City of Wildomar
Mobility Element

ACKNOWLEDGEMENTS

City Council
Dustin Nigg, Mayor
Ben J. Benoit, Mayor Pro Tem
Bridgette Moore, Council Member
Joseph Morabito, Council Member
Marsha Swanson, Council Member

Planning Commission
John Lloyd, Chairman
Kim Strong, Vice-Chair
Eric Filar, Commissioner
Brianna Bernard, Commissioner
Arrin Banks, Commissioner

Interagency Coordination
Caltrans District 8
City of Lake Elsinore
City of Murrieta
City of Menifee
Riverside County Transportation Commission
Riverside Transit Agency
Riverside Transit Agency
Riverside University Health System
Riverside County
Southern California Association of Governments
Western Riverside Council of Governments

City Staff
Dan York, Assistant City Manager/Engineer/Public Works Director
Matt Bassi, Planning Director
Daniel Torres, Parks/Community Services Manager
Warren Repke, Capital Projects Manager
Cameron Luna, Associates Engineer (Project Manager)

Consultant Team
CR Associates (Formerly Chen Ryan Associates, Inc.), Prime Consultant
Alta Planning + Design
PlaceWorks

Technical Advisory Committee
ALS One
American Volkssport Association
City of Wildomar Staff
Inland Valley Mountain Bike Association
Lake Elsinore Unified School District
Murrieta Creek Regional Trails Group
Riverside County Sheriff's Department
Riverside County Fire Department
Wildomar Walkers

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1.0 Introduction

1.1 Purpose & Background

The Mobility Element serves to identify a long-range vision for a balanced, multimodal transportation system that accommodates future growth while preserving the local character. It sets forth goals and policies and a series of transportation networks intended to improve connectivity and adequately support existing and planned land uses. Incorporated on July 1, 2008, Wildomar is largely guided by the County of Riverside General Plan with exception to general plan amendments that were made after incorporation. This document is the City's inaugural Mobility Element.

Wildomar's economic health and quality of life are directly tied to the transportation network, emphasizing the importance of the ability to efficiently move people and goods within and through the City. To this end, the Mobility Element encompasses users of all travel modes, including pedestrians, bicyclists, public transit users, motorists, and equestrian users.

In 2017, a special session of the Wildomar City Council was held with the intent of establishing a vision statement to guide future City endeavors. The interactive session consisted of Council, City Staff, and citizens, resulting in the following vision statement:

> *"The City of Wildomar will be a safe and active community, responsibly grown, with quality infrastructure while keeping a hometown feel."*
>
> *– City Council Resolution No. 2017-12*

The vision statement was referenced throughout development of the Mobility Element and influenced the policy and network recommendations set forth.

1.2 Legislative Context

The mobility element – also referred to as the circulation element – is one of seven mandated "elements" of a general plan, as required by California Government Code Section 65302. The mandatory elements for all jurisdictions include land use, circulation, housing, conservation, open space, noise, and safety. Cities and counties that have identified disadvantaged communities must also address environmental justice.

California Government Code Section 65302(b)(1) specifies a general plan must include:

> *"A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan."*

The City of Wildomar does not currently have any existing or proposed transportation terminals, military airports, or ports. Public utilities and facilities are addressed within the County of Riverside General Plan Infrastructure, Public Facilities & Service Provision section of the Land Use Element and the Major Utility Corridors section of the Circulation Element. As the City initiates development of their own Land Use Element, these components may be revisited and revised to accommodate anticipated land use changes. The City of Wildomar Mobility Element is focused on the thoroughfares and multimodal transportation routes within the City's jurisdiction.

The Mobility Element was also developed pursuant to AB 1358, the Complete Streets Act, which requires agencies to address the following when making substantive revisions to the circulation element:

"plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan."

Dedicated networks are provided for pedestrians, bicyclists, and equestrian/trail users. The Mobility Element is further supported by the City of Wildomar Active Transportation Plan developed in tandem with the Mobility Element, with a greater focus on pedestrian and bicycle modes, including the prioritization of the planned networks presented in this document.

1.3 Goals and Policies

This section provides the goals and policies that will be referenced as guidelines for developing public improvement projects and evaluating development project applications, with the intention of providing a comprehensive, multimodal transportation network. Six goals are identified, each supported by a series of policies, covering topics related to Complete Streets, pedestrian mobility, bicycle mobility, public transportation, vehicular circulation, and trails/equestrian use. The goals represent the desired end state, while the respective policies are the actions that will be undertaken to help realize the goals.

Goal 1: A well-connected transportation network that is safe, comfortable, efficient, and accessible by users of all ages, abilities, and modes of travel, including pedestrians, bicyclists, drivers, and equestrian users.

Policy 1.1: Plan, design, operate, and maintain city streets using Complete Streets principles for all types of transportation projects within the City including new, retrofit/reconstruction, maintenance, and ongoing projects. Repurposing unneeded roadway pavement to implement bicycle and pedestrian improvements, for example lane or road diets, should be considered as one of the tools to implement Complete Streets.

Policy 1.2: Implement the updated typical roadway cross-sections displayed in this Mobility Element to incorporate Complete Streets principles and help achieve mobility goals.

Policy 1.3: Integrate Complete Streets in a manner that is sensitive to the local context recognizing that needs vary among neighborhoods and communities.

Policy 1.4: Support the Wildomar Old Town Vision to create a walkable town center, anchored around the Old Town core, with gathering places and trails to reflect the City of Wildomar's unique qualities and history. Comfortable walking and bicycling connections will enhance access to the Old Town area from communities throughout the City.

Policy 1.5: Use traffic calming tools to assist in implementing Complete Streets principles and reducing vehicular travel speeds along Mobility Element roadways serving residential neighborhoods and schools such as Grand Avenue, Orange Street, Lemon Street, Gruwell Street, and McVicar Street and other roadways serving similar land uses. Traffic calming tools could include curb extensions, speed cushions, chokers/neckdowns, raised medians, narrowing lanes, raised crosswalks, and neighborhood traffic circles or roundabouts. The feasibility of deploying traffic calming devices shall be considered prior to increasing any posted speed limits.

Policy 1.6: Regularly monitor and evaluate Citywide safety and usage trends for all travel modes. Additionally, as new infrastructure is implemented, such as bicycle facilities, pedestrian facilities, and traffic calming measures, pre- and post-project evaluations should be conducted to better understand project benefits.

Policy 1.7: Require developments to provide appropriate dedications to implement planned transportation infrastructure as indicated in this Mobility Element and future documents adopted by City Council.

Policy 1.8: Require, when feasible, large parcel developments to incorporate short block spacing and a strong street grid network which enhances connectivity for all travel modes. Encourage the inclusion of non-motorized transportation corridors, such as paseos, promenades, and multi-use paths to improve connectivity along long blocks or non-continuous streets.

Policy 1.9: Pursue funding for multimodal infrastructure projects that promote Complete Streets, such as impact fees and local, regional, State, and federal grants.

Policy 1.10: Regularly update the City's Development Impact Fees (DIF) program to ensure adequate funding is allocated for the development, operation, and maintenance of the City's transportation system across all travel modes.

Goal 2: Pedestrian infrastructure that is safe, connected, and comfortable for users of all ages and abilities, inclusive of accessible curb ramps and sidewalks, marked crosswalks, trail connections, lighting, and pedestrian crossing features.

Policy 2.1: Improve pedestrian safety, comfort, and connectivity throughout the City, with an emphasis on implementing the various pedestrian route types (shown in Figure 2-1), and connections serving schools, parks, and commercial/retail centers.

Policy 2.2: As adjacent parcels are developed and/or capital improvement projects are undertaken, implement the designated pedestrian route types, inclusive of the respective pedestrian route type toolkit features, where feasible.

Policy 2.3: Improve pedestrian crossing safety and efficiency through appropriate signal hardware and timing, installation of marked and high visibility crosswalks and accessible curb ramps, and other intersection design features, where relevant.

Policy 2.4: Enhance pedestrian visibility by limiting parking at intersections, improving lighting at street crossings, and minimizing sidewalk obstructions.

Policy 2.5: Provide pedestrian connections to recreational trailheads, where feasible.

Policy 2.6: Pursue funding to implement programs that promote bicycle and pedestrian education, safety and use in schools.

Policy 2.7: Encourage walking as a preferred transportation mode for trips to and from elementary, middle, and high schools, as well as near-by destinations.

Policy 2.8: Regularly review and monitor reports of pedestrian-involved collisions to identify potential safety issues and appropriate improvements.

Goal 3: A safe and connected bicycle network comprised of context appropriate bicycle facilities and supporting amenities that serves the needs of recreational and utilitarian bicyclists of all ages and abilities.

Policy 3.1: Improve bicycle safety, comfort, and connectivity throughout the City, with an emphasis on implementing the planned bicycle network (shown in Figure 3-1).

Policy 3.2: Coordinate street resurfacing and restriping efforts, capital improvement projects, and development projects to include bicycle facilities identified in the planned bicycle network, where applicable.

Policy 3.3: Coordinate with adjacent jurisdictions to provide continuous and uniform bicycle connections to and from neighboring communities, where feasible.

Policy 3.4: Consider development of a wayfinding program which indicates additional bicycle connections and the direction and distance to key destinations.

Policy 3.5: Enhance bicycle intersection crossing efficiency and safety through intersection design considerations, provisions of bicycle detection at signalized intersections, and other appropriate design features.

Policy 3.6: Pursue collaborative opportunities with local schools to implement programs that promote bicycle education and safety and encourage usage among students.

Policy 3.7: Bicycle parking shall be provided with all new developments as required by Section 17.188.060 of Wildomar's Municipal Code.

Policy 3.8: Encourage existing retailers, shops, and shopping centers to install bicycle racks. Permit the reallocation of vehicular parking space(s) to bicycle parking spaces, if supported by a parking utilization study and/or if the remaining spaces are consistent with the minimum required for the respective land use as identified in Section 17.188.030 of Wildomar's Municipal Code.

Policy 3.9: Encourage employers to install end-of-trip amenities for bicycle riders, such as bicycle parking, maintenance stations, lockers, and/or showers.

Policy 3.10: Regularly review and monitor reports of bicycle-involved collisions to identify potential safety issues and appropriate improvements.

Policy 3.11: As properties adjacent to I-15 develop, consider the feasibility of, and potential demand for, incorporating additional freeway crossings that prioritize pedestrian and bicycle mobility.

Goal 4: A public transportation network that allows for convenient access to major destinations, both within Wildomar and the region.

Policy 4.1: Work with Riverside Transit Agency (RTA), Southern California Association of Governments (SCAG), and other regional partners to ensure that adequate transit service is provided consistent with future growth (shown in Figure 4-1).

Policy 4.2: Coordinate with Riverside Transit Agency to focus station improvements and enhanced amenities at locations with the greatest ridership.

Policy 4.3: Encourage convenient and safe pedestrian and bicycle linkages to and from bus stops to provide better first-mile/last-mile connectivity. This includes connectivity to/from existing and new development and along streets providing access to the bus stops. In coordination with RTA and adjacent properties, provide secure bicycle parking at high ridership transit stops, where feasible.

Goal 5: Convenient and efficient vehicle circulation with minimal congestion that does not degrade pedestrian and bicycle safety, mobility, and access.

Policy 5.1: Work with adjacent jurisdictions to provide continuous vehicular connections to and from neighboring communities.

Policy 5.2: Implement the planned roadway network and classification designations (shown in **Figure 5-3**) through new development, redevelopment, resurfacing, or other capital improvement projects.

Policy 5.3: Level of Service (LOS) D shall be the threshold for all Mobility Element roadways and intersections, with the exception of Clinton Keith Road, between Hidden Springs Road and I-15 Northbound Ramps, where LOS E would be acceptable due to right-of-way constraints, unless otherwise approved by the City Engineer.

Policy 5.4: All projects in the City shall be in compliance with Resolution No. 2020-40, Vehicle Miles Traveled (VMT) CEQA Threshold Policy Guidelines. Efforts should be made to reduce VMT by prioritizing pedestrian and bicycle travel and/or incorporating active transportation enhancements, to the extent feasible.

Policy 5.5: All development projects shall achieve the threshold identified in Policy 5.3, otherwise, the City reserves the rights to request the proposed development to amend the existing designations in order to ensure roadways and intersections can adequately handle volumes of traffic generated by the development.

Policy 5.6: As development occurs, evaluate the need to designate additional roads as Mobility Element roadways, or amend existing designations, to help enhance vehicle circulation, reduce congestion, and increase connectivity throughout the City. Measures shall not come at the expense of pedestrian and/or bicycle safety, mobility, and access.

Policy 5.7: Coordinate with Caltrans to evaluate the feasibility of an additional interchange along Interstate 15, between the existing Railroad Canyon Road/Diamond Drive and Bundy Canyon Road interchanges.

Policy 5.8: Monitor traffic operations on Grape Street once the Diamond Drive/Railroad Canyon Road/Grape Street Interchange is complete to ensure adequate capacity is provided. Grape Street should be studied and reclassified if additional capacity is required.

Policy 5.9: Evaluate intersection geometrics and treatments at the intersections of Crescent Avenue/Elberta Road and Crescent Avenue/Olive Street to improve safety and operations. This could include, but not limited to, Crescent Avenue road closure to vehicular traffic at its northern (Elberta Road) and southern (Olive Street) ends.

Policy 5.10: Continue to coordinate with the City of Lake Elsinore and respective property owners in Wildomar to identify a preferred connection between Lake Elsinore and Interstate 15 via Bundy Canyon Road. This connection will help reduce cut-through traffic on local or Collector streets in Wildomar and capitalize on the region's investment in Bundy Canyon Road.

Policy 5.11: Ensure that future interchange projects, such as the Bundy Canyon Road and Wildomar Trail Project Study Reports, incorporate recommended bicycle network and pedestrian route type features, to the extent possible.

Policy 5.12: Evaluate local and regional traffic as development continues along the Bundy Canyon Road/Scott Road corridor to ensure adequate north-south connectivity along the corridor to facilitate expected traffic volumes and circulation. Consider studying new vehicle routes ancillary to planned ATP facilities where warranted, such as the Sunset Avenue Class I Trail.

Policy 5.13: Utilize Transportation Demand Management (TDM) measures such as those identified in the Southern California Association of Governments (SCAG)'s Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to discourage the single-occupant vehicle, particularly during the commute peak hours. These measures include, but are not limited to, rideshare incentives, telecommuting and flexible work schedules, parking management, and incentives for employees who walk or bike to work.

Policy 5.14: Utilize Transportation System Management (TSM) measures throughout the City to ensure the circulation system is as efficient and cost effective as possible. These measures include, but are not limited to, improvements to signal coordination, transit signal priorities, and pedestrian/bicycle prioritized signals.

Policy 5.15: Manage curb space in activity areas to balance demands of all users such as emergency vehicles, buses, vehicle parking, bicycle/scooter parking, delivery loading/unloading, rideshare pick-up/drop-off, street furniture, electric vehicle charging stations, etc. the deployment of connected and autonomous vehicles is edging closer to reality. Potential implementation of advanced analytics and high-speed communication networks should be considered to get Wildomar ready for connected and autonomous vehicles.

Policy 5.16: Develop and maintain a designated truck route network in the City to ensure safe movements and adequate infrastructure support for the travel of commercial vehicles.

Goal 6: A comprehensive trail network that provides for equestrian mobility and alternative recreational options.

Policy 6.1: Continue to pursue funding and implementation of the Murrieta Creek Regional Trail Project, including an emphasis on safe at-grade crossings with the roadway network. Crossing treatments could include curb extensions, raised crosswalks, pedestrian hybrid beacons (also known as HAWK), rectangular rapid flash beacons (RRFB), etc.

Policy 6.2: Analyze gaps in the trail system and develop an approach for closing gaps, including an approach for property acquisition, where necessary.

Policy 6.3: Leverage trails within other jurisdictions to provide connectivity from Wildomar to points beyond.

Policy 6.4: Preserve and enhance equestrian trails where they currently exist.

Policy 6.5: Support the Old Town Vision for equestrian trails to connect the Old Town core and planned arena to surrounding areas.

Policy 6.6: Develop City-specific trail design guidelines or formally adopt guidelines, such as those provided in the County of Riverside Comprehensive Trails Plan.

1.4 Mobility Element Organization

This introductory chapter sets the stage for the mode specific transportation networks, providing background information, legislative context and the goals and policies intended to guide network development. The remainder of this Mobility Element is organized into the following mode-specific chapters:

Chapter 2 – Pedestrian Mobility
Chapter 3 – Bicycle Mobility
Chapter 4 – Public Transit
Chapter 5 – Vehicular Mobility

A comprehensive existing conditions report (dated June 2020 and included as **Appendix A**) was prepared to evaluate and illustrate Wildomar's existing transportation system. This report served as a foundation, along with inputs from community members and mobility planning principles, for the development of the various transportation networks in this Mobility Element.

2.0 Pedestrian Mobility

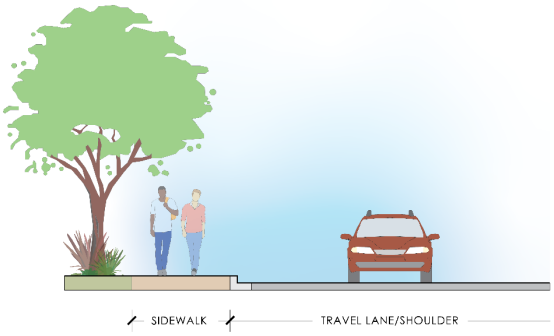
The pedestrian environment influences every trip. Regardless of the primary travel mode, all trips start and end with a pedestrian. We walk from our origins to our destinations, to our bicycles, to transit stops, or to vehicles, underscoring the importance of safe and comfortable walking environments.

Pedestrian facilities largely consist of sidewalks and trails, curb ramps, and crosswalks. Additional features help facilitate pedestrian crossings, such as pedestrian signal heads, curb extensions, and signage, while other amenities can be provided to enhance comfort, like lighting, landscaping, seating, and buffers from vehicular traffic.

Providing quality pedestrian infrastructure paired with complimentary land use patterns can support increased opportunities for walking as a means of transportation and recreation while also improving pedestrian safety. Increased walking can lead to health benefits through exercise and decreased greenhouse gas emissions resulting from fewer vehicle trips.

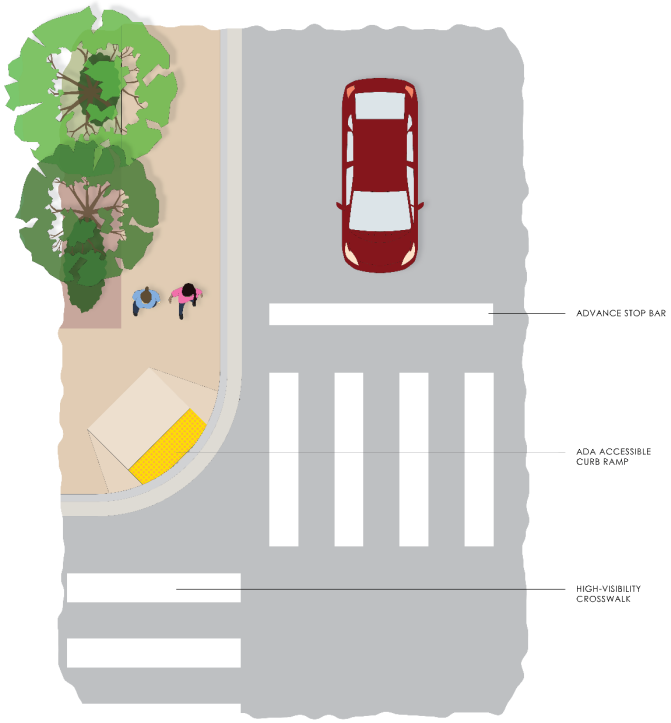
Wildomar is a growing city. Many roadways and older neighborhoods currently lack pedestrian infrastructure. However, development projects continue to construct sidewalk networks to support the newly established neighborhoods and commercial/industrial developments. These new developments are critical pieces to the growing pedestrian network.

A pedestrian route typology system was established to help guide development of the pedestrian network. The system categorizes roadways based on the existing or planned land uses and destinations served with the purposes of selecting pedestrian features appropriate for the environment. Three pedestrian route types are included: Connectors, Corridors, and Districts.



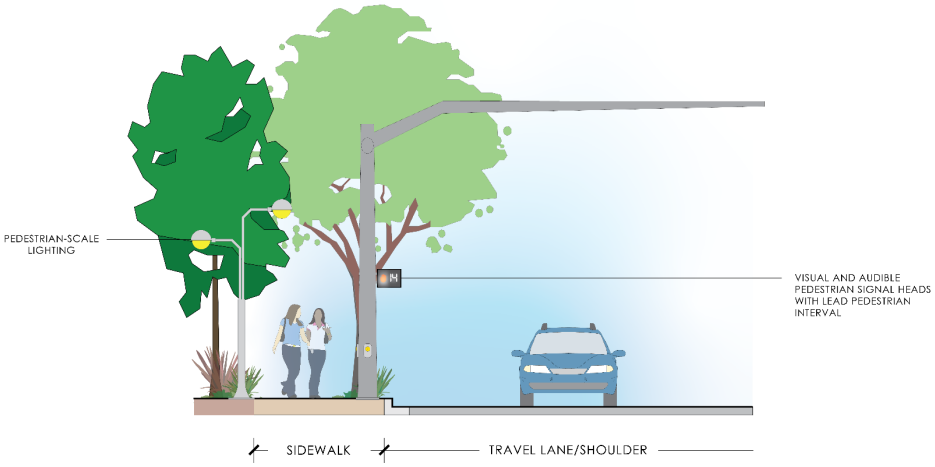
Connectors

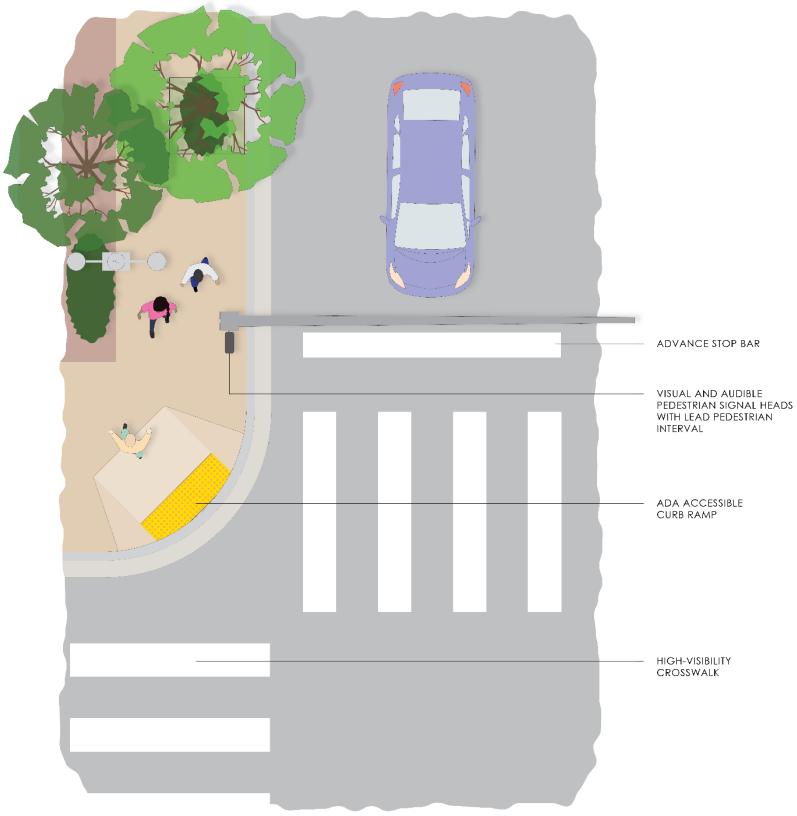
The Connector route type is designated for roadways with low pedestrian activity and moderate to high levels of vehicular traffic. Connectors help bridge the gap residential neighborhoods, Corridor route types, and final destinations. This designation makes up the greatest portion of the pedestrian route type system. The Connector route type is intended to consist of standard sidewalks with accessible curb ramps and marked crosswalks with advance stop bars at signalized intersections.



Corridors

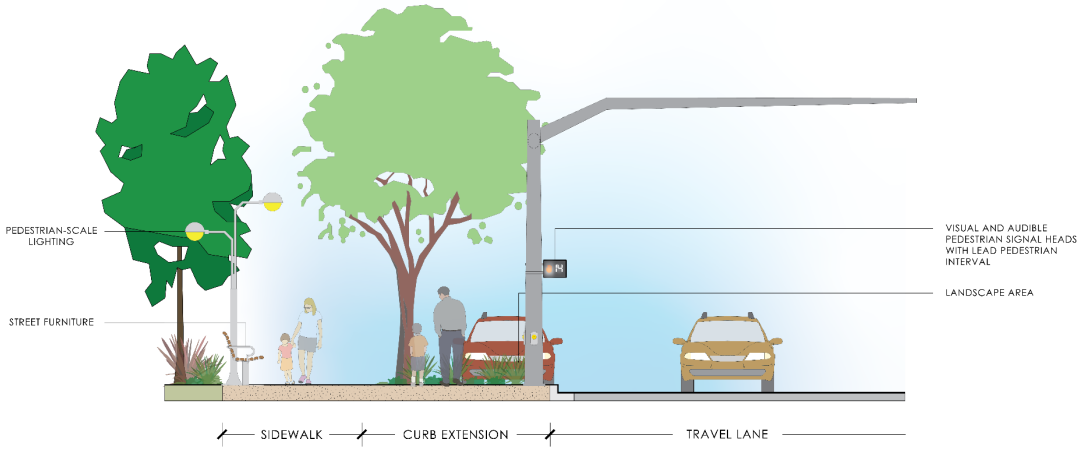
The Corridor route type is designated along roadways that support commercial businesses, shopping districts, schools, parks, and high ridership transit stops. Moderate pedestrian activity is anticipated in these areas, necessitating more enhanced features to support pedestrians. Corridor features consist of those identified under the Connector route type, and may include the addition of wider sidewalks (>5'), pedestrian countdown signal heads with lead pedestrian intervals at signalized intersection, and high visibility crosswalks with advance stop bars at marked crossing locations. Pedestrian scaled lighting may also be appropriate in some areas.





Districts

The District route type is reserved for the areas with the greatest anticipated pedestrian activity due to the proximity to existing or planned commercial/retail, high ridership transit stops, and higher density residential uses. Areas designated as Districts receive the greatest level of pedestrian enhancements. In addition to the Connector and Corridor route type features, Districts features may also include wide sidewalks (> 8’), increased landscaping and buffers from the roadway, decorative crosswalks, pedestrian street furnishings, and curb extensions at crossing locations.



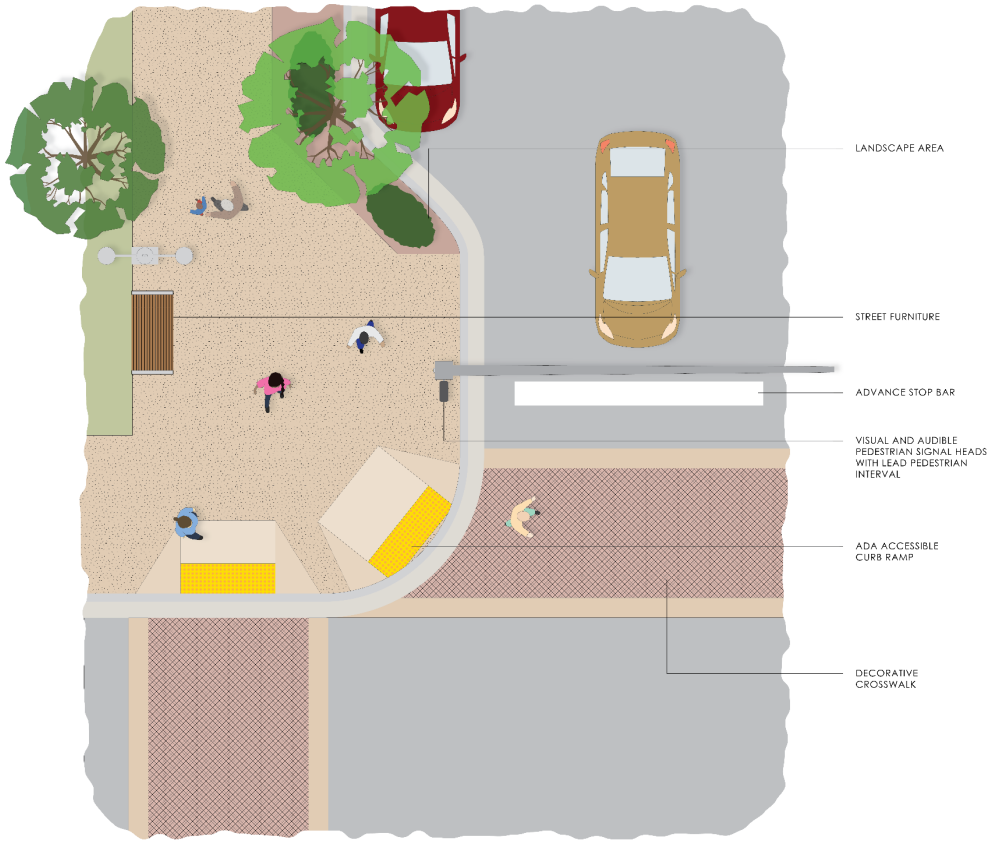
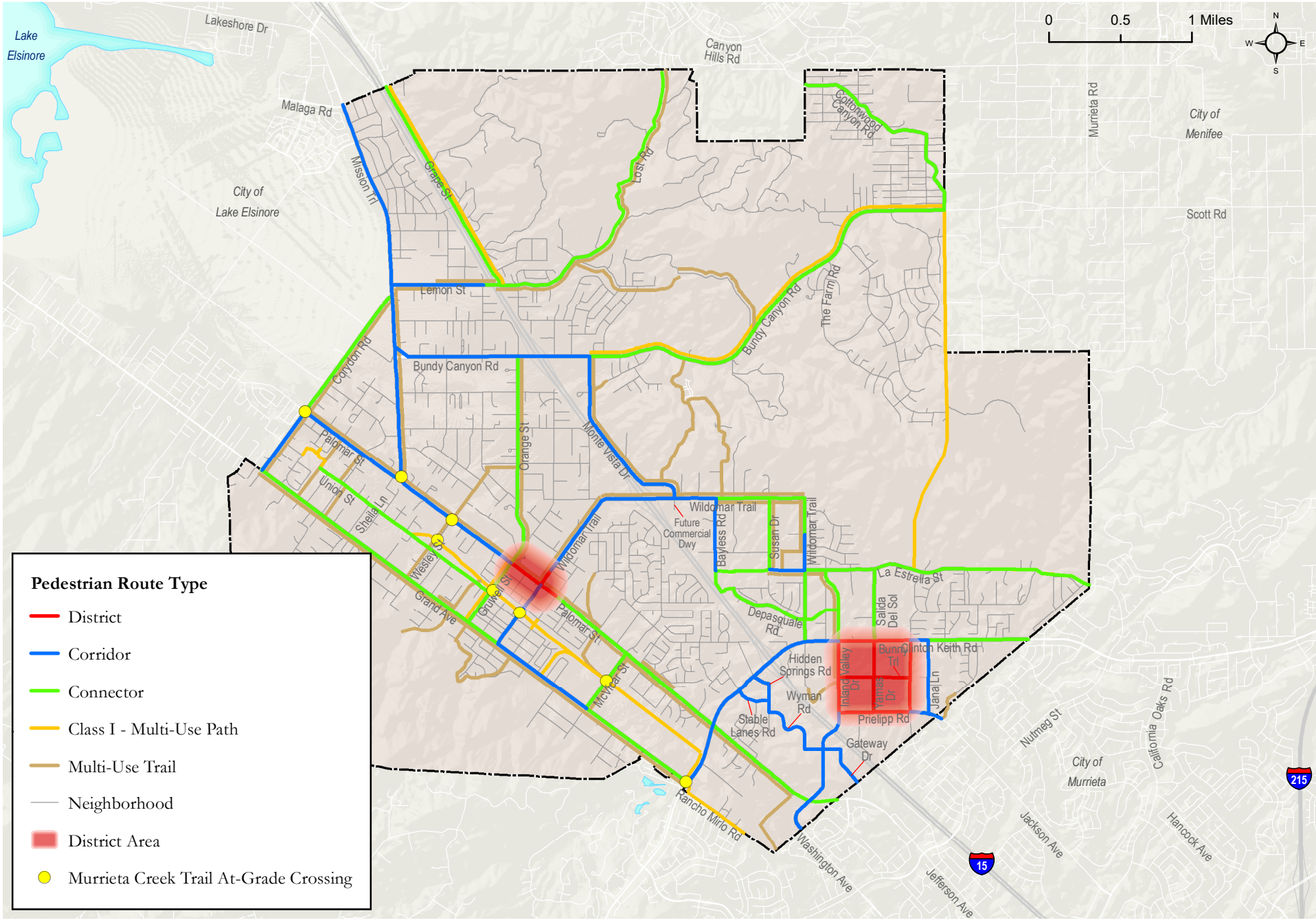


Figure 2-1 presents the planned pedestrian route types.

Figure 2-1 Planned Pedestrian Route Types



The pedestrian treatments shown in **Figure 2-2** are intended to strengthen the existing pedestrian network, to improve safety at pedestrian crossings, and to maximize the benefit of new connections as they are built.

Figure 2-2 Pedestrian Treatment Toolbox

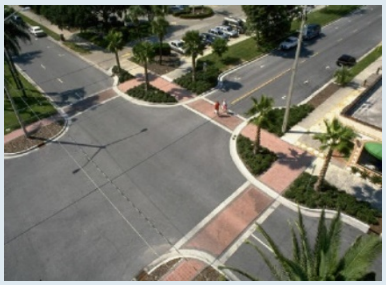
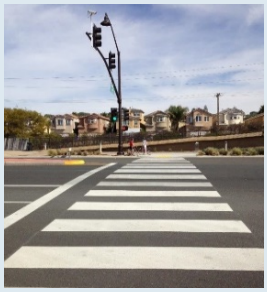
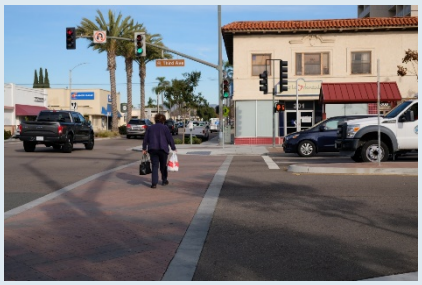
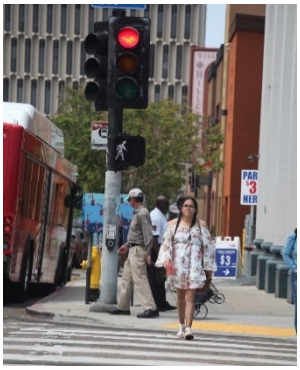
 **Curb Extensions/Bulb-Outs** shorten the crossing distance for pedestrians and narrow the roadway, resulting in slower vehicle speeds.	 **High-Visibility Crosswalks** improve crosswalk visibility and reinforce to drivers where to stop. Continental crosswalks may be used in conjunction with advance stop bars.	 **Advance Stop Bars/Lines** encourage drivers to stop well before the crosswalk, improving pedestrian safety and pedestrian visibility to drivers. May be used at intersections or mid-block crossings with additional signage.
Decorative Crosswalks improve crosswalk visibility to drivers and are visually appealing. Decorative crosswalks can be used to help brand a district and create an identity.	**Pedestrian Countdown Signals** indicate to the pedestrian how many seconds are remaining in the pedestrian phase.	 **Lead Pedestrian Intervals** give pedestrians a 3-7 second head start when entering an intersection, reinforcing their right-of-way overturning vehicles.
Pedestrian Hybrid Beacon is a traffic control device used to stop vehicular traffic and allow pedestrians to cross safely. Vehicular traffic is only stopped when a pedestrian is present and activates the signal.	**Rectangular Rapid Flashing Beacons** are pedestrian activated flashing signs that alert drivers a pedestrian is crossing.	**Pedestrian Refuge Islands** reduce the exposure time experienced by a pedestrian in the intersection.

Figure 2-2 (Cont'd) Pedestrian Treatment Toolbox

Pedestrian Scrambles temporarily stop all vehicular traffic and allow pedestrians to cross an intersection in every direction, including diagonally, at the same time.

Protected Intersections reduce the likelihood of highspeed vehicle turns, improve sightlines, and dramatically reduce the distance and time during which people on bikes are exposed to conflicts.

Roundabout is a circular intersection where drivers travel counterclockwise around a center island. There are no traffic signals or stop signs in a roundabout. Drivers yield at entry to traffic in the roundabout, then enter the intersection and exit at their desired street.

Landscape Buffer along roadways provide separation between pedestrians and vehicles, creating a more comfortable environment.

Pedestrian Scale Lighting can increase visibility along sidewalks and intersection approaches while creating a more comfortable and inviting pedestrian environment.

Pedestrian Amenities such as seating, shaded areas, trash cans, and landscaping enhance the pedestrian environment.

Paseos/Walkways are pedestrian-only pathways that provide opportunities to create unique public spaces.

Places to Gather create a sense of place and belonging and are usually surrounded by entertainment/commercial land uses.

Wayfinding is used to help orient pedestrians and direct them to destinations. Maps and directional signage are two wayfinding examples.

3.0 Bicycle Mobility

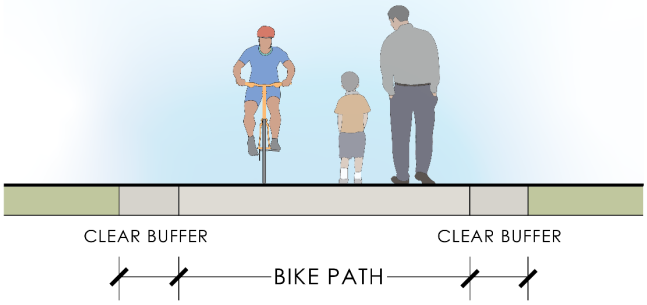
Bicycling offers a variety of transportation and recreational benefits. Bicycles can be used for local trips, potentially replacing vehicular trips while also reducing greenhouse gas emissions and congestion. They can be used by school-age children for commute trips to and from school. Bicycles can also help people access transit stops and reach their final destinations – commonly referred to as first-/last-mile. It is an accessible mode of transportation given the comparatively low entry and operational costs. As a form of recreation, bicycling can be used to fulfill exercise recommendations, thereby contributing to improve public health.

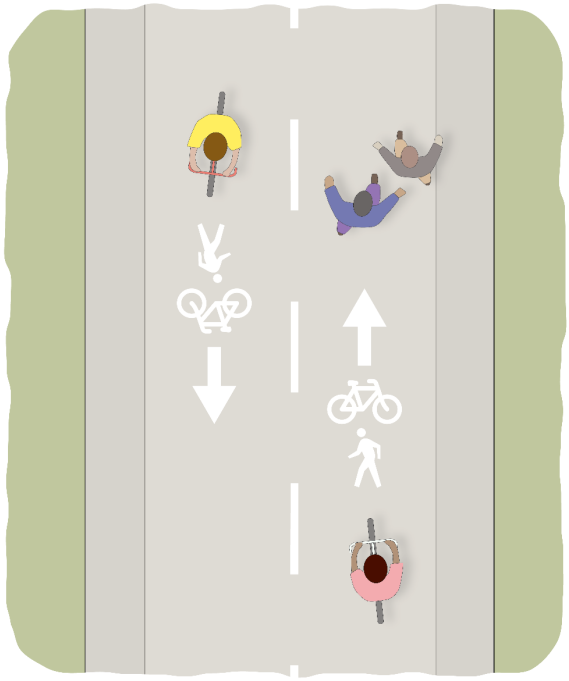
To realize these benefits, the bicycle network must be well-connected, safe, convenient, and comfortable for people of varying skill levels. Bicycle facilities should safely connect users from their trip origins to their destinations in a manner that is context appropriate. Safe and secure bicycle parking is another component that is often overlooked, yet critical to encouraging bicycle use.

Caltrans recognizes four classifications of bicycle facilities, Class I Bike Path, Class II Bike Lane, Class III Bike Route, and Class IV Separated Bikeway or Cycle Track.

Class I Bike Path

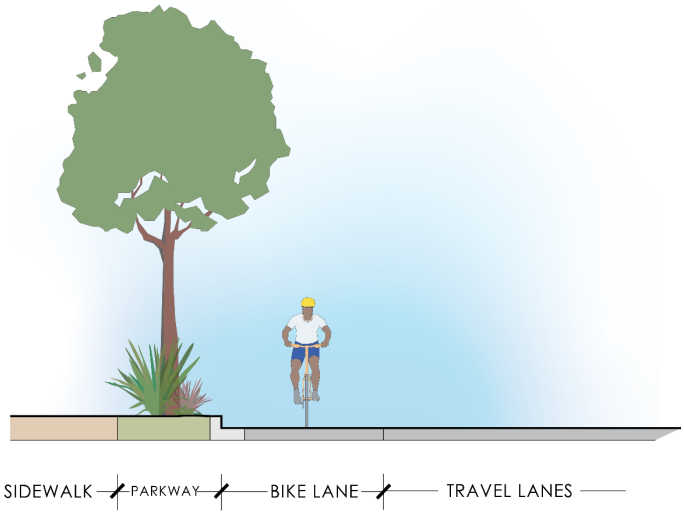
Also referred to as a multi-use path or shared-use path, Class I facilities provide a completely separated right-of-way designed for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized. Bike paths can provide connections where roadways are non-existent or unable to support bicycle travel. The minimum paved width for a two-way bike path is considered to be eight-feet (ten-feet preferred), with a two-foot wide graded area adjacent to each side of the pavement.

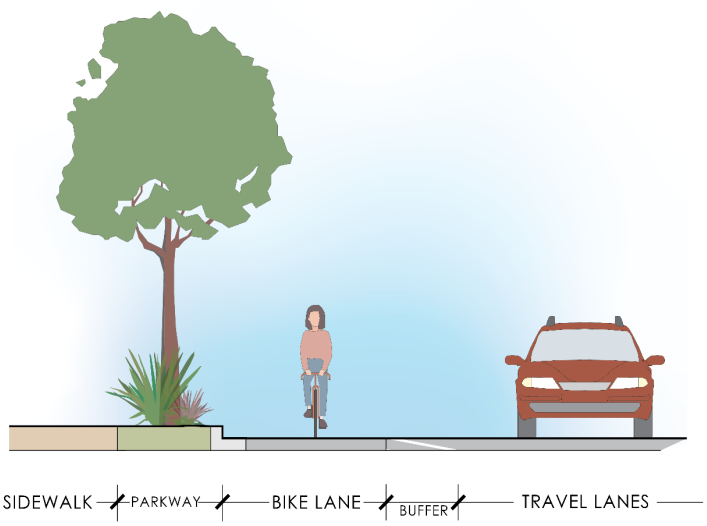


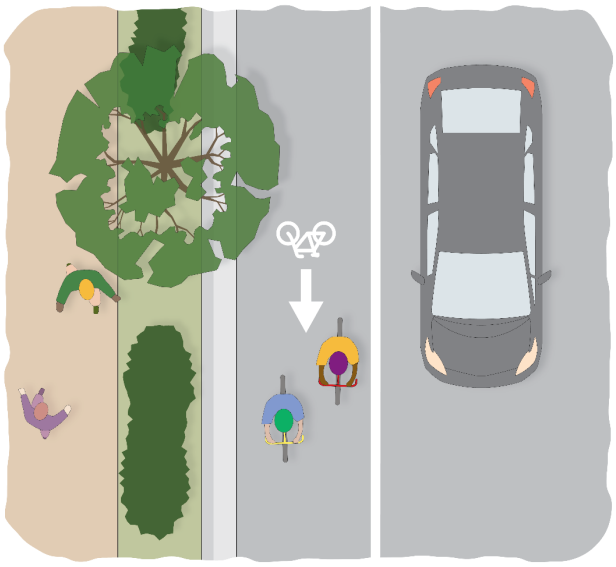


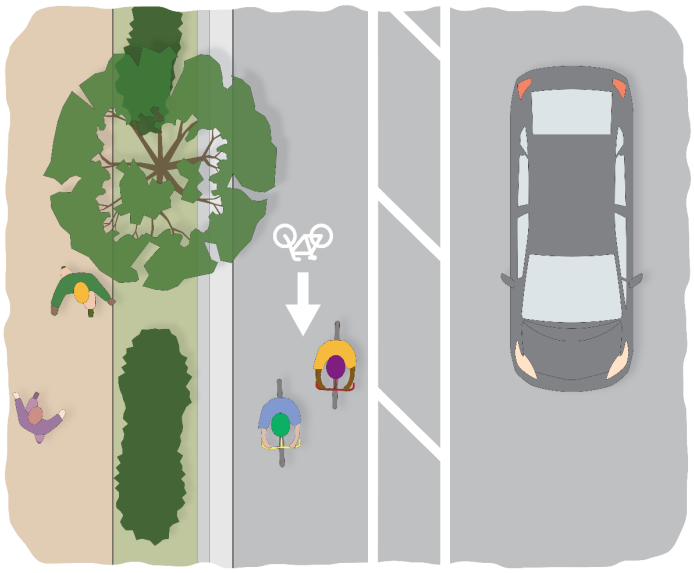
Class II Bike Lane

Provides a striped lane designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited. Bike lanes are one-way facilities located on either side of a roadway. Pedestrian and motorist crossflows are permitted. Additional enhancements such as painted buffers and signage may be applied. The minimum bike lane width is considered to be five-feet when adjacent to on-street parking, or six-feet when posted speeds are greater than 40 miles per hour. Bike lanes can also have striped buffer areas a few feet in width to provide separation from vehicles.



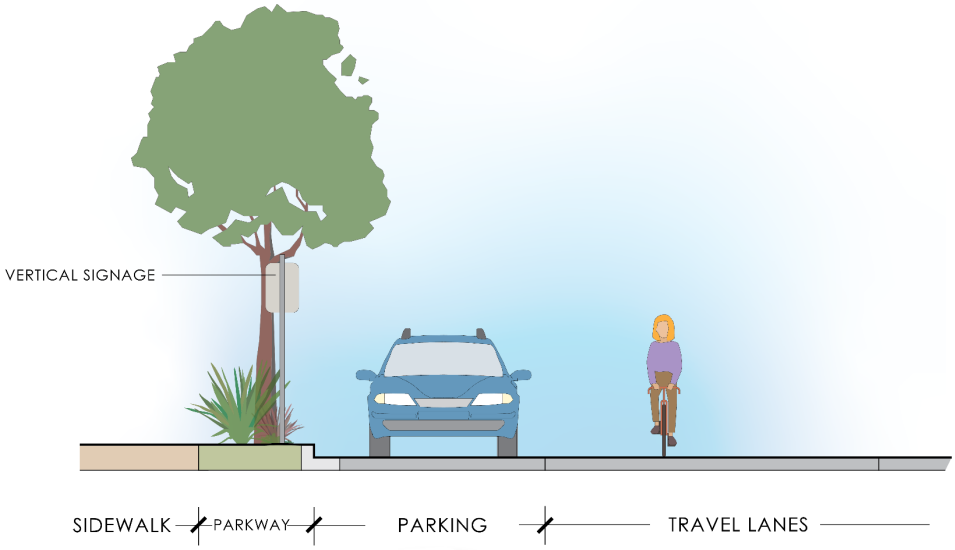


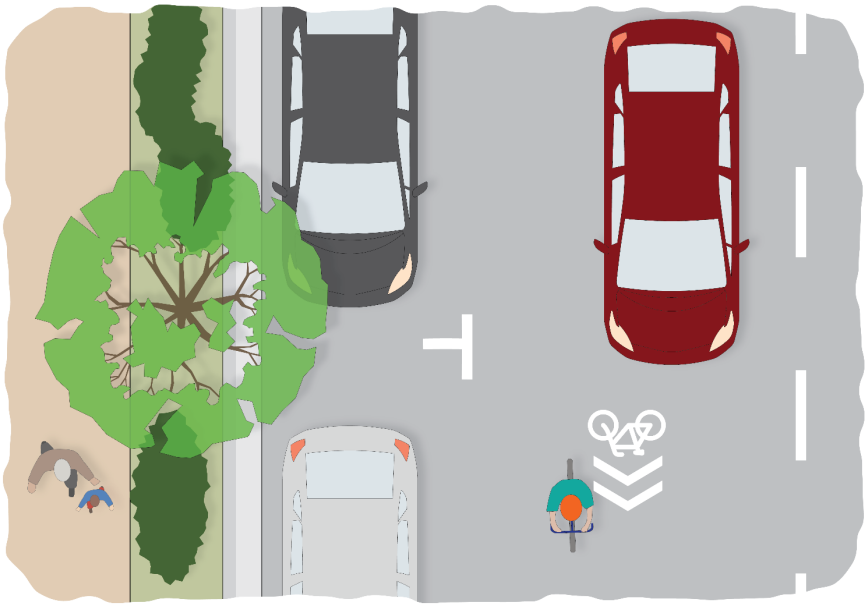




Class III Bike Route

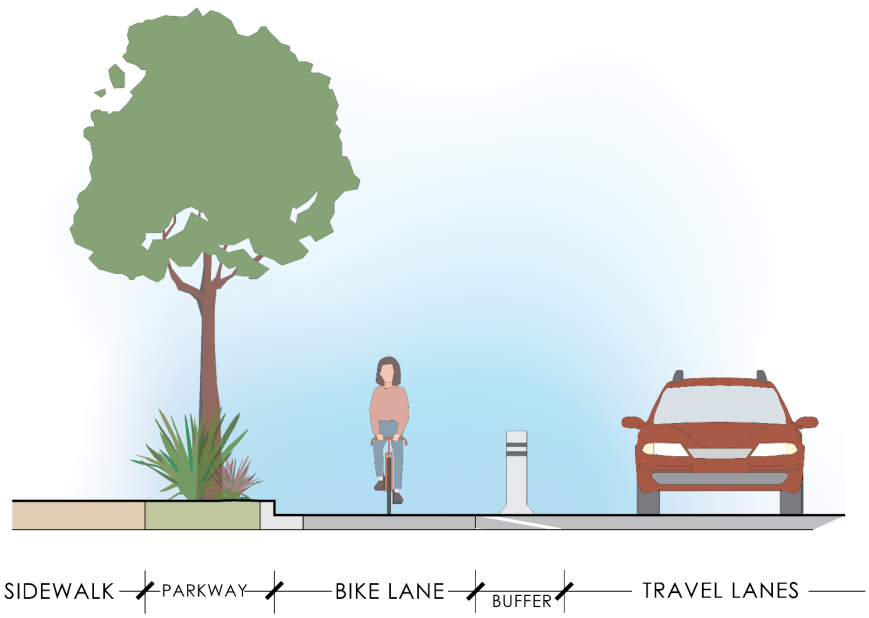
Provides shared use of traffic lanes with cyclists and motor vehicles, identified by signage and/or street markings known as “sharrows”. Bike routes are best suited for low-speed, low-volume roadways as they do not provide a dedicated space for bicyclists. Bike routes help provide network continuity or designate preferred routes where other facilities may be infeasible.

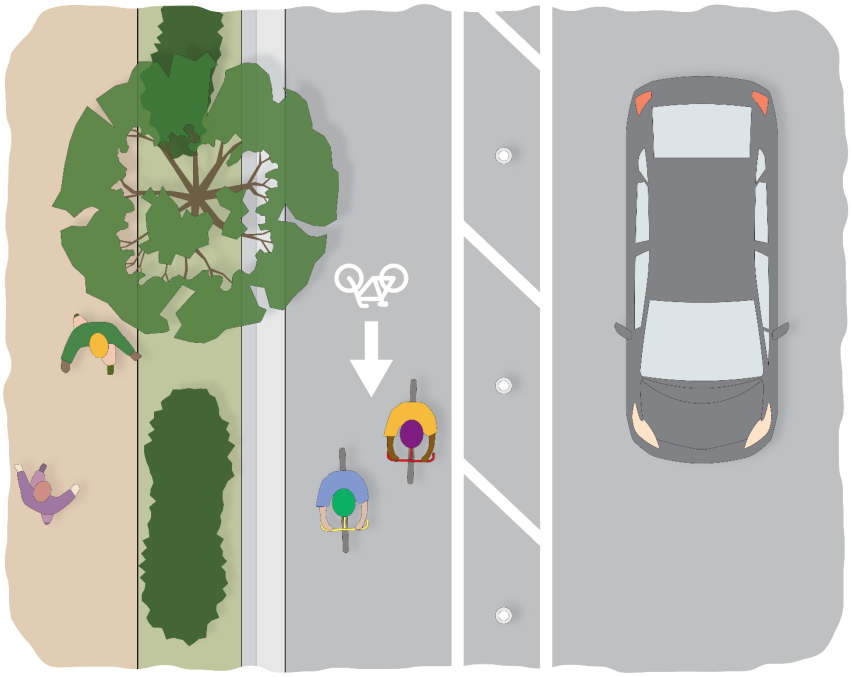




Class IV Cycle Track

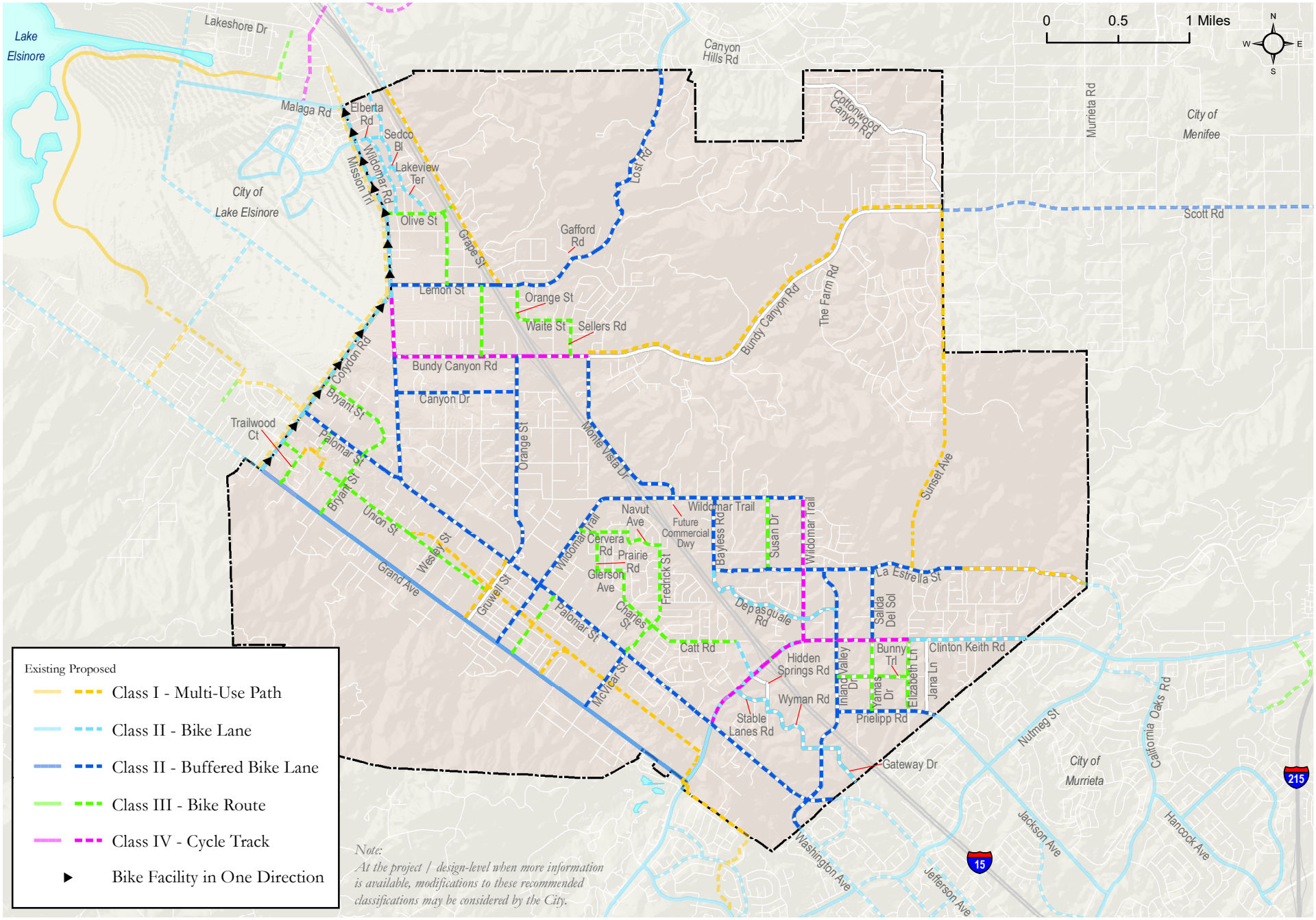
Also referred to as a separated or protected bikeway, cycle tracks provide a right-of-way designated exclusively for bicycle travel within the roadway and physically protected from vehicular traffic. Cycle tracks can provide for one-way or two-way travel. Types of separation include, but are not limited to, grade separation, flexible posts, or on-street parking.





The planned bicycle network is shown in **Figure 3-1**.

Figure 3-1 Planned Bicycle Network



4.0 Public Transit

Public transit is an energy and space efficient travel mode, making it an important component of the transportation network. Encouraging transit use as Wildomar continues to develop and grow will help accommodate the increase in roadway users. Efficient service that connects residential communities, employment centers, commercial areas, schools and other public resources is important to attracting and sustaining ridership.

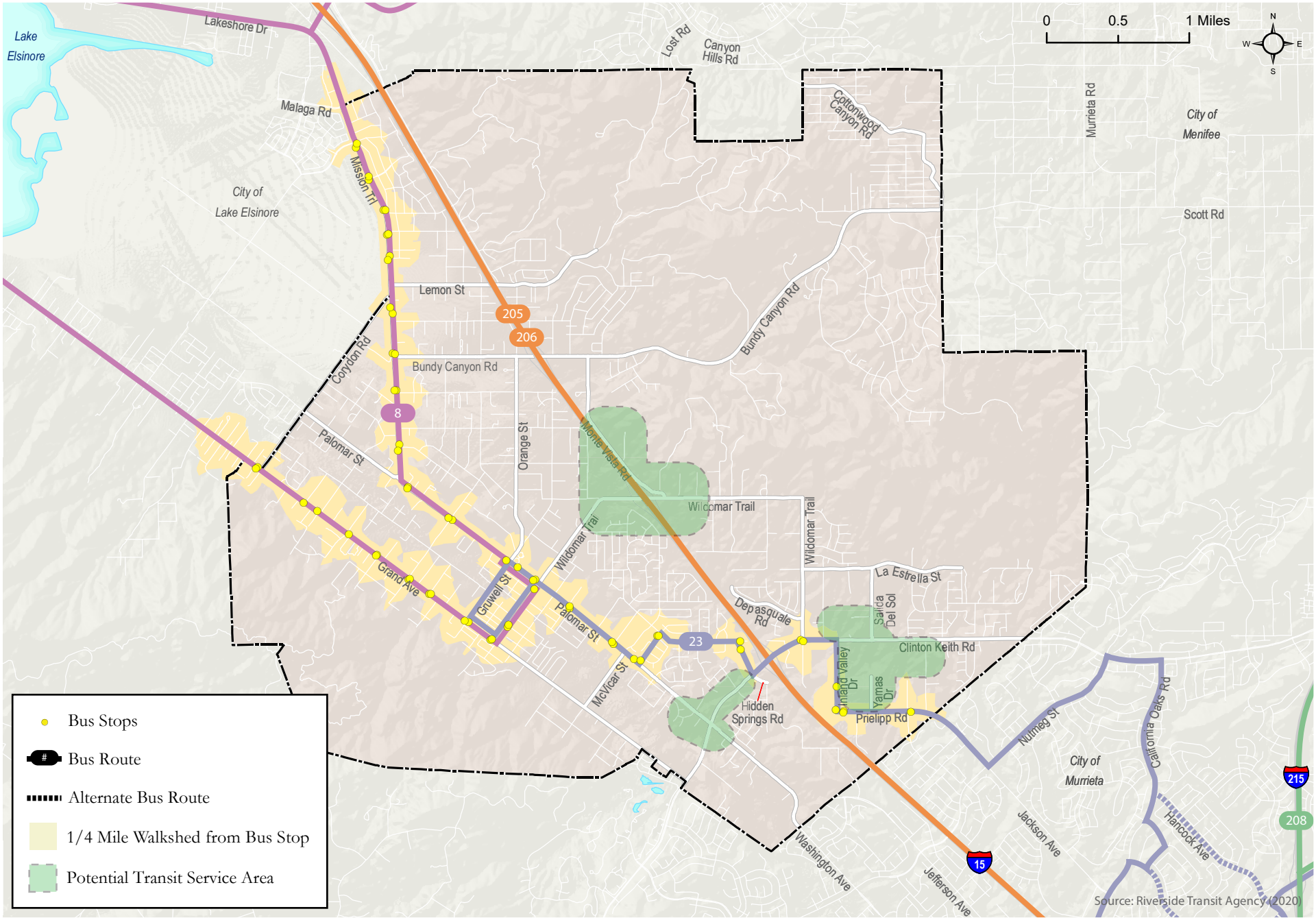
Pedestrian and bicycle access to transit stops is another important consideration. The planned pedestrian route types and bicycle network presented in the previous sections are intended to facilitate safe and comfortable active transportation access to bus stops, helping connect transit riders to the stops during the first- and last-mile of their trips.

Public transit in Wildomar is operated by the Riverside Transit Authority (RTA), while service is planned in collaboration at the regional level. Transit stop amenities, such as benches, shelters, trash cans, and route information, are selected by RTA and the local jurisdictions, while also considering ridership levels. The City is currently served by bus Routes 8 and 23 with no additional routes anticipated at this time.

The existing transit routes and stops are identified in **Figure 4-1** along with opportunity areas where future transit services should be considered as development occurs and the potential demand supports. These areas consist of anticipated future growth based on the currently adopted zoning, such as parcels designated as Very High Density Residential, Medium High Density Residential, Medium Density Residential, Mixed Use Planning Area, Commercial Retail, Light Industrial, and Business Park. The mix of uses in close proximity are consistent with those understood to support transit demand.

Increased transit frequency should be considered as additional development occurs in throughout the City. Additional consideration should be made to include a stop for Route 205/206, which currently traverses the City of Wildomar via I-15 but does not stop. This route could potentially stop just off I-15 at Wildomar Trail or at Clinton Keith Road, east of I-15.

Figure 4-1 Public Transit Network



5.0 Vehicular Mobility

Vehicular travel is the most in demand travel mode in Wildomar and nearly every city throughout the United States. The importance of efficient vehicular operations cannot be understated. Personal vehicles, bus transit, and movers of commercial goods all utilize the same roadway system.

Roadway congestion leads to increased greenhouse gas emissions from idling vehicles, longer travel times, and potentially increased vehicle miles traveled as drivers seek out of direction alternative routes. These considerations underscore the importance of maintaining the adequate flow of vehicles in a manner that is direct and safe.

Continued innovations in the transportation industry have led to more tools available now than ever before, enabling jurisdictions to accommodate vehicular demands while also offering quality networks for alternative transportation modes. The expansion of Wildomar's vehicular network must be achieved in a manner that compliments or supports alternative transportation modes, not at the expense.

Classification System

The planned vehicular classification system development was based on the City's existing functional classifications and future travel demand, with a horizon or buildout year of 2040. The roadway classifications are intended to balance the needs of all roadway users, while taking the existing built environment limitations into consideration. The City of Wildomar Mobility Element system consists of primary arterial, major arterial, minor arterial and collector designations. The remaining roadways under the City of Wildomar's jurisdiction are generally identified as undivided 2-lane local streets. **Figure 5-1** presents the planned roadway network classifications.

Figure 5-1 Planned Roadway Network Classifications

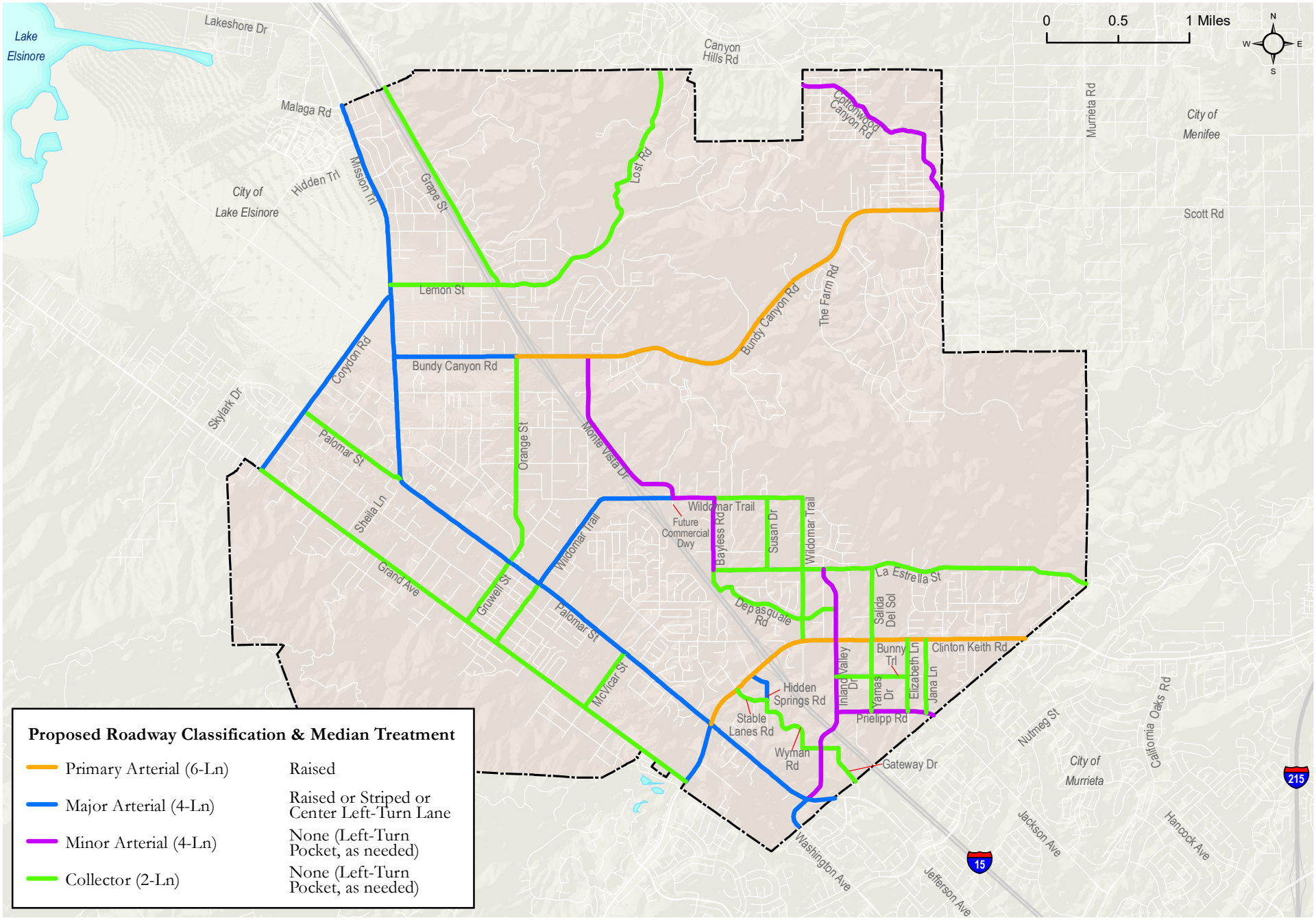


Table 5.1 displays the differences between existing functional classifications and the planned classification designations for Mobility Element roadways.

Table 5.1 Planned Roadway Classification Modifications

Roadway	Segment	Existing Functional Classification	Planned Classification Designation
Bayless Road	Wildomar Trail to La Estrella Street	Unpaved Road	4-Lane Minor Arterial
Bundy Canyon Road	Mission Trail to Orange Street	2-Lane Collector	4-Lane Major Arterial
Bundy Canyon Road	Orange Street to I-15 NB Ramps	4-Lane Urban Arterial	6-Lane Primary Arterial
Bundy Canyon Road	I-15 NB Ramps to Monte Vista Road	2-Lane Arterial	6-Lane Primary Arterial
Bundy Canyon Road	Monte Vista Road to City Limit	2-Lane Collector	6-Lane Primary Arterial
Bunny Trail	Inland Valley Drive to Elizabeth Lane	Does Not Exist	2-Lane Collector
Clinton Keith Road	Grand Avenue to Palomar Street	4-Lane Secondary	4-Lane Major Arterial
Clinton Keith Road	Palomar Street to Hidden Springs Road	4-Lane Urban Arterial	6-Lane Primary Arterial
Clinton Keith Road	Wildomar Trail to Inland Valley Drive	4-Lane Urban Arterial	6-Lane Primary Arterial
Clinton Keith Road	Inland Valley Drive to City Limit	2-Lane Collector	6-Lane Primary Arterial
Corydon Road	Grand Avenue to Palomar Street	2-Lane Arterial	4-Lane Major Arterial
Corydon Road	Palomar Street to Mission Trail	2-Lane Collector	4-Lane Major Arterial
Cottonwood Canyon Road	City Limit to Bundy Canyon Road	Unpaved Road	4-Lane Minor Arterial
Depasquale Road	La Estrella Street and Iodine Springs Road	Partially Does Not Existing	2-Lane Collector
Elizabeth Lane	Bunny Trail to Prielipp Road	Does Not Exist	2-Lane Collector
Grand Avenue	Corydon Road to Sheila Lane	2-Lane Arterial	2-Lane Collector
Grape Street	City Limit to Lemon Street	2-Lane Local Street	2-Lane Collector
Inland Valley Drive	La Estrella Street to Clinton Keith Road	Does Not Exist	4-Lane Minor Arterial
Inland Valley Drive	Clinton Keith Road to Prielipp Road	2-Lane Collector	4-Lane Minor Arterial
Inland Valley Drive	Prielipp Road to Palomar Street	Does Not Exist	4-Lane Minor Arterial
La Estrella Street	Bayless Road to Wildomar Trail	Does Not Exist	2-Lane Collector
McVicar Street	Grand Avenue to Palomar Street	2-Lane Local Street	2-Lane Collector
Monte Vista Road	Bundy Canyon Road to Wildomar Trail	2-Lane Collector	4-Lane Minor Arterial
Palomar Street	Mission Trail to McVicar Street	2-Lane Collector	4-Lane Major Arterial
Palomar Street	McVicar Street to Clinton Keith Road	2-Lane Arterial	4-Lane Major Arterial
Palomar Street	Clinton Keith Road to City Limit	2-Lane Collector	4-Lane Major Arterial
Prielipp Road	Inland Valley Drive to City Limit	2-Lane Collector	4-Lane Minor Arterial
Stable Lanes Road	Clinton Keith Road to Hidden Springs Road	Does Not Exist	2-Lane Collector
Susan Drive	Wildomar Trail to La Estrella Street	Unpaved Road	2-Lane Collector
Wildomar Trail	Palomar Street to Monte Vista Road	2-Lane Collector	4-Lane Major Arterial
Wildomar Trail	Monte Vista to Bayless Road	2-Lane Collector	4-Lane Minor Arterial
Wyman Road	Stable Lanes Road to Jefferson Avenue	Does Not Exist	2-Lane Collector
Yamas Drive	Clinton Keith Road to Bunny Trail	Does Not Exist	2-Lane Collector

The remainder of this section provides descriptions and cross-sections of each classification type.

Primary Arterial

Primary arterials are 6-lane roads divided by a raised median. They are intended to carry the greatest volumes of vehicular traffic within the City, providing connections to the regional freeway system, major commercial centers, and some neighboring jurisdictions. Primary arterials are commonly used by movers of commercial goods, necessitating considerations for large vehicles. Pedestrian mobility along these roadways should take the long crossing distances and high vehicular speeds into consideration by providing intersection crossing treatments and buffers to separate pedestrians from vehicles, where feasible. Bicycle facilities along primary arterials are recommended to be protected or physically separated from vehicular travel lanes due to higher traffic volumes and posted speed limits. **Figure 5-2** depicts cross-sections of designated primary arterial roadways.

Major Arterial

Major arterials are 4-lane roads divided by a raised or striped median, or a center left-turn lane to maximize access, where needed. These roadways supplement primary arterials, also providing access to the freeway and major community resources. Major arterials also facilitate connections for truck traffic between the freeway network and their destinations. These roadways carry moderate volumes of vehicular traffic. Pedestrian activity may be higher along these areas, particularly near destinations such as commercial and civic uses, warranting more intensive crossing treatments. Major arterials also serve as critical links in the bicycle network due to their connections, however, the moderate to high volumes and traffic speeds make painted or physical buffers recommended to make bicycling more comfortable in these environments. Major arterial roadway cross-sections are shown in **Figure 5-3**.

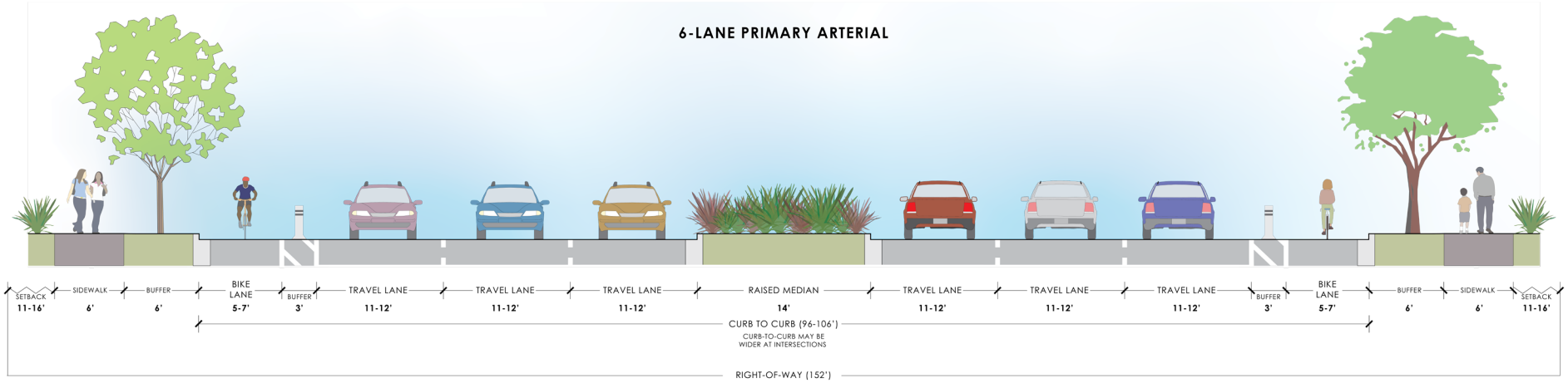
Minor Arterial

Minor arterials are undivided 4-lane roadways that provide left-turn pockets for access, where needed. They carry moderate volumes of vehicular traffic and generally consist of less active frontages than major arterials. Pedestrian activity can vary among minor arterials. Like major arterials, the moderate traffic volumes and speeds make minor arterials suited for bicycle facilities that are separated from vehicular traffic via a painted buffer. **Figure 5-4** depicts cross-sections of designated minor arterial roadways.

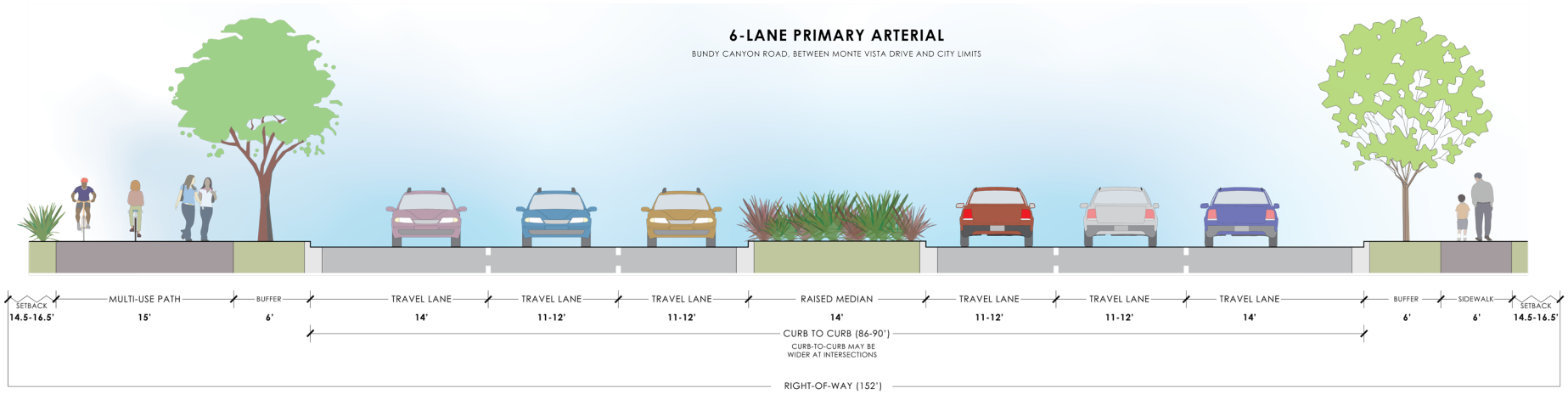
Collector

Collectors are undivided 2-lane roadways that provide left-turn pockets for access, where needed. These roadways are intended to carry lower volumes of vehicular traffic with lower posted speed limits. Traffic calming measures should be considered if speeding is an issue. Collectors generally serve residential neighborhoods, schools, and parks leading to moderate levels of pedestrian and bicycle activity. **Figure 5-5** displays collector roadway cross-sections.

Figure 5-2 Typical Cross-Sections of Designated 6-Lane Primary Arterial Roadways



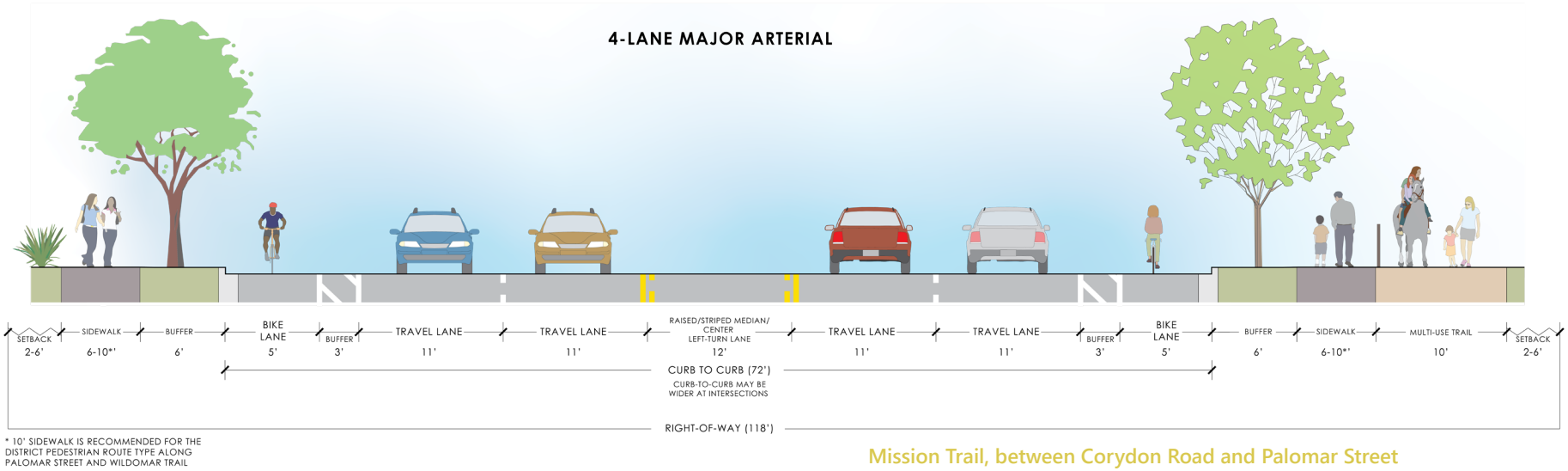
Clinton Keith Road, between Palomar Street and City Limits
Bundy Canyon Road, between Orange Street and Monte Vista Drive



Bundy Canyon Road, between Monte Vista Drive and Sunset Avenue

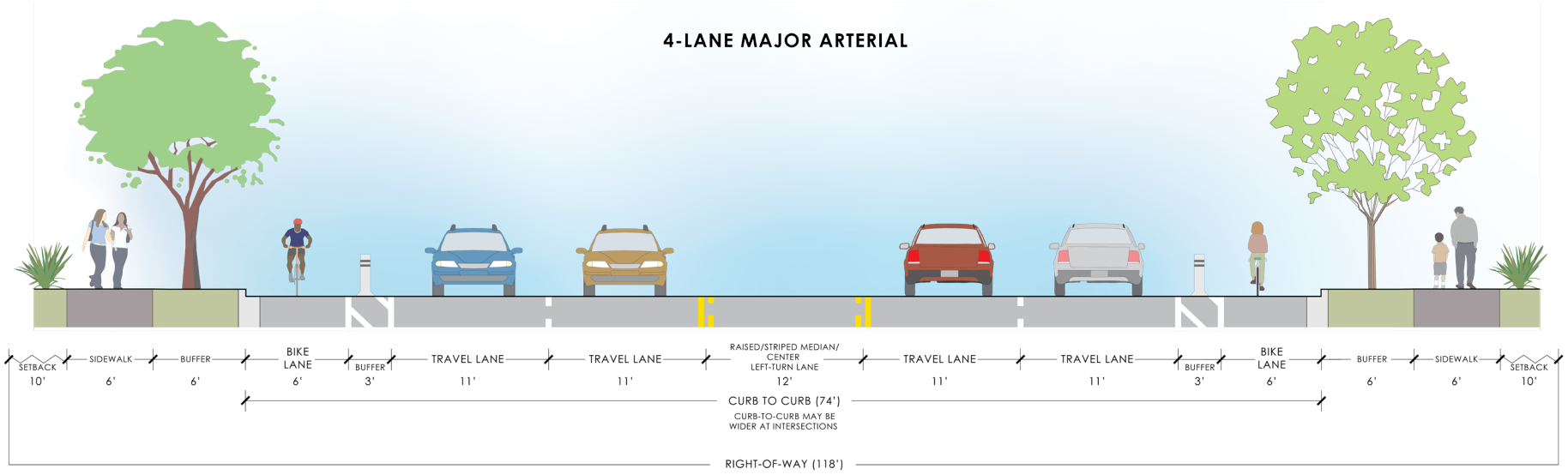
These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-3 Typical Cross-Sections of Designated 4-Lane Major Arterial Roadways, Part 1



* 10' SIDEWALK IS RECOMMENDED FOR THE DISTRICT PEDESTRIAN ROUTE TYPE ALONG PALOMAR STREET AND WILDOMAR TRAIL

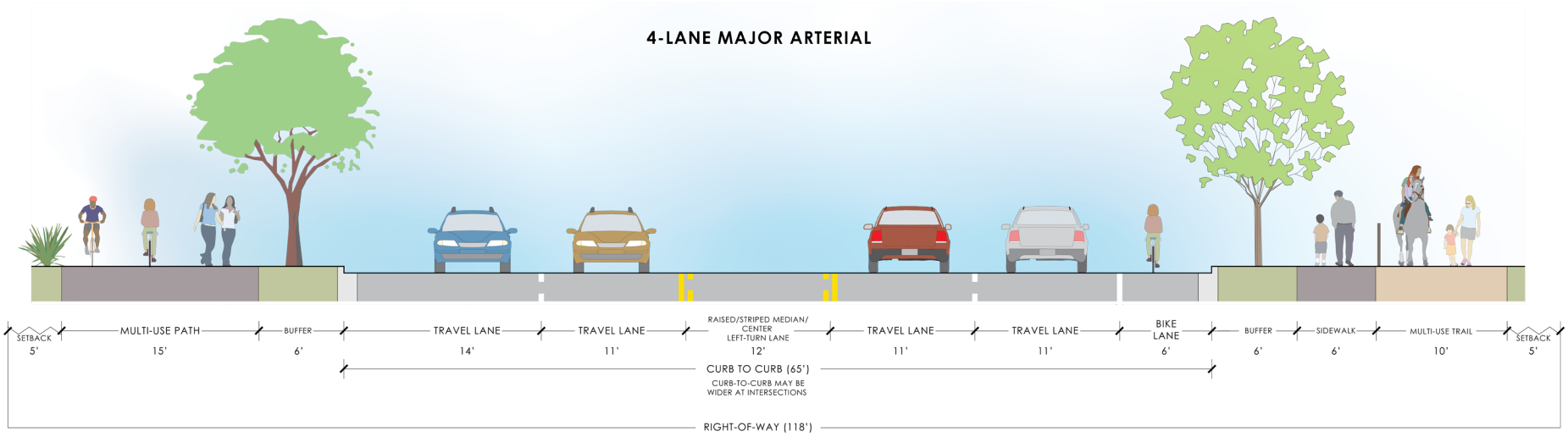
Mission Trail, between Corydon Road and Palomar Street
Palomar Street, between Mission Trail and City Limits
Wildomar Trail, between Palomar Street and Monte Vista Drive
Washington Avenue, between Palomar Street and City Limits



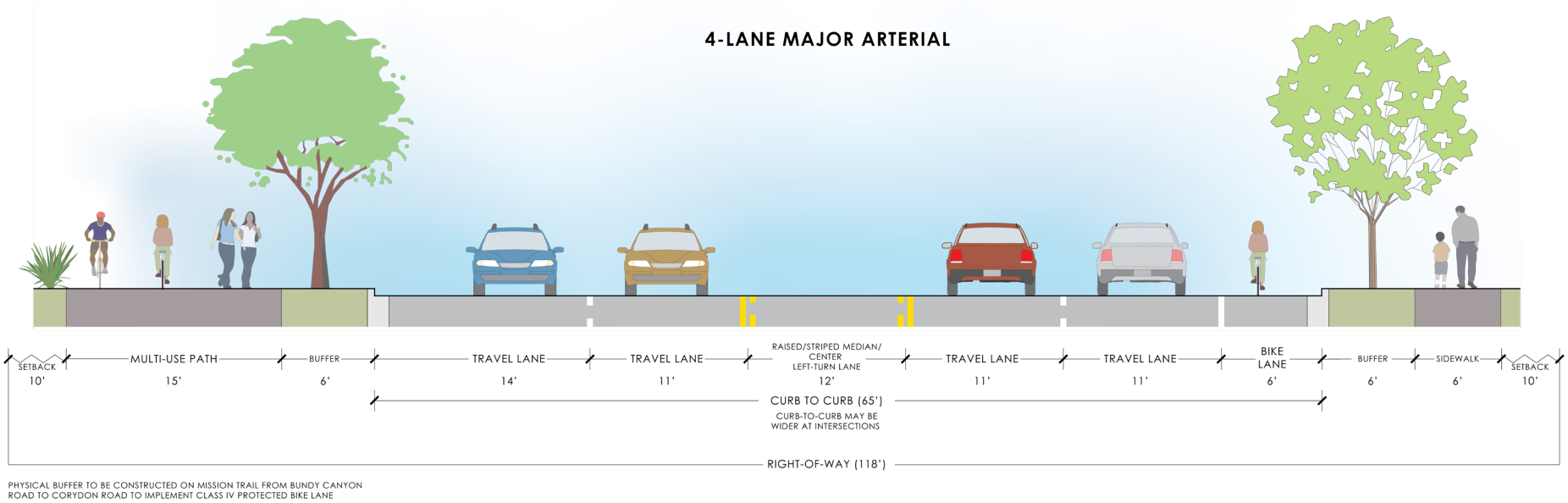
Bundy Canyon Road, between Mission Trail and Orange Street

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-3 Typical Cross-Sections of Designated 4-Lane Major Arterial Roadways, Part 2



Corydon Road, between Grand Avenue and Mission Trail

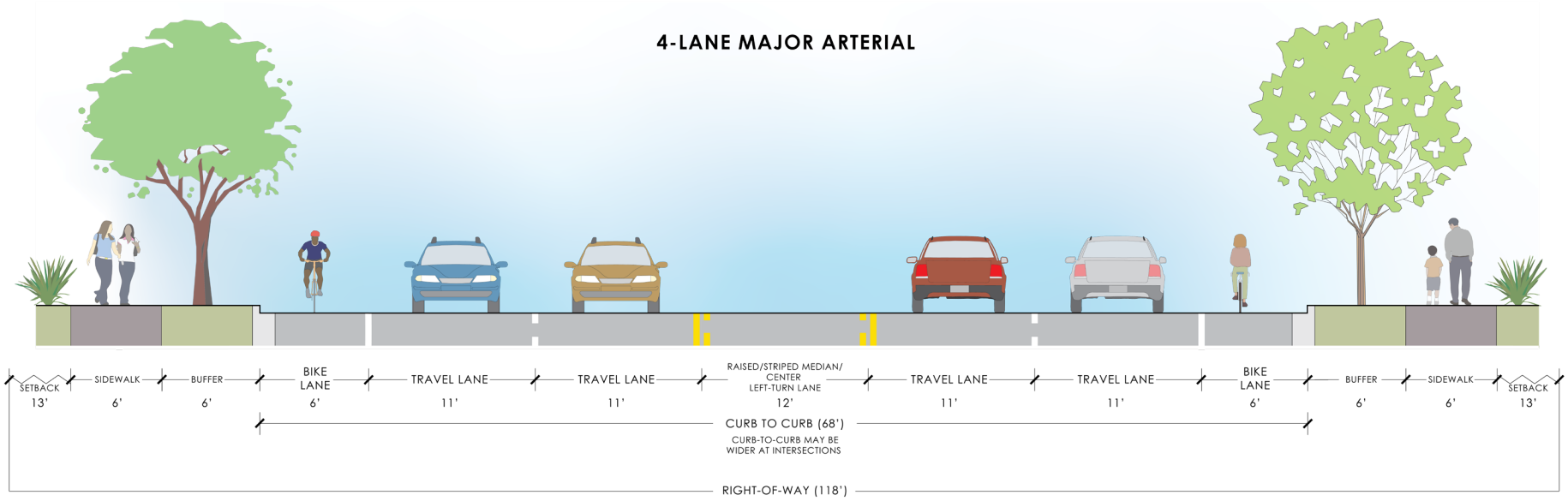


PHYSICAL BUFFER TO BE CONSTRUCTED ON MISSION TRAIL FROM BUNDY CANYON ROAD TO CORYDON ROAD TO IMPLEMENT CLASS IV PROTECTED BIKE LANE

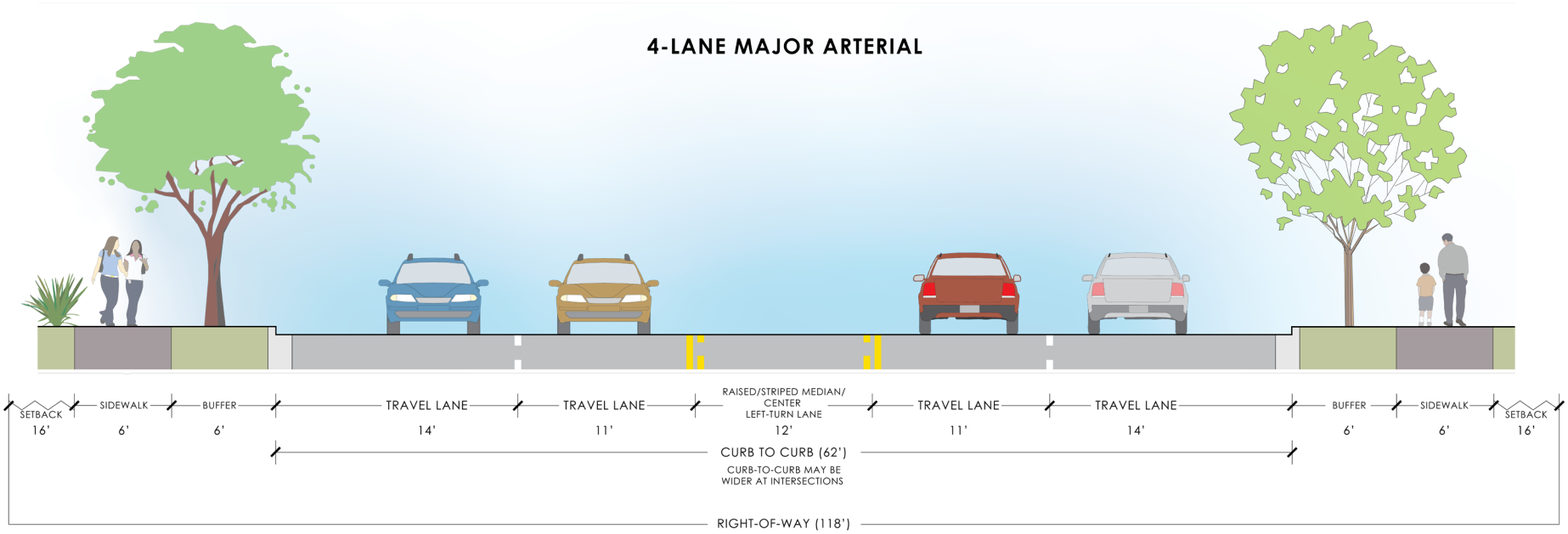
Mission Trail, between Malaga Road and Corydon Road

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-3 Typical Cross-Sections of Designated 4-Lane Major Arterial Roadways, Part 3



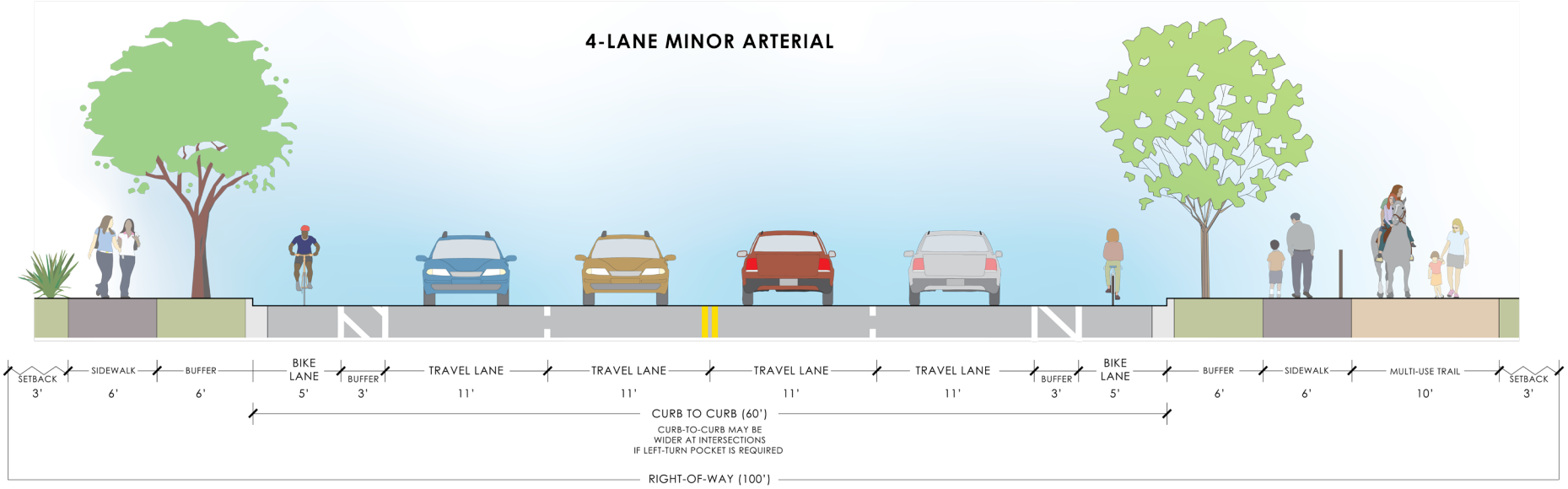
Clinton Keith Road, between Grand Avenue and Palomar Street



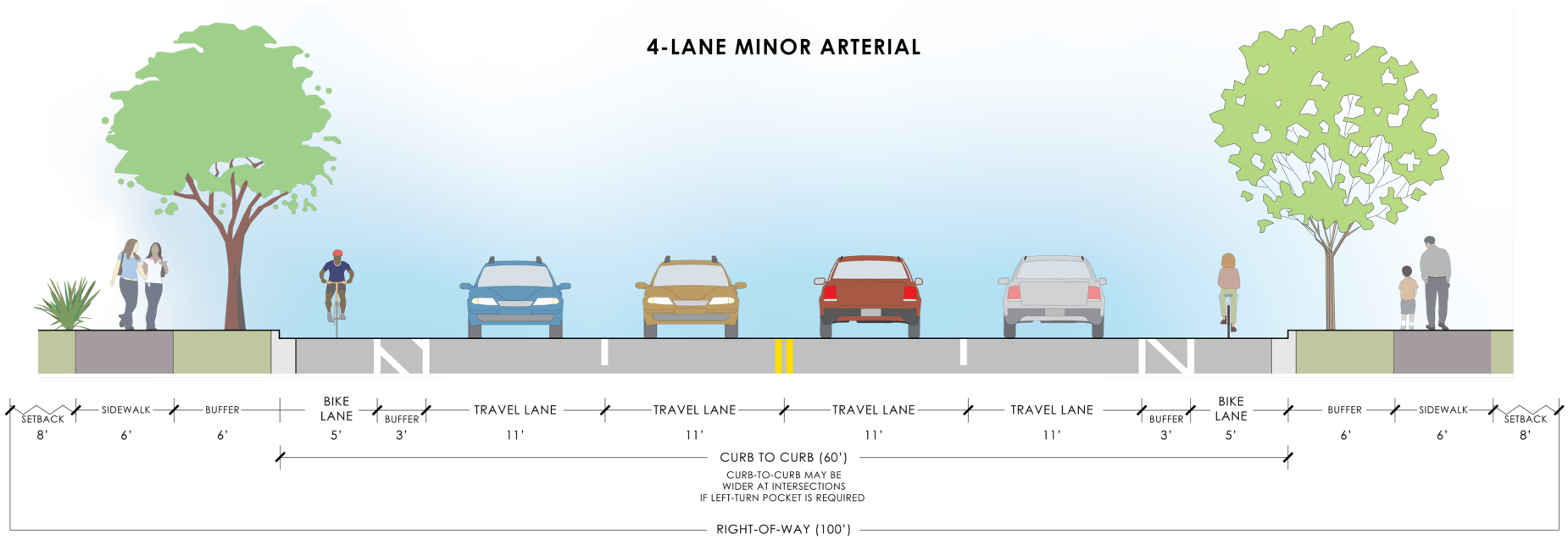
Hidden Springs Road, between Clinton Keith Road and Stable Lanes Road

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-4 Typical Cross-Sections of Designated 4-Lane Minor Arterial Roadways, Part 1



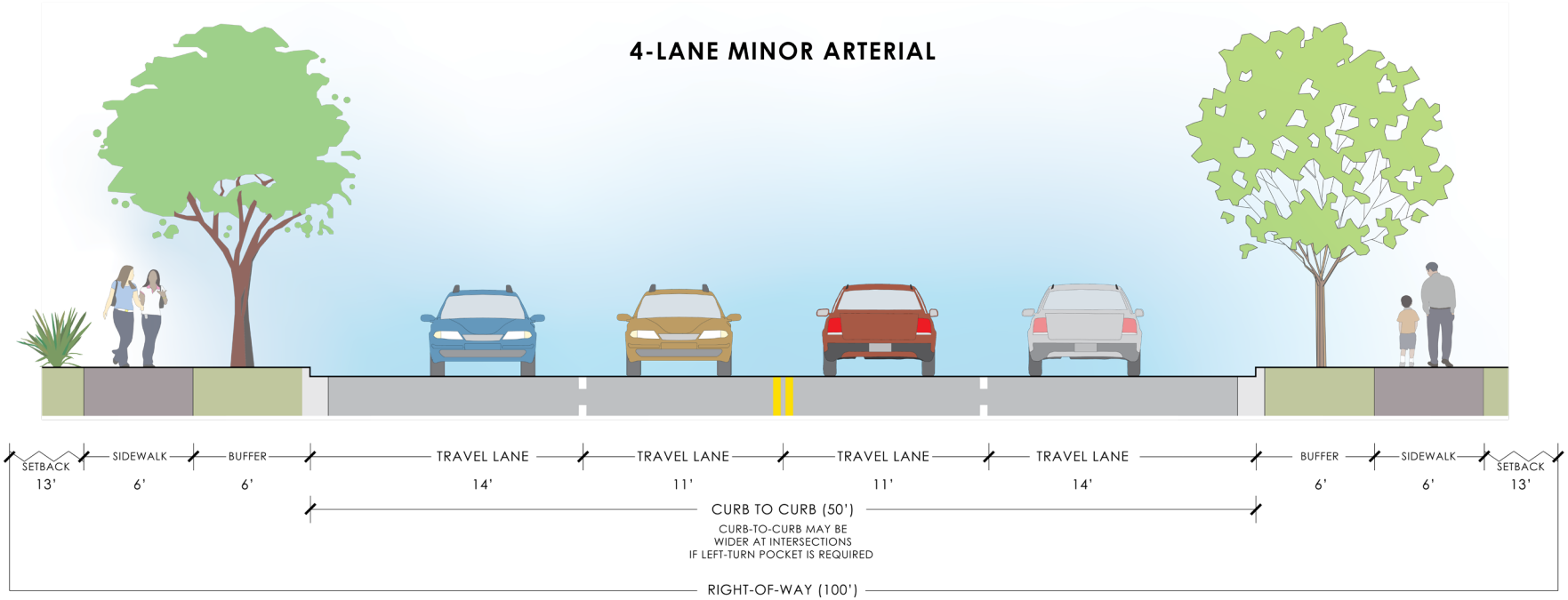
Monte Vista Drive, between Bundy Canyon Road and Wildomar Trail
Wildomar Trail, between Monte Vista Drive and Bayless Road
Inland Valley Drive, between La Estrella Street and Bunny Trail



Bayless Road, between Wildomar Trail and La Estrella Street
Inland Valley Drive, between Bunny Trail and Palomar Street
Prielipp Road, between Inland Valley Drive and City Limits

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

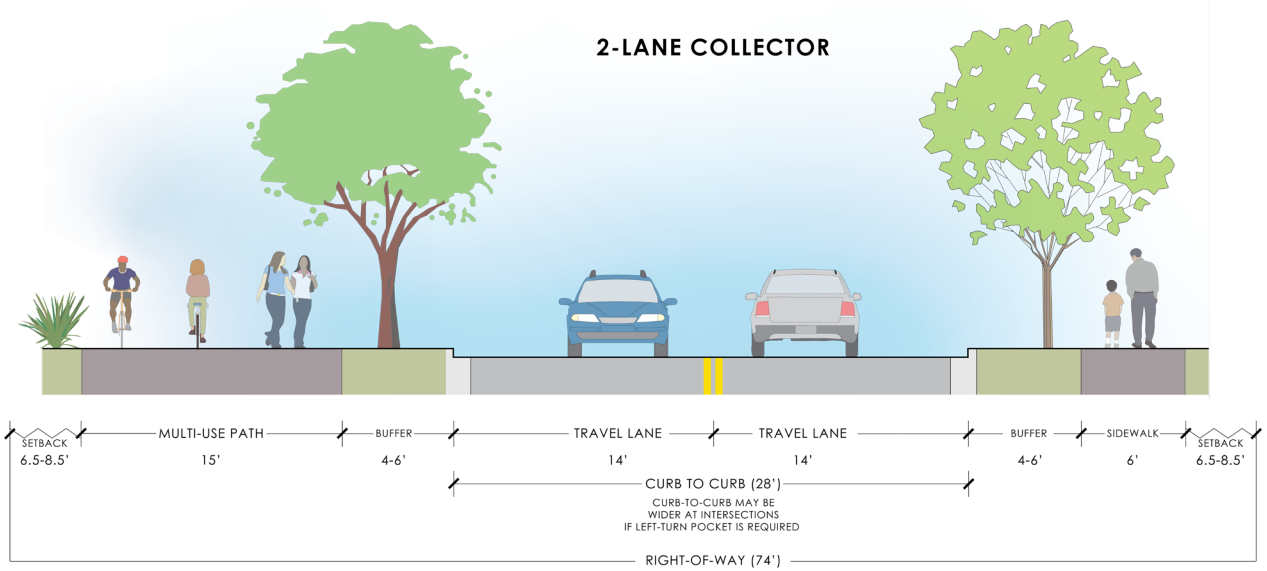
Figure 5-4 Typical Cross-Sections of Designated 4-Lane Minor Arterial Roadways, Part 2



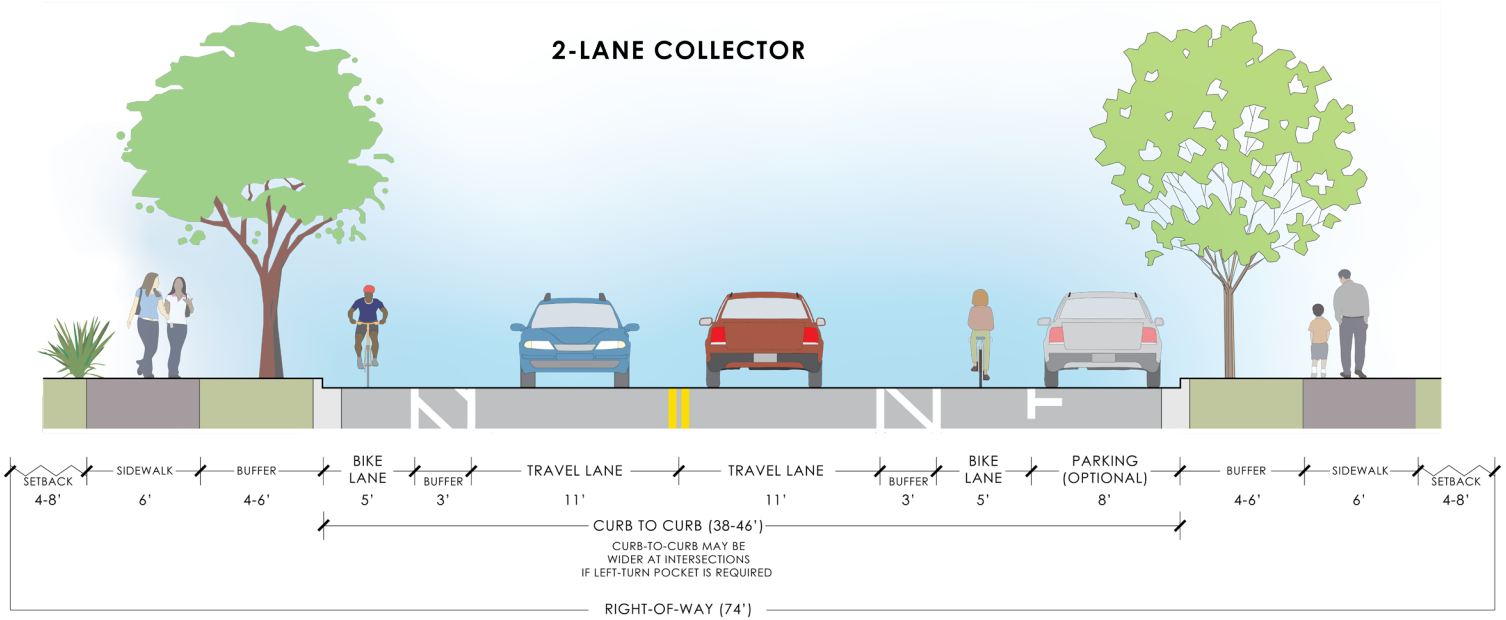
Cottonwood Canyon Road, between City Limits and Bundy Canyon Road

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-5 Typical Cross-Sections of Designated 2-Lane Collector Roadways, Part 1



Grape Street, between City Limits and Lemon Street
Gruwell Street, between Palomar Street and Grand Avenue
La Estrella Street, between Crossroads Street and City Limits

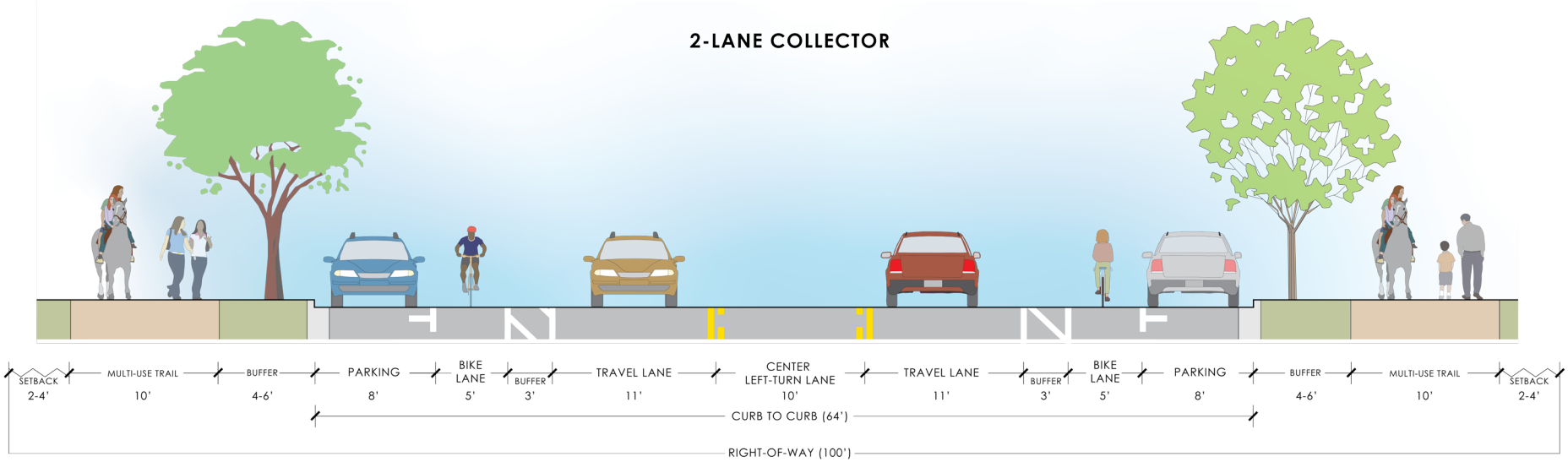


Lemon Street, between Mission Trail and Grape Street
Wildomar Trail, between Palomar Street and Grand Avenue

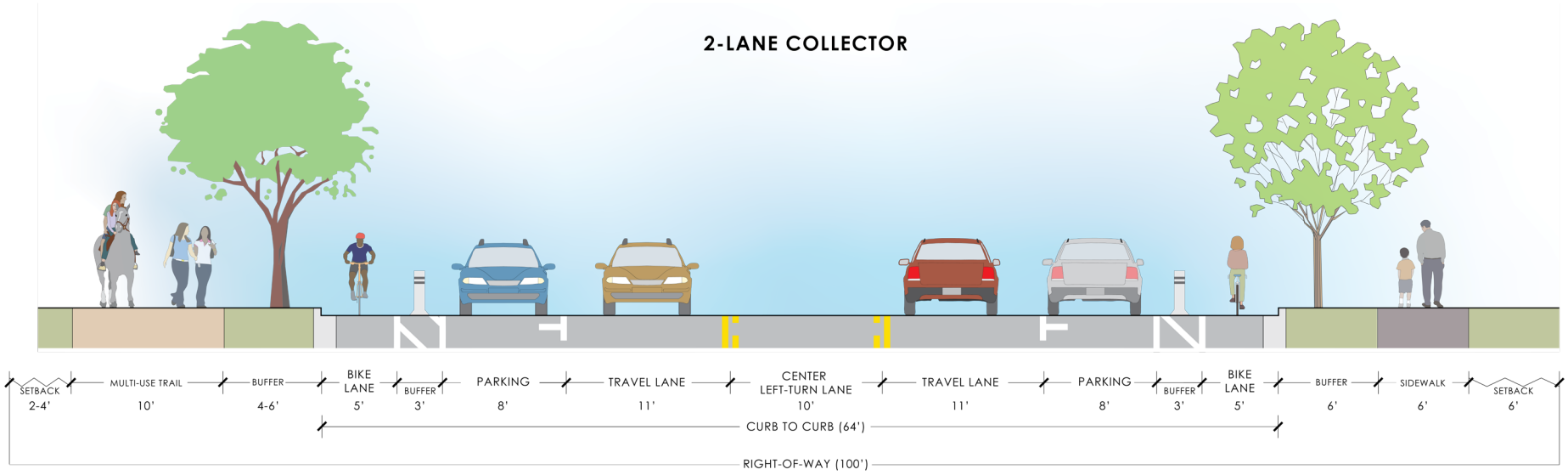
La Estrella Street, between Bayless Road and Susan Drive
La Estrella Street, between Inland Valley Drive and Crossroads Street
Salida Del Sol, between La Estrella Street and Clinton Keith Road

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-5 Typical Cross-Sections of Designated 2-Lane Collector Roadways, Part 2



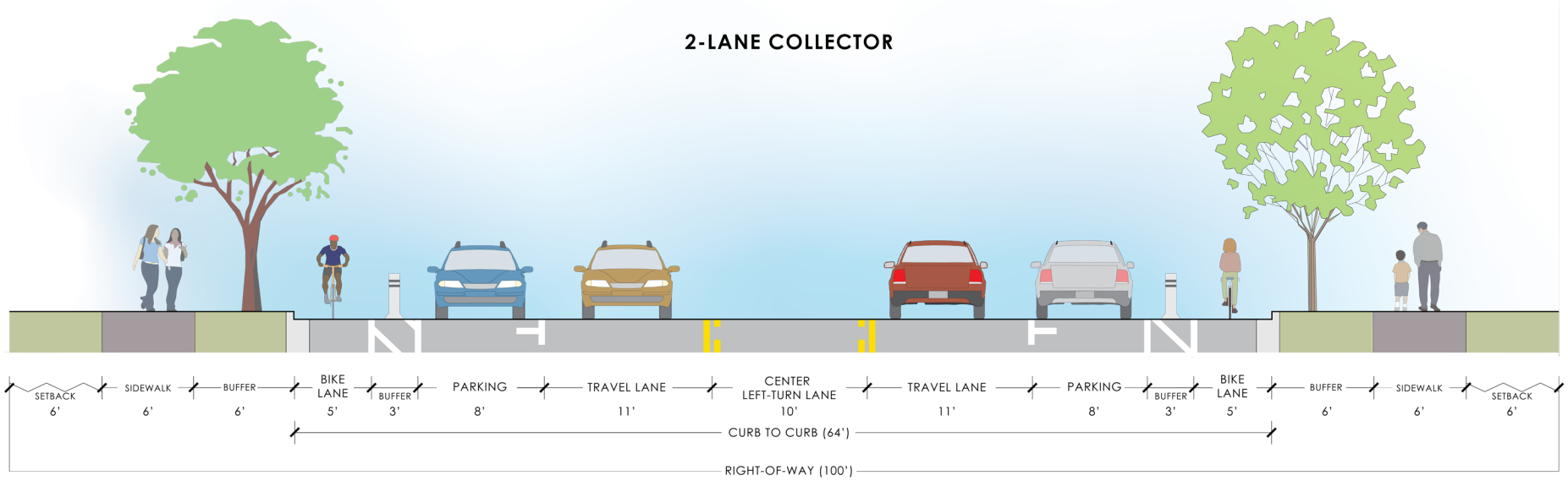
Wildomar Trail (E/W), between Bayless Road and Wildomar Trail (N/S)



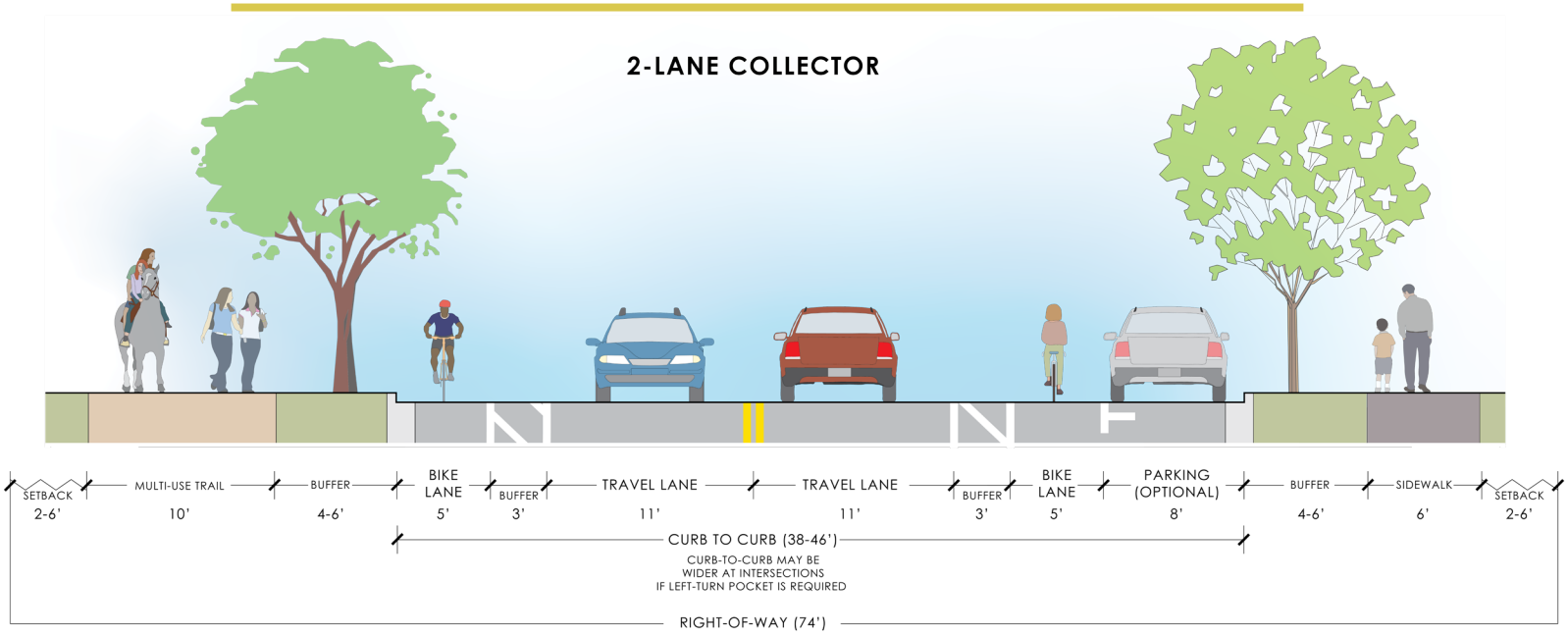
Wildomar Trail (N/S), between Wildomar Trail (E/W) and Brillante Drive

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-5 Typical Cross-Sections of Designated 2-Lane Collector Roadways, Part 3



Wildomar Trail (N/S), between Brillante Drive and Clinton Keith Road

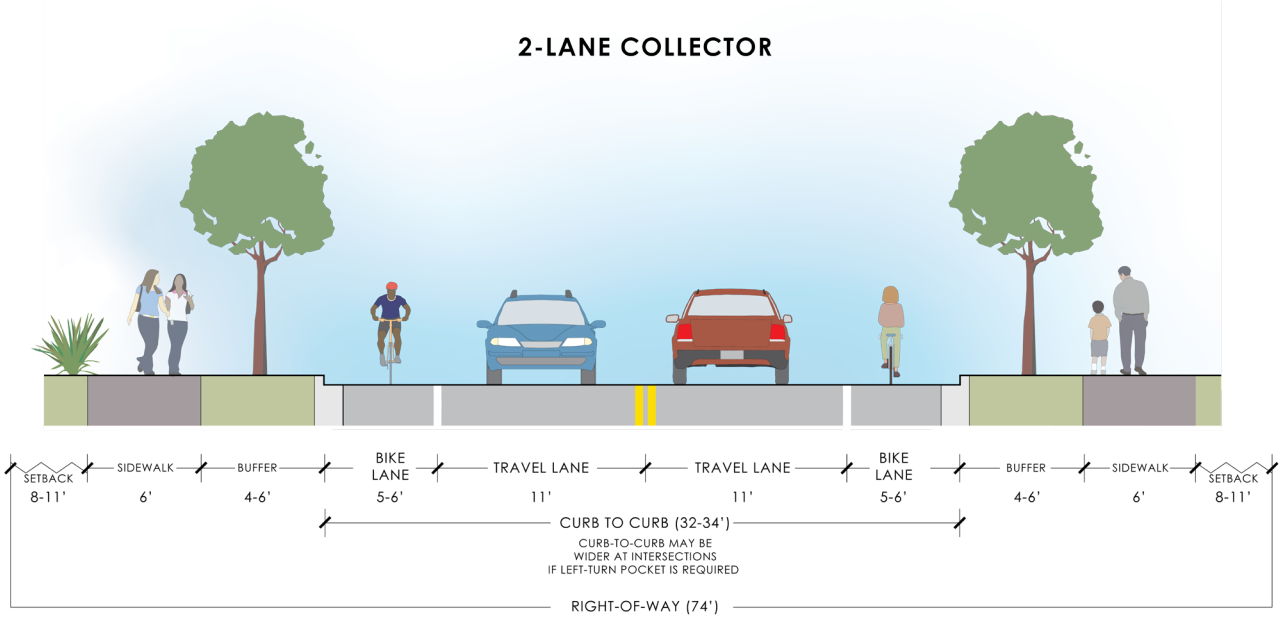


Lemon Street, between Grape Street and Gafford Road
Lost Road, between Gafford Road and City Limits
Palomar Street, between Corydon Road and Mission Trail

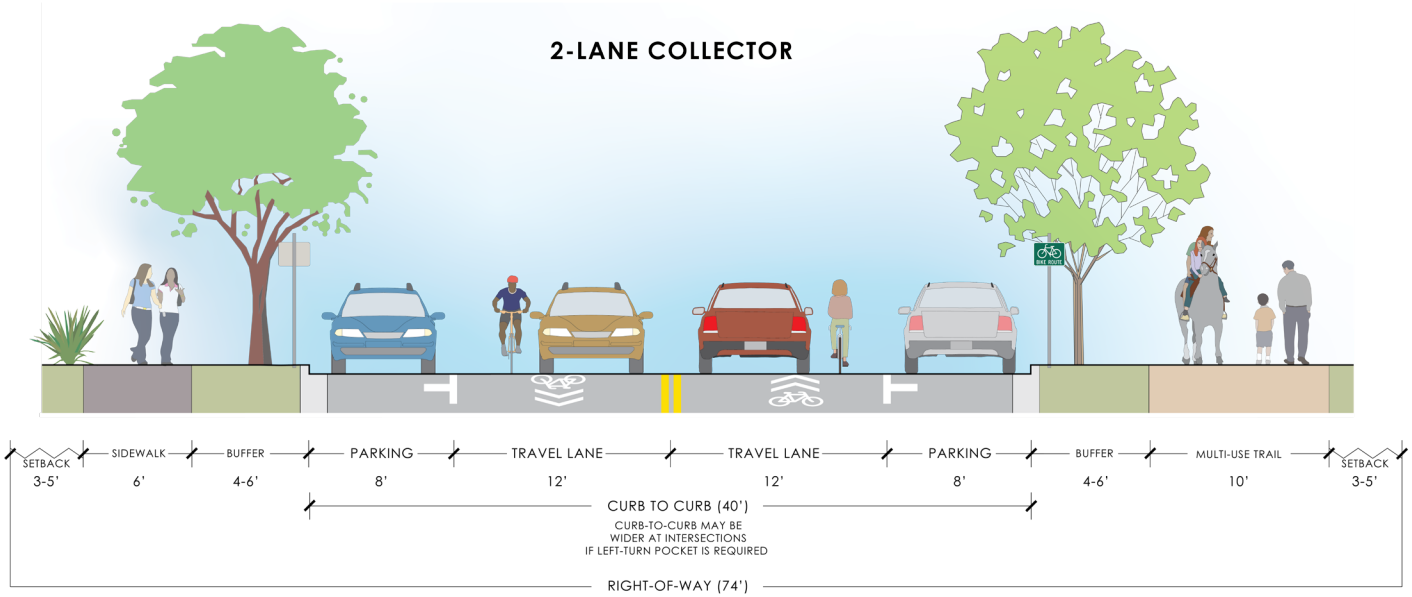
Grand Avenue, between Corydon Road and Clinton Keith Road
Orange Street, between Bundy Canyon Road and Gruwell Street
Gruwell Street, between Orange Street and Palomar Street
McVicar Street, between Palomar Street and Grand Avenue
La Estrella Street, between Susan Drive and Inland Valley Drive

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-5 Typical Cross-Sections of Designated 2-Lane Collector Roadways, Part 4



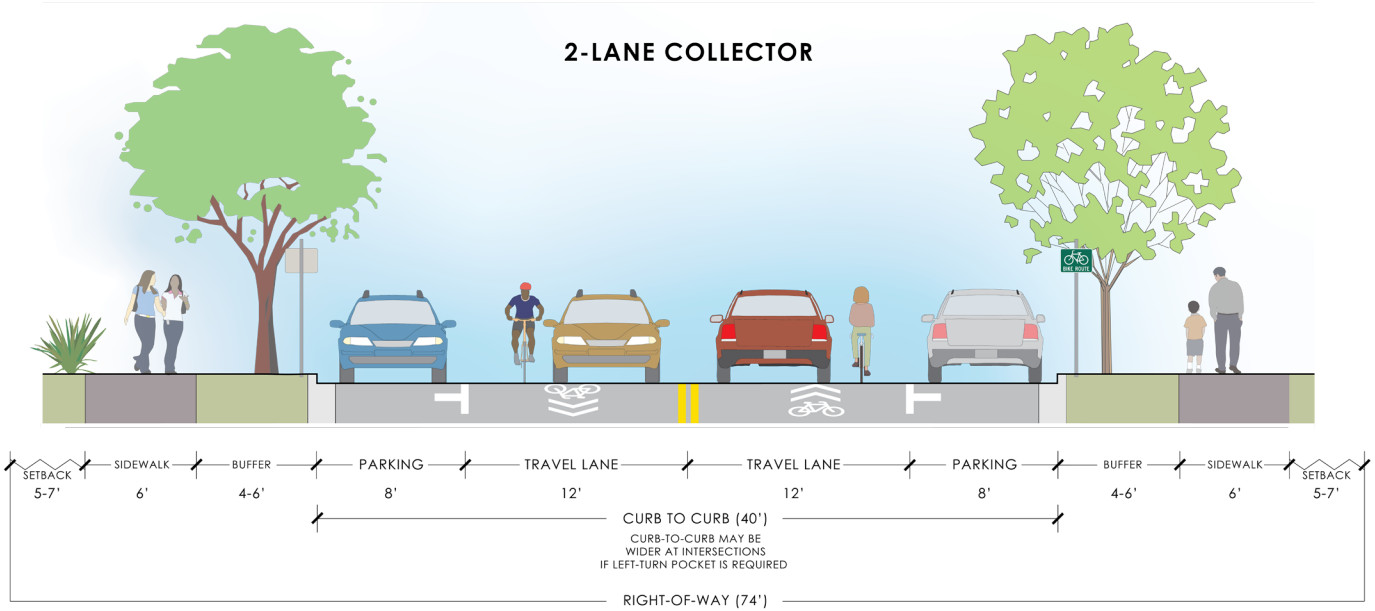
Depasquale Road, between Bayless Road and Inland Valley Drive
Stable Lanes Road, between Clinton Keith Road and Hidden Springs Road
Wyman Road, between Stable Lanes Road/Hidden Springs Road and City Limits



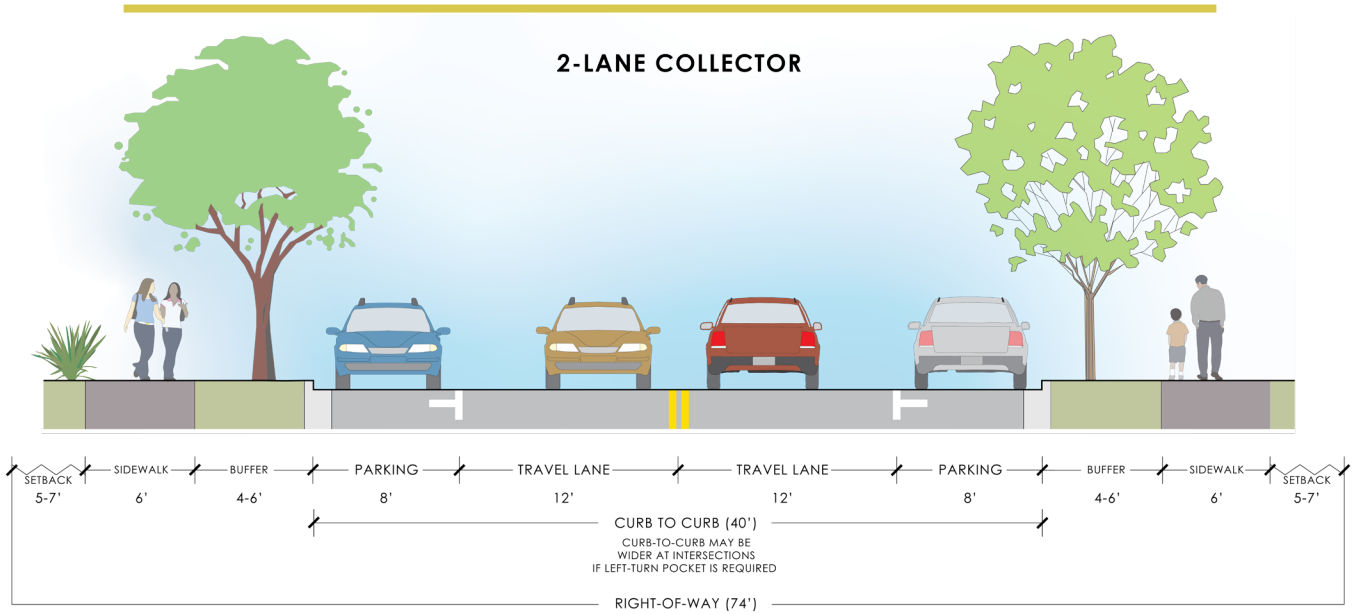
Susan Drive, between Wildomar Trail and La Estrella Street

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Figure 5-5 Typical Cross-Sections of Designated 2-Lane Collector Roadways, Part 5



Bunny Trail, between Inland Valley Drive and Elizabeth Lane
Yamas Drive, between Clinton Keith Road and Prielipp Road
Elizabeth Lane, between Clinton Keith Road and Prielipp Road



Jana Lane, between Clinton Keith Road and Prielipp Road

These Cross Sections are subject to change at the project-level at the discretion of the City Engineer.

Level of Service Criteria

In June of 2020, the Wildomar City Council adopted Resolution No. 2020 – 40 to establish Vehicle Miles Traveled (VMT) Threshold Policy Guidelines for evaluating vehicular traffic impacts as part of the City's California Environmental Quality Act (CEQA) review process. The resolution is consistent with the mandates set forth by Senate Bill 743 (SB 743), which requires public agencies to utilize VMT as the primary metric for identifying and evaluating vehicular impacts beginning July 1, 2020. The City's guidelines were based on guidance established by the Western Riverside Council of Governments (WRCOG) and adjusted to meet the needs of the City.

Although vehicular level of service (LOS) is no longer a transportation impact measure in terms of CEQA, it is still critical measure and indicator to the City of Wildomar as it continues to grow. LOS is a quantitative measure describing how well a transportation facility operates from a driver's perspective. These conditions are generally described in terms of speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS A represents optimum operating conditions from a driver's perspective, while LOS F represents the worst. Table 5.2 describes general definitions of vehicular LOS A through F.

Table 5.2 Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections have a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual (6th Edition)

As previously described in Policy 5.3, Level of Service (LOS) D shall be the threshold for all Mobility Element roadways and intersections, with the exception of Clinton Keith Road, between Hidden Springs Road and I-15 Northbound Ramps, where LOS E would be acceptable due to right-of-way constraints, unless otherwise approved by the City Engineer.

Table 5.3 presents the roadway segment capacity and LOS standards to be utilized for the City of Wildomar Mobility Element roadways.

Table 5.3 Wildomar Roadway Segment Daily Capacity (ADT) and Level of Service Standards

Roadway Functional Classification	Lanes	Level of Service		
		C or Better	D	E
6-Lane Major Arterial	6	43,100	48,500	53,900
4-Lane Major Arterial	4	28,700	32,300	35,900
4-Lane Minor Arterial	4	20,700	23,300	25,900
2-Lane Collector	2	10,400	11,700	13,000

Figure 5-6 illustrates the 2040 forecast daily traffic volumes and anticipated roadway levels of service.

A detailed Vehicular Operations Technical Report was prepared to evaluate future roadway and intersection operations, including assumed intersection geometrics. This report is provided in Appendix B.

Other Mobility Strategies

Transportation Demand Management (TDM) programs and Transportation System Management (TSM) tools help address the mobility needs of Wildomar by maximizing efficiency of services while increasing person throughput, reducing congestion and parking demand, and providing quality information to the commuting public.

Transportation Demand Management

Commute trips to work make up a majority of trips on streets and freeways, and therefore, play a role in reducing vehicle miles traveled (VMT). Throughout the SCAG region, employers offer TDM strategies and incentive programs to employees using alternative ways to get to work. This includes rideshare incentives, telecommuting and flexible work schedules, parking management, and incentives for employees who walk or bike to work. Additionally, convenient first/last mile infrastructure to fill gaps in transit access and transit priority treatments can encourage more people to use active transportation and participate in transportation options other than single occupancy vehicle trips.

Transportation System Management

Emerging technologies intended to integrate future mobility concepts and improve traffic management and operations are known TSM. The technologies employed vary widely and continue to evolve and shift how users experience the transportation system. TSM tools also has the potential to make transportation system more efficient by reducing travel times, including signal coordination, transit signal priorities, and adaptive signals. Additionally, the deployment of connected and autonomous vehicles is edging closer to reality. A potential integration of these innovations in Wildomar could include implementation of advanced analytics and high-speed communication networks to allow future connected vehicles, smartphones, and infrastructure to communicate and share real-time data.

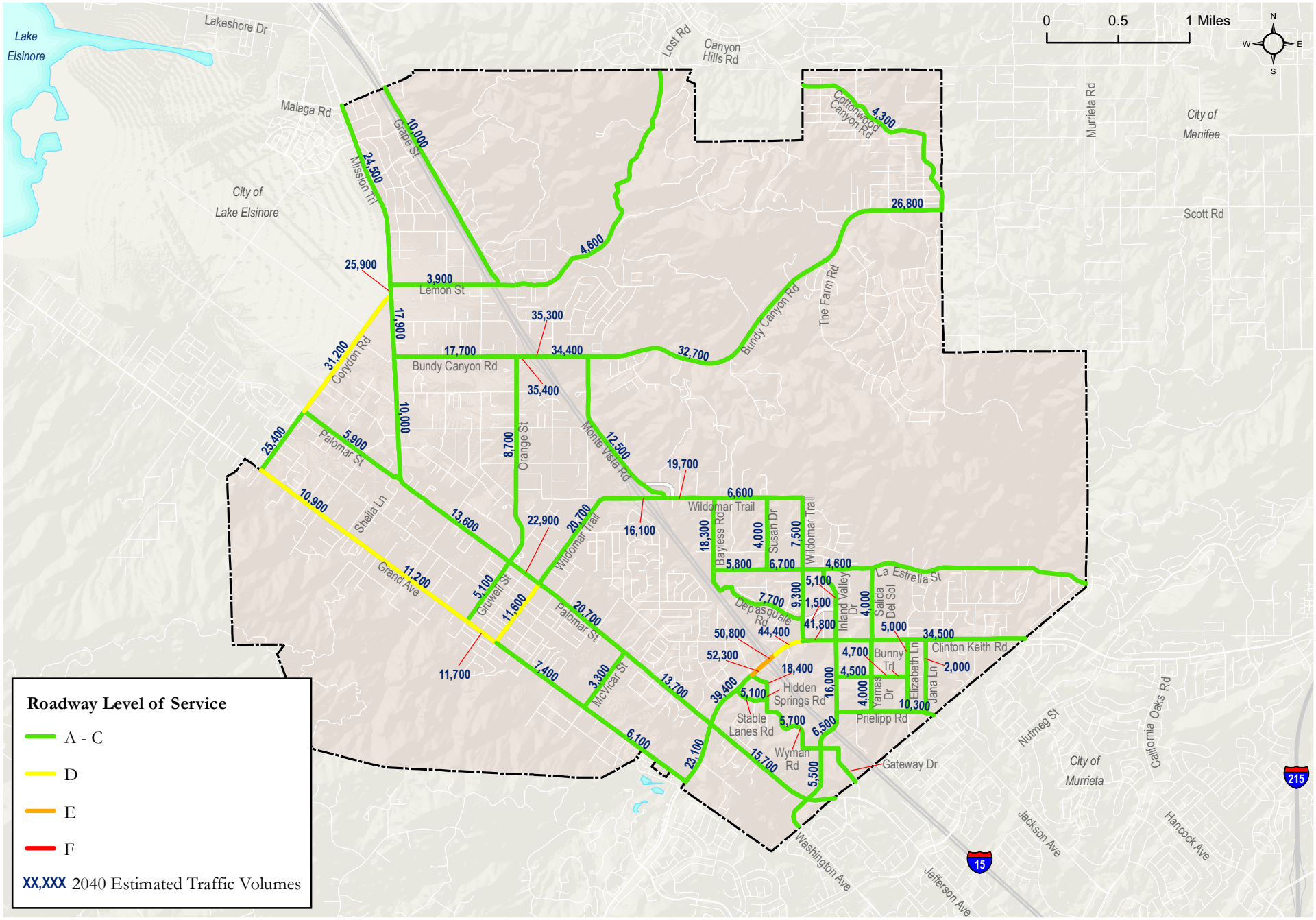



Figure 5-6 2040 Forecast Daily Traffic Volumes and Roadway LOS