



Mobility & Noise Workshop

March 22, 2022

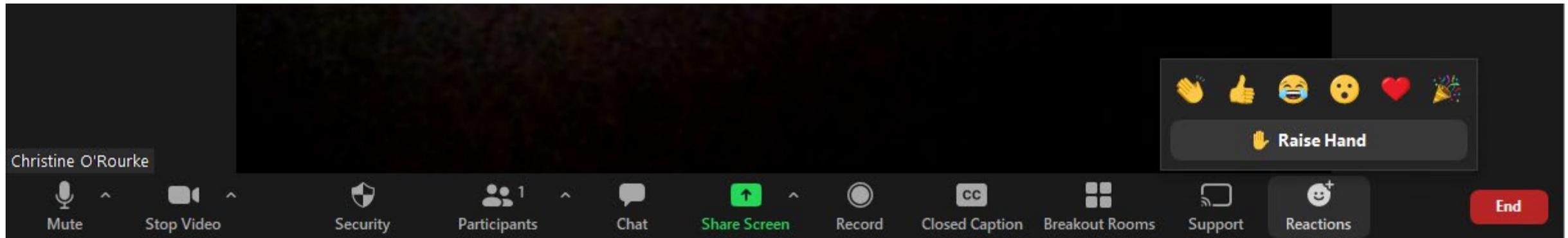
ZOOM TOOLS

Mute or Unmute
Microphone



Start or Stop
Video

ZOOM TOOLS



Chat for comments
and questions

AGENDA

| | |
|-----------------|-----------------------------------|
| 6:00pm – 6:10pm | Welcome and Introduction |
| 6:10pm - 6:55pm | Mobility Presentation and Polling |
| 6:55pm – 7:10pm | Mobility Q&A |
| 7:10pm – 7:20pm | Noise Presentation and Polling |
| 7:20pm – 7:30pm | Noise Q&A |
| 7:30pm | Next Steps and Close |



GENERAL PLAN UPDATE

- Overarching document that guides the future growth and development of the town
- Articulates a community's vision for the future
- Update to the 2005 Plan
- Will plan for next 20 years
- Contains goals, policies, and implementing programs
- Approvals of new development projects, public projects, and capital improvements require findings of consistency with the General Plan



GENERAL PLAN ELEMENTS

Required Elements:

- Land Use
- ✓ ■ Mobility
- Housing
- Open Space
- Conservation
- Safety
- ✓ ■ Noise

Additional Elements:

- Downtown
- Parks and Recreation

New Elements:

- Sustainability
- Diversity & Inclusion



GENERAL PLAN UPDATE TIMELINE

→ Jan '21 → Dec '21 → Jan '23

| PHASE 1 <i>Introduce the update</i> | PHASE 2 <i>Gather information</i> | PHASE 3 <i>Draft plan</i> | Adopt General Plan |
|---|--|---|-----------------------------------|
| <p>Mailer</p> <p>Website</p> <p>Social Media</p> <p>5 Community Surveys</p> <p>Stakeholder Interviews</p> | <p>Evaluation of Existing GP</p> <p>Background Reports</p> <p>Community Workshops:</p> <ul style="list-style-type: none"> • Open Space, Conservation, Parks & Recreation, and Safety • Sea Level Rise • Downtown <p>10 Meetings with Commissions and Town Council</p> | <p>Community Workshops:</p> <ul style="list-style-type: none"> • Housing and Land Use • Climate Action Plan • Mobility and Noise  • Diversity and Inclusion <p>Draft the General Plan</p> <p>Draft Environmental Impact Report</p> <p>Open House</p> <p>Meetings with Commissions and Town Council</p> | |

MOBILITY



GETTING TO KNOW THE AUDIENCE

Polling Question #1: Mobility Choices

When traveling to/from downtown Tiburon, what is your primary means of transportation? (choose one)

- Automobile
- Bicycle
- Bus
- Walk
- Other
- I don't travel to downtown Tiburon

Polling Question #2: Mobility Choices

If you worked prior to the pandemic, what was your primary means of transportation to and from your place of employment?

- Bicycle
- Bus
- Carpool
- Drive alone
- Ferry
- Walk
- Other
- Work at home

Polling Question #3: Mobility Choices

If you are currently working, what is your primary means of transportation to and from your place of employment?

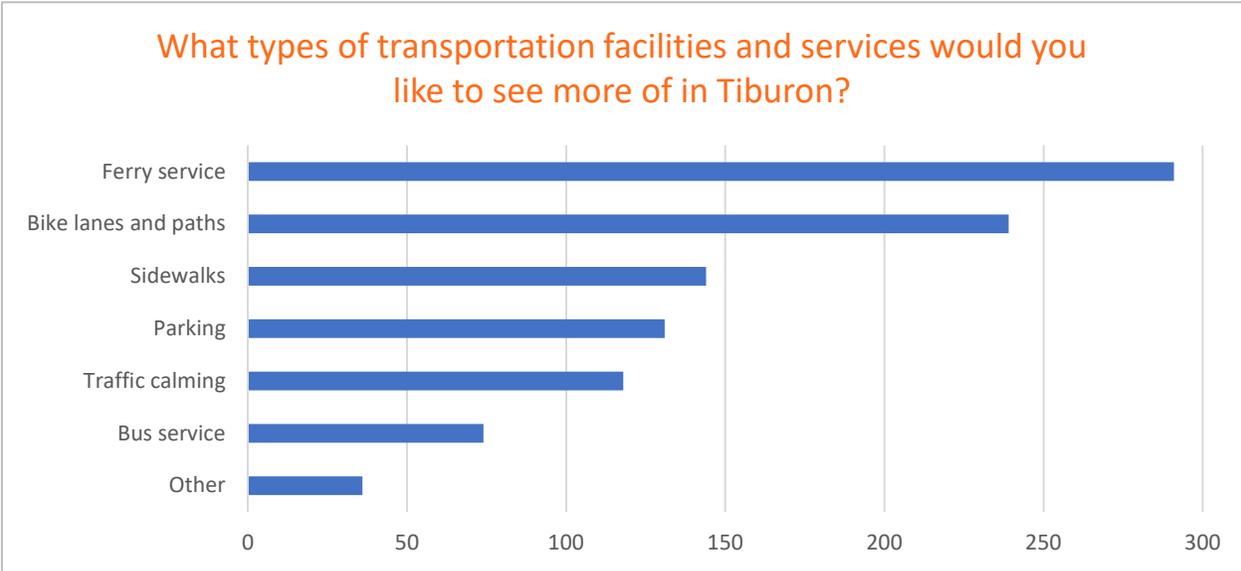
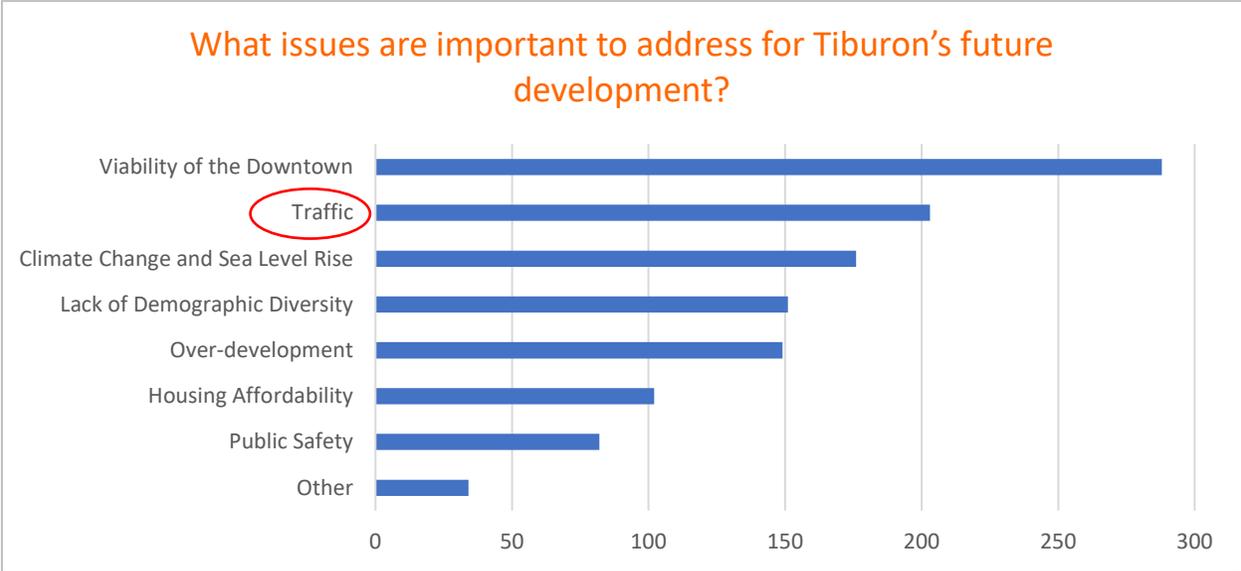
- Bicycle
- Bus
- Carpool
- Drive alone
- Ferry
- Walk
- Other
- Work at home

Polling Question #4: Mobility Choices

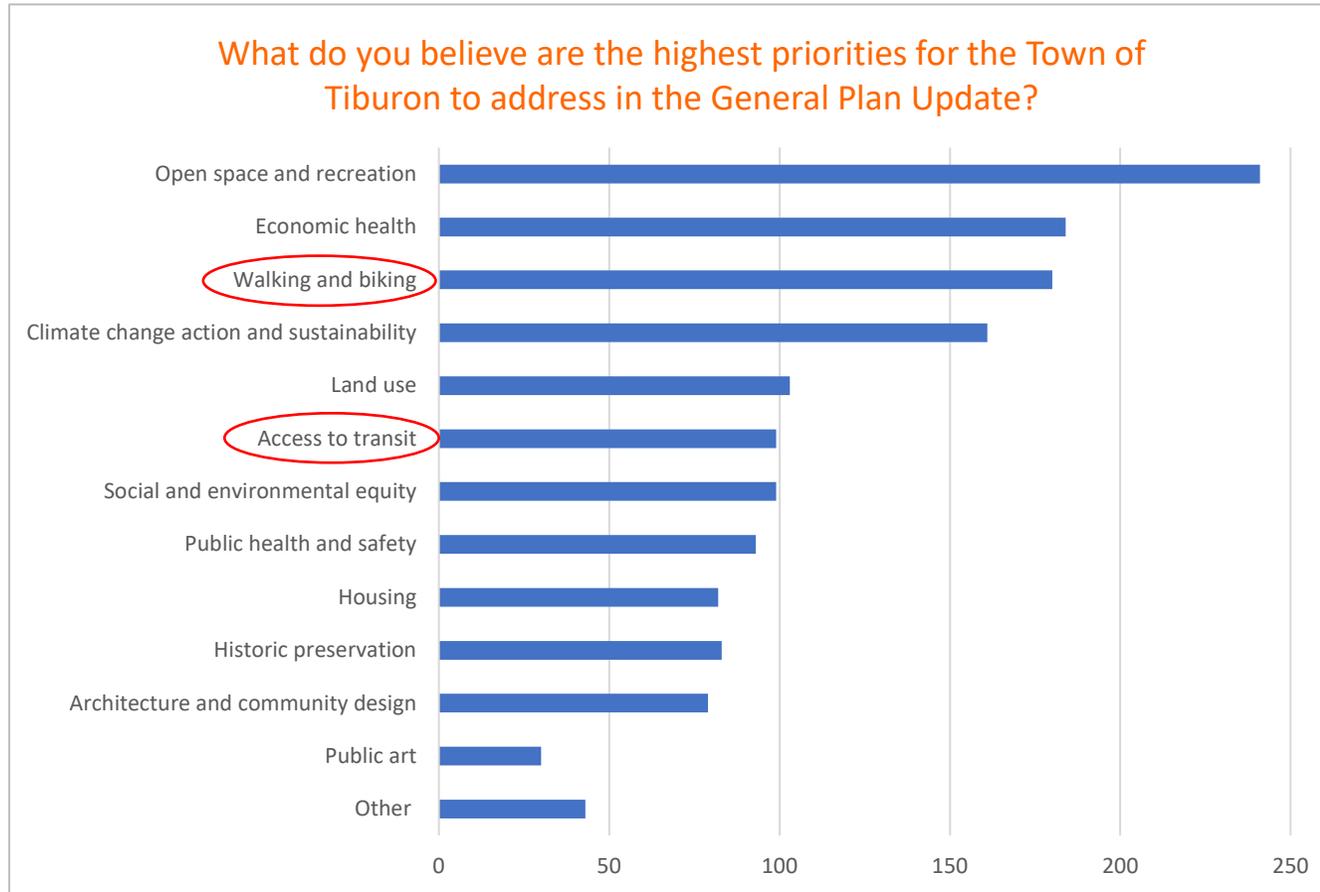
If you are a student (or a parent of a student), what is the primary means of travel to and from school?

- Automobile
- Bicycle
- Bus
- Walk
- Other

WHAT WE'VE HEARD



WHAT WE'VE HEARD



TRANSPORTATION / CIRCULATION & MOBILITY

- **Transportation** refers to the movement of people and goods, while **Circulation** refers more broadly to the movement of anything (including people, goods, energy, air, water, sewage, blood, etc.)
- **Mobility:** the term “Mobility” places an emphasis on having transportation options, and on the quality of those options. *“Mobility is having transportation options that you can count on to get you where you need to go.”* - Mobility Lab (Arlington, VA)

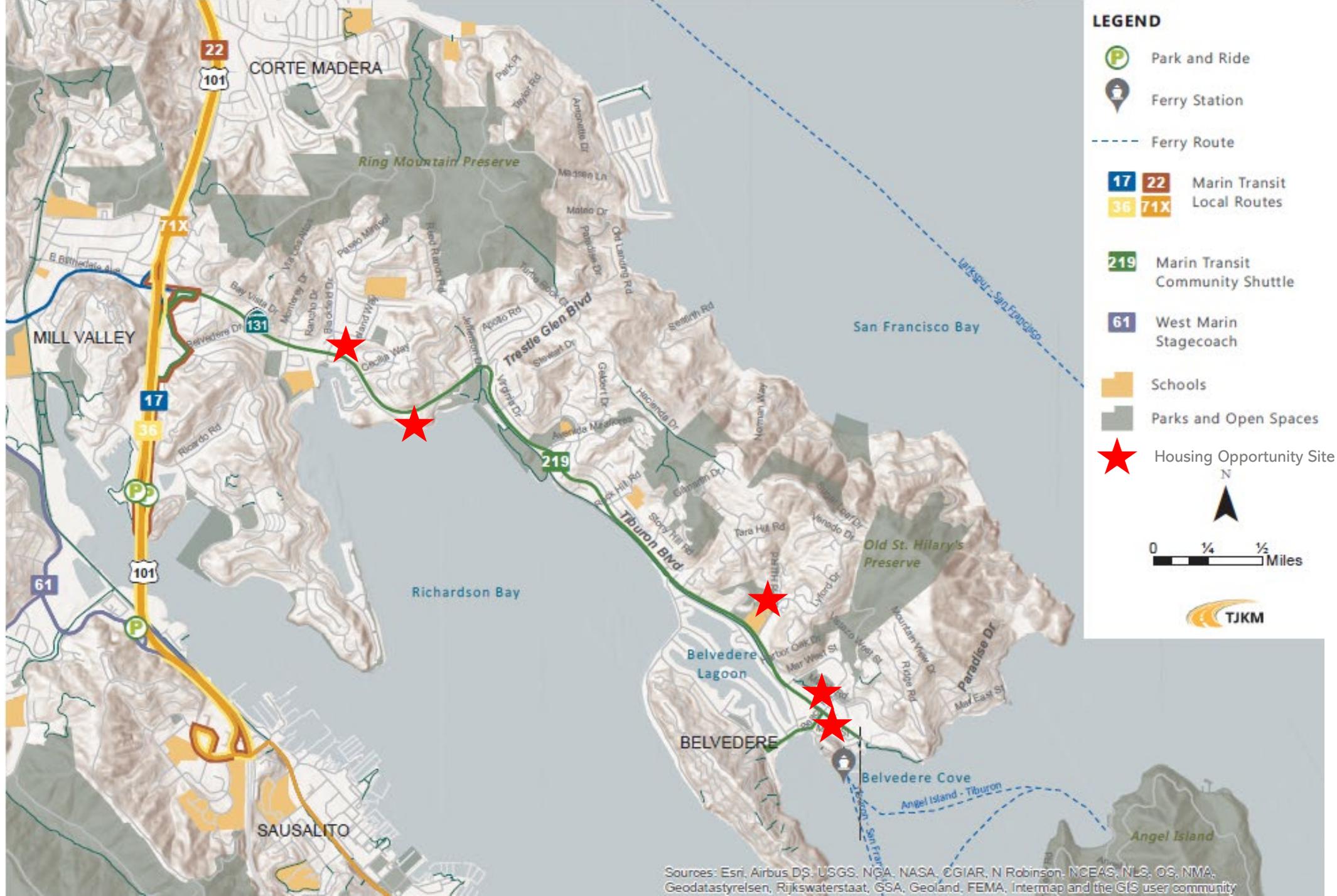


CIRCULATION ELEMENT REQUIREMENTS

California law requires the General Plan to include a circulation element correlated to the land use element that:

- Contains the general location and extent of existing and proposed major thoroughfares, transportation routes, airports, ports, and other local public utilities and facilities.
- Plans for a balanced multimodal transportation network that meets the needs of bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors, in a manner suitable to the context.





CIRCULATION ELEMENT (2016)

- Describes Tiburon's long-range transportation & mobility plan
- Specifies the town's vision, guiding principles, adopted goals and policies concerning transportation & mobility
- Identifies planned improvements to the town's circulation network
- Circulation Element was updated in February 2016 to incorporate required provisions for "complete streets"



CIRCULATION ELEMENT (2016)

- Stakeholder interviews held in 2014 identified multiple mobility concerns on Tiburon Blvd:
 - Traffic delays to private vehicles & transit
 - Safety of crossing for pedestrians, especially near transit stops & schools
 - Inadequate bicycle facilities (including a need for continuous bicycle lane and desire for separate lanes for high-speed and low-speed cyclists)
- Stakeholders stressed the importance of the Ferry to the town's economic vitality, while noting that access to the Ferry Terminal can be challenging.
 - Shuttle to the ferry had increased access
- School traffic (drop-offs/pick-ups of students by automobile) was cited as a big cause of traffic issues on Tiburon Boulevard
 - Bicycling to school had been discouraged due to safety concerns



CIRCULATION ELEMENT (2016)

Vision: a transportation system that supports the Town's goals for safe & healthy transportation, sustainability, a sense of small-town character, a high-quality of life for residents, and economic vibrancy of downtown.



CIRCULATION ELEMENT (2016)

Goals

- Comprehensive system
- Multimodal system
- Barrier removal
- Context sensitive roadways
- Residential streets maintained
- Complete streets

Policies include:

- Automobile Level of Service (LOS)
- Parking management



Automobile Level of Service (LOS) Results – 2016 Circulation Element Update

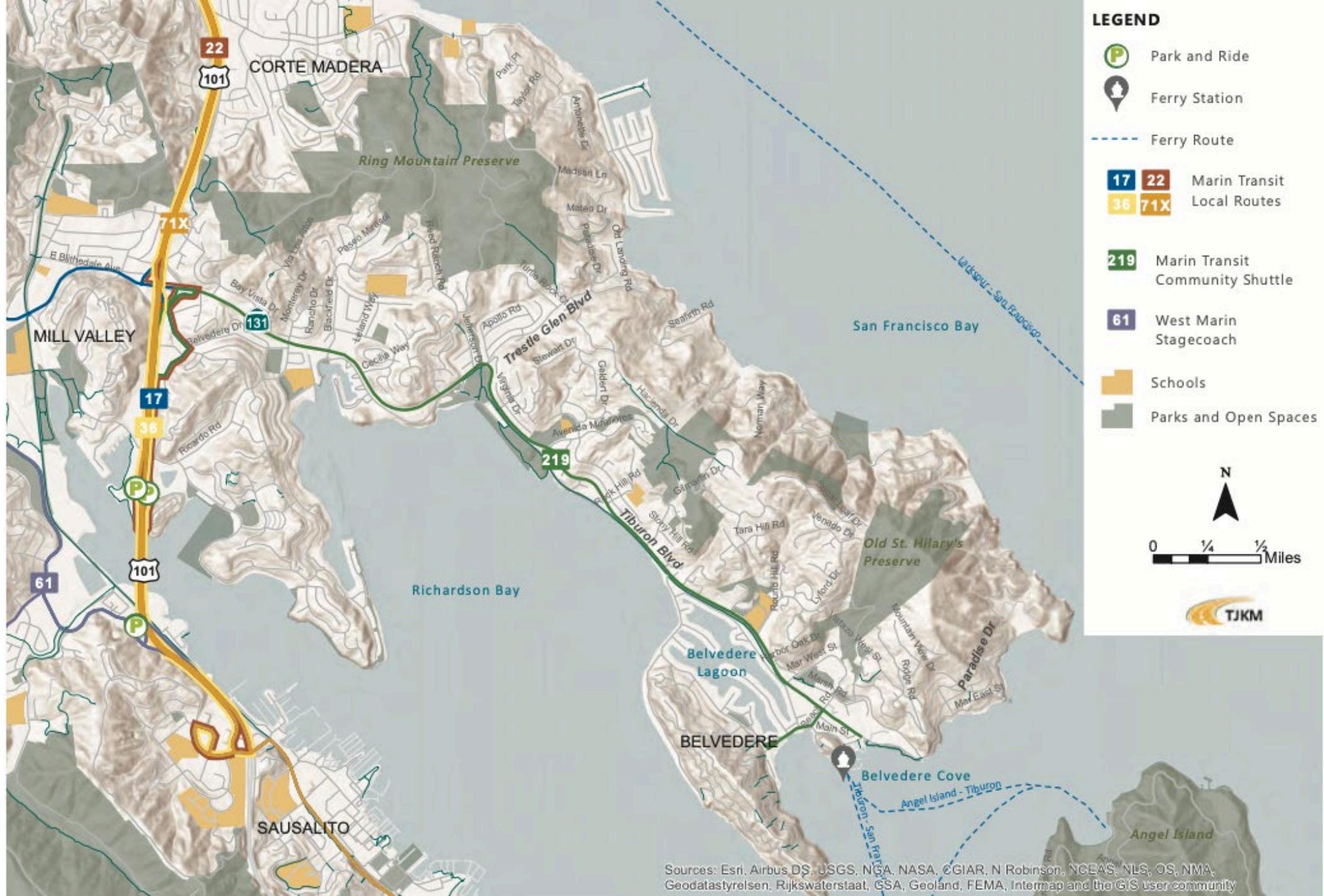
| INTERSECTION | CONTROL (LOS STANDARD) | PEAK HOUR | AVERAGE DELAY (SECONDS) | LOS |
|--|---------------------------|-----------|----------------------------|-----|
| Trestle Glen Blvd & Tiburon Blvd | Signal (C) | AM | 34.8 | C |
| | | PM | 19.1 | B |
| Ave Miraflores & Tiburon Blvd | Signal (C) | AM | 19.1 | B |
| | | PM | 13.4 | C |
| Rock Hill Dr & Tiburon Blvd | Signal (C) | AM | 19.1 | B |
| | | PM | 28.1 | C |
| Lyford Dr & Tiburon Blvd | Signal (C) | AM | 14.9 | B |
| | | PM | 15.1 | B |
| Beach St & Tiburon Blvd | Signal (C) | AM | 22.2 | C |
| | | PM | 22.8 | C |
| Trestle Glen Blvd & Paradise Dr | 2-way Stop-sign (C) | AM | 13.5 | B |
| | | PM | 12.7 | B |
| Blackfield Dr & Tiburon Blvd | Signal (C) | AM | 37.4 | D |
| | | PM | 33.4 | C |
| E Strawberry Dr – Bay Vista & Tiburon Blvd | Signal (C) | AM | 24.2 | C |
| | | PM | 28.7 | C |
| Redwood Highway & Tiburon Blvd | Signal (D) | AM | 47.1 | D |
| | | PM | 38.8 | D |
| US 101 Northbound Ramps & Tiburon Blvd | Signal (D) | AM | 23.5 | C |
| | | PM | 47.4 | D |
| US 101 Southbound Ramps & Tiburon Blvd | Signal (D) | AM | 23.7 | C |
| | | PM | 38.8 | D |

TRAFFIC VOLUMES

Daily Traffic

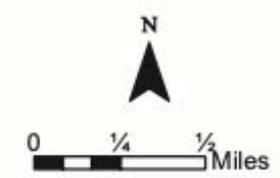


TRANSIT ROUTES



LEGEND

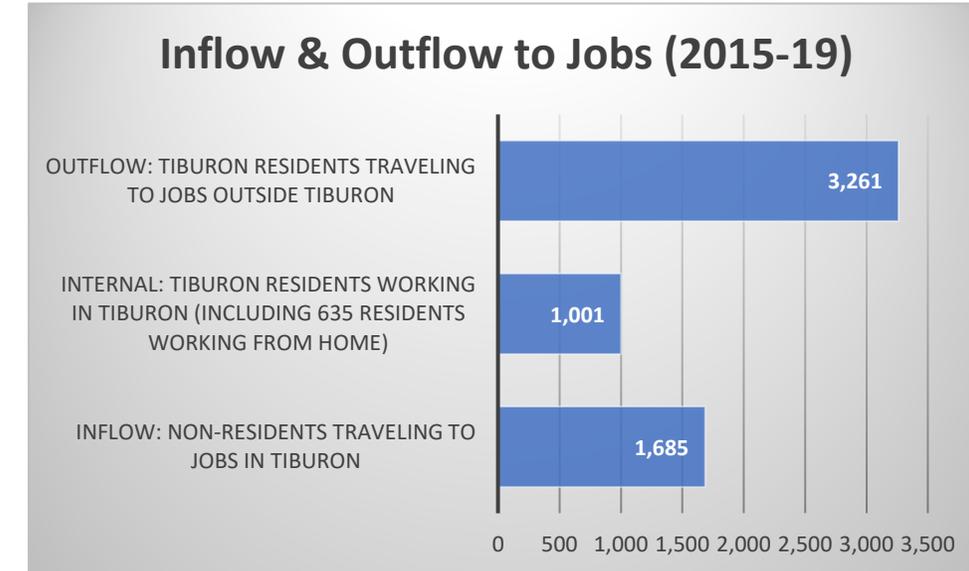
- Park and Ride
- Ferry Station
- Ferry Route
- 17
- 22
- 36
- 71X
- Marin Transit Local Routes
- 219
- Marin Transit Community Shuttle
- 61
- West Marin Stagecoach
- Schools
- Parks and Open Spaces



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastyrrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

TRAVEL MODES TO/FROM WORK

| JURISDICTION | TOWN OF TIBURON | | MARIN COUNTY | | BAY AREA (9 COUNTY REGION) | | STATE OF CALIFORNIA | |
|-------------------------------|-----------------|----------------|--------------|-------|----------------------------|-------|---------------------|-------|
| Employed persons ¹ | 4,344 | | 130,747 | | 4,119,405 | | 19,078,101 | |
| MODE SPLIT | NUMBER | % ² | NUMBER | % | NUMBER | % | NUMBER | % |
| Drove Alone | 2,327 | 54.6% | 82,136 | 64.1% | 2,522,264 | 65.1% | 13,767,903 | 73.5% |
| Carpool | 365 | 8.6% | 10,537 | 8.2% | 374,868 | 9.7% | 1,841,273 | 9.8% |
| Public Transit | 773 | 18.1% | 12,346 | 9.6% | 522,092 | 11.1% | 970,901 | 5.2% |
| Walk | 69 | 1.6% | 4,399 | 3.4% | 147,157 | 3.5% | 479,751 | 2.6% |
| Other | 92 | 2.2% | 2,813 | 2.2% | 143,493 | 3.3% | 482,036 | 2.6% |
| Worked at Home | 635 | 14.9% | 15,930 | 12.4% | 258,172 | 7.3% | 1,188,387 | 6.3% |



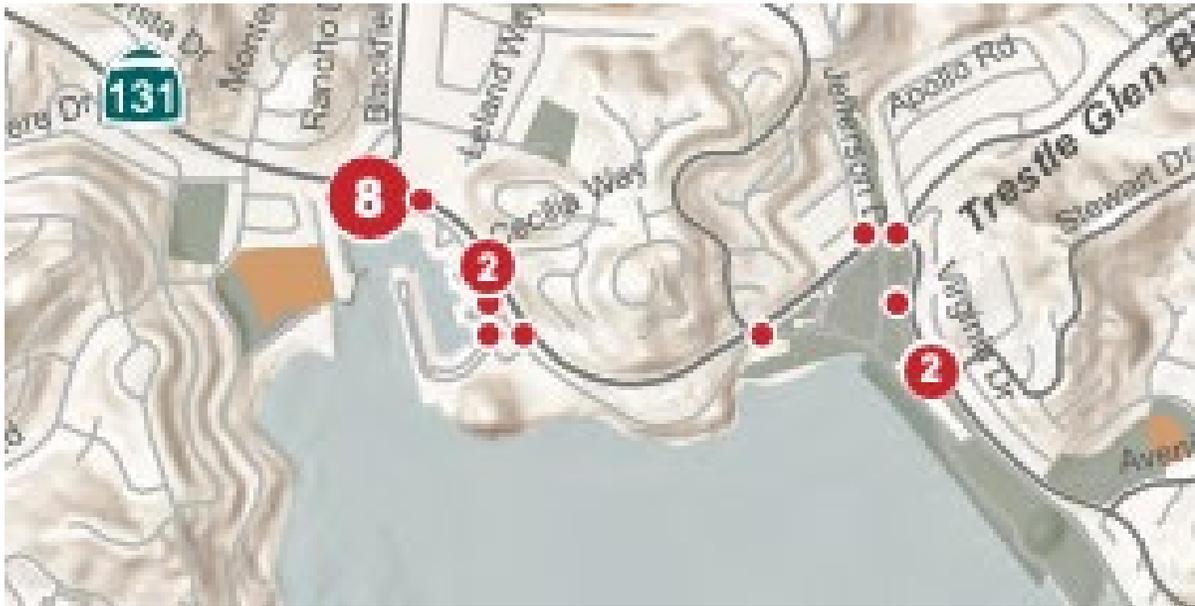
SAFETY

2015-19 collision locations



SAFETY

2015-19
collision
locations



SAFETY

2015-19
collision
locations
(involving
bicyclists or
pedestrians)



EXISTING SIDEWALKS & PATHS



Polling Question #5: Mobility Constraints

What are the biggest constraints to mobility in Tiburon? (select your top 3)

- Lack of sidewalks on key segments of major streets including Tiburon Boulevard
- Lack of bicycle lanes or paths along major streets including Tiburon Boulevard
- Traffic congestion on Tiburon Boulevard
- Safety concerns when walking or bicycling
- Limited routes for walking or bicycling to/from schools
- Infrequent bus service
- Infrequent ferry service
- Difficult to find parking in downtown Tiburon

Polling Question #6: Safety Perceptions

Do you feel safe walking in Tiburon?

- Yes
- Yes, but only in downtown Tiburon
- No

Polling Question #7: Safety Perceptions

Do you feel safe bicycling in Tiburon?

- Yes
- Yes, but only in downtown Tiburon
- No

Polling Question #8: Safety Perceptions

Would you feel comfortable letting children walk to school in Tiburon?

Yes

No

Polling Question #9: Safety Perceptions

Would you feel comfortable letting children bicycle to school in Tiburon?

Yes

No

BIKEWAY NETWORK PLAN

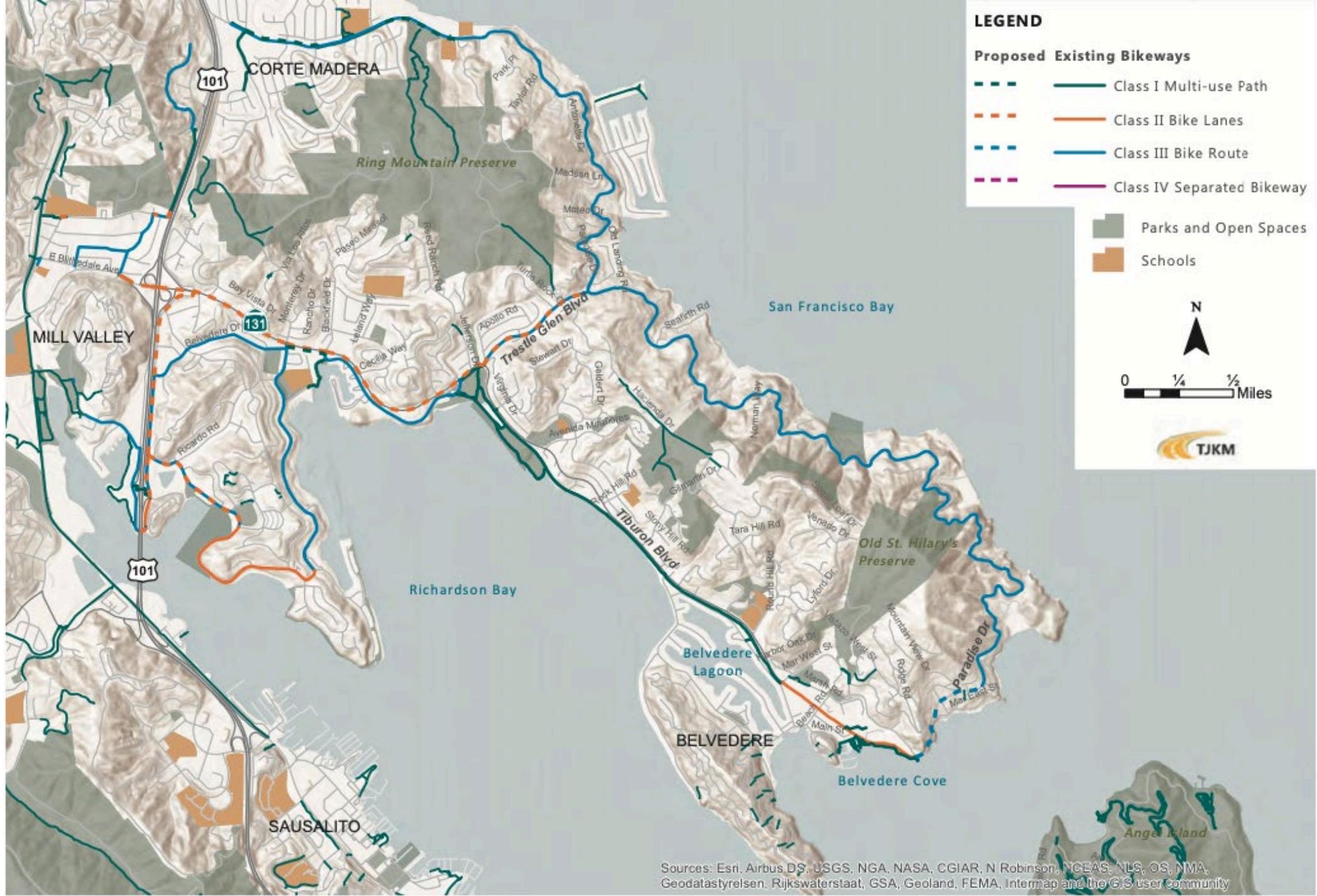
2016 Bicycle & Pedestrian Master Plan

Types of Bikeways



BIKEWAY NETWORK PLAN

2016 Bicycle & Pedestrian Master Plan



CIRCULATION ELEMENT (2022 UPDATE)

- Refine the Town's long-range transportation plan to reflect current concerns and priorities
- Increased emphasis on reducing vehicle miles traveled (VMT) consistent with State goals aimed at reducing greenhouse gas emissions
- Update the Town's list of proposed mobility improvement



STREET NETWORK PLAN

Proposed Improvements

1. Add second westbound through lane on Tiburon Blvd approaching Trestle Glen Blvd
2. Add dedicated right-turn lane on Gilmartin Dr approaching Tiburon Blvd
3. Add additional westbound lane on Tiburon Blvd between N. Knoll Rd and Highway 101
4. Install roundabout at intersection of Tiburon Blvd & Mar West St
5. Proposed signal coordination refinements on Tiburon Boulevard
6. Bicycle lane improvements on Tiburon Blvd and Trestle Glen Blvd
7. Improvements to existing bike paths and signed bicycle routes consistent with the Bicycle & Pedestrian Master Plan
8. Infill of walkway gaps, including sidewalk installation on Tiburon Blvd and new crosswalks
9. Updates to mid-block crosswalks in downtown Tiburon
10. Circulation Element also includes recommendations aimed at reducing delays associated with school traffic.



BICYCLE & PEDESTRIAN MASTER PLAN (2016)

Proposed Bicycle Projects

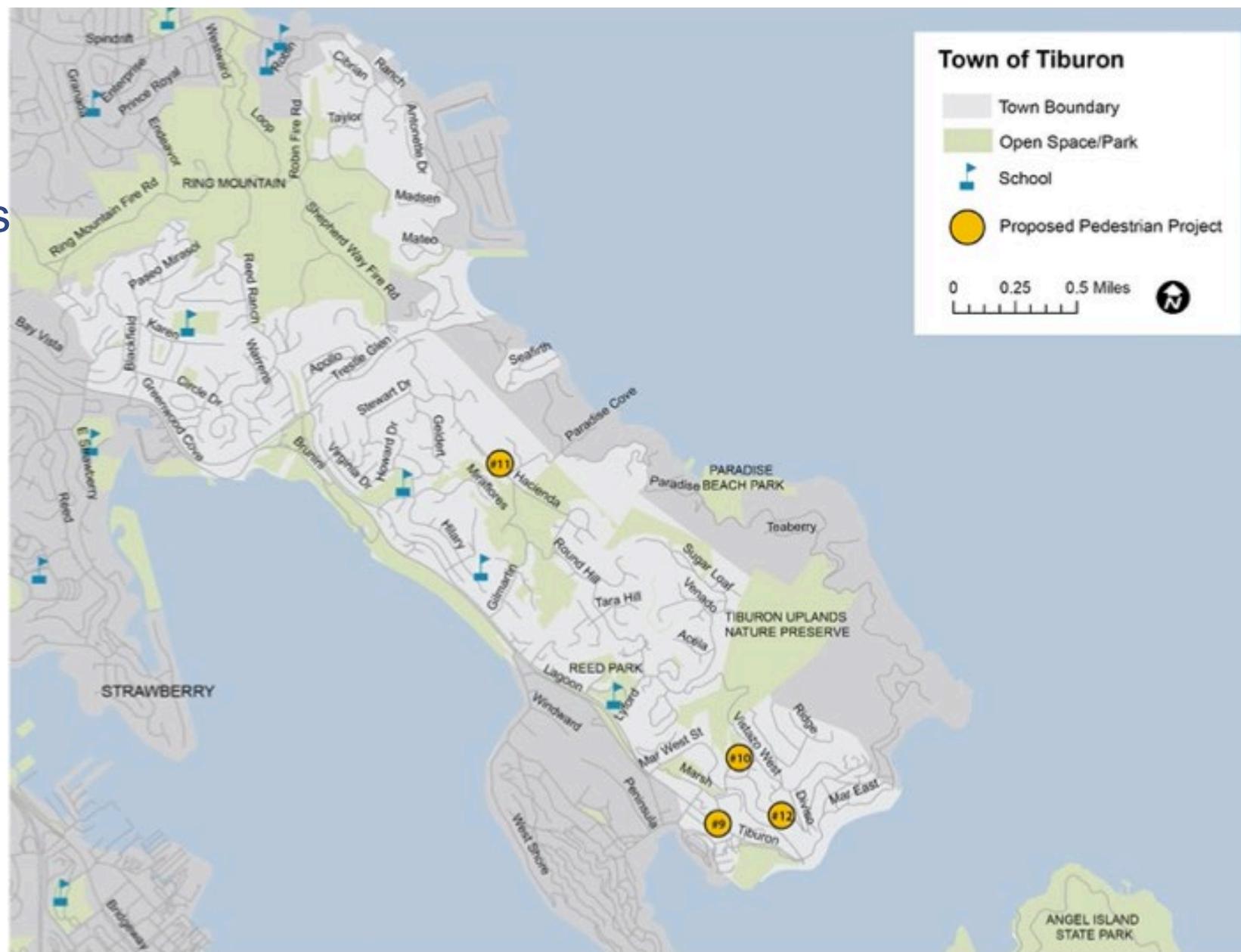
- 1) **Blackie's Pasture Connection (0.03 miles Class IV bikeway to Blackie's Cove)**
- 2) **Intersection enhancements at Tiburon Blvd/Blackfield Dr-Greenwood Cover Dr**
- 3) **Greenwood Beach Rd (0.43 miles Class III route)**
- 4) **Trestle Glen Blvd (0.61 miles Class II/III route)**
- 5) **Tiburon Blvd from Mar West St to Lagoon Rd/Cove Rd (0.01-mile improvement to transition from Class I path to Class II bike lanes)**
- 6) **Paradise Dr (0.54-mile Class III route from Mar West St to Town limit)**
- 7) **Tiburon Blvd (1-mile Class II bicycle lanes from Town limits to Trestle Glen Blvd, subject to Caltrans & County approval). ALSO: (7A) Tiburon Blvd is designated as a "special study zone" to study the feasibility of installing a 3.5-mile Class IV bikeway from Highway 101 to Trestle Glen Blvd.**
- 8) **Tiburon Blvd (0.19 miles from E. Strawberry Dr to Greenwood Cove Dr): support County implementation of a Class I path on the south side.**



BICYCLE & PEDESTRIAN MASTER PLAN (2016)

Proposed Pedestrian Projects

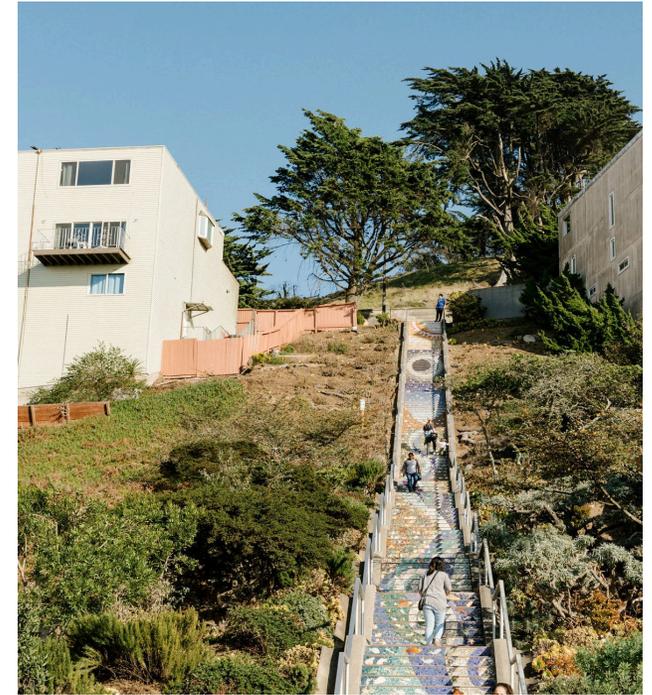
- 9) Tiburon Blvd (161 feet west of Juanita Lane):
Mid-block crossing upgrade
 - 10) Moitoza Lane (between Vistazo West St and
Emperanza St): installation of steps, lanes and
paths identified as top-priority pedestrian project.
 - 11) Tiburon Ridge Rail (vicinity of Rabin Property-
Town Trail) close trail gaps.
 - 12) Las Lomas Trail (weather harden existing trail, Las
Lomas Lane at Centro West St)
- Crosswalk enhancements at Tiburon Blvd
intersection with Blackfield Dr-Greenwood Cover Dr
(included in bicycle project #2).



Polling Question #10A: Mobility Improvements

Indicate your level of support for continuous bikeways on Tiburon Boulevard (choose one)

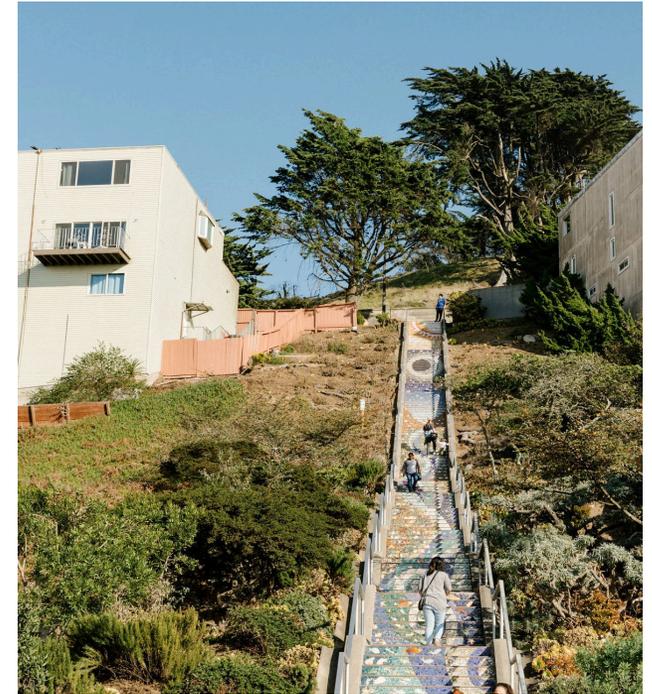
- Very High
- High
- Medium
- Low
- No support



Polling Question #10B: Mobility Improvements

Indicate your level of support for continuous bikeways on Trestle Glen Boulevard (choose one)

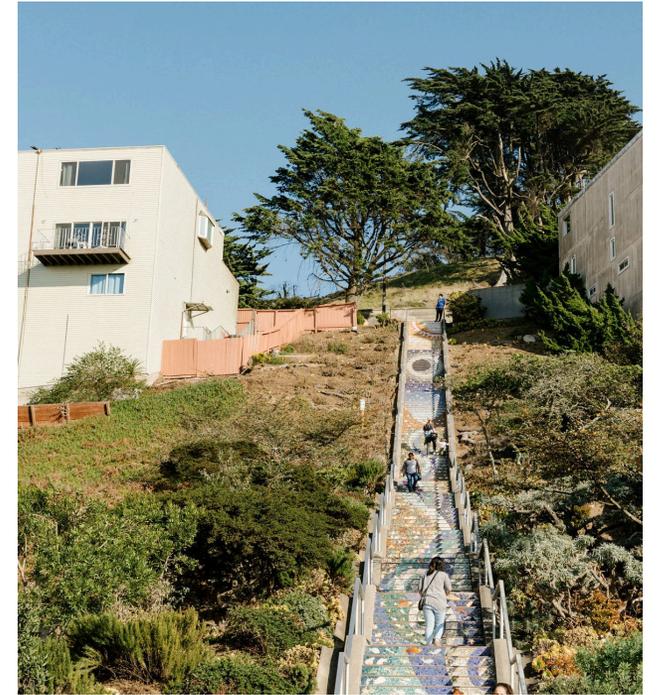
- Very High
- High
- Medium
- Low
- No support



Polling Question #11: Mobility Improvements

Indicate your level of support for continuous sidewalks and additional crosswalks on Tiburon Boulevard, and updates to mid-block crosswalks in downtown Tiburon (choose one)

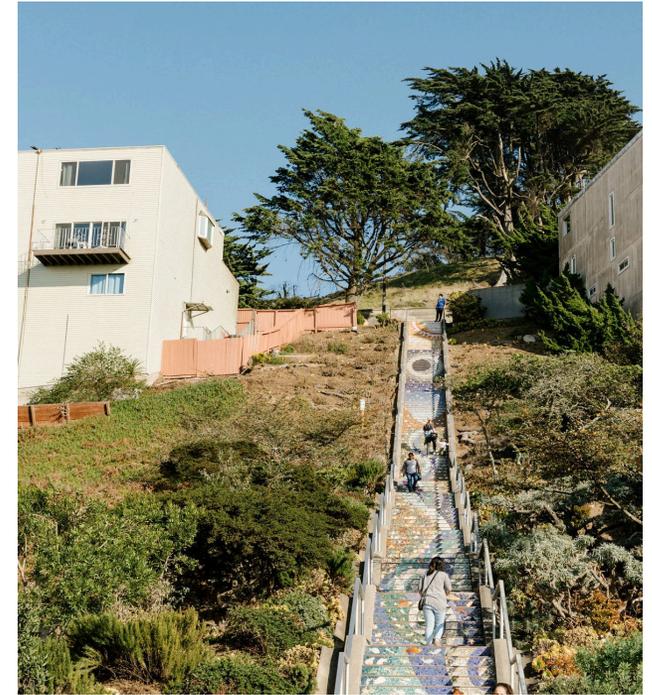
- Very High
- High
- Medium
- Low
- No support



Polling Question #12: Mobility Improvements

Indicate your level of support to eliminate walkway gaps near schools (choose one)

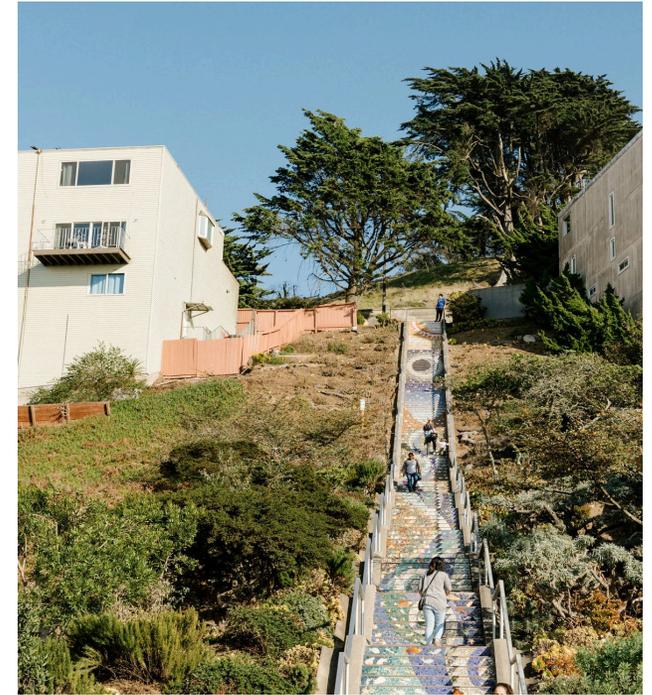
- Very High
- High
- Medium
- Low
- No support



Polling Question #13A: Mobility Improvements

Indicate your level of support for a roundabout at Tiburon Boulevard and Mar West Street
(choose one)

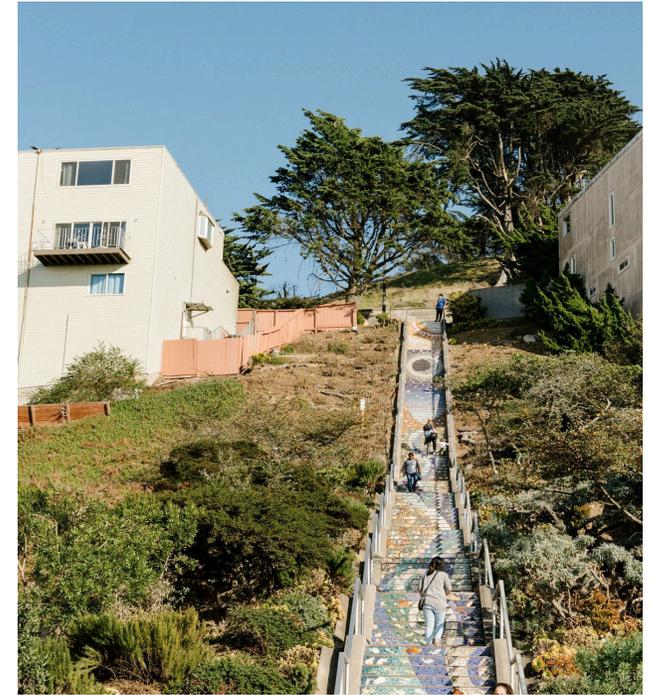
- Very High
- High
- Medium
- Low
- No support



Polling Question #13B: Mobility Improvements

Indicate your level of support for a roundabout at Tiburon Boulevard and Blackfield Drive
(choose one)

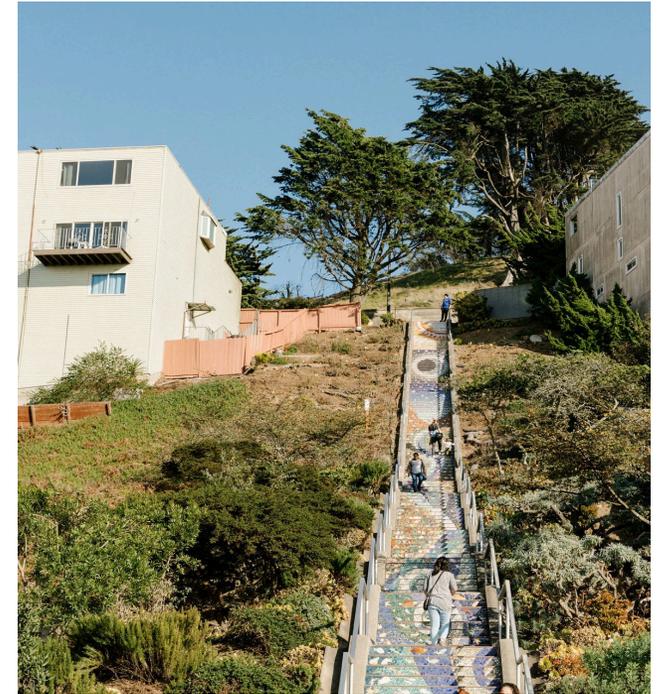
- Very High
- High
- Medium
- Low
- No support



Polling Question #14: Mobility Improvements

Indicate your level of support for ferry service enhancements (choose one)

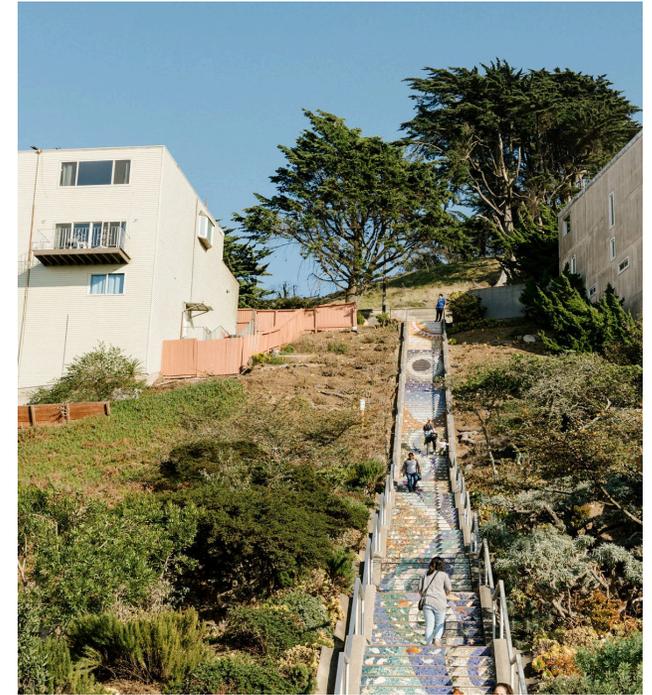
- Very High
- High
- Medium
- Low
- No support



Polling Question #15: Mobility Improvements

Indicate your level of support for additional automobile lanes at intersections on Tiburon Boulevard (choose one)

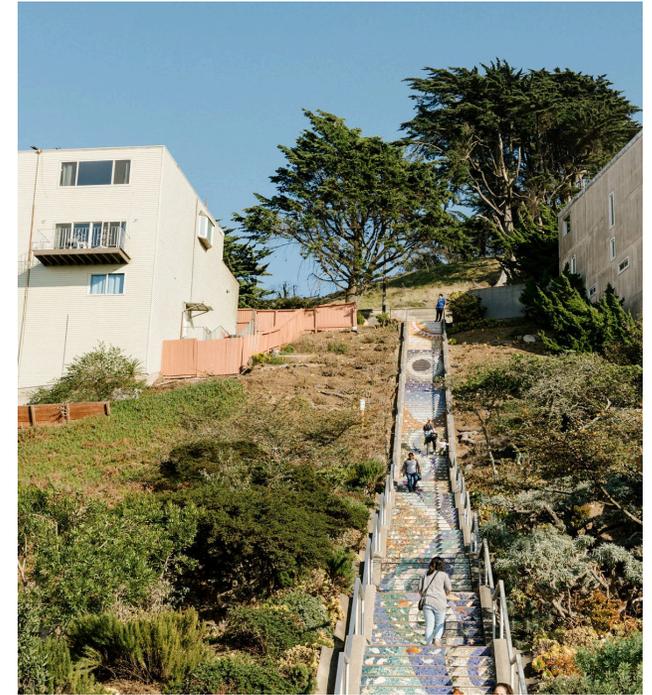
- Very High
- High
- Medium
- Low
- No support



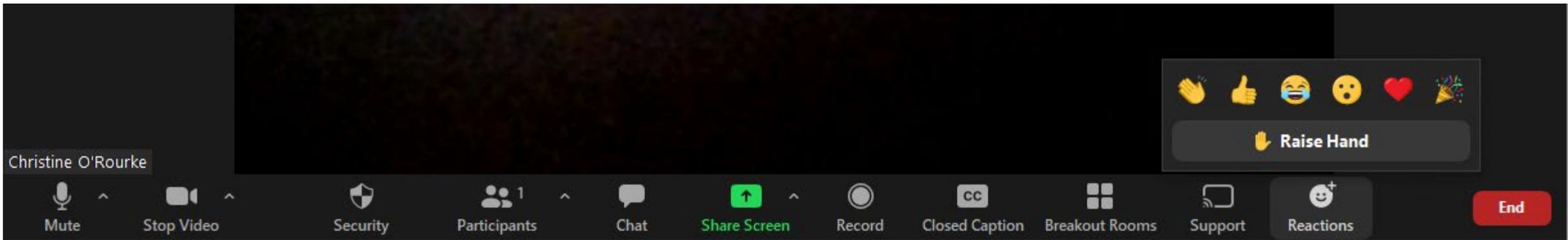
Polling Question #16: Mobility Improvements

Indicate your level of support for bus access improvements, including providing school and downtown shuttle bus service (choose one)

- Very High
- High
- Medium
- Low
- No support



Mobility Q & A



Type Your Question

Raise Your Hand

NOISE

NOISE ELEMENT PURPOSE

- Assess noise levels from existing sources (e.g., traffic, parking lots, parks, commercial uses)
- Project noise levels from estimated increases in traffic on highways and major arterials during the Plan timeframe
- Establish policies to protect the community from excessive noise



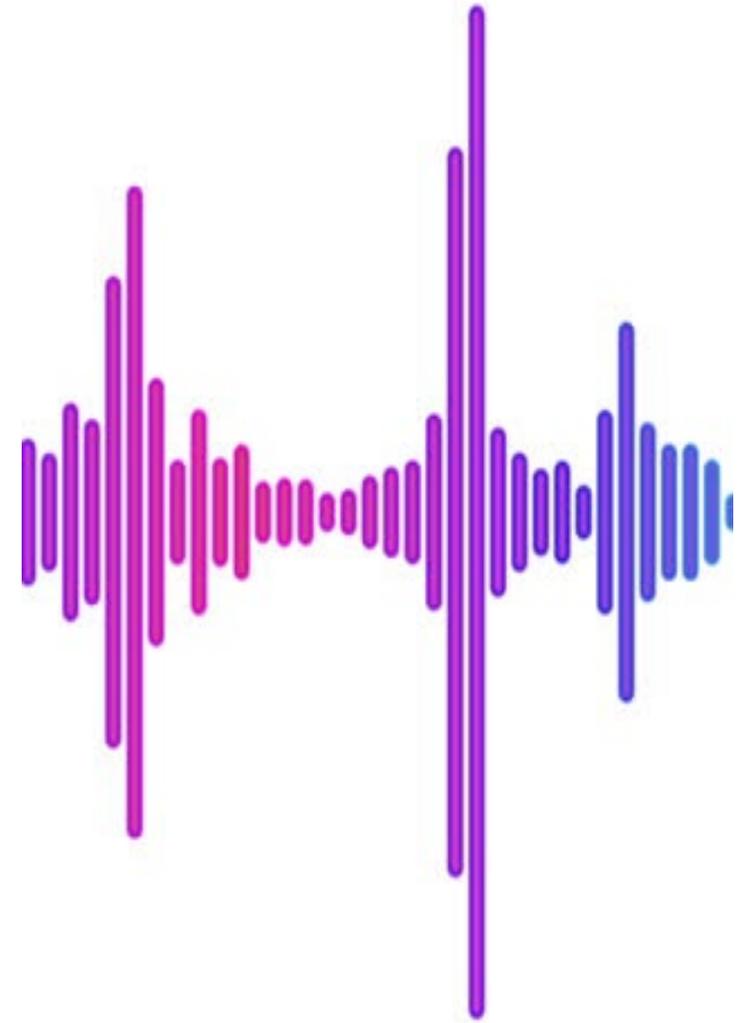
Polling Question #17: Noise Concerns

What are noise sources in Tiburon that are particularly disruptive?
(choose all that apply)

- Traffic
- Aircraft
- Construction activities
- Property maintenance activities
- Commercial businesses
- Parks
- Schools
- Community events
- None – the noise levels aren't disruptive

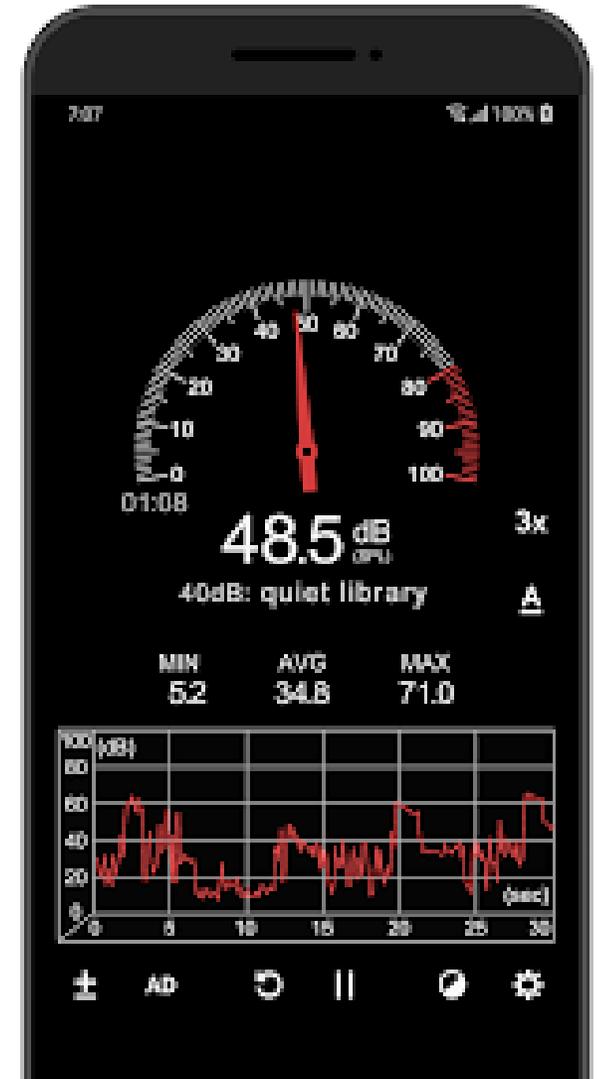
MEASURING NOISE

- Measured by sound frequency, magnitude and variation over a defined time period
- Ambient sound level = sound from all sources at a given location
- Decibel (dB) = basic unit of sound measurement
- L_{eq} = Average sound level over a defined period of time
- L_{dn} = Day/night average sound level over 24-hour period with 10 dB “penalty added for noise between 10pm and 7am



REGULATORY ENVIRONMENT

- State and federal guidelines recommend no greater than 65 dB L_{dn} exterior sound level for residential uses
- California Building Code requires maximum 45 dB for interior sound level in habitable rooms
- Tiburon General Plan includes Noise and Land Use Guidelines to evaluate suitability of new development in areas of high ambient noise and to require detailed analysis/mitigation measures



REGULATORY ENVIRONMENT

| Land Use Category | Community Noise Exposure, Ldn or CNEL, in dB | | | | | | |
|---|---|--------|--------|--------|--------|------|------|
| | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
| Residential (interior noise levels not to exceed 45 dBA Ldn) | Green | Green | Yellow | Yellow | Red | Grey | Grey |
| Transient Lodging, Motels, Hotels | Green | Green | Yellow | Yellow | Red | Grey | Grey |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | Green | Green | Yellow | Yellow | Red | Grey | Grey |
| Auditoriums, Concert Halls, Amphitheaters | Yellow | Yellow | Yellow | Yellow | Red | Grey | Grey |
| Sports Arenas, Outdoor Spectator Sports | Yellow | Yellow | Yellow | Yellow | Red | Grey | Grey |
| Playgrounds, Neighborhood Parks, Tennis Courts, Outdoor Recreation | Green | Green | Green | Green | Red | Grey | Grey |
| Water Recreation, Riding Stables, Golf Courses, Cemeteries | Green | Green | Green | Green | Red | Red | Grey |
| Office Buildings, Business, Commercial & Professional | Green | Green | Green | Yellow | Yellow | Red | Red |
| Industrial, Manufacturing, Utilities, Agriculture | Green | Green | Green | Green | Yellow | Red | Red |
|  | Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. | | | | | | |
|  | Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. | | | | | | |
|  | Normally Unacceptable: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. | | | | | | |
|  | Clearly Unacceptable: New construction or development clearly should not be undertaken. | | | | | | |

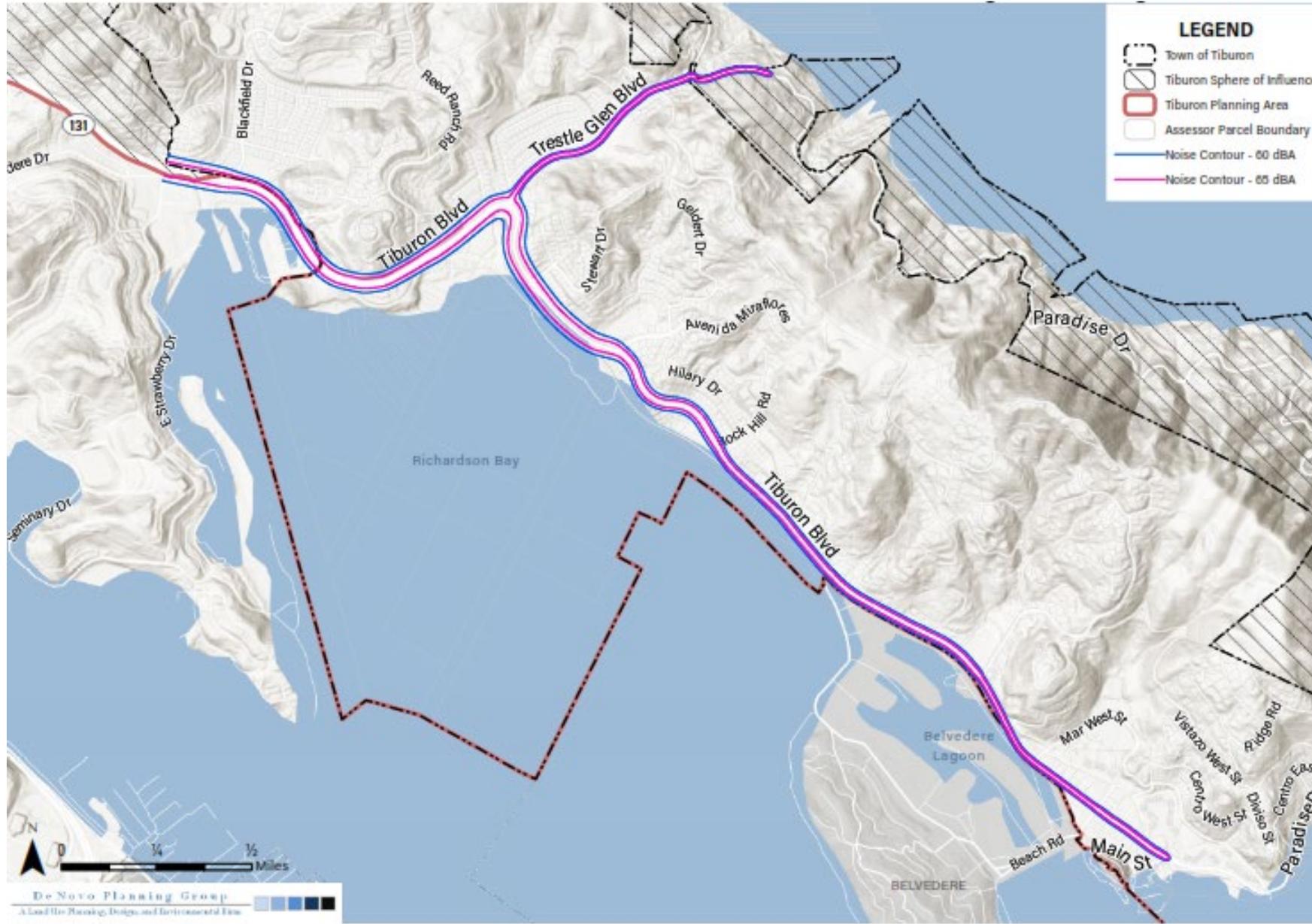
Noise and Land Use Guidelines

EXISTING NOISE LEVELS

From Roadways:

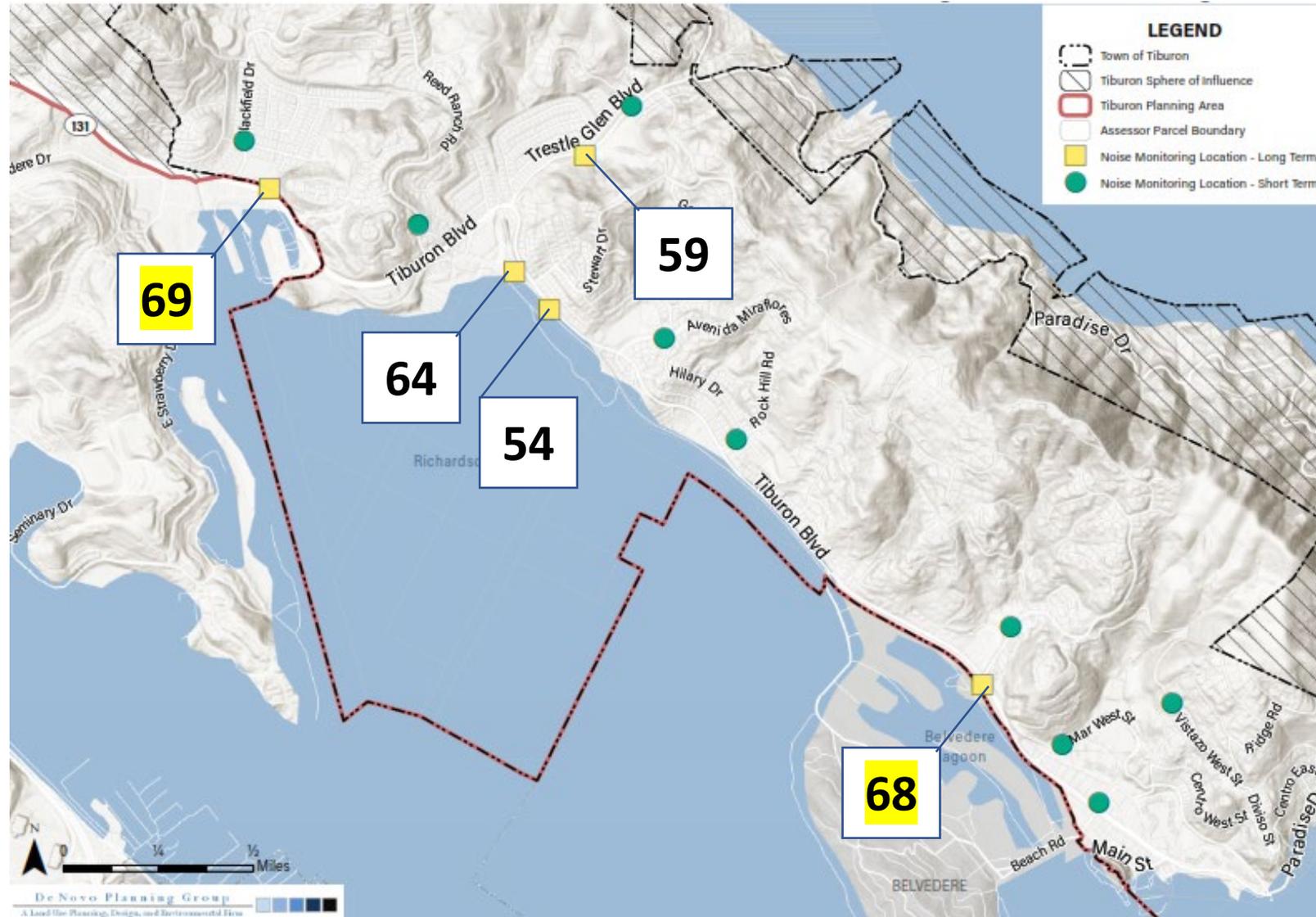
| ROADWAY | SEGMENT | NOISE LEVEL AT CLOSEST RECEPTORS (dB, LDN) |
|-------------------|-----------------------------|--|
| Tiburon Blvd | East of US 101 | 67.2 |
| Tiburon Blvd | West of Blackfield Drive | 65.4 |
| Tiburon Blvd | East of Reed Ranch Road | 68.2 |
| Tiburon Blvd | South of Trestle Glen Blvd | 68.4 |
| Tiburon Blvd | North of Avenida Miraflores | 66.3 |
| Tiburon Blvd | North of Rock Hill Drive | 67.2 |
| Tiburon Blvd | North of Lyford Drive | 64.8 |
| Tiburon Blvd | South of Beach Road | 61.9 |
| Tiburon Blvd | North of Main Street | 61.8 |
| Trestle Glen Blvd | East of Tiburon Blvd | 61.4 |
| Paradise Drive | East of Trestle Glen Blvd | 52.7 |

EXISTING NOISE LEVELS



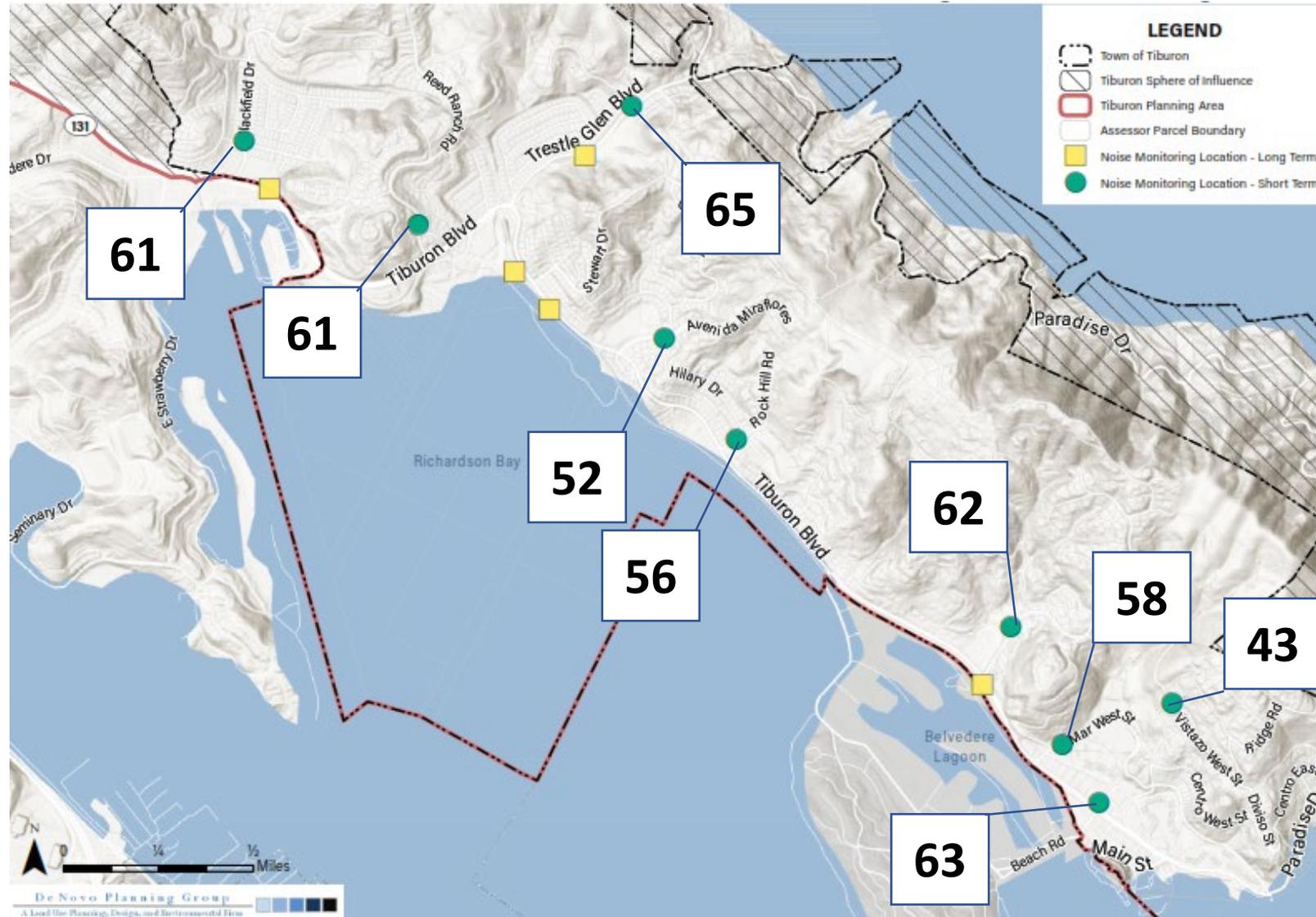
EXISTING NOISE LEVELS

Community Noise Survey conducted December 2020:
24-hour monitoring in dB, L_{dn}

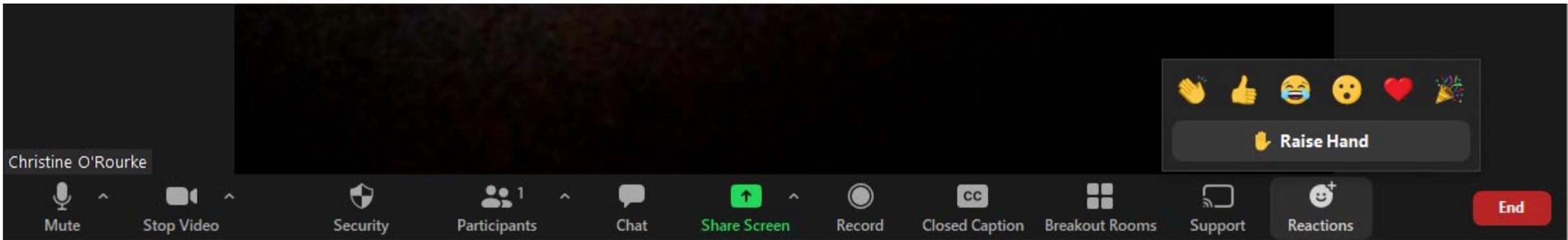


EXISTING NOISE LEVELS

Community Noise Survey conducted December 2020:
Short-term noise monitoring in dB, L_{eq}



Noise Q & A



Type Your Question

Raise Your Hand

NEXT STEPS

Mobility/Circulation and Noise Elements

- Surveys will be posted on [CreateTiburon2040.org](https://www.createtiburon2040.org)
- Workshop presentation and video will be posted
- Submit questions on Contact Us page
- Traffic and noise projections prepared based on growth projections and included in Draft EIR

General Plan Update

- Planning Commission and Town Council feedback on housing opportunity sites
- Draft Housing Element released in June 2022
- Upcoming Diversity & Inclusion workshop
- Sign up for the mailing list at [CreateTiburon2040.org](https://www.createtiburon2040.org)

