

5 ACCESS, CIRCULATION AND PARKING

As discussed in the Vision Chapter, this Plan takes an integrated land use and transportation approach which provides flexibility and monitors development so as to avoid or minimize traffic impacts.

This Access, Circulation and Parking Chapter includes enhancements to pedestrian and bicycle access and transit that will help to limit auto use in the station area. It also describes automobile circulation and parking management strategies. Circulation system recommendations are based on a “complete street” design strategy, which enhances safety, convenience, and mobility for all modes of travel. The Chapter includes the following sections:

- Integrated Land Use and Transportation Strategy
- Complete Streets
- Pedestrian and Bicycle Circulation
- Transit Service
- Parking Management
- Transportation Demand Management Program
- Access, Circulation and Parking Policy Recommendations



INTEGRATED LAND USE / TRANSPORTATION STRATEGY

As discussed in the Vision Chapter of this report, discussions about the future of the station area addressed opportunities for new development that could provide additional transit ridership and a variety of community amenities such as enhanced parks and open space to provide a greater sense of community to the area. At the same time, concerns regarding existing traffic congestion on Sir Francis Drake Boulevard, and the likelihood of future development exacerbating these conditions, were a topic of considerable discussion.

Consequently, this Plan proposes a joint land use and transportation strategy. This approach allows new development while simultaneously:

- Implementing TDM measures and other strategies to limit vehicle trips,
- Working with regional and local agencies to make immediate improvements to streets and intersections to alleviate existing congestion, and
- Monitoring growth in vehicle trips and impacts on critical intersections and managing growth to limit or avoid entirely these potential impacts.

New land uses proposed in this Plan would generate additional traffic onto the congested roadway network during the peak travel periods. Although some roadway modifications in the station area are proposed for study by the Transportation Authority of Marin (TAM)¹, it is unclear how much benefit they will provide to roadway congestion on Sir Francis Drake Boulevard. To reduce the impact of new vehicle traffic on the roadway network, this Plan proposes a TDM program and vehicle trip cap, as well as spot capacity enhancements along Sir Francis Drake Boulevard.

SIR FRANCIS DRAKE BOULEVARD CAPACITY ENHANCEMENTS

The improvements recommended below would allow maintenance of existing traffic operations while improving pedestrian, bicycle, and transit amenities in the station area. These capacity enhancements have been previously proposed in adopted plans or projects and include the following measures:

- Work with Caltrans and the County of Marin to study adding a third eastbound through lane on Sir Francis Drake Boulevard approaching Eliseo Drive through to the U.S. 101 southbound on-ramp. These improvements are proposed to be studied as a part of the Transportation Authority of Marin proposed studies (TAM Reso. 2013-14).
- Stripe a third westbound through lane on Sir Francis Drake Boulevard approaching Larkspur Landing Circle (West) through to northbound U.S. 101 on-ramp. This improvement was proposed as a mitigation measure for the 2000 Larkspur Landing Circle traffic study, which was approved by the Larkspur City Council in 2003.
- Work with Caltrans and the County of Marin to retime the traffic signals between Eliseo Drive and Larkspur Landing Circle (East) to accommodate future traffic volumes. The traffic signals on Sir Francis Drake Boulevard were recently retimed as a part of a study completed by the MTC and County of Marin. The signal timings would need to be updated to accommodate the shift in traffic patterns due to the proposed land uses in this Plan.
- Coordinate with the City of San Rafael and Caltrans to study the feasibility of signalizing the intersection of Sir Francis Drake Boulevard and Anderson Drive. The San Rafael General Plan and 2000 Larkspur Landing Circle traffic study proposed a traffic signal at this location to improve traffic operations and mitigate future impacts.

¹ TAM Board of Commissioners Resolution 2013-14, approved September 26, 2013.

TMA, VEHICLE TRIP CAP, AND TDM PROGRAM

Mixed-use, transit-oriented development such as that proposed in this Plan generates less traffic than traditional, suburban-type development. This Plan proposes the development of a transportation management association (TMA) to enable employers, developers, building owners, and government entities to work collectively to establish policies, programs, and services to assure that traffic generation complies with the vehicle trip cap, to promote travel by non-automobile modes, to address local transportation issues, and to foster economic development. It is anticipated that the TMA would be staffed initially by a public entity, such as the Transportation Authority of Marin, and that the City's share of the costs would be provided through grant funding. TMA participants would be required to fund annual TMA administration and management and share the costs of programs and services provided to participants.

The TMA would be quasi-public with the City having representation from both the Planning and Public Works Departments. It would conduct and coordinate annual trip generation monitoring, which would be paid for through the annual membership fees. The authority of the TMA would extend from the Conditions of Approval placed upon the project by the Planning Commission or City Council, and projects would be subject to subsequent review and action by the Planning Commission or City Council for failure to meet those Conditions of Approval. The TMA would market services and programs within the station area to encourage participation by existing uses such as the Marin Country Mart, the Larkspur ferry terminal, and other uses with high trip generation rates.

To further manage traffic generation, a Transportation Demand Management (TDM) program would be implemented in the station area. Consisting of strategies such as parking pricing, transit discounts, and shared parking, the TDM program would further limit the generation of vehicle trips by new development in the station area (see Transportation Demand Management section). The TMA would oversee TDM program implementation, arrange for shared parking, and coordinate with other agencies and stakeholders.

The vehicle trip cap would apply to weekday morning and afternoon peak traffic periods, as well as overall daily trips to limit the future increase in vehicle trips from the station area to no more than 10 percent above the current traffic generated by the station area². In establishing the vehicle trip cap, the City should identify a proportional share of the 10 percent increase in traffic generation to each opportunity site so that traffic increases occur incrementally with each development. Traffic counts would periodically be taken by the TMA at the area's key vehicle entrances and exits to monitor traffic levels. The City would have the ability to independently review the traffic data. The TMA would be responsible for achieving compliance with the vehicle trip cap. If the trip cap levels are exceeded, additional development would not be permitted until traffic volumes decrease below cap levels. Potential monetary penalties could be applied.

The combination of TDM measures and the mixed use, transit-oriented development land uses called for in this Plan, would result in a shift of five to 10 percent of total trips generated by the station area from auto to non-auto modes between existing and future development. This would result in fewer vehicle trips generated per dwelling unit or 1,000 square feet of commercial space in the future compared to the existing land uses, ensuring that future development would be feasible while resulting vehicle trips would remain under the trip cap.

² The accompanying Draft EIR presents an analysis of existing and projected traffic generation.

COMPLETE STREETS

Complete streets practices improve circulation for all modes by encouraging the design of streets with well-connected and comfortable sidewalks and bike paths, traffic calming measures to manage vehicle speeds, enhanced street crossings, and increased access to transit. Incomplete streets—those designed primarily for automobile access—can be a barrier in any community, particularly for people with disabilities, older adults, and children.

ADOPTED COMPLETE STREET PLANS

Several adopted plans provide guidance on complete street design within the station area. The City of Larkspur has adopted a Complete Streets Policy and the updated General Plan will comply with Complete Streets requirements in all Elements, including Circulation. The Complete Streets Policy includes the following goals:

- Create and maintain a comprehensive and integrated complete street network that provides safe, comfortable, and convenient travel across the city.
- Maintain sensitivity to local conditions and needs in both residential and commercial neighborhoods to ensure a strong sense of place remains.
- Ensure complete streets practices are practiced as a routine part of everyday operations and are incorporated into all projects within the City.

Regional guidance on complete street design is provided by the Complete Streets policy adopted by the Metropolitan Transportation Commission (MTC). The Complete Streets policy adopted by the MTC requires projects applying for MTC grant funding to include accommodations for non-motorized users.

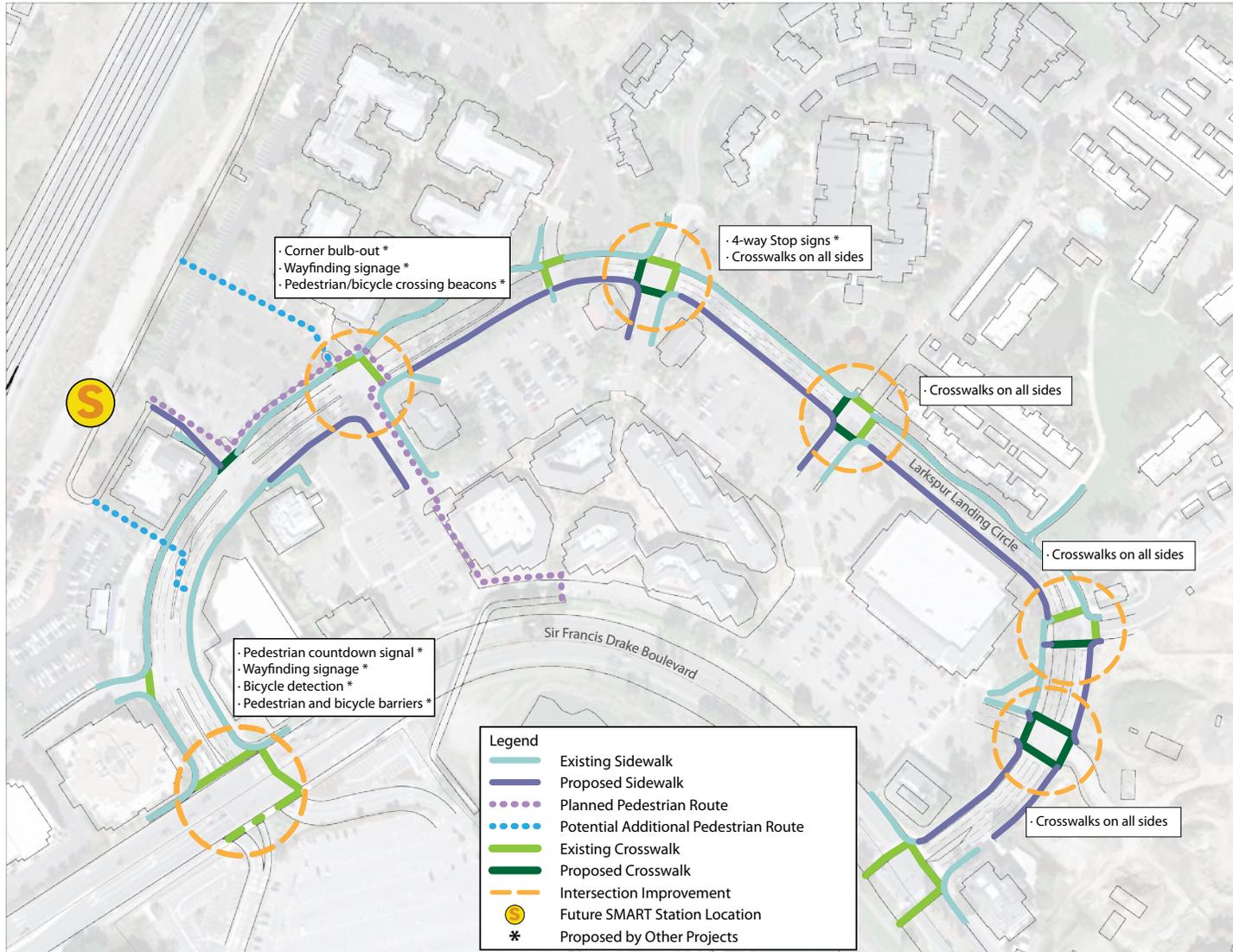
COMPLETE STREET NETWORK

In the station area, primary public and private circulation routes occur on the following streets and pathways:

- Sir Francis Drake Boulevard
- Larkspur Landing Circle
- Redwood Highway
- Internal neighborhood lanes
- Pedestrian paths

This Plan includes complete street design treatments for all circulation routes in the station area. Figures 5.1 and 5.2 illustrate the existing and proposed linkages provided by trails, streets, and pedestrian walkways. This Plan recommends creating a complete street network for each roadway and pathway as described below.

Figure 5.2: Larkspur Landing Circle Intersection Improvements





Sir Francis Drake Boulevard East (top) carries a large amount of traffic and creates a major barrier to pedestrian movement (top). Larkspur Landing Circle (bottom) provides access to many uses north of Sir Francis Drake Boulevard, including Marin Country Mart, Century Larkspur Landing Theater, various commercial and residential uses, the Marin Airport, and the future SMART Station.

Sir Francis Drake Boulevard

Many improvements to Sir Francis Drake Boulevard included in this Plan are proposed by other plans or projects to enhance multi-modal connectivity on Sir Francis Drake Boulevard. These include new regional transit stops at the U.S. 101 and Sir Francis Drake Boulevard interchange, completing sidewalks and closing gaps in pedestrian pathways along Sir Francis Drake Boulevard, enhanced crossings of Sir Francis Drake Boulevard, new bicycle facilities along East Sir Francis Drake boulevard to Andersen Drive, and potential vehicle capacity improvements on East Sir Francis Drake Boulevard. These improvements are described in further depth in later sections. Other improvements such as installing on-street parking that meets appropriate criteria is not a safety hazard on the south side of the street that is not a safety hazard also needs to be studied.

In addition to the improvements proposed as a part of other projects, this Plan will enhance multi-modal connectivity on Sir Francis Drake Boulevard through the following improvements:

- Fill in missing sidewalk sections on the north side of the road near the eastern edge of the station area and just east of U.S. 101.
- Where feasible, add pedestrian amenities (seating, interpretive signage, lighting) to the multi-use trail along the south side of the road between the ferry terminal and Remillard Park.
- Ensure automobile circulation is not worsened under this Plan through spot roadway capacity improvements on Sir Francis Drake Boulevard as described in the Integrated Land Use / Transportation Strategy section.
- Study creation of safe on-street parking along the south side of Sir Francis Drake Boulevard.

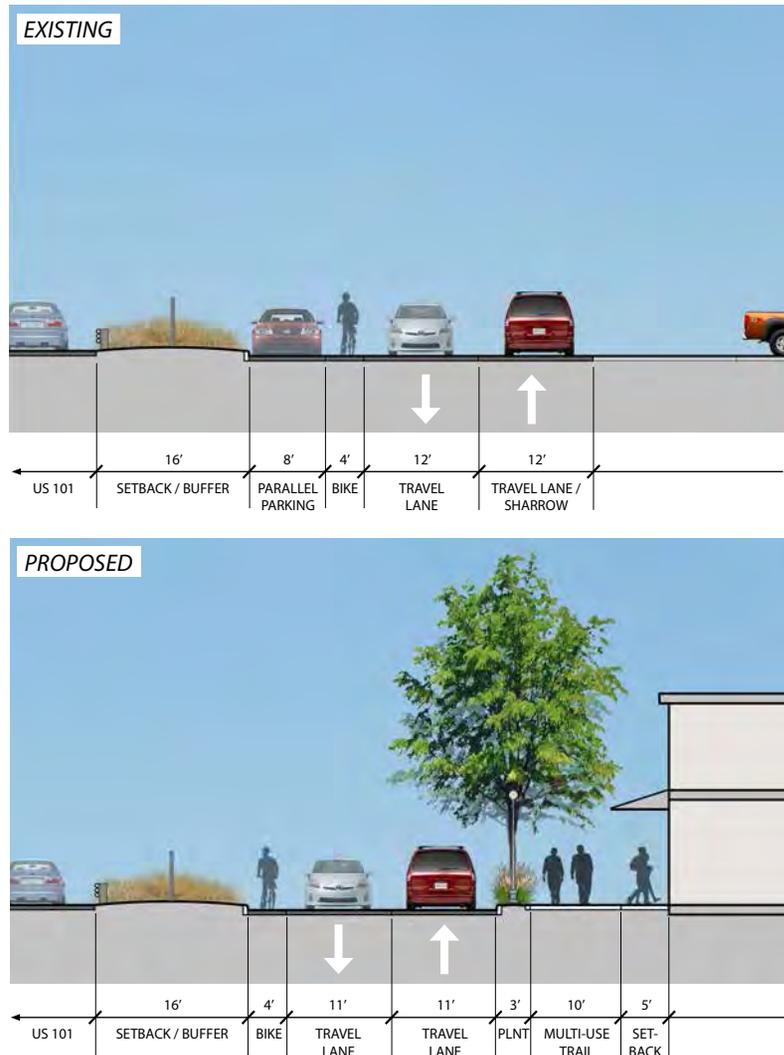
Larkspur Landing Circle

This Plan proposes to enhance multi-modal connectivity on Larkspur Landing Circle through the following projects, shown on Figure 5.2:

- Complete missing sidewalks on Larkspur Landing Circle, providing a minimum of six feet in width within the public right-of-way and separating the pedestrian walkway from the roadway with a planting strip wherever possible.
 - On the north side of the street, improvements are needed at the east end to connect from Lincoln Village Circle to Sir Francis Drake Boulevard and to provide access to the Sanitary District parcel.
 - Sidewalks are missing on the entire south side of the circle with the exception of the far west extent. There is insufficient available width to accommodate sidewalks at present; however, as shown in Figure 5.3, a slight narrowing of travel lanes will allow for a 6-foot sidewalk within the right-of-way. With a reconfiguration of the parking lots for the Marin Country Mart or construction of residential units an additional four feet of sidewalk is recommended to achieve a total sidewalk width of 10 feet.
- Further study is needed to determine whether bicycle lanes could be added. This will require cooperation with the Marin Country Mart owner and possibly dedication of frontage. At a minimum use sharrows markings along the circle to indicate shared use of the roadway.
- Conduct further study to determine the feasibility of accommodating additional pedestrian routes between the Larkspur SMART station and the Larkspur Ferry Terminal.
- Provide additional crosswalks so that each intersection along the circle has four-way crossing indicators.
- Consider providing additional pedestrian and bicycle access routes to surrounding destinations as new development occurs.

Figure 5.3: Existing and Proposed Section of Larkspur Landing Circle at Serenity



Figure 5.4: Existing and Proposed Redwood Highway Section**Redwood Highway**

The Transportation Authority of Marin is studying several pedestrian and bicycle improvements along Redwood Highway including filling in sidewalk gaps, adding bicycle lanes, and widening the multi-use path along the northbound U.S. off-ramp over Corte Madera Creek. Though this Plan does not propose any changes in land use or encourage major new development in the Redwood Highway area, property owners may choose to improve their properties. This Plan includes the following goals for future transportation changes in the Redwood Highway area:

- Ensure an attractive and safe pedestrian environment in future development along Redwood Highway.
- Ensure that residents, employees and patrons have convenient access to both the east and west sides of U.S. 101 as well as connectivity between them.

Specific recommendations to enhance multi-modal connectivity on Redwood Highway are shown in Figure 5.4 and include:

- Add sidewalks on the east side of Redwood Highway
- Complete bike lanes to Redwood Highway south of the U.S. 101 northbound off-ramp multi-use path to Wornum Drive.

Internal Neighborhood Lanes

Construction of new streets internal to private parcels will be required to provide access to new development for autos, service and emergency vehicles, bicyclists and pedestrians. In addition to new internal neighborhood streets that will accommodate pedestrians and bicyclists as well as vehicles, pedestrian lanes should be provided throughout new development areas. This Plan proposes to enhance multi-modal connectivity on new internal neighborhood lanes through the following measures:

- Design new streets with the minimum necessary roadway width in order to calm traffic but allow safe access by bicycles, pedestrians and autos.
- Design new streets with or without parking; dimensions for on-street parking are illustrated in Figure 5.5.
- Restrict new intersections along Larkspur Landing Circle
- Explore the provision of additional at-grade pedestrian and bicycle routes from the Larkspur SMART station to Sir Francis Drake Boulevard and the ferry terminal.
- Sidewalks at least six feet in width must be provided on all lanes separated from vehicular flow. Where sufficient width is available street trees and a park strip should be provided.
- Provide pedestrian-scaled lighting at 12-14 feet in height and at maximum 30 foot spacing.
- Provide safe and convenient bicycle parking

Figure 5.5: Section of Typical Internal Neighborhood Lane with On-Street Parking

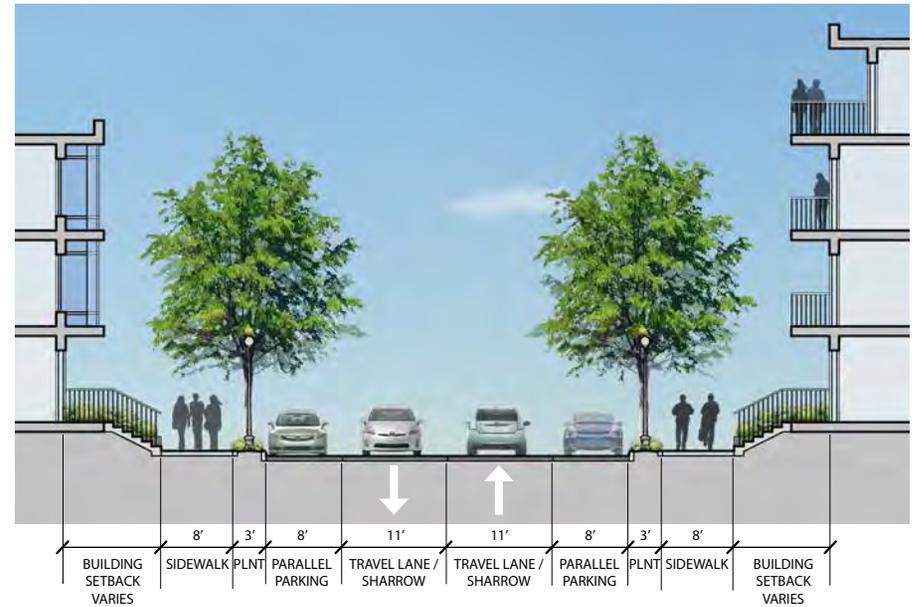
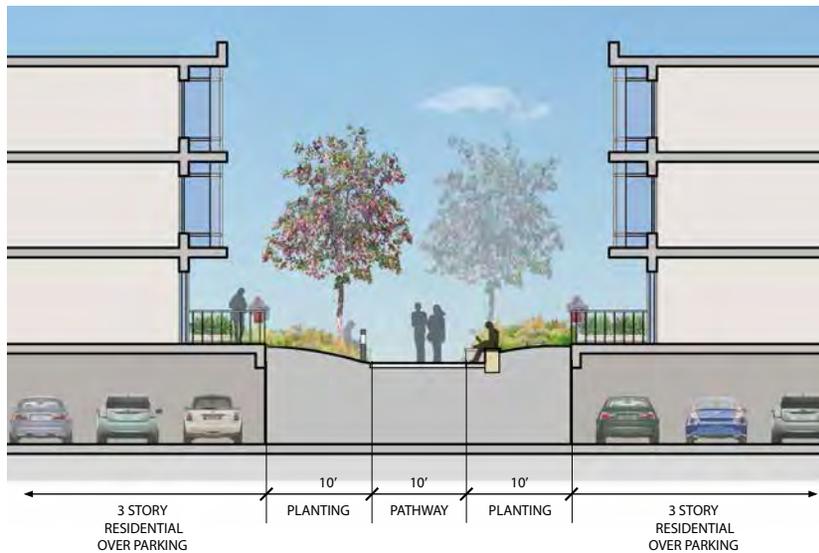


Figure 5.6: Section of Typical Pedestrian Pathway**Pedestrian Pathways**

In addition to new internal neighborhood streets, dedicated pedestrian paths should be provided throughout new development areas. At present, pedestrians must often traverse parking lots and drive aisles to reach their destinations. Pedestrian lanes may be public, semi-public or private, and will allow convenient pedestrian movement within and through the station area, making access to transit, services and amenities more safe and convenient. Recommendations to enhance multi-modal connectivity through the new development include:

- Incorporate additional pedestrian paths throughout new development. These paths should establish a finer grain of safe pedestrian access to shopping, office and residential uses. Typical dimensions are illustrated in Figure 5.6.
- Separate adjoining residential uses from the pedestrian lane by slightly elevating the ground floor use or providing a private front courtyard for these residences.
- Provide periodic amenities such as seating.
- Lighting of the pathways should be low and unobtrusive. Lighting may be provided with bollards, incorporated into site walls, or on pedestrian-scaled (12-14 feet) light standards.
- Explore the provision of additional at-grade pedestrian and bicycle routes from the SMART station to Sir Francis Drake Boulevard and the ferry terminal.

PEDESTRIAN AND BICYCLE CIRCULATION

Well-connected pedestrian and bicycle networks are vital components to livable communities, which thrive on multi-modal travel for all roadway users, regardless of age or ability. Existing pedestrian and bicycle circulation is accommodated through a network of on- and off-street pedestrian and bicycle facilities in the station area. These facilities include sidewalks, bicycle lanes, off-street multi-modal pathways, at grade crossings, and grade-separated crossings. Recommended practices that enhance the livability of all streets within and connecting to the station area include the following:

- Closing gaps in the pedestrian and bicycle networks.
- Creating accessibility guidelines.
- Improving signage and wayfinding.
- Providing convenient and secure bicycle parking.

These recommended practices are described in further depth in the following sub-sections. A discussion on bicycle parking is included in the subsequent Parking Management section.

NETWORK GAP CLOSURE

The proposed improvements to close the gaps in the pedestrian and bicycle network are shown in Figures 5.7 and 5.8. Improvements proposed through other local and regional plans, are described below.

Larkspur Bicycle and Pedestrian Master Plan (City of Larkspur)

- Recommendations include improving the visibility of pedestrians around Sir Francis Drake Boulevard and local schools, providing secure bicycle parking at key destinations within the city, improving east-west connections across U.S. 101, and making bus facilities safer and more accessible to pedestrians.

Marin County Unincorporated Area Bicycle and Pedestrian Master Plan (County of Marin)

- Key recommended facilities include the north-south greenway, which would extend from the Golden Gate Bridge in the south to Sonoma County in the north, an east-west bikeway along Sir Francis Drake Boulevard, and the potential use of abandoned railroad tunnels and rights-of-way for multi-use paths.

Central Marin Ferry Connection (Transportation Authority of Marin, SMART, and City of Larkspur)

- Construct a pedestrian and bicycle bridge across Sir Francis Drake Boulevard to connect the southern terminus of the Cal Park Hill Tunnel to the south side of Sir Francis Drake Boulevard and the existing multi-use path. In November 2011, the Transportation Authority of Marin held an open house to solicit public input on the type of structure crossing over Sir Francis Drake Boulevard. The preferred design was the Warren Truss, which was accepted by TAM and the Larkspur City Council. This project is expected to begin construction in 2014.

San Quentin Bicycle and Pedestrian Access Study (County of Marin)

- Stripe new bicycle lanes or build a Class I multi-use path along Sir Francis Drake Boulevard between Larkspur Landing and Andersen Drive.
- Install a new signal or undercrossing at Sir Francis Drake Boulevard/Andersen Drive.

Figure 5.7: Existing and Proposed Pedestrian Facilities

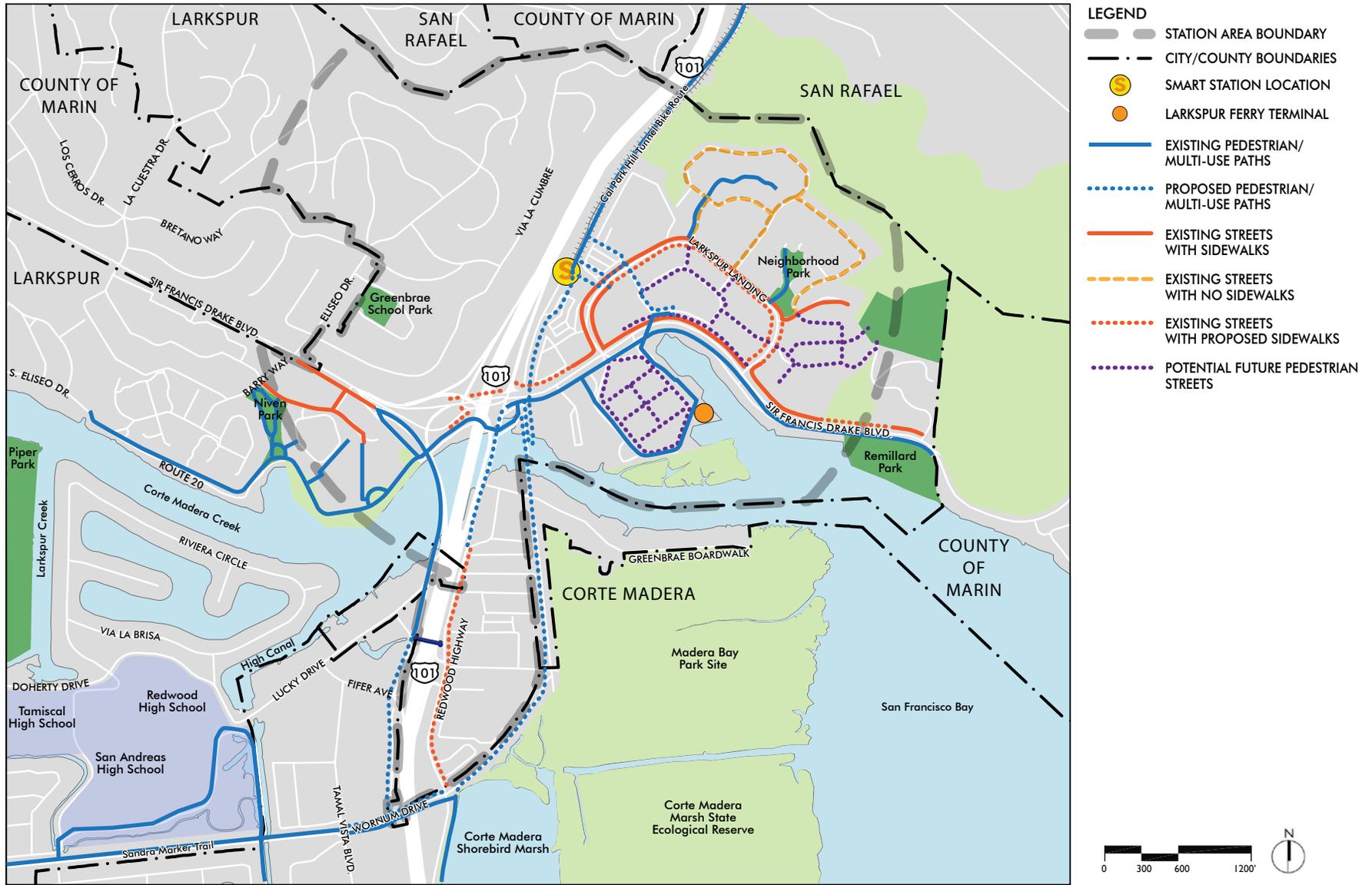
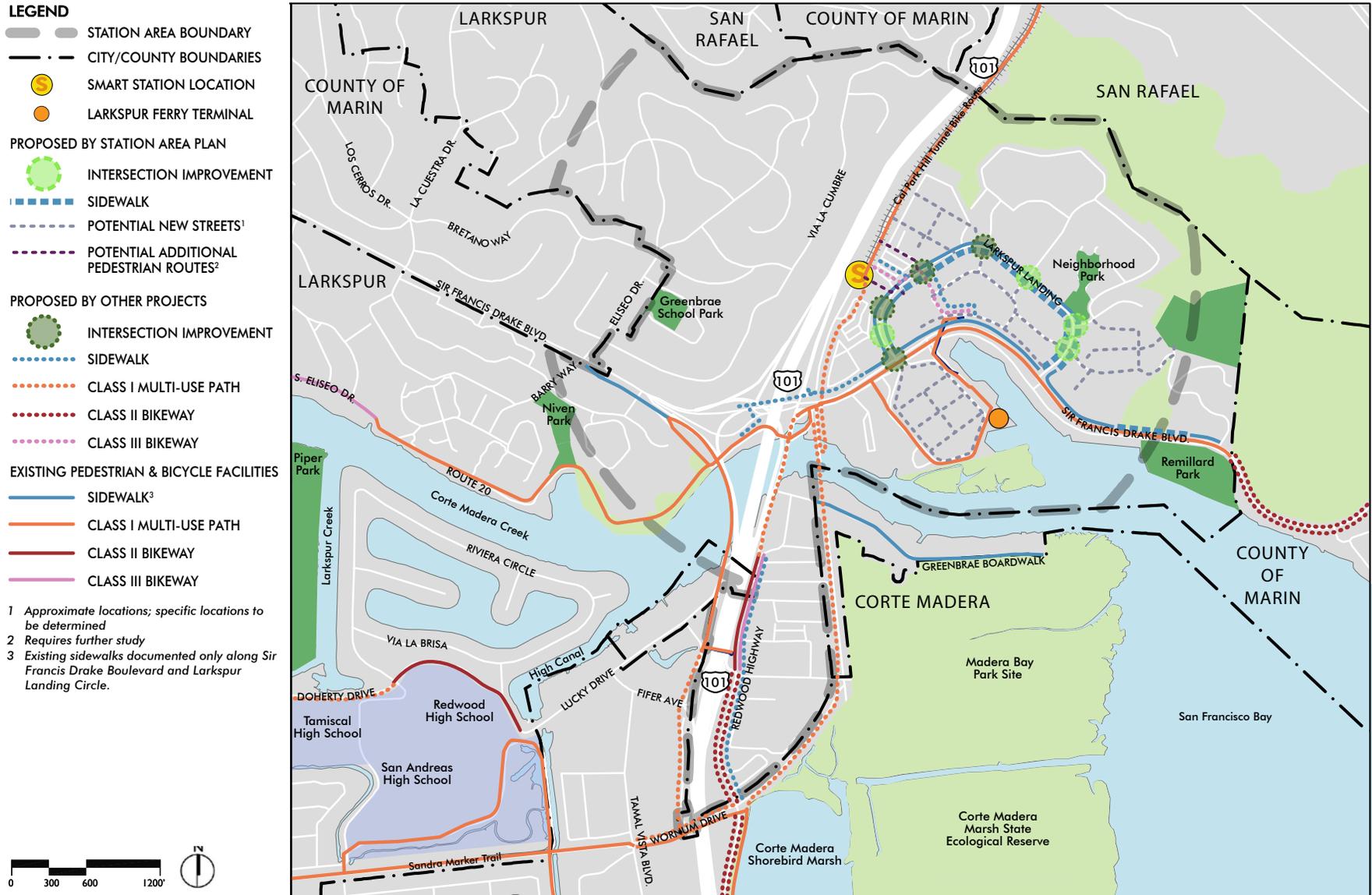


Figure 5.8: Existing and Proposed Bicycle Facilities



Cal Park Hill to Ferry Terminal Access Study (Transportation Authority of Marin)

- Improve crossings across Sir Francis Drake Boulevard at Larkspur Landing Circle (West) through a pedestrian countdown signal, median refuge, wayfinding signage, and bicycle detection.

In addition to these approved plans, the following projects are currently under consideration for funding by the MTC.

Transportation Authority of Marin Proposed Studies (Transportation Authority of Marin)

Per TAM Board of Commissioners Resolution 2013-14, TAM has recommended the following improvements to be funded by Regional Measure 2 funds:

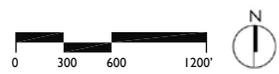
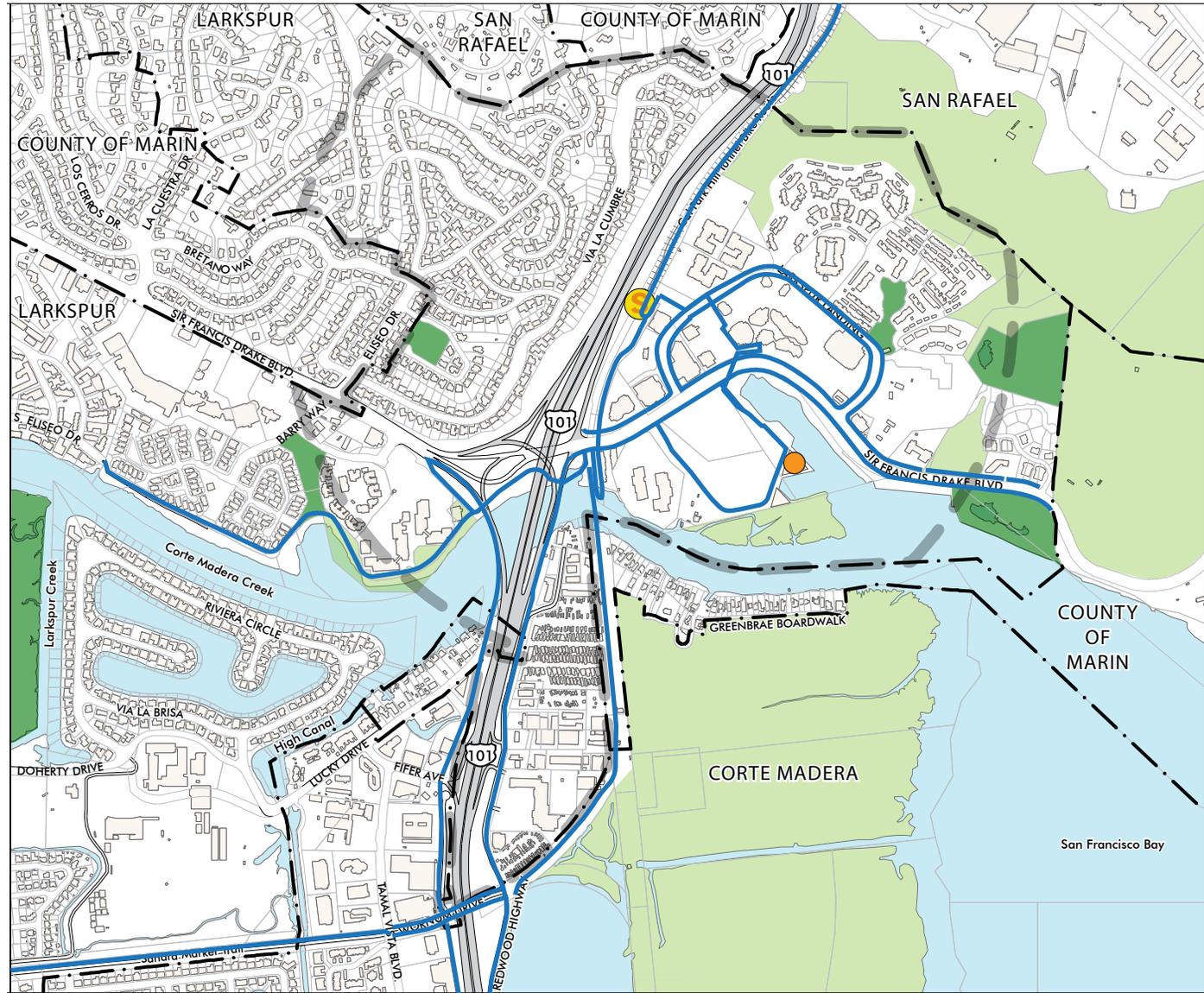
- Create new regional and local bus stops at the Sir Francis Drake Boulevard/U.S. 101 interchange. Install new pedestrian friendly intersection improvements and access routes (including new sidewalks) to existing and new bus stop locations at Sir Francis Drake Boulevard.
- Widen the existing pedestrian and bicycle path along the northbound off-ramp to provide 10-12 foot Class I multi-use pathway.
- Conduct further study on Phase 2 of the Central Marin Ferry Connector to continue the structure in Phase 1 across the Corte Madera Creek and extend the multi-use pathway along the railroad right-of-way to Wornum Drive to connect with the existing multi-use trails at Wornum Drive and Redwood Highway.
- Construct a sidewalk on the east side of Redwood Highway between Wornum Drive and Industrial Way.
- Enhance pedestrian and bicycle crossings of U.S. 101 at Wornum Drive.

This Plan proposes additional improvements to pedestrian and bicycle circulation including new sidewalks, pedestrian amenities, and enhanced pedestrian crossings. In addition, several pedestrian routes are recommended for further study to connect the Larkspur SMART station with the Larkspur Ferry Terminal. These pedestrian routes face many issues to imple-

mentation including sight-distances between pedestrians and vehicles on Larkspur Landing Circle, ADA compliance, and private property concerns. The completion of these network gap closure projects will provide a network of pedestrian and bicycle routes throughout the station area.

Figure 5.9: Priority Accessible Paths of Travel

- LEGEND**
-  STATION AREA BOUNDARY
 -  CITY/COUNTY BOUNDARIES
 -  SMART STATION LOCATION
 -  LARKSPUR FERRY TERMINAL
 -  PARKS
 -  OPEN SPACE
 -  PRIORITY ACCESSIBLE PATHS OF TRAVEL

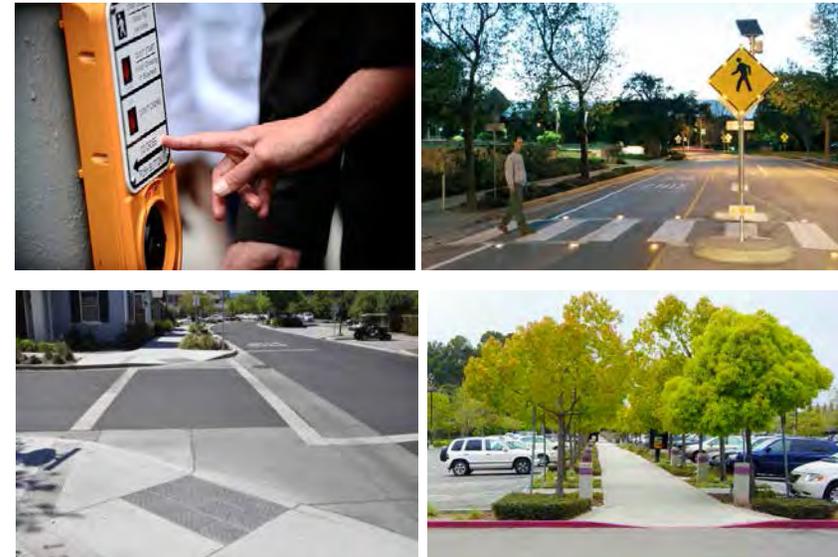


PEDESTRIAN ACCESSIBILITY RECOMMENDATIONS

A network of accessible routes is a critical component of any transit-supportive environment. This is particularly true for disabled and older residents and patrons who may desire to walk to destinations but need better accommodations on trails, sidewalks and pathways than the young or able-bodied need.

Figure 5.9 illustrates corridors within the station area that should be considered priority accessible paths of travel. These routes provide access to the major transit facilities in the station area and consist of slopes of less than 5%. They should be improved with controlled crosswalks, curb ramps, corner bulb-outs and medians, and clear signage. Accessibility improvements to Sir Francis Drake Boulevard, Larkspur Landing Circle, and other public streets will be the responsibility of the City or other public agencies. Accessible routes will also be needed on private properties. Recommendations with respect to accessibility include the following:

- Implement improvements along priority accessible paths of travel to ensure access to existing and planned transit facilities from surrounding areas.
- Provide accessible curb ramps, pedestrian scale lighting, and crossing technology at street crossings to enhance visibility of pedestrians.
- Shorten crossing distances with corner bulb outs and medians.
- Accommodate a diverse demographic by providing seating, lighting, and accessible paving materials.
- Provide pedestrian walkways through parking areas.
- Integrate traffic calming elements along accessible routes to ensure pedestrian safety.
- Ensure that any senior housing or housing specifically for the disabled is located in close proximity to convenient pedestrian walkways and connections to services and amenities, particularly the Marin Country Mart and transit (ferry, SMART and bus).



Crosswalk signals (top left) and lighting (top right) can make crossings safer for all users. Accessible curb cuts (bottom) should be installed at street crossings, and dedicated pedestrian lanes should be provided through parking areas.

SIGNAGE AND WAYFINDING

Throughout the area, there is intermittent signage directing pedestrians and bicyclists to destinations. Incorporating both wayfinding and interpretive signage would enhance pedestrian and bicycle connectivity within Larkspur Landing and the Larkspur SMART station. Guidelines and strategies for signage and wayfinding are described in Chapter 5 –Design Guidelines.

TRANSIT SERVICE

This Plan will increase future transit ridership due to a combination of increased land uses and the addition of the SMART train. New residential development in the station area has the highest potential to increase transit ridership due to the accessibility of jobs within walking distance of these transit routes. The SMART EIR found that approximately 400 daily transit trips are forecasted to use the new Larkspur SMART station. The Draft Larkspur SMART Station Area Plan EIR found that the land uses proposed in this Plan will generate 600 to 700 new daily transit riders. These transit riders will use a mix of the new SMART train, GGBHTD bus service, and the Larkspur Ferry Terminal.

PARKING MANAGEMENT

Existing parking conditions were reviewed throughout the station area to determine existing parking supply and demand. This Plan will increase parking demand in the station area due to the increased land uses. The existing parking conditions were reviewed to assist with developing estimates of future parking demand and require parking supply. This section summarizes the assessment of existing parking conditions, estimates future demand based on the characteristics of the Larkspur SMART station and Larkspur Landing, and recommended parking management measures to minimize the amount of required parking in the station area.

PARKING MANAGEMENT PLAN

As recommended in this Plan, amending parking requirements in the Larkspur municipal code will reduce parking demand by providing alternative

options to car ownership and driving for residents, employees and visitors. Reduced parking requirements support Station Area Plan goals by reducing infrastructure costs to build parking, minimizing the amount of land used by parking, and reducing the burden on the local roadway network.

Parking Demand Reduction Measures

The retail and office uses within the existing station area currently generate less parking demand than similar uses in a typical suburban site. This parking demand rates presented in Table 5.1 represent the existing levels of multi-modal accessibility and mix of uses. This Plan will increase multi-modal accessibility and transit supportive land uses in the station area, reducing the overall parking demand below the existing rates shown in Table 5.1.

Successful implementation of this Plan will include minimizing the amount of desired parking by residents, employees, and visitors to the station area. This will require the support of parking strategies that focus on incentivizing transit and non-motorized modes through transportation demand management measures. This Plan includes the following parking management measures to reduce parking demand in the station area:

1. Encourage Alternative Modes (as described in the Transportation Demand Management Section).
2. Require unbundled parking (separating the cost of parking in lease agreements with tenants, as described in further depth in the Transportation Demand Management section) for offices and housing units to create more affordable live and work spaces, encourage developers to build less parking, and make the price of parking more transparent.
3. Implement parking pricing for all on- and off-street short-term parking:
 - Charge for all on-street parking within Larkspur Landing.
 - Coordinate off- and on-street parking prices.
 - If feasible, set a variable market price for parking to ensure 15% vacancy at all times, thereby reducing cruising for park-

ing and air pollution, and encouraging visitors to local businesses. This includes varying parking by time of day and proximity to destination.

- Include a premium for parking closest to the ferry terminal.
 - Implement companion parking technologies (pay by cell phone, etc.) and parking informational brochure, website, and wayfinding signs.
4. Coordinate with the Golden Gate Bridge Highway and Transportation District to implement parking management policies and programs at the Larkspur ferry terminal to reduce parking demand at the terminal.
 5. Employ these complementary measures to parking pricing programs:
 - Create residential parking permit zones on residential-only streets to prevent parking spillover into residential neighborhoods.
 - Return the parking revenue to the district by establishing Parking Benefit Districts.
 - Enforce parking cash-out programs if employers offer subsidized parking to employees.

Parking Supply Requirements

Parking supply requirements are based on the parking demand for the proposed land uses. At development sites where opportunities for shared parking between land uses are available, the required parking supply for the station area can be reduced.

To determine the recommended parking requirements for this Plan, the parking demand ratios were adjusted to a desired 85 percent occupancy level for commercial uses, reflecting the public's perception that a parking facility is "full" when 85 percent of the spaces are utilized. This results in requirements of 2.6 per 1,000 square feet (KSF) for office uses and 4.4 per KSF for retail uses to satisfy the existing demand levels. Table 5.2 shows the required amount of parking for each type of land use per the Larkspur Municipal Code and for the Plan. These supply rates are 12 to 35 percent lower than the required parking ratios provided in the Larkspur Municipal Code.

Table 5.1: Existing Parking Demand Rates

Land Use	Existing Parking Demand Rates	Typical Suburban Site ²
Residential	1.6 per unit	1.6 per unit
Marin Country Mart	3.7 per KSF	3.8 per KSF
Offices	2.2 per KSF	2.8 per KSF

Notes:

1. Based on Institute of Transportation Engineers (ITE) Parking Generation, 4th Edition.
2. Based on parking surveys completed in September 2012. Rates are shown per "occupied KSF" at the time of the parking surveys.

Source: Fehr & Peers, November 2012.

Opportunities for shared parking arrangements arise as different land uses have peak parking demand at different times of the day. For example, commercial land uses (retail and office) have the peak parking demand during the middle of the day on weekdays, while residential land uses have their peak parking demand overnight. The Urban Land Institute's (ULI) Shared Parking Model determines the maximum shared parking demand on a weekday or weekend for a mix of land uses.

The peak parking demand will occur during the weekday mid-day period at all of the development sites period with the following exceptions:

- Marin Country Mart – Similar to the existing counts, the maximum retail parking demand will occur during the weekend mid-day. However, as excess supply will be available on the weekends at the adjacent development sites (Larkspur Landing Offices and Ferry Terminal), shared parking arrangements between development sites will allow overflow weekend retail parking demand to be accommodated at these sites. As a result, the parking supply at the Marin Country Mart should be designed to accommodate the weekday (and not weekend) peak parking demand.
- Sanitary District – The maximum parking demand will occur overnight when residential and hotel parking demand is the highest. Therefore, the parking supply should be designed to accommodate the overnight parking demand.

Based on the peak shared parking demand, recommended parking rates were determined for each of the development sites and are shown in Table 5.3. The Sanitary District will require a higher residential parking ratio as it includes primarily residential uses with limited opportunities for shared parking.

This Plan includes the following measures to manage and reduce the overall parking supply in the station area:

1. Reduce off-street parking requirements:
 - Take advantage of shared-parking opportunities generated by mixed use development and the ferry terminal.
 - Amend the City of Larkspur Municipal code to match the off-street parking maximums shown in Table 5.3.
 - Allow developers to pay in-lieu fees to reduce parking provisions where appropriate.
2. Develop a parking management strategy:
 - Designate areas for short- and long-term parking
 - Employ innovative payment, information and monitoring technologies including:
 - Offer “parking debit cards” or cell phone payment options at metered parking.
 - Coordinate off- and on-street parking availability via real-time message boards and mobile applications.
3. Where feasible, construct parking garages instead of parking lots. Avoid surrounding the transit station with surface parking:
 - Give developers flexibility to create space-efficient parking through the use of tandem, valet, and stacked mechanical parking.
 - Include ground floor retail to integrate parking structures into the neighborhood design and pedestrian realm.
4. Market the parking supply strategy by providing a brochure with parking locations and information on alternative transportation options.

Table 5.2: City of Larkspur and Station Area Plan Off-Street Parking Requirements

Land Use	Larkspur Municipal Code (Chapter 18.56)					Station Area Plan
	Unit Type	Rental	Condo	Guest Pkg ¹	Range of Parking Ratios	Parking Ratios ²
(A) Multi-family Residential (for large complexes in Station Area)	Studio & 1-Bedroom	1 per unit	1 per unit	0.25 to 0.5 per unit	1.25 to 3 per unit	1.1 to 1.6 per unit
	2-Bedroom	1.5 per unit	2 per unit			
	3-Bedroom	2 per unit	2.5 per unit			
	4-Bedroom	2 per unit	2.5 per unit			
(C) General Retail					5 per KSF	4.4 per 1,000 sf
(F) Office					4 per 1,000 sf	2.6 per 1,000 sf

Notes:

1. Guest parking is allowed to include on-street parking if it is available adjacent to the building which it serves. However, there is limited on-street parking in the Station Area.
2. Assumes 85 percent occupancy level for commercial uses. Residential parking requirements can be lowered when there are opportunities for shared parking.

Table 5.3: Proposed Parking Rates

Development Site	Residential (per unit)	Retail (per 1,000 SF)	Office (per 1,000 SF)	Hotel (per room)
Sanitary District Site	1.6	—	— ¹	1.1
All Other Development Sites	1.1	4.4	2.6	—

5. Provide on-street parking where possible (Note: this is often a product of reduced block sizes and enhanced pedestrian connections). Consider back-in or regular angled parking where feasible to maximize on-street parking opportunities.

BICYCLE PARKING

To enhance the viability of bicycle travel to and from the station area, this Plan includes minimum requirements for bicycle parking for all new developments. Desirable bicycle parking ranges from short-term parking amenities, such as bicycle racks in highly visible and secure locations near building entrances, to long-term parking facilities where bicycles are either locked individually (lockers) or with limited access (cages). The only existing secure bicycle parking within the station area is currently provided within the Larkspur Ferry Terminal. As land uses develop and bicycle routes expand, it will be essential to provide safe and convenient places to store bicycles throughout the station area. Because bicycling is much faster than walking, bicycle trips expand the area accessible without a car. Three main strategies support this:

- Provide bicycle parking and supporting facility requirements such as showers and lockers for new developments;
- Consider in-street bicycle corrals to reduce sidewalk clutter, especially at high demand locations; and
- Consider expanding MTC’s bike share program to Larkspur

Chapter 18.56.140 of the City of Larkspur Municipal Code currently requires short-term and long-term bicycle parking at a rate of five percent of automobile parking spaces. This Plan will increase those requirements to 10 percent for short-term parking, as shown in Table 5.4. Long-term requirements vary according to land uses. In some locations where less vehicle parking is provided, more than 10 percent of automobile parking spaces may be beneficial, and short- and long-term bicycle parking could reduce the amount of automobile parking required. The City of Larkspur Municipal Code also provides design and location guidelines for short- and long-term bicycle parking which will be applicable for this Plan.

Table 5.4: Station Area Plan Bicycle Parking Requirements

Type of Activity	Long-term Requirement ¹	Short-term Requirement ¹
Residential - Multi-family Dwelling		
With private garage for each unit (a private locked storage unit may be considered a private garage if a bicycle can fit into it)	No spaces required	0.10 spaces for each bedroom. Minimum is 2 spaces.
Without private garage for each unit	0.5 spaces for each bedroom. Minimum is 2 spaces.	0.10 spaces for each bedroom. Minimum is 2 spaces.
Senior Housing	0.5 spaces for each bedroom. Minimum is 2 spaces.	0.10 spaces for each bedroom. Minimum is 2 spaces.
Public Transportation		
Rail/bus terminals and stations./airports	Spaces for 7% of projected a.m. peak period daily ridership.	Spaces for 2% of projected a.m. peak period daily ridership.
Commercial		
General Retail	1 space for each 10,000 sf of floor area. Minimum requirement is 2 spaces.	1 space for each 20,000 sf of floor area. Minimum requirement is 2 spaces.
Office	1 space for each 10,000 sf of floor area. Minimum requirement is 2 spaces.	1 space for each 20,000 sf of floor area. Minimum requirement is 2 spaces.
Off-street parking lots and garages available to the general public either without charge or on a fee basis	1 space for each 20 automobile spaces. Minimum requirement is 2 spaces. Unattended surface parking lots excepted.	Minimum of 6 spaces or 1 to 10 auto spaces. Unattended surface parking lots excepted.

Note:

1. Long-term parking is for parking duration of greater than two hours, i.e. for parking at home, work, or a transit station. Long-term parking requires supervised or unsupervised cages, lockers or racks in secure areas. Short-term parking is for a parking duration of less than two hours, i.e. for commercial or retail, healthcare, parks and recreation areas, and community centers. Short-term parking can be simple bicycle racks, and should be in a convenient location and easy to use.

Source: Based on the *Bicycle Parking Guidelines, 2nd Edition*, Association of Pedestrian and Bicycle Professionals (APBP) 2010; Fehr & Peers, September 2013.

TRANSPORTATION DEMAND MANAGEMENT PROGRAM

This Plan includes a suite of Transportation Demand Management (TDM) strategies to reduce peak single-occupancy vehicle trips and encourage use of transit, walking, and biking as transportation modes. These strategies can significantly enhance mobility for people accessing the station area and will require close coordination among multiple agencies, including the GGBHTD, Transportation Authority of Marin, County of Marin, and Caltrans. These TDM strategies will be most effective when they are provided for all user groups in the station area, including residents, employees, shoppers, and transit riders. A vehicle trip cap will monitor effectiveness of the TDM program and the traffic generated from the station area. The TDM program and vehicle trip cap will be managed through the proposed transportation management association (TMA).

TDM COORDINATOR

Hire an on-site TDM Coordinator to manage and promote TDM programs and oversee monitoring to determine program effectiveness. A TDM Coordinator provides information via flyers, posters, e-mail, and educational programs regarding non-auto access and circulation options. The TDM Coordinator's role may also include actively marketing alternative mode use, or administering a neighborhood ridematching program. A TDM Coordinator could also help implement or support the following parking and vehicle management strategies described in this section.

NEIGHBORHOOD ECOPASS

Provide a transit subsidy ("commuter check" or "EcoPass") to all residents and employees. This program will reduce the cost of using transit service to access the station area.

NEIGHBORHOOD RIDEMATCHING AND RIDESHARING

Carpools consist of two or more people riding in one vehicle for commute purposes. A vanpool consists of seven to 15 passengers, including the driver, and the vehicle is either owned by one of the vanpoolers or their employer or leased by a vanpool rental company. Carpools and vanpool formations

often require ridematching assistance. Neighborhood carpooling could be incentivized through priority parking at the Larkspur SMART station and ferry terminal, and through transit fare reductions. Additionally, the Guaranteed Ride Home program (see below) will provide an insurance plan to those hesitant to join carpools for concerns of being unable to respond to an emergency, sick child, or other issue. To facilitate the formation of carpools, a TDM coordinator will administer an on-site carpool and vanpool matching service for commuters and maintain a list of available vanpools that provide service between the station area and various residential neighborhoods. The coordinator could also direct patrons to the 511.org Ride-share website to access additional ridematching services.

ATTENDED PARKING

Attended parking employs the service of a parking attendant who organizes efficient parking based on arrival and departure times. This strategy is well-suited for the ferry terminal, SMART station, and Larkspur Landing offices, where arrivals and departures come in "waves" with ample time during the day to re-arrange vehicles for efficient storage and exiting. Unlike valet parking, where a valet parks a vehicle on arrival and retrieves the vehicle on departure, attended parking relies on organized parking queues and is not intended as a luxury service. Drivers typically park and retrieve their own vehicles. A significant benefit of attended parking is the ability to utilize more capacity in a parking area.

PREFERENTIAL PARKING FOR VANPOOL OR CARPOOL

Reserve convenient parking spaces for high-occupancy vehicles (HOVs) to encourage ridesharing. Preferential spaces could be striped and signed at a low cost. By implementing this strategy with attended parking, there will be minimal enforcement costs. Complementary strategies such as a Guaranteed Ride Home program and a ridematching program will further encourage ridesharing.

TRANSIT DISCOUNTS FOR CARPOOLS OR VANPOOLS

In addition to preferential parking for carpools and vanpools, SMART or ferry terminal patrons commuting via carpool or vanpool may receive subsidized transit travel as an additional incentive. HOV discounts for ferry or SMART fares will require significant monitoring and enforcement to prevent abuse of the system. This could be a responsibility of a TDM Coordinator who could issue the discounted fares.

UNBUNDLED, SHARED PARKING

The cost of parking is often “hidden” within the rent or purchase price of a residential or commercial unit. When parking is unbundled, parking spaces may be rented or sold separately rather than automatically included with the building space. Unbundling parking can also make housing more affordable for lower income households by providing the option of paying for housing without also paying for parking (if the household chooses not to or does not have a vehicle). Companion strategies of prohibiting street parking overnight, charging market rates for on street parking, and selling limited residential parking permits are often necessary to prevent spillover effects. Unbundled parking can also complement car-sharing programs. Unbundling parking is more equitable and efficient and it has been shown to reduce the total amount of parking required for a building when alternatives to driving are available in the area. Where parking provisions are not reduced, excess parking may be used as shared parking in mixed-use developments. Shared parking maximizes the use of parking facilities by making parking available for several land uses, especially those that have different time-of-day parking requirements. A potential shared parking scheme could include the following:

- Parking spaces are sold separately from units, with the total parking supply equal to the amount described in the Parking Management section;
- Surplus residential or employee parking is leased to SMART or ferry terminal patrons at market rates (on a monthly basis to control the population of users with access to the residential parking area); this program could be managed by a TDM Coordinator or by SMART and GGT; and

- Available spaces are provided to residents first upon turnover should their parking needs change.

BICYCLE PARKING

Integrate bicycle parking and support facilities, including signage and wayfinding, primarily to reduce vehicle trips within Larkspur and neighboring communities. Bicycle parking strategies for convenient and secure on-street and off-street parking can make bicycling to the station area more appealing. Bicycle parking strategies are discussed in the Parking Management section.

CARSHARING

Recruit and make provisions for carshare programs and neighborhood electric vehicle programs to reduce the need to have a car on site for occasional use. Membership fees typically include insurance, fuel, and maintenance costs and may be paid on a per-hour or mile basis. Carsharing can be an alternative to car ownership or may encourage households within the station area to “shed” an extra car, or employees to take transit to the site knowing that they will have vehicles available if needed. Carsharing could complement other strategies such as unbundled parking or parking permits for residents and discounted transit passes and parking cash-out for employees.

ADDITIONAL STRATEGIES

- Improved wayfinding and signage
- Station branding and visibility
- Station area maps
- Variable real-time message signs (e.g., for parking)
- Information kiosks and booths
- Provide a transit subsidy (“commuter check” or “EcoPass”) to all residents and employees.

ACCESS, CIRCULATION AND PARKING POLICY RECOMMENDATIONS

The Integrated Land Use and Transportation Strategy at the heart of this Plan requires that land use decisions and transportation management go hand-in-hand through the life of the Plan. The Land Use Policy Recommendations and these policy recommendations should be considered together and approached in a coordinated manner.

ACP-1: The Circulation Element of the General Plan should be amended to address the City's intent to implement a Transportation Management Association and Trip Cap program that would apply to the station area. Participation in the TMA shall be required for all new development within the station area, and shall be strongly encouraged for all existing development within the station area. The vehicle trip cap program should include assessment of baseline data and annual monitoring of conditions as a means of managing development within the station area. The City should identify a proportional share of the 10 percent increase in traffic generation to each opportunity site so that traffic increase occur incrementally with each development.

ACP-2: Limit the future increase in vehicle trips from the station area to no more than 10 percent above the current traffic generated by the station area. Development that generates trips exceeding this trip cap should not be permitted until traffic improvements and TDM measures can reduce trip generation to this level.

ACP-3: Amend the existing Trip Reduction Ordinance (LMC 18.13) to update program policies and ensure it adequately incorporates the Transportation Demand Management strategies proposed by this Plan.

ACP-4: All development projects within the station area should be required to submit a trip reduction and parking management plan as part of the development application. The zoning code should be modified to establish a threshold defining projects such as remodeling

or additions to existing development within the station area that trigger comprehensive TDM requirements.

ACP-5: Work with SMART and GGBHTD to study an alternative location for the Larkspur SMART station in the vicinity of the ferry terminal.

ACP-6: In order to address existing traffic constraints, amend the Circulation Element of the General Plan to emphasize the City's intent to work with appropriate agencies to implement the following traffic improvements to Sir Francis Drake Boulevard.:

- Add a third eastbound through lane approaching Eliseo Drive through to the US 101 southbound on-ramp.
- Stripe a third westbound through lane approaching Larkspur Landing Circle (West) through to northbound US 101 on-ramp.
- Work with Caltrans and the County of Marin to improve and re-time traffic signals between Eliseo Drive and Larkspur Landing Circle (East) to more effectively accommodate future traffic volumes.
- Work with the City of San Rafael to study the feasibility of signalizing the intersection at Anderson Drive or consider alternate design solutions to improve traffic flow at that intersection.

ACP-7: Amend the Circulation Element of the General Plan to require Complete Streets improvements, as described in this Plan, to streets within the station area, to support pedestrian, bicycle and transit use in the station area, including:

- Improvements to Sir Francis Drake Boulevard such as extending sidewalks and improving the Remillard Park trail.
- Improvements to Larkspur Landing Circle including adding missing sidewalks, adding bicycle lanes if feasible, and adding complete crosswalks at all intersections.

- Along Redwood Highway, implement pedestrian improvements such as sidewalks, crosswalks and bicycle lanes to ensure safe multi-modal access.
- Require new lanes within development areas to be designed to calm traffic while providing adequately scaled sidewalks and pedestrian and bicycle amenities.
- Ensure that a fine grain of pedestrian walkways are provided throughout existing and new development to encourage walking to destinations within the station area and to transit facilities.

ACP-8: Ensure accessibility to pedestrians of all abilities, including seniors and the disabled, by implementing improvements described in this Plan on priority accessible paths of travel.

ACP-9: Incorporate standards and guidelines for street designs and improvements included in this Plan (e.g., to Larkspur Landing Circle) into capital planning and the General Plan.

ACP-10: Retain language in the General Plan that supports local and regional efforts to improvement pedestrian and bicycle circulation and facilities.

ACP-11: Retain language in the General Plan that supports working with Marin Airporter to ensure retention of this important service in the Larkspur Landing area.

ACP-12: Amend Chapter 18.56 of the Larkspur Municipal Code to reflect required parking ratios for new land use designations identified in the Station Area Plan.

ACP-13: Coordinate with GGBHTD to identify and manage ferry-related parking on site or in off-site locations, including opportunities for shared parking.