Lafayette-Moraga Regional Trail | Photo Credit: EBRPD

7

TRANSPORTATION ELEMENT

The Transportation Element includes the Town's policies for roads, intersections, bike paths, and sidewalks. It also addresses issues such as public transit, traffic safety, parking, and transportation technology. While the Element addresses current issues, it also looks ahead to the Year 2040 and evaluates future travel needs.

The overarching goal of this Element is to enhance travel options, safety, and efficiency across all transportation modes—driving, transit, bicycling, and walking—while minimizing greenhouse gas emissions. The Transportation Element aims to improve vehicle travel on streets while integrating more reliable transit, expanding bicycle lanes, and increasing pedestrian facilities like sidewalks and crosswalks. It supports a transportation network that maximizes the safe movement of people using existing infrastructure. This will be accomplished through design improvements that boost efficiency and accommodate all travel modes, as well as programs that reduce the total vehicle miles traveled on the town's roads.

The goals of this Element are closely tied to the Land Use and Housing Elements, which envision additional density in Moraga's commercial areas supported by a safe, multi-modal transportation system. Linking land use, transportation, and housing can create a more sustainable community, and help focus future capital improvement projects.

7.1 MORAGA TRANSPORTATION PROFILE

OVERVIEW

Moraga is served by a transportation system that connects residents to local and regional destinations via roadways, trails, and public transportation. The Town strives to accommodate all modes of travel on its road network by providing for smooth traffic flow, connected pedestrian and bicycle facilities, and a basic level of transit service. The road network is complemented by well-maintained streetscapes, bike lanes and trails, crosswalks, and sidewalks.

Initial plans for Moraga were focused on keeping traffic moving as quickly as possible, usually through traffic signals, turning lanes, and road widening. The current vision responds to State laws which require communities to balance the needs of different modes of travel. This is particularly important in the Moraga Center and Rheem Park areas, which are envisioned as becoming more walkable neighborhoods. The updated approach also recognizes the needs of Moraga residents, including students, older adults, and people with limited mobility, as well as commuters who could benefit from alternatives to driving alone.

The broader perspective on transportation is also driven by state and regional efforts to reduce greenhouse gas emissions and promote sustainable growth. In 2008, the California legislature adopted SB 375, requiring coordination of land use, transportation, and housing decisions. Practically speaking, this means making better use of existing transportation infrastructure, focusing development in town centers, and making it easier to travel without a car.

Sidewalks and bike lanes allow Moraga Road to accommodate multiple modes of travel

MOBILITY PATTERNS IN MORAGA

Moraga's land use pattern, regional location, low densities, and limited public transit result in driving being the prevalent form of transportation. Based on 2024 Census data, about 77 percent of the town's households owned two or more cars and less than one percent did not own a car. Commute data also indicates heavy dependence on automobiles, although a growing percentage of residents are working from home in the wake of the COVID-19 pandemic. Among those who commute, 68 percent drive alone and only 12 percent use transit.

Between 2010 and 2024, the percentage of employed Moraga residents working from home increased from 7.5 percent to 31.5 percent. While this has reduced the aggregate number of vehicle miles traveled by residents, there is still a significant amount of traffic on Moraga Road and Moraga Way during the peak hours. Roughly 54 percent of the town's employed residents work outside of Moraga. In 2024, the mean commute time for Moraga residents was 31.9 minutes, an increase over 2010 (30.1 minutes). About 31 percent of the town's residents commute to jobs outside of Contra Costa County, and 15 percent commute more than an hour each way to their jobs.[1]

[1] 2024 data is from the 2018-2022 American Community Survey (ACS) and 2010 data is from the 2006-10 ACS.

Meanwhile, most of the local workforce is commuting in from other communities. The largest employer is Saint Mary's College, followed by the Moraga School District. Other large employers include retail and health care businesses, with a primarily lower- to middle-income workforce.

ROAD NETWORK

Moraga's road network consists of arterial, collector, and local streets. Arterials are major streets carrying traffic to and from freeways, typically with traffic signals at major intersections. Collectors move traffic between arterial streets and local streets, while local streets are designed for limited volume and through-traffic. In Moraga, all three street types provide direct access to individual properties.

Moraga does not have a freeway within or adjacent to its boundaries. State Route 24 is located three miles north of the town boundary and is an 8-lane facility connecting I-580 in Oakland and I-680 in Walnut Creek. There are exits at Moraga Way (Camino Pablo) in Orinda and Central Lafayette that provide access to Moraga. Secondary points of access are available through the Acalanes Road and Pleasant Hill Road exits.

Moraga's arterials are described below and are shown in **Figure 7.1**.[2]

- **Moraga Road/Canyon Road** is a north-south arterial that includes two-lane and four-lane segments. Moraga Road extends from Mt. Diablo Boulevard in Downtown Lafayette to Moraga Center. The road becomes Canyon Road south of Moraga Center and continues southwest across Moraga Creek to Pinehurst Road and unincorporated Canyon.
- **Moraga Way** extends from SR 24 in Orinda southeast to Moraga, terminating in Moraga Center. The road is two lanes through residential areas and widens to four lanes in the commercial district.
- **Saint Mary's Road** is a two-lane arterial that extends from Moraga Road past Saint Mary's College to southeastern Lafayette. The road provides access to the Reliez/Glenside corridor in the Burton Valley neighborhood, which connects to Olympic Boulevard and Pleasant Hill Road.
- **Rheem Boulevard** is a two-lane arterial that connects Glorietta Road in Orinda to Moraga Road at the Rheem Valley Shopping Center. It continues on to Saint Mary's Road.

Figure 7.1 also shows collector streets. These are typically two-lane streets with lower volumes than the arterials. They sometimes provide the primary points of access into major neighborhoods. All streets not shown in color on **Figure 7.1** are classified as local streets. The town has adopted different engineering standards for each street type. While the prevalence of cul-de-sacs and dead ends has resulted in low traffic volumes on many residential streets, it has also made it more challenging to walk between home, shopping, school, and other local destinations. This General Plan supports greater connectivity in the future, with through-streets and paths that make walking easier. Connectivity also improves emergency response and evacuation capacity.

Figure 7.2 shows average daily traffic volumes in each direction on the arterial street network based on traffic counts taken in 2022. Table 7-1 shows the typical average daily volumes in both directions on these streets. Appendix B lists the arterial and collector streets.

[2] ***Camino Pablo*** is a two-lane road connecting southern Moraga with Rancho Laguna Park. It also provides access to Camino Pablo Elementary School, Joaquin Moraga Intermediate School, and the Larch and Sanders Ranch neighborhoods. In 2021, the Town Council reclassified the road from arterial to collector. Caltrans still classifies the street as an arterial.

Figure 7.1: Circulation Diagram

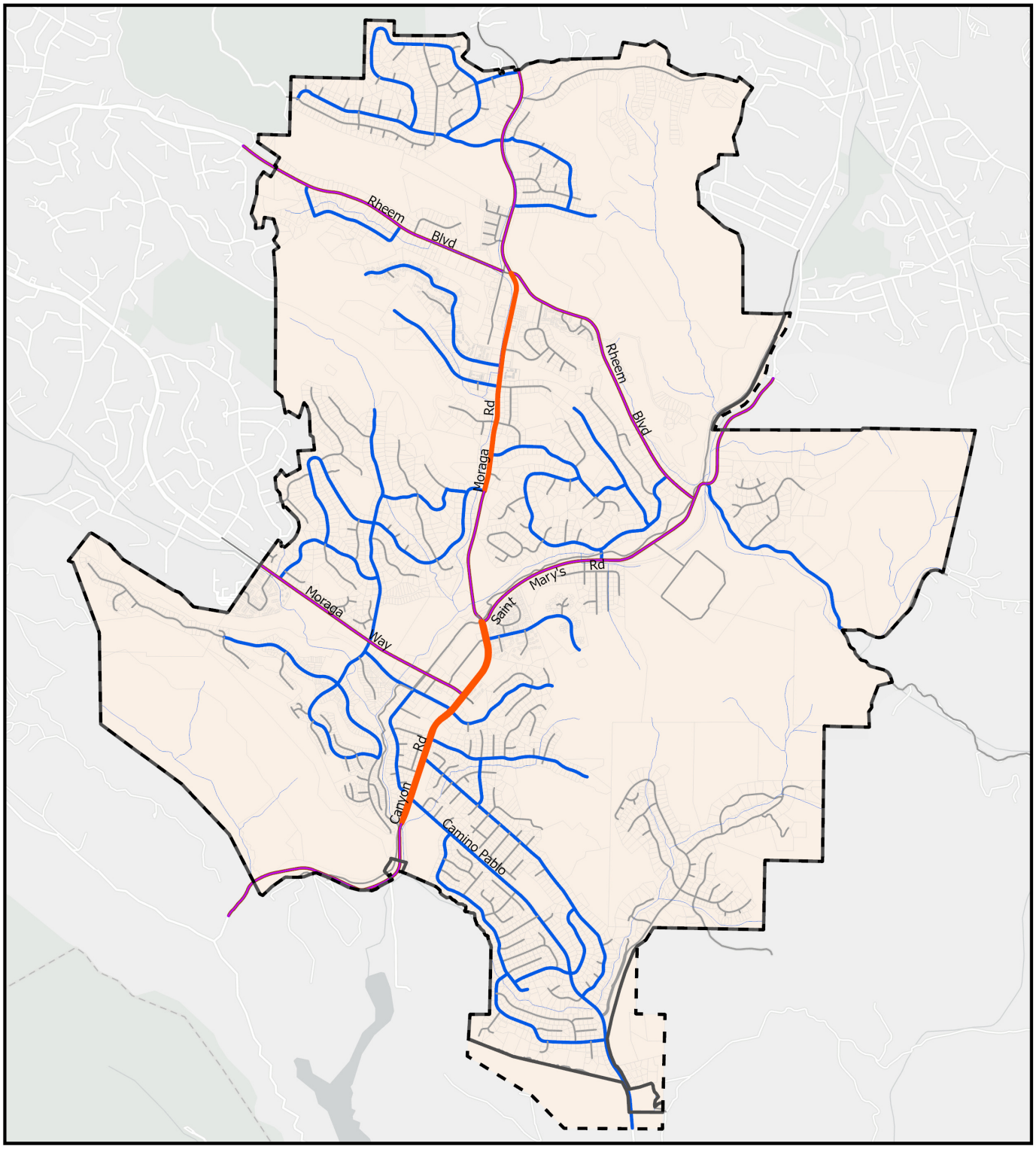
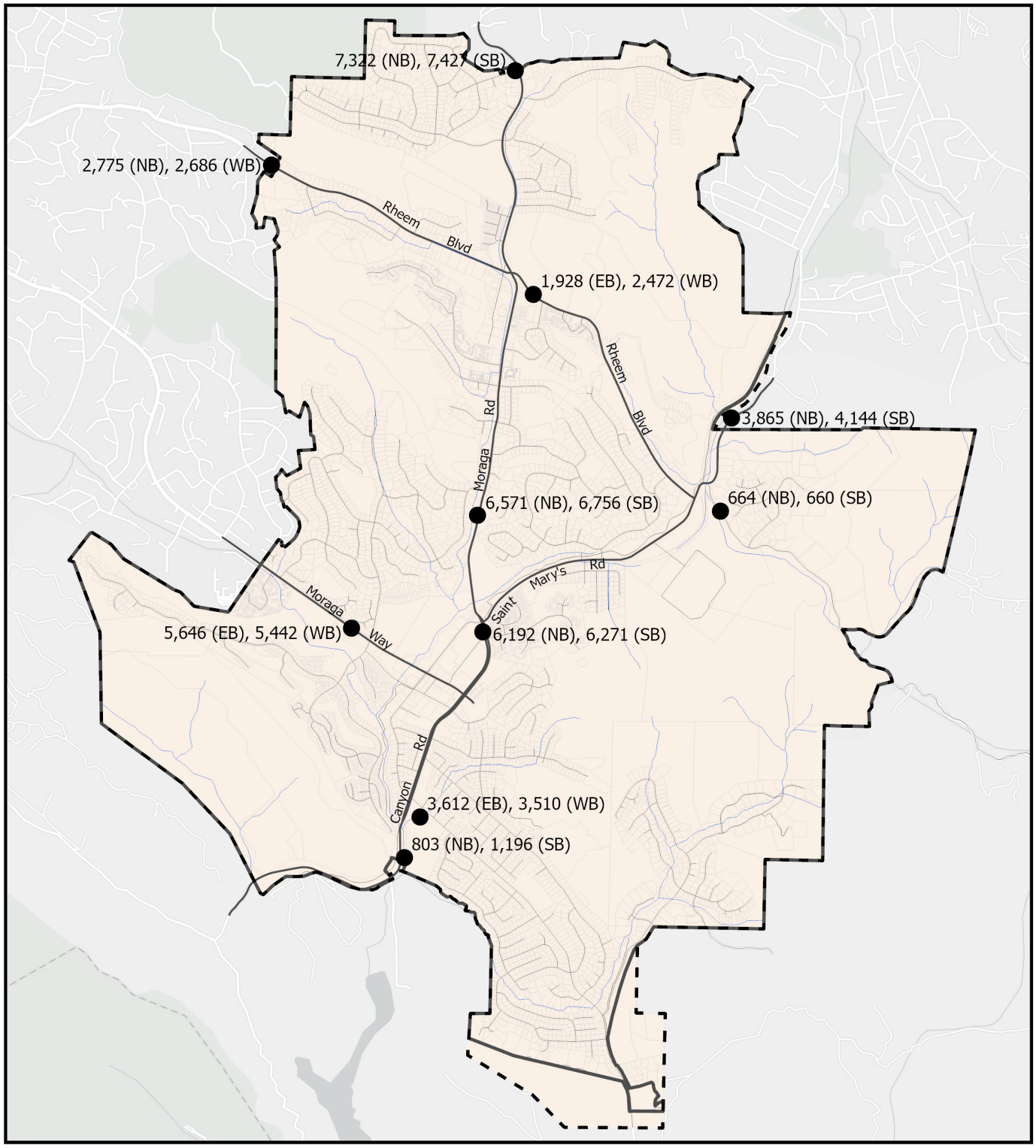


Figure 7.2: Traffic Volumes (2022)



Town Limits
Sphere of Influence
Streams
Streets
Parcels

KEY

(NB), ### (SB)

Average daily traffic (number of vehicles)

Directional flow (northbound, southbound, etc.)

Town of Moraga, California
General Plan Update

0 0.25 0.5 1 Mile

N

Table 7-1: Average Daily Traffic Volumes (2022)

Moraga Road (at Lafayette city limit)	14,749
Moraga Road (south of Corliss Dr)	13,327
Moraga Road (south of St. Mary's Rd)	12,463
Moraga Way (at Camino Ricardo)	11,088
St. Mary's Road (at Lafayette City limit)	8,009
Canyon Road (at Camino Pablo)	7,122
Rheem Boulevard (at Orinda City limit)	5,461
Rheem Boulevard (east of Moraga Road)	4,400
Canyon Road (near Valle Vista staging area)	1,999

Source: Town of Moraga (Fehr and Peers), 2022

Volumes on the town's arterials range from about 2,000 trips per day on Canyon Road southwest of the town to almost 15,000 daily trips on Moraga Road at the Lafayette border. Moraga Road is the town's busiest arterial, with volumes of 12,000-14,000 vehicles per day between Moraga Center and Rheem Center. Volumes on Moraga Way between Moraga Center and the Orinda border are about 11,000 vehicles per day. Rheem Boulevard and Saint Mary's Road have much lower volumes.

Much of the traffic on Moraga Road and Moraga Way is going to and from Highway 24. Moraga works in tandem with the Contra Costa Transportation Authority, Orinda, and Lafayette to develop special plans for these routes to manage congestion and ensure their functionality. Both roads may see increases in volume when there are incidents on Highway 24, occasionally causing traffic delays in Moraga. Both roads also serve high schools, shopping centers, and other traffic generating uses that make them vulnerable to congestion. These two routes are critically important to Moraga, especially in an emergency or evacuation scenario. They provide the primary means of ingress and egress to the town.

LEVEL OF SERVICE (LOS) AND VEHICLE MILES TRAVELED (VMT)

Historically, and consistent with standard practice in most cities and towns, the performance of streets and intersections in Moraga has been expressed through a measurement called "Level of Service" (LOS). In traffic engineering practice, streets and intersections are classified into six "levels of service" reflecting the degree of traffic congestion. Like a lettered report card, streets are graded on a scale from "A" to "F." The grades are based on the volume of vehicles passing through an intersection or along a street segment relative to the design capacity of that street or intersection (this is also called the volume to capacity ratio, or V/C ratio). LOS "A" indicates free flowing traffic with no delays. LOS "F" indicates jammed conditions, with long delays.

In the past, Moraga has used LOS "C" as the benchmark for defining the adequacy of a road's performance during the peak hour. Roads in the Town generally meet this standard today. CCTA has adopted different standards for roads designated as "Routes of Regional Significance" which recognize the higher volumes and more frequent daily congestion on such roadways. Programs in the Lamorinda Action Plan (discussed later in this chapter) are focused on managing this congestion. The Town is also working with Lafayette, Orinda, the Moraga-Orinda Fire District, and CCTA to address evacuation needs, trail improvements, and safety issues on a regionwide basis.[3]

[3] The Draft 2023 Lamorinda Action Plan designates Moraga Road, Moraga Way, and Saint Mary's Road as Routes of Regional Significance.

Moraga Way at Camino Ricardo

In 2013, the California legislature passed SB 743, which disallowed the use of LOS standards in environmental review (CEQA) documents. The State requirement was a response to unintended consequences of relying on LOS for decades, namely the continuous widening of roadways and expansion of road capacity. Expanding the road network—in effect making it easier to drive—made it harder to shift trips to public transit, cycling, and walking, leading to urban sprawl and conflicting with the State's climate change goals.

Jurisdictions are now required to evaluate transportation impacts using a metric called Vehicle Miles Traveled (VMT). VMT is explained in the text box on the next page. It is based on the amount of driving a project will generate, rather than the amount of congestion it will create. VMT impacts are addressed by identifying alternatives to driving, rather than increasing road capacity. Moraga adopted VMT standards in January 2023, thereby complying with SB 743.

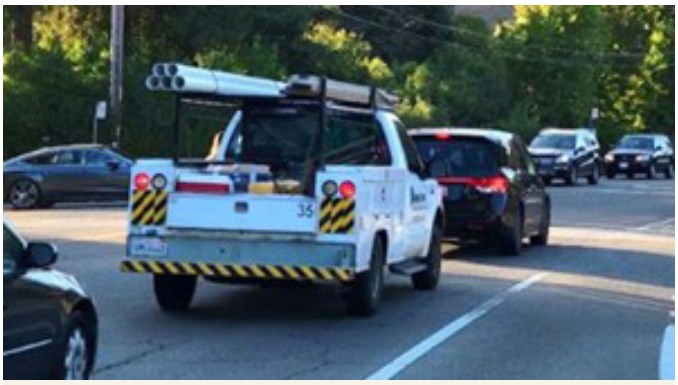
With the shift to VMT, Moraga's long-range planning policies must identify strategies for reducing the number and length of vehicle trips made by Moraga residents and workers on a typical day. These strategies include providing more goods and services in the town's commercial centers to reduce the need to drive out of town, supporting telecommuting and working from home (including local services that make this more feasible), and providing more housing for the local workforce. VMT reduction strategies also include improving public transit, and making walking and bicycling (including e-bikes) a more practical alternative to driving. VMT reduction is also achieved by placing new housing closer to shopping centers and transit, rather than in remote areas where driving is a necessity.

Even with these policies, traffic volumes in Moraga are expected to increase by 2040 as the town adds more homes and jobs. A traffic analysis conducted as part of the 2023-2031 Housing Element found that average daily traffic (ADT) volumes on Moraga Road at the Lafayette border could increase by about 10 percent over current volumes by 2040. ADT on Moraga Way (west of Camino Ricardo) and Saint Mary's Road (at the

Lafayette border) could increase by about 30 percent over current volumes by 2040.

In the 1980s, transportation plans for Moraga envisioned significant changes to the road network, including a new thoroughfare from Orinda's Gateway Valley (Wilder) to Moraga and an extension of Bollinger Canyon Road to San Ramon. These proposed road alignments were largely rescinded in the 1990s due to their potential for environmental and growth-inducing impacts. While improvements of this magnitude are no longer planned, there are still opportunities to address the potential for increased congestion. These include traffic signal improvements, turning lanes, and other intersection and road segment improvements to keep traffic moving safely and smoothly.

One such improvement is the extension of School Street between Moraga Way and Moraga Road. School Street currently ends about 800 feet south of Moraga Road. The extension would align with the existing "T" intersection at Saint Mary's Road and Moraga Road and provide circulation through the Moraga Center commercial area. Other planned improvements are the installation of a traffic signal at Rheem and Saint Mary's Road and potential improvements to the Bollinger Canyon Road/ Saint Mary's Road intersection.



What is VMT?

Vehicle Miles Traveled—or VMT—measures the number of miles traveled by all vehicles in a defined area over a given period of time. It is calculated by adding up the miles driven by all drivers in a city or town over the course of a day, a year, or other period of time. Reducing VMT is beneficial because it reduces the greenhouse gas vehicle emissions that cause global climate change.

VMT is calculated using anonymous data pulled from smart phones and devices with GPS. The data is used to generate maps evaluating the distance, frequency, origin, and destination of trips. Algorithms can be used to predict the VMT that will be generated by a new development project.

VMT is not a measurement of congestion, nor does it measure the effect of a project on nearby intersections or roads. It addresses the impacts of a project at a regional scale, based on the amount of driving it will induce. When development is placed in an urban location next to mass transit, VMT is typically low. When it is placed in low-density or rural areas, it is higher since residents are dependent on their cars and drive longer distances to work, shopping, and school.

The Metropolitan Transportation Commission reported that Bay Area residents collectively drove 182 million miles per day in 2019, or about 23 miles per person per day. This dropped to 18 miles per day in 2020 due to the COVID-19 pandemic, but has increased since then. The State Office of Planning and Research has suggested that new projects should strive for a per capita VMT that is 15 percent below the regional average. This can be achieved by locating new development in places where it is more feasible to walk, bicycle, or use transit for daily trips.

MAJOR CIRCULATION ISSUES

Currently, Moraga experiences congestion on Moraga Way and Moraga Road associated with commuting, school traffic, special events, and traffic incidents on Highway 24. In most cases, adding lanes to these two arterials is not feasible. The Town is instead working to optimize their capacity through "smart" signals that use real time demand data rather than cycling on a fixed time interval. Other strategies to manage demand and direct peak-hour and regional "cut-through" traffic are regularly evaluated. These strategies must address changes in travel demand associated with lifestyle and technology, such as remote work, on-line delivery, and transportation network companies such as Uber and Lyft. They also must consider evacuation capacity and emergency preparedness needs.

School campus congestion is an ongoing issue in Moraga, especially during drop-off and pick-up times. Measures to manage congestion are tailored to each campus based on the configuration of road, driveway, and parking areas. Programs such as Safe Routes to School (discussed later in this Element) can encourage walking and bicycling, reducing vehicle trips. There is also a fee-based school bus program serving the Lamorinda communities run by a joint powers authority comprised of Lafayette, Orinda, Moraga, and the Acalanes Union School District. Parents purchase annual bus passes for particular routes serving elementary schools in the three communities. Schools may also use transportation demand management (TDM) measures such as carpooling to reduce congestion.

Moraga is also working to make its travel system more multi-modal, particularly for pedestrians, bicyclists, and transit users. Multi-modal design promotes sustainability and provides more options for those without access to a vehicle. It also supports transportation safety, since it includes design features that support safer walking and cycling. Goal T-3 of this Element focuses on the concept of "complete streets" and the importance of designing streets for multiple travel modes. These issues are addressed in the following sections of this Element.

PEDESTRIAN AND BICYCLE NETWORK

Walking and bicycling are healthy, environmentally sustainable modes of travel. They promote physical activity, improve the environment, and contribute to neighborhood livability. While walking and bicycling have traditionally been forms of recreation in Moraga, they may also be a viable means of transportation for short trips to

School bus at Rheem Elementary

school, shopping, work, and other destinations. Presently the town lacks a comprehensive and connected network of paths and bikeways. While most of the arterial roads in town have paved shoulders, conditions for pedestrians and cyclists are highly variable.

The Town adopted a Bicycle and Pedestrian Master Plan (Walk | Bike Moraga) in 2016 to make walking and bicycling safer and easier. The Walk | Bike Plan included physical projects and programs to address gaps in the existing system and make walking and bicycling safer and more convenient. It responded to community needs, as determined through surveys, workshops, and a segment-by-segment analysis of the existing system. Moraga General Plan 2040 recommends a comprehensive update of the Walk | Bike Plan, providing an updated vision, strategies, and implementation program.

Pedestrian Network

Sidewalks in Moraga are sometimes discontinuous, narrow, or lack curb cuts. This is acceptable in some residential areas given Moraga's lower densities, but it is a potential safety hazard in the Moraga Center and Rheem Park areas, around schools, and in other areas where high-speed vehicle traffic mixes with pedestrian traffic.

The Walk | Bike Plan acknowledges that it would be prohibitively expensive and even inappropriate to build sidewalks on all streets that lack them. Instead, it recommends sidewalks on about a dozen strategic high-priority roadway segments. These segments total 3.1 miles, with about half on Moraga Road. Many of the priority projects would serve schools or improve access to the town's shopping areas. In addition to sidewalk construction, the Plan calls for improvements such as clearing overgrown vegetation, replacing concrete, and relocating signposts.

The Walk | Bike Plan further calls for intersection improvements where there are long pedestrian crossing distances and fast-moving traffic. These projects are focused on arterial streets and include recommend-ations such as textured pavement, pedestrian beacons, flashing digital speed signs, and pedestrian refuges on center medians. Street lighting improvements also are identified.

Bikes share the right of way with vehicles at St Mary's Road and Moraga Road

Bicycle Network

Figure 7.3 shows the recommended bicycle network, including segments proposed for future improvement. This network includes bike lanes, which are dedicated striped lanes within the right-of-way, and bike routes, in which bicycles use vehicle lanes. The bike routes tend to be on lower-volume streets where it is safer to mix vehicle and bicycle traffic. They are sometimes identified with "sharrows," which are pavement markings to alert drivers to the potential presence of cyclists. The text box on the following page highlights the different types of bicycle facilities in a typical network.

In addition to these facilities, the Town's bicycle network includes an off-road path operated by the East Bay Regional Park District called the

Lafayette-Moraga Trail. The trail is 7.65 miles long and connects the Valle Vista staging area on Canyon Road with a staging area near the intersection of Olympic Boulevard and Pleasant Hill Road in Lafayette. It was established largely along a former railroad and utility right-of-way in cooperation with the City of Lafayette, Central Contra Costa Sanitary District, EBMUD, and PG&E. The Town is prioritizing improvement of regional trail connections through planning, phasing, and funding opportunities.

Several intersections have been highlighted as presenting challenges for cyclists, including:

- Moraga Road at Rheem Boulevard
- Moraga Road at Corliss Drive
- Moraga Road at Saint Mary's Road
- Canyon Road at Country Club Drive
- Saint Mary's Road at Rheem Boulevard

The Walk | Bike Plan includes a menu of potential improvements to be considered for these and other locations. It includes recommendations for bicycle parking improvements, and longer-term projects such as widening the paved shoulders on various streets to accommodate stenciled bike lanes.

Moraga has also identified programmatic measures to support walking and bicycling in the town. These include Safe Routes to School (discussed later in this chapter), better signage, more bicycle-related events, traffic safety and education, and enhanced enforcement. Potential funding sources for these programs, as well as capital improvements, have been identified. The Walk | Bike Plan is intended to have a 15-year horizon, with a Plan update by 2031.

Bicycle Facility Types

Bicycle plans typically identify four "classes" of facilities, as follows:

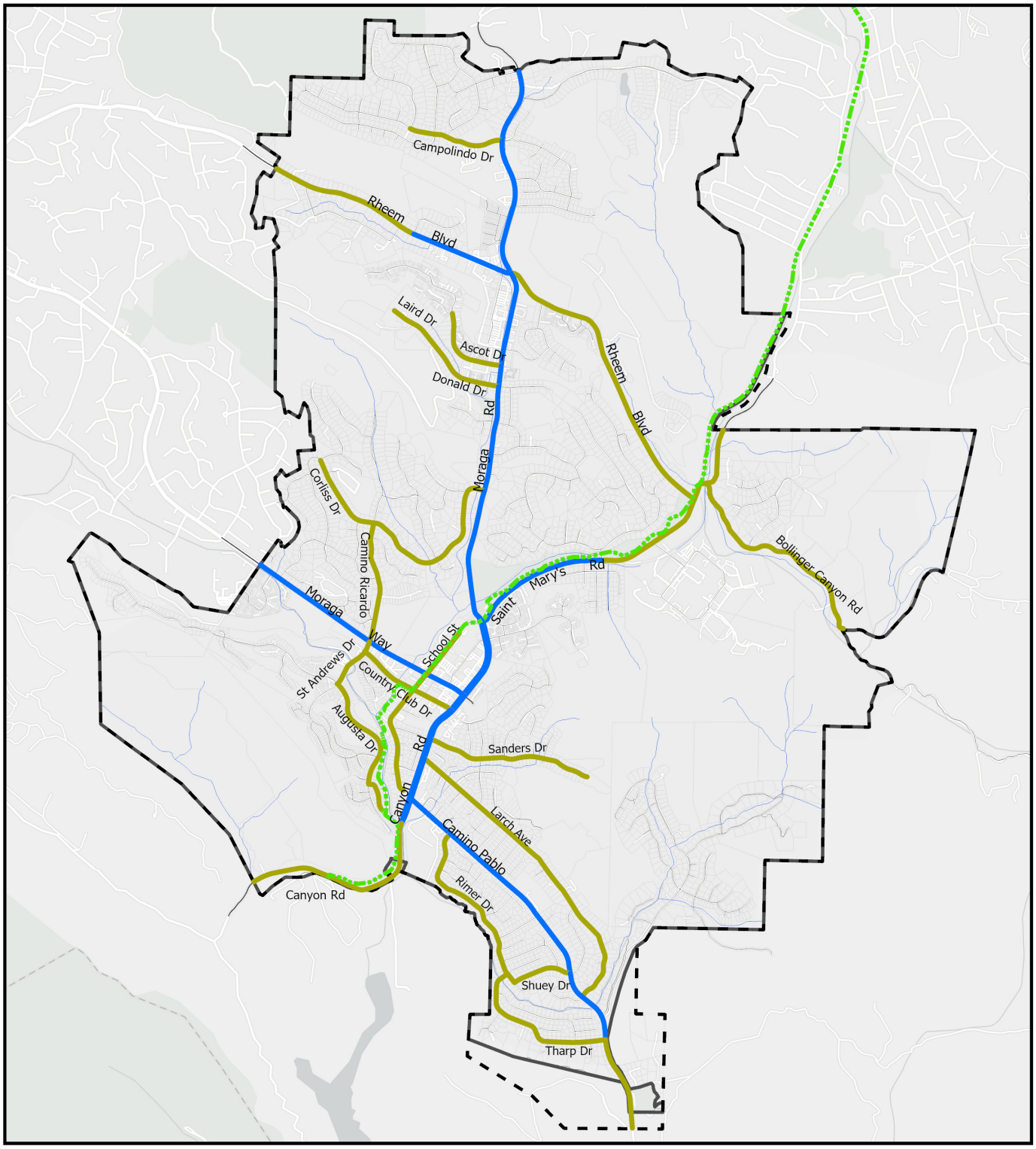
Class I bicycle facilities consist of completely separate rights of way and are designed for the exclusive use of bicyclists and pedestrians. These facilities provide a safe environment for younger or less experienced cyclists who do not want to ride alongside traffic. An example is the Lafayette-Moraga Regional Trail.

Class II bicycle facilities provide a restricted right-of-way and are designated for use by bicyclists with a striped lane on the street. Bicycle lanes are generally five feet wide. Examples include Country Club Drive and parts of Moraga Road.

Class III bicycle facilities require bicyclists to share the right-of-way with motor vehicles. These routes may be designated by signs or by "sharrow" markings on the pavement that indicate that bicycles may use the travel lanes. Examples in Moraga include Rheem Boulevard, pictured here.

Class IV bicycle facilities are dedicated bike lanes separated from vehicle traffic by bollards, raised medians, or dividers. They are located on the curb side of parking lanes, offering a higher level of protection to cyclists. There are no Class IV facilities in Moraga at this time.

Figure 7.3: Bicycle Network



TRANSPORTATION SYSTEMS MANAGEMENT (TSM)

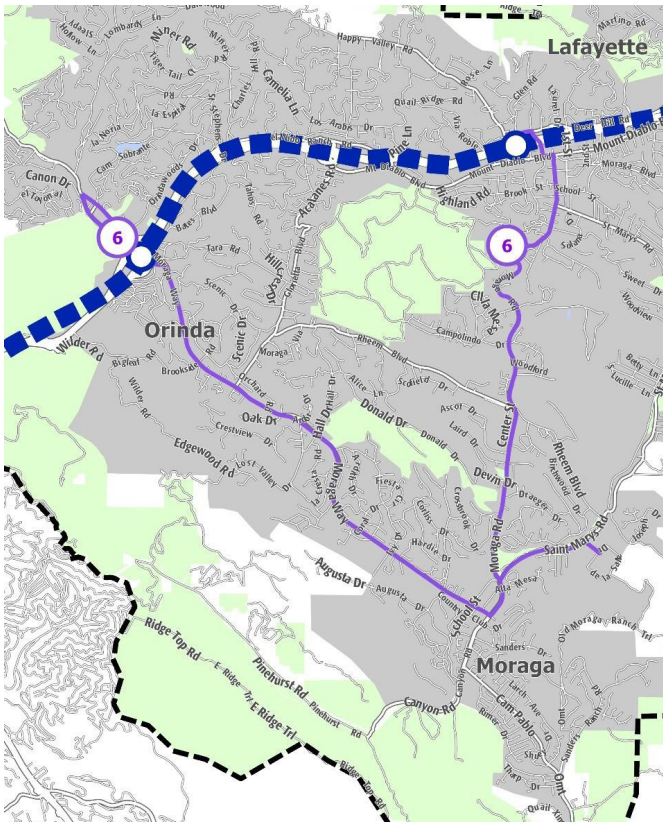
The Town of Moraga has taken steps to make more efficient use of its transportation system and to manage travel demand rather than simply increasing road capacity in response to growth. These steps are collectively referred to as Transportation Systems Management (TSM) measures. As required by the County Growth Management Act, Moraga has had a TSM Ordinance since the 1990s. The current Ordinance (Chapter12.16 of the Municipal Code) relies on voluntary measures to reduce peak hour traffic rather than mandatory requirements. TSM is also an important part of the Southwest Area Transportation Committee's Action Plan and other transportation plans for the Lamorinda area.

The Town's TSM Ordinance promotes transit, ridesharing, bicycling, walking, flexible work hours, telecommuting and other alternatives to solo driving. Many of these strategies depend upon the participation of private sector employers such as Saint Mary's College and are implemented in partnership with other jurisdictions and transportation planning agencies.

PUBLIC TRANSIT SERVICE

Local bus service is provided to Moraga by Central Contra Costa Transit Authority (CCCTA), also known as "County Connection." At the time the 2040 General Plan was adopted, there was a single route connecting Orinda BART to Moraga Center, continuing to Saint Mary's College, then returning to Moraga Center and heading north to the Rheem Valley Shopping Center and onward to the Lafayette BART station. Headways were 30 minutes during the peak hour, one-hour in the off-peak hour, and 80 minutes on weekends. There was no service between 8 PM and 6:15 AM on weekdays or between 5 PM and 10 AM on weekends.

Due to limited funding for transit, it is crucial that solutions are practical and aligned with local needs. In recent years, County Connection service has decreased service to Moraga, while operating costs have increased. Addressing these trends requires innovative approaches that rethink traditional notions of "public transportation." For example, the idea of a public/private shuttle connecting Saint Mary's College, Moraga's commercial areas, and the Lafayette and Orinda BART stations could be revisited.



Transit service to Moraga as of 2024. County Connection Line 6 provides service to the two BART stations. | Source: 2023 Lamorinda Action Plan

As technology advances, new "demand-responsive" services might complement the existing fixed-route County Connection service. Paratransit services (such as the Lamorinda Spirit Van for seniors) can also supplement traditional buses. Making transit more appealing also involves designing well-lit, comfortable bus waiting areas with real-time arrival and departure

information. Service reliability, comfort, and cost are critical factors to increasing ridership.

The Town will continue to advocate for service improvements and additional resources to make transit a more viable alternative to driving. General Plan 2040 focuses future residential development in Moraga Center and Rheem Park, where increased transit service is most practical and cost-effective. Growth in population and employment in these areas could ultimately boost ridership—and service feasibility.

LOCAL ROADWAY SAFETY

According to Moraga's 2022 Local Roadway Safety Plan (LRSP), there were 190 vehicle collisions in the town between 2015 and 2019, including 60 resulting in injuries. Most occurred at intersections along the arterial street network. About 15 percent of these collisions involved a bicycle or pedestrian, while 46 percent involved another vehicle and 16 percent involved a parked vehicle. The Town's LRSP provides a comprehensive analysis of collision locations and circumstances and identifies specific physical improvements to reduce hazards. These include larger stop signs, modified signal phasing at intersections, flashing beacons, improved crosswalks, and nighttime visibility improvements (such as reflectors).

At the Countywide level, CCTA has developed a Transportation Safety Policy and Implementation guide known as "Vision Zero." Vision Zero is particularly focused on reducing pedestrian and bicycle collisions, both of which have been trending upward over the past several years. Increased safety is achieved by redesigning streets to improve pedestrian and bicycle safety, slow down traffic, reduce lane widths, and develop visual cues that allow different modes to share the same space. These cues include more visible bike lanes and more crossing controls and warnings at crosswalks. Safety may also be improved through "road diets" that narrow the portion of the street used for vehicles, while increasing pedestrian and bicycle space.

The countywide plan recommends that cities and towns in Contra Costa adopt policies to reduce transportation- related injuries and fatalities by implementing best practices or street design. Goal T-1 in the Moraga 2040 General Plan expresses such a commitment.

Improving the safety of children walking and bicycling to school was ranked as a top priority in General Plan 2040 community workshops. Safety improvements are being implemented on Corliss Drive around Los Perales Elementary School and along Moraga Road in the vicinity of Campolindo High School. Typical recommendations include reconstructing sidewalks, improving crosswalk markings, and reducing line of sight obstructions. A similar effort has been underway along Moraga Road for several years, modifying the current roadway design to create a protected multi-use path.

REGIONAL AND SUB-REGIONAL TRANSPORTATION PLANNING

Because of Moraga's location, coordinated transportation planning with Lafayette, Orinda, and Contra Costa County is essential. The Town is an active member of the Contra Costa Transportation Authority (CCTA) and the Southwest Area Transportation Committee (SWAT). SWAT is composed of elected representatives and technical staff from the Cities of Lafayette, Orinda, and San Ramon; the Towns of Danville and Moraga; and the unincorporated area of Southern Contra Costa County. The Town is also a member of the Lamorinda Program Management Committee and the Lamorinda Fee and Financing Authority.

CCTA implements Contra Costa County Measure J, a one-half cent countywide sales tax that is collected for transportation improvements within the county. Funds collected through Measure J must be spent on projects and programs that

are specifically itemized in CCTA's Transportation Expenditure Plan. About 18 percent of these funds are returned to local jurisdictions in the county for street maintenance and improvements. SWAT also provides funding through a Measure J set-aside known as "28c," a lump-sum allocation for miscellaneous projects in the SWAT area.

CCTA also develops the Countywide Transportation Plan. Moraga participates in the development of this Plan, which is intended to carry out the following countywide goals:

- Support the efficient, safe, and reliable movement of people and goods using all available travel modes
- Manage growth to sustain Contra Costa's economy, preserve its environment, and support its communities
- Expand safe, convenient and affordable alternatives to the single-occupant vehicle
- Maintain the transportation system
- Continue to invest wisely to maximize the benefits of available funding

The CTP incorporates five sub-regional Action Plans for Routes of Regional Significance ("Action Plans"). This is one of the primary vehicles for implementing achieving the Measure J Growth Management Program's goal of reducing the cumulative impacts of growth. Each Action Plan includes assumptions about future growth, multi-modal transportation objectives, and specific actions to be implemented by each jurisdiction. The Lamorinda Action Plan covers Lafayette, Moraga, and Orinda.

Like the General Plan, the Lamorinda Action Plan is periodically updated to reflect changing conditions and forecasts. In Moraga, the most recent Plan's focus is on Moraga Road, Moraga Way, and Saint Mary's Road, as well as the Lafayette-Moraga Trail. The Action Plan addresses public transit and active transportation modes as well as vehicle flow in these corridors. It identifies future operational improvements (protected turn lanes, synchronized signal timing, traffic calming, etc.) to improve roadway efficiency.

> ***"Lamorinda's existing transportation network was constructed primarily with a focus on the efficient movement of vehicles. However, innovation and technology; prioritization of the movement of people (most efficiently transported via transit); considerations regarding the climate and safety; and an increased interest in non-vehicular modes of transportation have made possible a shift to a more dynamic future."***
>
> ***— Draft Lamorinda Action Plan, 2023***

Bike path crossing Moraga Road at Saint Mary's Road

7.2 TRANSPORTATION GOALS AND POLICIES

GOAL T-1: SAFETY

IMPROVE THE SAFETY OF ALL MODES OF TRAVEL.

Policy T-1.1: Vision Zero

Support the countywide goal of eliminating fatal and serious injury collisions on all roads in Contra Costa County. Prioritize projects that achieve this goal.

Policy T-1.2: Local Roadway Safety

Implement local roadway safety measures that reduce collisions, address road hazards, improve safety for all travelers, and improve emergency response capacity. Consistent with Moraga's Local Roadway Safety Plan, these measures should focus on intersections with the highest collision rates, as well as education on rules of the road and targeted enforcement of traffic safety laws.

Policy T-1.3: School Traffic Safety

Work with the Moraga Union School District and Acalanes Union High School District to reduce school-related congestion and implement programs that facilitate safer walking and cycling to schools. This should include Safe Routes to School initiatives as well as programs to manage student pick-up and drop-off times and locations.

Policy T-1.4: Traffic Calming

Implement measures to reduce speeding and improve safety on residential streets. Examples of such measures include stop signs, reduced speed limits, digital speed indicators, curb extensions, and other physical changes that slow traffic on residential streets. All proposed traffic calming improvements should be reviewed by the Moraga Orinda Fire District during the design phase for consistency with the Fire Code and emergency vehicle response impacts.

Policy T-1.5: Reducing Road Hazards

Regularly trim vegetation in Town rights-of-way to minimize road hazards and require homeowners to maintain vegetation in a manner that avoids potential sight-line obstructions. Ensure that parked recreational vehicles, trailers, fences, utilities, and other structures do not impact road safety.

Policy T-1.6: Collision Data

Regularly monitor and evaluate road safety and collision data, as well as the effectiveness of measures being implemented by the Town to reduce road hazards. Use the data to update road safety measures and achieve a safer, more efficient transportation system.

Safe Routes to School

Safe Routes to School (SRTS) is a national public health initiative designed to encourage more children to walk or bicycle to and from school. The program was formed and funded at a national level in 2005 and encourages community-based solutions to eliminate safety risks around primary and secondary schools. SRTS efforts typically involve a combination of education, engineering, and enforcement activities, including programs as well as capital improvements. SRTS programs have been found to significantly increase the number of children walking or cycling to school, while reducing the number of injuries.

GOAL T-2: SUSTAINABLE TRANSPORTATION

CREATE A MORE SUSTAINABLE TRANSPORTATION SYSTEM THAT REDUCES GREENHOUSE GAS EMISSIONS, IMPROVES AIR QUALITY, AND LESSENS ENVIRONMENTAL IMPACTS.

Policy T-2.1: Use of VMT in Environmental Review

Maintain local standards for Vehicle Miles Traveled (VMT) that are consistent with County and State standards and support the goal of reducing greenhouse gas emissions. Apply these standards as part of the environmental review process as required by CEQA.

Policy T-2.2: Transportation and Land Use

Support land use decisions that reduce the number and length of trips that are made in single passenger vehicles. This includes locating higher-density housing, mixed use development, shopping and employment uses in the Moraga Center and Rheem Park areas, where walking, bicycling, and transit use can become more feasible. It also includes providing more workforce housing so that those working in Moraga can also live in Moraga, along with more local-serving shopping, services, and restaurants that reduce the need to drive elsewhere.

Policy T-2.3: Transportation Demand Management (TDM)

Incentivize measures that reduce peak period travel demand and make it easier to travel around Moraga without driving. These measures include ridesharing, carpooling, shuttles, bicycle and pedestrian improvements, school buses, and better transit, along with support for telecommuting, compressed work weeks, and home-based employment. The Town will work with 511 Contra Costa and other agencies to promote their TDM-related services at the local level.

Policy T-2.4: Zero Emission Vehicle Use

Encourage the use of electric and other zero emission vehicles, including transitioning the Town's vehicle fleet to renewable energy or electric vehicles wherever feasible. Support similar initiatives when implemented by Moraga businesses and institutions.

Policy T-2.5: Alternative Energy Vehicle Infrastructure

Expand infrastructure that supports zero emission vehicles. This includes, but is not limited to, electric vehicle charging stations and alternative fuel pumps at existing gas stations and Town facilities.

(See also Policy T-6.2 on zero emission vehicle parking)

Charging station at Commons Park

Policy T-2.6: Park and Ride

Support the development of park and ride areas and other facilities that support the use of public transportation, carpools, vanpools, and ridesharing.

Policy T-2.7: Environmentally Sensitive Design

Encourage the use of design features and practices that minimize the environmental impacts of roads and parking lots, including features that minimize stormwater runoff, conserve energy and water, create pollinator and wildlife habitat, and avoid urban heat island effects.

Policy T-2.8: Education and Outreach

Collaborate with transportation agencies, non-profits and advocacy groups that promote alternatives to driving, including walking, ridesharing, public transit, and bicycling.

(See Goal T-5 - Active Transportation for additional policies supporting sustainability)

GOAL T-3: MULTI-MODAL NETWORK

PLAN AND DESIGN MORAGA'S ROAD NETWORK IN A WAY THAT SAFELY ACCOMMODATES ALL MODES OF TRAVEL, PROVIDES MOBILITY FOR ALL TRAVELERS, AND ENHANCES MORAGA'S SENSE OF PLACE.

Policy T-3.1: Complete Streets

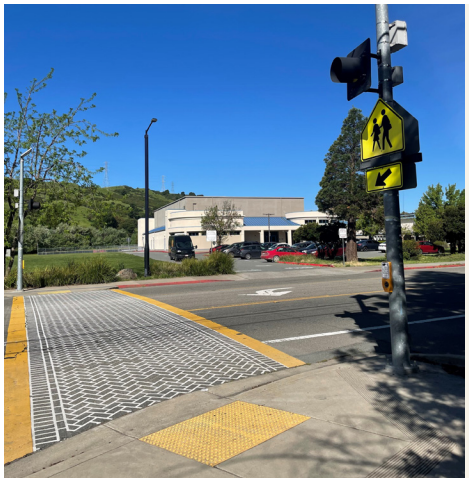
Create and maintain "complete streets" that provide safe, inviting environments for walking, bicycling, and transit users, as well as motor vehicles. Consider every transportation project as a potential opportunity to make Moraga's streets safer and more usable for all modes of travel.

(see text box)

Policy T-3.2: Context-Sensitive Transportation Planning

Apply accepted engineering principles in the design, construction, and maintenance of roadways to make them safe for all users. The design of each road segment or intersection also should reflect topography, adjacent uses, and the types of travel modes and trips it will support.

(see also Community Design Element Policy CD-2.5 on directional signage and Goal CD-3 on scenic corridors)



What's a Complete Street?

In 2008, the State of California began requiring all cities and towns to plan for "complete streets" in their General Plans. Complete streets is an approach to designing and building streets that considers the needs of all users, including pedestrians, bicyclists, motorists and transit riders. It also considers the needs of persons of all ages and abilities.

While there is no single prescription for a complete street, some of the important elements include wider sidewalks, bike lanes, and traffic "calming" features that force vehicles to slow down. On higher volume streets, design changes might include pullouts for buses, medians, and curb extensions (also called "bulb-outs") that reduce the distance pedestrians must travel when crossing the street.

Policy T-3.3: Private Streets

At the Town Council's discretion, allow private streets if they are constructed consistent with Town street standards and Complete Streets guidance, are not gated or similarly restricted, and provide their own maintenance and liability coverage.

Policy T-3.4: Residential Arterials

Recognize the dual function of Moraga's arterials as through-traffic routes and residential streets that provide access to individual homes. Use landscaping, signage, driveway standards, speed limits, and setbacks to create an attractive residential environment, and buffer nearby homes from the effects of high traffic volumes. Similarly, new development along arterials should be buffered to reduce noise and other impacts.

Policy T-3.5: Meeting the Needs of All Residents

Design and construct transportation facilities that serve people of all ages and mobility levels, including persons with disabilities, older adults, students, and youth. Ensure compliance with state and federal accessibility rules for new projects so that mobility barriers for persons with special transportation needs are removed.

Policy T-3.6: Engaging the Community

Ensure meaningful and accessible community engagement in the planning and design of transportation improvements and make it easier for the public to participate.

Corliss Drive

GOAL T-4: ROADWAY EFFICIENCY

MAINTAIN A SAFE, EFFICIENT ROAD NETWORK TO ACCOMMODATE TRAVEL TO, FROM, AND WITHIN MORAGA.

Policy T-4.1: Road Hierarchy

Maintain a hierarchy of arterial, collector, and local streets to maximize the efficient flow of traffic (see **Figure 7.1**). Design standards should reflect the function of each road type.

Policy T-4.2: Street Maintenance

Implement pavement maintenance, repair, and reconstruction programs to keep Moraga's roads in good operating condition, improve safety, and reduce long-term repair and replacement costs.

Policy T-4.3: Traffic Flow

Support measures to improve traffic flow and safety at intersections, including the use of signal interconnect projects, sensor-activated "smart" signals, roundabouts at unsignalized intersections, and other best traffic engineering practices.

Policy T-4.4: Priority Projects

Identify priority roadway improvements to guide project funding decisions in the Town's Capital Improvement Program. Projects may include safety-related projects, multi-modal and capacity enhancements, and other types of improvements.

(See the Safety Element for policies related to the resilience of the street network to extreme weather events and natural hazards)

Policy T-4.5: Emergency Preparedness

Maintain and improve roads, trails, and signage in ways that facilitate emergency vehicle access and support evacuation plans. While bicycle, pedestrian, and traffic calming improvements are strongly encouraged, they should not diminish emergency response capacity.

Policy T-4.6: Traffic Studies

Require traffic studies for individual projects with the potential to create safety hazards, increase vehicle miles traveled (VMT) beyond adopted thresholds, or otherwise affect local circulation conditions. Measures to reduce trip volumes or enhance roadway capacity and safety may be required based on project-level analysis.

Policy T-4.7: Development Impact Fees

Require each new development to pay its fair share of the cost of improving the local and regional transportation systems. Use impact fee revenues to implement projects consistent with the Town's Capital Improvement Program and transportation-related plans.

Policy T-4.8: Cut-Through Traffic

Use signage and road design to discourage cut-through traffic and speeding in residential areas, shopping centers, and other locations where motorists may try to avoid congestion by diverting on to other streets.

Policy T-4.9: Technology and Innovation

Monitor the effects of emerging technology on vehicle design, traffic signal design, travel behavior, and transportation needs. Adjust transportation plans, standards, and proposed improvements to reflect best practices.

Moraga Road

GOAL T-5: ACTIVE TRANSPORTATION

ENCOURAGE WALKING, BICYCLING, AND TRANSIT USE AS A WAY TO REDUCE VEHICLE TRIPS, IMPROVE ENVIRONMENTAL QUALITY, AND MAINTAIN A HEALTHY LIFESTYLE.

Policy T-5.1: Pedestrian Circulation

Provide a safe, continuous, and connected system of pedestrian routes throughout Moraga, including sidewalks, paths, and crosswalks along all principal streets. Pedestrian routes should link residential neighborhoods, commercial areas, community facilities such as schools and parks, and other important destinations.

Policy T-5.2: Bikeway Network

Develop a complete network of on-street and off-street bikeways that connect Moraga's neighborhoods, commercial areas, community facilities, commuter corridors, and transit hubs. Bikeways should meet the needs of commuters and students, as well as recreational cyclists.

Policy T-5.3: Pedestrian-Friendly Centers

Focus active transportation improvements in Moraga Center and Rheem Park to make these areas more pedestrian-friendly and connected to adjacent neighborhoods. This could include intersection and road design improvements, higher-visibility crosswalks, signage, lighting, pedestrian refuges and medians along wide street segments, curb extensions, audible pedestrian push buttons, and other projects that make it safer and easier to walk and bicycle.

Policy T-5.4: Improving Connectivity

Pursue opportunities for dedicated pedestrian paths and walkways through existing and new development in order to reduce walking distances between residences and key destinations such as schools, parks, and shopping. Such connections should be considered as part of emergency response and evacuation planning.

Policy T-5.5: Regional Trail Access

Improve links between Moraga's neighborhoods and the regional trail system, including hiking trails in regional open spaces and cycling trails that connect Moraga to BART and the surrounding region.

Policy T-5.6: Bike Parking

Support the installation of bike racks in new developments, commercial areas, and at schools, including Saint Mary's College.

Policy T-5.7: E-Bikes and Scooters

Consider the effects of electric bicycles ("e-bikes"), electric scooters, and other micromobility modes on the transportation network, particularly the ways they may impact safety, design, and operations.

PolicyT-5.8: Transit Improvements

Encourage the use of transit by Moraga residents, as well those who live elsewhere and commute to work or school in Moraga. Advocate for more efficient, comfortable, reliable and frequent transit service, particularly on routes connecting Saint Mary's College, Moraga's commercial districts, local schools, and the Lafayette and Orinda BART stations.

Policy T-5.9: Transit Infrastructure

Improve provisions for transit users in Moraga, including arterials that are designed to accommodate bus stops, more comfortable and attractive bus waiting areas, and real-time information on bus arrivals and departures. Future development along transit routes should include sidewalks, lighting, and bus stops built to the transit operator's design standards, as warranted by the scale and location of the development.

Policy T-5.10: Access to Saint Mary's College

Work with Saint Mary's College and transit operators to improve access between the college, Moraga's commercial districts, and the Lafayette and Orinda BART Stations. Promote efforts to create shuttle, car share, autonomous vehicle, or circulator bus service between the college and these destinations. Service improvements should be consistent with transit provider bylaws and joint powers agreements.

Policy T-5.11: Paratransit

Advocate for and promote expanded paratransit (e.g., "dial-a-ride") services and other programs that provide mobility to those with special transportation needs.

(See Open Space and Parks Element Goal OSP- 4 for additional policies on trails, including connecting Moraga to the regional trail system)

Photo Credit: VEO

Micromobility

Micromobility devices include e-scooters, e-bikes, and other devices that facilitate short-distance travel. They are increasingly popular for trips to school, work, and transit stops, and may be cheaper and less environmentally impactful than driving. However, these devices bring challenges, including increased potential for accidents and injuries, lack of clear regulation, improper parking, and conflicts with established travel modes such as bicycling and driving.

Communities are adopting a variety of strategies to regulate e-bikes, balancing their benefits with concerns over safety and road use. Some of these strategies include speed limits for e-bikes, classification (to determine where they may be used), limits on use on certain trails or roads, age restrictions, parking regulations. New strategies may evolve as these modes become more popular.

GOAL T-6: PARKING

PROVIDE A SUFFICIENT SUPPLY OF PARKING TO MEET THE NEEDS OF MORAGA RESIDENTS, BUSINESSES, AND INSTITUTIONS.

Policy T-6.1: Commercial Area Parking

Maintain sufficient, convenient free parking in Moraga's commercial areas to accommodate current and anticipated parking needs. Ensure that parking is efficiently used and is sited and landscaped in ways that support complementary goals related to walkability, aesthetics, and greenhouse gas reduction.

Policy T-6.2: Parking Standards

Periodically evaluate parking standards to ensure consistency with State law, emerging technology, vehicle design, business needs, transportation demand management (TDM) programs, and travel behavior. Consistent with State codes, implement measures requiring zero-emission vehicle parking and bicycle parking to be included in new multi-family, commercial, and mixed-use development.

Policy T-6.3: Shared Parking

Encourage shared parking arrangements for uses that have different peak demand characteristics (for instance, daytime office parking that can be used in the evening by restaurants).

Policy T-6.4: Parking Impacts

Carefully evaluate the potential impacts of new development on parking, particularly "overflow" impacts on neighborhood streets. To the extent permitted by law, require new development to include parking management measures that avoid adverse effects on neighborhood character and safety.

Policy T-6.5: Loading Areas

Regulate deliveries and the location of loading areas in a manner that minimizes congestion, reduces visual impacts, and avoids conflicts with customer and employee trips.

Rheem Valley Shopping Center parking

GOAL T-7: REGIONAL COORDINATION

IMPROVE MOBILITY AND ACCESS BETWEEN MORAGA, LAFAYETTE, ORINDA, AND THE REGION.

Policy T-7.1: Regional Collaboration and Problem Solving

Work collaboratively with Lafayette, Orinda, the Contra Contra Transportation Authority (CCTA), and local transit agencies to address mutual transportation issues, including traffic congestion, safety, evacuation, and reduction of vehicle miles traveled (VMT). Coordinate with adjacent jurisdictions in planning and approving new development so that cumulative effects on congestion are considered and appropriately mitigated.

Policy T-7.2: Routes of Regional Significance

Work collaboratively with other Lamorinda jurisdictions and agencies to plan for improvements to Moraga Road, Moraga Way, and Saint Mary's Road. This includes development and implementation of subregional "Action Plans" that address all modes of travel along these corridors and identify potential funding sources for their improvement.

Policy T-7.3: Evacuation Planning

Coordinate with Lafayette, Orinda, and appropriate county and regional agencies to assess evacuation needs and develop plans and programs that improve efficiency and safety in the event evacuation is required.

7.3 TRANSPORTATION IMPLEMENTATION PROGRAMS

Program T-A: Capital Improvements Program

Use the Town's Capital Improvement Program (CIP) to budget for and manage the design and construction of transportation projects and other infrastructure projects over the lifetime of the General Plan. Key transportation improvements requiring funding in the coming years include:

- School Street extension to the intersection of Saint Mary's Road and Moraga Road
- Saint Mary's Road intersection improvements at Bollinger Canyon Road and Rheem Boulevard
- "Smart" traffic signal improvements
- Complete Streets improvements (Camino Pablo, Moraga Road/Canyon Road, Moraga Way, Saint Mary's Road, School Street)
- Corliss Drive Safe Routes to School
- Minor Traffic Safety Program
- Annual Street Repairs
- Pavement Rehabilitation

Action T-A1: Transportation Action Plan. *Prepare a "Transportation Action Plan" (TAP) to coordinate ongoing transportation initiatives, prioritize activities and programs, engage the community, and close any identified gaps in the Town's transportation planning initiatives. An important focus of the TAP should be to strategically position the Town for grant funding and to address cost and financing issues related to major infrastructure projects.*

Aligning the Capital Improvement Program (CIP) with Transportation Priorities

General Plan 2040 includes a comprehensive set of goals and policies that align the CIP and decisions about future development with Moraga's transportation priorities. These priorities correspond to the seven goals of the Transportation Element and include:

- Improving the safety of all modes of travel
- Creating a more sustainable transportation system
- Planning and designing a multi-modal network that improves mobility for all users
- Maintaining an efficient road network
- Encouraging active transportation and transit to reduce vehicle trips
- Providing a sufficient parking supply
- Improving regional mobility and coordination

The CIP and future development should support Moraga's transportation networks by promoting safety, efficiency, and sustainability for all modes of travel. Improvements should promote a reduction in vehicle trips and enhance environmental quality, walking, bicycling, transit, and trail use.

Program T-B: Evacuation Planning

Implement and periodically update plans for safe, orderly evacuation in the event of an emergency. Such plans should consider evacuation time, responses, and strategies under different scenarios, and should account for anticipated local and regional growth and road capacity.

Action T-B1: Evacuation Plan. *Actively participate in the 2025-26 Contra Costa Transportation Authority Evacuation Study and use the outcomes of this study to inform future land use, transportation, and emergency preparedness decisions. CCTA will conduct local-level evacuation compliance assessments and a high-level evacuation route capacity, safety, and viability analysis for the county that includes the 19 cities/towns and unincorporated areas. These evaluations are intended to comply with California SB 99 and Assembly Bill 747— state laws requiring evacuation planning in the case of wildfires and other hazards. The Town will facilitate opportunities for local public involvement in this process.*

(See Safety Element Goals S-1, S-3, and S-7, and Programs S-A, S-B, and S-C for related measures)

Program T-C: Local Roadway Safety Plan (LRSP)

Continue implementation of the adopted LRSP. The LRSP identifies location-specific and systemic safety improvements throughout the Town. The Town is utilizing Federal and State Highway Safety Improvement (HSIP) funds to design and construct these improvements. Projects that cannot be funded through the HSIP program may become future CIP projects.

Action T-C1: Traffic Calming Design Guidelines. *Develop guidelines for neighborhood traffic calming projects for future consideration by Town Council.*

Program T-D: Walk | Bike Plan Implementation

Continue implementation of the Walk | Bike Plan (WBP). The WBP is Moraga's bicycle and pedestrian master plan and includes recommendations for capital improvements and programming to make walking and cycling in Moraga safer and more convenient. While the current Plan was forward-thinking at the time it was adopted, it should be updated to reflect emerging issues and priorities.

Action T-D1: Walk | Bike Plan Update. *Update the Walk | Bike Plan to identify future needs, improvement types, incorporate related efforts such as Livable Moraga Road, and standardize designs.*

Action T-D2: Trail System Expansion. *Apply for Regional Measure 3 Safe Routes to Transit & Bay Trail (SR2TBT) grant funding to study—and then develop—improvements to the Lafayette Moraga Trail, including spur trails to Moraga neighborhoods.*

(see also Program OSP E-2 in the Open Space and Parks Element)

A Town-sponsored bicycle safety event

Program T-E: Livable Moraga Road (LMR)

Pursue funding to implement the Livable Moraga Road (LMR) concept plan. LMR is a community-based plan for Moraga Road, looking at ways to improve the function, character, and livability of the corridor between Campolindo High School and Saint Mary's Road. A concept for LMR was initially adopted by the Town Council in 2016.

Program T-F: Safe Routes to School (SRTS)

Continue implementation of Safe Routes to School (SRTS) programs. SRTS is a nationwide initiative designed to encourage and enable students to walk and bike to school safely through improved infrastructure, education, and community engagement. The Town will also support educational initiatives on traffic safety, particularly around schools.

Action T-F1: Field Audits and Assessments. *Conduct field audits and assessments at each Moraga school to identify improvement needs and projects. The assessments can be used to seek grant funding and prioritize Town improvements and projects.*

Action T-F2: SRTS Street Mapping and Safety Improvements. *Develop street maps and SRTS improvement programs for individual campuses.*

Program T-G: Engineering Review of Development Applications

Engage the Town's Public Works and Engineering staff in the review of development applications to ensure that impacts on traffic, parking, and circulation are considered and mitigated as appropriate.

See also Action LU-B.4 (Land Use Element) on parking standards

Program T-H: Traffic Studies

Require traffic impact studies as part of the development application process in a manner that is consistent with the technical guidelines published by the Contra Costa Transportation Authority (CCTA). As appropriate, this should include requirements for Vehicle Miles Traveled (VMT) analysis for projects that exceed Moraga's VMT screening criteria. Projects resulting in significant VMT impacts shall incorporate measures to reduce VMT. For interjurisdictional consistency, the CCTA travel demand model should be used for traffic analysis purposes.

Action T-H1: Local Traffic Assessment (LTAs) Guidelines. *Utilize CCTA's guidelines to develop local guidelines for development-related traffic impact analyses, including guidelines for calculating VMT. As appropriate, LTAs may also address ingress/egress, safety, the need for physical improvements, level of service (LOS), and other site-level impacts.*

Program T-I: Traffic Impact Fees

Continue to collect traffic impact fees to secure a portion of the revenue necessary for construction and implementation of improvements necessary to accommodate the traffic volumes generated by new development.

Program T-J: Transportation Systems Management (TSM) Ordinance

As required by County Measure J, maintain TSM provisions in the Moraga Municipal Code (see Section 7.2 for a description of this program).

Program T-K: Pavement Management

Maintain a pavement management program to identify and prioritize maintenance projects in the Town's Annual Budget. Maintenance should also include regular bike routes to address potential safety hazards.

Program T-L: Traffic Monitoring

Monitor the traffic levels on major arterial roads and the intersection capacity at the Town's signalized intersections. Use this data to identify trends and inform transportation plans and pavement management schedules. Additionally, monitor collision data to inform prioritization of traffic safety improvements.

Program T-M: Public Works Engineering Standards

Implement engineering standards for roads, bike lanes, sidewalks, and paving that are consistent with best practices, ensure public safety, and support the Town's sustainability goals. Standards should address road and lane widths, turning radii and geometrics, maximum grades, and other features that ensure safe efficient operation of the road system.

Action T-M1: Street Cross-sections. *Prepare street cross-sections illustrating Town standards for arterial, collector, and local streets.*

Program T-N: Transit Improvements

Continue to evaluate opportunities to improve transit service to Moraga, including working with County Connection to implement improvements to the local bus system. Explore opportunities to increase daily service and provide transit amenities such as real-time information on bus arrivals and departures and timed connections at BART stations.

Action T-N1: Lamorinda Service Plan Update. *Work with Lafayette, Orinda, CCTA, and County Connection on an update of the 2015 Lamorinda Service Plan.*

Program T-O: Special Needs Transportation

Continue to work with County Connection and local nonprofit organizations providing special transportation services to meet the needs of older adults and others with mobility limitations. These services include CCCTA's LINK paratransit service, the Lamorinda Spirit Van, and Mobility Matters.

Program T-P: Lamorinda Transportation Planning

Participate in multi-jurisdictional transportation planning, including coordination with Lafayette and Orinda on circulation and traffic issues such as evacuation, congestion management, bike route planning, and transit service improvements. This includes participation in the Southwest Area Transportation Committee and the Lamorinda Planning and Management Committee, including collection of the Lamorinda Transportation Impact Fee for regional improvements.

Action T-P1: Lamorinda Action Plan. *Participate with Lafayette, Orinda, and CCTA in the implementation of the Lamorinda Action Plan.*

(See also Community Design Element Program CD-E on signage, wayfinding and streetscape planning)

Program T-Q: Street Light and Median Enhancement Assessment District Program

Expand and enhance the Town of Moraga's Street Lighting District 1979-1. This is a property tax-based assessment district that funds the maintenance, repair, and utility bills for 1,054 street light fixtures on poles in public and a limited number of private streets in Moraga. An expanded and enhanced Street Light and Median Enhancement Assessment District would provide additional program services and benefits. This new program includes: 1) developing revised Townwide standards for street lighting fixtures in residential and commercial areas for improved safety, operating cost reductions and efficiency; 2) annexation of more residential and commercial properties into an enhanced Street Lighting District to provide additional street lights where none currently exist, and 3) implementing median beautification, safety, and maintenance improvements for street medians. The program would be financed through property tax assessments for the new Street Light and Median Enhancement Program.