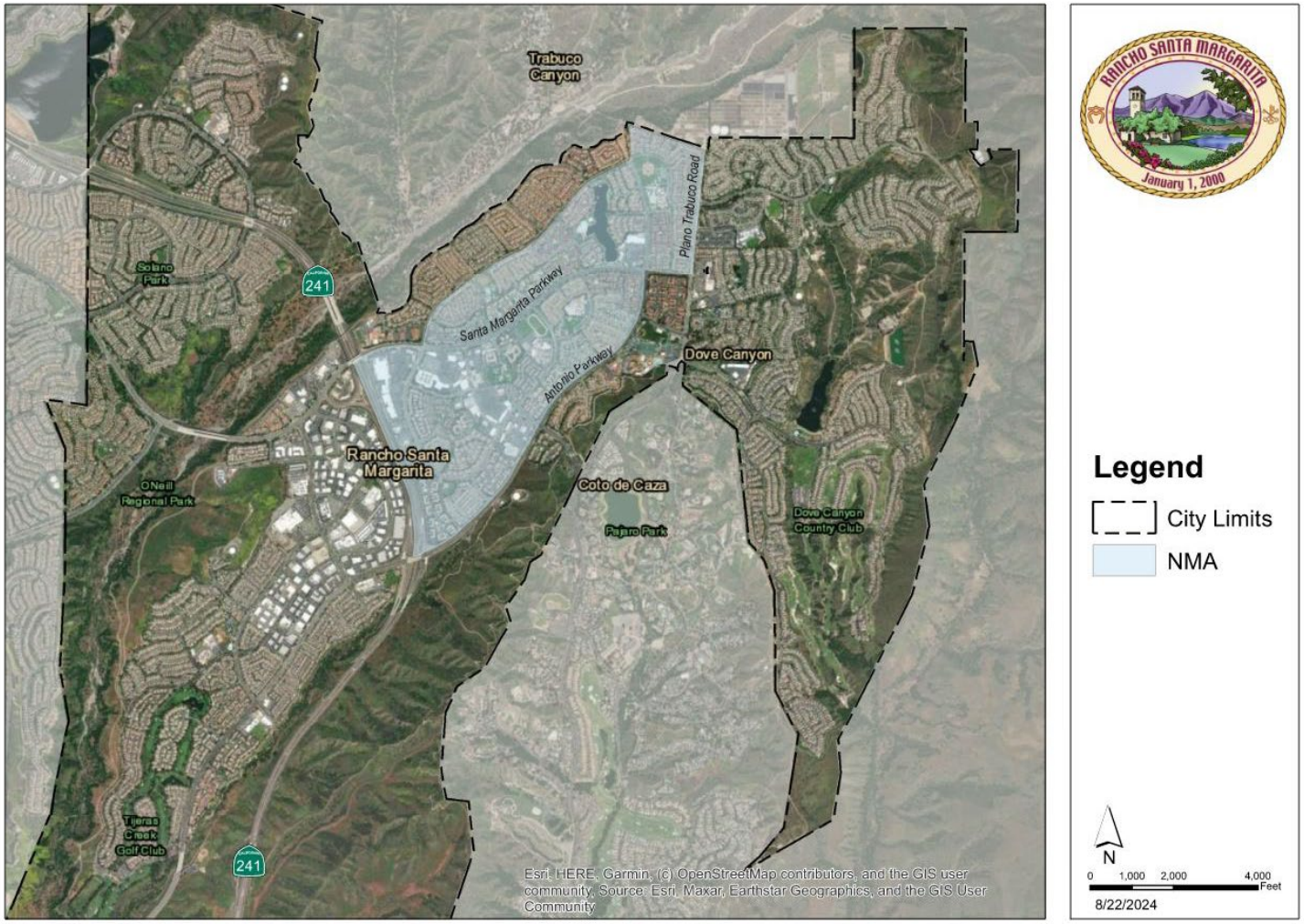
The four elements of an NMA are:

1) Intersection Density
2) Low-Speed Streets
3) Land Use Diversity
4) Accessibility to Amenities within One-Mile Using Street Network Distances

NMAs exist in each county and throughout the region, and can vary in their specific form, regardless of whether the NMA is located in a dense urban neighborhood or a historic business district. SCAG developed a region-wide map of neighborhood mobility to help further strategies and policies within Connect SoCal 2024.

A portion of Rancho Santa Margarita (generally bound by SR-241, Antonio Parkway, Avenida de las Flores and Plano Trabuco) is designated as a NMA as illustrated in the following map from Connect SoCal 2024 (**Figure CIR-1**):

Figure CIR-1: Connect SoCal 2024 Neighborhood Mobility Area (NMA)



SCAG Regional Data Platform, Connect SoCal 2024

Connect SoCal 2024 Neighborhood Mobility Area (NMA)

Rancho Santa Margarita

Orange County Transportation Authority (OCTA)

OCTA coordinates transportation planning efforts throughout Orange County and programs funding for project implementation. OCTA also plans, manages, and operates local transit service within Orange County. OCTA leads the following ongoing planning efforts:

- OCTA prepares the Congestion Management Program (CMP), which identifies strategies to address congestion on the County's CMP network; which includes State highways and principal arterials. CMP Guidelines require analysis of the CMP network in order to measure congestion and to determine how local governments meet CMP standards and requirements.

- OCTA administers the Master Plan of Arterial Highways (MPAH), which was established in 1956 to ensure that the County's regional arterial highway network would be planned, developed, and preserved in order to supplement the freeway system. The MPAH defines the intended functions and carrying capacities of regional roads in the County.

- OCTA's Long Range Transportation Plan (LRTP) is a long-range policy document that assesses the County's transportation system and identifies regional projects in the County, which address future population, housing, and employment needs. The LRTP also serves as the County's local input to SCAG's broader RTP/SCS for Southern California.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

According to State planning law, the Circulation Element must be independent, but consistent with the other General Plan elements. All elements of the General Plan are interrelated to a degree, and certain goals and policies of each element may also address issues that are the primary subjects of other elements. The integration of overlapping issues throughout the General Plan elements provides a strong basis for implementation of plans and programs, and achievement of community goals. The Circulation Element relates most closely to the Land Use, Housing, Conservation and Open Space, and Safety Elements.

In particular, the Land Use and Circulation Elements are linked, as future land uses identified in the Land Use Element, and in particular the identified development capacity, form the basis for determining the appropriate future transportation networks and/or improvements. The circulation policies and plans ensure that existing transportation facilities will be improved, and new facilities will be constructed to adequately serve activity generated by planned development. An efficient circulation system is a critical factor for diversifying and expanding local economic activities. In addition, the Circulation Element promotes alternative transportation modes to minimize the regional impacts of planned local development.

An efficient circulation system promotes access, safety, and convenience to residents. Therefore, the Circulation Element is also interrelated with the Housing Element. Specifically, the updated Housing Element (2021-2029) identified 15 sites suitable for future residential development, and the Circulation Element incorporates the potential for housing on these sites.

The Circulation Element provides for a circulation system that balances vehicular traffic and other modes while meeting community values. As a result, the Circulation Element provides for a trail system that accommodates bicycles and pedestrians. Trails connect with recreational areas and support the City's recreational goals articulated in the Open Space and Conservation Element. In addition to promoting bicycle and pedestrian transportation, the Circulation Element promotes the use of public transit. Alternative transportation modes will help achieve the air quality goals identified in the Conservation and Open Space Element.

Finally, the Circulation Element integrates policies related to evacuation routes from the Safety Element to ensure viability of evacuation routes under a range of emergency scenarios.

ISSUES, GOALS, AND POLICIES

Rancho Santa Margarita is a community with a well-defined circulation system featuring vehicular, goods movement, public transit, bicycle, and pedestrian components. An interdependent system is created by the connection of this local system with a larger regional circulation network. A safe and convenient circulation system operation is needed to support a variety of land uses and trip purposes throughout the community.

The Goals and Policies within this Element reflect the community's intent to provide and foster a balanced, multi-modal network for all roadway users that:

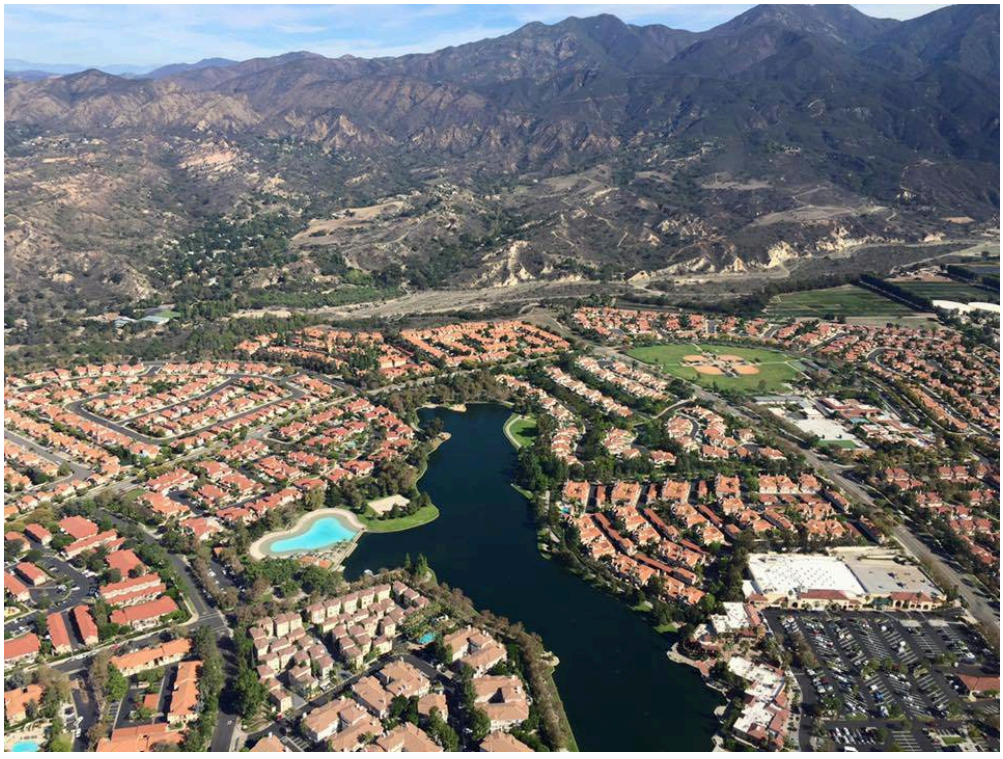
1) Provide a safe circulation system that facilitates the efficient flow of traffic and goods.

2) Develop and maintain a local circulation system that is integrated with the larger regional transportation system.

3) Provide a safe and convenient transportation network accessible for all transportation modes and users.

4) Provide and maintain extensive public bikeway and community pedestrian networks that facilitate and encourage non-vehicular travel.

5) Promote the increased use of multi-modal transportation.



Local Circulation System

Safe and convenient access to destinations in the community can be provided by a well-designed local roadway system. To allow for new development or redevelopment to occur without negatively affecting the existing community, improvements to the circulation system may be required.

Goal 1: Provide a safe circulation system that facilitates the efficient flow of traffic and goods.

Policy 1.1: Require roadways to:

- Comply with federal, State, and local design and safety standards.
- Meet the needs of multiple transportation modes and users, including children, seniors, and people with disabilities.
- Be compatible with the streetscape and surrounding land uses.
- Be maintained in accordance with best practices.

Policy 1.2: Strive to maintain sufficient levels of service on City roadways and intersections in concert with land development and consistent with the performance standards set forth in this Element and the City's Transportation Study Guidelines.

Policy 1.3: Coordinate improvements to and maintenance of the City circulation system with local and regional transportation improvement programs.

Policy 1.4: Use traffic calming methods within residential areas as needed to create a pedestrian-friendly circulation system, while accommodating local street patterns that unify neighborhoods whenever feasible.

Policy 1.5: Apply creative traffic management approaches to maintain efficient and orderly traffic flow, minimize vehicular congestion in areas with unique users, such as schools, businesses with drive-through access, and other special situations.

Policy 1.6: Require new development projects to prepare transportation studies consistent with the City's Transportation Study Guidelines, implement appropriate measures to mitigate CEQA impacts and address non-CEQA effects to the transportation network.

Policy 1.7: Require new development projects to accommodate vehicles (including emergency vehicles), pedestrians, and bicycles through the dedication of land for public improvements such as roadways, wider sidewalks and/or bicycle lanes, as appropriate and warranted by the project.

Policy 1.8: Coordinate with public school districts and private schools to minimize queueing and parking impacts on public streets and in residential areas.

Policy 1.9: Incorporate necessary improvements and maintenance to evacuation routes consistent with the Safety Element, and according to applicable requirements identified in regional and local plans.

Regional Circulation System

Transportation and traffic congestion in Rancho Santa Margarita is directly affected by the regional transportation network as traffic from surrounding communities can pass through Rancho Santa Margarita on the Foothill Transportation Corridor (SR-241) and other major roadways. In addition, a healthy economy depends on the ability of businesses to move their goods from one location to another. To support the continued success of local businesses, the local circulation system must provide adequate local and regional access. Planning for the community's existing and future needs necessarily includes recognition of the related transportation needs and planning efforts of the surrounding cities, county, region, and State. With this recognition is the need for the City to actively work with other public agencies responsible for transportation and development in southern Orange County and surrounding areas.

Goal 2: Develop and maintain a local circulation system that is integrated with the larger regional transportation system.

Policy 2.1: Engage in federal, State, and regional planning efforts with CalTrans, Federal Highway Administration (FHWA), the Southern California Association of Governments (SCAG), Orange County Transportation Authority (OCTA), Transportation Corridor Agencies (TCA), Orange County, adjacent cities, and other jurisdictions, as appropriate, to develop a transportation network that balances traffic flow and multi-modal needs.

Policy 2.2: Work closely with adjacent jurisdictions and transportation agencies to ensure that development projects outside Rancho Santa Margarita (e.g., development of Rancho Mission Viejo, Trabuco Canyon and Ladera Ranch) do not adversely impact the City or providers of public transportation service within the City.

Policy 2.3: Work with regional partners to plan for emerging transportation modes and technologies.

Policy 2.4: Continue to participate in the OCTA Congestion Management Program (CMP).

Policy 2.5: Coordinate with regional stakeholders to monitor and review plans to create additional freeway corridors or toll roads serving the Rancho Santa Margarita area.

Complete Streets

Complete Street networks are designed considering the full range of user abilities and modes. Complete Streets may include sidewalks, bike lanes, transit lanes, frequent pedestrian crossings, median islands, curb extensions, and other transportation facilities. In addition, complete streets are context-sensitive, reflecting the land use and travel needs of users and vehicles at a particular location. While Complete Streets-sensitive design does not mean that every roadway in the City will have the full suite of multi-modal improvements, the City's network should strive to provide safe and convenient access to key destinations for all modes and users of all ages and abilities in a manner that reduces inter-modal conflicts.

Goal 3: Provide a safe and convenient transportation network accessible for all transportation modes and users.

Policy 3.1: Apply Complete Streets principles to transportation improvements on City facilities to serve all types of travel (**Figure CIR-3** displays the existing roadway functional classifications).

Policy 3.2: Identify and address gaps in networks serving vehicles, bicyclists, pedestrians, transit users, and other users.

Policy 3.3: Seek grants to establish a Safe Routes to School Program, encouraging parents and children to walk or bike to school.

Policy 3.4: Consider the land use and design context of the surrounding areas when designing Complete Streets.

Policy 3.5: Monitor and evaluate the development of new mobility technologies and the potential impacts on designing a transportation network that accommodates all modes and users.

Policy 3.6: Plan for emerging autonomous vehicles and transportation network companies (TNCs) by designing spaces to allow for safe pick-up and drop-off.

Bicycle and Pedestrian System

Non-vehicular methods or modes of transportation offer an alternative to the traditional use of automobiles. These modes of transportation, such as bicycling and walking, also help to reduce roadway congestion and air pollution and improve public and community health. Trail systems also provide recreational opportunities for the community.

Goal 4: Provide and maintain extensive public bikeway and community pedestrian networks that facilitate and encourage non-vehicular travel.

Policy 4.1: Support roadway design principles that create a safe, pleasant, and comfortable experience for bicyclists and pedestrians.

Policy 4.2: Coordinate with adjacent jurisdictions and regional agencies to facilitate the development of a connected bikeway network across jurisdictional boundaries.

Policy 4.3: Design land development projects to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, and landscaping.

Policy 4.4: Require new developments to make improvements to provide connectivity and accessibility to a mix of uses such as schools, parks, work, and shopping destinations that meet residents' daily needs.

Policy 4.5: Seek funding for projects to implement bikeway facilities recommended in regional plans.

Policy 4.6: Promote the installation of pedestrian and bicycle amenities in appropriate locations, in order to enhance non-automobile forms of transportation.

Policy 4.7: Protect public access to the trails network and identify future opportunities to enhance the network.

Policy 4.8 Plan for emerging travel modes such as e-bikes, considering applicable regulations, infrastructure, education and enforcement needs to promote safety, accessibility and enjoyment for all users within the City.

Public Transportation System

Public transportation and the means to which people access these systems, such as bicycling and walking, are an important component of a comprehensive circulation system. Public transit, in conjunction with non-automobile modes, offers options to the use of automobiles and help reduce air pollution and road congestion.

Along key transit corridors and other high-demand locations, the City can improve first/last mile conditions to and from transit stops and stations, which can help encourage transit use by reducing barriers to walking and biking to transit. Other treatments to improve the passenger waiting experience and further encourage transit use in Rancho Santa Margarita include pedestrian-scale lighting and bus stop improvements.

Microtransit (small-scale on-demand bus service) and other new transit technologies will continue to evolve. The City will continue monitoring microtransit in order to incorporate it into any transit and city planning and explore opportunities to partner with providers to expand and improve access to key destinations.

Additionally, Transportation Demand Management (TDM) is a suite of incentives, information, and encouragement programs to reduce the use of single-occupant vehicles and consequently decrease traffic congestion and Vehicle Miles Traveled (VMT). These programs help people use modes other than driving and also encourage a shift to driving during off-peak periods.

To promote the increased usage of these modes of transportation, adequate services and supporting facilities must be provided.

Goal 5: Promote the increased use of multi-modal transportation.

Policy 5.1: Maintain a proactive working partnership with transit providers to encourage the provision of adequate public transit service and support facilities.

Policy 5.2: Monitor the effectiveness of regional alternative transportation programs, such as bus systems, providing service to the City.

Policy 5.3: Collaborate with neighboring cities and regional transportation providers to encourage the provision of microtransit (e.g., shuttles), paratransit and affordable transportation programs for elderly and youth to destinations in the region (e.g., regional shopping centers, medical facilities, etc.).

Policy 5.4: Incorporate design features into public improvement projects that promote and support the use of public and alternative modes of transportation.

Policy 5.5: Encourage the development of Transportation Demand Management plans for all developments or facility expansions pursuant to the City's Transportation Study Guidelines, to encourage ride-sharing and other improvements, thereby reducing vehicle trips.

RELATED GOALS AND POLICIES

The goals and policies described in the Circulation Element are related to and support subjects included within other General Plan elements. **Table CIR-1** summarizes the policy numbers from the other General Plan elements most closely related with the Circulation Element issue areas.

Table CIR-1:
Circulation-Related Goals and Policies by Element

General Plan Element	Circulation Element Issue Areas				
	Local Circulation System	Regional Circulation System	Complete Streets	Bicycle and Pedestrian System	Public Transportation System
Conservation/Open Space	4.2, 4.3, 4.5, 4.6	4.1	4.4		
Economic Development	2.7				
Housing	1.1				
Land Use	4.1, 9.3, 11.3	12.5	4.2	4.4, 4.5, 4.6, 12.6, 13.1	4.3
Noise	2.1, 3.4	2.2			
Safety	4.7	1.5, 5.1, 5.3			

CIRCULATION PLAN

A diverse circulation system with vehicle, transit, pedestrian, and bicycle linkages supports the City's community, environmental, and economic health. The local system connects with the larger regional system; the operation of the two systems is interdependent. This section establishes the Circulation Plan (Plan). The Plan summarizes the approach to ensure safe and convenient operation of the circulation system and identifies potential improvements to accommodate multi-modal travel demand from planned development.

Private automobile transportation is presently the primary mode of travel in Rancho Santa Margarita. An Arterial Highway Plan is established with hierarchical roadway designations, physical design standards, and service standards. The Arterial Highway Plan includes regional arterials and anticipated regional traffic levels. The use of alternative modes of transportation is promoted to reduce dependency on automobiles.

The Plan is based on the issues, goals, and policies identified in the previous section. The Circulation Element Implementation Program, which is part of the General Plan Implementation Program contained in Appendix A, is an extension of the Circulation Plan and contains specific programs to coordinate vehicular and non-vehicular circulation improvements.

Local Circulation System

The arterial roadway system in Rancho Santa Margarita is defined using a hierarchical classification system. Roadway functional classifications are differentiated by size, function, and capacity. The arterial roadway functional classification system is derived directly from the Orange County Master Plan of Arterial Highways (MPAH), administered by OCTA. In order to be eligible for OCTA's Measure M2 transportation funding, City roadway networks must be consistent with the MPAH. The dimensions and characteristics of local streets are determined in large part by circulation systems contained in the configuration for each of the various planned communities within the City.

There are four basic roadway categories within the functional classification hierarchy in Rancho Santa Margarita, ranging from a six-lane divided roadway with the highest capacity, to a two-lane undivided roadway with the lowest capacity. The categories are briefly summarized below:

- **Major Arterials:** Major Arterials are generally six-lane roadway sections with a raised curbed median, although an eight-lane version of this classification (designated as a Principal Arterial by OCTA) can be accommodated if necessary. A Major Arterial may consist of three through lanes, two left-turn lanes, and a dedicated right-turn lane. Major Arterials may carry a large volume of regional through traffic not handled by the toll road system. A Major Arterial is designed with emphasis for automobiles, goods movement, and/or transit. It is designed to accommodate up to approximately 56,300 vehicles per day. In the City of Rancho Santa Margarita, the three Major Arterial roadways are Santa Margarita Parkway, Antonio Parkway, and Alicia Parkway. The Major Arterial roadway classification restricts on-street parking and provides pavement markings for Class II on-street bike lanes.

- **Primary Arterials:** Primary Arterial roadways are four-lane divided (raised median) roadways which may be designed with emphasis for automobiles, goods movement, transit, and/or bicycles. Primary Arterials function similarly to Major Arterials, but with lower capacity. A Primary Arterial may consist of two through lanes, one left-turn lane, and a dedicated right-turn lane. An additional left-turn lane or optional right-turn lane may be allowed if warranted by traffic demand. The primary arterial restricts on-street parking and provides pavement markings for Class II on-street bike lanes. While the Primary Arterial (Augmented) is designed to accommodate four through travel lanes, the pavement and right-of way (width) may be able to accommodate up to six through travel lanes. In the City of Rancho Santa Margarita, Avenida Empresa is the only Primary Arterial.

- **Secondary Arterials:** Secondary Arterials are four-lane roadways, although it may be divided or undivided. In the City of Rancho Santa Margarita, Secondary Arterials generally include divided raised medians. A Secondary Arterial serves to distribute traffic between local streets and Major and Primary Arterials. Along Secondary Arterials, shoulders may accommodate exclusive bike lanes or on-street parking. Sidewalks may be curb-adjacent or separated from the roadway by a landscaped parkway. A Secondary Arterial may consist of two through

lanes, one left-turn lane, and a dedicated right-turn lane. An additional left-turn lane or optional right-turn lane may be allowed if warranted by traffic demand. Many of the Secondary Arterials within the City of Rancho Santa Margarita effectively function as Primary Arterials without the on-street parking restrictions.

- **Collectors:** Collector roadways move traffic from local streets to arterial roads. Unlike arterials, collector roads are designed to provide access to residential areas. Two versions of the collector classification are shown on **Figure CIR-2**. The "Collector – 2 Lanes Divided" may have a painted or raised median which can be utilized where left-turn pockets are needed while also providing a shoulder for on-street parking or cyclists. Finally, the "Collector – 2 Lanes Undivided" is a conventional two-lane section with shoulders that can accommodate on-street parking and/or cyclists.

Figure CIR-2 shows the schematic or typical cross sections of each category of arterial and collector roadway. These sections represent desirable standards, but variation in right-of-way width and specific road improvements will occur in certain cases due to physical constraints, and/or right-of-way limitations. In particular, the median width of major and primary arterials will vary according to the area being served, right-of-way constraints and turn lane requirements. Any of the arterial classifications may deviate from the standards where physical constraints exist or where preservation of community character dictates special treatment. Bikeways and sidewalks also affect the specific standards applied to various facilities. Another design consideration is the need to comply with MPAH capacity requirements. The overriding circulation goal is that all roadways sufficiently accommodate vehicular traffic flow, while providing opportunities for other modes of transportation, and meeting other community values.

Figure CIR-3 displays the roadway functional classifications for streets in Rancho Santa Margarita.

Driving is the most common form of mode share in the City. The City's objective is to balance vehicular circulation with roadway capacity and safety impacts. As such, Transportation Study Guidelines are established to determine methods of analysis and identify performance metrics of the roadway system. The Transportation Study Guidelines guide the preparation of transportation studies that are normally required as part of the application review and processing of land development projects.

Performance Criteria

Evaluating the ability of the circulation system to serve the desired future land uses requires establishing suitable "performance criteria." These are the means by which future traffic volumes are compared to future circulation system capacity, and the adequacy of that circulation system assessed. The technical evaluation of the Rancho Santa Margarita roadway system was conducted with volume-to-capacity (V/C) ratios. V/C ratios are calculated based on existing or future average daily traffic (ADT) volumes and daily capacity values for the various types of arterials. Daily capacity values for the City's roadway geometric classifications are provided in **Table CIR-2**. Based on the V/C ratio, each study area roadway segment is classified into one of four categories; Acceptable (V/C 0.00-0.79), Approaching Capacity (V/C 0.80-1.00), Potentially Exceeds Capacity (V/C 1.01-1.25), and Exceeds Capacity (V/C > 1.26). As the V/C ratio approaches or exceeds the average daily vehicle capacity thresholds, roadway capacity may be expanded by restricting on-street parking, improving signal timing, widening intersections, and adding through and turn lanes.

Table CIR-2:
Roadway Classifications and Daily Capacities[1]

Roadway Geometry Classification	Capacity
Major Arterial – 6 Lanes Divided	56,300 Vehicles Per Day
Primary Arterial – 4 Lanes Divided	37,500 Vehicles Per Day
Secondary Arterial – 4 Lanes Divided	31,300 Vehicles Per Day
Collector – 2 Lanes Divided	18,800 Vehicles Per Day
Collector – 2 Lanes Divided	12,500 Vehicles Per Day

The roadway segment V/C analysis is used as a planning tool to evaluate the adequacy of roadway segment capacities; however, a level of service (LOS) deficiency occurs when adjacent intersections experience LOS D or worse conditions during one of the peak hours (**Table CIR-3**). A LOS greater than "D" suggests that additional review is required; however, if adjacent intersections provide the lanes needed to achieve acceptable peak hour LOS, then segment capacity improvements between key intersections may not be needed.

Due to the generalized nature of ADT capacities, the daily capacity values in **Table CIR-2** are typically viewed as general rather than absolute guides for estimating LOS and sizing the future roadway system. A more detailed intersection evaluation (using peak hour LOS ranges, such as those shown in **Table CIR-3**) will be carried out for individual projects.

[1] These roadway capacities are approximate figures only, and are used at the General Plan level. They are affected by such factors as intersections (numbers & configuration), degrees of access control, roadway grades, and design geometrics (horizontal & vertical alignment).

Table CIR-3:
Peak Hour Level of Service Ranges

LOS	Average Delay Per Vehicle (Seconds)	
	Signalized Intersections	Stop-Controlled Intersections
A	≤10.0	≤10.0
B	>10.0 and ≤20.0	>10.0 and ≤15.0
C	>20.0 and ≤35.0	>15.0 and ≤25.0
D	>35.0 and ≤55.0	>25.0 and ≤35.0
E	>55.0 and ≤80.0	>35.0 and ≤50.0
F	>80.0	>50.0

Source: Highway Capacity Manual, 7th Edition.

Development proposals and amendments within Planned Communities will be reviewed for consistency with transportation infrastructure and fee requirements established in approved development plans and agreements.

Relationship to Land Use

Future traffic volumes and highway capacity needs are directly related to future land use. A refined version of the Orange County Transportation Analysis Model (OCTAM) has been used to evaluate future vehicular traffic conditions assuming build out of the General Plan based on the Development Capacity in Table LU-3 in the 2024 Land Use Element, including the sites identified as suitable for housing development in the 6th Cycle Housing Element (2021-2029).

General Plan Circulation System

The circulation element goals and policies emphasize the need for a circulation system capable of serving existing and future traffic, and successfully integrating that system with a regional circulation network. The location and design of the circulation system have the potential to impact air quality, noise, community appearance and other environmental resources. The Rancho Santa Margarita General Plan Circulation Plan depicted in **Figure CIR-3** delineates the circulation system.

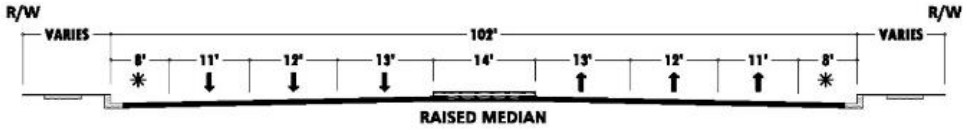
Truck Traffic

Rancho Santa Margarita experiences truck traffic generated by commercial and light industrial uses. Truck traffic will increase in future years to support new businesses. Noise impacts and congestion can be caused by truck traffic in urban areas. To avoid such impacts on a case-by-case basis, streets can be evaluated in the future for implementation of weight restrictions should problems occur. Given the current roadway system, such problems are not anticipated. Currently, the only designated truck route in the City is Foothill Transportation Corridor (SR-241).

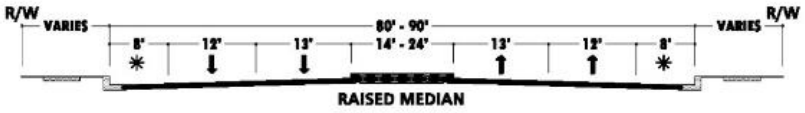
Neighborhood Traffic Safety

One of the major components of the Circulation Plan is the importance of non-vehicular modes of transportation. To increase the number of people using non-automobile means of transportation, an existing and safe transportation network has to be in place. This network should include crosswalks, grade separations (bridges), and walkways that ensure the safety of pedestrians and bicyclists. Where appropriate, traffic calming devices should be considered to reduce speeds on neighborhood streets. Special traffic caused by schools, businesses with drive-through access, and land uses that generate high traffic volumes at specific times will be studied and solutions developed to reduce the impact of increased traffic on neighborhoods. The City will continue to work with homeowner associations to ensure that sufficient improvements are in place to serve the needs of pedestrians and bicyclists, to investigate the potential for traffic calming in neighborhoods, and to assess and mitigate the impacts of special or unique traffic generators.

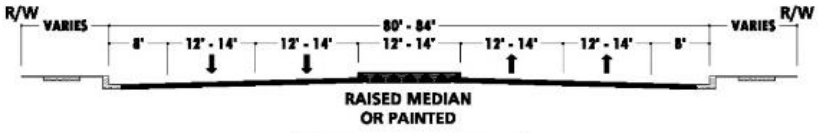
Figure CIR-2: Typical Roadway Cross-Sections



MAJOR ARTERIAL

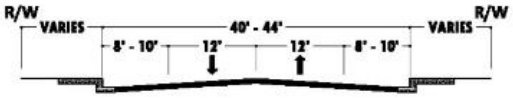


PRIMARY ARTERIAL (AUGMENTED)



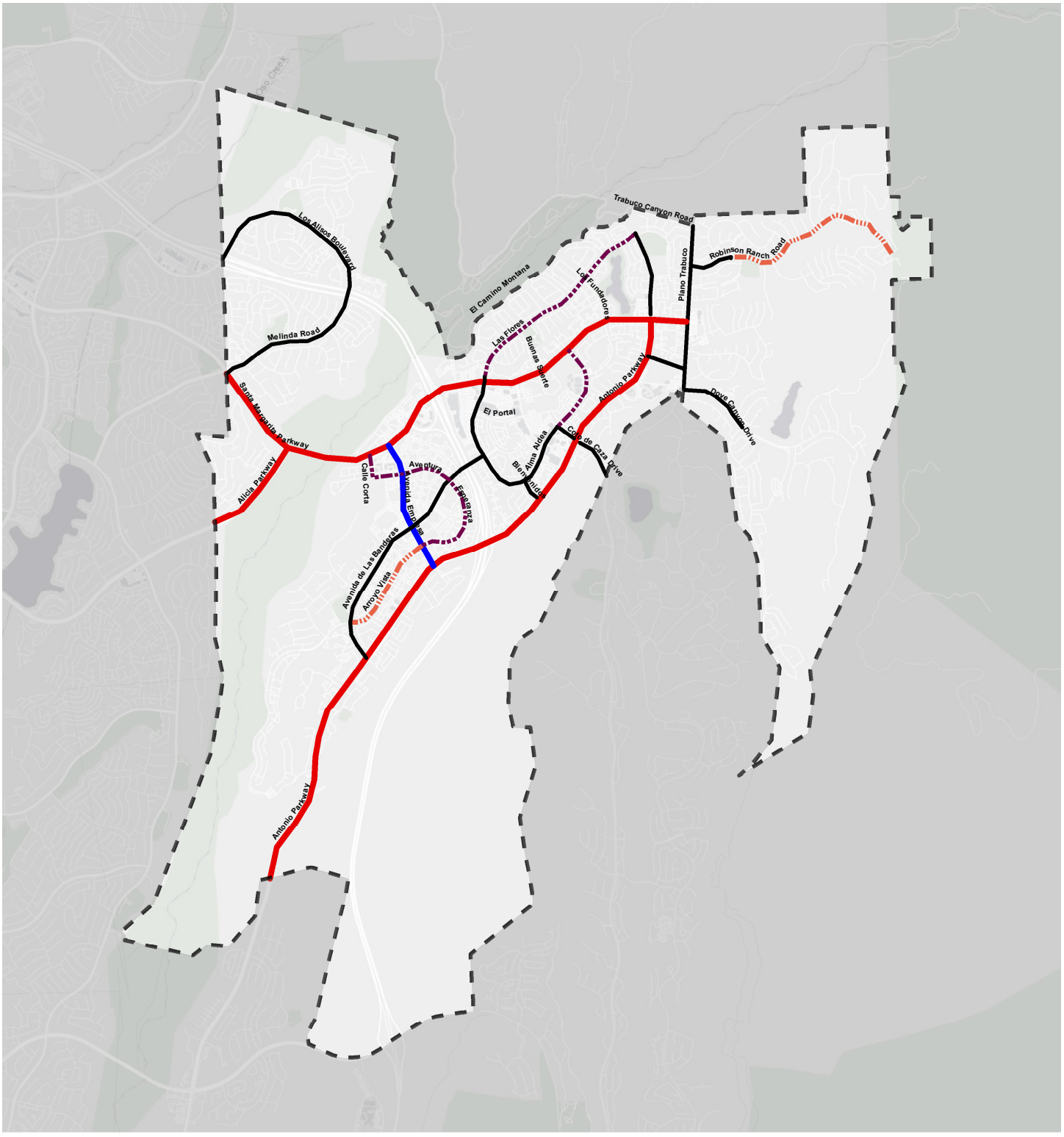
SECONDARY ARTERIAL

COLLECTOR - 2 LANES DIVIDED



COLLECTOR - 2 LANES UNDIVIDED

✳ CLASS II ON-STREET BIKE LANES
(PARKING RESTRICTED)



LEGEND

- Major Arterial
- Primary Arterial
- Secondary Arterial
- Collector - Two Lanes Divided
- Collector - Two Lanes Undivided
- Rancho Santa Margarita City Boundary

Figure CIR-3:
Roadway Functional Classifications
Rancho Santa Margarita Circulation Element

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Regional Circulation System

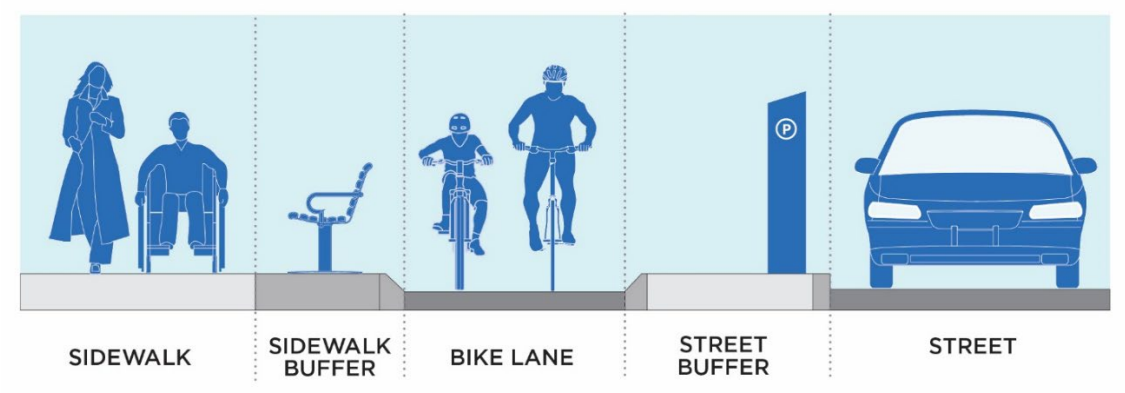
Southern California has experienced rapid urban growth within the last four decades. The success of existing and future development is in part dependent on the availability of an effective regional multi-modal transportation system. The system must link localities with outside commerce centers and regional transportation hubs. In addition, the regional circulation system must meet the needs of local residents. Rancho Santa Margarita is well connected with the regional system. The Foothill Transportation Corridor (SR-241) bisects the planning area and provides connections with other freeways in Orange, Riverside, Los Angeles Counties, and beyond. Additionally, residents can access other regional freeways, including I-5, SR-73, and SR-74, through streets like Alicia Parkway and Antonio Parkway.

Ensuring adequate circulation for residents and businesses will require continued coordination with regional and State transportation planning efforts, as well as with adjacent jurisdictions. Development projects outside of the City, including Rancho Mission Viejo ("The Ranch"), Trabuco Canyon, and Ladera Ranch will be monitored to ensure that they do not adversely affect circulation in Rancho Santa Margarita. In addition, the City will monitor efforts to develop additional regional freeways/toll roads and oppose any proposed project that creates unacceptable negative impacts on City circulation.

Complete Streets

The City of Rancho Santa Margarita's circulation system serves individuals using a multitude of travel modes, including driving alone, carpooling/vanpooling, taking public transit, walking, bicycling, and using ride-hailing services. These individuals also consist of a range of backgrounds, ages, and abilities. In addition, heavy trucks, cargo vans, and other goods movement and delivery vehicles navigate local roads between the freeway/highway network and local destinations. Emergency vehicles must also efficiently access all parts of the City using the local circulation network. In order to ensure that the local roadways meet the needs of all users, the City must plan transportation networks and policies that reflect a "Complete Streets" approach to mobility.

Complete Street networks are designed to consider the full range of user abilities and modes, with added consideration of land use and travel needs of users and vehicles at the location. Complete Streets may include amenities, such as sidewalks, bike lanes, transit lanes, frequent pedestrian crossings, median islands, curb extensions, and other transportation facilities, as shown in the graphic below. The City's network should strive to provide safe and convenient access to key destinations for all modes and users of all ages and abilities in a manner that reduces inter-modal conflicts.



The City of Rancho Santa Margarita Circulation Element includes networks, goals, and policies designed to accommodate the various modes and users traveling along City streets. As transportation and land use projects are implemented, a focus will be to ensure that improvements contribute to emphasize safe mobility and connectivity for the City's various road users. This includes developing plans and facilities that retain and improve safety for all roadway users and all vehicle types, including emergency and public safety vehicles.

Bicycle and Pedestrian System

Existing and Proposed Network

Existing and planned vehicular, pedestrian and bicycle facilities systems within the City provide opportunities for travel by non-automobile uses. The provision of a robust active transportation network will help reduce Greenhouse Gases (GHG) and roadway congestion, in alignment with multiple City and regional goals.

Pedestrian Facilities

The City has a comprehensive pedestrian network with sidewalks generally present along both sides of roads and crosswalks at signalized intersections. Crosswalks at signalized intersections are marked with traditional parallel line markings and include pedestrian signal heads with push-buttons. The City also has a network of off-road trails and shared use paths (**Figure CIR- 4**). The off-road trails include locations near Alicia Parkway, Antonio Parkway, and Sycamore Canyon Drive. Shared use paths (Class I bikeway) can be seen in **Figure CIR-5**.

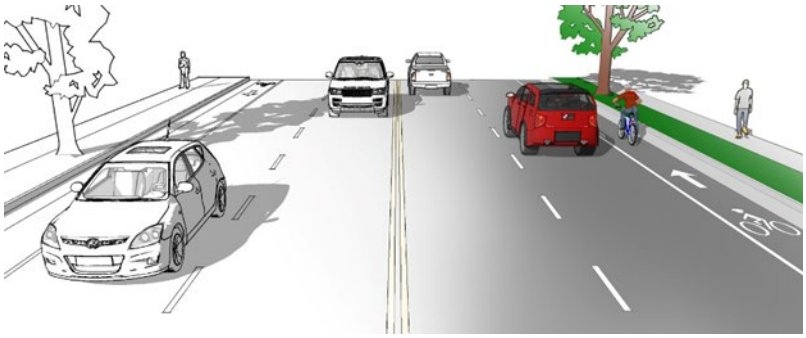
The City continues to regularly improve pedestrian facilities through efforts such as the Capital Improvement Program (CIP), and development requirements. As part of these efforts, the City will consider various types of improvements to crossings and other aspects of the walking experience, such as pavement markings, traffic signals, and pedestrian wayfinding signage.

Bicycle Facilities

Bicycle infrastructure is composed of a variety of facility types and may include a variety of amenities and methods of separation from vehicle traffic as illustrated below. Bikeway types include:

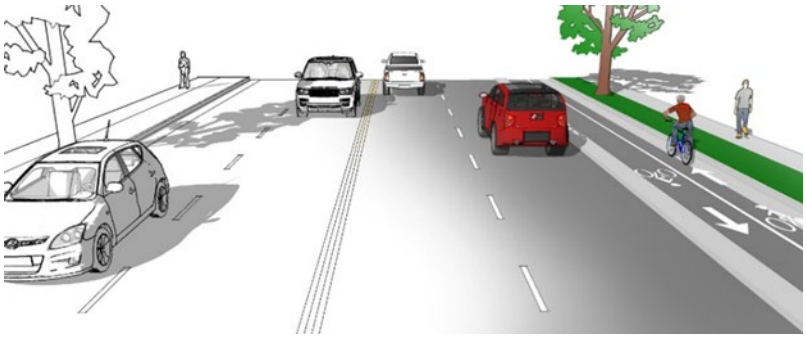
- **Class I Bikeway (Bike Path).** Also known as a shared path or multi-use path, a bike path is a paved right-of-way for bicycle travel that is completely separate from any street or highway.

- **Class II Bikeway (Bike Lane).** A striped and stenciled lane for one-way bicycle travel on a street or highway. This facility could include a buffered (typically painted) space between the bike lane and vehicle lane, and the bike lane could be adjacent to on- street parking.



- **Class III Bikeway (Bike Route).** A signed route along a street where the bicyclist shares the right-of-way with motor vehicles. This facility can also be designated using a shared-lane marking (sharrow).

- **Class IV Bikeway (Separated Bike Lane).** A cycle track, or a protected bike lane, this is a bikeway for the exclusive use of bicycles including a separation between the bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking. A separated bike lane can be one-way or two-way.



In particular, the City provides Class II bike lanes in many of the Major and Primary Arterials throughout Rancho Santa Margarita, including Santa Margarita Parkway, Antonio Parkway, Alicia Parkway and Avenida Empresa. Class III bike routes are present on portions of Los Alisos Boulevard, Melinda Road, Avenida de Las Banderas, Arroyo Vista, portions of Avenida Empresa, Esperanza, Las Flores, Alma Aldea, Bienvenidos, Coto de Caza Drive, Plano Trabuco, Dove Canyon Drive, Alas de Paz, and Robinson Ranch Road. Live Oak Canyon Trail, with portions located adjacent to El Camino Montana, is classified as a Class I bike path. Currently, there are no Class IV bikeways in the City.

In order to accommodate and encourage bicycling, **Figure CIR-5** shows the existing bicycle network, as well as proposed bicycle facilities which would provide improved connectivity within the City. Specifically, **Figure CIR-5** shows potential new bikeway facilities to connect to trails in the County's O'Neill Regional Park and along Arroyo Vista and Tijeras Creek to the extent this is feasible. These facilities could provide for north-south access through the City and for bicyclists. Additionally, the proposed bikeway facility on the Avenida de las Banderas bridge over the SR-241 freeway would provide for another west-east connection through the City.

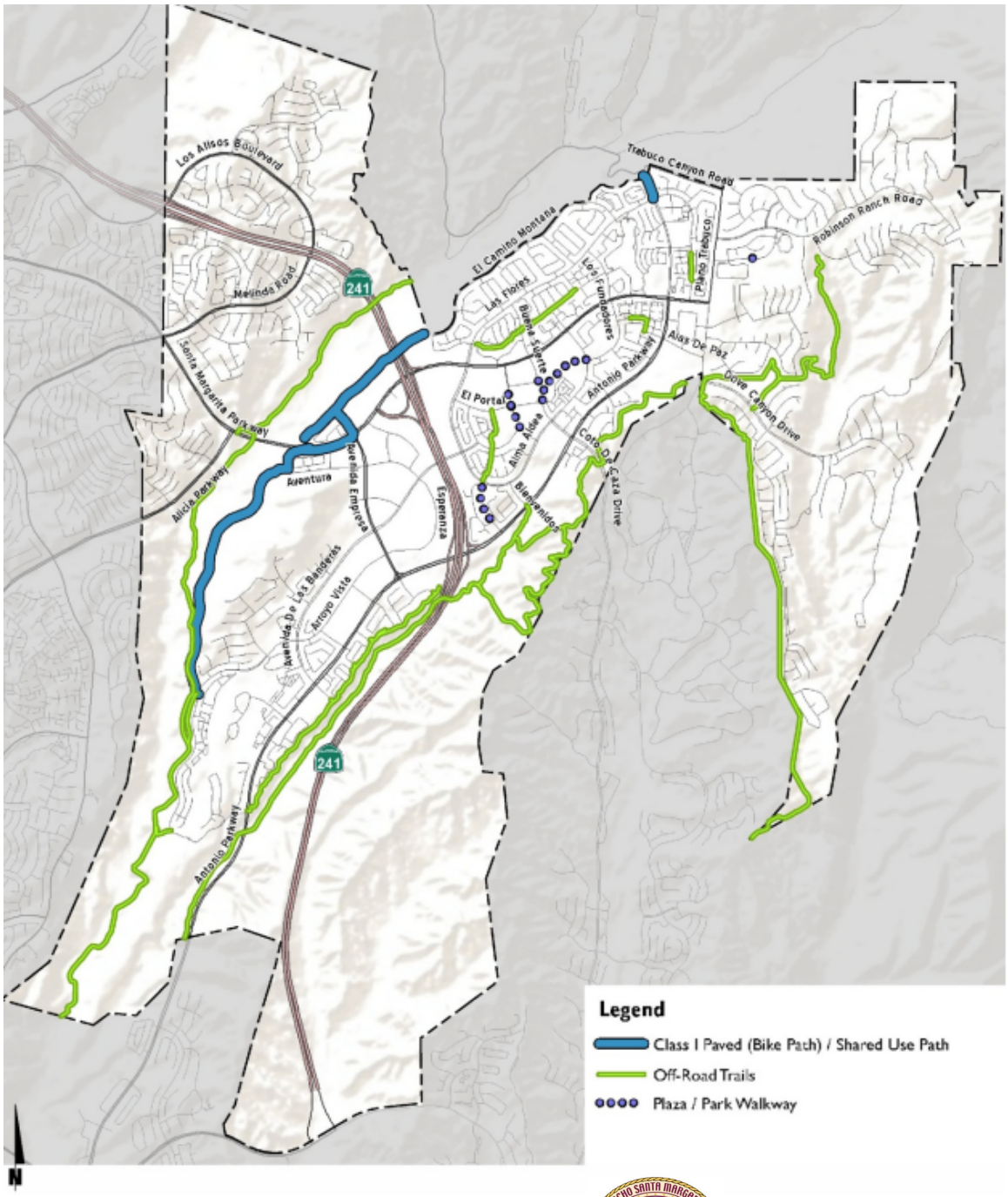
E-Bikes

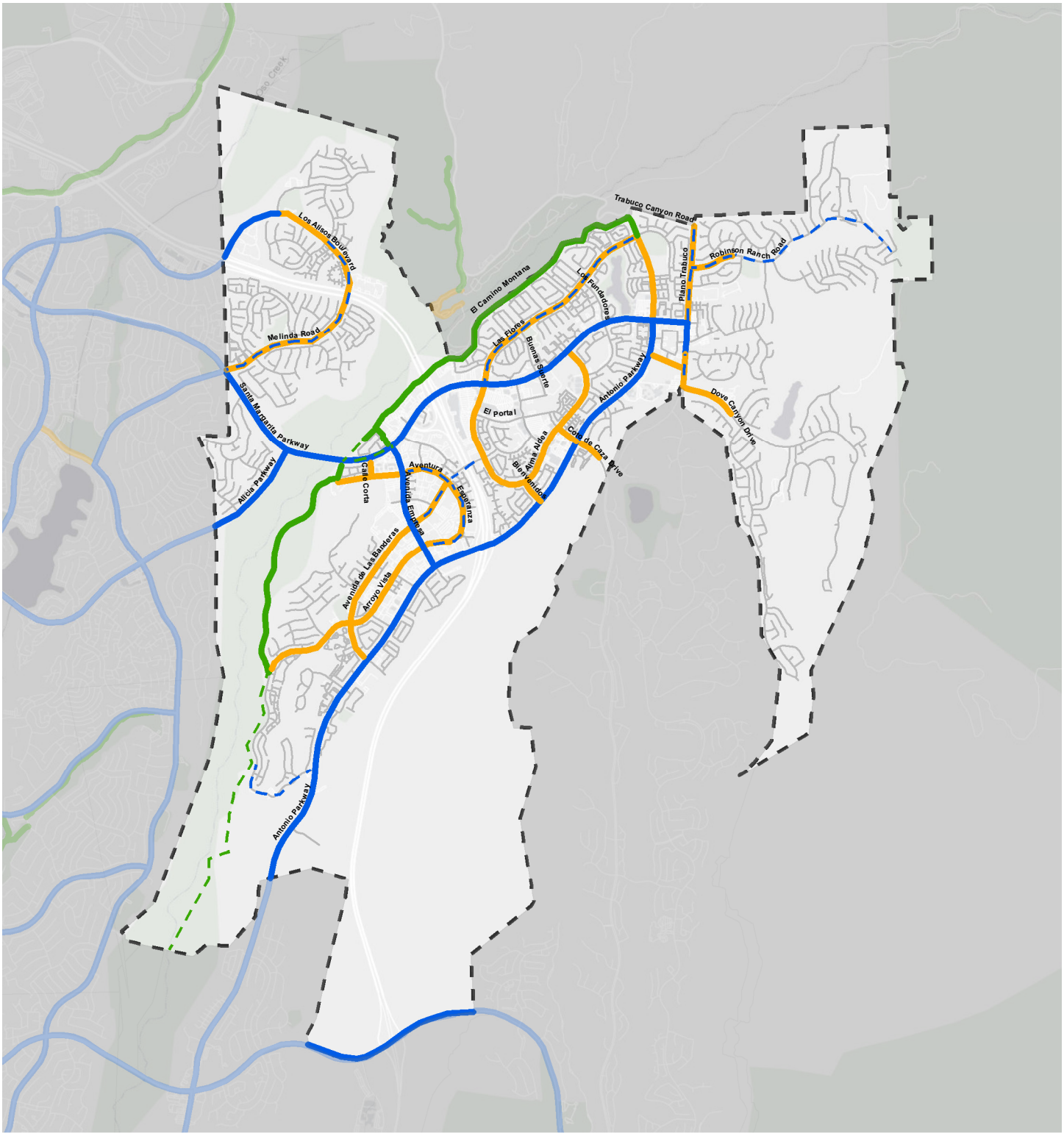
With the rising popularity of emerging modes of transportation such as e-bikes, cities are evaluating and planning for their incorporation into the transportation system. Assembly Bill (AB) 1096 and California Vehicle Code 312.5 define e-bikes as a bicycle equipped with fully operable pedals and an electric motor of less than 750 watts. They provide the following classifications for policy making and
Planning:

- **Class 1 E-bike:** An e-bike, other than a Class 3 e-bike, equipped with a motor that assists only when the rider is pedaling and ceases to provide assistance when the speed of the bicycle reaches or exceeds 20 mph.
- **Class 2 E-bike:** An e-bike equipped with a motor that may be used exclusively to propel the bicycle and is not capable of providing assistance when the speed of the bicycle reaches or exceeds 20 mph.
- **Class 3 E-bike:** An e-bike equipped with a motor that provides assistance only when the rider is pedaling, and ceases to provide assistance when the speed of the bicycle reaches or exceeds 28 mph.

  As a growing mode of transportation, the City is considering provisions to accommodate the safe use of e-bikes, giving consideration to infrastructure needs, regulations, education, enforcement, and monitoring. An ordinance regulating the operation of e-bikes within the City was adopted on September 11, 2024.

Figure CIR- 4 Pedestrian Network





LEGEND

- Proposed Class I - Bike Paths
- Proposed Class II - Bike Lanes
- Proposed Class III - Bike Routes
- Class I - Bike Paths
- Class II - Bike Lanes
- Class III - Bike Routes
- Rancho Santa Margarita City Boundary

Figure CIR-5:
Existing and Proposed Bikeway Facilities
Rancho Santa Margarita Circulation Element

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Public Transportation System

Public transit service provides opportunities for people to travel without relying on private vehicles. Public transit service in Rancho Santa Margarita is provided by OCTA, whose transportation system includes bus and passenger rail service throughout Orange County.

OCTA provides limited bus service within the City and the surrounding area, as shown on **Figure CIR-6**. There are two routes that directly serve the City:

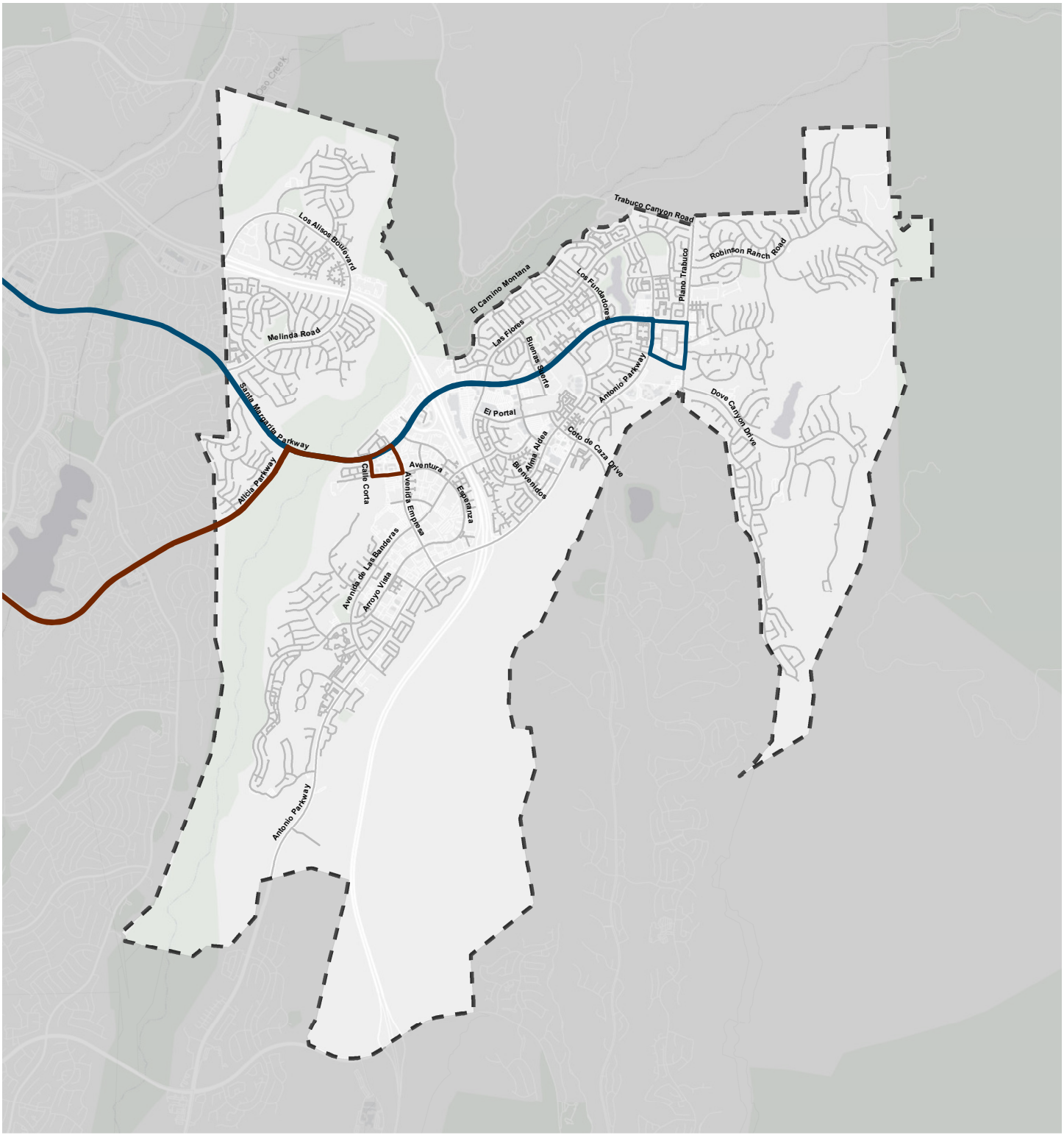
- Route 82 operates between Foothill Ranch and Rancho Santa Margarita, running along Santa Margarita Parkway, Plano Trabuco, Alas de Paz and Antonio Parkway within the City. Service is provided on weekdays only, generally between 5:00 a.m. and 8:00 p.m.

- Route 87 operates between Mission Viejo and Laguna Beach. It serves a small western portion of the City along Alicia Parkway and Santa Margarita Parkway. Service is provided all week, generally between 5:00 a.m. and 9:30 p.m.

OC Access, administered by OCTA, is a shared-ride service that is available to qualified applicants whose physical or cognitive limitations prevent them from using the regular OCTA Bus fixed-route service. The service area of the OC Access includes Rancho Santa Margarita. OCTA also administers OC Flex, a shared-ride service that allows users to be picked up or dropped off in a designated area of Orange County. The service zone currently includes parts of Aliso Viejo, Laguna Niguel, and Mission Viejo. Rancho Santa Margarita is not included within the service zone.

The nearest rail stations are the Irvine Station and Laguna Niguel/Mission Viejo Station, located approximately six miles and four miles away, respectively. Both stations accommodate Metrolink regional rail service (Orange County Line and Inland Empire-Orange County Line); in addition, Amtrak service is provided at the Irvine Station. The Irvine station includes free parking for passengers, bike racks, lockers, and dining options. The Laguna Niguel/Mission Viejo station includes free parking for passengers, bike racks/lockers, and vehicle charging stations.

OCTA continues to monitor and update public transit service in Rancho Santa Margarita and the rest of the County to attract and retain riders. In 2017, the City prepared a Transit Feasibility Study to determine if there was sufficient demand to support a local circulator of regional transit service within available funding limits. The study determined there was not enough demand for bus services in the City to pursue related funding and that a substantial subsidy from the City would likely be required to offset annual losses due to low ridership estimates. The City and OCTA continue to track mode share and public transit feasibility.



LEGEND

OCTA Bus Route 82

OCTA Bus Route 87

Rancho Santa Margarita City Boundary

Figure CIR-6:
Existing Bus Routes
Rancho Santa Margarita Circulation Element

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