

5 CIRCULATION ELEMENT

The Tiburon Peninsula possesses unique constraints and opportunities for circulation. The constraints are largely a function of the relative isolation that results from being a lengthy peninsula and from topography that is dominated by relatively steep hillsides. The unique opportunities are provided by the navigable waters that surround the peninsula, the clustering of pedestrian-oriented development in downtown, and the heavily-used Old Rail Trail, a multi-use path that runs most of the length of the peninsula. This Element sets forth a guiding vision and principles for the transportation system, and detailed goals and policies for each aspect of the system, which will shape the Town's implementation of a Complete Streets approach to mobility in the future. The Element discusses the existing conditions for mobility in Tiburon, including all modes of transportation that residents, visitors, and employees on the peninsula use regularly, and the sources of traffic congestion. It concludes with a list of programs designed to implement these goals and policies, and with a summary of proposed circulation and mobility improvements.

5.1 VISION & GUIDING PRINCIPLES

VISION

Town goals and policies should be guided by its overall vision for the transportation system. This vision contains an overall statement of purpose as well as principles that support the Circulation Element's critical features, such as the state-mandated Complete Streets policy. The following statement provides the vision for this Element:

“The Town of Tiburon envisions a transportation system that supports the Town's goals for safe and healthy transportation, sustainability, a sense of small-town community character, a high-quality of life for residents, and economic vibrancy of the downtown area. Tiburon envisions that that its streets and pathways will form a comprehensive and integrated transportation network promoting safe, equitable, and convenient travel for all users while preserving flexibility, recognizing community context, and using the latest and best design guidelines and standards. This entails the integration of Complete Streets concepts into street designs that are comfortable and convenient for the breadth of travel choices while creating more vital places in keeping with desired community character. Complete Streets are routinely planned, designed, operated, and maintained with consideration for the needs and safety of all travelers along and across the entire public right of way. Complete Streets will meet the needs of all ages and abilities who are walking, bicycling, using transit, traveling with mobility aids, driving vehicles, and transporting commercial freight.”

GUIDING PRINCIPLES

To support the vision statement, several principles are proposed to guide the Circulation Element:

- **Congestion.** Automobile traffic volumes along major corridors—especially Tiburon Boulevard (State Highway 131)—should be managed to improve traffic flow and enhance quality of life and safety. In particular, the Town shall address growing school and service-oriented/contractor traffic on weekdays, and visitor traffic on weekends. It is important to note, however, that Tiburon Boulevard is owned and maintained by the State of California and not by the Town of Tiburon, limiting the Town’s ability to effectuate significant change.
- **Health.** The Town's transportation system should support opportunities for active transportation choices, including walking and biking, which contribute to the community's health. Emissions from automobiles should be managed so as to lessen the negative health consequences of particulate matter contained in vehicle exhaust.
- **Economy.** The Town's transportation system should support economic vitality in the Town’ commercial areas as well as provide convenient access to other destinations. These functions are essential to maintaining the Town's appeal as a desirable place to live and work. Safe and reliable transportation connections to destinations across the San Francisco Bay Area are vital the Town's desirability and economic well-being.
- **Environmental Sustainability.** The Town values the preservation of local natural resources such as scenic beauty, open space and water quality. The Town also recognizes that local governments can play a key role in reducing greenhouse gas emissions and mitigating the potential impacts of global climate change. Transportation policies in the Town should support both of these objectives.
- **Safety.** The Town's transportation network should be safe for all users, whether walking, biking, driving, or taking transit. People of all ages should feel comfortable biking and walking as a means of transportation as well as recreation.
- **Equity.** The transportation network should balance the needs of all users, as well as people of different incomes who may have limited access to automobiles. Senior citizens and people with disabilities who are no longer able to drive should also be served by high-quality transportation options such as paratransit or Marin Village.
- **Choice.** Town residents and visitors to Tiburon should have the choice to travel by different modes as they see fit, safely, and with convenience and flexibility. Driving is likely to remain the most common mode of travel for the foreseeable future in Tiburon, but walking, biking, and riding transit (as well as carpooling) may become attractive choices for an increasing number of people.
- **Management and Measurement.** Roadway and circulation network performance metrics—encompassing all modes of travel—should be established and measured. The transportation network should be managed to achieve set targets, such as reducing automobile congestion, reducing the number of collisions, and improving parking availability.
- **Design.** Tiburon has views of natural and urban settings that are among the finest in the world. The design of transportation facilities should take into account and enhance the

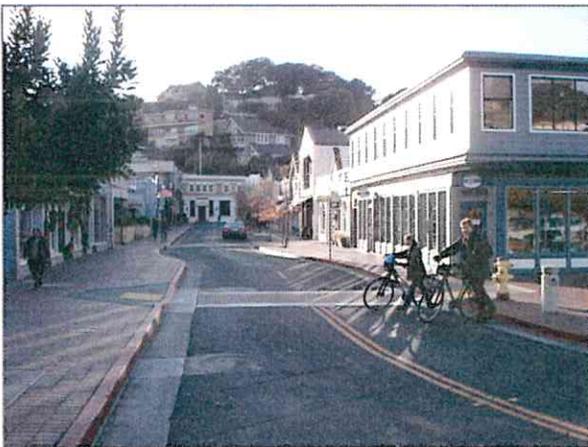
Town's setting of residential tranquility intertwined with nature beauty, as well as enhance the vibrancy and appeal of its small, village-like downtown.

What are Complete Streets?

In 2008, the State of California enacted the Complete Streets Act, which required cities and counties to revise their General Plans to incorporate the principles embodied in the Act. Briefly, Complete Streets are routinely planned, designed, operated and maintained with consideration of the needs and safety of all travelers along and across the entire public right of way. This includes people of all ages and abilities who are walking; driving vehicles such as cars, trucks, motorcycles or buses; bicycling; using transit, traveling with mobility aids; or shipping freight. Every street and its environs are different, such that physical manifestation of what constitutes a “complete street” will change based on the local context. However, providing for all users is a core tenet of Complete Streets.

The Complete Streets movement fundamentally redefines what a street is intended to do, what goals a transportation agency is going to meet, and how a community will spend its transportation money. The Complete Streets approach breaks down the traditional separation between highways, transit, biking, and walking, and instead focuses on the desired outcomes of a

transportation system that supports safe use of the roadway for everyone.



Complete Streets policies formalize a community’s intent to plan, design, operate, and maintain streets so they are safe and accessible for all users of all ages and abilities. Policies direct decision-makers to consistently fund, plan, design and construct community streets to accommodate all anticipated users, including pedestrians, bicyclists, public transit users, motorists and freight vehicles.

There are many types of Complete Streets—it is not necessary that every street has sidewalks, bike lanes and transit. On streets with low traffic volumes, such as those in Tiburon's hilly residential neighborhoods, a Complete Street may be a shared space with traffic calming that ensures walking and bicycling is safe, even without marked bike lanes or sidewalks. On busier thoroughfares such as Tiburon Boulevard or Trestle Glen Boulevard, separated walking and biking facilities are more appropriate. There is no one-size-fits-all solution, and the design of every street must take into account local land use, traffic volumes, and the role of the street in the overall multimodal network.

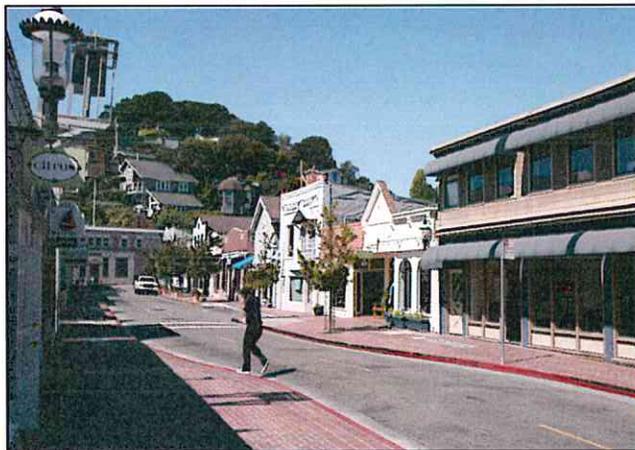


5.2 EXISTING MOBILITY CONDITIONS

Walking & Bicycling

Walking

Tiburon has a well-established network of paths, particularly in Old Tiburon near Downtown, which provide alternate access between homes and Downtown businesses and transportation services. In areas with older, substandard roads, these lanes and paths provide safe connections for pedestrians between and within neighborhoods. These lanes and paths range from formal lanes that are the property of the Town to informal paths that are privately held and serve only a few homes. Many of the lanes and paths are open to public use.



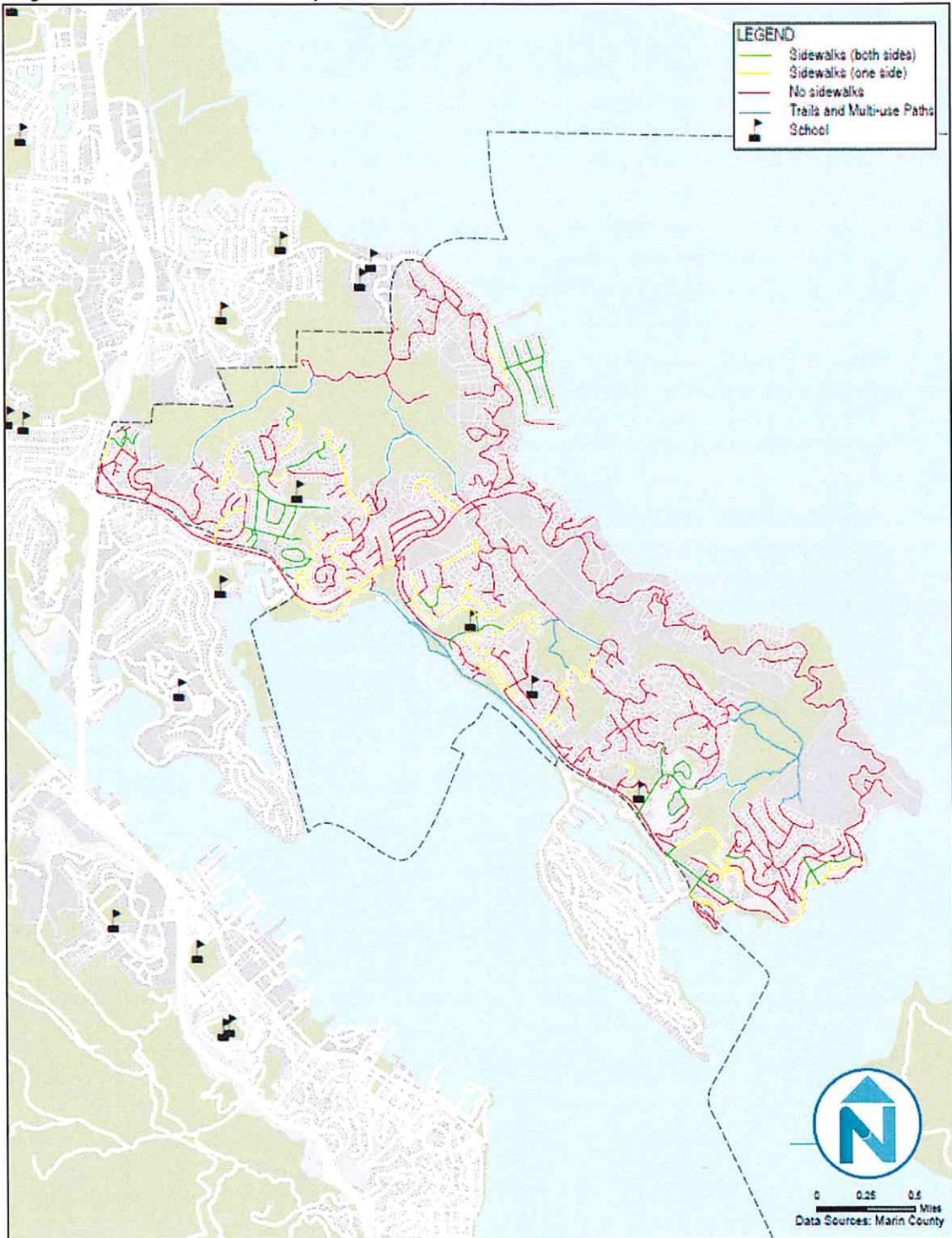
Pedestrians in Tiburon use a variety of facilities, including streets (with and without sidewalks), Old Rail Trail, and trails designed primarily for recreational purposes, such as the Tiburon Ridge Trail and its many tributaries. Sidewalks exist on portions of some arterial and collector streets, but most local streets in Tiburon do not have sidewalks. Diagram 5.2-1 provides an inventory of complete sidewalk segments.

On residential streets with low traffic speeds and relatively low traffic volumes, sidewalks may not be necessary as pedestrians are able to safely share the road with automobiles. Sidewalks are especially important on higher-volume streets with higher traffic speeds. Sidewalks may be necessary even when an adjacent multi-use path is available—as is the case along Tiburon Boulevard parallel to the Old Rail Trail—to ensure that pedestrians can make connections from the path to key destinations such as schools. Most streets leading to schools on the peninsula have sidewalks, with the exception of St. Hilary School, where the lack of sidewalks poses a challenge to

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walking safely. Paradise Drive, the main road around the north and east side of the peninsula, also lacks sidewalks, thus discouraging pedestrian use.

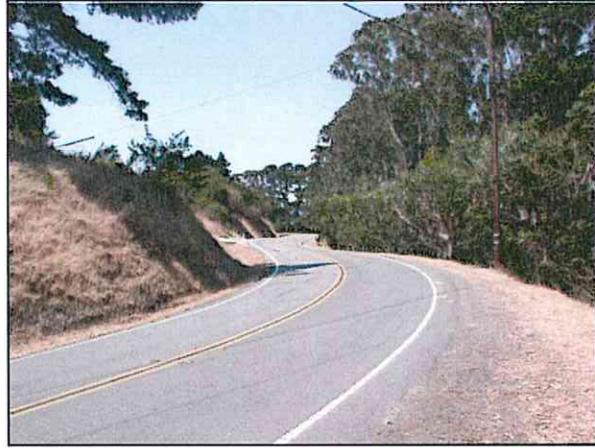
Diagram 5.2-1 Sidewalk Network Map



Biking

Bikeways in the Tiburon Planning Area are categorized into three classes:

- **Class I bicycle paths** are separated from adjacent roadways that serve the exclusive use of bicycles and pedestrians. The Old Rail Trail multi-use path from Blackie's Pasture to Mar West Street/Cove Road is a Class I facility.
- **Class II bicycle lanes** consist of established lanes within the paved area that serve the preferential use of bicycles. Tiburon has a Class II facility that runs along Tiburon Boulevard from Mar West Street to Main Street and on Paradise Drive from Main Street to Mar West Street.
- **Class III bikeways** are shared with other vehicles, with no bike lanes.



San Francisco Bay Trail

The Bay Trail is a recreational corridor that when fully complete will circle San Francisco and San Pablo Bays with a continuous 400-mile network of biking and hiking trails. To date approximately 210 miles of the trail have been completed.

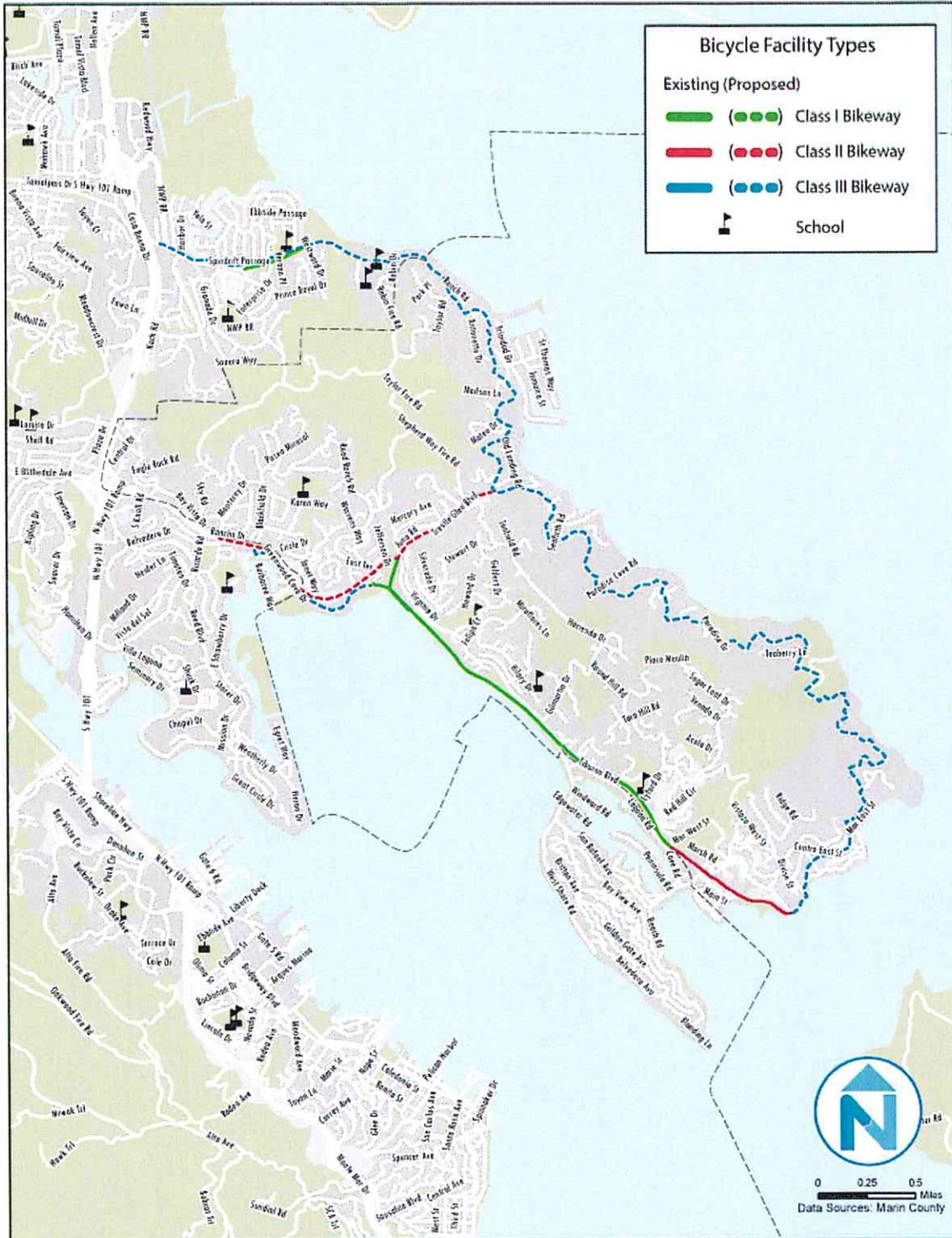
Within the Tiburon Planning Area, the Bay Trail roughly consists of Greenwood Cove Drive, Greenwood Beach Road, the Richardson Bay Lineal Park's Old Rail Trail, Tiburon Boulevard, and Paradise Drive. Trestle Glen Boulevard provides a Bay Trail spur connection from Tiburon Boulevard to Paradise Drive, and there are other trails, such as the Tiburon Ridge Trail and trails found on Ring Mountain, which connect to the Bay Trail.

Bicycle & Pedestrian Master Plan

This Circulation Element is supplemented for bicycle and pedestrian mobility purposes by the most-recently adopted Town of Tiburon Bicycle & Pedestrian Master Plan. The Master Plan provides much more detailed information and programming than is practicable in a General Plan Circulation Element. The Bicycle & Pedestrian Master Plan is informed and guided by the vision, goals, policies and programs as set forth in the Circulation Element, but provides additional specificity relative to bicycle and pedestrian mobility issues. The Town's Parks, Open Space & Trails Commission, acting in its capacity as the Town's Bicycle & Pedestrian Advisory Committee, provides major input and direction in the preparation and adoption of the Master Plan.

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Diagram 5.2-2 Bicycle Network Map



Motor Vehicle Traffic

This section provides an overview of existing motor vehicle circulation conditions.

Street Network & Classifications

The street network in the Tiburon Planning Area consists of approximately 60 miles of arterial, local and collector streets. The Town’s adopted street classifications are defined as follows:

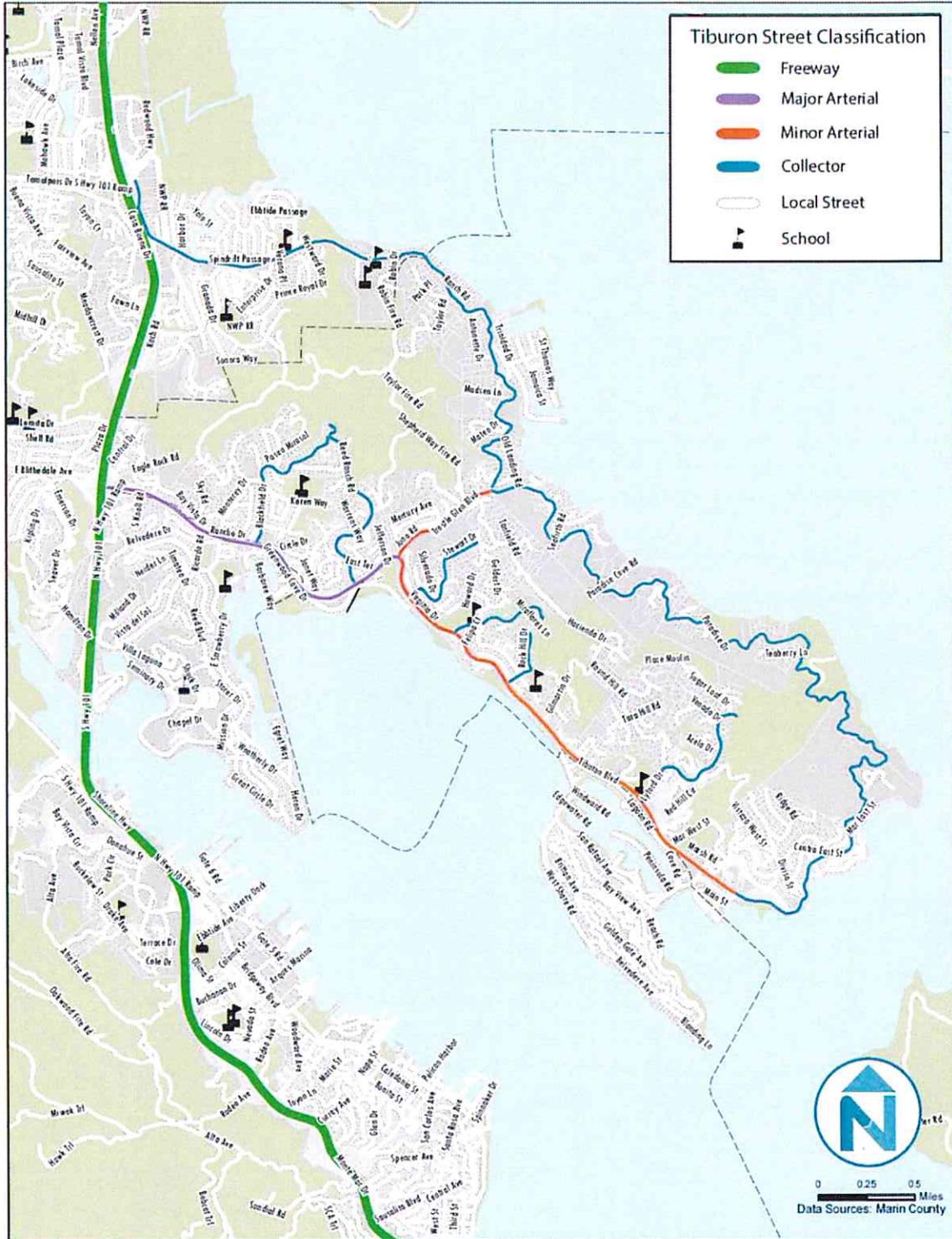
- **Freeway:** A highway serving high-speed traffic with no crossings interrupting the flow of traffic (i.e., no crossing at grade). Streets and Highways Code Sec. 23.5, in part, states that “Freeway means a highway in respect to which the owners of abutting lands have no right or easement of access to or from their abutting lands or in respect to which such owners have only limited or restricted right or easement of access.” Freeways also accommodate transit vehicles for service between communities on a regional scale.
- **Arterial:** A street carrying the traffic of local and collector streets to and from freeways and other major streets, with controlled intersections and generally providing direct access to properties. Safe pedestrian and bicycle facilities, where feasible and appropriate, should be provided along arterials.
- **Collector:** A street for automobile traffic moving between arterial and local streets, generally providing direct access to properties. Safe pedestrian and bicycle facilities should be provided along the collectors where feasible and appropriate.
- **Local:** A street providing direct access to properties and designed to discourage through-traffic. Dedicated bicycle and pedestrian facilities, even if feasible, may not be necessary if traffic speeds are slow enough to comfortably share the roadway space.

Table 5.2-1 Roadway Designations, Tiburon Planning Area

Type	Function	Examples	Traffic Lanes
Freeway	Connects regional activity centers	U.S. 101	> 4
Major Arterial	Connects major local activity centers; also connects arterials with freeways	Tiburon Blvd., from U.S. 101 to Trestle Glen Blvd.	4
Minor Arterial	Connects major arterials with collector and local streets.	Tiburon Blvd., from Trestle Glen Blvd. to Main St.; Trestle Glen Blvd.	2 – 4
Collector	Collects traffic from local streets and channels it to arterial streets.	Paradise Dr., Blackfield Dr., Reed Ranch Rd., Lyford Dr., Stewart Dr., Rock Hill Rd., Avenida Miraflores	2
Local	Serves adjacent residential and commercial property.	Gilmartin Dr., Cecilia Way, Main St., Mountain View Dr., Mt. Tiburon Rd., Juno Rd., all others	2

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Diagram 5.2-3 Street Classification Map



Traffic Patterns

Tiburon Boulevard is the main arterial road through Tiburon and experiences greater traffic congestion than any other street in the town. The sources of traffic on Tiburon Boulevard are varied. During the school year traffic is heavily peaked in the morning and mid-afternoon as school pick-up and drop-off occurs. Commuters driving northwest on Tiburon Boulevard in the morning and southeast in the evening peak hours are another major contributor to traffic. Contractors and service workers driving to sites throughout residential neighborhoods are a continuous source of traffic throughout the day. On weekends and during the summer, when school is out of session, visitors to downtown Tiburon also contribute to traffic on Tiburon Boulevard. Many drivers on Tiburon Boulevard are simply running errands or making various other trips that do not fall into any of these categories. At peak times, these diverse sources of traffic can create conditions on Tiburon Boulevard that cause delay to drivers, and traveling from downtown Tiburon to U. S. Highway 101 can take significantly longer than during times when traffic is free flowing—a frustrating experience for drivers.

A widely held concern amongst Planning Area residents relates to school traffic. There are several schools in Tiburon, and Tiburon Boulevard is the only viable street for access to most of them. Traffic counts confirm that traffic volumes are higher due to school traffic. School traffic was observed to be especially high as a share of all traffic on Tiburon Boulevard at Lyford Drive (near Reed Elementary School) and at East Strawberry Drive (near Bel Aire Elementary School and Strawberry Point School). The mid-peninsula location for Del Mar Middle School also exacerbates traffic congestion. The morning peak hour traffic volumes observed were slightly higher than the evening peak hour traffic volumes at most locations, which reflect the congestion impacts of school-related trips on the morning commute.

In order to better understand circulation patterns in Tiburon, 24-hour counts were carried out at four locations – Tiburon Blvd just east and just west of Trestle Glen Blvd, Trestle Glen Blvd north of Tiburon Blvd, and Paradise Dr east/south of Trestle Glen Blvd. Counts were also conducted at an additional 11 locations over two-hour periods in the morning, mid-afternoon, and late afternoon rush hour to determine the peak hours of traffic at those times. A map of count locations is shown in Diagram 5.2-4.

Unsurprisingly, there is significantly more traffic closer to U. S. Highway 101 and progressively less traffic the further along Tiburon Boulevard towards downtown Tiburon and the ferry terminal. The segment of Tiburon Boulevard between Trestle Glen Boulevard and Rock Hill Road experiences especially high levels of congestion, due to the combination of high traffic volumes and a more narrow roadway configuration than exists on other segments of Tiburon Boulevard.

From 2011-2013, the Town spearheaded a group called Community Action to Reduce Traffic (CART). CART was comprised of Council representatives from Tiburon, Belvedere, and Corte Madera; Reed Union School District and St. Hilary's School officials; Reed School PTA and a Safe Routes to School representatives; and the city managers and police chiefs from Tiburon and Belvedere. Technical assistance was provided by Marin Transit. CART's objective was to explore and consider every approach to reduce traffic on Tiburon Boulevard. A partial list of the approaches studied by CART in order to reduce traffic is as follows:

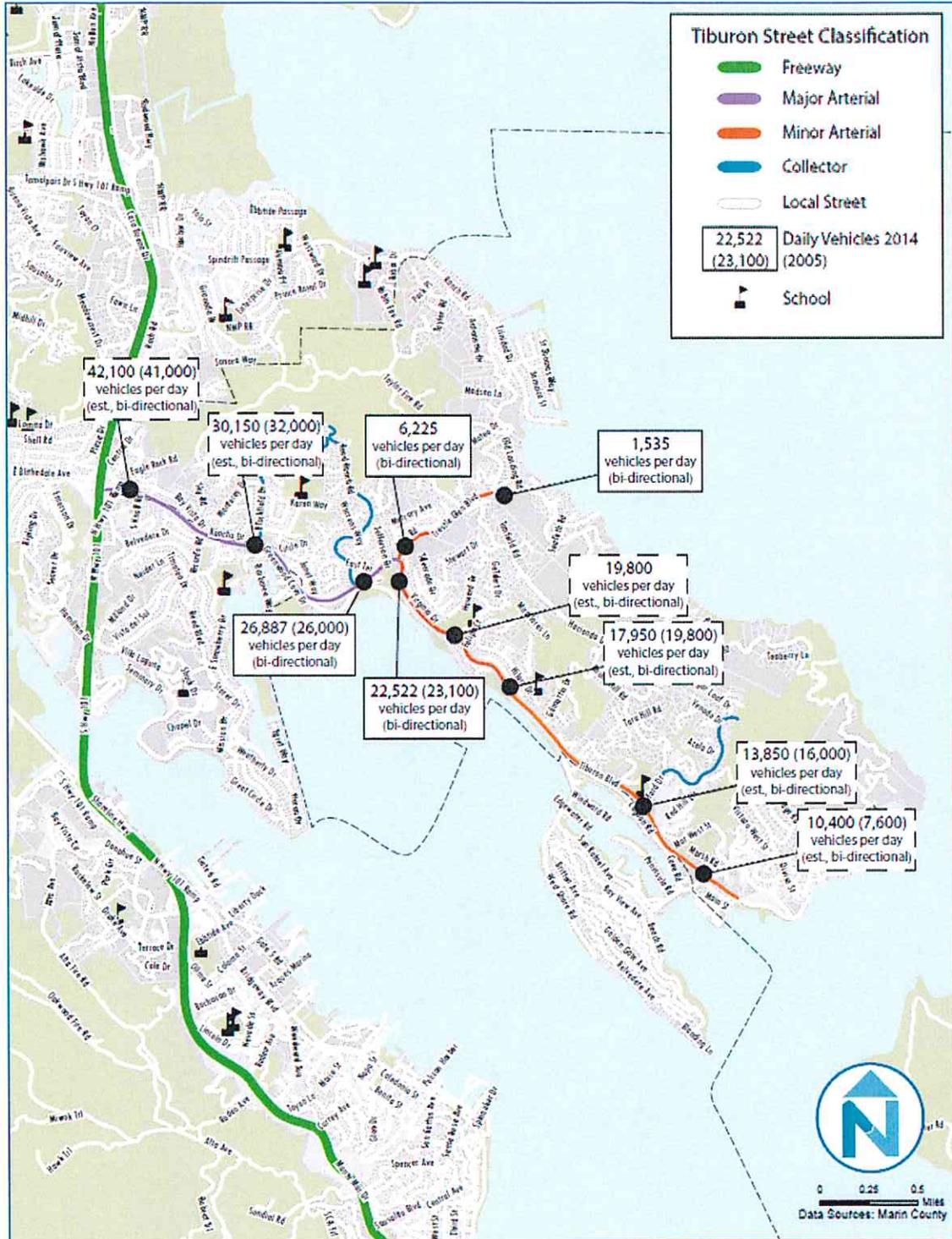
- Altering school bell times
- Altering school child drop-off practices and policies
- Additional school buses , routes and bus stops

- Carpools (school pools)
- Subsidization of bus pass costs
- Bank partnerships to help parents stagger payments for bus passes
- Public subsidies for school buses (tax measure)
- Bike trains and programs to encourage bike ridership
- Crossing guard practices and policies
- In formational campaigns to increase awareness of alternative modes to reach schools
- Traffic signal timing and coordination adjustments
- Underpasses and/or overpasses along Tiburon Boulevard
- Lengthening of left turn pockets
- Roundabouts
- Better coordination with public transit
- Before and after school programs to stagger drop-off and pick-up times
- Park & Ride lots in Blackie's Pasture or other locations
- School incentives for students who walk or bike
- Altering construction start times for contractors
- Increasing ferry service and ridership
- Trams, shuttles, and alternative modes of transport on Tiburon Boulevard and/or Old Rail Trail

Following a public forum, CART released its Summary Report in May 2013. Its broadest conclusion was a new understanding of the difficulty of addressing the Tiburon Boulevard congestion problem. The report concluded that Tiburon Boulevard simply lacked adequate physical capacity for the traffic that the Peninsula's business, work, school and recreational life create. The group found no "silver bullet" to make the problem disappear, but recommended several steps that could incrementally improve traffic flow along Tiburon Boulevard during the peak AM and mid-afternoon times. These included several items from the above list, including traffic signal adjustments, an enhanced school bus program combined with altered school bell times, bike trains, Marin Transit's Tiburon Boulevard Shuttle program, and additional crossing guards and training. All of these concepts were implemented to one degree or another. The most ambitious effort has been the Yellow School Bus Challenge 2.0, which launched in August 2015 with a greatly expanded school bus fleet, additional routes and additional bus stops. Early indications are that the program appears to be noticeably reducing congestion on Tiburon Boulevard during school drop-off and pick-up times, especially in the morning. If ultimately determined to be successful, an ongoing source of funding would be required to sustain the program, which was funded on a one-time trial basis for school year 2015-2016 through cash contributions from the Town of Tiburon, City of Belvedere, and Town of Corte Madera.

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Diagram 5.2-4 Daily Traffic Volumes



Traffic Level of Service (LOS)

Level of Service (LOS) is a qualitative assessment of perceived traffic conditions. LOS generally reflects driving conditions such as travel time and speed, freedom to maneuver, and traffic interruptions. Table 5.2-2 provides a qualitative description of LOS.

Table 5.2-2 Qualitative Description of Level of Service

LOS	Driver's Perception
A/B	LOS A/B is characterized by light congestion. Drivers are still able to pass through traffic-controlled intersections in one green phase.
C	LOS C represents moderate traffic congestion. Average vehicle speeds continue to be near the driver's desired speed for two and four lane roads. Occasionally, drivers do not clear the intersection on the first green phase.
D	LOS D is characterized by congestion with average vehicle speeds decreasing below the driver's desired level for two and four lane roads. Multiple cars must wait through more than one green phase at a traffic signal.
E	LOS E is the lowest grade possible without stop-and-go conditions. At signalized intersections, long vehicle queues can form waiting to be served by the signal's green phase.
F	LOS F represents stop-and-go conditions for two and four lane roads. Drivers at signalized intersections may wait several green phases prior to being served.

Key Level of Service Findings¹

The Highway Capacity Manual (HCM) is commonly used by jurisdictions to evaluate automobile traffic conditions at key intersections. However there are limitations to using automobile level of service as the sole guideline for recommending future transportation improvements. The current General Plan calls for level of service (LOS) standards of LOS C or better at most intersections, and LOS D or better at selected intersections on Tiburon Boulevard near the U. S. Highway 101 interchange. After evaluating future growth scenarios in the Circulation Element, it is apparent that capacity improvements would be needed at several intersections to mitigate the LOS to these levels. The capacity improvements are physically and financially undesirable and would alter the character of those intersections and may require acquisition of right-of-way from adjacent properties.

Currently the state of California is developing new requirements for environmental review under the California Environmental Quality Act (CEQA), which utilizes criteria to evaluate the transportation network that do not include automobile LOS under the HCM. The Town of Tiburon should monitor these developments within the state legislature and plan for the future on how transportation impacts are evaluated in light of the state-mandated changes.

One limitation of LOS is that its methodology considers a weighted aggregate of delay for all approaches over the peak 15 minutes for each the morning and afternoon weekday peak hours.

¹ The LOS analysis conducted in this section pertains to intersections, as opposed to road segments, in order to capture delays from both Tiburon Boulevard and its connecting streets – both important elements for a citywide Circulation Element.

The volumes during these 15-minute periods often are unrepresentative of the traffic patterns for the remaining hours of the week. Another limitation to auto LOS is that it only considers the movement of automobiles through the transportation network. Any capacity improvements that include widening the roadway and adding additional lanes would increase pedestrian crossing distances, increase vehicle speeds, and could decrease safety for all roadway users.

The analysis of traffic at key intersections on Tiburon's major thoroughfares revealed several important findings:

- Most intersections operate at LOS C or better, with the exception of the following:
 - Rock Hill Road & Tiburon Boulevard operates at LOS E during the AM Peak Hour. This may reflect the peaking pattern associated with AM school traffic.
 - Tiburon Boulevard & Mar West Street operates at LOS D during the PM Peak Hour.
 - Redwood Highway and the U. S. Highway 101 Northbound Ramp operate below LOS C in one or both periods. At these locations, LOS D is considered acceptable based on Town criteria. The U.S. Highway 101 Northbound Ramp intersection operates at LOS E in the PM, which is below what is currently considered acceptable.
- It should be noted that at some intersections, the letter grade assigned by the Highway Capacity Manual (HCM) may not be indicative of conditions experienced by motorists as vehicle demand exceeded capacity during the peak period counts. This is due to the model's methodology, which measures the throughput of vehicles and may not represent the actual demand for that period (i.e. cars that queued at the end of the signalized green phase). This occurred predominantly northwest of the Tiburon Boulevard and Trestle Glen Boulevard intersection in the AM peak period for the 30 minutes before the start of the schools, and southeast of the intersection in the mid-day and PM peak periods, where large queues formed.
- Overall, it is relevant to note that peak-hour conditions in most Bay Area cities include locations where LOS D, E and F are prevalent. Traffic conditions in Tiburon are similar or better than typical for the surrounding region.

It should be noted that since the traffic counts were conducted, some of these LOS determinations may have improved following implementation of the Yellow School Bus Challenge 2.0 program, especially between Mar West Street and Blackfield Drive.

Public Transit

This section provides an overview of public transit service in the Planning Area. In total, 10.5% of workers commute by public transportation in Tiburon, which is similar to the rate across the Bay Area (10.1%) and somewhat higher than Marin County as a whole (8.6%).

Bus Service

Bus service is provided in the Planning Area by the Golden Gate Bridge, Highway and Transportation District (Golden Gate Transit), and by Marin Transit.

Bus service fills an important role in Tiburon, providing ferry commuters with a connection from their homes to the Ferry Plaza, as well as serving employees who work in Tiburon but live outside the community. Many high school students in Tiburon also rely on public buses to travel to school. Approximately 3.1% of Tiburon residents use a bus to commute to work, lower than the

share of Marin County residents on the whole (6.2%) and the Bay Area (5.5%)². This reflects a greater use of ferry service among Planning Area residents.

Ferry Service

Due to its peninsular geography and convenient ferry service to San Francisco, Tiburon has a very high percentage (7.4%) of ferry commuters compared to other Bay Area cities.

Blue & Gold Fleet provides four morning commute trips from Tiburon to the Ferry Building and four evening trips from the Ferry Building to Tiburon on weekdays. In addition, Blue & Gold Fleet services a reverse commute with three morning trips from the Ferry Building to Tiburon and four evening trips from Tiburon to the Ferry Building. Unlike other Bay Area commuter ferry routes, the Tiburon Ferry does not receive public subsidy. Blue & Gold also provides service between Tiburon and Pier 41 in San Francisco and serves as a cross Bay connection for bicyclists. Blue & Gold offers six roundtrips daily on this route. In 2015, Blue & Gold Fleet announced its intention to drop the Tiburon commuter ferry service runs. The Golden Gate Bridge & Highway Transportation District is currently exploring taking over the Tiburon ferry service.

In total, the Blue & Gold Fleet has approximately 825 daily riders on its services from the Tiburon Ferry Plaza to San Francisco³.

Ferries are also the primary means for getting from Tiburon to Angel Island State Park. Ferry service to Angel Island is provided by the privately owned Angel Island – Tiburon Ferry Company. During the high season from May to September, the Angel Island Ferry makes four roundtrips daily on weekdays and makes hourly trips on weekends from 10 a.m. to 5 p.m. The Angel Island Ferry provides less frequent service during the balance of the year.

Paratransit

The Americans with Disabilities Act of 1990 (ADA) requires all public transit systems that provide fixed route bus service to also provide paratransit service for people with disabilities who cannot use the fixed route bus service. Paratransit alternatives usually consist of vans and small buses.

In Marin County, paratransit services are operated by Marin Access through a contract with Whistlestop Wheels. Marin Transit sponsors the paratransit services.

School Bus Service

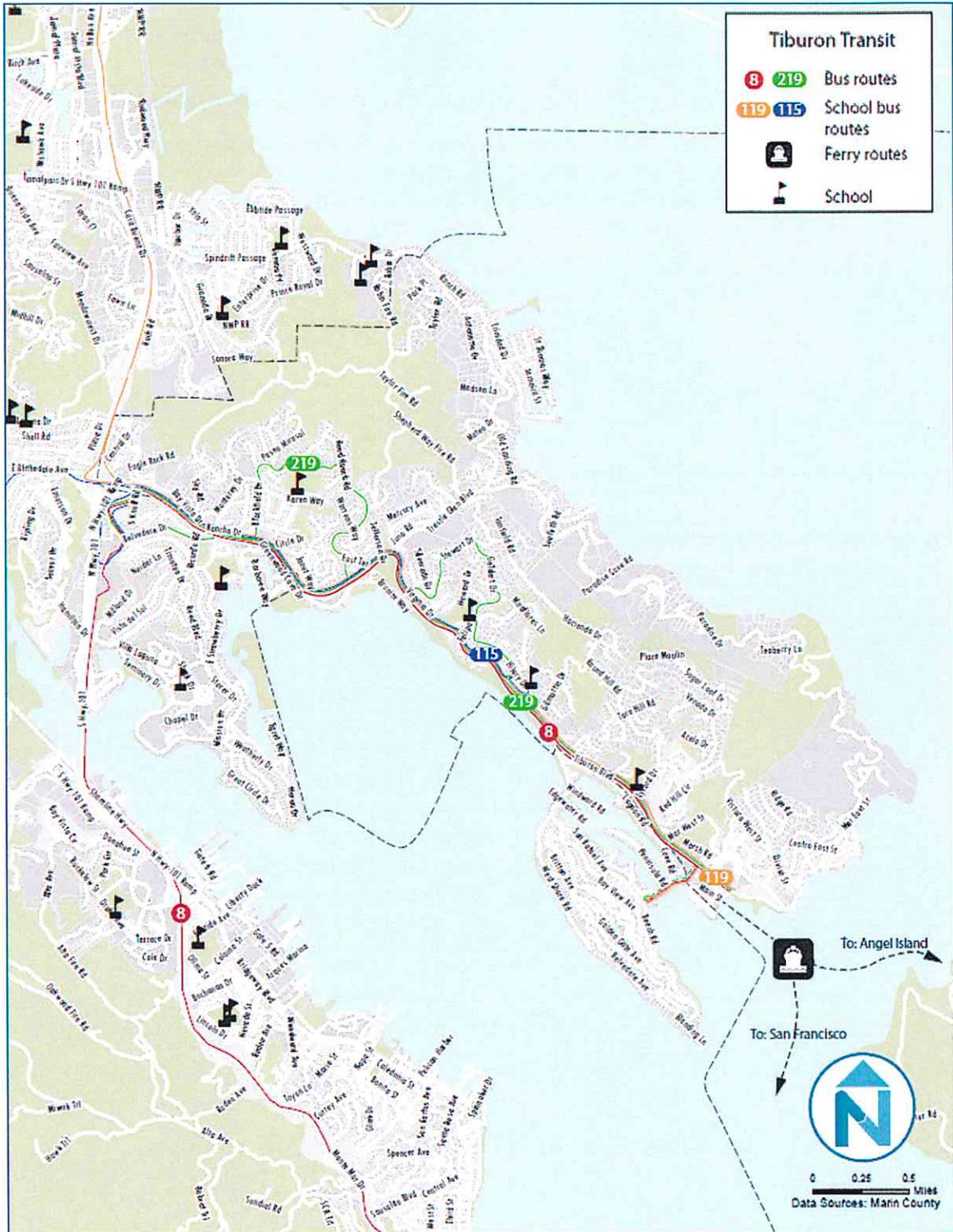
The Reed Union School District (RUSD) has for many years provided only limited school bus service within the Planning Area. In 2014, school bus service included three routes, stopping at Bel Aire School, Del Mar School, and Reed School. Each route made a single trip in the morning and afternoon, and the annual fee for using school buses was \$427 each way (\$854 for both morning and evening service). The Yellow Schools Challenge 2.0, launched for the 2015-2016 school year, greatly expanded the number of buses, bus routes and bus stops, while heavily subsidizing the cost of school bus passes. Over 1200 one-way passes were sold prior to the start of school in August 2015, a sizeable increase over previous years.

² Tiburon and Marin County data is taken from the 2008-2012 American Community Survey. Bay Area data is taken from the 2006-2010 American Community Survey, which is the most recent data available that has been compiled by the Metropolitan Transportation Commission at the regional level.

³ Tiburon Transit Needs Assessment.
http://www.dot.ca.gov/hq/tpp/offices/orip/Grants/final_products/2013/04_MTC_MCTDTiburonTNA2012.pdf

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Diagram 5.2-5 Public Transit Service Map



5.3 GOALS & POLICIES

Circulation System

GOAL C-A

Comprehensive Transportation System. Provide a multimodal transportation system that supports the vision, goals, and objectives of the Town and is effectively planned, funded, operated, and maintained.

POLICIES

C-1

Right-of-Ways. The Town shall preserve and manage rights-of-way consistent with the goal to provide Complete Streets, and the Town's goals for preserving residential quality of life and aesthetics.

C-2

Emergency Services. The Town shall prioritize emergency service needs when developing transportation plans and making transportation network changes.

C-3

Facilities and Infrastructure. The Town shall prioritize the maintenance and operation of the existing transportation network over major expansions to the transportation network when investing discretionary revenue.

GOAL C-B

Multimodal System. Increase multimodal accessibility throughout the Tiburon Planning Area with an emphasis on improved walking, bicycling, and transit modes.

POLICIES

C-4

Multimodal Choices. The Town shall strive to achieve an integrated, multimodal transportation system that improves the attractiveness of walking, bicycling, and riding transit. This would increase travel choices and aid in achieving a more balanced transportation system, thereby reducing air pollution and greenhouse gas emissions.

C-5

Multimodal Access. The Town shall facilitate multimodal access along appropriate corridors, to major facilities destinations such as Blackie's Pasture, schools, and Downtown Tiburon.

GOAL C-C

Barrier Removal. Improve accessibility and system connectivity by removing physical and operational barriers to safe travel.

POLICIES

C-6

Eliminate Gaps. The Town shall eliminate “gaps” in bikeways and pedestrian networks where feasible and appropriate.

C-7

Improve Transit Access. The Town shall support Marin Transit and the Golden Gate Bridge, Highway and Transportation District in addressing identified gaps in public transit networks by working together to appropriately locate passenger facilities and stations, providing and maintaining pedestrian walkways and bicycle access to transit stations and stops, and dedicating public rights of way as necessary for transit stops.

C-8

Barrier Removal for Accessibility. The Town shall remove barriers, where feasible, to allow people of all abilities to move freely and efficiently throughout the Planning Area, with the highest priority given to areas that are near Downtown or in other flat areas.

C-9

Connections to Transit Stations. The Town shall work to ensure adequate connections to transit stations by identifying, prioritizing, and seeking funding to plan and construct roadway, bikeway, and pedestrian improvements within ½ mile of existing and planned transit stations. Such improvements shall emphasize the development of complete streets.

Streets and Roadways

Goals and Policies

GOAL C-D

Context-Sensitive Roadways. Create a context-sensitive street and roadway system that provides safe access to all users between activity centers within the Planning Area and to destinations across the San Francisco Bay Area, including places of employment, shopping and recreation. As such, the Town shall strive to balance the needs for congestion relief, personal travel, goods movement, parking, social activities, business activities, and revenue generation, when planning, operating, maintaining, and expanding the roadway network.

POLICIES

C-10

Balancing Community, Social, Environmental, and Economic Goals. The Town shall evaluate and strive to address community, environmental, and town-wide economic development goals when adding or modifying public rights-of-way.

C-11

Transportation Impacts of Land Use. Land use decisions shall take into consideration potential multimodal access and automobile traffic impacts.

C-12

Transportation Mitigation Fee. All new projects shall be required to pay a pro rata share of needed multimodal access improvements (a transportation mitigation fee) in accordance with the burden created by such new projects.

C-13

Updating the Transportation Mitigation Fee. The transportation mitigation fee program shall be periodically reviewed and updated to ensure that it continues to provide funds for addressing multimodal transportation impacts generated by new projects.

C-14

Level of Service. For signalized intersections in the Tiburon Planning Area, the Town shall strive to achieve and maintain the average peak hour level of service (LOS) at LOS C, with the exception of:

1. Intersections from U.S. Highway 101 interchange to E. Strawberry Drive/Bay Vista Drive (inclusive), which the Town shall strive to achieve and maintain at LOS D.
2. Locations where Complete Streets roadway engineering improvements are necessary to ensure safe access for pedestrians and bicyclists, which shall be evaluated on a case-by-case basis, weighing safety with traffic delay considerations.

The Town acknowledges that actual conditions may not meet the above LOS levels during certain peak periods.

C-15

Traffic signals. At such time as any unsignalized intersection along Tiburon Boulevard meets signal warrants, the Town shall approach Caltrans to approve and/or provide signalization or other appropriate improvements.

C-16

Congestion Management Plan. The Town shall comply with the Transportation Authority of Marin's Congestion Management Plan (CMP), including adopting and monitoring the level of service (LOS) of the CMP network. As of 2015, the CMP LOS standards are LOS E for U.S. Highway 101 during the P.M. peak hour and LOS D for Tiburon Boulevard during the P.M. peak hour.

C-17

Overhead Utility Lines. In conjunction with Land Use Element policies, the Town shall encourage overhead utility lines to be placed underground along Tiburon Boulevard, Paradise Drive, and Trestle Glen Boulevard, working with the County of Marin where applicable.

C-18

Roundabouts. Where feasible, the Town shall consider roundabouts as an intersection traffic control option with demonstrated air quality, safety, and mobility benefits. In particular, the Town shall further study installing a roundabout at the intersection of Tiburon Boulevard and Mar West Street, due to the importance of this location as a gateway to Downtown, and potential traffic flow and safety benefits.

C-19

Tiburon Ridge and Significant Ridgelines. In connection with the ridgeline policies of the Open Space & Conservation Element, the Town shall ensure that no new streets, driveways, or utilities are installed along or over the Tiburon Ridge or Significant Ridgelines except for the use of emergency services, or where no other access is viable.

GOAL C-E

Residential Streets. To maintain all existing, as well as to design all future, residential streets with consideration of a combination of residents' safety, cost of maintenance, and protection of residential quality of life.

POLICIES

C-20

Traffic Calming Measures. The Town should consider traffic calming measures, where safe, warranted, and appropriate given topographical and other physical conditions, to increase safety in residential areas by reducing vehicle speeds and volumes and encouraging walking and bicycling. Specific measures may include, but are not limited to, marked crosswalks, curb extensions, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts, traffic circles, on-street parking, planter strips with street trees, chicanes, and other geometric design features.

C-21

Gated Streets and Subdivisions. The Town strongly discourages gated streets, roadways and subdivisions. This policy is not intended to prevent single family homeowners from installing gates on private driveways serving their individual residence.

C-22

Street Lights. Street lights shall be installed only at intersections or where required for safety purposes. Light sources shall be of a warm, subdued nature and should be down-lights and/or properly shielded.

GOAL C-F

Complete Streets. The Town and other agencies with jurisdiction over roadways within Town limits shall plan, design, operate and maintain all streets and roadways to accommodate and

promote safe and convenient travel for all users – pedestrians, bicyclists, transit riders, and persons of all abilities, as well as freight and motor vehicle drivers.

POLICIES

C-23

Accommodate All Users. The Town shall ensure that, where feasible and appropriate, all new roadway projects and any reconstruction projects designate sufficient travel space for all users including bicyclists, pedestrians, transit riders, and motorists except where pedestrians and bicyclists are prohibited by law from using a given facility.

C-24

Pedestrian and Bicycle-Friendly Streets. The Town shall ensure that all street construction projects support pedestrian travel. Improvements may include sidewalks, roundabouts, traffic circles, narrow lanes and other traffic calming devices, target speeds less than 35 miles per hour, street trees, high-visibility pedestrian crossings, and bikeways.

C-25

Identify and Fill Gaps in Complete Streets. The Town shall identify streets that can be made more “complete” through a reduction in the width of travel lanes, with consideration for emergency vehicle operations. The Town shall consider including new bikeways, sidewalks, and on-street parking on these streets by re-arranging and/or re-allocating how the available space within the public right of way is utilized. All new street configurations shall provide for adequate emergency vehicle operation. The Town shall explore the addition or enhancement of crosswalks on Tiburon Boulevard at key locations in conjunction with safety improvements to ensure that vehicular collisions with pedestrians are reduced.

Tiburon Boulevard

Overview

Tiburon Boulevard is the Town's main arterial street and serves multiple functions. There is a natural tension between moving vehicles quickly along Tiburon Boulevard and serving local functions, such as providing more pedestrian crossings and easier vehicle turning movements from local streets. To better meet the needs of the different segments of Tiburon Boulevard, this Element classifies Tiburon Boulevard into three distinct segments.

- **Highway 101 to Trestle Glen Boulevard:** This four-lane segment will remain a “major arterial” primarily serving auto traffic and allowing for higher speeds than other segments of the road.
- **Trestle Glen Boulevard to Mar West Street:** This segment will remain a “minor arterial.” However, it will no longer be considered a “rural highway,” as it was described in the previous Circulation Element. For many residents the term “rural highway” suggests high speeds and few access points. This characterization does not fit this roadway segment, which has moderate travel speeds, largely because it has only one

travel lane in each direction, despite relatively high traffic volumes. It also has a high number of direct connections to residents' homes and schools, which causes further tension with fast-moving traffic.

- **Mar West Street to the Ferry Terminal:** This segment is designated as a “downtown thoroughfare” (a type of local street), and is specifically intended to be walkable and to prioritize pedestrians because downtown Tiburon is a relatively dense, mixed-use area. Bicyclists are also integrated into the street design of this segment in that the Class II bike lane begins at Mar West Street where the Old Rail Trail multi-use path ends.

GOAL C-G

Tiburon Boulevard. To cooperatively plan for the maintenance and improvement of Tiburon Boulevard.

POLICIES

C-26

Roadway Classification. Tiburon Boulevard has three distinction segments, and future design treatments should reflect the character of each segment. Between Highway 101 and Trestle Glen Boulevard, Tiburon Boulevard is classified as a major arterial with priority for vehicle movement. Between Trestle Glen Boulevard and Mar West Street, Tiburon Boulevard is classified as a minor arterial with consideration for both vehicle traffic and the need for residential access as well as biking and walking. From Mar West Street to Ferry Plaza, Tiburon Boulevard is classified as a downtown thoroughfare (a type of local street), with priority given to pedestrians and bicyclists.

C-27

Additional curb cuts should be discouraged on Tiburon Boulevard except where other access points are not feasible or if necessary for emergency vehicle access. Unnecessary curb cuts should be eliminated.

C-28

Parking Lot Frontages. The Town should discourage parking lots that have substantial frontage on Tiburon Boulevard. Consistent with Downtown Element policies, such parking lots should be located in the rear of buildings to the extent possible. Parking lots should also be screened by buffers or berms where feasible.

C-29

Parking. Tiburon Boulevard between Rock Hill Road and San Rafael Avenue should remain free from parking on the water side to enhance and preserve views and the experience of a landscaped waterfront drive.

C-30

Water Views. Water views for pedestrians and drivers shall not be obscured. Overgrown planting shall be trimmed to frame, rather than block, views for pedestrians and drivers to the maximum extent feasible. The Town shall consider approving selective removal or thinning of undesirable trees that block water views.

Paradise Drive

GOAL C-H

Paradise Drive. To cooperatively plan for the maintenance and improvement of Paradise Drive.

POLICIES

C-31

Access. The Town shall attempt to work with the County of Marin to secure safe and reliable access for all users to and from the northeastern side of the Tiburon Peninsula along Paradise Drive. Due to the very high maintenance costs associated with Paradise Drive, the Town will avoid taking on the burden of maintaining additional portions of Paradise Drive unless a suitable and stable ongoing source of funding is established.

C-32

Views. Scenic views from Paradise Drive shall be preserved wherever possible.

C-33

Overlooks. Where appropriate, scenic overlooks should be established along Paradise Drive.

C-34

Driveways and Roadways. New driveways and roadways intersecting Paradise Drive shall be kept to the minimum number possible and be situated in safe locations. To meet this objective, to the extent feasible, multiple residences shall be served by a single access from Paradise Drive.

C-35

Turn-Outs and Widened Shoulders. Turn-outs and widened shoulders on Paradise Drive should be created where possible to protect the health and safety of its users.

Bicycles and Pedestrians

Goals & Policies

GOAL C-I

Bicycle and Pedestrian System. To design, construct, and maintain a universally accessible, safe, convenient, integrated and well-connected bicycle and pedestrian system that promotes biking and walking. Provide bicycle facilities, programs, and services, and implement other transportation and land use policies as necessary to achieve increased bicycle and walking use.

POLICIES

C-37

Bicycle Safety for Children. School-related congestion increased noticeably on Tiburon Boulevard in recent years, reflecting a large jump in school enrollment at the Reed Union School District. To reduce single-child automobile trips to schools, the Town shall support infrastructure improvements and programs that encourage children to bike and/or walk safely to school, or ride a bus. This includes installation of sidewalks in critical areas where feasible.

C-38

Countdown Pedestrian Signals. The Town supports, where warranted, the replacement by Caltrans of pedestrian traffic signals with “countdown-style” pedestrian signals, which inform pedestrians of the number of seconds remaining to cross safely.

C-39

Trail Connections. The pedestrian paths, trails and bicycle lanes in Tiburon should connect with other paths and trails where practical.

C-40

Bike Facilities. Bicycle facilities, including bike racks, shall be included as part of new public and commercial projects, particularly in Downtown Tiburon.

C-41

Pedestrian Streets. Pedestrian routes, particularly for school children, shall be established for all neighborhoods where feasible and appropriate. The Town shall require that pedestrian-oriented streets be designed to provide a pleasant environment for walking and other desirable uses of public space, including such elements as shade trees; plantings; and wayfinding signage where appropriate. Pedestrian routes shall include safe crossings at major intersections.

C-42

Speed Management Policies. The Town shall develop and implement speed management policies that support driving speeds that are safe for pedestrians and bicyclists, including consideration of bicycle riding speed limits on Old Rail Trail.

C-43

Bicycle and Pedestrian Master Plan. In developing capital improvement budgets, the Town shall use the Bicycle and Pedestrian Master Plan as a guide for prioritizing bicycle and pedestrian improvements. New development shall be consistent with applicable provisions of the Bicycle and Pedestrian Master Plan.

C-44

Bay Trail. The Town supports the completion and maintenance of the Bay Trail.

C-45

Old Rail Trail Multi-Use Path. The Town shall monitor Old Rail Trail and consider periodic improvements that would enhance the safety of its users. The Town shall continue to encourage low to moderate bike speeds along Old Rail Trail to ensure pedestrian safety.

C-46

School Route Maps. The Town shall work with local schools to develop maps detailing the safest routes for children to walk and bicycle to school, including trails and other shortcuts.

Public Transit

Goals & Policies

GOAL C-J

Integrated Transportation System. To promote an integrated transportation system, including the preservation and enhancement of transit as an essential component of a multimodal transportation system, in order that residents and visitors may efficiently, conveniently, and safely connect to, and transfer between, different transportation modes.

POLICIES

C-47

Bus Service. The Town shall work with Golden Gate Transit and Marin Transit to increase service levels for buses in the Planning Area when feasible and ensure that bus service provides accessibility and mobility for all Tiburon residents, workers and visitors. Implementing evening bus service shall be a priority for the Town. The Town shall ensure high-quality bicycle and pedestrian access to bus stops. The introduction of parking meters, a measure currently being considered by the Town, may provide a potential source of revenue to finance transit passes for employees, who are a target group for increasing transit ridership. The Town shall continue to identify additional strategies to encourage residents, workers, and visitors to ride buses for trips to, from, and within the Planning Area.

C-48

Utilizing Dead-Heading Buses. The Town shall encourage Marin Transit and Golden Gate Transit to service commutes on Tiburon Boulevard in the morning and evening with buses that would otherwise deadhead (return to their yard empty).

C-49

Bus Shelters. Bus shelters shall be coordinated with Golden Gate Transit and Marin Transit and should receive design review approval. Covered bus shelters are preferred. Benches and paved loading pads should be provided at all bus stops.

C-50

Seating at Bus Stops. The Town supports the installation and maintenance of attractive, covered, unobtrusively lighted seating areas at all bus stops along Tiburon Boulevard and will work with Golden Gate Transit, Marin Transit, and the Transportation Authority of Marin (TAM) to provide them. The Town strongly discourages the placement of commercial advertising on public bus shelters.

C-51

Provisions for Bus Stops. New development along transit routes, particularly in Downtown, shall include appropriate provisions for bus stops, including covered waiting areas.

C-52

Location of Transit Facilities. The location of new transit facilities shall emphasize safety and accessibility for the rider so as to encourage transit ridership.

C-53

Ferry Service. The Town shall help ensure that ferry service remains a viable commuter and recreational travel option. This may include helping to coordinate between Golden Gate Transit and Marin Transit bus service and ferry providers. The Town shall encourage the expansion of ferry service to Friday and Saturday evenings. In cooperation with ferry service and transit bus providers, the Town shall seek to identify public revenue sources to allow ferry service to Tiburon to be offered with lower fares and implement other improvements to increase ridership.

C-54

Water Taxis. The Town shall support the use of water taxi services, which provide on-demand boat trips to destinations across the Bay Area, as an alternative to driving for recreational and commuting trips when ferry service is not available.

C-55

Paratransit. The Town shall support the provision of paratransit services for those riders that cannot utilize fixed route bus service.

C-56

Paratransit and Senior Housing. Senior housing projects shall provide for convenient and accessible paratransit loading and unloading.

GOAL C-K

Reducing Reliance on Private Automobiles. To provide facilities and incentives to reduce reliance on the private automobile throughout the Planning Area.

POLICIES

C-57

Provide Alternatives to Single-child Autos for School Trips. The Town shall seek to reduce the number of auto trips made by parents who are picking-up and

dropping-off children at local schools by supporting programs that provide viable and attractive alternatives to driving children to school.

C-58

Employer Incentives for Alternative Transportation Modes. The Town shall coordinate with the Transportation Authority of Marin to encourage employers to work together to identify programs that provide incentives for employees to use alternative transportation modes, including carpools.

C-59

Contractors. The Town shall encourage contractors working on building renovations and repairs to arrive and depart outside of peak travel periods to reduce congestion on Tiburon Boulevard. The Town shall consider allowing contractors to use the Blackie's Pasture overflow parking lot as a park-and-ride location.

Parking

While studies have concluded that there is an adequate supply of parking in the Downtown area, there is a perception that available parking is inconveniently located or is too expensive if certain pay parking lots are used. Unlike many downtowns, Tiburon's is compact enough that the same parking space may be used to perform numerous errands throughout the Downtown area.

Goals & Policies

GOAL C-L

Parking Management. To provide and manage parking such that it balances the Town goals of economic development, livable neighborhoods, convenience, sustainability, and public safety throughout the Planning Area.

POLICIES

C-60

Appropriate Parking. The Town shall manage public parking and regulate the provision and management of private parking to support parking availability and auto access to neighborhoods across the Planning Area, with consideration for access to existing and funded transit service and shared parking opportunities.

C-61

Reciprocal Parking. The Town shall continue to encourage and allow reciprocal parking facilities for those businesses located near one another with different peak hour operating demands.

C-62

Parking for New Uses. Parking and loading should be provided for new uses and expansion of existing uses in Downtown Tiburon in accordance with the provisions of the Zoning Ordinance.

C-63

Acquisition of Parking Facilities. The Town should consider the acquisition of Town-owned and/or operated downtown parking facilities.

Interagency Coordination

As described earlier, certain agencies are responsible for transportation programming and funding. It is critical that the Town of Tiburon coordinate and cooperate with these agencies.

Interagency Coordination Policies

GOAL C-M

Interagency Coordination. To improve interagency coordination between the Town and agencies responsible for transportation programming and funding.

POLICIES

C-64

Coordination with TAM. The Town will engage in good faith, participatory planning efforts with the Transportation Authority of Marin and other agencies working toward alleviating congestion in the U.S. Highway 101 Corridor.

C-65

Coordination with Caltrans. The Town shall maintain a good working relationship with Caltrans to ensure that improvements proposed by Caltrans are sensitive to the Tiburon community and to facilitate expeditious consideration of Town requests for improvements.

5.4 MOBILITY IMPLEMENTATION PROGRAMS

PROGRAM C-a

Traffic Model and Monitoring. The Town shall maintain its traffic model and traffic monitoring program, which periodically measures intersection performance, evaluates the impact of new projects on vehicle delay, and re-evaluates appropriate transportation mitigation fee amounts. The evaluation of transportation impacts at relevant sites shall be expanded to take into account impacts on multimodal access, including the impact of new projects on pedestrians, bicyclists, and transit users.

Supporting Policies: C-11, C-12, C-13

PROGRAM C-b

Reviewing Transportation Mitigation Fees. The Town's traffic model shall be used to periodically review the Town's transportation mitigation fees to ensure that they are based on current information and that they are adequately capturing the impacts of new projects on the roadways in the Planning Area, including effects on bicyclists, pedestrians, and transit users. The Town shall update its transportation mitigation fees as necessary.

Supporting Policies: C-11, C-12, C-13

PROGRAM C-c

List of Needed Circulation Improvements. The Town shall periodically update and re-evaluate its list of needed circulation improvements.

Supporting Policies: C-3, C-4, C-5, C-6, C8

PROGRAM C-d

Funding for Local Roads. The Town shall work with funding agencies such as Metropolitan Transportation Commission and the Transportation Authority of Marin to ensure funding for critical local roads.

Supporting Policies: C-16, C-20

PROGRAM C-e

Bay Trail Funding. The Town shall use the designation of Paradise Drive as part of the Bay Trail as a tool in applying for improvement funding for the road.

Supporting Policies: C-16

PROGRAM C-f

Increase Connectivity in the Downtown. Improve pedestrian connectivity, linkages and ease of movement throughout the Downtown area through various physical and signage improvements.

PROGRAM C-g

Bicycle and Pedestrian Master Plan. The Town shall review and update its Bicycle and Pedestrian Master Plan periodically, and revise the list of improvements and actions called for in the Master Plan when implementation of adopted improvements has occurred, and/or when conditions warrant.

Supporting Policies: C-23, C-24, C-25

PROGRAM C-h

Bay Trail Improvement. The Town will work cooperatively with ABAG and neighboring jurisdictions to improve the Bay Trail around the Tiburon Peninsula.

Supporting Policies: C-22, C-26, C-27

PROGRAM C-i

Transit Facilities. The Town shall encourage the provision of adequate transit facilities in cooperation with transit agencies and operators.

Supporting Policies: C-28, C-29, C-30, C-31, C-33, C-34

PROGRAM C-j

Transit Schedules. The Town shall make available through links on its website schedules for buses, ferries, and any transit agencies that connect with those modes.

Supporting Policies: C-47, C-53

PROGRAM C-k

Safe Routes to School Program. The Town shall continue to work with the Reed Union School District, Tamalpais Union High School District, St. Hilary School, and with the Transportation Authority of Marin as the administrator of the County's Safe Routes to Schools Program, to promote alternative transportation programs that reduce traffic congestion around schools. This will include improving safe access routes to school for children walking and biking, as well as developing appropriate measures identified by the Community Action to Reduce Traffic (CART) committee.

Supporting Policies: C-38

PROGRAM C-l

Ridesharing. The Town shall promote and publicize the 511 Rideshare program to employers and employees as a resource for exploring ways to reduce traffic and parking congestion.

Supporting Policies: C-39

PROGRAM C-m

Mitigation Fee Program in Unincorporated Areas. Coordinate with Marin County for complementary spending of transportation mitigation fees collected from Planning Area projects on improvements within the Tiburon Planning Area.

Supporting Policies: C-31, C-34, C-35

PROGRAM C-n

U. S. Highway 101 Corridor Planning Program. Maintain an active role in the Transportation Authority of Marin and/or U.S. Highway 101 Corridor planning program with the purpose of ensuring that improvements enhance inter-city movement.

PROGRAM C-o

Complete Streets Implementation. Implement the complete streets goals and policies set forth in this Element by utilizing Town Council Resolution No. 42-2012 and referrals to the Parks, Open Space & Trails Commission (acting as the Bicycle and Pedestrian Advisory Committee).

Supporting Policies: C-43, C-44

PROGRAM C-p

Review and Revise Parking Regulations for Downtown. Review and revise the parking regulations set forth in the Tiburon Zoning Ordinance to better reflect the realities and uniqueness of Downtown Tiburon’s parking milieu and to encourage increased activity near streets, such as outdoor dining.

Supporting Policies: C-60, C-61, C-62, C-63

PROGRAM C-q

Main Street Enhancement. Enhance Main Street usage for pedestrian-only events on selected occasions by use of bollards or similar devices allowing for periodic temporary event closures.

5.5 PROPOSED CIRCULATION IMPROVEMENTS

It has become increasingly clear in recent years that there is no single “silver bullet” solution to traffic congestion on the Tiburon peninsula, and that a combination of numerous supply improvements and demand reduction methodologies will be required to improve and maintain mobility during peak travel times. The Circulation Improvements identified below are a mixture of supply and demand strategies intended to reduce congestion and improve traffic flow. These improvements and programs are intended to be applied and interpreted broadly and liberally. While the improvements and programs are intended to address known problems in the transportation network, they are not intended to be literally binding. Improvements similar and/or equivalent to those listed below may be substituted to achieve the desired results.

Capital Infrastructure Improvements

Roadway

Tiburon Boulevard & Trestle Glen Boulevard

Add a second westbound Tiburon Boulevard through lane and extend it back from Trestle Glen Boulevard as far east toward Stewart Drive as practical; or construct other intersection improvements of similar effectiveness at reducing delay and/or congestion.

Tiburon Boulevard & Gilmartin Drive

Add a dedicated right turn only lane from southbound Gilmartin Drive to westbound Tiburon Boulevard.

Tiburon Boulevard & Cecilia Way

Add a merge (acceleration) lane for traffic turning left from Cecilia Way to Tiburon Boulevard.

Tiburon Boulevard between N. Knoll Road and the U. S. Highway 101 Interchange

Add an additional westbound lane extending to the Redwood Highway Frontage Road and merging before the U.S. Highway 101 overpass in order to improve northbound traffic flow during the PM period.

Roundabout at Tiburon Boulevard & Mar West Street

To better accommodate growth, changing demographics, and travel patterns within the Town of Tiburon, and in order to create a signature gateway treatment entering the Downtown area, the intersection of Tiburon Boulevard and Mar West Street is proposed for conversion from a two-way stop controlled intersection to a single lane roundabout. This replaces a proposed traffic signal improvement in the prior Circulation Element.

Roundabouts can provide for a better safety record at intersections, operate with less delay and increased capacity overall than stop controlled intersections, and calm traffic entering the Downtown area. This intersection could operate more efficiently from a traffic perspective and result in fewer conflict points if replaced by a roundabout. The intersection at Mar West Street offers the greatest benefit as it would improve circulation and reduce vehicle speed as motorists enter Downtown. In addition, the roundabout should include a gateway treatment to alert motorists, pedestrians, and bicyclists to the downtown character of the street.

Limit Driveway Access along Tiburon Boulevard in Downtown

The consolidation of driveway access for businesses along Tiburon Boulevard has several benefits. It reduces the number of points where turning movements occur, thus reducing the number of conflict points for pedestrians. Although these driveways are not considered “true” intersections in the traditional sense, they still can cause delays for vehicles when drivers have more choices than is necessary for basic access.

Driveways near the Downtown area recommended for consolidation include:

- two driveways along the south side of Tiburon Boulevard between Mar West Street and the Boardwalk Shopping Center;
- two driveways along the south side of Tiburon Boulevard between Beach Road and Main Street;
- one driveway along the east side of Beach Road just south of Tiburon Boulevard.

There are several different types of materials that can be used for limiting driveway access, depending on the degree of permanency and funding limitations. Potential materials can be large cast-in-place concrete planters, a series of smaller prefabricated planters, or a full reconstruction of the curb and sidewalk.

Signal Optimization

The signalized intersections and maintenance of Tiburon Boulevard (State Highway 131) are currently under the control of Caltrans. Although there are many traffic signals on this main arterial, it is unclear whether they are optimally coordinated. Investigating the coordination can be a simple and effective means of improving the traffic flow during the AM and PM peak hours, especially at the signals in the western portion of the study area near the U. S. Highway 101 ramps. The large distance between signalized intersections can result in a loss of effectiveness in coordination of signals due to the variation in speeds of vehicles over these long segments between signals. Increased or altered cycle lengths may be beneficial for the following intersections:

- Rock Hill Road – Increase the cycle length to give more green time to Tiburon Boulevard
- Avenida Miraflores – Alter the green splits to reflect future demand during peak hours.

- Strawberry Drive/Bay Vista Drive – Decrease cycle length and change the green phase splits based on demands in the AM and PM peak periods.
- U.S. Highway 101 Northbound Ramps – Change the green splits to reflect an additional westbound through lane beginning at Eagle Rock Road.
- Redwood Highway Frontage Road – Decrease cycle length and change the green phase splits based on demands in the PM peak period

Bicycle

Improvements to Bicycle Parking

The Downtown Circulation and Parking Analysis report from 2012 concludes that while Downtown-wide bicycle parking was not fully utilized, there are various hotspots of demand and areas of concern. It recommends placement of new racks, including bicycle corrals in on-street parking spaces, and identifies facilities in poor condition that are in need of replacement and/or relocation. Careful selection of standardized types of bicycle racks is important to ensure security, proper use, and longevity of the infrastructure. Nearby jurisdictions such as San Francisco can be looked upon as a model for consistent bike rack inventory and placement procedures.

Improvements from 2008 Bike/Ped Plan

The following are recommended improvements detailed in the Town of Tiburon Bicycle and Pedestrian Master Plan (2008) and are arranged by the type of bicycle facility.

- Class I (Multi-use Path)
 - There are no new Class I pathways planned, but improvements planned to existing facilities can be found in Appendix A of the 2008 Tiburon Bicycle and Pedestrian Master Plan
- Class II (Striped On-Street Bicycle Lane)
 - Tiburon Boulevard from U. S. Highway 101 to Trestle Glen Boulevard
 - Trestle Glen Boulevard from Tiburon Boulevard to Paradise Drive
- Class III (Signed On-Street Bicycle Route)
 - Paradise Drive from Mar West Street to Tiburon Town Limit
 - Greenwood Beach Road/Greenwood Cove Drive from Brunini Way to Barbaree Way
 - Paradise Drive from Trestle Glen Boulevard to Corte Madera Town Limit

These improvements are subject to change depending on the most recently adopted Bicycle and Pedestrian Master Plan.

Pedestrian

Infill of Walkway Gaps

“Walkway gaps” are locations in Tiburon where there is no walkway and where the pedestrian network is discontinuous. These locations can be identified from Diagram 5.2-1, which maps the pedestrian network throughout the Planning Area. Gaps in walkways are not recommended and can decrease safety by forcing pedestrians to walk in the roadway or cross at undesirable

locations. For example, sidewalk installation on the land-side of Tiburon Boulevard, and new crosswalks that direct pedestrians to cross at specific crossing points, may be warranted in certain locations.

Upgrade Mid-Block Crosswalks in Downtown Area

Within the Downtown area, Tiburon Boulevard contains several mid-block crosswalks for pedestrians to freely move from one side of the street to another. At these crosswalks, motorists are required to yield to pedestrians crossing the street. To increase the percentage of motorists who yield to pedestrians and increase the visibility of the crosswalks and street, the Town of Tiburon can install new high visibility crosswalks for all midblock crossings along Tiburon Boulevard. Upgraded signage using newer style fluorescent yellow-green as well as advance yield lines at each of the midblock crossings on Tiburon Boulevard can enhance the safety of the crossings. A new mid-block crossing was recently installed on Tiburon Boulevard between Beach Road and Main Street, closing a prior 700 foot gap between crosswalks in that area.

Adding new crosswalks is not recommended at all intersections. A landmark study by the Federal Highway Administration (FHWA) determined that installing marked crosswalks at uncontrolled intersections on roadways with high traffic volumes does not improve pedestrian safety. Instead, the FHWA study recommends installing crosswalks at locations where it is also possible to add traffic signals with pedestrian signals or rapidly-flashing beacons, provide raised medians, speed-reducing measures, or other measures to increase safety for pedestrians. For instance, adding a crosswalk on Tiburon Boulevard at Gilmartin Drive has been discussed as part of ongoing planning processes to increase pedestrian safety. Adding crosswalks at this location poses challenges; however, as there may not be sufficient room to include safety features such as a pedestrian refuge island.

TDM Programs

Safe Routes to School and Other Programs

Automobile traffic during school start and end times is a large component of the peak hour traffic volumes on the Tiburon Peninsula. Some suggested recommendations for programs are listed below.

Yellow School Bus Challenge 2.0

The Yellow School Bus Challenge 2.0 program, initiated in 2015, is showing promising results over its first three months of operation in reducing school-related traffic during critical drop-off and pick-up times on those morning and afternoon weekdays when school is in session. If the program continues to demonstrate its success, an ongoing funding mechanism will be required to sustain the program over time. The Yellow School Bus Challenge 2.0, combined with staggered start times for peninsula schools, remains the single most-likely-to-be-effective measure for reducing transportation demand during critical periods.

Bike Train/Bike to School Days

In 2013, the Town of Tiburon's Community Action to Reduce Traffic (CART) submitted a report to the Mayor and Town Council recommending a "bike train" starting at Blackie's Pasture or The Boardwalk Shopping Center parking lot to encourage students to ride their bicycles to school. The bike train would have adults ride with kids from the collection points to the schools. An outreach

and education component on the program and the benefits of bike ridership would accompany the program to increase participation.

Traffic counts conducted in 2014 show a significant number of students riding their bike to school, with spikes during the AM peak period at Del Mar Intermediate School as well as Bel Aire School. The numbers are considerably less at Reed Elementary School, most likely because of the younger student body (kindergarten through second grade). A supervised bike train could increase bicycle ridership for those students whose parents have reservations on allowing their children to ride alone to school.

Private School Shuttle

To complement the Reed Union School District's school bus service, or in the event the Yellow School Bus Challenge 2.0 programs fails to be sustained, a shuttle service could be operated from a predetermined pick up and drop off point within the Planning Area. Further investigation would be needed to maximize the utility of the shuttle program with reference to pick up and drop off times and locations, number of shuttle buses, and who would operate the shuttle service. Special concern will need to be taken into account for parents who may have concerns such as younger children sharing the shuttle with older children.

This program could include an informal "kiss-and-ride" area at Blackie's Pasture for parents to drop off students traveling to school. This drop-off area should be coupled with adequate Marin Transit and school bus service.⁴

Varied School Start Times

Due to the proximity of the three schools in the Reed Unified School District and their similar start times, the peak traffic in the morning hours is very heavily concentrated during the half-hour between 7:30 am and 8:00 am. For the 2014-2015 school year, the start times of all schools were between 8:10 am and 8:20 am. It was believed that a difference in start time of 30 minutes could smooth out the demand over the peak hour. As part of the Yellow School Bus Challenge 2.0 effort, start times at the schools were adjusted for the 2015-2016 school year, with Bel Aire Elementary beginning at 8:00 a.m., Del Mar Middle School beginning at 8:15 a.m., and Reed Elementary School beginning at 8:30 a.m.

Employee-Commuter Related Programs

TAM-sponsored Programs

The Transportation Authority of Marin sponsors several TDM programs, including Green Commute Programs such as the Emergency Ride Home, Vanpool Assistance, Employer Outreach and Support Services programs, and GO TIME MARIN commuter tool-kit. Increased employer and employee awareness of these programs could be effectuated through Town actions.

⁴ Although not school-related, Blackie's Pasture parking linked to transit service could also be used separately by employees who wish to park at Blackie's Pasture and take transit into downtown.