REVISED 5/14/2026 AT 3:50 PM

City of Capitola
City Council Meeting Agenda
Thursday, May 14, 2026 – 6:00 PM

City Council Chambers
420 Capitola Avenue, Capitola, CA 95010

Mayor: Margaux Morgan
Vice Mayor: Gerry Jensen
Council Members: Joe Clarke, Melinda Orbach, Susan Westman

Closed Session – 5:30 PM

Closed Sessions are not open to the public and held only on specific topics allowed by State Law (noticed below). An announcement regarding the items to be discussed in Closed Session will be made in the City Hall Council Chambers prior to the Closed Session. Members of the public may, at this time, address the City Council on closed session items only. There will be a report of any final decisions in City Council Chambers during the Open Session Meeting.

i. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

Significant exposure to litigation pursuant to Gov't. Code §54956.9(d)(2), (e)(3)

One Case

Regular Meeting of the Capitola City Council – 6 PM

1. Roll Call and Pledge of Allegiance

Council Members Joe Clarke, Melinda Orbach, Susan Westman, Vice Mayor Gerry Jensen, and Mayor Margaux Morgan

2. Additions and Deletions to the Agenda

3. Presentations

Presentations are limited to eight minutes.

A. Proclamation Declaring May 18 - May 25, 2026, as National Beach Safety Week

B. Presentation of the 2025 Herb Ross Officer of the Year Award to Sergeant Kraig Evans

C. Presentation of Certificates of Recognition to the Inaugural Members of the Police Chief Advisory Committee

4. Report on Closed Session

5. Additional Materials

Additional information related to an agenda item on this agenda and submitted to the City after distribution of the agenda packet pursuant to Government Code §54957.5. All correspondence received prior to 5:00 p.m. on the Wednesday preceding a Council Meeting will be distributed to Councilmembers to review prior to the meeting. Information submitted after 5 p.m. on that Wednesday may not have time to reach Councilmembers, nor be read by them prior to consideration of an item.

A. Item 9A - Correspondence Received

B. Item 9B - Correspondence Received

6. Oral Communications by Members of the Public

Oral Communications allows time for members of the Public to address the City Council on any "Consent Item" on tonight's agenda, or on any topic within the jurisdiction of the City that is not on the "General Government/Public Hearings" section of the Agenda. Members of the public may speak for up to three minutes, unless otherwise specified by the Mayor. Individuals may not speak more than once during Oral Communications. All speakers must address the entire legislative body and will not be permitted to engage in dialogue. ***A maximum of 30 minutes*** *is set aside for Oral Communications.*

7. Staff / City Council Comments

Comments are limited to three minutes.

8. Consent Items

All items listed as "Consent Items" will be enacted by one motion in the form listed below. There will be no separate discussion on these items prior to the time the Council votes on the action unless members of the City Council request specific items to be discussed for separate review. Items pulled for separate discussion will be considered following General Government. Note that all Ordinances which appear on the public agenda shall be determined to have been read by title and further reading waived.

A. City Council Meeting Minutes
Recommended Action: Approve minutes from the special meeting on April 21, 2026, the regular meeting on April 23, 2026, the special meeting on April 30, 2026, and the special meeting on May 6, 2026.

B. Liability Claim
Recommended Action: Deny liability claim from Julissa Guzman.

C. Fiscal Year 2026-27 Appropriation Limit
Recommended Action: Adopt a resolution setting the Fiscal Year 2026-27 appropriation limit.

D. Appointment to City Advisory Body
Recommended Action: By motion and vote, appoint Raymond Gaeta to the Capitola Historical Museum Board to a term expiring June 30, 2028.

E. Proposed Expansion of Marine Protected Areas
Recommended Action: Authorize the Mayor to sign a letter opposing the petition under consideration by the California Fish and Game Commission, which requests to expand the boundaries of Natural Bridges State Marine Reserve (SMR) and designate a new state marine conservation area (SMCA) off Pleasure Point.

F. Support for State Budget Request for Public Beach Restoration Program Funding
Recommended Action: Authorize the Mayor to execute a letter supporting the allocation of $200 million in Proposition 4 Climate Bond funding for the Department of Boating and Waterways Public Beach Restoration Program.

G. Escalona Avenue Right-of-Way Vacation, Parcel Creation, and Reservation of Easements
Recommended Action: Adopt a resolution: 1) vacating a portion of the Escalona Avenue right-of-way, approving creation of a parcel, and reserving a public open space easement and a public access easement over the parcel; and 2) authorizing the City Manager to execute and record all documents necessary to effectuate these actions, subject to minor modifications approved by the City Manager, City Engineer, and City Attorney.

H. Local Roadway Safety Plan and Long-Term Roadway Safety Goal
Recommended Action: 1) Adopt the City of Capitola Local Roadway Safety Plan; and 2) adopt a resolution establishing a long-term goal of eliminating traffic fatalities and serious injuries on Capitola roadways by 2045, consistent with Safe System and Vision Zero principles.

9. General Government / Public Hearings

All items listed in "General Government / Public Hearings" are intended to provide an opportunity for public discussion of each item listed. The following procedure pertains to each General Government item: 1) Staff explanation; 2) Council questions; 3) Public comment; 4) Council deliberation; 5) Decision.

A. Bay Avenue Corridor Project Update & Rule 20A Coordination
Recommended Action: Receive an update regarding the Bay Avenue Corridor Project, including completed outreach, available funding opportunities, and Rule 20A utility undergrounding coordination; confirm whether to continue coordinating corridor improvements with underground utility work; and provide direction on which project components to advance.

B. Transition to By-District Elections
Recommended Action: Receive a presentation on the transition to by-district elections, receive community input, and provide direction to staff and the demographer regarding the composition of voting districts and number of districts.

C. Amendment to FY 2025-26 City Fee Schedule
Recommended Action: Conduct the duly noticed public hearing on the proposed amendments to the City Fee Schedule for Fiscal Year 2025–26 and adopt a resolution amending the current fee schedule, effective May 14, 2026.

D. FY 2026-27 City Fee Schedule
Recommended Action: Conduct the duly noticed public hearing on the proposed changes to the City's Fee Schedule and adopt a resolution approving the Fiscal Year 2026-27 Fee Schedule.

10. Adjournment

The next regularly scheduled City Council meeting is on May 28, 2026, at 6:00 PM.

How to View the Meeting

Meetings are open to the public for in-person attendance at the Capitola City Council Chambers located at 420 Capitola Avenue, Capitola, California, 95010.

Other ways to Watch:

Spectrum Cable Television channel 8

City of Capitola, California YouTube Channel

How to Provide Comments to the City Council

Members of the public may provide public comments to the City Council in-person during the meeting. If you are unable to attend in-person, please email your comments to citycouncil@cityofcapitola.gov and they will be included as a part of the record for the meeting.

Notice regarding City Council: The City Council meets on the 2nd and 4th Thursday of each month at 6:00 p.m. in the City Hall Council Chambers located at 420 Capitola Avenue, Capitola.

Agenda and Agenda Packet Materials: The City Council Agenda and the complete Agenda Packet are available for review on the City's website and at Capitola City Hall prior to the meeting. Need more information? Contact the City Clerk's office at 831-475-7300.

Agenda Materials Distributed after Distribution of the Agenda Packet: Pursuant to Government Code §54957.5, materials related to an agenda item submitted after distribution of the agenda packet are available for public inspection at the Reception Office at City Hall, 420 Capitola Avenue, Capitola, California, during normal business hours.

Americans with Disabilities Act: Disability-related aids or services are available to enable persons with a disability to participate in this meeting consistent with the Federal Americans with Disabilities Act of 1990. Assisted listening devices are available for individuals with hearing impairments at the meeting in the City Council Chambers. Should you require special accommodations to participate in the meeting due to a disability, please contact the City Clerk's office at least 24 hours in advance of the meeting at 831-475-7300. In an effort to accommodate individuals with environmental sensitivities, attendees are requested to refrain from wearing perfumes and other scented products.

Si desea asistir a esta reunión pública y necesita ayuda - como un intérprete de lenguaje de señas americano, español u otro equipo especial - favor de llamar al Departamento de la Secretaría de la Ciudad al 831-475-7300 al menos tres días antes para que podamos coordinar dicha asistencia especial o envié un correo electrónico a jgautho@cityofcapitola.gov.

Televised Meetings: City Council meetings are cablecast "Live" on Charter Communications Cable TV Channel 8 and are recorded to be rebroadcasted at 8:00 a.m. on the Wednesday following the meetings and at 1:00 p.m. on Saturday following the first rebroadcast on Community Television of Santa Cruz County (Charter Channel 71 and Comcast Channel 25). Meetings are streamed "Live" on the City's website by clicking on the Home Page link "Meeting Agendas/Videos." Archived meetings can be viewed from the website at any time.

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VIA CERTIFIED MAIL

March 13, 2026

Julia Gautho - City Clerk
City of Capitola
420 Capitola Ave
Capitola, CA 95010

Re: Violation of California Voting Rights Act

I write on behalf of Southwest Voter Registration Education Project and its members residing in the City of Capitola. The City of Capitola ("Capitola" or "City") relies upon an at-large election system for electing candidates to its governing board. Moreover, voting within the City is racially polarized, resulting in minority vote dilution, and therefore Capitola's at-large elections violate the California Voting Rights Act of 2001 ("CVRA").

The CVRA disfavors the use of so-called "at-large" voting – an election method that permits voters of an entire jurisdiction to elect candidates to each open seat. *See generally Sanchez v. City of Modesto* (2006) 145 Cal.App.4th 660, 667 ("*Sanchez*"). For example, if the U.S. Congress were elected through a nationwide at-large election, rather than through typical single-member districts, each voter could cast up to 435 votes and vote for any candidate in the country, not just the candidates in the voter's district, and the 435 candidates receiving the most nationwide votes would be elected. At-large elections thus allow a bare majority of voters to control *every* seat, not just the seats in a particular district or a proportional majority of seats.

Voting rights advocates have targeted "at-large" election schemes for decades, because they often result in "vote dilution," or the impairment of minority groups' ability to elect their preferred candidates or influence the outcome of elections, which occurs when the electorate votes in a racially polarized manner. *See Thornburg v. Gingles,* 478 U.S. 30, 46 (1986) ("*Gingles*"). The U.S. Supreme Court "has long recognized that multi-member districts and at-large voting schemes may operate to minimize or cancel out the voting strength" of minorities. *Id.* at 47; *see also id.* at 48, fn. 14 (at-large elections may also cause elected officials to "ignore [minority] interests without fear of political consequences"), citing *Rogers v. Lodge*, 458 U.S.

613, 623 (1982); *White v. Register*, 412 U.S. 755, 769 (1973). "[T]he majority, by virtue of its numerical superiority, will regularly defeat the choices of minority voters." *Gingles*, at 47. When racially polarized voting occurs, dividing the political unit into single-member districts, or some other appropriate remedy, may facilitate a minority group's ability to elect its preferred representatives. *Rogers*, at 616.

Section 2 of the federal Voting Rights Act ("FVRA"), 42 U.S.C. § 1973, which Congress enacted in 1965 and amended in 1982, targets, among other things, at-large election schemes. *Gingles* at 37; *see also* Boyd & Markman, *The 1982 Amendments to the Voting Rights Act: A Legislative History* (1983) 40 Wash. & Lee L. Rev. 1347, 1402. Although enforcement of the FVRA was successful in many states, California was an exception. By enacting the CVRA, "[t]he Legislature intended to expand protections against vote dilution over those provided by the federal Voting Rights Act of 1965." *Jauregui v. City of Palmdale* (2014) 226 Cal. App. 4th 781, 808. Thus, while the CVRA is similar to the FVRA in several respects, it is also different in several key respects, as the Legislature sought to remedy what it considered "restrictive interpretations given to the federal act." Assem. Com. on Judiciary, Analysis of Sen. Bill No. 976 (2001-2002 Reg. Sess.) as amended Apr. 9, 2002, p. 2.

The California Legislature dispensed with the requirement in *Gingles* that a minority group demonstrate that it is sufficiently large and geographically compact to constitute a "majority-minority district." *Sanchez,* at 669. In *Pico Neighborhood Association v. City of Santa Monica* (August 24, 2023) 15 Cal.5th 292, the California Supreme Court recently confirmed this commonsense reading of the CVRA. *Also see* Assem. Com. on Judiciary, Analysis of Sen. Bill No. 976 (2001–2002 Reg. Sess.) as amended Apr. 9, 2002, p. 3 ("Thus, this bill puts the voting rights horse (the discrimination issue) back where it sensibly belongs in front of the cart (what type of remedy is appropriate once racially polarized voting has been shown).")

To establish a violation of the CVRA, a plaintiff must generally show that "racially polarized voting occurs in elections for members of the governing body of the political subdivision or in elections incorporating other electoral choices by the voters of the political subdivision." Elec. Code § 14028(a). The CVRA specifies the elections that are most probative: "elections in which at least one candidate is a member of a protected class or elections involving ballot measures, or other electoral choices that affect the rights and privileges of members of a protected class." Elec. Code § 14028(a). The CVRA also makes clear that "[e]lections conducted prior to the filing of an action … are more probative to establish the existence of racially polarized voting than elections conducted after the filing of the action." *Id.*

Factors other than "racially polarized voting" that are required to make out a claim under the FVRA – under the "totality of the circumstances" test – "are probative, but not necessary factors to establish a violation of" the CVRA. Elec. Code § 14028(e). These "other factors" include "the history of discrimination, the use of electoral devices or other voting practices or procedures that may enhance the dilutive effects of at-large elections, denial of access to those processes determining which groups of candidates will receive financial or other support in a given election, the extent to which members of a protected class bear the effects of past discrimination in areas such as education, employment, and health, which hinder their ability to participate effectively in the political process, and the use of overt or subtle racial appeals in political campaigns." *Id.*

Capitola's at-large system dilutes the ability of Latinos (a "protected class") – to elect candidates of their choice or otherwise influence the outcome of the City's council elections.

According to the U.S. Census, Latinos comprise approximately 22.4% of the City's population. Yet, Latino representation on Capitola's governing board has been sparse to non-existent. The contrast between the significant Latino proportion of the electorate and the absence of Latinos elected to the Capitola City Council is outwardly disturbing and fundamentally hostile towards participation from members of this protected class.

In light of the City's underrepresentation of Latinos, it is no wonder why Latino residents do not frequently emerge as candidates. Opponents of fair, district-based elections may attempt to attribute the lack of candidates within the protected class to a lack of interest from their respective communities within the City. On the contrary, the near-absence of Latino candidates reveals vote dilution. *See Westwego Citizens for Better Government v. City of Westwego*, 872 F. 2d 1201, 1208-1209, n. 9 (5th Cir. 1989).

Still, elections for Capitola's city council likewise exhibit racially polarized voting. For example, in the most recent election (2024), Enrique Dolmo Jr. received significant support from Latino voters, but lost due to a lack of support from non-Hispanic white voters. The same was true for Mr. Dolmo in the 2022 election. While one might point to Yvette Lopez Brooks' success in the 2018 and 2022 elections, she acknowledged the near-complete absence of Latino representation on the Capitola City Council in the election guide – "I really believe that it's important to have a minority voice, a woman's voice, a woman of color … ," and then she resigned in January 2025, leaving the Capitola City Council once again with no Latino representation.

As you may be aware, in 2012, we sued the City of Palmdale for violating the CVRA. After an eight-day trial, we prevailed. After spending millions of dollars, a district-based remedy was ultimately imposed upon the Palmdale City Council, with districts that combine all incumbents into one of the four districts. Since then, we have similarly prevailed in a series of CVRA trials – against the cities of Highland and Santa Monica, and the Ramona Unified School District.

Given the racially polarized voting in elections in Capitola and resulting vote dilution, we urge the City to voluntarily change its at-large system of electing governing board members. Otherwise, on behalf of residents within the jurisdiction, we will be forced to seek judicial relief. Please advise us no later than May 5, 2026 as to whether you would like to discuss a voluntary change to your current at-large system.

We look forward to your response.

Very truly yours,

Kevin I. Shenkman

Gautho, Julia

From: Vicki Guinn <vickiguinn01@hotmail.com>
Sent: Friday, May 8, 2026 5:17 PM
To: City Council
Subject: Meeting 5/14/26 Agenda Item 9 Bay Avenue Corridor

Dear City Council, I am unable to attend the 5/14 meeting but wanted to voice my concern for roundabouts in the Bay Avenue Corridor. My own observations with the City of Santa Cruz roundabouts by the Wharf is that there a great deal of tourist and unfamiliar driver confusion in them. Granted, those two locations seem more feasible but, I can count on two hands how many times I've been cut off or almost side-swiped in those two roundabouts by unfamiliar drivers desperately trying to figure out where to go. No one could be thinking about pedestrians, Ebikes and Bicycles when frantically trying to navigate through unfamiliar lanes. The Diagram for the Bay Avenue Corridor roundabouts with residential driveways, additional street turns, business entrances etc give a chaotic impression once you visualze adding cars, delivery trucks, tour buses, RV's, EBikes, Bicycles and Pedestrians. Chaotic traffic confusion is never going to be cost wise.

Points of Concern:

While roundabouts can drastically reduce fatal head-on collisions, not our issue, they tend to increase minor side-swipe "fender benders", especially among those unsure of right-of-way rules.

Tourist towns often have high EBike, bicycle and foot traffic. Concern that roundabouts prioritize vehicles over pedestrian safety and convenience, often forcing walkers to take indirect paths to find a crossing.

Roundabouts do impact and can be counter-intuitive for neurodivergent drivers or those accustomed to the structured Lanes of traffic lights. In tourist hubs, this confusion is magnified as visitors may stop in the middle to check directions, defeating the purpose of constant flow.

Our tourist area rely on buses and tour coaches that can struggle to navigate tight circles, often requiring them to mount center aprons or straddle multiple lanes.

In historic or scenic towns, the large land mass required for a roundabout can be seen as destructive to green spaces or out of character with a "small town" feel, or basically unnecessary.

Gautho, Julia

From: michael routh <qwakwak@gmail.com>
Sent: Friday, May 8, 2026 5:25 PM
To: City Council
Subject: Item 9A,

Moving on from Bay Avenue BOONDOGGLE #1 To bigger and more expensive irreversible BOONDOGGLE #2.

Mayor and Council Members,

Spending rapidly depleting revenue on another Bay Avenue boondoggle at either of the two intersections is just making one bad decision after another. The proposals are almost schizophrenic- the first aimed to gum up traffic to make pedestrians crossings "safer", the roundabout proposal claims to "improve" the flow of traffic. Pedestrians be damned!

The Bay Avenue intersection configurations can be found in every city and town in the country and they work. No intersection is ever perfect and accident free, but Bay/Hill and Bay/Cap Ave are probably the most efficient and safest configuration for both motorists and pedestrians without putting in a stoplight. Instead of embarking on another foolhardy plan, set aside funds until enough for signalization is accumulated. New AI technology being utilized in traffic lights could be a problem solver.

Mick Routh

Sent from my iPad

Gautho, Julia

From: Tracy Armanino <tracyarm6@aol.com>
Sent: Sunday, May 10, 2026 12:38 PM
To: City Council
Subject: Roundabouts

Ugh! What a terrible idea. Both my husband, Andy Armanino, and myself are hugely opposed to these changes. They are difficult for the older population in Capitola.
This is a small and wonderful city, please do not make it more complicated!
Keep it simple, the red flags seem to be doing a good job.
If it ain't broke, don't fix it…someone wise once said.
Tracy ARMANINO

Ps. If you have money for roundabouts, how about filling in all the potholes in the city and repaint the very hard to see white lines between traffic lanes, now THERE are accidents waiting to happen!
Sent from my iPhone

Gautho, Julia

From: Kevin Maguire <kmaguire831@gmail.com>
Sent: Monday, May 11, 2026 7:48 AM
To: City Clerk; City Council
Subject: [PDF] 5/14/26 Agenda Item 9 A. Bay Avenue Corridor Project Update & Rule 20A Coordination
Attachments: Bay Corridor review.pdf

Subject: Opposition to Bay Avenue Roundabout Proposals — Agenda Item 9A, May 14, 2026

Dear Mayor Morgan and Members of the Capitola City Council,

I am writing in opposition to the proposed roundabouts at Bay Avenue & Hill Street and Bay Avenue & Capitola Avenue (Agenda Item 9A, May 14, 2026). I have reviewed the Kimley-Horn Bay Avenue Corridor Study, the City's Local Roadway Safety Plan, and the full agenda packet in detail. I respectfully ask the Council to consider the following five points before taking action:

1. YOUR OWN DATA PROVES SIGNALS ARE SAFER THAN ROUNDABOUTS
The City's Local Roadway Safety Plan (Table 4) shows that signalized intersections in Capitola have a fatal and severe injury rate of just 5.1%. Unsignalized intersections — the category a roundabout falls into — run at 17.5%, more than three times higher. The City is proposing to convert a stop-controlled intersection into an unsignalized one in a city already ranked #1 in California for seniors 65 and older killed or injured in crashes (OTS Table 2, 2023). The Kimley-Horn study and the LRSP together make the case against a roundabout. The City's own data should not be used to justify a design that moves this intersection into the more dangerous category.

ADA violation: A roundabout cannot accommodate blind and visually impaired pedestrians — federal PROWAG standards require Accessible Pedestrian Signals with audible and tactile crossing cues, and without a signal phase to attach them to, a blind resident at Bay & Hill would have no way to safely determine when it is safe to cross. This would put visually impaired residents of Hill Street, Capitola Hill Apartment at grave risk, and force them to detour to center street, some 300 feet away,

Liability: By approving a roundabout over overwhelming community opposition, documented evidence that signals are safer, and the City's own data showing the corridor is already improving, the Council is hereby on notice — **if pedestrian injuries or fatalities increase after this project is built, the City will bear full moral and legal responsibility for ignoring the public record placed before it tonight.**

2. THE COMMUNITY ALREADY SAID NO — AND NOTHING HAS CHANGED
In September 2025, the Council directed removal of the quick-build lane reduction at Bay & Hill following significant community opposition. The roundabout proposal requires that same road diet — now made permanent at a cost of $2 to $3.5 million. The residents who opposed it in 2025 are the same residents opposing it tonight. The only thing that has changed is the price tag.

3. POLICE DATA SHOWS THE CORRIDOR IS GETTING SAFER WITHOUT A ROUNDABOUT
Capitola PD moving citations peaked at 1,438 in 2023 and have dropped to 791 in 2025 — a 45% decline

— following the restoration of the intersection to its original two-lane all-way stop configuration. Th 2026 pace projects to approximately 667 citations annually, the lowest in eight years. Per the LRSP (page 172), these are officer-initiated enforcement records reflecting actual corridor conditions. The current configuration is working. Driver behavior is improving. This is not a corridor in crisis — it is a corridor that is stabilizing, and it is doing so without a roundabout.

4. A SIGNAL WILL BE LEGALLY REQUIRED HERE BY 2045 — SO BUILD IT ONCE Table 7 of the Kimley-Horn study confirms that Bay & Hill will meet California's mandatory MUTCD Signal Warrant 3 threshold by the 2045 PM peak, driven by development the City has already approved: the Capitola Mall redevelopment, the Farmers Market site, and the Dignity Healthcare campus expansion. By 2045, the study projects total intersection volume at Bay & Hill reaching **2,094 vehicles per hour** during the PM peak — with southbound traffic alone hitting **897 vehicles per hour**, one vehicle every 4 seconds. At that volume, a senior or mobility-impaired resident attempting to cross in a roundabout would need to find a 30 to 40 second gap in a stream of traffic averaging a 4-second headway. That crossing will be not just difficult — it will be functionally impossible.

The proposed solution to this pedestrian problem is a Rapid Rectangular Flashing Beacon crosswalk on Center Street, approximately 300 feet from the roundabout. At 897 southbound vehicles per hour, a single senior crossing activation stops 6 to 8 vehicles for 35 seconds, generating a queue of 150 to 200 feet that extends directly back into the roundabout's yield exit zone. A roundabout has no signal phase to hold exiting vehicles — they enter Bay Avenue southbound and immediately collide with that stopped queue, blocking the roundabout exit and locking up the entire intersection. The City's proposed pedestrian fix creates a bottleneck that defeats the roundabout's only operational advantage. A traffic signal at Bay & Hill eliminates the need for the Center Street beacon entirely, provides a protected crossing phase at the intersection itself, and costs half as much to build. Approving a $2 to $3.5 million roundabout today means the City will face pressure to retrofit or replace it with a signal within approximately 20 years — at additional cost and disruption. The study the City commissioned tells you what the correct answer is — on page 28.

5. THE CONSULTANT MADE VERIFIABLE FACTUAL ERRORS IN THEIR OWN REPORT
The Social Pinpoints community engagement survey on page 130 of the Kimley-Horn study lists the top contributor ZIP code as 95039 — which is Moss Landing, Monterey County, not Capitola. Capitola's ZIP code is 95010. Other data points in the same report correctly use 95010, confirming this is a transcription error by the consultant. If Kimley-Horn cannot accurately record the ZIP code of the city they were hired to study, the Council should ask: what other errors exist in this report? A document with verifiable factual mistakes in its community engagement data — used to justify a permanent $2 to $3.5 million infrastructure decision — does not meet the standard this Council should require. I would also note that the study's crash table (Table 5) claims to cover data through December 2024, yet the last entry is October 2023, leaving a 14-month gap in the crash record.

I respectfully ask the Council to: deny approval of both roundabout proposals; direct staff to analyze a traffic signal at Bay & Hill as the primary alternative consistent with the 2045 warrant already confirmed in the City's own study; and require a corrected crash analysis and updated safety data for Bay & Capitola before any vote is taken on that intersection.

Thank you for your service to our community and for your consideration of these concerns. For more in-depth analysis, view the attached PDF

Respectfully,
Keivn Maguire
838 Monterey Ave. Capitola 95010
kmaguire831@gmail.com

Item 5 A.

BAY AVENUE ROUNDABOUT — MULTI-ROLE SAFETY ANALYSIS

Agenda Item 9A · Bay Avenue Corridor Project Update & Rule 20A Coordination

City Council Meeting · Thursday, May 14, 2026 · 6:00 PM · 420 Capitola Avenue

⚠ **NEW since the February 2025 Kimley-Horn study:** The May 2026 agenda packet contains updated 2045 cumulative traffic counts that are substantially higher than the 2024 baseline — and documents a new **severe-injury pedestrian crash at Bay/Capitola in 2025** not included in the original study. These updates strengthen the case against a roundabout.

A UPDATED TRAFFIC DATA — 2045 CUMULATIVE COUNTS (FROM AGENDA PACKET)

BAY/HILL SB THROUGH — PM PEAK (2045)

717

↑ from 505 in 2024 baseline (+42%)

BAY/HILL TOTAL SB — PM PEAK (2045)

829

SBL 146 + SBT 717 + SBR 34 + others » 829/hr

BAY/HILL TOTAL INTERSECTION — PM PEAK (2045)

1,951

↑ from 1,322 in 2024 (+48%) — all movements

HWY 1 SB RAMP TOTAL — PM PEAK (2045)

2482

SBL 370 + SBT 351 + EB 417+208+640 combined

ANSWER TO QUESTION — IS THE 700/HR ONE DIRECTION OR BOTH?

The 700 vehicles/hour figure is **southbound only** — one direction — at Hill Street during the PM peak (2024 baseline). It consists of: SBL (left turns) 146 + SBT (through) 505 + SBR (right turns) 49 = **700 SB vehicles/hour**. The northbound flow at the same time is 46 + 307 + 21 = 374 vehicles/hour. **Combined two-directional Bay Ave flow at Hill St = 1,074 vehicles/hour in 2024.** Under the 2045 cumulative projections in the new agenda packet, the SB flow alone reaches approximately **829/hr** and the combined total reaches **1,951/hr** — nearly double. Every pedestrian crossing argument becomes significantly stronger with the updated numbers.

TRAFFIC ENGINEER

ENGINEERING ASSESSMENT

- **Vehicle LOS is a statistical tie at Bay/Hill.** Tables 8 & 9 show both roundabout (Alt 2) and signal (Alt 3) achieve LOS A/B at this intersection under 2024 conditions. The roundabout shows 7.8s delay AM, signal

Item 5 A.

shows 13.4s — a difference of 5.6 seconds that is imperceptible to drivers but represents the entire justification for removing pedestrian protection.

Tables 8 & 9, Kimley-Horn Feb. 2025

! **By 2045, Bay/Hill reaches LOS F under no-build and stop alternatives.** The roundabout holds LOS C (21s delay) and the signal also holds LOS C (26.5s) — again essentially tied. Under cumulative conditions, the signal performs within 5.5 seconds of the roundabout while providing pedestrian phases.

Table 11, 2045 PM peak — RAB 0.893 v/c, 21.0s = LOS C; Signal 26.5s = LOS C

! **SB southbound queue already exceeds storage at Bay/Hill** under all three alternatives in both AM and PM — including the roundabout. Queue spillback is a corridor-wide problem that no intersection control type fully resolves.

Table 12 — SB approach exceeds storage, all alternatives

! **By 2045 PM peak, Bay/Hill meets MUTCD Signal Warrant 3.** Bay Ave two-directional volume 1,626, Hill St minor approach 247 — state engineering threshold met. A signal will be required regardless. Building a $2–3.5M roundabout now means a retrofit or replacement within ~20 years.

Table 7 — Signal Warrant 3, 2045 cumulative PM peak: "Yes" for Bay/Hill

! **The roundabout v/c ratio at Bay/Hill reaches 0.893 by 2045 PM** — approaching the 1.0 breakdown threshold. At that v/c level a single pedestrian yielding event can collapse the roundabout into LOS E/F. The signal, by contrast, can be retimed.

Table 11, Alt 2 Roundabout, Bay/Hill 2045 PM

i **The RRFB at Center Street (300 ft away) creates a geometric deadlock.** At 829 SB vehicles/hour (2045), a 35-second pedestrian activation stops 8–9 vehicles, generating a 200+ ft queue into the roundabout's yield zone. Roundabouts have no signal phase to hold exiting vehicles — a textbook grid-lock condition.

Calculated from 2045 SB volumes; 25 ft vehicle spacing

PED & BIKE SAFETY ADVOCATE

PEDESTRIAN & VULNERABLE USER SAFETY

! **A roundabout provides zero guaranteed crossing time.** At 829 SB vehicles/hour (2045 projections now in the agenda), the average gap between southbound vehicles is approximately 4.3 seconds. Seniors need 30–40 seconds. Children need 20–25 seconds. A yield-only roundabout cannot accommodate either population without dangerous risk.

Agenda Table 3 — 2045 Hill St SB: 146+717+34 = 897 total SB movements

! **A resident of the Bay Ave Senior Apartments directly confirmed this risk in writing to council.** Joni Cashin (750 Bay Ave Apt 2203) stated: "My husband and I both strongly oppose this idea. This would make it impossible to cross the street to get to Nob Hill or to walk over to Rispin Manor." This is direct testimony from the affected population.

Correspondence packet — Joni Cashin, March 18, 2026

! **One fatal and 8 pedestrian-injury collisions already documented on this corridor (2013–2024).** A severe-injury pedestrian crash occurred at Bay/Capitola in 2025 — after the study was completed — confirming the corridor is actively dangerous for pedestrians.

Table 5 collision data; LRSP report: "In 2025, a severe-injury pedestrian crash occurred at Bay Ave and Capitola Ave."

Item 5 A.

- **35 near-miss collisions at Bay/Capitola in a single drone session.** The study notes the most common near miss: SB vehicles conflicting with crossing traffic. This is the same flow pedestrians face at Hill St. A roundabout removes the stop that currently forces driver compliance.
  Kimley-Horn Section 4.5 — drone video, May 16, 2024

- **The corridor serves Soquel Elementary and New Brighton Middle School children** — who cycle and walk through this intersection daily. The study notes school drop-off spikes generate additional congestion at Hill St. Children on bikes face increased risk at roundabout yield points compared to signalized crossings.
  Kimley-Horn Section 3.1 school peak note; Wendy Arsenault correspondence

- **The laundromat owner directly cited pedestrian and business access impacts.** Elizabeth Ramirez (Laundromat Teddy Bear) stated the two-lane restoration has helped recover customers; a roundabout with a road diet would reverse this, harming a small business serving the lower-income community that relies on this corridor.
  Correspondence packet — Elizabeth Ramirez, March 17, 2026

ADA & ACCESSIBILITY

BLIND, VISION-IMPAIRED & MOBILITY CHALLENGES

- **A roundabout cannot provide accessible pedestrian signals (APS) for blind community members.** APS devices provide audible and vibrotactile crossing cues at signalized intersections. The community member who is blind cannot determine safe crossing entry in a roundabout — there is no defined stop, no quiet phase, and no audible signal. A resident email in the packet specifically names this: *"Visually impaired pedestrians find it difficult to cross because they rely on traffic sounds to gauge gaps, and continuous, low-speed traffic is harder to interpret than a signalized stop."*
  Colleen Wysocki correspondence, March 22, 2026 — directly citing visual impairment challenge

- **A signal at Bay/Hill can be programmed with a 30–40 second APS-equipped extended phase.** This is the only design that addresses the 30–40 second crossing time required by seniors and people with mobility challenges while providing audible confirmation of safe entry for blind users. The roundabout with a remote RRFB 300 ft away does not meet this need.
  ADA Accessibility Guidelines; PROWAG standards for accessible pedestrian signals

- **Drivers exiting a roundabout accelerate** — they are focused on merging back into through traffic, not scanning for pedestrians at mid-block crossings. Research consistently shows lower driver yielding rates at roundabout exits vs. entries, and at cross-street crossings vs. signalized intersections.
  FHWA Roundabout pedestrian research; Wysocki correspondence: "Motorists are less likely to yield to pedestrians at the exit."

- **The Bay Ave Senior Apartments is high-density senior housing adjacent to this intersection.** This is not a general pedestrian concern — it is a concentrated, known population of older adults with mobility challenges who cross daily to reach Nob Hill, CVS pharmacy, Peet's Coffee, Starbucks, Dairy Queen, the laundromat, and children's dance studio. No alternative crossing exists on this block.
  Joni Cashin letter; field context; corridor destinations

CHIEF OF POLICE

LAW ENFORCEMENT & PUBLIC SAFETY

Item 5 A.

- **Roundabouts cannot be preempted for emergency vehicles.** The study's own Table 16 lists emergency vehicle preemption as an advantage available exclusively in Alt 3 (Signal). Bay Avenue is a primary access corridor to Capitola Village and the beach area. Signal preemption allows police, fire, and EMS to clear the intersection in seconds. A roundabout requires emergency vehicles to physically navigate the circle — adding critical seconds to response time.

  Kimley-Horn Table 16 — "Opportunity for emergency vehicle preemption" listed for Alt 3 only

- **Roundabouts are known to generate enforcement challenges.** At high-volume intersections, failure to yield is the primary roundabout violation — and it is nearly impossible to enforce at 700–829 vehicles/hour because the violation happens in the circulating flow, not at a defined stop line. Colleen Wysocki's letter noted: drivers "fail to yield right-of-way, enter recklessly, or come to a stop inside the circle." The police cannot station an officer there during peak hours indefinitely.

  Wysocki correspondence; FHWA roundabout enforcement literature

- **Driver unfamiliarity creates a real safety hazard during the adaptation period.** The study rates "driver adaptation time" as HIGH for the roundabout — the only alternative with this challenge. Unfamiliar drivers at a busy intersection adjacent to a school corridor, senior housing, and commercial area is a policing burden.

  Kimley-Horn Table 16 — "New traffic control in City for users" — driver adaptation HIGH for roundabout only

- **The Capitola Ave pedestrian crash in 2025 underscores active risk.** A severe-injury pedestrian crash occurred at Bay/Capitola in 2025 — after the original study. Proposing a roundabout at Bay/Capitola without updated safety analysis of this specific incident is a process gap that the police department should flag.

  LRSP report in agenda packet: "In 2025, a severe-injury pedestrian crash occurred at the intersection of Bay Avenue and Capitola Avenue"

FIRE & FIRST RESPONDERS

EMERGENCY VEHICLE ACCESS

- **Signal preemption is the gold standard for emergency vehicle access.** A traffic signal with Opticom or similar preemption clears the intersection in under 10 seconds. A roundabout requires a fire apparatus or ambulance to navigate the circle at reduced speed, then wait for drivers to yield — in a location where the study already documents failure-to-yield as the dominant crash type.

  Table 16 — emergency preemption advantage exclusive to Alt 3; Table 5 crash data: right-of-way violation as primary crash factor

- **Queue spillback at the roundabout creates apparatus access issues.** The study confirms SB queues already exceed storage at Bay/Hill under all alternatives. With a roundabout and a RRFB queue adding to the SB backup, a fire apparatus approaching from the north on Bay Ave would face blocked lanes with no signal phase to clear them.

  Table 12 — SB queue storage exceeded at Bay/Hill; roundabout exit blocking analysis

- **Bay Avenue is the primary access to Capitola Village, the beach, and high-density residential areas.** Any design that reduces emergency response reliability on this corridor is a public safety concern that extends beyond the intersection itself.

  Staff report Section 1: "Bay Avenue is one of the City's most important transportation corridors"

URBAN PLANNER

LAND USE, ECONOMIC & LONG-TERM PLANNING

Item 5 A.

- **The City already spent public money on a road diet that was removed due to community opposition.** In September 2025, the City Council directed removal of the quick-build lane reduction following "significant community feedback." The roundabout proposal includes the same road diet component. Building it permanently amplifies a design the community has already rejected once.

  Staff report: "In September 2025, Council directed staff to remove the quick-build project at Bay Avenue and Hill Street following significant community feedback."

- **A roundabout today is a stranded asset within 20 years.** Table 7 confirms Bay/Hill meets the state's signal warrant by 2045 — triggered by already-approved development: Capitola Mall redevelopment, Farmers Market site, Dignity Healthcare expansion. A $2–3.5M roundabout built now will require retrofitting or replacement as a signal within the same bond/grant cycle used to fund it.

  Table 7 — Signal Warrant 3, 2045 PM: "Yes"; Section 3.2 — SCCRTC travel demand model growth assumptions

- **The Rule 20A funding ($3M) creates a deadline pressure that should not drive the intersection design.** The staff report acknowledges the undergrounding program is being phased out and the City must act. But utility undergrounding and intersection control type are separate decisions. The City can pursue undergrounding coordination without committing to a roundabout design at this meeting.

  Staff report: Rule 20A balance ~$3M; "Not all utilities have confirmed participation"

- **Small businesses on this corridor have explicitly opposed road diet + roundabout.** The laundromat owner, multiple Nob Hill/CVS patrons, and Gayle's Bakery adjacency were all cited. A roundabout that reduces access, increases confusion, and changes left-turn access from the Nob Hill parking lot harms the commercial character of the corridor — directly against the Capitola General Plan economic goals the study is supposed to serve.

  Ramirez correspondence; Tom Brady letter: "Turning left out of the Nob Hill parking lot is already dangerous... The roundabout will make the left turn nearly impossible."

COMMUNITY VOICE

WHAT RESIDENTS ARE TELLING COUNCIL

The agenda packet contains extensive correspondence. Virtually all of it opposes the roundabout. Key themes:

"This would make it impossible to cross the street to get to Nob Hill or to walk over to Rispin Manor."
— Joni Cashin, Bay Ave Senior Apartments resident

"How are pedestrians going to cross? Trying to allow for that creates more confusion... This is a bad idea. The set up we currently have is working."
— Mary Craig Caruthers, Hollister Ave

"There are too many pedestrians crossing at this intersection... Left turns out of the Nob Hill lot will be nearly impossible and life threatening for cyclists."
— Tom Brady, cyclist & Nob Hill patron

"Please not a single lane on Bay Ave. This greatly affects my business. I'm starting to recover customers because traffic flows more smoothly with two lanes."
— Elizabeth Ramirez, Laundromat Teddy Bear

"Since the revert back to its original configuration, there is virtually no more backed up traffic on Bay Ave southbound off the freeway anymore. Please leave well enough alone."

"We tried roundabouts in Massachusetts and it was a failed experiment. They ended up removing them. We don't want to pay for another failed experiment."
— Wendy & Skip Arsenault, Gilroy Dr (30+ years)

— Michael Minoggi, daily Nob Hill customer

SUMMARY

DECISION MATRIX — ALL ROLES COMBINED

ISSUE	ROUNDABOUT	SIGNAL	IMPACT LEVEL
Pedestrian protected crossing phase	None — yield only	Guaranteed 30–40s, APS-capable	CRITICAL
Blind & vision-impaired access	Cannot be served — no audible cue	APS standard equipment	CRITICAL
Senior crossing (30–40 sec needed)	5-sec average gap — impossible	Extended phase programmable	CRITICAL
Emergency vehicle preemption	Not available	Standard option	HIGH
Vehicle LOS at Bay/Hill (2024)	LOS A (7.8s delay)	LOS B (13.4s delay)	LOW — tie
Vehicle LOS at Bay/Hill (2045 PM)	LOS C (21.0s)	LOS C (26.5s)	LOW — tie
2045 signal warrant	Yes — retrofit required later	Yes — proactively met	HIGH
Construction cost	$2–3.5M + possible ROW	$500K–$2M	MEDIUM
RRFB deadlock risk (2045)	High — queue reaches roundabout	Eliminated — no beacon needed	HIGH
Road diet community opposition	Required — already rejected once	Required but less footprint	MEDIUM
New 2025 pedestrian crash at Bay/Cap	Not in study safety analysis	Not in study safety analysis	STUDY GAP
Driver adaptation burden	High — new control type in City	Familiar to all drivers	MEDIUM

COUNCIL DIRECTION

RECOMMENDED POSITION FOR MAY 14

1. **Oppose approval of both roundabouts at Bay/Hill and Bay/Capitola.** The 2025 severe-injury pedestrian crash at Bay/Capitola — after the original study — means the City does not have complete safety data to make a permanent infrastructure decision at that intersection. Request updated safety analysis before any action.
2. **Request council direct staff to analyze the signal alternative as the primary option at Bay/Hill**, consistent with the 2045 signal warrant already confirmed in the City's own study. The signal meets all ADA requirements, serves the senior community, does not require a RRFB workaround, and is the code-required solution within 20 years regardless.

3. **Separate the Rule 20A undergrounding decision from intersection control type.** The City can preserve it $3M undergrounding opportunity without committing to a roundabout design at this meeting. These are independent decisions being artificially coupled.

4. **Support mid-block pedestrian improvements independent of intersection type** — enhanced crosswalk markings, lighting, and APS-equipped crossing devices along the corridor as near-term safety measures that serve seniors and blind community members now.

Sources: Kimley-Horn Bay Avenue Corridor Study, February 2025 · City of Capitola Agenda Packet, Item 9A, May 14, 2026 · Public correspondence received through May 7, 2026 · City of Capitola Local Roadway Safety Plan (LRSP), 2026 · SCCRTC Travel Demand Model 2045 projections. All traffic volume calculations derived from Tables 2, 3, 8, 9, 10, 11, 12, 13 of the Kimley-Horn study as attached to the council agenda.

Gautho, Julia

From: Nels Westman <nels@bestwestman.com>
Sent: Monday, May 11, 2026 1:09 PM
To: City Council
Subject: 5/14/26 CC Agenda Item 9A

Dear Mayor and Council Members,

I am very much opposed to the City wasting good money to return Bay Ave to its spectacularly unsuccessful single-lane configuration and to construct expensive roundabouts at the Hill St. and Capitola Ave. intersections. Kimley-Horn's theory that both congestion and safety will be improved by Roundabouts is laughable.

IMPROVING PEDESTRIAN AND CYCLIST SAFETY WAS THE STATED REASON WHY A PRIOR COUNCIL EMBARKED ON THIS EXPENSIVE PROJECT.
The current proposal accomplishes neither and will dramatically increase traffic congestion over the current configuration. Worst of all it will be permanent with generations of future Capitolans being cursed with Bay Ave. congestion and less pedestrian and bicyclist safety.

It is important to wrap our minds around the fact that during the peak AM and PM periods over 1,000 cars pass through the Bay/Hill intersection (both directions) **per** hour. This does not include Hill Street and Nob Hill traffic. Kimley-Horn contends there will be little or no congestion in the single traffic lanes approaching the roundabouts because cars will move smoothly and non-stop through the roundabout. That is not a realistic assumption. This is a very compact (80' diameter at Hill St) single lane roundabout with four busy entry/exit points and significant pedestrian and cyclist traffic. Divers must be focused on the left careful to not hit another car while merging into the roundabout or cars slowing or stopping in front of them while understandably having less time to carefully look to the right for pedestrians and cyclists.

PEDESTRIAN SAFETY

Pedestrians, particularly mobility impaired or visually impaired, can reasonably be expected to take 30 to 40 seconds to cross Bay which will result in entering/exiting cars having to stop and wait for them. The result? Gridlock in the roundabout and backed up cars in the single lanes. . Nothing smooth and continually in motion. As regards mobility and visually impaired pedestrians, these roundabouts show none of the yield markings (sharks teeth) or any of the federal or state requirements for positive stops and audible signals to aid pedestrians.

BICYCLE/E-BIKE SAFETY

Alarmingly bicycle lanes weave around quite a bit in the approaches to the roundabout, but they disappear in the roundabout, apparently after directing bikes onto the sidewalks and into the pedestrian crosswalks. This is very dangerous for both pedestrians and bicyclists It is naïve to think that youthful E-bikers will do this. Rather, they will take their chances merging with cars to get through faster, possibly even short cutting across the center of the roundabout. In my opinion navigating these roundabouts will result in significantly more car vs bike and bike vs pedestrian accidents.

BOTTOM LINE

1. DON'T pursue this expensive roundabout gamble based on Kimley-Horn's flawed assumptions.
2. Do proceed with a Bay Ave table design crosswalk at Center St with button actuated flashing warning lights.
3. Do proceed with improved lighting at Bay/Hill and Bay/Cap Ave intersections and up Hill Street.
4. If you do decide to roll the dice on roundabouts DO NOT proceed until after the Cliff Resiliency and the Stockton Ave Bridge repair or replacement projects are completed. Have mercy on us.

Thank you for your consideration.

Nels Westman

Gautho, Julia

From: capcouncil (null) <capcouncil@aol.com>
Sent: Monday, May 11, 2026 2:03 PM
To: City Council
Subject: Agenda 5/14/26 Item 9A

I just finished reading Nels Westman's email about the roundabouts. Hope you take the time to read it also. I could take up a lot of your time reading my thoughts, but Nels has pointed out everything that needs to be said.

Bruce Arthur
Sent from my iPhone

Gautho, Julia

From: Tory Delfavero <tory.delfavero@sbcglobal.net>
Sent: Monday, May 11, 2026 2:25 PM
To: City Council
Subject: Item 9A: Roundabouts on Bay Avenue

Dear Mayor and Council Members,

Please do not move forward with the proposed roundabouts on Bay Avenue.

While I fully support efforts to improve pedestrian and bicycle safety along the corridor, roundabouts do not appear to be the right solution here.

The staff report acknowledges that peak-period congestion is expected to persist under any intersection configuration, and then states that proposed improvements such as reduced conflict points and traffic calming MAY improve corridor function.

This project represents a significant investment of public funds. "May improve" is simply not a sufficient standard to justify it.

If congestion will remain regardless and the functional benefits are uncertain, I respectfully ask that the Council not move forward with this project.

Kindly,
Tory Del Favero
Capitola Resident

Gautho, Julia

From: Judith Feinman <judithfeinman@gmail.com>
Sent: Monday, May 11, 2026 2:50 PM
To: City Council
Subject: CC Agenda 5/14/26 Item 9A

Dear Mayor and Council Members,

I am very much opposed to the City spending money to return Bay Ave to its *spectacularly unsuccessful* single-lane configuration and to construct expensive roundabouts at the Hill St. and Capitola Ave. intersections.the theory that both congestion and safety will be improved by Roundabouts is laughable.

IMPROVING PEDESTRIAN AND CYCLIST SAFETY WAS THE STATED REASON WHY A PRIOR COUNCIL EMBARKED ON THIS EXPENSIVE PROJECT.
The current proposal accomplishes neither and will dramatically increase traffic congestion over the current configuration. Worst of all it will be permanent with generations of future Capitolans being cursed with *Bay Ave. congestion and less pedestrian and bicyclist safety.*

It is important to wrap our minds around the fact that during the peak AM and PM periods over 1,000 cars pass through the Bay/Hill intersection (both directions) **per** hour. This does not include Hill Street and Nob Hill traffic. Kimley-Horn contends there will be little or no congestion in the single traffic lanes approaching the roundabouts because cars will move smoothly and non-stop through the roundabout. That is not a realistic assumption. **This is a very compact (80' diameter at Hill St) single lane roundabout with four busy entry/exit points and significant pedestrian and cyclist traffic. Divers must be focused on the left careful to not hit another car while merging into the roundabout or cars slowing or stopping in front of them while**

understandably having less time to carefully look to the right for pedestrians and cyclists.

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PLEASE;

1. DON'T pursue this expensive roundabout gamble based on flawed assumptions.
2. **Do** proceed with a Bay Ave table design crosswalk at Center St with button actuated flashing warning lights.
3. **Do** proceed with improved lighting at Bay/Hill and Bay/Cap Ave intersections and up Hill Street.
4. If you do decide to roll the dice on roundabouts DO NOT proceed until after the Cliff Resiliency and the Stockton Ave Bridge repair or replacement projects are completed. Have mercy on us.

Thank you, Judith Feinman…...

Gautho, Julia

From: Doug Thom <doug@campcapitola.com>
Sent: Monday, May 11, 2026 3:10 PM
To: City Council
Subject: Bay Avenue Corridors

Dear City Council,

We wanted to express our support of the Bay Avenue Corridor improvements, in particular the two traffic circles proposed at Hill and Capitola Streets and any other supportive activities pertaining to this long-term plan.

Thanks,

Doug & Susan Thom, 117 Central Ave., Capitola, CA

Gautho, Julia

From: Mikaela Martorella <martorellamikaela@gmail.com>
Sent: Monday, May 11, 2026 3:20 PM
To: City Council
Subject: Bay Ave May 14th Meeting

Hello City Council,
I'm writing to oppose the possible roundabouts at Bay Avenue. We all saw how bad it was when it was one lane, I have personally almost been hit many times coming off the freeway onto Bay Avenue as people were not aware the right lane was turn only into Nob Hill. The traffic is bad enough and that intersection backs up so far, people are annoyed and driving reckless causing accidents. We all know more accidents will happen if the roundabouts move forward. I want to see the intersection remain how it is until it breaks and a new solution is needed.
Mikaela Martorella

Gautho, Julia

From: The Martorella's <jmarto@pacbell.net>
Sent: Monday, May 11, 2026 3:22 PM
To: City Council
Subject: Bay Avenue (May 14th Meeting)

Dear Members of the City Council,

I write to you as a concerned resident regarding the proposed roundabout installations along Bay Avenue, and I ask that you consider this letter a firm and reasoned objection to that plan.

Those of us who live adjacent to Bay Avenue and depend on it throughout the day have not forgotten the single-lane configuration. It was, by nearly every measure, a failure. Traffic worsened, pedestrian safety deteriorated, and the quality of life for residents along that corridor suffered considerably. **The restoration of the two-lane configuration was not merely welcomed; it was a relief.** The proposal to revert to restricted flow and compound it with two roundabouts is, frankly, difficult to comprehend.

Our town is small and our traffic is not. During summer months, Bay Avenue the primary thoroughfare into town, is already under significant strain. **Introducing roundabouts to that corridor would not ease congestion; it would manufacture it.** The logistics alone are troubling: e-bikes navigating tight turn radii, large delivery vehicles attempting to enter and exit near Nob Hill, and seasonal visitor traffic all converging in a newly constrained roadway. This proposal appears to have been developed without the lived experience of those who use this road daily.

Equally concerning is the fiscal reality. Bay Avenue was recently returned to its current configuration at considerable expense. The cost of yet another study for not one, but TWO roundabouts is a burden this town simply cannot justify, particularly when a far more sensible solution exists.

Two well-placed pedestrian crosswalks would address the core safety concern at a fraction of the cost and with minimal disruption:

• One crosswalk at Center Street, across from the senior housing development. This location offers strong sightlines and natural pedestrian flow, well removed from the congestion at the Nob Hill stop sign. A raised crosswalk with solar-activated warning lights consistent with what we already have in the village would serve this location well.

• A second crosswalk past Gayle's, near Rosedale. Again, situated away from a formal intersection, this crossing would serve a logical and well-traveled pedestrian route without disrupting traffic patterns.

Depending on the treatment selected, painted, lighted, or raised, both installations can be completed at a cost that is genuinely comparable, and responsible. They do not require a feasibility study. They do not require years of planning. **They solve the problem.**

I urge the Council to keep Bay Avenue in its current two-lane configuration and to pursue the crosswalk solution outlined above. The residents who live on and use this corridor every day will notice the difference. So will the visitors who come here to enjoy what makes our town worth visiting.

Marie Martorella

Gautho, Julia

From: E Rock <sanjosemom@gmail.com>
Sent: Monday, May 11, 2026 4:35 PM
To: City Council
Subject: Council Agenda, Thursday, May 14, 2026 - 6:00pm—Bay Avenue Roundabout

Please do not approve the Bay Street roundabout proposals!

I have been driving Bay Avenue at different times of the day for over 40 years. I have also driven roundabouts in other cities, including those in England.

The roundabout for Bay/Hill St and Bay/Capitola Ave is not a good idea. Bay Avenue at Hill Street needs to stay two lanes in each direction, plus left turn lanes. The four way stop intersections are working fine. It does get a little crowded at beginning and end of a school day, but otherwise there are no backups. And pedestrians crossing the street is not a problem either, in spite of what initiated this whole process.

I would appreciate not approving the roundabouts. Please do not spend the money on changes that will not make anything better, just worse.

Emma Rock
707 Gilroy Dr.
Capitola CA

Gautho, Julia

From: Teresa Maguire <tlcmaguire@gmail.com>
Sent: Monday, May 11, 2026 7:03 PM
To: City Clerk
Subject: May 14th Item 9. A. Children's Safety at Risk — Bay Avenue Roundabout Demands a Full End-to-End Traffic Study

Dear Mayor Morgan and Members of the Capitola City Council,

My name is Teresa Maguire. I own and operate a licensed home childcare at 838 Monterey Ave. in Capitola's Cliffwood Heights neighborhood, at Monterey Avenue and Kennedy Drive. Every day I am responsible for the safety of young children being dropped off and picked up from my home. Every day I watch speeding cars, impatient drivers, and cut-through traffic race past a licensed childcare facility on a narrow residential street — and I am writing to tell you that the proposed roundabouts on Bay Avenue will make that worse.

We are one block from New Brighton Middle School. Dozens of children — many on e-bikes — travel through our neighborhood streets every morning and afternoon. They ride on Monterey Avenue, Kennedy Drive, Sir Francis Avenue, Loma Avenue, and the surrounding Cliffwood Heights streets. These are not arterial roads built for high-speed through traffic. They are residential streets with no bike lanes, no traffic calming, and no safe crossing infrastructure. And they are already being used as a bypass route every time Highway 1 or Bay Avenue backs up.

This Council already tried a single-lane configuration on Bay Avenue and removed it in September 2025 after the community rejected it. The roundabout proposal requires that same road diet — now made permanent. We said no once. We are saying no again.

A ROUNDABOUT MOVES THE BACKUP — IT DOESN'T FIX IT
The Kimley-Horn study projects vehicle volume at Monterey Avenue and Park Avenue reaching 1,508 vehicles per hour by 2045 — a 37% increase over today's already-strained 1,096 vehicles per hour. A roundabout at Bay & Hill may improve flow at that single intersection, but it pushes the backup downstream into Cliffwood Heights, directly past my childcare, directly past New Brighton Middle School, and directly into the streets where children on e-bikes are riding every single day. The City's own study documents residents reporting vehicles traveling 35 to 40 miles per hour on Monterey Avenue, a blind spot at the McCormick-Loma intersection, and children with no safe bike route to school. A severe-injury bicycle crash has already been recorded at Kennedy Drive and Sir Francis Avenue — the intersection I look out at from my childcare window.

THE STUDY DOESN'T LOOK AT OUR STREETS
The Kimley-Horn study was scoped from Highway 1 to Park Avenue. It ends exactly where Cliffwood Heights begins. There is no analysis of what happens to Monterey Avenue, Kennedy Drive, Loma Avenue, McCormick Avenue, or Washburn Avenue when Bay Avenue traffic is redistributed. Monterey Avenue has a right-of-way of just 38 feet — a narrow residential street already carrying nearly 900 vehicles per hour at peak — and the City's own study confirms Monterey and Park Avenue already meet California's signal warrant threshold today, yet nothing has been done. The City is being asked to approve a permanent $2 to $3.5 million infrastructure decision without ever modeling its impact on the neighborhood that

absorbs its consequences.

MY REQUEST
I ask this Council for three things:

1. Oppose the roundabout. It is not a safety improvement for the children, families, and elderly residents of Cliffwood Heights.

2. Require a full end-to-end traffic study — from Highway 1 through Cliffwood Heights — before any Bay Avenue alternative is approved. The study must include Monterey Avenue, Park Avenue, Kennedy Drive, Sir Francis Avenue, Loma Avenue, McCormick Avenue, and Washburn Avenue, and must model the cut-through diversion impact of each alternative on our residential streets.

3. Address the documented safety failures on Monterey Avenue and the surrounding streets now — independent of whatever happens on Bay Avenue — because children are using those streets today.

I will not be at the May 14 meeting. The children in my care, and the children riding their e-bikes to New Brighton Middle School every morning, deserve a Council that looks at the full picture before it acts.

Respectfully,
Teresa Maguire
Capitola CA 95010

Gautho, Julia

From: Sara Wainer <sara.r.wainer@gmail.com>
Sent: Tuesday, May 12, 2026 10:52 AM
To: City Council
Subject: Support for Bay / Hill Roundabout

Hi there,

I'm a resident of Depot Hill in Capitola and I just saw a flyer from a fellow resident encouraging people to push back on the Bay / Hill roundabout at the May 14 City Council meeting. I likely won't be able to attend, but I want to say that, unlike my neighbor, I FULLY SUPPORT THE ROUNDABOUT. Please install it.

My daughter is starting TK at Main Street Elementary in August and I want to be able to get her to school safely, whether by bike or by car. The current 10 way stop intersection is a confusing nightmare. No one can keep track of whose turn it is to go, and then you throw a pedestrian in the mix and everyone's brains shut down. It doesn't work and people are dying.

There is plenty of data to show that roundabouts are safer for drivers, pedestrians, and cyclists. They move traffic more quickly and are better for the environment. It's a win win win win win.

Please build it, and build one by Gayle's while you're at it because that intersection is insane as well.

Thank you,
Sara Wainer

Gautho, Julia

From: Brian Hawes <brianh@OceanMist.com>
Sent: Tuesday, May 12, 2026 11:15 AM
To: City Clerk; City Council
Subject: Agenda item 9 A. Opposition to Bay Avenue Roundabout — Cliffwood Heights Resident

Subject: Opposition to Bay Avenue Roundabout — Cliffwood Heights Resident

Dear Mayor Morgan and Members of the Capitola City Council,

My name is **Brian Hawes.** I am a **homeowner** at **813 Orchid Ave** in Capitola's Cliffwood Heights neighborhood, and I am writing to oppose the proposed roundabouts at Bay Avenue & Hill Street and Bay Avenue & Capitola Avenue.

Every day when Highway 1 ups, impatient drivers cut through our neighborhood streets at dangerous speeds — through Monterey Avenue, Park Avenue, Kennedy Drive, Wesley, Cabrillo, Orchid, Elinor, Cortez, Sir Francis Avenue, Loma Avenue, McCormick Avenue, and Washburn Avenue. We deal with congestion, gridlock, and drivers doing 35 to 40 miles per hour past homes where children play, ride bikes, and walk to school. This is a residential neighborhood, not a bypass road.

A roundabout at Bay & Hill will not fix this. It will push the backup further downstream — directly into Cliffwood Heights at even higher volumes. The City's own Kimley-Horn study projects traffic at Monterey and Park Avenue growing 37% by 2045 (And requireing a Stop Sign by then), yet the study's scope ends at Park Avenue. There is no analysis of what any Bay Avenue alternative does to our streets.

This Council listened to us in September 2025 and removed the single-lane road diet on Bay Avenue because our community opposed it — approving a roundabout now quietly puts that same lane reduction back, this time in concrete.

Before this Council approves any permanent changes to Bay Avenue, I ask that you require a full traffic impact study on the downstream neighborhood streets of Cliffwood Heights. We should not bear the consequences of a $2 to $3.5 million infrastructure decision that was made without ever looking at our neighborhood.

Respectfully,
Brian Hawes
813 Orchid Ave, Capitola CA 95010
831-970-8191

Gautho, Julia

From: Ariel Braswell Gray <arielbgray@gmail.com>
Sent: Tuesday, May 12, 2026 7:08 PM
To: City Council
Subject: Yes to Roundabouts!

Dear Capitola City Council,

I am writing in support of roundabouts as part of our Bay Ave Corridor Project. Roundabouts are efficient, safe, and would be an excellent addition to our Capitola roadways. I am strongly in favor of a roundabout at the intersection near Gayle's (Bay and Capitola) - I think it's the best solution for that intersection. I am also in favor of roundabouts at Bay /Park and Bay / Hill. I think the one at Bay and Capitola is most needed and should happen first.

My reasons to support roundabouts are:
- efficiency: currently there is wasted time trying to see if the other car is going, or if you should go. Roundabouts solve that. Traffic moves with limited wasted time.

- safety: especially at Bay and Capitola where the intersection is an odd shape, it is easy for cars to not see a pedestrian, cyclist, or car. Roundabouts improve safety significantly.

- elegance: they are just a really cool traffic solution, and more Californians should know how to navigate them.

It's a shame roundabouts seem to be less common in California. Let's change that.

Thanks for considering,
Ariel Gray

Gautho, Julia

From: landis Landis <pupjill@hotmail.com>
Sent: Tuesday, May 12, 2026 9:03 PM
To: City Council
Subject: PLEASE NO ROUNDABOUT ON BAY AVE

Dear Capitola Council Members,

I am a Capitola resident and strongly believe that **the proposed roundabout on Bay Ave. will cause way more problems that it could solve**. It will likely be worse that the disastrous "traffic diet" lane was. I get around on foot and my tricycle, as well as drive a car. I have experience with roundabouts in California and in other countries and have noticed that:

- Roundabouts are totally unsafe for pedestrians
- The one lane roundabout will be disastrous for bicycles, especially students bicycling to/from New Brighton Middle School.
- People get confused in roundabouts and make circle 2-3 times before getting the right exit, especially tourists
- It will be costly AND the construction will create an absolute nightmare

I'm begging you to take this option off the table. Roundabouts only make sense in very specific situations and they need a larger space to make sense.

Sincerely,

Jill Landis, Capitola

RECEIVED
MAY 13 2026
CITY OF CAPITOLA
CITY CLERK'S OFFICE

Dear Capitola City Council Members:

Some residents of the Riverview Terrace Neighborhood were unable to attend this meeting but wanted to voice their opinion of not being in favor of the proposed single-lane roundabout at the intersection of Bay Ave. and Hill St.

They believe a roundabout would establish a dangerous precedent for pedestrian safety, specifically for seniors, and our children who walk, bike or skateboard through the area to and from New Brighton Middle School and Soquel Elementary.

A single lane roundabout will cause drivers significant difficulty merging with other traffic.

Also, with the new pedestrian crossing being installed on Bay Ave. by Center Street drivers trying to turn left from Center St. towards Hill St. will have to deal with merging traffic, then stopping for pedestrians crossing the street. Sounds like an accident waiting to happen.

Please, do not accept this current proposal.

Since the Bay Ave. & Hill street corridor has now returned to its previous 2-lane reconfiguration traffic is flowing smoother.

Please do not impose a dangerous street/corridor plan on the residents of Capitola and tourists visiting our city.

Thank You for Listening

Brian Interdonato
Diana Deaton
James Fitzpatrick
Lisa Burroughs Kim
Tie Kim
Jill Payonzeck Lengre
Adrienne Hagen
Tim Marshall
William A. Gorson
Denise Gallagher
Daniel Robinson
Betty Williams
Kimberly Rawlings
Rhea Carriger
Emma Rook
Mike E. Rock
Karen Huntley
Bruce Huntley
Brook Flanders
Carol Schlief
Bianca Rodriguez
Dax Lachica
Edward Martinez III
709 Sunset Dr 95010
Patty Threet

RECEIVED
MAY 13 2026
CITY OF CAPITOLA
CITY CLERK'S OFFICE

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Thank You for Listening

Jack Batenbaal

L O'Neill LINDA O'NEILL

CRAIG SMART

Lillian Laus-Riccobono

Anne Spoon

Christy Laus

Amy Gonzales

Leslie Jude-Batt

Patrick McCarter

Dennis Blair

D. Richards

Kristyn Bonderson

Kevin Ky

Thilo Thanhain

RECEIVED
MAY 13 2026
CITY OF CAPITOLA
CITY CLERK'S OFFICE

Item 5 A.

Dear Capitola City Council Members:

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A single lane roundabout will cause drivers significant difficulty merging with other traffic.

Also, with the new pedestrian crossing being installed on Bay Ave. by Center Street drivers trying to turn left from Center St. towards Hill St. will have to deal with merging traffic, then stopping for pedestrians crossing the street. Sounds like an accident waiting to happen.

Please, do not accept this current proposal.

Since the Bay Ave. & Hill street corridor has now returned to its previous 2-lane reconfiguration traffic is flowing smoother.

Please do not impose a dangerous street/corridor plan on the residents of Capitola and tourists visiting our city.

Thank You for Listening

Warren Rudder
Amy Rudder
Larry Viera (Larry Viera)
Celina
Verni
Marilee Westen
Steve Westen
Cathy Boterenbrood
Carmen Bernal
Gail Gothes
LINDA JORDAN
Mary Hall
Sara Domingo
Kimberly Brant
Adreanna Stephen
Doug Bennett
Debrah Bennett
Patricia Boepple
David Rench
Katie Pesherov
Alon Weisz
Judith Feinman
JOHN NOLAN
Mary Hernandez
Rosemary Morgan
Sara Wallace

Gautho, Julia

From: Bob Hickman <bobster1263@yahoo.com>
Sent: Wednesday, May 13, 2026 11:35 AM
To: City Council; City Clerk
Subject: Item 9a on May 14 agenda

Please include the following into the packet thank you

Subject: Opposition to Bay Avenue Roundabout — Cliffwood Heights Resident

Dear Mayor Morgan and Members of the Capitola City Council,

My name is Bob Hickman I am a home owner on Washburn Ave in Capitola's Cliffwood Heights neighborhood, and I am writing to oppose the proposed roundabouts at Bay Avenue & Hill Street and Bay Avenue & Capitola Avenue.

Every day when Highway 1 ups, impatient drivers cut through our neighborhood streets at dangerous speeds — through Monterey Avenue, Park Avenue, Kennedy Drive, Wesley, Cabrillo, Orchid, Elinor, Cortez, Sir Francis Avenue, Loma Avenue, McCormick Avenue, and Washburn Avenue. We deal with congestion, gridlock, and drivers doing 35 to 40 miles per hour past homes where children play, ride bikes, and walk to school. This is a residential neighborhood, not a bypass road.

A roundabout at Bay & Hill will not fix this. It will push the backup further downstream — directly into Cliffwood Heights at even higher volumes. The City's own Kimley-Horn study projects traffic at Monterey and Park Avenue growing 37% by 2045 (And requireing a Stop Sign by then), yet the study's scope ends at Park Avenue. There is no analysis of what any Bay Avenue alternative does to our streets.

This Council listened to us in September 2025 and removed the single-lane road diet on Bay Avenue because our community opposed it — approving a roundabout now quietly puts that same lane reduction back, this time in concrete.

Before this Council approves any permanent changes to Bay Avenue, I ask that you require a full traffic impact study on the downstream neighborhood streets of Cliffwood Heights. We should not bear the consequences of a $2 to $3.5 million infrastructure decision that was made without ever looking at our neighborhood.

My final thoughts on the roundabout. I personally think this is worse for pedestrians!!! In a roundabout you are always looking left for your opening to get in, so you work your way in and want to go right oh wait there is a cross walk with someone in it you did not see because you were always looking left!! With a stop sign you are looking Left right left then go….Roundabouts and pedestrians do not mix!

Bob Hickman 20+ year Capitola Resident.

RECEIVED
MAY 13 2026
CITY OF CAPITOLA
CITY CLERK'S OFFICE

City Council Meeting 5/14/26, Public Comment - Item 9A – Bay Avenue Corridor Project Update and Rule 20A Coordination

Dear Council Members and Mayor Kaiser,

Please support the roundabout improvements on Bay Avenue. The roundabout alternative 2 as described in the Bay Avenue Corridor Study, will reduce collision severity, improve pedestrian, and bicycle safety; improve and reduce GHG emissions by keeping traffic flowing instead of 100's of cars stopping, idling and starting. Lower speeds in roundabouts increase safety and the severity of collisions.

The benefits are many and the challenges are high cost and driver adaptability. The cost is not high compared to a traffic signal and maintenance. The city has conducted many public outreach opportunities and has done a great job obtaining grant money for the project. Although It is the first roundabout in Capitola, drivers will be able to adapt and easily learn how to use a roundabout. Roundabouts are safer for beginners and senior drivers. A roundabout is a great solution to a skewed intersection like the one at Capitola and Bay Avenues. This was proposed 15 or so years ago for this intersection and it is a shame it wasn't supported at that time. I travel in EU frequently and most intersections have been converted to roundabouts because they are proven to be safer, effectively keep traffic flowing, reduce delays, and reduce emissions. There is lots of data supporting them. It will also provide an opportunity for landscaping. Yay for roundabouts!

Sincerely,

Paula Bradley, resident

Gautho, Julia

From: Leslie Nielsen <lpbeach21@gmail.com>
Sent: Wednesday, May 13, 2026 3:05 PM
To: City Council
Subject: SAFE Solutions for Bay Avenue

Mayor and Council,

Thank you for reviewing the roundabout plans tomorrow night.
The Kimley Horn Study offers the following:

Conclusion and Recommendations: The roundabout configuration (Alternative 2) offers the most optimal solution for minimizing vehicle delays, **enhancing traffic safety, and improving multimodal access**. This option, however, requires significant infrastructure investment and potential right-of-way acquisition.

I suspect "traffic safety" could mean ALL traffic .. cars and multi-modal, but please be sure that **MULTIMODAL SAFETY** is your # 1 priority. Peds and Bikes don't stand a chance against a vehicle. Our largest demographic slice in the City is seniors. We walk slower and would like to limit the frustration to bikes and vehicles that might be experienced in this design.
The priority should not be improving multimodal access, but multimodal SAFETY.

Please consider the possibility of studying traffic patterns with E-bikes specifically whose ridership is also still emerging as a class of drivers learning new rules. Where has something like this worked in other cities? We could benefit from not trying to be an early adopter of this recommendation.

Maybe it's possible to understand when signals will be required in our future and see if we can manage improvements without something as permanent and expensive as this today.

Thank you again for carefully reviewing the options with Safety as your #1 priority.

Best regards,
Leslie Nielsen

Gautho, Julia

From: Rich Didday <rich.didday@gmail.com>
Sent: Wednesday, May 13, 2026 3:27 PM
To: City Council
Subject: Roundabouts

Dear Council

I strongly oppose the roundabout at the Bay and Hill intersection. It seem inconceivable to me that massive 18 wheel trucks, cars, vans, bicyclists, pedestrians and could coexist there reasonably. What a mess the recent experiment of making Bay Avenue one lane at the intersection proved to be! I witnessed multiple fender bender accidents, plus cars backing up the southbound offramp from Hwy 1.

Thank you

Rich Didday

Gautho, Julia

From: Bev Viguerie <bevviguerie@yahoo.com>
Sent: Wednesday, May 13, 2026 4:24 PM
To: City Clerk
Subject: URGENT!

Follow Up Flag: Follow up
Flag Status: Flagged

Please do not approve any roundabouts for Bay Avenue at Nob Hill or Gayles Bakery!

I am a 30 year tax paying resident of Capitola. I live at 209 Washburn Avenue. Vote NO!

Let's fix our pot holes and roads first. It's our money!

Sincerely,
Bev Viguerie

Sent from my iPhone

Gautho, Julia

From: LIsa Garrigues <lisamgarrigues@gmail.com>
Sent: Wednesday, May 13, 2026 4:35 PM
To: City Council
Subject: opposition to proposed roundabouts

Dear Council,

As residents of Depot Hill, we are daily impacted by the intersections along Bay Avenue, both at Capitola Road and especially at Nob Hill.

The recent attempt to redraw the intersection at Nob Hill, reducing the car lanes from two to one, was a total nightmare, causing backups and near accidents twice daily. We routinely had to add ten minutes to get to Route 1, and many days we had to resort to detours and alternate routes to avoid the intersection altogether.

The proposed roundabouts along Bay Avenue would only cause more confusion and congestion. Roundabouts are not common in the United States, rare in the state of California. Residents are not familiar or versed with the rules of the roundabout.

We are adamantly opposed to the proposition.

Sincerely,
Lisa and Mark Garrigues
110 Hollister Avenue

Gautho, Julia

From: Gabe Harris <gmharris831@gmail.com>
Sent: Wednesday, May 13, 2026 4:43 PM
To: City Clerk; City Council
Subject: Agenda 9A Bay Avenue Corridor Project Update & Rule 20 A

Dear Capitola City Council,

I am writing regarding Agenda Item 9A, May 14, 2026. Before this Council approves a $2 to $3.5 million permanent roundabout at Bay Avenue and Hill Street, I ask you to look at one number that the Kimley-Horn study contains but does not highlight.

Bay and Hill Street processes approximately 4.9 million vehicle entries per year. Over the 10.8-year study period, the intersection produced 9 documented crashes — a rate of 0.83 crashes per year and 0.17 crashes per million entering vehicles. There were zero fatalities at this intersection. One serious injury occurred approximately every two to three years.

For context:

— The national average crash rate for unsignalized intersections is 0.50 to 1.50 crashes per million entering vehicles. Bay and Hill is at 0.17 — three times lower.

— The national average for signalized intersections is 0.30 to 0.80. Bay and Hill is lower than that too.

— California's High Injury Network criteria, used to prioritize where safety dollars are spent, requires a rate above 1.0 per million entering vehicles to qualify as a priority location. Bay and Hill is at one-sixth of that threshold.

— Bay and Hill is performing 2.1 times better than the California statewide average for comparable arterial intersections.

This is not a crisis intersection. By every standard traffic engineering benchmark, Bay and Hill is performing at or better than average for its volume class. The Capitola intersections with genuinely elevated crash rates are on 41st Avenue and at the Highway 1 ramps — not here.

The City's own OTS data ranks Capitola among the worst in the state for seniors 65 and older killed or injured, and for bicycle crashes. Those are real safety priorities. But they are driven by other locations in the city — not by an intersection that has produced zero fatalities and fewer than one crash per year over more than a decade of nearly five million annual vehicle entries.

Spending $2 to $3.5 million on the lowest-crash-rate intersection in this corridor, when the same money could address documented high-injury locations elsewhere in Capitola, is not responsible use of public safety funds. The data does not support this project at this location at this price.

I respectfully ask the Council to require staff to present the crash rate per million entering vehicles for

Bay and Hill alongside the state and national benchmarks before any vote is taken. The numbers a
the study. They tell a very different story than the one being presented tonight.

--
Best,
Gabe

Gautho, Julia

From: Scott <scott.public49@gmail.com>
Sent: Wednesday, May 13, 2026 4:47 PM
To: City Council
Subject: Support for Roundabouts on Bay Avenue - Item 9A

Dear City Council Members,

I am writing in support of pursuing roundabouts along the Bay Avenue corridor. Roundabouts offer numerous advantages to all road users. These benefits have been well documented. Even our notoriously slow and bureaucratic federal government has identified roundabouts as a Proven Safety Countermeasure. Here are some of the benefits to our City were roundabouts to be implemented:

1) Improvements to traffic flow: High traffic areas see benefits to transit time and reductions to idling while in line as the use of yields rather than full stops promotes continuous flow. This effect is even greater in areas that experience rush hour traffic congestion, as low cross traffic volumes allow for streamlined unidirectional travel.

2) Improvements to safety: The Federal Highway Administration reports that conversion to roundabouts lowers fatal and injury crashes by 78-82%. If you had the opportunity to reduce three-quarters of the fatal and injury-producing crashes on a road, you'd do that, wouldn't you? Well, roundabouts are a way to do that.

Roundabouts facilitate slower vehicle travel while maintaining higher traffic flows with the use of yields (discussed above). Slower vehicle rates as cars begin to yield allow for better reaction times to avoid an incident. Roundabouts lower user conflicts by limiting the directions from which oncoming traffic and pedestrians can approach. Roundabouts can also be constructed with separated islands that allow pedestrians a space of safety while crossing the crosswalk and lessen the distance car drivers need to scan in search of pedestrians. As you can see in the image below from the FHWA, roundabouts bring other users (oncoming traffic, pedestrians) closer to the field of view of a driver entering the roundabout. This allows the driver to scan only a few places before entering the roundabout. No more worrying about a car in every lane and a pedestrian potentially in every crosswalk. This is a safer and easier intersection.

Illustration of a multi-lane roundabout. Source: FHWA

3) Improvements for the environment, your budget, and your health: Improved traffic flows reduce the need to wait in line, idling. Idling causes noise and emission pollution, with no benefit to moving you forward. This effect worsens anthropogenic climate change. This reduces your miles per gallon, and with the cost of fuel these days that hurts your bottom line a lot. It is also well established that the sedentary life of Americans, including sitting in traffic, is incredibly bad for your health. Improved traffic flow from roundabouts is better for the environment, it is better for your budget, and it is better for our health.

Please make decisions that are based on research, data, and intellectual rigour. Modern roundabouts are well studied and are objectively shown to increase traffic flows, reduce safety problems, pollute less, and be better for our health. Please continue to advance and implement roundabouts on the Bay Avenue corridor.

Below are some sources I reviewed for this public comment for your review as well.

Thank you,
Scott

Sources:

Roundabout with Pedestrians and Bicycles: A Safer Choice for Everyone, Federal Highway Administration, highways.dot.gov/media/11171. Accessed 13 May 2026.

"What Is a Roundabout? A Roundabout Is a Circular Intersection Without." *A STEP-BY-STEP GUIDE TO DRIVING A MULTI-LANE ROUNDABOUT*, CA Department of Transportation, dot.ca.gov/-/media/dot-media/programs/safety-programs/documents/psc/202405-rab-brochure-roundabout-gen-en-a11y.pdf. Accessed 13 May 2026.

Roundabouts, US Federal Highway Administration, highways.dot.gov/sites/fhwa.dot.gov/files/Roundabouts_508.pdf. Accessed 13 May 2026.

"The Cost of Traffic Congestion." *Metropolitan Transportation Commission*, 22 Apr. 2026, mtc.ca.gov/news/cost-traffic-congestion.

"What traffic does to your health." *AltaMed*, 2 Jan. 2020, www.altamed.org/articles/what-traffic-does-your-health.

"Stops Signs Suck and We Should Get Rid of Them." *YouTube*, Not Just Bikes, www.youtube.com/watch?v=42oQN7fy_eM. Accessed 13 May 2026.

Gautho, Julia

From: Kristen Presleigh <kpresleigh@gmail.com>
Sent: Wednesday, May 13, 2026 5:00 PM
To: City Council
Subject: Item 9A: I like Support for Roundabouts

Dear Capitola City Counsel,

I'm writing in for public comment in support for building a roundabout on Bay Avenue, and would like to continue to see their implementation. Roundabouts are designed to increase traffic flow, and if designed well, can safely be designed with pedestrians, cyclists, and cars in mind. Four way stop intersections are slow, and with increased distraction from car drivers are not efficient with drivers cutting each other off because they were not paying attention to who's turn it is, particularly with pedestrians trying to cross. Roundabouts tend to have a number of naysayers until the roundabout is actually built, and then they will lemenant that yes, they are actually better functioning for traffic. Please continue to review and use roundabouts for better streets.

Thank you,

--
Kristen
kpresleigh@gmail.com

Gautho, Julia

From: Kevin Maguire <kmaguire831@gmail.com>
Sent: Wednesday, May 13, 2026 6:28 PM
To: City Clerk
Cc: City Council; Gerry Jensen; Melinda Orbach; Westman, Susan; Margaux Morgan; Clarke, Joe
Subject: 5/14/2026 Agenda 9A - Before You Vote: 4.9 Million Vehicles, Zero Fatalities — What the Study Actually Says About Bay & Hill

BAY AVE & HILL ST — COUNCIL DATA BRIEF

Independent data review · All figures from City-commissioned documents

Agenda Item 9A · Thursday, May 14, 2026 · 6:00 PM · 420 Capitola Avenue

Purpose: This report does not oppose investment in the Bay Avenue corridor. It provides data context the staff report does not include, so the Council can evaluate the proposal against the full record. Every figure is drawn from the Kimley-Horn Bay Avenue Corridor Study (February 2025), the City's Local Roadway Safety Plan (2026), or Capitola PD citation records.

POINT 1

The data shows this intersection is performing well — not in crisis

Bay and Hill Street processes approximately **4.9 million vehicle entries per year**. Over the 10.8-year study period it produced 9 documented crashes — zero fatalities at the intersection itself — and one serious injury approximately every two to three years.

0.17

Bay & Hill actual crash rate per million entering vehicles

1.0

CA High Injury Network minimum threshold to qualify as priority location

0.50–1.50

National average for unsignalized intersections

Bay & Hill actual rate0.17 per MEV

0.17

CA High Injury Network threshold (minimum to qualify)1.0 per MEV

1.0

National average — unsignalized intersectionsup to 1.5 per MEV

0.50 – 1.50 national average

Bay & Hill is performing at **one-sixth of the state's intervention threshold** — nearly three times better than the national average for this intersection type. Capitola PD moving citations also peaked at 1,438 in 2023 and have declined **45% to 791 in 2025**, projected at approximately 667 for 2026 — the lowest in eight years — since the intersection was restored to its original configuration. The corridor is stabilizing, not deteriorating.

Note on OTS rankings: Capitola's statewide rankings for seniors 65+ and bicycle crashes reflect city-wide data. The Kimley-Horn study's own crash record shows those incidents are concentrated on the 41st Avenue corridor and at the Highway 1 ramps — not at Bay & Hill. Applying city-wide rankings to justify action specifically at this intersection conflates two separate datasets.

Sources: Kimley-Horn Table 5; FHWA national crash rate benchmarks; CA HIN eligibility criteria; Capitola PD citation records 2019–2026

POINT 2

The study's own findings point toward a signal — two material facts were not included in the staff report

Finding A — A signal will be legally required here by 2045. Table 7 of the Kimley-Horn study confirms Bay & Hill will meet California's mandatory MUTCD Signal Warrant 3 threshold by the 2045 PM peak, driven by already-approved development: Capitola Mall, the Farmers Market site, and Dignity Healthcare. A $2–3.5M roundabout built today will require a second construction cycle to replace it with a signal within approximately 20 years. A signal installed today costs $500K–$2M and permanently resolves the intersection. The staff report does not reference this finding.

Finding B — Vehicle performance is essentially a tie at this intersection. Tables 8 and 9 show a difference of just 5.6 seconds per vehicle in AM peak delay between a signal and a roundabout at Bay & Hill. Both achieve LOS C by 2045. That 5.6-second advantage is the entire operational case for a roundabout over a signal here — weighed against the following:

ROUNDABOUT ONLY	SIGNAL ONLY
✗ No pedestrian crossing phase — ever	✓ 30–40 sec protected crossing phase
✗ Cannot serve blind residents — no APS	✓ APS-capable for blind residents
✗ No emergency vehicle preemption	✓ Emergency vehicle preemption
✗ Signal retrofit still needed by 2045	✓ Meets 2045 warrant permanently
✗ $2–3.5M upfront cost	✓ $500K–$2M — half the cost

At 700 southbound vehicles per hour today — rising to 897 by 2045 — seniors and mobility-impaired residents crossing from the Bay Avenue Senior Apartments face a vehicle every 4–5 seconds. They need 30–40 seconds to cross safely. A roundabout provides no guaranteed crossing time. A signal does.

Sources: Kimley-Horn Tables 7, 8, 9, 16; PROWAG accessible pedestrian signal requirements; Table 2 & 3 turning movement counts

POINT 3

The Rule 20A funding and the intersection design are two independent decisions — and this intersection does not qualify for safety grant priority funding

The staff report presents utility undergrounding and intersection control type as a single coupled decision, implying that a vote for the roundabout must happen tonight to preserve the $3M Rule 20A undergrounding opportunity. These are operationally independent decisions.

The **Rule 20A credits apply to underground utility work.** The City can advance undergrounding coordination, easement acquisition, and utility participation confirmation without committing to a roundabout design at this meeting. Not all utilities have confirmed participation — a fact the staff report itself acknowledges. The intersection design decision can follow once those open items are resolved.

Additionally, **Bay & Hill does not meet California's High Injury Network criteria** at a crash rate of 0.17 per MEV — one-sixth of the 1.0 threshold programs use to prioritize safety infrastructure funding. The staff report references grant competitiveness as a project benefit without disclosing that this intersection's crash rate places it outside the criteria those grant programs apply.

A question for staff: Can the Rule 20A undergrounding credits be preserved through a phased decision that advances utility coordination now, while the Council takes additional time to evaluate the signal alternative — including its long-term cost advantage given the 2045 warrant — with full information?

Sources: Staff Report Item 9A — Rule 20A section; Kimley-Horn Table 7 — signal warrant 2045; CA High Injury Network eligibility criteria

All data sourced from: Kimley-Horn Bay Avenue Corridor Study, February 2025 · City of Capitola Agenda Packet Item 9A, May 14, 2026 · City of Capitola Local Roadway Safety Plan, 2026 · Capitola Police Department citation records 2019–2026 · FHWA national intersection crash rate benchmarks · California High Injury Network criteria

Gautho, Julia

From: Capitola Morrissey <morrisseycapitola@gmail.com>
Sent: Wednesday, May 13, 2026 7:26 PM
To: City Council
Subject: Agenda Item 9A: Please listen to the citizens of Capitola!

Dear Capitola City Council:

I'm pleased to see the citizens of Capitola show up and speak up about the importance of keeping the Bay Avenue intersections in their current state of operation and voicing their clear opinions for NOT installing roundabouts in those two heavily trafficked intersections.

The logic of keeping these intersections in their current state is sound from a safety, financial and logistical perspective. Traffic flow is finally working well again after reverting the last attempt to fix something that literally wasn't broken to begin with.

Also, please think of the chaos that will result from 100's of tourists trying to navigate two successive roundabouts with no experience and limited patience after a long trip from over the hill or other locations.

I trust in your individual and collective ability to use common sense and good foresight to do the right thing here. We have so little money and so many challenges as a community. Let's focus our efforts, energy and financial resources on our most pressing problems. This agenda item 9A isn't even in the top ten!

Thanks in advance,

Mike and Meghan Morrissey
Capitola residents

Gautho, Julia

From: Lindsey Roscoe <lindseyr@me.com>
Sent: Wednesday, May 13, 2026 8:55 PM
To: City Council
Subject: Item 9A Roundabouts

I am against this proposal. Please don’t move forward with this idea and waste precious resources.

Lindsey Roscoe
Capitola resident

Sent from my iPad

Gautho, Julia

From: Pam Greeninger <pamgreeninger@gmail.com>
Sent: Wednesday, May 13, 2026 10:59 PM
To: City Council
Subject: May 14, 2026 Agenda Item 9.A. Roundabout

Mayor and Members of the City Council,

PLEASE DO NOT approve a roundabout at the Bay Avenue/Hill Street intersection!!! The fiasco that occurred on Bay Avenue when the lanes were reduced to a single lane was a nightmare. If anything, it made things considerably worse, causing gridlock coming off the freeway onto Bay, vehicles cutting through the shopping center, as well as traffic congestion from Monterey Avenue all the way to the freeway at numerous intervals throughout the day, especially when New Brighton Middle School was getting out.

My husband and I and many of our neighbors were so thankful when the old configuration was put back in place! Why? It works! The traffic moves the way it should. And now you are considering yet another far more expensive and questionable plan: a roundabout at Bay and Hill. Didn't we learn our lesson from the last experiment? My understanding regarding the use of roundabouts is to keep the **traffic** flowing. A roundabout in that location will not address the original goal to provide a safer intersection for pedestrians and bicyclists. I feel that it will be next to impossible to cross at that intersection safely with a roundabout.

There are so many other more important projects that the City needs to consider and budget for at this time. It just seems like a waste of our taxpayers dollars to approve this project with the unknown consequences it may cause.

JUST SAY "NO"! PLEASE!

Thank you for your thoughtful consideration in making your decision on this item.

Pam and Stewart Greeninger

Gautho, Julia

From: Jason Martorella <martorellajason@gmail.com>
Sent: Thursday, May 14, 2026 9:30 AM
To: City Council
Subject: No Roundabout

Hi everyone,

Hard NO on the proposed roundabout(s) in Capitola, I mean really? I ask that you do something that is not so common anymore, and use common sense!

First off, this is a massive problem you are creating for virtually no reason. You guys have yet to read one intelligent reason why this will work. Roundabouts are something that seem to turn everyone's brain off when driving through them, not only are you challenging California drivers even more than they already are, and you are making us, the people, pay for it with our tax dollars, no thanks!

Enough preliminaries, here's the facts, you're going to attempt to put in a massive roundabout in a major intersection in our town where it is too small and dense, you will be causing much more road rage especially in rush hour with people scurrying to get home along with NBMS traffic.

You are slowing down emergency vehicles from responding to calls and when everyone stops to let them pass you are creating worse traffic than a controlled intersection.

18-wheelers can barely make a left turn out of Nob Hill as is right now, they will have to drive over your roundabout probably damaging the lovely foliage you want to plant!

Think about what the majority of people have said, after all, YOU work for US, the people.

Thank you

Jason Martorella

Gautho, Julia

From: Misha Burich <misha@burich.com>
Sent: Thursday, May 14, 2026 9:34 AM
To: City Council
Subject: Do not pursue roundabouts at Bay Avenue intersections with Capitola Avenue and Hill Street

Dear Council members,

My wife Lisa and I agree with all the previously submitted comments opposing the roundabouts at the intersection of Bay Avenue and Capitola Avenue, as well as at Bay Avenue and Hill Street.
Just like anybody else can do this, in order to articulate the reasons, I asked for the analysis by Copilot, a Microsoft AI tool. I am sure that other similar tools would give the same answer.
This is the summary of the recommendation, followed by a detailed explanation.

Sincerely,
Misha and Lisa Burich
101 Hollister Ave.
Capitola, CA 95010

Recommendation to Council

Do **not** pursue roundabouts at Bay Avenue & Capitola Avenue, and Bay Avenue & Hill Street. Instead, proceed with design and evaluation of a **modernized signalized intersections** incorporating adaptive timing and pedestrian-priority features.

MEMORANDUM

To: Capitola City Council
Subject: Evaluation of Proposed Roundabouts
Date: May 14, 2026

Purpose

This memo provides an evaluation of the feasibility and suitability of installing roundabouts at the intersections of **Bay Avenue and Capitola Avenue and Bay Avenue and Hill Street**. The analysis considers geometry, traffic operations, pedestrian activity, access, safety, and right-of-way constraints.

Summary Conclusion

Based on current conditions, roundabouts at these locations are **not recommended**. The intersections' **limited right-of-way**, **high pedestrian activity**, **multiple driveways**, and **unbalanced traffic flows** make roundabouts operationally inefficient and geometrically difficult without significant property

impacts. A **modernized signal with adaptive timing and pedestrian-priority features** at these intersections are the more effective and context-appropriate solution.

Key Findings

1. Right-of-Way and Geometric Constraints

- The intersections are tightly bounded by **commercial buildings, driveways, and narrow sidewalks**.
- Driveway access points on all corners further limit feasible roundabout geometry.

2. Traffic Operations

- **Bay Avenue** carries consistent commuter and school-hour traffic.

- **These intersections at Capitola Avenue** experience **highly variable, peak-intensive demand**, especially mornings, weekends, and summer months.

- Roundabouts perform poorly under **unbalanced or surge-based flows**, increasing the risk of minor-approach delay and queue lockout.

3. Pedestrian Activity and Safety

- These intersections support **heavy pedestrian volumes**, including bakery and shopping patrons at the Nob Hill Foods shopping mall, Village visitors, and school-hour crossings.

- Roundabouts require **split-island crossings** set back from the circle, which lengthen crossing paths and reduce pedestrian priority.

- Frequent informal crossings would create recurring interruptions to circulating flow, reducing efficiency and increasing driver hesitation.

4. Access and Business Impacts

- Multiple driveways serving the businesses and adjacent parcels fall within the functional fo of a roundabout.

- Maintaining safe access while preserving circulation geometry is not feasible without substantial redesign or property impacts.

Recommended Alternative

A **signalized intersections upgrade** is the preferred solution, including:

- **Adaptive signal timing** to manage bakery peaks, school surges, and seasonal traffic.

- **Leading Pedestrian Intervals (LPI)** to improve pedestrian safety.

- **Protected left-turn phases** where warranted.

- High-visibility crosswalks and potential **raised approaches** to calm speeds.

This approach improves safety and reduces delay while preserving walkability and business access.

Recommendation to Council

Do **not** pursue roundabouts at Bay Avenue & Capitola Avenue, and Bay Avenue & Hill Street. Proceed with design and evaluation of a **modernized signalized intersections** incorporating adaptive timing and pedestrian-priority features.

Gautho, Julia

From: Mara Palandrani <Mara@sierrautility.net>
Sent: Thursday, May 14, 2026 11:44 AM
To: City Council
Cc: Joe Palandrani; Mara Palandrani
Subject: proposed roundabouts
Attachments: Outlook-Descriptio

Mara and I are against the proposed roundabouts because they will limit traffic flow and only make the traffic situation worse. The traffic flow at Bay/Hill was a nightmare when the city experimented with a poorly thought out single lane solution and now they want to force us to live through a much more expensive single lane experiment that involves mixing bicyclists and E-Bikes in with cars.

We have the real estate for two lanes each way on Bay Ave and it has proven effective and safe for years. We are against the proposed experimental roundabouts that will only reduce the badly needed traffic flow and will not provide safer access to pedestrians and bicyclists.

The city has limited funds and needs to address the poor condition of the streets that we have throughout the city and the Stockton Bridge repair or replacement. Capitola needs to have a detail budget that lists the spend that will be directed to repairing or replacing city streets instead of wasting money on experimental intersections that are functioning as they should. The city desperately needs a detailed budget with named streets and defined spend that can be tracked on a yearly basis and discussed quarterly. The city has collected funds that were to be directed to street repair and has chosen to redirect the spend to the detriment of our city streets and now they are proposing to waste funds to limit traffic flow.

Please let us know what needs to be done to direct the city to address our failing streets and stop wasting funds on experiment solutions that will reduce traffic flow, mix bicyclists and E-Bikes with cars and offer reduced pedestrian safety.

Mara and Joe Palandrani
105 Hollister Ave., Capitola

Gautho, Julia

From: fastest.tusk3d@icloud.com
Sent: Thursday, May 14, 2026 12:29 PM
To: City Council
Subject: Roundabout

Hi - please do not pass an ordinance for a roundabout on Bay Ave. I drive through there nearly every day and there is little if any substantial back-up. It's been much better since the other design was replaced with the one that's there now. The money for that project is much better spent on other projects (like re-surfacing the road going down into the village). Thanks for listening. Jeff

Gautho, Julia

From: Tyler Shanahan <tyler.shanahan@yahoo.com>
Sent: Thursday, May 14, 2026 7:10 PM
To: City Council
Subject: Concerns and Recommendations Regarding Bay Avenue Traffic and Pedestrian Safety

Dear Mayor and City Council,

I wanted to share concerns as a resident regarding Bay Avenue and the ongoing discussion around pedestrian safety and traffic improvements.

We recently got a real-world test when the uphill section of Bay was temporarily reduced to a single lane. What we saw was confusion and unintended consequences everywhere. Drivers were turning into the Nob Hill parking lot and going against traffic. Pedestrians were unsure when it was safe to cross. Drivers didn't know where they were supposed to be. It created uncertainty for everyone.

What stood out most, however, was the impact on residents living back near Riverview and Center Street. With traffic reduced to a single uphill lane, vehicles coming up Bay were traveling much faster. Under the previous two-lane merge configuration approaching Center Street, drivers naturally slowed down and gaps were created, which allowed residents to safely turn onto Bay. For whatever reason, people accelerate up that hill far more than they should. Removing the merge effect made it noticeably harder and less safe to exit from Center.

The temporary flag solution felt more symbolic than practical. While the blinking crosswalk sign is certainly an improvement, asking pedestrians to wave flags in hopes that distracted or speeding drivers notice them does not feel like a serious long-term safety solution.

In my opinion, the strongest option is to install the embedded crosswalk lighting systems used in Capitola Village. Those systems work because they actively demand attention. They combine flashing signage with embedded roadway lights and create a very clear expectation: a pedestrian pushes a button, traffic stops, and the crossing sequence begins. Drivers understand it immediately. Pedestrians understand it immediately. Most importantly, people actually notice it.

A traditional traffic signal could potentially solve part of the issue, although I recognize that may create significant backup and challenges around the southbound off-ramp area.

I also want to strongly express concern regarding the idea of a roundabout. In theory they sound efficient; in practice, people already struggle navigating them. More importantly, I do not believe a roundabout solves the underlying issue of vehicle speed coming down Bay or the ability of residents to safely enter traffic from Center Street and Riverview. I worry it could actually create additional confusion and simply shift the problem elsewhere.

If slowing traffic is the objective, another alternative worth considering would be a four-way stop where Center intersects Bay. At minimum, it would create more predictable vehicle behavior and naturally slow traffic entering the area.

One thing is clear: many vehicles coming over from San Jose toward the Village enter at speeds that feel disconnected from the environment they are driving into. We are no longer talking about a highway approach — this is a residential and pedestrian-heavy area. The intersection near Gayle's and Grady's experiences many of the same concerns, although not quite to the same degree.

I appreciate the City's effort to improve safety and understand there are competing priorities and constraints. Ho
hope the City prioritizes solutions that are intuitive, visible, and proven rather than temporary measures or concepts that may sound good in theory but create new problems in practice.

Thank you for your time and consideration.

Sincerely,

Capitola Resident
-Tyler Shanahan

Gautho, Julia

From: Benjamin Weisz <a.benjamin.weisz@gmail.com>
Sent: Thursday, May 14, 2026 11:42 PM
To: City Council
Subject: Proposed Roundabout

Hello,

I wasn't able to attend the meeting today regarding a proposed roundabout in front of the Nob Hill Plaza, but still wanted to provide input as I live nearby on Sunset and frequently use Center St to get both into and out of my block. I looked at the specifications and it looks like the current right turn only lane heading onto Center St will be solely a bike lane. Similar to the prior project we had last summer. I hope that's not the case, as that created a massive overflow of cars.

Most concerning is the roundabout however, as it appears that the crosswalks are directly in front of the entering and exiting of the roundabout, which would make it nearly impossible for pedestrians to cross and for cars to stop as they try to exit the roundabout. I believe a walk light similar to what we have for the village would be safer for pedestrians as even with the current stop signs, people are eager to keep moving. It's hard to solve for overall traffic since we for better or worse are a very popular destination, but we need to think about the safety of our pedestrians first.

Thank you,
Ben Weisz

Gautho, Julia

From: Y C <ymcollins@gmail.com>
Sent: Friday, May 15, 2026 5:14 AM
To: City Council
Subject: Roundabout

Roundabout Concerns:
1. How to turn left from Center to Bay Ave with constant flow of traffic without stop signs 2. How and where one would cross Bay Ave and street across from Raley's heading toward USPS with heavy traffic in roundabout 3. Cross walking is already minimal. Plans for additional cross walks on Bay Ave ?

Yvonne Collins
621 Sunset Drive, Capitola

Gautho, Julia

From: Brenda Torres <btvenice8@gmail.com>
Sent: Friday, May 15, 2026 9:17 AM
To: City Council
Subject: 5/14 Council meeting

I attended the 5/14 meeting and was very disappointed you voted against the roundabouts. I think a roundabout at Gayles would be enough. I was very disappointed that 1 fatality is not enough for you to seek grants to solve the problem. The presentation was excellent. I DO believe the initial impact would be high - people won't know how to handle the roundabouts - but people learn. The cars are not slowing, they are going faster. People are distracted by their phones and in a hurry. I would like to know how many people must be hurt or die before this problem is solved - and it is NOT with lights.

A homeowner that likes to walk, Brenda Torres (I live on Bay).

Gautho, Julia

From: Linda Smith <vlrsmith@sbcglobal.net>
Sent: Monday, May 11, 2026 7:29 AM
To: City Council
Subject: Agenda Item 9b, 5/14/2026 Council Meeting
Attachments: Linda Smith 4 District Map1.pdf

It seems the purpose of Agenda Item 9b on the 5/14 Council Agenda is to inform and educate, receive comments from the engaged community, and begin to consider the pivotal decision of how many Districts we define and how we choose our Mayor. My early comments are food for thought that I hope will be considered.

So. How do we think about this question?

I started with the General Plan discussion on Community Identity where we defined 7 neighborhoods: 41st Ave./ West Capitola, Jewel Box, Riverview Terrace, Upper Village, Village, Depot Hill, and Cliffwood Heights. I've often referred to Capitola's 'micro-climates', and these are them. Although we are all 'Capitolians', the civic issues we deal with, and how we perceive them, are different depending on where we live. These 'communities of interest' have roots, and deserve to be recognized and kept whole in this process. But does that mean we need 7 Districts? 7 Councilmembers to lead us instead of 5? Maybe not.

Using the mapping tool provided by NDC, I started with the 41st/West Capitola neighborhood and started putting the neighborhoods together. The natural flow of consolidating the population numbers led me to 4 Districts of similar size. The result needs some adjustment to meet the max 248 difference between the largest (Cliffwood Heights @ 2644) and the smallest (Jewel Box @ 2383). We have a qualified demographer to sort out the details, and I am confident that they will take care in dividing neighborhoods and disenfranchising community members. (I hear that drawing lines down the middle of buildings can happen, and makes a confusing nightmare out of the voting process.)

To make the numbers work, The Depot Hill, Village, Upper Village, and Riverview Terrace neighborhoods were combined into a single district because, in my experience, these neighborhoods tend to share impacts of our civic issues in the same way; what happens in Capitola Village and in the Bay Avenue corridor have a bigger impact on their daily lives than on other areas of town.

41st Ave/West Capitola will be the district that changes the most with future development of the Mall property. With the density increases in residential use of this area, I would expect a realignment of District lines in the future. My question: Do we migrate to a 7-district structure when this happens? Does the question of Mayor-elect vs Council selected come back to the table at that time?

How do the demographics lay on this map? Age, ethnicity, socio-economic demographics matter when it comes to representation. I have submitted a question on the portal as to the availability of a

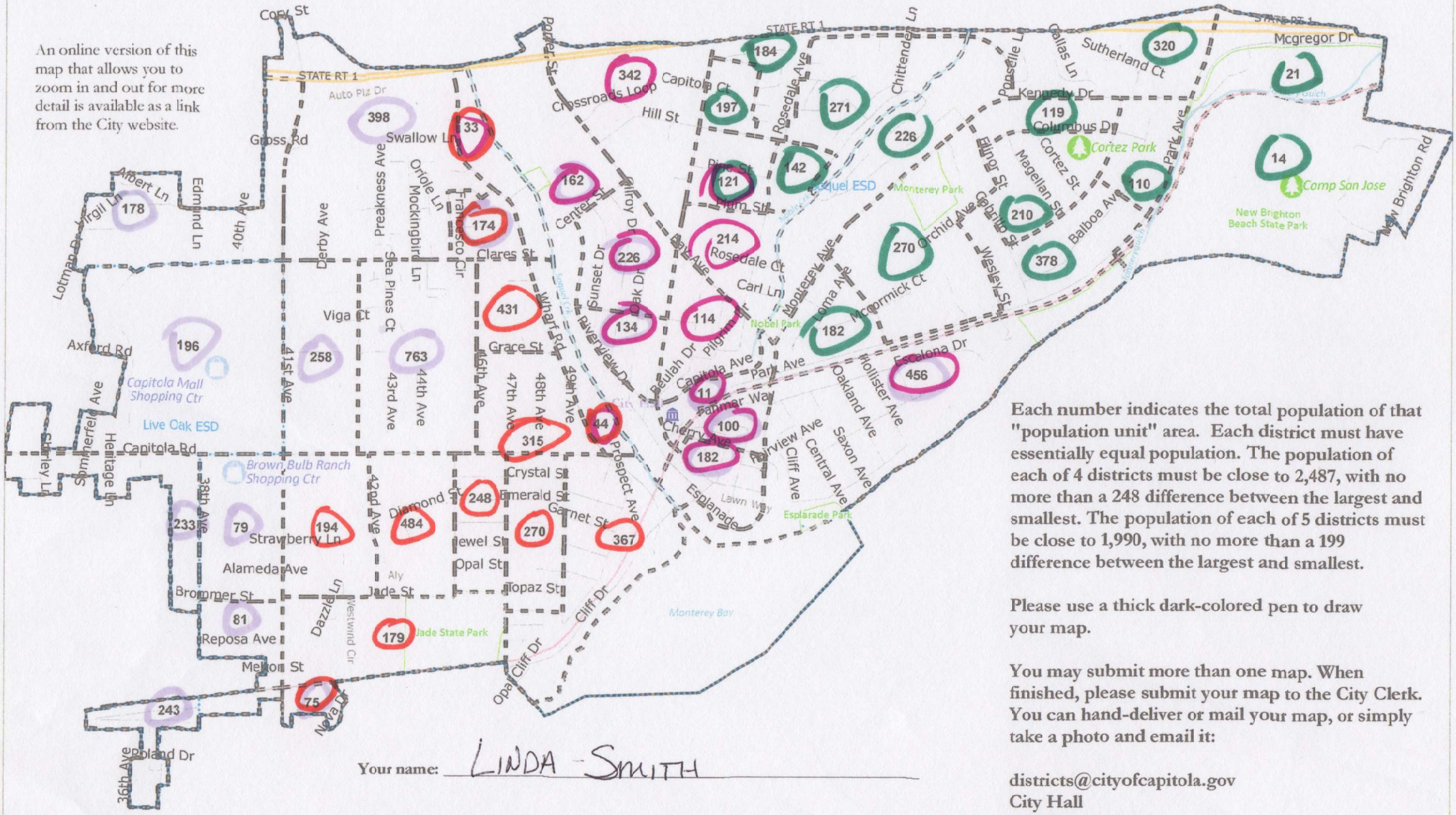
demographic baseline map taken from the 2020 Census AND subsequent American Community Survey. This information would greatly inform any drawing of districts, and therefore further inform the decision of how many districts we should have.

Thank you for considering these comments.

Linda Smith vlrsmith@sbcglobal.net
Life is short -- Break the rules!
Forgive quickly..
Kiss slowly..
Love truly..
Laugh uncontrollably..
And never regret anything that make you smile!

Capitola 2026 Districting "Public Participation Kit" Map

An online version of this map that allows you to zoom in and out for more detail is available as a link from the City website.



Each number indicates the total population of that "population unit" area. Each district must have essentially equal population. The population of each of 4 districts must be close to 2,487, with no more than a 248 difference between the largest and smallest. The population of each of 5 districts must be close to 1,990, with no more than a 199 difference between the largest and smallest.

Please use a thick dark-colored pen to draw your map.

You may submit more than one map. When finished, please submit your map to the City Clerk. You can hand-deliver or mail your map, or simply take a photo and email it:

districts@cityofcapitola.gov
City Hall
420 Capitola Ave
Capitola, CA 95010

Your name: LINDA SMITH

Your phone or email: _____

National Demographics Corporation, May 3, 2026

©2021 CALIPER

41st/West 2504

Jewel box 2383

CLIFFWOOD HTS 2644

VILLAGE/DEPOT HILL/R.TER. 2493

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: City Manager Department

Subject: City Council Meeting Minutes

Recommended Action: Approve minutes from the special meeting on April 21, 2026, the regular meeting on April 23, 2026, the special meeting on April 30, 2026, and the special meeting on May 6, 2026.

Background: Attached for City Council review and approval are the draft minutes from the special meeting on April 21, 2026, the regular meeting on April 23, 2026, the special meeting on April 30, 2026, and the special meeting on May 6, 2026.

Alignment with 2025-2029 Strategic Plan Priority: Accountable Government

Attachments:

1. Special Meeting 4/21/2026
2. Regular Meeting 4/23/2026
3. Special Meeting 4/30/2026
4. Special Meeting 5/6/2026

Report Prepared By: Julia Gautho, City Clerk

Approved By: Jamie Goldstein, City Manager

City of Capitola
Special Council Meeting / Project Celebration Minutes
Tuesday, April 21, 2026 – 10:30 AM

City Council Chambers
420 Capitola Avenue, Capitola, CA 95010

Mayor: Margaux Morgan
Vice Mayor: Gerry Jensen
Council Members: Joe Clarke, Melinda Orbach, Susan Westman

Special Meeting of the Capitola City Council – 10:30 AM

1. Roll Call

The meeting was called to order at 10:30 AM. In attendance: Council Members Clarke, Westman, Vice Mayor Jensen, and Mayor Morgan. Absent: Council Member Orbach.

2. General Government

A. Park at Rispin Mansion Project Celebration & Community Event
Recommended Action: None. No Council Action will be taken.

Public Comment: None

3. Adjournment

The meeting adjourned at 10:55 AM. The next regularly scheduled City Council meeting is on April 23, 2026, at 6:00 PM.

Margaux Morgan, Mayor

ATTEST:

Julia Gautho, City Clerk

City of Capitola
City Council Meeting Minutes
Thursday, April 23, 2026 – 6:00 PM

City Council Chambers
420 Capitola Avenue, Capitola, CA 95010

Mayor: Margaux Morgan
Vice Mayor: Gerry Jensen
Council Members: Joe Clarke, Melinda Orbach, Susan Westman

Closed Session – 5:15 PM

i. CONFERENCE WITH REAL PROPERTY NEGOTIATOR (Govt. Code § 54956.8)
Property: Capitola Wharf Buildings, 1400 Wharf Road (APN: 034-072-01)
City Negotiator: Jamie Goldstein, City Manager
Negotiating Parties: JFS Incorporated (dba Capitola Boat and Bait)
Under Negotiation: Terms of lease

ii. CONFERENCE WITH LEGAL COUNSEL—LIABILITY CLAIMS (Gov. Code § 54956.95)
Claim Against the City of Capitola
Claimant: Julissa Guzman

iii. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to Gov't. Code §54956.9(d)(2), (e)(3)
One Case

Regular Meeting of the Capitola City Council – 6 PM

1. **Roll Call and Pledge of Allegiance** - *The meeting was called to order at 6:00 PM. In attendance: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan.*

2. **Additions and Deletions to the Agenda –** *None*

3. **Report on Closed Session –** *The City Council met and discussed three items on the Closed Session agenda. No reportable action was taken.*

4. **Additional Materials**

   A. *Item 5 – One email received after publication of the agenda packet.*

   B. *Item 7B - One email received after publication of the agenda packet.*

   C. *Item 7C - Two emails received after publication of the agenda packet and two staff memorandums distributed after publication of the agenda packet.*

   D. *Item 7D - One email received after publication of the agenda packet.*

   E. *Item 8A - Two emails received after publication of the agenda packet.*

   F. *Item 8B - One email received after publication of the agenda packet.*

   G. *Item 8C - Two emails received after publication of the agenda packet.*

5. **Oral Communications by Members of the Public**

   - *Goran Klepic*

- *Bob Hickman*
- *Melinda Vinto*
- *Speaker*

6. Staff / City Council Comments

- *Public Works Department staff provided an update and photos from the rehabilitation of the Wharf kiosk signage.*
- *City Manager Goldstein provided a status update on the arbitration hearing between tenants and the Cabrillo Mobile Home Estates.*
- *Council Member Westman provided an update on her attendance at a recent Seniors Advisory Council meeting and requested that the City Council send a letter of opposition to the Department of Fish and Game on their newly proposed rules on off-shore fishing. Mayor Morgan seconded her request.*
- *Vice Mayor Jensen provided an update on his attendance at the opening of the Park at the Rispin Mansion event, held at the Capitola Library; asked staff to clarify how the proposed City budget will be made available to the public, when the Treasure Cove playground will open, and when the roundabout on Bay Ave will be on a Council agenda.*
- *Council Member Clarke thanked staff for their efforts to install the stairs at Hooper's Beach.*
- *Council Member Orbach provided comments on her previous comments from the April 9, 2026, City Council meeting.*
- *Mayor Morgan provided comments on her attendance at the opening of the Park at the Rispin Mansion event, held at the Capitola Library; and reminded the Council to maintain decorum at the dais.*

7. Consent Items

A. City Council Meeting Minutes
Recommended Action: Approve minutes from the special meeting on April 7, 2026, and the regular meeting on April 9, 2026.

B. Esplanade Park Coastal Access Enhancement and Adaptation Plan
Recommended Action: 1) Adopt a resolution authorizing the City Manager to execute a grant agreement with the State Coastal Conservancy for the Esplanade Park Coastal Access Enhancement and Adaptation Plan; and 2) Authorize the City Manager to execute a professional services agreement with Integral Consulting Inc. in the amount of $275,000, in a form substantially similar to the attached agreement, subject to approval by the City Attorney. ***(Pulled for discussion by Vice Mayor Jensen) (Resolution No. 4480)***

C. Homeland Security Grant Program
Recommended Action: 1) Accept a Homeland Security Grant as a subrecipient through the County of Santa Cruz in an amount up to $50,000; and 2) adopt a resolution amending the FY 2025–26 General Fund operating budget to increase revenues and expenditures by up to $50,000. ***(Resolution No. 4481)***

D. Park at Rispin Mansion Fundraising Partnership
Recommended Action: 1) Authorize the City Manager to execute a Memorandum of Understanding with Capitola Cares for a fundraising campaign for additional elements at the Park at Rispin Mansion; and 2) approve an administrative policy regarding Donor Recognition at the Park at Rispin Mansion. ***(Administrative Police No. V-22)***

Council Member Jensen requested to pull Item 7B for discussion.
Motion to approve Consent Items 7A and 7C: Council Member Westman
Second: Council Member Orbach
Voting Yea: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan

Council Member Westman recused from Item 7D due to a conflict of interest arising from her husband's position on the Capitola Cares Board.

Motion to approve Consent Item 7D: Council Member Clarke
Second: Vice Mayor Jensen
Voting Yea: Council Members Clarke, Orbach, Vice Mayor Jensen, and Mayor Morgan
Abstaining: Council Member Westman

Vice Mayor Jensen thanked staff for their efforts to secure grant funding for Item 7B. He inquired about the intent of the grant funding and project, and how this project interacts with overall efforts to combat coastal erosion.

Motion to approve Consent Item 7B: Vice Mayor Jensen
Second: Council Member Orbach
Voting Yea: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan

8. General Government / Public Hearings

A. Wharf Master Plan
Recommended Action: Receive a presentation on the conceptual design for a Wharf Master Plan; adopt a resolution adopting the Wharf Master Plan; and direct staff to release a Request for Proposals (RFP) for a qualified private entity to construct and operate the marketplace through a lease agreement with the City.

Community and Economic Development Director Herlihy presented the staff report with the project consultant, Fuse Architects.

Public Comment:

- ***Cami Corvin***
- ***Scott Harway***
- ***Speaker***

The City Council requested that staff rewrite the request for proposals (RFP) to allow for further flexibility from respondents and incorporate the public outreach conducted for public review. Council discussed the importance of incorporating public safety elements into the Wharf Master Plan. Council clarified that the RFP does not need to return at a future Council meeting but requested that staff return with a policy for the leasing of City-owned property. The City Council opted not to adopt a resolution approving the Master Plan, as they felt it wasn't necessary.

The Council discussed the possibility of inviting Central Fire to a Council meeting to present on the partnership between the City and CFD.

Motion to direct staff to revise the RFP before releasing to allow for greater flexibility: Council Member Westman
Second: Council Member Orbach
Voting Yea: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan

The City Council took a recess at 7:35 PM and reconvened at 7:38 PM.

B. 41st Avenue Pavement Rehabilitation and Multimodal Improvements Project - Entryway Enhancement

Recommended Action: Authorize staff to modify the project scope of the 41st Avenue Pavement Rehabilitation and Multimodal Improvements Project to include curb, sidewalk, and hardscape improvements at the corner of 41st Avenue and Gross Road Extension to accommodate a future gateway monument.

Community and Economic Development Director Herlihy presented the staff report.

Public Comment: None

Council Discussion

Motion to authorize staff to amend the scope of the 41st Avenue Pavement Rehabilitation and Multimodal Improvements Project: Council Member Orbach
Second: Council Member Clarke
Voting Yea: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan

C. California Voting Rights Act Challenge and Demand for City to Transition to District-Based Elections
Recommended Action: Consider a letter received on March 19, 2026, challenging the City's at-large election system and demanding the City transition to district-based elections; and provide direction to staff regarding next steps.

City Attorney Tran presented the staff report.

Public Comment:
- ***Cami Corvin***
- ***Speaker***
- ***Speaker***
- ***Meghan Morrissey***

Council formed an ad-hoc subcommittee, composed of Mayor Morgan and Vice Mayor Jensen, to work with staff to review proposals for a demographer/mapping consultant and interview prospective consultants. The Council discussed the importance of taking time to allow for maximum public input during the process and the potential of reviewing the feasibility of the composition of the districts (four districts and an elected Mayor vs. five districts).

Motion to form an ad-hoc subcommittee (composed of Mayor Morgan and Vice Mayor Jensen) to work with staff to select a demographer and hold a special meeting on April 30th at 6:00 PM to present a resolution of intent to transition to districts and an agreement with the selected consultant: Council Member Westman
Second: Vice Mayor Jensen
Voting Yea: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan

D. Citywide Website Update Project
Recommended Action: Receive a presentation of the City's new website.

Assistant to the City Manager Woodmansee presented the staff report.

Public Comment: None

9. Adjournment

The meeting adjourned at 8:31 PM. The next regularly scheduled City Council meeting is on May 14, 2026, at 6:00 PM.

_____

Margaux Morgan, Mayor

ATTEST:

_____

Julia Gautho, City Clerk

City of Capitola
Special City Council Meeting Minutes
Thursday, April 30, 2026 – 6:00 PM

City Council Chambers
420 Capitola Avenue, Capitola, CA 95010

Mayor: Margaux Morgan
Vice Mayor: Gerry Jensen
Council Members: Joe Clarke, Melinda Orbach, Susan Westman

Closed Session – 5:30 PM

i. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to Gov't. Code §54956.9(d)(2), (e)(1).
One Case

ii. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to Gov't. Code §54956.9(d)(2), (e)(3)
One Case

Special Meeting of the Capitola City Council – 6 PM

1. Roll Call and Pledge of Allegiance - *The meeting was called to order at 6:03 PM. In attendance: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan.*

2. Additional Materials

A. Item 4A - *Seven emails received after publication of the agenda packet.*

B. Item 4B – *One staff memorandum with Updated Report, Recommendation, and Attachments & Correspondence Received and one email received after publication of the agenda packet.*

3. Report on Closed Session - *The City Council met and discussed two items on the Closed Session agenda. No reportable action was taken.*

4. General Government / Public Hearings

A. Resolution Declaring the City of Capitola's Intent to Initiate Procedures to Transition From At-Large Elections to District-Based Elections Pursuant to Elections Code Section 10010; Approving the Tentative Timeline and Other Related Actions.
Recommended Action: Adopt a resolution declaring the City's intent to initiate procedures to transition from at-large elections to district-based elections pursuant to California Elections Code Section 10010, and approving the tentative timeline and other related actions.

City Attorney Marc Tran presented the Staff Report.

Public Comment:

- ***Mick Routh***
- ***Speaker***
- ***Theresa Green***
- ***Jaques Bertrand***
- ***Kevin Maguire***

- ***Linda Smith***

Council discussed the timeline to transition from at-large elections to district-based elections and the possibility of adding a community meeting to the schedule.

Motion to approve Resolution No. 4482 with amendments to the meeting schedule: Council Member Orbach
Second: Council Member Westman
Voting Yea: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan

B. Agreement for Demographer Consultant
Recommended Action: 1) Authorize the City Manager to execute an agreement with a consultant to be recommended by the Council ad-hoc subcommittee for demographer and mapping consultant services to transition the City to by-district elections, in an amount to be recommended by the Council ad-hoc subcommittee; and 2) adopt a resolution amending the FY 2025-26 budget for expenditures related to the transition to by-district elections.

City Manager Goldstein presented the Staff Report.

Public Comment:

- ***Enrique Dolmo***
- ***Speaker***

Motion to authorize the City Manager to execute an agreement with National Demographic Services for demographer and mapping consultant services to transition the City to by-district elections and approve Resolution No. 4483 amending the budget: Council Member Orbach
Second: Vice Mayor Jensen
Voting Yea: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan

5. Adjournment

The meeting adjourned at 7:06 PM. The next regularly scheduled City Council meeting is on May 14, 2026, at 6:00 PM.

_____

Margaux Morgan, Mayor

ATTEST:

_____

Rosie Wyatt, Deputy City Clerk

City of Capitola
Special City Council Meeting - Budget Minutes
Wednesday, May 06, 2026 – 6:00 PM

City Council Chambers
420 Capitola Avenue, Capitola, CA 95010

Mayor: Margaux Morgan
Vice Mayor: Gerry Jensen
Council Members: Joe Clarke, Melinda Orbach, Susan Westman

Special Meeting of the Capitola City Council – 6 PM

1. **Roll Call and Pledge of Allegiance** – *The meeting was called to order at 6:02 PM. In attendance: Council Members Clarke, Orbach, Westman, Vice Mayor Jensen, and Mayor Morgan.*
2. **Additions and Deletions to the Agenda –** *None*
3. **Additional Materials**
   A. *Item 5A - Staff Memorandum with Updated Attachment*
4. **Oral Communications by Members of the Public –** *None*
5. **General Government / Public Hearings**
   A. Presentation of the Proposed Fiscal Year 2026-27 Budget
   Recommended Action: Receive the proposed budget, provide staff direction, and continue budget deliberations to the next budget hearing scheduled for May 21, 2026.

   City staff presented the proposed budget.

   Public Comment:
   - ***Leslie Nielsen***

   Council requested that staff address the following points at the next budget meeting or as a part of the FY 2026-27 Budget Goals:
   - ***An evaluation of parking rates Citywide and reviewing the feasibility of the addition of paid parking in short-term rental areas in the Village;***
   - ***A brief review of transient occupancy tax rates and how Capitola compares to other jurisdictions;***
   - ***Verification of the costs for a negotiator for employee bargaining unit agreements;***
   - ***Seeking funding opportunities for RING radio system infrastructure;***
   - ***Reviewing staff's recommendation to freeze a vacant MSO position;***
   - ***A review of PEMHCA funding and its uses;***
   - ***Review the Zoning Code requirements that apply to the Capitola Village for new businesses with the goal of expanding business opportunities to address vacancies;***
   - ***Include costs for a fiscal transparency software in the budget;***
   - ***Reallocate $9,000 of the Council Training & Travel Budget;***

- ***Review costs for the replacement of the emergency generator at the Public Works Corp. Yard;***
- ***Addition of the economic development consultant contract in the proposed budget.***

The Council stressed the importance of seeking new revenue sources to ensure a balanced budget in years to come.

6. Adjournment

The meeting adjourned at 8:47 PM. The next regularly scheduled City Council meeting is on May 14, 2026, at 6:00 PM.

_____

Margaux Morgan, Mayor

ATTEST:

_____

Julia Gautho, City Clerk

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: Administrative Services Department

Subject: Fiscal Year 2026-27 Appropriation Limit

Recommended Action: Adopt a resolution setting the Fiscal Year 2026-27 appropriation limit.

Background: On November 6, 1979, California voters approved Proposition 4, commonly known as the Gann Initiative, establishing Article XIIIB of the State Constitution. This proposition, which has been amended twice, places annual limits on the appropriation of tax proceeds that can be made, based on the 1978-79 base year and adjusted each year for population growth and cost-of-living factors. It precludes state and local government from retaining “excess” revenues above the appropriation limit and requires the state to reimburse local government for the cost of certain mandates. The appropriations limit on the amount of revenue that can be spent applies only to tax proceeds. Charges for services, fees, grants, loans, donations, and other non-tax-based proceeds are excluded. The State Constitution requires that prior to June 30 of each year, the Council ratify the calculation factors and set the City’s appropriations limit for the following fiscal year.

Discussion: The Appropriations Limit for a given fiscal year is established in the months preceding the beginning of that fiscal year. California Revenue and Taxation Code, Section 2227, mandates that the State Department of Finance transmit an estimate of the percentage change in population to local governments. Capitola uses this percentage change in population factor for January 1, 2026, in conjunction with the County-issued “Change in California Per Capita Income” to calculate the Appropriation Factor used to determine the limit.

The 2026-27 calculation is:

Annual % change in City Population minus Exclusions	x	Change in California per capita Income	=	Appropriation Factor	x	FY 2025-26 Appropriation Limit	=	FY 2026-27 Appropriation Limit
0.9971		1.0495		1.0465		$ 38,359,050		$ 40,141,579

The 2026-27 Proposed Budget tax revenues are:

Source of Tax Revenue	2026-27 Proposed Budget
Sales Tax (1%)	$ 6,576,445
District Taxes (Measures O & F / Y)	3,433,750
Property Tax and In-Lieu	3,613,050
Transient Occupancy Tax	2,300,000
Document Transfer Tax	100,000
Franchise Taxes	797,900
Business License Tax	330,300
Cannabis Retail Tax	291,000
Interest Income from tax revenue	20,000
Total Tax Revenue	$ 17,462,445

The 2026-27 percent of appropriations limit used is:

Fiscal Year ended:	2024-25	2025-26	2026-27
Appropriations Limit	$ 36,164,767	$ 38,359,050	$ 40,141,579
Tax revenue	$ 15,445,020	$ 16,912,877	$ 17,462,445
Remaining to limit	$ 20,719,747	$ 21,446,173	$ 22,679,134
% of limit used	42.71%	44.09%	43.50%
Limit vs. prior year	$ 2,085,481	$ 2,194,283	$ 1,782,529
Incr./(Decr.) vs. pr. yr.	6.1%	6.1%	4.6%

As shown in the tables above, Capitola tax revenues have historically been well below the Appropriations Limit and the FY 2026-27 Proposed Budget continues this trend.

Fiscal Impact: The appropriations limit increased $1,782,529 (or 4.6%) to $40 million from Fiscal Year 2025-26 to Fiscal Year 2026-27.

Alignment with 2025-2029 Strategic Plan Priority: Accountable Government

Attachments:

1. Resolution

Report Prepared By: Luis Ruiz, Accountant II

Reviewed By: Jim Malberg, Administrative Services Director; Julia Gautho, City Clerk; Marc Tran, City Attorney

Approved By: Jamie Goldstein, City Manager

RESOLUTION NO. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CAPITOLA SETTING THE 2026-27 FISCAL YEAR APPROPRIATION LIMIT PURSUANT TO ARTICLE XIIIB OF THE CALIFORNIA CONSTITUTION

WHEREAS, before June 30 of each year, the City Council must select the factors to calculate the appropriation limit for the ensuing fiscal year and set the appropriation limit accordingly.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the City Council of the City of Capitola that the 2026-27 Fiscal Year Appropriation Limit shall be $40,141,579 calculated as follows:

Population change withing the city:	0.9971
Change in California per capita income:	1.0495

2025-26 Appropriation Limit:	$ 38,359,050
Adjustment Factor:	x 1.0465
2026-27 Appropriation Limit:	$ 40,141,579

I HEREBY CERTIFY that the foregoing Resolution was passed and adopted by the City Council of the City of Capitola on the 14th day of May 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Margaux Morgan, Mayor

ATTEST:

_____
Julia Gautho, City Clerk

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: City Manager Department

Subject: Appointment to City Advisory Body

Recommended Action: By motion and vote, appoint Raymond Gaeta to the Capitola Historical Museum Board to a term expiring June 30, 2028.

Background/Discussion: Members of the public are appointed to serve in a voluntary capacity on the City's advisory bodies for terms. The Historical Museum Board was founded in 1967 through the adoption of Ordinance No. 301. The Board promotes a program that will bring about better understanding and appreciation by the Capitola community of its history, architecture, culture, technology, and its creative and natural environments.

Board Bylaws (Resolution No. 4099) state the Board is composed of seven members. The Bylaws state the Commission must review applications and provide a recommendation to City Council for appointment. Since the last appointments made by City Council in July 2025, a Board Member resigned, causing an unexpected vacancy on the Board. On May 7, 2026, the Historical Museum Board formally recommended Raymond Gaeta to the board for appointment.

Staff recommends the Council appoint (by motion and vote) Raymond Gaeta to the Historical Museum Board to fill the vacant term, expiring on June 30, 2028. Mr. Gaeta's application is Attachment 1.

Attachments:

1. Application

Report Prepared By: Julia Gautho, City Clerk

Reviewed By: Marc Tran, City Attorney

Approved By: Jamie Goldstein, City Manager

Boards and Commissions Application

Thank you for your interest in serving on a City of Capitola Advisory Group. Please fill out the following form with your information. Appointments are made at a public City Council meeting.

Application For:

Application For:

- [ ] Art and Cultural Commission - Artist
- [ ] Art and Cultural Commission - Arts Professional
- [ ] Art and Cultural Commission - At Large
- [ ] Capitola Village and Wharf Business Improvement Area Advisory Committee
- [ ] Commission on the Environment
- [ ] Finance Advisory Committee - At Large
- [ ] Finance Advisory Committee - Business Representative
- [x] Historical Museum Board
- [ ] Planning Commission
- [ ] Other:

Applicant Information

First Name *

Raymond

Last Name *

Gaeta

Email *

[redacted]

Current Address *

Street Address

[redacted]

Address Line 2

City

Capitola

State / Province / Region

CA

Postal / Zip Code

95010

Country

United States

Telephone (Home)

[redacted]

Telephone (Mobile) *

[redacted]

Are you a Capitola resident? *

Yes

Residential Neighborhood:

Village

Are you applying as a Youth Member to an Advisory Group? *

No

Youth Members are encouraged to participate with City Boards, Committees, and Commissions.

Qualifications

Occupation:

Physician

Please describe your qualifications and interest in serving on this Board/Commission/Committee: *

I have a keen interest in history and have spent time researching the history of Capitola especially Village where I am the owner of one the Six Sisters since 1996. The area and history of our town is quite remarkable and has been presented quite well by our museum. I am certain that there are more stories to tell through expressive displays from the archives and oral histories.

Additional Attachments

Acknowledgement Required *

Please note that appointment to this position may require you to file a conflict of interest disclosure statement or complete additional trainings with the City Clerk. This information is a public record and these statements are available to the public on request.

☑ Acknowledged

Signature *

All information contained in this page is public data and will be made available for public review upon request. Qualifications and interests of applicants will be provided to the City Council in a public forum and will be reviewed before appointments are made. Questions regarding this application and appointment process should be directed to the Capitola City Clerk.

Raymond Gaeta

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: Public Works Department

Subject: Proposed Expansion of Marine Protected Areas

Recommended Action: Authorize the Mayor to sign a letter opposing the petition under consideration by the California Fish and Game Commission, which requests to expand the boundaries of Natural Bridges State Marine Reserve (SMR) and designate a new state marine conservation area (SMCA) off Pleasure Point.

Background: At the March 28, 2024, City Council Meeting, the Council authorized Mayor Brown to sign a letter to the California Fish and Game Commission (Commission) opposing Marine Protected Area Petition 2023-33MPA (petition) submitted by Environment California and Azul. The petition initially sought to modify the California Marine Protected Areas Network by expanding the Natural Bridges SMR and establishing a new SMR at or near Pleasure Point. In the letter, the Council expressed opposition to the petition unless it was amended to propose a SMCA, rather than a SMR, near Pleasure Point to allow for recreational hook-and-line fishing and spearfishing, thus striking a balance between kelp forest protection and low-impact subsistence fishing.

At the April 21, 2026, California Fish and Game Commission hearing, Environment California and Azul representatives presented recent amendments to the petition, including modifying the proposal to designate a Pleasure Point SMCA instead of a SMR. Under this amendment, recreational “take” from shore by hook-and-line and spearfishing only would be permitted within the Pleasure Point SMCA, rather than designating the area as a “no-take” zone for both commercial and recreational activities, as is generally required for a SMR.

During the City Council meeting held on April 23, 2026, Council Member Westman referenced a letter submitted to the Commission by the Santa Cruz County Board of Supervisors opposing the proposed modifications to the California Marine Protected Areas Network and requested that staff draft a similar letter opposing the petition for the City Council’s consideration (Attachment 2).

Discussion: The California Department of Fish and Wildlife’s (Department) recommendation to the Commission is to deny the petition actions. The Department stated that, specifically, the proposed Pleasure Point SMCA is unlikely to meaningfully advance ecological or network design objectives due to its small size and relatively low level of protection from the allowed shore and spear fishing take, and it is not expected to fulfill the stated objectives of supporting kelp resilience outlined in the petition. Additionally, the Department stated that the proposed SMCA’s proximity to Santa Cruz Harbor is expected to result in significant socioeconomic impacts, while the proposed boundaries do not align with Department feasibility guidelines, potentially complicating enforcement.

While the petition has been amended to propose a SMCA rather than a SMR at Pleasure Point, this change does not address the City’s concerns regarding scientific support, stakeholder engagement, or potential impacts. The Commission is currently considering the amended petition, and regional agencies, including Santa Cruz County, have reaffirmed opposition. For these reasons, staff recommends reaffirming the City’s opposition and supporting the Department’s recommendation to deny Petition 2023-33MPA.

Fiscal Impact: None.

Attachments:

1. Draft Mayor’s Letter (May 14, 2026)

2. Letter from the Santa Cruz Board of Supervisor (April 2026)

Report Prepared By: Erika Senyk, Environmental Projects Manager
Reviewed By: Julia Gautho, City Clerk, Jessica Kahn, Public Works Director
Approved By: Jamie Goldstein, City Manager

420 Capitola A
Capitola, California 95010
Telephone: (831) 475-7300
FAX: (831) 479-8879
Website: http://www.cityofcapitola.org

May 14, 2026

California Fish and Game Commission
1416 Ninth Street, Suite 1320
Sacramento, CA 95814

RE: Reaffirmation of Opposition to Marine Protected Area Petition 2023-33MPA

Dear President Sklar, Vice President Anderson, and Honorable Commissioners,

I write to respectfully follow up on the City of Capitola's prior correspondence from Mayor Brown regarding the proposed modifications to the California Marine Protected Area Network. We wish to reaffirm our position and reiterate the concerns and sentiments expressed in the attached letter, dated March 28, 2024.

The City remains opposed to the petition as currently proposed and amended by Environment California and Azul to expand the Natural Bridges State Marine Reserve and designate a new 3.2 square mile state marine conservation area off Pleasure Point, in Santa Cruz County.

We continue to recognize and support the importance of protecting nearshore kelp forest ecosystems and the role of adaptive management under the Marine Life Protection Act. However, we firmly believe the current petition falls short of sound environmental policy, as it does not meaningfully engage stakeholders or the broader community. Furthermore, the proposed regulatory approach lacks robust scientific support and limits equitable public access to local marine ecosystems without clear evidence that such measures are warranted. While the amendment to a state marine conservation area allows limited recreational take, it does not address these broader concerns.

Additionally, our concerns regarding potential economic impacts remain unchanged. The coastal areas of Santa Cruz County support a vibrant tourism economy driven by ocean-based activities, including fishing. Limiting access to these activities risks unintended consequences for local businesses and the broader community that depends on this economic activity.

For these reasons, we respectfully urge the Commission to support the California Department of Fish and Wildlife's Evaluation of the 2023 Decadal Management Review Marine Protected Area Petition's recommendation to **deny** Marine Protected Area Petition 2023-33MPA.

The City of Capitola remains committed to working collaboratively with the Commission and other stakeholders to identify solutions that protect kelp forests and other vital marine resources while preserving responsible public access and supporting regional economic vitality.

Thank you again for your consideration and continued engagement on this important matter.

Sincerely,

Margaux Morgan
Mayor, City of Capitola

County of Santa Cruz

BOARD OF SUPERVISORS
701 OCEAN STREET, SUITE 500, SANTA CRUZ, CA 95060-4069
(831) 454-2200 FAX: (831) 454-3262 TDD/TTY - Call 711

MANU KOENIG FIRST DISTRICT | **KIMBERLY DE SERPA** SECOND DISTRICT | **JUSTIN CUMMINGS** THIRD DISTRICT | **FELIPE HERNANDEZ** FOURTH DISTRICT | **MONICA MARTINEZ** FIFTH DISTRICT

April 20, 2026

California Fish and Game Commission
1416 Ninth Street, Suite 1320
Sacramento, CA 95814

RE: Reaffirmation of Santa Cruz County Board of Supervisors' Opposition to Marine Protected Area Petition 2023-33MPA

Dear President Sklar, Vice President Anderson, and Members of the California Fish and Game Commission,

On behalf of the Santa Cruz County Board of Supervisors, I write in strong support of the California Department of Fish and Wildlife's Evaluation of the 2023 Decadal Management Review Marine Protected Area Petition's recommendation to **deny** Marine Protected Area Petition 2023-33MPA, which proposes to expand the State Marine Reserve (SMR) at Natural Bridges by 14.5 square miles and establish a new State Marine Conservation Area (SMCA) of approximately 3.2 square miles at Pleasure Point. The California Fish and Game Commission (CFGC) is scheduled to consider this petition on April 21, 2026, and we urge the Commission to reject it in its current form.

The Board first acted on this matter on March 12, 2024, voting unanimously to oppose the petition absent significant revisions. At that time, the Board identified four specific conditions that would need to be satisfied before further consideration was warranted:

1. Conduct studies to evaluate the specific factors influencing kelp forest expansion and contraction on the Central California Coast, including the role, if any, of recreational fishing activities.

2. Hold community outreach forums to inform the public about the purpose and scientific rationale for the proposed MPA changes.

3. Convene a regional stakeholder group, including scientists, environmentalists, fishers, indigenous tribes, and elected officials, to help determine appropriate designations and regulatory frameworks.

4. Identify specific areas where current management is failing to sustain kelp forests and prioritize MPA protections accordingly.

Unfortunately, the amended petition does not address the scientific and procedural deficiencies the Board identified. Since our 2024 action, the petitioners have met with the Third District office only once and to our knowledge have engaged minimal outreach with the broader community of stakeholders, including local fishers, Santa Cruz and Capitola City Councils, indigenous tribes, scientists, and residents directly affected by the proposed restrictions. This is not an acceptable foundation for regulations of this magnitude. For these reasons, on March 24, 2026, the Santa Cruz County Board of Supervisors unanimously voted to reaffirm their opposition to the creation of these two MPA's.

Our concerns fall into five principal areas:

1. Insufficient Scientific Evidence

The petition's central premise — that restricting recreational fishing will advance kelp forest health and expansion — is not supported by the available science. A December 2021 technical report on Monitoring and Evaluation of Kelp Forest Ecosystems in the MLPA Marine Protected Area Network found no substantial negative effect from current uses on average kelp canopy area in existing MPAs. Critically, the report found no effect of MPA status on kelp forest resilience during the 2014–2016 Marine Heat Wave, and found that existing Central Coast MPAs were evenly split between higher and lower resilience than nearby non-MPA reference sites. These findings do not support the conclusion that expanding MPAs in the proposed areas will reliably produce the outcomes the petitioners seek.

2. Proposed Areas Already Support Healthy Kelp Forests

The areas targeted by this petition contain persistent, stable kelp beds that recovered effectively from the 2014–2016 Marine Heat Wave. By focusing on sites where kelp is already thriving under current management, including existing recreational fishing activity, the petition undermines its own rationale. There is no data indicating that recreational fishing intensity in these areas is inhibiting kelp forest growth. Regulatory restrictions should be directed where management is demonstrably failing.

3. Significant Impacts on Recreational and Subsistence Fishing

A State Marine Reserve designation prohibits any taking or possession of living, geological, or cultural marine resources except under specific permits. Expansion of the

Natural Bridges SMR would curtail recreational and subsistence fishing opportunities for residents who depend on coastal access for recreation, cultural practice, and livelihood. While the amended petition proposes to create a State Marine Conservation Area that allows for shore-based recreational hook-and-line fishing and spearfishing (as opposed to the previously proposed SMR) we remain concerned that the designation will limit recreational and subsistence fishing opportunities in this area, where small vessels, kayaks, and paddle boards are also utilized for these purposes, and will provide no benefits that will improve kelp forest health through the new regulation.

The Santa Cruz region already carries significant protective designations through the Monterey Bay National Marine Sanctuary and multiple existing MPAs. Further restrictions, absent compelling and site-specific scientific justification, would impose disproportionate burdens on our community by further reducing access to marine ecosystems.

4. Inadequate Stakeholder Engagement and Public Outreach

Many residents first became aware of these proposals only when the item appeared on the Fish and Game Commission's agenda. A significant portion of the affected community remains uninformed of the proposed changes to this day. Sound environmental policy requires meaningful community engagement from the outset. That has not occurred here.

Santa Cruz County has a proud tradition of environmental stewardship grounded in balanced, evidence-based decision-making. We remain deeply committed to the health and resilience of our marine ecosystems. It is precisely because of that commitment that we cannot support a regulatory approach that lacks rigorous scientific justification, bypasses meaningful community participation, and imposes burdens on residents without a demonstrated need to do so.

5. Concurrence with Recommendations Proposed by Fish and Wildlife Staff

After reading the recommendations that were provided by Fish and Wildlife staff, we agree with their recommendations that overall the expansion of the Natural Bridges MPA would be unnecessary to achieve the goals of protecting kelp, which occurs mostly near shore, and the original intent of this particular MPA, which was designed to protect intertidal and nearshore habitats while minimizing socio-economic impacts. We also agree that the creation of the Pleasure Point MPA would be too small in nature to provide meaningful ecological impacts and instead impose socioeconomic impacts on residents and visitors to the region.

We respectfully urge the California Fish and Game Commission to deny Petition 2023-33MPA. If there are future efforts to expand MPA's in the Santa Cruz region, we hope to be notified of such changes and would encourage that any changes be driven by the scientific community, and include extensive community outreach and regional stakeholder engagement that the seriousness of these kinds of proposals demand. As a community that is a leader in environmental protection, we are committed to protecting our environment while balancing that with public access and we are always open and available to work with all parties to strike a healthy balance for both activities.

Thank you for your consideration of the Board's position.

Sincerely,

MONICA MARTINEZ, Chair
Santa Cruz County Board of Supervisors

Cc: Senator Laird
Assemblymember Pellerin
Assemblymember Addis
Speaker Rivas
Mayor and City Council, City of Capitola
Mayor and City Council, City of Santa Cruz

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: Public Works Department

Subject: Support for State Budget Request for Public Beach Restoration Program Funding

Recommended Action: Authorize the Mayor to execute a letter supporting the allocation of $200 million in Proposition 4 Climate Bond funding for the Department of Boating and Waterways Public Beach Restoration Program.

Background: The Department of Boating and Waterways (DBW) Public Beach Restoration Program provides funding assistance to local jurisdictions for projects addressing coastal erosion, shoreline retreat, protection of public access, beach nourishment, sand retention, and resilience to sea level rise and storm impacts.

Senator Catherine Blakespear submitted a request to the California Senate Budget Committee seeking an allocation of $200 million in Proposition 4 Climate Bond funding for the DBW Public Beach Restoration Program. The request is intended to support coastal resilience and beach restoration projects statewide.

Currently, no funding has been proposed for the Public Beach Restoration Program in the State budget. The current request seeks to establish funding within the Proposition 4 Climate Bond allocation process for future coastal resilience and beach restoration projects statewide.

Discussion: A broader statewide effort is now underway seeking support from coastal jurisdictions for the funding request.

The City of Capitola has ongoing coastal resilience and shoreline protection needs associated with beach erosion, sea level rise, and storm impacts along the Capitola shoreline. Staff previously pursued funding through the DBW Public Beach Restoration Program for the Cliff Drive Resiliency Project and related coastal adaptation efforts.

Participating agencies have been invited to either sign onto a coalition support letter or submit individual support letters supporting the funding request. Staff recommends submitting a City letter in support of the funding request.

Fiscal Impact: No direct fiscal impact is associated with this action. Future funding through the Public Beach Restoration Program could support coastal resilience and shoreline protection projects within the City.

Attachments:

1. Senator Blakespear Letter Requesting Proposition 4 Funding for the DBW Public Beach Restoration Program

Alignment with 2025-2029 Strategic Plan Priority: Healthy Families, Community, and Environment; Sustainable Infrastructure

Report Prepared By: Jessica Kahn, P.E., Public Works Director

Reviewed By: Julia Gautho, City Clerk

Approved By: Jamie Goldstein, City Manager

CAPITOL OFFICE
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California State Senate

SENATOR
CATHERINE BLAKESPEAR
THIRTY-EIGHTH SENATE DISTRICT

STANDING COMMITTEES
ENVIRONMENTAL QUALITY
CHAIR
BUDGET AND FISCAL REVIEW
GOVERNMENTAL ORGANIZATION
TRANSPORTATION

SUBCOMMITTEES
BUDGET SUBCOMMITTEE #2:
RESOURCES, ENVIRONMENTAL PROTECTION AND ENERGY
LOSSAN RAIL CORRIDOR RESILIENCY
CHAIR

JOINT COMMITTEES
CLIMATE CHANGE POLICIES

March 6, 2026

The Honorable John Laird
Chair, Senate Budget and Fiscal Review Committee
California State Senate
1020 N. Street, Room 502
Sacramento, CA 95814

The Honorable Roger Niello
Vice Chair, Senate Budget and Fiscal Review Committee
California State Senate
1020 N. Street, Room 502
Sacramento, CA 95814

The Honorable Eloise Gomez Reyes
Chair, Senate Budget Subcommittee 2
1020 N. Street, Room 502
Sacramento, CA 95814

Re: Request for $200 Million in Climate Bond Funding for the Department of Boating and Waterways Public Beach Restoration Program

Dear Chair Laird, Vice Chair Niello, and Subcommittee No. 2 Chair Reyes:

I respectfully request that Senate Budget Subcommittee No. 2 allocate $200 million in Climate Bond funding from the coastal resilience categories to the Department of Boating and Waterways (DBW) Public Beach Restoration Program.

California's coastline is one of the State's most valuable natural, economic, and cultural assets, yet it is increasingly threatened by sea level rise, coastal erosion, and the accelerating impacts of climate change. The Public Beach Program is one of the State's most effective tools for delivering long-term, nature-based coastal resilience solutions, including beach nourishment, sand retention, and shoreline protection projects that preserve public access while safeguarding coastal infrastructure and ecosystems.

As voters and the Legislature look toward implementation of recently authorized Climate Bond funding, it is critical that these dollars be rolled out promptly and strategically to projects that are ready to deliver measurable resilience benefits. Public beach restoration projects are inherently long-term in nature, requiring planning, engineering, and permitting well in advance of construction. Dedicated bond funding

will allow DBW to support projects that not only respond to immediate erosion threats but also build adaptive capacity to combat sea level rise over decades.

Each year, cities and counties up and down the California coast submit applications for Public Beach Program funding to address severe erosion, loss of recreational beaches, and threats to public safety and coastal access. However, despite consistent demand and demonstrated need, the program has not received sufficient funding in recent years to advance these critical projects. As a result, many shovel-ready efforts that would protect communities and public assets remain unfunded.

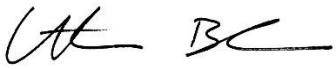
An investment of $200 million in Climate Bond funding would enable DBW to meaningfully address this backlog, support regional equity along the coast, and advance projects that align squarely with the State's climate resilience, public access, and coastal protection goals. These investments will help ensure that California's beaches remain resilient, accessible, and economically viable in the face of rising seas.

This investment is particularly important to the communities I represent along the San Diego County coastline, where beaches are already experiencing chronic erosion, narrowing shorelines, and increased storm impacts. Cities in my district rely on healthy, resilient beaches to protect coastal infrastructure, maintain public access, and support local economies driven by tourism and recreation. Without sustained state investment, these communities face escalating risks from sea level rise that threaten public safety, transportation corridors, and essential coastal assets. Funding the Public Beach Program will directly support long-term resilience solutions for these communities while advancing statewide climate adaptation goals.

For example, in my district, the City of Oceanside's RE:BEACH coastal resilience initiative would benefit from prioritization of Proposition 4 Climate Bond funding through the Public Beach Restoration Program. RE:BEACH is an innovative pilot project designed to address chronic shoreline erosion through sand retention strategies, including artificial headlands and an offshore reef intended to slow nearshore currents and help retain sand along the coastline. By stabilizing beaches, protecting coastal infrastructure, and preserving public access along the San Diego County shoreline, projects like RE:BEACH support the state's goals of strengthening coastal resilience while sustaining the recreational and economic value of California's coast. Furthermore, as Southern California prepares host the Olympics, surfing location Trestles State Beach and San Onofre State Beach would benefit from funding to ensure erosion control and sand projects can confidently compete for funding.

Thank you for your consideration of this request and for your continued leadership on climate resilience and natural resource protection. I look forward to working with you and the Subcommittee to ensure climate bond investments are deployed effectively to protect California's coastline for future generations.

Sincerely,



Catherine Blakespear
California State Senate
District 38

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: Public Works Department

Subject: Escalona Avenue Right-of-Way Vacation, Parcel Creation, and Reservation of Easements

Recommended Action: Adopt a resolution: 1) vacating a portion of the Escalona Avenue right-of-way, approving creation of a parcel, and reserving a public open space easement and a public access easement over the parcel; and 2) authorizing the City Manager to execute and record all documents necessary to effectuate these actions, subject to minor modifications approved by the City Manager, City Engineer, and City Attorney.

Background: The subject area is an unimproved portion of right-of-way located at the end of Escalona Drive on Depot Hill. The area is situated between private parcels, including the Monarch Cove property and an adjacent private residence. The right-of-way has remained undeveloped and is not used for vehicular access. At the terminus of the right-of-way, an informal pathway provides pedestrian access to an ocean overlook. This pathway has functioned as a public access point and is a valued feature of the site.

The property is not needed for current or future street purposes. The site's physical characteristics, constraints, and potential for limited future use have been evaluated, and an opportunity has been identified to formalize the property configuration and consider future disposition while maintaining key public benefits.

To achieve this, staff proposes to vacate the public right-of-way, establish a legal parcel, and reserve easements to preserve these public benefits. A public access easement would formalize and protect continued pedestrian access along the existing pathway to the ocean overlook, and an open space easement would limit future development and maintain the natural character of the site.

Discussion: Staff recommends vacating the unused right-of-way and creating a legal parcel. As part of that action, the City would reserve permanent easements over the parcel to retain ongoing public benefit.

The easements would include:

- Public Access Easement: to preserve pedestrian access along the existing pathway to the ocean overlook and allow related pathway, safety, and maintenance improvements.
- Open Space Easement: to preserve the majority of the parcel in a natural and open condition, limit development potential, and protect scenic and environmental values while allowing low-impact amenities and maintenance activities.

These easements are intended to run with the land and be recorded concurrently with the parcel creation documents.

Following Council action, the parcel map and associated legal documents will be finalized and recorded. Minor refinements to legal descriptions, exhibits, and mapping may occur prior to recordation, subject to review and approval by the City Engineer and City Attorney.

Once the parcel is created, staff anticipates returning to the City Council with a separate action to declare the property surplus and initiate the disposition process in accordance with the Surplus Land Act. Reservation of the easements ensures permanent public benefit regardless of future ownership.

Fiscal Impact: There is no immediate fiscal impact associated with the proposed action. Future disposition of the parcel may result in revenue to the City, subject to compliance with applicable laws and Council direction.

Attachments:

1. Resolution Vacating Right-of-Way and Reserving Easements
2. Right-of-Way/Parcel Exhibit
3. Public Access Easement Deed
4. Open Space Easement Deed

Alignment with 2025-2029 Strategic Plan Priority: Accountable Government; Economic Opportunity; Sustainable Infrastructure

Report Prepared By: Jessica Kahn, Public Works Director

Reviewed By: Julia Gautho, City Clerk; Marc Tran, City Attorney

Approved By: Jamie Goldstein, City Manager

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CAPITOLA VACATING A PORTION OF ESCALONA DRIVE RIGHT-OF-WAY, APPROVING PARCEL CREATION, AND RESERVING OPEN SPACE AND PUBLIC ACCESS EASEMENTS

WHEREAS, the City of Capitola holds an interest in a portion of Escalona Drive right-of-way located at the end of Escalona Drive on Depot Hill; and

WHEREAS, the subject right-of-way is unimproved and not required for present or prospective public street purposes; and

WHEREAS, the City Council desires to vacate the public right-of-way and facilitate creation of a parcel for potential future disposition; and

WHEREAS, it is in the public interest to retain ongoing public benefit through the reservation of easements over the property, including preservation of open space and continued public pedestrian access to the ocean overlook;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Capitola as follows:

Section 1. The City Council hereby vacates the public right-of-way over the area shown on Exhibit A, attached hereto and incorporated herein by reference.

Section 2. The City Council approves the creation of a parcel from the vacated right-of-way area as shown on Exhibit A, subject to final map and legal description approval by the City Engineer.

Section 3. The City Council hereby reserves the following easements over the parcel:

(a) A public open space easement over the area shown on Exhibit B; and
(b) A public access easement over the area shown on Exhibit C.

Said easements shall be in substantially the form presented to the City Council and may be finalized as separate deeds or recordable instruments, subject to minor modifications approved by the City Manager, City Engineer, and City Attorney.

Section 4. The City Manager is hereby authorized to execute and record all documents necessary to effectuate this resolution, including but not limited to the right-of-way vacation, parcel map, easement deeds, legal descriptions, and related instruments, subject to approval as to form by the City Attorney.

Section 5. This resolution shall take effect immediately upon adoption.

I HEREBY CERTIFY that the above and foregoing Resolution was passed and adopted by the City Council of the City of Capitola at its regular meeting held on the 14th day of May 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Margaux Morgan, Mayor

ATTEST:

_____
Julia Gautho, City Clerk

VOLUME _____ OF PARCEL MAPS, PAGE _____

OWNER'S STATEMENT

WE HEREBY STATE THAT WE ARE THE OWNERS OF, OR HAVE SOME RIGHT, TITLE, OR INTEREST IN AND TO, THE REAL PROPERTY INCLUDED WITHIN THE SUBDIVISION SHOWN ON THIS MAP AND THAT WE ARE THE ONLY PERSONS WHOSE CONSENT IS NECESSARY TO PASS A CLEAR TITLE TO SAID PROPERTY, AND WE CONSENT TO THE MAKING OF SAID MAP AND SAID SUBDIVISION AS SHOWN WITHIN THE DISTINCTIVE BORDER LINES, PURSUANT TO SECTION 66436(A) OF THE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA GOVERNMENT CODE.

OWNER: CITY OF CAPITOLA, CALIFORNIA

BY: _____ DATE: _____
XXXXX

BY: _____ DATE: _____
XXXXX

ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF SANTA CRUZ

ON _____, 2026, BEFORE ME,_____

A NOTARY PUBLIC, PERSONALLY APPEARED _____

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(DIES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND (NOTARY'S SIGNATURE) _____
(NOTARY SEAL NOT REQUIRED)

PRINTED NOTARY'S NAME _____

NOTARY'S EXPIRATION DATE _____

COUNTY OF PRINCIPAL _____

PLACE OF BUSINESS _____

ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF SANTA CRUZ

ON _____, 2026, BEFORE ME,_____

A NOTARY PUBLIC, PERSONALLY APPEARED _____

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(DIES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND (NOTARY'S SIGNATURE) _____
(NOTARY SEAL NOT REQUIRED)

PRINTED NOTARY'S NAME _____

NOTARY'S EXPIRATION DATE _____

COUNTY OF PRINCIPAL _____

PLACE OF BUSINESS _____

CITY CLERK'S STATEMENT

IT IS HEREBY ORDERED THAT THE PARCEL MAP OF LANDS OF CITY OF CAPITOLA BE, AND THE SAME IS HEREBY APPROVED, AND THAT NONE OF THE STREETS OR OTHER PARCELS OF LAND SHOWN ON SAID MAP AND THEREON OFFERED FOR DEDICATION ARE ACCEPTED.

I HEREBY STATE THAT THE FOREGOING ORDER WAS ADOPTED BY THE CITY COUNCIL OF THE CITY OF CAPITOLA AT A MEETING OF SAID COUNCIL HELD ON ON THE _____ DAY OF _____ 2026.

_____

CITY CLERK AND EX-OFFICIO CLERK OF THE CITY COUNCIL OF THE CITY OF CAPITOLA, STATE OF CALIFORNIA — DATED

PRELIMINARY

BOWMAN & WILLIAMS CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SOQUEL, CA 95073-2094 (831) 426-3560 LICENSED LAND SURVEYOR NO.		PARCEL MAP OF THE LANDS OF CITY OF CAPITOLA ESCALONA AVENUE SITUATE IN THE CITY OF CAPITOLA COUNTY OF SANTA CRUZ, CALIFORNIA	
SCALE NONE	DRAWN CMM	JOB NO. 29542	SHEET
DATE FEB 11, 2026	CHECKED BFH	INDEX SOQUEL RO 2	1
DESIGN CMM	DWG NAME PARCEL MAP	FILE NO. 29542	OF 3

VOLUME _____ OF PARCEL MAPS, PAGE _____

TAX AND ASSESSMENT CERTIFICATE

I HEREBY STATE THAT THERE ARE NO LIENS FOR UNPAID STATE, COUNTY, MUNICIPAL OR LOCAL TAXES OR SPECIAL ASSESSMENTS COLLECTED AS TAXES AGAINST THE LAND INCLUDED WITHIN THE SUBDIVISION OR AGAINST ANY PART THEREOF EXCEPT TAXES WHICH ARE NOT YET PAYABLE, AND WHICH IT IS HEREBY ESTIMATED WILL NOT EXCEED THE SUM OF $_____ FOR THE YEAR OF 202_ –202_ , AND THAT THIS STATEMENT DOES NOT INCLUDE ANY ASSESSMENTS OF ANY ASSESSMENT DISTRICT THE BONDS OF WHICH HAVE NOT YET BECOME A LIEN AGAINST THE LAND OR ANY PART THEREOF.

_____
DATED

_____
AUDITOR–CONTROLLER OF THE COUNTY OF SANTA CRUZ,
STATE OF CALIFORNIA

BY_____
DEPUTY

STATEMENT OF THE CITY SURVEYOR

I HEREBY STATE THAT I HAVE EXAMINED THIS MAP PURSUANT TO THE GOVERNMENT CODE SECTION 66450 (b)(c) AND PURSUANT TO THE GOVERNMENT CODE SECTION 66450 (a)(4), I AM SATISFIED THAT IT IS TECHNICALLY CORRECT.

_____
JOE L. AKERS, CITY SURVEYOR
CITY OF CAPITOLA, CALIFORNIA
RCE 20372

_____
DATED

CLERK OF THE BOARD OF SUPERVISOR'S STATEMENT

THE CLERK OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SANTA CRUZ DOES HEREBY STATE THAT ALL CERTIFICATES AND SECURITIES REQUIRED UNDER THE PROVISIONS OF SECTION 66492 AND 66493 OF DIVISION 2 OF TITLE 7 OF THE GOVERNMENT CODE HAVE BEEN DULY FILED AND DEPOSITS HAVE BEEN DULY MADE. PURSUANT TO THE AUTHORITY DELEGATED TO ME BY SAID BOARD, I HEREBY APPROVE SAID CERTIFICATES AND SECURITIES ON BEHALF OF THE COUNTY OF SANTA CRUZ.

_____
CLERK OF THE BOARD OF SUPERVISORS

BY: _____
DEPUTY DATE

SURVEYOR'S STATEMENT

THIS MAP WAS PREPARED BE ME OR UNDER MY DIRECTION AND IS BASED ON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF THE CITY OF CAPITOLA ON NOVEMBER 10, 2025. I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED BY CITY COUNCIL OF CAPITOLA , IF ANY.

_____ 03/03/2026
BRYAN F. HAPPEE LICENSED LAND SURVEYOR NO. 8229 DATED

LICENSED LAND SURVEYOR
BRYAN F. HAPPEE
8229
STATE OF CALIFORNIA

PRELIMINARY

CITY ENGINEER'S STATEMENT

I HEREBY STATE THAT I HAVE EXAMINED THIS MAP AND THAT THE SUBDIVISION AS SHOWN HEREON AND THAT ALL PROVISIONS OF THE GOVERNMENT CODE OF THE STATE OF CALIFORNIA SECTION 66450 (a)(1)(2)(3), AS AMENDED, AND OF ANY LOCAL ORDINANCES APPLICABLE AT THE TIME OF APPROVAL BY THE CITY COUNCIL, IF ANY, HAVE BEEN COMPLIED WITH.

_____
JESSICA L. KAHN, CITY ENGINEER
CITY OF CAPITOLA, CALIFORNIA
RCE 81258

COUNTY RECORDER'S STATEMENT

SERIAL NO.

FILED THIS _____ DAY OF _____ , 20_____, AT ____

___ M IN VOLUME _____ OF _____ , AT PAGE _____ ,

AT THE REQUEST OF _____

_____
COUNTY RECORDER OF THE COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA

BY_____

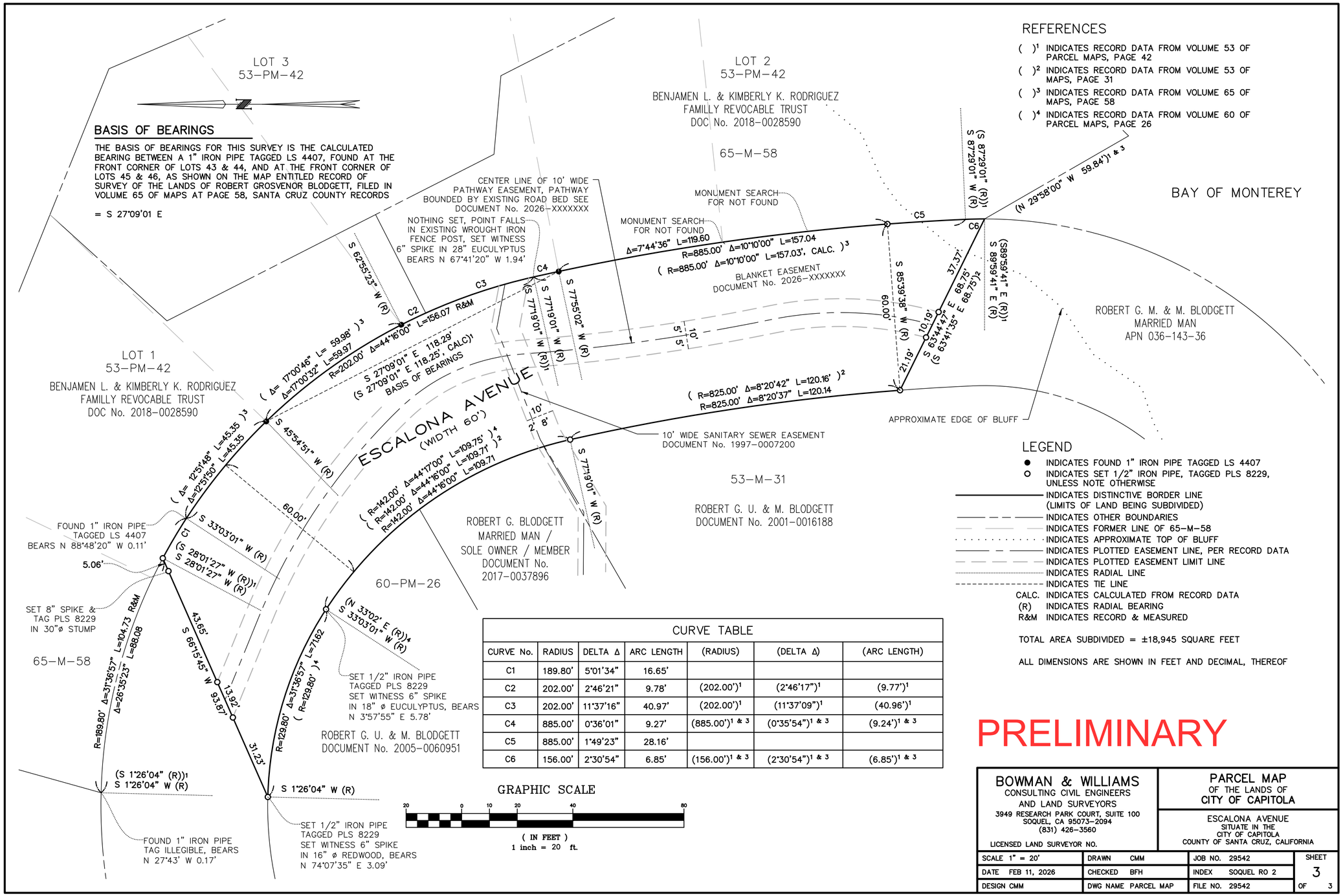
DEPUTY

DATED:

PRELIMINARY

BOWMAN & WILLIAMS CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SOQUEL, CA 95073–2094 (831) 426–3560 LICENSED LAND SURVEYOR NO.		PARCEL MAP OF THE LANDS OF CITY OF CAPITOLA ESCALONA AVENUE SITUATE IN THE CITY OF CAPITOLA COUNTY OF SANTA CRUZ, CALIFORNIA	
SCALE NONE	DRAWN CMM	JOB NO. 29542	SHEET
DATE FEB 11, 2026	CHECKED BFH	INDEX SOQUEL RO 2	2
DESIGN CMM	DWG NAME PARCEL MAP	FILE NO. 29542	OF 3

VOLUME _____ OF PARCEL MAPS, PAGE _____



BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALCULATED BEARING BETWEEN A 1" IRON PIPE TAGGED LS 4407, FOUND AT THE FRONT CORNER OF LOTS 43 & 44, AND AT THE FRONT CORNER OF LOTS 45 & 46, AS SHOWN ON THE MAP ENTITLED RECORD OF SURVEY OF THE LANDS OF ROBERT GROSVENOR BLODGETT, FILED IN VOLUME 65 OF MAPS AT PAGE 58, SANTA CRUZ COUNTY RECORDS

= S 27°09'01 E

REFERENCES

( )1 INDICATES RECORD DATA FROM VOLUME 53 OF PARCEL MAPS, PAGE 42

( )2 INDICATES RECORD DATA FROM VOLUME 53 OF MAPS, PAGE 31

( )3 INDICATES RECORD DATA FROM VOLUME 65 OF MAPS, PAGE 58

( )4 INDICATES RECORD DATA FROM VOLUME 60 OF PARCEL MAPS, PAGE 26

LEGEND

- ● INDICATES FOUND 1" IRON PIPE TAGGED LS 4407
- ○ INDICATES SET 1/2" IRON PIPE, TAGGED PLS 8229, UNLESS NOTE OTHERWISE
- INDICATES DISTINCTIVE BORDER LINE (LIMITS OF LAND BEING SUBDIVIDED)
- INDICATES OTHER BOUNDARIES
- INDICATES FORMER LINE OF 65-M-58
- INDICATES APPROXIMATE TOP OF BLUFF
- INDICATES PLOTTED EASEMENT LINE, PER RECORD DATA
- INDICATES PLOTTED EASEMENT LIMIT LINE
- INDICATES RADIAL LINE
- INDICATES TIE LINE

CALC. INDICATES CALCULATED FROM RECORD DATA
(R) INDICATES RADIAL BEARING
R&M INDICATES RECORD & MEASURED

TOTAL AREA SUBDIVIDED = ±18,945 SQUARE FEET

ALL DIMENSIONS ARE SHOWN IN FEET AND DECIMAL, THEREOF

CURVE TABLE

CURVE No.	RADIUS	DELTA Δ	ARC LENGTH	(RADIUS)	(DELTA Δ)	(ARC LENGTH)
C1	189.80'	5°01'34"	16.65'			
C2	202.00'	2°46'21"	9.78'	(202.00')1	(2°46'17")1	(9.77')1
C3	202.00'	11°37'16"	40.97'	(202.00')1	(11°37'09")1	(40.96')1
C4	885.00'	0°36'01"	9.27'	(885.00')1 & 3	(0°35'54")1 & 3	(9.24')1 & 3
C5	885.00'	1°49'23"	28.16'			
C6	156.00'	2°30'54"	6.85'	(156.00')1 & 3	(2°30'54")1 & 3	(6.85')1 & 3

PRELIMINARY

BOWMAN & WILLIAMS
CONSULTING CIVIL ENGINEERS
AND LAND SURVEYORS
3949 RESEARCH PARK COURT, SUITE 100
SOQUEL, CA 95073-2094
(831) 426-3560
LICENSED LAND SURVEYOR NO.

PARCEL MAP
OF THE LANDS OF
CITY OF CAPITOLA

ESCALONA AVENUE
SITUATE IN THE
CITY OF CAPITOLA
COUNTY OF SANTA CRUZ, CALIFORNIA

SCALE 1" = 20'	DRAWN CMM	JOB NO. 29542	SHEET 3
DATE FEB 11, 2026	CHECKED BFH	INDEX SOQUEL RO 2	
DESIGN CMM	DWG NAME PARCEL MAP	FILE NO. 29542	OF 3

RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO:

City Clerk
City of Capitola
420 Capitola Avenue
Capitola, CA 95010

This document is exempt from recording fees pursuant to California Government Code § 27383

PUBLIC ACCESS EASEMENT DEED

THIS EASEMENT is granted this _____ day of _____, 2026, by the City of Capitola, a California municipal corporation, hereinafter called "GRANTOR," for the benefit of the public.

RECITALS

WHEREAS, is the owner in fee simple of that certain real property located in the City of Capitola, County of Santa Cruz, State of California, described in Exhibit "A" attached hereto and incorporated herein (the "Property"); and

WHEREAS, GRANTOR desires to provide and preserve public pedestrian access over a portion of the Property described in Exhibit "B" (the "Public Access Easement Area"); and

WHEREAS, the Public Access Easement Area provides access to an ocean overlook and has open space, scenic, public interest, passive recreational, and aesthetic values (collectively, "Public Access Values"); and

WHEREAS, GRANTOR intends that the Public Access Easement Area be preserved for public access and enjoyment in perpetuity;

NOW, THEREFORE, GRANTOR hereby grants and conveys for the benefit of the public a non-exclusive public access easement over the Public Access Easement Area of the Property, on the terms and conditions set forth below.

1. PUBLIC ACCESS EASEMENT

a. **Purpose.** It is the purpose of this Public Access Easement to ensure that the Public Access Easement Area will be retained in a manner that allows and protects public pedestrian access and passive recreational use, and to prevent any use that would interfere with the public's access and enjoyment.

b. **Permitted Uses.** The following uses are permitted within the Public Access Easement Area:

i. Public non-motorized access at all reasonable times;
ii. Passive recreational uses, including walking and nature observation;
iii. Maintenance, repair, and improvement of the pathway and related facilities;
iv. Installation of minor improvements such as pathways, bike parking, steps, railings,

benches, signage, landscaping not otherwise prohibited by Section (d), and safety f

c. **Prohibited Uses.** The following uses are prohibited within the Public Access Easement Area:

i. Any obstruction, barrier, gate, fencing, or other improvement, except as reasonably necessary for temporary maintenance, repair, emergency response, or public safety purposes;

ii. Construction or placement of buildings, structures, or improvements inconsistent with the public access purposes of this Easement;

iii. Storage, dumping, camping, open fires, or the accumulation of refuse, debris, hazardous materials, or other materials.

d. **Trail Character and Access Integrity.** The Public Access Easement Area shall be maintained in a manner that preserves safe and functional pedestrian access. No landscaping, or other features shall be installed within the Public Access Easement Area that:

i. Materially narrow the pathway;

ii. Create enclosed, confined, or visually obstructed conditions; or

iii. Otherwise impair visibility, safety, or the public's use and enjoyment of the Easement Area.

e. **Owner Use.** The owner of the Property may use the Public Access Easement Area in any manner that does not interfere with public access or the purposes of this easement.

f. **Maintenance and Access Rights of City.** GRANTOR shall have the right, but not the obligation, to enter the Public Access Easement Area at reasonable times for purposes of inspection, maintenance, repair, and improvement.

g. **Enforcement.** GRANTOR shall have the right to enforce the terms of this easement by any lawful means, including injunctive relief.

h. **Indemnification.** The owner of the Property shall defend, indemnify, and hold harmless the City, its officers, officials, employees, and agents from and against any and all claims, demands, damages, liabilities, losses, costs, and expenses, including reasonable attorneys' fees, arising out of or related to:

i. The condition of the Property; or

ii. The acts or omissions of the owner, its agents, contractors, tenants, or invitees;

i. **Runs with the Land.** This easement shall run with the land and be binding upon all successors and assigns.

j. **Severability.** If any provision of this easement is found invalid, the remainder shall remain in full force and effect.

k. **Amendment.** This easement may be amended only by a written instrument executed by the City and recorded in the Official Records of Santa Cruz County.

IN WITNESS WHEREOF, GRANTOR has executed this Public Access Easement Deed as of the date first written above.

Executed on _____, 2026.

GRANTOR

City of Capitola

By: _____

Its: _____

EXHIBIT "A"

EXHIBIT C

LEGAL DESCRIPTION OF THE CENTERLINE OF A 10.00-FOOT-WIDE PUBLIC PEDESTRIAN TRAIL AND ACCESS EASEMENT OVER A PORTION OF ESCALONA AVENUE (FORMERLY RAILROAD AVENUE);

PARCEL TWO: PRELIMINARY

SITUATE IN THE CITY OF CAPITOLA, COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA AND;

BEING A PORTION OF ESCALONA AVENUE AS SHOWN ON THE PARCEL MAP ENTITLED "PARCEL MAP APPLICATION 93-86, LANDS OF ROBERT G. BLODGETT, FILED FOR RECORD FEBRUARY 13TH, 1995 IN VOLUME 53 OF PARCEL MAPS AT PAGE 42, SANTA CRUZ COUNTY RECORDS, A CITY STREET 60-FEET IN WIDTH; SAID 10.00-FOOT-WIDE PUBLIC PEDESTRIAN TRAIL AND ACCESS EASEMENT LYING 5.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE TO WIT;

COMMENCING AT A FOUND 1" IRON PIPE ON THE NORTHEASTERN SIDELINE OF ESCALONA AVENUE AS SHOWN ON THE ABOVE REFERENCED PARCEL MAP AT THE WESTERN TERMINUS OF THE COURSE SHOWN AS "BASIS OF BEARINGS NORTH 27°14'42" WEST (217.17')" FROM WHICH POINT, A RADIAL LINE TO THE CENTER OF SAID RIGHT OF WAY HAS A BEARING OF (L3) SOUTH 46°03'26" WEST; AND FROM WHICH POINT ANOTHER FOUND 1-INCH IRON PIPE TAGGED LS4407 AS SHOWN ON THE ABOVE REFERENCED PARCEL MAP BEARS SOUTH 27°08'47" EAST 118.27 FEET DISTANT;

THENCE (C2) FROM SAID POINT OF COMMENCEMENT, NORTHWESTERLY ALONG THE NORTHEASTERN SIDELINE OF ESCALONA AVENUE AS SHOWN ON SAID ABOVE REFERENCED PARCEL MAP, A RADIAL LINE TO THE CENTER OF SAID RIGHT-OF-WAY FROM SAID NORTHEASTERN SIDELINE BEARS (L1) SOUTH 28°01'27" WEST; THENCE ALONG SAID SIDELINE, ON A CURVE TO THE LEFT, HAVING A RADIUS OF 202.00 FEET, THROUGH A CENTRAL ANGLE OF 12°51'50" AN ARC DISTANCE OF 45.35 FEET, TO A POINT OF COMPOUND CURVATURE; THENCE (C1) ON A CURVE TO THE LEFT, HAVING A RADIUS OF 189.80 FEET, THROUGH A CENTRAL ANGLE OF 5°01'34" AN ARC DISTANCE OF 16.65 FEET; THENCE LEAVING SAID SIDELINE OF ESCALONA AVENUE AND ACROSS ESCALONA AVENUE, SOUTH 66°15'45" WEST 55.68 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION

THENCE FROM SAID TRUE POINT OF BEGINNING (L15) SOUTH 67°50'00" EAST 32.15 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE (C11) ALONG SAID CURVE, HAVING A RADIUS OF 220.00 FEET, THROUGH A CENTRAL ANGLE OF 23°44'08", AN ARC DISTANCE OF 91.14 FEET TO A POINT OF COMPOUND CURVATURE; THENCE (C10) ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 70.50 FEET, THROUGH A CENTRAL ANGLE OF 39°57'26", AN ARC DISTANCE OF 49.17 FEET TO THE BEGINNING OF A REVERSE CURVE; THENCE (C9) ON A CURVE TO THE LEFT, HAVING A RADIUS OF 694 FEET, THROUGH A CENTRAL ANGLE OF 7°27'52", AN ARC DISTANCE OF 90.41 FEET TO THE BEGINNING OF A REVERSE CURVE; THENCE (C8) ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 126.00 FEET, THROUGH A CENTRAL ANGLE OF 26°45'32" AN ARC DISTANCE OF 58.85 FEET, A LITTLE MORE OR LESS TO THE EDGE OF THE BEACH BLUFF;

CONTAINING 3,217 SQ.FT. OF LAND, A LITTLE MORE OR LESS

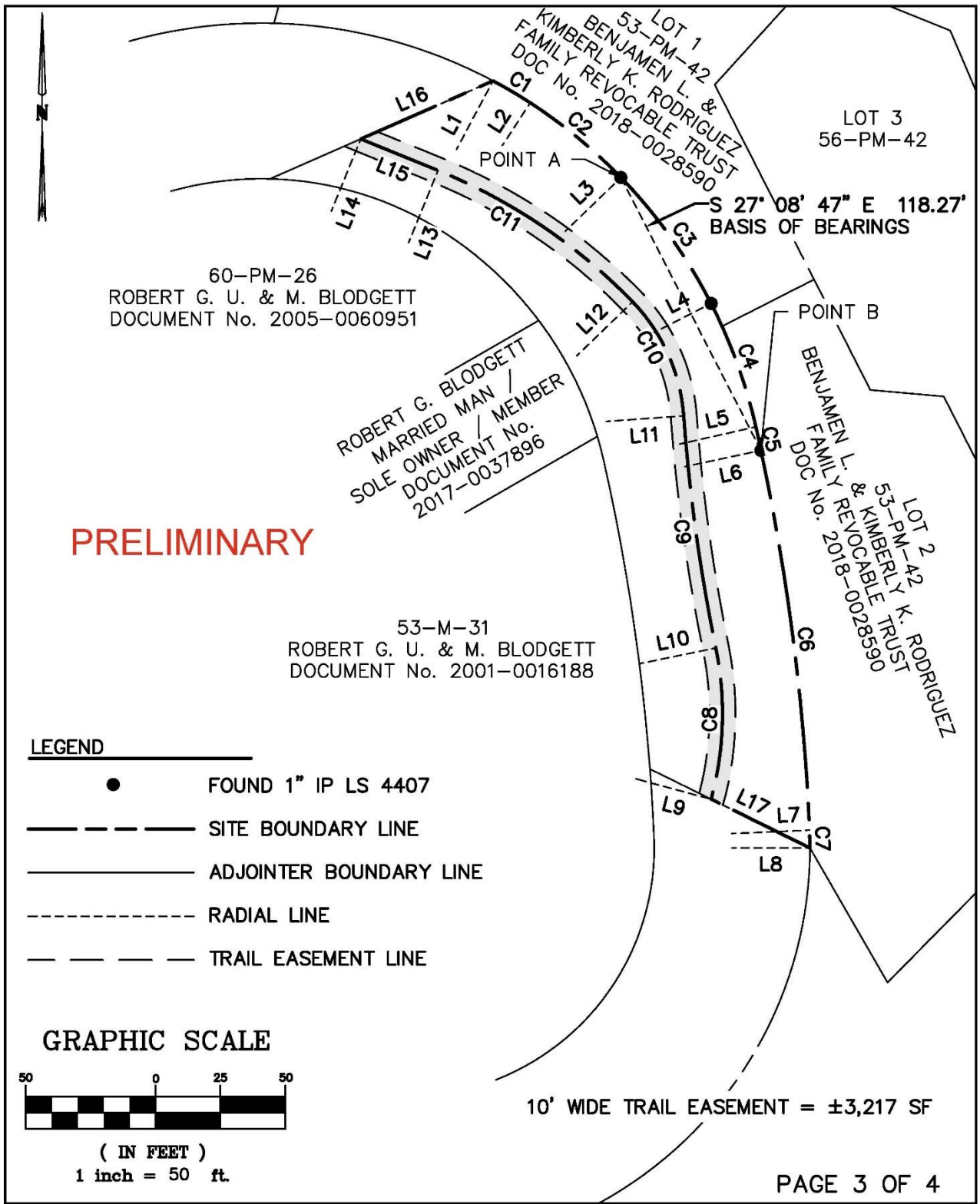
END OF DESCRIPTION

EXHIBIT C

BRYAN F. HAPPEE PLS 8229

File No. 27852
Drawn By BFH
Checked By CMM
February 9, 2026
Escalona Ave (PTN)

EXHIBIT "B"



BOWMAN & WILLIAMS CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS 3949 RESEARCH PARK CT., STE. 100, SOQUEL, CA 95073 (831) 426-3560	SCALE 1" = 50'	JOB NO. 29542
	DATE DECEMBER 30, 2025	DWG NAME PLAT 2_TRAIL
	DRAWN JJG	EXHIBIT B, SHEET X OF X

LINE TABLE		
LINE No.	BEARING	LENGTH
L15	S 67°50'00" E	32.15
L16	S 66°15'45" W	55.68
L17	S 63°45'00" E	42.46

RADIAL TABLE	
LINE No.	BEARING
L1	S 28°01'27" W
L2	S 33°03'01" W
L3	S 46°03'26" W
L4	S 62°55'23" W
L5	S 77°19'01" W
L6	S 77°55'02" W
L7	S 87°29'01" W
L8	S 89°59'55" W
L9	S 74°51'10" E
L10	S 78°23'41" W
L11	S 85°51'33" W
L12	S 45°54'07" W
L13	S 22°10'00" W
L14	S 22°10'00" W
L15	S 67°50'00" E
L16	S 66°15'45" W
L17	S 63°45'00" E

CURVE TABLE			
CURVE No.	RADIUS	DELTA Δ	ARC LENGTH
C1	189.80'	5°01'34"	16.65'
C2	202.00'	12°51'50"	45.35'
C3	202.00'	17°00'32"	59.97'
C4	202.00'	11°37'16"	40.97'
C5	885.00'	0°36'01"	9.27'
C6	885.00'	7°44'36"	119.60'
C7	156.00'	2°30'54"	6.85'
C8	126.00'	26°45'32"	58.85'
C9	694.00'	7°27'52"	90.41'
C10	70.50'	39°57'26"	49.17'
C11	220.00'	23°44'08"	91.14'

BASIS OF BEARINGS

BEARINGS ARE BASED BETWEEN A 1" IRON PIPE TAGGED LS 4407, FOUND AT THE FRONT CORNER OF LOTS 43 & 44 LABELED POINT A ON THE PLAT, AND AT THE FRONT CORNER OF LOTS 45 & 46 LABELED POINT B ON THE PLAT, AS SHOWN ON THE MAP ENTITLED RECORD OF SURVEY OF THE LANDS OF ROBERT GROSVENOR BLODGETT, FILED IN VOL 65 OF MAPS AT PAGE 58, SANTA CRUZ COUNTY RECORDS.

= S 27°09'01" E

PRELIMINARY

PAGE 4 OF 4

BOWMAN & WILLIAMS
CONSULTING CIVIL ENGINEERS
AND LAND SURVEYORS
3949 RESEARCH PARK CT., STE. 100, SOQUEL, CA 95073
(831) 426-3560

SCALE 1" = 50'	JOB NO. 29542
DATE DECEMBER 30, 2025	DWG NAME PLAT 2_TRAIL
DRAWN JJG	EXHIBIT B, SHEET X OF X

RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO:

City Clerk
City of Capitola
420 Capitola Avenue
Capitola, CA 95010

This document is exempt from recording fees pursuant to California Government Code § 27383

OPEN SPACE EASEMENT DEED

THIS EASEMENT is granted this _____ day of _____, 2026, by the City of Capitola, a California municipal corporation, hereinafter called "GRANTOR," for the benefit of the public.

RECITALS

WHEREAS, is the owner in fee simple of that certain real property located in the City of Capitola, County of Santa Cruz, State of California, described in Exhibit "A" attached hereto and incorporated herein (the "Property"); and

WHEREAS, GRANTOR desires to preserve the Property in a natural, open condition, protect scenic and environmental values, and limit development; and

WHEREAS, GRANTOR further desires to allow for limited, low-impact improvements and passive recreational uses consistent with preservation of the Property;

WHEREAS, GRANTOR intends that the Easement Area be preserved in perpetuity for open space purposes;

NOW, THEREFORE, GRANTOR hereby grants and conveys for the benefit of the public a **non-exclusive** open space easement over the real property described in Exhibit "B" attached hereto and incorporated herein (the "Easement Area"), on the terms and conditions set forth below.

1. OPEN SPACE EASEMENT

a. **Purpose.** It is the purpose of this Open Space Easement to ensure that the Easement Area will be retained in a natural, open condition; to protect scenic and environmental values; to

limit development; and to allow passive recreational uses and limited improvements consistent with these purposes.

b. **Permitted Uses.** The following uses are permitted within the Easement Area:
   i. Passive recreational uses, including walking and nature observation;
   ii. Minor improvements such as benches, overlooks, trails, pathways, signage, and similar low-impact amenities;
   iii. Improvements and activities necessary to support public access;
   iv. Maintenance, restoration, and fire safety activities;
   v. Removal or management of vegetation, including non-native or invasive species, in accordance with applicable City permitting requirements.

c. **Prohibited Uses.** The following uses are prohibited within the Easement Area:
   i. Construction or placement of buildings or structures, except as expressly permitted in Section 1(b);
   ii. Commercial or industrial uses;
   iii. Agricultural use or keeping of livestock;
   iv. Dumping, storage, or disposal of materials;
   v. Grading, paving, or alteration of the natural terrain except as necessary for permitted uses.

d. **Vegetation.** Removal or disturbance of vegetation shall be prohibited except for maintenance, restoration, fire safety purposes, removal of non-native or invasive species, or as otherwise approved by the City through its standard permitting processes.

e. **Fencing.** New fencing shall be limited to 36” in height and designed to maintain visual openness and shall not include solid walls or barriers.

f. **Subdivision.** Subdivision of the Property is prohibited, except for lot line adjustments that do not create additional development potential and remain consistent with the purposes of this easement.

g. **Owner Use.** The owner of the Property may use the Easement Area in any manner that does not unreasonably interfere with the purposes of this easement.

h. **General Restriction.** Any use of the Easement Area inconsistent with the purposes of this easement is prohibited.

i. **Enforcement.** GRANTOR shall have the right to enforce the terms of this easement by any lawful means, including injunctive relief.

j. **Indemnification.** The owner of the Property shall defend, indemnify, and hold harmless the City, its officers, officials, employees, and agents from and against any and all claims, demands, damages, liabilities, losses, costs, and expenses, including reasonable attorneys’ fees, arising out of or related to:
   i. the condition of the Property; or

ii. the acts or omissions of the owner, its agents, contractors, tenants, or invitees;

k. **Runs with the Land.** This easement shall run with the land and be binding upon all successors and assigns.

l. **Severability.** If any provision of this easement is found invalid, the remainder shall remain in full force and effect.

m. **Amendment.** This easement may be amended only by a written instrument executed by the City and recorded in the Official Records of Santa Cruz County.

IN WITNESS WHEREOF, GRANTOR has executed this Public Access Easement Deed as of the date first written above.

Executed on _____, 2026.

GRANTOR

City of Capitola

By: _____

Its: _____

EXHIBIT "A"

EXHIBIT B

PRELIMINARY

LEGAL DESCRIPTION OF A PORTION OF ESCALONA AVENUE(FORMERLY RAILROAD AVENUE) FOR AN OPEN SPACE EASEMENT

PARCEL ONE:

SITUATE IN THE CITY OF CAPITOLA, COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA AND;

BEING A PORTION OF ESCALONA AVENUE AS SHOWN ON THE PARCEL MAP ENTITLED "PARCEL MAP APPLICATION 93-86, LANDS OF ROBERT G. BLODGETT, FILED FOR RECORD FEBRUARY 13TH, 1995 IN VOLUME 53 OF PARCEL MAPS AT PAGE 42, SANTA CRUZ COUNTY RECORDS, A CITY STREET 60-FEET IN WIDTH,AND BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS TO WIT:

BEGINNING AT A STATION IN THE NORTHEASTERN SIDELINE OF ESCALONA AVENUE (FORMERLY RAILROAD AVENUE), FROM WHICH POINT, A RADIAL LINE TO THE CENTER OF SAID RIGHT-OF-WAY HAS A BEARING OF (L1) SOUTH 28°01'27" WEST;

THENCE FROM SAID POINT OF BEGINNING, ALONG THE NORTHEASTERN SIDELINE OF SAID ESCALONA AVENUE, ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 189.80 FEET THROUGH A CENTRAL ANGLE OF 5°01'34", AN ARC DISTANCE OF 16.65 FEET TO A POINT OF COMPOUND CURVATURE; SAID POINT OF COMPOUND CURVATURE BEING SHOWN ON THE ABOVE REFERENCED PARCEL MAP, IDENTIFIED BY A RADIAL BEARING TO THE CENTER OF SAID CURVE OF SOUTH 33°03'01" WEST; THENCE (C2) CONTINUING ALONG SAID SIDELINE OF ESCALONA AVENUE, ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 202.00 FEET, THROUGH A CENTRAL ANGLE OF 12°51'50", AN ARC DISTANCE OF 45.35 FEET, TO A FOUND 1-INCH IRON PIPE TAGGED LS 4407 AS SHOWN ON SAID ABOVE REFERENCED PARCEL MAP; THENCE (C3) CONTINUING ALONG SAID SIDELINE AND CURVE TO THE RIGHT, HAVING A RADIUS OF 202.00 FEET, THROUGH A CENTRAL ANGLE OF 17°00'32" AN ARC DISTANCE OF 59.97 FEET (59.98 FEET ON SAID PARCEL MAP) TO A FOUND 1-INCH IRON PIPE TAGGED LS4407 AS SHOWN ON SAID PARCEL MAP AND A POINT OF COMPOUND CURVATURE ON SAID SIDELINE OF ESCALONA AVENUE; THENCE (C4) CONINUING ALONG SAID SIDELINE OF ESCALONA AVENUE, ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 202.00 FEET, THROUGH A CENTRAL ANGLE OF 14°23'38" AN ARC DISTANCE OF 50.75 FEET TO A POINT OF COMPOUND CURVATURE; THENCE (C5) CONTINUING ALONG SAID SIDELINE OF ESCALONA AVENUE, (C5) ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 885.00 FEET, THROUGH A CENTRAL ANGLE OF 0°36'01", AN ARC DISTANCE OF 9.27 FEET (9.24 ON SAID PARCEL MAP) TO A FOUND 1 INCH IRON PIPE TAGGED LS4407; THENCE CONTINUING ALONG SAID SIDELINE OF ESCALONA AVENUE, (C6) ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 885.00 FEET, THROUGH A CENTRAL ANGLE OF 7°44'36" AN ARC DISTANCE OF 119.60 FEET TO A POINT OF COMPOUND CURVATURE; THENCE (C7) ON A CURVE TO THE RIGHT, HAVING A RADIUS OF 156.00 FEET, THROUGH A CENTRAL ANGLE OF 2°30'54" AN ARC DISTANCE OF 6.85 FEET; THENCE LEAVING SAID SIDLEINE OF ESCALONA AVENUE, NORTHWESTERLY ACROSS SAID ESCALONA AVENUE NORTH 63°44'47" WEST 68.75 FEET, A LITTLE MORE OR LESS TO A POINT ON THE WESTERN SIDELINE OF SAID ESCALONA AVENUE; A RADIAL BEARING TO THE CENTER OF SAID SIDELINE BEARS (L10) SOUTH 85°39'38" WEST; THENCE (C8) NORTHWESTERLY ALONG SAID WESTERN SIDELINE OF ESCALONA AVENUE ON A CURVE TO THE LEFT, HAVING A RADIUS OF 825.00 FEET, THROUGH A CENTRAL ANGLE OF 8°20'37", AN ARC DISTANCE OF 120.14 FEET TO A POINT OF COMPOUND CURVATURE; THENCE (C9) ON A CURVE TO THE LEFT, HAVING A RADIUS OF 142.00 FEET, THROUGH A

EXHIBIT B

CENTRAL ANGLE OF 44°16'00", AN ARC DISTANCE OF 109.71 FEET TO A POINT OF COMPOUND CURVATURE; THENCE (C10) ON A CURVE OT THE LEFT, HAVING A RADIUS OF 129.80 FEET, THROUGH A CENTRAL ANGLE OF 31°36'57" AN ARC DISTANCE OF 71.62 FEET; THENCE LEAVING SAID SIDELINE OF ESCALONA AVENUE, AND NORTHEASTERLY ACROSS SAID AVENUE, NORTH 66°15'45" EAST 93.87 FEET, A LITTLE MORE OR LESS TO THE POINT OF BEGINNING;

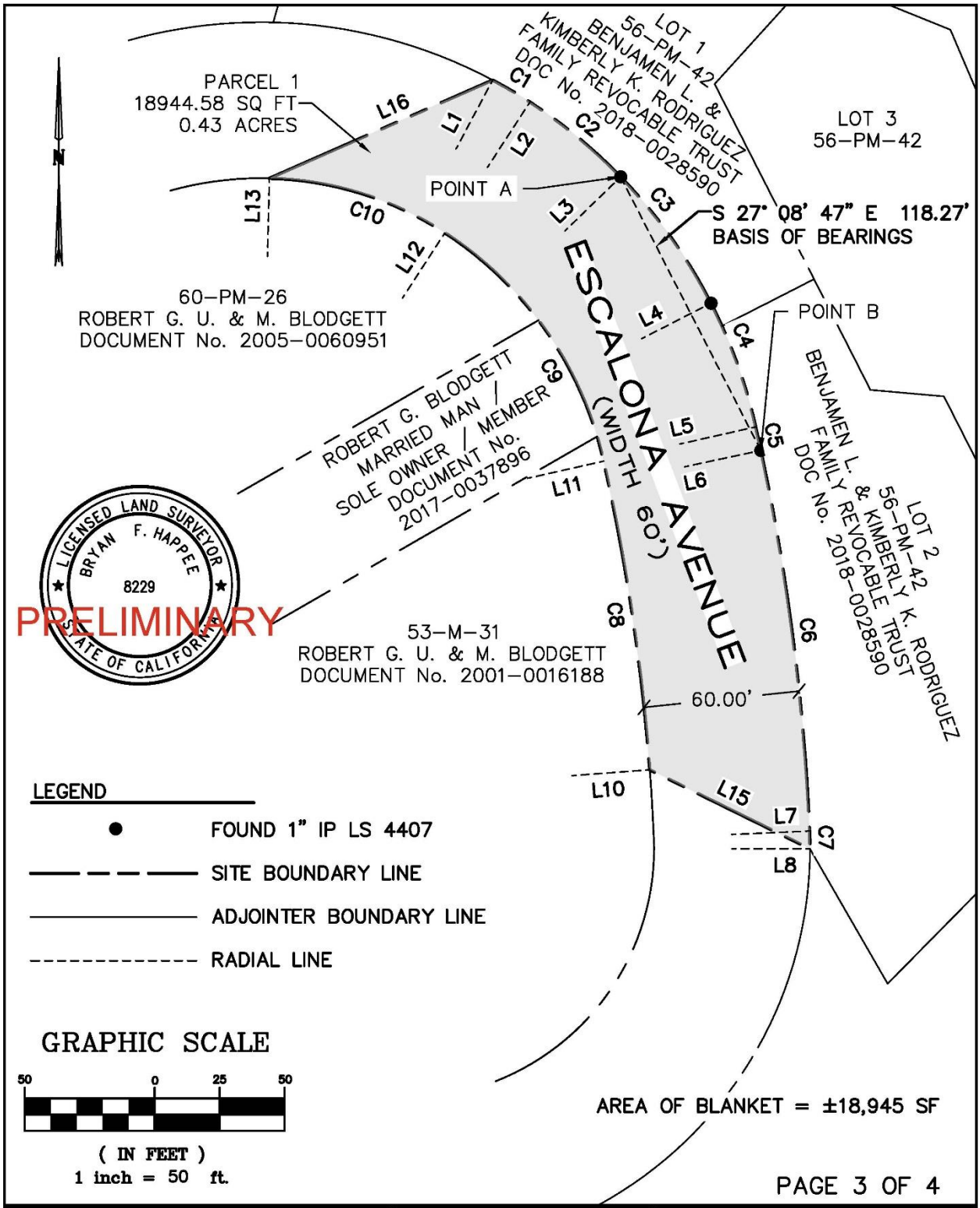
CONTAINING 18,945 SQ.FT. OF LAND, A LITTLE MORE OR LESS

ENF OF DESCRIPTION

File No. 27852
Drawn By BFH
Checked By CMM
February 9, 2026
Escalona Ave (PTN)

BRYAN F. HAPPEE PLS 8229

EXHIBIT "B"



BOWMAN & WILLIAMS CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS 3949 RESEARCH PARK CT., STE. 100, SOQUEL, CA 95073 (831) 426-3560	SCALE 1" = 50'	JOB NO. 29542
	DATE DECEMBER 30, 2025	DWG NAME PLAT 1_BLANKET
	DRAWN JJG	EXHIBIT B, SHEET X OF X

LINE TABLE		
LINE No.	BEARING	DISTANCE
L15	N 63°44'47" W	68.75
L16	N 66°15'45" E	93.87

RADIAL TABLE	
LINE No.	BEARING
L1	S 28°01'27" W
L2	S 33°03'01" W
L3	S 45°54'51" W
L4	S 62°55'23" W
L5	S 77°19'01" W
L6	S 77°55'02" W
L7	S 87°29'01" W
L8	S 89°59'55" W
L10	S 85°39'38" W
L11	S 77°19'01" W
L12	S 33°03'01" W
L13	S 1°26'04" W

CURVE TABLE			
CURVE No.	RADIUS	DELTA Δ	ARC LENGTH
C1	189.80'	5°01'34"	16.65'
C2	202.00'	12°51'50"	45.35'
C3	202.00'	17°00'32"	59.97'
C4	202.00'	14°23'38"	50.75'
C5	885.00'	0°36'01"	9.27'
C6	885.00'	7°44'36"	119.60'
C7	156.00'	2°30'54"	6.85'
C8	825.00'	8°20'37"	120.14'
C9	142.00'	44°16'00"	109.71'
C10	129.80'	31°36'57"	71.62'

BASIS OF BEARINGS

BEARINGS ARE BASED BETWEEN A 1" IRON PIPE TAGGED LS 4407, FOUND AT THE FRONT CORNER OF LOTS 43 & 44 LABELED POINT A ON THE PLAT, AND AT THE FRONT CORNER OF LOTS 45 & 46 LABELED POINT B ON THE PLAT, AS SHOWN ON THE MAP ENTITLED RECORD OF SURVEY OF THE LANDS OF ROBERT GROSVENOR BLODGETT, FILED IN VOL 65 OF MAPS AT PAGE 58, SANTA CRUZ COUNTY RECORDS.

= S 27°09'01" E

PRELIMINARY

PAGE 4 OF 4

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AND LAND SURVEYORS
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(831) 426-3560

SCALE 1" = 50'	JOB NO. 29542
DATE DECEMBER 30, 2025	DWG NAME PLAT 1_BLANKET
DRAWN JJG	EXHIBIT B, SHEET X OF X

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: Public Works Department

Subject: Local Roadway Safety Plan and Long-Term Roadway Safety Goal

Recommended Action: 1) Adopt the City of Capitola Local Roadway Safety Plan; and 2) adopt a resolution establishing a long-term goal of eliminating traffic fatalities and serious injuries on Capitola roadways by 2045, consistent with Safe System and Vision Zero principles.

Background: The City initiated preparation of a Local Roadway Safety Plan (LRSP) to provide a data-driven framework for evaluating traffic safety conditions, identifying crash trends, and developing strategies to reduce fatal and serious injury collisions. LRSPs are encouraged by the Federal Highway Administration (FHWA) and Caltrans and are commonly used by local agencies to strengthen eligibility for transportation safety funding programs, including the Highway Safety Improvement Program (HSIP) and the Safe Streets and Roads for All (SS4A) program administered by the U.S. Department of Transportation.

On March 26, 2026, the City Council received an informational presentation on the draft LRSP and provided feedback for refinement before final adoption. Staff incorporated Council comments and finalized the plan for consideration.

Discussion: The LRSP evaluates five years of collision data, roadway characteristics, and community input to better understand safety conditions throughout Capitola. The plan identifies trends involving vulnerable roadway users, driver behavior, intersection conflicts, and corridor conditions, and recommends both location-specific and systemwide strategies intended to reduce collision severity and frequency.

The LRSP is a planning document and does not approve or commit the City to the construction of any specific capital improvement projects. Rather, it provides a framework to help guide future decision-making, prioritize investments, and support competitive grant applications. Many of the strategies identified may also be incorporated incrementally through routine maintenance, resurfacing, striping, operational changes, and future capital projects as opportunities arise.

Following Council direction at the March meeting, the final LRSP has been refined to include:

- Additional context regarding traffic enforcement and citation trends through a supplemental Police Department memorandum (Attachment 2), noting year-to-year variation rather than a consistent long-term trend;
- Clarification that the case study locations are illustrative examples intended to demonstrate how countermeasures may be applied and do not represent funded, prioritized, or programmed projects;
- Additional high-level references to signal-related improvements that may better accommodate bicyclists, including bicycle detection, signal timing, and signal operations considerations;
- Clarification that aggressive driving behavior may be influenced by congestion, roadway conditions, construction activity, detours, or temporary disruptions, consistent with community input and observed roadway conditions, without identifying a singular causal relationship;
- Clarification that many low-cost and systemwide countermeasures may be implemented incrementally through routine maintenance activities, resurfacing projects, striping improvements, operational changes, and future capital projects; and
- Additional language supporting consideration of a long-term City policy goal to eliminate traffic fatalities and serious injuries consistent with Vision Zero principles.

In addition to the adoption of the LRSP, staff recommends the adoption of a resolution (Attachment 3) establishing a long-term roadway safety goal of eliminating traffic fatalities and serious injuries by 2045. The 2045 timeframe aligns with common long-term planning horizons used in roadway safety, Vision Zero, and broader statewide policy efforts, and provides a realistic timeframe to implement systemic safety improvements. Adoption of a formal safety policy is consistent with national Safe System and Vision Zero practices and is expected to strengthen the City's competitiveness for future SS4A and other grant funding opportunities.

The proposed resolution does not create new regulatory requirements or commit the City to any specific expenditure. It establishes a policy direction that future transportation planning, capital improvements, education, enforcement, and grant pursuits should support safer travel for all roadway users, with near-term progress guided by the LRSP and future implementation efforts.

Adoption of the LRSP makes certain projects potentially eligible for grant funding. The identified corridors and intersections were identified based on documented collision history, severe injury and pedestrian-related crashes, multimodal conflict areas, and recurring safety concerns identified through the LRSP process. Potential project locations include:

- Bay Avenue corridor and intersection safety improvements between Highway 1 and Capitola Avenue;
- 41st Avenue corridor safety improvements between Gross Road and Clares Street;
- Monterey Avenue and surrounding neighborhood streets serving access to New Brighton Middle School;
- Citywide systemic intersection safety improvements focused on pedestrian visibility, crossing safety, lighting, signage and striping upgrades, traffic control improvements, and related low-cost systemic safety enhancements at priority locations identified through the LRSP process.

On May 21, the Council will be discussing the 5-Year Capital Improvement Program. Priorities for future roadway safety improvement grants can be identified at that time.

Fiscal Impact: Preparation of the LRSP was funded through the adopted Public Works budget. Adoption of the LRSP and resolution does not commit the City to specific construction expenditures. The actions are expected to improve eligibility and competitiveness for external grant funding for future safety improvements.

Attachments:

1. Final Local Roadway Safety Plan
2. Police Department Enforcement and Citation Trends Memorandum
3. Resolution Establishing a Long-Term Roadway Safety Goal

Alignment with 2025-2029 Strategic Plan Priority: Community Safety; Healthy Families, Community, and Environment; Sustainable Infrastructure

Report Prepared By: Jessica Kahn, Public Works Director

Reviewed By: Julia Gautho, City Clerk; Marc Tran, City Attorney

Approved By: Jamie Goldstein, City Manager

City of Capitola

LOCAL ROADWAY SAFETY PLAN

Kimley»Horn
Expect More. Experience Better.

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FINAL REPORT

CITY OF CAPITOLA
LOCAL ROADWAY SAFETY PLAN (LRSP)

Prepared for:

City of Capitola
Engineering Department
420 Capitola Avenue,
Capitola, California 95010
(831) 475-7300

Prepared by:

Kimley-Horn and Associates, Inc.
10 Almaden Blvd, Suite 1250
San Jose, California 95113
(669) 800-4130

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

May 2026

ACKNOWLEDGEMENTS

The City of Capitola's employees and partners were instrumental in the development, review, and refinement of this LRSP. The City of Capitola and Kimley-Horn would like to express their appreciation to the supporting staff and partners for their participation and contributions.

City of Capitola Staff

Jessica Kahn (Director)

Kailash Mozumder (Project Manager)

Matt Kotila (Operation Maintenance Supervisor)

Sarah Ryan (Chief of Police)

Pedro Zammora (Police Captain)

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Robert Paderna, PE, RSP$_1$

Zachary Ramalingam, EIT

Shahrzad Rahgozar

External Agency Stakeholders

Matt Miller (Director – Mobility Transportation (Ecology Action)

Paula Bradley (SCCRTC Bicycle Advisory Committee)

Claudia Romero (Santa Cruz County, Health Program Specialist)

Marin Rocha (Santa Cruz County, Health Program Specialist)

Ernst Bauen (Division Chief- Operations, Central Fire District)

Bent Paulson (Capitola Signal Maintenance Contractor (Bear Electric)

STATUTORY NOTICE

23 U.S.C. § 409: US Code - Section 409: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway- highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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List of Acronyms and Terminology

AASHTO	American Association of State Highway and Transportation Officials
ABAG	Association of Bay Area Governments
ATP	Active Transportation Program
ARIDE	Advance Roadside Impaired Enforcement
CA MUTCD	California Manual on Uniform Traffic Control Devices
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CEJST	Climate and Economic Justice Screening Tool
CMAQ	Congestion Mitigation and Air Quality
CMF	Crash Modification Factor
CRF	Crash Reduction Factor
CTC	California Transportation Commission
DAC	Disadvantaged Communities
DEV	Daily Entering Volume
DRE	Drug Recognition Expert
EO	Executive Order
EPDO	Equivalent Property Damage Only
FAST	Fixing America's Surface Transportation
FHWA	Federal Highway Administration
GIS	Geographic Information System
HSIP	Highway Safety Improvement Program
HFST	High Friction Surface Treatment
HSM	Highway Safety Manual
IIP	Interregional Improvement Program
ITIP	Interregional Transportation Improvement Program
KSI	Fatal and Severe Injury Crashes
LRSP	Local Roadway Safety Plan
LRSM	Local Roadway Safety Manual

MEV	Million Entering Vehicles
NEV	Neighborhood Electric Vehicle
NHTSA	National Highway Traffic Safety Administration
PD	Police Department
PDO	Property Damage Only
RRFB	Rectangular Rapid Flashing Beacon
RIP	Regional Improvement Program
RSTP	Rural Surface Transportation Program
RTIP	Regional Transportation Improvement Program
R/W	Right-of-Way
SARC	School Accountability Report Card
SB	Senate Bill
SHSP	Strategic Highway Safety Plan
SRTS	Safe Routes to School
SS4A	Safe Streets and Roads for All
STIP	State Transportation Improvement Program
SWITRS	Statewide Integrated Traffic Records System
TCAS	Traffic Collision Analysis System (Draft)
TDM	Transportation Demand Model
TIMS	Transportation Injury Mapping System
US ACS	United States Census American Community Survey
VMT	Vehicle Miles Traveled

1. INTRODUCTION

This Local Roadway Safety Plan (LRSP) identifies factors associated with the most prevalent vehicle crashes occurring in the City of Capitola and proposes matching countermeasures to reduce or eliminate those crashes. This report identifies emphasis areas to inform and guide further safety evaluation of the City's transportation network. The emphasis areas include the type of crash, certain locations, and notable relationships between current efforts and crash history. The LRSP analyzes crash data on an aggregate basis as well as at specific locations to identify high-crash locations, high-risk locations, and city-wide trends and patterns. The analysis of crash history throughout the City's transportation network allows for the following opportunities:

- Identify factors in the transportation network that inhibit safety for roadway users of all modes of travel.
- Improve safety at high-crash locations and locations which experience a disproportionately high number of fatal and severe injury crashes.
- Develop safety measures aligning with the California Strategic Highway Safety Plan (SHSP) Five Es of safety: Engineering, Enforcement, Education, Emergency Services, and Emerging Technologies, to encourage safer driver behavior and more favorable severity outcomes.

The process and analysis performed for the City's LRSP includes a summary of vision and goals, crash history analysis, the establishment of emphasis areas, a demographic and socioeconomic assessment, a countermeasure toolbox, and a set of policy recommendations. The information compiled will provide a foundation for decision making and prioritization of safety countermeasures and projects that enhance safety equitably for all modes of travel within the City. The expanded implementation section will provide guidance to the City on applying for grant funding from various safety programs.

The intent of the LRSP is to:

- Create a greater awareness of road safety and risks
- Reduce the number of fatal and severe-injury crashes
- Develop lasting partnerships
- Provide support for grant funding opportunities
- Aid in the prioritization of investments in traffic safety

1.1. Document Organization

The LRSP is organized into the following sections:

- **Section 1** presents an introduction to the LRSP.
- **Section 2** presents the vision, goal, and objectives for the LRSP.
- **Section 3** presents the LRSP development process including guidance documents and analysis techniques.
- **Section 4** presents the community engagement.
- **Section 5** reviews City planning documents and policies.
- **Section 6** contains the LRSP data sources.
- **Section 7** provides a summary of safety trends.
- **Section 8** presents demographic and socioeconomic assessment.

- **Section 9** includes recommended engineering and non-infrastructure countermeasures for case-study locations.
- **Section 10** summarizes the evaluation and implementation of the safety countermeasures.
- **Section 11** identifies next steps.
- **Appendices**

2. VISION, GOAL, AND OBJECTIVES

The Capitola LRSP evaluates the transportation network as well as non-infrastructure programs and policies within the City. Mitigation measures are evaluated using criteria to analyze the safety of road users (drivers and passengers, bicyclists, and pedestrians), the interaction of modes, influences on the roadway network from adjacent municipalities, and the potential benefits of safety countermeasures. This effort utilizes historical data to identify trends and develop a toolbox of countermeasures applicable to conditions in the City that can be used for proactive identification and implementation of opportunities, without relying solely on a reaction and response to crashes as they occur.

The Federal Highway Administration (FHWA) maintains a list of Proven Safety Countermeasures. The list currently has 20 Proven Safety Countermeasures, and LRSPs are included on the list of 20 Proven Safety Countermeasures. Implementation of LRSPs has improved safety in local jurisdictions across the country by providing a guide for local jurisdictions to systematically address the conditions that lead to fatal and severe-injury crashes. They provide a locally developed and customized roadmap to directly address the most common safety challenges in the given jurisdiction. Vision zero plans include a similar safety analysis as LRSPs, but also include a vision zero resolution and goal, establishing a collaborative working group to monitor safety performance and progress. The City of Capitola plans to adopt a policy resolution for the LRSP, setting a long-term goal of eliminating traffic fatalities and serious injuries.

Following discussions with Capitola staff and a review of existing plans and policies for the area, the following Vision, Goals, and Objectives have been established for this project.

Vision - Support the California vision of moving towards significantly reducing fatalities and severe injuries for all road users.	
Goal	**Objectives**
Goal 1: Identify areas with a high risk for crashes.	• Evaluate the City's roadway network for crash activity. • Identify intersections and segments in need of mitigation. • Identify areas of interest with respect to safety concerns for pedestrians and bicycles.
Goal 2: Illustrate the value of a comprehensive safety program and the systematic process.	• Demonstrate the systematic process, ability to identify locations with higher risk for crashes based on present characteristics closely associated with severe crashes. • Demonstrate, through the systematic process, the gaps and data collection activities that can be improved upon.
Goal 3: Define safety improvements for the near-, mid- and long-term, including projects for HSIP, SS4A and other programs with funding consideration.	• Create the outline for a prioritization process that can be used in forth-coming funding cycles. • Demonstrate the correlation between the proposed safety countermeasures with the Vision Zero Initiative and the California State Highway Safety Plan (SHSP).
Goal 4: Identify emphasis areas to prioritize countermeasure application.	• Use systematic crash analysis to identify emphasis areas. • Prioritize emphasis areas for countermeasure development. • Align emphasis areas with City goals & objectives. • Align emphasis areas with current City areas of concern.
Goal 5: Proposed List of Conceptual Priority Projects for Implementation of Countermeasures.	• Identify conceptual priority projects for implementation. • Identify similar areas where countermeasures can be implemented. • Prioritize these countermeasures for implementation based on cost, effort, and timeline.

3. PROCESS

The primary goal for the City of Capitola and their safety partners is to provide safe, sustainable, and efficient mobility choices for their residents and visitors. Through the development and implementation of this LRSP, the City will continue its collaboration with safety partners to identify and discuss safety issues within the community.

Guidance on the LRSP process is provided at both the national (FHWA) and state (Caltrans) level, and both agencies have developed a general framework of data and recommendations for an LRSP.

The FHWA encourages:

- The establishment of a working group (Stakeholders) to participate in developing a LRSP
- The review of crash, traffic, and roadway data to identify areas of concern
- The establishment of goals, priorities, and countermeasures to recommend improvements at spot locations, systemically, and comprehensively

Caltrans guidance follows a similar outline with the following steps:

1. Establish leadership
2. Analyze the safety data
3. Determine emphasis areas
4. Identify strategies
5. Prioritize and incorporate strategies
6. Evaluate and update the LRSP

This LRSP documents the results of data and information obtained, including the vision, goals, and objectives for the LRSP; existing safety efforts; crash analyses; emphasis areas; the City's existing countermeasure toolbox; and potential countermeasures for select priority locations. The development of the LRSP recommendations considers the Five Es of traffic safety defined by the California SHSP: Engineering, Enforcement, Education, Emergency Response, and Emerging Technologies throughout its process.

3.1. Guiding Manuals

The following section describes the analysis process undertaken to evaluate safety within the City at a systemic level. Using a network screening process, locations within the City that will most likely benefit from safety enhancements were identified. Using historic crash data, crash risk factors for the entire network are derived. The outcomes will inform the identification and prioritization of engineering and non-infrastructure safety countermeasures that address certain roadway characteristics and related behaviors that contribute to motor vehicle crashes as well as active transportation users.

This process uses the latest national and state best practices for statistical roadway analysis described in the following sections.

3.1.1. Local Roadway Safety: A Manual for California's Local Road Owners

The purpose of Local Roadway Safety: A Manual for California's Local Road Owners (Version 1.7, April 2024) (LRSM) is to encourage local agencies to pursue a proactive approach to identifying and analyzing safety issues, while positioning themselves to be eligible for competitive federal, state, and local grant programs for project implementation funding opportunities. A proactive approach is

defined as analyzing the safety of the entire roadway network through either a one-time, network wide analysis, or by routine analyses of the roadway network.

According to the LRSM, "The California Department of Transportation (Caltrans) – Division of Local Assistance is responsible for administering California's federal safety funding intended for local safety improvements."

To provide the most benefit and to be competitive for grant funding, the analysis leading to countermeasure selection should focus on both intersections and roadway segments and be considerate of roadway characteristics and traffic volumes. The result should be a list of locations that are most likely to benefit from the implementation of cost-effective countermeasures, preferably prioritized by benefit/cost ratio. The LRSM suggests using a mixture of quantitative and qualitative measures to identify and rank locations that consider both crash frequency and crash rates. These findings should then be screened for patterns such as crash types and severity to aid in the determination of issues causing higher numbers of crashes and the potential countermeasures that could be most effective. Qualitative analysis should include field visits and a review of existing roadway characteristics and devices. The specific roadway context can then be used to assess what conditions may increase safety risk at the site and systematic level.

Countermeasure selection should be supported using Crash Modification Factors (CMFs). These factors are the peer reviewed product of before-and-after research that quantifies the expected rate of crash reduction that can be expected from a given countermeasure. If more than one countermeasure is under consideration, the LRSM provides guidance on how to apply CMFs appropriately.

3.1.2. Highway Safety Manual

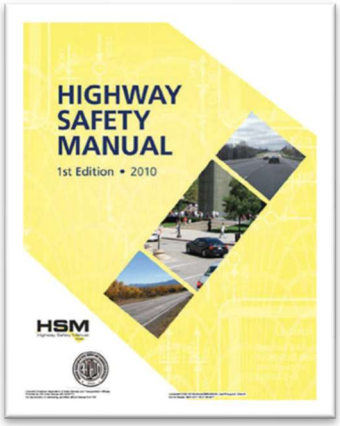
The American Association of State Highway and Transportation Officials (AASHTO) Highway Safety Manual (HSM), published in 2010, presents a variety of methods for quantitatively estimating crash frequency or severity at a variety of locations. This four-part manual is divided into Parts: A) Introduction, Human Factors, and Fundamentals, B) Roadway Safety Management Process, C) Predictive Method, and D) Crash Modification Factors.

Chapter 4 of Part B of the HSM discusses the network screening process. The network screening process is a tool for an agency to analyze their entire network as well as identify and rank locations that (based on the implementation of a countermeasure) are most to realize a reduction in the frequency of crashes.

The HSM identifies five steps in this process:

1. **Establish Focus:** Identify the purpose or intended outcome of the network screening process. This decision will influence data needs, the selection of performance measures and the screening method that can be applied.
2. **Identify Network and Establish Reference Populations:** Specify the types of sites or facilities being screened (i.e. segments, intersections, or geometrics) and identify groupings of similar sites or facilities.
3. **Select Performance Measures:** There are a variety of performance measures available to evaluate the potential to reduce crash frequency at a site. In this step, the performance measure is selected as a function of the screening focus and the data and analytical tools available.

4. **Select Screening Method:** There are three screening methods described in this chapter: ranking, sliding window, and peak searching. Each method has advantages and disadvantages; the most appropriate method for a given situation should be selected.
5. **Screen and Evaluate Results:** The final step in the process is to conduct the screening and analysis and evaluate the results.



The HSM provides several statistical methods for screening roadway networks to identify high risk locations based on overall crash histories.

3.2. Analysis Techniques

3.2.1. Crash and Network Screening Analysis

Intersections and roadways were analyzed using four crash metrics:

- Number of Crashes
- Critical Crash Rate (HSM Ch. 4)
- Probability of Specific Crash Types Exceeding Threshold Proportion (HSM Ch. 4)
- Equivalent Property Damage Only (HSM Ch. 4)

The initial steps of the crash analysis established sub-populations of roadway segments and intersections that have similar characteristics. For this LRSP, intersections were grouped by their control type (signalized and unsignalized) and segments by their roadway category (arterial, collector, minor collector, and local). Individual crash rates were calculated for each sub-population. The sub-population level crash rates were then used to assess whether a specific location has more or fewer crashes than expected. These sub-populations were also used to determine typical crash patterns to help identify locations where unusual numbers of specific crash types are occurring.

The network screening process ranks intersections and roadway segments by the number of crashes that occurred at each one over the analysis period and then identifies areas that had more of a given type of crash than would be expected for that type of location. The crash type factors were:

- **Crash severity** - fatal, severe injury, other visible injury, complaint of pain, and property damage only (PDO)
- **Crash type** - broadside, rear-end, sideswipe, head-on, hit object, overturned, bicycle, pedestrian, and other
- **Environmental factors** – lighting and wet roads
- **Driver behavior** - impaired, aggressive, and distracted driving

From the results of the network screening analyses, a short-list of locations was chosen based on crash activity, crash severity, crash patterns, location type, and area within the City to provide the greatest variety of locations covering the widest range of safety opportunities for countermeasure toolbox development. The intent is to populate the safety countermeasure toolbox with mitigation measures that will be applicable to most of the crash activity in the City.

3.2.2. Critical Crash Rate (CCR) Analysis

Reviewing the number of crashes at a location is a good way to understand the cost to society incurred at the local level, but does not provide a complete indication of the level of risk for those who use that intersection or roadway segment on a daily basis. The HSM describes the CCR method, which provides a statistical review of locations to determine where risk is higher than that experienced by other similar locations. It is also the first step in analyzing for patterns that may suggest systemic issues that can be addressed at that location, and proactively at others to prevent new safety challenges from emerging.

The CCR analysis compares the observed crash rate to the expected crash rate at a particular location based on facility type and traffic volume using a locally calculated average crash rate for the specific type of intersection or roadway segment being analyzed. Based on traffic volumes and a weighted Citywide crash rate for each facility type, a critical crash rate threshold is established at the 95-percent confidence level to determine locations with higher crash rates that are unlikely to be random. The threshold is calculated for each location individually based on its traffic volume and the crash profile of similar facilities. A CCR value of greater than zero reflects a location that has a higher crash rate than facilities with similar volumes, while a negative CCR value signifies a below-average crash rate. It should be noted that the CCR does not reflect the severity of the crashes occurring at the location, but rather the number of crashes for the given volume.

3.2.3. Probability of Specific Crash Types Exceeding Threshold Proportion

When analyzing crash data systematically, it is important to identify areas where certain types of crashes are occurring with greater frequency. The HSM describes a method of identifying locations where probability of a specific crash type exceeds the threshold population. This method prioritizes locations based on the probability that the true proportion (long-term predicted proportion) of a type of crash or injury level will exceed the threshold proportion. The threshold proportion is based on the proportion of a specific crash type/severity to all crashes within the dataset (HSM, Chapter 4). This analysis identifies locations where certain crash types are over-represented to be isolated for further analysis.

3.2.4. Equivalent Property Damage Only (EPDO)

The EPDO method is described in the Highway Safety Manual. This method assigns weighting factors to crashes based on injury level to develop a property damage only score. In this analysis, the injury crash costs were calculated for each location based on the latest Caltrans injury costs. This value is then divided by the injury cost for a property damage only crash. The resulting number is the equivalent number of property damage only crashes at each site. This value allows all locations to be compared based on injury crash costs. (HSM, Chapter 4).

The results of the network screening analysis for both intersections and roadway segments are presented in **Appendix A** and **Appendix B**, respectively.

4. COMMUNITY ENGAGEMENT

The City of Capitola's LRSP public engagement plan included strategies and activities to reach a broad cross-section of the community throughout the City. The plan included one round of public outreach as well as extensive stakeholder engagement with agency partners and interested parties.

Stakeholder engagement and outreach efforts for the LRSP occurred between September 2025 and January 2026 and consisted of the following components:

1. In-person pop-up meeting
2. Online Community Outreach
   - Interactive Map hosted on Social Pinpoint
   - Safety Survey

4.1. In-Person Community Event

In person public engagement took place on October 28, 2025, at New Brighton Middle School. In this meeting, the City's LRSP project was introduced to the public. An interactive poster board identifying the safety concerns throughout the City was stationed, and participants were asked to identify the top three safety challenges faced by them by placing dots. Along with interactive poster board, a poster board showing intersection and roadway segment crashes within the last five years (2019 – 2023) was also stationed. Additionally, Postcards featuring a QR code to the City of Capitola LRSP survey and interactive map were developed and handed out at this meeting. All collateral was disseminated in both English and Spanish, including flyers, interactive boards, and palm cards (pictures shown below).

Figure 1 — Interactive Engagement Poster for Pop-Up Event

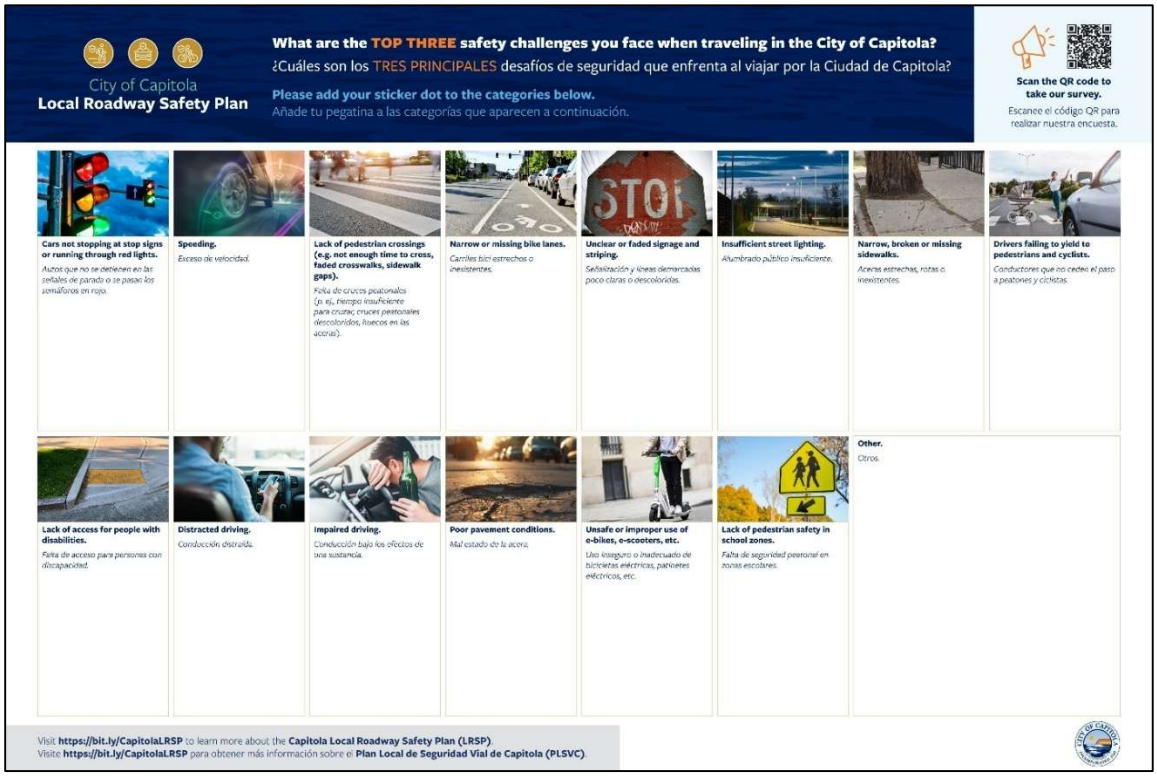


Figure 2 — Intersection and Segment Crash Map (2019 – 2023)

Figure 3 — Flyer for City of Capitola LRSP

City of Capitola
Local Roadway Safety Plan

What is a Local Roadway Safety Plan (LRSP)?
¿Qué es un Plan Local de Seguridad Vial (PLSV)?

A **Local Roadway Safety Plan** is a data-driven safety plan that coordinates the efforts of a wide range of organizations to reduce traffic fatalities and serious injuries on all public roads. Based on this analysis, the Local Roadway Safety Plan creates a framework to recommend and prioritize safety improvements on a citywide level for future planning and development efforts towards a safer community for pedestrians, bicyclists, and motorists.

Un **Plan Local de Seguridad Vial** es un plan de seguridad basado en datos que coordina los esfuerzos de varrios organizaciones para reducir las fatalidades de tráfico y las heridas graves en todas las carreteras públicas. Sobre la base de este análisis, el Plan Local de Seguridad Vial crea un plan para recomendar y dar prioridad a las mejoras de seguridad en toda la ciudad. para los esfuerzos futuros de planificación y desarrollo hace una comunidad más segura para peatones, biciclistas y conductores.

Potential Vehicle Safety Improvements
Posibles Mejoramientos en la Seguridad de los Vehículos

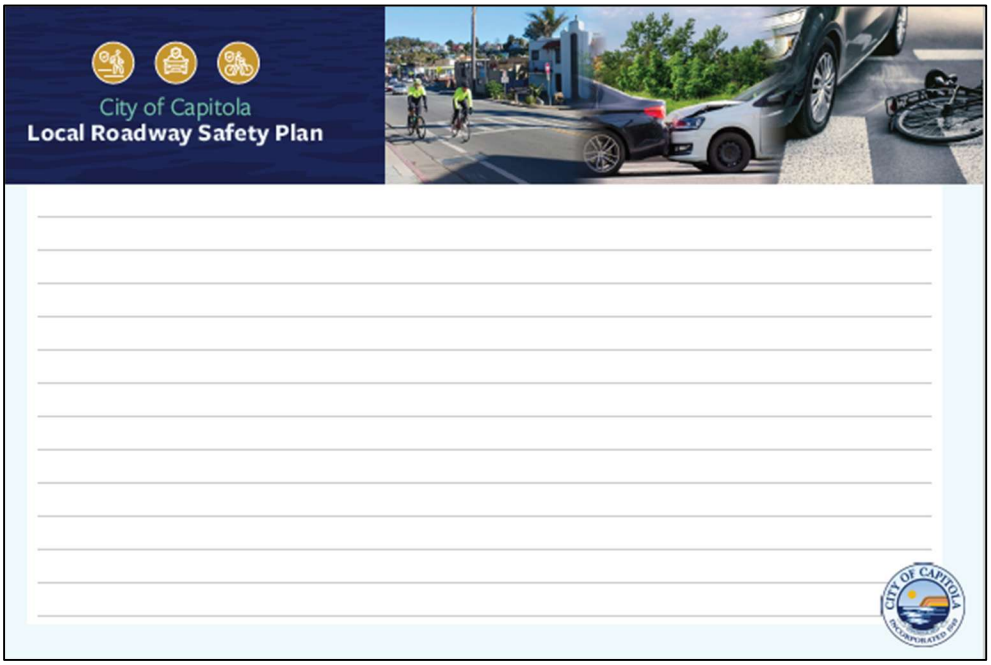
Potential Bicyclist Safety Improvements
Posibles Mejoramientos en la Seguridad de los Ciclistas

Potential Pedestrian Safety Improvements
Posibles Mejoramientos en la Seguridad de los Peatones

Figure 4 — Bilingual Palm Card Developed for Distribution (Front & Back)

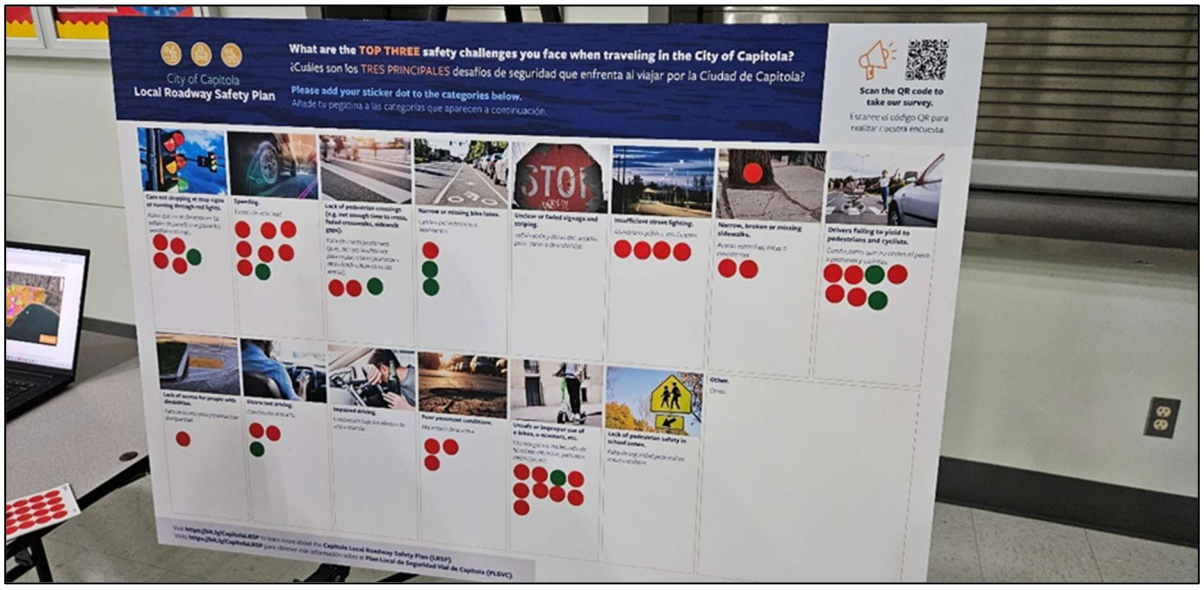
Additionally, comment cards were distributed at this pop-up meeting for participants to write down additional safety concerns they might have within the City, shown in **Figure 5**Error! Reference source not found..

Figure 5 — Comment Card for City of Capitola LRSP

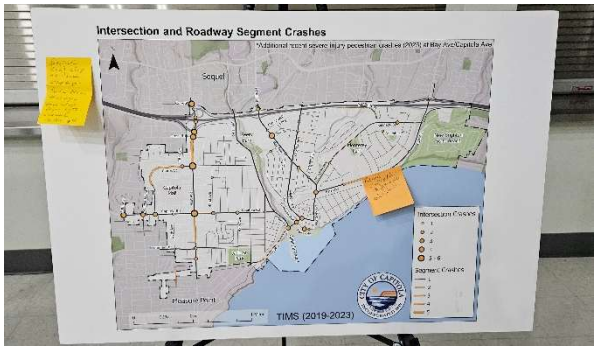


Key safety challenges identified by the public at this in-person public engagement on October 28, 2025, at New Brighton Middle School included unsafe or improper use of e-bike/e-scooters, speeding, and drivers failing to yield to pedestrians and cyclists. The safety challenges identified during this in person event are summarized in **Figure 6** below.

Figure 6 — Interactive Engagement Poster – Summary of Input Received



Pictures from the in-person community event are shown below:



4.2. Online Community Outreach

4.2.1. Interactive Map

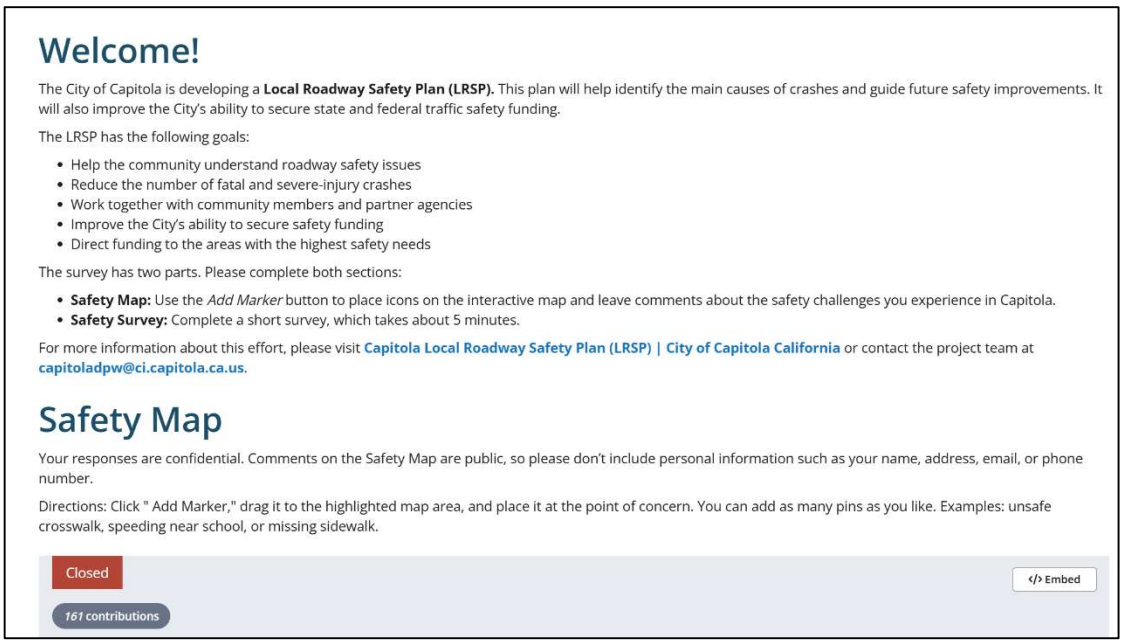
Social Pinpoint, which is an online map survey tool that utilizes the same survey logic and dynamic answer format available on standard survey platforms, combined with interactive mapping and location-specific data collection capabilities, was used to collect safety concerns of the public.

A pre-populated menu (shown below) was provided to narrow down the known safety concerns. Using this online tool, survey respondents were able to drop "pins" on the City map and select from the list of pre-populated safety concerns menu or select others and provide text associated with their concern. Additionally, the survey respondents also could provide an up-vote or a down-vote on an existing comment. The pre-populated concerns were as follows:

- Pedestrian Safety
- Bicycle Safety
- Vehicle Safety
- Transit Safety
- Others

The online engagement survey resulted in a total of 215 contributions. The online interactive social map had 163 contributors and site-specific comments recorded, and the survey form received 52 contributions. A total of one (1) in-person survey was also completed. The online survey platform in addition to the in-person interactive poster board. Comments and surveys received during online engagement can be found in **Appendix C.** A link to the Social Pinpoint online map tool and survey was also provided on City's LRSP homepage to facilitate more public input (https://www.cityofcapitola.org/publicworks/page/capitola-local-roadway-safety-plan).

Figure 7 — Online Interactive Map Platform with Comments



Welcome!

The City of Capitola is developing a **Local Roadway Safety Plan (LRSP).** This plan will help identify the main causes of crashes and guide future safety improvements. It will also improve the City's ability to secure state and federal traffic safety funding.

The LRSP has the following goals:

- Help the community understand roadway safety issues
- Reduce the number of fatal and severe-injury crashes
- Work together with community members and partner agencies
- Improve the City's ability to secure safety funding
- Direct funding to the areas with the highest safety needs

The survey has two parts. Please complete both sections:

- **Safety Map:** Use the *Add Marker* button to place icons on the interactive map and leave comments about the safety challenges you experience in Capitola.
- **Safety Survey:** Complete a short survey, which takes about 5 minutes.

For more information about this effort, please visit **Capitola Local Roadway Safety Plan (LRSP) | City of Capitola California** or contact the project team at **capitoladpw@ci.capitola.ca.us**.

Safety Map

Your responses are confidential. Comments on the Safety Map are public, so please don't include personal information such as your name, address, email, or phone number.

Directions: Click " Add Marker," drag it to the highlighted map area, and place it at the point of concern. You can add as many pins as you like. Examples: unsafe crosswalk, speeding near school, or missing sidewalk.

Closed

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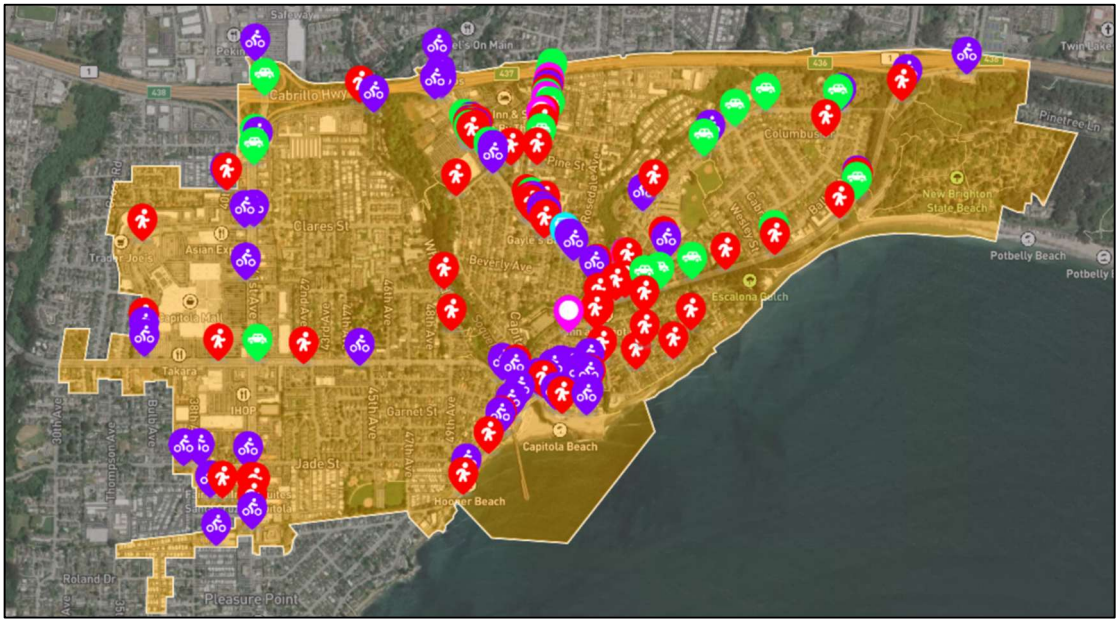
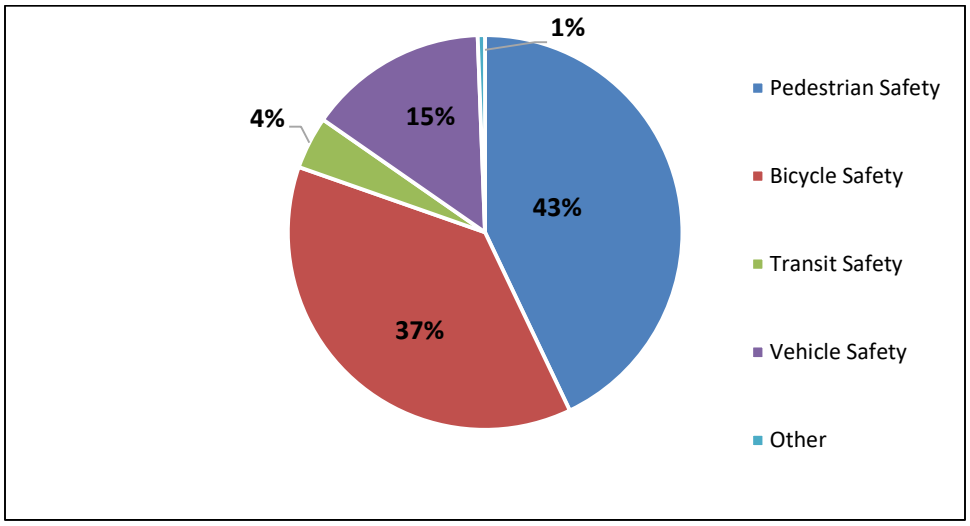
161 contributions



Pedestrian safety was identified as the top safety concern area by the survey respondents, followed by bicycle safety, and vehicle safety. Summary of the safety concern feedback received from the Interactive Map is shown in **Figure 8**.

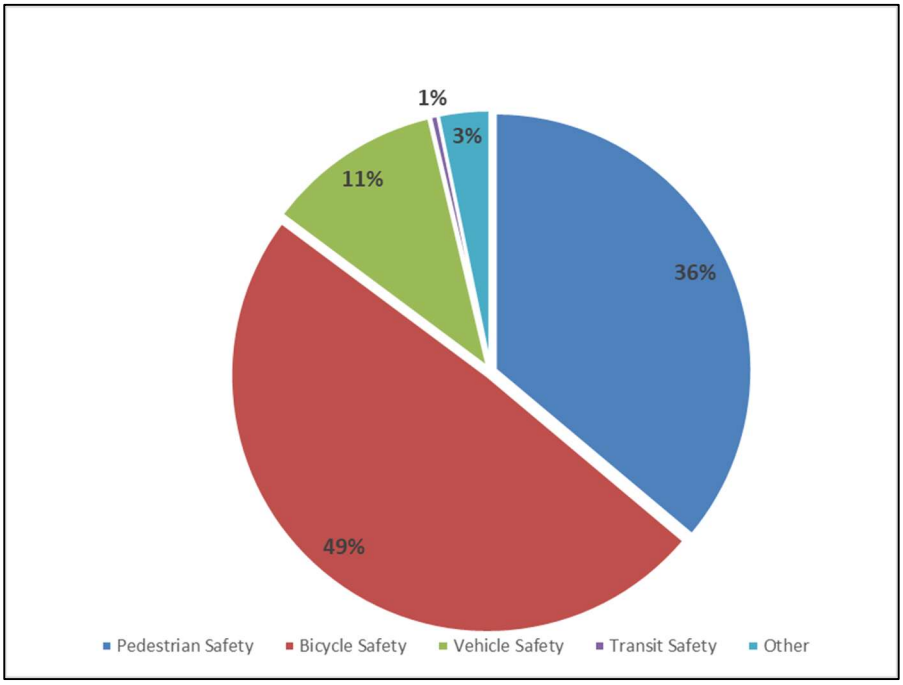
Figure 8 — Summary of Safety Concerns from Capitola's Online Survey Platform



As part of Santa Cruz County Safety Action Plan (SCCSAP), a similar exercise was conducted using online survey platform to gather public input on safety concerns. The SCCSAP was a joint effort with Santa Cruz County and the Cities of Watsonville and Scotts Valley. Although City of Capitola was not part of the SCCSAP, the plan received 53 posts identifying safety concerns in the City of Capitola. These posts were added to the posts received on the City's online survey platform and are summarized in **Figure 9** and these posts related to the City of Capitola can be found in **Appendix C**.

With the addition of safety concerns from the SCCSAP, a higher percentage was observed for bicycle safety, followed by pedestrian safety and vehicle safety as the top three safety concerns.

Figure 9 — Summary of Safety Concerns – County of Santa Cruz and Capitola Online Survey Platforms



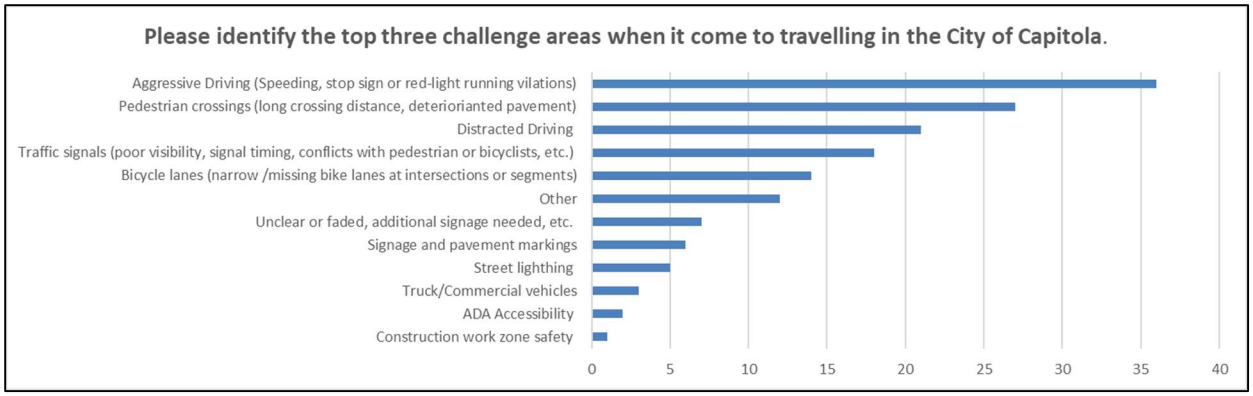
4.2.2. Safety Survey

As part of the online community engagement, an online survey was also conducted to identify the top three safety challenges the residents and visitors face within the City of Capitola. Demographic data was also collected from this survey. The online survey was made public similar to the interactive map from mid-September to January 19, 2026, and promoted on City of Capitola website (Capitola Local Roadway Safety Plan | City of Capitola California). A total of 52 survey responses were received for this online survey. Most respondents noted that they mainly drive solo as their primary mode of travel, with a large handful of participants noting that they mainly bike and walk. Survey participants expressed that they feel the safest as a driver when traveling through City of Capitola. The top three safety challenges expressed by survey users were:

1) Aggressive driving (speeding Stop sign or red-light running violations)
2) Pedestrian crossing (long crossing distance, deteriorated pavement), and
3) Distracted driving.

These top three safety challenges were followed by traffic signals, and bicycle lanes. Summary of safety challenges are shown in **Figure 10**.

Figure 10 — Summary of Challenge Areas in the City of Capitola



A complete list of all survey questions and all comments received can be found in **Appendix C**.

Some of the key comments from the online map survey tool (i.e., Social PinPoint) are summarized below:

Pedestrian Safety Concerns

1. "Mid-block crossing is not well lit, difficult to see pedestrians at night." *[41st Avenue and Reposa Avenue]*

Bicycle Safety Concerns

2. *"Kids on bikes don't have a dedicated bike lane or safe route to school." [Monterey Avenue]*

Vehicle Safety Concerns

3. "Vehicles Are Going Like 35 - 40 MPH!! SLOW DOWN!!!" [Monterey Avenue]

5. Review of Planning Documents

Existing plans, policies, and projects that were recently completed, planned, or are on-going within the City were compiled at the start of the LRSP process in order to gain perspective on the existing efforts for transportation-related improvements within the City. High-level key points regarding transportation improvements and safety-related topics were identified to inform decision making in this LRSP. The following plans and documents were reviewed:

City Plans and Policies

- Capitola General Plan (2019)
  - Provides a vision for the future and establishes a framework for maintaining Capitola's unique identity
  - Establishes goals, policies, and actions to guide growth, conversation, and enhancement
  - Outlines City's future including areas of improvement
  - It aims to provide adequate pedestrians, bicycles, vehicles, transit, and emergency access for existing and proposed land uses.
- Bicycle Transportation Plan (2011)
  - Prioritizes bicycle improvement projects with the goal of increasing bicycle commuting, recreation, tourism, and safety.
  - Defines a network of bikeways, with an emphasis on commuter routes and compliments other routes in Santa Cruz County.
- Municipal Code (relevant sections)
  - Establishes rules for ensuring community safety and maintaining quality of life.
- Traffic Impact Fee Program
  - Complies with California's Mitigation Fee Act (AB 1600)

Programs and Initiatives

- Street Smarts Education Campaign
  - Santa Cruz County collaborates with Capitola to circulate traffic safety messages through radio, print ads, videos, and more.
- Community Traffic Safety Coalition
  - The City participates with the Coalition to advance the County's vision zero goal.
  - Countywide crash data analysis prepared by the Coalition has included the City of Capitola.

Recent Projects and Studies

- Engineering and Traffic Study (2020)
  - Evaluates existing speed limits across the City
  - Establishes appropriate speed limits that encourage compliance, enhances pedestrian/bicycle safety, and allows for enforcement.
- Park Avenue and Clares Street Traffic Calming
  - Evaluates and identifies potential traffic calming improvements on Park Avenue from Monterey Avenue to Coronado Street to reduce vehicle speeds and improve accessibility for bicyclists and pedestrians along the corridor.

The City of Capitola seeks to improve roadway safety by implementing the **Safe System Approach**. The Safe System Approach, as defined in the Caltrans SHSP, is built upon the following principles[1]:

Source: *What Is a Safe System Approach?* USDOT 2025.

- Death and serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

While engineering countermeasures are a critical part of preventing fatal and severe injury crashes, the City also recognizes that policy plays a key role in safety as well. The city performed a literature review of relevant policies and programs to identify other means by which the Safe System Approach and road safety could be further established. **Appendix D** presents a summary of local programs, policies, and practices as well as considerations of how they can be improved or enhanced to further support and prioritize road safety.

[1] 2020-2024 SHSP – Jan 2023 (PDF), Caltrans. January 2023. dot.ca.gov/-/media/dot-media/programs/safety-programs/documents/shsp/2023-shsp-full-report-2020-2024-a11y.pdf

6. DATA SOURCES

The following data was obtained from the City for use in crash data analysis.

6.1. Roadway Network

The crash analysis, which is described in detail in **Section 3**, requires each corridor within the City to be classified. The City's roadway network was obtained from Caltrans GIS database and roadway classification for roads were categorized using the data provided by City of Capitola. The roadway network classification was assigned to each corridor roadway segment as either a major arterial, minor arterial, collector, or local road. This was done in order to compare the functional design and capacity to better stratify analysis results, only comparing roadway segment safety performance with similar peer roadways (i.e., only arterials are compared to arterials, etc.) within the City.

6.2. Intersections

The crash analysis also requires each intersection within the City to be classified by control type. Intersections throughout the City were classified by control type as either signalized or unsignalized (including roundabouts). The safety analysis also only compares intersection safety performance with similar control types (i.e., signalized intersections are only compared to signalized intersections, etc.) within the City.

6.3. Crashes

Injury collision data for the most recent five-year period (January 1, 2019 through December 31, 2023) was used for the collision analysis. Using data from the past five-year period is sufficient to identify potential trends in crashes by location and types, while not being so long as to have data that would include long-term technology and cultural changes. The collision data was obtained from UC Berkeley's SafeTrek Transportation Injury Mapping System (TIMS). Collision records were allocated to intersection and the roadway network segments.

Knowing the impacts of the crash (the injuries or type of damage which occurred) is a key part of assessing the environment and safety factors around the site of the crash. The TIMS dataset used for this analysis categorizes crashes in the following categories:

- 1 – Fatality
- 2 – Severe injury
- 3 – Other Visible Injury
- 4 – Complaint of Pain

Property damage only or "fender bender" crashes that did not result in any forms of injury are not included in this dataset. This LRSP includes crashes which occurred on the City's roadway network (including intersections which border City limits). However, crashes along Highway 1 were not included as these belong to Caltrans right-of-way and are outside the jurisdiction of the City of Capitola.

7. SAFETY TRENDS

The following sections contain the results of the analysis process which included evaluation of Capitola fatal and severe injury (KSI) crashes compared to statewide levels, among other evaluations including crashes by severity level, cause, pedestrian, and bicycle crashes.

7.1. Capitola KSI Crashes Compared to Statewide KSI Crashes

The California Strategic Highway Safety Plan (SHSP) focuses on 16 challenge areas identified through analysis of California KSI crash data and input from traffic safety partners around the state. Crashes in Capitola were associated with 13 of the 16 challenge areas. **Table 1** presents a summary of City's crash trends from 2019-2023 by comparing KSI crashes to statewide averages. The City of Capitola experienced a higher proportion oof KSI crashes than the statewide average in the following five areas: Intersections, Pedestrians, Bicyclists, Distracted Driving, Impaired Driving.

Table 1 — Capitola KSI Crashes Compared to Statewide KSI Crashes

California SHSP Challenge Area	City of Capitola Comparison to Statewide Percentages	Percent of Fatal and Severe Injury Crashes (2019-2023)		Differential
		City of Capitola Percentages	Statewide Percentages	
Intersections	**Higher**	**62.5%**	**24.3%**	**38.2%**
Pedestrians	**Higher**	**37.5%**	**18.9%**	**18.6%**
Bicyclists	**Higher**	**25.0%**	**7.3%**	**17.7%**
Distracted Driving	**Higher**	**18.8%**	**4.4%**	**14.4%**
Impaired Driving	**Higher**	**25.0%**	**23.9%**	**1.1%**
Aging Drivers	Lower	12.5%	12.8%	-0.3%
Work Zones	Lower	0.0%	1.6%	-1.6%
Commercial Vehicles	Lower	0.0%	6.7%	-6.7%
Occupant Protection	Lower	6.3%	13.1%	-6.9%
Aggressive Driving	Lower	25.0%	33.4%	-8.4%
Young Drivers	Lower	0.0%	12.1%	-12.1%
Motorcyclists	Lower	6.3%	20.8%	-14.5%
Lane Departure	Lower	25.0%	42.1%	-17.1%

Source: Statewide Integrated Traffic Records System (2019 – 2023).
Driver Licensing is based on crash data from the Fatality Analysis Reporting Service (FARS) (2019 – 2023).
Note: Percentages will not add up to 100%, as a fatality or severe injury could have involved multiple Challenge Areas (i.e., a young driver that was impaired and unrestrained).

7.2. California OTS Rankings for Capitola

The California OTS publishes annual reports ranking agencies of similar population by their crash profile. **Table 2** presents the City of Capitola's 2023 (the most recent) OTS rankings. OTS notes that "Number 1 in the rankings is the highest, or 'worst'"[2]. Compared to other cities of similar population,

[2] City of Capitola OTS Crash Rankings Results, California Office of Traffic Safety. Accessed February 2026. https://www.ots.ca.gov

Capitola ranks among the top 50 in Total Fatal and Injury Crashes. Additionally, Capitola ranks among the Top 50 for crashes for all categories except the following categories:

- Crashes Involving Drivers under Influence (21-34)
- Crashes Involving Pedestrians <15 categories.

Table 2 - Capitola OTS Ranking (2023)

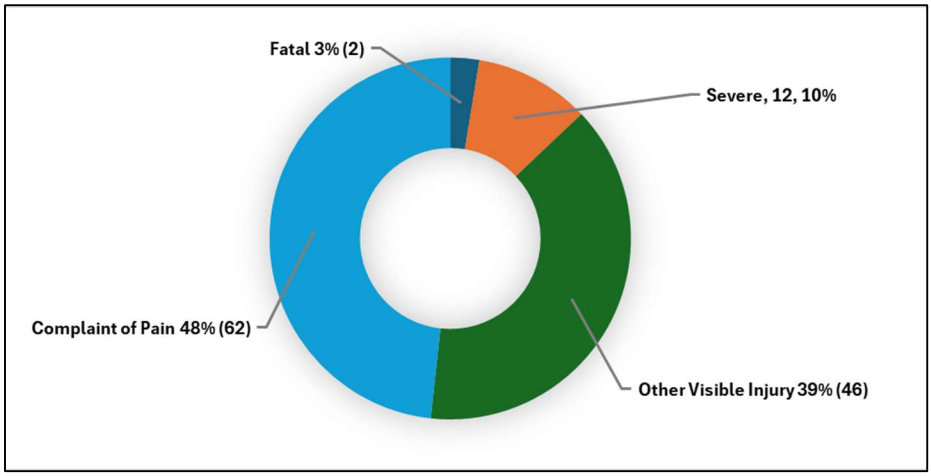
Crash Category	Victims Killed or Injured	OTS Ranking
Total Fatal and Injury	30	30/74
Alcohol Involved	9	10/74
Had Been Drinking Driver < 21	1	6/74
Had Been Drinking Driver 21 – 34	0	73/74
Motorcycles	1	50/74
Pedestrians	5	5/74
Pedestrians < 15	0	70/74
Pedestrians 65+	3	1/74
Bicycle	11	2/74
Bicyclist < 15	3	2/74
Composite	29	10/74
Crash Category	**Fatal or Injury Crashes**	**OTS Ranking**
Speed Related	13	5/74
Nighttime (9:00pm – 2:59am)	2	28/74
Hit and Run	4	4/74
Type Of Arrests	**Arrests**	**OTS Ranking**
DUI Arrests	33	44/74

7.3. Severity Level

Over the observed five-year time period, there were a total of 116 crashes, 3 of which were fatal and 12 of which resulted in severe injuries, as shown in **Figure 11**.

Nearly 46 (39%) crashes resulted in other visible injuries and 62 (48%) crashes resulted in complaint of pain respectively.

Figure 11 — Crashes by Severity (2019 - 2023)



Source: UC Berkeley SafeTrek Transportation Injury Mapping System(TIMS) (2019-2023)

Majority of all crashes in the City occurred at intersections, with nearly half of all crashes occurring at unsignalized intersections. **Table 3** presents the distribution of all crashes, and especially KSI crashes across the City's various facility types (signalized intersections, unsignalized intersections, and roadway segments). Sixty-seven percent (67%) of all KSI crashes occurred at unsignalized intersections, followed by 13.3% signalized intersections and 20% at roadway segments.

Table 3 — KSI Crashes by Facility Type

Facility Type	Total Crashes	Percentage	KSI Crashes	Percentage
Signalized Intersections	39	33.62%	2	13.3%
Unsignalized Intersections	57	49.14%	10	66.7%
Roadway Segments	20	17.24%	3	20.0%
Total	**116**	**100%**	**15**	**100%**

Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

Table 4 presents the distribution of all crashes by severity across the City's facility types. Crashes were more common at unsignalized intersections, followed by signalized intersections and roadway segments. In coordination with the City, the following fatal injury crash which was not reflected in the crash data was added to the data set:

- 41st Ave and Clares: A fatal crash occurred in 2019[3]

[3] Capitola, CA - 1 Killed in Crash on 41st Ave Near Clares St | Brady Law Group

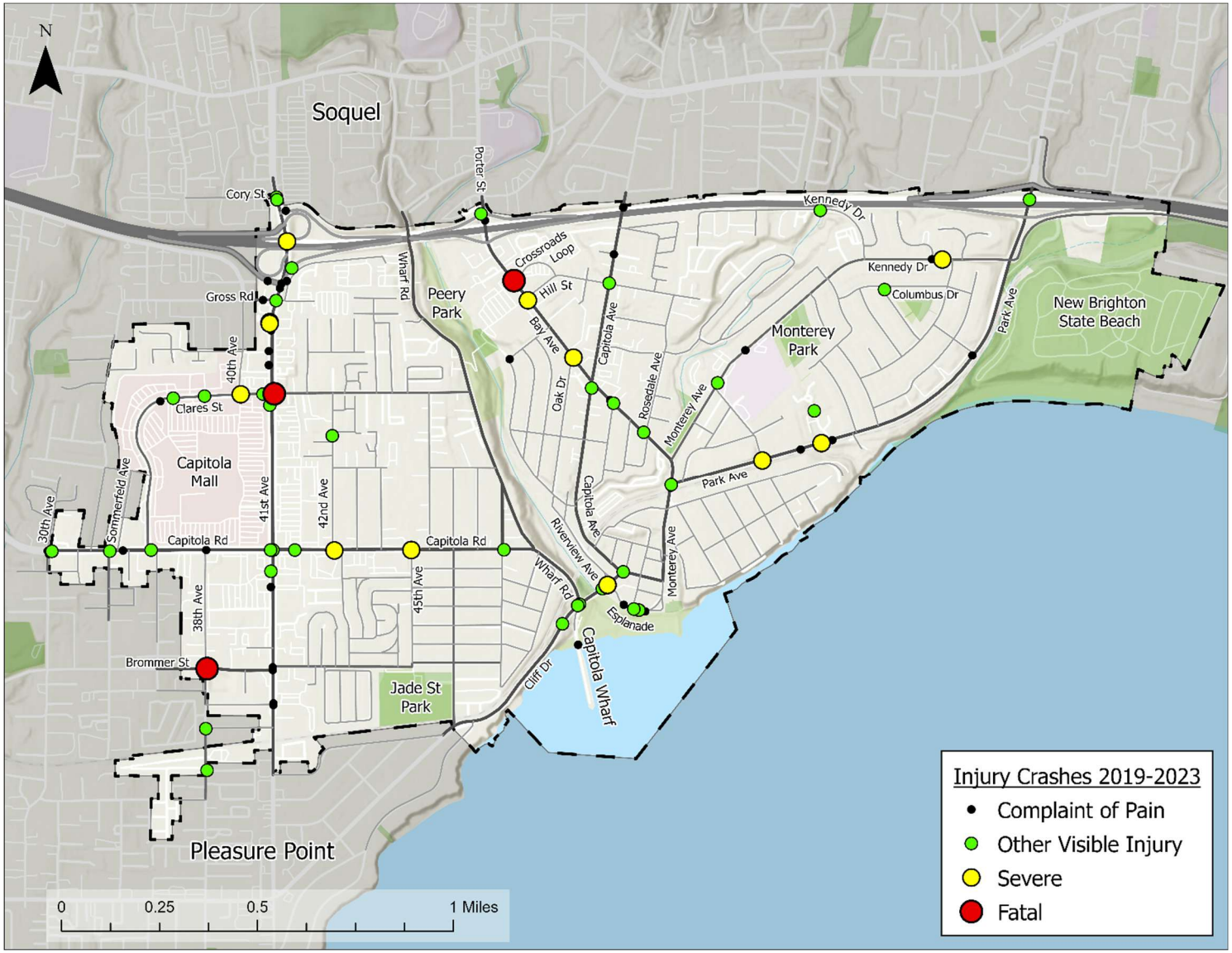
Table 4 — Crashes by Severity (2019 – 2023)

Severity	Signalized Intersections		Unsignalized Intersections		Roadway Segments		Total	
	Crashes	%	Crashes	%	Crashes	%	Crashes	%
Fatal	1	2.56%	2	3.51%	0	0.00%	3	2.59%
Severe	1	2.56%	8	14.04%	3	15.00%	12	10.34%
Other Visible Injury	15	38.46%	23	40.35%	7	35.00%	45	38.79%
Complaint of Pain	22	56.41%	24	42.11%	10	50.00%	56	48.28%
Total	**39**	**100%**	**57**	**100%**	**20**	**100%**	**116**	**100.0%**

Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

It should be noted that the observed speed trends with the City overtime also provide additional context and may serve as a valuable supplement to crash data analysis used in this LRSP. This supplemental data is attached in **Appendix E**.

Figure 12 — Citywide Crashes (2019-2023)



Source: UC Berkeley SafeTrek Transportation Injury Mapping System(TIMS) (2019-2023)

7.4. Annual Crashes

Figure 13 presents the number of total crashes per year and **Figure 14** presents the KSI crashes annually on roads in the City of Capitola. The year with the most crashes was 2022, with a total of 31 crashes. Annual crashes trended downwards in the years leading up to the COVID-19 pandemic, with 2020 having the least number of crashes. Annual crashes have generally trended upwards since 2020.

It is likely that the COVID-19 pandemic influenced crash trends in 2020 and 2021. In 2020, the number of daily household trips decreased due to widespread shelter-in-place orders; fewer vehicles on the road could be connected to fewer vehicle conflicts and thus fewer crashes. However, reduced roadway volumes and congestion could also be connected to increased vehicle speeds, a phenomenon that numerous law enforcement agencies have reported. As volumes returned to "pre-pandemic" levels in 2021, law enforcement agencies in California anecdotally noted that vehicle speeds remained high; it is theorized that this pandemic-era aggressive driving behavior has persisted and is partially contributing to the increase in annual crashes than can be seen since 2020.

Figure 13 — Annual Crashes (2019-2023)

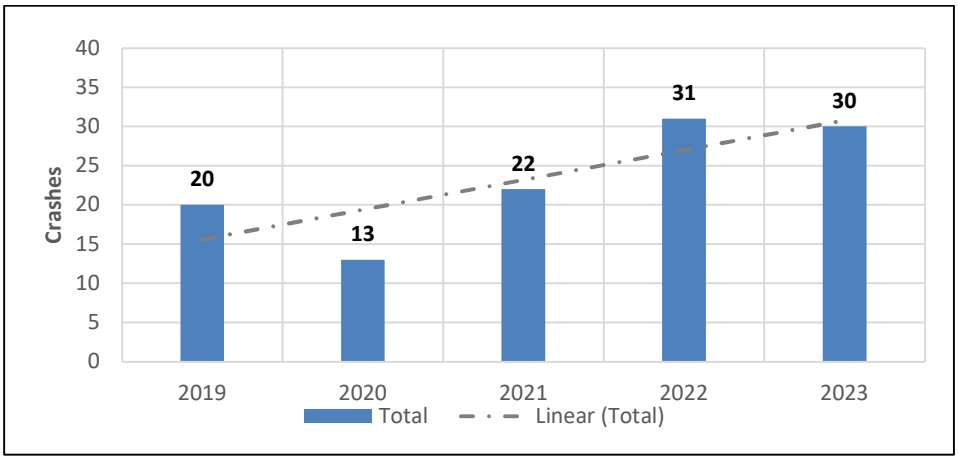
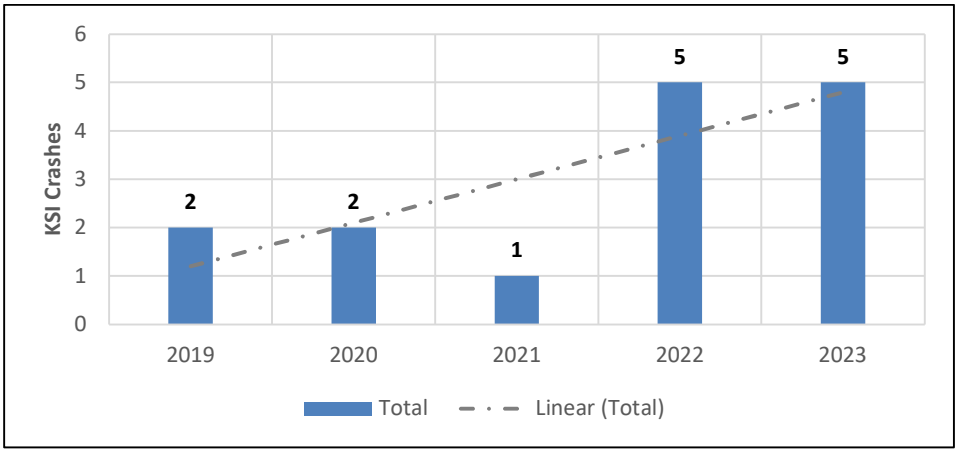


Figure 14 — Annual KSI Crashes (2019-2023)

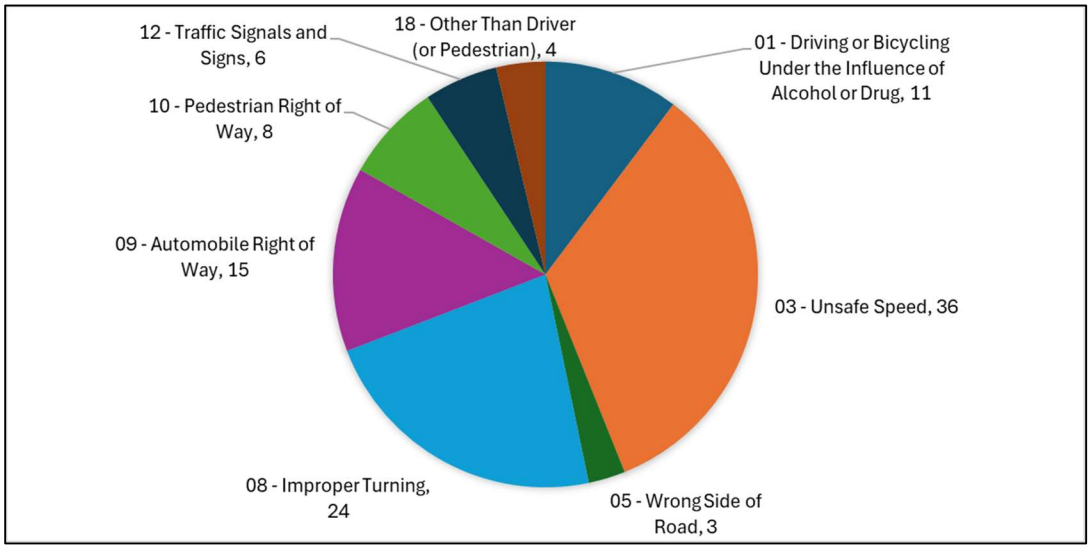


Source: UC Berkeley SafeTrek Transportation Injury Mapping System(TIMS) (2019-2023)

7.5. Crash Causes

As shown in **Figure 15**, the most frequently identified crash causes were Unsafe Speeds, Improper Turning, and Automobile Right of Way. Crash causes that accounted for less than two percent are not pictured in the figure.

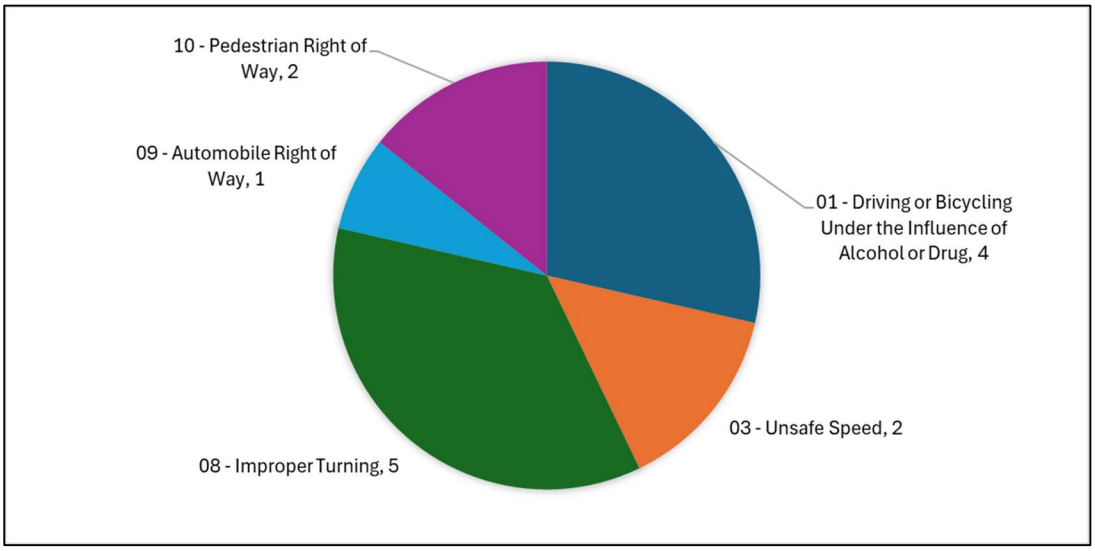
Figure 15 — Total Crashes by Cause (2019-2023)



Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

The most common crash causes for KSI crashes include Improper Turning, DUIs, Unsafe Speed, and Pedestrian Right of Way**.** Crash causes which accounted for more than one crash are presented in **Figure 16**. Improper turning is related to vehicles turning when or where it is unsafe to do so; these crashes mostly included hit-object crashes, bicycles, broadsides and sideswipes.

Figure 16 — KSI Crashes by Cause (2019-2023)

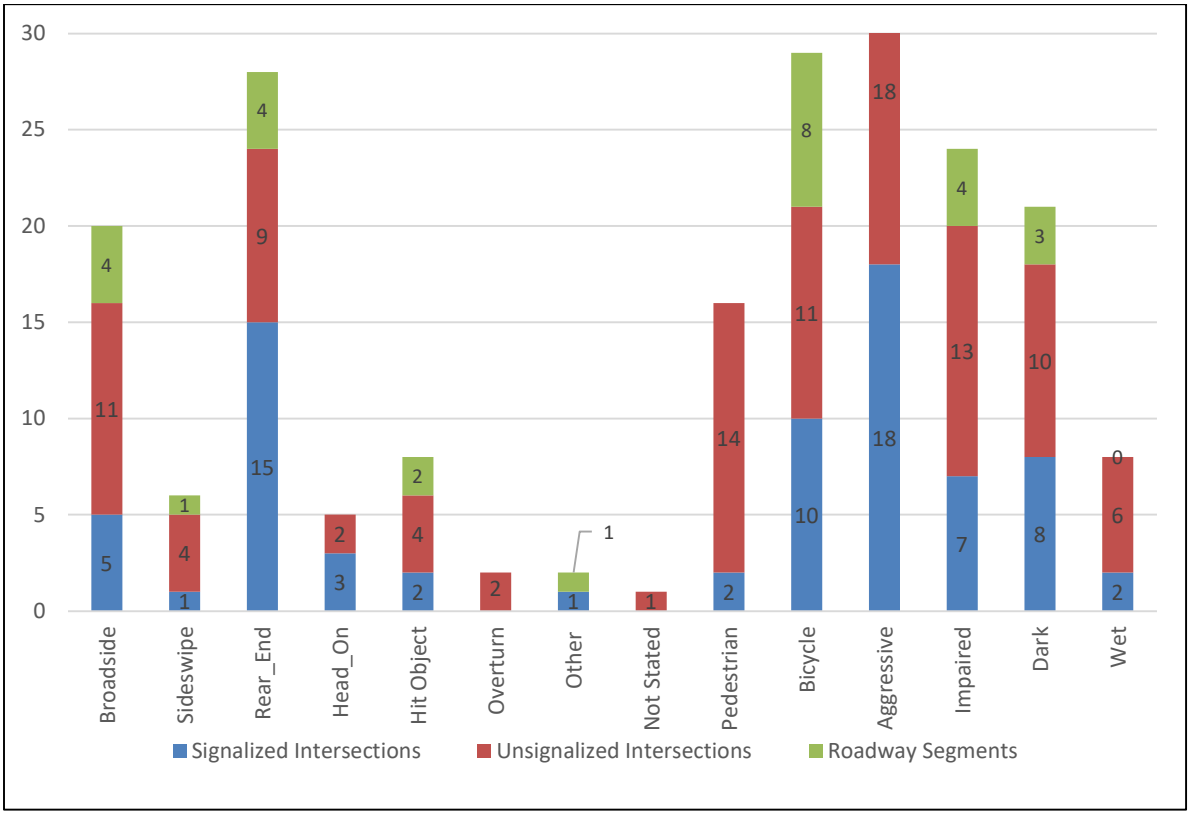


Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

7.6. Crash Types

According to reported data, approximately 116 injury crashes occurred within the City during the five-year study period on city owned and maintained roadways. **Figure 17** indicates that aggressive driving crashes were the most common crash type within the City, followed by bicycle crashes and rear end crashes. Aggressive driving crashes are equally split between signalized and unsignalized intersections. Aggressive driving behavior may be influenced by roadway conditions, congestion, or temporary disruptions such as construction activity or detours; however, it should be noted that this should be viewed as a potential correlation rather than a direct cause-and-effect relationship. A large proportion of rear ends occurred at signalized intersections, while bike involved crashes occurred most at unsignalized intersections. The most common crash type along roadway segments was bike involved crashes.

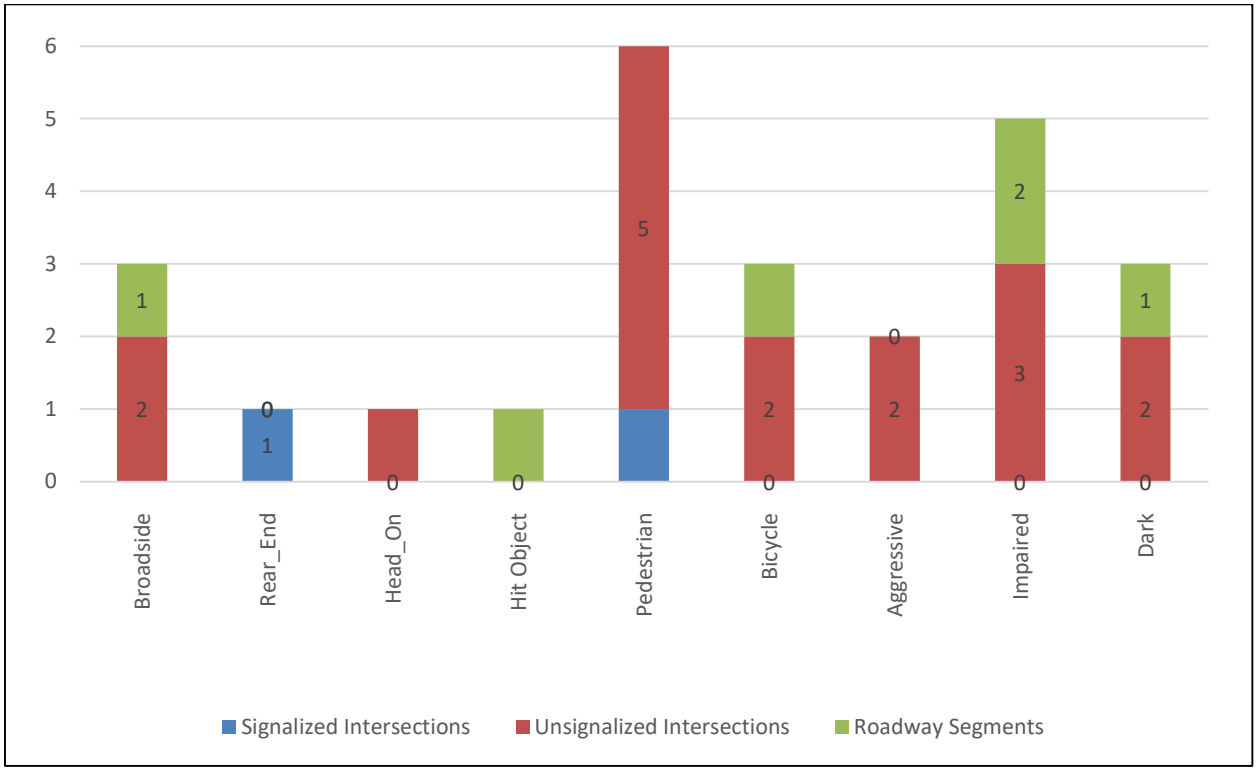
Figure 17 — Crashes by Type (2019-2023)



Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

The most common crash types which resulted in fatal and severe injuries were pedestrian crashes followed by impaired driving crashes, and broadside & bicycle crashes **(Figure 18)**. Though crashes involving vulnerable road users (bicycles and pedestrians) accounted for 38% of all crashes, they accounted for a disproportionately higher percentage (60%) of all KSI crashes.

Figure 18 — KSI Crashes by Type (2019-2023)



Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)
Note: The crash types with no KSI crashes are not shown in the chart.

As identified in **Table 1**, there are five challenge areas within the City of Capitola where the percentage of KSI crashes are higher than the statewide average. These challenge areas include intersections, pedestrians, bicyclists, distracted driving, and impaired driving. Some of these challenge areas are discussed in further detail in the sections below:

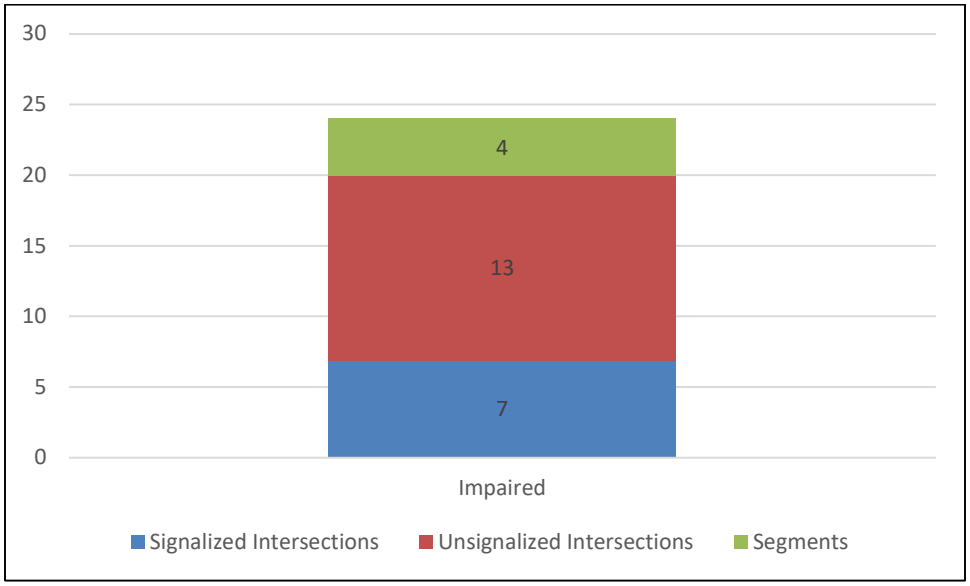
7.7. Impaired Driving Crashes

Impaired driving crashes include all crashes where there was evidence of drug or alcohol use by the driver. Drivers do not need to exceed the legally defined threshold of intoxication to be counted, as Caltrans considers any level of alcohol consumption to have the potential to impact driver responsiveness and decision making. There were 24 impaired driving crashes between 2019-2023, none of which resulted in a fatality and five of which resulted in severe injuries. **Figure 19** illustrates the impaired driving crashes within the City. A list of the intersections in order of the highest to lowest number of crashes due to impaired driving are shown below:

- 41st Ave and Capitola Rd (2)
- Capitola Rd and 30th Ave (2)
- 41st Ave and Clares St (1)
- Clares St and Capitola Rd (1)
- Esplanade and San Jose Ave (1)
- Stockton Ave and Esplanade (1)
- Thompson Ave and Capitola Rd (1)

- 42nd Ave and Capitola Rd (1)
- Bay Ave and Burlingame Ave (1)
- Callas Ln and Kennedy Dr (1)
- Monterey Ave and Esplanade (1)
- Park Ave and Washburn Ave (1)
- Bay Ave and Capitola Ave (1)
- Bay Ave and Oak Dr (1)
- Columbus Dr and Cortez St (1)

Figure 19 — Impaired Driving Crashes

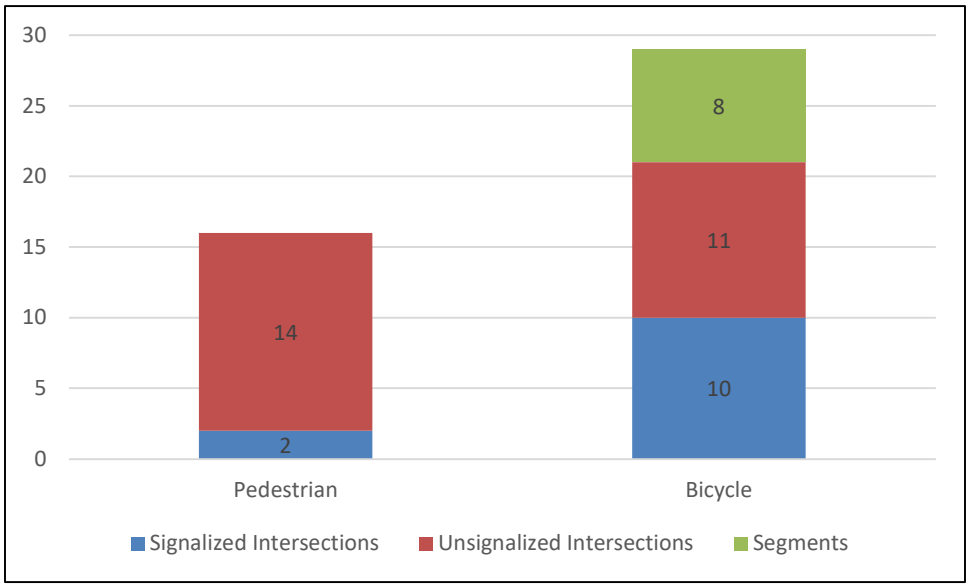


Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

7.8. Non-Motorized Crashes

There were a total of 29 crashes involving bicycles and 16 crashes involving pedestrians, as shown in **Figure 20**. Bicycle and pedestrian crashes were most common at intersections, particularly at unsignalized intersections.

Figure 20 — Bicycle and Pedestrian Crashes



Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

Figure 21 illustrates the locations of pedestrian and bicycle crashes at intersections within the City. Additional information on pedestrian and bicycle crashes is in the following sections.

7.8.1. Bicycle Crashes

There were 29 bicycle-involved crashes in the City over the study period. Of the bicycle-involved crashes, three were reported with severe injuries, 17 with visible injuries, and 9 with complaints of pain. The severe injury bicycle crashes occurred at the following locations:

- Bay Avenue and Oak Drive
- 41st Avenue and Gross Road
- Kennedy Drive and Sir Francis Avenue

7.8.2. Pedestrian Crashes

Over the study period of 2019-2023, a total of 16 pedestrian-involved crashes occurred in the City. Of the pedestrian-involved injury crashes, 2 crashes were fatal, 4 were reported with severe injuries, 4 were reported with other visible injuries, and 6 with complaints of pain.

The fatal pedestrian crashes occurred at the following intersections:

- 38th Avenue and Brommer Street
- Crossroads Loop and Bay Avenue

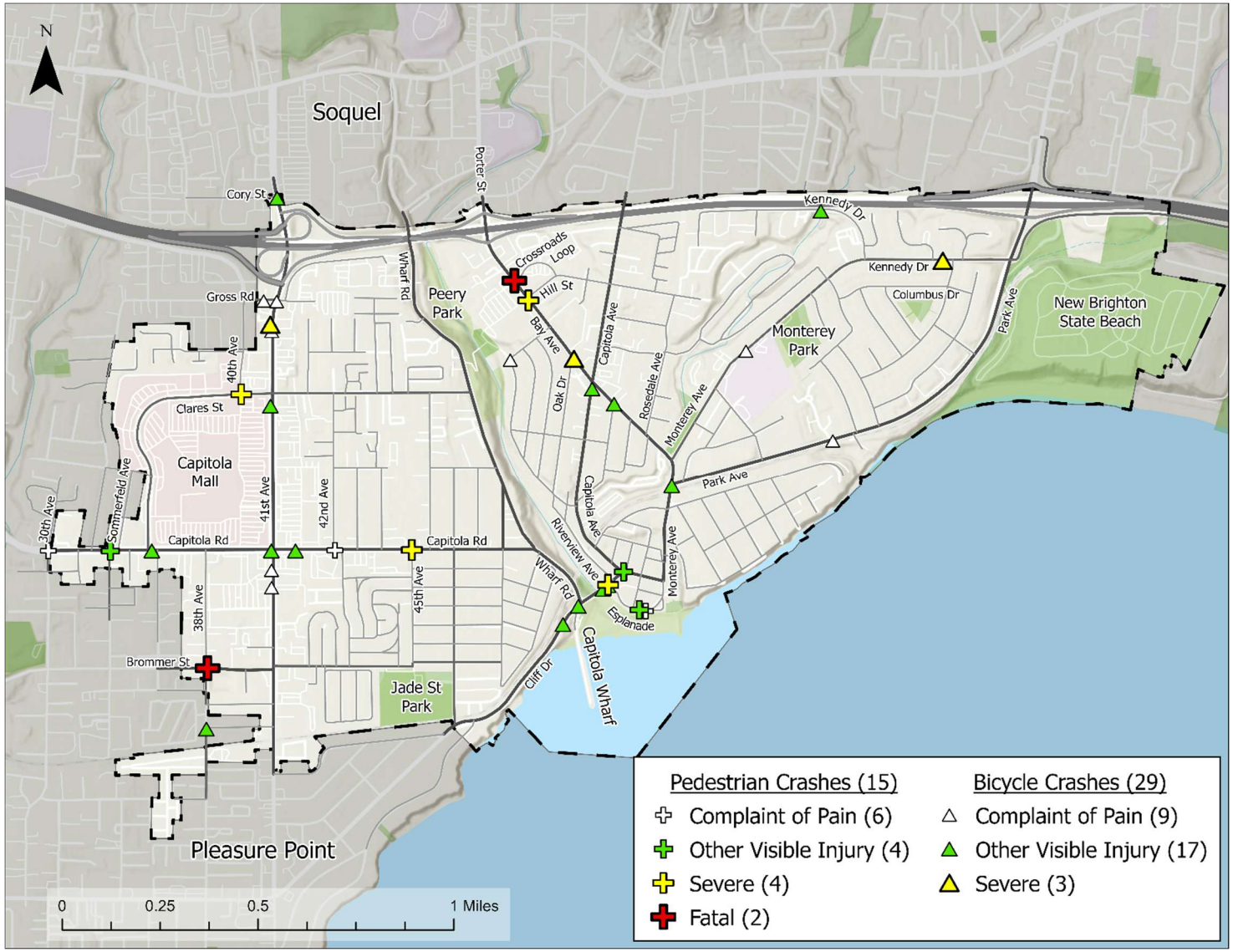
The severe injury pedestrian crashes occurred at the following locations:

- 45th Avenue and Capitola Road
- Bay Avenue and Hill Street
- Clares Street and 40th Avenue
- Stockton Avenue and Esplanade

In 2025, a severe-injury pedestrian crash occurred at the intersection of Bay Avenue and Capitola Avenue, which is not included in the above summary.

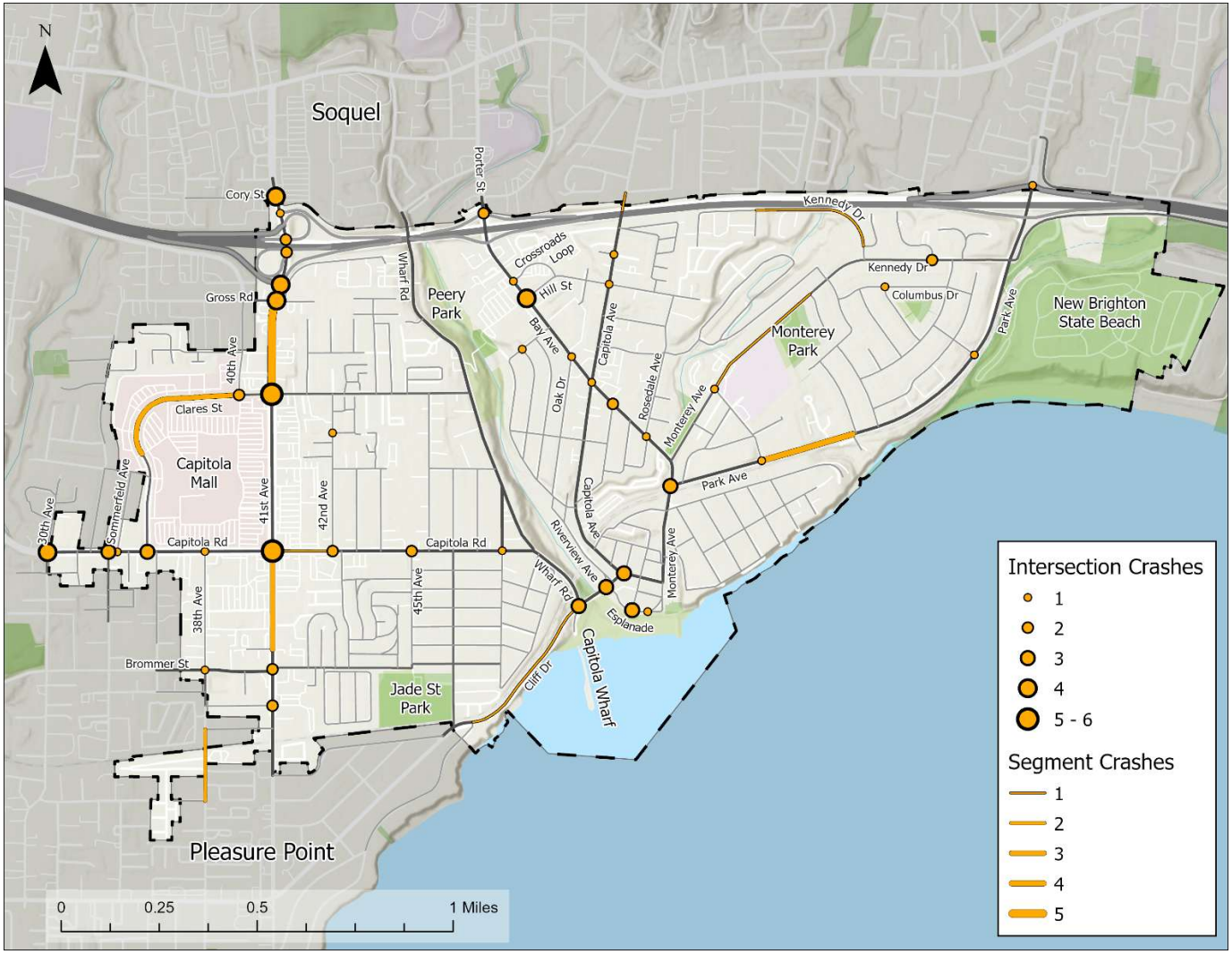
Figure 22 illustrates the intersection and roadway segment injury crashes in City of Capitola.

Figure 21 — Non-Motorized Crash Map



Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

Figure 22 — Intersection and Roadway Segment Injury Crashes

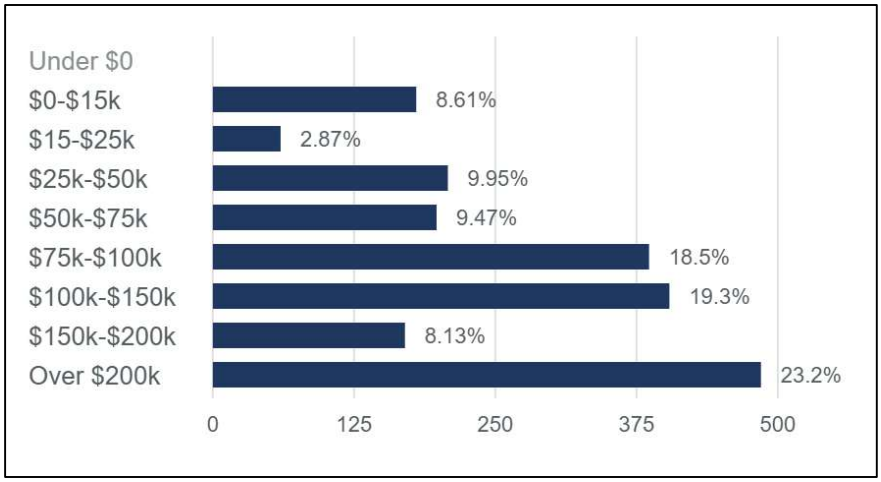


Source: UC Berkeley SafeTrek Transportation Injury Mapping System (TIMS) (2019-2023)

8. DEMOGRAPHIC AND SOCIOECONOMIC ASSESSMENT

Road user data was obtained from ReplicaHQ[4] for the City of Capitola. Replica is a nationally calibrated agent-based travel model that provides simulated transportation analytics for baseline existing conditions. Replica uses large public and private datasets including mobile location data, census and other government datasets, and observed traffic datasets to generate the conditions of an average day during select periods of the year. Replica's agent-based model simulates highly detailed travel behavior, modeled at the individual traveler level throughout the full course of the day, providing insights into travel purpose, modal distribution, travel time, and routing patterns. The 2025 Spring dataset was selected to capture the most recently available travel data. The Replica data indicates that 11.5% of residents travelling along 41st Ave have a household income of $25K or less, while 21% have an household income of $50K or less (**Figure 23**).

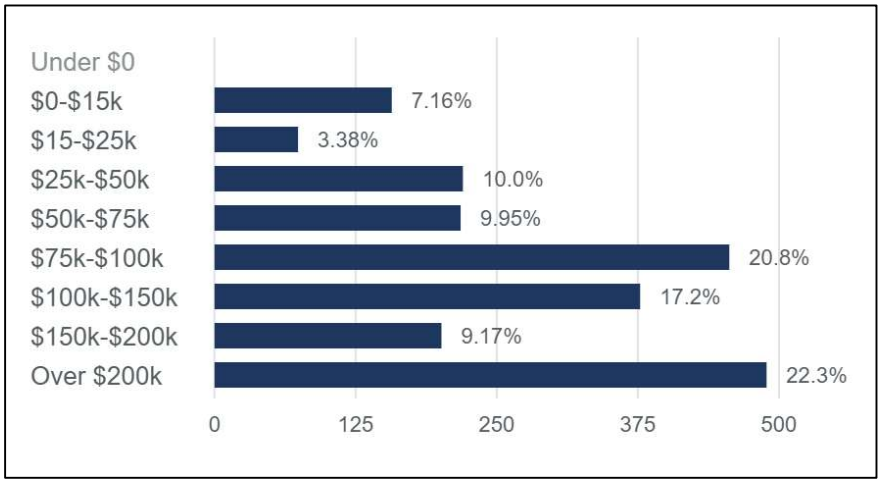
Figure 23 — Household Income of road users along 41st Ave



Along Stockton Ave in the Main Village, 10.5% of resident trips have a household income less than $25K, while an additional 10% have a household income of 50K or less (Error! Not a valid bookmark self-reference.). The safety improvements identified for these corridors and proposed in the safety countermeasure toolbox will benefit these low income households.

[4] ReplicaHQ, Accessed January 2026. https://www.replicahq.com/

Figure 24 — Household income for road users along Stockton Ave



Approximately 15% of resident trips were completed by walking or cycling. **Figure 26** presents a map of the low-income pedestrian and cyclist trips originating in Capitola. Clares St and Capitola Rd (both east of 41st Ave) carried high proportions of daily low-income pedestrian and cyclist trips. The Cliff Dr/Stockton Rd approach to the village carried a moderate amount of low-income pedestrian and cyclist trips. The safety improvements proposed at the intersections of Capitola Rd with Clares St and by Stockton Ave within the village will benefit these Capitola residents.

Figure 25 presents a map of network link volumes, representing the volume of resident trips with an annual household income of less than $25K. The 41st Ave corridor, especially the segment north of Clares St, carries a high volume of low-income road residents. Capitola Rd east of 41st Ave, Bay Ave, and Stockton Ave leading into the village also carry a higher proportion of low-income resident trips. The safety improvements proposed along these corridors would benefit these low-income Capitola residents.

Approximately 15% of resident trips were completed by walking or cycling. **Figure 26** presents a map of the low-income pedestrian and cyclist trips originating in Capitola. Clares St and Capitola Rd (both east of 41st Ave) carried high proportions of daily low-income pedestrian and cyclist trips. The Cliff Dr/Stockton Rd approach to the village carried a moderate amount of low-income pedestrian and cyclist trips. The safety improvements proposed at the intersections of Capitola Rd with Clares St and by Stockton Ave within the village will benefit these Capitola residents.

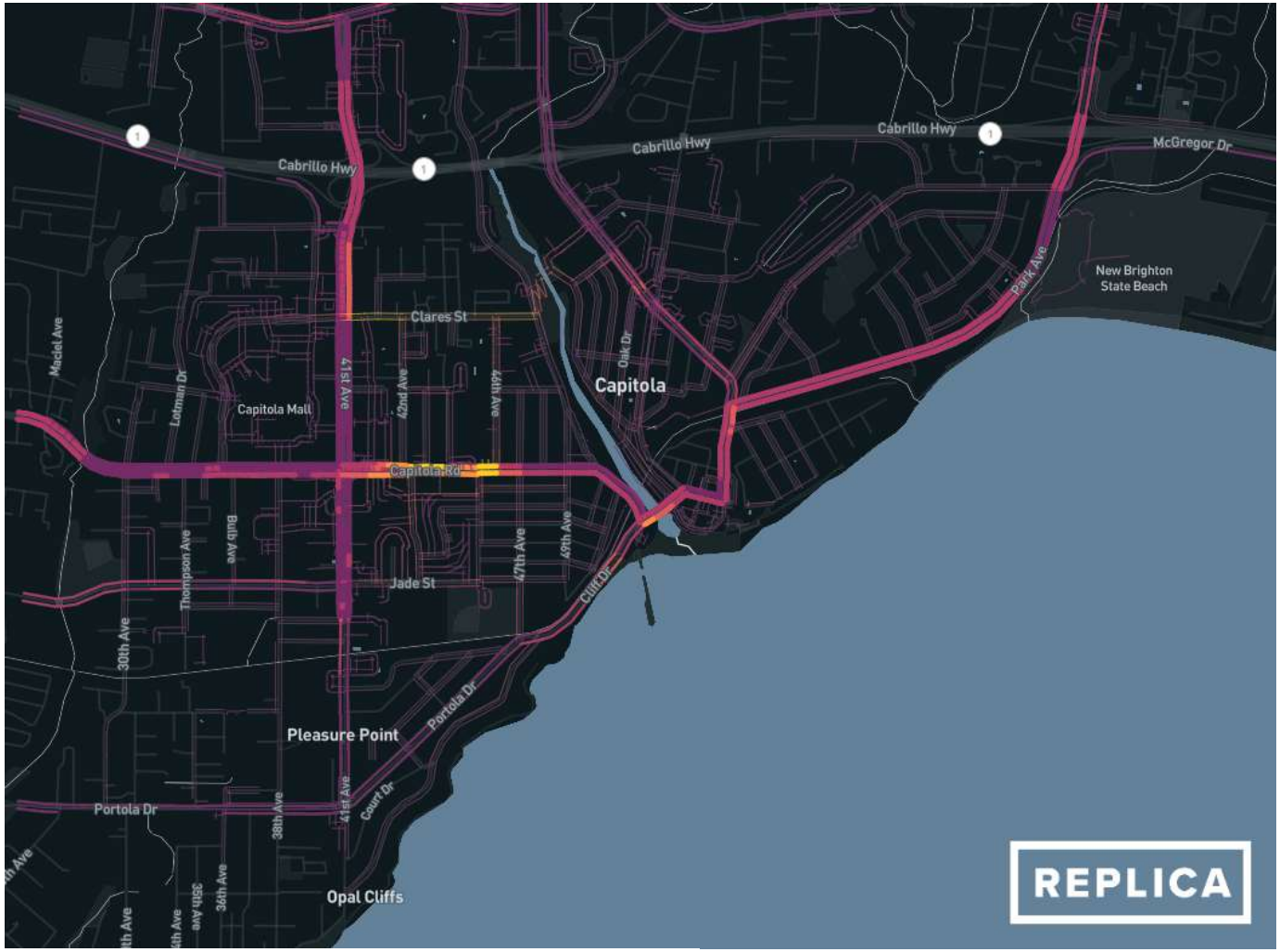
Figure 25 — Low Income Network Link Volumes Originating in Capitola

Network Link Volume

Number of trips that pass through each network link

1 47 93 159 242 483

Figure 26 — Low Income Pedestrian and Cyclist Network Link Volumes Originating in Capitola



Network Link Volume

Number of trips that pass through each network link

1 7 13 19 26 39

9. RECOMMENDATIONS

The following sections provide more information on potential engineering and non-infrastructure safety countermeasures that might address conditions that were observed to contribute to crash activity in the City.

9.1. Engineering Countermeasures

The following sections contain a description of Crash Modification Factors (CMFs) and Crash Reduction Factors (CRFs) associated with the engineering countermeasures toolbox.

9.1.1. Crash Modification Factors

When identifying potential systemic safety improvements, it is important to look at CMFs for the proposed improvements. The CMF Method is found in Part D of the HSM. CMFs are defined as the ratio of effectiveness of one condition in comparison to another condition and represent the relative change in crash frequency due to a change in one specific condition. Countermeasures with CMFs less than one are expected to reduce crashes if applied, while those countermeasures with CMFs greater than one are expected to increase crashes. **Figure 27** illustrates the definition of CMFs.

Figure 27 — CMF Calculation

$$CMF = \frac{\text{EXPECTED CRASHES WITH TREATMENT}}{\text{EXPECTED CRASHES WITHOUT TREATMENT}}$$

CMF = 1.0	Expected to have no impact on safety
CMF < 1.0	Expected to reduce crashes
CMF > 1.0	Expected to increase crashes

A Crash Reduction Factor (CRF) is similar to a CMF but stated in different terms. A CRF is defined as a percentage of crash reduction that might be expected after the implementation of a given countermeasure at a specific site. In application, the higher a CRF value is, the more effective the countermeasure is at preventing crashes. The countermeasures proposed in this LRSP were chosen because of their effectiveness in reducing crashes, especially those most commonly occurring in the City.

9.1.2. Engineering Countermeasures Toolbox

The systemic improvements identified as most likely effective to be for Capitola are listed in **Table 5,** and include a wide range of countermeasures that can be implemented in phases where appropriate. Many of these proposed countermeasures have already been implemented in the City, including but not limited to installation of high-visibility crosswalks, implementation Leading Pedestrian Intervals (LPI), installation of retro-reflective backplates on traffic signal heads, installation of advanced stop bar, installation of intersection lighting.

The CMF indicates how effective the countermeasure is at reducing crashes. CMFs and CRFs have been provided for reference to aid the City of Capitola in understanding potential reductions from crashes by different countermeasures. Caltrans funding levels for each countermeasure are also

provided to aid the City in determining what the local match would likely be if the City were to pursue grant funding. Most countermeasures are eligible for Caltrans funding up to 90%, though some are lower.

Some of the low-cost countermeasures identified in **Table 5** are part of the routine improvements regularly implemented by the City through ongoing maintenance and capital projects.

Table 5 — Capitola Engineering Countermeasures Toolbox

Countermeasure	Also Addresses		Crash Modification Factor (CMF)	Crash Reduction Factor (CRF)	CRF Applies to			Caltrans Funding	Cost to Implement
	Pedestrian	Bicycle			All	Nighttime	Pedestrian and Bicycle		
Signalized Intersections									
Modify signal to provide a Leading Pedestrian Interval (LPI)	X		0.4	60%			X	90%	$
Install Left Turn Lane, Add Left Turn Phase			0.45	55%	X			90%	$$$
Install High Friction Surface Treatment (HFST)			0.45	55%	X			90%	$$$
Install intersection lighting			0.6	40%		X		90%	$$
Pedestrian scramble	X		0.6	40%			X	90%	$$
Curb extensions	X		0.63	37%			X	N/A	$$
Install pedestrian median fencing on approaches	X		0.65	35%			X	90%	$$
Protected left turn phase			0.7	30%	X			90%	$$
Convert signal from pedestal-mounted to mast arm			0.7	30%	X			90%	$$$
Install signs with LED borders as advanced warning			0.7	30%	X			90%	$$
Install raised median on approaches			0.75	25%	X			90%	$$
Pedestrian countdown signal heads	X		0.75	25%			X	90%	$
Signal ahead warning signs			0.85	15%	X			N/A	$
Retroreflective backplates			0.85	15%	X			90%	$
Improve signal timing (coordination)			0.85	15%	X			50%	$$

Countermeasure	Also Addresses		Crash Modification Factor (CMF)	Crash Reduction Factor (CRF)	CRF Applies to			Caltrans Funding	Cost to Implement
	Pedestrian	Bicycle			All	Nighttime	Pedestrian and Bicycle		
Advanced stop bar before crosswalk and bicycle box	X	X	0.85	15%			X	90%	$
Install raised pavement markers and striping			0.9	10%	X			90%	$
Flashing yellow arrow			0.94	6%	X			N/A	$
Convert intersection to roundabout (from signal)			Varies	Varies	X			90%	$$$
Convert intersection to mini/compact roundabout (from signal)			Varies	Varies	X			90%	$$
Install a raised intersection	X		Not Available	Not Available			X	N/A	$$
Unsignalized Intersections									
Install High Friction Surface Treatment (HFST)			0.55	55%	X			90%	$$$
Pedestrian Signal or Pedestrian High Intensity Activated Crosswalk (HAWK)	X		0.45	55%			X	90%	$$$
Install all-way STOP control			0.5	50%	X			90%	$
Directional median openings to restrict turning movements			0.5	50%	X			90%	$$
Reduced Left-Turn Conflict (R-CUT) intersections			0.5	50%	X			90%	$$$
Pedestrian refuge island	X		0.55	45%			X	90%	$$
Install splitter-islands on minor road approaches			0.6	40%	X			90%	$$
Crosswalk lighting	X		0.6	40%		X	X	90%	$$
Install splitter-islands on minor road			0.6	40%	X			90%	$$
Add intersection lighting			0.6	40%		X		90%	$$
Colored bicycle lanes		X	0.61	39%			X	90%	$
Curb extensions	X		0.63	37%			X	N/A	$$$

Countermeasure	Also Addresses		Crash Modification Factor (CMF)	Crash Reduction Factor (CRF)	CRF Applies to			Caltrans Funding	Cost to Implement
	Pedestrian	Bicycle			All	Nighttime	Pedestrian and Bicycle		
Install/upgrade pedestrian crossing with	X		0.65	35%			X	90%	$$$
Rectangular Rapid Flashing Beacon	X		0.65	35%			X	90%	$$
Install left-turn lane			0.65	35%	X			90%	$$
Install flashing beacons as advanced warning			0.7	30%	X			90% (if beacons are utilized)	$$
Upgrade pavement markings			0.75	25%	X			90%	$
Install raised median on approaches			0.75	25%	X			90%	$$
Clear sight triangles			0.8	20%	X			90%	$
Install right-turn lane			0.8	20%	X			90%	$$
Install/upgrade intersection			0.85	15%	X			90%	$
Install flashing beacons at stop-			0.85	15%	X			90%	$$
Convert intersection to roundabout			Varies	Varies	X			90%	$$$
Retroreflective strips on sign posts			Not Available	Not Available	X			90%	$
Install a raised intersection	X		Not Available	Not Available			X	N/A	$$$
Partial street closure or diagonal diverter			Not Available	Not Available	X			N/A	$$
Full street closure	X	X	Not Available	Not Available	X		X	N/A	$$
Roadway Segments									
Improve pavement friction (High Friction Surface Treatment)			0.45	55%	X			90%	$$$
Install chevron signs on horizontal curves			0.60	40%	X			90%	$
Remove or relocate fixed object outside of Clear Recovery Zone			0.65	35%	X			90%	$$$
Install pedestrian median fencing	X	X	0.65	35%			X	90%	$$

Countermeasure	Also Addresses		Crash Modification Factor (CMF)	Crash Reduction Factor (CRF)	CRF Applies to			Caltrans Funding	Cost to Implement
	Pedestrian	Bicycle			All	Nighttime	Pedestrian and Bicycle		
Install bike lanes	X	X	0.65	35%			X	90%	$
Add segment lighting			0.65	35%		X		90%	$$
Install/upgrade pedestrian crossing (with enhanced safety features)	X	X	0.65	35%			X	90%	$$
Install raised pedestrian crossing	X	X	0.65	35%			X	90%	$$
Install rectangular rapid flashing beacon	X	X	0.65	35%			X	90%	$$
Install curve advance warning signs (flashing beacon)			0.70	30%	X			90%	$$
Install dynamic/variable speed warning signs			0.70	30%	X			90%	$$
Install curve advance warning signs			0.75	25%	X			90%	$
Install impact attenuators			0.75	25%	X			90%	$$
Install centerline rumble strips/stripes			0.80	20%	X			90%	$$
Install edge line rumble strips/stripes			0.85	15%	X			90%	$$
Install/Upgrade signs with new fluorescent sheeting (regulatory/warning)			0.85	15%	X			90%	$
Install delineators, reflectors and/or object markers			0.85	15%	X			90%	$
Speed feedback signs (mobile or fixed)	X	X	Not Available	Not Available			X	Opportunity for OTS funding	$$
Install lane narrowing treatments (extend curb inward/extend median)	X		Not Available	Not Available	X			N/A	$$
Install a chicane, deviation, or angled slow point			Not Available	Not Available	X			N/A	$$$
Install speed hump			Not Available	Not Available	X			N/A	$$

$$$ Requires design and construction of extensive infrastructure improvements

$$ Requires procurement and/or minor construction activities

$ Requires limited staff resources and can be implemented in-house with current engineering and/or maintenance staff

9.1.3. Case-Study Locations

The case-study locations in this section illustrate potential countermeasures, their crash modification factors, and implementation costs. These locations are not prioritized, funded, or programmed projects for the City.

The network screening analysis identified the high-severity crash locations within the City of Capitola. The network screening analysis tables for intersections and roadway segments are summarized in **Appendix A** and **Appendix B**. Based on the network screening analysis, the highest number of crashes occurred at the following locations.

- Signalized Intersections:
  - 41st Avenue and Capitola Rd (6 crashes)
  - 41st Avenue and Clares St (6 crashes)
- Unsignalized intersections:
  - 41ST Avenue and Cory St (4 crashes)
- Roadway Segment
  - 41st Avenue from Gross Rd to Clares St (5 crashes)

Several of the highest crash locations identified through the network screening analysis are located along 41st Avenue and Bay Avenue, which remain the City's highest priority corridors for roadway safety improvements. These corridors are already the focus of ongoing City safety improvement efforts and capital projects. Because improvements are currently being advanced along these corridors, they were not selected as case study locations in this LRSP. Instead, the case studies presented below focus on additional locations identified through the analysis where conceptual countermeasures may help inform future project development and funding applications.

The case-study locations selected are shown in **Table 6**.

Table 6 — Case-Study Locations

Case Study Location	Crashes	EPDO	Notes
Signalized Intersections			
Capitola Road and 30th Avenue	4	30	• 1 Broadside crash • 2 Rear-End crashes • 1 Pedestrian crash • 2 Aggressive crashes • 2 Impaired crashes • 2 Dark crashes
Capitola Road and Clares Street	3	28	• 1 Rear-End crash • 2 Bike crashes • 1 Aggressive crash • 1 Impaired crash • 1 Dark crash
Unsignalized Intersections			

Case Study Location	Crashes	EPDO	Notes
Esplanade and San Jose Avenue	3	29	• 1 Broadside crash • 1 Rear-End crash • 1 Pedestrian crash • 1 Aggressive crash • 1 Impaired crash • 1 Dark crash
Esplanade and Stockton Avenue	3	187	• 1 Pedestrian crash • 2 Bike crashes • 1 Impaired crash • 1 Dark crash
Segments (Major Arterials)			
Park Avenue from Washburn Ave to Wesley St	4	209	• 1 Severe Injury crash • 2 Rear-End crash • 1 Hit-Object crash • 1 Pedestrian crash • 2 Aggressive crashes • 1 Impaired crash

A total of five case study locations (2 signalized intersections, 2 unsignalized intersections, and 1 roadway segment) were selected for further analysis and recommendations. For each of these locations, recommended countermeasures were developed to provide a case study to organize projects when applying for funding. While the crash analysis identified higher crash concentrations along corridors such as 41st Avenue and Bay Avenue, those corridors are already the focus of ongoing City safety improvement efforts. The case study locations were identified through the analysis process based on their crash histories, the observed crash patterns, and their differing characteristics to illustrate systemic safety countermeasures that the City can employ to achieve the most cost-effective safety benefits. The recommended countermeasures are listed in **Table 7**. These countermeasures are intended to illustrate possible safety improvements and would require further evaluation and design before implementation.

An additional set of low-cost countermeasures is also recommended for systemic implementation across the City. These improvements include installing retroreflective signage and traffic signal backplates, as well as a recommendation to follow the requirements of Assembly Bill (AB) 413 to restrict parking within 20 feet of crosswalks on the vehicle approach side with the goal of improving visibility for all road users (also known as daylighting)[5]. AB 413 was signed into law on October 10, 2023, with ticketed enforcement being permitted following January 1, 2025. While daylighting may be conducted with low-cost treatments such as signage, painted curbs, or raised delineators, it is recommended that the City also conduct outreach to inform the public about this new law and its impact in removing parking spaces. Additionally, signal-related improvements, such as enhanced

[5] AB-413 Vehicles: stopping, standing, and parking. October 10, 2023. Available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB413

bicycle detection and optimized signal timing and operations, can help better accommodate bicyclists at signalized intersections and improve overall safety and efficiency.

Table 7 — Countermeasures for Selected Case Study Locations

Countermeasure	Crash Reduction Factor (CRF)	Cost
Capitola Road and 30th Avenue		
Upgrade to high-visibility crosswalks	25%	$$
Implement Leading Pedestrian Interval (LPI)	60%	$$
Upgrade signal heads to incorporate retroreflective backplates	15%	$
Advanced stop bar before crosswalk and bicycle box	15%	$
Increased enforcement of speeding and aggressive driving	-	-
Capitola Road and Clares Street		
Implement Leading Pedestrian Interval (LPI)	60%	$$
Upgrade signal heads to incorporate retroreflective backplates	15%	$
Advanced stop bar before crosswalk and bicycle box	15%	$
Increased enforcement of speeding and aggressive driving	-	-
Esplanade And San Jose Avenue		
Add intersection lighting	40%	$$
Install raised pedestrian crossing across Esplanade	35%	$$
Install sharrows and bike route signage	-	$
Rectangular Rapid Flashing Beacon (RRFB)	35%	$$
Increased enforcement of speeding and aggressive driving	-	-
Esplanade and Stockton Avenue		
Add intersection lighting	40%	$$
Install/upgrade intersection warning/regulatory signs – Do Not Enter sign at Southern Riverview Ave intersection approach	15%	$
Bulb-out at Esplanade on either side	-	$$
Increased enforcement of speeding and aggressive driving	-	-

Countermeasure	Crash Reduction Factor (CRF)	Cost
Park Avenue from Washburn Ave to Wesley St		
Install/Upgrade signs with new fluorescent sheeting (regulatory/warning)	15%	$
Install delineators, reflectors and/or object markers	15%	$
Flatten Crest Vertical Curve	25%	$$$
Increased enforcement of speeding and aggressive driving	5%	$

9.2. Non-Infrastructure Countermeasures

The National Highway Traffic Safety Administration (NHTSA) *Countermeasures that Work, Ninth Edition,* is a reference to assist safety stakeholders in selecting effective, science-based non-infrastructure traffic safety countermeasures for major highway safety problem areas. While many of the countermeasures are more appropriate to apply at the state-level or require legislative modifications to implement, **Table 8** contains countermeasures that have demonstrated effectiveness and could be applied at the City level. Note that while there are several other non-infrastructure countermeasures available, only those which have an effectiveness rating of four stars or higher are presented. Access to Drug Recognition Experts (DREs) and Advanced Roadside Impaired Driving Enforcement (ARIDE) training for law enforcement is not included in the document but are countermeasures that could also be considered for the City.

Table 8 — Capitola Non-Infrastructure Countermeasures Toolbox

Countermeasure	Effectiveness	Cost to Implement	Use	Time to Implement
Aggressive Driving				
B.A.D.G.E.S. (Before Aggressive Drivers Get Everyone Stopped)	***** Effective	$$†	Medium	Short
Impaired Driving				
Publicized Sobriety Checkpoints	***** Effective	$$$	Medium	Short
High-Visibility Saturation Patrols (large number of law enforcement officers patrolling a specific area)	**** Situational	$$	High	Short
Occupant Protection (Seat Belts, Helmets, Child Seats)				
Short-term high visibility enforcement	***** Effective	$$$	Medium	Medium
Distracted Driving				
High visibility cellphone/text messaging enforcement	**** Situational	$$$	Low	Medium

Effectiveness:
****** Demonstrated to be effective by several high quality evaluations with consistent results*
***** Demonstrated to be effective in certain situations*
Cost to Implement:
$$$ Requires extensive new facilities, staff, equipment, or publicity, or makes heavy demands on current resources
$$ Requires some additional staff time, equipment, facilities, and/or publicity
$ Can be implemented with current staff, perhaps with training; limited costs for equipment, facilities, and publicity
†Can be covered by income from citations
Use:
High: More than two-thirds of states, or a substantial majority of communities
Medium: Between one-third and two-thirds of states or communities
Low: Less than one-third of states or communities
Unknown: Data not available
Time to Implement:
Long: More than 1 year
Medium: More than 3 months but less than 1 year
Short: 3 months or less

10. Evaluation and Implementation

10.1. Evaluation

The success of the LRSP can be evaluated using the general process outlined below. This process can be useful to monitor progress towards implementation of safety improvement projects and strategies, and to determine when updates to the LRSP should be considered.

- Law enforcement continues monitoring and recording of traffic incidents on local roadways.
- Conduct frequent progress meetings (annually or quarterly) between City staff and a working group (i.e. traffic safety committee) to review the latest crash data, including assessing the effectiveness of safety countermeasures implemented, discussing ongoing traffic safety challenges, and tracking progress on plan implementation.
- Maintain a list of focus/priority areas where there are transportation safety concerns based on review of crash data. The list of priority and/or top crash locations can be updated as an outcome of review of updated crash data and trends.
- Perform an update to the plan after no more than five years. It is recommended that updates to the LRSP be approved by City Council and made available to the public in accordance with Caltrans' Local Roadway Safety Plan guidance.

10.2. Implementation

Implementation of the LRSP can be accomplished through development and implementation of safety improvement projects and strategies, the establishment of new/updated policies and programs, and development/strengthening of relationships with stakeholders.

With regard to projects, the following section identifies potential focus areas for the City in the near-to-mid-term.

10.2.1. Near- and Mid-Term Focus Areas

The opportunities identified in this LRSP provide more of the systemic countermeasures that can be applied within the City. Over the next three to five years, it is recommended that the City concentrate its efforts on the following emphasis areas:

1. Aggressive Driving
2. Speeding
3. Vulnerable Road Users (Pedestrians & Bicyclists)
4. Intersections with Unconventional Geometries

Analysis conducted at the citywide level indicated that these factors were some of the most frequent influences contributing to crashes within the City. The countermeasure opportunities previously discussed in this report for both systemic and project-specific improvements can be used as a basis for developing projects at locations where addressing these focus areas would be of the most benefit. Projects that address these focused areas can be developed with a high benefit-to-cost ratio (by applying City-wide crash rates), allowing competitive projects to be developed even at sites with little to no direct crash history, but with conditions that might contribute to future crashes.

10.3. Funding

Competitive funding resources are available to assist in the development and implementation of safety projects in Capitola. The City should continue to seek available funding and grant opportunities from local, state, and federal resources to accelerate their ability to implement safety improvements throughout Capitola. The following is a high-level introduction into some of the main funding programs and grants for which the City can apply.

10.3.1. Highway Safety Improvement Program (HSIP)

The HSIP is a Federal program housed under Fixing America's Surface Transportation (FAST) Act. This program apportions funding as a lump sum for each state, which is then divided among apportioned programs. These flexible funds can be used for projects to preserve or improve safety conditions and performance on any Federal-aid highway, bridge projects on any public road, facilities for non-motorized transportation, and other project types. Safety improvement projects eligible for this funding include:

- New or upgraded traffic signals
- Upgraded guard rails
- Pedestrian warning flashing beacons
- Marked crosswalks

California's local HSIP focuses on infrastructure projects with national recognized crash reduction factors. Normally HSIP call-for-projects is made at an interval of one to two years. The applicant must be a city, a county, or a tribal government federally recognized within the State of California.

Additional information regarding this program at the Federal level can be found online at: https://safety.fhwa.dot.gov/hsip/. California specific HSIP information – including dates for upcoming call for projects - can be found at: http://www.dot.ca.gov/hq/LocalPrograms/hsip.html.

10.3.2. Safe Streets and Roads for All (SS4A)

The SS4A Grant Program is a federal program established by the Bipartisan Infrastructure Law. A total of $5 billion are available from 2022-2026 in the form of planning grants and implementation grants. Grant applications for projects that implement the Safe Systems Approach, such as those related to speed management, improvements in underserved communities, and vulnerable road users, are encouraged. Implementation grant projects must be identified in an applicant's qualifying Safety Action Plan. The SS4A Self-Certification Eligibility Worksheet describes the required elements of an Action Plan and can be accessed at: https://www.transportation.gov/sites/dot.gov/files/2024-02/SS4A-FY24-Self-Certification-Worksheet.pdf

Additional information about implementation grants can be found at: https://www.transportation.gov/grants/ss4a/implementation-grants

10.3.3. Caltrans Active Transportation Program (ATP)

Caltrans Active Transportation Program (ATP) is a statewide funding program, created in 2013, consolidating several federal and state programs. The ATP funds projects that encourage increased mode share for walking and bicycling, improve mobility and safety for non-motorized users, enhance public health, and decrease greenhouse gas emissions. Projects eligible for this funding include:

- Bicycle and pedestrian infrastructure projects
- Bicycle and pedestrian planning projects (e.g. safe routes to school)
- Non-infrastructure programs (education and enforcement)

This program funding is provided annually. The ATP call for projects typically comes out in the spring. Information on this program and cycles can be found online at: http://www.dot.ca.gov/hq/LocalPrograms/atp/

10.3.4. State Transportation Improvement Program (STIP)

The State Transportation Improvement Program (STIP) provides state and federal gas tax money for improvements both on and off the state highway system. STIP programming occurs every two years. The programming cycle begins with the release of a proposed fund estimate, followed by California Transportation Commission (CTC) adoption of the fund estimate. The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal. Caltrans prepares the Interregional Transportation Improvement Program (ITIP) using Interregional Improvement Program (IIP) funds, and regional agencies prepare Regional Transportation Improvement Programs (RTIPs) using Regional Improvement Program (RIP) funds. The STIP is then adopted by the CTC.

10.3.5. California SB 1

SB 1 is a landmark transportation investment to rebuild California by fixing neighborhood streets, freeways, and bridges in communities across California and targeting funds toward transit and congested trade and commute corridor improvements.

California's state-maintained transportation infrastructure will receive roughly half of SB 1 revenue: $26 billion. The other half will go to local roads, transit agencies, and an expansion of the state's growing network of pedestrian and cycle routes. Each year, this new funding will be used to tackle deferred maintenance needs both on the state highway system and the local road system, including:

- Bike and Pedestrian Projects: $100 million
  - This will go to cities, counties and regional transportation agencies to build or convert more bike paths, crosswalks and sidewalks. It is a significant increase in funding for these projects through the ATP.
- Local Planning Grants: $25 million

10.3.6. California OTS Grants

This program has funding for projects related to traffic safety, including transportation safety education and encouragement activities. Grants applications must be supported by local crash data (such as the data analyzed in this LRSP) and must relate to the following priority program areas:

- Alcohol Impaired Driving
- Distracted Driving
- Drug-Impaired Emergency Medical Services
- Motorcycle Safety
- Occupant Protection
- Pedestrian and Bicycle Safety

- Police Traffic Services
- Public Relations, Advertising, and Marketing Program
- Roadway Safety and Traffic Records

10.3.7. ABAG Regional Funding Programs

ABAG provides funding allocation for various multi-modal transportation projects in the Bay Area. Projects that are considered for this regional funding program must be eligible for Congestion Mitigation and Air Quality (CMAQ), Rural Surface Transportation Program (RSTP), or STIP funds.

Performance outcomes which are considered for selection include those which:

- Reduce regional VMT per capita
- Reduce regional congest VMT per capita
- Increase multi-modal or alternative travel choices
- Provide long term benefits, sustaining both rural and urban economies
- Improve movement of goods, in and through the region
- Improve safety and security
- Maintain and improve upon the existing transportation system

11. NEXT STEPS

The City has completed this LRSP to guide the process of future transportation safety improvements for years to come. In addition to the actions identified in the Implementation Plan, the City can perform the following to guide the success of this LRSP and its overall safety efforts.

- Develop a prioritized investment program for transportation safety improvements based on LRSP findings and available funding opportunities.
- Work with state and partner agencies on implementation of large-scale programs and policies.
- Incorporate safety analysis findings in future updates of safety programs.
- Monitor statewide safety priorities, guidance, and funding opportunities.
- Incorporate LRSP findings into the City's upcoming Active Transportation Plan (ATP) process, including evaluation of pedestrian and bicycle safety improvements along key corridors.

APPENDIX A

INTERSECTION NETWORK SCREENING RESULTS

Network Screening Table - Intersections

Intersection	Crashes	Local CCR Differential[1]	EPDO[2]	*Fatal*	*Serious Injury*	*Other Visible Injury*	*Complaint of Pain*	Broadside	Sideswipe	Rear End	Head On	Hit Object	Overturned	Other	Pedestrian	Bicycle	Aggressive	Impaired	Dark	Wet
Signalized Intersections																				
41st AVE and CAPITOLA RD	6	0.00	60			5	1		1		1	1				3	1	2	1	
41st AVE and CLARES ST	6	0.00	160	1		2	3			4				1		1	2	1	1	
CAPITOLA RD and 30th AVE	4	-0.03	30			1	3	1		2					1		2	2	2	
41st AVE and EB CA 1 RAMPS	4	-0.05	24				4			4							4			1
41st AVE and GROSS RD	4	-0.03	31			1	3	2								2	1		1	
CLARES ST and CAPITOLA RD	3	-0.06	28			2	1			1						2	1	1	1	
41st AVE and JADE ST	2	-0.10	12				2			2							2			1
CA 1 RAMPS and PORTER ST	2	-0.09	18			1	1	1		1							2			
38th AVE and CAPITOLA RD	1	-0.13	6				1	1												
CA-1 WB RAMPS and PARK AVE	1	-0.13	11			1					1									
41st AVE and US 1 WB OFF-RAMP	1	-0.13	6				1			1							1			
Unsignalized Intersections																				
41st AVE and CORY ST	4	0.03	44			4		1		1						2				1
BAY AVE and HILL ST	4	0.05	190		1	1	2	1	1						2		1		1	1
ESPLANADE and SAN JOSE AVE	3	2.69	29			2	1	1		1					1		1	1	1	
STOCKTON AVE and ESPLANADE	3	0.05	187		1	2									1	2		1	1	
CLIFF DR and WHARF RD	3	-0.02	29			2	1		1			1				1	1			
THOMPSON AVE and CAPITOLA RD	3	0.00	25			1	2	2							1			1	1	1
CAPITOLA AVE and STOCKTON AVE	3	0.03	25			1	2								3					
MONTEREY AVE and PARK AVE	3	0.01	25			1	2			1	1					1	2			
40th AVE and CLARES ST	2	-0.04	126		1		1				1				1		1			
41st AVE and REPOSA AVE	2	-0.02	14				2	1					1						1	1
42nd AVE and CAPITOLA RD	2	-0.02	173		1		1	1							1			1	1	
45th AVE and CAPITOLA RD	2	-0.02	173		1		1								2					
BAY AVE and BURLINGAME AVE	2	-0.03	18			1	1	1								1	1	1		
CALLAS LN and KENNEDY DR	2	0.03	173		1		1			1						1	2	1	1	
38th AVE and BROMMER ST	1	-0.07	165	1											1					
MONTEREY AVE and ESPLANADE	1	0.25	7				1								1			1		
SOMMERFIELD AVE and CAPITOLA RD	1	-0.07	7				1			1							1			
PARK AVE and CORONADO ST	1	-0.07	7				1							1			1			1
49th AVE and CAPITOLA RD	1	-0.07	11			1				1										
PARK AVE and WASHBURN AVE	1	-0.07	165		1						1							1		
BAY AVE and CAPITOLA AVE	1	-0.07	11			1										1	1	1	1	
42nd AVE and SEA PINES CT	1	0.06	11			1				1							1			
BAY AVE and ROSEDALE AVE	1	-0.07	11			1			1										1	
BAY AVE and OAK DR	1	-0.07	165		1											1	1	1		
CENTER ST and SUNSET DR	1	0.04	7				1									1	1			
MONTEREY AVE and WASHBURN AVE	1	-0.07	11			1						1								
CAPITOLA AVE and CAPITOLA CT	1	-0.07	7				1			1							1			
COLUMBUS DR and CORTEZ ST	1	0.49	11			1			1									1		
BAY AVE and CROSSROADS LOOP	1	-0.06	165	1											1					
CAPITOLA AVE and HILL ST	1	-0.07	11			1		1									1			1

1 Local Critical Crash Rate Differential

2 Equivalent Property Damage Only Crashes

APPENDIX B

SEGMENT NETWORK SCREENING RESULTS

Network Screening Table - Roadway Sements

Facility	Limits	Crashes	Local CCR Differential[1]	EPDO[2]	*Fatal*	*Serious Injury*	*Other Visible Injury*	*Complaint of Pain*	Broadside	Sideswipe	Rear End	Head On	Hit Object	Overturned	Other	Pedestrian	Bicycle	Aggressive	Impaired	Dark	Wet
Major Arterials																					
41st AVE	GROSS RD to CLARES ST	5	0.3011	401		2		3	2	1						2			1	2	
PARK AVE	WASHBURN AVE to WESLEY ST	4	0.92508	209		1		3			2		1			1		2	1		
41st AVE	CAPITOLA RD to ALAMEDA AVE	3	-0.0419	23			1	2					1			2		2		2	
CAPITOLA RD	41st AVE to 42nd AVE	1	-0.2879	11			1									1					
Minor Arterials																					
CAPITOLA AVE	BALBOA AVE TO GARY DR	1	1.05	6				1						1							
CLIFF DR	OPAL CLIFF DR/PORTOLA DR TO WHARF RD	1	-0.2652	11			1									1					
Major Collectors																					
CLARES ST	40TH AVE to MALL DRIVEWAY	3	0.1135	28			2	1	1		1				1						
38th AVE	ROLAND DR to MELTON ST	2	3.88532	21			2		1							1					
MONTEREY AVE	WASHBURN AVE to JUNIPERO CT	1	-0.3108	6				1								1		1			
Local																					
KENNEDY DR	CHITTENDEN LN to PONSELLE LN	1	4.19559	11			1									1			1		

1. Local Critical Crash Rate Differential

2. Equivalent Property Damage Only Crashes

APPENDIX C

PUBLIC COMMENTS

Social PinPoint
Online Interactive Map Tool
Posts - Capitola

Kimley-Horn Social Pinpoint

Report Type: Social Map Results Summary
Date Range: 23-09-2025 - 15-12-2025
Exported: 14-01-2026 14:30:50

Closed

Untitled
Capitola Local Roadway Safety Plan

38	163
Contributors	Contributions

Key Statistics

Top-level information about the activity.

163
Posts
38 contributors

Map Post Summary

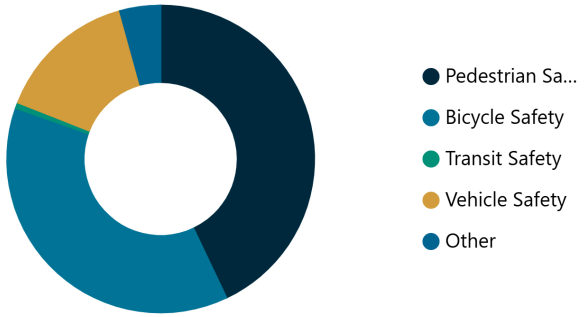
Summary of content contributed by participants including location information, voting results and more.

Posts by Location
Map showing all posts contributed by participants.

Top Contributions by Location
Top 10 most frequent postal/ZIP codes of posts submitted by participants.

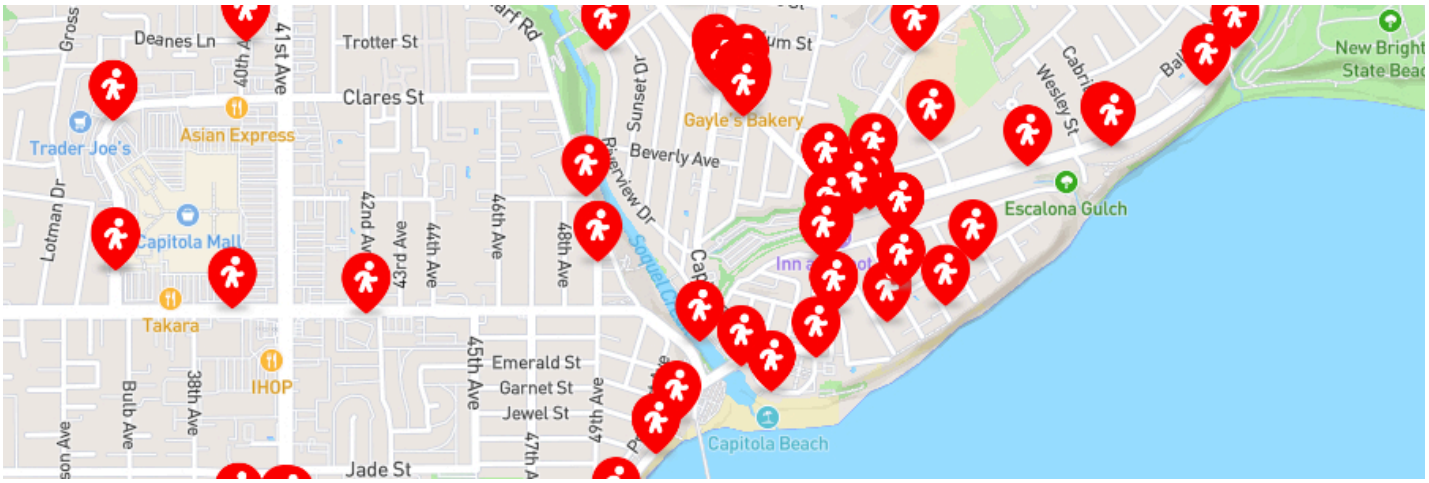
Location	Total Contributions	% Contributions
95039, Capitola, Santa Cruz County, California, United States	149	91.41%
95062, Santa Cruz, Santa Cruz County, California, United States	7	4.29%
95073, Soquel, Santa Cruz County, California, United States	3	1.84%
95062, Live Oak, Santa Cruz, Santa Cruz County, California, United States	2	1.23%

Posts by Category
Comparison showing the number of posts for each category, as selected by participants.



Categories - Pedestrian Safety

Posts by Location
Map showing posts contributed by participants for nominated category.

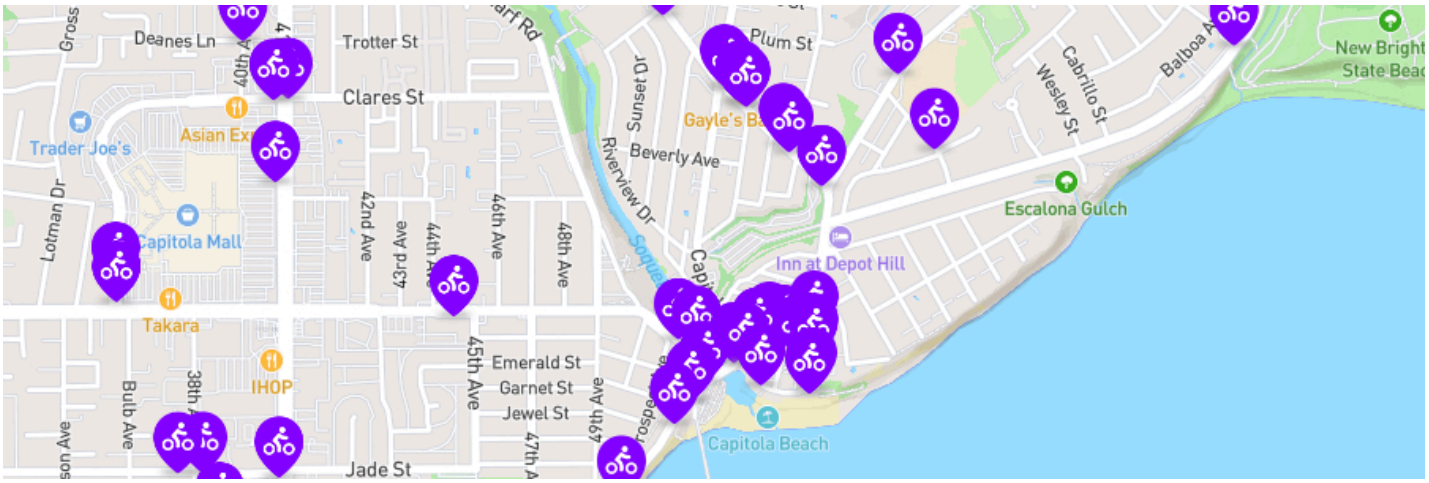


Top Contributions by Location
Top 10 most frequent postal/ZIP codes of posts submitted by participants.

Location	Total Contributions	% Contributions
95039, Capitola, Santa Cruz County, California, United States	65	92.86%
95010, Santa Cruz, Santa Cruz County, California, United States	3	4.29%
	1	1.43%
95062, Live Oak, Santa Cruz, Santa Cruz County, California, United States	1	1.43%

Categories - Bicycle Safety

Posts by Location
Map showing posts contributed by participants for nominated category.

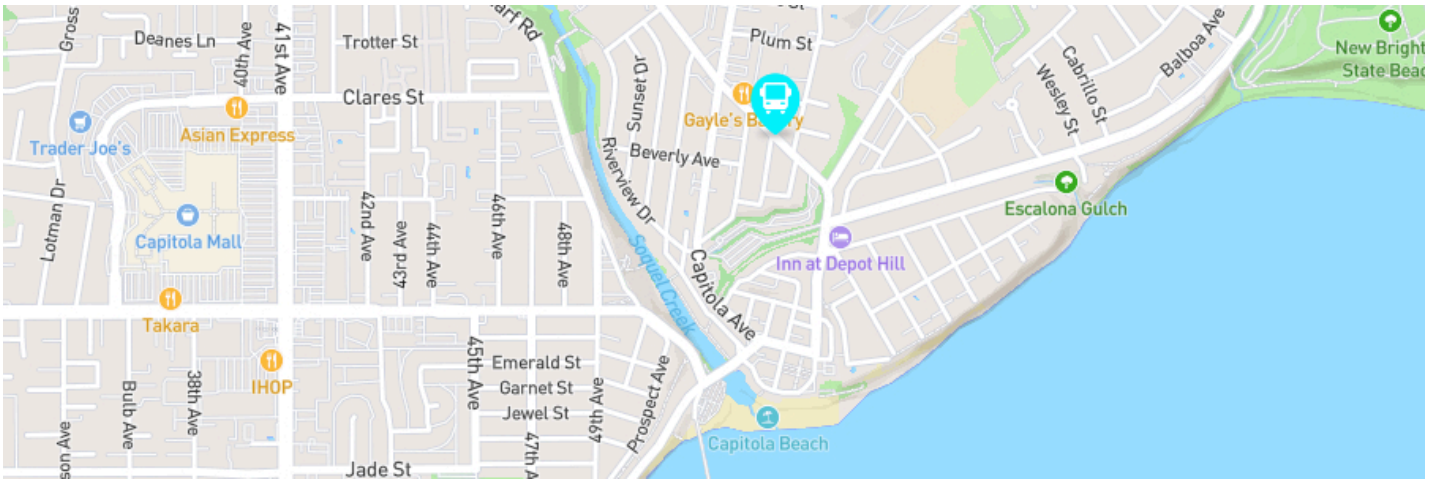


Top Contributions by Location
Top 10 most frequent postal/ZIP codes of posts submitted by participants.

Location	Total Contributions	% Contributions
95010, Capitola, Santa Cruz County, California, United States	53	86.89%
95062, Santa Cruz, Santa Cruz County, California, United States	4	6.56%
95073, Soquel, Santa Cruz County, California, United States	2	3.28%
	1	1.64%
95010, Live Oak, Santa Cruz, Santa Cruz County, California, United States	1	1.64%

Categories - Transit Safety

Posts by Location
Map showing posts contributed by participants for nominated category.

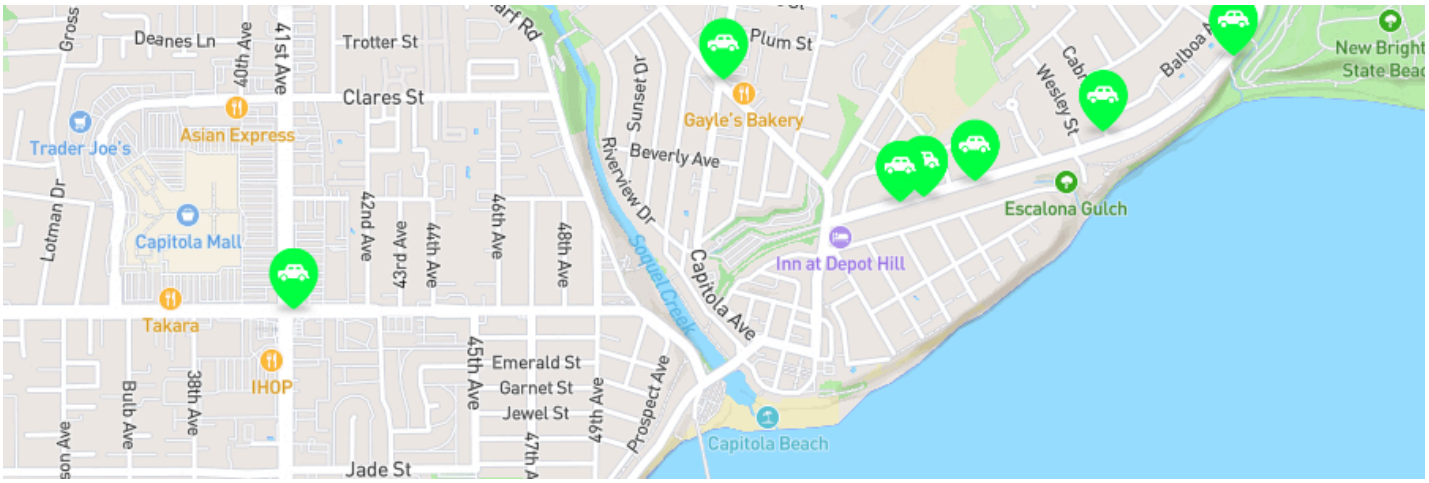


Top Contributions by Location
Top 10 most frequent postal/ZIP codes of posts submitted by participants.

Location	Total Contributions	% Contributions
95010, Capitola, Santa Cruz County, California, United States	1	100%

Categories - Vehicle Safety

Posts by Location
Map showing posts contributed by participants for nominated category.

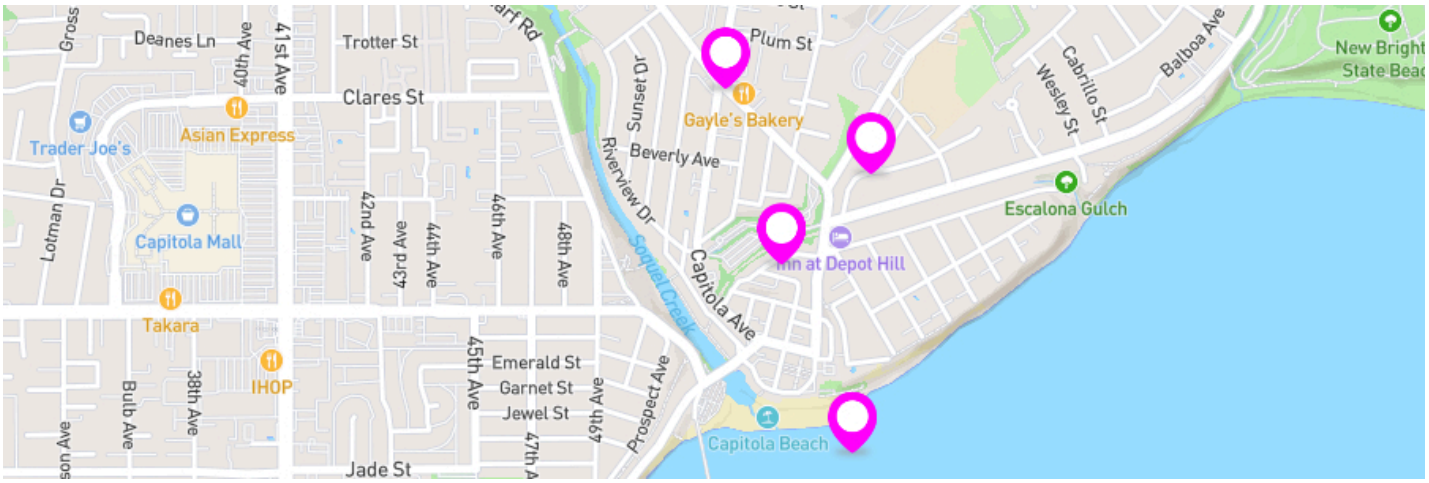


Top Contributions by Location
Top 10 most frequent postal/ZIP codes of posts submitted by participants.

Location	Total Contributions	% Contributions
95010, Capitola, Santa Cruz County, California, United States	23	95.83%
95073, Soquel, Santa Cruz County, California, United States	1	4.17%

Categories - Other

Posts by Location
Map showing posts contributed by participants for nominated category.



Top Contributions by Location
Top 10 most frequent postal/ZIP codes of posts submitted by participants.

Location	Total Contributions	% Contributions
95010, Capitola, Santa Cruz County, California, United States	7	100%

Capitola Local Roadway Safety Plan

Title/Question: Untitled
Tool Type: Social Map
Activity ID: 412
Report Date Range: 23 Sep 2025 - 15 Dec 2025
Date Exported: 1/14/2026 14:37
Exported By: KMei

Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
25690	Dec 15, 2025, 05:30 PM	mid block crossing is not well lit, difficult to see pedestrians at night.	Pedestrian Safety	36.96909757	-121.9648128
25491	Dec 08, 2025, 12:02 PM	Road deterioration, location 325 Loam Ave., the downhill water runoff has degraded the asphalt curb road areas to the point that the asphalt is missing, and large gaps of earth are exposed. It will only continue to get degrade and continue to pop the asphalt up, out and down the road to Park Ave. and eventually into our Bay. And it is a safety hazard, please find a way to at least patch the area. We seem to get cute tiles on walls, sidewalks that nobody uses, and yet when it comes to the maintenance of our roads, Zero attention.	Other	36.97674689	-121.9490265
25486	Dec 06, 2025, 02:16 PM	A driver almost hit my daughter here. Because of the wide turning radius the drivers are able to take this corner at high speed without fully stopping at the red lights. Please consider a curb extension here to slow down the cars and give those of us on bikes and walking to have a safer way to cross this offramp.	Bicycle Safety	36.98271402	-121.9571534
25485	Dec 06, 2025, 02:14 PM	This is marked as a bike lane but is so close to the parked cars that it puts me in the door zone. Meanwhile there is a turning lane down the middle of the road that is rarely used. Please consider removing the turning lane or parking to make a safe space for me to bike on Bay Ave.	Bicycle Safety	36.98019803	-121.9546782
25484	Dec 06, 2025, 02:11 PM	The bike sharrow is painted in the door zone of parked cars. Encouraging people to bike this close to a parked car can cause fatal accidents.	Bicycle Safety	36.97830462	-121.9525955
25483	Dec 06, 2025, 02:10 PM	The bike lane and parked cars are too close and a potentially fatal hazard for me when I ride my bike on Bay Ave. An opening car door can knock me into the road. These types of accidents can be fatal.	Bicycle Safety	36.97739289	-121.9514118
25448	Dec 05, 2025, 05:55 PM	There is a section of the bike lane across from Center St that veers into a parked car that is a hazard.	Bicycle Safety	36.98039795	-121.9546854
25278	Dec 03, 2025, 09:58 PM	Loma Ave. gets an intense amount of traffic during the school hours via New Brighten. Instead of the parents driving down Monterey Ave. as required they zoom down Loma Ave. as a short cut to Park Ave. There is a blind spot at the island of the McCormick - Loma Ave. intersection. Could we please have speed bumps installed to slow down the traffic. And could we have the Police make more of a presence - patrolling our Loma Ave. and McCormick corridor, not just Monterey Ave.	Pedestrian Safety	36.97673806	-121.948964
25273	Dec 03, 2025, 11:01 AM	No curb ramp and vegetation blocks clear view of people and bikes accessing the Peery Park Bridge.	Pedestrian Safety	36.97942821	-121.9562456
25272	Dec 03, 2025, 11:00 AM	Visibility at this corner is obscured by the overgrowth of shrubbery	Other	36.9815452	-121.9526289
25253	Dec 01, 2025, 05:48 PM	Sidewalk ends here, forcing lots of kids to walk in the street.	Pedestrian Safety	36.97746878	-121.9474132
25252	Dec 01, 2025, 05:46 PM	Needs bike lanes for school traffic.	Bicycle Safety	36.97728283	-121.9473022
25251	Dec 01, 2025, 05:45 PM	Sidewalk has a large raised section that is unsafe.	Pedestrian Safety	36.98144156	-121.9404998
25250	Dec 01, 2025, 05:24 PM	Crosswalks at Hill and Capitola Avenue when bridge opens.	Pedestrian Safety	36.98129031	-121.9525534

Capitola Local Roadway Safety Plan

Title/Question: Untitled
Tool Type: Social Map
Activity ID: 412
Report Date Range: 23 Sep 2025 - 15 Dec 2025
Date Exported: 1/14/2026 14:37
Exported By: KMei

Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
25249	Dec 01, 2025, 04:38 PM	Speed table closer to the bridge would help slow down the cars going towards Capitola Village. They drive fast and barely stop at Hill Street-- especially when turning Right on Hill.	Vehicle Safety	36.98317588	-121.9521559
25248	Dec 01, 2025, 04:35 PM	Would like to see a speed table placed here too. Drivers come off the bridge (heading towards Capitola Village) at a fast rate. This will help slow everyone down and make it safer for those of us living here.	Vehicle Safety	36.98096806	-121.9526278
25247	Dec 01, 2025, 04:33 PM	We need crosswalks at this 4 way stop. (Hill and Capitola Ave.) I live on the corner and drivers barely make a complete stop here. There are a lot of us pedestrians that need to cross the street here. It feels unsafe and I'm concerned that it will get worse when the bridge opens up again. Thank You for looking into this!	Pedestrian Safety	36.98155908	-121.952516
25245	Dec 01, 2025, 02:20 PM	There is a lot of pedestrian traffic at this intersection. Many people blindly speed up the hills to the stop sign	Pedestrian Safety	36.98158453	-121.9524867
25225	Nov 25, 2025, 12:26 PM	Reposa is used a car thoroughfare between 38th and 41st causing unsafe conditions for families living on the street. Consider making a one-way. Traffic should be using Capitola or Brommer. This makes it safer for the pedestrians and cyclists who do use Reposa	Pedestrian Safety	36.9691533	-121.9662018
25209	Nov 23, 2025, 03:27 PM	Slow down traffic	Pedestrian Safety	36.97491515	-121.9503275
25208	Nov 23, 2025, 03:26 PM	Slow down cars and buses. Vehicles fly down the hills and run fail to stop for pedestrians and at stop signs	Pedestrian Safety	36.97867056	-121.9399224
25207	Nov 23, 2025, 03:24 PM	Slow cars and buses down.	Pedestrian Safety	36.97691808	-121.9447731
25206	Nov 23, 2025, 03:22 PM	Add raised, signaled crosswalk.	Pedestrian Safety	36.97742789	-121.9426763
25204	Nov 23, 2025, 03:10 PM	Speeding vehicles often run this stop sign, or stop short, and endanger the many beachgoers who cross here every day. Suggest raised crosswalk with flashing lights, similar to those on Clares.	Pedestrian Safety	36.97946421	-121.9391396
25197	Nov 21, 2025, 05:27 PM	Cars are taking a right from Reposa onto 41st. Cars are taking a left from 41st to InShape. Cars are taking a left out of Grocery Outlet onto 41st. Itâ€™s extremely dangerous. Iâ€™ve seen cyclist and pedestrians hit here. There either needs to be an island, a round about or the crosswalk should not be here and put more infrastructure at the Melton crosswalk.	Pedestrian Safety	36.96910523	-121.9649666
25033	Nov 14, 2025, 12:36 PM	The speeding on Park Avenue has gotten out of control. The police are rarely around to issue tickets (which would help dissuade speeders). So I am suggesting the city put two traffic controlling bumps (one on either side of Washburn) to at least control speeders in the areas where driveways are directly on the street.	Vehicle Safety	36.97625438	-121.9475957
25029	Nov 13, 2025, 06:34 PM	Agree, no bike lanes but lots of blind corners. The islands make it difficult to fit a bike lane but with some creativity maybe it's a problem to be solved?	Bicycle Safety	36.97438183	-121.9695416

Capitola Local Roadway Safety Plan

Title/Question: Untitled
Tool Type: Social Map
Activity ID: 412
Report Date Range: 23 Sep 2025 - 15 Dec 2025
Date Exported: 1/14/2026 14:37
Exported By: KMei

Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
25028	Nov 13, 2025, 06:32 PM	Cars are turning left and right from Target, and traffic is busy on Clares, but pedestrians have a 1000 foot walk to get to the next crosswalk!	Pedestrian Safety	36.97465696	-121.9695428
24804	Nov 03, 2025, 04:52 PM	Difficult location for pedestrians, skateboarders or bicyclist to cross McGregor when exiting park.	Bicycle Safety	36.98356888	-121.934504
24803	Nov 03, 2025, 04:46 PM	Not having a distinct pedestrian path means people walk in the bike lane and in the road creating hazards for car/bike and bike/pedestrian conflicts.	Pedestrian Safety	36.97066861	-121.9548678
24802	Nov 03, 2025, 04:38 PM	Particularly dangerous right turn for bikes.	Bicycle Safety	36.97295585	-121.9521365
24796	Nov 03, 2025, 02:16 PM	Cars merge over into bike lane area, not to turn right on MacGregor but to be in right lane as they cross the intersection.	Bicycle Safety	36.98297324	-121.9370355
24658	Oct 29, 2025, 12:53 PM	Numerous complaints on vehicles , bikes and just unsafe speeds of street traffic. Park now is nothing more than a highway with NO safety features.	Pedestrian Safety	36.97587555	-121.9494541
24657	Oct 29, 2025, 12:48 PM	A constant problem here is bicycle s jump the curb and ride the sidewalk . My wife narrowly escaped being hit by working in our front yard.	Pedestrian Safety	36.97596917	-121.9490586
24656	Oct 29, 2025, 09:56 AM	Please consider speed tables on Capitola Ave between Gayleâ€™s and Hill for Pedestrian Safety	Pedestrian Safety	36.98048466	-121.9528015
24655	Oct 29, 2025, 09:54 AM	Add a cross walk at Rosedale so kids heading to school on bikes have an easier time crossing and going between Rosedale and Monterey correctly	Bicycle Safety	36.97722275	-121.9512541
24653	Oct 29, 2025, 09:50 AM	No bike lanes speeding cars major bike route connecting county and Capitola	Bicycle Safety	36.98245648	-121.9523352
24650	Oct 28, 2025, 07:44 PM	No bike lanes but heavily used by bikes	Bicycle Safety	36.97332639	-121.9505721
24647	Oct 28, 2025, 07:14 PM	Shark!	Other	36.97069149	-121.949532
24646	Oct 28, 2025, 07:13 PM	please provide police escort so we can cross safely	Pedestrian Safety	36.97852659	-121.9530667
24645	Oct 28, 2025, 07:13 PM	cars dont stop for people we need police escort to cross the street	Pedestrian Safety	36.98110708	-121.9556414
24644	Oct 28, 2025, 07:12 PM	we need a bike trail here	Bicycle Safety	36.9730015	-121.9537743
24643	Oct 28, 2025, 07:12 PM	covert this to a trail so we can walk safely over this and avoid the village	Pedestrian Safety	36.97311192	-121.9536799
24642	Oct 28, 2025, 07:11 PM	hard to bike up the hill and no bike lane its not safe	Bicycle Safety	36.9731595	-121.9542598
24640	Oct 28, 2025, 07:03 PM	Cars hall A** on this road! put in speed bumps	Pedestrian Safety	36.97734388	-121.9425032
24639	Oct 28, 2025, 07:02 PM	i am 74 years old i walk slow and its a challenge and stressful for me to get to cvs to get my medication, people these days dont have paitens or respect for someone in the crosswalk	Pedestrian Safety	36.98110275	-121.9554405
24638	Oct 28, 2025, 07:01 PM	Making Walking Safe Again!! Cars dont obey the laws and put our lives at risk! Roundabout is terrible we have too many pedestrains here	Pedestrian Safety	36.98123108	-121.9553248
24637	Oct 28, 2025, 06:59 PM	Bikes come down the hill and they want to go to the beach this way, against traffic, remove the parking spots and put in a bike path here	Bicycle Safety	36.97273579	-121.9505971
24636	Oct 28, 2025, 06:58 PM	No bike lanes and stupid toursit i got hit by some guys mirror	Bicycle Safety	36.97301448	-121.9513758

Capitola Local Roadway Safety Plan

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Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24635	Oct 28, 2025, 06:57 PM	Bikes come flying down the hill and dont stop for people in the cross walk!	Pedestrian Safety	36.97257393	-121.9525503
24634	Oct 28, 2025, 06:56 PM	We need better biking infrastructure, make it safe please	Bicycle Safety	36.98084552	-121.9646985
24633	Oct 28, 2025, 06:56 PM	We need protectieve bike lanes!	Bicycle Safety	36.97025444	-121.9678558
24632	Oct 28, 2025, 06:55 PM	Traffic cuts thru neighborhood when Park is backed up, please stop them	Vehicle Safety	36.97767475	-121.9427187
24631	Oct 28, 2025, 06:54 PM	Traffic is backed up daily!	Vehicle Safety	36.97931646	-121.939179
24630	Oct 28, 2025, 06:54 PM	give us protected bike lanes	Bicycle Safety	36.98136085	-121.9556223
24629	Oct 28, 2025, 06:53 PM	Make it safe for the People!! We need police here to write ticekts to cars that dont yeild to pedstrians	Pedestrian Safety	36.98130384	-121.9555467
24628	Oct 28, 2025, 06:52 PM	My brother got hit here by a car last month! Not SAFE!	Pedestrian Safety	36.97884892	-121.9532247
24627	Oct 28, 2025, 06:52 PM	cars dont yeild to people in the cross walk they drive up to us, stressing us out	Pedestrian Safety	36.9788946	-121.9532328
24626	Oct 28, 2025, 06:51 PM	No bike lane, the vehicle lane shits over and crushes us on bikes	Bicycle Safety	36.97867023	-121.9530098
24625	Oct 28, 2025, 06:51 PM	a lot of cars turn left here and they are not suppsoed to! Fix this!!	Vehicle Safety	36.97879488	-121.9530328
24624	Oct 28, 2025, 06:50 PM	Lots of cars going in and out, no bike lane	Bicycle Safety	36.97820481	-121.9524214
24623	Oct 28, 2025, 06:49 PM	school traffic doesnt look at people in the cross walk, too many cars!	Pedestrian Safety	36.97652747	-121.9502565
24622	Oct 28, 2025, 06:49 PM	Traffic is jammed and backup up to the school	Vehicle Safety	36.98229614	-121.939987
24621	Oct 28, 2025, 06:48 PM	Vehicles Are Going Like 35 - 40 MPH!! SLOW DOWN!!!	Vehicle Safety	36.98078536	-121.9456973
24620	Oct 28, 2025, 06:48 PM	Kids on bikes dont have a dedicated bike lane or safe route to school	Bicycle Safety	36.98109235	-121.9454307
24619	Oct 28, 2025, 06:47 PM	Speeding Cars!!	Vehicle Safety	36.98179866	-121.9443762
24618	Oct 28, 2025, 06:47 PM	99 out of 100 cars dont stop at this stop sign	Vehicle Safety	36.98233349	-121.9430645
24617	Oct 28, 2025, 06:46 PM	a truck was turning right and never looked at us in the cross walk	Pedestrian Safety	36.9810405	-121.9555511
24616	Oct 28, 2025, 06:46 PM	not safe to cross please put in a stop light so we have dedicated crossing time that is the only thing that will stop cars from running us over!!!	Pedestrian Safety	36.98116437	-121.9557452
24615	Oct 28, 2025, 06:45 PM	no bike lanes here	Bicycle Safety	36.97857988	-121.9529136
24614	Oct 28, 2025, 06:45 PM	cars pulling out from street parking hit me!	Bicycle Safety	36.97832984	-121.952563
24613	Oct 28, 2025, 06:44 PM	People are walking in the bike lane and no room to ride in the street	Bicycle Safety	36.97132442	-121.9543671
24612	Oct 28, 2025, 06:44 PM	bikes flying down the hill and no safe place for us to walk	Pedestrian Safety	36.97136606	-121.9543043
24611	Oct 28, 2025, 06:43 PM	car hit me with their mirror and kept driving away	Bicycle Safety	36.98120704	-121.9557362
24610	Oct 28, 2025, 06:42 PM	cars dont care that people are trying to cross the street!! We need a stoplight!	Pedestrian Safety	36.98126545	-121.9554871
24609	Oct 28, 2025, 06:41 PM	cars turning right dont see us in the cross walks, and people coming off the freeway start to go before we are past the center line	Pedestrian Safety	36.98103574	-121.9555955
24608	Oct 28, 2025, 06:40 PM	With the reduction to one lane, then splitting to two lanes i got ran off the road by driving trying to race to get into the other lane	Bicycle Safety	36.98113479	-121.9553929
24606	Oct 28, 2025, 05:26 PM	Car speed	Other	36.98206402	-121.9523998
24604	Oct 28, 2025, 05:18 PM	Speed table	Other	36.98269668	-121.9522909
24603	Oct 28, 2025, 03:28 PM	Intersection is dangerous. Distracted, speeding drivers do not often wait for pedestrians to cross	Pedestrian Safety	36.97799504	-121.9524948
24600	Oct 28, 2025, 12:51 PM	Speeding cars past kids on bikes riding to school.	Bicycle Safety	36.98227113	-121.9597568

Capitola Local Roadway Safety Plan

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Tool Type: Social Map
Activity ID: 412
Report Date Range: 23 Sep 2025 - 15 Dec 2025
Date Exported: 1/14/2026 14:37
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Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24599	Oct 28, 2025, 12:14 PM	Two speed bumps need to be put on the road in front of 905 Capitola Avenue. Cars are speeding after the bridge down to the stop sign. There are no bike lanes either.	Vehicle Safety	36.98290791	-121.9522434
24598	Oct 28, 2025, 12:10 PM	challenging to back out onto street, cars drive too fast	Vehicle Safety	36.97659739	-121.9462003
24597	Oct 28, 2025, 12:10 PM	challenging to back out onto street, cars drive too fast	Vehicle Safety	36.9761415	-121.9482376
24594	Oct 28, 2025, 12:01 PM	this crosswalk is hard to see at night	Pedestrian Safety	36.96857743	-121.9649288
24593	Oct 28, 2025, 12:00 PM	Green bike box is appreciated	Bicycle Safety	36.97015867	-121.9651072
24592	Oct 28, 2025, 11:59 AM	Not many places to cross Clares as a pedestrian	Pedestrian Safety	36.9778962	-121.9696094
24591	Oct 28, 2025, 11:58 AM	no crosswalk on Wharf from Capitola Road to Clares, that seems too far apart.	Pedestrian Safety	36.97625764	-121.9567702
24590	Oct 28, 2025, 11:56 AM	Crosswalks are not even in the street	Pedestrian Safety	36.9720249	-121.9517362
24589	Oct 28, 2025, 11:54 AM	no sidewalk to walk/skate to the skatepark	Pedestrian Safety	36.98265535	-121.9372667
24588	Oct 28, 2025, 11:52 AM	Bikes sharing the road on 41st is not great	Bicycle Safety	36.98401795	-121.9648059
24587	Oct 28, 2025, 11:51 AM	improve this connection at 40th/Deans for bikes and people, not cars	Bicycle Safety	36.97963185	-121.9660869
24586	Oct 28, 2025, 11:51 AM	improve this connection at 40th/Deans for bikes and people, not cars	Pedestrian Safety	36.97962054	-121.9660089
24585	Oct 28, 2025, 11:50 AM	I see people run across the street here all the time	Pedestrian Safety	36.97469915	-121.969552
24584	Oct 28, 2025, 11:49 AM	no bike lanes on Clares from Capitola Rd to 41st	Bicycle Safety	36.97397184	-121.9695254
24583	Oct 28, 2025, 11:49 AM	no bike lanes on Clares from 41st to Capitola Rd	Bicycle Safety	36.9783527	-121.9652533
24582	Oct 28, 2025, 11:46 AM	missing bike lanes in the village	Bicycle Safety	36.97263403	-121.9524563
24581	Oct 28, 2025, 11:45 AM	lack of adequate bike parking during many of the events	Bicycle Safety	36.97209556	-121.9506131
24580	Oct 28, 2025, 11:45 AM	No bike lanes anywhere in the village, but is a necessary route to get through town.	Bicycle Safety	36.97287379	-121.950873
24578	Oct 28, 2025, 11:43 AM	Can we make all yellow (school) crosswalks into raised speed tables? Makes the kids more visible and reduces speeds.	Pedestrian Safety	36.97940077	-121.9478395
24577	Oct 28, 2025, 11:42 AM	Missing bike lanes in the school zone	Bicycle Safety	36.97891755	-121.9482973
24576	Oct 28, 2025, 11:41 AM	turning left up the hill onto Monterey as a cyclist can be challenging	Bicycle Safety	36.97648677	-121.95037
24575	Oct 28, 2025, 11:41 AM	We need speed tables on Capitola Ave between the newly opened bridge and Gayles. When drivers come into Capitola and head down hill they pick up speeds of up to 45 miles an hour. When this area opens again it is a major bike and walking route between the schools. There is no bike lane and no sidewalk in some areas so slowing traffic is paramount	Pedestrian Safety	36.98252048	-121.952306
24574	Oct 28, 2025, 11:34 AM	Major bike corridor for school aged children and excessive vehicle speed between Highway 1 overpass and Hill Street is an easily mitigated hazard that requires speed tables. The cars commuting through our village typically ignore speed signage and present a significant damaged to the Capitola residents and their property. Please install speed tables.	Vehicle Safety	36.98215877	-121.9523939
24573	Oct 28, 2025, 11:29 AM	Speed table request. Cars ignore speed signs and cause hazards for the kids, animals and disabled people in our neighborhood.	Vehicle Safety	36.98187736	-121.952263

Capitola Local Roadway Safety Plan

Title/Question: Untitled
Tool Type: Social Map
Activity ID: 412
Report Date Range: 23 Sep 2025 - 15 Dec 2025
Date Exported: 1/14/2026 14:37
Exported By: KMei

Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24571	Oct 28, 2025, 11:24 AM	Vehicles from Soquel cross the Highway 1 bridge and gain excessive speed coming into Capitola. There have been numerous accidents resulting in injuries and total property losses between Highway 1 and Hill Street.	Pedestrian Safety	36.98229057	-121.9523924
24513	Oct 27, 2025, 12:53 AM	Can't cross over to Nob Hill on one side and Gayles or the bank on the other side.	Pedestrian Safety	36.980476	-121.953915
24510	Oct 25, 2025, 08:31 PM	These trees are blocking the signage that shows left lane turn left only and right lane goes straight. They need to be trimmed back	Transit Safety	36.97759771	-121.9516256
24509	Oct 25, 2025, 08:22 PM	Really scary to ride bike here! very narrow space	Bicycle Safety	36.9718008	-121.9539455
24508	Oct 25, 2025, 08:20 PM	put it back to what it was. I see you want to change to roundabout. Good Lord are you nuts! what a pedestrian nightmare it will be	Pedestrian Safety	36.9811668	-121.9554363
24507	Oct 25, 2025, 08:16 PM	we should eliminate these parking places in between the two entrances of Gayles. It will open up greater visibility of this intersection.	Pedestrian Safety	36.97835638	-121.9526142
24501	Oct 25, 2025, 02:10 AM	Blind corner for pedestrians, bike and cars. Cars allowed to park to close to curve requiring cars to come around corner in both lanes.	Pedestrian Safety	36.97374723	-121.9500388
24500	Oct 25, 2025, 02:05 AM	No crosswalk for pedestrians to cross Escalona while walking down Monterey.	Pedestrian Safety	36.97496484	-121.9501662
24488	Oct 23, 2025, 11:19 PM	Middle schoolers on ebike running stop signs	Bicycle Safety	36.97223186	-121.9535404
24470	Oct 23, 2025, 02:07 PM	Many pedestrians and bicyclists do not use the crossing button to let cars know they are going to walk across.	Pedestrian Safety	36.97371655	-121.9627394
24469	Oct 23, 2025, 02:05 PM	Uneven pavement	Vehicle Safety	36.98284377	-121.9644026
24468	Oct 23, 2025, 02:04 PM	Hole in pavement making it unsafe for vehicles turning to Gross road.	Vehicle Safety	36.98094203	-121.9648209
24467	Oct 23, 2025, 02:03 PM	Thereâ€™s also quite a bit of jaywalking, as pedestrians sometimes cross outside of designated areas, creating dangerous situations for both walkers and drivers.	Pedestrian Safety	36.97382698	-121.9663761
24465	Oct 23, 2025, 02:02 PM	Many do not obey the "no right turn on red" sign	Vehicle Safety	36.9738125	-121.9647075
24461	Oct 23, 2025, 10:49 AM	Bike lane is too narrow.	Bicycle Safety	36.9718563	-121.9538748
24459	Oct 23, 2025, 10:12 AM	Two lanes down to one lane has created daily traffic nightmares. This is a major thoroughfare and needs to have traffic flow	Vehicle Safety	36.98051027	-121.9548723
24458	Oct 23, 2025, 10:10 AM	Cars often crowd the bike lanes when traffic backs up and then need to turn right by Carpoâ€™s.	Bicycle Safety	36.98386336	-121.9570546
24457	Oct 23, 2025, 10:09 AM	Cars often crowd into bike lanes when traffic backs up and cars want to turn right	Bicycle Safety	36.98274184	-121.9568763
24456	Oct 23, 2025, 10:08 AM	Narrow bike lanes with fast cars. When traffic backs up cars often crowd into the bike lanes to make right turns.	Bicycle Safety	36.98297034	-121.956931
24455	Oct 23, 2025, 10:07 AM	A crosswalk from Burlingame Ave across to bay ave to get over to the Gayleâ€™s complex would be helpful with how fast cara move	Pedestrian Safety	36.9780427	-121.9524405
24452	Oct 23, 2025, 09:05 AM	Sidewalks along 49th Ave between Capitola Rd and Clare's aren't clear for handicapped access	Pedestrian Safety	36.97484056	-121.956448
24450	Oct 22, 2025, 08:16 PM	Large, complex intersection with long travel times for pedestrians. Given the traffic volume, this should be redesigned.	Other	36.9785972	-121.9529761

Capitola Local Roadway Safety Plan

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Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24448	Oct 22, 2025, 07:55 PM	This entire intersection was so difficult to manage for many years. It has been much easier since the upgrade and far less confusing to figure out who goes next at this intersection.	Vehicle Safety	36.981075	-121.9557094
24447	Oct 22, 2025, 07:45 PM	The current setup is very protective of peds. It seems counterproductive to go back to the way things were when folks were getting hurt walking through here. Please put in a 4 way signal light with crosswalk signals as well. I bet the traffic would flow much easier and safer if this were to happen. When a city outgrows a 4 way stop, the next step is a 4 way signal light.	Pedestrian Safety	36.98125717	-121.9557026
24418	Oct 17, 2025, 06:50 PM	A car hit me while i was in the cross walk - Dan	Pedestrian Safety	36.97276216	-121.9505191
24417	Oct 17, 2025, 06:49 PM	Vehicle not aware of people on bikes i got ran off the road	Bicycle Safety	36.97197895	-121.9507
24416	Oct 17, 2025, 06:49 PM	Car backed out and hit me!	Bicycle Safety	36.97216268	-121.9520186
24415	Oct 17, 2025, 06:48 PM	Car turning right didnt yeild and almost hit me, i think i got hit by the mirror, i fell and they drove off	Bicycle Safety	36.96809787	-121.964935
24414	Oct 17, 2025, 06:47 PM	car turned right and didnt see me, i had to swearve and i crash and they drove off	Bicycle Safety	36.9691682	-121.9667207
24413	Oct 17, 2025, 06:46 PM	Car turning right didnt yeild to me and i crash into the curb and they drove off!!	Bicycle Safety	36.96753848	-121.9664641
24380	Oct 11, 2025, 08:55 PM	cars back up and almost hit me, and people are walking in the bike lane, its not safe to bike thru the village! There has to be a better route to bypass going down cliff drive	Bicycle Safety	36.9697428	-121.9558065
24379	Oct 11, 2025, 08:52 PM	i crashed do to a car turning right and not vielding to me on my bike	Bicycle Safety	36.97025836	-121.9671784
24378	Oct 11, 2025, 08:51 PM	cars parked in the bike lane no stopping zone	Bicycle Safety	36.97953441	-121.9391682
24373	Oct 11, 2025, 01:31 PM	traffic calming needed. Often used as a thoroughfare--too narrow for neighborhood safety. Need stop sign at Fanmar/Terrace	Other	36.97478456	-121.9514569
24368	Oct 11, 2025, 12:40 PM	This intersection is a mess since you eliminated the lane. It backs up all the way to the highway and some cars turn right into Nobhill parking lot and speed through the parking lot to go around this intersection. It happens going the other way too where they speed through the neighborhood by the post office so they do not have to wait in the long line at the stop sign by Nobhill shopping center. You need to bring back the two lanes.	Vehicle Safety	36.98145343	-121.9559087
24365	Oct 11, 2025, 10:58 AM	It is very dangerous trying to exit Gayleâ€™s parking lot onto Bay Ave	Pedestrian Safety	36.97822324	-121.9523944
24364	Oct 11, 2025, 10:56 AM	Cars are making a left turn when it is marked right turn only	Pedestrian Safety	36.97866892	-121.9524603
24362	Oct 11, 2025, 10:44 AM	Pedestrians walking along Cliff Drive above the beach need protection from cars! Drivers may be distracted from the view, putting pedestrians at risk of serious injury.	Pedestrian Safety	36.96927614	-121.9559493
24361	Oct 11, 2025, 10:39 AM	Pedestrians trying to exit the parking lot, pedestrians trying to cross Park Ave need more distinctive signage and street markings.	Pedestrian Safety	36.97554331	-121.9501832

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Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24360	Oct 11, 2025, 10:18 AM	Limited visibility for cars pulling out of back parking lot at Gayleâ€™s. Dangerous for both pedestrians and drivers. It would help if red curb was extended in both directions from the entrance/exit and making traffic one way through parking lot.	Pedestrian Safety	36.97837044	-121.9524764
24357	Oct 10, 2025, 07:07 PM	No Sidewalks	Pedestrian Safety	36.97546114	-121.9482391
24356	Oct 10, 2025, 07:06 PM	No Sidewalks	Pedestrian Safety	36.97388944	-121.9470037
24355	Oct 10, 2025, 07:06 PM	No Sidewalks	Pedestrian Safety	36.9735343	-121.9485877
24354	Oct 10, 2025, 07:06 PM	No Sidewalks	Pedestrian Safety	36.97486644	-121.9462583
24353	Oct 10, 2025, 07:06 PM	No Sidewalks	Pedestrian Safety	36.97431281	-121.948215
24352	Oct 10, 2025, 07:05 PM	Unsafe for bikes	Bicycle Safety	36.97365992	-121.9603589
24351	Oct 10, 2025, 07:05 PM	Unsafe for bikes	Bicycle Safety	36.97280852	-121.9510103
24350	Oct 10, 2025, 07:05 PM	Unsafe for bikes	Bicycle Safety	36.97657229	-121.965204
24349	Oct 10, 2025, 07:05 PM	Unsafe for bikes	Bicycle Safety	36.97264413	-121.9527496
24348	Oct 10, 2025, 07:05 PM	Unsafe for bikes	Bicycle Safety	36.97308301	-121.9517867
24346	Oct 10, 2025, 06:51 PM	Bumper to bumper traffic accident	Vehicle Safety	36.98049101	-121.964852
24345	Oct 10, 2025, 06:50 PM	Truck ran over Kid on E-bike Critical condition	Bicycle Safety	36.97837745	-121.9648593
24344	Oct 10, 2025, 06:44 PM	I got hit by a car mirror the other day, driver pulled into the bike lane	Bicycle Safety	36.9728282	-121.9505798
24342	Oct 10, 2025, 06:39 PM	Do NOT install traffic lights.	Vehicle Safety	36.98118985	-121.955581
24341	Oct 10, 2025, 06:37 PM	Safety lights at each corner for pedestrians to use crosswalks.	Pedestrian Safety	36.9786201	-121.9531584
24340	Oct 10, 2025, 06:35 PM	Traffic is backed up, often onto freeway; 2 lanes are necessary at Bay/Hill intersection driving from freeway.	Vehicle Safety	36.9812891	-121.9557494
24234	Sep 23, 2025, 07:52 PM	Bikes traveling straight northbound do not interact with traffic and should not need to stop at the stop sign. Signage should be changed to reflect this.	Bicycle Safety	36.98233597	-121.9398475
24233	Sep 23, 2025, 07:38 PM	Add a pathway to Auto Plaza Dr to Safely get to 41st ave & encourage biking & walking to shopping	Pedestrian Safety	36.98258793	-121.9603444

Social PinPoint
Online Interactive Map Tool
Posts - From Santa Cruz County Safety Action Plan

Kimley-Horn Social Pinpoint

Report Type: Social Map Results Summary
Date Range: 29-08-2025 - 23-09-2025
Exported: 14-01-2026 14:34:17

Item 8 H.

Open

Untitled
Capitola Local Roadway Safety Plan

2	53
Contributors	Contributions

Key Statistics

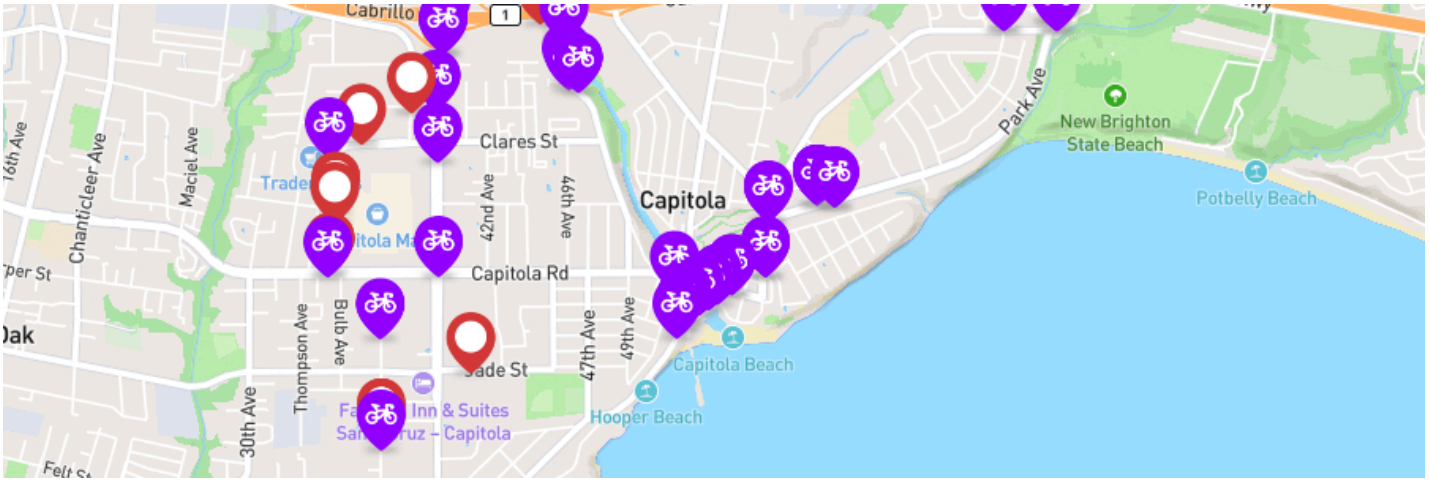
Top-level information about the activity.

53
Posts
2 contributors

Map Post Summary

Summary of content contributed by participants including location information, voting results and more.

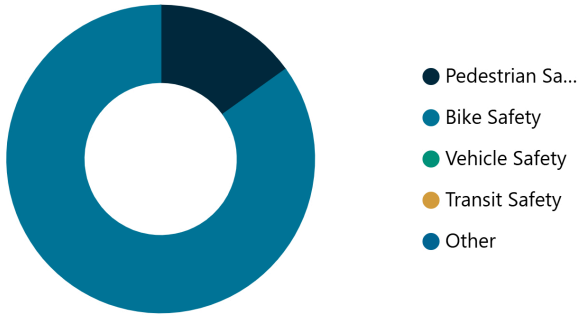
Posts by Location
Map showing all posts contributed by participants.



Top Contributions by Location
Top 10 most frequent postal/ZIP codes of posts submitted by participants.

Location	Total Contributions	% Contributions
95010, Capitola, Santa Cruz County, California, United States	47	88.68%
95062, Santa Cruz, Santa Cruz County, California, United States	4	7.55%
95073, Soquel, Santa Cruz County, California, United States	2	3.77%

Posts by Category
Comparison showing the number of posts for each category, as selected by participants.



Social PinPoint
Online Interactive Map Tool Comments - From Santa Cruz County Safety Action Plan

Capitola Local Roadway Safety Plan

Title/Question: Untitled
Tool Type: Social Map
Activity ID: 386
Report Date Range: 29 Aug 2025 - 23 Sep 2025
Date Exported: 1/14/2026 14:37
Exported By: KMei

Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24230	Sep 23, 2025, 02:01 PM	Narrow bike lanes	Bike Safety	36.973	-121.9519
24229	Sep 23, 2025, 02:00 PM	Bike lanes on street are poor quality	Bike Safety	36.97363	-121.9504
24228	Sep 23, 2025, 02:00 PM	Intersection not safe for Bikes attempting to legally go straight. Often have to merge into tourist traffic that is unaware of the workings of the intersection. Better Signage, painting on the road, clearly marked bike lane would help. Paving this	Bike Safety	36.9756	-121.9503
24227	Sep 23, 2025, 01:59 PM	There are some serious tree root bumps in the bike lane (which have been slightly scraped, but it's not enough). To go around you need to be in the traffic lane. It's not super safe and can mess with your bike handling.	Bike Safety	36.97617	-121.9481
24226	Sep 23, 2025, 01:59 PM	Park Avenue, Capitola, CA 95010. Cars, trucks, and commercial vehicles drive fast. There isn't a buffer between bikes and motorized vehicles. Driving eastbound the street descends down a hill and vehicle speeds increase and could easily strike bikes ridd	Bike Safety	36.9761	-121.9473
24225	Sep 23, 2025, 01:58 PM	Bikes traveling straight northbound do not interact with traffic and should not need to stop at the stop sign. Signage should be changed to reflect this.	Bike Safety	36.98234	-121.9398
24224	Sep 23, 2025, 01:57 PM	More signage is needed to alert vehicles bikes move into the car lane from mcgreggor to park ave.	Bike Safety	36.98233	-121.9375
24223	Sep 23, 2025, 01:57 PM	Drain grate is a hazard for bikers which are going around and leaving bike lane	Bike Safety	36.98266	-121.9377
24222	Sep 23, 2025, 01:57 PM	This section of McGregor Drive is full of potholes and rough road, making it difficult for bikes to traverse safely as cars swerve to avoid potholes. Please repave.	Bike Safety	36.98296	-121.9372
24221	Sep 23, 2025, 01:51 PM	There are two huge grates here under highway one taking up most of the bike lane. It's one thing in the daylight, but even more hazardous at night, very hard to see. To go around them you are in the traffic lane. One of them is already marked. I can't qu	Bike Safety	36.98424	-121.9371
24220	Sep 23, 2025, 01:45 PM	Lane shifts are dangerous	Bike Safety	36.98345	-121.9372
24192	Sep 15, 2025, 01:57 PM	This could really use some separation of the eastbound bike lane. There are always walkers in the bike lane or too close to the bike lane. I take the road often, but I can't always do that.	Bike Safety	36.97177	-121.9541
24191	Sep 15, 2025, 01:56 PM	Westbound bike lane needs barrier from cars. Cars are looking off toward the ocean and veer into the bike lane.	Bike Safety	36.97201	-121.9539
24190	Sep 15, 2025, 01:55 PM	Cars entering freeway cross bike lanes	Bike Safety	36.98153	-121.9647

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Report Date Range: 29 Aug 2025 - 23 Sep 2025
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Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24076	Sep 02, 2025, 02:10 PM	Track crossing rough	Pedestrian Safety	36.96791	-121.9674
24075	Sep 02, 2025, 02:10 PM	No sidewalk	Pedestrian Safety	36.97024	-121.9634
24074	Sep 02, 2025, 02:07 PM	No dedicated bike lane	Bike Safety	36.97145	-121.9674
24073	Sep 02, 2025, 02:06 PM	Cars turning right from Clares onto Capitola Rd are generally only (barely) slowing down, even when light is red, and looking left for cars and often overlook pedestrians entering/in crosswalk. It is especially scary when crossing south because the pote	Pedestrian Safety	36.97378	-121.9697
24072	Sep 02, 2025, 02:06 PM	Cars speeding southbound and not slowing at all for pedestrians	Pedestrian Safety	36.97556	-121.9695
24071	Sep 02, 2025, 02:05 PM	Why is there no crosswalk between the "hole in the wall" on Sommerfeld and the Capitola Mall food court area parking lot? This is constantly used by those of us in the neighborhood and is clearly meant as a pathway (since there is the median with cutout	Pedestrian Safety	36.97592	-121.9694
24070	Sep 02, 2025, 02:04 PM	closest pedestrian crossing is 40th and at the mall/Bay Federal, could use more	Pedestrian Safety	36.97832	-121.9683
24069	Sep 02, 2025, 02:04 PM	Mobility scooter, dirt hydrant in side walk, 40th&Deans Lane	Pedestrian Safety	36.97944	-121.9661
24068	Sep 02, 2025, 02:04 PM	Drivers driver WAY TOO fast and aggressively along 41st avenue! Speed limits need to be reduced and speeding checked.	Bike Safety	36.97952	-121.965
24067	Sep 02, 2025, 02:02 PM	Add a pathway to Auto Plaza Dr to safely get to 41st ave & encourage biking & walking to shopping.	Pedestrian Safety	36.98258	-121.9604
24066	Sep 02, 2025, 02:00 PM	Walkers and bikers share a bike lane. Frequently they're not paying attention and will walk directly in front of a bike, who then has to swerve into traffic to avoid. Extremely dangerous when the road is busy, even when biking	Bike Safety	36.97146	-121.9543
24031	Aug 29, 2025, 01:16 PM	Bike lane goes away	Bike Safety	36.97365	-121.9649
24030	Aug 29, 2025, 01:14 PM	Lane shifts are dangerous	Bike Safety	36.98346	-121.9372
24029	Aug 29, 2025, 01:11 PM	Drain grate is a hazard for bikers which are going around and leaving bike lane	Bike Safety	36.98266	-121.9377
24028	Aug 29, 2025, 01:09 PM	Narrow bike lanes and traffic congestion	Bike Safety	36.97246	-121.9529
24027	Aug 29, 2025, 01:06 PM	Narrow bike lanes	Bike Safety	36.97301	-121.9519
24026	Aug 29, 2025, 01:05 PM	Bike lanes on street are poor quality	Bike Safety	36.97364	-121.9504
24025	Aug 29, 2025, 01:03 PM	NArrow bike lane going uphill and no bike lane going downhill	Bike Safety	36.97312	-121.9544

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Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24024	Aug 29, 2025, 01:03 PM	cars run us off the road, there is no dedicated lane, and bikes dont sit in traffic like cars do. we need a safe route around not through the village	Bike Safety	36.97266	-121.9525
24023	Aug 29, 2025, 01:00 PM	No dedicated bike lane	Bike Safety	36.97784	-121.9697
24022	Aug 29, 2025, 12:58 PM	Narrow road, speeding cars, no bike lane, cars honking when cyclists use roadway.	Bike Safety	36.9675	-121.9674
24021	Aug 29, 2025, 12:55 PM	The bike loop does not change the signal is no cars are there. This has gone on for at least a couple of years. I have sent notices to the County	Bike Safety	36.97229	-121.9533
24020	Aug 29, 2025, 12:54 PM	Unprotected bike path the entire length of 41st Avenue where cars/trucks often travel at 40-50 mph. The bike lane is narrow and not well not well marked with paint. It is particularly dangerous between Capitola Rd and Soquel Dr.	Bike Safety	36.97768	-121.9649
24019	Aug 29, 2025, 12:52 PM	The bike lanes are very narrow and dangerous when both side of the street have cars going trough.	Bike Safety	36.98048	-121.9592
24018	Aug 29, 2025, 12:50 PM	Wharf road and Soquel Dr. Cars not stopping.	Bike Safety	36.98196	-121.9593
24017	Aug 29, 2025, 12:46 PM	Cars routinely drive faster than the postered speed limit of 25 and drive into the bike lane	Bike Safety	36.98015	-121.9587
24016	Aug 29, 2025, 12:44 PM	This section of McGregor Drive is full of potholes and rough road, making it difficult for bikes to traverse safely as cars swerve to avoid potholes. Please repave.	Bike Safety	36.98296	-121.9372
24015	Aug 29, 2025, 12:37 PM	Intersection not safe for Bikes attempting to legally go straight. Often have to merge into tourist traffic that is unaware of the workings of the intersection. Better Signage, painting on the road, clearly marked bike lane would help. Paving this	Bike Safety	36.9756	-121.9503
24014	Aug 29, 2025, 12:17 PM	Unprotected,no bike lane	Bike Safety	36.98218	-121.9645
24013	Aug 29, 2025, 12:16 PM	This could really use some separation of the eastbound bike lane. There are always walkers in the bike lane or too close to the bike lane. I take the road often, but I can't always do that.	Bike Safety	36.972	-121.9539
24012	Aug 29, 2025, 12:14 PM	Difficult for a bike to move from the bike lane to the left turn late due to car traffic. Have to go onto the side walk to use the cross walks which are narrow	Bike Safety	36.97363	-121.9698
24011	Aug 29, 2025, 12:13 PM	There are some serious tree root bumps in the bike lane (which have been slightly scraped, but it's not enough). To go around you need to be in the traffic lane. It's not super safe and can mess with your bike handling.	Bike Safety	36.97617	-121.9481

Capitola Local Roadway Safety Plan

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Contribution ID	Date Submitted	Please describe your safety concern at this location.	Category	Latitude	Longitude
24010	Aug 29, 2025, 12:11 PM	There are two huge grates here under highway one taking up most of the bike lane. It's one thing in the daylight, but even more hazardous at night, very hard to see. To go around them you are in the traffic lane. One of them is already marked. I can't qu	Bike Safety	36.98424	-121.9371
24009	Aug 29, 2025, 12:10 PM	Walkers and bikers share a bike lane. Frequently they're not paying attention and will walk directly in front of a bike, who then has to swerve into traffic to avoid. Extremely dangerous when the road is busy, even when biking	Bike Safety	36.97177	-121.9541
24008	Aug 29, 2025, 12:08 PM	More signage is needed to alert vehicles bikes move into the car lane from mcgreggor to park ave.	Bike Safety	36.98233	-121.9375
24007	Aug 29, 2025, 12:03 PM	Bikes traveling straight northbound do not interact with traffic and should not need to stop at the stop sign. Signage should be changed to reflect this.	Bike Safety	36.98234	-121.9398
24006	Aug 29, 2025, 12:01 PM	This Soquel Creek crossing was designed for bikes and pedestrians however, the bike entrances off Wharf road and paths leading to the bridge do not comply with bike design standards. The curbs are all square and the entrance closest to Clares St required	Bike Safety	36.98025	-121.9591
24005	Aug 29, 2025, 11:55 AM	Park Avenue, Capitola, CA 95010. Cars, trucks, and commercial vehicles drive fast. There isn't a buffer between bikes and motorized vehicles. Driving eastbound the street descends down a hill and vehicle speeds increase and could easily strike bikes ridd	Bike Safety	36.9761	-121.9473
24004	Aug 29, 2025, 11:53 AM	Drivers driver WAY TOO fast and aggressively along 41st avenue! Speed limits need to be reduced and speeding checked.	Bike Safety	36.98152	-121.9647

Comment Card
From In-Person Meeting
on October 28, 2025
at
New Brighton Middle School
Capitola

City of Capitola
Local Roadway Safety Plan

Suggesting that the City look at the bridge opening on Capitola Ave as part of the plan. When it opens it is a MAJOR connection between the county + Capitola for bikes + pedestrians. Fix sidewalk Add speed table/cross walks from Bridge to Gaytes. Also Rosedale hill.

Online Survey Results
Capitola

Kimley-Horn Social Pinpoint

Form Results Summary

Sep 12, 2025 - Dec 01, 2025

Project: Capitola Local Roadway Safety Plan

Form: Untitled

Tool Type: Form

Activity ID: 409

Exported: Jan 14, 2026, 02:35 PM

Exported By: KMei

Filter By: No filters applied.

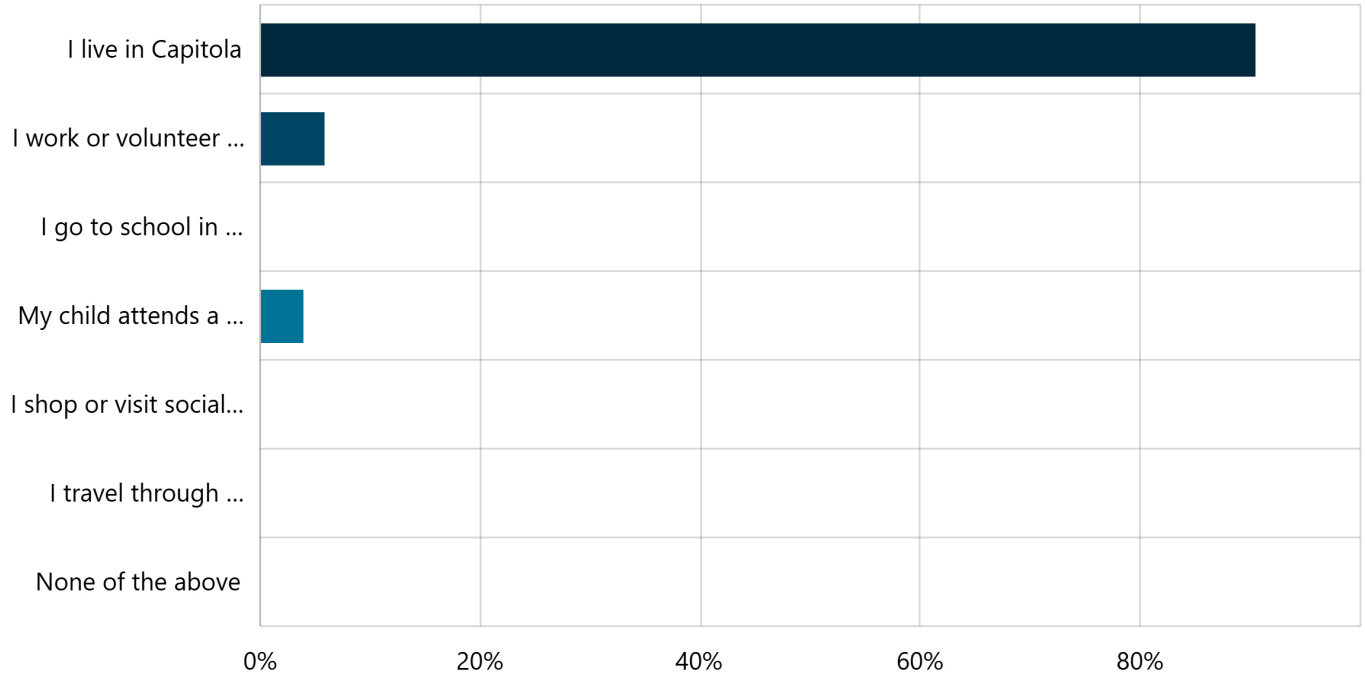
Closed

Untitled
Capitola Local Roadway Safety Plan

47	52
Contributors	Contributions

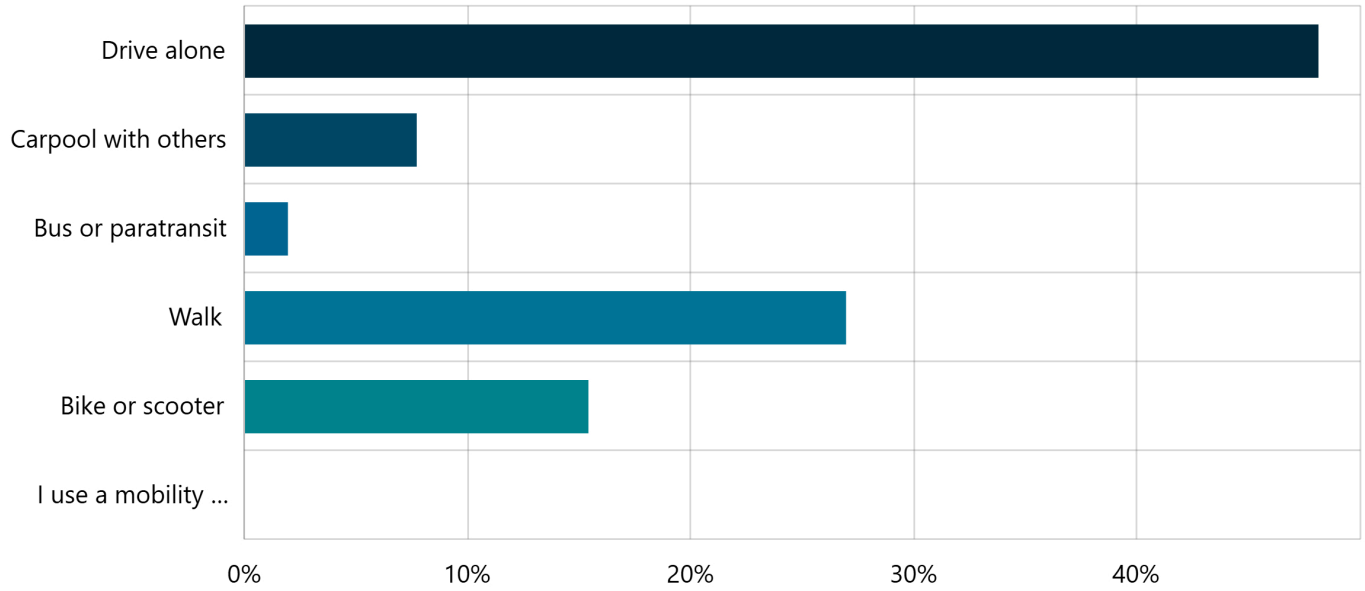
Contribution Summary

1. What is your connection to the City of Capitola? if more than one answer, pick the one that best describes the reason you spend time there. Required
Multi Choice | Skipped: 0 | Answered: 52 (100%)



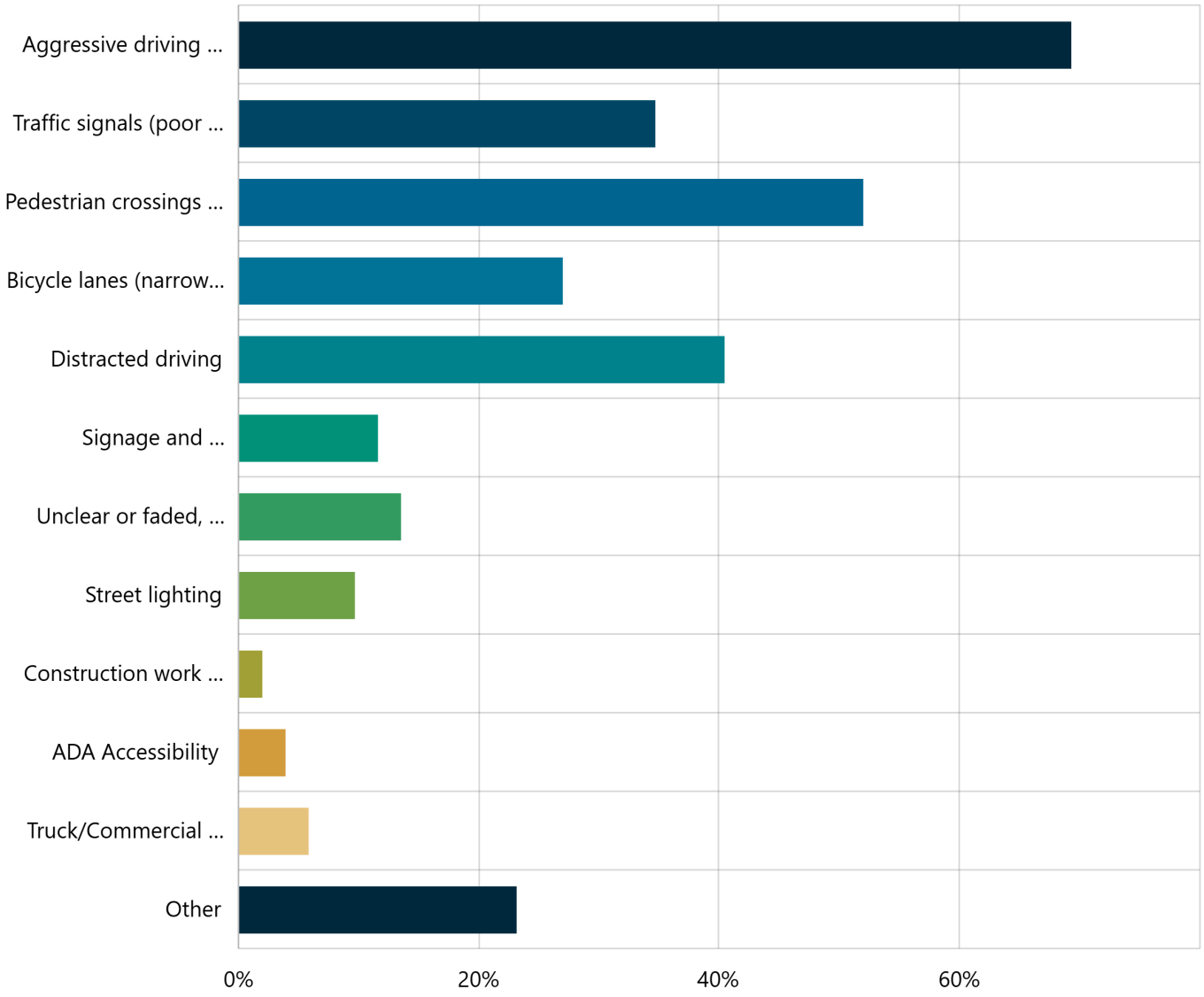
Answer choices	Percent	Count
I live in Capitola	90.38%	47
I work or volunteer in Capitola	5.77%	3
I go to school in Capitola	0%	0
My child attends a school in Capitola	3.85%	2
I shop or visit social/recreational destinations in Capitola	0%	0
I travel through Capitola on the way to a destination outside the City	0%	0
None of the above	0%	0
Total	**100.00%**	**52**

2. How do you typically travel throughout the City of Capitola Required
Multi Choice | Skipped: 0 | Answered: 52 (100%)



Answer choices	Percent	Count
Drive alone	48.08%	25
Carpool with others	7.69%	4
Bus or paratransit	1.92%	1
Walk	26.92%	14
Bike or scooter	15.38%	8
I use a mobility device (like a walker or wheelchair)	0%	0
Total	**100.00%**	**52**

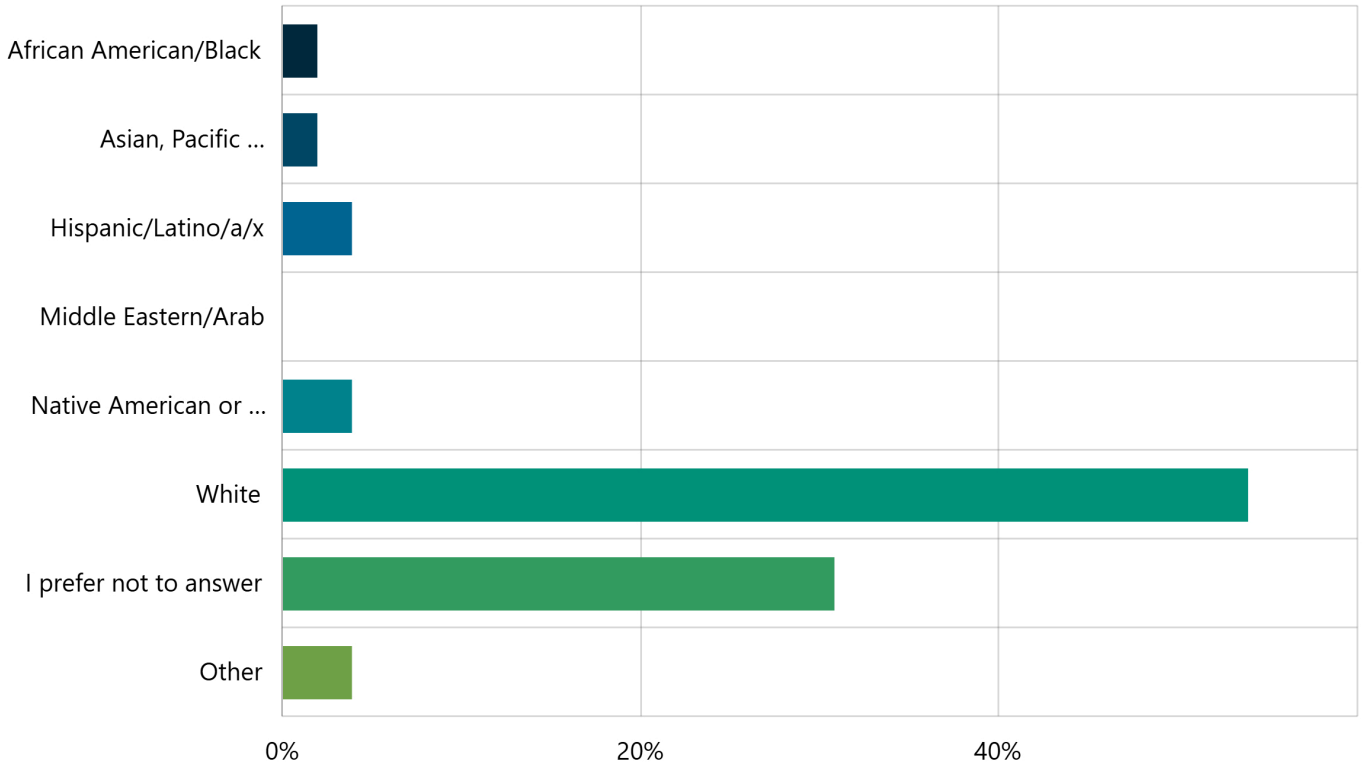
3. Please identify the top three challenge areas when it comes to travelling in the City of Capitola. Required
Multi Choice | Skipped: 0 | Answered: 52 (100%)



Answer choices	Percent	Count
Aggressive driving (speeding, stop sign or red-light running violations)	69.23%	36
Traffic signals (poor visibility, signal timing, conflicts with pedestrians or bicyclists, etc.)	34.62%	18
Pedestrian crossings (long crossing distance, deteriorated pavement)	51.92%	27
Bicycle lanes (narrow/missing bike lanes at intersections or segments)	26.92%	14
Distracted driving	40.38%	21
Signage and pavement markings	11.54%	6
Unclear or faded, additional signage needed, etc.	13.46%	7
Street lighting	9.62%	5

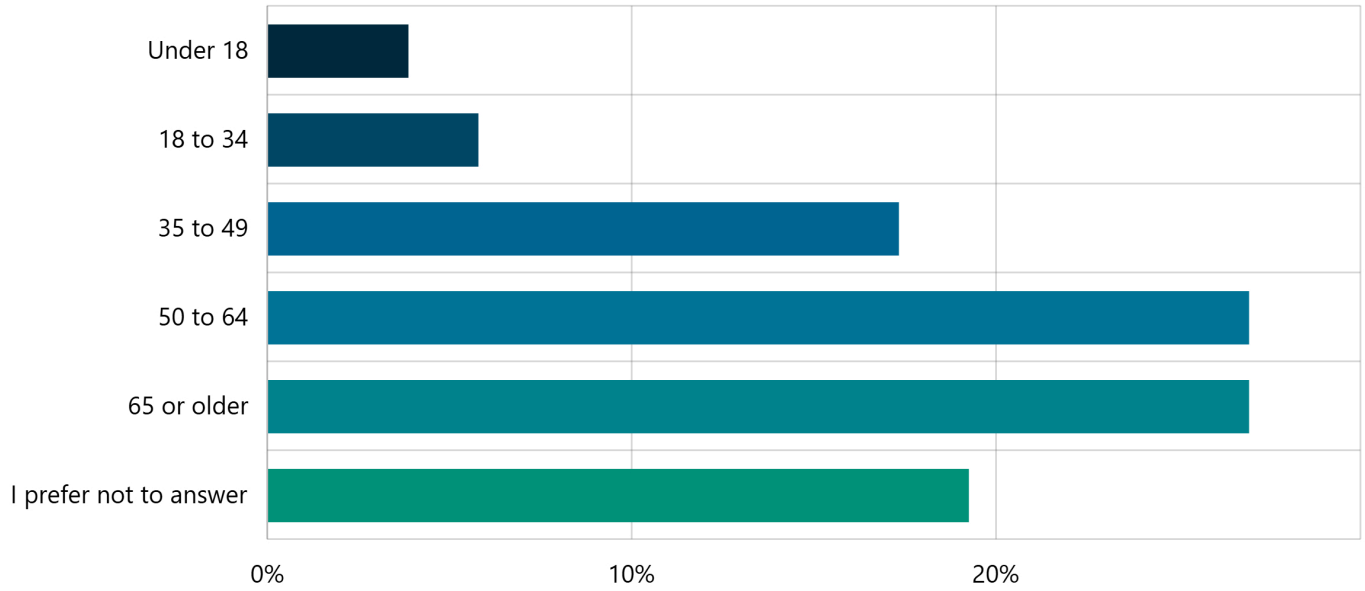
Construction work zone safety	1.92%	1
ADA Accessibility	3.85%	2
Truck/Commercial vehicles	5.77%	3
Other	23.08%	12

4. Which of the following best describes you? Required
Multi Choice | Skipped: 0 | Answered: 52 (100%)



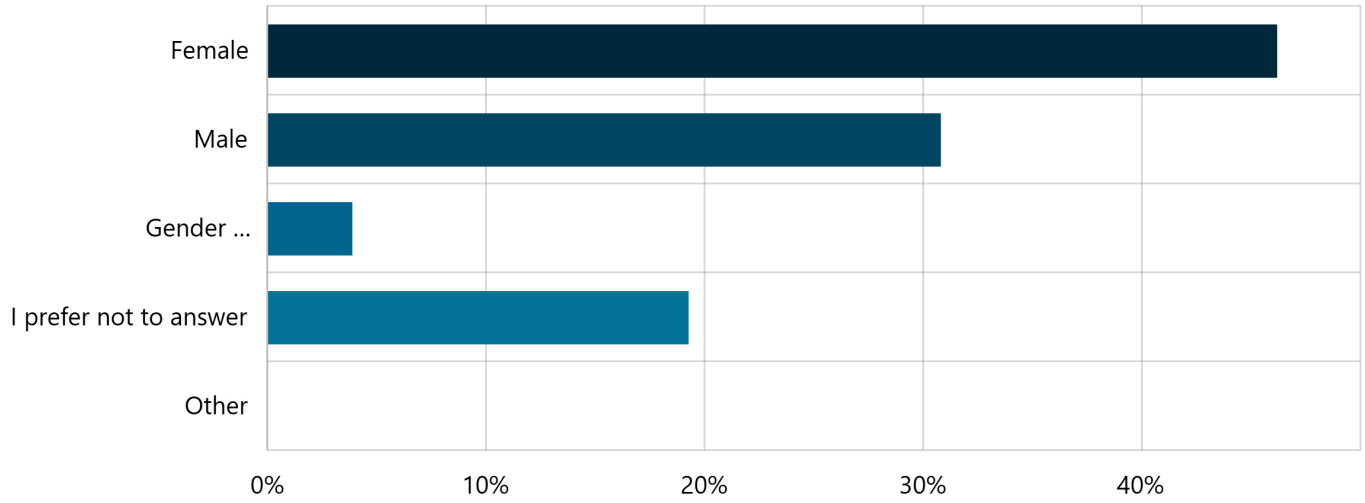
Answer choices	Percent	Count
African American/Black	1.92%	1
Asian, Pacific Islander, or Native Hawaiian	1.92%	1
Hispanic/Latino/a/x	3.85%	2
Middle Eastern/Arab	0%	0
Native American or Alaska Native	3.85%	2
White	53.85%	28
I prefer not to answer	30.77%	16
Other	3.85%	2
Total	**100.00%**	**52**

5. How old are you? Required
Multi Choice | Skipped: 0 | Answered: 52 (100%)



Answer choices	Percent	Count
Under 18	3.85%	2
18 to 34	5.77%	3
35 to 49	17.31%	9
50 to 64	26.92%	14
65 or older	26.92%	14
I prefer not to answer	19.23%	10
Total	**100.00%**	**52**

6. What is your gender? Required
Multi Choice | Skipped: 0 | Answered: 52 (100%)



Answer choices	Percent	Count
Female	46.15%	24
Male	30.77%	16
Gender non-conforming or non-binary	3.85%	2
I prefer not to answer	19.23%	10
Other	0%	0
Total	**100.00%**	**52**

APPENDIX D

SUMMARY OF PROGRAMS, POLICIES, AND PRACTICES FOR THE CITY OF CAPITOLA

Topic	Current Status	Recommendation
Complete Streets Policy	The Capitola General Plan Mobility Element includes policies supporting Complete Streets and multimodal transportation[1].	Continue implementing Complete Streets through corridor studies and capital improvement projects.
Traffic Impact Fees	The City does not currently impose a transportation impact fee.	Consider evaluating whether a transportation impact fee nexus study could support future transportation infrastructure improvements associated with new development.
Safe Routes to School (SRTS)	The City completed a Safe Routes to School plan for the Soquel Union Elementary School District in 2014 with Caltrans funding.	Continue pursuing SRTS funding and implementing identified safety improvements.
Traffic Safety Education	Capitola participates in the countywide *Street Smarts* Vision Zero public education campaign and conducts traffic safety outreach.[2]	Consider expanding local education efforts in partnership with schools and community organizations to promote pedestrian and bicycle safety.
Program for Reviewing Crash Activity	Capitola participates in the Community Traffic Safety Coalition, which compiles crash and injury data for regional safety planning and education efforts.[3]	Continue reviewing crash data and prioritize safety improvements at locations with high crash frequency or severity.
Crash Database Updates	The Police Department maintains a crash database.	Continue to provide training on the City's new RMS system to ensure that the appropriate fields are accounted for in the data, in support of support safety analysis and project prioritization.
Speed Limits	The City completed an Engineering and Traffic Survey and updated speed limits in 2020[4].	Continue conducting speed surveys as required and evaluate opportunities for speed reductions under AB 43 guidance and CA MUTCD guidance.

[1] General Plan Update, City of Capitola, 2019. https://www.cityofcapitola.org/sites/default/files/fileattachments/page//general_plan_-_update_2019.pdf
[2] Street Smarts Public Education Campaign, City of Capitola
[3] Santa Cruz County, Community Traffic Safety Coalition
[4] City of Capitola Engineering and Traffic Study 2020, January 2020.

Topic	Current Status	Recommendation
Enforcement of Bicycle Regulations	Bicycle rules are enforced under the Capitola Municipal Code, with increasing attention to e-bike regulations.[5]	Continue public education and targeted enforcement efforts to support safe bicycle and micromobility use.
Sobriety / Seatbelt Checks	The Police Department conducts sobriety checkpoints and traffic safety enforcement.	Continue coordination between Public Works and Police to support targeted enforcement and traffic safety campaigns.
Coordination with Adjacent Jurisdictions	Capitola coordinates with neighboring jurisdictions on enforcement and safety issues as outlined in Police Department policy.[6]	Continue coordination and pursue grant funding for targeted enforcement at high-crash locations and jurisdictional boundaries.
Traffic Calming Policies	The City has several traffic calming and corridor improvement projects underway or in development, including Park Avenue, 41st Avenue improvements, Clare Street improvements, and Bay Avenue corridor improvements. [7] [8]	Consider establishing a citywide neighborhood traffic calming program to promote slower speeds and improve safety on local streets.
Transit Accommodation of Bicycles	Bicycles are permitted on local transit services operating within Capitola.	Continue supporting transit providers in accommodating bicycles to encourage multimodal trips.
Coordination with Transit Providers	The City coordinates with regional transit providers regarding transit operations and infrastructure.	Continue coordination on transit stop placement and improvements, particularly for first- and last-mile connections.
Bicycle and Pedestrian Planning	The City adopted a Bicycle Transportation Plan in 2011[9] and is currently preparing an Active Transportation Plan.[10]	Continue implementing priority projects and monitoring bicycle and pedestrian safety outcomes.

[5] Capitola police seize e-bike from teen rider as city presses for new state laws, April 2025
[6] City of Capitola Police Department Manual, 10/10/2024
[7] City of Capitola Public Works, Park Ave. Traffic Calming Workshop
[8] City of Capitola Public Works, Clare Street Traffic Calming Improvements
[9] City of Capitola Bicycle Transportation Plan, 2011
[10] City of Capitola ATP Grant Application, January 2025

Topic	Current Status	Recommendation
General Plan Multimodal Policies	The Capitola General Plan includes a Mobility Element addressing multimodal transportation and safety.[11]	Continue implementing General Plan mobility policies and evaluate progress periodically.
Inventory of Multimodal Facilities	The City tracks bicycle, pedestrian, parking, and other transportation facilities through planning studies and municipal code provisions.[12]	Continue maintaining and updating facility inventories to support transportation planning and project development.
Traffic Safety Audit Program	The City does not have a formal, standalone traffic safety audit program.	Consider implementing periodic safety reviews or traffic safety audits to identify and address safety concerns.
County / Regional Planning Coordination	Capitola coordinates with county agencies and regional organizations on transportation planning and safety initiatives.	Continue coordination to support corridor planning and regional transportation improvements.
Emergency Response Coordination	Transportation planning is coordinated with emergency response planning through hazard mitigation and regional planning efforts.[13]	Continue involving emergency response representatives in transportation planning and project development.
Resident Feedback	Residents can provide feedback through City Council meetings, Planning Commission meetings, and project-specific outreach efforts.	Continue public engagement and evaluate feedback trends to identify systemic safety concerns.
Maintenance of Roadway Surfaces	The City maintains roadway surfaces through its Pavement Management Program and capital improvement projects.[14]	Continue regular pavement maintenance and incorporate safety improvements where feasible.
Transportation Demand Management (TDM)	The Municipal Code includes provisions encouraging reductions in single-occupant vehicle trips. [15]	Continue coordinating with the Regional Transportation Commission to strengthen TDM strategies.

[11] City of Capitola General Plan, 2019
[12] City of Capitola Municipal Code, Chapter 8.54
[13] City of Capitola Local Hazard Mitigation Plan, 2013
[14] City of Capitola 2025 Pavement Maintenance Program
[15] City of Capitola Municipal Code, Chapter 17.76

Topic	Current Status	Recommendation
Land Use and Infill Development	Capitola uses overlay zoning and planning tools in areas such as the Central Village to support walkability and multimodal access.[16]	Continue coordinating land use and transportation planning to support safe infill development.
School Zone Safety	School zone safety is supported through enforcement and traffic control measures.	Continue enforcement and pursue grant funding for additional school zone safety programs where appropriate.
Wayfinding Signage	Wayfinding signage is implemented on a project-specific basis.	Continue maintaining wayfinding signage and evaluate opportunities for improved traveler information.
Traffic Control Device Warrants	The City follows CA MUTCD warrants when evaluating traffic control devices.	Continue applying CA MUTCD standards and consider supplemental local guidelines where appropriate.
Crosswalk Safety	The City installs and maintains crosswalks and pedestrian safety treatments as part of roadway projects and traffic safety improvements.	Continue evaluating crosswalk safety at locations with high pedestrian activity and consider targeted enhancements such as improved signage, visibility improvements, or additional pedestrian safety treatments where appropriate.
Traffic / Bicycle / Pedestrian Counts	The City collects traffic volumes and ADT data through project studies and speed feedback signs.	Continue collecting multimodal traffic counts and incorporate bicycle and pedestrian counts into routine data collection.

[16] City of Capitola Municipal Code, Chapter 17.40

APPENDIX E

POLICE DEPARTMENT ENFORCEMENT AND CITATION TRENDS MEMORANDUM

POLICE DEPARTMENT

Memo

To: City Council

From: Sarah Ryan, Chief of Police

Date: May 1, 2026

Re: Local Road Safety Plan (LRSP)

Summary of Key Trends (2019–2026 YTD)

A review of citywide data from 2019 through 2026 (year-to-date) shows year-to-year variation rather than a consistent long-term trend, specifically moving citations increased significantly between 2021 and 2023, then declined in 2024–2025. Overall, the data reflect year-to-year variation and are influenced by enforcement levels and other factors, rather than indicating a clear long-term trend.

Data Sources

Traffic-related data were obtained from Capitola Police Department records, including citations, reported violations, and collision reports occurring within city limits. These data reflect **officer-initiated enforcement activity** and documented incidents.

Year	Moving Citations Issued
2019	796
2020	779
2021	684
2022	1,036
2023	1,438
2024	1,335
2025	791
2026*	222

*Data entry as of 4/30/26.

This dataset does **not** include enforcement or incident data from the California Highway Patrol (CHP) or the Santa Cruz County Sheriff's Office (SCSO), even on roadways that extend beyond or connect to the city. As a result, findings are limited to activity captured by Capitola Police.

Contextual Factors to Consider

The following external and operational factors should be considered:

- **Staffing Levels and Deployment**
  Variations in officer availability and assignment patterns over time. Lower counts may indicate **reduced enforcement presence**, rather than improved driver behavior.
- **Targeted Enforcement Campaigns**
  Higher citation counts may reflect **increased enforcement effort**, not necessarily increased non-compliance.
- **Community Complaints and Engagement**
  Locations with higher public concern may receive increased enforcement attention.

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- **Community Complaints and Engagement**
  Locations with higher public concern may receive increased enforcement attention.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CAPITOLA ADOPTING A LONG-TERM ROADWAY SAFETY POLICY AND ESTABLISHING A GOAL OF ELIMINATING TRAFFIC FATALITIES AND SERIOUS INJURIES BY 2045

WHEREAS, the City of Capitola is committed to protecting the health, safety, and welfare of residents, visitors, businesses, employees, and all users of the public right-of-way; and

WHEREAS, traffic fatalities and serious injuries are preventable and impose significant human and economic costs on communities; and

WHEREAS, the City has completed a Local Roadway Safety Plan that analyzes collision trends, community concerns, and opportunities to improve roadway safety for people walking, bicycling, driving, using mobility devices, riding transit, and traveling by all modes; and

WHEREAS, national, state, and regional transportation agencies increasingly utilize Safe System principles recognizing that people make mistakes, human bodies are vulnerable, and transportation systems should be designed to reduce the likelihood and severity of crashes; and

WHEREAS, the United States Department of Transportation Safe Streets and Roads for All (SS4A) program encourages local governments to adopt comprehensive safety action plans and policy commitments intended to eliminate roadway fatalities and serious injuries; and

WHEREAS, the City Council desires to establish a long-term safety goal and policy direction to guide future planning, project development, operations, education, enforcement, and funding pursuits.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Capitola as follows:

Section 1. The City of Capitola hereby adopts a long-term goal of eliminating traffic fatalities and serious injuries on Capitola roadways by the year 2045.

Section 2. The City shall strive to incorporate Safe System principles, where feasible and appropriate, into transportation planning, capital improvements, maintenance activities, traffic operations, education efforts, and related decision-making processes.

Section 3. The adopted Local Roadway Safety Plan shall serve as a planning resource to help identify priorities, evaluate strategies, support grant funding applications, and guide future implementation efforts.

Section 4. The City Manager, or designee, is authorized to coordinate with local, regional, state, federal, school, transit, and community partners to advance roadway safety initiatives consistent with this Resolution.

Section 5. The City recognizes roadway safety is an ongoing effort. Progress toward this goal may be advanced through future plans, capital projects, operational changes, data review, community engagement, and periodic updates to safety priorities as resources allow.

Section 6. Nothing in this Resolution shall be interpreted to require unbudgeted expenditures or create entitlement to any specific project or improvement. Implementation shall remain subject to future

Council actions, funding availability, environmental review, and applicable law.

I HEREBY CERTIFY that the above and foregoing Resolution was passed and adopted by the City Council of the City of Capitola at its regular meeting held on the 14th day of May 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Margaux Morgan, Mayor

ATTEST:

_____
Julia Gautho, City Clerk

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: Public Works Department

Subject: Bay Avenue Corridor Project Update & Rule 20A Coordination

Recommended Action: Receive an update regarding the Bay Avenue Corridor Project, including completed outreach, available funding opportunities, and Rule 20A utility undergrounding coordination; confirm whether to continue coordinating corridor improvements with underground utility work; and provide direction on which project components to advance.

Background: Bay Avenue is one of the City's most important transportation corridors, providing access between Highway 1, residential neighborhoods, schools, commercial centers, senior housing, and Capitola Village. The corridor serves both local and regional traffic and has longstanding challenges related to congestion, pedestrian crossings, bicycle comfort, turning conflicts, and aging overhead utility infrastructure.

Over the last several years, the City has evaluated multiple approaches to improve safety and operations along Bay Avenue, including temporary quick-build measures at Bay Avenue and Hill Street, corridor traffic analysis, and conceptual long-term intersection improvements.

On February 27, 2025, the City Council reviewed the Bay Avenue Corridor Study prepared by Kimley-Horn and identified the roundabout-based concept as the preferred long-term strategy for key intersections along the corridor. At that meeting Council authorized additional outreach, concept refinement, and preliminary right-of-way review to better position the project for future implementation and grant opportunities. This direction reflects a series of Council discussions over multiple meetings, informed by technical analysis and community input.

This report provides an update on work completed since that direction and seeks Council input regarding implementation strategy, project sequencing, and coordination with underground utility improvements.

Work Completed Since February 27, 2025: Following Council authorization, staff and the City's consultant team completed stakeholder outreach meetings, public engagement efforts, corridor review, and concept refinement. Outreach included more than 10 meetings with corridor businesses and property owners, Bay Avenue senior housing residents, public meetings, and online comment opportunities.

Public feedback reflected a range of viewpoints. Common themes included support for safer crossings, improved pedestrian access, reduced vehicle speeds, and long-term investment in the Bay Avenue corridor. Concerns included congestion, construction impacts, business access, and comparisons to the prior temporary quick-build lane reduction at Bay Avenue and Hill Street.

In September 2025, Council directed staff to remove the quick-build project at Bay Avenue and Hill Street following significant community feedback. The quick-build was a temporary, striping-based pilot. The proposed improvements are fully engineered, based on detailed traffic analysis, and include permanent geometric changes such as intersection reconstruction and defined pedestrian crossings.

Corridor Operations and Congestion: Bay Avenue functions as a major connection to State Route 1 and serves regional traffic in addition to local circulation. As a result, peak-period congestion is largely influenced by regional traffic patterns associated with access to Highway 1 and is expected to persist under any feasible local intersection configuration. The purpose of the Bay Avenue Corridor Project is not to eliminate congestion, but to improve safety, predictability, and multimodal access along the corridor.

Improvements such as reduced conflict points, clearer pedestrian crossings, and traffic calming may improve corridor function, even where congestion remains during peak periods. The corridor study also

evaluated signalized intersection alternatives; however, based on the analysis, roundabouts were identified as the preferred long-term option due to improved traffic operations, reduced delay, and safety benefits.

The original corridor concept assumed coordinated improvements at multiple intersections. While phased implementation remains possible, advancing individual components independently may limit the overall effectiveness of the corridor improvements.

PG&E Rule 20A Utility Undergrounding Coordination: The Bay Avenue corridor also presents an opportunity to coordinate transportation improvements with underground utility work. Rule 20A work credits allow California local governments to fund overhead-to-underground power line conversions. New allocations under this program stopped after 2022. As of December 31, 2025, the City's reported Rule 20A work credit balance was approximately $3 million, which may be applied toward eligible underground utility work subject to utility program rules, participation, and final cost accounting.

The prior sequencing concept anticipated delaying final roadway restoration so restoration could occur as part of the ultimate corridor improvement project. If corridor improvements do not proceed in the near term, separate final restoration work may be required, easement acquisition may need to proceed independently, and available credits may not fully offset future undergrounding and restoration costs.

Not all utilities have confirmed participation, which may affect final coordination and cost responsibilities. Utility easements needed for undergrounding may overlap with or relate to easements that would be beneficial for corridor transportation improvements. Coordinated acquisition may improve efficiency.

The Rule 20A undergrounding program is being phased out, and available Bay Avenue credits represent the City's only opportunity to utilize this funding source for utility undergrounding. If the City does not move forward with undergrounding on Bay Avenue this funding source will not remain available in the future.

Funding and Implementation Considerations: The City has obtained funding resources available to support project advancement, including $500,000 in Regional Transportation Improvement Program (RTIP) funding and $250,000 in Federal Highway Infrastructure Project funding. These funds may support design, right-of-way activities, matching requirements, or phased construction.

Advancing the project improves the City's ability to position these funds effectively and remain competitive for future state and federal grant opportunities. Should the project scope be revised, staff can research the feasibility of reallocating project funding to other roadway-related Council priorities.

Project Components and Implementation Approach: To support Council direction, the Bay Avenue Corridor Project can be understood as a set of coordinated components. The proposed improvements include defined pedestrian crossings and reduced vehicle speeds, which are key factors in improving pedestrian safety. These components were previously considered as part of a single, integrated corridor project, but may be advanced individually or in combination based on Council direction.

- Roundabout at Bay Avenue and Hill Street: Reconstruct the skewed intersection into a single-lane roundabout to improve safety and operations. This location has a history of non-fatal pedestrian collisions and complex vehicle movements.
- Roundabout at Bay Avenue and Capitola Road: Reconstruct the intersection into a single-lane roundabout to reduce conflicts and improve traffic flow. This location has a history of non-fatal pedestrian collisions, and the corridor has documented bicycle collisions at and near intersections.
- Utility Undergrounding (Rule 20A): Underground overhead utilities near the Capitola Road intersection to support roadway improvements, improve aesthetics, and minimize future roadway disruption associated with utility work.
- Corridor Lighting, Striping, and Signing Improvements: Upgrade lighting and pavement markings to improve visibility, wayfinding, and overall corridor safety.
- Mid-Block Pedestrian Crossing (Center Street): Install a pedestrian crossing to improve safe access across Bay Avenue where crossing demand exists.

Advancing these components together provides the greatest benefit in terms of safety, cost efficiency, and overall corridor function. However, individual components may be advanced based on Council priorities, funding strategy, or implementation timing.

Fiscal Impact: No immediate construction appropriation is requested with this item. Existing external funds may support future phases of the project, subject to Council direction and future budget actions.

The project currently includes $250,000 in Federal Highway Infrastructure Project funding, which must be used on Bay Avenue construction and requires a non-federal match of approximately $65,000.

The City also has $500,000 in Regional Transportation Improvement Program (RTIP) funding, which may be used in whole or in part for Bay Avenue construction, used as matching funds for grant applications, or reallocated to other eligible transportation projects.

Additional local funding may be required depending on the final scope, phasing, and implementation of selected project components.

Attachments:

1. Bay Avenue Corridor Study (February 2025)
2. Current Corridor Concept Layout
3. Correspondence Received Since March 2026

Alignment with 2025-2029 Strategic Plan Priority: Accountable Government; Community Safety; Economic Opportunity; Healthy Families, Community, and Environment; Sustainable Infrastructure

Report Prepared By: Jessica Kahn, Public Works Director

Reviewed By: Julia Gautho, City Clerk; Marc Tran, City Attorney

Approved By: Jamie Goldstein, City Manager

Bay Avenue Corridor Study

Transportation Analysis

February 2025

Prepared for

Prepared by

10 South Almaden Boulevard, Suite 1250
San Jose, CA 95113

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Executive Summary

Project Overview:

The Bay Avenue Corridor Study, conducted by Kimley-Horn in partnership with the City of Capitola, aims to analyze and propose improvements for the Bay Avenue corridor stretching from Highway 1 to Park Avenue. The primary objectives are to enhance mobility, economic development, traffic operations, and multimodal safety through long-term roadway and intersection modifications. It is intended that the proposed corridor improvements would be funded through grant opportunities.

Study Scope and Methodology:

A traffic operations analysis for existing (Year 2024) and cumulative (Year 2045) conditions was conducted to assess the feasibility of multiple alternative configurations:

- Alternative 0 – No Build: Maintain current traffic control and roadway geometry.
- Alternative 1 – Stop Control and Road Diet: Convert a portion of Bay Avenue from a four-lane to a two-lane road with enhanced multimodal crossings at the existing all-way stop intersections.
- Alternative 2 – Roundabout: Implement single-lane roundabouts at key intersections.
- Alternative 3 – Signal: Implement traffic signals at key intersections.

Traffic data, including intersection volumes, daily traffic, speed, and collision statistics, were collected and analyzed using Synchro, Sidra, and VISSIM software.

Existing Conditions (Year 2024) Analysis Results:

- Most intersections operate at an acceptable level of service (LOS).
- The roundabout alternative (Alt 2) demonstrates better LOS operations compared to the stop control (Alt 1) and signal (Alt 3) configurations.
- Significant vehicle queues were observed at some intersections, particularly the Bay Avenue/Highway 1 ramps and Hill Street.

Cumulative Conditions (Year 2045) Analysis Results:

- Several intersections are anticipated to exceed acceptable LOS thresholds.
- The roundabout alternative (Alt 2) consistently provides the best performance in terms of vehicle delay and travel times.
- Signalized intersections (Alt 3) yields acceptable LOS but with increased vehicle queues compared to roundabouts.

Multimodal Access and Safety Improvements

The proposed improvements for each alternative configuration would aim to enhance safety for pedestrians and cyclists through various measures:

- General Multimodal Enhancements:
    - Traffic Calming Features: All alternatives incorporate traffic calming features like narrower lanes and improved intersection design, which inherently enhance safety for all road users.
    - Visibility Improvements: Enhanced lighting, signage, and marked crosswalks improve visibility for pedestrians and cyclists, especially at night or during adverse weather conditions.

  - Collision Mitigation: Historical collision data and near-miss analysis inform the design to specifically address risky driver behaviors and common collision types, further ensuring pedestrian and cyclist safety.
- Summary of Multimodal Safety Benefits:
  - Reduced Vehicle Speeds: Slower travel speeds generally lead to decreased collision severity for vehicles, cyclists and pedestrians.
  - Clear Right-of-Way: Signal and roundabout controls provide structured and predictable movement patterns.
  - Protected Space: Buffered and clearly marked spaces for pedestrians and cyclists reduce the risk of conflicts with vehicles.
  - Improved Crossings: Shorter and more visible crossing areas make it safer and easier for pedestrians to navigate intersections.
  - Enhanced Visibility and Lighting: Increased visibility through better lighting and clear signage reduces the risk of accidents.

Conclusion and Recommendations:

The roundabout configuration (Alternative 2) offers the most optimal solution for minimizing vehicle delays, enhancing traffic safety, and improving multimodal access. This option, however, requires significant infrastructure investment and potential right-of-way acquisition.

The stop control and road diet alternative (Alternative 1) would improve pedestrian and cyclist safety with minimal initial capital costs but result in poor corridor operations and long vehicle delay.

The signalized intersection configuration (Alternative 3) presents an intermediate solution, providing moderate operation and multimodal improvements at the expense of infrastructure investment and high ongoing maintenance costs.

Based on the analysis results, the study recommends pursuing the roundabout configuration at key intersections for long-term benefits in traffic operations, safety, economic development, and multi-modal accessibility. Compared to the no-build alternative, the stop control and signal control alternatives could also be considered feasible based on budgetary constraints and immediate needs.

ES-1: Qualitative Corridor Operations Summary Comparison

Criteria	Alternative 0 – No Build	Alternative 1 – Stop & Road Diet	Alternative 2 – Roundabout	Alternative 3 - Signal
Operations				
Vehicle Delay	High Stop control creates delay for intersection approaches	High Stop control creates delay for intersection approaches	Low Yield control reduces average delay	Moderate Signal control reduces average delay
Vehicle Travel Time	Long Stop control creates delay for intersection approaches	Long Stop control creates delay for intersection approaches	Short Yield control reduces average delay	Moderate Signal control reduces average delay
Vehicle Queue Length	Long Long queues and spillback into adjacent intersection	Long Long queues and spillback into adjacent intersection	Moderate Yield control generates average queues	Moderate Signal control generates average queues
Transit and Emergency Vehicle Access Improvement	Poor Slower average travel times and higher VHT	Poor Slower average travel times and higher VHT	Moderate Faster average travel times and lower VHT	Moderate Opportunity for emergency vehicle preemption
Driver Adaptation Time	Low Existing conditions on corridor	Low Existing conditions on corridor	High New traffic control in City for users	Moderate Existing conditions on corridor
Safety				
Collision Severity Potential	Moderate Numerous conflict points with stop control at intersection	Moderate Numerous conflict points with stop control at intersection	Low Fewer conflict points and controlled lower speeds at intersection	High Higher vehicle speeds and numerous conflict points at intersection
Bicycle Access Improvement	Poor No Build scenario would not improve conditions	Moderate Buffered bike lanes and markings	Good Buffered bike lanes and markings. Shorter and protected crossings	Moderate Buffered bike lanes and markings. Designated crossing phases
Pedestrian Access Improvement	Poor No Build scenario would not improve conditions	Moderate Shorter crossings with traffic calming	Good Shorter and protected crossings	Moderate Designated crossing phases
Economic				
Capital Construction Cost	Low No Build scenario would not improve conditions	Low Updates to existing infrastructure	High New infrastructure and utility coordination	High New infrastructure and signal equipment
Right of Way Impact	Low	Low	High	Moderate

Criteria	Alternative 0 – No Build	Alternative 1 – Stop & Road Diet	Alternative 2 – Roundabout	Alternative 3 - Signal
	No change to existing conditions	Updates to existing infrastructure	Property impacts to accommodate design	New infrastructure and signal equipment
Operation & Maintenance Costs	Low No Build scenario would not improve conditions	Low Landscaping	Moderate Landscaping	High Signal equipment, electricity
Greenhouse Gas Emissions	Moderate Vehicle idling with stop traffic control	Moderate Vehicle idling with stop traffic control	Low Less vehicle idling with yield traffic control	Moderate Higher speeds & vehicle idling with signal traffic control
Aesthetics & Community Character Improvement	Poor No Build scenario would not improve conditions	Moderate Opportunities for art and landscaping with traffic calming	Good Opportunities for art and landscaping at intersection	Moderate Requires signal poles and cabinets
Grant Funding Opportunity	Poor No Build scenario would not improve conditions	Moderate Multimodal safety improvement	Good Multimodal safety improvement, traffic congestion reduction, environmental impact	Moderate Traffic congestion reduction
General Benefits	• Lower initial capital cost and ongoing maintenance	• Improved driver certainty • Lower initial capital cost • Improved bike & ped safety	• Reduction collision severity • Improved bike & ped safety • Improved operations • Reduced GHG emissions	• Improved operations & capacity • Provides designated crossing times and driver certainty
General Challenges	• Decreased operations • Increased queues	• Decreased operations • Increased queues	• High initial capital cost and potential ROW impact • Driver adaptation to new traffic operations	• High capital and maintenance costs • Increased queues and collision severity potential

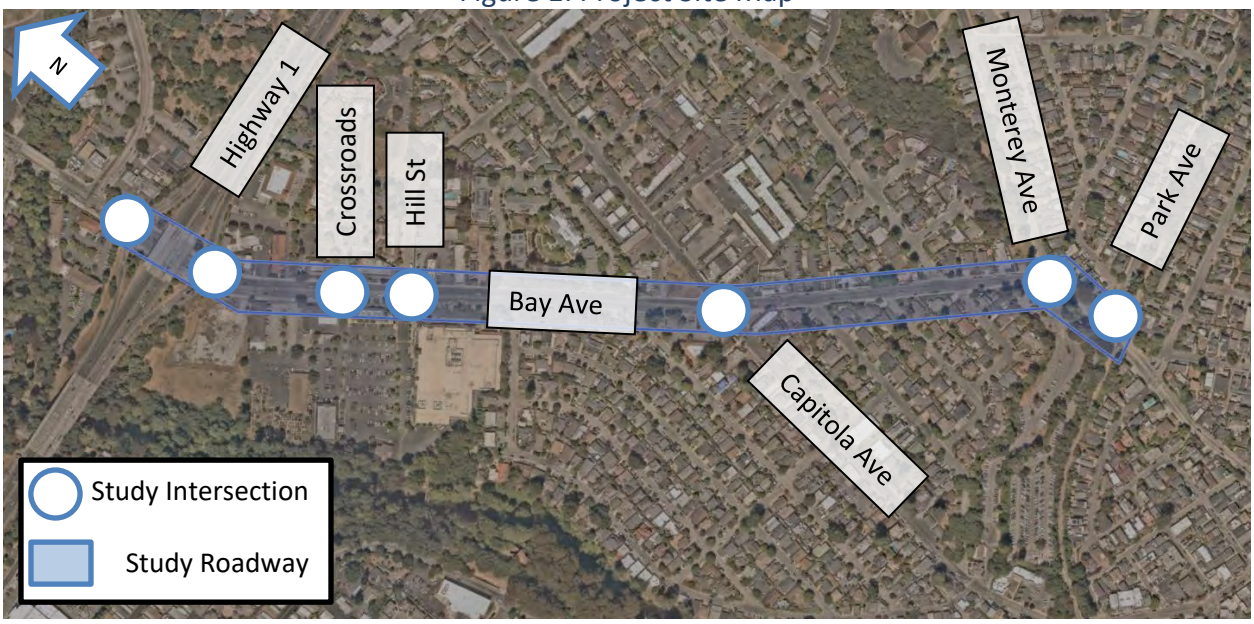
1. Project Description and Corridor Study Scope

Kimley-Horn and Associates, Inc. (Kimley-Horn) is working with the City of Capitola (City) to conduct a traffic operations analysis and corridor study along Bay Avenue from Highway 1 to Park Avenue. This planning study was prepared to assess current and future needs of the Bay Avenue corridor to improve mobility, safety, operations, and economic development for all users.

The study investigates feasible long-term roadway and intersection improvements that could enhance traffic operations and safety for vehicles, bicyclists, and pedestrians through a traffic analysis and intersection control evaluation (ICE) for the Bay Avenue corridor. The overall recommendations of the corridor study are consistent with the Bay Avenue Vision, mobility, and economic goals in the Capitola General Plan. It is anticipated these long-term future improvements would consist of permanent hardscape and geometric roadway changes that would be funded through grant opportunities.

Figure 1 presents an overview map of the Bay Avenue corridor study area.

Figure 1: Project Site Map



1.1 Corridor Study Scenarios

Traffic conditions for Bay Avenue was analyzed during the 7:00 – 9:00 AM and 4:00 – 6:00 PM peak hours of traffic which represent the most heavily congested traffic on a typical weekday. The study area was assessed under the following study scenarios.

- **Existing Scenario**: Existing AM and PM peak-hour traffic volumes from Year 2024 traffic count data and utilizing roadway geometry and intersection traffic control from proposed corridor alternatives aimed to enhance multimodal operations.

- **Cumulative Scenario**: Peak-hour traffic volumes based on the Santa Cruz County Regional Transportation Commission (SCCRTC) Travel Demand Model for Year 2045 and utilizing roadway geometry and intersection traffic control from proposed corridor alternatives aimed to enhance multimodal operations.

1.2 Proposed Corridor Alternatives

The corridor operations and intersection control evaluation (ICE) analysis investigated potential improvements that could improve access and safety for vehicles, bicycles, and pedestrians. Based on internal discussion and direction from City staff, the lane intersection improvement and lane configuration alternatives were evaluated under the Existing Year 2024 and Cumulative Year 2045 study scenarios. Exhibits and tables detailing the general operations, traffic control, and roadway geometry of the conceptual Bay Avenue corridor alternatives are included in **Figure 2**.

Alternative 0 – No Build

- All study intersections and roadways segments are analyzed with its existing traffic control and lane geometry to provide a comparison with the proposed corridor alternatives.

Alternative 1 – Stop Control and Road Diet

- Roadway between Crossroads Loop and Center Street
  - Convert Bay Avenue from a 4-lane roadway into a 2-lane roadway with road diet transition
- Bay Avenue / Crossroads Loop Intersection
  - Adjust Bay Avenue Major Approach (Southbound direction) for 2-lane road diet
- Bay Avenue / Hill Street Intersection
  - Install curb bulb-outs and enhanced pedestrian crossings with 2-lane road diet
- Assumes improvements can fit within existing City intersection footprint and right-of-way.
- All other study intersections are analyzed with its existing traffic control and lane geometry

Alternative 2 – Roundabout

For the purposes of this study, a qualitative right-of-way evaluation for the Existing and Cumulative condition was conducted to determine if a roundabout is feasible for any of the existing Bay Avenue stop-controlled study intersections.

- Roadway between Crossroads Loop and Center Street
  - Convert Bay Avenue from a 4-lane roadway into a 2-lane roadway with road diet transition
- Bay Avenue / Crossroads Loop Intersection
  - Adjust Bay Avenue Major Approach (Southbound direction) for 2-lane road diet
- Bay Avenue / Hill Street Intersection
  - Convert intersection into single lane roundabout layout with yield control with 2-lane road diet
- Bay Avenue / Capitola Avenue Intersection
  - Convert intersection into single lane roundabout layout with yield control
- Bay Avenue / Monterey Avenue Intersection
  - Convert intersection into single lane roundabout layout with yield control

    - It should be noted that for existing and cumulative conditions, the intersection has right-of-way constraints that impact the economic and construction feasibility for a roundabout; however for consistency and ICE comparison purposes, this intersection was analyzed as a roundabout for the Alternative 2 layout.
- Monterey Avenue / Park Avenue Intersection
    - Convert intersection into single lane roundabout layout with yield control
    - It should be noted that for existing and cumulative conditions, the intersection has right-of-way constraints that impact the economic and construction feasibility for a roundabout; however for consistency and ICE comparison purposes, this intersection was analyzed as a roundabout for the Alternative 2 layout.
- Assumes roundabout improvements would have minor impacts outside of City right-of-way.
- All other study intersections are analyzed with its existing traffic control and lane geometry

Alternative 3 – Signal

For the purposes of this study and based on the collected traffic volumes, MUTCD peak hour signal warrant #3 was evaluated for the Existing and Cumulative condition to determine if a signal is warranted for any of the existing Bay Avenue stop-controlled study intersections. See Section 3 for analysis.

- Roadway between Crossroads Loop and Center Street
    - Convert Bay Avenue from a 4-lane roadway into a 2-lane roadway with road diet transition
- Bay Avenue / Crossroads Loop Intersection
    - Adjust Bay Avenue Major Approach (Southbound direction) for 2-lane road diet
- Bay Avenue / Hill Street Intersection
    - Convert intersection into signal control with 2-lane road diet
- Bay Avenue / Capitola Avenue Intersection
    - Convert intersection into signal control
    - It should be noted that for existing and cumulative conditions, the Bay/Capitola intersection does not meet the Warrant 3 volume criteria for a signal; however for consistency and ICE comparison purposes, this intersection was analyzed as signal for the Alternative 3 layout.
- Bay Avenue / Monterey Avenue Intersection
    - Convert intersection into signal control
- Monterey Avenue / Park Avenue Intersection
    - Convert intersection into signal control
- Assumes signal equipment can fit within existing City intersection footprint and right-of-way, no physical improvements needed.
- All other study intersections are analyzed with its existing traffic control and lane geometry

It should be noted that a combination of the intersection control alternatives, such as an all-way stop at one location and a roundabout/signal at another location, may be considered along the Bay Avenue corridor pending City direction and public outreach. A detailed analysis of all the possible intersection control combinations is outside the scope of this planning study; however, , While I don't think we need to run a detailed analysis on this, having a general answer prepared would be helpful.

Figure 2: Corridor Alternatives Summary

Intersection

#	Intersection Name	Alternative 0 - No Build		Alternative 1 - Stop & Road Diet		Alternative 2 - Roundabout		Alternative 3 - Signal	
		Traffic Control	Intersection Geometry and Operations	Traffic Control	Intersection Geometry and Operations	Traffic Control	Intersection Geometry and Operations	Traffic Control	Intersection Geometry and Operations
1	Bay Avenue / Highway 1 NB Ramps	Signal	No changes to current condition (Intersection in Caltrans right-of-way) 3 NB, 2 SB, 2 WB Lanes	Signal	Same as Alt 0 - No Build	Signal	Same as Alt 0 - No Build	Signal	Same as Alt 0 - No Build
2	Bay Avenue / Highway 1 SB Ramps	Signal	No changes to current conditions (Intersection in Caltrans right-of-way) 2 NB, 3 SB, 3 EB Lanes	Signal	Same as Alt 0 - No Build	Signal	Same as Alt 0 - No Build	Signal	Same as Alt 0 - No Build
3	Bay Avenue / Crossroads Loop	TWSC	No changes to current condition (Minor street access to private driveways) 2 NB, 3 SB, 2 EB, 1 WB Lanes	TWSC	Adjust Bay Avenue Major Approach (Southbound direction) for 2-lane road diet -1 left lane, 1 through lane, 1 right lane -Buffered Class II bike lanes	TWSC	Adjust Bay Avenue Major Approach (Southbound direction) for 2-lane road diet -1 left lane, 1 through lane, 1 right lane -Buffered Class II bike lanes -It should be noted that for existing and cumulative conditions, the Bay/Crossroads intersection has right-of-way constraints that impact the economic and construction feasibility for a roundabout	TWSC	Adjust Bay Avenue Major Approach (Southbound direction) for 2-lane road diet -1 left lane, 1 through lane, 1 right lane -Buffered Class II bike lanes -It should be noted that for existing and cumulative conditions, the Bay/Crossroads intersection does not meet the MUTCD Warrant 3 volume criteria for a signal
4	Bay Avenue / Hill Street	AWSC	No changes to current condition 3 NB, 3 SB, 2 EB, 1 WB Lanes	AWSC	Install curb bulb-outs and enhanced pedestrian crossings with 2-lane road diet -Buffered Class II bike lanes -Bay Avenue Major Approach (Northbound and Southbound directions) --1 left lane, 1 shared through-right lane -Hill Street Minor Approach (Westbound direction) --1 shared left-through-right lane -Nob Hill Driveway Minor Approach (Eastbound direction) --1 shared left-through lane, 1 right lane	RDBT	Convert intersection into single lane roundabout layout with yield control with 2-lane road diet -Bay Avenue Major Approach (Northbound and Southbound directions) --1 shared left-through-right lane --Lane drop transition prior to roundabout intersection --Bike lane transitions and curb ramps onto Class I shared bike/ped pathway prior to roundabout intersection --Santa Cruz Metro bus stop and commercial driveway access is maintained along Bay Avenue corridor -Hill Street Minor Approach (Westbound direction) --1 shared left-through-right lane --Pedestrian crossing relocated before roundabout intersection -Nob Hill Driveway Minor Approach (Eastbound direction) --1 shared left-through-right lane --Pedestrian crossing and pathway relocated inside plaza parking lot before roundabout intersection	Signal	Convert intersection into signal control with 2-lane road diet -Bay Avenue Major Approach (Northbound and Southbound directions) --1 left lane, 1 shared through-right lane --Protected left turn operations for Northbound and Southbound approaches -Nob Hill Driveway and Hill Street Minor Approach (Eastbound and Westbound directions) --Lane geometry same as existing condition --Permissive yield left turn operations for Eastbound and Westbound approaches
5	Bay Avenue / Capitola Avenue	AWSC	No changes to current condition 2 NB, 2 SB, 2 EB, 1 WB Lanes	AWSC	Same as Alt 0 - No Build	RDBT	Convert intersection into single lane roundabout layout with yield control -Bay Avenue Major Approach (Northbound and Southbound directions) --1 shared left-through-right lane --Bike lane transitions and curb ramps onto Class I shared bike/ped pathway prior to roundabout intersection -Capitola Avenue Minor Approach (Westbound and Eastbound directions) --1 shared left-through-right lane --Pedestrian crossing relocated before roundabout intersection	Signal	Convert intersection into signal control -It should be noted that for existing and cumulative conditions, the Bay/Capitola intersection does not meet the MUTCD Warrant 3 volume criteria for a signal; however for consistency and ICE comparison purposes, this intersection was analyzed as signal for the Alternative 3 layout. -Lane geometry same as existing condition for all intersection leg approaches --Permissive yield left turn operations for all approaches

Intersection

#	Intersection Name	Alternative 0 - No Build		Alternative 1 - Stop & Road Diet		Alternative 2 - Roundabout		Alternative 3 - Signal	
		Traffic Control	Intersection Geometry and Operations	Traffic Control	Intersection Geometry and Operations	Traffic Control	Intersection Geometry and Operations	Traffic Control	Intersection Geometry and Operations
6	Bay Avenue / Monterey Avenue	AWSC	No changes to current condition 1 NB, 1 SB, 1 WB Lanes	AWSC	Same as Alt 0 - No Build	RDBT	Convert intersection into single lane roundabout layout with yield control -It should be noted that for existing and cumulative conditions, the Bay/Monterey intersection has right-of-way constraints that impact the economic and construction feasibility for a roundabout; however for consistency and ICE comparison purposes, this intersection was analyzed as a roundabout for the Alternative 2 layout. -All roadway approaches --1 shared left-through-right lane --Bike lane transitions and curb ramps onto Class I shared bike/ped pathway prior to roundabout intersection	Signal	Convert intersection into signal control -Lane geometry same as existing condition for all intersection leg approaches --Permissive yield left turn operations for all approaches
7	Monterey Avenue / Park Avenue	AWSC	No changes to current condition 2 NB, 2 SB, 1 EB, 1 WB Lanes	AWSC	Same as Alt 0 - No Build	RDBT	Convert intersection into single lane roundabout layout with yield control -It should be noted that for existing and cumulative conditions, the Monterey/Park intersection has right-of-way constraints that impact the economic and construction feasibility for a roundabout; however for consistency and ICE comparison purposes, this intersection was analyzed as a roundabout for the Alternative 2 layout. -All roadway approaches --1 shared left-through-right lane --Bike lane transitions and curb ramps onto Class I shared bike/ped pathway prior to roundabout intersection	Signal	Convert intersection into signal control -Lane geometry same as existing condition for all intersection leg approaches --Permissive yield left turn operations for all approaches

Roadway

#	Roadway Segment (Bay Avenue)	Alternative 0 - No Build		Alternative 1 - Stop & Road Diet		Alternative 2 - Roundabout		Alternative 3 - Signal	
		# Travel Lanes	Roadway Geometry and Operations	# Travel Lanes	Roadway Geometry and Operations	# Travel Lanes	Roadway Geometry and Operations	# Travel Lanes	Roadway Geometry and Operations
A	Highway 1 to Crossroads Loop	4	2 NB, 2 SB, Center left turn lane, Class II Bike	4	Same as Alt 0 - No Build	4	Same as Alt 0 - No Build	4	Same as Alt 0 - No Build
B	Crossroads Loop to Hill Street	4	2 NB, 2 SB, Center left turn lane, Class II Bike	2	Convert from a 4-lane roadway into a 2-lane roadway with road diet transition	2	Convert from a 4-lane roadway into a 2-lane roadway with road diet transition	2	Convert from a 4-lane roadway into a 2-lane roadway with road diet transition
C	Hill Street to Center Street	4	2 NB, 2 SB, Center left turn lane, Class II Bike	2	Convert from a 4-lane roadway into a 2-lane roadway with road diet transition	2	Convert from a 4-lane roadway into a 2-lane roadway with road diet transition	2	Convert from a 4-lane roadway into a 2-lane roadway with road diet transition
D	Center Street to Capitola Avenue	2	1 NB, 1 SB, Class II Bike, On-Street Parking	2	Same as Alt 0 - No Build	2	Same as Alt 0 - No Build	2	Same as Alt 0 - No Build
E	Capitola Avenue to Monterey Avenue	2	1 NB, 1 SB, Class II Bike, On-Street Parking	2	Same as Alt 0 - No Build	2	Same as Alt 0 - No Build	2	Same as Alt 0 - No Build
F	Monterey Avenue to Park Avenue	2	1 NB, 1 SB, Class II Bike	2	Same as Alt 0 - No Build	2	Same as Alt 0 - No Build	2	Same as Alt 0 - No Build

1.3 Capitola General Plan Consistency

The objectives of the Bay Avenue Corridor Study were prepared to be consistent with the following land use, mobility, and economic goals identified in the City's latest General Plan.

- Goal LU-10 Maintain and enhance Bay Avenue commercial district as a thriving destination with businesses that serve Capitola residents and visitors.
    - Policy LU-10.2 Bay Avenue Streetscape. Enhance the Bay Avenue streetscape in a way that improves the appearance of Bay Avenue, increases safety for bicyclists and pedestrians, and stimulates private investment within the area.
    - Policy LU-10.3 Tree-Lined Boulevard. Encourage a tree-lined boulevard streetscape character along Bay Avenue north of the Capitola Produce property. Encourage installation of drought tolerant and non-invasive street trees and landscaping along the Bay Avenue property frontage in conjunction with capital improvement or redevelopment projects.
    - Action LU-10.1 Medians. Explore opportunities to install medians on Bay Avenue in locations where left turn movements for vehicles would not be restricted.
    - Action LU-10.2 Roundabout. Conduct a public process to study the feasibility of installing a roundabout at the Bay Avenue/Capitola Avenue intersection. The study shall consider impacts on traffic speeds, delays, and air quality.
    - Action LU-10.3 Streetscape Master Plan. Prepare a streetscape master plan for Bay Avenue that presents a unified design theme for the corridors and identifies specific improvements needed to implement this vision.

- Goal MO-4 Provide a roadway system that enhances community aesthetics and promotes a high quality of life
    - Action MO-4.1 Bay Avenue Roundabout. Prepare a study and conduct outreach with business stakeholders and the public to evaluate the feasibility of constructing a roundabout at the intersection of Bay Avenue and Capitola Avenue.

- Goal ED-2 Provide businesses and jobs that create a healthy and stable local economy.
    - Policy ED-2.8 Major Bay Avenue Development Projects. Ensure that major development projects contribute to the vitality and enhance the function of Bay Avenue as a thriving commercial district.

Bay Avenue Vision in the Capitola General Plan

1.4 Level-of-Service Criteria and Thresholds

Analysis of potential adverse effects at roadway intersections is based on the concept of level-of-service (LOS). The LOS of an intersection is a qualitative measure used to describe operational conditions. LOS A (best) represents minimal delay, while LOS F (worst) represents heavy delay and a facility that is operating at or near its functional capacity.

This LOS analysis uses methods defined in the Highway Capacity Manual (HCM) Seventh Edition. HCM 7th Edition methodologies include procedures for analyzing side-street stop-controlled ("SSSC"), all-way stop-controlled ("AWSC"), and signalized intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement. Conversely, the AWSC and signalized intersection procedures define LOS as a function of average control delay for the overall intersection. **Table 1** relates the operational characteristics associated with each LOS category for signalized and unsignalized intersections.

Table 1: Intersection Operation Standards at Signalized and Unsignalized Intersections

Level of Service	Description	Signalized (Avg. control delay per vehicle sec/veh.)	Unsignalized (Avg. control delay per vehicle sec/veh.)
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream	less than 10	less than 10
B	Stable traffic. Traffic flows smoothly with few delays.	less than or equal to 10 to 20	less than or equal to 10 to 15
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	less than or equal to 20 to 35	less than or equal to 15 to 25
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	less than or equal to 35 to 55	less than or equal to 25 to 35
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	less than or equal to 55 to 80	less than or equal to 35 to 50
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	greater than or equal to 80	greater than or equal to 50

Sources: Transportation Research Board, *Highway Capacity Manual 6th Edition*, National Research Council.

City of Capitola LOS Threshold

The City of Capitola General Plan (adopted June 26, 2014, and updated March 13, 2019) (Policy MO-3.3) establishes a minimum LOS C traffic operation standard at intersections throughout the City, with the exception of the Village Area, Bay Avenue, and 41st Avenue where LOS D is the minimum acceptable standard.

Capitola General Plan Policy MP-3.4 permits a lower LOS and higher congestion at major regional intersections, if necessary, improvements are considered infeasible, as determined by the City's Public Works Director, or result in significant, unacceptable environmental impacts. Any evaluation of the Project's LOS impact on City of Capitola streets follows the City's General Plan.

California Department of Transportation (Caltrans) LOS Threshold

An LOS-based analysis of Caltrans facilities is provided using the previously applied LOS standard combined with the County v/c standard for significance criteria purposes. Deficiencies at Caltrans study intersections occur when:

- Cause operations to deteriorate from an acceptable level (LOS C or better) to an unacceptable level (LOS D or worse); or
- Causes the existing measure of effectiveness (average delay) to deteriorate at a State-operated intersection operating at LOS D or worse.

Roundabout Analysis – FHWA Requirements

Roundabouts: An Information Guide (June 2000) by the Federal Highway Administration (FHWA) was used for guidance. The FHWA recommends that no approach to a roundabout should handle more than 85% of its capacity, even if the level of service is still acceptable. This helps ensure that each entrance runs smoothly, preventing congestion and keeping traffic flowing efficiently. The analysis takes this design standard into account.

1.5 Traffic Analysis Methodology

For the Bay Avenue Corridor (Alternative 0 – No Build, Alternative 1 - Stop, Alternative 2 – Roundabout, and Alternative 3 – Signal), the LOS, vehicle delay, and critical vehicle queues were determined using Synchro 12 traffic analysis software. Sidra 9 traffic analysis software was also used to estimate the LOS, vehicle delay, and critical vehicle queues for the proposed roundabout geometry along Bay Avenue.

For the Alternative 1 – Stop and Alternative 2 – Roundabout layouts, a microsimulation analysis using VISSIM software was also conducted for operation comparison purposes. VISSIM was used because the software is the most appropriate tool to simulate the pedestrian, bicycle, vehicular traffic movements, and driver behavior through various traffic control devices. **Figure 3** illustrates the VISSIM model used for the traffic analysis.

Figure 3: Illustrative VISSIM Model for Project Study Area

Crossroads Loop
Hill St
Capitola Ave
Bay Ave
Bay Ave
Driveway
Driveway

Crossroads Loop
Hill St
Capitola Ave
Bay Ave
Bay Ave
Driveway
Driveway

Monterey Ave
Bay Ave
Park Ave

2. Existing Transportation Conditions

2.1 Study Intersections

Study intersections for the project were selected in consultation with City staff. The intersections evaluated in this study are listed below.

1. Bay Avenue / Highway 1 NB Ramps
2. Bay Avenue / Highway 1 SB Ramps
3. Bay Avenue / Crossroads Loop
4. Bay Avenue / Hill Street
5. Bay Avenue / Capitola Avenue
6. Bay Avenue / Monterey Avenue
7. Monterey Avenue / Park Avenue

2.2 Roadway Network

The following local and regional roadways provide access to the project study area:

Highway 1 is 4-lane freeway (that connects with State Route 17 and State Route 156) in the north-south direction. Within Capitola, Highway 1 travels in an east-west direction. Access to and from the project study area is provided by ramp terminals at Porter Street / Bay Avenue.

Bay Avenue is an arterial in the northwest-southeast direction between Highway 1 and Monterey Avenue, and the road is classified as a minor arterial per the City's General Plan. Class II bike lanes and sidewalks exist along both sides of the roadway. The posted speed limit is 25 miles per hour and provides direct access to commercial and residential land uses. Between Highway 1 and Center Street, Bay Avenue is a four-lane facility with a center two-way left-turn lane (TWLTL), and on-street parking is prohibited along this section. Between Center Street and Park Avenue, Bay Avenue is a two-lane facility, and on-street parking is allowed in marked areas next to commercial and residential uses.

Crossroads Loop is a private two-lane street in the east-west direction that provides direct driveway access to commercial uses at the Nob Hill plaza on the westside and at the Crossroads center on the eastside. The roadway provides sidewalks for pedestrians and on-street parking on the private road east of Bay Avenue. Crossroads Loop is located approximately 175-feet north of Hill Street.

Hill Street is a two-lane local street in the east-west direction that provides access to some retail and mostly residential land uses east of Bay Avenue. The roadway provides sidewalks between Bay Avenue and Crossroads Loop. Class II bike lanes are provided in the eastbound direction and Class III shared bike sharrows are provided in the westbound direction from Bay Avenue to Capitola Avenue.

Capitola Avenue is a two-lane street in the north-south direction that provides access to the project study area as well as various commercial and residential land uses between Soquel Drive and Monterey Avenue. The roadway provides sidewalks and Class III shared bike sharrows on both sides of the street. The posted speed limit is 25 miles per hour. Per the General Plan, the road is classified as a minor arterial south of Bay Street and a collector street north of Bay Street.

Monterey Avenue is a two-lane street in the north-south direction that provides access to the project study area as well as various commercial and residential land uses between Kennedy Drive and Esplanade. The roadway provides sidewalks, Class II bike lanes, and Class III shared bike sharrows on both sides of the street. The posted speed limit is 25 miles per hour. Per the General Plan, the road is classified as an arterial south of Bay Street and a collector street north of Bay Street.

Park Avenue is a two-lane street in the east-west direction that provides access to the project study area as well as residential land uses between Monterey Avenue and Soquel Drive. The roadway provides sidewalks and Class II bike lanes, and the posted speed limit is 25 miles per hour. Per the General Plan, the road is classified as an arterial.

2.3 Pedestrian and Bicycle Facilities

Pedestrian and bicycle activity within project vicinity are active along Bay Avenue, Capitola Avenue, and Monterey Avenue with an established pedestrian and bicycle infrastructure. Connected sidewalks at least four (4) feet wide are available on at least one side of all roadways in the study area with adequate lighting and signing. At the Highway 1 ramp signalized intersections, marked crosswalks, Americans with Disabilities Act (ADA) standard curb ramps, and count down pedestrian signals provide improved pedestrian visibility and safety.

Bicycle facilities in the area include Bay Avenue, Hill Street, and Monterey Avenue which consist of Class II bike lanes with buffered striping to separate the vehicle and bike travel way, and Capitola Avenue, which consists of Class III shared bike sharrows. Bay Avenue features green paint markings in potential conflict areas at the Highway 1 ramp signalized intersections. Bicycle parking in the area is limited to private commercial and industrial lots.

Overall, the existing pedestrian and bicycle facilities near the project have adequate connectivity and provide pedestrian and bicyclists with routes to the surrounding land uses. The City of Capitola Bicycle Transportation Plan 2011 does not indicate any future bicycle facilities planned within the study area.

A discussion of potential bike and pedestrian improvements along the Bay Avenue corridor are provided in Section 4.

2.4 Transit Facilities

Transit services in the study area include a bus route provided by the Santa Cruz Metro Transit District (SCMTD). Per the updated latest service schedule, the project study area is served by the following major transit route.

- Mid-County Bus Route 55
    - Capitola Mall Transit Center – Seascape Blvd/Via Pacifica
    - Mid-county service approximately every 60-100 minutes on weekdays and approximately every 4 to 5 hours on weekends
    - This bus route travels through the following study intersections:
        - Bay Avenue / Highway 1 NB Ramps
        - Bay Avenue / Highway 1 SB Ramps
        - Bay Avenue / Crossroads Loop
        - Bay Avenue / Hill Street

- Bay Avenue / Capitola Avenue

Several bus stops with a bench are located along the Bay Avenue corridor which include the intersections of Bay Avenue / Hill Street and Bay Avenue / Capitola Avenue.

2.5 Roadway Cross Section

The existing roadway cross section of Bay Avenue varies along the corridor with different lane configurations, widths, and multi-modal facilities**. Figures 4-8** summarize the typical roadway cross-section along Bay Avenue.

Figure 4: Existing Section – Highway 1 to Center St (80-ft ROW)

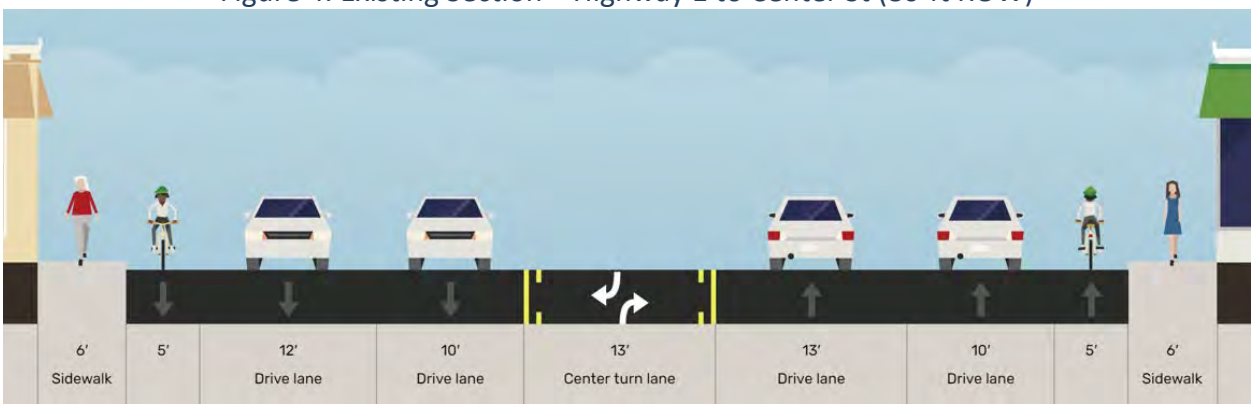


Figure 5: Existing Section – Center St to Capitola Ave (65-ft ROW)

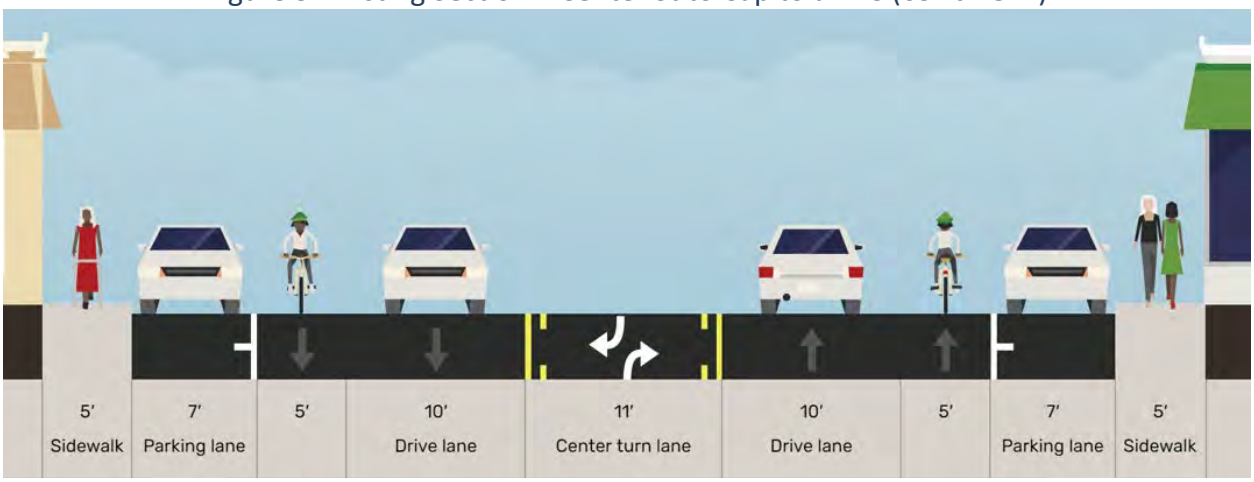


Figure 6: Existing Section – Capitola Ave to Burlingame Ave (56-ft ROW)

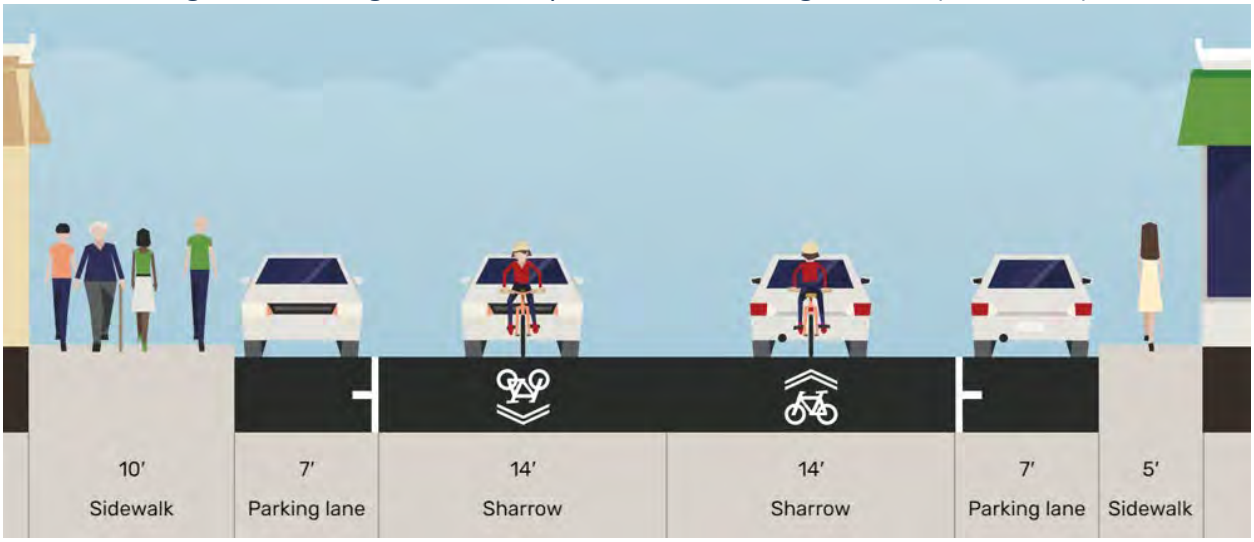


Figure 7: Existing Section – Burlingame Ave to Monterey Ave (56-ft ROW)

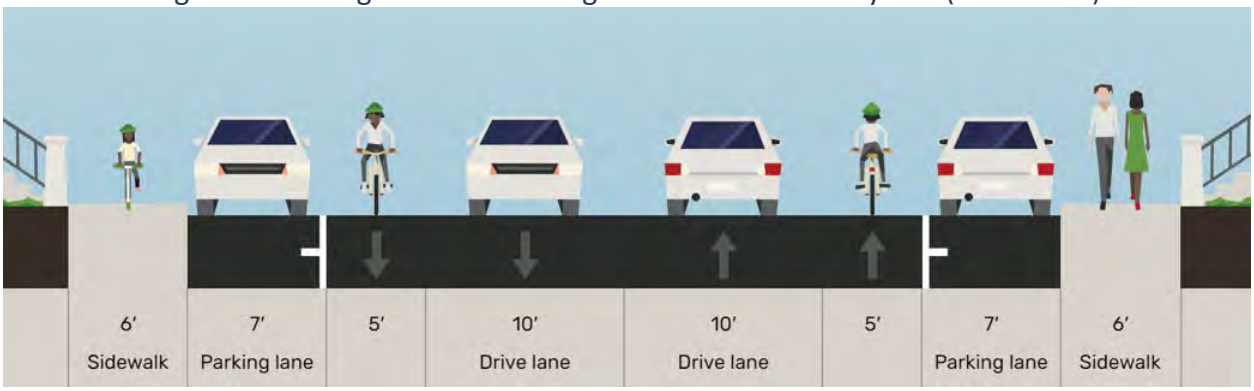
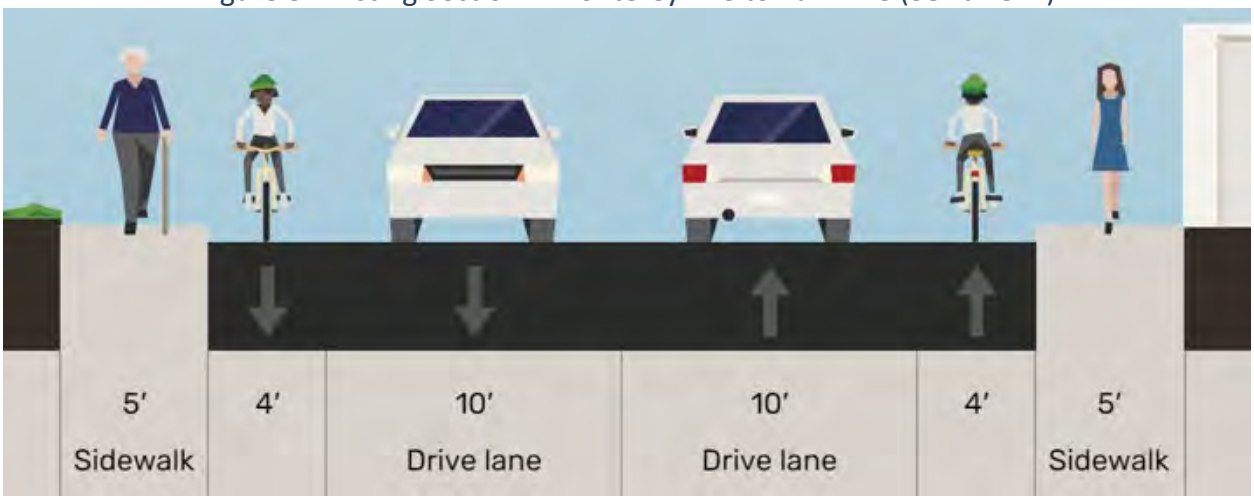


Figure 8: Existing Section – Monterey Ave to Park Ave (38-ft ROW)



3. Traffic Data Collection

3.1 Year 2024 Existing Intersection Volumes

Year 2024 existing turning movement counts during the 7-9 AM peak, 2-4 PM Midday peak, and 4-6 PM peak hours at the project study intersections were collected by Retkor / All Traffic Data Service. These traffic counts were collected on 3/7/2024 when school was in session and during favorable weather conditions. The collected intersection traffic volume data is provided in **Table 2** and **Attachment A**.

Table 2: Year 2024 Existing Intersection Volumes

ID	NB/SB Street	WB/EB Street	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Bay Ave	Hwy 1 NB Ramps	7 AM	369	516	0	0	431	478	0	0	0	59	12	107
2	Bay Ave	Hwy 1 SB Ramps	7 AM	0	572	111	176	314	0	313	0	296	0	0	0
3	Bay Ave	Crossroads Loop	7 AM	1	616	9	39	462	109	53	0	21	0	1	14
4	Bay Ave	Hill St	7 AM	57	441	10	75	377	31	43	19	39	9	28	142
5	Bay Ave	Capitola Ave	7 AM	27	312	55	74	183	128	70	67	6	83	94	42
6	Bay Ave	Monterey Ave	7 AM	0	162	61	219	84	0	0	0	0	87	0	282
7	Monterey Ave	Park Ave	7 AM	1	123	225	41	126	4	0	9	1	418	3	100
1	Bay Ave	Hwy 1 NB Ramps	5 PM	290	401	0	0	642	316	0	0	0	107	1	195
2	Bay Ave	Hwy 1 SB Ramps	5 PM	0	457	91	276	473	0	234	208	347	0	0	0
3	Bay Ave	Crossroads Loop	5 PM	4	462	9	50	658	112	49	2	38	4	1	37
4	Bay Ave	Hill St	5 PM	46	307	21	146	505	49	92	45	84	18	33	76
5	Bay Ave	Capitola Ave	5 PM	29	200	23	56	337	124	72	84	8	61	72	31
6	Bay Ave	Monterey Ave	5 PM	0	124	85	304	141	0	0	0	0	35	0	104
7	Monterey Ave	Park Ave	5 PM	1	165	498	92	83	1	5	3	3	203	3	39

It should be noted that the during the morning and mid-day afternoon school drop off times, the Bay Avenue corridor experiences a period of congestion in the northbound and southbound directions from the influx of vehicles accessing the Soquel Elementary School and New Brighton Middle School. Field observations cite that during these times, the average vehicle delay increases, and vehicle queues are longer at the existing stop control intersections at Hill Street and Capitola Avenue.

3.2 Year 2045 Cumulative Intersection Volumes

Cumulative volumes in the study area were determined based on the SCCRTC Travel Demand Model, which was updated for 2019 “base year” conditions and 2045 “future year” condition. Land uses for the cumulative condition include reasonable growth consistent with the growth nodes in the Sustainable Santa Cruz County Plan (2014) and some major projects such as the proposed redevelopment of the Capitola Mall, the redevelopment of the Farmers Market site, and the expansion of the Dignity Healthcare Campus.

2045 future year condition roadway segment volumes from the SCCRTC Travel Demand Model were obtained for Cumulative traffic volume growth estimates. The same Model was used to plot bi-directional AM and PM peak-hour traffic volumes on each segment along roadways within the Project study area. The 2019 base year (2019) and future year (2045) forecast volumes were compared to

determine the annual incremental growth in traffic volumes at study intersection approach and departure links. 2045 future year turning movement volumes were calculated by adding the growth increment to the base year traffic count volumes to calculate the final adjusted roadway link forecast volume. Final adjusted forecast volumes were then converted to Cumulative intersection turning movement volumes using a process commonly referred to as the Furness Method. The Furness Method uses an iterative process to derive future turning movement volumes based on future year roadway link volumes and an initial estimate of turning percentages (obtained from the existing intersection turning movement counts). The Cumulative traffic volumes are a conservative estimate of future vehicle traffic, and the cumulative scenario traffic volume data is provided in **Table 3**.

Table 3: Year 2045 Cumulative Intersection Volumes

ID	NB/SB Street	WB/EB Street	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Bay Ave	Hwy 1 NB Ramps	7 AM	321	392	0	0	436	536	0	0	0	161	12	379
2	Bay Ave	Hwy 1 SB Ramps	7 AM	0	465	61	251	346	0	248	0	586	0	0	0
3	Bay Ave	Crossroads Loop	7 AM	1	394	9	69	754	109	53	0	21	0	1	79
4	Bay Ave	Hill St	7 AM	57	293	4	75	669	31	43	19	39	13	28	68
5	Bay Ave	Capitola Ave	7 AM	27	312	55	74	183	128	78	67	6	83	94	42
6	Bay Ave	Monterey Ave	7 AM	0	162	61	219	239	0	0	0	0	87	0	282
7	Monterey Ave	Park Ave	7 AM	1	123	238	201	121	4	0	9	1	418	3	100
1	Bay Ave	Hwy 1 NB Ramps	5 PM	683	726	0	0	644	149	0	0	0	77	1	406
2	Bay Ave	Hwy 1 SB Ramps	5 PM	0	992	104	370	351	0	417	208	640	0	0	0
3	Bay Ave	Crossroads Loop	5 PM	4	988	9	92	787	112	49	2	38	4	1	59
4	Bay Ave	Hill St	5 PM	46	717	34	146	634	49	92	45	84	22	33	192
5	Bay Ave	Capitola Ave	5 PM	29	200	23	61	337	171	190	63	8	17	65	73
6	Bay Ave	Monterey Ave	5 PM	0	305	85	304	251	0	0	0	0	35	0	104
7	Monterey Ave	Park Ave	5 PM	1	148	619	202	83	1	5	3	3	203	3	237

3.3 Roadway Daily Traffic and Speed Data

Average daily traffic (ADT) and speed counts were collected along the Bay Avenue corridor and are summarized in **Table 4** and **Attachment A**.

Table 4: Bay Avenue ADT & Vehicle Speed Summary

Traffic Criteria	From Hill St to Capitola Ave		From Capitola Ave to Montrey Ave	
	3/7/2024		3/7/2024	
	Northbound	Southbound	Northbound	Southbound
Average Daily Traffic	4,801	5,415	3,145	3,182
Posted Speed Limit (mph)	25	25	25	25
50th Percentile Speed (mph)	26	26.7	25.5	27
85th Percentile Speed (mph)	29.6	30.6	29.4	30.7
95th Percentile Speed (mph)	32.2	33.3	32.1	33.4

As shown in the table above, the posted speed limit on Bay Avenue is 25 mph, and the 85th percentile (critical) speed is about 30 mph in both the northbound and southbound directions.

3.4 Collision Data

Collision data from 2013 to 2024 along Bay Avenue was obtained using the Transportation Injury Mapping System (TIMS). TIMS is a tool which geocodes, maps, and presents various types of statistical collision reports from the California Statewide Integrated Traffic Records System (SWITRS) database. A heat map showing the location of the reported collisions is shown in **Figure 9** and a summary of the collision types is shown in **Figure 10**. **Table 5** and **Attachment B** summarizes the reported traffic collisions along the study corridor.

Figure 9: Bay Avenue Collision Heat Map (2013 to 2024)

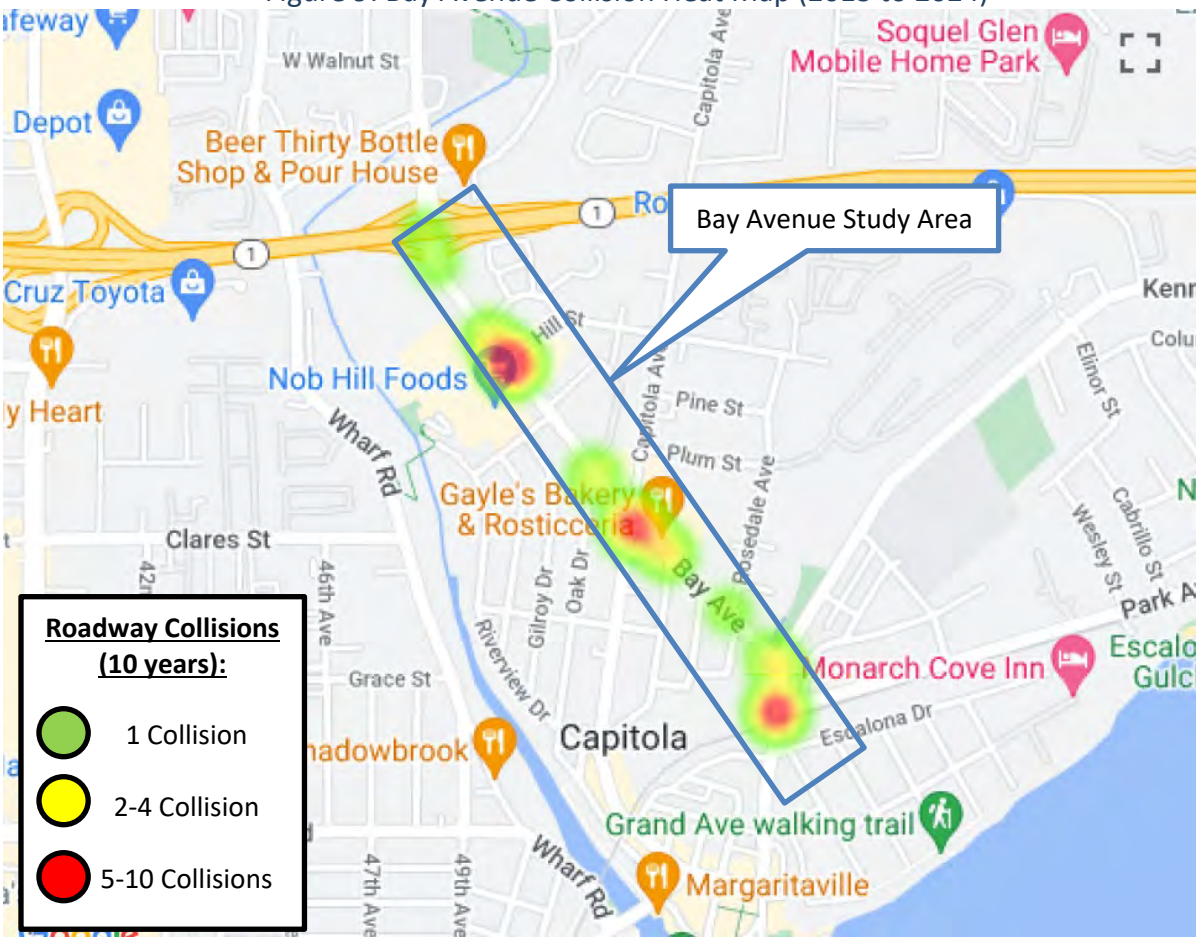
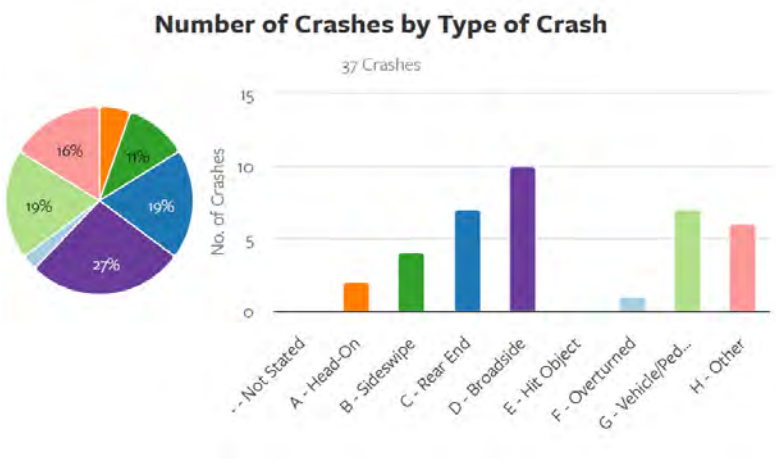


Figure 10: Bay Avenue Collision Types (2013 to 2024)



Type of Crash	Count	%
- - Not Stated	0	0.00%
A - Head-On	2	5.41%
B - Sideswipe	4	10.81%
C - Rear End	7	18.92%
D - Broadside	10	27.03%
E - Hit Object	0	0.00%
F - Overturned	1	2.70%
G - Vehicle/Pedestrian	7	18.92%
H - Other	6	16.22%

Between January 2013 and December 2024, there were 36 total reported collisions along the Bay Avenue study corridor which include ten (10) bicycle and eight (8) pedestrian recorded collisions. One (1) of the collisions was a fatal accident with a pedestrian and the remaining collisions resulted in injuries. Approximately ten (10) of the bike and pedestrian collisions along the Bay Avenue corridor occurred within an intersection. The most common primary crash factors (PCF) that caused the reported bike and pedestrian collisions include unsafe speed, improper turning, and right-of-way violation.

Table 5: Bay Avenue Collision Data (2013 to 2024)

#	Case ID	Date	Primary Road	Secondary Rd	Distance & Direction from Intersection	Bike Collision	Pedestrian Collision	Killed	Injured
1	5737844	5/25/2012	Bay Ave	Hill St	90ft South	No	No	0	1
2	5769463	7/30/2012	Capitola Ave	Bay Ave	80ft West	No	No	0	1
3	5926906	2/2/2013	Highway 1	Bay Ave	200ft North	No	No	0	1
4	6483008	4/24/2014	Bay Ave	Capitola Ave	At Intersection	No	Yes	0	1
5	6494114	4/30/2014	Bay Ave	Capitola Ave	At Intersection	No	No	0	1
6	6487930	5/6/2014	Oak Dr	Bay Ave	37ft South	Yes	No	0	1
7	6487941	5/9/2014	Bay Ave	Hill St	At Intersection	No	No	0	1
8	6511924	6/3/2014	Bay Ave	Hill St	At Intersection	No	Yes	0	1
9	6724062	11/17/2014	Bay Ave	Monterey Ave	26ft South	No	No	0	1
10	6748318	12/3/2014	Monterey Ave	Park Ave	18ft South	No	Yes	0	1
11	6864222	3/19/2015	Bay Ave	Capitola Ave	83ft East	No	Yes	0	1
12	6870050	3/19/2015	Monterey Ave	Park Ave	At Intersection	No	No	0	1
13	6889427	4/4/2015	Bay Ave	Bay Ave	At Intersection	Yes	No	0	1
14	6940786	6/7/2015	Monterey Ave	Bay Ave	At Intersection	No	No	0	1
15	7063888	7/20/2015	Monterey Ave	Park Ave	At Intersection	Yes	No	0	1
16	7075959	9/9/2015	Monterey Ave	Park Ave	At Intersection	No	No	0	1
17	8152095	10/7/2016	Bay Ave	Hill St	At Intersection	No	Yes	0	1
18	8339317	3/26/2017	Bay Ave	Burlingame Ave	90ft North	Yes	No	0	1
19	8373999	4/29/2017	Bay Ave	Hill St	At Intersection	No	No	0	1
20	8506493	11/25/2017	Bay Ave	Hill St	40ft North	No	No	0	1
21	8593314	2/13/2018	Bay Ave	Hill St	203ft North	No	No	0	1
22	90781844	7/21/2018	Bay Ave	Monterey Ave	100ft North	Yes	No	0	1
23	8701088	8/13/2018	Bay Ave	Hill St	213ft North	Yes	No	0	1
24	8648318	10/6/2018	Bay Ave	Highway 1	218ft South	No	Yes	1	0
25	9007558	11/22/2019	Monterey Ave	Park Ave	At Intersection	Yes	No	0	1
26	9174869	10/8/2020	Bay Ave	Hill St	At Intersection	No	No	0	1
27	9355886	9/24/2021	Bay Ave	Rosedale Ave	44ft North	No	No	0	1
28	9472209	5/5/2022	Bay Ave	Oak Dr	At Intersection	Yes	No	0	1
29	9472208	5/7/2022	Bay Ave	Hill St	At Intersection	No	No	0	1
30	9495729	8/1/2022	Monterey Ave	Park Ave	At Intersection	No	No	0	1
31	9495924	9/4/2022	Capitola Ave	Bay Ave	58ft South	Yes	No	0	1
32	9534052	12/9/2022	Bay Ave	Hill St	At Intersection	No	Yes	0	1
33	9549472	2/1/2023	Bay Ave	Burlingame Ave	At Intersection	Yes	No	0	1
34	9625429	8/11/2023	Monterey Ave	Park Ave	35ft South	No	No	0	1
35	9625425	8/24/2023	Bay Ave	Hill St	At Intersection	No	Yes	0	1
36	9646836	10/12/2023	Bay Ave	Burlingame Ave	47ft North	No	No	0	1
					Total	**10**	**8**	**1**	**35**

Note: Bicycle Collision = Green, Pedestrian Collision = Yellow

3.5 Signal Warrant Analysis

Chapter 4C of the California Manual on Uniform Traffic Control Devices (CAMUTCD) states that an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location. The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions using applicable factors contained in traffic signal warrants.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal. On local streets and highways, the engineering study should include consideration of a roundabout (yield control). If a roundabout is determined to provide a viable and practical solution, it should be studied in lieu of, or in addition to a traffic control signal.

For the purposes of this study and based on the collected traffic volumes, peak hour signal warrant #3 was evaluated for the Existing and Cumulative condition to determine if a signal is warranted for any of the Bay Avenue stop-controlled study intersections. To be warranted under Warrant #3, peak hour traffic volumes must plot above the corresponding threshold provided in **Figure 10**. The AM and PM peak hour volumes were analyzed using the following assumptions as shown in **Table 6** and **Table 7**.

Figure 11: CA MUTCD Signal Warrant 3

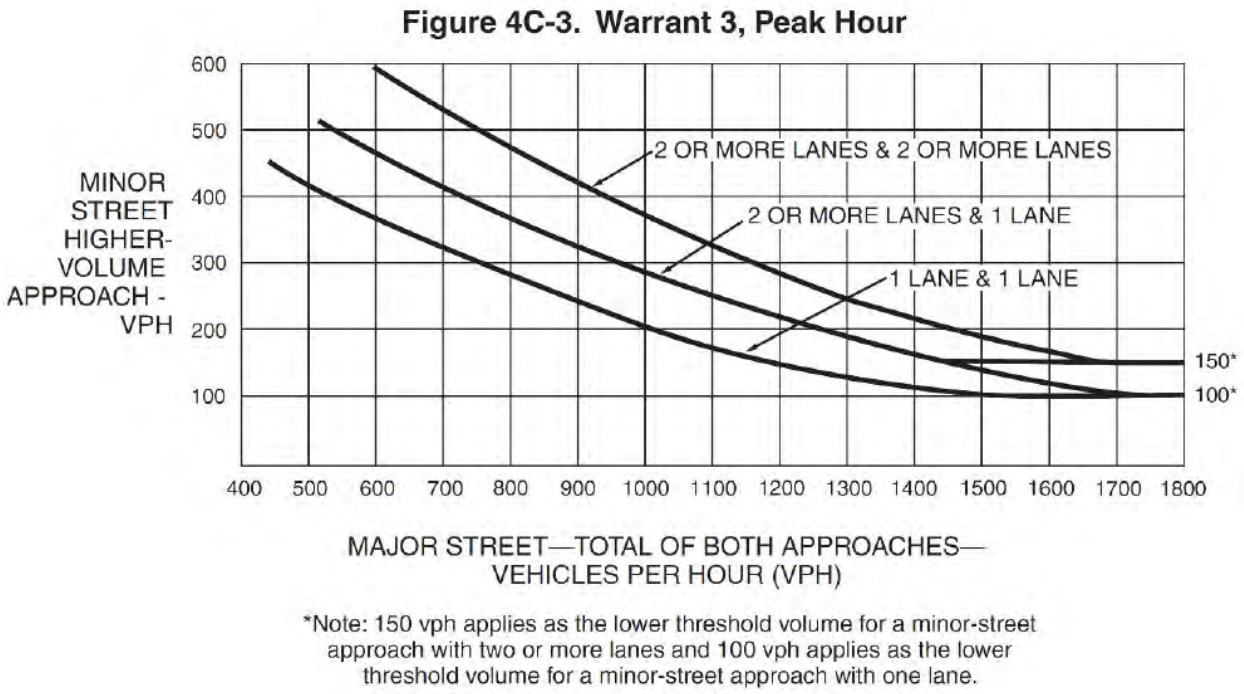


Table 6: CA MUTCD Signal Warrant #3 Assumptions – Year 2024 Existing Conditions

Major Street			Minor Street			
Street Name	# Lanes	Volume (Total of Both Approaches)	Street Name	# Lanes	Volume (Higher Volume Approach)	Meets MUTCD Warrant 3 Criteria?
AM Peak						
Bay Ave	2	1236	Crossroads Lp	1	109	No
Bay Ave	2	991	Hill St	1	179	No
Bay Ave	1	779	Capitola Ave	1	219	No
Bay Ave	1	526	Monterey Ave	1	369	No
Monterey Ave	1	520	Park Ave	1	521	Yes
PM Peak						
Bay Ave	2	1295	Crossroads Lp	1	89	No
Bay Ave	2	1074	Hill St	1	221	No
Bay Ave	1	769	Capitola Ave	1	164	No
Bay Ave	1	654	Monterey Ave	1	139	No
Monterey Ave	1	840	Park Ave	1	245	No

Table 7: CA MUTCD Signal Warrant #3 Assumptions – Year 2045 Cumulative Conditions

Major Street			Minor Street			
Street Name	# Lanes	Volume (Total of Both Approaches)	Street Name	# Lanes	Volume (Higher Volume Approach)	Meets MUTCD Warrant 3 Criteria?
AM Peak						
Bay Ave	2	1336	Crossroads Lp	1	80	No
Bay Ave	2	1129	Hill St	1	109	No
Bay Ave	1	779	Capitola Ave	1	219	No
Bay Ave	1	681	Monterey Ave	1	369	Yes
Monterey Ave	1	688	Park Ave	1	521	Yes
PM Peak						
Bay Ave	2	2002	Crossroads Lp	1	89	No
Bay Ave	2	1626	Hill St	1	247	Yes
Bay Ave	1	821	Capitola Ave	1	261	No
Bay Ave	1	945	Monterey Ave	1	139	No
Monterey Ave	1	1054	Park Ave	1	443	Yes

Under existing conditions, the Monterey/Park intersection would meet Warrant 3 volume criteria for the AM peak hour. Under cumulative conditions, the peak hour traffic volumes along Bay Avenue would meet the Warrant 3 volume criteria for the Bay/Hill, Bay/Monterey, and Monterey/Park intersections. These intersections were analyzed as a signal for the Alternative 3 layout. It should be noted that for existing and cumulative conditions, the Bay/Capitola intersection does not meet the Warrant 3 volume criteria for a signal; however for consistency and ICE comparison purposes, this intersection was analyzed as signal for the Alternative 3 layout.

4. Corridor Operations and Intersection Control Evaluation Results

4.1 Year 2024 Existing ICE Operations

Traffic operations and ICE analysis were evaluated at the study intersections under Existing conditions based on Existing conditions and utilizing roadway geometry and intersection traffic control from developed corridor concepts to enhance multimodal operations. Traffic operations for the study intersections with Synchro software between the various corridor alternatives are shown below in **Table 8** and **Table 9**. The LOS calculations are included in **Attachment C** and **Attachment D**.

Operations Summary

Under Existing conditions, most of the Bay Avenue corridor is anticipated to operate at acceptable LOS. Compared to the Alt 0 no build and Alt 1 stop configuration, the Alt 2 roundabout option at the Bay/Hill and Bay/Capitola intersections would operate with better LOS and reduced overall intersection delay during the peak periods. The Alt 3 signal layout would also yield acceptable intersection LOS with reduced intersection delay compared to the Alt 1 stop; however, the Alt 3 signal operates at similar LOS to the Alt 2 roundabout layout for the Bay/Hill and Bay/Capitola intersections.

Deficient Operations

- **Bay Avenue / Crossroads Loop (Intersection #3)**
  - TWSC operates at LOS E during the PM peak.
  - Alt 0 No Build, Alt 1 Stop, Alt 2 Roundabout, Alt 3 Signal
    - Vehicle queues spillback into the Crossroads Loop intersection and cause delay for the minor leg approach

- **Bay Avenue / Hill Street (Intersection #4)**
  - AWSC operates at LOS E during the PM peak.
  - Alt 1 Stop
    - Vehicle queues and delay on southbound approach spillback into the Crossroads Loop intersection and cause delay for the intersection

Table 8: Year 2024 Existing Intersection LOS – AM Peak

No.	Intersection	Alternative 0 No Build				Alternative 1 Stop & Road Diet				Alternative 2 Roundabout				Alternative 3 Signal			
		Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS
1	Bay Ave & Hwy 1 NB Ramps	Signal	-	25.2	C	Signal	-	26.8	C	Signal	-	26.8	C	Signal	-	21.0	C
2	Bay Ave & Hwy 1 SB Ramps	Signal	-	17.0	B	Signal	-	17.1	B	Signal	-	17.1	B	Signal	-	30.7	C
3	Bay Ave & Crossroads Loop	TWSC	EB	26.9	D	TWSC	EB	24.0	C	TWSC	EB	24.0	C	TWSC	EB	23.3	C
4	Bay Ave & Hill St	AWSC	-	18.2	C	AWSC	-	28.5	D	RAB	0.482	7.8	A	Signal	-	13.4	B
5	Bay Ave & Capitola Ave	AWSC	-	27.7	D	AWSC	-	27.7	D	RAB	0.407	7.4	A	Signal	-	7.6	A
6	Bay Ave & Monterey Ave	AWSC	-	19.7	C	AWSC	-	19.6	C	RAB	0.36	6.1	A	Signal	-	17.4	B
7	Monterey Ave & Park Ave	AWSC	-	25.1	D	AWSC	-	24.9	D	RAB	0.488	7.2	A	Signal	-	10.1	B

Note: TWSC delay is worst movement approach, AWSC, RAB, and Signal delay is overall average

Table 9: Year 2024 Existing Intersection LOS – PM Peak

No.	Intersection	Alternative 0 No Build				Alternative 1 Stop & Road Diet				Alternative 2 Roundabout				Alternative 3 Signal			
		Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS
1	Bay Ave & Hwy 1 NB Ramps	Signal	-	28.7	C	Signal	-	23.1	C	Signal	-	28.7	C	Signal	-	28.7	C
2	Bay Ave & Hwy 1 SB Ramps	Signal	-	20.4	C	Signal	-	22.7	C	Signal	-	20.4	C	Signal	-	20.4	C
3	Bay Ave & Crossroads Loop	TWSC	EB	39.7	E	TWSC	EB	35.3	E	TWSC	EB	35.3	E	TWSC	EB	33.0	D
4	Bay Ave & Hill St	AWSC	-	22.5	C	AWSC	-	44.2	E	RAB	0.634	10.1	B	Signal	-	14.1	B
5	Bay Ave & Capitola Ave	AWSC	-	20.5	C	AWSC	-	20.5	C	RAB	0.505	7.5	A	Signal	-	6.7	A
6	Bay Ave & Monterey Ave	AWSC	-	12.1	B	AWSC	-	11.9	B	RAB	0.376	5.9	A	Signal	-	6.4	A
7	Monterey Ave & Park Ave	AWSC	-	15.4	C	AWSC	-	15.4	C	RAB	0.604	8.5	A	Signal	-	7.7	A

Note: TWSC delay is worst movement approach, AWSC, RAB, and Signal delay is overall average

4.2 Year 2045 Cumulative ICE Operations

Traffic operations and ICE analysis were evaluated at the study intersections under Cumulative conditions based on roadway geometry and intersection traffic control from developed corridor concepts to enhance multimodal operations. Traffic operations for the study intersections with Synchro software between the various corridor alternatives are shown below in **Table 10** and **Table 11**. The LOS results are included in **Attachment C** and **Attachment D**.

Operations Summary

Under Cumulative conditions, several intersections along the Bay Avenue corridor are anticipated to operate at a level of service above the City's LOS threshold. Compared to the Alt 0 no build and Alt 1 stop configuration, the Alt 2 roundabout option at the Bay/Hill and Bay/Capitola intersections would operate with better LOS and reduced overall intersection delay during the peak periods. The Alt 3 signal layout would also yield acceptable intersection LOS with reduced intersection delay compared to the Alt 1 stop; however, the Alt 3 signal operates at similar LOS to the Alt 2 roundabout layout for the Bay/Hill and Bay/Capitola intersections.

Deficient Operations

- **Bay Avenue / Highway 1 NB Ramps (Intersection #1)**
  - Signal operates at LOS E during the AM and PM peak.
  - Alt 0 No Build, Alt 1 Stop, Alt 2 Roundabout, Alt 3 Signal
    - High traffic volumes from the Bay Avenue southbound approach creates delay and long queues with the signal control.
    - Delay and long queues for southbound vehicles wanting to access the Caltrans freeway on-ramp.

- **Bay Avenue / Crossroads Loop (Intersection #3)**
  - TWSC operates at LOS E during the AM and PM peak.
  - Alt 0 No Build, Alt 1 Stop, Alt 2 Roundabout, Alt 3 Signal
    - Vehicle queues spillback into the Crossroads Loop intersection and cause delay for the minor leg approach

- **Bay Avenue / Hill Street (Intersection #4)**
  - AWSC operates at LOS F during the AM and PM peak.
  - Alt 0 No Build, Alt 1 Stop
    - Vehicle queues and delay on southbound approach spillback into the Crossroads Loop intersection and cause delay for the intersection

- **Montrey Avenue / Park Avenue (Intersection #7)**
  - AWSC operates at LOS F during the PM peak.
  - Alt 0 No Build, Alt 1 Stop
    - For the AM peak, high traffic volumes from the Park Avenue westbound approach creates delay and long vehicle queues with the stop control.
    - For the PM peak, high right-turn traffic volumes from the Monterey Avenue NB approach creates delay and long vehicle queues with the stop control.

Table 10: Year 2045 Cumulative Intersection LOS – AM Peak

No.	Intersection	Alternative 0 No Build				Alternative 1 Stop & Road Diet				Alternative 2 Roundabout				Alternative 3 Signal			
		Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS
1	Bay Ave & Hwy 1 NB Ramps	Signal	-	71.2	E	Signal	-	71.2	E	Signal	-	71.2	E	Signal	-	71.2	E
2	Bay Ave & Hwy 1 SB Ramps	Signal	-	32.8	C	Signal	-	32.8	C	Signal	-	32.8	C	Signal	-	32.8	C
3	Bay Ave & Crossroads Loop	TWSC	EB	48.0	E	TWSC	EB	44.2	E	TWSC	EB	44.2	E	TWSC	EB	39.1	E
4	Bay Ave & Hill St	AWSC	-	22.2	C	AWSC	-	73.2	F	RAB	0.703	10.5	B	Signal	-	12.8	B
5	Bay Ave & Capitola Ave	AWSC	-	18.4	C	AWSC	-	18.4	C	RAB	0.41	7.4	A	Signal	-	6.9	A
6	Bay Ave & Monterey Ave	AWSC	-	18.2	C	AWSC	-	18.2	C	RAB	0.41	6.7	A	Signal	-	10.7	B
7	Monterey Ave & Park Ave	AWSC	-	33.0	D	AWSC	-	33.0	D	RAB	0.488	8.4	A	Signal	-	12.9	B

Note: TWSC delay is worst movement approach, AWSC, RAB, and Signal delay is overall average

Table 11: Year 2045 Cumulative Intersection LOS – PM Peak

No.	Intersection	Alternative 0 No Build				Alternative 1 Stop & Road Diet				Alternative 2 Roundabout				Alternative 3 Signal			
		Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS	Control Type	Worst Mvmt or RDBT v/c	Delay (sec)	LOS
1	Bay Ave & Hwy 1 NB Ramps	Signal	-	71.1	E	Signal	-	64.7	E	Signal	-	76.0	E	Signal	-	71.1	E
2	Bay Ave & Hwy 1 SB Ramps	Signal	-	46.5	D	Signal	-	34.7	C	Signal	-	34.6	C	Signal	-	46.5	D
3	Bay Ave & Crossroads Loop	TWSC	EB	65.9	F	TWSC	EB	63.4	F	TWSC	EB	63.4	F	TWSC	EB	119.1	F
4	Bay Ave & Hill St	AWSC	-	98.7	F	AWSC	-	109.6	F	RAB	0.893	21.0	C	Signal	-	26.5	C
5	Bay Ave & Capitola Ave	AWSC	-	21.7	C	AWSC	-	21.3	C	RAB	0.524	8.1	A	Signal	-	7.3	A
6	Bay Ave & Monterey Ave	AWSC	-	20.3	C	AWSC	-	24.4	C	RAB	0.469	7.8	A	Signal	-	7.1	A
7	Monterey Ave & Park Ave	AWSC	-	55.5	F	AWSC	-	60.8	F	RAB	0.792	13.1	B	Signal	-	22.7	C

Note: TWSC delay is worst movement approach, AWSC, RAB, and Signal delay is overall average

4.3 Intersection Queuing Analysis

A queuing analysis with the VISSIM and Synchro software was also performed along the Bay Avenue roadway corridor to determine the queuing effect for each of the alternative layouts. The micro-simulation was conducted to obtain the average and maximum vehicle queue on each approach during the AM and PM peak hour period. The results of the vehicles queues observed in the analysis for the existing and cumulative conditions are summarized in **Table 12, Table 13,** and **Attachment C** and **Attachment D**.

Table 12: Year 2024 Existing Intersection Queue Summary

ID	Intersection	Intersection Approaches with Max Queue that Exceeds Storage Capacity			
		Control Type	AM Peak		
			Alternative 1 Stop	Alternative 2 Roundabout	Alternative 3 Signal
1	Bay Ave / SR1 NB Ramps	Signal	NB, SB	NB, SB	NB, SB
2	Bay Ave / SR1 SB Ramps	Signal			
3	Bay Ave / Crossroads	TWSC			
4	Bay Ave / Hill St	Varies	SB	SB	SB, EB
5	Bay Ave / Capitola Ave	Varies			WB
6	Bay Ave / Monterey Ave	Varies			
7	Monterey Ave / Park Ave	Varies	WB	WB	NB, SB, WB

ID	Intersection	Intersection Approaches with Max Queue that Exceeds Storage Capacity			
		Control Type	PM Peak		
			Alternative 1 Stop	Alternative 2 Roundabout	Alternative 3 Signal
1	Bay Ave / SR1 NB Ramps	Signal	NB, SB	NB, SB	NB, SB
2	Bay Ave / SR1 SB Ramps	Signal			
3	Bay Ave / Crossroads	TWSC			
4	Bay Ave / Hill St	Varies	SB	SB	SB, EB
5	Bay Ave / Capitola Ave	Varies			WB
6	Bay Ave / Monterey Ave	Varies			
7	Monterey Ave / Park Ave	Varies	WB	WB	NB, SB, WB

Note: NB=northbound, SB=southbound, EB=eastbound, WB=westbound

Under existing conditions, each corridor layout option would generate maximum vehicle queues that exceed the storage capacity at several intersection approaches which include the SR1 Caltrans ramps, Hill Street, and Park Avenue. The Alternative 1 AWSC and Alternative 2 roundabout would have similar vehicle queues; however, the Alternative 3 signal would have additional queue impacts due to the nature of signal operations that generate longer queues for vehicles during the red signal phase.

Table 13: Year 2045 Cumulative Intersection Queue Summary

ID	Intersection	Intersection Approaches with Max Queue that Exceeds Storage Capacity			
		Control Type	AM Peak		
			Alternative 1 Stop	Alternative 2 Roundabout	Alternative 3 Signal
1	Bay Ave / SR1 NB Ramps	Signal	NB, SB	NB, SB	NB, SB
2	Bay Ave / SR1 SB Ramps	Signal	SB, EB	SB	EB
3	Bay Ave / Crossroads	TWSC	SB		SB
4	Bay Ave / Hill St	Varies	SB	SB	SB, EB
5	Bay Ave / Capitola Ave	Varies			
6	Bay Ave / Monterey Ave	Varies	SB		SB
7	Monterey Ave / Park Ave	Varies	WB		NB, SB, WB

ID	Intersection	Intersection Approaches with Max Queue that Exceeds Storage Capacity			
		Control Type	PM Peak		
			Alternative 1 Stop	Alternative 2 Roundabout	Alternative 3 Signal
1	Bay Ave / SR1 NB Ramps	Signal	NB, SB	NB, SB	NB, SB
2	Bay Ave / SR1 SB Ramps	Signal	NB, SB, EB	NB, SB, EB	NB, SB, EB
3	Bay Ave / Crossroads	TWSC	SB, WB	NB, SB	NB, SB, EB, WB
4	Bay Ave / Hill St	Varies	NB, SB, EB	SB, EB	NB, SB, EB
5	Bay Ave / Capitola Ave	Varies	SB	SB	NB, SB, EB, WB
6	Bay Ave / Monterey Ave	Varies	SB		SB, WB
7	Monterey Ave / Park Ave	Varies	NB, WB	NB	NB, SB, WB

Note: NB=northbound, SB=southbound, EB=eastbound, WB=westbound

Under cumulative conditions, each corridor layout option would generate maximum vehicle queues that exceed the storage capacity for at least one intersection approach for all the study intersections. The Alternative 1 AWSC and Alternative 2 roundabout would have similar vehicle queues; however, the Alternative 3 signal would have additional queue impacts due to the nature of signal operations that generate longer queues for vehicles during the red signal phase.

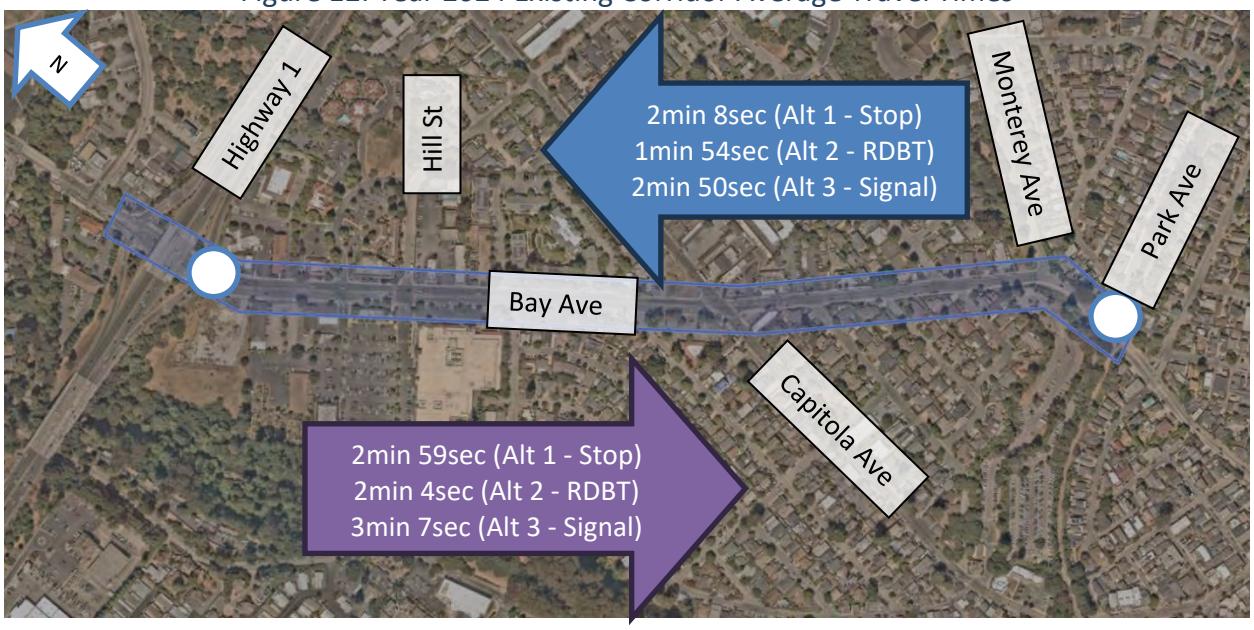
Overall, for the Existing and Cumulative scenarios, the Alternative 2 roundabout option would provide the most optimal intersection configuration to accommodate and minimize the anticipated peak hour vehicle queues along the Bay Avenue corridor.

4.4 Corridor Travel Time Summary

The VISSIM model (Alternative 1 and Alternative 2) and Synchro model (Alternative 3) performed an average travel time comparison for vehicles traveling through Bay Avenue between the Highway 1 SB Ramp and Park Avenue intersections. A summary of the average travel time, average speed, and annual vehicle hours traveled (VHT) results between the Alternative 1 AWSC and Alternative 2 Roundabout layouts is shown in **Figure 12, Figure 13, Table 14,** and **Table 15**.

Vehicle hours traveled (VHT) is a key metric in transportation planning that calculates the total travel time for all vehicles. Since time is a non-renewable resource and is the largest economic cost of traveling and shipping, VHT is used to measure the quality of travel service on a roadway facility. When comparing VHT results, a lower VHT indicates vehicles are traveling through the roadway facility more efficiently and the facility is experiencing less traffic congestion.

Figure 12: Year 2024 Existing Corridor Average Travel Times



Existing Conditions

Vehicles traveling northbound on the Alternative 1 Stop layout would have an average peak hour travel time of 2 minutes 9 seconds, and the estimated annual VHT from Park Avenue to SR1 is 62,501 vehicle-hours. The Alternative 2 Roundabout layout would have an average peak hour travel time of 1 minute 54 seconds and would have an annual VHT of 55,492 vehicle-hours. The Alternative 3 Signal layout would have an average peak hour travel time of 2 minute 50 seconds and would have an annual VHT of 82,726 vehicle-hours.

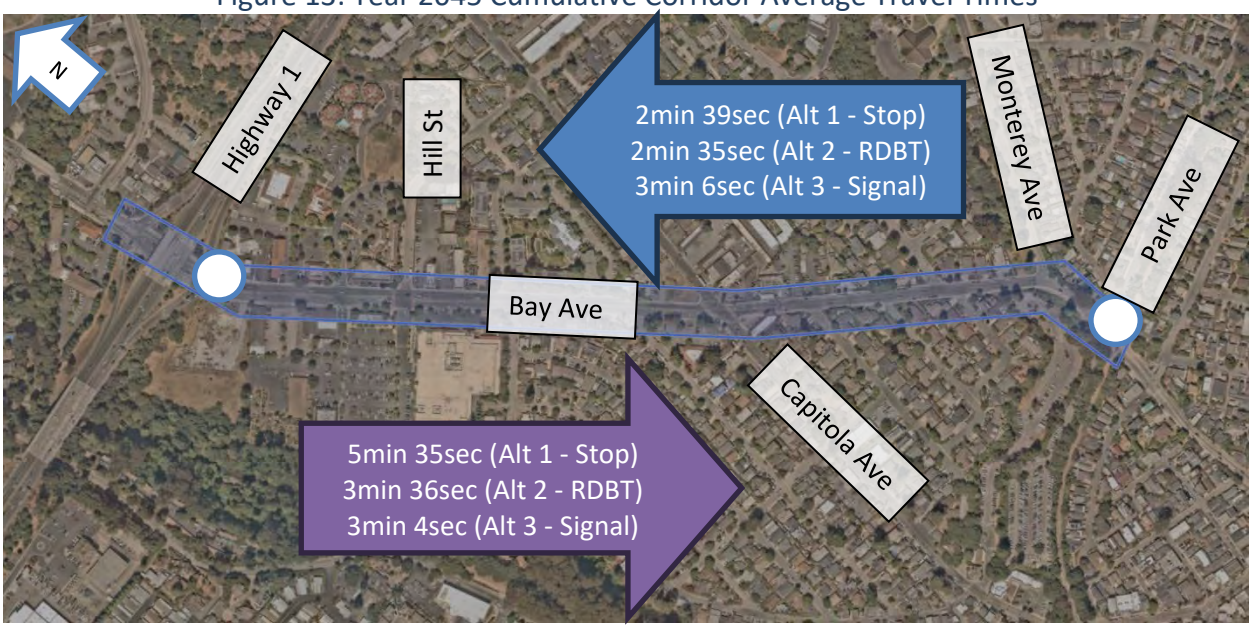
Similarly, vehicles traveling southbound on the Alternative 1 Stop layout would have an average peak hour travel time of 3 minutes 59 seconds, and the estimated annual VHT from SR1 to Park Avenue is 98,494 vehicle-hours. The Alternative 2 Roundabout layout would have an average peak hour travel time of 2 minute 4 seconds and would have an annual VHT of 68,188 vehicle-hours. The Alternative 3 Signal layout would have an average peak hour travel time of 3 minute 7 seconds and would have an annual VHT of 102,557 vehicle-hours.

For both travel directions, the Alternative 2 Roundabout layout would generate fewer VHT and provide a faster average travel time compared to the Alternative 1 Stop and Alternative 3 signal layout. This is because roundabouts are yield controlled and allow for faster continuous movement of vehicles compared to an all-way stop and signal control where vehicles are required to stop completely at the intersection approach.

Table 14: Year 2024 Existing Corridor Travel Times

Scenario	Analysis Criteria	Alternative 1 Stop & Road Diet [VISSIM]	Alternative 2 Roundabout [VISSIM]	Alternative 3 Signal [Synchro]
NB - N. of Park Ave to S. of Highway 1 SB Ramps		**0.62 Travel Distance (mi)**		
AM Peak	Avg Travel Time (sec)	136.2	114.6	174.8
	Avg Travel Time (min & sec)	2 min 16 sec	1 min 55 sec	2 min 55 sec
	Avg Travel Speed (mph)	16.3	19.5	12.3
PM Peak	Avg Travel Time (sec)	120.6	113.4	165.1
	Avg Travel Time (min & sec)	2 min 1 sec	1 min 53 sec	2 min 45 sec
	Avg Travel Speed (mph)	18.4	19.7	13.4
VHT Estimation	Avg Peak Hour Travel Time (sec)	128.4	114.0	170.0
	Avg Peak Hour Travel Time (min & sec)	2 min 8 sec	1 min 54 sec	2 min 50 sec
	Avg Daily Traffic (vehicles)	4801	4801	4801
	Vehicle Hours Traveled (veh-hr/year)	62,501	55,492	82,726
Scenario	**Analysis Criteria**	**Alternative 1 Stop & Road Diet [VISSIM]**	**Alternative 2 Roundabout [VISSIM]**	**Alternative 3 Signal [Synchro]**
SB - S. of Highway 1 SB Ramps to N. of Park Ave		**0.62 Travel Distance (mi)**		
AM Peak	Average Travel Time (sec)	126.6	113.4	191.2
	Average Travel Time (min & sec)	2 min 7 sec	1 min 53 sec	3 min 11 sec
	Average Travel Speed (mph)	17.7	20.0	10.9
PM Peak	Average Travel Time (sec)	232.2	135	182.4
	Average Travel Time (min & sec)	3 min 52 sec	2 min 15 sec	3 min 2 sec
	Average Travel Speed (mph)	9.6	16.7	12.0
VHT Estimation	Avg Peak Hour Travel Time (sec)	179.4	124.2	186.8
	Avg Peak Hour Travel Time (min & sec)	2 min 59 sec	2 min 4 sec	3 min 7 sec
	Avg Daily Traffic (vehicles)	5415	5415	5415
	Vehicle Hours Traveled (veh-hr/year)	98,494	68,188	102,557

Figure 13: Year 2045 Cumulative Corridor Average Travel Times



Cumulative Conditions

Vehicles traveling northbound on the Alternative 1 Stop layout would have an average peak hour travel time of 2 minutes 39 seconds, and the estimated annual VHT from Park Avenue to SR1 is 104,314 vehicle-hours. The Alternative 2 Roundabout layout would have an average peak hour travel time of 2 minute 35 seconds and would have an annual VHT of 101,948 vehicle-hours. The Alternative 3 Signal layout would have an average peak hour travel time of 3 minute 6 seconds and would have an annual VHT of 122,259 vehicle-hours.

For vehicles traveling southbound on the Alternative 1 Stop layout would have an average peak hour travel time of 5 minutes 35 seconds, and the estimated annual VHT from SR1 to Park Avenue is 271,317 vehicle-hours. The Alternative 2 Roundabout layout would have an average peak hour travel time of 3 minute 36 seconds and would have an annual VHT of 175,200 vehicle-hours. The Alternative 3 Signal layout would have an average peak hour travel time of 3 minute 4 seconds and would have an annual VHT of 149,285 vehicle-hours.

For vehicles traveling northbound on Bay Avenue, the Alternative 2 Roundabout layout would generate fewer VHT and provide a faster average travel time; however, for vehicles traveling southbound on Bay Avenue, the Alternative 3 Signal layout would generate fewer VHT and provide a faster average travel time.

Table 15: Year 2045 Cumulative Corridor Travel Times

Scenario	Analysis Criteria	Alternative 1 Stop & Road Diet [VISSIM]	Alternative 2 Roundabout [VISSIM]	Alternative 3 Signal [Synchro]
NB - N. of Park Ave to S. of Highway 1 SB Ramps		**0.62 Travel Distance (mi)**		
AM Peak	Avg Travel Time (sec)	125.4	112.8	162.4
	Avg Travel Time (min & sec)	2 min 5 sec	1 min 53 sec	2 min 42 sec
	Avg Travel Speed (mph)	17.6	19.8	15.6
PM Peak	Avg Travel Time (sec)	192	197.4	209.6
	Avg Travel Time (min & sec)	3 min 12 sec	3 min 17 sec	3 min 30 sec
	Avg Travel Speed (mph)	11.5	11.3	11.7
VHT Estimation	Avg Peak Hour Travel Time (sec)	158.70	155.10	186.00
	Avg Peak Hour Travel Time (min & sec)	2 min 39 sec	2 min 35 sec	3 min 6 sec
	Avg Daily Traffic (vehicles)	6483	6483	6483
	Vehicle Hours Traveled (veh-hr/year)	104,314	101,948	122,259
Scenario	**Analysis Criteria**	**Alternative 1 Stop & Road Diet [VISSIM]**	**Alternative 2 Roundabout [VISSIM]**	**Alternative 3 Signal [Synchro]**
SB - S. of Highway 1 SB Ramps to N. of Park Ave		**0.62 Travel Distance (mi)**		
AM Peak	Avg Travel Time (sec)	315.6	132.6	182.8
	Avg Travel Time (min & sec)	5 min 16 sec	2 min 13 sec	3 min 3 sec
	Avg Travel Speed (mph)	7.1	17.0	10.7
PM Peak	Avg Travel Time (sec)	353.4	299.4	185.3
	Avg Travel Time (min & sec)	5 min 53 sec	4 min 59 sec	3 min 5 sec
	Avg Travel Speed (mph)	6.3	7.5	10.3
VHT Estimation	Avg Peak Hour Travel Time (sec)	334.50	216.00	184.05
	Avg Peak Hour Travel Time (min & sec)	5 min 35 sec	3 min 36 sec	3 min 4 sec
	Avg Daily Traffic (vehicles)	8000	8000	8000
	Vehicle Hours Traveled (veh-hr/year)	271,317	175,200	149,285

Travel Time Impact to Driver Behavior, Transit Access, and Emergency Vehicle Response

Optimizing the travel time along Bay Avenue provides several benefits to multimodal access and safety. Long vehicle delays and queues at intersections typically increases driver frustration and increases risky driver behavior to rush towards their destination. This frustration and risky driver behavior can increase the likelihood and severity of a motor vehicle collision which can jeopardize the safety of vulnerable users such as bikes and pedestrians.

Roadway facilities with travel times optimized to the intended design speed also improves consistency and access of transit services and emergency vehicle response.

4.5 Driver Behavior & Drone Video Analysis at Bay/Capitola Intersection

The current all-way stop intersection of Bay Avenue / Capitola Avenue was evaluated using aerial video collection by drone and processed using video analytics to observe driver behavior and determine vehicle stopping rate, measured speeds, deceleration, and near miss collisions between vehicles, pedestrians, and bicyclists. The drone video collection was conducted by Kimley-Horn on Thursday May 16, 2024, when school was in session and during favorable weather conditions, and the data is representative of the AM peak, school mid-day peak, and PM peak commute times. The technical memo and results of the drone video analysis is provided in **Attachment E**.

The near-miss collision analysis was conducted by calculating the post encroachment time (PET) between vehicles which is the critical or minimum gap between the intersection point of two or more objects on their intended trajectory. For the study, a near-miss collision at the Bay/Capitola is recorded when the PET is equal or less than 1.5 seconds from where objects would collide. A total of 35 near miss-collisions were observed at the Bay/Capitola all-way stop controlled intersection with the most common near miss occurring on Bay Avenue between vehicles making a southbound left turn to access Capitola Avenue and the Gayles driveway and vehicles making a northbound through movement towards Highway 1.

Based on the observed driver behavior and near-miss collisions at the existing all-way stop controlled intersection at Bay/Capitola, the recommended measures to address these intersection challenges may include:

- Convert the intersection into a roundabout. Vehicles entering a roundabout all travel in one direction around a raised center island at a controlled lower speed which reduces the number of conflict points and the severity of potential collisions between vehicles, pedestrians, and bicyclists.
- Convert the intersection into a signal. Signal control provides clear right-of-way instructions to all users and improve driver certainty when traveling through the intersection.

4.6 Multimodal Safety and Access Improvements

This section provides an overview of the potential long-term roadway improvements that may be implemented along the Bay Avenue corridor to enhance multimodal safety and access. The intersection control investigated for each roadway alternative would introduce geometric changes that would benefit bicycle and pedestrian facilities.

Alternative 1: Stop Control and Road Diet

- Road Diet Transition: Converting Bay Avenue from a four-lane to a two-lane roadway reduces vehicle speeds and minimizes the number of lanes pedestrians and cyclists must cross.
- Enhanced Pedestrian Crossings: Installation of curb bulb-outs and enhanced pedestrian crossings shortens the crossing distance and increases visibility.
- Buffered Class IV Bike Facilities: Adding buffered bike lanes separates cyclists from vehicular traffic, enhancing safety and comfort.

Example road diet and traffic calming features implemented at the existing all-way stop at Bay/Hill (Capitola)

Alternative 2: Roundabout

- Reduced Conflict Points: Roundabouts reduce the number of conflict points compared to traditional intersections, lowering the likelihood of collisions.
- Slower Vehicle Speeds: Vehicles travel at lower speeds through roundabouts, reducing the severity of any potential collisions.
- Bike and Pedestrian Pathways: The design includes bike lane transitions and curb ramps onto Class I shared bike/ped pathways, providing a safer and more direct route for cyclists and pedestrians.
- Shorter and Protected Crossings: Pedestrians benefit from shorter crossing distances and protected refuge areas within the roundabout design.

Example bike and pedestrian facilities at a roundabout approach (Lafayette)

Alternative 3: Signal

- Signal Control: Traffic signals provide clear right-of-way instructions, thereby improving driver predictability and reducing confusion at intersections.
- Designated Crossing Times: Pedestrian signals provide designated crossing times, ensuring safe passage across intersections.
- Buffered Bike Lanes: Similar to Alternative 1, buffered bike lanes protect cyclists from the main traffic stream.
- Pedestrian Countdown Signals: These signals improve pedestrian safety by providing clear timing information for crossing.
- Protected Intersection Design: Installation of curb bulb-outs that separate travel areas and shorten the pedestrian and bicycle crossings improves multimodal safety and access.

Example protected intersection features for bikes and peds at a signalized intersection (Fremont)

Other Roadway Considerations and Enhancements

- Class IV protected bikeways: Where possible, restripe the existing Class II bike lanes on Bay Avenue with buffered bike lanes via striping and/or raised bollards to increase the physical separation between the vehicle and bicycle travel lanes. The added comfort and visibility of the bikeway improves bicycle safety along the roadway.
- Mid-block crossings: Where feasible and warranted, install mid-block crossings to enhance pedestrian connectivity and safety. Crossing augmented with median refuge areas, flashing signs, and high contrast striping provides shorter crossing distance and improves visibility to pedestrians crossing the street.
- Landscaped medians: Where feasible, implement raised medians with opportunities for landscaping to enhance the Bay Avenue streetscape in a way that improves the appearance of Bay Avenue, increases safety for bicyclists and pedestrians, and stimulates private investment within the area per the Capitola General Plan.

Example of mid-block crosswalk and buffered bike lanes

General Safety Enhancements:

- Traffic Calming Features: All alternatives incorporate traffic calming features like narrower lanes and improved intersection design, which inherently enhance safety for all road users.
- Visibility Improvements: Enhanced lighting, signage, and marked crosswalks improve visibility for pedestrians and cyclists, especially at night or during adverse weather conditions.
- Collision Mitigation: Historical collision data and near-miss analysis inform the design to specifically address risky driver behaviors and common collision types, further ensuring pedestrian and cyclist safety.

Summary of Safety Benefits:

- Reduced Vehicle Speeds: Slower travel speeds generally lead to decreased collision severity for vehicles, cyclists and pedestrians.
- Clear Right-of-Way: Signal and roundabout controls provide structured and predictable movement patterns.
- Protected Space: Buffered and clearly marked spaces for pedestrians and cyclists reduce the risk of conflicts with vehicles.
- Improved Crossings: Shorter and more visible crossing areas make it safer and easier for pedestrians to navigate intersections.
- Enhanced Visibility and Lighting: Increased visibility through better lighting and clear signage reduces the risk of accidents.

5. Corridor Study Conclusions and Recommendations

Table 16 provides a qualitative comparison of the proposed corridor alternatives from an economic, operations, and safety assessment. Based on the analysis results, the study recommends pursuing the roundabout configuration at key intersections for long-term benefits in traffic operations, safety, economic development, and multi-modal accessibility.

Operations

From an intersection operations perspective, the Alternative 2 roundabout configuration would provide the lowest average vehicle LOS delay and shortest average travel time along the Bay Avenue corridor. As a result, improved intersection operations benefit transit and emergency vehicle access. The introduction of roundabouts as a new traffic control in the City would require a longer adjustment period for drivers to adapt to the new infrastructure compared to existing signals or stop control.

The Alternative 1 stop configuration with road diet would result in the worst LOS, longest travel times, and vehicle queues operating similar to the Alternative 0 no build scenario. Forecasted traffic growth from the county travel demand model would cause operation deficiencies with the stop control alternative. With keeping the existing road condition, there is little driver adaptation time.

The Alternative 3 signal configuration would provide acceptable operations for average vehicle delay, queues, and travel time but not to the same level as the roundabout option. It is worth noting that while the LOS would be improved with a signal-controlled intersection, the typical delay for a vehicle to traverse through the intersection would actually increase compared to a roundabout option.

Multimodal Safety

As discussed in Section 4, each potential corridor alternative would introduce geometric changes that would benefit bicycle and pedestrian facilities for safety improvement and access. The Alternative 2 roundabout configuration would have the fewest vehicle conflict points for bikes and pedestrians crossing the street as well as shorter and protected crossings with the roundabout layout introducing raised medians and separated pathways. These features plus slower overall vehicle speeds through the intersection generates the lowest collision severity potential compared to the other alternatives. Based on the observed driver behavior and near-miss collision analysis at the Bay/Capitola all-way stop controlled intersection, a roundabout layout would improve overall safety at the skewed roadway approaches.

The Alternative 1 stop configuration would introduce curb bulb-outs at the stop intersections and road diet traffic calming effects that reduce the crossing distances and enhance visibility of bikes and peds crossing the vehicle conflict areas. These features help reduce the number of vehicle conflict points and provide a moderate safety improvement compared to the roundabout and signal alternatives.

The Alternative 3 signal configuration helps facilitate designated crossing phases for all transportation modes and the infrastructure can be designed with a protected intersection layout to separate and shorten the bike and pedestrian crossings at the corners. These features improve bike and pedestrian access, but the number of vehicle conflict points remains similar with the existing stop layout. For a signal during a green light, vehicles will typically travel at higher speeds than the stop and roundabout alternatives which increases the collision severity potential with more vulnerable users.

Economic Development

For the Alternative 2 roundabout layout to be feasible, substantial infrastructure and construction improvements would be required to convert the existing stop control into a roundabout throughout the corridor. Compared to the other alternatives, the roundabout would have the highest upfront capital costs and potential right-of-way impacts to implement due to the larger geometric footprint needed for designing acceptable operations and the multimodal features. Typical rough order of magnitude (ROM) costs for a single lane roundabout range between $2 to $3.5 million per location. Once constructed however, the roundabout would have lower long-term maintenance costs and better environmental benefits than a signal option due to no electrical equipment, lower vehicle emissions, and opportunities for art and landscaping within the intersection. Grant funding opportunities with roundabouts are also advantageous since many state and federal grant programs are focused on active transportation and improving safety for cyclists and pedestrians which are elements that roundabouts provide.

The Alternative 1 stop layout would have the lowest capital costs, right-of-way impact, and ongoing maintenance compared to the roundabout and signal alternatives. Typical ROM costs for a road diet and traffic calming improvements range between $100,00 to $500,000 per location. Depending on the traffic calming design, aesthetics can also be improved along the streetscape corridor with landscaping and decorative art. Grant funding opportunities with Alternative 1 are also good with the safety benefits to pedestrians and cyclists from the potential road diet and traffic calming features.

The Alternative 3 signal layout would have high capital costs and high ongoing maintenance costs to support the electrical and signal infrastructure compared to the roundabout and stop alternatives. Typical ROM costs for a signal varies based on the number of travel lanes and approaches and can range between $500,000 to $2 million per location.

Table 16: Qualitative Corridor Operations Summary Comparison

Criteria	Alternative 0 – No Build	Alternative 1 – Stop & Road Diet	Alternative 2 – Roundabout	Alternative 3 - Signal
Operations				
Vehicle Delay	High Stop control creates delay for intersection approaches	High Stop control creates delay for intersection approaches	Low Yield control reduces average delay	Moderate Signal control reduces average delay
Vehicle Travel Time	Long Stop control creates delay for intersection approaches	Long Stop control creates delay for intersection approaches	Short Yield control reduces average delay	Moderate Signal control reduces average delay
Vehicle Queue Length	Long Long queues and spillback into adjacent intersection	Long Long queues and spillback into adjacent intersection	Moderate Yield control generates average queues	Moderate Signal control generates average queues
Transit and Emergency Vehicle Access Improvement	Poor Slower average travel times and higher VHT	Poor Slower average travel times and higher VHT	Moderate Faster average travel times and lower VHT	Moderate Opportunity for emergency vehicle preemption

Criteria	Alternative 0 – No Build	Alternative 1 – Stop & Road Diet	Alternative 2 – Roundabout	Alternative 3 - Signal
Driver Adaptation Time	Low Existing conditions on corridor	Low Existing conditions on corridor	High New traffic control in City for users	Moderate Existing conditions on corridor
Safety				
Collision Severity Potential	Moderate Numerous conflict points with stop control at intersection	Moderate Numerous conflict points with stop control at intersection	Low Fewer conflict points and controlled lower speeds at intersection	High Higher vehicle speeds and numerous conflict points at intersection
Bicycle Access Improvement	Poor No Build scenario would not improve conditions	Moderate Buffered bike lanes and markings	Good Buffered bike lanes and markings. Shorter and protected crossings	Moderate Buffered bike lanes and markings. Designated crossing phases
Pedestrian Access Improvement	Poor No Build scenario would not improve conditions	Moderate Shorter crossings with traffic calming	Good Shorter and protected crossings	Moderate Designated crossing phases
Economic				
Capital Construction Cost	Low No Build scenario would not improve conditions	Low Updates to existing infrastructure	High New infrastructure and utility coordination	High New infrastructure and signal equipment
Right of Way Impact	Low No change to existing conditions	Low Updates to existing infrastructure	High Property impacts to accommodate design	Moderate New infrastructure and signal equipment
Operation & Maintenance Costs	Low No Build scenario would not improve conditions	Low Landscaping	Moderate Landscaping	High Signal equipment, electricity
Greenhouse Gas Emissions	Moderate Vehicle idling with stop traffic control	Moderate Vehicle idling with stop traffic control	Low Less vehicle idling with yield traffic control	Moderate Higher speeds & vehicle idling with signal traffic control
Aesthetics & Community Character Improvement	Poor No Build scenario would not improve conditions	Moderate Opportunities for art and landscaping with traffic calming	Good Opportunities for art and landscaping at intersection	Moderate Requires signal poles and cabinets
Grant Funding Opportunity	Poor No Build scenario would not improve conditions	Moderate Multimodal safety improvement	Good Multimodal safety improvement, traffic congestion reduction, environmental impact	Moderate Traffic congestion reduction

Criteria	Alternative 0 – No Build	Alternative 1 – Stop & Road Diet	Alternative 2 – Roundabout	Alternative 3 - Signal
General Benefits	• Lower initial capital cost and ongoing maintenance	• Improved driver certainty • Lower initial capital cost • Improved bike & ped safety	• Reduction collision severity • Improved bike & ped safety • Improved operations • Reduced GHG emissions	• Improved operations & capacity • Provides designated crossing times and driver certainty
General Challenges	• Decreased operations • Increased queues	• Decreased operations • Increased queues	• High initial capital cost and potential ROW impact • Driver adaptation to new traffic operations	• High capital and maintenance costs • Increased queues and collision severity potential

6. Appendix

- Attachment A – Year 2024 Existing Traffic Count Data
- Attachment B – Bike and Pedestrian Collision Data
- Attachment C – VISSIM & SIDRA LOS Results (Stop and Roundabout Alternatives)
- Attachment D – Synchro LOS Results (No Build, Stop, and Signal Alternatives)
- Attachment E – Existing Intersection Observed Driver Behavior at Bay/Capitola Technical Memo

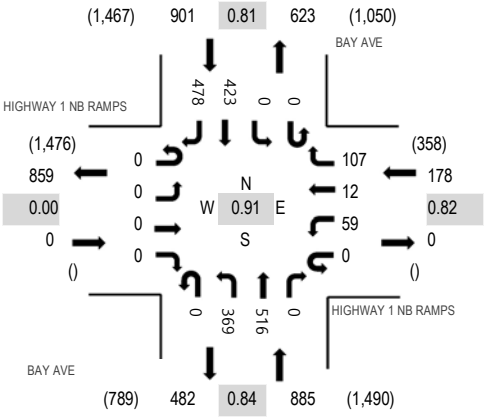
Attachment A – Year 2024 Existing Traffic Count Data

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 BAY AVE & HIGHWAY 1 NB RAMPS AM
Date: Thursday, March 7, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour

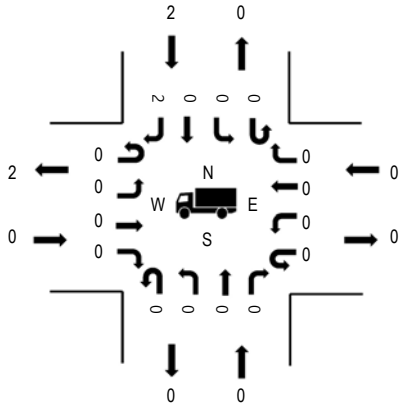
Motorized Vehicles



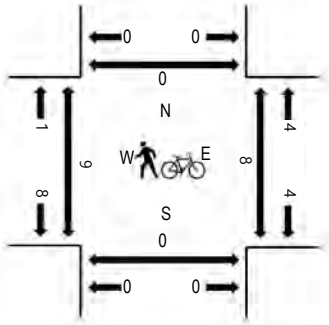
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.82
NB	0.0%	0.84
SB	0.2%	0.81
All	0.1%	0.91

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HIGHWAY 1 NB RAMPS Eastbound				HIGHWAY 1 NB RAMPS Westbound				BAY AVE Northbound				BAY AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	0	0	0	0	20	0	25	0	43	56	0	0	0	52	38	234	1,351
7:15 AM	0	0	0	0	0	15	0	40	0	69	68	0	0	0	52	87	331	1,639
7:30 AM	0	0	0	0	0	17	0	30	0	91	77	0	0	0	80	99	394	1,848
7:45 AM	0	0	0	0	0	7	5	21	0	91	110	0	0	0	64	94	392	1,892
8:00 AM	0	0	0	0	0	14	4	23	0	105	158	0	0	0	104	114	522	1,964
8:15 AM	0	0	0	0	0	12	4	24	0	90	132	0	0	0	147	131	540	
8:30 AM	0	0	0	0	0	13	1	33	0	87	102	0	0	0	89	113	438	
8:45 AM	0	0	0	0	0	20	3	27	0	87	124	0	0	0	83	120	464	
Count Total	0	0	0	0	0	118	17	223	0	663	827	0	0	0	671	796	3,315	
Peak Hour	0	0	0	0	0	59	12	107	0	369	516	0	0	0	423	478	1,964	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

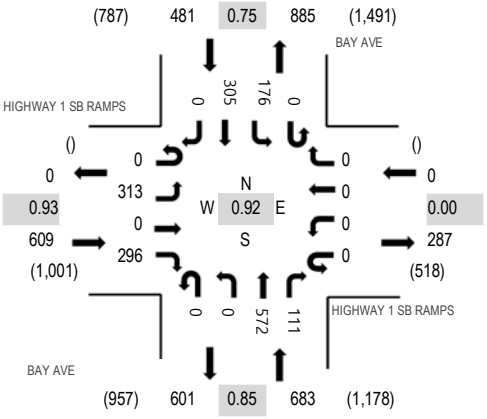
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	1	0	1	2	7:00 AM	0	0	0	1	1	7:00 AM	2	0	1	0	3
7:15 AM	0	1	1	0	2	7:15 AM	0	0	0	0	0	7:15 AM	0	0	3	0	3
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	3	0	0	0	3
7:45 AM	0	1	0	1	2	7:45 AM	0	0	0	2	2	7:45 AM	2	0	1	0	3
8:00 AM	0	0	0	1	1	8:00 AM	0	2	0	4	6	8:00 AM	4	0	1	0	5
8:15 AM	0	0	0	0	0	8:15 AM	0	2	0	8	10	8:15 AM	4	0	2	0	6
8:30 AM	0	0	0	0	0	8:30 AM	0	1	0	0	1	8:30 AM	1	0	4	0	5
8:45 AM	0	0	0	1	1	8:45 AM	0	1	0	0	1	8:45 AM	0	0	1	0	1
Count Total	0	3	1	4	8	Count Total	0	6	0	15	21	Count Total	16	0	13	0	29
Peak Hour	0	0	0	2	2	Peak Hour	0	6	0	12	18	Peak Hour	9	0	8	0	17

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 BAY AVE & HIGHWAY 1 SB RAMPS AM
Date: Thursday, March 7, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour

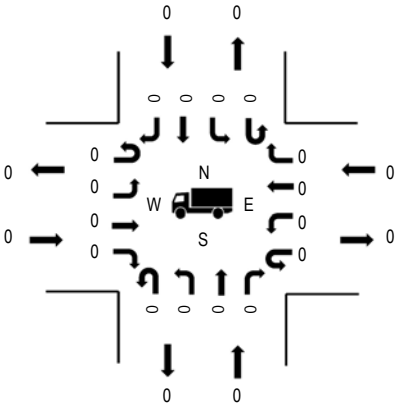
Motorized Vehicles



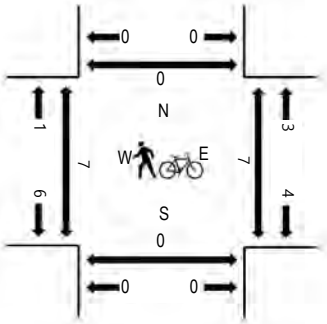
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.93
WB	0.0%	0.00
NB	0.0%	0.85
SB	0.0%	0.75
All	0.0%	0.92

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HIGHWAY 1 SB RAMPS Eastbound				HIGHWAY 1 SB RAMPS Westbound				BAY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	36	0	39	0	0	0	0	0	0	65	12	1	32	35	0	220	1,193
7:15 AM	0	50	0	49	0	0	0	0	0	0	92	18	0	34	35	0	278	1,455
7:30 AM	0	42	0	49	0	0	0	0	0	0	124	31	0	38	58	0	342	1,655
7:45 AM	0	71	0	56	0	0	0	0	0	0	125	28	0	38	35	0	353	1,713
8:00 AM	0	96	0	68	0	0	0	0	0	0	167	35	0	41	75	0	482	1,773
8:15 AM	0	81	0	75	0	0	0	0	0	0	141	21	0	56	104	0	478	
8:30 AM	0	55	0	73	0	0	0	0	0	0	139	30	0	33	70	0	400	
8:45 AM	0	81	0	80	0	0	0	0	0	0	125	25	0	46	56	0	413	
Count Total	0	512	0	489	0	0	0	0	0	0	978	200	1	318	468	0	2,966	
Peak Hour	0	313	0	296	0	0	0	0	0	0	572	111	0	176	305	0	1,773	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

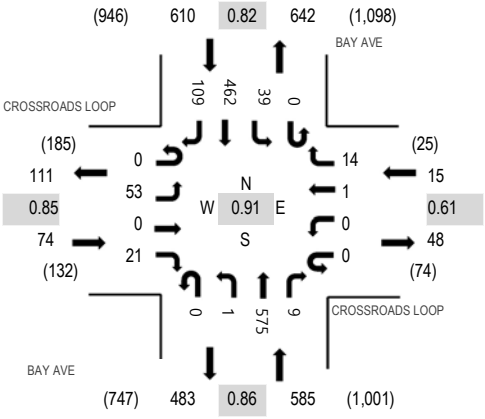
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	1	0	0	0	1	7:00 AM	0	0	0	1	1	7:00 AM	2	0	1	0	3
7:15 AM	0	1	0	0	1	7:15 AM	0	0	0	0	0	7:15 AM	1	0	1	0	2
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	2	0	0	0	2
7:45 AM	0	1	0	0	1	7:45 AM	0	0	0	2	2	7:45 AM	2	0	1	0	3
8:00 AM	0	0	0	0	0	8:00 AM	0	2	0	4	6	8:00 AM	3	0	2	0	5
8:15 AM	0	0	0	0	0	8:15 AM	0	2	0	8	10	8:15 AM	4	0	2	0	6
8:30 AM	0	0	0	0	0	8:30 AM	0	1	0	0	1	8:30 AM	0	0	3	0	3
8:45 AM	0	0	0	0	0	8:45 AM	0	1	0	0	1	8:45 AM	0	0	0	0	0
Count Total	1	2	0	0	3	Count Total	0	6	0	15	21	Count Total	14	0	10	0	24
Peak Hour	0	0	0	0	0	Peak Hour	0	6	0	12	18	Peak Hour	7	0	7	0	14

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 BAY AVE & CROSSROADS LOOP AM
Date: Thursday, March 7, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour

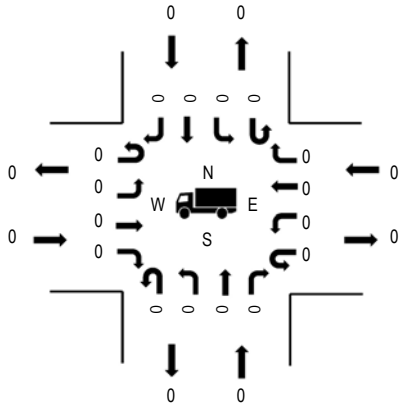
Motorized Vehicles



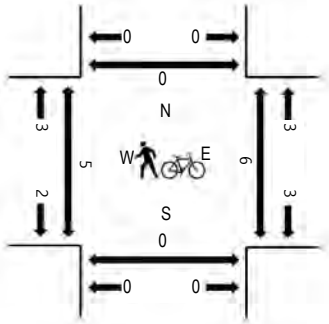
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.85
WB	0.0%	0.61
NB	0.0%	0.86
SB	0.0%	0.82
All	0.0%	0.91

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	CROSSROADS LOOP Eastbound				CROSSROADS LOOP Westbound				BAY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	7	0	1	0	0	0	0	0	3	61	0	0	2	44	12	130	820
7:15 AM	0	8	0	6	0	1	0	3	0	0	90	1	0	10	60	18	197	1,033
7:30 AM	0	8	0	5	0	0	0	3	0	0	136	1	0	5	64	26	248	1,187
7:45 AM	0	15	0	8	0	0	0	3	0	1	122	1	0	6	75	14	245	1,248
8:00 AM	0	9	0	2	0	0	0	7	0	0	167	3	0	8	116	31	343	1,284
8:15 AM	0	13	0	10	0	0	0	2	0	0	137	2	0	6	155	26	351	
8:30 AM	0	15	0	6	0	0	1	4	0	1	147	2	0	10	94	29	309	
8:45 AM	0	16	0	3	0	0	0	1	0	0	124	2	0	15	97	23	281	
Count Total	0	91	0	41	0	1	1	23	0	5	984	12	0	62	705	179	2,104	
Peak Hour	0	53	0	21	0	0	1	14	0	1	575	9	0	39	462	109	1,284	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

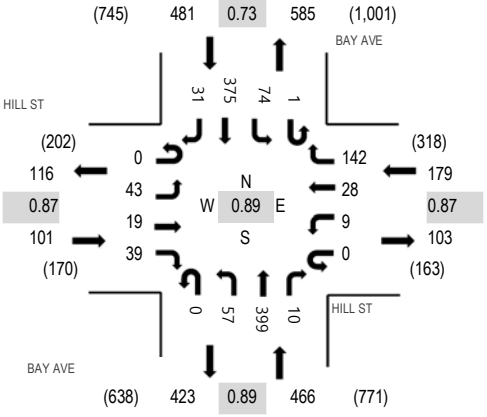
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	1	1	7:00 AM	2	1	0	0	3
7:15 AM	0	1	0	0	1	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	1	0	0	0	1
7:45 AM	0	1	0	0	1	7:45 AM	0	0	0	2	2	7:45 AM	2	0	1	0	3
8:00 AM	0	0	0	0	0	8:00 AM	0	2	0	4	6	8:00 AM	1	0	1	0	2
8:15 AM	0	0	0	0	0	8:15 AM	0	2	0	8	10	8:15 AM	1	0	2	0	3
8:30 AM	0	0	0	0	0	8:30 AM	0	1	0	0	1	8:30 AM	1	0	3	0	4
8:45 AM	0	0	0	0	0	8:45 AM	0	1	0	0	1	8:45 AM	2	0	0	0	2
Count Total	0	2	0	0	2	Count Total	0	6	0	15	21	Count Total	10	1	7	0	18
Peak Hour	0	0	0	0	0	Peak Hour	0	6	0	12	18	Peak Hour	5	0	6	0	11

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 BAY AVE & HILL ST AM
Date: Thursday, March 7, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour

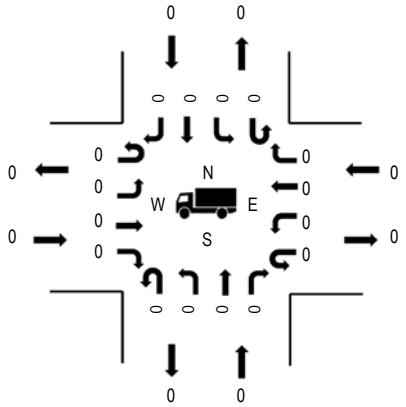
Motorized Vehicles



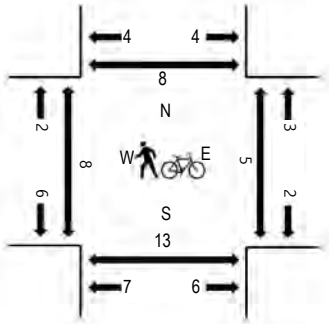
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.87
WB	0.0%	0.87
NB	0.0%	0.89
SB	0.0%	0.73
All	0.0%	0.89

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HILL ST Eastbound				HILL ST Westbound				BAY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	10	3	1	0	0	6	18	0	5	37	0	0	10	31	6	127	777
7:15 AM	0	7	2	5	0	2	6	28	0	6	56	0	0	14	42	11	179	976
7:30 AM	0	11	4	5	0	3	5	30	0	11	95	1	0	9	53	3	230	1,141
7:45 AM	0	11	2	8	0	1	7	33	0	12	80	2	0	13	64	8	241	1,209
8:00 AM	0	12	4	10	0	0	11	42	0	13	116	2	0	16	96	4	326	1,227
8:15 AM	0	12	6	9	0	3	5	34	0	15	92	4	1	19	137	7	344	
8:30 AM	0	10	2	7	0	1	8	40	0	17	106	3	0	14	81	9	298	
8:45 AM	0	9	7	13	0	5	4	26	0	12	85	1	0	25	61	11	259	
Count Total	0	82	30	58	0	15	52	251	0	91	667	13	1	120	565	59	2,004	
Peak Hour	0	43	19	39	0	9	28	142	0	57	399	10	1	74	375	31	1,227	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

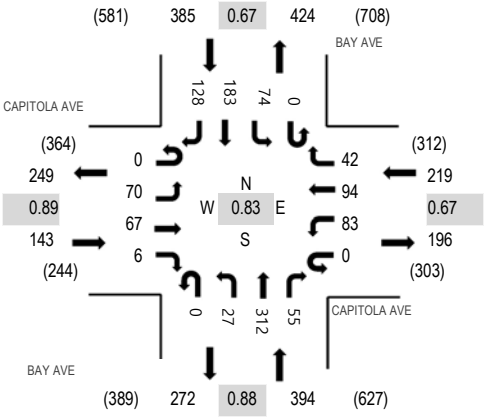
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	1	0	0	1	2	7:00 AM	3	2	1	1	7
7:15 AM	0	1	0	0	1	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	1	0	0	1
7:45 AM	0	1	0	0	1	7:45 AM	0	0	0	2	2	7:45 AM	2	0	1	1	4
8:00 AM	0	0	0	0	0	8:00 AM	0	2	0	4	6	8:00 AM	3	2	0	2	7
8:15 AM	0	0	0	0	0	8:15 AM	1	1	0	8	10	8:15 AM	0	3	2	2	7
8:30 AM	0	0	0	0	0	8:30 AM	0	1	1	0	2	8:30 AM	1	4	1	3	9
8:45 AM	0	0	0	0	0	8:45 AM	0	0	1	0	1	8:45 AM	4	4	2	1	11
Count Total	0	2	0	0	2	Count Total	2	4	2	15	23	Count Total	13	16	7	10	46
Peak Hour	0	0	0	0	0	Peak Hour	1	4	2	12	19	Peak Hour	8	13	5	8	34

(303) 216-2439
www.alltrafficdata.net

Location: 5 BAY AVE & CAPITOLA AVE AM
Date: Thursday, March 7, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour

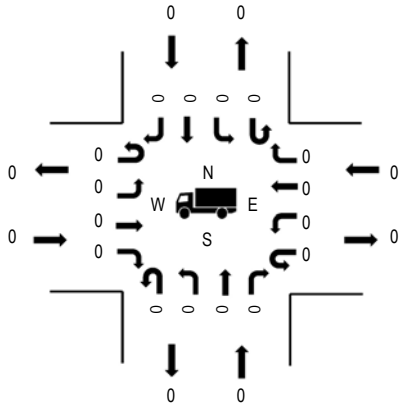
Motorized Vehicles



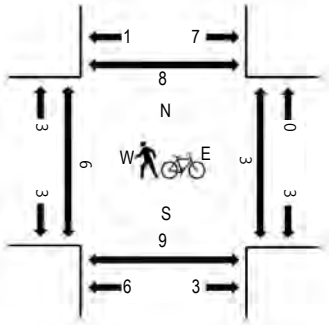
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.89
WB	0.0%	0.67
NB	0.0%	0.88
SB	0.0%	0.67
All	0.0%	0.83

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	CAPITOLA AVE Eastbound				CAPITOLA AVE Westbound				BAY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	12	8	1	0	2	4	5	0	0	18	4	0	10	7	11	82	623
7:15 AM	0	17	10	1	0	2	7	4	0	4	37	8	0	7	24	12	133	821
7:30 AM	0	18	11	0	0	7	13	9	0	0	78	2	0	8	33	15	194	1,032
7:45 AM	0	10	12	1	0	6	24	10	0	6	66	10	0	17	33	19	214	1,118
8:00 AM	0	21	12	4	0	18	21	15	0	3	82	15	0	18	47	24	280	1,141
8:15 AM	0	12	15	1	0	45	26	12	0	5	71	12	0	17	85	43	344	
8:30 AM	0	18	20	0	0	15	26	6	0	7	91	14	0	15	36	32	280	
8:45 AM	0	19	20	1	0	5	21	9	0	12	68	14	0	24	15	29	237	
Count Total	0	127	108	9	0	100	142	70	0	37	511	79	0	116	280	185	1,764	
Peak Hour	0	70	67	6	0	83	94	42	0	27	312	55	0	74	183	128	1,141	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

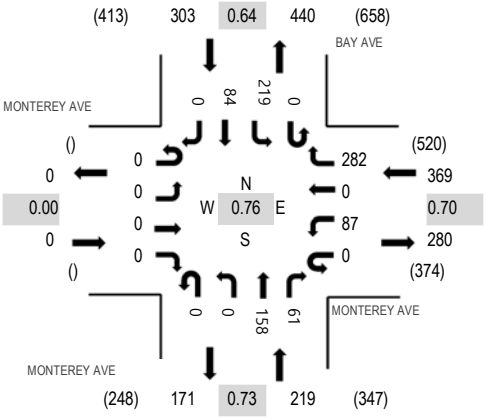
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	1	0	0	1	7:00 AM	1	0	0	1	2
7:15 AM	0	0	0	0	0	7:15 AM	0	0	1	1	2	7:15 AM	2	2	1	3	8
7:30 AM	0	0	0	0	0	7:30 AM	0	0	1	2	3	7:30 AM	0	1	0	1	2
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	4	4	7:45 AM	0	3	0	0	3
8:00 AM	0	0	0	0	0	8:00 AM	2	0	1	4	7	8:00 AM	1	3	0	1	5
8:15 AM	0	0	0	0	0	8:15 AM	1	2	1	12	16	8:15 AM	0	1	1	2	4
8:30 AM	0	0	0	0	0	8:30 AM	0	0	1	2	3	8:30 AM	3	4	1	4	12
8:45 AM	0	0	0	0	0	8:45 AM	1	0	0	0	1	8:45 AM	2	1	1	1	5
Count Total	0	0	0	0	0	Count Total	4	3	5	25	37	Count Total	9	15	4	13	41
Peak Hour	0	0	0	0	0	Peak Hour	4	2	3	18	27	Peak Hour	6	9	3	8	26

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 MONTEREY AVE & MONTEREY AVE AM
Date: Thursday, March 7, 2024
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour

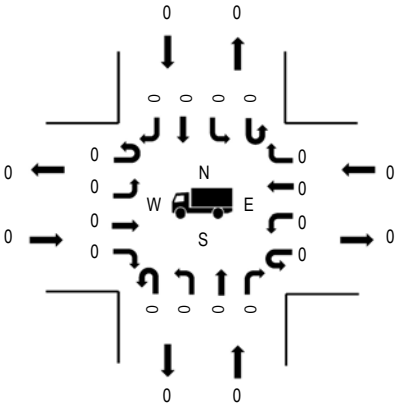
Motorized Vehicles



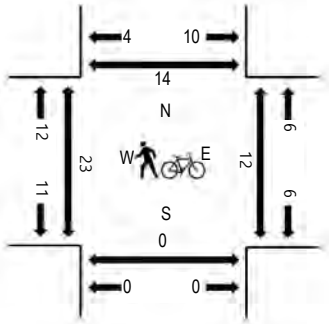
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.70
NB	0.0%	0.73
SB	0.0%	0.64
All	0.0%	0.76

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	MONTEREY AVE Eastbound				MONTEREY AVE Westbound				MONTEREY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	6	0	8	0	0	16	5	0	5	5	0	45	412
7:15 AM	0	0	0	0	0	8	0	28	0	0	22	4	0	18	5	0	85	560
7:30 AM	0	0	0	0	0	17	0	43	0	0	26	7	0	34	10	0	137	768
7:45 AM	0	0	0	0	0	16	0	45	0	0	38	6	0	23	17	0	145	891
8:00 AM	0	0	0	0	0	12	0	65	0	0	38	9	0	45	24	0	193	868
8:15 AM	0	0	0	0	0	25	0	74	0	0	45	31	0	97	21	0	293	
8:30 AM	0	0	0	0	0	34	0	98	0	0	37	15	0	54	22	0	260	
8:45 AM	0	0	0	0	0	8	0	33	0	0	42	6	0	15	18	0	122	
Count Total	0	0	0	0	0	126	0	394	0	0	264	83	0	291	122	0	1,280	
Peak Hour	0	0	0	0	0	87	0	282	0	0	158	61	0	219	84	0	891	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	1	1	7:00 AM	3	0	1	1	5
7:15 AM	0	0	0	0	0	7:15 AM	0	1	2	0	3	7:15 AM	5	0	0	3	8
7:30 AM	0	0	0	0	0	7:30 AM	0	0	1	2	3	7:30 AM	2	0	2	0	4
7:45 AM	0	0	0	0	0	7:45 AM	0	2	1	5	8	7:45 AM	6	0	2	1	9
8:00 AM	0	0	0	0	0	8:00 AM	0	1	1	6	8	8:00 AM	6	0	2	5	13
8:15 AM	0	0	0	0	0	8:15 AM	0	3	3	15	21	8:15 AM	4	0	5	4	13
8:30 AM	0	0	0	0	0	8:30 AM	0	1	2	4	7	8:30 AM	7	0	3	4	14
8:45 AM	0	0	0	0	0	8:45 AM	0	0	1	1	2	8:45 AM	8	0	5	6	19
Count Total	0	0	0	0	0	Count Total	0	8	11	34	53	Count Total	41	0	20	24	85
Peak Hour	0	0	0	0	0	Peak Hour	0	7	7	30	44	Peak Hour	23	0	12	14	49

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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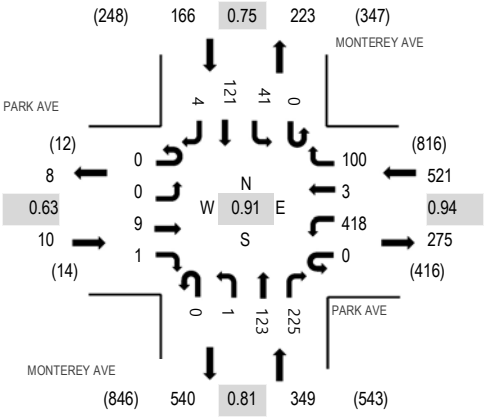
Location: 7 MONTEREY AVE & PARK AVE AM
Date: Thursday, March 7, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour

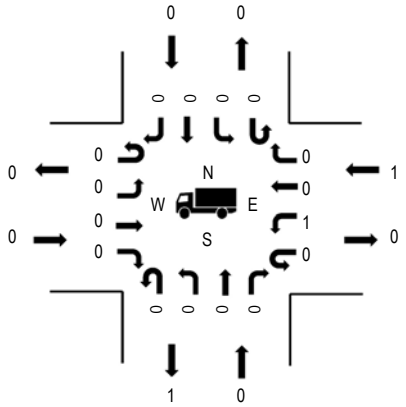
Motorized Vehicles



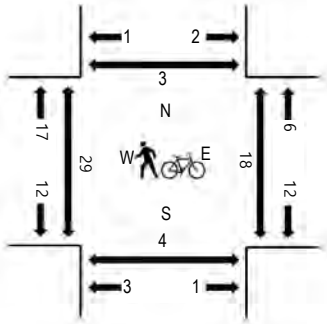
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.63
WB	0.2%	0.94
NB	0.0%	0.81
SB	0.0%	0.75
All	0.1%	0.91

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	PARK AVE Eastbound				PARK AVE Westbound				MONTEREY AVE Northbound				MONTEREY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	35	0	8	0	0	13	10	0	0	10	0	76	575
7:15 AM	0	1	0	0	0	46	1	12	0	1	13	26	0	1	13	0	114	739
7:30 AM	0	0	1	1	0	71	1	14	0	0	19	34	0	2	24	0	167	912
7:45 AM	0	1	0	0	0	83	1	23	0	0	20	58	0	9	23	0	218	1,028
8:00 AM	0	0	0	0	0	94	2	27	0	1	22	57	0	11	25	1	240	1,046
8:15 AM	0	0	4	0	0	101	0	28	0	0	46	63	0	13	32	0	287	
8:30 AM	0	0	3	0	0	116	0	22	0	0	30	55	0	12	44	1	283	
8:45 AM	0	0	2	1	0	107	1	23	0	0	25	50	0	5	20	2	236	
Count Total	0	2	10	2	0	653	6	157	0	2	188	353	0	53	191	4	1,621	
Peak Hour	0	0	9	1	0	418	3	100	0	1	123	225	0	41	121	4	1,046	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

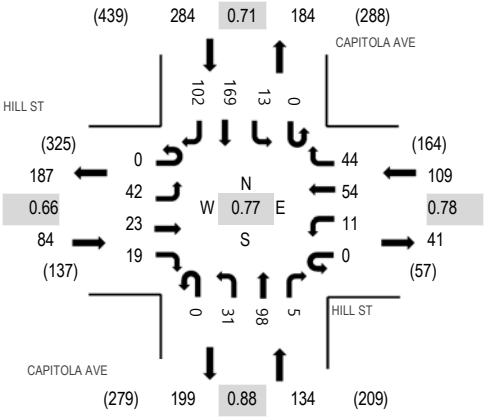
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	1	1	2	7:00 AM	5	1	1	0	7
7:15 AM	0	0	0	0	0	7:15 AM	0	0	2	1	3	7:15 AM	6	1	3	1	11
7:30 AM	0	0	0	0	0	7:30 AM	0	5	2	0	7	7:30 AM	3	1	4	2	10
7:45 AM	0	0	0	0	0	7:45 AM	0	2	2	1	5	7:45 AM	7	2	2	3	14
8:00 AM	0	0	0	0	0	8:00 AM	0	6	2	3	11	8:00 AM	7	2	2	0	11
8:15 AM	0	0	0	0	0	8:15 AM	0	4	6	1	11	8:15 AM	4	1	8	0	13
8:30 AM	0	0	1	0	1	8:30 AM	0	4	2	0	6	8:30 AM	8	0	4	2	14
8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	1	1	8:45 AM	10	1	4	1	16
Count Total	0	0	1	0	1	Count Total	0	21	17	8	46	Count Total	50	9	28	9	96
Peak Hour	0	0	1	0	1	Peak Hour	0	14	10	5	29	Peak Hour	29	4	18	3	54

(303) 216-2439
www.alltrafficdata.net

Location: 8 CAPITOLA AVE & HILL ST AM
Date: Thursday, March 7, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour

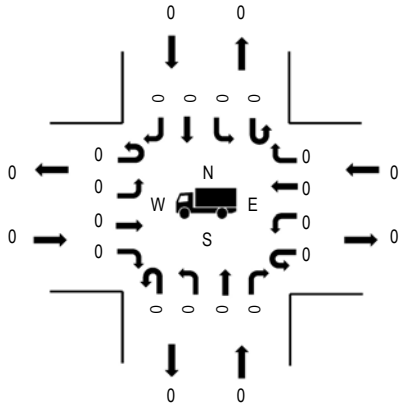
Motorized Vehicles



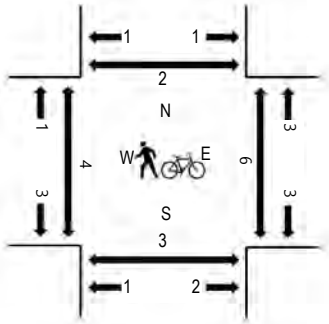
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.66
WB	0.0%	0.78
NB	0.0%	0.88
SB	0.0%	0.71
All	0.0%	0.77

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HILL ST Eastbound				HILL ST Westbound				CAPITOLA AVE Northbound				CAPITOLA AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	9	0	3	0	0	3	4	0	2	8	0	0	2	9	18	58	338
7:15 AM	0	10	3	1	0	0	11	3	0	6	14	1	0	2	13	19	83	428
7:30 AM	0	8	4	0	0	1	12	3	0	8	10	1	0	0	20	21	88	543
7:45 AM	0	12	2	1	0	1	13	4	0	6	19	0	0	1	31	19	109	605
8:00 AM	0	7	6	4	0	3	19	14	0	9	18	1	0	0	37	30	148	611
8:15 AM	0	13	12	7	0	5	9	13	0	11	27	0	0	10	75	16	198	
8:30 AM	0	12	1	3	0	1	17	14	0	4	27	3	0	2	33	33	150	
8:45 AM	0	10	4	5	0	2	9	3	0	7	26	1	0	1	24	23	115	
Count Total	0	81	32	24	0	13	93	58	0	53	149	7	0	18	242	179	949	
Peak Hour	0	42	23	19	0	11	54	44	0	31	98	5	0	13	169	102	611	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0	7:00 AM	1	0	3	2	6
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	1	1	7:15 AM	0	2	2	1	5
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	1	1	7:30 AM	0	0	3	0	3
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0	7:45 AM	0	0	7	0	7
8:00 AM	0	0	0	0	0	8:00 AM	1	1	1	2	5	8:00 AM	3	1	1	1	6
8:15 AM	0	0	0	0	0	8:15 AM	1	1	0	4	6	8:15 AM	0	2	3	1	6
8:30 AM	0	0	0	0	0	8:30 AM	0	0	1	2	3	8:30 AM	1	0	0	0	1
8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	1	1	8:45 AM	0	0	2	0	2
Count Total	0	0	0	0	0	Count Total	2	2	2	11	17	Count Total	5	5	21	5	36
Peak Hour	0	0	0	0	0	Peak Hour	2	2	2	9	15	Peak Hour	4	3	6	2	15

(303) 216-2439
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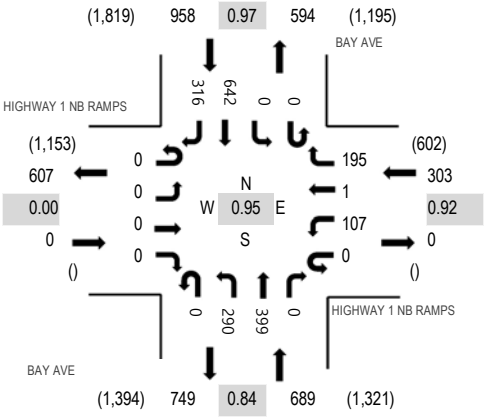
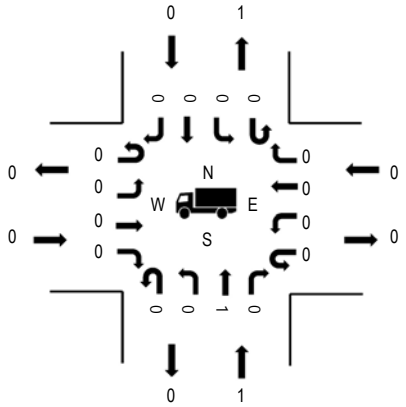
Location: 1 BAY AVE & HIGHWAY 1 NB RAMPS PM
Date: Thursday, March 7, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour

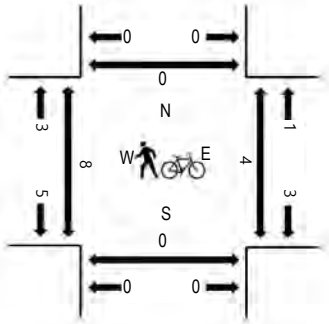
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.92
NB	0.1%	0.84
SB	0.0%	0.97
All	0.1%	0.95

Traffic Counts - Motorized Vehicles

Interval Start Time	HIGHWAY 1 NB RAMPS Eastbound				HIGHWAY 1 NB RAMPS Westbound				BAY AVE Northbound				BAY AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	0	0	0	32	0	51	0	88	116	0	0	0	154	70	511	1,950
4:15 PM	0	0	0	0	0	23	1	48	0	69	100	0	0	0	169	84	494	1,948
4:30 PM	0	0	0	0	0	23	0	43	0	64	82	0	0	0	157	83	452	1,935
4:45 PM	0	0	0	0	0	29	0	53	0	69	101	0	0	0	162	79	493	1,883
5:00 PM	0	0	0	0	0	25	0	58	0	73	103	0	0	0	167	83	509	1,792
5:15 PM	0	0	0	0	0	19	0	68	0	50	102	0	0	0	170	72	481	
5:30 PM	0	0	0	0	0	20	0	47	0	65	83	0	0	0	117	68	400	
5:45 PM	0	0	0	0	0	19	0	43	0	59	97	0	0	0	108	76	402	
Count Total	0	0	0	0	0	190	1	411	0	537	784	0	0	0	1,204	615	3,742	
Peak Hour	0	0	0	0	0	107	1	195	0	290	399	0	0	0	642	316	1,950	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	1	0	0	1	4:00 PM	0	0	0	2	2	4:00 PM	1	0	3	0	4
4:15 PM	0	0	0	0	0	4:15 PM	0	1	0	2	3	4:15 PM	5	0	0	0	5
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	3	3	4:30 PM	1	0	1	0	2
4:45 PM	0	0	0	0	0	4:45 PM	0	3	0	1	4	4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	1	1	5:00 PM	0	2	0	1	3	5:00 PM	1	0	2	0	3
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	2	2	5:15 PM	0	0	6	0	6
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	1	0	0	0	1
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	4	4	5:45 PM	0	0	2	0	2
Count Total	0	1	0	1	2	Count Total	0	6	0	15	21	Count Total	10	0	14	0	24
Peak Hour	0	1	0	0	1	Peak Hour	0	4	0	8	12	Peak Hour	8	0	4	0	12

(303) 216-2439
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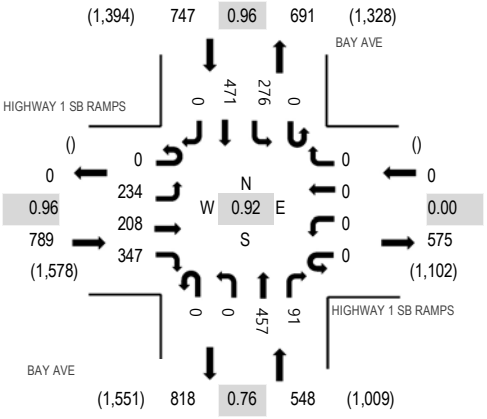
Location: 2 BAY AVE & HIGHWAY 1 SB RAMPS PM
Date: Thursday, March 7, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour

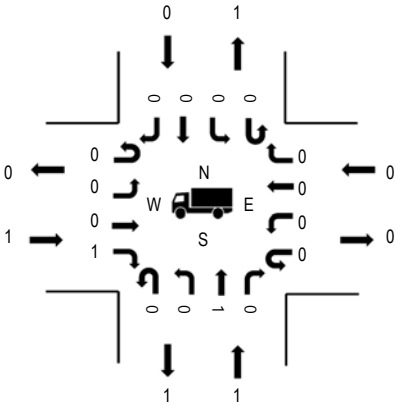
Motorized Vehicles



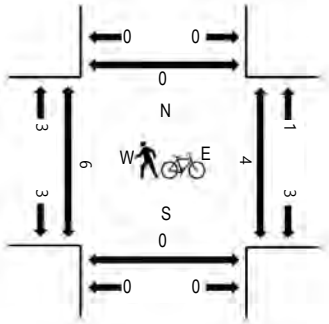
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.1%	0.96
WB	0.0%	0.00
NB	0.2%	0.76
SB	0.0%	0.96
All	0.1%	0.92

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HIGHWAY 1 SB RAMPS Eastbound				HIGHWAY 1 SB RAMPS Westbound				BAY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	56	57	83	0	0	0	0	0	0	151	30	0	58	132	0	567	2,084
4:15 PM	0	52	52	86	0	0	0	0	0	0	119	19	0	71	120	0	519	2,048
4:30 PM	0	53	57	82	0	0	0	0	0	0	88	25	0	74	109	0	488	2,034
4:45 PM	0	73	42	96	0	0	0	0	0	0	99	17	0	73	110	0	510	1,998
5:00 PM	0	60	53	80	0	0	0	0	0	0	114	27	0	72	125	0	531	1,897
5:15 PM	0	67	53	92	0	0	0	0	0	0	90	20	0	83	100	0	505	
5:30 PM	0	49	56	97	0	0	0	0	0	0	94	13	0	52	91	0	452	
5:45 PM	0	75	40	67	0	0	0	0	0	0	88	15	0	43	81	0	409	
Count Total	0	485	410	683	0	0	0	0	0	0	843	166	0	526	868	0	3,981	
Peak Hour	0	234	208	347	0	0	0	0	0	0	457	91	0	276	471	0	2,084	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	1	0	0	1	4:00 PM	0	0	0	2	2	4:00 PM	0	0	2	0	2
4:15 PM	1	0	0	0	1	4:15 PM	0	1	0	2	3	4:15 PM	4	0	1	0	5
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	3	3	4:30 PM	1	0	1	0	2
4:45 PM	0	0	0	0	0	4:45 PM	0	3	0	1	4	4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	1	1	5:00 PM	0	2	0	1	3	5:00 PM	1	0	2	0	3
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	2	2	5:15 PM	0	0	5	0	5
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	1	0	0	0	1
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	4	4	5:45 PM	0	0	2	0	2
Count Total	1	1	0	1	3	Count Total	0	6	0	15	21	Count Total	8	0	13	0	21
Peak Hour	1	1	0	0	2	Peak Hour	0	4	0	8	12	Peak Hour	6	0	4	0	10

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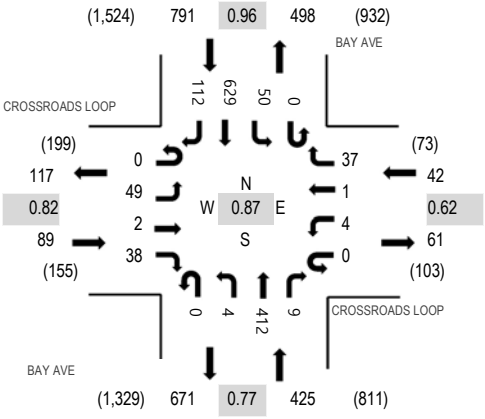
Location: 3 BAY AVE & CROSSROADS LOOP PM
Date: Thursday, March 7, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour

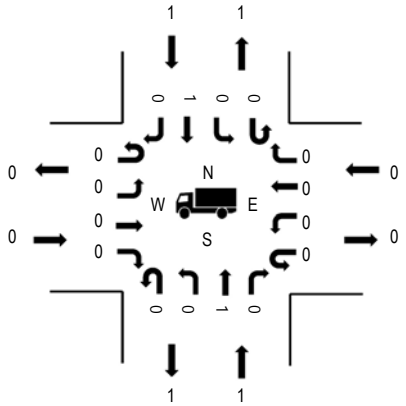
Motorized Vehicles



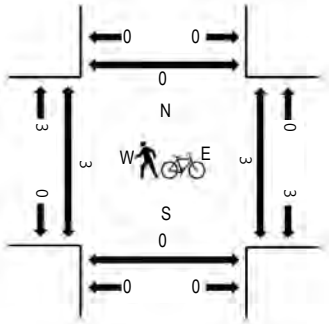
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.82
WB	0.0%	0.62
NB	0.2%	0.77
SB	0.1%	0.96
All	0.1%	0.87

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	CROSSROADS LOOP Eastbound				CROSSROADS LOOP Westbound				BAY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	14	1	10	0	1	1	15	0	0	135	3	0	11	151	43	385	1,347
4:15 PM	0	15	1	11	0	2	0	8	0	1	91	0	0	13	165	25	332	1,306
4:30 PM	0	9	0	8	0	1	0	7	0	0	93	5	0	13	140	30	306	1,286
4:45 PM	0	11	0	9	0	0	0	7	0	3	93	1	0	13	173	14	324	1,287
5:00 PM	0	16	0	7	0	0	0	12	0	1	100	3	0	8	170	27	344	1,216
5:15 PM	0	11	0	8	0	3	0	3	0	1	87	2	0	10	175	12	312	
5:30 PM	0	6	0	10	0	4	0	4	0	1	94	2	0	10	160	16	307	
5:45 PM	0	7	0	1	0	1	1	3	0	2	91	2	0	5	119	21	253	
Count Total	0	89	2	64	0	12	2	59	0	9	784	18	0	83	1,253	188	2,563	
Peak Hour	0	49	2	38	0	4	1	37	0	4	412	9	0	50	629	112	1,347	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	1	0	0	1	4:00 PM	0	0	1	2	3	4:00 PM	0	0	1	0	1
4:15 PM	0	0	0	1	1	4:15 PM	1	0	0	2	3	4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	3	3	4:30 PM	2	0	1	0	3
4:45 PM	0	0	0	0	0	4:45 PM	0	4	0	1	5	4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0	5:00 PM	0	2	0	1	3	5:00 PM	0	0	3	0	3
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	2	2	5:15 PM	0	0	5	0	5
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	3	0	0	0	3
5:45 PM	0	0	0	0	0	5:45 PM	0	0	1	4	5	5:45 PM	0	0	2	0	2
Count Total	0	1	0	1	2	Count Total	1	6	2	15	24	Count Total	6	0	13	0	19
Peak Hour	0	1	0	1	2	Peak Hour	1	4	1	8	14	Peak Hour	3	0	3	0	6

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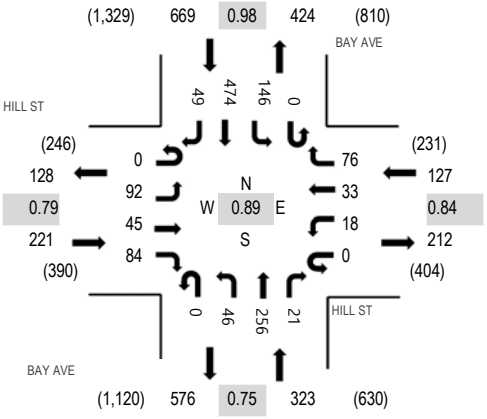
Location: 4 BAY AVE & HILL ST PM
Date: Thursday, March 7, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour

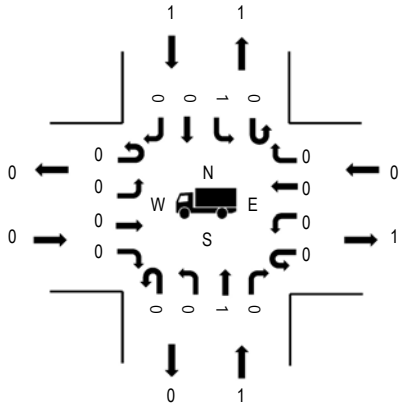
Motorized Vehicles



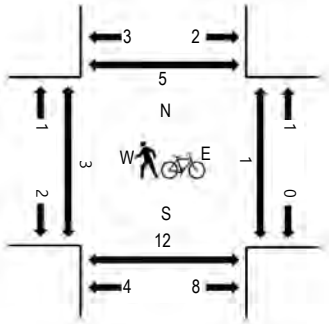
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.79
WB	0.0%	0.84
NB	0.3%	0.75
SB	0.1%	0.98
All	0.1%	0.89

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HILL ST Eastbound				HILL ST Westbound				BAY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	30	12	28	0	5	11	22	0	16	85	7	0	35	113	12	376	1,340
4:15 PM	0	19	12	19	0	4	11	17	0	6	57	6	0	37	129	14	331	1,293
4:30 PM	0	20	11	20	0	5	7	25	0	12	52	4	0	35	101	12	304	1,278
4:45 PM	0	23	10	17	0	4	4	12	0	12	62	4	0	39	131	11	329	1,289
5:00 PM	0	24	7	18	0	2	6	15	0	10	69	0	0	43	122	13	329	1,240
5:15 PM	0	18	5	23	0	3	6	14	0	13	53	1	1	44	128	7	316	
5:30 PM	0	11	10	12	0	2	7	19	0	13	68	2	0	35	127	9	315	
5:45 PM	0	15	11	15	0	4	11	15	0	12	64	2	0	32	88	11	280	
Count Total	0	160	78	152	0	29	63	139	0	94	510	26	1	300	939	89	2,580	
Peak Hour	0	92	45	84	0	18	33	76	0	46	256	21	0	146	474	49	1,340	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	1	0	0	1	4:00 PM	0	0	0	2	2	4:00 PM	0	6	0	2	8
4:15 PM	0	0	0	1	1	4:15 PM	0	0	0	2	2	4:15 PM	1	1	0	1	3
4:30 PM	0	0	0	0	0	4:30 PM	1	0	0	3	4	4:30 PM	1	2	1	2	6
4:45 PM	0	0	0	0	0	4:45 PM	2	2	2	1	7	4:45 PM	1	3	0	0	4
5:00 PM	0	0	0	0	0	5:00 PM	0	3	0	1	4	5:00 PM	0	4	7	0	11
5:15 PM	0	0	0	0	0	5:15 PM	1	0	0	2	3	5:15 PM	1	7	2	2	12
5:30 PM	0	0	0	0	0	5:30 PM	3	0	1	0	4	5:30 PM	1	0	1	2	4
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	4	4	5:45 PM	0	4	1	0	5
Count Total	0	1	0	1	2	Count Total	7	5	3	15	30	Count Total	5	27	12	9	53
Peak Hour	0	1	0	1	2	Peak Hour	3	2	2	8	15	Peak Hour	3	12	1	5	21

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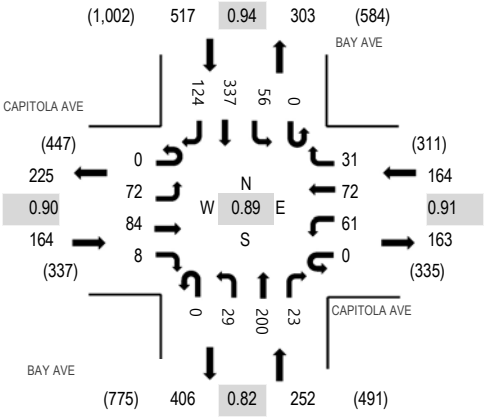
Location: 5 BAY AVE & CAPITOLA AVE PM
Date: Thursday, March 7, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour

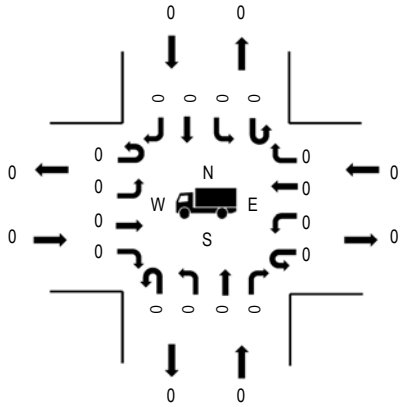
Motorized Vehicles



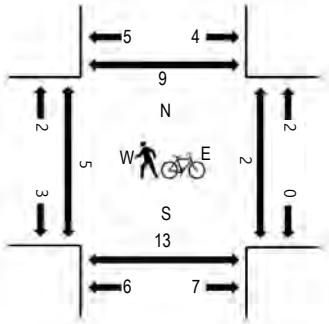
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.90
WB	0.0%	0.91
NB	0.0%	0.82
SB	0.0%	0.94
All	0.0%	0.89

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	CAPITOLA AVE Eastbound				CAPITOLA AVE Westbound				BAY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	28	23	4	0	19	14	12	0	6	66	5	0	18	80	34	309	1,097
4:15 PM	0	16	19	1	0	16	21	4	0	9	40	11	0	13	91	29	270	1,064
4:30 PM	0	11	19	1	0	13	21	10	0	6	45	2	0	13	71	29	241	1,063
4:45 PM	0	17	23	2	0	13	16	5	0	8	49	5	0	12	95	32	277	1,090
5:00 PM	0	22	14	6	0	14	26	5	0	7	47	11	0	19	74	31	276	1,044
5:15 PM	0	14	24	5	0	13	19	7	0	8	42	5	0	22	83	27	269	
5:30 PM	0	19	18	3	0	12	18	6	0	6	51	5	0	12	86	32	268	
5:45 PM	0	24	22	2	0	4	16	7	0	9	37	11	0	9	67	23	231	
Count Total	0	151	162	24	0	104	151	56	0	59	377	55	0	118	647	237	2,141	
Peak Hour	0	72	84	8	0	61	72	31	0	29	200	23	0	56	337	124	1,097	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	2	5	0	1	8	4:00 PM	0	3	2	4	9
4:15 PM	0	0	0	0	0	4:15 PM	0	3	2	1	6	4:15 PM	2	2	0	1	5
4:30 PM	0	0	0	0	0	4:30 PM	0	0	1	4	5	4:30 PM	2	7	0	2	11
4:45 PM	0	0	0	0	0	4:45 PM	0	2	1	2	5	4:45 PM	1	1	0	2	4
5:00 PM	0	0	0	0	0	5:00 PM	0	2	1	2	5	5:00 PM	4	4	2	2	12
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	2	2	5:15 PM	2	5	1	3	11
5:30 PM	0	0	0	0	0	5:30 PM	0	0	1	0	1	5:30 PM	2	2	2	2	8
5:45 PM	0	0	0	0	0	5:45 PM	0	0	1	5	6	5:45 PM	2	3	4	1	10
Count Total	0	0	0	0	0	Count Total	2	12	7	17	38	Count Total	15	27	11	17	70
Peak Hour	0	0	0	0	0	Peak Hour	2	10	4	8	24	Peak Hour	5	13	2	9	29

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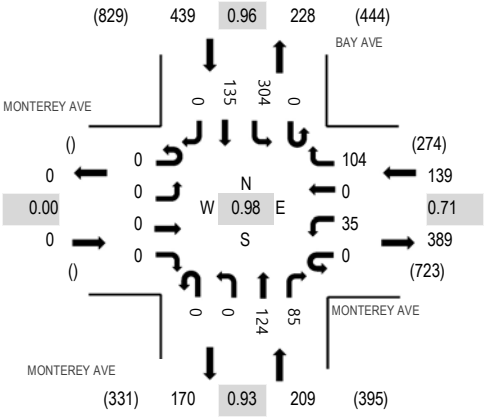
Location: 6 MONTEREY AVE & MONTEREY AVE PM
Date: Thursday, March 7, 2024
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour

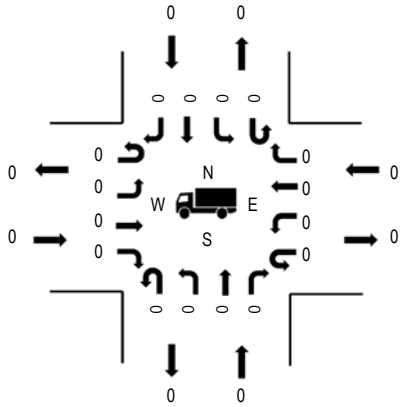
Motorized Vehicles



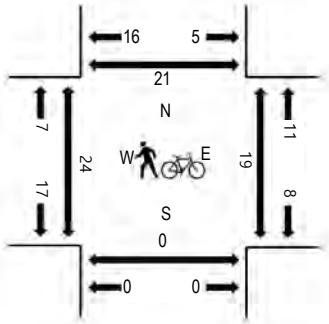
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.71
NB	0.0%	0.93
SB	0.0%	0.96
All	0.0%	0.98

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	MONTEREY AVE Eastbound				MONTEREY AVE Westbound				MONTEREY AVE Northbound				BAY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	0	0	16	0	40	0	0	26	17	0	63	39	0	201	753
4:15 PM	0	0	0	0	0	6	0	26	0	0	32	15	0	78	43	0	200	753
4:30 PM	0	0	0	0	0	5	0	18	0	0	24	21	0	63	27	0	158	748
4:45 PM	0	0	0	0	0	7	0	17	0	0	33	23	0	78	36	0	194	787
5:00 PM	0	0	0	0	0	13	0	36	0	0	28	17	0	81	26	0	201	745
5:15 PM	0	0	0	0	0	6	0	22	0	0	31	24	0	70	42	0	195	
5:30 PM	0	0	0	0	0	9	0	29	0	0	32	21	0	75	31	0	197	
5:45 PM	0	0	0	0	0	4	0	20	0	0	30	21	0	56	21	0	152	
Count Total	0	0	0	0	0	66	0	208	0	0	236	159	0	564	265	0	1,498	
Peak Hour	0	0	0	0	0	35	0	104	0	0	124	85	0	304	135	0	787	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

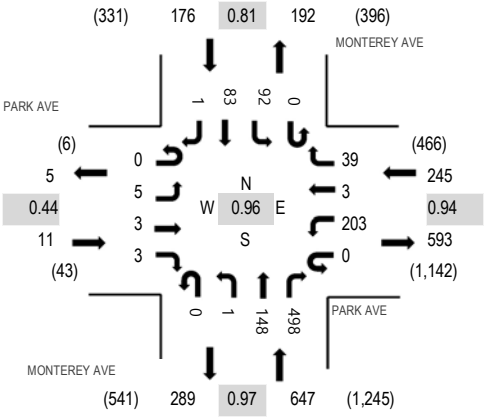
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	7	2	9	4:00 PM	7	0	3	5	15
4:15 PM	0	0	0	0	0	4:15 PM	0	0	6	1	7	4:15 PM	3	0	6	2	11
4:30 PM	0	0	0	0	0	4:30 PM	0	1	0	4	5	4:30 PM	6	0	0	2	8
4:45 PM	0	0	0	0	0	4:45 PM	0	1	3	2	6	4:45 PM	3	0	5	3	11
5:00 PM	0	0	0	0	0	5:00 PM	0	1	1	1	3	5:00 PM	7	0	5	3	15
5:15 PM	0	0	0	0	0	5:15 PM	0	1	2	2	5	5:15 PM	10	0	8	11	29
5:30 PM	0	0	0	0	0	5:30 PM	0	0	3	1	4	5:30 PM	4	0	1	4	9
5:45 PM	0	0	0	0	0	5:45 PM	0	1	0	2	3	5:45 PM	7	1	1	4	13
Count Total	0	0	0	0	0	Count Total	0	5	22	15	42	Count Total	47	1	29	34	111
Peak Hour	0	0	0	0	0	Peak Hour	0	3	9	6	18	Peak Hour	24	0	19	21	64

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 MONTEREY AVE & PARK AVE PM
Date: Thursday, March 7, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour

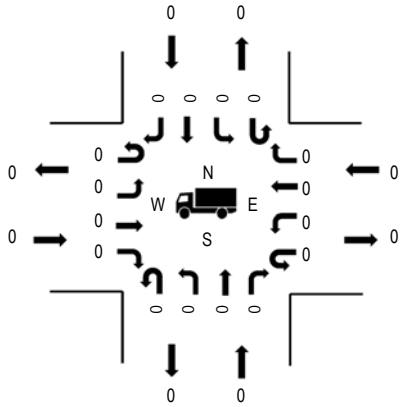
Motorized Vehicles



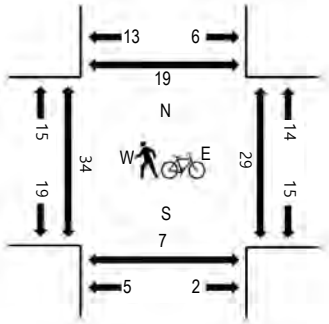
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.44
WB	0.0%	0.94
NB	0.0%	0.97
SB	0.0%	0.81
All	0.0%	0.96

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	PARK AVE Eastbound				PARK AVE Westbound				MONTEREY AVE Northbound				MONTEREY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	4	1	0	0	51	0	6	0	0	34	128	0	22	31	1	278	1,079
4:15 PM	0	0	0	3	0	57	0	10	0	0	37	122	0	27	24	0	280	1,063
4:30 PM	0	0	2	0	0	47	3	7	0	0	37	130	0	20	11	0	257	1,040
4:45 PM	0	1	0	0	0	48	0	16	0	1	40	118	0	23	17	0	264	1,036
5:00 PM	0	7	9	2	0	53	0	10	0	0	27	116	0	19	19	0	262	1,006
5:15 PM	0	2	5	1	0	41	0	12	0	0	42	108	0	27	19	0	257	
5:30 PM	0	0	5	0	0	40	0	10	0	0	42	114	0	21	20	1	253	
5:45 PM	0	0	1	0	0	42	0	13	0	0	39	110	0	14	15	0	234	
Count Total	0	14	23	6	0	379	3	84	0	1	298	946	0	173	156	2	2,085	
Peak Hour	0	5	3	3	0	203	3	39	0	1	148	498	0	92	83	1	1,079	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

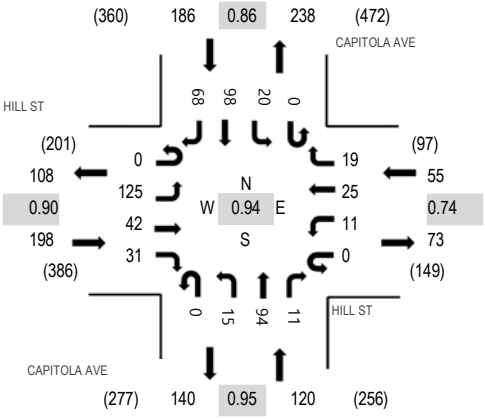
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	2	2	2	6	4:00 PM	7	1	4	2	14
4:15 PM	0	0	0	0	0	4:15 PM	0	1	1	2	4	4:15 PM	5	0	10	3	18
4:30 PM	0	0	0	0	0	4:30 PM	0	1	2	3	6	4:30 PM	12	6	7	7	32
4:45 PM	0	0	0	0	0	4:45 PM	0	6	0	3	9	4:45 PM	10	0	8	7	25
5:00 PM	0	0	0	0	0	5:00 PM	0	3	2	1	6	5:00 PM	6	2	16	2	26
5:15 PM	0	0	0	0	0	5:15 PM	0	2	5	1	8	5:15 PM	5	3	9	0	17
5:30 PM	0	0	0	0	0	5:30 PM	0	4	1	2	7	5:30 PM	11	1	0	7	19
5:45 PM	0	0	0	0	0	5:45 PM	1	1	1	0	3	5:45 PM	10	0	3	5	18
Count Total	0	0	0	0	0	Count Total	1	20	14	14	49	Count Total	66	13	57	33	169
Peak Hour	0	0	0	0	0	Peak Hour	0	10	5	10	25	Peak Hour	34	7	29	19	89

(303) 216-2439
www.alltrafficdata.net

Location: 8 CAPITOLA AVE & HILL ST PM
Date: Thursday, March 7, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour

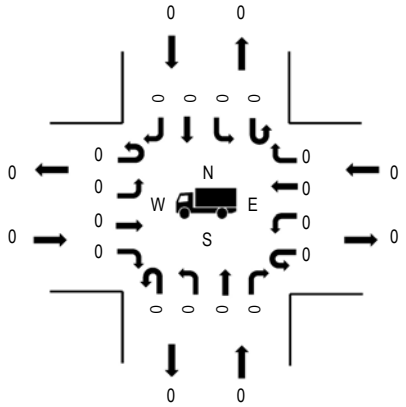
Motorized Vehicles



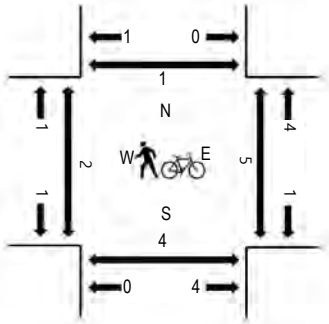
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.90
WB	0.0%	0.74
NB	0.0%	0.95
SB	0.0%	0.86
All	0.0%	0.94

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	HILL ST Eastbound				HILL ST Westbound				CAPITOLA AVE Northbound				CAPITOLA AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	38	8	6	0	3	3	3	0	8	26	1	0	5	25	19	145	559
4:15 PM	0	29	11	11	0	0	9	6	0	1	24	4	0	4	29	21	149	551
4:30 PM	0	30	10	6	0	3	7	2	0	2	18	1	0	2	28	16	125	547
4:45 PM	0	28	13	8	0	5	6	8	0	4	26	5	0	9	16	12	140	559
5:00 PM	0	22	15	13	0	1	5	4	0	7	25	2	1	4	28	10	137	540
5:15 PM	0	35	17	4	0	2	6	2	0	4	28	2	0	5	29	11	145	
5:30 PM	0	28	11	2	0	1	5	4	0	3	32	2	0	3	28	18	137	
5:45 PM	0	23	12	6	0	3	7	2	0	1	28	2	0	1	20	16	121	
Count Total	0	233	97	56	0	18	48	31	0	30	207	19	1	33	203	123	1,099	
Peak Hour	0	125	42	31	0	11	25	19	0	15	94	11	0	20	98	68	559	

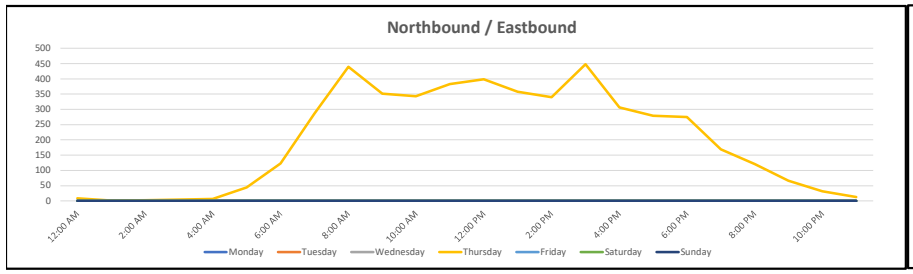
Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk

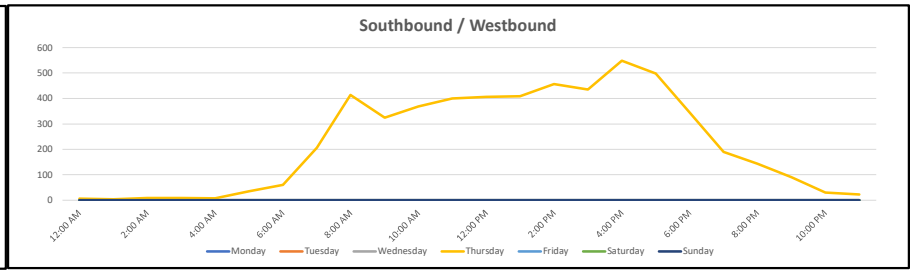
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	1	1	4:00 PM	0	2	1	0	3
4:15 PM	0	0	0	0	0	4:15 PM	0	2	0	3	5	4:15 PM	0	0	2	0	2
4:30 PM	0	0	0	0	0	4:30 PM	0	1	0	1	2	4:30 PM	1	1	1	0	3
4:45 PM	0	0	0	0	0	4:45 PM	0	0	2	1	3	4:45 PM	1	1	1	1	4
5:00 PM	0	0	0	0	0	5:00 PM	0	2	0	2	4	5:00 PM	0	3	2	1	6
5:15 PM	0	0	0	0	0	5:15 PM	1	0	0	0	1	5:15 PM	0	4	4	2	10
5:30 PM	0	0	0	0	0	5:30 PM	3	0	0	2	5	5:30 PM	0	2	0	0	2
5:45 PM	0	0	0	0	0	5:45 PM	0	2	0	1	3	5:45 PM	0	2	3	0	5
Count Total	0	0	0	0	0	Count Total	4	7	2	11	24	Count Total	2	15	14	4	35
Peak Hour	0	0	0	0	0	Peak Hour	0	3	2	6	11	Peak Hour	2	4	5	1	12

Vehicle Volume Report - Hourly

Site Description: Bay Ave S.O Center St
Site Number: 14
Start Date: 03/07/2024
End Date: 03/07/2024

Time	Monday 3/11/24			Tuesday 3/12/24			Wednesday 3/13/24			Thursday 3/7/24			Friday 3/8/24			Saturday 3/9/24			Sunday 3/10/24			3 Day Avg Tue-Thu		5 Day Avg Mon-Fri		7 Day Avg Mon-Sun	
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	NB	SB	NB	SB
12:00 AM	-	-	-	-	-	-	-	-	-	9	6	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1:00 AM	-	-	-	-	-	-	-	-	-	1	4	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 AM	-	-	-	-	-	-	-	-	-	2	8	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 AM	-	-	-	-	-	-	-	-	-	5	8	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 AM	-	-	-	-	-	-	-	-	-	6	7	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5:00 AM	-	-	-	-	-	-	-	-	-	44	35	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 AM	-	-	-	-	-	-	-	-	-	123	60	183	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	-	-	-	-	-	-	-	-	-	286	207	493	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8:00 AM	-	-	-	-	-	-	-	-	-	440	414	854	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9:00 AM	-	-	-	-	-	-	-	-	-	352	325	677	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM	-	-	-	-	-	-	-	-	-	343	368	711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	-	-	-	-	-	-	-	-	-	383	400	783	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM	-	-	-	-	-	-	-	-	-	399	406	805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1:00 PM	-	-	-	-	-	-	-	-	-	358	409	767	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 PM	-	-	-	-	-	-	-	-	-	340	457	797	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	-	-	-	-	-	-	-	-	-	448	435	883	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	-	-	-	-	-	-	-	-	-	307	548	855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5:00 PM	-	-	-	-	-	-	-	-	-	279	498	777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 PM	-	-	-	-	-	-	-	-	-	275	344	619	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 PM	-	-	-	-	-	-	-	-	-	169	190	359	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8:00 PM	-	-	-	-	-	-	-	-	-	121	143	264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9:00 PM	-	-	-	-	-	-	-	-	-	66	90	156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM	-	-	-	-	-	-	-	-	-	32	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM	-	-	-	-	-	-	-	-	-	13	23	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 AM - 9:00 AM	-	-	-	-	-	-	-	-	-	849	681	1530	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM - 6:00 PM	-	-	-	-	-	-	-	-	-	1034	1481	2515	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 AM - 7:00 PM	-	-	-	-	-	-	-	-	-	4333	4871	9204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 12:00 AM	-	-	-	-	-	-	-	-	-	4801	5415	10216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Percent	-	-	-	-	-	-	-	-	-	*47.0%*	*53.0%*	*100.0%*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AM Peak	-	-		-	-		-	-		8:00 AM	9:00 AM		-	-		-	-		-	-							
PM Peak	-	-		-	-		-	-		3:00 PM	4:00 PM		-	-		-	-		-	-							





Vehicle Speed Report - Hourly

Site Description: Bay Ave S.O Center St
Site Number: 14
Start Date: 03/07/2024
End Date: 03/07/2024

Total Study Speed Summary		
	Northbound	Southbound
Average Speed	25.9 mph	26.5 mph
50th Percentile	26.0 mph	26.7 mph
85th Percentile	29.6 mph	30.6 mph
95th Percentile	32.2 mph	33.3 mph

Speed Range (MPH) - Total Study																					
	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
Northbound	4801	22	52	183	1617	2314	544	60	6	3	0	0	0	0	0	0	0	0	0	0	0
Percent	*100.0%*	*0.5%*	*1.1%*	*3.8%*	*33.7%*	*48.2%*	*11.3%*	*1.2%*	*0.1%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Southbound	5415	51	59	210	1446	2657	878	103	10	1	0	0	0	0	0	0	0	0	0	0	0
Percent	*100.0%*	*0.9%*	*1.1%*	*3.9%*	*26.7%*	*49.1%*	*16.2%*	*1.9%*	*0.2%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Total	10216	73	111	393	3063	4971	1422	163	16	4	0	0	0	0	0	0	0	0	0	0	0
Percent	*100.0%*	*0.7%*	*1.1%*	*3.8%*	*30.0%*	*48.7%*	*13.9%*	*1.6%*	*0.2%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

Site Description: Bay Ave S.O Center St
Site Number: 14
Start Date: 03/07/2024
End Date: 03/07/2024

Vehicle Speed Report (Northbound - 03/07/2024)

Thursday	Northbound																				
3/7/24	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	9	1	0	1	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	5	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	6	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	44	0	0	1	11	19	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	123	0	0	2	41	55	23	2	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	286	1	2	6	86	161	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	440	1	4	12	157	225	38	3	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	352	0	2	16	137	163	32	2	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	343	1	1	5	77	156	77	20	3	3	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	383	2	8	16	117	197	39	4	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	399	2	4	24	139	186	41	3	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	358	3	6	11	138	165	32	3	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	340	2	5	15	134	140	39	5	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	448	0	5	20	178	205	39	0	1	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	307	1	4	18	80	159	40	5	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	279	2	4	9	79	148	36	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	275	1	4	16	105	126	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	169	1	0	5	67	84	11	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	121	3	0	3	38	58	15	3	1	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	66	1	1	1	18	35	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	32	0	1	2	5	18	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	13	0	1	0	4	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 9:00 AM	849	2	6	20	284	441	88	8	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 6:00 PM	1034	3	13	47	337	512	115	6	1	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 7:00 PM	4333	16	49	170	1468	2086	486	51	4	3	0	0	0	0	0	0	0	0	0	0	0
12:00 AM - 12:00 AM	4801	22	52	183	1617	2314	544	60	6	3	0	0	0	0	0	0	0	0	0	0	0
Percent	*100%*	*0.5%*	*1.1%*	*3.8%*	*33.7%*	*48.2%*	*11.3%*	*1.2%*	*0.1%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
50th Percentile	26.0 mph																				
85th Percentile	29.6 mph																				
95th Percentile	32.2 mph																				

Site Description: Bay Ave S.O Center St
Site Number: 14
Start Date: 03/07/2024
End Date: 03/07/2024

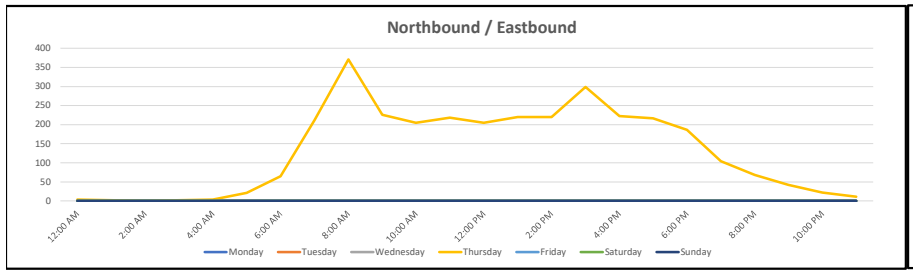
Vehicle Speed Report (Southbound - 03/07/2024)

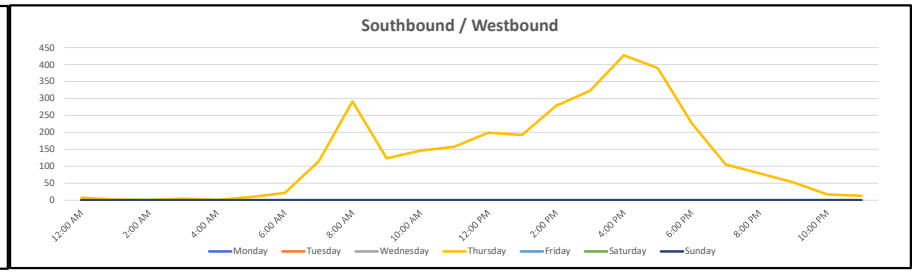
Thursday	Southbound																				
3/7/24	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	6	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	4	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	8	0	0	0	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	8	0	0	0	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	7	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	35	0	0	2	8	14	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	60	0	0	0	7	34	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	207	0	1	5	47	98	51	5	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	414	4	9	43	124	186	44	4	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	325	1	1	11	99	151	59	3	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	368	0	1	14	52	150	116	29	6	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	400	2	3	14	95	218	61	6	1	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	406	1	6	15	100	209	69	6	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	409	2	2	6	85	232	73	7	2	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	457	3	6	18	146	225	55	4	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	435	2	2	15	109	244	62	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	548	10	11	29	172	257	64	5	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	498	22	9	23	162	213	61	7	1	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	344	2	2	4	100	181	48	7	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	190	1	1	4	52	103	27	2	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	143	1	3	3	48	63	23	1	0	1	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	90	0	0	4	27	43	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	30	0	0	0	5	14	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	23	0	2	0	2	10	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 9:00 AM	**681**	**4**	**10**	**48**	**178**	**318**	**108**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3:00 PM - 6:00 PM	**1481**	**34**	**22**	**67**	**443**	**714**	**187**	**13**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
6:00 AM - 7:00 PM	**4871**	**49**	**53**	**197**	**1298**	**2398**	**776**	**90**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:00 AM - 12:00 AM	**5415**	**51**	**59**	**210**	**1446**	**2657**	**878**	**103**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	***100%***	***0.9%***	***1.1%***	***3.9%***	***26.7%***	***49.1%***	***16.2%***	***1.9%***	***0.2%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***
50th Percentile	**26.7 mph**																				
85th Percentile	**30.6 mph**																				
95th Percentile	**33.3 mph**																				

Vehicle Volume Report - Hourly

Site Description: Bay Ave N.O Del Monte Ave
Site Number: 15
Start Date: 03/07/2024
End Date: 03/07/2024

Time	Monday 3/11/24			Tuesday 3/12/24			Wednesday 3/13/24			Thursday 3/7/24			Friday 3/8/24			Saturday 3/9/24			Sunday 3/10/24			3 Day Avg Tue-Thu		5 Day Avg Mon-Fri		7 Day Avg Mon-Sun	
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	NB	SB	NB	SB
12:00 AM	-	-	-	-	-	-	-	-	-	3	7	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1:00 AM	-	-	-	-	-	-	-	-	-	2	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 AM	-	-	-	-	-	-	-	-	-	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 AM	-	-	-	-	-	-	-	-	-	2	4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 AM	-	-	-	-	-	-	-	-	-	4	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5:00 AM	-	-	-	-	-	-	-	-	-	21	9	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 AM	-	-	-	-	-	-	-	-	-	65	22	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	-	-	-	-	-	-	-	-	-	212	115	327	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8:00 AM	-	-	-	-	-	-	-	-	-	371	292	663	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9:00 AM	-	-	-	-	-	-	-	-	-	226	123	349	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 AM	-	-	-	-	-	-	-	-	-	205	146	351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	-	-	-	-	-	-	-	-	-	218	157	375	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM	-	-	-	-	-	-	-	-	-	205	199	404	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1:00 PM	-	-	-	-	-	-	-	-	-	220	192	412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 PM	-	-	-	-	-	-	-	-	-	220	278	498	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	-	-	-	-	-	-	-	-	-	299	323	622	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	-	-	-	-	-	-	-	-	-	222	427	649	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5:00 PM	-	-	-	-	-	-	-	-	-	217	390	607	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 PM	-	-	-	-	-	-	-	-	-	186	227	413	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 PM	-	-	-	-	-	-	-	-	-	104	105	209	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8:00 PM	-	-	-	-	-	-	-	-	-	68	79	147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9:00 PM	-	-	-	-	-	-	-	-	-	42	53	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00 PM	-	-	-	-	-	-	-	-	-	22	17	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 PM	-	-	-	-	-	-	-	-	-	11	13	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 AM - 9:00 AM	-	-	-	-	-	-	-	-	-	**648**	**429**	**1077**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM - 6:00 PM	-	-	-	-	-	-	-	-	-	**738**	**1140**	**1878**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 AM - 7:00 PM	-	-	-	-	-	-	-	-	-	**2866**	**2891**	**5757**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 AM - 12:00 AM	-	-	-	-	-	-	-	-	-	**3145**	**3182**	**6327**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Percent	-	-	-	-	-	-	-	-	-	***49.7%***	***50.3%***	***100.0%***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AM Peak	-	-		-	-		-	-		**8:00 AM**	**9:00 AM**		-	-		-	-		-	-							
PM Peak	-	-		-	-		-	-		**4:00 PM**	**5:00 PM**		-	-		-	-		-	-							





Vehicle Speed Report - Hourly

Site Description: Bay Ave N.O Del Monte Ave
Site Number: 15
Start Date: 03/07/2024
End Date: 03/07/2024

Total Study Speed Summary		
	Northbound	Southbound
Average Speed	25.2 mph	26.7 mph
50th Percentile	25.5 mph	27.0 mph
85th Percentile	29.4 mph	30.7 mph
95th Percentile	32.1 mph	33.4 mph

Speed Range (MPH) - Total Study																					
	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
Northbound	3145	66	39	179	1108	1372	345	30	3	3	0	0	0	0	0	0	0	0	0	0	0
Percent	*100.0%*	*2.1%*	*1.2%*	*5.7%*	*35.2%*	*43.6%*	*11.0%*	*1.0%*	*0.1%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Southbound	3182	39	35	100	759	1630	552	56	8	3	0	0	0	0	0	0	0	0	0	0	0
Percent	*100.0%*	*1.2%*	*1.1%*	*3.1%*	*23.9%*	*51.2%*	*17.3%*	*1.8%*	*0.3%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Total	6327	105	74	279	1867	3002	897	86	11	6	0	0	0	0	0	0	0	0	0	0	0
Percent	*100.0%*	*1.7%*	*1.2%*	*4.4%*	*29.5%*	*47.4%*	*14.2%*	*1.4%*	*0.2%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

Site Description: Bay Ave N.O Del Monte Ave
Site Number: 15
Start Date: 03/07/2024
End Date: 03/07/2024

Vehicle Speed Report (Northbound - 03/07/2024)

Thursday	Northbound																				
3/7/24	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	3	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	4	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	21	0	0	0	1	9	7	3	0	1	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	65	0	1	3	14	35	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	212	0	2	6	66	107	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	371	5	7	38	186	111	22	1	0	1	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	226	0	1	10	101	94	18	2	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	205	0	2	10	77	89	24	2	1	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	218	0	2	11	92	91	21	1	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	205	0	4	24	76	87	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	220	0	3	18	66	113	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	220	1	1	6	82	105	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	299	59	14	25	89	83	27	2	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	222	0	2	10	48	119	40	2	1	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	217	1	0	5	61	112	37	0	0	1	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	186	0	0	7	71	87	19	1	1	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	104	0	0	3	38	51	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	68	0	0	1	15	37	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	42	0	0	0	15	22	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	22	0	0	0	5	11	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	11	0	0	0	2	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 9:00 AM	**648**	**5**	**10**	**47**	**266**	**253**	**65**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3:00 PM - 6:00 PM	**738**	**60**	**16**	**40**	**198**	**314**	**104**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
6:00 AM - 7:00 PM	**2866**	**66**	**39**	**173**	**1029**	**1233**	**304**	**17**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:00 AM - 12:00 AM	**3145**	**66**	**39**	**179**	**1108**	**1372**	**345**	**30**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	***100%***	***2.1%***	***1.2%***	***5.7%***	***35.2%***	***43.6%***	***11.0%***	***1.0%***	***0.1%***	***0.1%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***
50th Percentile	**25.5 mph**																				
85th Percentile	**29.4 mph**																				
95th Percentile	**32.1 mph**																				

Site Description: Bay Ave N.O Del Monte Ave
Site Number: 15
Start Date: 03/07/2024
End Date: 03/07/2024

Vehicle Speed Report (Southbound - 03/07/2024)

Thursday	Southbound																				
3/7/24	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	7	0	0	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	4	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	9	0	0	0	1	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	22	0	0	1	3	11	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	115	0	2	2	19	64	26	1	1	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	292	32	10	22	75	132	17	2	0	2	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	123	0	1	6	33	67	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	146	1	1	2	36	84	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	157	0	3	3	35	96	18	2	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	199	2	1	11	53	101	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	192	0	1	6	41	103	34	6	1	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	278	0	4	6	94	134	38	2	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	323	4	4	13	91	144	61	5	1	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	427	0	2	9	76	230	100	9	1	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	390	0	3	6	71	209	81	16	3	1	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	227	0	0	10	58	107	47	5	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	105	0	1	1	29	58	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	79	0	0	0	24	37	15	2	1	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	53	0	0	1	13	29	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	17	0	0	1	4	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	13	0	0	0	1	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 9:00 AM	**429**	**32**	**12**	**25**	**97**	**207**	**49**	**4**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3:00 PM - 6:00 PM	**1140**	**4**	**9**	**28**	**238**	**583**	**242**	**30**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
6:00 AM - 7:00 PM	**2891**	**39**	**32**	**97**	**685**	**1482**	**497**	**49**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:00 AM - 12:00 AM	**3182**	**39**	**35**	**100**	**759**	**1630**	**552**	**56**	**8**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	***100%***	***1.2%***	***1.1%***	***3.1%***	***23.9%***	***51.2%***	***17.3%***	***1.8%***	***0.3%***	***0.1%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***
50th Percentile	**27.0 mph**																				
85th Percentile	**30.7 mph**																				
95th Percentile	**33.4 mph**																				

Attachment B – Bike and Pedestrian Collision Data

Overview

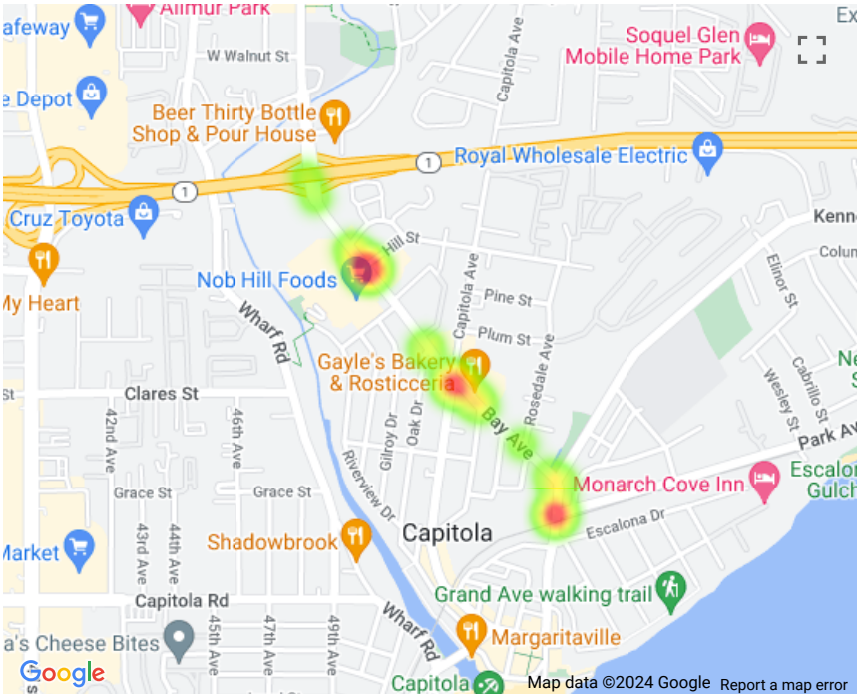
This report was created with the help of The Transportation Injury Mapping System (TIMS). TIMS has been developed by UC Berkeley SafeTREC to provide quick, easy and free access to California crash data, the Statewide Integrated Traffic Records System (SWITRS), that has been geo-coded by SafeTREC to make it easy to map crashes.

Query by Case ID(s)

User Entered SWITRS Case ID(s)

Result

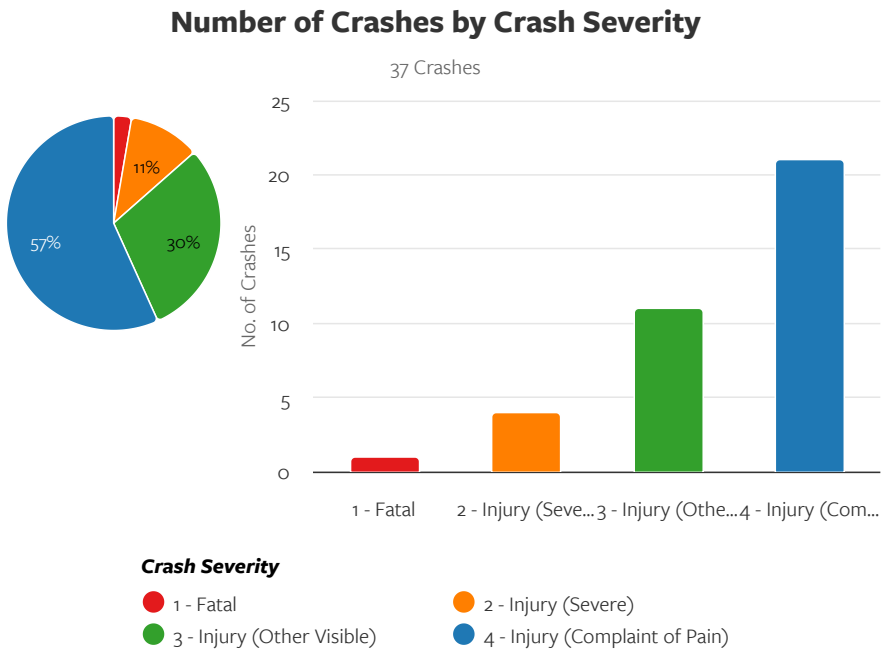
Total Crashes	37
Total Victims	1 Killed & 38 Injured
State Highway	1 (2.7%)
Ped Involved	8 (21.6%)
Bike Involved	11 (29.7%)
Motorcycle Involved	1 (2.7%)



37 of 37 (100%) Crashes are geocoded and mapped.

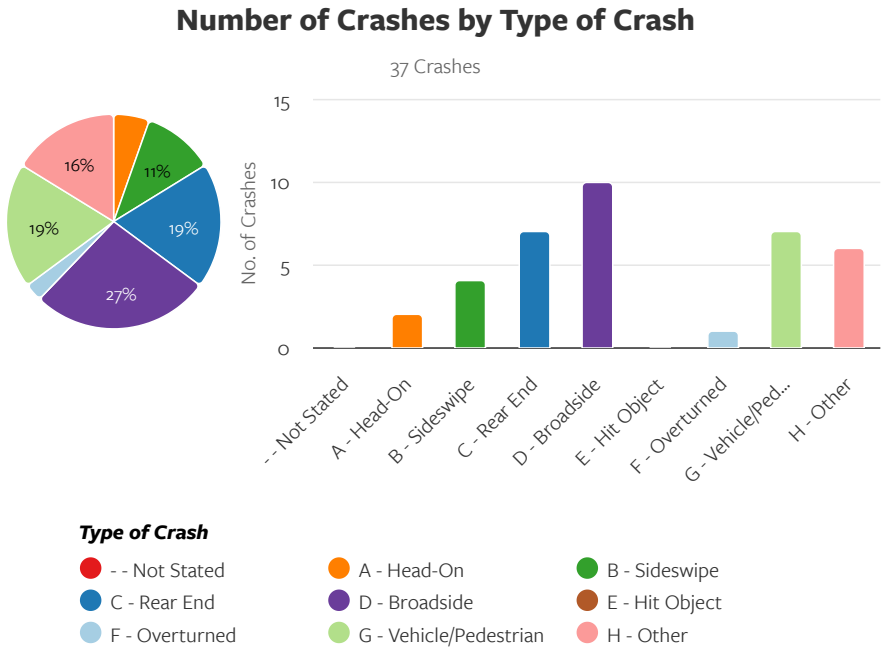
Crash Summary

By Crash Severity



Crash Severity	Count	%
1 - Fatal	1	2.70%
2 - Injury (Severe)	4	10.81%
3 - Injury (Other Visible)	11	29.73%
4 - Injury (Complaint of Pain)	21	56.76%

By Crash Type



Type of Crash	Count	%
- - Not Stated	0	0.00%
A - Head-On	2	5.41%
B - Sideswipe	4	10.81%
C - Rear End	7	18.92%
D - Broadside	10	27.03%
E - Hit Object	0	0.00%
F - Overturned	1	2.70%
G - Vehicle/Pedestrian	7	18.92%
H - Other	6	16.22%

By Day of Week and Time

Number of Crashes per Day of Week per Time

37 Crashes

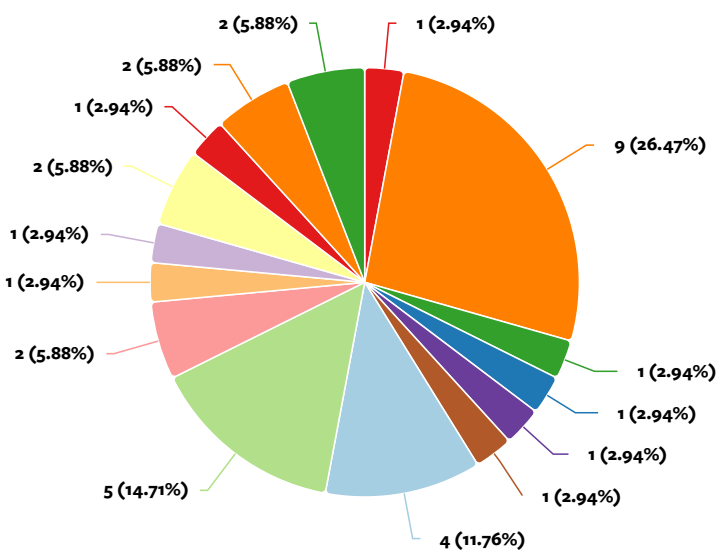
	1 - Monday	2 - Tuesday	3 - Wednesday	4 - Thursday	5 - Friday	6 - Saturday	7 - Sunday
25:00 - Unknown	0	0	0	0	0	0	0
21:00~23:59	0	0	0	0	2	0	0
18:00~20:59	2	0	1	0	2	2	1
15:00~17:59	0	0	0	3	1	1	0
12:00~14:59	3	1	1	1	1	3	2
09:00~11:59	0	0	1	2	1	1	0
06:00~08:59	0	2	1	1	0	1	0
03:00~05:59	0	0	0	0	0	0	0
00:00~02:59	0	0	0	0	0	0	0

0 1 2 3

By Primary Crash Factor (PCF) Violation

Number of Crashes by PCF Violation

34 Crashes

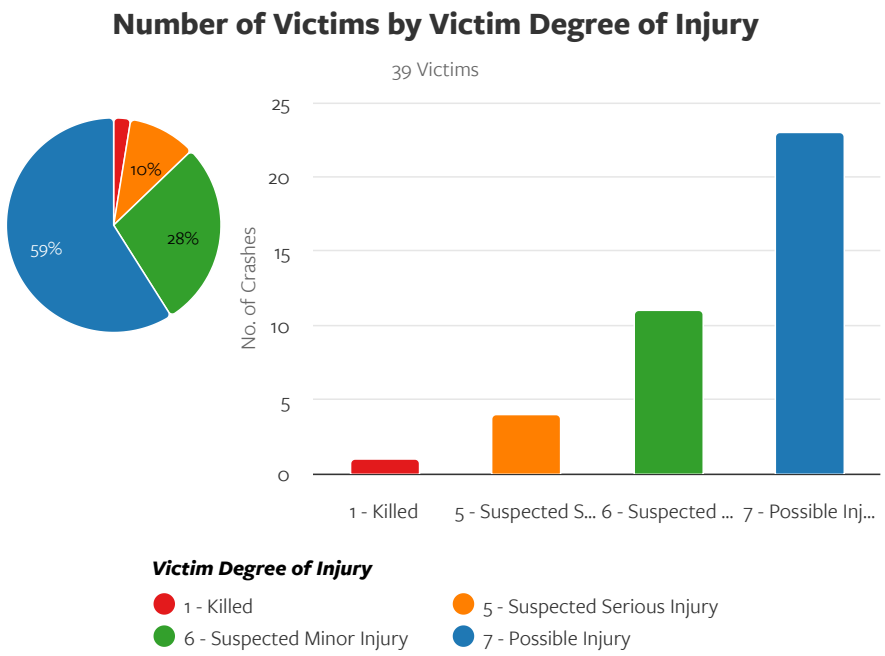


PCF Violation

- 01 - Driving or Bicycling Under the Influence of Alcohol or Drug
- 03 - Unsafe Speed
- 04 - Following Too Closely
- 05 - Wrong Side of Road
- 06 - Improper Passing
- 07 - Unsafe Lane Change
- 08 - Improper Turning
- 09 - Automobile Right of Way
- 10 - Pedestrian Right of Way
- 11 - Pedestrian Violation
- 12 - Traffic Signals and Signs
- 17 - Other Hazardous Violation
- 18 - Other Than Driver (or Pedestrian)
- 21 - Unsafe Starting or Backing
- 22 - Other Improper Driving

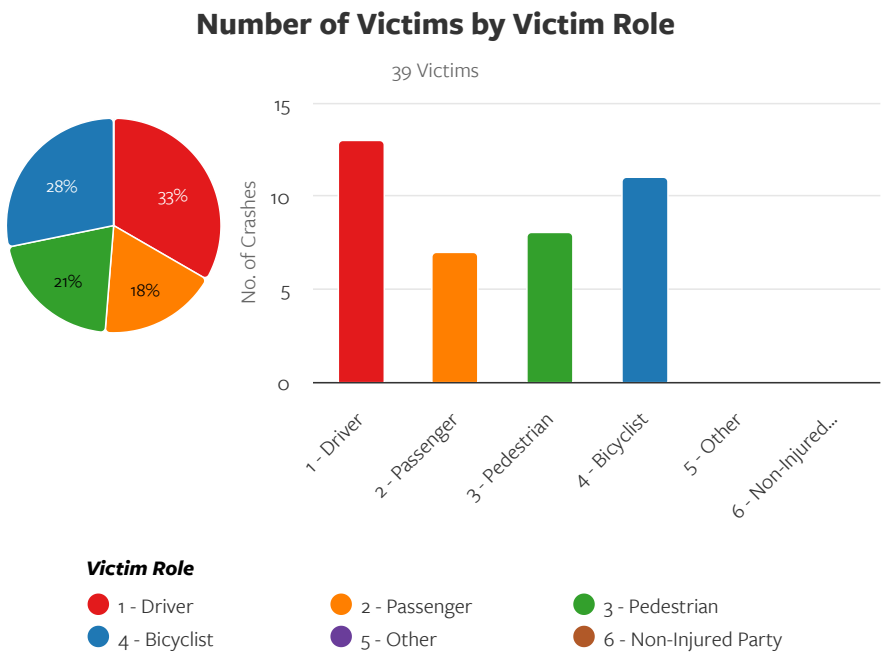
Victim Summary

By Victim Degree of Injury



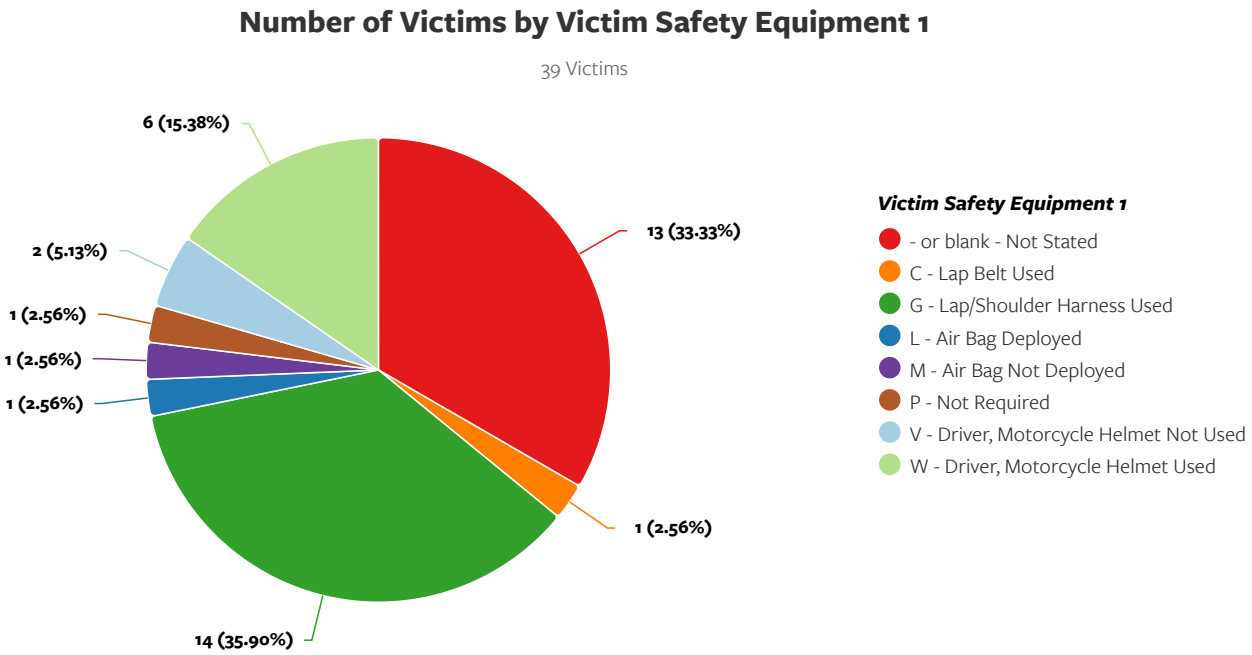
Victim Degree of Injury	Count	%
1 - Killed	1	2.56%
5 - Suspected Serious Injury	4	10.26%
6 - Suspected Minor Injury	11	28.21%
7 - Possible Injury	23	58.97%

By Victim Role

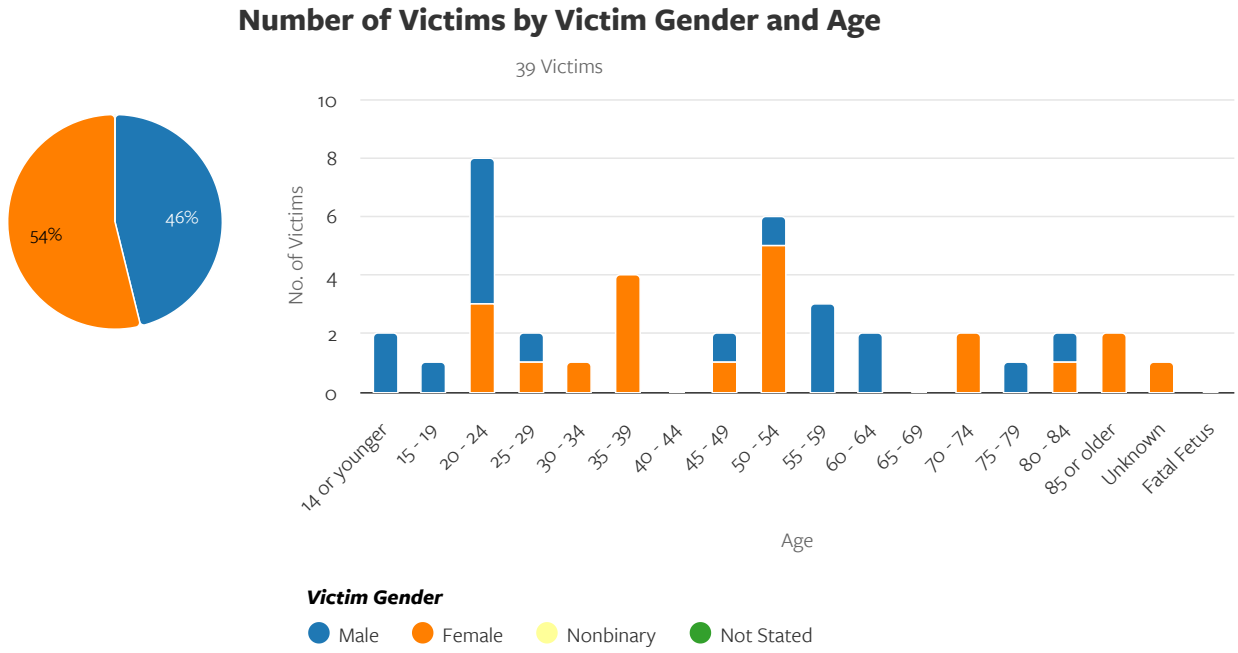


Victim Role	Count	%
1 - Driver	13	33.33%
2 - Passenger	7	17.95%
3 - Pedestrian	8	20.51%
4 - Bicyclist	11	28.21%
5 - Other	0	0.00%
6 - Non-Injured Party	0	0.00%

By Victim Safety Equipment 1



By Victim Gender and Age

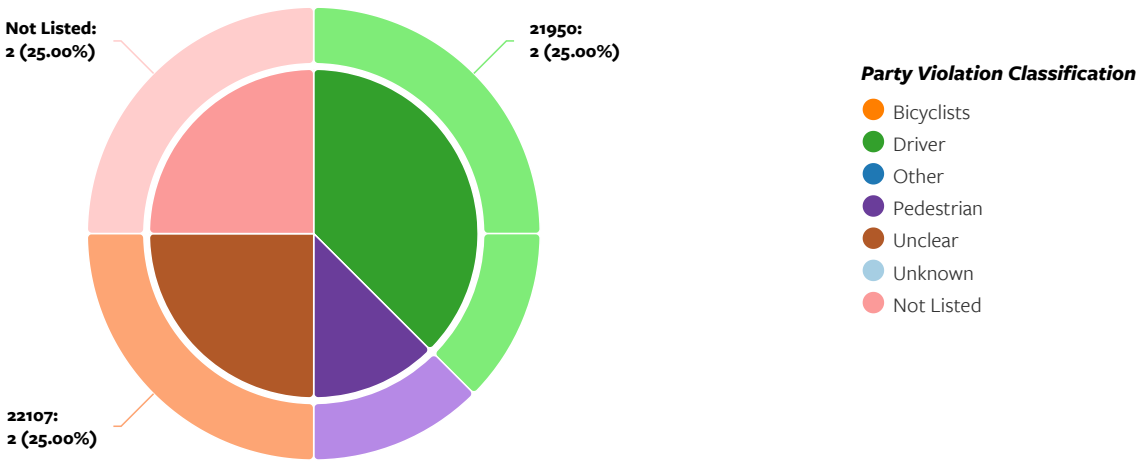


Ped Crash Summary

By Type of Violation

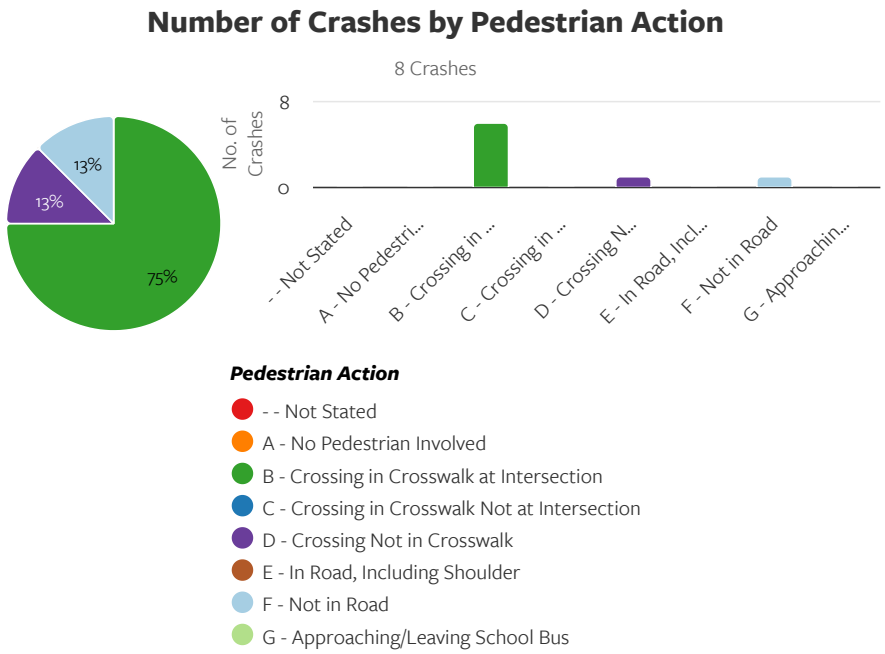
Number of Crashes by Type of Violation

8 Crashes



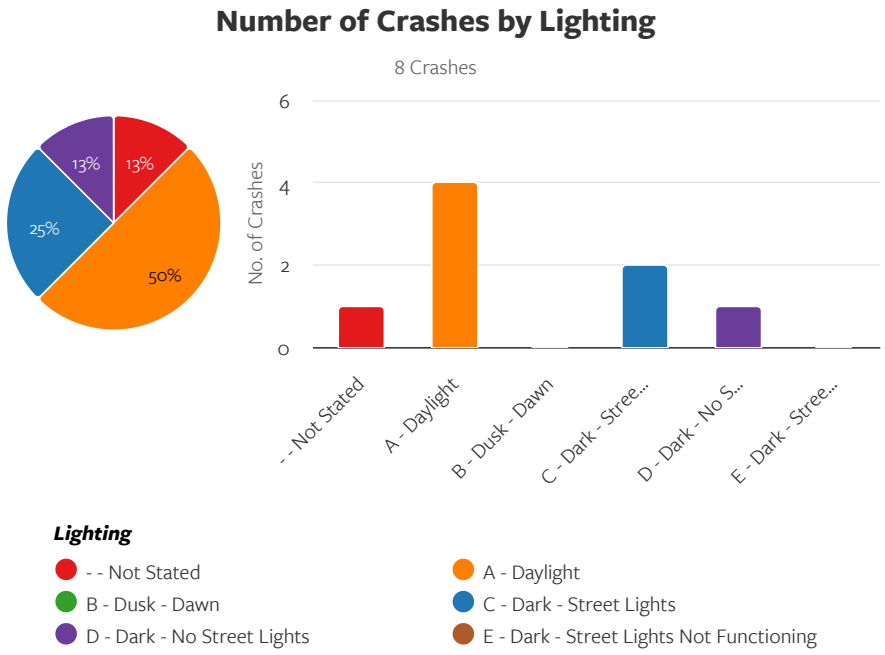
Party Violation Classification	Type of Violation	Description	Count	%
Driver	21950	Driver failure to yield right-of-way to pedestrians at a marked or unmarked crosswalk	2	25.00%
Unclear	22107	Unsafe turning or moving right or left on a roadway Turning without signaling	2	25.00%
Not Listed	Not Listed	Violation code was not included in the crash	2	25.00%
Driver	22106	Unsafe starting or backing of a vehicle on a highway	1	12.50%
Pedestrian	21954	Pedestrian failure to yield right-of-way to vehicles when crossing outside of a marked or unmarked crosswalk	1	12.50%

By Pedestrian Action



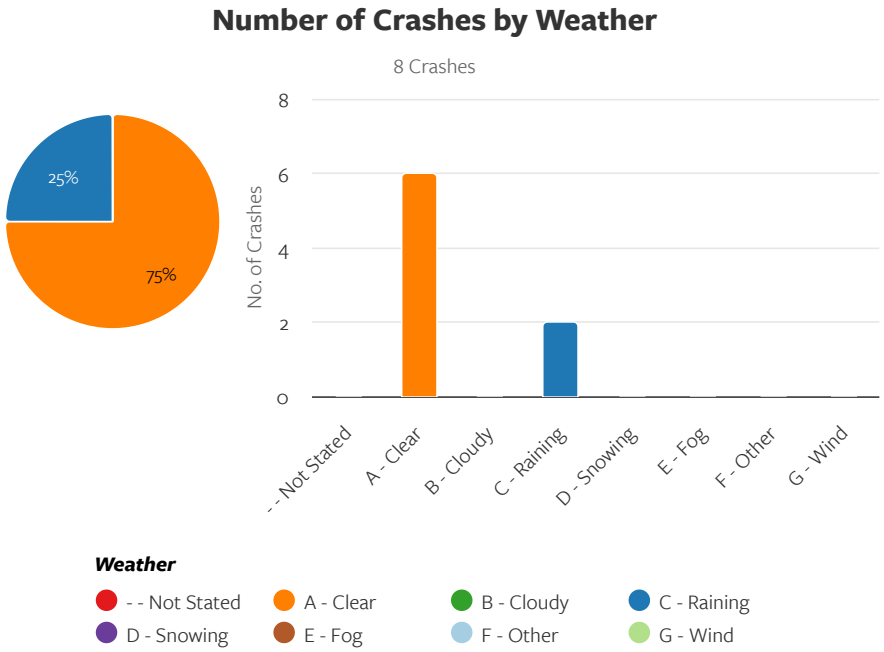
Pedestrian Action	Count	%
- - Not Stated	0	0.00%
A - No Pedestrian Involved	0	0.00%
B - Crossing in Crosswalk at Intersection	6	75.00%
C - Crossing in Crosswalk Not at Intersection	0	0.00%
D - Crossing Not in Crosswalk	1	12.50%
E - In Road, Including Shoulder	0	0.00%
F - Not in Road	1	12.50%
G - Approaching/Leaving School Bus	0	0.00%

By Lighting



Lighting	Count	%
- - Not Stated	1	12.50%
A - Daylight	4	50.00%
B - Dusk - Dawn	0	0.00%
C - Dark - Street Lights	2	25.00%
D - Dark - No Street Lights	1	12.50%
E - Dark - Street Lights Not Functioning	0	0.00%

By Weather



Weather	Count	%
- - Not Stated	0	0.00%
A - Clear	6	75.00%
B - Cloudy	0	0.00%
C - Raining	2	25.00%
D - Snowing	0	0.00%
E - Fog	0	0.00%
F - Other	0	0.00%
G - Wind	0	0.00%

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 5737844

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	05/25/2012 10:01
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	90.00 ft South
State Highway	No
Geocoded Location	36.9809602, -121.9553731

Type of Crash	H - Other
Motor Vehicle Involved With	J - Other Object
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	22 - Other Improper Driving
Weather	B - Cloudy
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	-	K - Parking Maneuver

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	2 - Passenger	F - Female	88	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 5769463

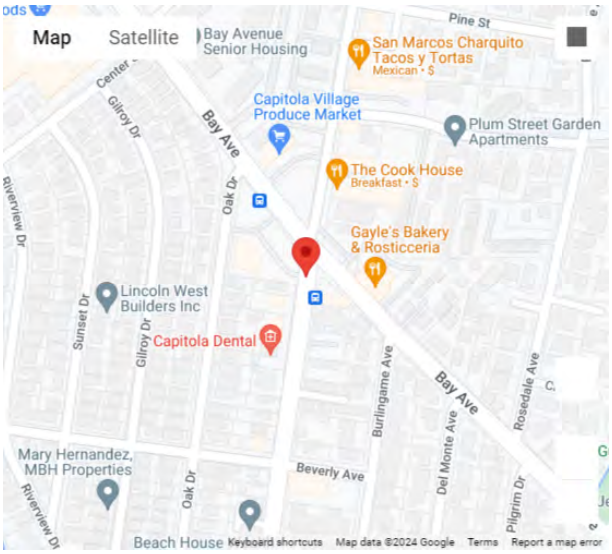
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	07/30/2012 12:40
Location (Intersection)	Capitola Av & Bay Av
Dist. & Dir. from Intersection	80.00 ft West
State Highway	No
Geocoded Location	36.9784681, -121.9531876

Type of Crash	C - Rear End
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	01 - Driving or Bicycling Under the Influence of Alcohol or Drug
Weather	A - Clear
Alcohol Involved	Yes

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 3

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	Yes	East	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	No	East	A - Stopped
3	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	No	-	A - Stopped

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	F - Female	23	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 5926906

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	02/02/2013 14:01
Location (Intersection)	Rt 1 & Bay Av
Dist. & Dir. from Intersection	200.00 ft North
State Highway Info	Route Number 1 Side of Hwy S Postmile 13.230 Location Type H - Highway
Geocoded Location	36.983175, -121.957233

Type of Crash	C - Rear End
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	04 - Following Too Closely
Weather	B - Cloudy
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	No	South	H - Slowing/Stopping

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	F - Female	23	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 6487941

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	05/09/2014 20:40
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9811, -121.95551

Type of Crash	D - Broadside
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	12 - Traffic Signals and Signs
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	West	E - Making Left Turn

Victims: 2

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	2 - Passenger	M - Male	20	7 - Possible Injury
2	2 - Passenger	M - Male	6	7 - Possible Injury

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Item 9 A.

Crash Details for: Case ID 6494114

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	04/30/2014 12:20
Location (Intersection)	Bay Av & Capitola Av
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.97867, -121.9531299

Type of Crash	C - Rear End
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	2 - Injury (Severe)
PCF Violation Category	18 - Other Than Driver (or Pedestrian)
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	Yes

Map View

Street View

Parties: 3

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	No	East	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	East	B - Proceeding Straight
3	3 - Parked Vehicle	F - Truck or Truck Tractor	No	-	O - Parked

Victims: 2

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	82	5 - Suspected Serious Injury
2	1 - Driver	F - Female	36	7 - Possible Injury

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Item 9 A.

Crash Details for: Case ID 6940786

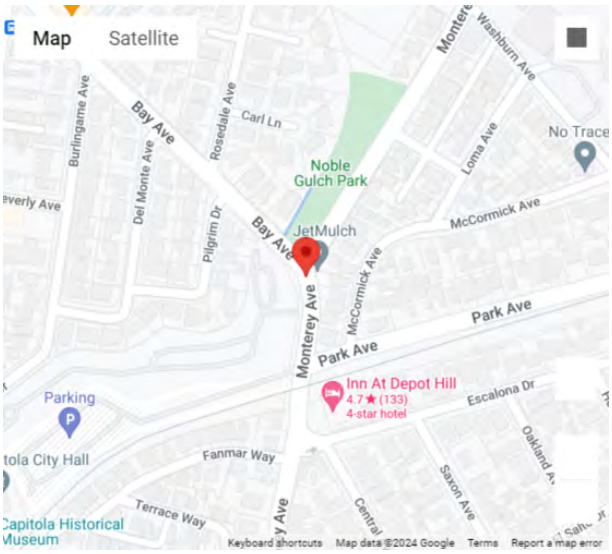
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	06/07/2015 12:39
Location (Intersection)	Monterey Av & Bay Av
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.97634, -121.9502099

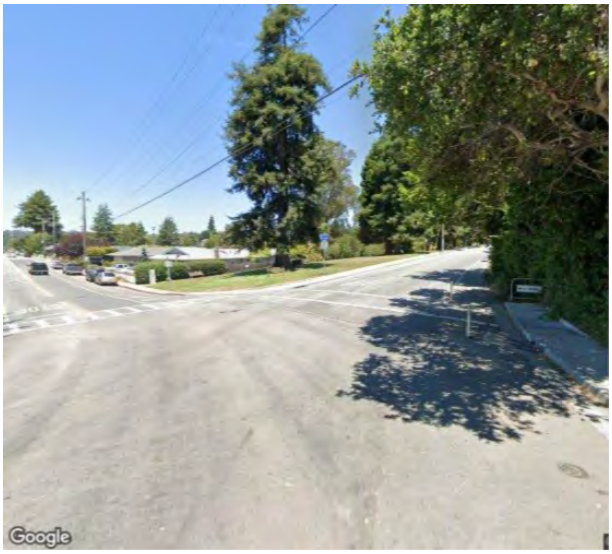
Type of Crash	D - Broadside
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	09 - Automobile Right of Way
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	**Bicycle Crash**	No
Motorcycle Crash	No	**Truck Crash**	No

Map View



Street View



Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	West	D - Making Right Turn
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	1 - Driver	F - Female	82	6 - Suspected Minor Injury

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Item 9 A.

Crash Details for: Case ID 7075959

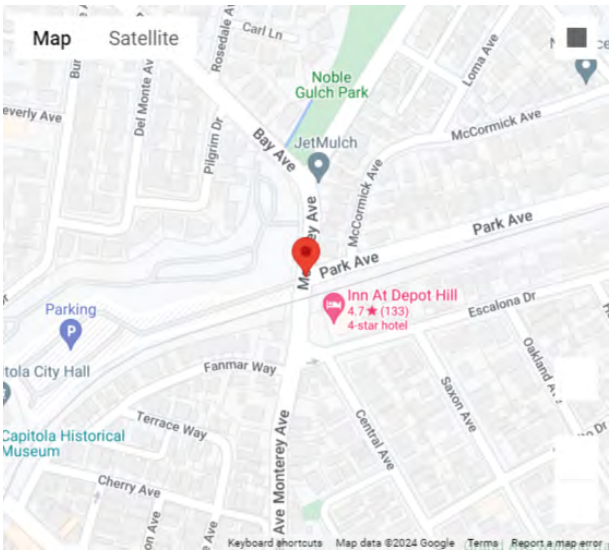
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	09/09/2015 20:08
Location (Intersection)	Monterey Av & Park Av
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.97564, -121.95022

Type of Crash	A - Head-On
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	09 - Automobile Right of Way
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	E - Making Left Turn
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	1 - Driver	F - Female	52	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 8373999

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	04/29/2017 18:10
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9811, -121.95551

Type of Crash	G - Vehicle/Pedestrian
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	- - Not Stated
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	2 - Passenger	M - Male	18	6 - Suspected Minor Injury

Item 9 A.

Crash Details for: Case ID 8506493

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	11/25/2017 12:01
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	40.00 ft North
State Highway	No
Geocoded Location	36.9811865, -121.9555946

Type of Crash	C - Rear End
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	03 - Unsafe Speed
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	H - Slowing/Stopping
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	South	A - Stopped

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	1 - Driver	F - Female	20	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 8593314

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	02/13/2018 07:50
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	203.00 ft North
State Highway	No
Geocoded Location	36.9815369, -121.9559402

Type of Crash	D - Broadside
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	09 - Automobile Right of Way
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	Yes	South	L - Entering Traffic
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	South	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	1 - Driver	F - Female	39	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 9174869

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	10/08/2020 16:00
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9810982, -121.955513

Type of Crash	D - Broadside
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	03 - Unsafe Speed
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	West	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	2 - Passenger	F - Female	32	7 - Possible Injury

Item 9 A.

Crash Details for: Case ID 9355886

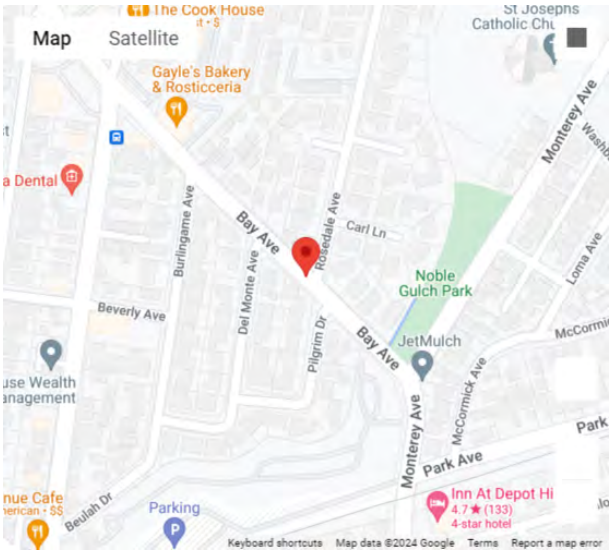
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	09/24/2021 22:16
Location (Intersection)	Bay Av & Rosedale Av
Dist. & Dir. from Intersection	44.00 ft North
State Highway	No
Geocoded Location	36.9772072, -121.9512329

Type of Crash	B - Sideswipe
Motor Vehicle Involved With	E - Parked Motor Vehicle
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	07 - Unsafe Lane Change
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	M - Other Unsafe Turning
2	3 - Parked Vehicle	A - Passenger Car/Station Wagon	No	-	O - Parked

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	2 - Passenger	M - Male	28	6 - Suspected Minor Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 9472208

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	05/07/2022 10:04
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9810982, -121.9555054

Type of Crash	B - Sideswipe
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	09 - Automobile Right of Way
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	E - Making Left Turn

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	F - Female	52	7 - Possible Injury

Item 9 A.

Crash Details for: Case ID 9495729

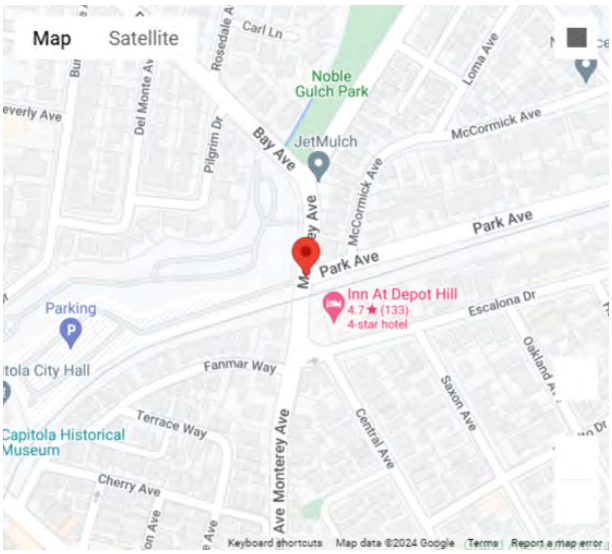
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	08/01/2022 13:16
Location (Intersection)	Monterey Av & Park Av
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9756355, -121.9502182

Type of Crash	A - Head-On
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	03 - Unsafe Speed
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	E - Making Left Turn
2	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	No	North	A - Stopped

Victims: 3

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	2 - Passenger	M - Male	22	0 - No Injury
1	2 - Passenger	F - Female	19	0 - No Injury
2	1 - Driver	M - Male	59	7 - Possible Injury

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Item 9 A.

Crash Details for: Case ID 9625429

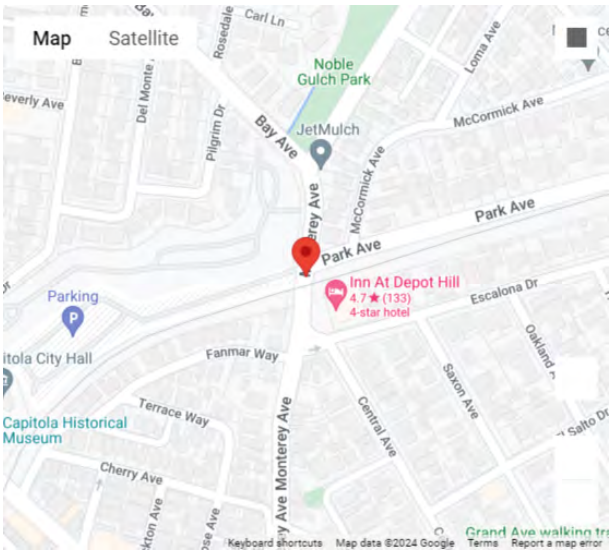
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	08/11/2023 15:10
Location (Intersection)	Monterey Av & Park Av
Dist. & Dir. from Intersection	35.00 ft South
State Highway	No
Geocoded Location	36.975544, -121.9502335

Type of Crash	C - Rear End
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	03 - Unsafe Speed
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	Yes	North	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	A - Stopped

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	1 - Driver	F - Female	26	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 9646836

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	10/12/2023 15:11
Location (Intersection)	Bay Av & Burlingame Av
Dist. & Dir. from Intersection	47.00 ft North
State Highway	No
Geocoded Location	36.978157, -121.9524689

Type of Crash	D - Broadside
Motor Vehicle Involved With	C - Other Motor Vehicle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	09 - Automobile Right of Way
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 3

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	E - Making Left Turn
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	South	B - Proceeding Straight
3	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	A - Stopped

Victims: 7

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	2 - Passenger	M - Male	1	0 - No Injury

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	2 - Passenger	M - Male	5	0 - No Injury
1	2 - Passenger	F - Female	12	0 - No Injury
1	2 - Passenger	M - Male	36	0 - No Injury
1	1 - Driver	F - Female	37	7 - Possible Injury
2	2 - Passenger	F - Female	6	0 - No Injury
3	2 - Passenger	M - Male	13	0 - No Injury

Crash List

CASE ID	Date	Time	Primary Rd	Secondary Rd	Dist & Dir from Int.	Bike	Ped	Killed	Injured
6483008	04/24/2014	11:00	Bay Av	Capitola Av	At Int	No	Yes	0	1
6487930	05/06/2014	07:21	Oak Dr	Bay Av	37 ft South	Yes	No	0	1
6511924	06/03/2014	14:04	Bay Av	Hill St	At Int	No	Yes	0	1
6748318	12/03/2014	10:41	Monterey Av	Park Av	18 ft South	No	Yes	0	1
6864222	03/19/2015	12:43	Bay Av	Capitola Av	83 ft East	No	Yes	0	1
6889427	04/04/2015	12:50	Bay Av	Bay Av 504	At Int	Yes	No	0	1
7063888	07/20/2015	19:19	Monterey Av	Park Pl	At Int	Yes	No	0	1
8152095	10/07/2016	21:28	Bay Av	Hill St	At Int	No	Yes	0	1
8339317	03/26/2017	12:07	Bay Av	Burlingame Av	90 ft North	Yes	No	0	1
90781844	07/21/2018	16:05	Bay Ave	Monterey Ave	100 ft North	Yes	No	0	1
8701088	08/13/2018	20:13	Bay Av	Hill Av	213 ft North	Yes	No	0	1
8648318	10/06/2018	19:46	Bay Av	Rt 1	218 ft South	No	Yes	1	0
9007558	11/22/2019	13:57	Monterey Av	Park Av	At Int	Yes	No	0	1
9472209	05/05/2022	17:48	Bay Av	Oak Dr	At Int	Yes	No	0	1
9495924	09/04/2022	20:42	Capitola Av	Bay Av	58 ft South	Yes	No	0	1
9534052	12/09/2022	18:24	Bay Av	Hill St	At Int	No	Yes	0	1
9549472	02/01/2023	08:15	Bay Av	Burlingame Av	At Int	Yes	No	0	1
9625425	08/24/2023	08:40	Bay Av	Hill St	At Int	No	Yes	0	1

Overview

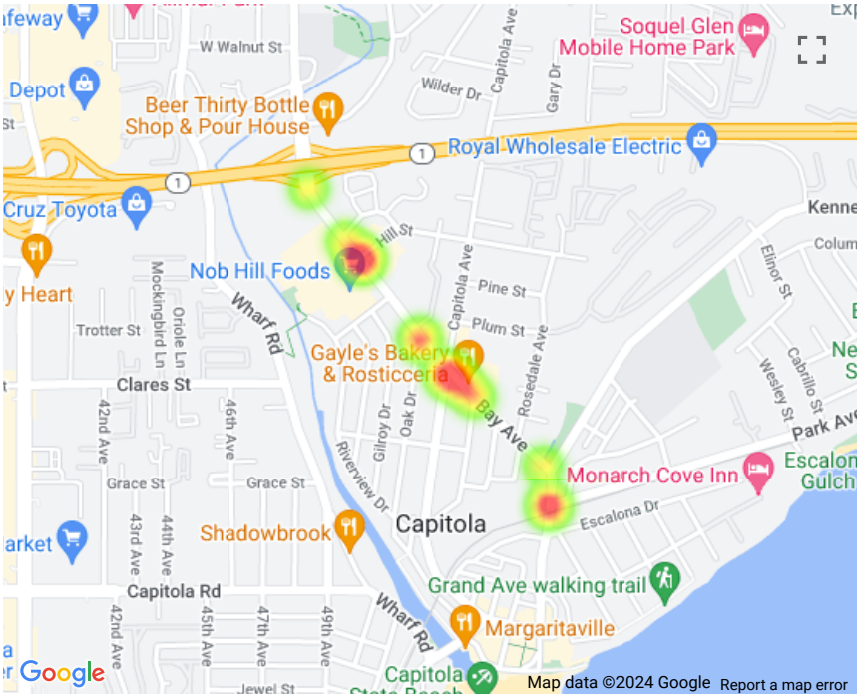
This report was created with the help of The Transportation Injury Mapping System (TIMS). TIMS has been developed by UC Berkeley SafeTREC to provide quick, easy and free access to California crash data, the Statewide Integrated Traffic Records System (SWITRS), that has been geo-coded by SafeTREC to make it easy to map crashes.

Query by Case ID(s)

User Entered SWITRS Case ID(s)

Result

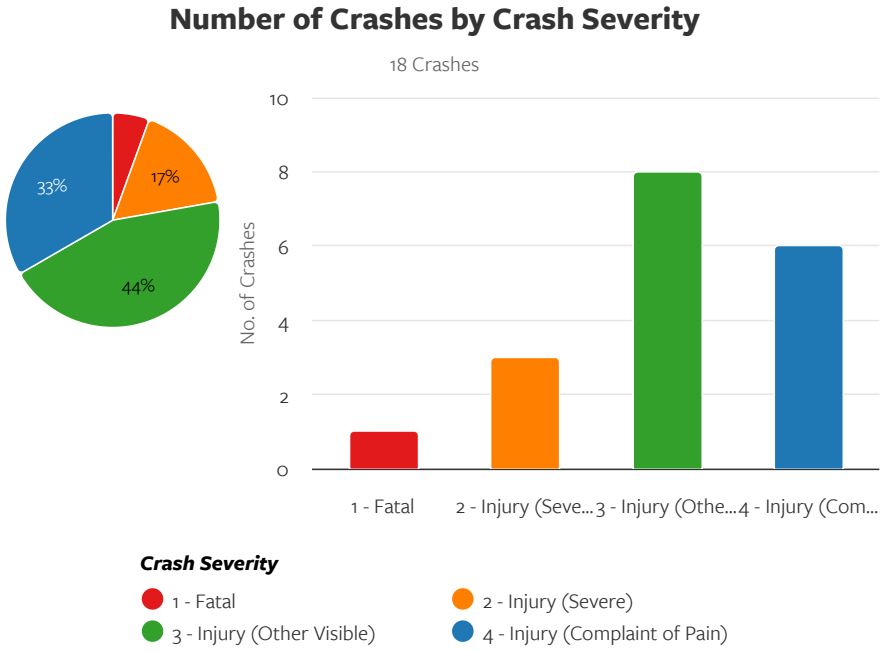
Total Crashes
18
Total Victims
1 Killed & 17 Injured
State Highway
None
Ped Involved
8 (44.4%)
Bike Involved
10 (55.6%)
Motorcycle Involved
None



18 of 18 (100%) Crashes are geocoded and mapped.

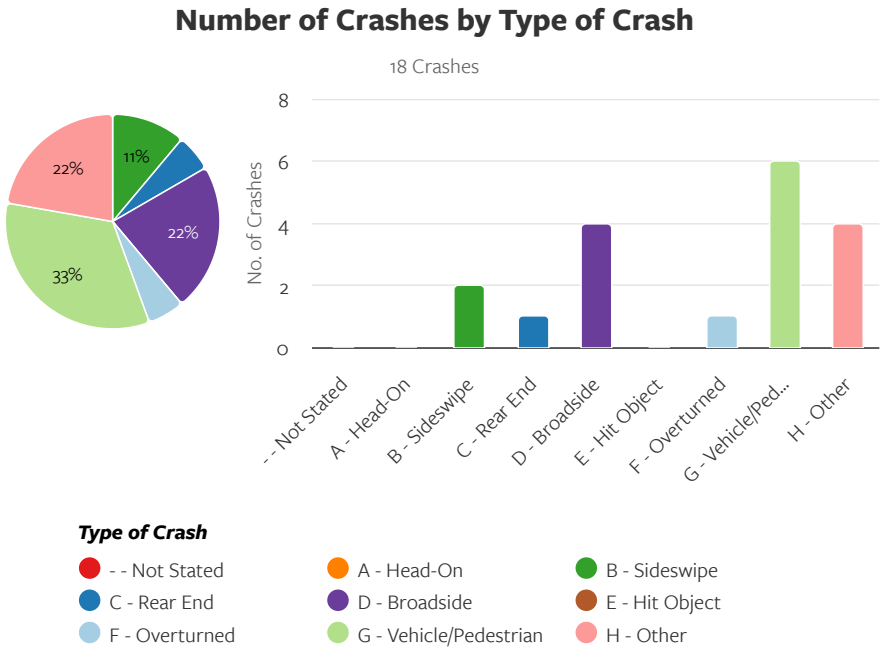
Crash Summary

By Crash Severity



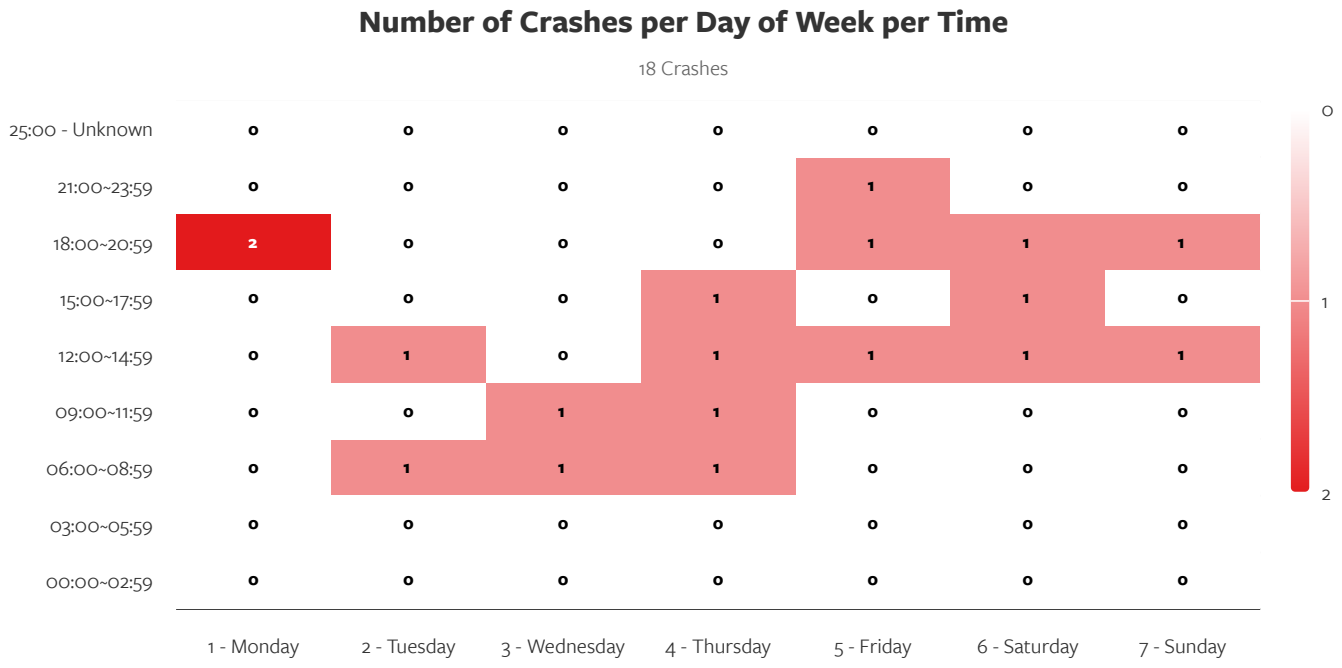
Crash Severity	Count	%
1 - Fatal	1	5.56%
2 - Injury (Severe)	3	16.67%
3 - Injury (Other Visible)	8	44.44%
4 - Injury (Complaint of Pain)	6	33.33%

By Crash Type

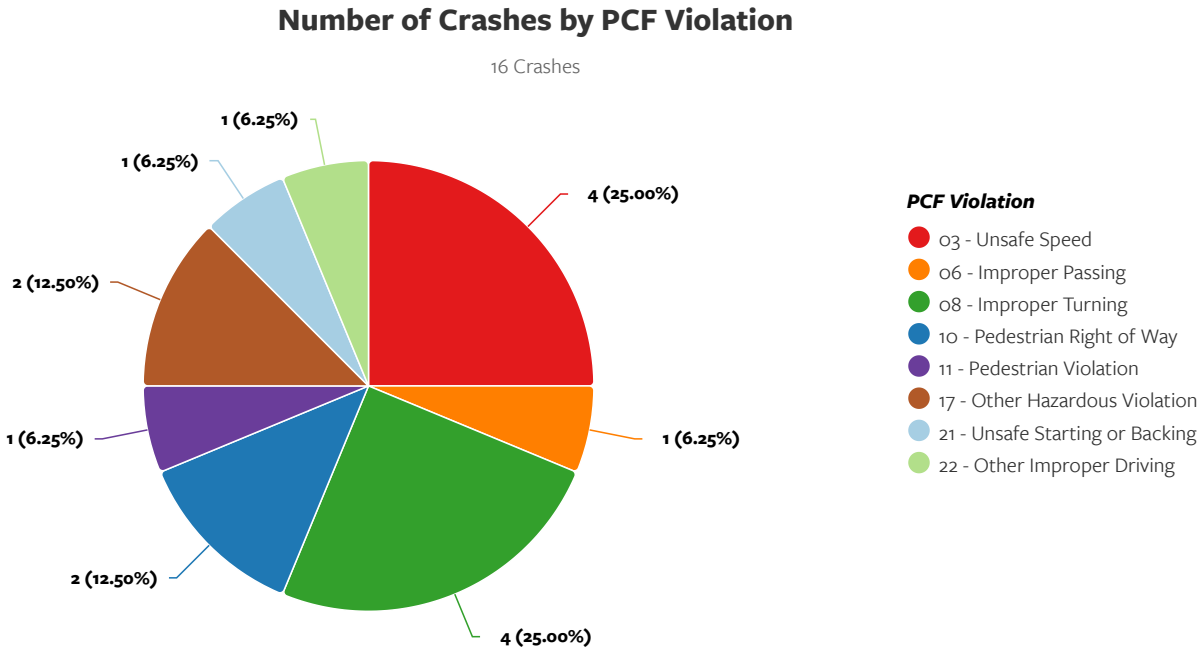


Type of Crash	Count	%
- - Not Stated	0	0.00%
A - Head-On	0	0.00%
B - Sideswipe	2	11.11%
C - Rear End	1	5.56%
D - Broadside	4	22.22%
E - Hit Object	0	0.00%
F - Overturned	1	5.56%
G - Vehicle/Pedestrian	6	33.33%
H - Other	4	22.22%

By Day of Week and Time

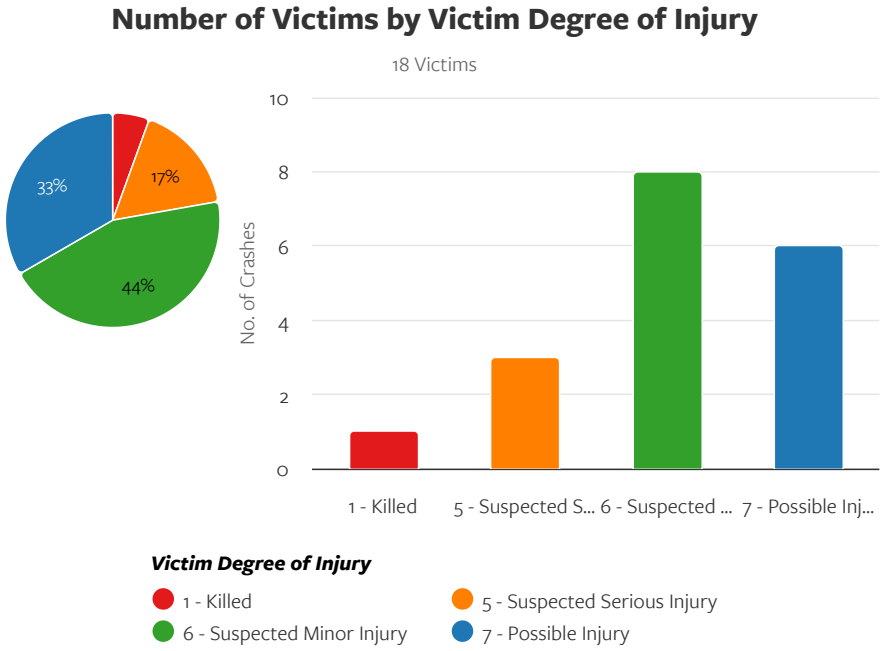


By Primary Crash Factor (PCF) Violation



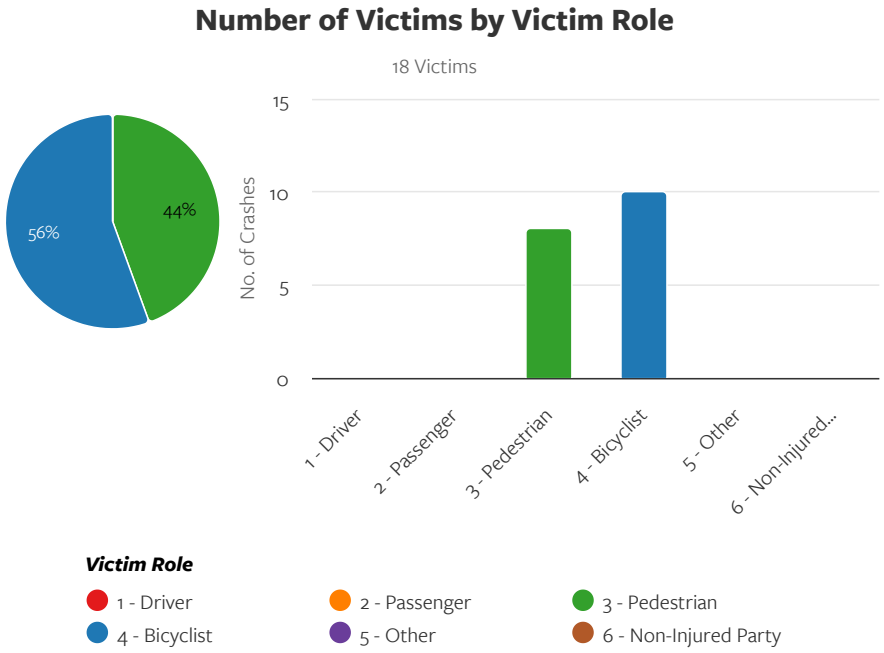
Victim Summary

By Victim Degree of Injury



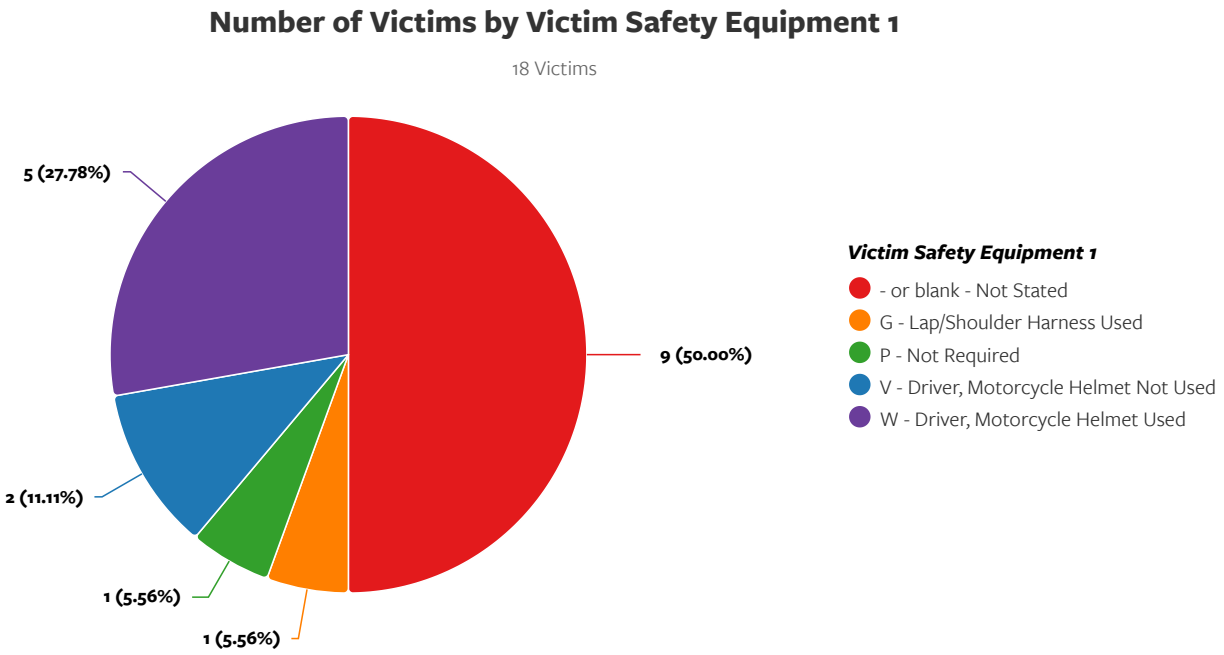
Victim Degree of Injury	Count	%
1 - Killed	1	5.56%
5 - Suspected Serious Injury	3	16.67%
6 - Suspected Minor Injury	8	44.44%
7 - Possible Injury	6	33.33%

By Victim Role

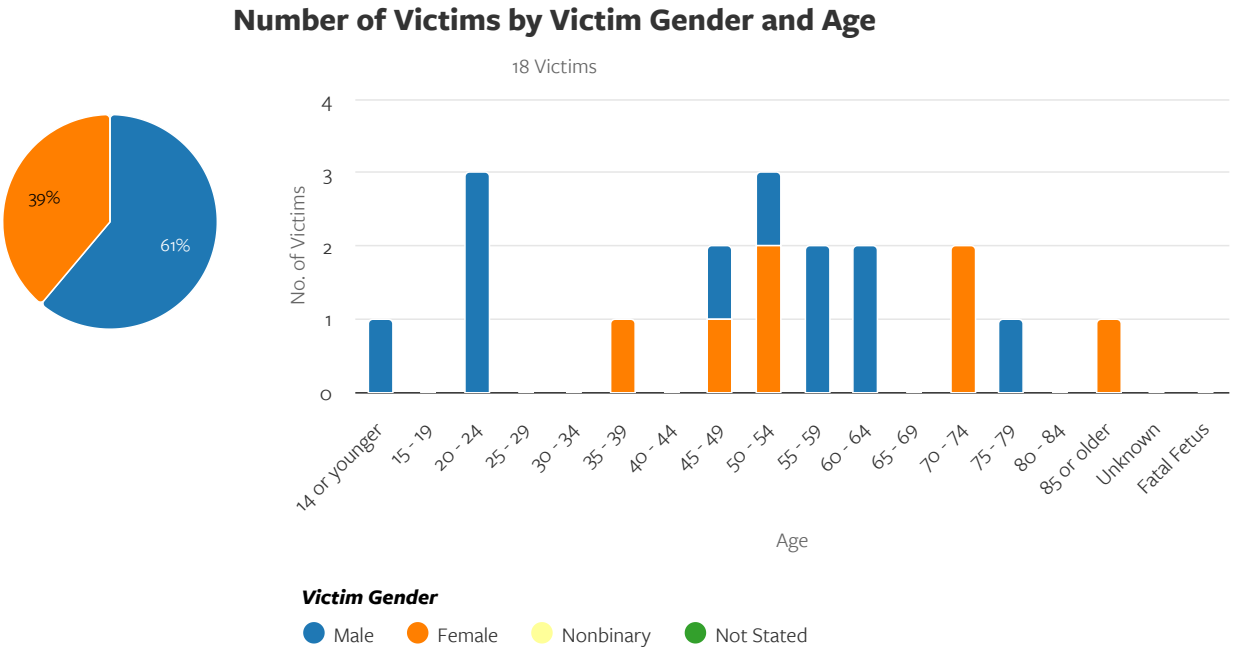


Victim Role	Count	%
1 - Driver	0	0.00%
2 - Passenger	0	0.00%
3 - Pedestrian	8	44.44%
4 - Bicyclist	10	55.56%
5 - Other	0	0.00%
6 - Non-Injured Party	0	0.00%

By Victim Safety Equipment 1



By Victim Gender and Age

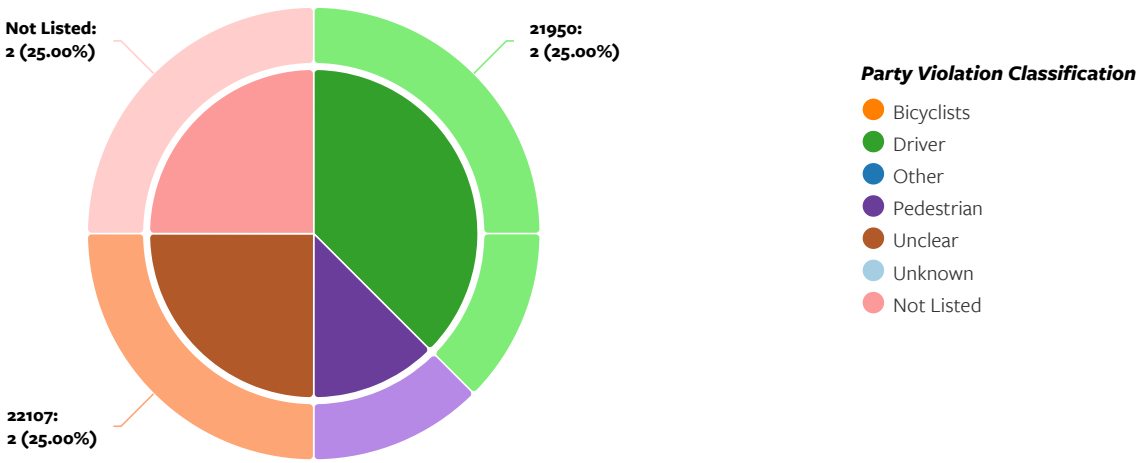


Ped Crash Summary

By Type of Violation

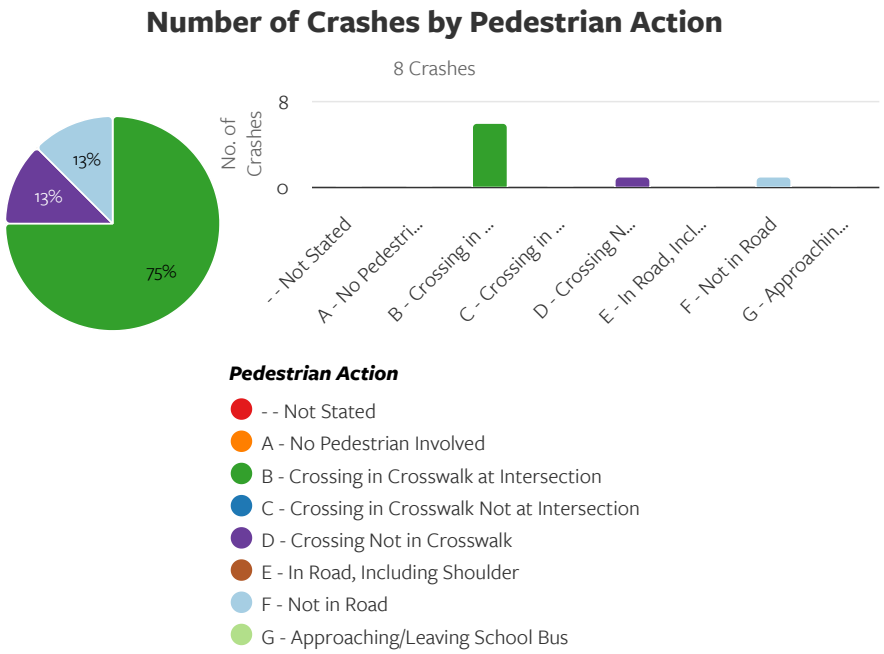
Number of Crashes by Type of Violation

8 Crashes



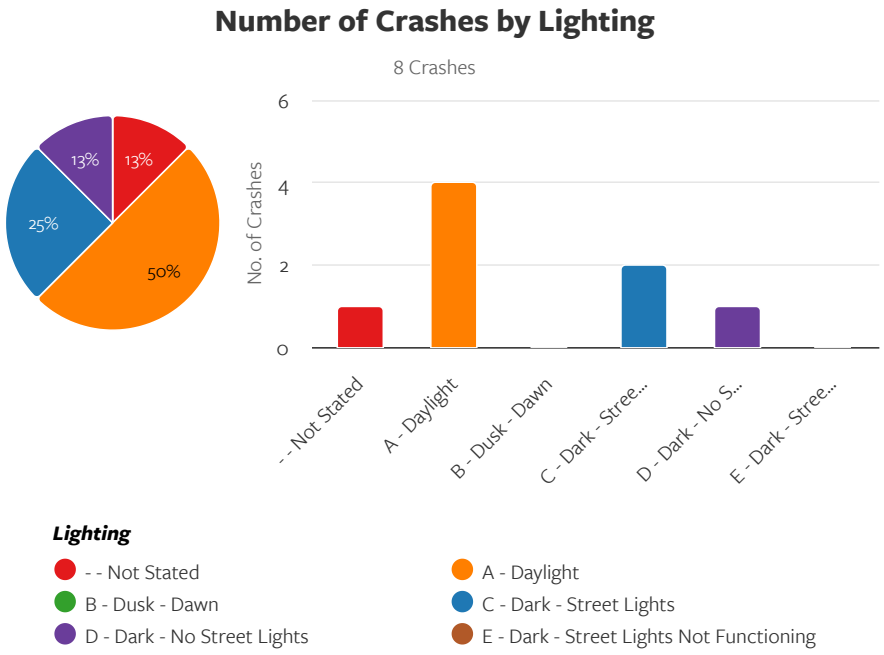
Party Violation Classification	Type of Violation	Description	Count	%
Driver	21950	Driver failure to yield right-of-way to pedestrians at a marked or unmarked crosswalk	2	25.00%
Unclear	22107	Unsafe turning or moving right or left on a roadway Turning without signaling	2	25.00%
Not Listed	Not Listed	Violation code was not included in the crash	2	25.00%
Driver	22106	Unsafe starting or backing of a vehicle on a highway	1	12.50%
Pedestrian	21954	Pedestrian failure to yield right-of-way to vehicles when crossing outside of a marked or unmarked crosswalk	1	12.50%

By Pedestrian Action



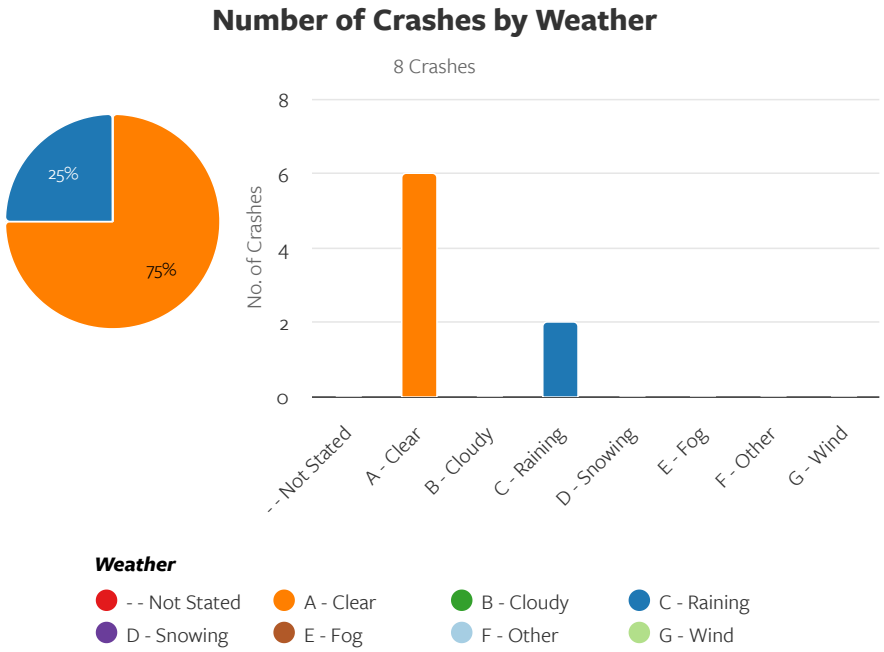
Pedestrian Action	Count	%
- - Not Stated	0	0.00%
A - No Pedestrian Involved	0	0.00%
B - Crossing in Crosswalk at Intersection	6	75.00%
C - Crossing in Crosswalk Not at Intersection	0	0.00%
D - Crossing Not in Crosswalk	1	12.50%
E - In Road, Including Shoulder	0	0.00%
F - Not in Road	1	12.50%
G - Approaching/Leaving School Bus	0	0.00%

By Lighting



Lighting	Count	%
- - Not Stated	1	12.50%
A - Daylight	4	50.00%
B - Dusk - Dawn	0	0.00%
C - Dark - Street Lights	2	25.00%
D - Dark - No Street Lights	1	12.50%
E - Dark - Street Lights Not Functioning	0	0.00%

By Weather



Weather	Count	%
- - Not Stated	0	0.00%
A - Clear	6	75.00%
B - Cloudy	0	0.00%
C - Raining	2	25.00%
D - Snowing	0	0.00%
E - Fog	0	0.00%
F - Other	0	0.00%
G - Wind	0	0.00%

Crash Diagram

Primary Street:

Secondary Street:

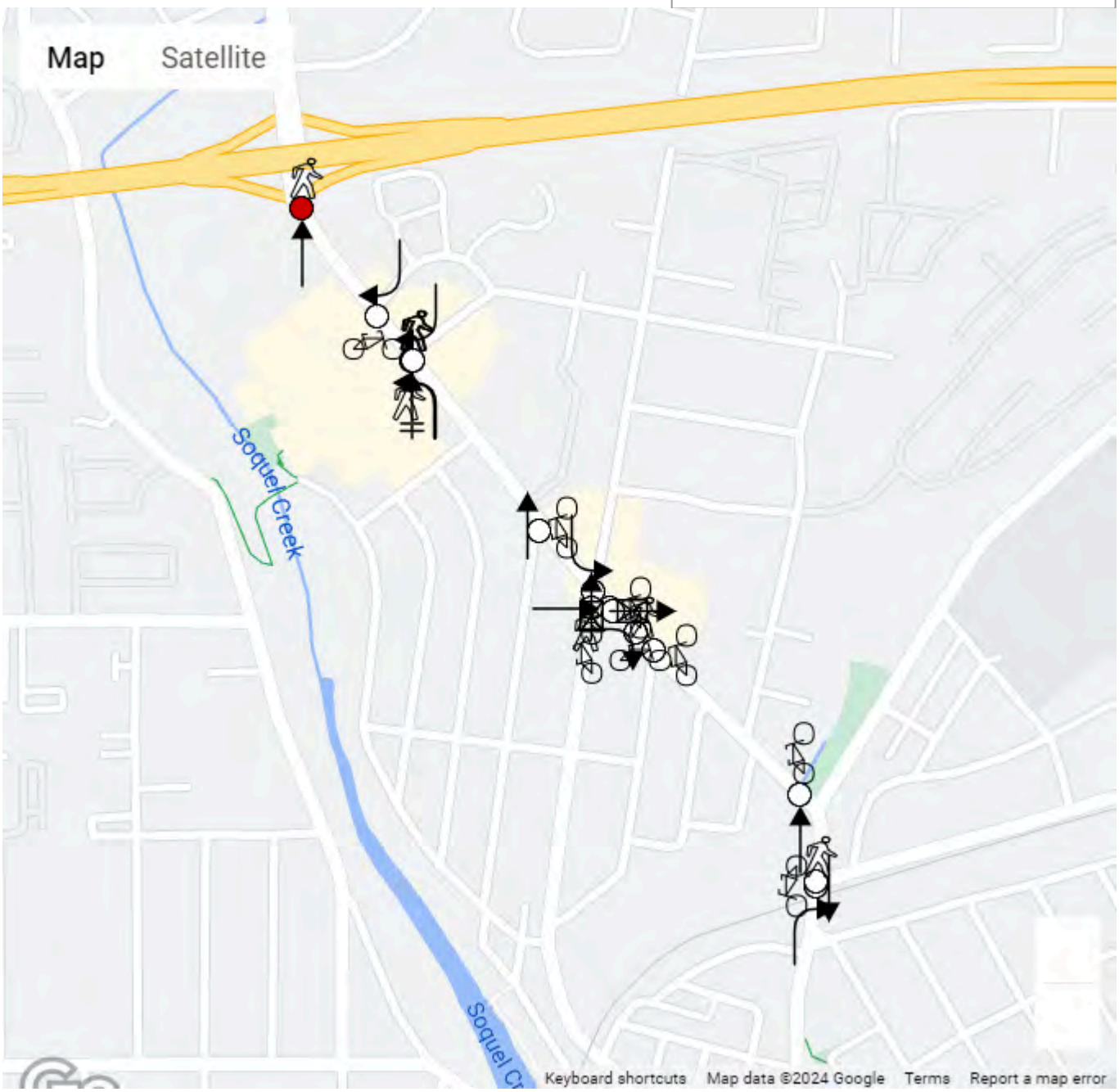
Time Period:

Agency Name:

Mapping Summary:

Fatal Crash	1
Injury Crash	15
Mapped	16
Not Drawn	2
Total	18

- Straight
- Left Turn
- Right Turn
- U-Turn
- Overturned
- Ran Off Road
- Stopped
- Parked
- Pedestrian
- Bicycle
- Object
- Fatal Crash
- Injury Crash



Date Created: 06/06/2024

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Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 6483008

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	04/24/2014 11:00
Location (Intersection)	Bay Av & Capitola Av
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.97867, -121.9531299

Type of Crash	G - Vehicle/Pedestrian
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	- - Not Stated
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	Yes	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	E - Making Left Turn
2	2 - Pedestrian	N - Pedestrian	No	South	R - Other

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	F - Female	70	7 - Possible Injury

Item 9 A.

Crash Details for: Case ID 6487930

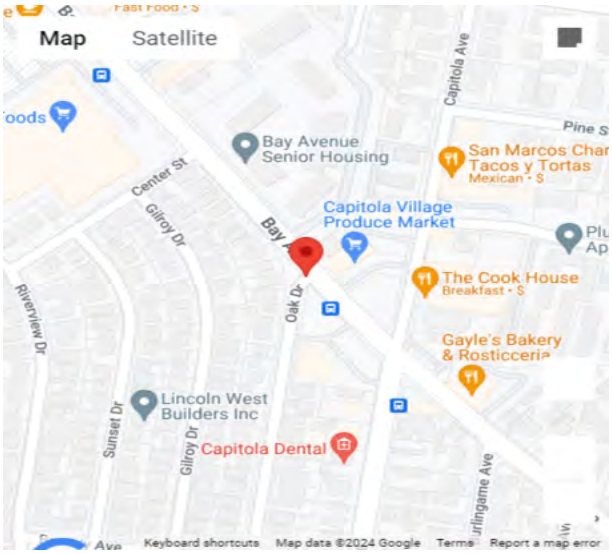
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	05/06/2014 07:21
Location (Intersection)	Oak Dr & Bay Av
Dist. & Dir. from Intersection	37.00 ft South
State Highway	No
Geocoded Location	36.9793094, -121.9538479

Type of Crash	B - Sideswipe
Motor Vehicle Involved With	G - Bicycle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	06 - Improper Passing
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	I - Passing Other Vehicle
2	4 - Bicyclist	L - Bicycle	No	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	4 - Bicyclist	M - Male	54	7 - Possible Injury

Item 9 A.

Crash Details for: Case ID 6511924

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	06/03/2014 14:04
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9811, -121.95551

Type of Crash	G - Vehicle/Pedestrian
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	- - Not Stated
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	Yes	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	A - Stopped
2	2 - Pedestrian	N - Pedestrian	No	-	- - Not Stated

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	F - Female	36	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 6748318

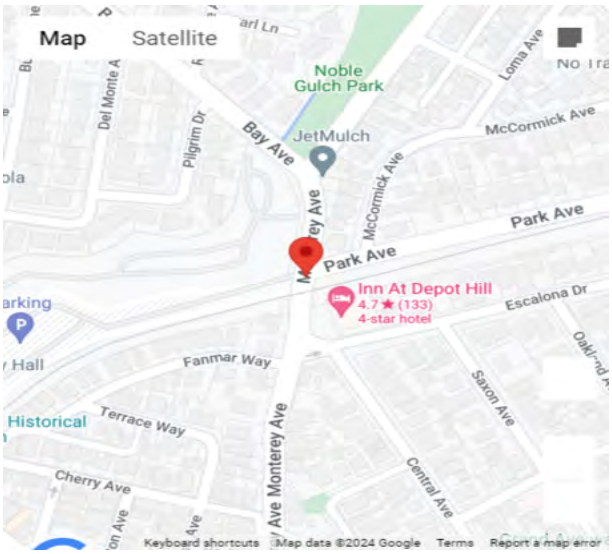
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	12/03/2014 10:41
Location (Intersection)	Monterey Av & Park Av
Dist. & Dir. from Intersection	18.00 ft South
State Highway	No
Geocoded Location	36.9755907, -121.9502255

Type of Crash	G - Vehicle/Pedestrian
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	10 - Pedestrian Right of Way
Weather	C - Raining
Alcohol Involved	No

Pedestrian Crash	Yes	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	D - Making Right Turn
2	2 - Pedestrian	N - Pedestrian	No	-	A - Stopped

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	F - Female	53	6 - Suspected Minor Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 6864222

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	03/19/2015 12:43
Location (Intersection)	Bay Av & Capitola Av
Dist. & Dir. from Intersection	83.00 ft East
State Highway	No
Geocoded Location	36.9785132, -121.9529236

Type of Crash	G - Vehicle/Pedestrian
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	21 - Unsafe Starting or Backing
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	Yes	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	G - Backing
2	2 - Pedestrian	N - Pedestrian	No	East	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	M - Male	62	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 6889427

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	04/04/2015 12:50
Location (Intersection)	Bay Av & Bay Av 504
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9784767, -121.9528824

Type of Crash	H - Other
Motor Vehicle Involved With	G - Bicycle
Crash Severity	2 - Injury (Severe)
PCF Violation Category	17 - Other Hazardous Violation
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	3 - Parked Vehicle	A - Passenger Car/Station Wagon	Yes	North	O - Parked
2	4 - Bicyclist	L - Bicycle	No	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	4 - Bicyclist	M - Male	21	5 - Suspected Serious Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 7063888

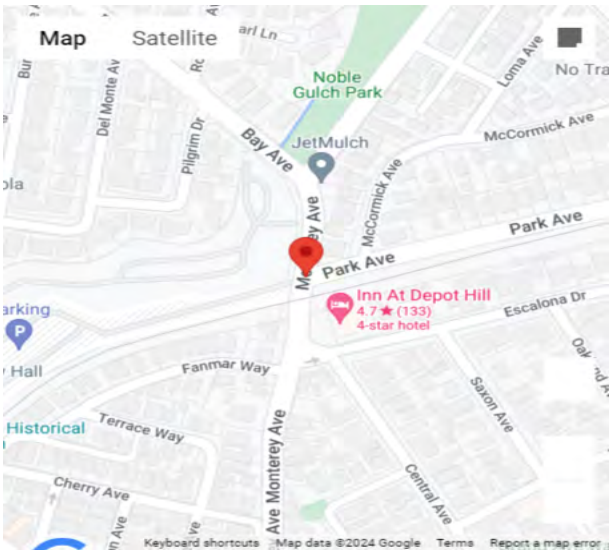
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	07/20/2015 19:19
Location (Intersection)	Monterey Av & Park Pl
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.97564, -121.95022

Type of Crash	H - Other
Motor Vehicle Involved With	G - Bicycle
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	17 - Other Hazardous Violation
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	3 - Parked Vehicle	A - Passenger Car/Station Wagon	Yes	-	O - Parked
2	4 - Bicyclist	L - Bicycle	No	-	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	4 - Bicyclist	M - Male	46	6 - Suspected Minor Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 8152095

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	10/07/2016 21:28
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9811, -121.95551

Type of Crash	D - Broadside
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	08 - Improper Turning
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	Yes	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	E - Making Left Turn
2	2 - Pedestrian	N - Pedestrian	No	West	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	F - Female	53	7 - Possible Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 8339317

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	03/26/2017 12:07
Location (Intersection)	Bay Av & Burlingame Av
Dist. & Dir. from Intersection	90.00 ft North
State Highway	No
Geocoded Location	36.9782415, -121.952572

Type of Crash	H - Other
Motor Vehicle Involved With	G - Bicycle
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	22 - Other Improper Driving
Weather	B - Cloudy
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	East	O - Parked
2	4 - Bicyclist	L - Bicycle	No	East	- - Not Stated

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	4 - Bicyclist	M - Male	61	6 - Suspected Minor Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 90781844

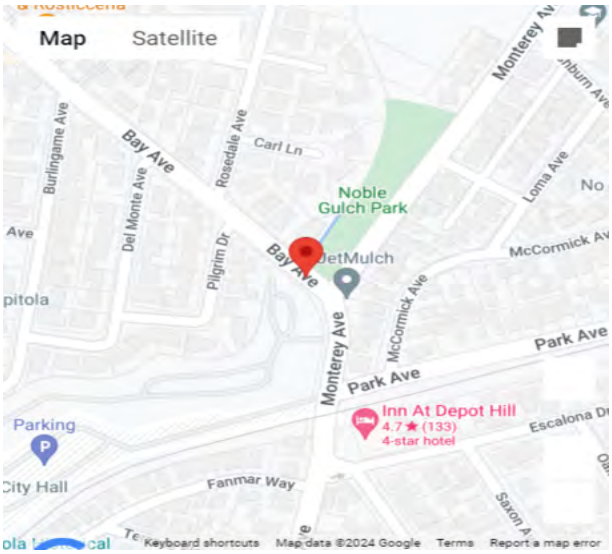
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	07/21/2018 16:05
Location (Intersection)	Bay Ave & Monterey Ave
Dist. & Dir. from Intersection	100.00 ft North
State Highway	No
Geocoded Location	36.9765549, -121.9504242

Type of Crash	C - Rear End
Motor Vehicle Involved With	G - Bicycle
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	03 - Unsafe Speed
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	4 - Bicyclist	L - Bicycle	Yes	North	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	H - Slowing/Stopping

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	4 - Bicyclist	M - Male	23	6 - Suspected Minor Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 8701088

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	08/13/2018 20:13
Location (Intersection)	Bay Av & Hill Av
Dist. & Dir. from Intersection	213.00 ft North
State Highway	No
Geocoded Location	36.9815598, -121.9559631

Type of Crash	D - Broadside
Motor Vehicle Involved With	G - Bicycle
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	08 - Improper Turning
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	South	D - Making Right Turn
2	4 - Bicyclist	L - Bicycle	No	South	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	4 - Bicyclist	M - Male	22	7 - Possible Injury

Item 9 A.

Crash Details for: Case ID 8648318

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	10/06/2018 19:46
Location (Intersection)	Bay Av & Rt 1
Dist. & Dir. from Intersection	218.00 ft South
State Highway	No
Geocoded Location	36.9826889, -121.9569473

Type of Crash	G - Vehicle/Pedestrian
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	1 - Fatal
PCF Violation Category	11 - Pedestrian Violation
Weather	A - Clear
Alcohol Involved	Yes

Pedestrian Crash	Yes	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	2 - Pedestrian	N - Pedestrian	Yes	-	R - Other
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	3 - Pedestrian	M - Male	59	1 - Killed

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 9007558

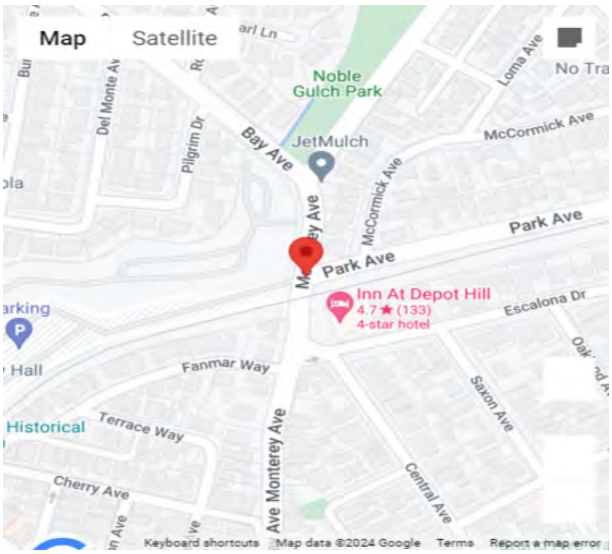
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	11/22/2019 13:57
Location (Intersection)	Monterey Av & Park Av
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9756393, -121.9502182

Type of Crash	B - Sideswipe
Motor Vehicle Involved With	G - Bicycle
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	08 - Improper Turning
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	4 - Bicyclist	L - Bicycle	Yes	South	E - Making Left Turn
2	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	No	South	B - Proceeding Straight

Victims: 2

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	4 - Bicyclist	M - Male	77	6 - Suspected Minor Injury
2	2 - Passenger	F - Female	0	0 - No Injury

Item 9 A.

Crash Details for: Case ID 9472209

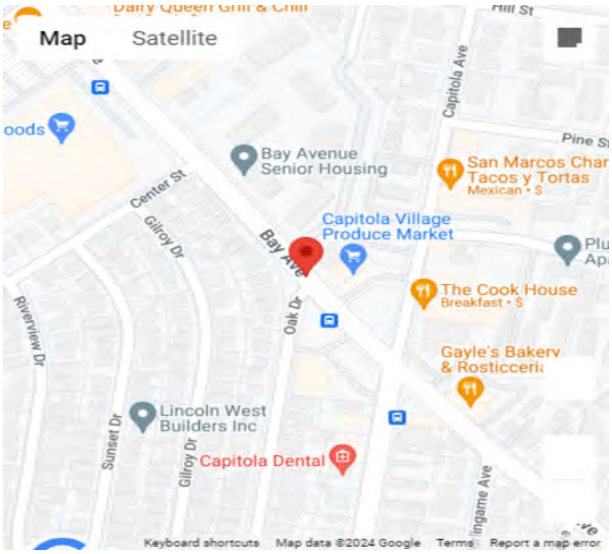
Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	05/05/2022 17:48
Location (Intersection)	Bay Av & Oak Dr
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9794083, -121.9538269

Type of Crash	H - Other
Motor Vehicle Involved With	- - Not Stated
Crash Severity	2 - Injury (Severe)
PCF Violation Category	03 - Unsafe Speed
Weather	A - Clear
Alcohol Involved	Yes

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View



Street View

Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	4 - Bicyclist	L - Bicycle	Yes	South	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	4 - Bicyclist	M - Male	59	5 - Suspected Serious Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 9495924

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	09/04/2022 20:42
Location (Intersection)	Capitola Av & Bay Av
Dist. & Dir. from Intersection	58.00 ft South
State Highway	No
Geocoded Location	36.9785118, -121.9531555

Type of Crash	F - Overturned
Motor Vehicle Involved With	A - Non-Collision
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	03 - Unsafe Speed
Weather	A - Clear
Alcohol Involved	Yes

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	4 - Bicyclist	L - Bicycle	Yes	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	4 - Bicyclist	F - Female	45	6 - Suspected Minor Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 9534052

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	12/09/2022 18:24
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9810982, -121.9555054

Type of Crash	G - Vehicle/Pedestrian
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	2 - Injury (Severe)
PCF Violation Category	08 - Improper Turning
Weather	A - Clear
Alcohol Involved	No

Pedestrian Crash	Yes	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	D - Pickup or Panel Truck	Yes	South	D - Making Right Turn
2	2 - Pedestrian	N - Pedestrian	No	East	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	F - Female	74	5 - Suspected Serious Injury

Item 9 A.

Crash Details for: Case ID 9549472

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	02/01/2023 08:15
Location (Intersection)	Bay Av & Burlingame Av
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9780655, -121.9523468

Type of Crash	D - Broadside
Motor Vehicle Involved With	G - Bicycle
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	03 - Unsafe Speed
Weather	A - Clear
Alcohol Involved	Yes

Pedestrian Crash	No	Bicycle Crash	Yes
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	East	D - Making Right Turn
2	4 - Bicyclist	L - Bicycle	No	East	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	4 - Bicyclist	M - Male	0	6 - Suspected Minor Injury

Berkeley SafeTREC

Item 9 A.

Crash Details for: Case ID 9625425

Crash Information

County	Santa Cruz
City	Capitola
Date & Time (M/D/Y)	08/24/2023 08:40
Location (Intersection)	Bay Av & Hill St
Dist. & Dir. from Intersection	At Intersection
State Highway	No
Geocoded Location	36.9810982, -121.9555054

Type of Crash	D - Broadside
Motor Vehicle Involved With	B - Pedestrian
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	10 - Pedestrian Right of Way
Weather	C - Raining
Alcohol Involved	No

Pedestrian Crash	Yes	Bicycle Crash	No
Motorcycle Crash	No	Truck Crash	No

Map View

Street View

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	E - Making Left Turn
2	2 - Pedestrian	N - Pedestrian	No	-	- - Not Stated

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	F - Female	86	6 - Suspected Minor Injury

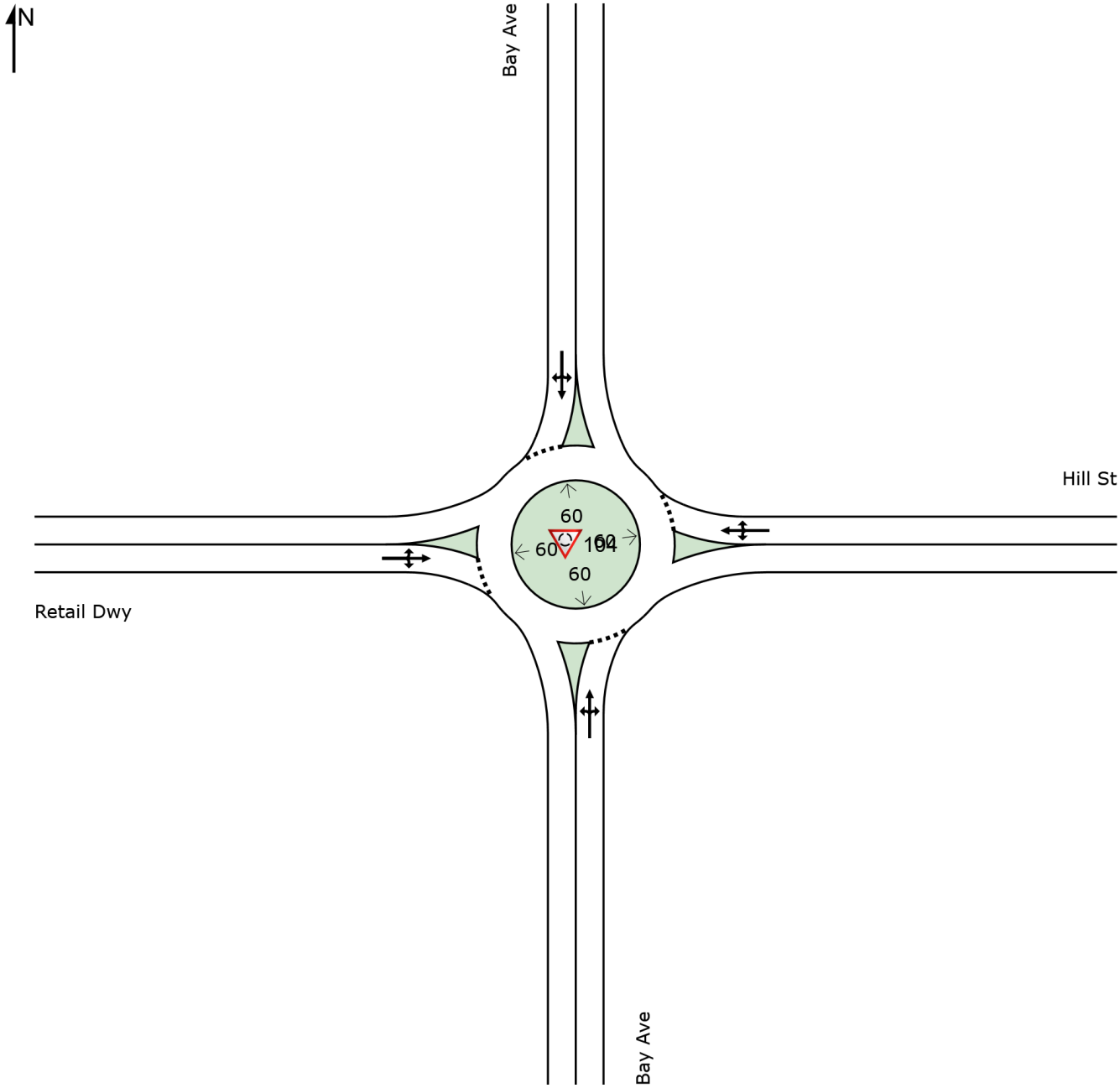
Attachment C – VISSIM and SIDRA LOS Results (Stop and Roundabout Alternatives)

SITE LAYOUT

Site: 104 [Bay/Hill (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.

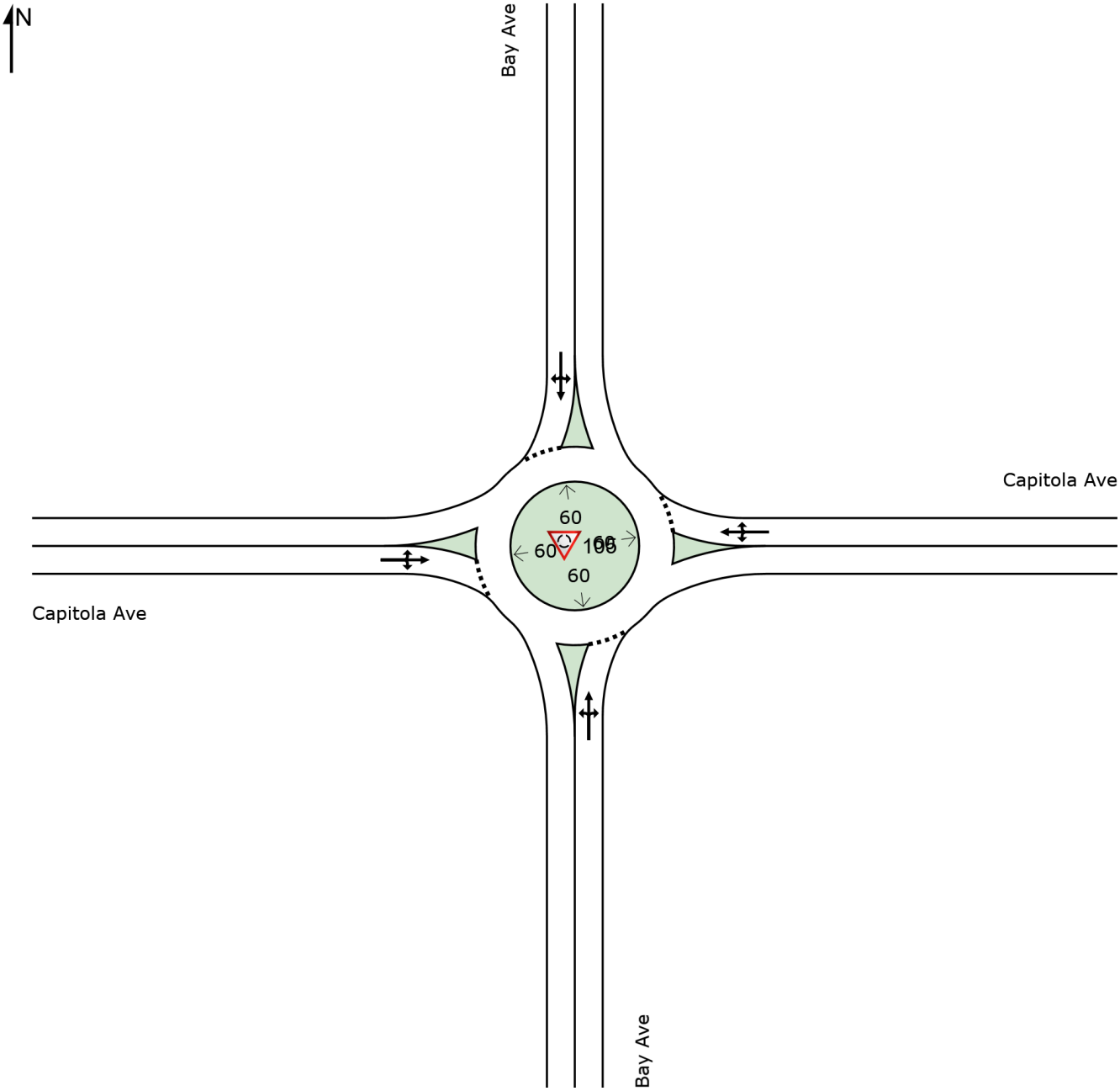


SITE LAYOUT

Site: 105 [Bay/Capitola (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.

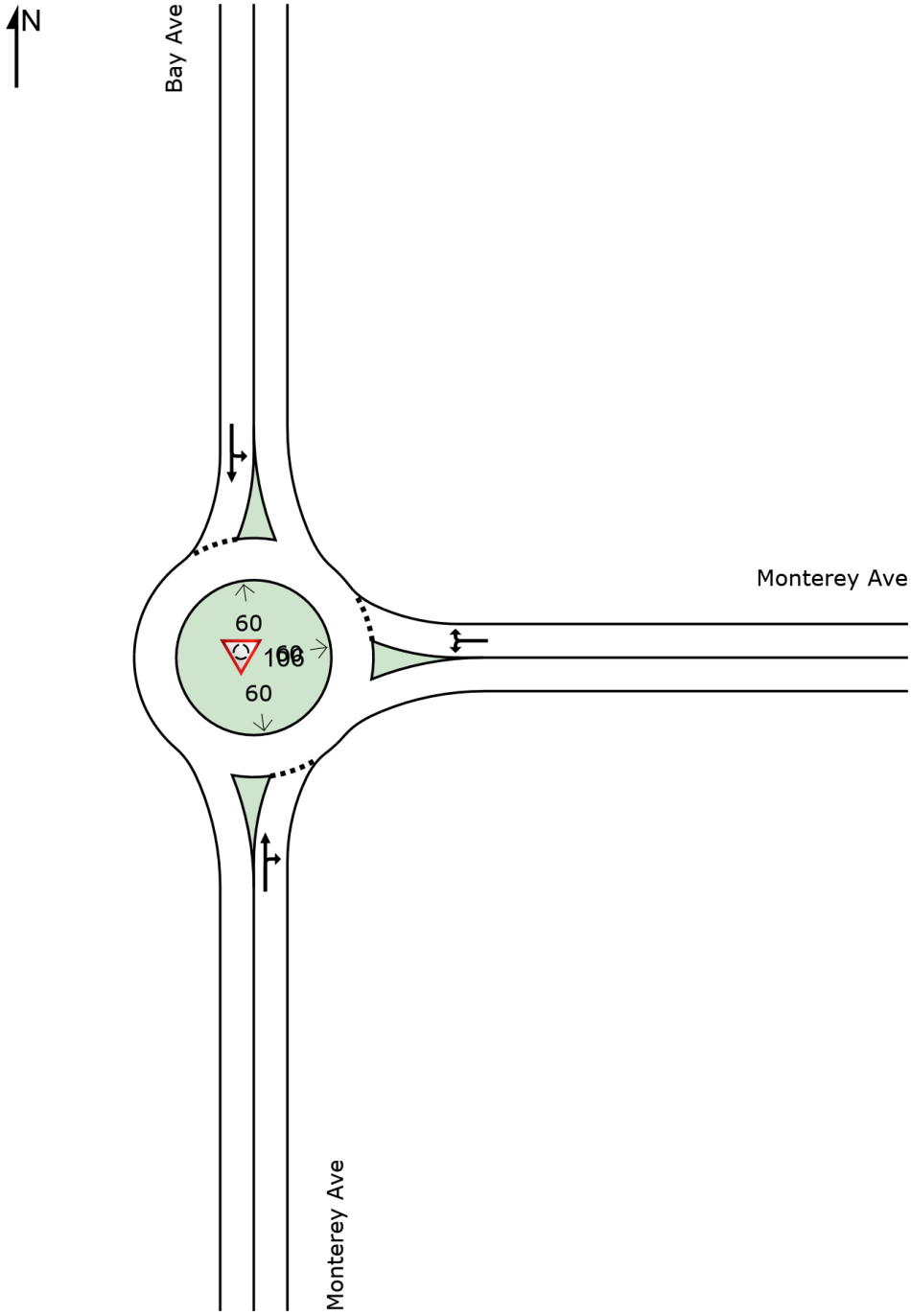


SITE LAYOUT

Site: 106 [Bay/Monterey (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.

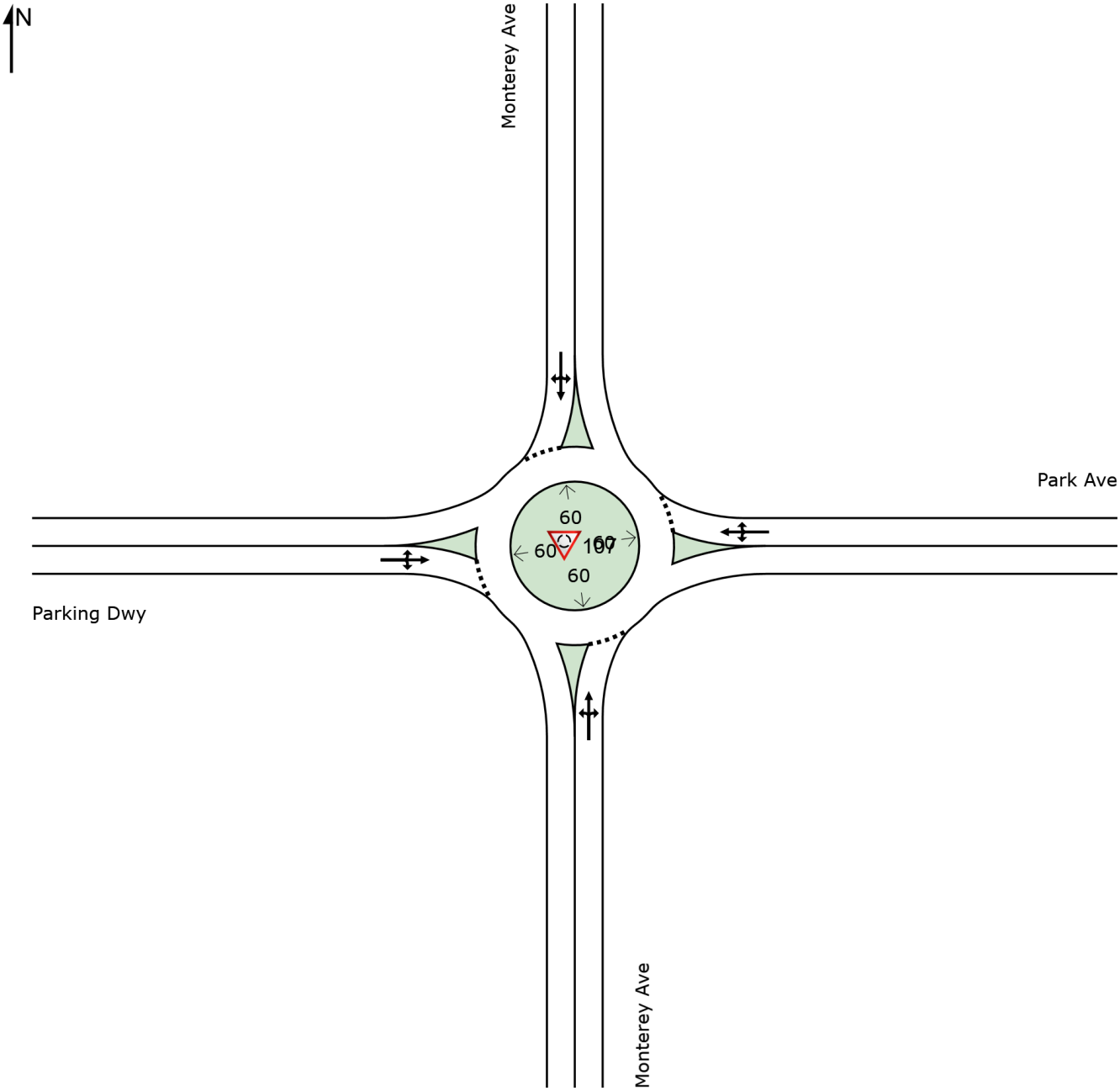


SITE LAYOUT

Site: 107 [Monterey/Park (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 104 [Bay/Hill (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Bay Ave														
3	L2	57	3.0	62	3.0	0.482	8.4	LOS A	3.2	81.9	0.46	0.30	0.46	32.0
8	T1	441	3.0	479	3.0	0.482	8.4	LOS A	3.2	81.9	0.46	0.30	0.46	23.9
18	R2	10	3.0	11	3.0	0.482	8.4	LOS A	3.2	81.9	0.46	0.30	0.46	31.5
Approach		508	3.0	552	3.0	0.482	8.4	LOS A	3.2	81.9	0.46	0.30	0.46	25.3
East: Hill St														
1	L2	9	3.0	10	3.0	0.269	8.2	LOS A	1.2	29.8	0.63	0.63	0.63	32.3
6	T1	28	3.0	30	3.0	0.269	8.2	LOS A	1.2	29.8	0.63	0.63	0.63	32.4
16	R2	142	3.0	154	3.0	0.269	8.2	LOS A	1.2	29.8	0.63	0.63	0.63	24.9
Approach		179	3.0	195	3.0	0.269	8.2	LOS A	1.2	29.8	0.63	0.63	0.63	26.9
North: Bay Ave														
7	L2	75	3.0	82	3.0	0.436	7.5	LOS A	2.8	72.3	0.36	0.20	0.36	29.3
4	T1	377	3.0	410	3.0	0.436	7.5	LOS A	2.8	72.3	0.36	0.20	0.36	29.6
14	R2	31	3.0	34	3.0	0.436	7.5	LOS A	2.8	72.3	0.36	0.20	0.36	28.6
Approach		483	3.0	525	3.0	0.436	7.5	LOS A	2.8	72.3	0.36	0.20	0.36	29.5
West: Retail Dwy														
5	L2	43	3.0	47	3.0	0.139	6.0	LOS A	0.6	14.5	0.55	0.49	0.55	24.2
2	T1	19	3.0	21	3.0	0.139	6.0	LOS A	0.6	14.5	0.55	0.49	0.55	32.7
12	R2	39	3.0	42	3.0	0.139	6.0	LOS A	0.6	14.5	0.55	0.49	0.55	32.0
Approach		101	3.0	110	3.0	0.139	6.0	LOS A	0.6	14.5	0.55	0.49	0.55	29.3
All Vehicles		1271	3.0	1382	3.0	0.482	7.8	LOS A	3.2	81.9	0.46	0.33	0.46	27.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 105 [Bay/Capitola (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Bay Ave														
3	L2	27	3.0	29	3.0	0.407	7.8	LOS A	2.3	59.4	0.51	0.38	0.51	32.4
8	T1	312	3.0	339	3.0	0.407	7.8	LOS A	2.3	59.4	0.51	0.38	0.51	32.5
18	R2	55	3.0	60	3.0	0.407	7.8	LOS A	2.3	59.4	0.51	0.38	0.51	31.9
Approach		394	3.0	428	3.0	0.407	7.8	LOS A	2.3	59.4	0.51	0.38	0.51	32.4
East: Capitola Ave														
1	L2	83	3.0	90	3.0	0.283	7.4	LOS A	1.3	33.3	0.58	0.53	0.58	32.0
6	T1	94	3.0	102	3.0	0.283	7.4	LOS A	1.3	33.3	0.58	0.53	0.58	32.1
16	R2	42	3.0	46	3.0	0.283	7.4	LOS A	1.3	33.3	0.58	0.53	0.58	31.4
Approach		219	3.0	238	3.0	0.283	7.4	LOS A	1.3	33.3	0.58	0.53	0.58	31.9
North: Bay Ave														
7	L2	74	3.0	80	3.0	0.394	7.6	LOS A	2.2	57.0	0.49	0.36	0.49	32.3
4	T1	183	3.0	199	3.0	0.394	7.6	LOS A	2.2	57.0	0.49	0.36	0.49	32.4
14	R2	128	3.0	139	3.0	0.394	7.6	LOS A	2.2	57.0	0.49	0.36	0.49	31.7
Approach		385	3.0	418	3.0	0.394	7.6	LOS A	2.2	57.0	0.49	0.36	0.49	32.1
West: Capitola Ave														
5	L2	70	3.0	76	3.0	0.171	5.6	LOS A	0.7	19.0	0.50	0.41	0.50	32.6
2	T1	67	3.0	73	3.0	0.171	5.6	LOS A	0.7	19.0	0.50	0.41	0.50	32.7
12	R2	6	3.0	7	3.0	0.171	5.6	LOS A	0.7	19.0	0.50	0.41	0.50	32.0
Approach		143	3.0	155	3.0	0.171	5.6	LOS A	0.7	19.0	0.50	0.41	0.50	32.6
All Vehicles		1141	3.0	1240	3.0	0.407	7.4	LOS A	2.3	59.4	0.52	0.41	0.52	32.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 106 [Bay/Monterey (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Monterey Ave														
8	T1	162	3.0	176	3.0	0.232	5.7	LOS A	1.1	28.3	0.43	0.31	0.43	31.2
18	R2	61	3.0	66	3.0	0.232	5.7	LOS A	1.1	28.3	0.43	0.31	0.43	30.1
Approach		223	3.0	242	3.0	0.232	5.7	LOS A	1.1	28.3	0.43	0.31	0.43	30.9
East: Monterey Ave														
1	L2	87	3.0	95	3.0	0.360	6.8	LOS A	2.0	51.5	0.43	0.29	0.43	27.2
16	R2	282	3.0	307	3.0	0.360	6.8	LOS A	2.0	51.5	0.43	0.29	0.43	32.0
Approach		369	3.0	401	3.0	0.360	6.8	LOS A	2.0	51.5	0.43	0.29	0.43	31.1
North: Bay Ave														
7	L2	219	3.0	238	3.0	0.271	5.4	LOS A	1.4	36.7	0.28	0.15	0.28	32.2
4	T1	84	3.0	91	3.0	0.271	5.4	LOS A	1.4	36.7	0.28	0.15	0.28	27.6
Approach		303	3.0	329	3.0	0.271	5.4	LOS A	1.4	36.7	0.28	0.15	0.28	31.2
All Vehicles		895	3.0	973	3.0	0.360	6.1	LOS A	2.0	51.5	0.38	0.25	0.38	31.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 107 [Monterey/Park (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Monterey Ave														
3	L2	1	3.0	1	3.0	0.300	5.6	LOS A	1.7	42.8	0.22	0.09	0.22	31.1
8	T1	123	3.0	134	3.0	0.300	5.6	LOS A	1.7	42.8	0.22	0.09	0.22	12.9
18	R2	225	3.0	245	3.0	0.300	5.6	LOS A	1.7	42.8	0.22	0.09	0.22	30.2
Approach		349	3.0	379	3.0	0.300	5.6	LOS A	1.7	42.8	0.22	0.09	0.22	26.0
East: Park Ave														
1	L2	418	3.0	454	3.0	0.488	8.4	LOS A	3.3	84.5	0.45	0.28	0.45	25.2
6	T1	3	3.0	3	3.0	0.488	8.4	LOS A	3.3	84.5	0.45	0.28	0.45	30.9
16	R2	100	3.0	109	3.0	0.488	8.4	LOS A	3.3	84.5	0.45	0.28	0.45	25.5
Approach		521	3.0	566	3.0	0.488	8.4	LOS A	3.3	84.5	0.45	0.28	0.45	25.3
North: Monterey Ave														
7	L2	41	3.0	45	3.0	0.225	6.7	LOS A	1.0	25.2	0.56	0.51	0.56	29.5
4	T1	126	3.0	137	3.0	0.225	6.7	LOS A	1.0	25.2	0.56	0.51	0.56	16.3
14	R2	4	3.0	4	3.0	0.225	6.7	LOS A	1.0	25.2	0.56	0.51	0.56	28.8
Approach		171	3.0	186	3.0	0.225	6.7	LOS A	1.0	25.2	0.56	0.51	0.56	21.9
West: Parking Dwy														
5	L2	1	3.0	1	3.0	0.017	5.4	LOS A	0.1	1.7	0.56	0.44	0.56	25.2
2	T1	9	3.0	10	3.0	0.017	5.4	LOS A	0.1	1.7	0.56	0.44	0.56	33.6
12	R2	1	3.0	1	3.0	0.017	5.4	LOS A	0.1	1.7	0.56	0.44	0.56	28.9
Approach		11	3.0	12	3.0	0.017	5.4	LOS A	0.1	1.7	0.56	0.44	0.56	32.7
All Vehicles		1052	3.0	1143	3.0	0.488	7.2	LOS A	3.3	84.5	0.39	0.26	0.39	25.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 104 [Bay/Hill (Site Folder: 2024 Existing PM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Bay Ave														
3	L2	46	3.0	50	3.0	0.419	8.5	LOS A	2.3	59.1	0.57	0.48	0.57	32.0
8	T1	307	3.0	334	3.0	0.419	8.5	LOS A	2.3	59.1	0.57	0.48	0.57	23.9
18	R2	21	3.0	23	3.0	0.419	8.5	LOS A	2.3	59.1	0.57	0.48	0.57	31.4
Approach		374	3.0	407	3.0	0.419	8.5	LOS A	2.3	59.1	0.57	0.48	0.57	25.7
East: Hill St														
1	L2	18	3.0	20	3.0	0.171	6.2	LOS A	0.7	18.4	0.55	0.50	0.55	33.0
6	T1	33	3.0	36	3.0	0.171	6.2	LOS A	0.7	18.4	0.55	0.50	0.55	33.1
16	R2	76	3.0	83	3.0	0.171	6.2	LOS A	0.7	18.4	0.55	0.50	0.55	25.8
Approach		127	3.0	138	3.0	0.171	6.2	LOS A	0.7	18.4	0.55	0.50	0.55	29.3
North: Bay Ave														
7	L2	146	3.0	159	3.0	0.634	11.2	LOS B	5.7	145.2	0.51	0.30	0.51	26.9
4	T1	505	3.0	549	3.0	0.634	11.2	LOS B	5.7	145.2	0.51	0.30	0.51	27.1
14	R2	49	3.0	53	3.0	0.634	11.2	LOS B	5.7	145.2	0.51	0.30	0.51	26.2
Approach		700	3.0	761	3.0	0.634	11.2	LOS B	5.7	145.2	0.51	0.30	0.51	27.0
West: Retail Dwy														
5	L2	92	3.0	100	3.0	0.385	11.3	LOS B	1.9	49.0	0.71	0.76	0.88	22.0
2	T1	45	3.0	49	3.0	0.385	11.3	LOS B	1.9	49.0	0.71	0.76	0.88	30.4
12	R2	84	3.0	91	3.0	0.385	11.3	LOS B	1.9	49.0	0.71	0.76	0.88	29.8
Approach		221	3.0	240	3.0	0.385	11.3	LOS B	1.9	49.0	0.71	0.76	0.88	27.1
All Vehicles		1422	3.0	1546	3.0	0.634	10.1	LOS B	5.7	145.2	0.56	0.44	0.59	26.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 105 [Bay/Capitola (Site Folder: 2024 Existing PM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Bay Ave														
3	L2	29	3.0	32	3.0	0.260	5.9	LOS A	1.3	32.7	0.44	0.31	0.44	33.2
8	T1	200	3.0	217	3.0	0.260	5.9	LOS A	1.3	32.7	0.44	0.31	0.44	33.3
18	R2	23	3.0	25	3.0	0.260	5.9	LOS A	1.3	32.7	0.44	0.31	0.44	32.6
Approach		252	3.0	274	3.0	0.260	5.9	LOS A	1.3	32.7	0.44	0.31	0.44	33.3
East: Capitola Ave														
1	L2	61	3.0	66	3.0	0.188	5.6	LOS A	0.8	21.3	0.48	0.38	0.48	32.8
6	T1	72	3.0	78	3.0	0.188	5.6	LOS A	0.8	21.3	0.48	0.38	0.48	33.0
16	R2	31	3.0	34	3.0	0.188	5.6	LOS A	0.8	21.3	0.48	0.38	0.48	32.3
Approach		164	3.0	178	3.0	0.188	5.6	LOS A	0.8	21.3	0.48	0.38	0.48	32.8
North: Bay Ave														
7	L2	56	3.0	61	3.0	0.505	9.0	LOS A	3.4	86.4	0.51	0.36	0.51	31.8
4	T1	337	3.0	366	3.0	0.505	9.0	LOS A	3.4	86.4	0.51	0.36	0.51	31.9
14	R2	124	3.0	135	3.0	0.505	9.0	LOS A	3.4	86.4	0.51	0.36	0.51	31.2
Approach		517	3.0	562	3.0	0.505	9.0	LOS A	3.4	86.4	0.51	0.36	0.51	31.7
West: Capitola Ave														
5	L2	72	3.0	78	3.0	0.223	6.9	LOS A	1.0	24.7	0.58	0.54	0.58	32.1
2	T1	84	3.0	91	3.0	0.223	6.9	LOS A	1.0	24.7	0.58	0.54	0.58	32.2
12	R2	8	3.0	9	3.0	0.223	6.9	LOS A	1.0	24.7	0.58	0.54	0.58	31.5
Approach		164	3.0	178	3.0	0.223	6.9	LOS A	1.0	24.7	0.58	0.54	0.58	32.1
All Vehicles		1097	3.0	1192	3.0	0.505	7.5	LOS A	3.4	86.4	0.50	0.38	0.50	32.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 106 [Bay/Monterey (Site Folder: 2024 Existing PM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Monterey Ave														
8	T1	124	3.0	135	3.0	0.240	6.2	LOS A	1.1	28.4	0.50	0.41	0.50	30.8
18	R2	85	3.0	92	3.0	0.240	6.2	LOS A	1.1	28.4	0.50	0.41	0.50	29.7
Approach		209	3.0	227	3.0	0.240	6.2	LOS A	1.1	28.4	0.50	0.41	0.50	30.4
East: Monterey Ave														
1	L2	35	3.0	38	3.0	0.130	4.2	LOS A	0.6	14.9	0.30	0.16	0.30	28.8
16	R2	104	3.0	113	3.0	0.130	4.2	LOS A	0.6	14.9	0.30	0.16	0.30	33.2
Approach		139	3.0	151	3.0	0.130	4.2	LOS A	0.6	14.9	0.30	0.16	0.30	32.4
North: Bay Ave														
7	L2	304	3.0	330	3.0	0.376	6.3	LOS A	2.3	60.0	0.20	0.07	0.20	31.9
4	T1	141	3.0	153	3.0	0.376	6.3	LOS A	2.3	60.0	0.20	0.07	0.20	27.2
Approach		445	3.0	484	3.0	0.376	6.3	LOS A	2.3	60.0	0.20	0.07	0.20	30.7
All Vehicles		793	3.0	862	3.0	0.376	5.9	LOS A	2.3	60.0	0.29	0.18	0.29	31.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 107 [Monterey/Park (Site Folder: 2024 Existing PM)]

Alt 3 Roundabout
Site Category: Base Year
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Monterey Ave														
3	L2	1	3.0	1	3.0	0.604	10.5	LOS B	5.1	129.9	0.49	0.29	0.49	27.7
8	T1	165	3.0	179	3.0	0.604	10.5	LOS B	5.1	129.9	0.49	0.29	0.49	10.6
18	R2	498	3.0	541	3.0	0.604	10.5	LOS B	5.1	129.9	0.49	0.29	0.49	27.0
Approach		664	3.0	722	3.0	0.604	10.5	LOS B	5.1	129.9	0.49	0.29	0.49	24.2
East: Park Ave														
1	L2	203	3.0	221	3.0	0.242	5.5	LOS A	1.2	30.3	0.39	0.26	0.39	26.7
6	T1	3	3.0	3	3.0	0.242	5.5	LOS A	1.2	30.3	0.39	0.26	0.39	32.1
16	R2	39	3.0	42	3.0	0.242	5.5	LOS A	1.2	30.3	0.39	0.26	0.39	27.0
Approach		245	3.0	266	3.0	0.242	5.5	LOS A	1.2	30.3	0.39	0.26	0.39	26.8
North: Monterey Ave														
7	L2	92	3.0	100	3.0	0.181	5.1	LOS A	0.8	21.1	0.40	0.28	0.40	29.9
4	T1	83	3.0	90	3.0	0.181	5.1	LOS A	0.8	21.1	0.40	0.28	0.40	16.9
14	R2	1	3.0	1	3.0	0.181	5.1	LOS A	0.8	21.1	0.40	0.28	0.40	29.1
Approach		176	3.0	191	3.0	0.181	5.1	LOS A	0.8	21.1	0.40	0.28	0.40	26.0
West: Parking Dwy														
5	L2	5	3.0	5	3.0	0.014	4.3	LOS A	0.1	1.4	0.47	0.31	0.47	25.1
2	T1	3	3.0	3	3.0	0.014	4.3	LOS A	0.1	1.4	0.47	0.31	0.47	33.5
12	R2	3	3.0	3	3.0	0.014	4.3	LOS A	0.1	1.4	0.47	0.31	0.47	28.6
Approach		11	3.0	12	3.0	0.014	4.3	LOS A	0.1	1.4	0.47	0.31	0.47	28.7
All Vehicles		1096	3.0	1191	3.0	0.604	8.5	LOS A	5.1	129.9	0.45	0.28	0.45	25.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 104 [Bay/Hill (Site Folder: 2045 Cumulative AM)]

Alt 3 Roundabout
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Bay Ave														
3	L2	57	3.0	62	3.0	0.336	6.4	LOS A	1.9	47.5	0.39	0.24	0.39	32.9
8	T1	293	3.0	318	3.0	0.336	6.4	LOS A	1.9	47.5	0.39	0.24	0.39	24.8
18	R2	4	3.0	4	3.0	0.336	6.4	LOS A	1.9	47.5	0.39	0.24	0.39	32.3
Approach		354	3.0	385	3.0	0.336	6.4	LOS A	1.9	47.5	0.39	0.24	0.39	26.5
East: Hill St														
1	L2	13	3.0	14	3.0	0.139	5.6	LOS A	0.6	14.8	0.52	0.44	0.52	33.4
6	T1	28	3.0	30	3.0	0.139	5.6	LOS A	0.6	14.8	0.52	0.44	0.52	33.5
16	R2	68	3.0	74	3.0	0.139	5.6	LOS A	0.6	14.8	0.52	0.44	0.52	26.2
Approach		109	3.0	118	3.0	0.139	5.6	LOS A	0.6	14.8	0.52	0.44	0.52	29.5
North: Bay Ave														
7	L2	75	3.0	82	3.0	0.703	13.3	LOS B	7.2	185.3	0.59	0.35	0.59	26.0
4	T1	669	3.0	727	3.0	0.703	13.3	LOS B	7.2	185.3	0.59	0.35	0.59	26.1
14	R2	31	3.0	34	3.0	0.703	13.3	LOS B	7.2	185.3	0.59	0.35	0.59	25.3
Approach		775	3.0	842	3.0	0.703	13.3	LOS B	7.2	185.3	0.59	0.35	0.59	26.1
West: Retail Dwy														
5	L2	43	3.0	47	3.0	0.195	8.9	LOS A	0.8	19.3	0.66	0.66	0.66	22.9
2	T1	19	3.0	21	3.0	0.195	8.9	LOS A	0.8	19.3	0.66	0.66	0.66	31.4
12	R2	39	3.0	42	3.0	0.195	8.9	LOS A	0.8	19.3	0.66	0.66	0.66	30.7
Approach		101	3.0	110	3.0	0.195	8.9	LOS A	0.8	19.3	0.66	0.66	0.66	28.0
All Vehicles		1339	3.0	1455	3.0	0.703	10.5	LOS B	7.2	185.3	0.54	0.35	0.54	26.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 105 [Bay/Capitola (Site Folder: 2045 Cumulative AM)]

Alt 3 Roundabout
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Bay Ave														
3	L2	27	3.0	29	3.0	0.410	7.9	LOS A	2.3	59.8	0.52	0.39	0.52	32.3
8	T1	312	3.0	339	3.0	0.410	7.9	LOS A	2.3	59.8	0.52	0.39	0.52	32.5
18	R2	55	3.0	60	3.0	0.410	7.9	LOS A	2.3	59.8	0.52	0.39	0.52	31.8
Approach		394	3.0	428	3.0	0.410	7.9	LOS A	2.3	59.8	0.52	0.39	0.52	32.4
East: Capitola Ave														
1	L2	83	3.0	90	3.0	0.286	7.5	LOS A	1.3	33.5	0.59	0.54	0.59	31.9
6	T1	94	3.0	102	3.0	0.286	7.5	LOS A	1.3	33.5	0.59	0.54	0.59	32.1
16	R2	42	3.0	46	3.0	0.286	7.5	LOS A	1.3	33.5	0.59	0.54	0.59	31.4
Approach		219	3.0	238	3.0	0.286	7.5	LOS A	1.3	33.5	0.59	0.54	0.59	31.9
North: Bay Ave														
7	L2	74	3.0	80	3.0	0.394	7.6	LOS A	2.2	57.0	0.49	0.36	0.49	32.3
4	T1	183	3.0	199	3.0	0.394	7.6	LOS A	2.2	57.0	0.49	0.36	0.49	32.4
14	R2	128	3.0	139	3.0	0.394	7.6	LOS A	2.2	57.0	0.49	0.36	0.49	31.7
Approach		385	3.0	418	3.0	0.394	7.6	LOS A	2.2	57.0	0.49	0.36	0.49	32.1
West: Capitola Ave														
5	L2	78	3.0	85	3.0	0.181	5.7	LOS A	0.8	20.2	0.50	0.41	0.50	32.5
2	T1	67	3.0	73	3.0	0.181	5.7	LOS A	0.8	20.2	0.50	0.41	0.50	32.6
12	R2	6	3.0	7	3.0	0.181	5.7	LOS A	0.8	20.2	0.50	0.41	0.50	31.9
Approach		151	3.0	164	3.0	0.181	5.7	LOS A	0.8	20.2	0.50	0.41	0.50	32.5
All Vehicles		1149	3.0	1249	3.0	0.410	7.4	LOS A	2.3	59.8	0.52	0.41	0.52	32.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 106 [Bay/Monterey (Site Folder: 2045 Cumulative AM)]

Alt 3 Roundabout
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Monterey Ave														
8	T1	162	3.0	176	3.0	0.232	5.7	LOS A	1.1	28.3	0.43	0.31	0.43	31.2
18	R2	61	3.0	66	3.0	0.232	5.7	LOS A	1.1	28.3	0.43	0.31	0.43	30.1
Approach		223	3.0	242	3.0	0.232	5.7	LOS A	1.1	28.3	0.43	0.31	0.43	30.9
East: Monterey Ave														
1	L2	87	3.0	95	3.0	0.360	6.8	LOS A	2.0	51.5	0.43	0.29	0.43	27.2
16	R2	282	3.0	307	3.0	0.360	6.8	LOS A	2.0	51.5	0.43	0.29	0.43	32.0
Approach		369	3.0	401	3.0	0.360	6.8	LOS A	2.0	51.5	0.43	0.29	0.43	31.1
North: Bay Ave														
7	L2	219	3.0	238	3.0	0.410	7.1	LOS A	2.6	66.0	0.34	0.18	0.34	31.9
4	T1	239	3.0	260	3.0	0.410	7.1	LOS A	2.6	66.0	0.34	0.18	0.34	27.2
Approach		458	3.0	498	3.0	0.410	7.1	LOS A	2.6	66.0	0.34	0.18	0.34	29.9
All Vehicles		1050	3.0	1141	3.0	0.410	6.7	LOS A	2.6	66.0	0.39	0.25	0.39	30.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 107 [Monterey/Park (Site Folder: 2045 Cumulative AM)]

Alt 3 Roundabout
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Monterey Ave														
3	L2	1	3.0	1	3.0	0.374	7.3	LOS A	2.1	52.6	0.49	0.36	0.49	29.8
8	T1	123	3.0	134	3.0	0.374	7.3	LOS A	2.1	52.6	0.49	0.36	0.49	12.0
18	R2	238	3.0	259	3.0	0.374	7.3	LOS A	2.1	52.6	0.49	0.36	0.49	29.0
Approach		362	3.0	393	3.0	0.374	7.3	LOS A	2.1	52.6	0.49	0.36	0.49	25.0
East: Park Ave														
1	L2	418	3.0	454	3.0	0.488	8.4	LOS A	3.3	84.5	0.45	0.28	0.45	25.2
6	T1	3	3.0	3	3.0	0.488	8.4	LOS A	3.3	84.5	0.45	0.28	0.45	30.9
16	R2	100	3.0	109	3.0	0.488	8.4	LOS A	3.3	84.5	0.45	0.28	0.45	25.5
Approach		521	3.0	566	3.0	0.488	8.4	LOS A	3.3	84.5	0.45	0.28	0.45	25.3
North: Monterey Ave														
7	L2	201	3.0	218	3.0	0.428	9.7	LOS A	2.5	63.3	0.66	0.67	0.76	26.8
4	T1	121	3.0	132	3.0	0.428	9.7	LOS A	2.5	63.3	0.66	0.67	0.76	13.7
14	R2	4	3.0	4	3.0	0.428	9.7	LOS A	2.5	63.3	0.66	0.67	0.76	26.2
Approach		326	3.0	354	3.0	0.428	9.7	LOS A	2.5	63.3	0.66	0.67	0.76	23.7
West: Parking Dwy														
5	L2	1	3.0	1	3.0	0.021	6.5	LOS A	0.1	1.9	0.61	0.52	0.61	24.7
2	T1	9	3.0	10	3.0	0.021	6.5	LOS A	0.1	1.9	0.61	0.52	0.61	33.1
12	R2	1	3.0	1	3.0	0.021	6.5	LOS A	0.1	1.9	0.61	0.52	0.61	28.2
Approach		11	3.0	12	3.0	0.021	6.5	LOS A	0.1	1.9	0.61	0.52	0.61	32.2
All Vehicles		1220	3.0	1326	3.0	0.488	8.4	LOS A	3.3	84.5	0.52	0.41	0.55	24.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 104 [Bay/Hill (Site Folder: 2045 Cumulative PM)]

Alt 3 Roundabout
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Bay Ave														
3	L2	46	3.0	50	3.0	0.893	29.6	LOS D	28.3	725.6	1.00	1.60	2.56	24.6
8	T1	717	3.0	779	3.0	0.893	29.6	LOS D	28.3	725.6	1.00	1.60	2.56	17.1
18	R2	34	3.0	37	3.0	0.893	29.6	LOS D	28.3	725.6	1.00	1.60	2.56	24.3
Approach		797	3.0	866	3.0	0.893	29.6	LOS D	28.3	725.6	1.00	1.60	2.56	18.0
East: Hill St														
1	L2	22	3.0	24	3.0	0.532	17.6	LOS C	3.0	77.9	0.79	0.93	1.26	28.3
6	T1	33	3.0	36	3.0	0.532	17.6	LOS C	3.0	77.9	0.79	0.93	1.26	28.4
16	R2	192	3.0	209	3.0	0.532	17.6	LOS C	3.0	77.9	0.79	0.93	1.26	20.9
Approach		247	3.0	268	3.0	0.532	17.6	LOS C	3.0	77.9	0.79	0.93	1.26	22.9
North: Bay Ave														
7	L2	146	3.0	159	3.0	0.755	15.4	LOS C	8.7	223.1	0.68	0.41	0.68	24.7
4	T1	634	3.0	689	3.0	0.755	15.4	LOS C	8.7	223.1	0.68	0.41	0.68	24.9
14	R2	49	3.0	53	3.0	0.755	15.4	LOS C	8.7	223.1	0.68	0.41	0.68	24.2
Approach		829	3.0	901	3.0	0.755	15.4	LOS C	8.7	223.1	0.68	0.41	0.68	24.8
West: Retail Dwy														
5	L2	92	3.0	100	3.0	0.448	14.3	LOS B	2.3	59.8	0.75	0.85	1.07	20.9
2	T1	45	3.0	49	3.0	0.448	14.3	LOS B	2.3	59.8	0.75	0.85	1.07	29.2
12	R2	84	3.0	91	3.0	0.448	14.3	LOS B	2.3	59.8	0.75	0.85	1.07	28.6
Approach		221	3.0	240	3.0	0.448	14.3	LOS B	2.3	59.8	0.75	0.85	1.07	26.0
All Vehicles		2094	3.0	2276	3.0	0.893	21.0	LOS C	28.3	725.6	0.82	0.97	1.50	21.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 105 [Bay/Capitola (Site Folder: 2045 Cumulative PM)]

Alt 3 Roundabout
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Bay Ave														
3	L2	29	3.0	32	3.0	0.293	6.9	LOS A	1.4	36.1	0.53	0.45	0.53	32.7
8	T1	200	3.0	217	3.0	0.293	6.9	LOS A	1.4	36.1	0.53	0.45	0.53	32.9
18	R2	23	3.0	25	3.0	0.293	6.9	LOS A	1.4	36.1	0.53	0.45	0.53	32.2
Approach		252	3.0	274	3.0	0.293	6.9	LOS A	1.4	36.1	0.53	0.45	0.53	32.8
East: Capitola Ave														
1	L2	17	3.0	18	3.0	0.203	6.5	LOS A	0.9	22.4	0.55	0.50	0.55	33.0
6	T1	65	3.0	71	3.0	0.203	6.5	LOS A	0.9	22.4	0.55	0.50	0.55	33.1
16	R2	73	3.0	79	3.0	0.203	6.5	LOS A	0.9	22.4	0.55	0.50	0.55	32.4
Approach		155	3.0	168	3.0	0.203	6.5	LOS A	0.9	22.4	0.55	0.50	0.55	32.7
North: Bay Ave														
7	L2	61	3.0	66	3.0	0.524	9.0	LOS A	3.8	97.2	0.45	0.27	0.45	31.8
4	T1	337	3.0	366	3.0	0.524	9.0	LOS A	3.8	97.2	0.45	0.27	0.45	31.9
14	R2	171	3.0	186	3.0	0.524	9.0	LOS A	3.8	97.2	0.45	0.27	0.45	31.2
Approach		569	3.0	618	3.0	0.524	9.0	LOS A	3.8	97.2	0.45	0.27	0.45	31.7
West: Capitola Ave														
5	L2	190	3.0	207	3.0	0.340	8.2	LOS A	1.6	41.6	0.61	0.57	0.61	31.0
2	T1	63	3.0	68	3.0	0.340	8.2	LOS A	1.6	41.6	0.61	0.57	0.61	31.1
12	R2	8	3.0	9	3.0	0.340	8.2	LOS A	1.6	41.6	0.61	0.57	0.61	30.5
Approach		261	3.0	284	3.0	0.340	8.2	LOS A	1.6	41.6	0.61	0.57	0.61	31.0
All Vehicles		1237	3.0	1345	3.0	0.524	8.1	LOS A	3.8	97.2	0.51	0.40	0.51	31.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 106 [Bay/Monterey (Site Folder: 2045 Cumulative PM)]

Alt 3 Roundabout
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Monterey Ave														
8	T1	305	3.0	332	3.0	0.448	9.1	LOS A	2.5	64.2	0.61	0.52	0.61	28.8
18	R2	85	3.0	92	3.0	0.448	9.1	LOS A	2.5	64.2	0.61	0.52	0.61	27.9
Approach		390	3.0	424	3.0	0.448	9.1	LOS A	2.5	64.2	0.61	0.52	0.61	28.6
East: Monterey Ave														
1	L2	35	3.0	38	3.0	0.160	5.3	LOS A	0.7	17.8	0.47	0.37	0.47	28.1
16	R2	104	3.0	113	3.0	0.160	5.3	LOS A	0.7	17.8	0.47	0.37	0.47	32.6
Approach		139	3.0	151	3.0	0.160	5.3	LOS A	0.7	17.8	0.47	0.37	0.47	31.8
North: Bay Ave														
7	L2	304	3.0	330	3.0	0.469	7.6	LOS A	3.4	86.4	0.23	0.09	0.23	31.6
4	T1	251	3.0	273	3.0	0.469	7.6	LOS A	3.4	86.4	0.23	0.09	0.23	26.8
Approach		555	3.0	603	3.0	0.469	7.6	LOS A	3.4	86.4	0.23	0.09	0.23	29.8
All Vehicles		1084	3.0	1178	3.0	0.469	7.8	LOS A	3.4	86.4	0.39	0.28	0.40	29.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 107 [Monterey/Park (Site Folder: 2045 Cumulative PM)]

Alt 3 Roundabout
Site Category: Future Conditions 1
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Monterey Ave														
3	L2	1	3.0	1	3.0	0.792	18.9	LOS C	18.9	483.9	0.88	1.07	1.60	23.4
8	T1	148	3.0	161	3.0	0.792	18.9	LOS C	18.9	483.9	0.88	1.07	1.60	8.2
18	R2	619	3.0	673	3.0	0.792	18.9	LOS C	18.9	483.9	0.88	1.07	1.60	22.9
Approach		768	3.0	835	3.0	0.792	18.9	LOS C	18.9	483.9	0.88	1.07	1.60	20.8
East: Park Ave														
1	L2	203	3.0	221	3.0	0.428	7.7	LOS A	2.6	66.9	0.45	0.31	0.45	26.2
6	T1	3	3.0	3	3.0	0.428	7.7	LOS A	2.6	66.9	0.45	0.31	0.45	31.8
16	R2	237	3.0	258	3.0	0.428	7.7	LOS A	2.6	66.9	0.45	0.31	0.45	26.6
Approach		443	3.0	482	3.0	0.428	7.7	LOS A	2.6	66.9	0.45	0.31	0.45	26.5
North: Monterey Ave														
7	L2	202	3.0	220	3.0	0.294	6.3	LOS A	1.5	38.2	0.45	0.32	0.45	28.6
4	T1	83	3.0	90	3.0	0.294	6.3	LOS A	1.5	38.2	0.45	0.32	0.45	15.7
14	R2	1	3.0	1	3.0	0.294	6.3	LOS A	1.5	38.2	0.45	0.32	0.45	27.9
Approach		286	3.0	311	3.0	0.294	6.3	LOS A	1.5	38.2	0.45	0.32	0.45	26.4
West: Parking Dwy														
5	L2	5	3.0	5	3.0	0.016	4.8	LOS A	0.1	1.5	0.52	0.38	0.52	24.8
2	T1	3	3.0	3	3.0	0.016	4.8	LOS A	0.1	1.5	0.52	0.38	0.52	33.2
12	R2	3	3.0	3	3.0	0.016	4.8	LOS A	0.1	1.5	0.52	0.38	0.52	28.3
Approach		11	3.0	12	3.0	0.016	4.8	LOS A	0.1	1.5	0.52	0.38	0.52	28.4
All Vehicles		1508	3.0	1639	3.0	0.792	13.1	LOS B	18.9	483.9	0.67	0.70	1.04	23.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Bay Avenue Corridor Improvement Project

Existing 2024 VISSIM Results: Bay Ave Peak Hour Intersection Results

No.	Intersection	Movement	Alternative 1 AM AWSC							Alternative 2 AM RAB							Alternative 1 PM AWSC							Alternative 2 PM RAB						
			Volume (vph)			Avg. Delay	LOS	Avg. Queue	Max. Queue	Volume (vph)			Avg. Delay	LOS	Avg. Queue	Max. Queue	Volume (vph)			Avg. Delay	LOS	Avg. Queue	Max. Queue	Volume (vph)			Avg. Delay	LOS	Avg. Queue	Max. Queue
			Count	Served		(sec)		(ft)	(ft)	Count	Served		(sec)		(ft)	(ft)	Count	Served		(sec)		(ft)	(ft)	Count	Served		(sec)		(ft)	(ft)
1	Bay Ave & Hwy 1 NB Ramps	NBL	369	377	2%	17.0	B	33	220	369	379	3%	17.9	B	35	218	290	291	0%	18.6	B	28	184	290	290	0%	18.7	B	29	200
		NBT	516	518	0%	0.9	A	33	219	516	518	0%	1.0	A	35	218	401	407	1%	0.9	A	28	184	401	408	2%	1.0	A	29	200
		SBT	431	435	1%	13.0	B	41	258	431	435	1%	13.0	B	41	264	642	646	1%	14.3	B	40	255	642	646	1%	14.2	B	40	252
		SBR	478	478	0%	13.3	B	43	262	478	478	0%	13.2	B	43	268	316	315	0%	10.3	B	39	259	316	315	0%	10.1	B	39	256
		WBL	59	59	0%	27.8	C	8	72	59	59	0%	27.9	C	8	72	107	108	1%	28.4	C	15	110	107	108	1%	28.1	C	15	108
		WBT	12	13	8%	28.1	C	4	82	12	13	8%	28.1	C	4	84	1	1	0%	26.1	C	4	103	1	1	0%	26.5	C	4	97
		WBR	107	108	1%	8.0	A	5	82	107	108	1%	7.9	A	5	84	195	197	1%	7.3	A	5	103	195	197	1%	7.3	A	5	97
		Overall	**1972**	**1988**	**1%**	**10.9**	**B**			**1972**	**1990**	**1%**	**11.1**	**B**			**1952**	**1965**	**1%**	**11.6**	**B**			**1952**	**1965**	**1%**	**11.5**	**B**		
2	Bay Ave & Hwy 1 SB Ramps	NBT	572	585	2%	17.4	B	45	252	572	586	2%	18.1	B	47	259	457	458	0%	18.0	B	36	201	457	457	0%	17.9	B	35	204
		NBR	111	112	1%	7.4	A	46	255	111	113	2%	8.0	A	48	262	91	89	-2%	8.1	A	38	203	91	89	-2%	8.1	A	37	207
		SBL	176	178	1%	34.6	C	36	170	176	177	1%	34.4	C	36	156	276	274	-1%	35.2	D	60	251	276	274	-1%	34.9	C	58	259
		SBT	314	317	1%	8.9	A	36	171	314	316	1%	8.8	A	36	157	473	480	1%	13.6	B	60	250	473	480	1%	9.7	A	59	259
		EBL	313	312	0%	26.4	C	29	139	313	311	-1%	26.7	C	29	135	234	239	2%	40.6	D	140	704	234	240	3%	29.7	C	66	385
		EBT	0	0	-	0.0	A	29	139	0	0	-	0.0	A	29	135	208	206	-1%	55.6	E	140	704	208	208	0%	40.7	D	66	385
		EBR	296	300	1%	10.4	B	29	139	296	299	1%	10.4	B	29	135	347	341	-2%	30.0	C	140	704	347	345	-1%	17.7	B	66	385
		Overall	**1782**	**1804**	**1%**	**17.4**	**B**			**1782**	**1802**	**1%**	**17.7**	**B**			**2086**	**2087**	**0%**	**27.1**	**C**			**2086**	**2093**	**0%**	**21.4**	**C**		
3	Bay Ave & Crossroads Loop	NBL	1	1	0%	6.5	A	0	26	1	1	0%	3.5	A	0	23	4	3	-25%	16.5	C	1	57	4	4	0%	13.4	B	0	60
		NBT	616	625	1%	0.1	A	0	14	616	625	1%	0.2	A	0	7	462	457	-1%	0.1	A	0	5	462	457	-1%	0.2	A	0	0
		NBR	9	8	-11%	0.8	A	0	10	9	8	-11%	1.0	A	0	10	9	8	-11%	0.8	A	0	6	9	8	-11%	0.9	A	0	3
		SBL	39	39	0%	5.7	A	1	36	39	39	0%	5.9	A	1	40	50	49	-2%	69.6	F	23	234	50	50	0%	4.4	A	1	40
		SBT	462	469	2%	2.8	A	5	164	462	469	2%	0.9	A	0	35	658	654	-1%	79.6	F	289	547	658	665	1%	1.8	A	2	124
		SBR	109	109	0%	1.2	A	4	162	109	109	0%	1.2	A	0	71	112	108	-4%	58.2	F	288	545	112	110	-2%	1.4	A	2	121
		EBL	53	55	4%	11.1	B	0	41	53	55	4%	12.6	B	0	42	49	51	4%	11.3	B	1	43	49	51	4%	17.2	C	1	45
		EBT	0	0	-	0.0	A	0	41	0	0	-	0.0	A	0	42	2	2	0%	13.8	B	1	43	2	2	0%	19.7	C	1	45
		EBR	21	23	10%	9.3	A	0	27	21	23	10%	8.4	A	0	27	38	37	-3%	9.9	A	0	35	38	37	-3%	12.1	B	0	43
		WBL	0	0	-	0.0	A	0	33	0	0	-	0.0	A	0	34	4	3	-25%	41.2	E	2	48	4	4	0%	17.2	C	1	44
		WBT	1	1	0%	15.5	C	0	33	1	1	0%	23.9	C	0	34	1	1	0%	17.8	C	2	48	1	1	0%	20.9	C	1	44
		WBR	14	17	21%	8.0	A	0	33	14	17	21%	8.0	A	0	34	37	37	0%	8.1	A	2	48	37	37	0%	7.8	A	1	43
		Overall	**1325**	**1347**	**2%**	**15.5**	**C**			**1325**	**1347**	**2%**	**23.9**	**C**			**1426**	**1410**	**-1%**	**79.6**	**F**			**1426**	**1426**	**0%**	**20.9**	**C**		
4	Bay Ave & Hill St	NBL	57	59	4%	9.4	A	1	45	57	59	4%	2.1	A	4	148	46	50	9%	7.2	A	1	44	46	49	7%	3.2	A	6	150
		NBT	441	446	1%	18.5	C	51	252	441	446	1%	2.2	A	4	148	307	302	-2%	10.5	B	13	129	307	302	-2%	3.5	A	6	150
		NBR	10	10	0%	19.0	C	47	252	10	10	0%	1.8	A	4	148	21	20	-5%	9.3	A	9	129	21	21	0%	3.1	A	6	150
		SBL	75	77	3%	8.9	A	2	83	75	77	3%	1.9	A	3	189	146	148	1%	17.1	C	7	210	146	150	3%	2.7	A	8	203
		SBT	377	383	2%	15.9	C	36	216	377	383	2%	2.2	A	3	189	505	498	-1%	29.6	D	121	228	505	505	0%	2.8	A	8	203
		SBR	31	31	0%	14.8	B	34	216	31	31	0%	1.8	A	3	189	49	48	-2%	27.7	D	120	228	49	49	0%	2.4	A	8	203
		EBL	43	43	0%	10.2	B	2	61	43	43	0%	5.6	A	1	58	92	92	0%	12.1	B	7	102	92	92	0%	10.3	B	9	143
		EBT	19	20	5%	12.2	B	1	62	19	20	5%	5.0	A	1	58	45	44	-2%	14.4	B	6	102	45	44	-2%	10.1	B	9	143
		EBR	39	40	3%	9.5	A	1	62	39	40	3%	7.0	A	1	58	84	86	2%	11.4	B	7	102	84	86	2%	12.4	B	9	143
		WBL	9	9	0%	13.2	B	3	95	9	9	0%	9.4	A	6	130	18	17	-6%	10.9	B	2	66	18	18	0%	6.6	A	2	83
		WBT	28	27	-4%	12.9	B	3	95	28	27	-4%	8.4	A	6	130	33	34	3%	12.1	B	2	66	33	34	3%	5.3	A	2	83
		WBR	142	145	2%	11.0	B	5	95	142	145	2%	8.4	A	6	130	76	75	-1%	10.4	B	2	66	76	75	-1%	6.0	A	2	83
		Overall	**1271**	**1290**	**1%**	**15.0**	**B**			**1271**	**1290**	**1%**	**9.4**	**A**			**1422**	**1414**	**-1%**	**18.7**	**C**			**1422**	**1425**	**0%**	**12.4**	**B**		
5	Bay Ave & Capitola Ave	NBL	27	27	0%	8.8	A	1	38	27	27	0%	2.7	A	1	62	29	30	3%	8.7	A	1	39	29	30	3%	2.3	A	0	36
		NBT	312	311	0%	14.7	B	25	174	312	311	0%	2.9	A	1	62	200	196	-2%	9.5	A	6	84	200	196	-2%	2.1	A	0	36
		NBR	55	56	2%	12.2	B	22	173	55	56	2%	2.6	A	1	62	23	24	4%	7.5	A	4	84	23	24	4%	2.4	A	0	36
		SBL	74	78	5%	9.3	A	5	95	74	78	5%	2.6	A	3	167	56	56	0%	11.1	B	14	166	56	56	0%	2.3	A	4	168
		SBT	183	179	-2%	9.3	A	6	95	183	180	-2%	2.7	A	3	167	337	333	-1%	11.8	B	18	166	337	337	0%	2.4	A	4	168
		SBR	128	134	5%	6.3	A	2	68	128	134	5%	2.3	A	3	167	124	126	2%	6.6	A	2	53	124	129	4%	2.5	A	4	168
		EBL	70	69	-1%	11.7	B	3	65	70	69	-1%	3.9	A	1	71	72	72	0%	12.2	B	4	80	72	72	0%	4.2	A	2	92
		EBT	67	69	3%	11.7	B	3	65	67	69	3%	3.7	A	1	71	84	88	5%	12.2	B	4	80	84	88	5%	4.4	A	2	92
		EBR	6	6	0%	8.0	A	0	28	6	6	0%	2.7	A	0	28	8	8	0%	8.2	A	0	22	8	8	0%	2.4	A	0	19
		WBL	83	83	0%	13.0	B	7	105	83	82	-1%	4.2	A	2	94	61	60	-2%	11.9	B	4	89	61	60	-2%	2.9	A	1	68
		WBT	94	96	2%	13.9	B	7	105	94	96	2%	4.1	A	2	94	72	77	7%	12.6	B	4	89	72	77	7%	2.7	A	1	68
		WBR	42	45	7%	10.9	B	4	97	42	45	7%	3.2	A	0	70	31	31	0%	9.4	A	2	81	31	31	0%	2.5	A	0	52
		Overall	**1141**	**1153**	**1%**	**11.5**	**B**			**1141**	**1153**	**1%**	**4.2**	**A**			**1097**	**1101**	**0%**	**10.6**	**B**			**1097**	**1108**	**1%**	**4.4**	**A**		
6	Bay Ave & Monterey Ave	NBT	162	160	-1%	8.8	A	4	61	162	160	-1%	9.0	A	4	67	124	123	-1%	8.2	A	2	58	124	123	-1%	8.2	A	2	54
		NBR	61	63	3%	2.2	A	3	61	61	64	5%	2.4	A	3	67	85	85	0%	1.6	A	2	58	85	85	0%	1.6	A	2	54
		SBL	219	222	1%	11.6	B	16	151	219	223	2%	13.4	B	21	194	304	303	0%	24.2	C	68	270	304	305	0%	34.4	D	104	385
		SBT	84	82	-2%	11.9	B	15	151	84	82	-2%	13.9	B	20	194	141	141	0%	25.0	C	67	270	141	141	0%	35.0	E	104	385
		WBL	87	85	-2%	21.3	C	36	236	87	85	-2%	20.6	C	35	220	35	36	3%	11.5	B	3	71	35	36	3%	11.4	B	3	73
		WBR	282	287	2%	18.1	C	37	236	282	286	1%	17.7	C	36	220	104	102	-2%	9.0	A	4	71	104	102	-2%	9.0	A	4	73
		Overall	**895**	**899**	**0%**	**13.5**	**B**			**895**	**900**	**1%**	**13.9**	**B**			**793**	**790**	**0%**	**16.8**	**C**			**793**	**792**	**0%**	**22.6**	**C**		
7	Monterey Ave & Park Ave	NBL	1	1	0%	9.0	A	1	62	1	1	0%	8.0	A	1	68	1	1	0%	25.5	D	9	252	1	1	0%	23.9	C	16	280
		NBT	123	127	3%	10.2	B	3	61	123	127	3%	10.1	B	3	68	165	167	1%	32.6	D	11	252	165	167	1%	33.1	D	18	279
		NBR	225	221	-2%	8.5	A	7	154	225	221	-2%	8.6	A	7	156	498	503	1%	40.7	E	183	609	498	504	1%	41.8	E	186	626
		SBL	41	41	0%	8.6	A	3	74	41	41	0%	8.4	A	3	78	92	93	1%	9.2	A	4	84	92	93	1%	9.4	A	5	98
		SBT	126	123	-2%	8.7	A	4	71	126	123	-2%	8.5	A	4	81	83	83	0%	8.9	A	3	84	83	84	1%	9.3	A	4	97
		SBR	4	3	-25%	5.2	A	0	18	4	3	-25%	5.3	A	0	18	1	1	0%	5.3	A	0	13	1	1	0%	7.0	A	0	15
		EBL	0	0	-	0.0	A	0	10	0	0	-	0.0	A	0	10	5	5	0%	9.4	A	0	26	5	5	0%	9.4	A	0	28
		EBT	9	11	22%	12.4	B	0	26	9	11	22%	12.2	B	0	26	3	4	33%	12.3	B	0	28	3	4	33%	12.6	B	0	30
		EBR	1	1	0%	8.7	A	0	8	1	1	0%	8.3	A	0	8	3	3	0%	8.1	A	0	12	3	3	0%	8.2	A	0	15
		WBL	418	426	2%	60.6	F	222	518	418	426	2%	56.7	F	207	472	203	210	3%	10.2	B	9	114	203	210	3%	10.0	B	9	109
		WBT	3	4	33%	61.5	F	222	518	3	4	33%	59.8	F	206	472	3	2	-33%	12.4	B	7	114	3	2	-33%	13.1	B	7	109
		WBR	100	97	-3%	58.5	F	222	518	100	97	-3%	54.3	F	206	472	39	35	-10%	8.4	A	7	114	39	36	-8%	8.3	A	7	109
		Overall	**1051**	**1055**	**0%**	**34.6**	**D**			**1051**	**1055**	**0%**	**32.6**	**D**			**1096**	**1107**	**1%**	**27.2**	**D**			**1096**	**1110**	**1%**	**27.8**	**D**		

Bay Avenue Corridor Improvement Project

Existing 2024 VISSIM Results: Bay Ave AM Peak Hour Travel Time Summary

Scenario	Segment	Distance *(mi)*	Free Flow *Speed*	Simulation *Car*
NB - N. of Park Ave to S. of Highway 1 SB Ramps				
Alternative 1	Average Travel Time (mins)	0.62	1.5	2.27
AWSC	Average Travel Speed (mph)		*25*	*16*
Alternative 2	Average Travel Time (mins)	0.62	1.5	1.91
Roundabout	Average Travel Speed (mph)		*25*	*20*
SB - S. of Highway 1 SB Ramps to N. of Park Ave				
Alternative 1	Average Travel Time (mins)	0.62	1.5	2.11
AWSC	Average Travel Speed (mph)		*25*	*18*
Alternative 2	Average Travel Time (mins)	0.63	1.5	1.89
Roundabout	Average Travel Speed (mph)		*25*	*20*

Existing 2024 VISSIM Results: Bay Ave PM Peak Hour Travel Time Summary

Alternative	Segment	Distance *(mi)*	Free Flow *Speed*	Simulation *Car*
NB - N. of Park Ave to S. of Highway 1 SB Ramps				
Alternative 1	Average Travel Time (mins)	0.62	1.5	2.01
AWSC	Average Travel Speed (mph)		*25*	*18*
Alternative 2	Average Travel Time (mins)	0.62	1.5	1.89
Roundabout	Average Travel Speed (mph)		*25*	*20*
SB - S. of Highway 1 SB Ramps to N. of Park Ave				
Alternative 1	Average Travel Time (mins)	0.62	1.5	3.87
AWSC	Average Travel Speed (mph)		*25*	*10*
Alternative 2	Average Travel Time (mins)	0.63	1.5	2.25
Roundabout	Average Travel Speed (mph)		*25*	*17*

Bay Avenue Corridor Improvement Project

Existing 2024 VISSIM Results: Bay Ave Peak Hour Queueing Summary

Item 9 A.

No.	Intersection	Movement	AM Peak Hour									PM Peak Hour								
			Alternative 1 AWSC (VISSIM)			Alternative 2 Roundabout (VISSIM)			Alternative 3 Signal (Synchro)			Alternative 1 AWSC (VISSIM)			Alternative 2 Roundabout (VISSIM)			Alternative 3 Signal (Synchro)		
			Capacity (ft)	Avg Queue *(ft)*	Max Queue *(ft)*	Capacity (ft)	Avg Queue *(ft)*	Max Queue *(ft)*	Capacity (ft)	Avg Queue *(ft)*	Max Queue *(ft)*	Capacity (ft)	Avg Queue *(ft)*	Max Queue *(ft)*	Capacity (ft)	Avg Queue *(ft)*	Max Queue *(ft)*	Capacity (ft)	Avg Queue *(ft)*	Max Queue *(ft)*
1	Bay Ave & Hwy 1 NB Ramps	NBL	200	33	**220**	200	35	**218**	200	182	**261**	200	28	184	200	29	**200**	200	129	**258**
		NBT	200	33	**219**	200	35	**218**	200	23	68	200	28	184	200	29	200	200	25	70
		SBT	130	41	**258**	130	41	**264**	130	**141**	**484**	130	40	**255**	130	40	**252**	130	**151**	**480**
		SBR	130	43	**262**	130	43	**268**	130	**252**	**496**	130	39	**259**	130	39	**256**	130	**262**	**496**
		WBL	220	8	72	220	8	72	220	31	70	220	15	110	220	15	108	220	59	152
		WBT	730	4	82	730	4	84	730	40	173	730	4	103	730	4	97	730	40	86
		WBR	730	5	82	730	5	84	730	40	173	730	5	103	730	5	97	730	40	86
2	Bay Ave & Hwy 1 SB Ramps	NBT	450	45	252	450	47	259	450	105	228	450	36	201	450	35	204	450	76	156
		NBR	450	46	255	450	48	262	450	136	244	450	38	203	450	37	207	450	104	181
		SBL	200	36	170	200	36	156	200	74	116	200	60	**251**	200	58	**259**	200	111	**218**
		SBT	200	36	171	200	36	157	200	65	152	200	60	**250**	200	59	**259**	200	103	161
		EBL	200	29	139	200	29	135	200	130	175	200	140	**704**	200	66	**385**	200	138	175
		EBT	360	29	139	360	29	135	360	249	358	360	140	**704**	360	66	**385**	360	346	**387**
		EBR	360	29	139	360	29	135	360	249	358	360	140	**704**	360	66	**385**	360	346	**387**
3	Bay Ave & Crossroads Loop	NBL	60	0	26	60	0	23	60	0	16	60	1	57	60	0	**60**	60	3	29
		NBT	145	0	14	145	0	7	145	0	16	145	0	5	145	0	0	145	1	16
		NBR	145	0	10	145	0	10	145	0	16	145	0	6	145	0	3	145	1	16
		SBL	60	1	36	60	1	40	60	13	45	60	23	**234**	60	1	40	60	15	**74**
		SBT	450	5	164	450	0	35	450	6	45	450	289	**547**	450	2	124	450	24	172
		SBR	450	4	162	450	0	71	450	6	45	450	288	**545**	450	2	121	450	24	172
		EBL	80	0	41	80	0	42	80	30	73	80	1	43	80	1	45	80	29	72
		EBT	80	0	41	80	0	42	80	30	73	80	1	43	80	1	45	80	29	72
		EBR	80	0	27	80	0	27	80	13	26	80	0	35	80	0	43	80	20	48
		WBL	100	0	33	100	0	34	100	15	29	100	2	48	100	1	44	100	21	50
		WBT	100	0	33	100	0	34	100	15	29	100	2	48	100	1	44	100	21	50
		WBR	100	0	33	100	0	34	100	15	29	100	2	48	100	1	43	100	21	50
4	Bay Ave & Hill St	NBL	100	1	45	340	4	148	100	48	85	100	1	44	340	6	150	340	37	85
		NBT	340	51	252	340	4	148	340	106	226	340	13	129	340	6	150	340	89	208
		NBR	340	47	252	340	4	148	340	106	226	340	9	129	340	6	150	340	89	208
		SBL	100	2	83	160	3	**189**	100	47	80	100	7	**210**	160	8	**203**	160	64	80
		SBT	160	36	**216**	160	3	**189**	160	99	**162**	160	121	**228**	160	8	**203**	160	125	**165**
		SBR	160	34	**216**	160	3	**189**	160	99	**162**	160	120	**228**	160	8	**203**	160	125	**165**
		EBL	100	2	61	100	1	58	100	51	**111**	100	7	**102**	100	9	**143**	100	63	**164**
		EBT	100	1	62	100	1	58	100	51	**111**	100	6	**102**	100	9	**143**	100	63	**164**
		EBR	100	1	62	100	1	58	100	51	**111**	100	7	**102**	100	9	**143**	100	63	**164**
		WBL	340	3	95	340	6	130	340	51	115	340	2	66	340	2	83	340	37	71
		WBT	340	3	95	340	6	130	340	51	115	340	2	66	340	2	83	340	37	71
		WBR	340	5	95	340	6	130	340	51	115	340	2	66	340	2	83	340	37	71
5	Bay Ave & Capitola Ave	NBL	90	1	38	260	1	62	90	9	54	90	1	39	260	0	36	260	10	44
		NBT	220	25	174	260	1	62	220	51	150	220	6	84	260	0	36	260	18	68
		NBR	220	22	173	220	1	62	220	51	150	220	4	84	220	0	36	220	18	68
		SBL	230	5	95	170	3	167	230	59	220	230	14	166	170	4	168	170	73	173
		SBT	230	6	95	170	3	167	230	59	220	230	18	166	170	4	168	170	73	173
		SBR	130	2	68	170	3	167	130	21	95	130	2	53	170	4	168	170	17	95
		EBL	200	3	65	230	1	71	200	33	63	200	4	80	230	2	92	230	45	89
		EBT	200	3	65	230	1	71	200	33	63	200	4	80	230	2	92	230	45	89
		EBR	60	0	28	150	0	28	60	3	28	60	0	22	150	0	19	150	5	28
		WBL	180	7	105	180	2	94	180	64	**227**	180	4	89	180	1	68	180	39	89
		WBT	180	7	105	180	2	94	180	64	**227**	180	4	89	180	1	68	180	39	89
		WBR	180	4	97	180	0	70	180	64	**227**	180	2	81	180	0	52	180	39	89
6	Bay Ave & Monterey Ave	NBT	215	4	61	215	4	67	215	46	120	215	2	58	215	2	54	215	28	56
		NBR	215	3	61	215	3	67	215	46	120	215	2	58	215	2	54	215	28	56
		SBL	240	16	151	240	21	194	240	76	194	240	68	**270**	240	104	**385**	240	69	140
		SBT	240	15	151	240	20	194	240	76	194	240	67	**270**	240	104	**385**	240	69	140
		WBL	400	36	236	400	35	220	400	78	167	400	3	71	400	3	73	400	43	72
		WBR	400	37	236	400	36	220	400	78	167	400	4	71	400	4	73	400	43	72
7	Monterey Ave & Park Ave	NBL	90	1	62	90	1	68	90	69	**188**	90	9	**252**	90	16	**280**	90	**93**	**194**
		NBT	90	3	61	90	3	68	90	69	**188**	90	11	**252**	90	18	**279**	90	**93**	**194**
		NBR	180	7	154	180	7	156	180	69	**188**	180	**183**	**609**	180	**186**	**626**	180	93	**194**
		SBL	215	3	74	215	3	78	215	59	111	215	4	84	215	5	98	215	84	**238**
		SBT	215	4	71	215	4	81	215	59	111	215	3	84	215	4	97	215	84	**238**
		SBR	50	0	18	50	0	18	50	**59**	**111**	50	0	13	50	0	15	50	**84**	**238**
		EBL	250	0	10	250	0	10	250	9	28	250	0	26	250	0	28	250	9	28
		EBT	250	0	26	250	0	26	250	9	28	250	0	28	250	0	30	250	9	28
		EBR	250	0	8	250	0	8	250	9	28	250	0	12	250	0	15	250	9	28
		WBL	85	**222**	**518**	85	**207**	**472**	85	**134**	**268**	85	9	**114**	85	9	**109**	85	79	**182**
		WBT	85	**222**	**518**	85	**206**	**472**	85	**134**	**268**	85	7	**114**	85	7	**109**	85	79	**182**
		WBR	85	**222**	**518**	85	**206**	**472**	85	**134**	**268**	85	7	**114**	85	7	**109**	85	79	**182**

* Red = Queue exceeds capacity

Bay Avenue Corridor Improvement Project

Cumulative 2040 VISSIM Results: Bay Ave Peak Hour Intersection Results

No.	Intersection	Movement	Alternative 1 AM AWSC							Alternative 2 AM RAB							Alternative 1 PM AWSC							Alternative 2 PM RAB						
			Volume (vph)			Avg. Delay	LOS	Avg. Queue	Max. Queue	Volume (vph)			Avg. Delay	LOS	Avg. Queue	Max. Queue	Volume (vph)			Avg. Delay	LOS	Avg. Queue	Max. Queue	Volume (vph)			Avg. Delay	LOS	Avg. Queue	Max. Queue
			Count	Served		(sec)		(ft)	(ft)	Count	Served		(sec)		(ft)	(ft)	Count	Served		(sec)		(ft)	(ft)	Count	Served		(sec)		(ft)	(ft)
1	Bay Ave & Hwy 1 NB Ramps	NBL	321	315	-2%	19.9	B	33	208	321	315	-2%	17.7	B	29	210	683	567	-17%	21.5	C	60	270	683	563	-18%	20.3	C	55	283
		NBT	392	307	-22%	1.3	A	33	207	392	398	2%	1.1	A	29	209	726	598	-18%	2.4	A	60	281	726	636	-12%	3.9	A	55	283
		SBT	436	436	0%	17.7	B	70	328	436	435	0%	17.1	B	69	325	644	648	1%	50.0	D	151	401	644	644	0%	49.4	D	146	419
		SBR	536	538	0%	19.4	B	73	333	536	538	0%	19.1	B	72	329	149	144	-3%	22.4	C	152	406	149	147	-1%	23.1	C	148	424
		WBL	161	165	2%	29.1	C	24	168	161	165	2%	27.7	C	22	159	77	81	5%	32.8	C	13	117	77	82	6%	33.8	C	13	112
		WBT	12	11	-8%	30.5	C	21	240	12	11	-8%	30.6	C	23	247	1	1	0%	31.2	C	30	238	1	1	0%	34.5	C	26	209
		WBR	379	376	-1%	12.1	B	22	240	379	376	-1%	12.6	B	24	247	406	396	-2%	14.1	B	31	238	406	394	-3%	14.2	B	27	210
		Overall	**2237**	**2148**	**-4%**	**16.1**	**B**			**2237**	**2238**	**0%**	**14.9**	**B**			**2686**	**2435**	**-9%**	**23.6**	**C**			**2686**	**2467**	**-8%**	**23.3**	**C**		
2	Bay Ave & Hwy 1 SB Ramps	NBT	465	460	-1%	18.5	B	37	219	465	460	-1%	16.7	B	34	215	992	770	-22%	47.6	D	171	480	992	769	-22%	92.9	F	302	518
		NBR	61	59	-3%	6.5	A	39	221	61	59	-3%	6.1	A	35	217	104	85	-18%	31.2	C	173	482	104	82	-21%	61.5	E	304	520
		SBL	251	251	0%	33.8	C	55	235	251	251	0%	33.9	C	49	224	370	369	0%	49.9	D	109	261	370	375	1%	50.9	D	119	285
		SBT	346	349	1%	21.8	C	56	236	346	349	1%	6.0	A	50	224	351	359	2%	18.9	B	109	261	351	349	-1%	14.8	B	119	285
		EBL	248	163	-34%	515.0	F	3156	3423	248	254	2%	26.3	C	30	153	417	394	-6%	139.8	F	1582	2743	417	430	3%	64.6	E	509	1664
		EBT	0	0	-	0.0	A	3156	3423	0	0	-	0.0	A	30	153	208	188	-10%	160.6	F	1582	2743	208	206	-1%	73.3	E	509	1664
		EBR	586	389	-34%	578.9	F	3156	3423	586	582	-1%	11.5	B	30	153	640	468	-27%	134.5	F	1582	2743	640	503	-21%	52.3	D	509	1664
		Overall	**1957**	**1671**	**-15%**	**200.0**	**F**			**1957**	**1955**	**0%**	**16.4**	**B**			**3082**	**2633**	**-15%**	**80.8**	**F**			**3082**	**2714**	**-12%**	**62.6**	**E**		
3	Bay Ave & Crossroads Loop	NBL	1	1	0%	11.3	B	0	22	1	1	0%	3.0	A	0	18	4	5	25%	8.7	A	0	58	4	5	25%	13.8	B	1	120
		NBT	394	392	-1%	0.1	A	0	0	394	391	-1%	0.2	A	0	0	988	751	-24%	1.9	A	3	113	988	749	-24%	5.8	A	15	239
		NBR	9	9	0%	0.8	A	0	4	9	9	0%	1.0	A	0	5	9	8	-11%	1.8	A	3	124	9	8	-11%	4.0	A	13	226
		SBL	69	55	-20%	144.5	F	174	299	69	68	-1%	3.5	A	1	51	92	73	-21%	95.8	F	87	498	92	78	-15%	7.7	A	2	79
		SBT	754	599	-21%	159.5	F	517	578	754	755	0%	1.3	A	1	101	787	645	-18%	96.4	F	354	572	787	666	-15%	2.1	A	4	168
		SBR	109	85	-22%	143.9	F	515	576	109	106	-3%	1.0	A	1	134	112	102	-9%	68.4	F	352	570	112	109	-3%	1.5	A	3	165
		EBL	53	52	-2%	12.0	B	0	41	53	52	-2%	14.4	B	0	41	49	47	-4%	13.8	B	0	40	49	47	-4%	21.3	C	1	57
		EBT	0	0	-	0.0	A	0	41	0	0	-	0.0	A	0	41	2	1	-50%	13.8	B	0	40	2	1	-50%	26.6	D	1	57
		EBR	21	20	-5%	44.0	E	0	33	21	20	-5%	11.5	B	0	26	38	36	-5%	8.0	A	0	41	38	36	-5%	13.1	B	1	52
		WBL	0	0	-	0.0	A	2	53	0	0	-	0.0	A	2	51	4	3	-25%	157.5	F	13	127	4	3	-25%	21.7	C	5	63
		WBT	1	1	0%	15.9	C	2	53	1	1	0%	16.7	C	2	51	1	1	0%	74.6	F	13	127	1	1	0%	21.0	C	5	63
		WBR	79	78	-1%	7.8	A	2	53	79	78	-1%	7.9	A	2	51	59	56	-5%	38.4	E	13	127	59	55	-7%	19.5	C	5	62
		Overall	**1490**	**1292**	**-13%**	**159.5**	**F**			**1490**	**1481**	**-1%**	**16.7**	**C**			**2145**	**1728**	**-19%**	**157.5**	**F**			**2145**	**1758**	**-18%**	**26.6**	**D**		
4	Bay Ave & Hill St	NBL	57	57	0%	6.9	A	1	48	57	58	2%	1.7	A	2	94	46	43	-7%	24.8	C	1	46	46	45	-2%	5.6	A	17	268
		NBT	293	291	-1%	8.9	A	9	92	293	291	-1%	1.7	A	2	94	717	484	-32%	39.6	E	166	529	717	482	-33%	6.0	A	17	268
		NBR	4	4	0%	7.6	A	4	92	4	4	0%	1.4	A	2	94	34	29	-15%	39.4	E	165	529	34	29	-15%	5.2	A	17	268
		SBL	75	61	-19%	18.3	C	2	149	75	77	3%	2.8	A	9	240	146	142	-3%	15.8	C	5	163	146	147	1%	3.1	A	9	220
		SBT	669	532	-20%	33.1	D	144	227	669	666	0%	3.1	A	9	240	634	493	-22%	27.8	D	102	222	634	510	-20%	2.9	A	9	220
		SBR	31	26	-16%	32.0	D	144	227	31	31	0%	2.7	A	9	240	49	48	-2%	26.3	D	102	223	49	49	0%	2.5	A	9	220
		EBL	43	43	0%	10.4	B	2	62	43	43	0%	14.5	B	6	90	92	90	-2%	12.2	B	6	100	92	89	-3%	11.0	B	9	133
		EBT	19	20	5%	12.3	B	1	62	19	20	5%	14.3	B	6	90	45	43	-4%	14.4	B	6	101	45	46	2%	10.0	B	9	133
		EBR	39	40	3%	10.0	A	2	63	39	40	3%	17.4	C	6	91	84	82	-2%	11.3	B	6	101	84	81	-4%	12.9	B	9	134
		WBL	13	14	8%	11.8	B	1	63	13	14	8%	5.4	A	1	75	22	22	0%	13.9	B	8	121	22	22	0%	8.7	A	9	135
		WBT	28	27	-4%	11.6	B	1	63	28	27	-4%	4.6	A	1	75	33	34	3%	15.0	C	8	120	33	34	3%	7.2	A	9	135
		WBR	68	68	0%	10.0	A	2	63	68	68	0%	4.9	A	1	75	192	191	-1%	13.1	B	10	120	192	191	-1%	7.3	A	9	135
		Overall	**1339**	**1183**	**-12%**	**21.0**	**C**			**1339**	**1339**	**0%**	**17.4**	**C**			**2094**	**1701**	**-19%**	**26.2**	**D**			**2094**	**1725**	**-18%**	**12.9**	**B**		
5	Bay Ave & Capitola Ave	NBL	27	27	0%	8.6	A	1	36	27	27	0%	2.6	A	0	58	29	28	-3%	9.5	A	1	38	29	29	0%	4.0	A	0	32
		NBT	312	310	-1%	14.5	B	24	172	312	311	0%	2.7	A	0	58	200	184	-8%	9.7	A	6	86	200	185	-8%	2.9	A	0	32
		NBR	55	56	2%	11.9	B	21	171	55	56	2%	2.8	A	0	58	23	22	-4%	7.1	A	3	85	23	21	-9%	3.3	A	0	32
		SBL	74	63	-15%	8.2	A	3	72	74	76	3%	2.5	A	3	129	61	53	-13%	16.6	C	57	305	61	56	-8%	5.2	A	16	335
		SBT	183	144	-21%	8.4	A	4	71	183	178	-3%	2.6	A	3	129	337	319	-5%	16.9	C	59	305	337	324	-4%	9.7	A	16	335
		SBR	128	108	-16%	6.2	A	2	52	128	131	2%	2.3	A	3	129	171	134	-22%	9.0	A	3	76	171	143	-16%	5.1	A	16	335
		EBL	78	76	-3%	11.8	B	3	78	78	76	-3%	4.0	A	1	73	190	186	-2%	15.2	C	13	131	190	184	-3%	7.0	A	8	156
		EBT	67	68	1%	11.6	B	3	78	67	68	1%	3.7	A	1	73	63	63	0%	15.8	C	11	131	63	64	2%	7.4	A	8	156
		EBR	6	6	0%	7.8	A	0	28	6	6	0%	2.3	A	0	13	8	8	0%	9.3	A	0	26	8	8	0%	11.8	B	1	44
		WBL	83	83	0%	12.8	B	7	109	83	82	-1%	4.4	A	2	93	17	16	-6%	12.8	B	2	87	17	18	6%	11.4	B	1	51
		WBT	94	96	2%	13.7	B	7	109	94	96	2%	4.3	A	2	93	65	67	3%	13.4	B	3	87	65	64	-2%	4.7	A	1	51
		WBR	42	45	7%	10.8	B	4	102	42	45	7%	3.6	A	0	75	73	67	-8%	10.1	B	3	79	73	68	-7%	2.7	A	0	51
		Overall	**1149**	**1082**	**-6%**	**11.4**	**B**			**1149**	**1152**	**0%**	**4.4**	**A**			**1237**	**1147**	**-7%**	**13.4**	**B**			**1237**	**1164**	**-6%**	**11.8**	**B**		
6	Bay Ave & Monterey Ave	NBT	162	160	-1%	9.0	A	4	77	162	160	-1%	9.0	A	4	71	305	282	-8%	9.8	A	9	112	305	280	-8%	9.8	A	9	106
		NBR	61	63	3%	2.2	A	3	77	61	63	3%	2.1	A	2	72	85	77	-9%	3.5	A	7	112	85	75	-12%	3.5	A	7	106
		SBL	219	207	-5%	24.7	C	65	316	219	223	2%	25.9	D	75	344	304	295	-3%	89.3	F	486	841	304	289	-5%	111.7	F	753	1228
		SBT	239	220	-8%	24.5	C	65	316	239	236	-1%	27.0	D	75	344	251	232	-8%	90.3	F	486	841	251	238	-5%	112.3	F	753	1228
		WBL	87	85	-2%	21.1	C	36	227	87	85	-2%	19.3	C	30	205	35	35	0%	12.0	B	3	76	35	36	3%	12.0	B	3	75
		WBR	282	287	2%	18.0	C	36	227	282	286	1%	16.2	C	30	206	104	104	0%	9.1	A	4	76	104	103	-1%	9.3	A	4	75
		Overall	**1050**	**1022**	**-3%**	**18.6**	**C**			**1050**	**1053**	**0%**	**19.0**	**C**			**1084**	**1025**	**-5%**	**50.4**	**F**			**1084**	**1021**	**-6%**	**62.1**	**F**		
7	Monterey Ave & Park Ave	NBL	1	1	0%	9.6	A	2	72	1	1	0%	11.5	B	2	69	1	1	0%	229.3	F	711	877	1	1	0%	247.6	F	615	888
		NBT	123	127	3%	10.7	B	4	72	123	127	3%	10.7	B	4	68	148	125	-16%	242.2	F	712	877	148	123	-17%	249.6	F	616	888
		NBR	238	233	-2%	9.5	A	9	159	238	233	-2%	9.4	A	9	158	619	528	-15%	251.6	F	1340	1417	619	514	-17%	260.1	F	1345	1418
		SBL	201	191	-5%	11.7	B	15	135	201	199	-1%	13.0	B	19	159	202	188	-7%	10.4	B	9	104	202	195	-3%	10.9	B	11	104
		SBT	121	112	-7%	12.2	B	14	134	121	118	-2%	13.1	B	18	159	83	78	-6%	9.8	A	7	103	83	78	-6%	10.8	B	9	104
		SBR	4	3	-25%	6.8	A	0	20	4	4	0%	6.2	A	0	22	1	1	0%	6.2	A	0	12	1	1	0%	8.5	A	0	8
		EBL	0	0	-	0.0	A	0	14	0	0	-	0.0	A	0	14	5	2	-60%	9.3	A	0	20	5	3	-40%	9.6	A	0	20
		EBT	9	11	22%	12.7	B	0	28	9	11	22%	13.1	B	0	28	3	2	-33%	12.6	B	0	18	3	2	-33%	12.5	B	0	20
		EBR	1	1	0%	8.0	A	0	12	1	1	0%	7.9	A	0	12	3	2	-33%	8.6	A	0	4	3	1	-67%	8.8	A	0	6
		WBL	418	419	0%	102.3	F	389	700	418	422	1%	95.8	F	363	650	203	205	1%	20.6	C	48	255	203	209	3%	20.4	C	49	256
		WBT	3	4	33%	105.8	F	389	700	3	4	33%	97.1	F	363	650	3	3	0%	23.1	C	47	256	3	4	33%	23.2	C	47	256
		WBR	100	96	-4%	100.4	F	389	700	100	96	-4%	94.0	F	363	650	237	230	-3%	19.1	C	48	255	237	227	-4%	18.7	C	49	256
		Overall	**1219**	**1198**	**-2%**	**50.3**	**F**			**1219**	**1216**	**0%**	**47.5**	**E**			**1508**	**1365**	**-9%**	**128.1**	**F**			**1508**	**1358**	**-10%**	**129.8**	**F**		

Bay Avenue Corridor Improvement Project

Cumulative 2040 VISSIM Results: Bay Ave AM Peak Hour Travel Time Summary

Scenario	Segment	Distance *(mi)*	Free Flow *Speed*	Simulation *Car*
NB - N. of Park Ave to S. of Highway 1 SB Ramps				
Alternative 1	Average Travel Time (mins)	0.62	1.5	2.09
AWSC	Average Travel Speed (mph)		*25*	*18*
Alternative 2	Segment	0.62	1.5	1.88
Roundabout	Average Travel Speed (mph)		*25*	*20*
SB - S. of Highway 1 SB Ramps to N. of Park Ave				
Alternative 1	Average Travel Time (mins)	0.62	1.5	5.26
AWSC	Average Travel Speed (mph)		*25*	*7*
Alternative 2	Average Travel Time (mins)	0.63	1.5	2.21
Roundabout	Average Travel Speed (mph)		*25*	*17*

Cumulative 2040 VISSIM Results: Bay Ave PM Peak Hour Travel Time Summary

Alternative	Segment	Distance *(mi)*	Free Flow *Speed*	Simulation *Car*
NB - N. of Park Ave to S. of Highway 1 SB Ramps				
Alternative 1	Average Travel Time (mins)	0.62	1.5	3.20
AWSC	Average Travel Speed (mph)		*25*	*12*
Alternative 2	Average Travel Time (mins)	0.62	1.5	3.29
Roundabout	Average Travel Speed (mph)		*25*	*11*
SB - S. of Highway 1 SB Ramps to N. of Park Ave				
Alternative 1	Average Travel Time (mins)	0.62	1.5	5.89
AWSC	Average Travel Speed (mph)		*25*	*6*
Alternative 2	Average Travel Time (mins)	0.63	1.5	4.99
Roundabout	Average Travel Speed (mph)		*25*	*8*

Bay Avenue Corridor Improvement Project

Cumulative 2040 VISSIM Results: Bay Ave Peak Hour Queueing Summary

No.	Intersection	Movement	AM Peak Hour									PM Peak Hour								
			Alternative 1 AWSC (VISSIM)			Alternative 2 Roundabout (VISSIM)			Alternative 3 Signal (Synchro)			Alternative 1 AWSC (VISSIM)			Alternative 2 Roundabout (VISSIM)			Alternative 3 Signal (Synchro)		
			Capacity (ft)	Avg Queue (ft)	Max Queue (ft)	Capacity (ft)	Avg Queue (ft)	Max Queue (ft)	Capacity (ft)	Avg Queue (ft)	Max Queue (ft)	Capacity (ft)	Avg Queue (ft)	Max Queue (ft)	Capacity (ft)	Avg Queue (ft)	Max Queue (ft)	Capacity (ft)	Avg Queue (ft)	Max Queue (ft)
1	Bay Ave & Hwy 1 NB Ramps	NBL	200	33	208	200	29	210	200	159	242	200	60	270	200	55	283	200	244	252
		NBT	200	33	207	200	29	209	200	26	73	200	60	281	200	55	283	200	25	50
		SBT	130	70	328	130	69	325	130	336	544	130	151	401	130	146	419	130	340	520
		SBR	130	73	333	130	72	329	130	413	533	130	152	406	130	148	424	130	356	515
		WBL	220	24	168	220	22	159	220	89	204	220	13	117	220	13	112	220	54	149
		WBT	730	21	240	730	23	247	730	101	295	730	30	238	730	26	209	730	86	173
		WBR	730	22	240	730	24	247	730	101	295	730	31	238	730	27	210	730	86	173
2	Bay Ave & Hwy 1 SB Ramps	NBT	450	37	219	450	34	215	450	86	151	450	171	480	450	302	518	450	417	452
		NBR	450	39	221	450	35	217	450	126	224	450	173	482	450	304	520	450	421	469
		SBL	200	55	235	200	49	224	200	100	184	200	109	261	200	119	285	200	246	269
		SBT	200	56	236	200	50	224	200	66	118	200	109	261	200	119	285	200	38	205
		EBL	200	3156	3423	200	30	153	200	166	175	200	1582	2743	200	509	1664	200	130	175
		EBT	360	3156	3423	360	30	153	360	348	376	360	1582	2743	360	509	1664	360	343	376
		EBR	360	3156	3423	360	30	153	360	348	376	360	1582	2743	360	509	1664	360	343	376
3	Bay Ave & Crossroads Loop	NBL	60	0	22	60	0	18	60	0	0	60	0	58	60	1	120	60	6	75
		NBT	145	0	0	145	0	0	145	0	0	145	3	113	145	15	239	145	162	193
		NBR	145	0	4	145	0	5	145	0	0	145	3	124	145	13	226	145	169	202
		SBL	60	174	299	60	1	51	60	12	74	60	87	498	60	2	79	60	21	74
		SBT	450	517	578	450	1	101	450	30	215	450	354	572	450	4	168	450	92	344
		SBR	450	515	576	450	1	134	450	30	215	450	352	570	450	3	165	450	92	344
		EBL	80	0	41	80	0	41	80	41	76	80	0	40	80	1	57	80	223	236
		EBT	80	0	41	80	0	41	80	41	76	80	0	40	80	1	57	80	165	236
		EBR	80	0	33	80	0	26	80	15	26	80	0	41	80	1	52	80	165	236
		WBL	100	2	53	100	2	51	100	35	73	100	13	127	100	5	63	100	337	482
		WBT	100	2	53	100	2	51	100	35	73	100	13	127	100	5	63	100	337	482
		WBR	100	2	53	100	2	51	100	35	73	100	13	127	100	5	62	100	337	482
4	Bay Ave & Hill St	NBL	100	1	48	340	2	94	100	38	84	100	1	46	340	17	268	340	37	84
		NBT	340	9	92	340	2	94	340	69	144	340	166	529	340	17	268	340	393	433
		NBR	340	4	92	340	2	94	340	69	144	340	165	529	340	17	268	340	393	433
		SBL	100	2	149	160	9	240	100	53	80	100	5	163	160	9	220	160	65	80
		SBT	160	144	227	160	9	240	160	124	163	160	102	222	160	9	220	160	127	163
		SBR	160	144	227	160	9	240	160	124	163	160	102	223	160	9	220	160	127	163
		EBL	100	2	62	100	6	90	100	48	114	100	6	100	100	9	133	100	171	202
		EBT	100	1	62	100	6	90	100	48	114	100	6	101	100	9	133	100	171	202
		EBR	100	2	63	100	6	91	100	48	114	100	6	101	100	9	134	100	171	202
		WBL	340	1	63	340	1	75	340	38	93	340	8	121	340	9	135	340	183	290
		WBT	340	1	63	340	1	75	340	38	93	340	8	120	340	9	135	340	183	290
		WBR	340	2	63	340	1	75	340	38	93	340	10	120	340	9	135	340	183	290
5	Bay Ave & Capitola Ave	NBL	90	1	36	260	0	58	90	10	54	90	1	38	260	0	32	260	22	55
		NBT	220	24	172	260	0	58	220	51	154	220	6	86	260	0	32	260	186	697
		NBR	220	21	171	220	0	58	220	51	154	220	3	85	220	0	32	220	186	697
		SBL	230	3	72	170	3	129	230	60	204	230	57	305	170	16	335	170	58	188
		SBT	230	4	71	170	3	129	230	26	95	230	59	305	170	16	335	170	58	188
		SBR	130	2	52	170	3	129	130	26	95	130	3	76	170	16	335	170	24	95
		EBL	200	3	78	230	1	73	200	50	85	200	13	131	230	8	156	230	206	786
		EBT	200	3	78	230	1	73	200	50	85	200	11	131	230	8	156	230	206	786
		EBR	60	0	28	150	0	13	60	3	28	60	0	26	150	1	44	150	4	79
		WBL	180	7	109	180	2	93	180	57	131	180	2	87	180	1	51	180	64	277
		WBT	180	7	109	180	2	93	180	57	131	180	3	87	180	1	51	180	64	277
		WBR	180	4	102	180	0	75	180	57	131	180	3	79	180	0	51	180	64	277
6	Bay Ave & Monterey Ave	NBT	215	4	77	215	4	71	215	61	186	215	9	112	215	9	106	215	77	158
		NBR	215	3	77	215	2	72	215	61	186	215	7	112	215	7	106	215	77	158
		SBL	240	65	316	240	75	344	240	105	261	240	486	841	240	753	1228	240	601	1065
		SBT	240	65	316	240	75	344	240	105	261	240	486	841	240	753	1228	240	601	1065
		WBL	400	36	227	400	30	205	400	88	159	400	3	76	400	3	75	400	185	451
		WBR	400	36	227	400	30	206	400	88	159	400	4	76	400	4	75	400	185	451
7	Monterey Ave & Park Ave	NBL	90	2	72	90	2	69	90	84	237	90	711	877	90	615	888	90	155	269
		NBT	90	4	72	90	4	68	90	84	237	90	712	877	90	616	888	90	155	269
		NBR	180	9	159	180	9	158	180	84	237	180	1340	1417	180	1345	1418	180	155	269
		SBL	215	15	135	215	19	159	215	136	244	215	9	104	215	11	104	215	169	427
		SBT	215	14	134	215	18	159	215	136	244	215	7	103	215	9	104	215	169	427
		SBR	50	0	20	50	0	22	50	136	244	50	0	12	50	0	8	50	169	427
		EBL	250	0	14	250	0	14	250	4	28	250	0	20	250	0	20	250	2	27
		EBT	250	0	28	250	0	28	250	4	28	250	0	18	250	0	20	250	2	27
		EBR	250	0	12	250	0	12	250	4	28	250	0	4	250	0	6	250	2	27
		WBL	85	389	700	85	363	650	85	131	269	85	48	255	85	49	256	85	155	269
		WBT	85	389	700	85	363	650	85	131	269	85	47	256	85	47	256	85	155	269
		WBR	85	389	700	85	363	650	85	131	269	85	48	255	85	49	256	85	155	269

* Red = Queue exceeds capacity

Attachment D – Synchro LOS Results (No Build, Stop, and Signal Alternatives)

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	59	12	107	369	516	0	0	431	478
Future Volume (veh/h)	0	0	0	59	12	107	369	516	0	0	431	478
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				65	13	118	405	567	0	0	474	525
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				164	15	139	535	2628	0	0	646	545
Arrive On Green				0.09	0.09	0.09	0.30	0.75	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1739	162	1473	1795	3618	0	0	1870	1498
Grp Volume(v), veh/h				65	0	131	405	567	0	0	474	525
Grp Sat Flow(s),veh/h/ln				1739	0	1635	1795	1763	0	0	1777	1498
Q Serve(g_s), s				1.9	0.0	4.3	11.2	2.7	0.0	0.0	12.7	18.9
Cycle Q Clear(g_c), s				1.9	0.0	4.3	11.2	2.7	0.0	0.0	12.7	18.9
Prop In Lane				1.00		0.90	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				164	0	155	535	2628	0	0	646	545
V/C Ratio(X)				0.40	0.00	0.85	0.76	0.22	0.00	0.00	0.73	0.96
Avail Cap(c_a), veh/h				164	0	155	565	2628	0	0	646	545
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				23.4	0.0	24.5	17.5	2.1	0.0	0.0	15.2	17.1
Incr Delay (d2), s/veh				0.6	0.0	31.8	4.0	0.2	0.0	0.0	7.2	30.6
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.0	2.9	4.8	0.5	0.0	0.0	5.9	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				24.0	0.0	56.3	21.5	2.3	0.0	0.0	22.4	47.8
LnGrp LOS				C		E	C	A			C	D
Approach Vol, veh/h					196			972			999	
Approach Delay, s/veh					45.6			10.3			35.7	
Approach LOS					D			B			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.0	24.6		9.4		45.6
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	17.3	* 20		5.2		41.0
Max Q Clear Time (g_c+I1), s	13.2	20.9		6.3		4.7
Green Ext Time (p_c), s	0.1	0.0		0.0		1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	25.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	0	296	0	0	0	0	572	111	176	314	0
Future Volume (veh/h)	313	0	296	0	0	0	0	572	111	176	314	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	440	0	215				0	622	121	191	341	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	613	0	277				0	1035	201	370	2283	0
Arrive On Green	0.18	0.00	0.18				0.00	0.35	0.35	0.21	0.65	0.00
Sat Flow, veh/h	3478	0	1572				0	3069	577	1781	3618	0
Grp Volume(v), veh/h	440	0	215				0	374	369	191	341	0
Grp Sat Flow(s),veh/h/ln	1739	0	1572				0	1791	1762	1781	1763	0
Q Serve(g_s), s	6.0	0.0	6.5				0.0	8.6	8.6	4.8	1.9	0.0
Cycle Q Clear(g_c), s	6.0	0.0	6.5				0.0	8.6	8.6	4.8	1.9	0.0
Prop In Lane	1.00		1.00				0.00		0.33	1.00		0.00
Lane Grp Cap(c), veh/h	613	0	277				0	623	613	370	2283	0
V/C Ratio(X)	0.72	0.00	0.78				0.00	0.60	0.60	0.52	0.15	0.00
Avail Cap(c_a), veh/h	751	0	340				0	623	613	370	2283	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	19.4	0.0	19.6				0.0	13.4	13.4	17.6	3.4	0.0
Incr Delay (d2), s/veh	1.7	0.0	6.8				0.0	4.2	4.3	0.4	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	2.6				0.0	3.7	3.7	1.8	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	0.0	26.5				0.0	17.7	17.8	18.0	3.5	0.0
LnGrp LOS	C		C					B	B	B	A	
Approach Vol, veh/h		655						743			532	
Approach Delay, s/veh		22.9						17.7			8.7	
Approach LOS		C						B			A	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	37.0		15.0	22.0		13.0
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	30.4		9.3	* 17		10.8
Max Q Clear Time (g_c+I1), s	3.9		6.8	10.6		8.5
Green Ext Time (p_c), s	0.9		0.0	1.3		0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	17.0
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	21	0	1	14	1	616	9	39	462	109
Future Vol, veh/h	53	0	21	0	1	14	1	616	9	39	462	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	0	23	0	1	15	1	677	10	43	508	120

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	995	1342	314	1024	1397	343	627	0	0	687	0	0
Stage 1	653	653	-	684	684	-	-	-	-	-	-	-
Stage 2	341	689	-	340	713	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	199	151	682	190	140	653	950	-	-	903	-	-
Stage 1	422	462	-	405	447	-	-	-	-	-	-	-
Stage 2	647	445	-	649	433	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	184	144	682	174	133	653	950	-	-	903	-	-
Mov Cap-2 Maneuver	184	144	-	174	133	-	-	-	-	-	-	-
Stage 1	402	440	-	404	446	-	-	-	-	-	-	-
Stage 2	630	444	-	597	413	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	26.93	12.18	0.01	0.59
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	950	-	-	184	682	518	903	-	-
HCM Lane V/C Ratio	0.001	-	-	0.317	0.034	0.032	0.047	-	-
HCM Control Delay (s/veh)	8.8	-	-	33.5	10.5	12.2	9.2	-	-
HCM Lane LOS	A	-	-	D	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.3	0.1	0.1	0.1	-	-

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	19	39	9	28	142	57	441	10	75	377	31
Future Vol, veh/h	43	19	39	9	28	142	57	441	10	75	377	31
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	6	0	0	0	3	1	2	1	9	0	3	3
Mvmt Flow	48	21	44	10	31	160	64	496	11	84	424	35
Number of Lanes	0	1	1	0	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	13.2	16.7	20.3	17.5
HCM LOS	B	C	C	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	69%	0%	5%	100%	0%	0%
Vol Thru, %	0%	100%	94%	31%	0%	16%	0%	100%	80%
Vol Right, %	0%	0%	6%	0%	100%	79%	0%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	57	294	157	62	39	179	75	251	157
LT Vol	57	0	0	43	0	9	75	0	0
Through Vol	0	294	147	19	0	28	0	251	126
RT Vol	0	0	10	0	39	142	0	0	31
Lane Flow Rate	64	330	176	70	44	201	84	282	176
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.142	0.683	0.369	0.179	0.098	0.439	0.188	0.593	0.362
Departure Headway (Hd)	7.976	7.447	7.54	9.257	8.084	7.849	8.014	7.554	7.412
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	448	486	476	386	441	457	447	477	484
Service Time	5.744	5.215	5.308	7.051	5.876	5.624	5.781	5.321	5.179
HCM Lane V/C Ratio	0.143	0.679	0.37	0.181	0.1	0.44	0.188	0.591	0.364
HCM Control Delay, s/veh	12.1	24.9	14.7	14.1	11.8	16.7	12.6	20.8	14.4
HCM Lane LOS	B	C	B	B	B	C	B	C	B
HCM 95th-tile Q	0.5	5.1	1.7	0.6	0.3	2.2	0.7	3.8	1.6

Intersection	
Intersection Delay, s/veh	27.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	67	6	83	94	42	27	312	55	74	183	128
Future Vol, veh/h	70	67	6	83	94	42	27	312	55	74	183	128
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	81	7	100	113	51	33	376	66	89	220	154
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	16.8	22.6	41.7	20.2
HCM LOS	C	C	E	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	51%	0%	38%	29%	0%
Vol Thru, %	0%	85%	49%	0%	43%	71%	0%
Vol Right, %	0%	15%	0%	100%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	367	137	6	219	257	128
LT Vol	27	0	70	0	83	74	0
Through Vol	0	312	67	0	94	183	0
RT Vol	0	55	0	6	42	0	128
Lane Flow Rate	33	442	165	7	264	310	154
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.071	0.884	0.399	0.015	0.598	0.661	0.292
Departure Headway (Hd)	7.949	7.327	8.703	7.714	8.153	7.687	6.816
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	453	500	414	465	446	471	529
Service Time	5.649	5.027	6.435	5.445	6.168	5.409	4.538
HCM Lane V/C Ratio	0.073	0.884	0.399	0.015	0.592	0.658	0.291
HCM Control Delay, s/veh	11.3	43.9	17.1	10.6	22.6	24.2	12.3
HCM Lane LOS	B	E	C	B	C	C	B
HCM 95th-tile Q	0.2	9.7	1.9	0	3.8	4.7	1.2

Intersection	
Intersection Delay, s/veh	19.7
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	282	162	61	219	84
Future Vol, veh/h	87	282	162	61	219	84
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	371	213	80	288	111
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	22.4	14.4	20.3
HCM LOS	C	B	C

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	24%	72%
Vol Thru, %	73%	0%	28%
Vol Right, %	27%	76%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	223	369	303
LT Vol	0	87	219
Through Vol	162	0	84
RT Vol	61	282	0
Lane Flow Rate	293	486	399
Geometry Grp	1	1	1
Degree of Util (X)	0.48	0.737	0.665
Departure Headway (Hd)	5.895	5.462	6.007
Convergence, Y/N	Yes	Yes	Yes
Cap	607	655	598
Service Time	3.983	3.534	4.086
HCM Lane V/C Ratio	0.483	0.742	0.667
HCM Control Delay, s/veh	14.4	22.4	20.3
HCM Lane LOS	B	C	C
HCM 95th-tile Q	2.6	6.5	5

Intersection	
Intersection Delay, s/veh	25.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	9	1	418	3	100	1	123	225	41	126	4
Future Vol, veh/h	0	9	1	418	3	100	1	123	225	41	126	4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	1	459	3	110	1	135	247	45	138	4
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	10	37.6	12.5	13.8
HCM LOS	A	E	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	1%	0%	0%	80%	25%	0%
Vol Thru, %	99%	0%	90%	1%	75%	0%
Vol Right, %	0%	100%	10%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	225	10	521	167	4
LT Vol	1	0	0	418	41	0
Through Vol	123	0	9	3	126	0
RT Vol	0	225	1	100	0	4
Lane Flow Rate	136	247	11	573	184	4
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.254	0.411	0.021	0.89	0.361	0.008
Departure Headway (Hd)	6.702	5.982	6.816	5.598	7.083	6.238
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	533	598	528	647	505	569
Service Time	4.482	3.761	4.816	3.656	4.871	4.026
HCM Lane V/C Ratio	0.255	0.413	0.021	0.886	0.364	0.007
HCM Control Delay, s/veh	11.8	12.9	10	37.6	13.9	9.1
HCM Lane LOS	B	B	A	E	B	A
HCM 95th-tile Q	1	2	0.1	10.8	1.6	0

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	107	1	195	290	401	0	0	642	316
Future Volume (veh/h)	0	0	0	107	1	195	290	401	0	0	642	316
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				113	1	205	305	422	0	0	676	333
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				209	1	192	415	2413	0	0	792	390
Arrive On Green				0.12	0.12	0.12	0.23	0.68	0.00	0.00	0.35	0.35
Sat Flow, veh/h				1739	8	1604	1795	3618	0	0	2351	1112
Grp Volume(v), veh/h				113	0	206	305	422	0	0	532	477
Grp Sat Flow(s),veh/h/ln				1739	0	1611	1795	1763	0	0	1777	1592
Q Serve(g_s), s				2.8	0.0	5.4	7.1	1.9	0.0	0.0	12.5	12.5
Cycle Q Clear(g_c), s				2.8	0.0	5.4	7.1	1.9	0.0	0.0	12.5	12.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.70
Lane Grp Cap(c), veh/h				209	0	193	415	2413	0	0	624	559
V/C Ratio(X)				0.54	0.00	1.07	0.74	0.17	0.00	0.00	0.85	0.85
Avail Cap(c_a), veh/h				209	0	193	451	2413	0	0	624	559
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				18.6	0.0	19.8	16.0	2.5	0.0	0.0	13.5	13.5
Incr Delay (d2), s/veh				1.6	0.0	83.1	3.9	0.1	0.0	0.0	13.8	15.2
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.0	0.0	6.2	3.0	0.4	0.0	0.0	6.5	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				20.2	0.0	102.9	19.9	2.7	0.0	0.0	27.4	28.7
LnGrp LOS				C		F	B	A			C	C
Approach Vol, veh/h					319			727			1009	
Approach Delay, s/veh					73.6			9.9			28.0	
Approach LOS					E			A			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	20.4		9.6		35.4
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	11.3	* 16		5.4		30.8
Max Q Clear Time (g_c+I1), s	9.1	14.5		7.4		3.9
Green Ext Time (p_c), s	0.0	0.5		0.0		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	28.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	208	347	0	0	0	0	457	91	276	473	0
Future Volume (veh/h)	234	208	347	0	0	0	0	457	91	276	473	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	245	305	306				0	497	99	300	514	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	396	433	358				0	879	174	449	2205	0
Arrive On Green	0.23	0.23	0.23				0.00	0.30	0.30	0.25	0.63	0.00
Sat Flow, veh/h	1739	1900	1572				0	3057	587	1781	3618	0
Grp Volume(v), veh/h	245	305	306				0	299	297	300	514	0
Grp Sat Flow(s),veh/h/ln	1739	1900	1572				0	1791	1759	1781	1763	0
Q Serve(g_s), s	7.6	8.9	11.2				0.0	8.5	8.6	9.1	3.8	0.0
Cycle Q Clear(g_c), s	7.6	8.9	11.2				0.0	8.5	8.6	9.1	3.8	0.0
Prop In Lane	1.00		1.00				0.00		0.33	1.00		0.00
Lane Grp Cap(c), veh/h	396	433	358				0	531	522	449	2205	0
V/C Ratio(X)	0.62	0.70	0.85				0.00	0.56	0.57	0.67	0.23	0.00
Avail Cap(c_a), veh/h	446	488	404				0	531	522	449	2205	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.66	0.66	0.00
Uniform Delay (d), s/veh	20.8	21.3	22.2				0.0	17.8	17.9	20.2	4.9	0.0
Incr Delay (d2), s/veh	1.2	3.0	13.5				0.0	4.3	4.5	2.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.9	5.1				0.0	3.9	3.9	3.8	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.1	24.3	35.8				0.0	22.1	22.3	22.2	5.1	0.0
LnGrp LOS	C	C	D					C	C	C	A	
Approach Vol, veh/h		856						596			814	
Approach Delay, s/veh		27.8						22.2			11.4	
Approach LOS		C						C			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	42.1		19.7	22.4		17.9
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	35.8		14.3	* 18		15.4
Max Q Clear Time (g_c+I1), s	5.8		11.1	10.6		13.2
Green Ext Time (p_c), s	1.5		0.1	1.0		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	20.4
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	2	38	4	1	37	4	462	9	50	658	112
Future Vol, veh/h	49	2	38	4	1	37	4	462	9	50	658	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	2	44	5	1	43	5	531	10	57	756	129

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1211	1486	443	1040	1545	271	885	0	0	541	0	0
Stage 1	936	936	-	545	545	-	-	-	-	-	-	-
Stage 2	275	551	-	494	1000	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	138	123	563	185	113	727	760	-	-	1023	-	-
Stage 1	285	342	-	490	517	-	-	-	-	-	-	-
Stage 2	707	514	-	525	319	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	121	116	563	157	106	727	760	-	-	1023	-	-
Mov Cap-2 Maneuver	121	116	-	157	106	-	-	-	-	-	-	-
Stage 1	269	323	-	487	513	-	-	-	-	-	-	-
Stage 2	661	511	-	454	301	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	39.65	13.16	0.08	0.53
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	760	-	-	121	563	490	1023	-	-
HCM Lane V/C Ratio	0.006	-	-	0.486	0.078	0.099	0.056	-	-
HCM Control Delay (s/veh)	9.8	-	-	60.3	11.9	13.2	8.7	-	-
HCM Lane LOS	A	-	-	F	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.2	0.3	0.3	0.2	-	-

Intersection	
Intersection Delay, s/veh	22.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	92	45	84	18	33	76	46	307	21	146	505	49
Future Vol, veh/h	92	45	84	18	33	76	46	307	21	146	505	49
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	6	0	0	0	3	1	2	1	9	0	3	3
Mvmt Flow	103	51	94	20	37	85	52	345	24	164	567	55
Number of Lanes	0	1	1	0	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	16.7	16.8	18.3	27.6
HCM LOS	C	C	C	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	0%	14%	100%	0%	0%
Vol Thru, %	0%	100%	83%	33%	0%	26%	0%	100%	77%
Vol Right, %	0%	0%	17%	0%	100%	60%	0%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	205	123	137	84	127	146	337	217
LT Vol	46	0	0	92	0	18	146	0	0
Through Vol	0	205	102	45	0	33	0	337	168
RT Vol	0	0	21	0	84	76	0	0	49
Lane Flow Rate	52	230	139	154	94	143	164	378	244
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.13	0.546	0.33	0.407	0.219	0.358	0.38	0.828	0.524
Departure Headway (Hd)	9.081	8.547	8.564	9.525	8.364	9.043	8.345	7.882	7.719
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	395	423	420	379	428	398	433	461	469
Service Time	6.833	6.299	6.316	7.283	6.121	6.806	6.045	5.582	5.419
HCM Lane V/C Ratio	0.132	0.544	0.331	0.406	0.22	0.359	0.379	0.82	0.52
HCM Control Delay, s/veh	13.2	21.2	15.5	18.7	13.5	16.8	16.1	38.5	18.6
HCM Lane LOS	B	C	C	C	B	C	C	E	C
HCM 95th-tile Q	0.4	3.2	1.4	1.9	0.8	1.6	1.7	8	3

Intersection	
Intersection Delay, s/veh	20.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	84	8	61	72	31	29	200	23	56	337	124
Future Vol, veh/h	72	84	8	61	72	31	29	200	23	56	337	124
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	81	94	9	69	81	35	33	225	26	63	379	139
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	14.9	15.3	15.3	26.5
HCM LOS	B	C	C	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	46%	0%	37%	14%	0%
Vol Thru, %	0%	90%	54%	0%	44%	86%	0%
Vol Right, %	0%	10%	0%	100%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	223	156	8	164	393	124
LT Vol	29	0	72	0	61	56	0
Through Vol	0	200	84	0	72	337	0
RT Vol	0	23	0	8	31	0	124
Lane Flow Rate	33	251	175	9	184	442	139
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.068	0.481	0.379	0.017	0.386	0.809	0.225
Departure Headway (Hd)	7.496	6.91	7.788	6.834	7.541	6.598	5.812
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	478	521	463	523	477	548	617
Service Time	5.242	4.655	5.537	4.583	5.59	4.336	3.549
HCM Lane V/C Ratio	0.069	0.482	0.378	0.017	0.386	0.807	0.225
HCM Control Delay, s/veh	10.8	15.9	15.2	9.7	15.3	31.7	10.2
HCM Lane LOS	B	C	C	A	C	D	B
HCM 95th-tile Q	0.2	2.6	1.7	0.1	1.8	7.9	0.9

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	104	124	85	304	141
Future Vol, veh/h	35	104	124	85	304	141
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	106	127	87	310	144
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	9.4	9.3	14.2
HCM LOS	A	A	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	68%
Vol Thru, %	59%	0%	32%
Vol Right, %	41%	75%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	209	139	445
LT Vol	0	35	304
Through Vol	124	0	141
RT Vol	85	104	0
Lane Flow Rate	213	142	454
Geometry Grp	1	1	1
Degree of Util (X)	0.27	0.198	0.588
Departure Headway (Hd)	4.564	5.034	4.664
Convergence, Y/N	Yes	Yes	Yes
Cap	783	708	772
Service Time	2.618	3.098	2.71
HCM Lane V/C Ratio	0.272	0.201	0.588
HCM Control Delay, s/veh	9.3	9.4	14.2
HCM Lane LOS	A	A	B
HCM 95th-tile Q	1.1	0.7	3.9

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	3	3	203	3	39	1	165	498	92	83	1
Future Vol, veh/h	5	3	3	203	3	39	1	165	498	92	83	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	3	3	211	3	41	1	172	519	96	86	1
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	9.7	13.4	17	12.3
HCM LOS	A	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	1%	0%	45%	83%	53%	0%
Vol Thru, %	99%	0%	27%	1%	47%	0%
Vol Right, %	0%	100%	27%	16%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	166	498	11	245	175	1
LT Vol	1	0	5	203	92	0
Through Vol	165	0	3	3	83	0
RT Vol	0	498	3	39	0	1
Lane Flow Rate	173	519	11	255	182	1
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.272	0.714	0.021	0.424	0.327	0.002
Departure Headway (Hd)	5.667	4.956	6.462	5.985	6.466	5.487
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	635	731	552	602	556	651
Service Time	3.398	2.687	4.52	4.021	4.21	3.23
HCM Lane V/C Ratio	0.272	0.71	0.02	0.424	0.327	0.002
HCM Control Delay, s/veh	10.5	19.1	9.7	13.4	12.3	8.2
HCM Lane LOS	B	C	A	B	B	A
HCM 95th-tile Q	1.1	6.1	0.1	2.1	1.4	0

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	161	12	379	321	392	0	0	436	536
Future Volume (veh/h)	0	0	0	161	12	379	321	392	0	0	436	536
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				169	13	399	338	413	0	0	459	564
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				341	10	308	437	2269	0	0	562	471
Arrive On Green				0.20	0.20	0.20	0.49	1.00	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1739	51	1567	1795	3618	0	0	1870	1489
Grp Volume(v), veh/h				169	0	412	338	413	0	0	459	564
Grp Sat Flow(s),veh/h/ln				1739	0	1618	1795	1763	0	0	1777	1489
Q Serve(g_s), s				4.8	0.0	10.8	8.5	0.0	0.0	0.0	13.1	17.4
Cycle Q Clear(g_c), s				4.8	0.0	10.8	8.5	0.0	0.0	0.0	13.1	17.4
Prop In Lane				1.00		0.97	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				341	0	318	437	2269	0	0	562	471
V/C Ratio(X)				0.49	0.00	1.30	0.77	0.18	0.00	0.00	0.82	1.20
Avail Cap(c_a), veh/h				341	0	318	467	2269	0	0	562	471
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.83	0.83	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.7	0.0	22.1	12.8	0.0	0.0	0.0	17.3	18.8
Incr Delay (d2), s/veh				0.4	0.0	154.9	5.4	0.1	0.0	0.0	12.4	107.7
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	17.3	3.0	0.0	0.0	0.0	6.7	19.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				20.1	0.0	177.0	18.3	0.1	0.0	0.0	29.7	126.5
LnGrp LOS				C		F	B	A			C	F
Approach Vol, veh/h					581			751			1023	
Approach Delay, s/veh					131.4			8.3			83.1	
Approach LOS					F			A			F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	18.0	22.0		15.0		40.0
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	14.3	* 17		10.8		35.4
Max Q Clear Time (g_c+I1), s	10.5	19.4		12.8		2.0
Green Ext Time (p_c), s	0.1	0.0		0.0		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	71.2
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	0	586	0	0	0	0	465	61	251	346	0
Future Volume (veh/h)	248	0	586	0	0	0	0	465	61	251	346	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	174	0	710				0	489	64	264	364	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	373	0	675				0	1062	138	369	2205	0
Arrive On Green	0.21	0.00	0.21				0.00	0.33	0.33	0.41	1.00	0.00
Sat Flow, veh/h	1739	0	3145				0	3268	413	1781	3618	0
Grp Volume(v), veh/h	174	0	710				0	275	278	264	364	0
Grp Sat Flow(s),veh/h/ln	1739	0	1572				0	1791	1796	1781	1763	0
Q Serve(g_s), s	4.8	0.0	11.8				0.0	6.6	6.7	6.8	0.0	0.0
Cycle Q Clear(g_c), s	4.8	0.0	11.8				0.0	6.6	6.7	6.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h	373	0	675				0	599	601	369	2205	0
V/C Ratio(X)	0.47	0.00	1.05				0.00	0.46	0.46	0.72	0.17	0.00
Avail Cap(c_a), veh/h	373	0	675				0	599	601	398	2205	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.67	0.67	0.00
Uniform Delay (d), s/veh	18.9	0.0	21.6				0.0	14.4	14.4	14.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	49.2				0.0	2.5	2.6	3.0	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	8.4				0.0	2.8	2.9	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.2	0.0	70.8				0.0	16.9	17.0	17.8	0.1	0.0
LnGrp LOS	B		F					B	B	B	A	
Approach Vol, veh/h		884						553			628	
Approach Delay, s/veh		60.6						16.9			7.5	
Approach LOS		E						B			A	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	39.0		16.0	23.0		16.0
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	34.4		12.3	* 18		11.8
Max Q Clear Time (g_c+I1), s	2.0		8.8	8.7		13.8
Green Ext Time (p_c), s	1.0		0.1	1.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	32.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	21	0	1	79	1	394	9	69	754	109
Future Vol, veh/h	53	0	21	0	1	79	1	394	9	69	754	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	0	22	0	1	83	1	415	9	73	794	115

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1206	1423	454	964	1475	212	908	0	0	424	0	0
Stage 1	996	996	-	422	422	-	-	-	-	-	-	-
Stage 2	210	426	-	542	1054	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	139	135	553	210	125	793	745	-	-	1131	-	-
Stage 1	262	320	-	580	587	-	-	-	-	-	-	-
Stage 2	773	584	-	492	301	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	115	126	553	188	117	793	745	-	-	1131	-	-
Mov Cap-2 Maneuver	115	126	-	188	117	-	-	-	-	-	-	-
Stage 1	245	300	-	579	586	-	-	-	-	-	-	-
Stage 2	689	583	-	442	282	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	48	10.49	0.02	0.62
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	745	-	-	115	553	740	1131	-	-
HCM Lane V/C Ratio	0.001	-	-	0.483	0.04	0.114	0.064	-	-
HCM Control Delay (s/veh)	9.8	-	-	62.4	11.8	10.5	8.4	-	-
HCM Lane LOS	A	-	-	F	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.2	0.1	0.4	0.2	-	-

Intersection	
Intersection Delay, s/veh	22.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	19	39	13	28	68	57	293	4	75	669	31
Future Vol, veh/h	43	19	39	13	28	68	57	293	4	75	669	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	6	0	0	0	3	1	2	1	9	0	3	3
Mvmt Flow	45	20	41	14	29	72	60	308	4	79	704	33
Number of Lanes	0	1	1	0	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	12.4	13.3	14	28.4
HCM LOS	B	B	B	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	69%	0%	12%	100%	0%	0%
Vol Thru, %	0%	100%	96%	31%	0%	26%	0%	100%	88%
Vol Right, %	0%	0%	4%	0%	100%	62%	0%	0%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	57	195	102	62	39	109	75	446	254
LT Vol	57	0	0	43	0	13	75	0	0
Through Vol	0	195	98	19	0	28	0	446	223
RT Vol	0	0	4	0	39	68	0	0	31
Lane Flow Rate	60	206	107	65	41	115	79	469	267
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.132	0.422	0.223	0.159	0.087	0.251	0.156	0.868	0.488
Departure Headway (Hd)	7.915	7.388	7.499	8.786	7.621	7.863	7.113	6.657	6.571
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	453	487	478	408	469	457	508	549	551
Service Time	5.664	5.137	5.248	6.547	5.382	5.62	4.813	4.357	4.271
HCM Lane V/C Ratio	0.132	0.423	0.224	0.159	0.087	0.252	0.156	0.854	0.485
HCM Control Delay, s/veh	11.9	15.5	12.4	13.2	11.1	13.3	11.1	38.7	15.4
HCM Lane LOS	B	C	B	B	B	B	B	E	C
HCM 95th-tile Q	0.5	2.1	0.8	0.6	0.3	1	0.5	9.5	2.7

Intersection	
Intersection Delay, s/veh	18.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	67	6	83	94	42	27	312	55	74	183	128
Future Vol, veh/h	78	67	6	83	94	42	27	312	55	74	183	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	82	71	6	87	99	44	28	328	58	78	193	135
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	14.5	17.2	23.8	15.2
HCM LOS	B	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	54%	0%	38%	29%	0%
Vol Thru, %	0%	85%	46%	0%	43%	71%	0%
Vol Right, %	0%	15%	0%	100%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	367	145	6	219	257	128
LT Vol	27	0	78	0	83	74	0
Through Vol	0	312	67	0	94	183	0
RT Vol	0	55	0	6	42	0	128
Lane Flow Rate	28	386	153	6	231	271	135
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.058	0.718	0.336	0.012	0.477	0.527	0.23
Departure Headway (Hd)	7.308	6.689	7.923	6.928	7.442	7.015	6.151
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	490	541	453	515	484	514	582
Service Time	5.059	4.44	5.685	4.689	5.499	4.77	3.905
HCM Lane V/C Ratio	0.057	0.713	0.338	0.012	0.477	0.527	0.232
HCM Control Delay, s/veh	10.5	24.8	14.7	9.8	17.2	17.4	10.7
HCM Lane LOS	B	C	B	A	C	C	B
HCM 95th-tile Q	0.2	5.8	1.5	0	2.5	3	0.9

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	282	162	61	219	239
Future Vol, veh/h	87	282	162	61	219	239
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	297	171	64	231	252
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	16	12	22.9
HCM LOS	C	B	C

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	24%	48%
Vol Thru, %	73%	0%	52%
Vol Right, %	27%	76%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	223	369	458
LT Vol	0	87	219
Through Vol	162	0	239
RT Vol	61	282	0
Lane Flow Rate	235	388	482
Geometry Grp	1	1	1
Degree of Util (X)	0.369	0.587	0.742
Departure Headway (Hd)	5.665	5.441	5.539
Convergence, Y/N	Yes	Yes	Yes
Cap	631	660	651
Service Time	3.729	3.499	3.589
HCM Lane V/C Ratio	0.372	0.588	0.74
HCM Control Delay, s/veh	12	16	22.9
HCM Lane LOS	B	C	C
HCM 95th-tile Q	1.7	3.8	6.6

Intersection	
Intersection Delay, s/veh	33
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	9	1	418	3	100	1	123	238	201	121	4
Future Vol, veh/h	0	9	1	418	3	100	1	123	238	201	121	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	9	1	440	3	105	1	129	251	212	127	4
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	11	50.8	14.1	26.3
HCM LOS	B	F	B	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	1%	0%	0%	80%	62%	0%
Vol Thru, %	99%	0%	90%	1%	38%	0%
Vol Right, %	0%	100%	10%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	238	10	521	322	4
LT Vol	1	0	0	418	201	0
Through Vol	123	0	9	3	121	0
RT Vol	0	238	1	100	0	4
Lane Flow Rate	131	251	11	548	339	4
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.265	0.457	0.023	0.949	0.707	0.008
Departure Headway (Hd)	7.297	6.572	7.779	6.23	7.509	6.468
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	492	546	458	581	481	552
Service Time	5.053	4.327	5.864	4.267	5.261	4.219
HCM Lane V/C Ratio	0.266	0.46	0.024	0.943	0.705	0.007
HCM Control Delay, s/veh	12.7	14.8	11	50.8	26.5	9.3
HCM Lane LOS	B	B	B	F	D	A
HCM 95th-tile Q	1.1	2.4	0.1	12.6	5.5	0

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	77	1	406	683	726	0	0	644	149
Future Volume (veh/h)	0	0	0	77	1	406	683	726	0	0	644	149
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.93
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				81	1	427	719	764	0	0	678	157
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				286	1	264	746	2601	0	0	765	177
Arrive On Green				0.16	0.16	0.16	0.83	1.00	0.00	0.00	0.27	0.27
Sat Flow, veh/h				1739	4	1607	1795	3618	0	0	2915	653
Grp Volume(v), veh/h				81	0	428	719	764	0	0	427	408
Grp Sat Flow(s),veh/h/ln				1739	0	1611	1795	1763	0	0	1777	1698
Q Serve(g_s), s				3.7	0.0	14.8	30.6	0.0	0.0	0.0	20.7	20.8
Cycle Q Clear(g_c), s				3.7	0.0	14.8	30.6	0.0	0.0	0.0	20.7	20.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				286	0	265	746	2601	0	0	482	460
V/C Ratio(X)				0.28	0.00	1.62	0.96	0.29	0.00	0.00	0.89	0.89
Avail Cap(c_a), veh/h				286	0	265	764	2601	0	0	482	460
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.29	0.29	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				33.0	0.0	37.6	7.0	0.0	0.0	0.0	31.5	31.5
Incr Delay (d2), s/veh				0.2	0.0	293.9	10.2	0.1	0.0	0.0	20.7	21.6
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	27.3	4.9	0.0	0.0	0.0	11.5	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				33.2	0.0	331.5	17.2	0.1	0.0	0.0	52.1	53.1
LnGrp LOS				C		F	B	A			D	D
Approach Vol, veh/h					509			1483			835	
Approach Delay, s/veh					284.1			8.4			52.6	
Approach LOS					F			A			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	42.0	29.0		19.0		71.0
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	38.3	* 24		14.8		66.4
Max Q Clear Time (g_c+I1), s	32.6	22.8		16.8		2.0
Green Ext Time (p_c), s	0.3	0.5		0.0		2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	71.1
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	417	208	640	0	0	0	0	992	104	370	351	0
Future Volume (veh/h)	417	208	640	0	0	0	0	992	104	370	351	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	366	500	483				0	1044	109	389	369	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	498	545	451				0	1138	119	468	2336	0
Arrive On Green	0.29	0.29	0.29				0.00	0.35	0.35	0.44	1.00	0.00
Sat Flow, veh/h	1739	1900	1572				0	3357	340	1781	3618	0
Grp Volume(v), veh/h	366	500	483				0	573	580	389	369	0
Grp Sat Flow(s),veh/h/ln	1739	1900	1572				0	1791	1812	1781	1763	0
Q Serve(g_s), s	17.1	22.9	25.8				0.0	27.5	27.6	17.4	0.0	0.0
Cycle Q Clear(g_c), s	17.1	22.9	25.8				0.0	27.5	27.6	17.4	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	498	545	451				0	625	632	468	2336	0
V/C Ratio(X)	0.73	0.92	1.07				0.00	0.92	0.92	0.83	0.16	0.00
Avail Cap(c_a), veh/h	498	545	451				0	625	632	468	2336	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.55	0.55	0.00
Uniform Delay (d), s/veh	29.0	31.1	32.1				0.0	28.0	28.1	23.5	0.0	0.0
Incr Delay (d2), s/veh	4.9	20.3	62.8				0.0	20.5	20.5	6.6	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	13.1	17.2				0.0	15.0	15.2	6.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.9	51.3	94.9				0.0	48.5	48.5	30.1	0.1	0.0
LnGrp LOS	C	D	F					D	D	C	A	
Approach Vol, veh/h		1349						1153			758	
Approach Delay, s/veh		62.2						48.5			15.5	
Approach LOS		E						D			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	64.2		28.2	36.0		30.0
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	55.4		20.3	* 31		25.8
Max Q Clear Time (g_c+I1), s	2.0		19.4	29.6		27.8
Green Ext Time (p_c), s	1.1		0.0	0.8		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	46.5
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	2	38	4	1	59	4	988	9	92	787	112
Future Vol, veh/h	49	2	38	4	1	59	4	988	9	92	787	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	2	40	4	1	62	4	1040	9	97	828	118

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1610	2139	473	1662	2193	525	946	0	0	1049	0	0
Stage 1	1081	1081	-	1053	1053	-	-	-	-	-	-	-
Stage 2	529	1058	-	609	1140	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	70	48	537	64	45	497	721	-	-	659	-	-
Stage 1	232	292	-	242	301	-	-	-	-	-	-	-
Stage 2	501	300	-	449	274	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 50	41	537	48	38	497	721	-	-	659	-	-
Mov Cap-2 Maneuver	~ 50	41	-	48	38	-	-	-	-	-	-	-
Stage 1	198	249	-	240	299	-	-	-	-	-	-	-
Stage 2	434	298	-	351	234	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/veh	65.89	21.9	0.04	1.06
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	721	-	-	50	537	280	659	-	-
HCM Lane V/C Ratio	0.006	-	-	1.073	0.074	0.241	0.147	-	-
HCM Control Delay (s/veh)	10	-	-	280.4	12.2	21.9	11.4	-	-
HCM Lane LOS	B	-	-	F	B	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	4.7	0.2	0.9	0.5	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Intersection Delay, s/veh	98.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	92	45	84	22	33	192	46	717	34	146	634	49
Future Vol, veh/h	92	45	84	22	33	192	46	717	34	146	634	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	6	0	0	0	3	1	2	1	9	0	3	3
Mvmt Flow	97	47	88	23	35	202	48	755	36	154	667	52
Number of Lanes	0	1	1	0	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	23.7	44.9	145.5	89.8
HCM LOS	C	E	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	0%	9%	100%	0%	0%
Vol Thru, %	0%	100%	88%	33%	0%	13%	0%	100%	81%
Vol Right, %	0%	0%	12%	0%	100%	78%	0%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	478	273	137	84	247	146	423	260
LT Vol	46	0	0	92	0	22	146	0	0
Through Vol	0	478	239	45	0	33	0	423	211
RT Vol	0	0	34	0	84	192	0	0	49
Lane Flow Rate	48	503	287	144	88	260	154	445	274
Geometry Grp	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.14	1.382	0.793	0.476	0.264	0.775	0.435	1.203	0.731
Departure Headway (Hd)	10.87	10.326	10.377	12.914	11.72	11.575	10.83	10.357	10.218
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	332	357	351	281	309	315	335	356	356
Service Time	8.57	8.026	8.077	10.614	9.42	9.275	8.53	8.057	7.918
HCM Lane V/C Ratio	0.145	1.409	0.818	0.512	0.285	0.825	0.46	1.25	0.77
HCM Control Delay, s/veh	15.3	216.5	43.1	26.8	18.6	44.9	21.6	146.4	36.2
HCM Lane LOS	C	F	E	D	C	E	C	F	E
HCM 95th-tile Q	0.5	24.1	6.6	2.4	1	6.1	2.1	17.7	5.6

Intersection	
Intersection Delay, s/veh	21.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	190	63	8	17	65	73	29	200	23	61	337	171
Future Vol, veh/h	190	63	8	17	65	73	29	200	23	61	337	171
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	200	66	8	18	68	77	31	211	24	64	355	180
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	20.9	14.9	16	26.4
HCM LOS	C	B	C	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	75%	0%	11%	15%	0%
Vol Thru, %	0%	90%	25%	0%	42%	85%	0%
Vol Right, %	0%	10%	0%	100%	47%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	223	253	8	155	398	171
LT Vol	29	0	190	0	17	61	0
Through Vol	0	200	63	0	65	337	0
RT Vol	0	23	0	8	73	0	171
Lane Flow Rate	31	235	266	8	163	419	180
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.067	0.477	0.585	0.016	0.349	0.807	0.307
Departure Headway (Hd)	7.907	7.318	7.913	6.811	7.693	6.935	6.14
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	452	491	455	524	467	519	583
Service Time	5.672	5.083	5.672	4.569	5.764	4.69	3.895
HCM Lane V/C Ratio	0.069	0.479	0.585	0.015	0.349	0.807	0.309
HCM Control Delay, s/veh	11.2	16.6	21.3	9.7	14.9	32.8	11.6
HCM Lane LOS	B	C	C	A	B	D	B
HCM 95th-tile Q	0.2	2.5	3.7	0	1.5	7.7	1.3

Intersection	
Intersection Delay, s/veh	20.3
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	104	305	85	304	251
Future Vol, veh/h	35	104	305	85	304	251
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	109	321	89	320	264
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	10.8	14.5	26.7
HCM LOS	B	B	D

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	55%
Vol Thru, %	78%	0%	45%
Vol Right, %	22%	75%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	390	139	555
LT Vol	0	35	304
Through Vol	305	0	251
RT Vol	85	104	0
Lane Flow Rate	411	146	584
Geometry Grp	1	1	1
Degree of Util (X)	0.571	0.239	0.82
Departure Headway (Hd)	5.007	5.876	5.05
Convergence, Y/N	Yes	Yes	Yes
Cap	718	610	724
Service Time	3.04	3.924	3.05
HCM Lane V/C Ratio	0.572	0.239	0.807
HCM Control Delay, s/veh	14.5	10.8	26.7
HCM Lane LOS	B	B	D
HCM 95th-tile Q	3.6	0.9	8.8

Intersection	
Intersection Delay, s/veh	55.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	3	3	203	3	237	1	148	619	202	83	1
Future Vol, veh/h	5	3	3	203	3	237	1	148	619	202	83	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	3	3	214	3	249	1	156	652	213	87	1
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	11.8	33.7	80.2	23.7
HCM LOS	B	D	F	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	1%	0%	45%	46%	71%	0%
Vol Thru, %	99%	0%	27%	1%	29%	0%
Vol Right, %	0%	100%	27%	53%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	149	619	11	443	285	1
LT Vol	1	0	5	203	202	0
Through Vol	148	0	3	3	83	0
RT Vol	0	619	3	237	0	1
Lane Flow Rate	157	652	12	466	300	1
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.3	1.115	0.027	0.826	0.638	0.002
Departure Headway (Hd)	6.88	6.159	8.605	6.626	7.97	6.881
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	519	586	419	550	456	523
Service Time	4.667	3.945	6.605	4.626	5.67	4.581
HCM Lane V/C Ratio	0.303	1.113	0.029	0.847	0.658	0.002
HCM Control Delay, s/veh	12.6	96.5	11.8	33.7	23.7	9.6
HCM Lane LOS	B	F	B	D	C	A
HCM 95th-tile Q	1.3	20.2	0.1	8.3	4.4	0

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	59	12	107	369	516	0	0	423	478
Future Volume (veh/h)	0	0	0	59	12	107	369	516	0	0	423	478
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				65	13	118	405	567	0	0	465	525
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				168	16	142	581	2668	0	0	634	534
Arrive On Green				0.10	0.10	0.10	0.32	0.76	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1739	162	1473	1795	3618	0	0	1870	1497
Grp Volume(v), veh/h				65	0	131	405	567	0	0	465	525
Grp Sat Flow(s),veh/h/ln				1739	0	1635	1795	1763	0	0	1777	1497
Q Serve(g_s), s				2.1	0.0	4.7	11.8	2.8	0.0	0.0	13.7	20.9
Cycle Q Clear(g_c), s				2.1	0.0	4.7	11.8	2.8	0.0	0.0	13.7	20.9
Prop In Lane				1.00		0.90	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				168	0	158	581	2668	0	0	634	534
V/C Ratio(X)				0.39	0.00	0.83	0.70	0.21	0.00	0.00	0.73	0.98
Avail Cap(c_a), veh/h				168	0	158	607	2668	0	0	634	534
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.4	0.0	26.6	17.7	2.1	0.0	0.0	16.8	19.1
Incr Delay (d2), s/veh				0.5	0.0	27.8	2.2	0.1	0.0	0.0	7.4	35.1
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.8	0.0	2.9	4.9	0.5	0.0	0.0	6.4	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				26.0	0.0	54.4	20.0	2.3	0.0	0.0	24.2	54.2
LnGrp LOS				C		D	B	A			C	D
Approach Vol, veh/h					196			972			990	
Approach Delay, s/veh					45.0			9.6			40.1	
Approach LOS					D			A			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.0	26.0		10.0		50.0
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	20.3	* 21		5.8		45.4
Max Q Clear Time (g_c+I1), s	13.8	22.9		6.7		4.8
Green Ext Time (p_c), s	0.1	0.0		0.0		1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	26.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	0	296	0	0	0	0	572	111	176	305	0
Future Volume (veh/h)	313	0	296	0	0	0	0	572	111	176	305	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	440	0	215				0	622	121	191	332	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	613	0	277				0	1035	201	370	2283	0
Arrive On Green	0.18	0.00	0.18				0.00	0.35	0.35	0.21	0.65	0.00
Sat Flow, veh/h	3478	0	1572				0	3069	577	1781	3618	0
Grp Volume(v), veh/h	440	0	215				0	374	369	191	332	0
Grp Sat Flow(s),veh/h/ln	1739	0	1572				0	1791	1762	1781	1763	0
Q Serve(g_s), s	6.0	0.0	6.5				0.0	8.6	8.6	4.8	1.8	0.0
Cycle Q Clear(g_c), s	6.0	0.0	6.5				0.0	8.6	8.6	4.8	1.8	0.0
Prop In Lane	1.00		1.00				0.00		0.33	1.00		0.00
Lane Grp Cap(c), veh/h	613	0	277				0	623	613	370	2283	0
V/C Ratio(X)	0.72	0.00	0.78				0.00	0.60	0.60	0.52	0.15	0.00
Avail Cap(c_a), veh/h	751	0	340				0	623	613	370	2283	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	19.4	0.0	19.6				0.0	13.4	13.4	17.6	3.4	0.0
Incr Delay (d2), s/veh	1.7	0.0	6.8				0.0	4.2	4.3	0.4	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	2.6				0.0	3.7	3.7	1.8	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	0.0	26.5				0.0	17.7	17.8	18.0	3.5	0.0
LnGrp LOS	C		C					B	B	B	A	
Approach Vol, veh/h		655						743			523	
Approach Delay, s/veh		22.9						17.7			8.8	
Approach LOS		C						B			A	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	37.0		15.0	22.0		13.0
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	30.4		9.3	* 17		10.8
Max Q Clear Time (g_c+I1), s	3.8		6.8	10.6		8.5
Green Ext Time (p_c), s	0.9		0.0	1.3		0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	17.1
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	21	0	1	14	1	575	9	39	462	109
Future Vol, veh/h	53	0	21	0	1	14	1	575	9	39	462	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	0	23	0	1	15	1	632	10	43	508	120

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	912	1237	508	1232	1352	321	627	0	0	642	0	0
Stage 1	593	593	-	639	639	-	-	-	-	-	-	-
Stage 2	319	644	-	593	713	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	241	175	564	143	149	676	952	-	-	941	-	-
Stage 1	491	492	-	432	469	-	-	-	-	-	-	-
Stage 2	668	467	-	491	434	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	223	167	564	131	142	676	952	-	-	941	-	-
Mov Cap-2 Maneuver	223	167	-	131	142	-	-	-	-	-	-	-
Stage 1	468	470	-	431	469	-	-	-	-	-	-	-
Stage 2	650	467	-	449	415	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	24.04	11.87	0.02	0.58
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	952	-	-	269	541	941	-	-
HCM Lane V/C Ratio	0.001	-	-	0.302	0.03	0.046	-	-
HCM Control Delay (s/veh)	8.8	-	-	24	11.9	9	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.1	0.1	-	-

Intersection	
Intersection Delay, s/veh	28.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	19	39	9	28	142	57	399	10	75	375	31
Future Vol, veh/h	43	19	39	9	28	142	57	399	10	75	375	31
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	6	0	0	0	3	1	2	1	9	0	3	3
Mvmt Flow	48	21	44	10	31	160	64	448	11	84	421	35
Number of Lanes	0	1	1	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	12.4	15.6	33.6	31.7
HCM LOS	B	C	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	69%	0%	5%	100%	0%
Vol Thru, %	0%	98%	31%	0%	16%	0%	92%
Vol Right, %	0%	2%	0%	100%	79%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	57	409	62	39	179	75	406
LT Vol	57	0	43	0	9	75	0
Through Vol	0	399	19	0	28	0	375
RT Vol	0	10	0	39	142	0	31
Lane Flow Rate	64	460	70	44	201	84	456
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.128	0.851	0.167	0.091	0.414	0.168	0.842
Departure Headway (Hd)	7.215	6.669	8.646	7.459	7.409	7.162	6.648
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	496	542	414	479	485	501	543
Service Time	4.965	4.419	6.413	5.226	5.467	4.911	4.397
HCM Lane V/C Ratio	0.129	0.849	0.169	0.092	0.414	0.168	0.84
HCM Control Delay, s/veh	11	36.7	13.2	11	15.6	11.4	35.5
HCM Lane LOS	B	E	B	B	C	B	E
HCM 95th-tile Q	0.4	9	0.6	0.3	2	0.6	8.8

Intersection	
Intersection Delay, s/veh	27.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	67	6	83	94	42	27	312	55	74	183	128
Future Vol, veh/h	70	67	6	83	94	42	27	312	55	74	183	128
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	81	7	100	113	51	33	376	66	89	220	154
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	16.8	22.6	41.7	20.2
HCM LOS	C	C	E	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	51%	0%	38%	29%	0%
Vol Thru, %	0%	85%	49%	0%	43%	71%	0%
Vol Right, %	0%	15%	0%	100%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	367	137	6	219	257	128
LT Vol	27	0	70	0	83	74	0
Through Vol	0	312	67	0	94	183	0
RT Vol	0	55	0	6	42	0	128
Lane Flow Rate	33	442	165	7	264	310	154
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.071	0.884	0.399	0.015	0.598	0.661	0.292
Departure Headway (Hd)	7.949	7.327	8.703	7.714	8.153	7.687	6.816
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	453	500	414	465	446	471	529
Service Time	5.649	5.027	6.435	5.445	6.168	5.409	4.538
HCM Lane V/C Ratio	0.073	0.884	0.399	0.015	0.592	0.658	0.291
HCM Control Delay, s/veh	11.3	43.9	17.1	10.6	22.6	24.2	12.3
HCM Lane LOS	B	E	C	B	C	C	B
HCM 95th-tile Q	0.2	9.7	1.9	0	3.8	4.7	1.2

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	282	158	61	219	84
Future Vol, veh/h	87	282	158	61	219	84
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	371	208	80	288	111
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	22.2	14.2	20.2
HCM LOS	C	B	C

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	24%	72%
Vol Thru, %	72%	0%	28%
Vol Right, %	28%	76%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	219	369	303
LT Vol	0	87	219
Through Vol	158	0	84
RT Vol	61	282	0
Lane Flow Rate	288	486	399
Geometry Grp	1	1	1
Degree of Util (X)	0.471	0.734	0.664
Departure Headway (Hd)	5.888	5.445	5.994
Convergence, Y/N	Yes	Yes	Yes
Cap	608	660	598
Service Time	3.972	3.519	4.069
HCM Lane V/C Ratio	0.474	0.736	0.667
HCM Control Delay, s/veh	14.2	22.2	20.2
HCM Lane LOS	B	C	C
HCM 95th-tile Q	2.5	6.4	4.9

Intersection	
Intersection Delay, s/veh	24.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	9	1	418	3	100	1	123	225	41	121	4
Future Vol, veh/h	0	9	1	418	3	100	1	123	225	41	121	4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	1	459	3	110	1	135	247	45	133	4
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	9.9	37	12.5	13.6
HCM LOS	A	E	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	1%	0%	0%	80%	25%	0%
Vol Thru, %	99%	0%	90%	1%	75%	0%
Vol Right, %	0%	100%	10%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	225	10	521	162	4
LT Vol	1	0	0	418	41	0
Through Vol	123	0	9	3	121	0
RT Vol	0	225	1	100	0	4
Lane Flow Rate	136	247	11	573	178	4
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.253	0.409	0.021	0.887	0.35	0.008
Departure Headway (Hd)	6.682	5.962	6.78	5.579	7.079	6.231
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	534	601	531	647	506	570
Service Time	4.462	3.741	4.78	3.635	4.866	4.017
HCM Lane V/C Ratio	0.255	0.411	0.021	0.886	0.352	0.007
HCM Control Delay, s/veh	11.7	12.9	9.9	37	13.7	9.1
HCM Lane LOS	B	B	A	E	B	A
HCM 95th-tile Q	1	2	0.1	10.7	1.6	0

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	107	1	195	290	399	0	0	642	316
Future Volume (veh/h)	0	0	0	107	1	195	290	399	0	0	642	316
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				113	1	205	305	420	0	0	676	333
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				226	1	208	431	2550	0	0	920	453
Arrive On Green				0.13	0.13	0.13	0.48	1.00	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1739	8	1604	1795	3618	0	0	2355	1114
Grp Volume(v), veh/h				113	0	206	305	420	0	0	531	478
Grp Sat Flow(s),veh/h/ln				1739	0	1611	1795	1763	0	0	1777	1599
Q Serve(g_s), s				3.6	0.0	7.7	8.0	0.0	0.0	0.0	15.2	15.2
Cycle Q Clear(g_c), s				3.6	0.0	7.7	8.0	0.0	0.0	0.0	15.2	15.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.70
Lane Grp Cap(c), veh/h				226	0	209	431	2550	0	0	723	650
V/C Ratio(X)				0.50	0.00	0.98	0.71	0.16	0.00	0.00	0.74	0.74
Avail Cap(c_a), veh/h				226	0	209	458	2550	0	0	723	650
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				24.3	0.0	26.0	13.9	0.0	0.0	0.0	15.1	15.1
Incr Delay (d2), s/veh				0.6	0.0	57.1	3.1	0.1	0.0	0.0	6.5	7.2
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.4	0.0	6.0	2.7	0.0	0.0	0.0	6.8	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				24.9	0.0	83.1	17.1	0.1	0.0	0.0	21.6	22.3
LnGrp LOS				C		F	B	A			C	C
Approach Vol, veh/h					319			725			1009	
Approach Delay, s/veh					62.5			7.2			21.9	
Approach LOS					E			A			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.0	29.0		12.0		48.0
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	15.3	* 24		7.8		43.4
Max Q Clear Time (g_c+I1), s	10.0	17.2		9.7		2.0
Green Ext Time (p_c), s	0.1	2.0		0.0		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	23.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	208	347	0	0	0	0	457	91	276	471	0
Future Volume (veh/h)	234	208	347	0	0	0	0	457	91	276	471	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	245	305	306				0	497	99	300	512	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	396	433	358				0	879	174	449	2205	0
Arrive On Green	0.23	0.23	0.23				0.00	0.30	0.30	0.08	0.21	0.00
Sat Flow, veh/h	1739	1900	1572				0	3057	587	1781	3618	0
Grp Volume(v), veh/h	245	305	306				0	299	297	300	512	0
Grp Sat Flow(s),veh/h/ln	1739	1900	1572				0	1791	1759	1781	1763	0
Q Serve(g_s), s	7.6	8.9	11.2				0.0	8.5	8.6	9.8	7.3	0.0
Cycle Q Clear(g_c), s	7.6	8.9	11.2				0.0	8.5	8.6	9.8	7.3	0.0
Prop In Lane	1.00		1.00				0.00		0.33	1.00		0.00
Lane Grp Cap(c), veh/h	396	433	358				0	531	522	449	2205	0
V/C Ratio(X)	0.62	0.70	0.85				0.00	0.56	0.57	0.67	0.23	0.00
Avail Cap(c_a), veh/h	446	488	404				0	531	522	449	2205	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.69	0.69	0.00
Uniform Delay (d), s/veh	20.8	21.3	22.2				0.0	17.8	17.9	25.1	11.8	0.0
Incr Delay (d2), s/veh	1.2	3.0	13.5				0.0	4.3	4.5	2.1	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.9	5.1				0.0	3.9	3.9	4.8	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.1	24.3	35.8				0.0	22.1	22.3	27.2	12.0	0.0
LnGrp LOS	C	C	D					C	C	C	B	
Approach Vol, veh/h		856						596			812	
Approach Delay, s/veh		27.8						22.2			17.6	
Approach LOS		C						C			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	42.1		19.7	22.4		17.9
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	35.8		14.3	* 18		15.4
Max Q Clear Time (g_c+I1), s	9.3		11.8	10.6		13.2
Green Ext Time (p_c), s	1.5		0.1	1.0		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	2	38	4	1	37	4	412	9	50	629	112
Future Vol, veh/h	49	2	38	4	1	37	4	412	9	50	629	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	2	44	5	1	43	5	474	10	57	723	129

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1084	1331	723	1327	1455	242	852	0	0	484	0	0
Stage 1	838	838	-	488	488	-	-	-	-	-	-	-
Stage 2	247	493	-	839	967	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	182	154	425	122	129	760	785	-	-	1077	-	-
Stage 1	360	381	-	531	549	-	-	-	-	-	-	-
Stage 2	736	546	-	359	332	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	161	145	425	102	122	760	785	-	-	1077	-	-
Mov Cap-2 Maneuver	161	145	-	102	122	-	-	-	-	-	-	-
Stage 1	341	360	-	528	546	-	-	-	-	-	-	-
Stage 2	689	543	-	303	314	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	35.33	14.27	0.09	0.54
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	785	-	-	218	437	1077	-	-
HCM Lane V/C Ratio	0.006	-	-	0.469	0.111	0.053	-	-
HCM Control Delay (s/veh)	9.6	-	-	35.3	14.3	8.5	-	-
HCM Lane LOS	A	-	-	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.3	0.4	0.2	-	-

Intersection	
Intersection Delay, s/veh	44.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	92	45	84	18	33	76	46	256	21	146	474	49
Future Vol, veh/h	92	45	84	18	33	76	46	256	21	146	474	49
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	6	0	0	0	3	1	2	1	9	0	3	3
Mvmt Flow	103	51	94	20	37	85	52	288	24	164	533	55
Number of Lanes	0	1	1	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	14.2	14.6	19.5	71.7
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	67%	0%	14%	100%	0%
Vol Thru, %	0%	92%	33%	0%	26%	0%	91%
Vol Right, %	0%	8%	0%	100%	60%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	277	137	84	127	146	523
LT Vol	46	0	92	0	18	146	0
Through Vol	0	256	45	0	33	0	474
RT Vol	0	21	0	84	76	0	49
Lane Flow Rate	52	311	154	94	143	164	588
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.109	0.609	0.351	0.186	0.307	0.326	1.082
Departure Headway (Hd)	7.901	7.315	8.537	7.365	8.089	7.153	6.627
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	456	498	423	490	447	499	547
Service Time	5.601	5.015	6.237	5.065	6.089	4.945	4.419
HCM Lane V/C Ratio	0.114	0.624	0.364	0.192	0.32	0.329	1.075
HCM Control Delay, s/veh	11.6	20.8	15.8	11.7	14.6	13.4	88
HCM Lane LOS	B	C	C	B	B	B	F
HCM 95th-tile Q	0.4	4	1.6	0.7	1.3	1.4	17.7

Intersection	
Intersection Delay, s/veh	20.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	84	8	61	72	31	29	200	23	56	337	124
Future Vol, veh/h	72	84	8	61	72	31	29	200	23	56	337	124
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	81	94	9	69	81	35	33	225	26	63	379	139
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	14.9	15.3	15.3	26.5
HCM LOS	B	C	C	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	46%	0%	37%	14%	0%
Vol Thru, %	0%	90%	54%	0%	44%	86%	0%
Vol Right, %	0%	10%	0%	100%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	223	156	8	164	393	124
LT Vol	29	0	72	0	61	56	0
Through Vol	0	200	84	0	72	337	0
RT Vol	0	23	0	8	31	0	124
Lane Flow Rate	33	251	175	9	184	442	139
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.068	0.481	0.379	0.017	0.386	0.809	0.225
Departure Headway (Hd)	7.496	6.91	7.788	6.834	7.541	6.598	5.812
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	478	521	463	523	477	548	617
Service Time	5.242	4.655	5.537	4.583	5.59	4.336	3.549
HCM Lane V/C Ratio	0.069	0.482	0.378	0.017	0.386	0.807	0.225
HCM Control Delay, s/veh	10.8	15.9	15.2	9.7	15.3	31.7	10.2
HCM Lane LOS	B	C	C	A	C	D	B
HCM 95th-tile Q	0.2	2.6	1.7	0.1	1.8	7.9	0.9

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	104	124	85	304	135
Future Vol, veh/h	35	104	124	85	304	135
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	106	127	87	310	138
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	9.3	9.3	14
HCM LOS	A	A	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	69%
Vol Thru, %	59%	0%	31%
Vol Right, %	41%	75%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	209	139	439
LT Vol	0	35	304
Through Vol	124	0	135
RT Vol	85	104	0
Lane Flow Rate	213	142	448
Geometry Grp	1	1	1
Degree of Util (X)	0.27	0.198	0.58
Departure Headway (Hd)	4.556	5.022	4.664
Convergence, Y/N	Yes	Yes	Yes
Cap	785	711	770
Service Time	2.61	3.084	2.712
HCM Lane V/C Ratio	0.271	0.2	0.582
HCM Control Delay, s/veh	9.3	9.3	14
HCM Lane LOS	A	A	B
HCM 95th-tile Q	1.1	0.7	3.8

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	3	3	203	3	39	1	148	498	92	83	1
Future Vol, veh/h	5	3	3	203	3	39	1	148	498	92	83	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	3	3	211	3	41	1	154	519	96	86	1
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	9.6	13.3	17.1	12.3
HCM LOS	A	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	1%	0%	45%	83%	53%	0%
Vol Thru, %	99%	0%	27%	1%	47%	0%
Vol Right, %	0%	100%	27%	16%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	149	498	11	245	175	1
LT Vol	1	0	5	203	92	0
Through Vol	148	0	3	3	83	0
RT Vol	0	498	3	39	0	1
Lane Flow Rate	155	519	11	255	182	1
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.244	0.714	0.021	0.423	0.326	0.002
Departure Headway (Hd)	5.665	4.953	6.441	5.969	6.442	5.463
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	635	731	554	602	558	654
Service Time	3.396	2.684	4.5	4.005	4.185	3.206
HCM Lane V/C Ratio	0.244	0.71	0.02	0.424	0.326	0.002
HCM Control Delay, s/veh	10.2	19.1	9.6	13.3	12.3	8.2
HCM Lane LOS	B	C	A	B	B	A
HCM 95th-tile Q	1	6.1	0.1	2.1	1.4	0

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	161	12	379	321	392	0	0	436	536
Future Volume (veh/h)	0	0	0	161	12	379	321	392	0	0	436	536
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				169	13	399	338	413	0	0	459	564
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				341	10	308	437	2269	0	0	562	471
Arrive On Green				0.20	0.20	0.20	0.49	1.00	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1739	51	1567	1795	3618	0	0	1870	1489
Grp Volume(v), veh/h				169	0	412	338	413	0	0	459	564
Grp Sat Flow(s),veh/h/ln				1739	0	1618	1795	1763	0	0	1777	1489
Q Serve(g_s), s				4.8	0.0	10.8	8.5	0.0	0.0	0.0	13.1	17.4
Cycle Q Clear(g_c), s				4.8	0.0	10.8	8.5	0.0	0.0	0.0	13.1	17.4
Prop In Lane				1.00		0.97	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				341	0	318	437	2269	0	0	562	471
V/C Ratio(X)				0.49	0.00	1.30	0.77	0.18	0.00	0.00	0.82	1.20
Avail Cap(c_a), veh/h				341	0	318	467	2269	0	0	562	471
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.83	0.83	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.7	0.0	22.1	12.8	0.0	0.0	0.0	17.3	18.8
Incr Delay (d2), s/veh				0.4	0.0	154.9	5.4	0.1	0.0	0.0	12.4	107.7
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	17.3	3.0	0.0	0.0	0.0	6.7	19.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				20.1	0.0	177.0	18.3	0.1	0.0	0.0	29.7	126.5
LnGrp LOS				C		F	B	A			C	F
Approach Vol, veh/h					581			751			1023	
Approach Delay, s/veh					131.4			8.3			83.1	
Approach LOS					F			A			F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	18.0	22.0		15.0		40.0
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	14.3	* 17		10.8		35.4
Max Q Clear Time (g_c+I1), s	10.5	19.4		12.8		2.0
Green Ext Time (p_c), s	0.1	0.0		0.0		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	71.2
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	0	586	0	0	0	0	465	61	251	346	0
Future Volume (veh/h)	248	0	586	0	0	0	0	465	61	251	346	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	174	0	710				0	489	64	264	364	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	373	0	675				0	1062	138	369	2205	0
Arrive On Green	0.21	0.00	0.21				0.00	0.33	0.33	0.41	1.00	0.00
Sat Flow, veh/h	1739	0	3145				0	3268	413	1781	3618	0
Grp Volume(v), veh/h	174	0	710				0	275	278	264	364	0
Grp Sat Flow(s),veh/h/ln	1739	0	1572				0	1791	1796	1781	1763	0
Q Serve(g_s), s	4.8	0.0	11.8				0.0	6.6	6.7	6.8	0.0	0.0
Cycle Q Clear(g_c), s	4.8	0.0	11.8				0.0	6.6	6.7	6.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h	373	0	675				0	599	601	369	2205	0
V/C Ratio(X)	0.47	0.00	1.05				0.00	0.46	0.46	0.72	0.17	0.00
Avail Cap(c_a), veh/h	373	0	675				0	599	601	398	2205	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.67	0.67	0.00
Uniform Delay (d), s/veh	18.9	0.0	21.6				0.0	14.4	14.4	14.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	49.2				0.0	2.5	2.6	3.0	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	8.4				0.0	2.8	2.9	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.2	0.0	70.8				0.0	16.9	17.0	17.8	0.1	0.0
LnGrp LOS	B		F					B	B	B	A	
Approach Vol, veh/h		884						553			628	
Approach Delay, s/veh		60.6						16.9			7.5	
Approach LOS		E						B			A	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	39.0		16.0	23.0		16.0
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	34.4		12.3	* 18		11.8
Max Q Clear Time (g_c+I1), s	2.0		8.8	8.7		13.8
Green Ext Time (p_c), s	1.0		0.1	1.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	32.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	21	0	1	79	1	394	9	69	754	109
Future Vol, veh/h	53	0	21	0	1	79	1	394	9	69	754	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	0	22	0	1	83	1	415	9	73	794	115

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1149	1365	794	1361	1475	212	908	0	0	424	0	0
Stage 1	939	939	-	422	422	-	-	-	-	-	-	-
Stage 2	210	426	-	939	1054	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	164	147	387	116	126	794	747	-	-	1133	-	-
Stage 1	316	342	-	581	588	-	-	-	-	-	-	-
Stage 2	773	585	-	316	302	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	136	137	387	102	118	794	747	-	-	1133	-	-
Mov Cap-2 Maneuver	136	137	-	102	118	-	-	-	-	-	-	-
Stage 1	296	320	-	580	587	-	-	-	-	-	-	-
Stage 2	690	584	-	279	283	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	44.16	10.48	0.02	0.62
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	747	-	-	167	741	1133	-	-
HCM Lane V/C Ratio	0.001	-	-	0.467	0.114	0.064	-	-
HCM Control Delay (s/veh)	9.8	-	-	44.2	10.5	8.4	-	-
HCM Lane LOS	A	-	-	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.2	0.4	0.2	-	-

Intersection	
Intersection Delay, s/veh	73.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	19	39	13	28	68	57	293	4	75	669	31
Future Vol, veh/h	43	19	39	13	28	68	57	293	4	75	669	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	6	0	0	0	3	1	2	1	9	0	3	3
Mvmt Flow	45	20	41	14	29	72	60	308	4	79	704	33
Number of Lanes	0	1	1	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	11.8	12.8	15.6	116
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	69%	0%	12%	100%	0%
Vol Thru, %	0%	99%	31%	0%	26%	0%	96%
Vol Right, %	0%	1%	0%	100%	62%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	57	297	62	39	109	75	700
LT Vol	57	0	43	0	13	75	0
Through Vol	0	293	19	0	28	0	669
RT Vol	0	4	0	39	68	0	31
Lane Flow Rate	60	313	65	41	115	79	737
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.112	0.539	0.145	0.078	0.227	0.14	1.204
Departure Headway (Hd)	7.029	6.492	8.453	7.27	7.595	6.368	5.882
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	513	560	427	496	476	564	619
Service Time	4.729	4.192	6.153	4.97	5.595	4.099	3.613
HCM Lane V/C Ratio	0.117	0.559	0.152	0.083	0.242	0.14	1.191
HCM Control Delay, s/veh	10.6	16.5	12.6	10.6	12.8	10.1	127.4
HCM Lane LOS	B	C	B	B	B	B	F
HCM 95th-tile Q	0.4	3.2	0.5	0.3	0.9	0.5	26.1

Intersection	
Intersection Delay, s/veh	18.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	67	6	83	94	42	27	312	55	74	183	128
Future Vol, veh/h	78	67	6	83	94	42	27	312	55	74	183	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	82	71	6	87	99	44	28	328	58	78	193	135
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	14.5	17.2	23.8	15.2
HCM LOS	B	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	54%	0%	38%	29%	0%
Vol Thru, %	0%	85%	46%	0%	43%	71%	0%
Vol Right, %	0%	15%	0%	100%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	367	145	6	219	257	128
LT Vol	27	0	78	0	83	74	0
Through Vol	0	312	67	0	94	183	0
RT Vol	0	55	0	6	42	0	128
Lane Flow Rate	28	386	153	6	231	271	135
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.058	0.718	0.336	0.012	0.477	0.527	0.23
Departure Headway (Hd)	7.308	6.689	7.923	6.928	7.442	7.015	6.151
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	490	541	453	515	484	514	582
Service Time	5.059	4.44	5.685	4.689	5.499	4.77	3.905
HCM Lane V/C Ratio	0.057	0.713	0.338	0.012	0.477	0.527	0.232
HCM Control Delay, s/veh	10.5	24.8	14.7	9.8	17.2	17.4	10.7
HCM Lane LOS	B	C	B	A	C	C	B
HCM 95th-tile Q	0.2	5.8	1.5	0	2.5	3	0.9

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	282	162	61	219	239
Future Vol, veh/h	87	282	162	61	219	239
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	297	171	64	231	252
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	16	12	22.9
HCM LOS	C	B	C

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	24%	48%
Vol Thru, %	73%	0%	52%
Vol Right, %	27%	76%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	223	369	458
LT Vol	0	87	219
Through Vol	162	0	239
RT Vol	61	282	0
Lane Flow Rate	235	388	482
Geometry Grp	1	1	1
Degree of Util (X)	0.369	0.587	0.742
Departure Headway (Hd)	5.665	5.441	5.539
Convergence, Y/N	Yes	Yes	Yes
Cap	631	660	651
Service Time	3.729	3.499	3.589
HCM Lane V/C Ratio	0.372	0.588	0.74
HCM Control Delay, s/veh	12	16	22.9
HCM Lane LOS	B	C	C
HCM 95th-tile Q	1.7	3.8	6.6

Intersection	
Intersection Delay, s/veh	33
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	9	1	418	3	100	1	123	238	201	121	4
Future Vol, veh/h	0	9	1	418	3	100	1	123	238	201	121	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	9	1	440	3	105	1	129	251	212	127	4
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	11	50.8	14.1	26.3
HCM LOS	B	F	B	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	1%	0%	0%	80%	62%	0%
Vol Thru, %	99%	0%	90%	1%	38%	0%
Vol Right, %	0%	100%	10%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	238	10	521	322	4
LT Vol	1	0	0	418	201	0
Through Vol	123	0	9	3	121	0
RT Vol	0	238	1	100	0	4
Lane Flow Rate	131	251	11	548	339	4
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.265	0.457	0.023	0.949	0.707	0.008
Departure Headway (Hd)	7.297	6.572	7.779	6.23	7.509	6.468
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	492	546	458	581	481	552
Service Time	5.053	4.327	5.864	4.267	5.261	4.219
HCM Lane V/C Ratio	0.266	0.46	0.024	0.943	0.705	0.007
HCM Control Delay, s/veh	12.7	14.8	11	50.8	26.5	9.3
HCM Lane LOS	B	B	B	F	D	A
HCM 95th-tile Q	1.1	2.4	0.1	12.6	5.5	0

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	77	1	406	593	629	0	0	644	149
Future Volume (veh/h)	0	0	0	77	1	406	593	629	0	0	644	149
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.93
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				81	1	427	624	662	0	0	678	157
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				371	1	343	581	2256	0	0	676	156
Arrive On Green				0.21	0.21	0.21	0.32	0.64	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1739	4	1607	1795	3618	0	0	2911	652
Grp Volume(v), veh/h				81	0	428	624	662	0	0	427	408
Grp Sat Flow(s),veh/h/ln				1739	0	1611	1795	1763	0	0	1777	1692
Q Serve(g_s), s				2.3	0.0	12.8	19.4	5.0	0.0	0.0	14.4	14.4
Cycle Q Clear(g_c), s				2.3	0.0	12.8	19.4	5.0	0.0	0.0	14.4	14.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.39
Lane Grp Cap(c), veh/h				371	0	344	581	2256	0	0	426	406
V/C Ratio(X)				0.22	0.00	1.25	1.07	0.29	0.00	0.00	1.00	1.00
Avail Cap(c_a), veh/h				371	0	344	581	2256	0	0	426	406
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.41	0.41	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.5	0.0	23.6	20.3	4.8	0.0	0.0	22.8	22.8
Incr Delay (d2), s/veh				0.1	0.0	132.6	46.8	0.1	0.0	0.0	44.1	45.6
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.9	0.0	17.0	14.9	1.4	0.0	0.0	10.8	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				19.6	0.0	156.2	67.1	4.9	0.0	0.0	66.9	68.4
LnGrp LOS				B		F	F	A			F	F
Approach Vol, veh/h					509			1286			835	
Approach Delay, s/veh					134.5			35.1			67.6	
Approach LOS					F			D			E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.0	19.0		17.0		43.0
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	17.3	* 14		12.8		38.4
Max Q Clear Time (g_c+I1), s	21.4	16.4		14.8		7.0
Green Ext Time (p_c), s	0.0	0.0		0.0		2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	64.7
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	417	208	512	0	0	0	0	805	91	370	351	0
Future Volume (veh/h)	417	208	512	0	0	0	0	805	91	370	351	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	366	437	416				0	847	96	389	369	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	482	527	436				0	1008	114	475	2255	0
Arrive On Green	0.28	0.28	0.28				0.00	0.31	0.31	0.27	0.64	0.00
Sat Flow, veh/h	1739	1900	1572				0	3325	366	1781	3618	0
Grp Volume(v), veh/h	366	437	416				0	469	474	389	369	0
Grp Sat Flow(s),veh/h/ln	1739	1900	1572				0	1791	1806	1781	1763	0
Q Serve(g_s), s	14.4	16.2	19.5				0.0	18.3	18.3	15.4	3.2	0.0
Cycle Q Clear(g_c), s	14.4	16.2	19.5				0.0	18.3	18.3	15.4	3.2	0.0
Prop In Lane	1.00		1.00				0.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	482	527	436				0	559	564	475	2255	0
V/C Ratio(X)	0.76	0.83	0.95				0.00	0.84	0.84	0.82	0.16	0.00
Avail Cap(c_a), veh/h	482	527	436				0	559	564	475	2255	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.53	0.53	0.00
Uniform Delay (d), s/veh	24.8	25.4	26.6				0.0	24.1	24.1	25.8	5.4	0.0
Incr Delay (d2), s/veh	6.2	10.1	31.2				0.0	14.2	14.1	5.7	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	8.2	10.5				0.0	9.6	9.7	7.0	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.0	35.5	57.8				0.0	38.2	38.1	31.5	5.5	0.0
LnGrp LOS	C	D	E					D	D	C	A	
Approach Vol, veh/h		1219						943			758	
Approach Delay, s/veh		41.8						38.2			18.9	
Approach LOS		D						D			B	

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	52.6	24.6	28.0	25.0
Change Period (Y+Rc), s	4.6	4.6	* 4.6	4.2
Max Green Setting (Gmax), s	45.4	18.3	* 23	20.8
Max Q Clear Time (g_c+I1), s	5.2	17.4	20.3	21.5
Green Ext Time (p_c), s	1.1	0.0	1.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	2	38	4	1	59	4	788	9	79	672	112
Future Vol, veh/h	49	2	38	4	1	59	4	788	9	79	672	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	2	40	4	1	62	4	829	9	83	707	118

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1297	1721	707	1717	1834	419	825	0	0	839	0	0
Stage 1	874	874	-	843	843	-	-	-	-	-	-	-
Stage 2	424	847	-	875	992	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	129	89	434	64	76	583	803	-	-	794	-	-
Stage 1	344	366	-	326	379	-	-	-	-	-	-	-
Stage 2	579	377	-	343	323	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	101	79	434	50	67	583	803	-	-	794	-	-
Mov Cap-2 Maneuver	101	79	-	50	67	-	-	-	-	-	-	-
Stage 1	308	328	-	324	377	-	-	-	-	-	-	-
Stage 2	514	375	-	277	289	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	63.37	18.8	0.05	0.92
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	803	-	-	149	328	794	-	-
HCM Lane V/C Ratio	0.005	-	-	0.63	0.206	0.105	-	-
HCM Control Delay (s/veh)	9.5	-	-	63.4	18.8	10.1	-	-
HCM Lane LOS	A	-	-	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	3.4	0.8	0.3	-	-

Intersection	
Intersection Delay, s/veh	109.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	92	45	84	22	33	192	46	517	34	146	519	49
Future Vol, veh/h	92	45	84	22	33	192	46	517	34	146	519	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	6	0	0	0	3	1	2	1	9	0	3	3
Mvmt Flow	97	47	88	23	35	202	48	544	36	154	546	52
Number of Lanes	0	1	1	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	17.1	25.9	146.2	136.7
HCM LOS	C	D	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	67%	0%	9%	100%	0%
Vol Thru, %	0%	94%	33%	0%	13%	0%	91%
Vol Right, %	0%	6%	0%	100%	78%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	551	137	84	247	146	568
LT Vol	46	0	92	0	22	146	0
Through Vol	0	517	45	0	33	0	519
RT Vol	0	34	0	84	192	0	49
Lane Flow Rate	48	580	144	88	260	154	598
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.112	1.254	0.374	0.201	0.607	0.351	1.281
Departure Headway (Hd)	8.874	8.292	10.307	9.11	9.418	8.783	8.253
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	406	441	352	396	387	412	442
Service Time	6.574	5.992	8.007	6.81	7.418	6.483	5.953
HCM Lane V/C Ratio	0.118	1.315	0.409	0.222	0.672	0.374	1.353
HCM Control Delay, s/veh	12.7	157.3	19	14.1	25.9	16.2	167.7
HCM Lane LOS	B	F	C	B	D	C	F
HCM 95th-tile Q	0.4	22.8	1.7	0.7	3.8	1.6	24

Intersection	
Intersection Delay, s/veh	21.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	190	63	8	17	65	73	29	200	23	56	337	142
Future Vol, veh/h	190	63	8	17	65	73	29	200	23	56	337	142
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	200	66	8	18	68	77	31	211	24	59	355	149
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh	20.7	14.7	15.8	26
HCM LOS	C	B	C	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	75%	0%	11%	14%	0%
Vol Thru, %	0%	90%	25%	0%	42%	86%	0%
Vol Right, %	0%	10%	0%	100%	47%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	223	253	8	155	393	142
LT Vol	29	0	190	0	17	56	0
Through Vol	0	200	63	0	65	337	0
RT Vol	0	23	0	8	73	0	142
Lane Flow Rate	31	235	266	8	163	414	149
Geometry Grp	5	5	5	5	4b	5	5
Degree of Util (X)	0.067	0.473	0.581	0.016	0.346	0.794	0.254
Departure Headway (Hd)	7.847	7.258	7.848	6.747	7.634	6.911	6.122
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	455	495	458	529	470	521	584
Service Time	5.611	5.022	5.606	4.504	5.705	4.665	3.876
HCM Lane V/C Ratio	0.068	0.475	0.581	0.015	0.347	0.795	0.255
HCM Control Delay, s/veh	11.2	16.4	21	9.6	14.7	31.4	11
HCM Lane LOS	B	C	C	A	B	D	B
HCM 95th-tile Q	0.2	2.5	3.6	0	1.5	7.4	1

Intersection	
Intersection Delay, s/veh	24.4
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	104	305	85	304	296
Future Vol, veh/h	35	104	305	85	304	296
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	109	321	89	320	312
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	11	14.9	33.7
HCM LOS	B	B	D

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	51%
Vol Thru, %	78%	0%	49%
Vol Right, %	22%	75%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	390	139	600
LT Vol	0	35	304
Through Vol	305	0	296
RT Vol	85	104	0
Lane Flow Rate	411	146	632
Geometry Grp	1	1	1
Degree of Util (X)	0.579	0.243	0.883
Departure Headway (Hd)	5.077	5.987	5.033
Convergence, Y/N	Yes	Yes	Yes
Cap	710	598	720
Service Time	3.108	4.033	3.058
HCM Lane V/C Ratio	0.579	0.244	0.878
HCM Control Delay, s/veh	14.9	11	33.7
HCM Lane LOS	B	B	D
HCM 95th-tile Q	3.7	0.9	11

Intersection	
Intersection Delay, s/veh	60.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	3	3	203	3	237	1	148	619	247	83	1
Future Vol, veh/h	5	3	3	203	3	237	1	148	619	247	83	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	3	3	214	3	249	1	156	652	260	87	1
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	12.2	36.2	88.8	30.6
HCM LOS	B	E	F	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	1%	0%	45%	46%	75%	0%
Vol Thru, %	99%	0%	27%	1%	25%	0%
Vol Right, %	0%	100%	27%	53%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	149	619	11	443	330	1
LT Vol	1	0	5	203	247	0
Through Vol	148	0	3	3	83	0
RT Vol	0	619	3	237	0	1
Lane Flow Rate	157	652	12	466	347	1
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.307	1.143	0.027	0.842	0.744	0.002
Departure Headway (Hd)	7.038	6.315	8.95	6.79	8.059	6.947
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	507	573	402	536	452	518
Service Time	4.832	4.108	6.95	4.79	5.759	4.647
HCM Lane V/C Ratio	0.31	1.138	0.03	0.869	0.768	0.002
HCM Control Delay, s/veh	13	107.1	12.2	36.2	30.7	9.7
HCM Lane LOS	B	F	B	E	D	A
HCM 95th-tile Q	1.3	21.3	0.1	8.7	6.1	0

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	59	12	107	369	516	0	0	431	478
Future Volume (veh/h)	0	0	0	59	12	107	369	516	0	0	431	478
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				65	13	118	405	567	0	0	474	525
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				172	16	145	426	2867	0	0	957	817
Arrive On Green				0.10	0.10	0.10	0.47	1.00	0.00	0.00	0.54	0.54
Sat Flow, veh/h				1739	162	1473	1795	3618	0	0	1870	1516
Grp Volume(v), veh/h				65	0	131	405	567	0	0	474	525
Grp Sat Flow(s),veh/h/ln				1739	0	1635	1795	1763	0	0	1777	1516
Q Serve(g_s), s				3.5	0.0	7.9	21.6	0.0	0.0	0.0	16.8	24.4
Cycle Q Clear(g_c), s				3.5	0.0	7.9	21.6	0.0	0.0	0.0	16.8	24.4
Prop In Lane				1.00		0.90	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				172	0	161	426	2867	0	0	957	817
V/C Ratio(X)				0.38	0.00	0.81	0.95	0.20	0.00	0.00	0.50	0.64
Avail Cap(c_a), veh/h				195	0	183	634	2867	0	0	957	817
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.84	0.84	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.2	0.0	44.2	25.7	0.0	0.0	0.0	14.5	16.3
Incr Delay (d2), s/veh				0.5	0.0	18.8	13.9	0.1	0.0	0.0	1.8	3.9
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	4.0	8.5	0.1	0.0	0.0	7.1	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				42.7	0.0	63.0	39.6	0.1	0.0	0.0	16.3	20.1
LnGrp LOS				D		E	D	A			B	C
Approach Vol, veh/h					196			972			999	
Approach Delay, s/veh					56.2			16.6			18.3	
Approach LOS					E			B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.4	58.5		14.1		85.9
Change Period (Y+Rc), s	3.7	4.6		4.2		4.6
Max Green Setting (Gmax), s	35.3	41.0		11.2		80.0
Max Q Clear Time (g_c+I1), s	23.6	26.4		9.9		2.0
Green Ext Time (p_c), s	0.2	2.8		0.1		1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	21.0
HCM 7th LOS	C

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	0	296	0	0	0	0	572	111	176	314	0
Future Volume (veh/h)	313	0	296	0	0	0	0	572	111	176	314	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	440	0	215				0	622	121	191	341	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	557	0	252				0	1113	216	591	2651	0
Arrive On Green	0.16	0.00	0.16				0.00	0.37	0.37	0.11	0.25	0.00
Sat Flow, veh/h	3478	0	1572				0	3070	578	1781	3618	0
Grp Volume(v), veh/h	440	0	215				0	374	369	191	341	0
Grp Sat Flow(s),veh/h/ln	1739	0	1572				0	1791	1762	1781	1763	0
Q Serve(g_s), s	12.2	0.0	13.3				0.0	16.5	16.6	9.9	7.5	0.0
Cycle Q Clear(g_c), s	12.2	0.0	13.3				0.0	16.5	16.6	9.9	7.5	0.0
Prop In Lane	1.00		1.00				0.00		0.33	1.00		0.00
Lane Grp Cap(c), veh/h	557	0	252				0	670	659	591	2651	0
V/C Ratio(X)	0.79	0.00	0.85				0.00	0.56	0.56	0.32	0.13	0.00
Avail Cap(c_a), veh/h	967	0	437				0	670	659	591	2651	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	40.4	0.0	40.9				0.0	24.8	24.8	34.2	12.2	0.0
Incr Delay (d2), s/veh	1.0	0.0	3.2				0.0	3.3	3.4	0.1	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	5.3				0.0	7.6	7.5	4.7	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.3	0.0	44.0				0.0	28.1	28.2	34.3	12.2	0.0
LnGrp LOS	D		D					C	C	C	B	
Approach Vol, veh/h		655						743			532	
Approach Delay, s/veh		42.2						28.2			20.1	
Approach LOS		D						C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	79.8		37.8	42.0		20.2
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	63.4		22.3	* 37		27.8
Max Q Clear Time (g_c+I1), s	9.5		11.9	18.6		15.3
Green Ext Time (p_c), s	1.0		0.1	1.8		0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	30.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	21	0	1	14	1	616	9	39	462	109
Future Vol, veh/h	53	0	21	0	1	14	1	616	9	39	462	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	50	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	0	23	0	1	15	1	677	10	43	508	120

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	935	1282	508	1277	1397	343	627	0	0	687	0	0
Stage 1	593	593	-	684	684	-	-	-	-	-	-	-
Stage 2	341	689	-	593	713	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	233	165	564	133	140	653	952	-	-	905	-	-
Stage 1	491	492	-	406	448	-	-	-	-	-	-	-
Stage 2	648	446	-	491	434	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	215	157	564	121	133	653	952	-	-	905	-	-
Mov Cap-2 Maneuver	215	157	-	121	133	-	-	-	-	-	-	-
Stage 1	468	469	-	405	447	-	-	-	-	-	-	-
Stage 2	630	445	-	448	414	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	23.3	12.17	0.01	0.59
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	952	-	-	215	564	519	905	-	-
HCM Lane V/C Ratio	0.001	-	-	0.271	0.041	0.032	0.047	-	-
HCM Control Delay (s/veh)	8.8	-	-	27.9	11.7	12.2	9.2	-	-
HCM Lane LOS	A	-	-	D	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0.1	0.1	0.1	-	-

HCM 7th Signalized Intersection Summary
4: Bay Ave & Retail Dwy/Hill St

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	19	39	9	28	142	57	441	10	75	377	31
Future Volume (veh/h)	43	19	39	9	28	142	57	441	10	75	377	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1900	1900	1856	1885	1870	1885	1767	1900	1856	1856
Adj Flow Rate, veh/h	48	21	44	10	31	160	64	496	11	84	424	35
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	6	0	0	0	3	1	2	1	9	0	3	3
Cap, veh/h	359	130	314	105	59	259	169	679	15	139	593	49
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.37	0.37	0.08	0.35	0.35
Sat Flow, veh/h	987	641	1542	35	291	1271	1781	1835	41	1810	1686	139
Grp Volume(v), veh/h	69	0	44	201	0	0	64	0	507	84	0	459
Grp Sat Flow(s),veh/h/ln	1628	0	1542	1596	0	0	1781	0	1876	1810	0	1825
Q Serve(g_s), s	0.0	0.0	0.9	0.0	0.0	0.0	1.3	0.0	9.0	1.7	0.0	8.4
Cycle Q Clear(g_c), s	1.2	0.0	0.9	4.4	0.0	0.0	1.3	0.0	9.0	1.7	0.0	8.4
Prop In Lane	0.70		1.00	0.05		0.80	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	489	0	314	423	0	0	169	0	695	139	0	642
V/C Ratio(X)	0.14	0.00	0.14	0.48	0.00	0.00	0.38	0.00	0.73	0.60	0.00	0.71
Avail Cap(c_a), veh/h	848	0	722	841	0	0	254	0	1111	258	0	1081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.7	0.0	12.6	14.0	0.0	0.0	16.4	0.0	10.5	17.3	0.0	10.8
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.8	0.0	0.0	1.4	0.0	1.5	4.2	0.0	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.3	1.4	0.0	0.0	0.5	0.0	3.1	0.8	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.9	0.0	12.8	14.8	0.0	0.0	17.8	0.0	12.0	21.4	0.0	12.3
LnGrp LOS	B		B	B			B		B	C		B
Approach Vol, veh/h		113			201			571			543	
Approach Delay, s/veh		12.8			14.8			12.6			13.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	18.8		12.4	8.2	18.1		12.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.5	22.9		18.1	5.5	22.9		18.1
Max Q Clear Time (g_c+I1), s	3.7	11.0		3.2	3.3	10.4		6.4
Green Ext Time (p_c), s	0.0	2.7		0.4	0.0	2.5		0.9

Intersection Summary		
HCM 7th Control Delay, s/veh		13.4
HCM 7th LOS		B

HCM 7th Signalized Intersection Summary
5: Bay Ave & Capitola Ave

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	67	6	83	94	42	27	312	55	74	183	128
Future Volume (veh/h)	70	67	6	83	94	42	27	312	55	74	183	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	81	7	100	113	51	33	376	66	89	220	154
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	288	436	298	231	85	449	623	109	252	468	630
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	626	1030	1557	440	824	303	1002	1545	271	220	1160	1561
Grp Volume(v), veh/h	165	0	7	264	0	0	33	0	442	309	0	154
Grp Sat Flow(s),veh/h/ln	1656	0	1557	1566	0	0	1002	0	1817	1380	0	1561
Q Serve(g_s), s	0.0	0.0	0.1	2.1	0.0	0.0	0.8	0.0	5.5	0.5	0.0	1.9
Cycle Q Clear(g_c), s	2.0	0.0	0.1	4.1	0.0	0.0	6.7	0.0	5.5	5.9	0.0	1.9
Prop In Lane	0.51		1.00	0.38		0.19	1.00		0.15	0.29		1.00
Lane Grp Cap(c), veh/h	655	0	436	613	0	0	449	0	733	720	0	630
V/C Ratio(X)	0.25	0.00	0.02	0.43	0.00	0.00	0.07	0.00	0.60	0.43	0.00	0.24
Avail Cap(c_a), veh/h	1172	0	986	1160	0	0	680	0	1151	1055	0	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	0.0	7.4	8.8	0.0	0.0	9.5	0.0	6.7	6.1	0.0	5.6
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.8	0.4	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	1.0	0.0	0.0	0.1	0.0	1.4	0.8	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.3	0.0	7.4	9.3	0.0	0.0	9.6	0.0	7.5	6.5	0.0	5.8
LnGrp LOS	A		A	A			A		A	A		A
Approach Vol, veh/h		172			264			475			463	
Approach Delay, s/veh		8.2			9.3			7.6			6.3	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.0	12.5	16.0	12.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	8.7	4.0	7.9	6.1
Green Ext Time (p_c), s	2.1	0.8	1.9	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	7.6
HCM 7th LOS	A

HCM 7th Signalized Intersection Summary
6: Monterey Ave & Bay Ave

01/06/2025

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	87	282	162	61	219	84
Future Volume (veh/h)	87	282	162	61	219	84
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	371	213	80	288	111
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	129	421	599	225	454	154
Arrive On Green	0.34	0.34	0.46	0.46	0.46	0.46
Sat Flow, veh/h	382	1242	1296	487	685	333
Grp Volume(v), veh/h	486	0	0	293	399	0
Grp Sat Flow(s),veh/h/ln	1628	0	0	1783	1017	0
Q Serve(g_s), s	12.7	0.0	0.0	4.8	12.3	0.0
Cycle Q Clear(g_c), s	12.7	0.0	0.0	4.8	17.0	0.0
Prop In Lane	0.23	0.76		0.27	0.72	
Lane Grp Cap(c), veh/h	551	0	0	824	607	0
V/C Ratio(X)	0.88	0.00	0.00	0.36	0.66	0.00
Avail Cap(c_a), veh/h	647	0	0	1102	799	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.1	0.0	0.0	7.8	12.5	0.0
Incr Delay (d2), s/veh	12.1	0.0	0.0	0.3	1.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	0.0	1.4	3.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.2	0.0	0.0	8.1	13.7	0.0
LnGrp LOS	C			A	B	
Approach Vol, veh/h	486		293			399
Approach Delay, s/veh	26.2		8.1			13.7
Approach LOS	C		A			B

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	25.4			25.4	19.8
Change Period (Y+Rc), s	4.5			4.5	4.5
Max Green Setting (Gmax), s	28.0			28.0	18.0
Max Q Clear Time (g_c+I1), s	6.8			19.0	14.7
Green Ext Time (p_c), s	1.7			1.9	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	17.4
HCM 7th LOS	B

HCM 7th Signalized Intersection Summary
7: Monterey Ave & Park Ave

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	9	1	418	3	100	1	123	225	41	126	4
Future Volume (veh/h)	0	9	1	418	3	100	1	123	225	41	126	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	10	1	459	3	110	1	135	247	45	138	4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	837	84	763	4	137	107	442	376	187	338	376
Arrive On Green	0.00	0.50	0.50	0.50	0.50	0.50	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	0	1673	167	1146	7	275	4	1865	1585	238	1426	1585
Grp Volume(v), veh/h	0	0	11	572	0	0	136	0	247	183	0	4
Grp Sat Flow(s),veh/h/ln	0	0	1840	1428	0	0	1868	0	1585	1664	0	1585
Q Serve(g_s), s	0.0	0.0	0.1	11.4	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.1	11.5	0.0	0.0	2.1	0.0	4.8	2.8	0.0	0.1
Prop In Lane	0.00		0.09	0.80		0.19	0.01		1.00	0.25		1.00
Lane Grp Cap(c), veh/h	0	0	921	904	0	0	549	0	376	525	0	376
V/C Ratio(X)	0.00	0.00	0.01	0.63	0.00	0.00	0.25	0.00	0.66	0.35	0.00	0.01
Avail Cap(c_a), veh/h	0	0	1690	1504	0	0	1166	0	901	1036	0	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	4.3	7.2	0.0	0.0	10.8	0.0	11.8	11.1	0.0	10.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.2	0.0	2.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	2.0	0.0	0.0	0.7	0.0	1.5	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	4.3	7.9	0.0	0.0	11.0	0.0	13.8	11.5	0.0	10.0
LnGrp LOS			A	A			B		B	B		B
Approach Vol, veh/h		11			572			383			187	
Approach Delay, s/veh		4.3			7.9			12.8			11.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	12.6	21.7	12.6	21.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.5	31.5	19.5	31.5
Max Q Clear Time (g_c+I1), s	6.8	2.1	4.8	13.5
Green Ext Time (p_c), s	1.3	0.0	0.9	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	10.1
HCM 7th LOS	B

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	107	1	195	290	401	0	0	642	316
Future Volume (veh/h)	0	0	0	107	1	195	290	401	0	0	642	316
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				113	1	205	305	422	0	0	676	333
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				209	1	192	415	2413	0	0	792	390
Arrive On Green				0.12	0.12	0.12	0.23	0.68	0.00	0.00	0.35	0.35
Sat Flow, veh/h				1739	8	1604	1795	3618	0	0	2351	1112
Grp Volume(v), veh/h				113	0	206	305	422	0	0	532	477
Grp Sat Flow(s),veh/h/ln				1739	0	1611	1795	1763	0	0	1777	1592
Q Serve(g_s), s				2.8	0.0	5.4	7.1	1.9	0.0	0.0	12.5	12.5
Cycle Q Clear(g_c), s				2.8	0.0	5.4	7.1	1.9	0.0	0.0	12.5	12.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.70
Lane Grp Cap(c), veh/h				209	0	193	415	2413	0	0	624	559
V/C Ratio(X)				0.54	0.00	1.07	0.74	0.17	0.00	0.00	0.85	0.85
Avail Cap(c_a), veh/h				209	0	193	451	2413	0	0	624	559
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				18.6	0.0	19.8	16.0	2.5	0.0	0.0	13.5	13.5
Incr Delay (d2), s/veh				1.6	0.0	83.1	3.9	0.1	0.0	0.0	13.8	15.2
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.0	0.0	6.2	3.0	0.4	0.0	0.0	6.5	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				20.2	0.0	102.9	19.9	2.7	0.0	0.0	27.4	28.7
LnGrp LOS				C		F	B	A			C	C
Approach Vol, veh/h					319			727			1009	
Approach Delay, s/veh					73.6			9.9			28.0	
Approach LOS					E			A			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	20.4		9.6		35.4
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	11.3	* 16		5.4		30.8
Max Q Clear Time (g_c+I1), s	9.1	14.5		7.4		3.9
Green Ext Time (p_c), s	0.0	0.5		0.0		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	28.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	208	347	0	0	0	0	457	91	276	473	0
Future Volume (veh/h)	234	208	347	0	0	0	0	457	91	276	473	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	245	305	306				0	497	99	300	514	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	396	433	358				0	879	174	449	2205	0
Arrive On Green	0.23	0.23	0.23				0.00	0.30	0.30	0.25	0.63	0.00
Sat Flow, veh/h	1739	1900	1572				0	3057	587	1781	3618	0
Grp Volume(v), veh/h	245	305	306				0	299	297	300	514	0
Grp Sat Flow(s),veh/h/ln	1739	1900	1572				0	1791	1759	1781	1763	0
Q Serve(g_s), s	7.6	8.9	11.2				0.0	8.5	8.6	9.1	3.8	0.0
Cycle Q Clear(g_c), s	7.6	8.9	11.2				0.0	8.5	8.6	9.1	3.8	0.0
Prop In Lane	1.00		1.00				0.00		0.33	1.00		0.00
Lane Grp Cap(c), veh/h	396	433	358				0	531	522	449	2205	0
V/C Ratio(X)	0.62	0.70	0.85				0.00	0.56	0.57	0.67	0.23	0.00
Avail Cap(c_a), veh/h	446	488	404				0	531	522	449	2205	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.66	0.66	0.00
Uniform Delay (d), s/veh	20.8	21.3	22.2				0.0	17.8	17.9	20.2	4.9	0.0
Incr Delay (d2), s/veh	1.2	3.0	13.5				0.0	4.3	4.5	2.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.9	5.1				0.0	3.9	3.9	3.8	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.1	24.3	35.8				0.0	22.1	22.3	22.2	5.1	0.0
LnGrp LOS	C	C	D					C	C	C	A	
Approach Vol, veh/h		856						596			814	
Approach Delay, s/veh		27.8						22.2			11.4	
Approach LOS		C						C			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	42.1		19.7	22.4		17.9
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	35.8		14.3	* 18		15.4
Max Q Clear Time (g_c+I1), s	5.8		11.1	10.6		13.2
Green Ext Time (p_c), s	1.5		0.1	1.0		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	20.4
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	2	38	4	1	37	4	462	9	50	658	112
Future Vol, veh/h	49	2	38	4	1	37	4	462	9	50	658	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	50	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	2	44	5	1	43	5	531	10	57	756	129

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1147	1422	756	1418	1545	271	885	0	0	541	0	0
Stage 1	871	871	-	545	545	-	-	-	-	-	-	-
Stage 2	275	551	-	872	1000	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	165	136	407	105	114	728	763	-	-	1025	-	-
Stage 1	345	367	-	491	517	-	-	-	-	-	-	-
Stage 2	708	515	-	344	320	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	144	127	407	87	107	728	763	-	-	1025	-	-
Mov Cap-2 Maneuver	144	127	-	87	107	-	-	-	-	-	-	-
Stage 1	325	347	-	488	514	-	-	-	-	-	-	-
Stage 2	661	512	-	288	302	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	33	15.37	0.08	0.53
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	763	-	-	143	407	395	1025	-	-
HCM Lane V/C Ratio	0.006	-	-	0.409	0.107	0.122	0.056	-	-
HCM Control Delay (s/veh)	9.7	-	-	46.5	14.9	15.4	8.7	-	-
HCM Lane LOS	A	-	-	E	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.8	0.4	0.4	0.2	-	-

HCM 7th Signalized Intersection Summary
4: Bay Ave & Retail Dwy/Hill St

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	45	84	18	33	76	46	307	21	146	505	49
Future Volume (veh/h)	92	45	84	18	33	76	46	307	21	146	505	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1900	1900	1856	1885	1870	1885	1767	1900	1856	1856
Adj Flow Rate, veh/h	103	51	94	20	37	85	52	345	24	164	567	55
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	6	0	0	0	3	1	2	1	9	0	3	3
Cap, veh/h	320	112	265	126	88	163	98	637	44	214	714	69
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.06	0.37	0.37	0.12	0.43	0.43
Sat Flow, veh/h	974	650	1536	123	511	947	1781	1736	121	1810	1660	161
Grp Volume(v), veh/h	154	0	94	142	0	0	52	0	369	164	0	622
Grp Sat Flow(s),veh/h/ln	1624	0	1536	1581	0	0	1781	0	1857	1810	0	1821
Q Serve(g_s), s	0.0	0.0	2.1	0.2	0.0	0.0	1.1	0.0	6.2	3.5	0.0	11.7
Cycle Q Clear(g_c), s	3.0	0.0	2.1	3.2	0.0	0.0	1.1	0.0	6.2	3.5	0.0	11.7
Prop In Lane	0.67		1.00	0.14		0.60	1.00		0.07	1.00		0.09
Lane Grp Cap(c), veh/h	433	0	265	377	0	0	98	0	681	214	0	783
V/C Ratio(X)	0.36	0.00	0.35	0.38	0.00	0.00	0.53	0.00	0.54	0.77	0.00	0.79
Avail Cap(c_a), veh/h	840	0	702	820	0	0	231	0	938	395	0	1081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	14.4	14.8	0.0	0.0	18.1	0.0	9.9	16.8	0.0	9.7
Incr Delay (d2), s/veh	0.5	0.0	0.8	0.6	0.0	0.0	4.4	0.0	0.7	5.7	0.0	2.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.7	1.1	0.0	0.0	0.5	0.0	2.1	1.6	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.2	0.0	15.2	15.4	0.0	0.0	22.5	0.0	10.5	22.5	0.0	12.6
LnGrp LOS	B		B	B			C		B	C		B
Approach Vol, veh/h		248			142			421			786	
Approach Delay, s/veh		15.2			15.4			12.0			14.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	19.0		11.3	6.7	21.4		11.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.6	19.9		18.0	5.1	23.4		18.0
Max Q Clear Time (g_c+I1), s	5.5	8.2		5.0	3.1	13.7		5.2
Green Ext Time (p_c), s	0.1	1.8		1.0	0.0	3.1		0.6

Intersection Summary		
HCM 7th Control Delay, s/veh		14.1
HCM 7th LOS		B

HCM 7th Signalized Intersection Summary
5: Bay Ave & Capitola Ave

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	84	8	61	72	31	29	200	23	56	337	124
Future Volume (veh/h)	72	84	8	61	72	31	29	200	23	56	337	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	94	9	69	81	35	33	225	26	63	379	139
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	348	266	376	290	200	69	473	659	76	220	655	627
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	576	1096	1552	387	824	283	878	1643	190	142	1632	1561
Grp Volume(v), veh/h	175	0	9	185	0	0	33	0	251	442	0	139
Grp Sat Flow(s),veh/h/ln	1673	0	1552	1495	0	0	878	0	1833	1775	0	1561
Q Serve(g_s), s	0.0	0.0	0.1	0.8	0.0	0.0	0.8	0.0	2.4	0.5	0.0	1.5
Cycle Q Clear(g_c), s	2.0	0.0	0.1	2.8	0.0	0.0	5.5	0.0	2.4	4.7	0.0	1.5
Prop In Lane	0.46		1.00	0.37		0.19	1.00		0.10	0.14		1.00
Lane Grp Cap(c), veh/h	614	0	376	558	0	0	473	0	736	875	0	627
V/C Ratio(X)	0.29	0.00	0.02	0.33	0.00	0.00	0.07	0.00	0.34	0.51	0.00	0.22
Avail Cap(c_a), veh/h	1332	0	1106	1282	0	0	746	0	1306	1406	0	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	0.0	7.3	8.2	0.0	0.0	8.1	0.0	5.2	5.9	0.0	5.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.3	0.5	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.6	0.0	0.0	0.1	0.0	0.5	1.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.3	0.0	7.3	8.6	0.0	0.0	8.2	0.0	5.5	6.4	0.0	5.1
LnGrp LOS	A		A	A			A		A	A		A
Approach Vol, veh/h		184			185			284			581	
Approach Delay, s/veh		8.2			8.6			5.8			6.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.6	10.6	14.6	10.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	7.5	4.0	6.7	4.8
Green Ext Time (p_c), s	1.2	0.8	2.7	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

HCM 7th Signalized Intersection Summary
6: Monterey Ave & Bay Ave

01/06/2025

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	35	104	124	85	304	141
Future Volume (veh/h)	35	104	124	85	304	141
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	106	127	87	310	144
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	52	154	521	357	641	254
Arrive On Green	0.13	0.13	0.50	0.50	0.50	0.50
Sat Flow, veh/h	411	1210	1034	709	780	504
Grp Volume(v), veh/h	143	0	0	214	454	0
Grp Sat Flow(s),veh/h/ln	1632	0	0	1743	1284	0
Q Serve(g_s), s	2.0	0.0	0.0	1.7	5.2	0.0
Cycle Q Clear(g_c), s	2.0	0.0	0.0	1.7	6.9	0.0
Prop In Lane	0.25	0.74		0.41	0.68	
Lane Grp Cap(c), veh/h	208	0	0	878	895	0
V/C Ratio(X)	0.69	0.00	0.00	0.24	0.51	0.00
Avail Cap(c_a), veh/h	1211	0	0	2352	2016	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.2	0.0	0.0	3.4	4.8	0.0
Incr Delay (d2), s/veh	4.0	0.0	0.0	0.1	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.2	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.2	0.0	0.0	3.6	5.2	0.0
LnGrp LOS	B			A	A	
Approach Vol, veh/h	143		214			454
Approach Delay, s/veh	14.2		3.6			5.2
Approach LOS	B		A			A

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	16.8			16.8	7.6
Change Period (Y+Rc), s	4.5			4.5	4.5
Max Green Setting (Gmax), s	32.9			32.9	18.1
Max Q Clear Time (g_c+I1), s	3.7			8.9	4.0
Green Ext Time (p_c), s	1.3			3.4	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	6.4
HCM 7th LOS	A

HCM 7th Signalized Intersection Summary
7: Monterey Ave & Park Ave

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	3	3	203	3	39	1	165	498	92	83	1
Future Volume (veh/h)	5	3	3	203	3	39	1	165	498	92	83	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	3	3	211	3	41	1	172	519	96	86	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	174	112	526	7	56	135	800	679	404	302	679
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	523	727	469	1186	29	233	2	1867	1585	469	705	1585
Grp Volume(v), veh/h	11	0	0	255	0	0	173	0	519	182	0	1
Grp Sat Flow(s),veh/h/ln	1720	0	0	1447	0	0	1869	0	1585	1174	0	1585
Q Serve(g_s), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	4.4	0.0	0.0	1.6	0.0	7.5	1.7	0.0	0.0
Prop In Lane	0.45		0.27	0.83		0.16	0.01		1.00	0.53		1.00
Lane Grp Cap(c), veh/h	605	0	0	589	0	0	935	0	679	706	0	679
V/C Ratio(X)	0.02	0.00	0.00	0.43	0.00	0.00	0.19	0.00	0.76	0.26	0.00	0.00
Avail Cap(c_a), veh/h	1258	0	0	1202	0	0	1376	0	1054	954	0	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.9	0.0	0.0	9.5	0.0	0.0	4.9	0.0	6.6	4.9	0.0	4.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	1.8	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.3	0.0	1.4	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.9	0.0	0.0	10.0	0.0	0.0	5.0	0.0	8.4	5.1	0.0	4.4
LnGrp LOS	A			A			A		A	A		A
Approach Vol, veh/h		11			255			692			183	
Approach Delay, s/veh		7.9			10.0			7.5			5.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.1	11.0	16.1	11.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	9.5	2.1	3.7	6.4
Green Ext Time (p_c), s	2.1	0.0	1.1	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	161	12	379	321	392	0	0	436	536
Future Volume (veh/h)	0	0	0	161	12	379	321	392	0	0	436	536
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				169	13	399	338	413	0	0	459	564
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				341	10	308	437	2269	0	0	562	471
Arrive On Green				0.20	0.20	0.20	0.49	1.00	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1739	51	1567	1795	3618	0	0	1870	1489
Grp Volume(v), veh/h				169	0	412	338	413	0	0	459	564
Grp Sat Flow(s),veh/h/ln				1739	0	1618	1795	1763	0	0	1777	1489
Q Serve(g_s), s				4.8	0.0	10.8	8.5	0.0	0.0	0.0	13.1	17.4
Cycle Q Clear(g_c), s				4.8	0.0	10.8	8.5	0.0	0.0	0.0	13.1	17.4
Prop In Lane				1.00		0.97	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				341	0	318	437	2269	0	0	562	471
V/C Ratio(X)				0.49	0.00	1.30	0.77	0.18	0.00	0.00	0.82	1.20
Avail Cap(c_a), veh/h				341	0	318	467	2269	0	0	562	471
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.83	0.83	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.7	0.0	22.1	12.8	0.0	0.0	0.0	17.3	18.8
Incr Delay (d2), s/veh				0.4	0.0	154.9	5.4	0.1	0.0	0.0	12.4	107.7
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	17.3	3.0	0.0	0.0	0.0	6.7	19.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				20.1	0.0	177.0	18.3	0.1	0.0	0.0	29.7	126.5
LnGrp LOS				C		F	B	A			C	F
Approach Vol, veh/h					581			751			1023	
Approach Delay, s/veh					131.4			8.3			83.1	
Approach LOS					F			A			F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	18.0	22.0		15.0		40.0
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	14.3	* 17		10.8		35.4
Max Q Clear Time (g_c+I1), s	10.5	19.4		12.8		2.0
Green Ext Time (p_c), s	0.1	0.0		0.0		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	71.2
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	0	586	0	0	0	0	465	61	251	346	0
Future Volume (veh/h)	248	0	586	0	0	0	0	465	61	251	346	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	174	0	710				0	489	64	264	364	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	373	0	675				0	1062	138	369	2205	0
Arrive On Green	0.21	0.00	0.21				0.00	0.33	0.33	0.41	1.00	0.00
Sat Flow, veh/h	1739	0	3145				0	3268	413	1781	3618	0
Grp Volume(v), veh/h	174	0	710				0	275	278	264	364	0
Grp Sat Flow(s),veh/h/ln	1739	0	1572				0	1791	1796	1781	1763	0
Q Serve(g_s), s	4.8	0.0	11.8				0.0	6.6	6.7	6.8	0.0	0.0
Cycle Q Clear(g_c), s	4.8	0.0	11.8				0.0	6.6	6.7	6.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h	373	0	675				0	599	601	369	2205	0
V/C Ratio(X)	0.47	0.00	1.05				0.00	0.46	0.46	0.72	0.17	0.00
Avail Cap(c_a), veh/h	373	0	675				0	599	601	398	2205	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.67	0.67	0.00
Uniform Delay (d), s/veh	18.9	0.0	21.6				0.0	14.4	14.4	14.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	49.2				0.0	2.5	2.6	3.0	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	8.4				0.0	2.8	2.9	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.2	0.0	70.8				0.0	16.9	17.0	17.8	0.1	0.0
LnGrp LOS	B		F					B	B	B	A	
Approach Vol, veh/h		884						553			628	
Approach Delay, s/veh		60.6						16.9			7.5	
Approach LOS		E						B			A	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	39.0		16.0	23.0		16.0
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	34.4		12.3	* 18		11.8
Max Q Clear Time (g_c+I1), s	2.0		8.8	8.7		13.8
Green Ext Time (p_c), s	1.0		0.1	1.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	32.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	21	0	1	79	1	394	9	69	754	109
Future Vol, veh/h	53	0	21	0	1	79	1	394	9	69	754	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	50	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	0	22	0	1	83	1	415	9	73	794	115

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1149	1365	794	1361	1475	212	908	0	0	424	0	0
Stage 1	939	939	-	422	422	-	-	-	-	-	-	-
Stage 2	210	426	-	939	1054	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	164	147	387	116	126	794	747	-	-	1133	-	-
Stage 1	316	342	-	581	588	-	-	-	-	-	-	-
Stage 2	773	585	-	316	302	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	136	137	387	102	118	794	747	-	-	1133	-	-
Mov Cap-2 Maneuver	136	137	-	102	118	-	-	-	-	-	-	-
Stage 1	296	320	-	580	587	-	-	-	-	-	-	-
Stage 2	690	584	-	279	283	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	39.07	10.48	0.02	0.62
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	747	-	-	136	387	741	1133	-	-
HCM Lane V/C Ratio	0.001	-	-	0.41	0.057	0.114	0.064	-	-
HCM Control Delay (s/veh)	9.8	-	-	48.7	14.9	10.5	8.4	-	-
HCM Lane LOS	A	-	-	E	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.8	0.2	0.4	0.2	-	-

HCM 7th Signalized Intersection Summary
4: Bay Ave & Retail Dwy/Hill St

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	19	39	13	28	68	57	293	4	75	669	31
Future Volume (veh/h)	43	19	39	13	28	68	57	293	4	75	669	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1900	1900	1856	1885	1870	1885	1767	1900	1856	1856
Adj Flow Rate, veh/h	45	20	41	14	29	72	60	308	4	79	704	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	0	0	3	1	2	1	9	0	3	3
Cap, veh/h	268	95	214	107	67	139	105	903	12	127	874	41
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.06	0.49	0.49	0.07	0.50	0.50
Sat Flow, veh/h	943	690	1559	111	491	1008	1781	1856	24	1810	1756	82
Grp Volume(v), veh/h	65	0	41	115	0	0	60	0	312	79	0	737
Grp Sat Flow(s),veh/h/ln	1632	0	1559	1610	0	0	1781	0	1880	1810	0	1838
Q Serve(g_s), s	0.0	0.0	1.0	0.3	0.0	0.0	1.4	0.0	4.5	1.9	0.0	14.8
Cycle Q Clear(g_c), s	1.4	0.0	1.0	2.9	0.0	0.0	1.4	0.0	4.5	1.9	0.0	14.8
Prop In Lane	0.69		1.00	0.12		0.63	1.00		0.01	1.00		0.04
Lane Grp Cap(c), veh/h	362	0	214	313	0	0	105	0	914	127	0	915
V/C Ratio(X)	0.18	0.00	0.19	0.37	0.00	0.00	0.57	0.00	0.34	0.62	0.00	0.81
Avail Cap(c_a), veh/h	755	0	639	744	0	0	214	0	1269	353	0	1378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.0	0.0	16.9	17.7	0.0	0.0	20.2	0.0	7.0	19.9	0.0	9.3
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.7	0.0	0.0	4.8	0.0	0.2	4.9	0.0	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	1.0	0.0	0.0	0.7	0.0	1.4	0.9	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.2	0.0	17.3	18.4	0.0	0.0	25.0	0.0	7.2	24.8	0.0	11.4
LnGrp LOS	B		B	B			C		A	C		B
Approach Vol, veh/h		106			115			372			816	
Approach Delay, s/veh		17.3			18.4			10.1			12.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	26.0		10.6	7.1	26.5		10.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.6	29.8		18.1	5.3	33.1		18.1
Max Q Clear Time (g_c+I1), s	3.9	6.5		3.4	3.4	16.8		4.9
Green Ext Time (p_c), s	0.1	2.0		0.3	0.0	5.1		0.5

Intersection Summary			
HCM 7th Control Delay, s/veh			12.8
HCM 7th LOS			B

HCM 7th Signalized Intersection Summary
5: Bay Ave & Capitola Ave

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	67	6	83	94	42	27	312	55	74	183	128
Future Volume (veh/h)	78	67	6	83	94	42	27	312	55	74	183	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	71	6	87	99	44	28	328	58	78	193	135
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	263	408	312	220	79	502	590	104	275	483	596
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	638	1002	1555	440	838	302	1044	1543	273	242	1265	1560
Grp Volume(v), veh/h	153	0	6	230	0	0	28	0	386	271	0	135
Grp Sat Flow(s),veh/h/ln	1640	0	1555	1580	0	0	1044	0	1816	1506	0	1560
Q Serve(g_s), s	0.0	0.0	0.1	1.4	0.0	0.0	0.6	0.0	4.2	0.2	0.0	1.5
Cycle Q Clear(g_c), s	1.7	0.0	0.1	3.1	0.0	0.0	5.0	0.0	4.2	4.4	0.0	1.5
Prop In Lane	0.54		1.00	0.38		0.19	1.00		0.15	0.29		1.00
Lane Grp Cap(c), veh/h	649	0	408	611	0	0	502	0	694	759	0	596
V/C Ratio(X)	0.24	0.00	0.01	0.38	0.00	0.00	0.06	0.00	0.56	0.36	0.00	0.23
Avail Cap(c_a), veh/h	1304	0	1105	1307	0	0	845	0	1291	1248	0	1109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.5	0.0	6.9	8.0	0.0	0.0	8.2	0.0	6.1	5.7	0.0	5.3
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.7	0.3	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.7	0.0	0.0	0.1	0.0	1.0	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.7	0.0	6.9	8.4	0.0	0.0	8.2	0.0	6.8	6.0	0.0	5.5
LnGrp LOS	A		A	A			A		A	A		A
Approach Vol, veh/h		159			230			414			406	
Approach Delay, s/veh		7.7			8.4			6.9			5.8	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.2	11.2	14.2	11.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	7.0	3.7	6.4	5.1
Green Ext Time (p_c), s	2.0	0.7	1.8	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

HCM 7th Signalized Intersection Summary
6: Monterey Ave & Bay Ave

01/06/2025

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	87	282	162	61	219	239
Future Volume (veh/h)	87	282	162	61	219	239
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	297	171	64	231	252
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	114	367	588	220	402	371
Arrive On Green	0.30	0.30	0.45	0.45	0.45	0.45
Sat Flow, veh/h	384	1240	1297	486	561	819
Grp Volume(v), veh/h	390	0	0	235	483	0
Grp Sat Flow(s),veh/h/ln	1628	0	0	1783	1380	0
Q Serve(g_s), s	8.0	0.0	0.0	3.0	7.9	0.0
Cycle Q Clear(g_c), s	8.0	0.0	0.0	3.0	10.9	0.0
Prop In Lane	0.24	0.76		0.27	0.48	
Lane Grp Cap(c), veh/h	482	0	0	808	774	0
V/C Ratio(X)	0.81	0.00	0.00	0.29	0.62	0.00
Avail Cap(c_a), veh/h	816	0	0	1639	1443	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.7	0.0	0.0	6.2	8.4	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.0	0.2	0.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0	0.7	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.0	0.0	0.0	6.4	9.3	0.0
LnGrp LOS	B			A	A	
Approach Vol, veh/h	390		235			483
Approach Delay, s/veh	15.0		6.4			9.3
Approach LOS	B		A			A

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	20.8			20.8	15.1
Change Period (Y+Rc), s	4.5			4.5	4.5
Max Green Setting (Gmax), s	33.0			33.0	18.0
Max Q Clear Time (g_c+I1), s	5.0			12.9	10.0
Green Ext Time (p_c), s	1.4			3.4	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	10.7
HCM 7th LOS	B

HCM 7th Signalized Intersection Summary
7: Monterey Ave & Park Ave

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	9	1	418	3	100	1	123	238	201	121	4
Future Volume (veh/h)	0	9	1	418	3	100	1	123	238	201	121	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	9	1	440	3	105	1	129	251	212	127	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	737	82	657	3	122	82	658	558	362	167	558
Arrive On Green	0.00	0.45	0.45	0.45	0.45	0.45	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	0	1654	184	1147	8	274	2	1867	1585	655	475	1585
Grp Volume(v), veh/h	0	0	10	548	0	0	130	0	251	339	0	4
Grp Sat Flow(s),veh/h/ln	0	0	1837	1428	0	0	1869	0	1585	1130	0	1585
Q Serve(g_s), s	0.0	0.0	0.1	15.3	0.0	0.0	0.0	0.0	5.4	10.5	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.1	15.4	0.0	0.0	2.2	0.0	5.4	12.7	0.0	0.1
Prop In Lane	0.00		0.10	0.80		0.19	0.01		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	0	0	819	782	0	0	740	0	558	529	0	558
V/C Ratio(X)	0.00	0.00	0.01	0.70	0.00	0.00	0.18	0.00	0.45	0.64	0.00	0.01
Avail Cap(c_a), veh/h	0	0	1092	996	0	0	899	0	693	633	0	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	6.9	11.2	0.0	0.0	10.0	0.0	11.1	13.9	0.0	9.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.6	0.0	0.0	0.1	0.0	0.6	1.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.9	0.0	0.0	0.7	0.0	1.6	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	6.9	12.7	0.0	0.0	10.2	0.0	11.7	15.5	0.0	9.4
LnGrp LOS			A	B			B		B	B		A
Approach Vol, veh/h		10			548			381			343	
Approach Delay, s/veh		6.9			12.7			11.2			15.4	
Approach LOS		A			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	20.2	24.4	20.2	24.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.5	26.5	19.5	26.5
Max Q Clear Time (g_c+I1), s	7.4	2.1	14.7	17.4
Green Ext Time (p_c), s	1.3	0.0	1.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	12.9
HCM 7th LOS	B

HCM 7th Signalized Intersection Summary
1: Bay Ave & Hwy 1 NB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	77	1	406	683	726	0	0	644	149
Future Volume (veh/h)	0	0	0	77	1	406	683	726	0	0	644	149
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.93
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1900	1885	1885	1856	0	0	1870	1885
Adj Flow Rate, veh/h				81	1	427	719	764	0	0	678	157
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				5	0	1	1	3	0	0	2	1
Cap, veh/h				286	1	264	746	2601	0	0	765	177
Arrive On Green				0.16	0.16	0.16	0.83	1.00	0.00	0.00	0.27	0.27
Sat Flow, veh/h				1739	4	1607	1795	3618	0	0	2915	653
Grp Volume(v), veh/h				81	0	428	719	764	0	0	427	408
Grp Sat Flow(s),veh/h/ln				1739	0	1611	1795	1763	0	0	1777	1698
Q Serve(g_s), s				3.7	0.0	14.8	30.6	0.0	0.0	0.0	20.7	20.8
Cycle Q Clear(g_c), s				3.7	0.0	14.8	30.6	0.0	0.0	0.0	20.7	20.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				286	0	265	746	2601	0	0	482	460
V/C Ratio(X)				0.28	0.00	1.62	0.96	0.29	0.00	0.00	0.89	0.89
Avail Cap(c_a), veh/h				286	0	265	764	2601	0	0	482	460
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.29	0.29	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				33.0	0.0	37.6	7.0	0.0	0.0	0.0	31.5	31.5
Incr Delay (d2), s/veh				0.2	0.0	293.9	10.2	0.1	0.0	0.0	20.7	21.6
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	27.3	4.9	0.0	0.0	0.0	11.5	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				33.2	0.0	331.5	17.2	0.1	0.0	0.0	52.1	53.1
LnGrp LOS				C		F	B	A			D	D
Approach Vol, veh/h					509			1483			835	
Approach Delay, s/veh					284.1			8.4			52.6	
Approach LOS					F			A			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	42.0	29.0		19.0		71.0
Change Period (Y+Rc), s	4.6	* 4.6		4.2		4.6
Max Green Setting (Gmax), s	38.3	* 24		14.8		66.4
Max Q Clear Time (g_c+I1), s	32.6	22.8		16.8		2.0
Green Ext Time (p_c), s	0.3	0.5		0.0		2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	71.1
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary
2: Bay Ave & Hwy 1 SB Off-Ramp

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	417	208	640	0	0	0	0	992	104	370	351	0
Future Volume (veh/h)	417	208	640	0	0	0	0	992	104	370	351	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1856				0	1885	1856	1870	1856	0
Adj Flow Rate, veh/h	366	500	483				0	1044	109	389	369	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	0	3				0	1	3	2	3	0
Cap, veh/h	498	545	451				0	1138	119	468	2336	0
Arrive On Green	0.29	0.29	0.29				0.00	0.35	0.35	0.44	1.00	0.00
Sat Flow, veh/h	1739	1900	1572				0	3357	340	1781	3618	0
Grp Volume(v), veh/h	366	500	483				0	573	580	389	369	0
Grp Sat Flow(s),veh/h/ln	1739	1900	1572				0	1791	1812	1781	1763	0
Q Serve(g_s), s	17.1	22.9	25.8				0.0	27.5	27.6	17.4	0.0	0.0
Cycle Q Clear(g_c), s	17.1	22.9	25.8				0.0	27.5	27.6	17.4	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	498	545	451				0	625	632	468	2336	0
V/C Ratio(X)	0.73	0.92	1.07				0.00	0.92	0.92	0.83	0.16	0.00
Avail Cap(c_a), veh/h	498	545	451				0	625	632	468	2336	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.55	0.55	0.00
Uniform Delay (d), s/veh	29.0	31.1	32.1				0.0	28.0	28.1	23.5	0.0	0.0
Incr Delay (d2), s/veh	4.9	20.3	62.8				0.0	20.5	20.5	6.6	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	13.1	17.2				0.0	15.0	15.2	6.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.9	51.3	94.9				0.0	48.5	48.5	30.1	0.1	0.0
LnGrp LOS	C	D	F					D	D	C	A	
Approach Vol, veh/h		1349						1153			758	
Approach Delay, s/veh		62.2						48.5			15.5	
Approach LOS		E						D			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	64.2		28.2	36.0		30.0
Change Period (Y+Rc), s	4.6		4.6	* 4.6		4.2
Max Green Setting (Gmax), s	55.4		20.3	* 31		25.8
Max Q Clear Time (g_c+I1), s	2.0		19.4	29.6		27.8
Green Ext Time (p_c), s	1.1		0.0	0.8		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	46.5
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	2	38	4	1	59	4	988	9	92	787	112
Future Vol, veh/h	49	2	38	4	1	59	4	988	9	92	787	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	50	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	2	40	4	1	62	4	1040	9	97	828	118

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1551	2080	828	2076	2193	525	946	0	0	1049	0	0
Stage 1	1022	1022	-	1053	1053	-	-	-	-	-	-	-
Stage 2	529	1058	-	1023	1140	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	84	53	370	35	45	498	723	-	-	661	-	-
Stage 1	284	312	-	243	302	-	-	-	-	-	-	-
Stage 2	502	301	-	283	275	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	61	45	370	25	38	498	723	-	-	661	-	-
Mov Cap-2 Maneuver	61	45	-	25	38	-	-	-	-	-	-	-
Stage 1	242	267	-	241	300	-	-	-	-	-	-	-
Stage 2	435	299	-	214	235	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/veh	19.07	29.77	0.04	1.06
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	723	-	-	60	370	212	661	-	-
HCM Lane V/C Ratio	0.006	-	-	0.889	0.108	0.318	0.147	-	-
HCM Control Delay (s/veh)	10	-	-	195.9	15.9	29.8	11.4	-	-
HCM Lane LOS	B	-	-	F	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	4.1	0.4	1.3	0.5	-	-

HCM 7th Signalized Intersection Summary
4: Bay Ave & Retail Dwy/Hill St

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	45	84	22	33	192	46	717	34	146	634	49
Future Volume (veh/h)	92	45	84	22	33	192	46	717	34	146	634	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1900	1900	1856	1885	1870	1885	1767	1900	1856	1856
Adj Flow Rate, veh/h	97	47	88	23	35	202	48	755	36	154	667	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	0	0	3	1	2	1	9	0	3	3
Cap, veh/h	200	82	380	63	56	230	76	837	40	191	904	70
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.04	0.47	0.47	0.11	0.53	0.53
Sat Flow, veh/h	490	341	1573	41	233	952	1781	1781	85	1810	1695	132
Grp Volume(v), veh/h	144	0	88	260	0	0	48	0	791	154	0	719
Grp Sat Flow(s),veh/h/ln	831	0	1573	1225	0	0	1781	0	1866	1810	0	1828
Q Serve(g_s), s	0.0	0.0	3.3	3.2	0.0	0.0	2.0	0.0	28.8	6.1	0.0	22.4
Cycle Q Clear(g_c), s	12.6	0.0	3.3	15.8	0.0	0.0	2.0	0.0	28.8	6.1	0.0	22.4
Prop In Lane	0.67		1.00	0.09		0.78	1.00		0.05	1.00		0.07
Lane Grp Cap(c), veh/h	282	0	380	349	0	0	76	0	876	191	0	974
V/C Ratio(X)	0.51	0.00	0.23	0.74	0.00	0.00	0.64	0.00	0.90	0.80	0.00	0.74
Avail Cap(c_a), veh/h	287	0	386	355	0	0	123	0	1003	213	0	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.4	0.0	22.5	26.3	0.0	0.0	34.8	0.0	18.0	32.3	0.0	13.3
Incr Delay (d2), s/veh	1.4	0.0	0.3	8.2	0.0	0.0	8.5	0.0	10.3	18.1	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	1.2	5.1	0.0	0.0	1.0	0.0	13.8	3.6	0.0	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.8	0.0	22.8	34.4	0.0	0.0	43.3	0.0	28.3	50.4	0.0	15.7
LnGrp LOS	C		C	C			D		C	D		B
Approach Vol, veh/h		232			260			839			873	
Approach Delay, s/veh		25.3			34.4			29.2			21.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	39.2		22.3	7.6	43.9		22.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.7	39.7		18.1	5.1	43.3		18.1
Max Q Clear Time (g_c+I1), s	8.1	30.8		14.6	4.0	24.4		17.8
Green Ext Time (p_c), s	0.0	3.9		0.4	0.0	5.3		0.1

Intersection Summary		
HCM 7th Control Delay, s/veh		26.5
HCM 7th LOS		C

HCM 7th Signalized Intersection Summary
5: Bay Ave & Capitola Ave

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	63	8	17	65	73	29	200	23	61	337	171
Future Volume (veh/h)	190	63	8	17	65	73	29	200	23	61	337	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	66	8	18	68	77	31	211	24	64	355	180
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	528	125	448	172	230	228	437	627	71	212	614	594
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1029	433	1558	86	798	791	865	1646	187	156	1613	1560
Grp Volume(v), veh/h	266	0	8	163	0	0	31	0	235	419	0	180
Grp Sat Flow(s),veh/h/ln	1462	0	1558	1675	0	0	865	0	1833	1769	0	1560
Q Serve(g_s), s	1.9	0.0	0.1	0.0	0.0	0.0	0.8	0.0	2.5	0.8	0.0	2.2
Cycle Q Clear(g_c), s	3.9	0.0	0.1	2.0	0.0	0.0	5.8	0.0	2.5	4.9	0.0	2.2
Prop In Lane	0.75		1.00	0.11		0.47	1.00		0.10	0.15		1.00
Lane Grp Cap(c), veh/h	653	0	448	629	0	0	437	0	698	827	0	594
V/C Ratio(X)	0.41	0.00	0.02	0.26	0.00	0.00	0.07	0.00	0.34	0.51	0.00	0.30
Avail Cap(c_a), veh/h	1156	0	1032	1243	0	0	681	0	1215	1306	0	1034
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.2	0.0	6.9	7.6	0.0	0.0	9.0	0.0	6.0	6.7	0.0	5.9
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.3	0.5	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.6	1.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.6	0.0	6.9	7.8	0.0	0.0	9.1	0.0	6.3	7.2	0.0	6.2
LnGrp LOS	A		A	A			A		A	A		A
Approach Vol, veh/h		274			163			266			599	
Approach Delay, s/veh		8.5			7.8			6.6			6.9	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.8	12.3	14.8	12.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	7.8	5.9	6.9	4.0
Green Ext Time (p_c), s	1.1	1.4	2.7	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	7.3
HCM 7th LOS	A

HCM 7th Signalized Intersection Summary
6: Monterey Ave & Bay Ave

01/06/2025

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	35	104	305	85	304	251
Future Volume (veh/h)	35	104	305	85	304	251
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	109	321	89	320	264
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	48	141	879	244	510	378
Arrive On Green	0.12	0.12	0.62	0.62	0.62	0.62
Sat Flow, veh/h	411	1210	1409	391	561	605
Grp Volume(v), veh/h	147	0	0	410	584	0
Grp Sat Flow(s),veh/h/ln	1632	0	0	1800	1166	0
Q Serve(g_s), s	3.0	0.0	0.0	3.9	10.3	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	3.9	14.1	0.0
Prop In Lane	0.25	0.74		0.22	0.55	
Lane Grp Cap(c), veh/h	191	0	0	1123	888	0
V/C Ratio(X)	0.77	0.00	0.00	0.36	0.66	0.00
Avail Cap(c_a), veh/h	845	0	0	2487	1831	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	3.2	5.4	0.0
Incr Delay (d2), s/veh	6.4	0.0	0.0	0.2	0.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	0.4	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.3	0.0	0.0	3.4	6.2	0.0
LnGrp LOS	C			A	A	
Approach Vol, veh/h	147		410			584
Approach Delay, s/veh	21.3		3.4			6.2
Approach LOS	C		A			A

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	26.2			26.2	8.6
Change Period (Y+Rc), s	4.5			4.5	4.5
Max Green Setting (Gmax), s	48.0			48.0	18.0
Max Q Clear Time (g_c+I1), s	5.9			16.1	5.0
Green Ext Time (p_c), s	2.9			5.6	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	7.1
HCM 7th LOS	A

HCM 7th Signalized Intersection Summary
7: Monterey Ave & Park Ave

01/06/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	3	3	203	3	237	1	148	619	202	83	1
Future Volume (veh/h)	5	3	3	203	3	237	1	148	619	202	83	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	3	3	214	3	249	1	156	652	213	87	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	188	142	351	27	290	87	800	679	368	127	679
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	533	525	397	632	75	811	2	1868	1585	516	296	1585
Grp Volume(v), veh/h	11	0	0	466	0	0	157	0	652	300	0	1
Grp Sat Flow(s),veh/h/ln	1455	0	0	1518	0	0	1870	0	1585	812	0	1585
Q Serve(g_s), s	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0	16.8	12.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	11.9	0.0	0.0	2.2	0.0	16.8	14.2	0.0	0.0
Prop In Lane	0.45		0.27	0.46		0.53	0.01		1.00	0.71		1.00
Lane Grp Cap(c), veh/h	644	0	0	667	0	0	887	0	679	494	0	679
V/C Ratio(X)	0.02	0.00	0.00	0.70	0.00	0.00	0.18	0.00	0.96	0.61	0.00	0.00
Avail Cap(c_a), veh/h	743	0	0	774	0	0	887	0	679	494	0	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.7	0.0	0.0	12.4	0.0	0.0	7.5	0.0	11.7	11.0	0.0	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.3	0.0	0.0	0.1	0.0	25.0	2.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	3.5	0.0	0.0	0.7	0.0	8.9	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.7	0.0	0.0	14.7	0.0	0.0	7.6	0.0	36.6	13.1	0.0	6.9
LnGrp LOS	A			B			A		D	B		A
Approach Vol, veh/h		11			466			809			301	
Approach Delay, s/veh		8.7			14.7			31.0			13.1	
Approach LOS		A			B			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	22.5	19.5	22.5	19.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	18.8	2.2	16.2	13.9
Green Ext Time (p_c), s	0.0	0.0	0.5	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

Arterial Level of Service: NB Bay Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Capitola Ave	IV	25	36.4	9.9	46.3	0.22	17.1	C
Hill St	IV	25	36.2	12.0	48.2	0.22	16.4	C
Hwy 1 SB Off-Ramp	IV	25	24.9	19.5	44.4	0.14	11.2	D
Hwy 1 NB Off-Ramp	IV	25	16.0	3.0	19.0	0.06	11.4	D
Total	IV		113.5	44.4	157.9	0.64	14.5	C

Arterial Level of Service: SB Bay Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hwy 1 NB Off-Ramp	IV	25	21.0	12.2	33.2	0.10	10.3	D
Hwy 1 SB Off-Ramp	IV	25	16.0	5.0	21.0	0.06	10.3	D
Retail Dwy	IV	25	24.9	12.2	37.1	0.14	13.4	C
Capitola Ave	IV	25	36.2	10.3	46.5	0.22	17.0	C
Monterey Ave	IV	25	36.4	18.3	54.7	0.22	14.5	C
Total	IV		134.5	58.0	192.5	0.73	13.7	C

Arterial Level of Service: NB Monterey Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Park Ave	IV	25	19.0	16.9	35.9	0.09	8.6	E
Monterey Ave	IV	25	14.9	0.0	14.9	0.06	13.6	C
Total	IV		33.9	16.9	50.8	0.14	10.1	D

Arterial Level of Service: WB Monterey Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Bay Ave	IV	25	19.8	12.1	31.9	0.09	10.2	D
Park Ave	IV	25	14.9	19.4	34.3	0.06	5.9	F
Total	IV		34.7	31.5	66.2	0.15	8.0	E

Arterial Level of Service: NB Bay Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Capitola Ave	IV	25	36.4	6.8	43.2	0.22	18.4	C
Hill St	IV	25	36.2	15.5	51.7	0.22	15.3	C
Hwy 1 SB Off-Ramp	IV	25	24.9	17.8	42.7	0.14	11.7	D
Hwy 1 NB Off-Ramp	IV	25	16.0	2.5	18.5	0.06	11.7	D
Total	IV		113.5	42.6	156.1	0.64	14.7	C

Arterial Level of Service: SB Bay Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hwy 1 NB Off-Ramp	IV	25	21.0	13.6	34.6	0.10	9.9	D
Hwy 1 SB Off-Ramp	IV	25	16.0	5.6	21.6	0.06	10.0	D
Retail Dwy	IV	25	24.9	16.6	41.5	0.14	12.0	D
Capitola Ave	IV	25	36.2	9.3	45.5	0.22	17.3	C
Monterey Ave	IV	25	36.4	7.8	44.2	0.22	18.0	C
Total	IV		134.5	52.9	187.4	0.73	14.1	C

Arterial Level of Service: NB Monterey Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Park Ave	IV	25	19.0	8.5	27.5	0.09	11.3	D
Monterey Ave	IV	25	14.9	0.0	14.9	0.06	13.6	C
Total	IV		33.9	8.5	42.4	0.14	12.1	D

Arterial Level of Service: WB Monterey Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Bay Ave	IV	25	19.8	9.8	29.6	0.09	11.0	D
Park Ave	IV	25	14.9	9.2	24.1	0.06	8.4	E
Total	IV		34.7	19.0	53.7	0.15	9.8	D

Arterial Level of Service: NB Bay Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Capitola Ave	IV	25	36.4	8.7	45.1	0.22	17.6	C
Hill St	IV	25	36.2	9.5	45.7	0.22	17.3	C
	IV	25	24.9	14.4	39.3	0.14	12.7	D
Hwy 1 NB Off-Ramp	IV	25	16.0	1.3	17.3	0.06	12.5	D
Total	IV		113.5	33.9	147.4	0.64	15.6	C

Arterial Level of Service: SB Bay Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	IV	25	21.0	9.9	30.9	0.10	11.1	D
Hwy 1 SB Off-Ramp	IV	25	16.0	2.6	18.6	0.06	11.7	D
Retail Dwy	IV	25	24.9	13.1	38.0	0.14	13.1	C
Capitola Ave	IV	25	36.2	9.0	45.2	0.22	17.5	C
Monterey Ave	IV	25	36.4	14.5	50.9	0.22	15.6	C
Total	IV		134.5	49.1	183.6	0.73	14.4	C

Arterial Level of Service: NB Monterey Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Park Ave	IV	25	19.0	13.3	32.3	0.09	9.6	D
Monterey Ave	IV	25	14.9	0.0	14.9	0.06	13.6	C
Total	IV		33.9	13.3	47.2	0.14	10.9	D

Arterial Level of Service: WB Monterey Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Bay Ave	IV	25	19.8	10.3	30.1	0.09	10.8	D
Park Ave	IV	25	14.9	26.9	41.8	0.06	4.8	F
Total	IV		34.7	37.2	71.9	0.15	7.3	E

Arterial Level of Service: NB Bay Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Capitola Ave	IV	25	36.4	8.4	44.8	0.22	17.7	C
Hill St	IV	25	36.2	31.8	68.0	0.22	11.6	D
Hwy 1 SB Off-Ramp	IV	25	24.9	43.2	68.1	0.14	7.3	E
Hwy 1 NB Off-Ramp	IV	25	16.0	3.5	19.5	0.06	11.1	D
Total	IV		113.5	86.9	200.4	0.64	11.5	D

Arterial Level of Service: SB Bay Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hwy 1 NB Off-Ramp	IV	25	21.0	36.7	57.7	0.10	5.9	F
Hwy 1 SB Off-Ramp	IV	25	16.0	1.2	17.2	0.06	12.6	D
Retail Dwy	IV	25	24.9	15.8	40.7	0.14	12.2	D
Capitola Ave	IV	25	36.2	11.1	47.3	0.22	16.7	C
Monterey Ave	IV	25	36.4	9.4	45.8	0.22	17.3	C
Total	IV		134.5	74.2	208.7	0.73	12.6	D

Arterial Level of Service: NB Monterey Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Park Ave	IV	25	19.0	9.7	28.7	0.09	10.8	D
Monterey Ave	IV	25	14.9	0.0	14.9	0.06	13.6	C
Total	IV		33.9	9.7	43.6	0.14	11.8	D

Arterial Level of Service: WB Monterey Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Bay Ave	IV	25	19.8	14.5	34.3	0.09	9.5	D
Park Ave	IV	25	14.9	17.4	32.3	0.06	6.3	F
Total	IV		34.7	31.9	66.6	0.15	7.9	E

Attachment E – Existing Intersection Observed Driver Behavior at Bay/Capitola Technical Memo

DRAFT TECHNICAL MEMORANDUM

RE: ***Capitola Avenue at Bay Avenue - Existing Intersection Observed Driver Behavior***

From: ***Sean Houck, P.E, Kimley-Horn***
Derek Wu P.E, Kimley-Horn

To: ***Kailash Mozumder, City of Capitola***

Date: ***July 23, 2024***

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INTRODUCTION

This Technical Memorandum evaluates vehicle navigation and observes driver behavior at the intersection of Capitola Avenue and Bay Avenue (study intersection) in Capitola, California. The existing, four-leg intersection currently operates as an all-way stop-controlled (AWSC) intersection. The intersection was evaluated using aerial video collected by drone and processed using video analytics (VA). VA is the process of applying artificial intelligence (AI) to define vehicle kinematics in the video for the purpose of extracting time-spatial data, applying prediction kinematic models, and visualizing driver behavior trends. VA were used in this study to evaluate:

- Stopping Rate
- Measured Speed
- Deceleration Rate
- Near Miss Collisions - Vehicles, Pedestrians, and Bicyclists

The study intersection is shown below in **Figure 1**.

Figure 1: Study Location

Existing Conditions

Capitola Avenue is a two-lane, north-south roadway with a posted speed limit of 25 miles per hour (mph). Capitola Avenue is classified as an arterial south of Bay Avenue and a collector north of Bay Avenue. The northbound approach has a dedicated right-turn lane and a shared left-turn/through lane. The southbound approach has a shared left/through/right-turn lane. Bay Avenue is a two-lane, east-west arterial with a posted speed limit of 25 mph. There is a two-way left-turn lane west of the intersection. The eastbound approach consists of a dedicated right-turn lane and shared left-turn/through lane. The westbound approach consists of a dedicated left-turn lane and a shared through/right turn lane.

There are crosswalks and sidewalks located along all legs of the intersection. There are Class II bike lanes along the western leg of Bay Avenue. The north, east, and south legs have Class III bike routes in which bicyclists share the road with the vehicles. There are two (2) schools located within a half-mile radius of the study intersection including one elementary and one middle school.

Data Collection

Data collection occurred at the study intersection using drone imagery, on May 16th, 2024, during the following time periods:

- AM peak hour/school drop-off
- PM school pick-up
- PM peak hour
- PM evening off-peak

The data collection start and end times of each captured video is identified in **Table 1**.

Table 1: Video Times

Video	Peak Hour	Start Time	End Time
1	AM Peak/School Drop-off	7:50 AM	8:40 AM
2	PM School Pick-up	2:45 PM	3:30 PM
3	PM Peak	3:55 PM	4:45 PM
4	PM Evening Off-Peak	7:05 PM	7:35 PM

Existing Conditions Assessment

Drone videos were processed using pixel tracing software which identifies and measures vehicle movement as shown in **Figure 2**. The focus of this assessment was to identify the following of the observed vehicles:

- Deceleration speeds approaching the stop signs
- Heavy braking
- Interaction with other vehicles and pedestrians/bicyclists

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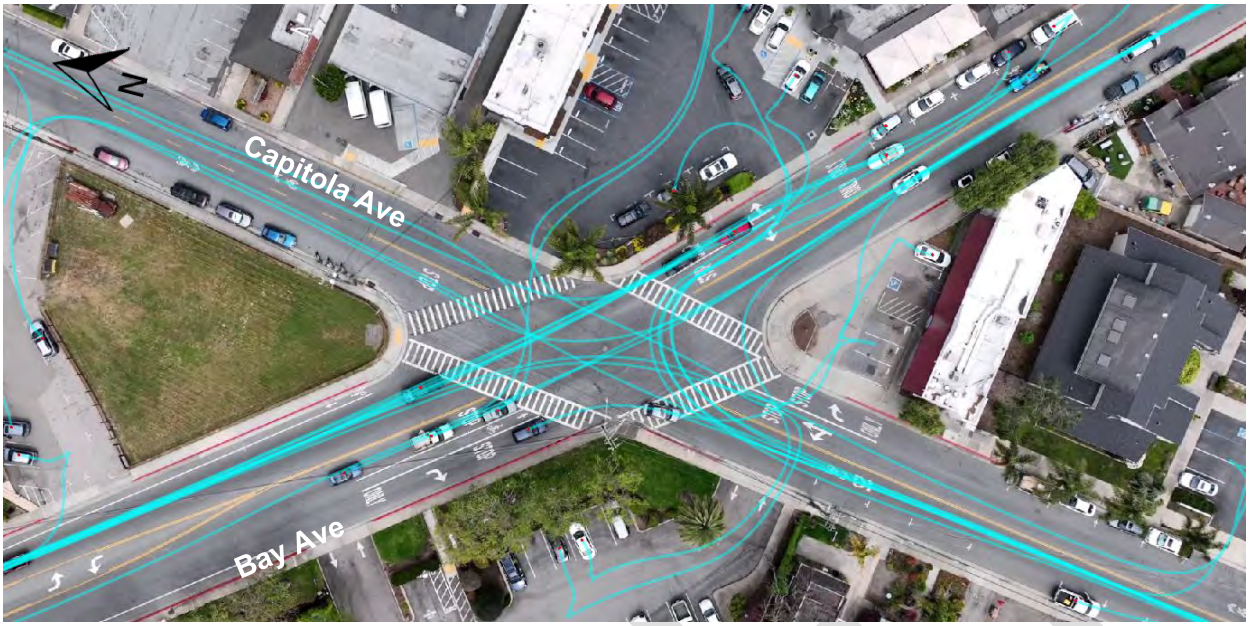

Figure 2: Pixel Tracing Software for PM School Pick-up Video

Stopping Rate

Traffic regions were created at each approach to measure the minimum speed of each vehicle before entering the intersection. See **Figure 3** for the location of the traffic regions.

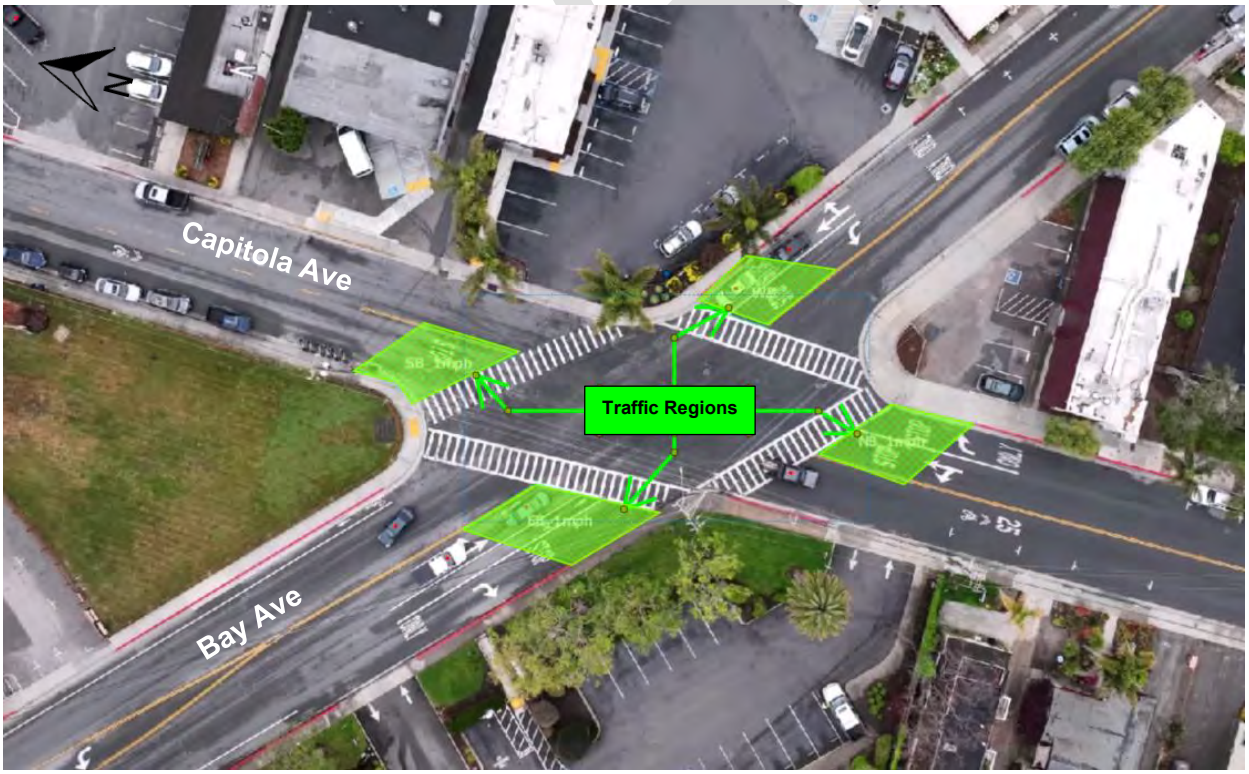

Figure 3: Speed Measurement Gates

The vehicle speed analysis may vary by 0.5 mph or less as compared to actual speeds, therefore the criteria for making a complete stop was determined to be vehicles traveling between 0 and 1 mph. Vehicles traveling at a speed of 0 to 1 mph within the traffic regions identified in **Figure 3** meet the criteria for vehicles making a complete stop**. Table 2** through **Table 6** summarize the number of vehicles that met the complete stop criteria along each intersection approach for each observed period.

Table 2: Intersection Stopping Rate

All Observed Periods				
Approach	Total Number of Vehicles	Criteria Met	Criteria Not Met	
		Vehicle Count	Vehicle Count	Percentage
NB	405	217	188	46.4%
WB	907	342	565	62.3%
SB	270	109	161	59.6%
EB	1227	413	814	66.3%

Table 3: AM Peak/School Drop-off Stopping Rate

AM Peak/School Drop-off Period				
Approach	AM Peak Number of Vehicles	Criteria Met	Criteria Not Met	
		Vehicle Count	Vehicle Count	Percentage
NB	81	36	45	55.6%
WB	331	104	227	68.6%
SB	85	37	48	56.5%
EB	333	95	238	71.5%

Table 4: PM School Pick-up Stopping Rate

PM School Pick-up Period				
Approach	School Pick-up Number of Vehicles	Criteria Met	Criteria Not Met	
		Vehicle Count	Vehicle Count	Percentage
NB	160	104	56	35.0%
WB	300	145	155	51.7%
SB	71	36	35	49.3%
EB	395	171	224	56.7%

Table 5: PM Peak Stopping Rate

PM Peak Period				
Approach	PM Peak Number of Vehicles	Criteria Met	Criteria Not Met	
		Vehicle Count	Vehicle Count	Percentage
NB	116	61	55	47.4%
WB	215	76	139	64.7%
SB	80	32	48	60.0%
EB	378	123	255	67.5%

Table 6: PM Evening Off-Peak Stopping Rate

PM Evening Off-Peak Period				
Approach	PM Off-Peak Number of Vehicles	Criteria Met	Criteria Not Met	
		Vehicle Count	Vehicle Count	Percentage
NB	48	16	32	66.7%
WB	61	17	44	72.1%
SB	34	4	30	88.2%
EB	121	24	97	80.2%

The tables above summarize approaching vehicles that did and did not meet the criteria of traveling 0 to 1 mph. The tables identify the percentage of vehicles not making a complete stop at the intersection along each directional approach. The PM evening off-peak period had the highest recorded percentage of 66.3% of vehicles not making a complete stop.

Measured Vehicle Speed

Vehicle speeds within the designated traffic regions were further analyzed to capture the maximum and 85th percentile speed entering the region. These speeds are summarized below in **Table 7** for each studied time period combined. The vehicle speeds were further reviewed for each studied time period by directional approach and are graphically shown in **Figure 4** through **Figure 11**.

Table 7: Total Intersection Measured Vehicle Speed

All Observed Periods		AM Peak/ School Drop-offPeriods		PM School Pick-up Period		PM Peak Period		PM Evening Off-Peak Period	
Speed	Total Vehicles	Speed	Total Vehicles	Speed	Total Vehicles	Speed	Total Vehicles	Speed	Total Vehicles
0	235	0	65	0	127	0	39	0	4
2	1088	2	313	2	405	2	307	2	63
4	932	4	299	4	267	4	267	4	99
6	358	6	94	6	76	6	124	6	64
8	113	8	28	8	31	8	32	8	22
10	32	10	10	10	10	10	8	10	4
12	22	12	9	12	4	12	7	12	2
14	15	14	4	14	3	14	3	14	5
16	8	16	3	16	3	16	2	16	0
18	6	18	5	18	0	18	0	18	1
Max Speed									
19.223969		19.223969		17.837877		17.749456		18.966279	
85th Percentile									
6.5047956		6.4144871		5.86448425		6.7806282		7.5144739	

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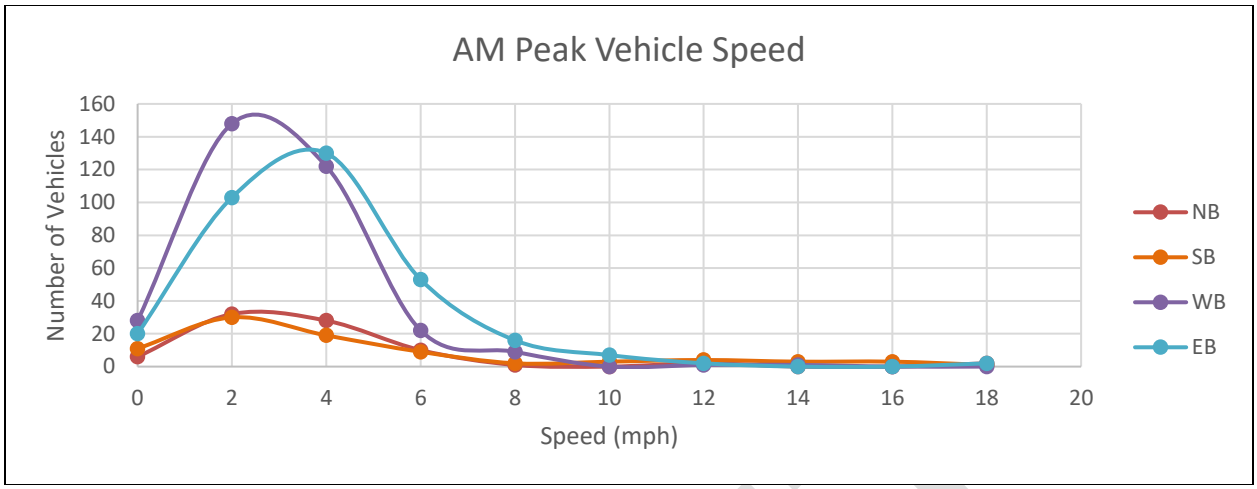


Figure 4: Vehicle Speed per Approach (AM Peak/School Drop-off)

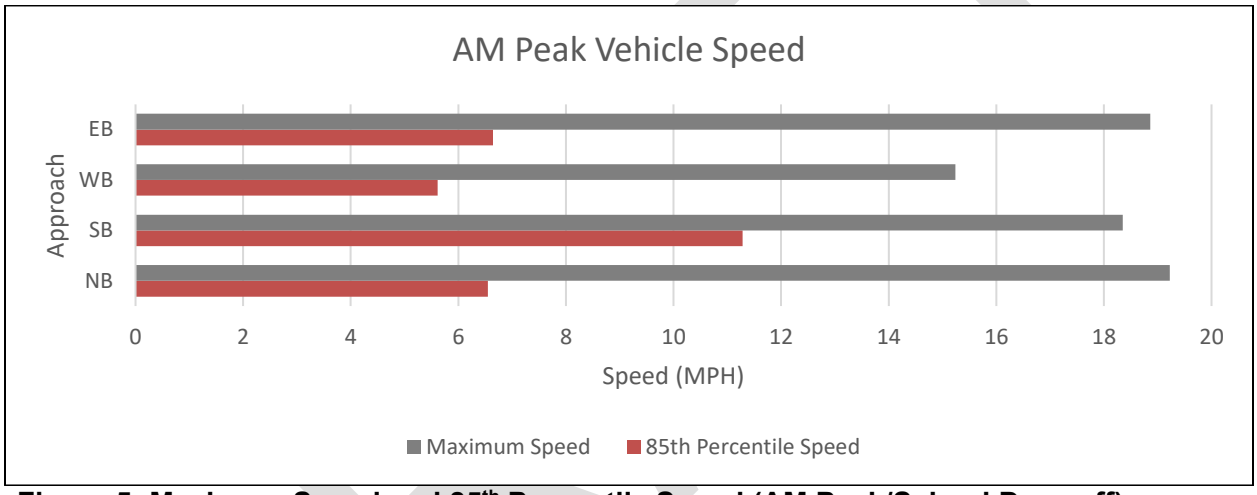


Figure 5: Maximum Speed and 85th Percentile Speed (AM Peak/School Drop-off)

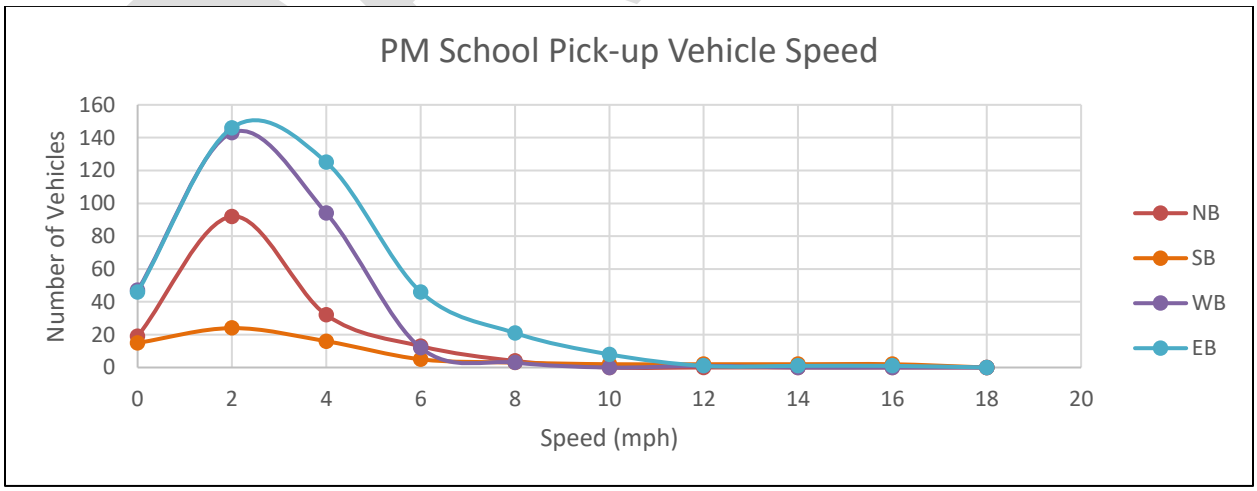


Figure 6: Vehicle Speed per Approach (PM School Pick-up)

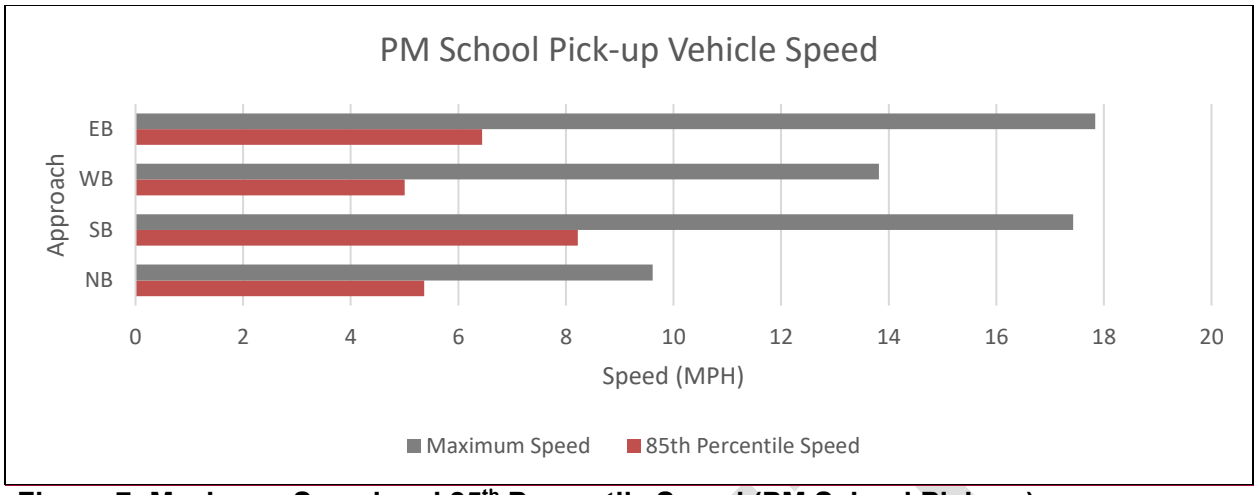


Figure 7: Maximum Speed and 85th Percentile Speed (PM School Pick-up)

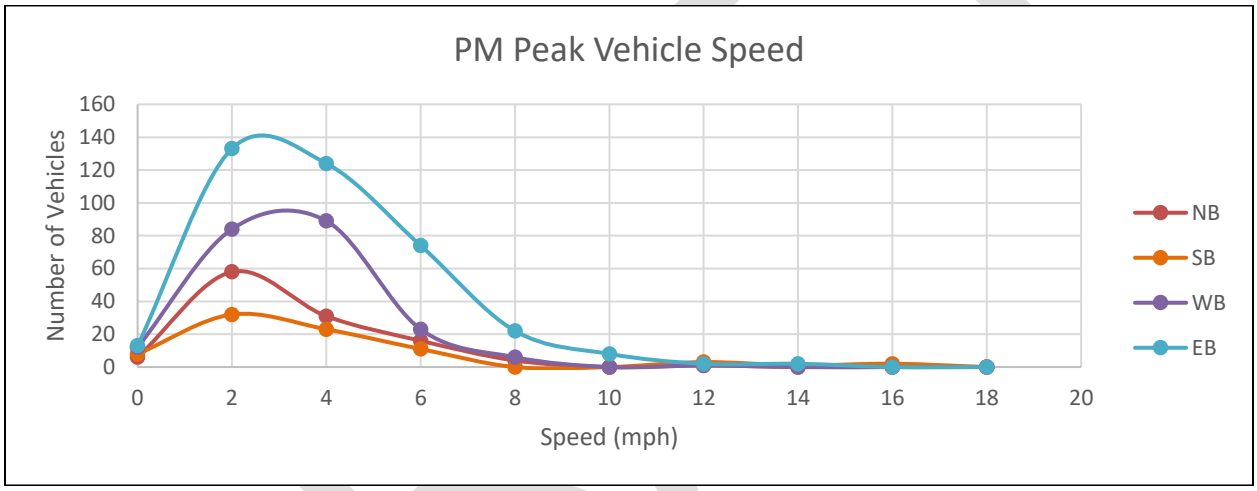


Figure 8: Vehicle Speed per Approach (PM Peak)

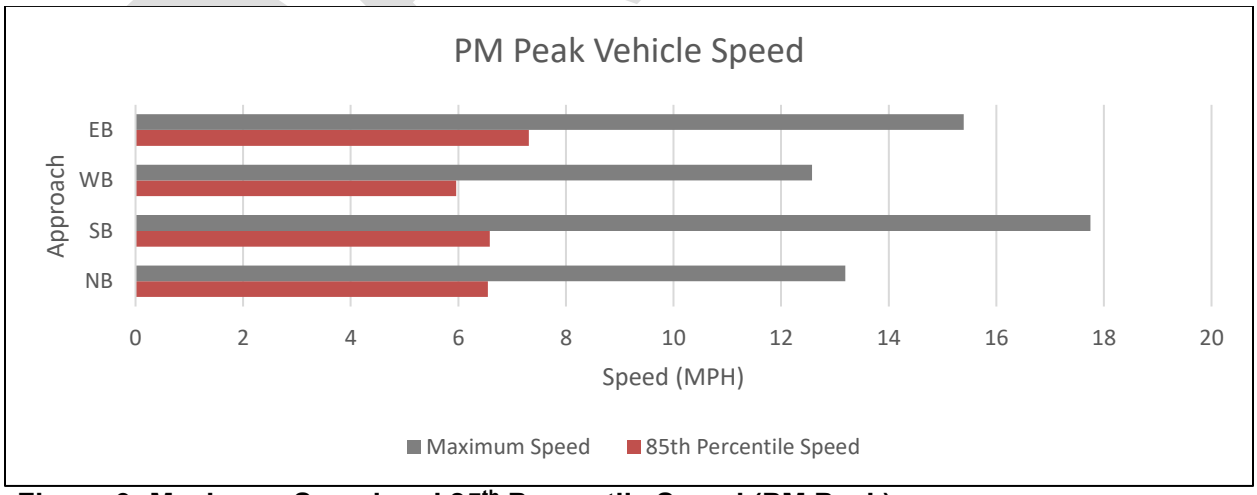


Figure 9: Maximum Speed and 85th Percentile Speed (PM Peak)

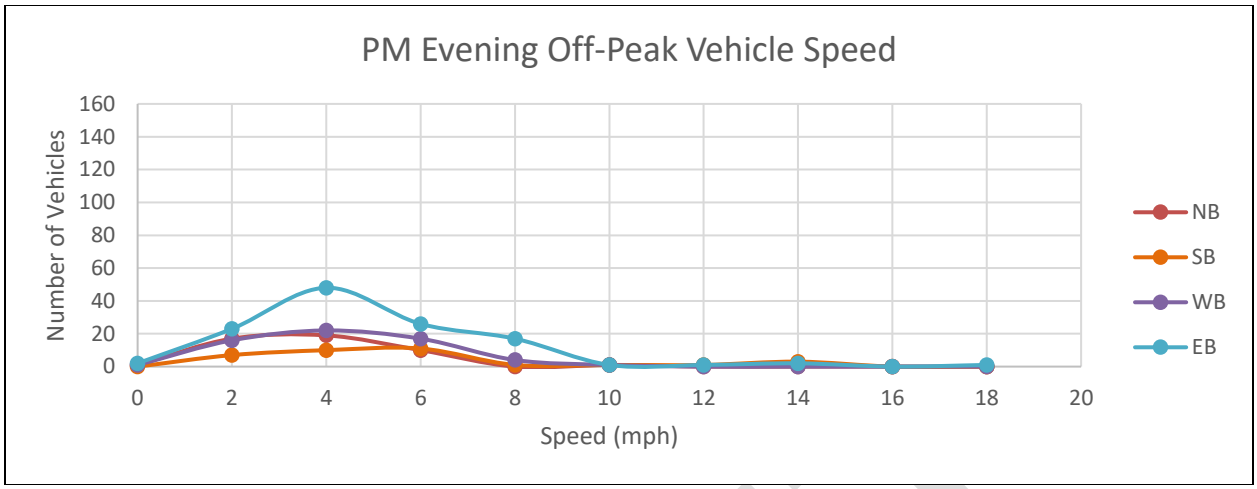


Figure 10: Vehicle Speed per Approach (PM Evening Off-Peak)

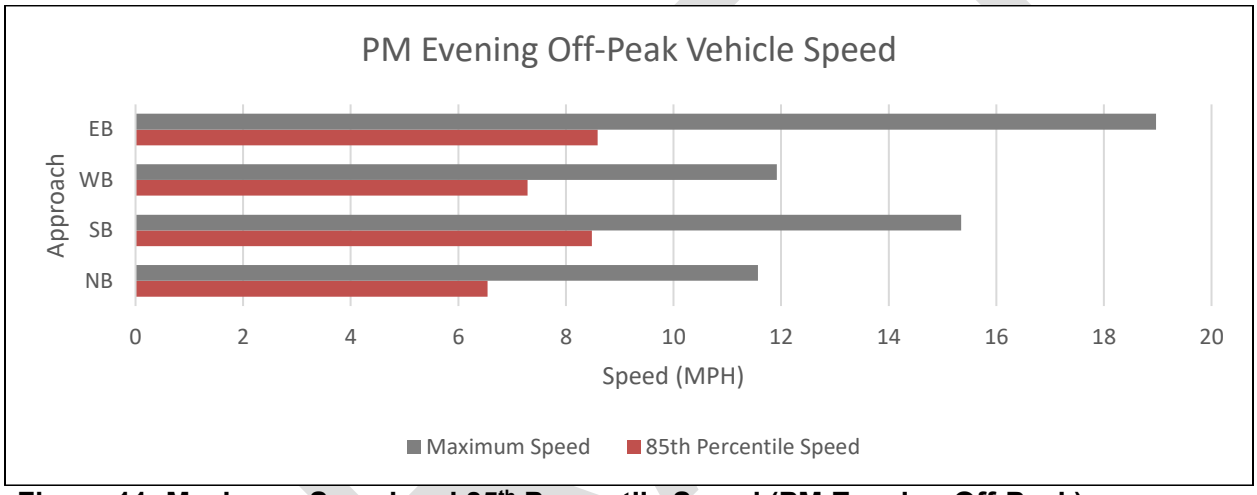


Figure 11: Maximum Speed and 85th Percentile Speed (PM Evening Off-Peak)

The table and figures above portray the number of approaching vehicles and vehicle speeds within the approach regions. The percentage of vehicles within the 2 to 6 mph category was 72%, which indicates that majority of vehicles do not meet the complete stop criteria. Furthermore, six (6) vehicles were driving at a speed greater than 18 mph during the AM peak and PM evening off-peak periods.

Deceleration Rate

VA was used to identify vehicles decelerating at a rate equal to or greater than 10 ft/s^2. Vehicles decelerating at or above this criteria were classified as Heavy Braking. An example of an observed heavy braking incident was vehicle id 293 shown in **Figure 16.** The vehicle approached the intersection at a recorded speed of 28 mph and decelerated to nearly 0 mph in under 5 seconds resulting in a deceleration rate of 13 ft/s^2. **Figure 17** illustrates the rapid deceleration of the vehicle over the short period of time.

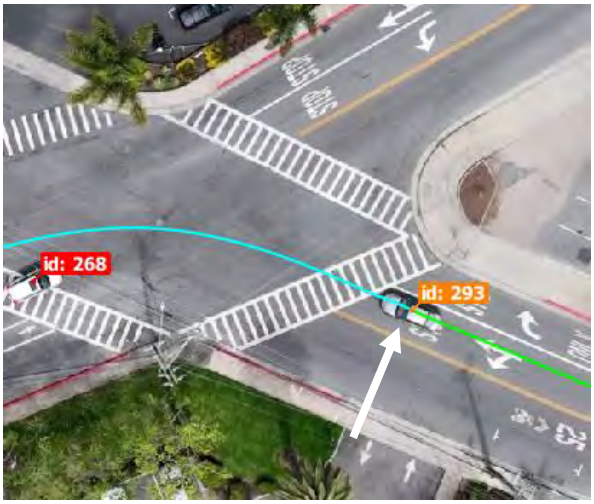


Figure 16:Heavy Braking

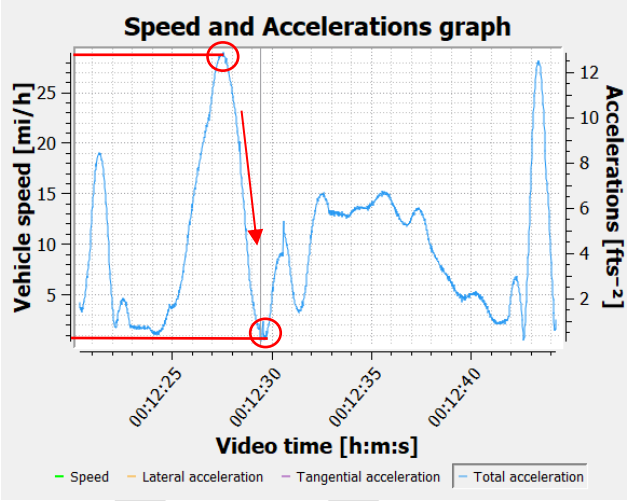


Figure 17: Car Deceleration

The number of vehicles identified as meeting the heavy braking criteria are summarized in **Table 8** below.

Table 8: Heavy Braking Summary

AM Peak/School Drop-off				PM School Pick-up			
Approach	Vehicles			Approach	Vehicles		
	Heavy Braking	Total	% Heavy Braking		Heavy Braking	Total	% Heavy Braking
NB	14	81	**17.3%**	**NB**	3	160	**1.9%**
WB	41	331	**12.4%**	**WB**	16	300	**5.3%**
SB	6	85	**7.1%**	**SB**	4	71	**5.6%**
EB	36	333	**10.8%**	**EB**	14	395	**3.5%**
PM Peak				**PM Evening Off-Peak**			
Approach	Vehicles			Approach	Vehicles		
	Heavy Braking	Total	% Heavy Braking		Heavy Braking	Total	% Heavy Braking
NB	7	116	**6.0%**	**NB**	3	48	**6.3%**
WB	6	215	**2.8%**	**WB**	8	61	**13.1%**
SB	3	80	**3.8%**	**SB**	2	34	**5.9%**
EB	23	378	**6.1%**	**EB**	14	121	**11.6%**

All Observed Periods			
Approach	Vehicles		
	Heavy Braking	Total	% Heavy Braking
NB	27	405	**6.7%**
WB	71	907	**7.8%**
SB	15	270	**5.6%**
EB	87	1227	**7.1%**

Figure 12 through **Figure 15** illustrate the vehicle position and direction of travel of each identified heavy braking incident. Approach and departure crosswalks are identified to reference the vehicle position.

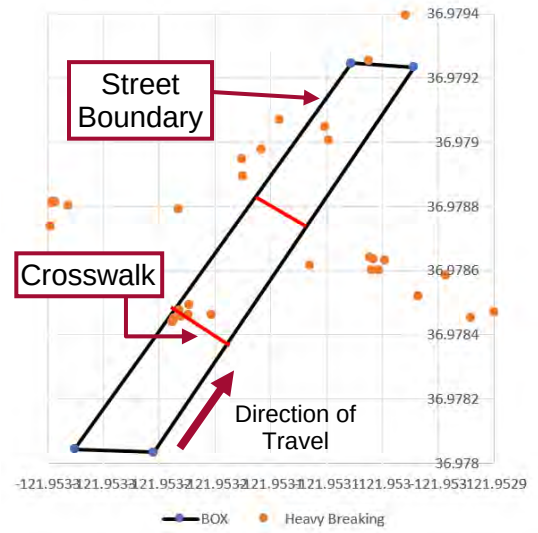


Figure 12: Northbound Heavy Braking

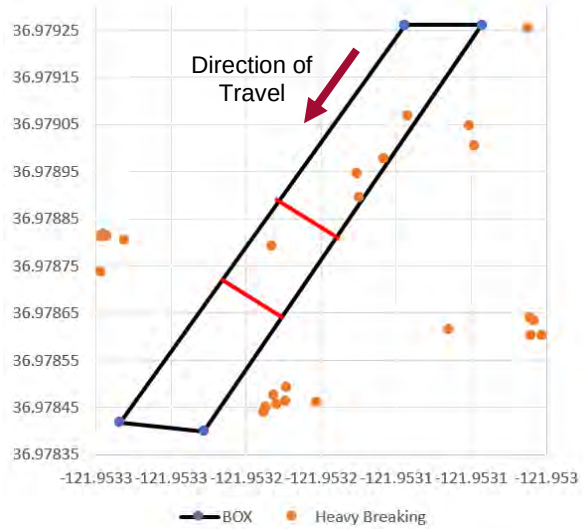


Figure 13: Southbound Heavy Braking

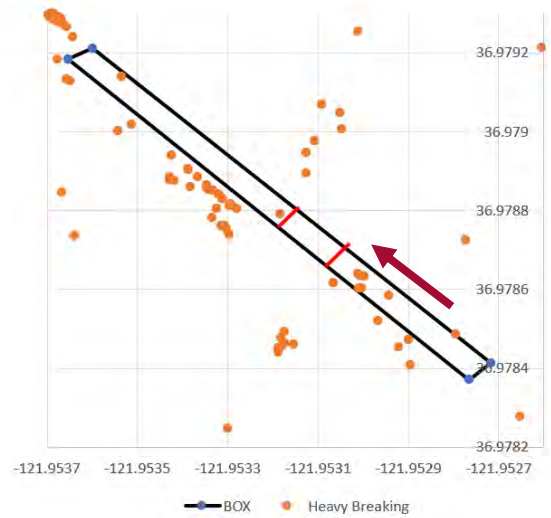


Figure 14: Westbound Heavy Braking

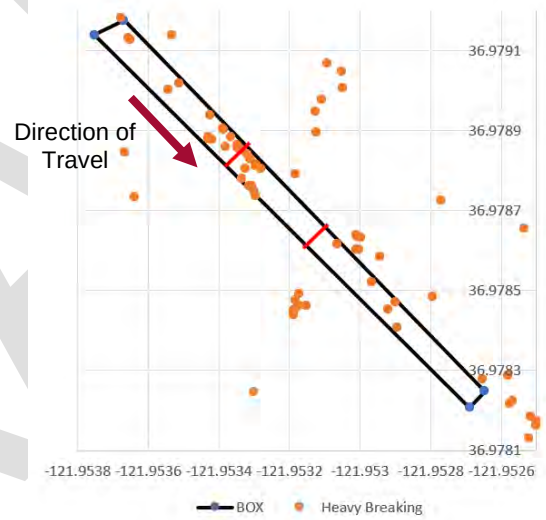


Figure 15: Eastbound Heavy Braking

The table and figures above portray the number of vehicles heavy braking along each approach of the intersection. The figures identify where the 200 recorded heavy braking occurrences, over all observed time periods, happened relative to the crosswalk. Of the observed 200 heavy braking incidents, approximately 43.5% of them occurred along the eastbound directional approach.

Near Miss Collisions

Post encroachment time (PET) is the time it takes for an object to leave a point that a second object reaches. A near-miss collision occurs when the PET is equal to or less than 1.5 seconds. **Figure 18** shows an example of a near-miss occurrence. Vehicle id 370 makes an eastbound left-turn movement while vehicle id 369 travels westbound, reaching the same point of the left-turning vehicle in 1.5 seconds.

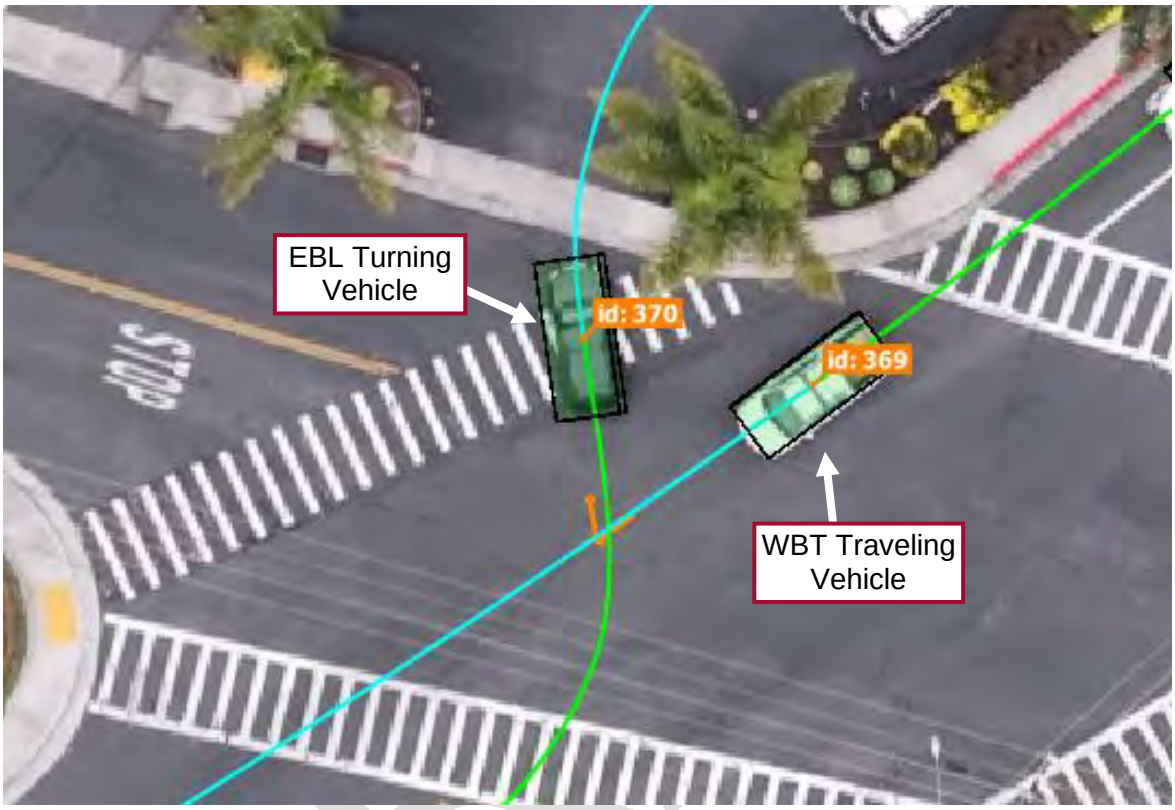


Figure 18: Observed Near Miss

Table 9: Recorded Near Misses

Time	Number of PET ≤ 1.5
AM Peak/School Drop-off	13
PM School Pick-up	10
PM Peak	10
PM Evening Off-Peak	2
Total	**35**

Table 10: Direction of Travel for Near Misses

Directions	Number of PET	Percentage
WBT/EBL	23	65.7%
EBT/WBL	6	17.1%
NBL/EBL	3	8.6%
WBR/EBL	2	5.7%
NBL/EBR	1	2.9%

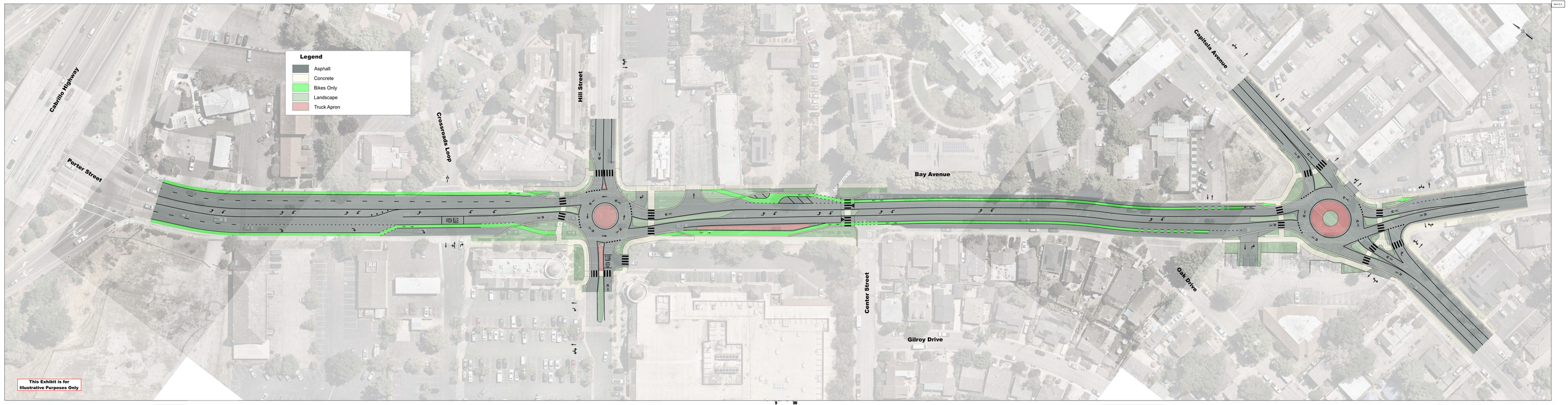
The tables above summarize the number of near miss collisions and their direction of travel during each observed time period. Of the total recorded 35 near miss collisions, approximately 65.7% of them occurred between vehicles making the eastbound left-turning movement and westbound vehicles traveling through the intersection (WBT/EBL).

CONCLUSION

Kimley Horn conducted a study on the way drivers interact with the AWSC intersection of Capitola Avenue and Bay Avenue in the city of Capitola. Driver behavior was evaluated using aerial video collected by drone and processed using VA to document the following:

1. Stopping Rate
    a. The highest rate of vehicles not making a complete stop within the region was during the PM evening off-peak period.
    b. The eastbound approach trended higher rates of not making a complete stop compared to the other approaches.
2. Measured Vehicle Speed
    a. The maximum speed was approximately 19 mph.
    b. 85th percentile speed was approximately 7.5 mph.
        i. The eastbound and southbound approaches saw the highest 85th percentile speeds during all observed time periods.
3. Deceleration Rate
    a. The percentage identified as heavy braking was 7.1% of all observed vehicles during all observed periods.
    b. The highest rate of heavy braking occurred during the AM peak/school drop-off period.
    c. The highest rate of heavy braking occurred along the eastbound approach accounting for 43.5% of the total heavy braking incidents.
4. Near Miss Collisions - Vehicles, Pedestrians, and Bicyclists
    a. A total of 35 near misses were recorded during the observed time periods.
        i. Conflict occurrences between vehicles making an eastbound left-turning movement and westbound vehicles traveling through the intersection accounted for 65.7% of recorded near misses.
    b. There were no observed occurrences of a near miss between a vehicle and a bicyclist or pedestrian.

DRAFT



Kimley»Horn

City of Capitola
Bay Avenue Corridor Exhibit

October 2025

SCALE
1" : 60'

Gautho, Julia

From: Cheryl <cherylbeardolphin@gmail.com>
Sent: Monday, April 6, 2026 7:31 PM
To: citycouncil@ci.capitola.ca.us
Subject: Roundabout At Bay and Hill

Dear Capitola City Council,
I would like to express a few thoughts in regards to the proposed
roundabout at Bay and Hill st. in Capitola.
Proceeding with a roundabout would escalate into another nightmare project of zero benefit.
Bay Ave is a critical roadway providing one of the main entrances and exits to Capitola.
The intersection at Bay and Hill is multi use, pedestrian, drivers, bicyclists, and E- bike riders.
Take time to consider what will serve the diverse needs of the community and
the thousands of visitors.

We have volumes of information from prior discussions about this area using lived experiences from pedestrians, drivers, bicyclists, and E- bike riders.
Capitola has been dealing with this intersection for years now, trying to do the right thing.
In this experiment the community was 'trying to make it work', until it became glaringly obvious that this predicable problem of 'single lanes' traffic flow
needed to revert back to the original design, incurring wasteful expenses to redo to the original layout.
We are moving headlong once again into the same avoidable scenario with a roundabout with a single lane approach at this intersection.
If a roundabout goes in, another failure, we are passing down a permanent expensive situation into the future of Capitola.

This whole county is construction and traffic exhausted.
The communities quality of life is adversely affected daily with no end in sight.
With more projects coming, 41st Avenue corridor, the freeway, and freeway bridges, and the on and off ramps on Bay Avenue, and building constructions.
As a policy setting Council without a crystal ball into the future, your powers of common sense must prevail.

Is it possible that leaving the intersection the way it is, may be the best scenario?
It is possible to move the car limit line, back from the crosswalk,
stopping well before the crosswalk, giving a clear view to the motorist and pedestrians?
Is a traffic light a consideration?
I am a pedestrian, a bicyclist, and a motorist living in Capitola.
Thank-you,
Cheryl Ban

4/2/26

Gautho, Julia

From: mark Ban <markban@sbcglobal.net>
Sent: Sunday, March 29, 2026 12:24 PM
To: citycouncil@ci.capitola.ca.us
Subject: Roundabout
Attachments: Blank.pages; attachment.html

Dear city Council,
This letter is to express my concerns about the roundabout being considered at Bay Avenue and Hill Street. As a bicyclist, I can assure you roundabouts are the least desirable for bicycles and pedestrians. The idea of a roundabout is that traffic does not stop. Cars are not looking for bicycles and pedestrians because they are preoccupied trying to merge into moving traffic. As a driver, I know from experience when you do stop for bicycles or pedestrians it now causes back up in heavy traffic because you can't merge in to the moving traffic. Also if you just build a one lane roundabout, you've now have created the same problem we had with the single lane intersection experiment that failed. The best solution to increase safety at this intersection is a stoplight that controls both pedestrian and vehicle traffic. This would keep both lanes on Bay Avenue operating and pedestrians would have stopped traffic to safely cross the street. Please for the safety of Capitola citizens and traffic congestion rule out a roundabout at this intersection.
Mark Ban
321 McCormick Ave
Capitola

Gautho, Julia

From: Dolores Linville <doloreslin58@gmail.com>
Sent: Thursday, March 26, 2026 2:20 PM
To: citycouncil@ci.capitola.ca.us
Subject: No Roundabout at Bay and Hill

Dear Councilmembers,

I am a long time resident- and voter in the city of Capitola. I am very opposed to the proposed plan to install a Roundabout at the intersection of Bay Ave. and Hill Street. I have witnessed many cars actually speeding through Roundabouts without slowing down. There are several residents who use the pedestrian crosswalk at that intersection and there needs to be stop signs and a stopping of traffic to ensure their safety while crossing the street.

Please vote NO on this proposed plan. It is not a good one!

Thank you,
Dolores Linville

Gautho, Julia

From: Mark <erickson831@gmail.com>
Sent: Wednesday, March 25, 2026 2:04 PM
To: citycouncil@ci.capitola.ca.us
Subject: Stop the madness

NO ROUNDABOUT AT BAY/HILL. HOW DOES THIS MAKE PEDESTRIAN SAFER?

Gautho, Julia

From: Ron Compton <ronjonvonshu@gmail.com>
Sent: Tuesday, March 24, 2026 4:25 PM
To: citycouncil@ci.capitola.ca.us
Subject: Bay Ave. & Hill St. intersection

I have lived in Capitola for over 50 years and have walked through that intersection almost every day for the last 20 years. The suggested roundabout is not going to solve the hazard to pedestrians.
The only solution is signal lights.
Signal lights are NOT going to make traffic more congested. There are already 3 signal lights by the freeway; one on the Capitola side on Bay Ave., and 2 on the other side of the freeway on Porter St. There is no major congestion there at any point of the day or night. One more signal light, if in harmony with the others, will not be a problem.
This will ensure safe crossing of the intersection by pedestrians.
I ask you, please, to use this solution.

John R. Compton Jr.
Resident and property owner in Capitola since 1975

Gautho, Julia

From: Debbie Manning <damanning_2000@yahoo.com>
Sent: Tuesday, March 24, 2026 11:10 AM
To: citycouncil@ci.capitola.ca.us
Subject: No Roundabout!

I am constantly amazed at the inept way the leaders of Capitola run this town. Everything is done with a knee jerk reactio n to some incident. The newest(vbesides the debacle at the mall property), is the lame idea to make a roundabout at Bay /Hill streets. First of all, there is not enough room at that intersection. Second no one knows how to use a roundabout in California. third, look at the lack of safe crossings at the entrance to the SC wharf roundabout. It is a traffic nightmare.

Many Capitola residents live here because we can do things like walk to our destinations. How would street crossers ever feel safe in a roundabout when no one knows how to use them? The intersection is now back to it's original configuratio n with flashing lights at the crosswalk. That is sufficient.

Have any of you even gone there and observed the mess at school drop and pick up times? Maybe that would be a good idea before you muck it up more with a roundabout. Imagine the mess with all the kids on the Ebikes running through th ere with drivers who have no idea what to do!

At this point, I am deeply untrusting of those we have elected and I am looking forward to seeing a new election to try to improve this.

And by the way, remove the speed bumps on the newly opened section of Capitola Rd, where the new bridge has opene d. What a pain.

Debbie Manning
Capitola, CA.

Gautho, Julia

From: Lupe Robles-Sane <nicopopo12@icloud.com>
Sent: Tuesday, March 24, 2026 11:03 AM
To: citycouncil@ci.capitola.ca.us
Subject: Roundabout Bay & Hill
Attachments: image001.jpg; attachment.txt

Please take time to consider the “solution” of a roundabout at the busy intersection of Bay & Hill! It does not seem to be the best answer.

Gautho, Julia

From: Erlinda Soto <ebaniaga@outlook.com>
Sent: Monday, March 23, 2026 6:27 AM
To: citycouncil@ci.capitola.ca.us
Subject: No

Roundabout!
Sent from my iPhone

◀ Mail 7:12 AM 100%

nextdoor.com

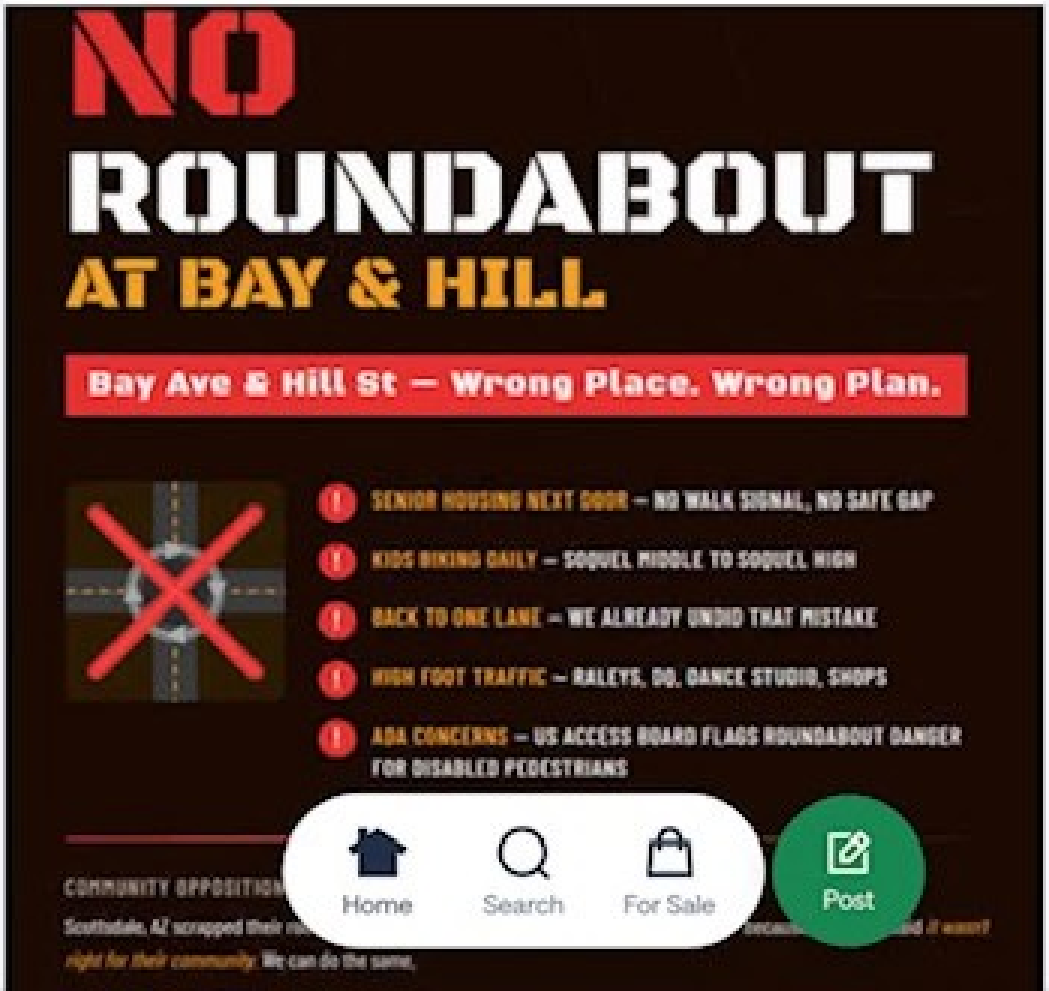
Cliffwood Heights B

March 26th — Capitola City Council Meeting
420 Capitola Ave, Capitola

Come in person. Send an email to:
citycouncil@ci.capitola.ca.us and
cityclerk@ci.capitola.ca.us

Make your voice heard before this is decided for us.

#CapitolaCA #BayAndHill #Roundabout
#CapitolaNeighbors #CityCouncil



Gautho, Julia

From: Colleen Wysocki <cewysocki@yahoo.com>
Sent: Sunday, March 22, 2026 9:03 PM
To: citycouncil@ci.capitola.ca.us; cityclerk@ci.capitola.ca.us
Subject: Round-about Proposal at Bay Ave.

Good morning Capitola City Council,

I'm a Capitola resident and would like to share my thoughts on a roundabout at the Bay Ave. "Nob Hill" intersection.

As a resident who travels this road multiple times per day, I am much happier with the current set-up than the previous one-lane. I also do not want to experience another construction project there, nor go back to 1 lane.

The traffic gets backed up and drivers get confused. Tourists already get confused about when to go at 4-way stops; a round-about is asking for more confusion, hesitation, longer wait times, and minor accidents.

According to civil engineers and many accident attorneys, the primary drawbacks of round-abouts include driver confusion, higher rates of low-severity crashes, challenges for large vehicles, and negative impacts on pedestrians and cyclists.

Safety and Traffic Flow Disadvantages

- **Driver Confusion and Improper Usage:** Drivers unfamiliar with roundabouts may fail to yield right-of-way, enter recklessly, or come to a stop inside the circle, causing accidents.
- **Increased Minor Collisions:** While fatalities are reduced compared to traffic signals, roundabouts can lead to a higher frequency of low-severity accidents, such as rear-end collisions (often due to sudden stopping) and sideswipes.
- **Unbalanced Flow Challenges:** At intersections where one road has significantly higher traffic than the other, drivers on the busier road may experience delays compared to a signalized intersection that favors them.
- **Failed Merging (Gridlock):** When traffic reaches maximum capacity at a moderately busy, yet constrained intersection, the roundabout can "lock up," requiring police to manage the gridlock.
-

Operational and Infrastructure Disadvantages

- **Large Vehicle Navigation:** Tractor-trailers, school buses, and emergency vehicles may struggle to turn within a restricted roundabout area, potentially causing traffic delays and physical damage to the central island.

- **High Initial Cost:** Constructing a roundabout is expensive. Residents such as myself would rather see money for roads go toward repairing Bay Ave and Depot Hill roads.
- **Space Limitations:** Roundabouts often require more space for the central island and circulating lanes compared to a standard intersection, which is hard to implement in developed urban areas.

Pedestrian and Cyclist Disadvantages

- **Challenging for Visually Impaired:** Visually impaired pedestrians find it difficult to cross because they rely on traffic sounds to gauge gaps, and continuous, low-speed traffic is harder to interpret than a signalized stop.
- **Yielding Rates at Exits:** Motorists are less likely to yield to pedestrians at the *exit* of a roundabout compared to the entrance, as they accelerate to leave the circle.
- **Risks for Cyclists:** Cyclists can face higher crash rates at roundabouts compared to traditional intersections, particularly when sharing lanes with vehicles in multi-lane layouts.

I will not ba able to attend the March 26 Council Meeting due to work, but I would like my opinion acknowledged and counted.

Thank you for all the hard work you do!

Colleen Wysocki
106 Oakland Ave.,
Capitola, CA 95010
(970)889-5303

Gautho, Julia

From: Bev Viguerie <bevviguerie@yahoo.com>
Sent: Saturday, March 21, 2026 9:35 PM
To: citycouncil@ci.capitola.ca.us; Bev Viguerie
Subject: Bay Avenue Roundabout

Dear Council Members:

Please vote no on the Bay Avenue Round-About on Bay Avenue. Your last idea about narrowing Bay Ave by Nob Hill was a disaster and wasted our tax payer dollars.

Why don't you instead, repave our roads and fill our potholes. Do something that will help the community instead of creating chaos and wasting money on projects we do not want.

Remember- you work for us.

Thank you,
Bev Viguerie

Sent from my iPhone

Gautho, Julia

From: Tom Brady <tombinsc@gmail.com>
Sent: Thursday, March 19, 2026 3:12 PM
To: citycouncil@ci.capitola.ca.us; cityclerk@ci.capitola.ca.us
Subject: No Roundabout on Bay!

As a cyclist and regular patron of Nob Hill/CVS, I object to a roundabout at this intersection. Roundabouts are great to keep traffic flowing, but there are too many pedestrians crossing at this intersection. The previous design that limited Bay to one lane proved that one lane Southbound causes a huge back up to Hwy 1 and up the off ramp from SB Hwy 1.

If you think that people will observe speed limits entering the roundabout, you are mistaken, people use Bay to Park as an option when traffic is heavy SB on Hwy 1. All of the stop signs currently make that less appealing. Putting in roundabouts will make Bay Ave a secondary freeway. Turning left out of the Nob Hill parking lot is already dangerous, making sure that both lanes of motorists are actually stopping. The roundabout will make the left turn nearly impossible and life threatening for cyclists.

I would like to know who is complaining about the current 4 way stop? If it is pedestrian safety, this is not the answer. They answer is pedestrian activated flashing lights like the ones by Soguel HS and on Clares. Those work. If they cannot be placed at the intersection, place one set up the hill across from the Nursing home where the proposed cross walk is and a a cross walk and a set at the northern entrance to the Nob Hill parking lot next to the Car wash. These work. I see it every day by Soquel HS.

Thanks,

Tom Brady
3884 Aldo Ct
Soquel, CA 95073
831-212-3510

Gautho, Julia

From: Nels Westman <nels@bestwestman.com>
Sent: Wednesday, March 18, 2026 9:44 AM
To: Cyndie Quist
Cc: City Council
Subject: Re: The Roundabout

Thanks for checking in, Cyndie. Grateful for your passing the word along. If you could take a few moments to email the Council and just say that you do not believe that the roundabout will function as claimed and that serious congestion on Bay Ave. will result. citycouncil@ci.capitola.ca.us. Have a great trip and enjoy revisiting lots of good memories and, perhaps, old friends. We'd love to hear all about it…….and drink some gin.

Nels

> On Mar 17, 2026, at 6:50 PM, Cynthia Quist <cquist850@gmail.com> wrote:
>
> Hi Nels,
> Thank you for your email, as always it was clear as a bell.
>
> I have forwarded it to several neighbors, who, like me, knew nothing about the rotary. They too have sent it on to groups that they belong to.
>
> Unfortunately, Jim and I will be away at the time of the meeting, but I am hoping that a few of our neighbors will be attending.
>
> Thank you so much for your avid attention to the goings on in our darling town. Of course, thank you too, to the little birdie that is chirping in your ear. 🐤 👂 You two are one of the "power couples" in town. Hands down.
>
> Off to Malaysia on Friday, back April 6. If you'd like, let's pick a date to get together the week of April 13. What's good for you?
>
> Always, C
>
>
>

Gautho, Julia

From: Joni Cashin <jcashin831@gmail.com>
Sent: Wednesday, March 18, 2026 9:37 AM
To: citycouncil@ci.capitola.ca.us
Subject: Roundabout for Bay Ave and Hill St

My husband and I live in the Bay Ave Senior housing.
We both strongly oppose this idea. This would make it impossible to cross the street to get to Nob Hill or to walk over to Rispin Manor. This would also affect kids who ride their bikes to and from school.
This was tried months ago by taking a lane away and it was a disaster. Leave this as is, it's working just fine.
Joni Cashin and David Cashin
750 Bay Ave Apt 2203
Capitola
831-420-7440

Sent from my iPhone

Gautho, Julia

From: Mike Pasetta <mike@pasetta.net>
Sent: Wednesday, March 18, 2026 9:05 AM
To: citycouncil@ci.capitola.ca.us; cityclerk@ci.capitola.ca.us
Subject: Bay and Hill Round About

Greetings,

While I do not have any ideas except perhaps a lighted cross walk for pedestrians, I would like to strongly discourage a roundabout. In my experience roundabouts can work well for moving vehicles, but they can make it very dangerous for pedestrians. Also, the one lane in each direction for Bay was a bad idea and should not be repeated.

Mike Pasetta
126 Cabrillo St, Capitola, CA 95010

Gautho, Julia

From: dreymerbizvideo2 <dreymerbizvideo2@juno.com>
Sent: Tuesday, March 17, 2026 5:23 PM
To: Citycouncil@ci.capitola.ca.us
Subject: BAY HILL ROUNDABOUT

The issue is and has been pedestrian safety. How the H is a $5M roundabout safer with elders and kids dodging between moving vehicles. For $5M build a 4 way pedestrian bridge with elevators (like at Shadowbrook) to accommodate bikes, wheelchairs, carts) OVER the intersection. 100% SAFETY.

D Reymer

Gautho, Julia

From: mminoggi@icloud.com
Sent: Tuesday, March 17, 2026 5:13 PM
To: citycouncil@ci.capitola.ca.us
Subject: Bay Ave /Hill St intersection

For those who have further thoughts/ideas how to make this intersection safer with less congestion:

If you all haven't noticed YET, since the revert back to its original configuration earlier this year and the added Capitola Ave bridge completion, there is virtually No more backed up traffic on Bay Ave southbound off the freeway anymore.
There is occasional backup northbound on Bay Ave between Hill St and the freeway but that is due to CalTrans three Stoplights within about 150 yards.
Nothing would improve that.
A roundabout would do absolutely nothing to alleviate that and that is just too many vehicles wanting to exit Bay Ave at about heavy commute time.

I foresee a roundabout encouraging drivers to increase their speed, especially the many impatient drivers we see anymore and I foresee pedestrians being even more at risk with a roundabout. I like roundabouts where the few are in the county but I think you all need to stop trying to improve this intersection and be satisfied with how you've brought it back to its original config and brought a sense of calmness to drivers versus the prior rage of impatient drivers speeding through Nob Hill's parking lot to save time and other side street shortcuts.
Please Leave Well Enough Alone.
Save ALOT of money

Thank you, Michael Minoggi
Soquel, a daily Nob Hill and Gayle's customer Sent from my iPhone

Gautho, Julia

From: thea luiten <theastouch831@gmail.com>
Sent: Friday, March 20, 2026 5:16 PM
To: citycouncil@ci.capitola.ca.us
Subject: I'm calling in concern about the proposed traffic circle. My suggestion (having driven that area for the last 30)years is put a traffic right at that confusing diagonal corner at Gail's bakery. ?...It really needs help. It's wider than a typical

... please do not limit it to a single lane in front of the knob Hill/Bay Avenue corner!!! 😞 😰 🥺 . Those of us leaving from the mid County Senior center get caught up in the flow of cars coming under the freeway and it's a dangerous when it gets shut down to one lane.!!!
Sent from my iPhone

Gautho, Julia

From: Ruth Ingram <qsaunt@gmail.com>
Sent: Thursday, March 19, 2026 8:53 PM
To: citycouncil@ci.capitola.ca.us
Subject: Round About on Bay

Regarding the proposed round about at Bay and Hill. Please do not approve this! One lane has already proved to be a disaster, there will be many confused drivers and pedestrians and bicyclists will be in greater danger than they are now. This is an absolutely terrible solution. The back up now is horrible and this will make it worse and be a complete waste of our taxpayer money.
You must reconsider this it will be a nightmare that will cost additional funds to remove much like the one lane attempt.
Thank you,
Ruth Ingram

Gautho, Julia

From: Elizabeth Ramirez <eliza.beth.83.08@hotmail.com>
Sent: Tuesday, March 17, 2026 6:04 PM
To: citycouncil@ci.capitola.ca.us
Subject: Possible Spam Not one lane

Please not a single lane on Bay Ave. This greatly affects my business, "Laundromat Teddy Bear." I am starting to recover customers because traffic flows more smoothly with two lanes.
What's really needed is a few more police officers patrolling the area because drivers don't respect the signs or the road.

Enviado desde mi Galaxy

Gautho, Julia

From: Sue Hart <sue.hart09@gmail.com>
Sent: Tuesday, March 24, 2026 11:01 AM
To: citycouncil@ci.capitola.ca.us
Subject: Bay and Hill roundabout

Definitely AGAINST this. We need lights at that intersection, not a dangerous roundabout. Please don't do it. Sue Hart, 300 Plum St.
Sent from my iPhone

Gautho, Julia

From: E Rock <sanjosemom@gmail.com>
Sent: Saturday, May 2, 2026 7:21 PM
To: City Council
Subject: Bay/Hill Roundabout Plans

Hi,
I see that you are still planing to convert the Bay/Hill St intersection into a roundabout.
I have been driving that intersection at different times of the day for over 40 years. I have also driven roundabouts in other cities, including those in England.

The roundabout for Bay/Hill St is not a good idea. The four way stop intersection is working just fine. It does get a little crowded at beginning and end of a school day, but otherwise there are no backups. And pedestrians crossing the street is not a problem either, in spite of what initiated this whole process.

I would appreciate not approving the roundabout. Please do not spend the money on an experiment that will not make anything better.

Thank you.
Emma Rock
707 Gilroy Dr.

Gautho, Julia

From: elizabeth williams <bettyworld1@att.net>
Sent: Monday, May 4, 2026 4:00 PM
To: City Council
Subject: Round about

Please leave Bay Ave. alone. Spend the money on another well deserved project but don't waste it on changing something that doesn't need changing. The other changes made earlier created a lot of traffic and people problems.
Thank you
E. Walker

Gautho, Julia

From: Mary Craig Caruthers <marycraigcaruthers@yahoo.com>
Sent: Tuesday, May 5, 2026 2:57 PM
To: City Council
Subject: PROPOSED BAY/HILL ROUNDABOUT

To the Capitola City Council Members:

I am writing in opposition to the proposed Bay/Hill Roundabout.

1. Reducing the intersection to one lane would only create congestion. We have already learned this lesson!
2. There would be four entrances to the roundabout, and in my experience, no one in Santa Cruz knows how to navigate a roundabout. We'll leave that to the Brits!
3. How are pedestrians going to cross? Trying to allow for that creates more confusion.
4. This is a bad idea. The set up we currently have is working, and traffic is flowing relatively smoothly. Why change that?

I oppose this idea, and hope the City Council will not make it a reality.
Sincerely yours,
Mary Craig Caruthers
210 Hollister Avenue
Capitola, CA 95010

Outlook

May 14 roundabout agenda item

From Ortiz, Gayle (gayle@gocapitola.com) <gayle@gocapitola.com>
Date Thu 5/7/2026 8:08 AM
To City Council <citycouncil@cityofcapitola.gov>

Dear Council,

Since I will be out of the country on the 14th, I wanted to share my thoughts regarding the proposed roundabouts on Bay Avenue. I understand the discussion will likely focus on the roundabout at Hill Street, so I will limit my comments to that proposal, although I also oppose the proposed roundabout at Capitola Avenue.

Reducing Bay Avenue to a single lane will create significant traffic problems, even if traffic is technically moving more smoothly. The high volume of pedestrian and bicycle traffic along Bay Avenue will frequently interrupt vehicle flow, causing backups within the roundabout and recreating the same congestion issues we experienced a few months ago when Bay Avenue was temporarily reduced to one lane.

And as I read the proposal, bicycles will have to share car lanes.

I am also concerned that this proposal conflicts with the city's stated goal of encouraging active transportation. Roundabouts are designed primarily to keep vehicle traffic moving efficiently, not to improve safety or accessibility for pedestrians and cyclists. In practice, they often make crossing more difficult and less comfortable for those who walk or bike.

For these reasons, I urge you not to approve this proposal. At the very least, please wait until the freeway construction is complete so the city can better evaluate how those changes will impact traffic patterns on Bay Avenue before making a permanent decision.

Outlook

Another comment on roundabouts

From Ortiz, Gayle (gayle@gocapitola.com) <gayle@gocapitola.com>
Date Thu 5/7/2026 9:04 AM
To City Council <citycouncil@cityofcapitola.gov>

Dear Council,

I have just learned from Jessica that both intersections will be considered on May 14.

I am strongly opposed to the roundabout at the Bay/Capitola Ave. intersection for a few reasons that were not stated in my last email.

There is a proposed crosswalk in conflict with a loading zone at the Gayle's Bakery production building at 704 Capitola Avenue. City staff and consultants tried to mitigate this in a sincere way that we appreciate greatly. But the truth is, there's no way to mitigate having a crosswalk directly behind large delivery trucks that are unloading many times every day.

The consultants say, "just tell the drivers to be careful". If they only knew how hard it is to get anybody to do anything these days! Drivers change frequently, are usually running behind and generally don't remember what you've told them last week even if it's the same driver.

We are trying to get people out of their cars, why would we make it harder for them to walk?

This, along with the fact that bicycles are given short shrift in this design is just plain wrong.

I've witnessed many mishaps in this intersection over the last 47 years and it almost always involves pedestrians or bicycles. And even if the consultants tell you this is safer for pedestrians it won't be. The Bay Avenue corridor is a fragile ecosystem that, for vehicles, is working ok now. All it needs is more pedestrian safety measures.

Please do not go forward with either of these roundabouts.

Thank you,
Gayle Ortiz
Gayle's Bakery & Rosticceria

Outlook

Re: CITY PLAN FOR ROUNDABOUT AT BAY / CAPITOLA AVE INTERSECTION

From Alfred carlson <alcarlton@aol.com>
Date Thu 5/7/2026 10:22 AM
To Al Carlson <capitolaal@gmail.com>; City Council <citycouncil@cityofcapitola.gov>

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I think roundabouts are a case of simple instinctive physics. Not cultural stubbornness or anything like that. You see four large moving objects approaching the same point at the same time, and your instinct tells you at least two of them must stop for the other one or two to proceed safely. I understand that a roundabout are supposed prevents collision by, paradoxically, keeping everyone moving, but that's not something a driver unfamiliar with the process are going to remember. Studies have
shown that roundabouts are most difficult for senior drivers, which Capitola has a disproportionately high number of.
So I don't see this as a high priority, money could be better spent else where.
AL CARLSON 5000 JEWEL ST CAPITOLA. 831-600-5511

Gautho, Julia

From: Wendy Arsenault <wendyarsenault@sbcglobal.net>
Sent: Thursday, May 7, 2026 2:23 PM
To: City Council
Subject: Proposal for Roundabout at Bay Ave. & Hill St.

Dear City Council Members,

My husband and I are unable to attend the City Council meeting on May 14th but want to register our opposition to a roundabout at Bay Ave. and Hill St. in Capitola. We believe a roundabout at that intersection would be dangerous for motorists, bicyclists and pedestrians, especially with the proximity to crosswalks. A car rounding the circuit may have to brake for a pedestrian in the crosswalk, causing the other moving vehicles in the single-lane roundabout to have to brake suddenly while looking out for merging vehicles at the same time. When a pedestrian is in the crosswalk, cars who see them in time would have to continue around the circuit a second and possibly third time to keep from having to brake. If cars are braking in the roundabout it negates the whole purpose of a roundabout, which is to keep traffic flowing.

Many of the pedestrians and bicyclists at this intersection are students at New Brighton Middle School and Soquel Elementary, and we're not sure they'll be able to judge which cars are coming their way, especially if drivers don't signal. They won't be able to rely on a car stopping, as they currently do at the stop signs. It seems very dangerous to us.

We've lived on Gilroy, off of Center Street, for over 30 years and have never had a problem with this intersection the way it is currently configured. My husband lived in Massachusetts for a while, and he says they tried roundabouts there and it was a failed experiment. They ended up removing them. As taxpayers, we don't want to pay for another failed experiment at this intersection and its subsequent removal.

Sincerely,

Wendy and Skip Arsenault

701 Gilroy Dr., Capitola, CA 95010

Outlook

Roundabout at Bay Ave. and Hill St.

From chris amsden <amsdenfinance@yahoo.com>
Date Fri 5/8/2026 8:35 AM
To City Council <citycouncil@cityofcapitola.gov>

Dear Capitola City Council,

I am writing to express my concerns about the proposed roundabout at the intersection of Bay Avenue and Hill Street, particularly regarding the safety of pedestrians and cyclists.

This intersection is used regularly by people walking and biking, including families, students, and commuters. Roundabouts can create challenges for non-motorized users, especially when vehicle speeds are not sufficiently reduced and when drivers are primarily focused on merging and navigating traffic rather than yielding to pedestrians or cyclists.

I am especially concerned about:

- The ability of pedestrians to safely cross multiple entry and exit points
- Reduced visibility and predictability for cyclists navigating alongside vehicles
- The potential for increased conflict points between cars, bikes, and pedestrians
- Accessibility challenges for individuals with disabilities

Given these concerns, I urge the City to carefully evaluate whether a roundabout is the safest design for this location. Alternatives such as signalized intersections, enhanced crosswalks or protected bike infrastructure may better serve all users.

Thank you for your time and consideration. I appreciate your efforts to improve transportation safety in our community and hope that pedestrian and cyclist safety remains the top priority in this decision.

Sincerely,

Chris Amsden
Phone: (408) 386-7484

Outlook

Concerns Regarding Proposed Roundabouts at Bay Avenue/Hill Drive and Capitola Avenue/Bay Avenue

From Jessica Hansen <jvhansen3@gmail.com>
Date Fri 5/8/2026 11:15 AM
To City Council <citycouncil@cityofcapitola.gov>

Dear Members of the Capitola City Council,

I am writing as a long-time Capitola resident who regularly both drives and walks through the proposed roundabout locations at Bay Avenue/Hill Drive and Capitola Avenue/Bay Avenue.

I appreciate the City's efforts to address traffic flow and safety concerns, and I understand that modern roundabouts can offer benefits in certain settings. However, I would ask the Council to carefully consider the very different pedestrian realities present at these two intersections, particularly at Bay Avenue and Hill Drive near the Highway 1 off-ramp.

My greatest concern is pedestrian safety and accessibility.

The Bay/Hill intersection serves not only heavy vehicular traffic, but also nearby school pedestrians, older residents, walkers, and community members accessing surrounding neighborhoods and services. The combination of freeway off-ramp traffic, multiple east-west lanes, and drivers transitioning directly from Highway 1 into local streets creates an environment that already feels fast-moving and difficult for pedestrians.

As someone who walks these routes myself, I have serious concerns about how safe and comfortable this intersection would feel for:
- seniors,
- children walking to school,
- visually or hearing-impaired pedestrians,
- and residents who may already feel uncertain crossing Bay Avenue.

While roundabouts may reduce certain categories of vehicle collisions statistically, I believe the lived pedestrian experience also matters greatly. A crossing that technically functions is not necessarily one that people — especially older adults — feel safe using.

I would strongly urge the City to carefully evaluate:
- pedestrian crossing distances,
- actual projected vehicle speeds entering from the Highway 1 off-ramp,
- driver yielding compliance,
- school walking routes,
- senior accessibility,
- and whether pedestrians will realistically feel safe crossing during peak traffic periods.

I would also ask whether alternatives such as enhanced signalization, protected pedestrian crossings, flashing beacons, or other traffic calming measures have been fully explored before moving forward with a roundabout at this location.

The proposed intersection at Capitola Avenue and Bay Avenue seems to present a somewhat different situation. Although the current angled four-way stop can be awkward and involve long crossing distances, I can better understand how a carefully designed, compact, pedestrian-oriented roundabout there might improve traffic flow while slowing speeds. Even so, pedestrian safety and comfort should remain central to the design process.

Capitola is a walking community. Many of us value the ability to comfortably walk between neighborhoods, schools, shops, beaches, and services. I hope the City will prioritize not only traffic efficiency, but also the safety, accessibility, and quality of life of the people who live here every day.

Thank you for your time and consideration.

Sincerely,

Jessica Hansen
Capitola Resident

Sent from my iPad

Outlook

Roundabout located at Hill and Bay.

From Mary Tavella <tavella@sbcglobal.net>
Date Fri 5/8/2026 11:49 AM
To City Council <citycouncil@cityofcapitola.gov>

I want to register my profound opposition to the placement of a roundabout at Bay and Hill. As a city Council, your last effort at controlling that area was a complete disaster. You had only to go and look at the effects of that lane closure to realize that it had created. created a choke point!
It beggars imagination that you did not notice that and realized that you had created an ongoing problem that took you months to resolve. This new fiasco is bound to fail, and will only Garner the anger of this entire area. I can promise you if you do pass this, there will be a recall election that will follow almost immediately. This is an abuse of process. I will attend the meeting this Thursday evening and voice the same concerns. If you have any questions, feel free to call me at 916-502-0410. I live at 615 Riverview Dr. here in Capitola. Ernie Tavella.

Outlook

Roundabouts & Crosswalks

From John Martorella <martorella1115@gmail.com>
Date Fri 5/8/2026 1:19 PM
To City Council <citycouncil@cityofcapitola.gov>

Hello all,

NO on the roundabout (s). This proposed project (s) is very costly and not intuitive for the Bay ave./ Hill st. and Bay ave./ Cap ave. intersections.

Reasons against the roundabout (s):

-Pedestrian and cyclist safety.
-Driver confusion.
-Large vehicle navigation.
-Very high potential for gridlock all the way around.
-Large footprint in dense areas.
-Not fiscally responsible.

Instead, I would recommend 2 new raised-lighted crosswalks @ Bay ave /Center st. and Bay ave./ Rosedale ave.

Reasons for the crosswalks:

-Much needed pedestrian safety crossings @ both locations.
- Intuitive and cost effective.
- Most logical addition to Bay ave.

We have all seen the mess, frustration and wasted money that the previous Bay ave. project caused, so lets not repeat a bad decision with another one.

Thank you,
John Martorella

Bay Avenue Corridor Study

City Council

May 14, 2026

Presentation Overview

1. Corridor Background
2. Existing Conditions & Traffic Data
3. Corridor Alternatives
4. Recommended Improvements
5. Example Projects
6. Funding & Implementation Considerations
7. Requested Council Direction

Why This Corridor Matters

- Key connection between Highway 1, neighborhoods, schools, commercial areas, and Capitola Village
- Serves local and regional traffic
- Important corridor for pedestrians, bicyclists, transit, and vehicles

Longstanding Corridor Challenges

- Congestion and turning conflicts
- Pedestrian crossings and visibility
- Bicycle comfort and connectivity
- Existing overhead utility infrastructure

What is the Bay Avenue Corridor Study?

A planning study used to assess current and future needs of a transportation route to improve mobility, safety, operations, and economic development for all users.

Bay Avenue Corridor Study Objectives

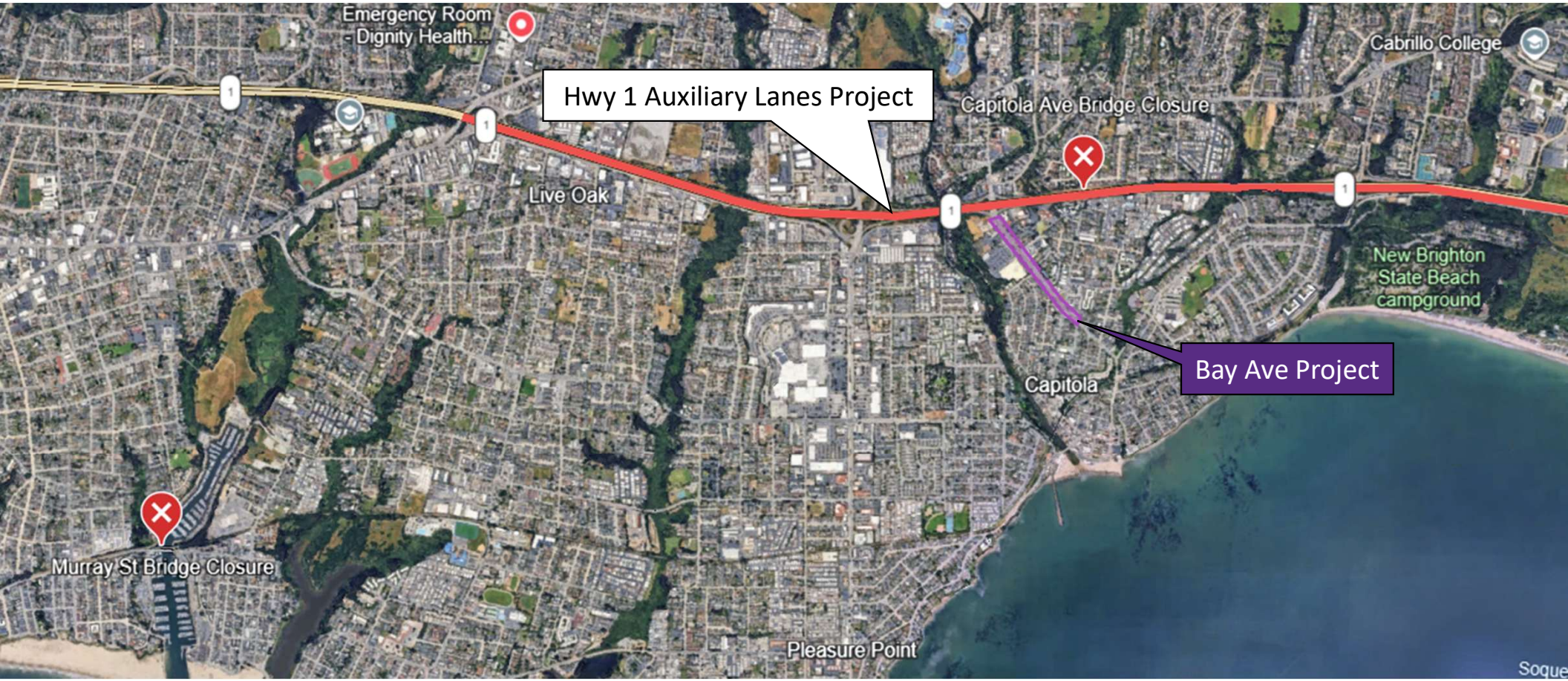
Determine feasible long-term improvements for the Bay Avenue corridor between Highway 1 and Park Avenue

1. Enhance access and safety for all users including vehicles, pedestrians, and cyclists
2. Maintain acceptable traffic operations along the corridor
3. Compliment the Bay Avenue Vision, mobility, and economic goals in the Capitola General Plan
4. Prepare a long-term plan to pursue grant funding opportunities

Bay Avenue Corridor Study Timeline

- **2014** – Initial roundabout concepts
- **2016–Present** – Rule 20A undergrounding coordination
- **June 2023** – Bay/Hill pilot project funded
- **September 2023** – City Council initiates corridor planning
- **November 2023** – Pedestrian fatality at Bay/Crossroads
- **2024** – Pilot quick-build project + corridor study
- **February 2025** – Council advances roundabout concept
- **September 2025** – Removed Quick-build project
- **2025–2026** – Outreach and refinement on corridor study
- **Today** – Rule 20A and final corridor plan presentation

Regional Projects and Effect on Local Traffic



Corridor Study Overview

1. Project Background
2. Existing Conditions & Traffic Data
3. Corridor Alternative
4. Recommended Improvements
5. Example Projects
6. Conclusion

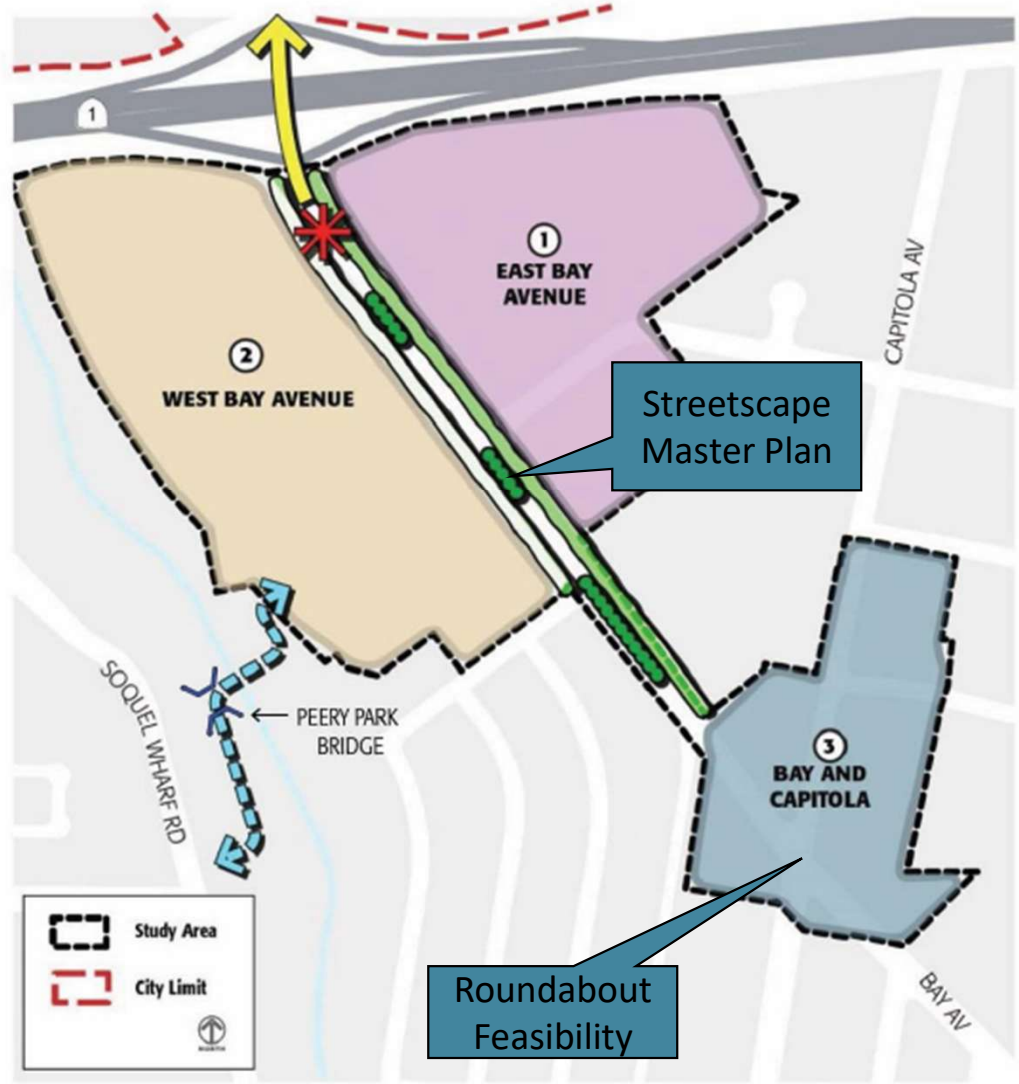
1. Project Background

Capitola General Plan

- Goal LU-10:
  - Maintain and enhance Bay Avenue commercial district as a thriving destination with businesses that serve Capitola residents and visitors.

- Goal MO-4:
  - Provide a roadway system that enhances community aesthetics and promotes a high quality of life

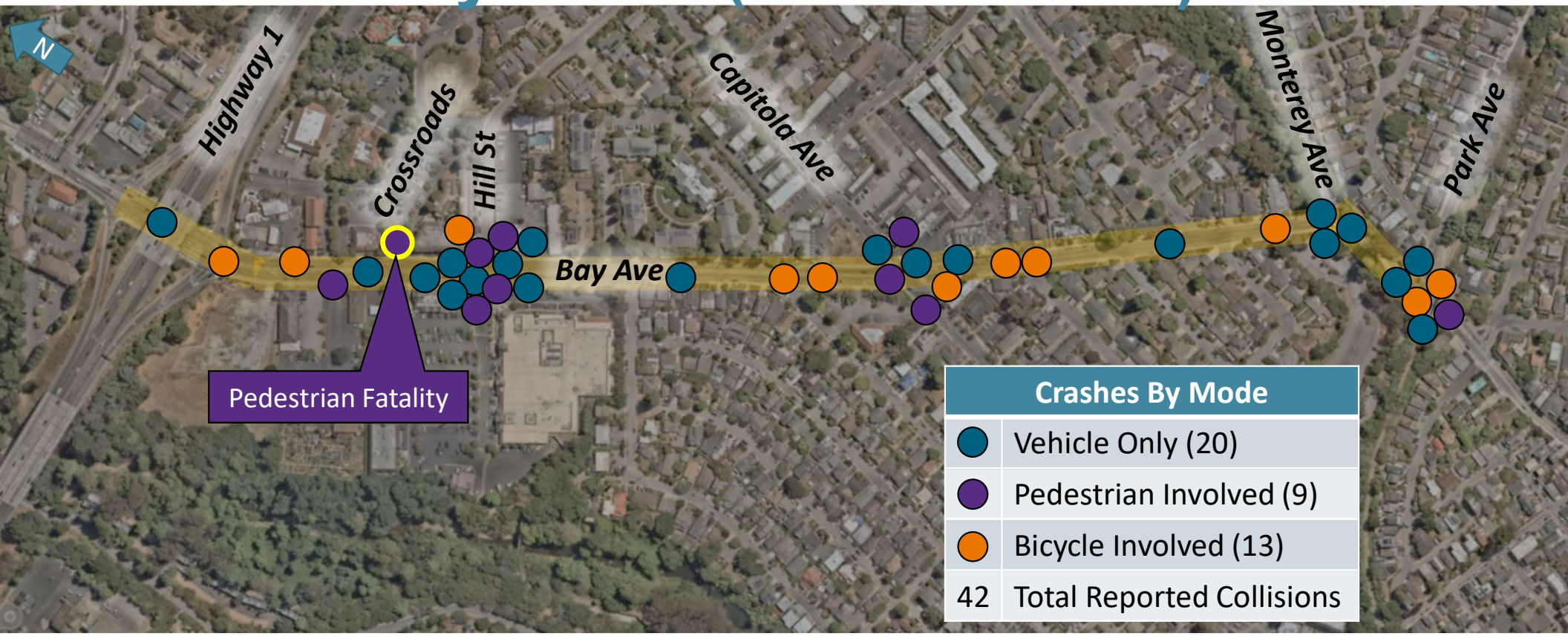
FIGURE LU-7 BAY AVENUE VISION



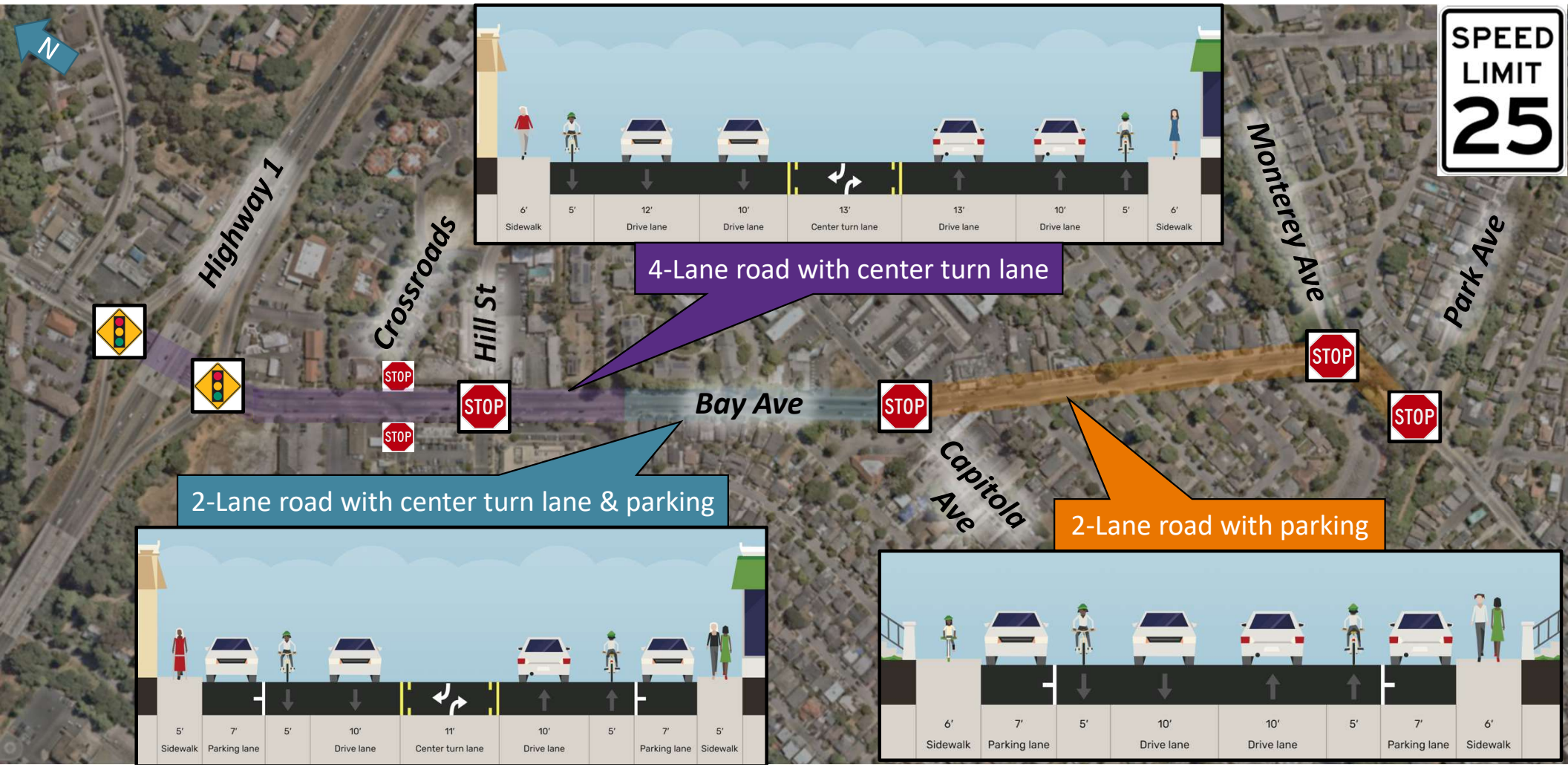
Bay Avenue from Highway 1 to Park Avenue

2. Existing Conditions & Traffic Data

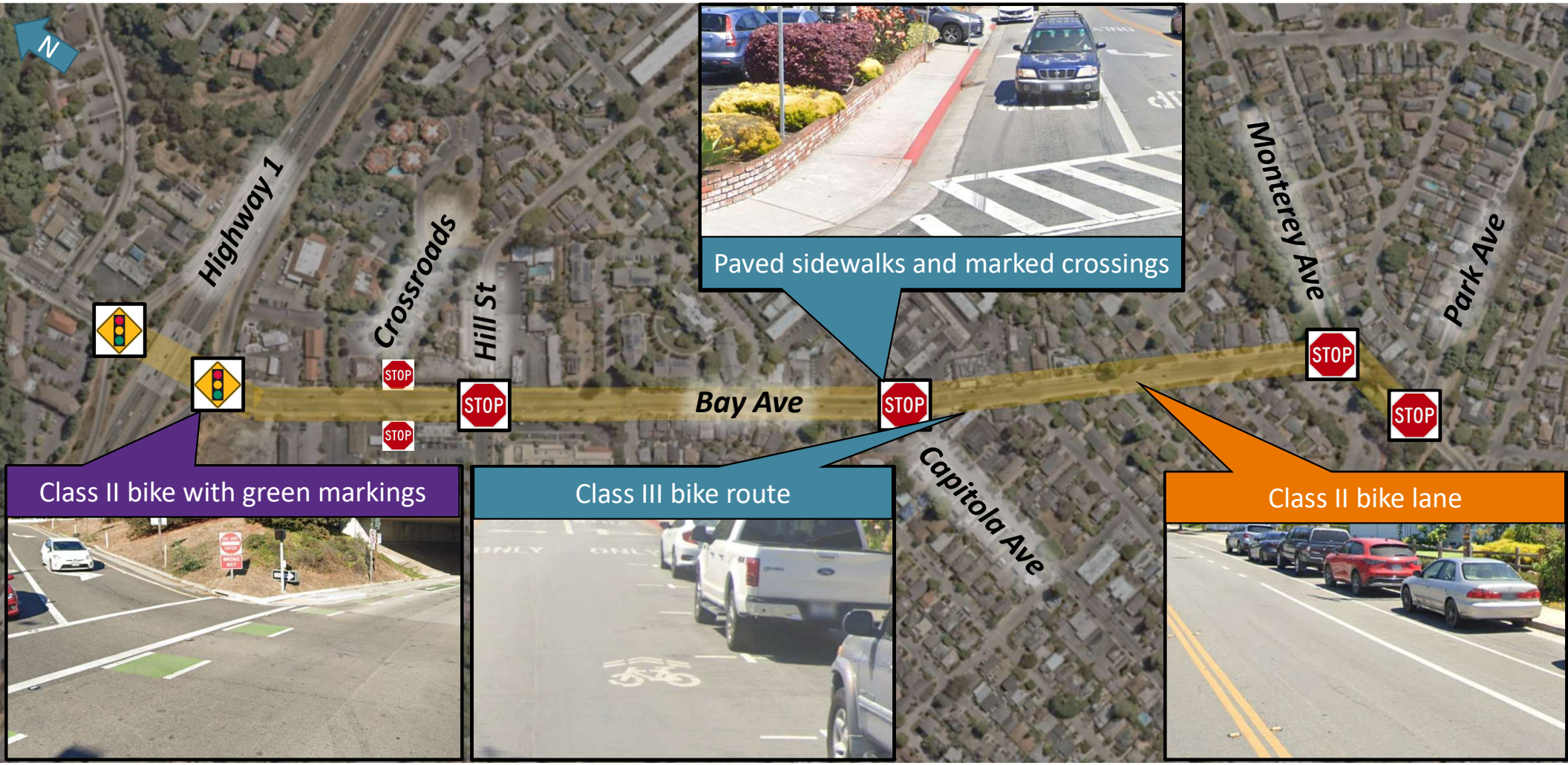
Crash Data by Mode (2014 to 2025)



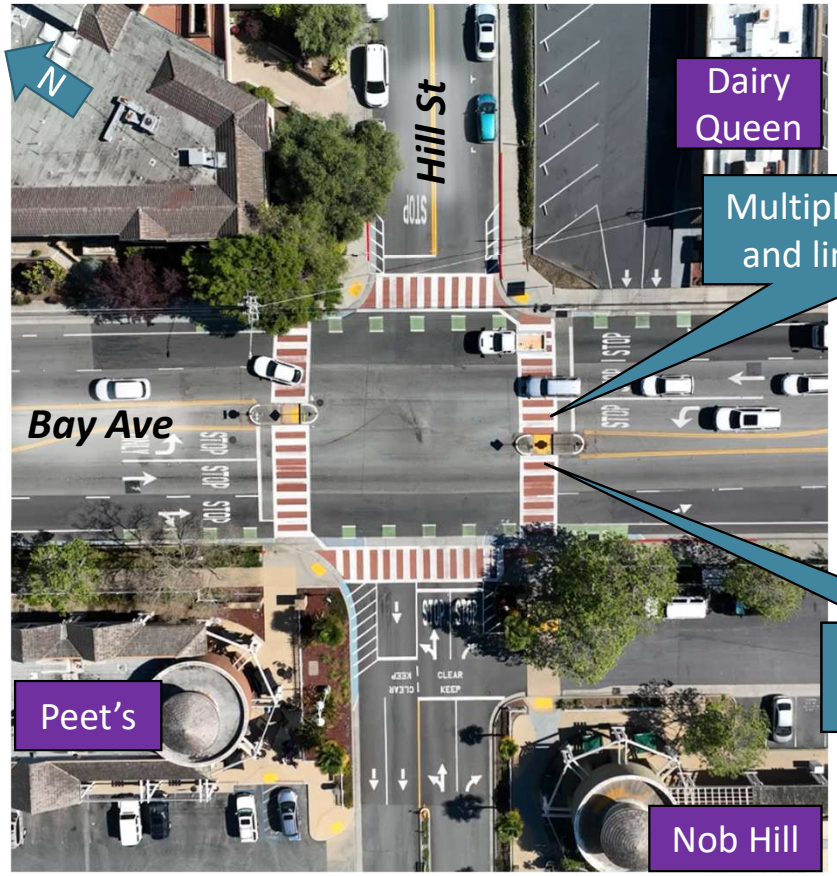
Existing Conditions - Segment



Existing Conditions – Bike & Pedestrian

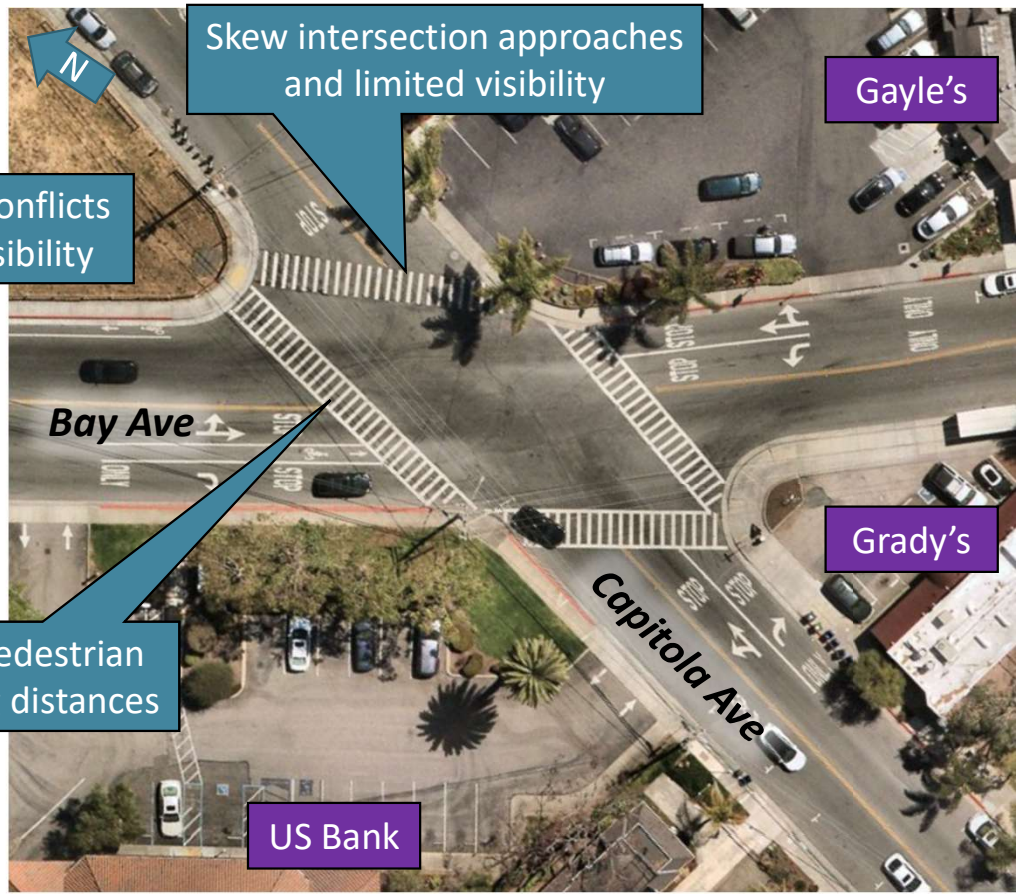


Existing Conditions – Intersection

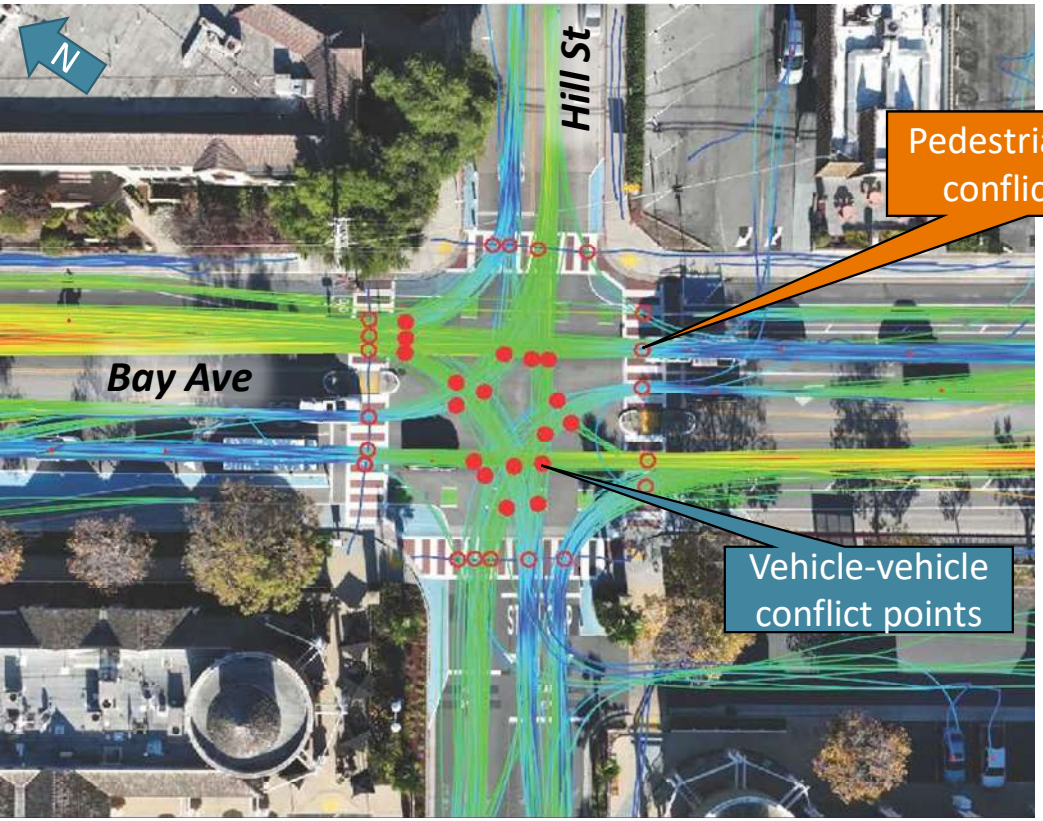


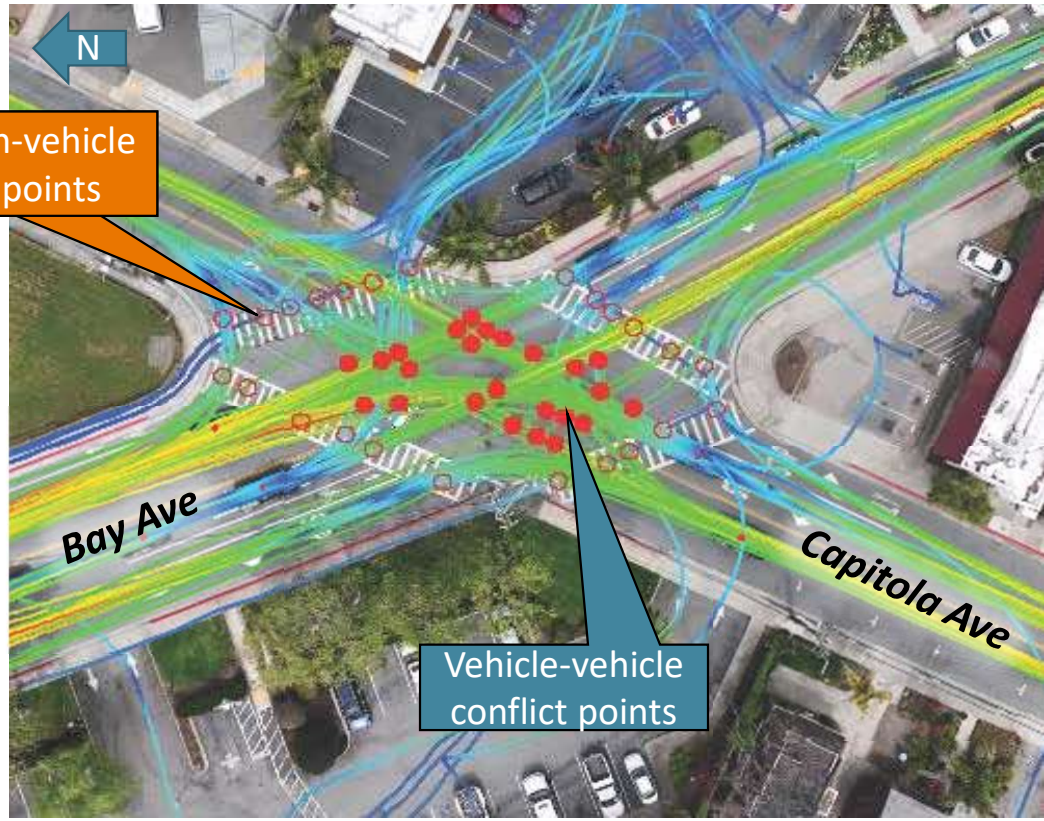
Multiple turn conflicts and limited visibility

Long pedestrian crossing distances

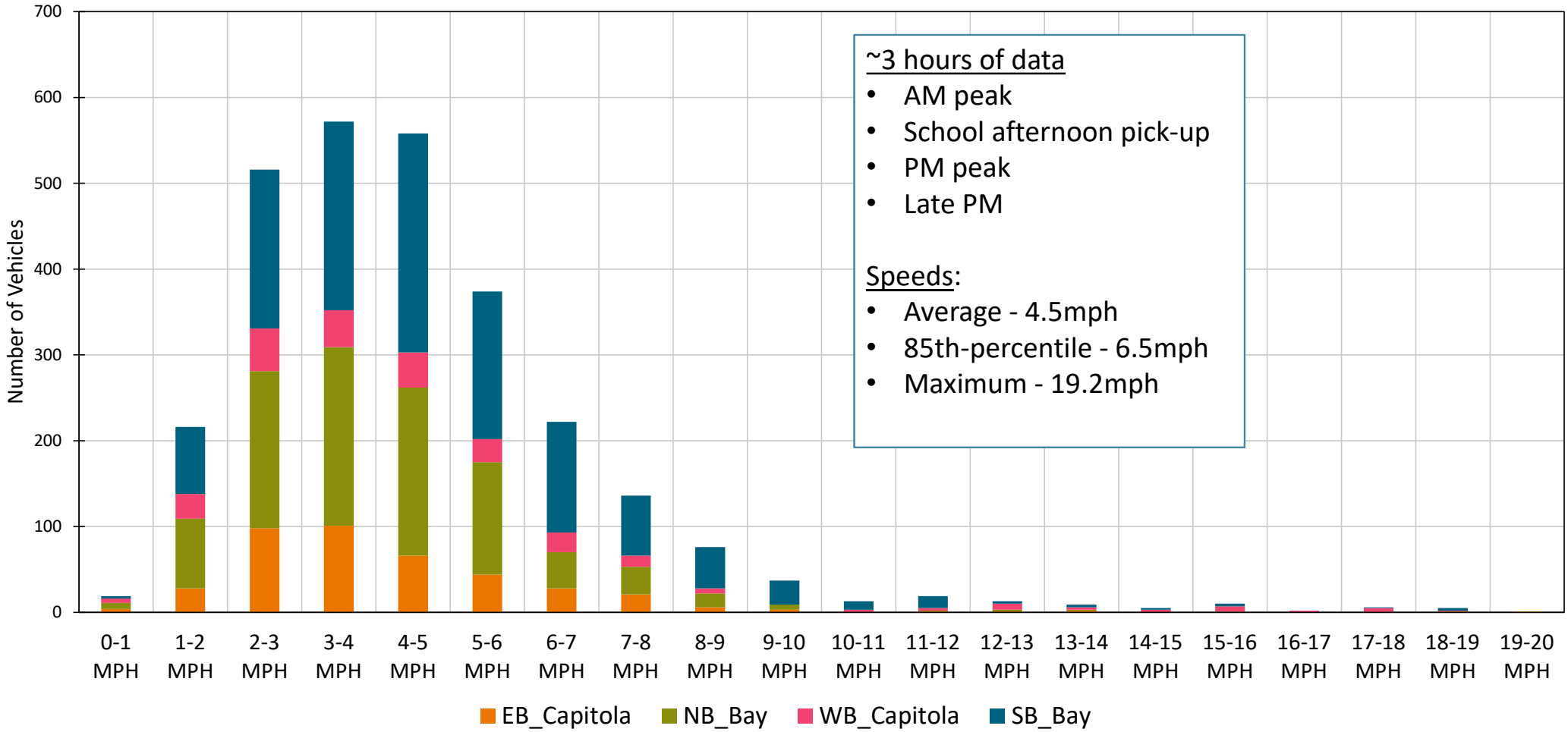


Existing Conditions – Near Miss Analysis





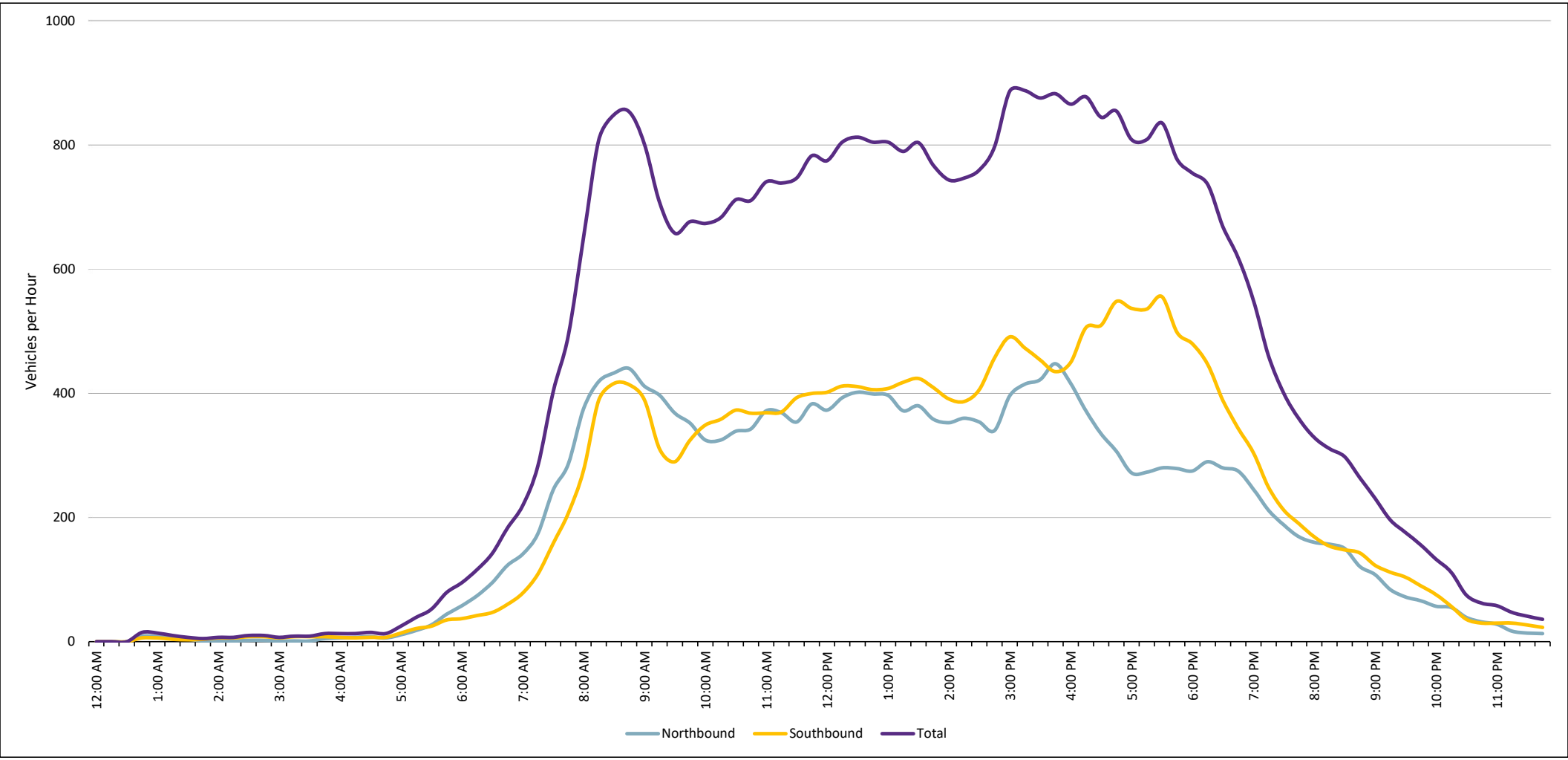
Existing Conditions – Stopping Analysis



~3 hours of data
- AM peak
- School afternoon pick-up
- PM peak
- Late PM

Speeds:
- Average - 4.5mph
- 85th-percentile - 6.5mph
- Maximum - 19.2mph

Bay Ave Existing Count Data (2024)

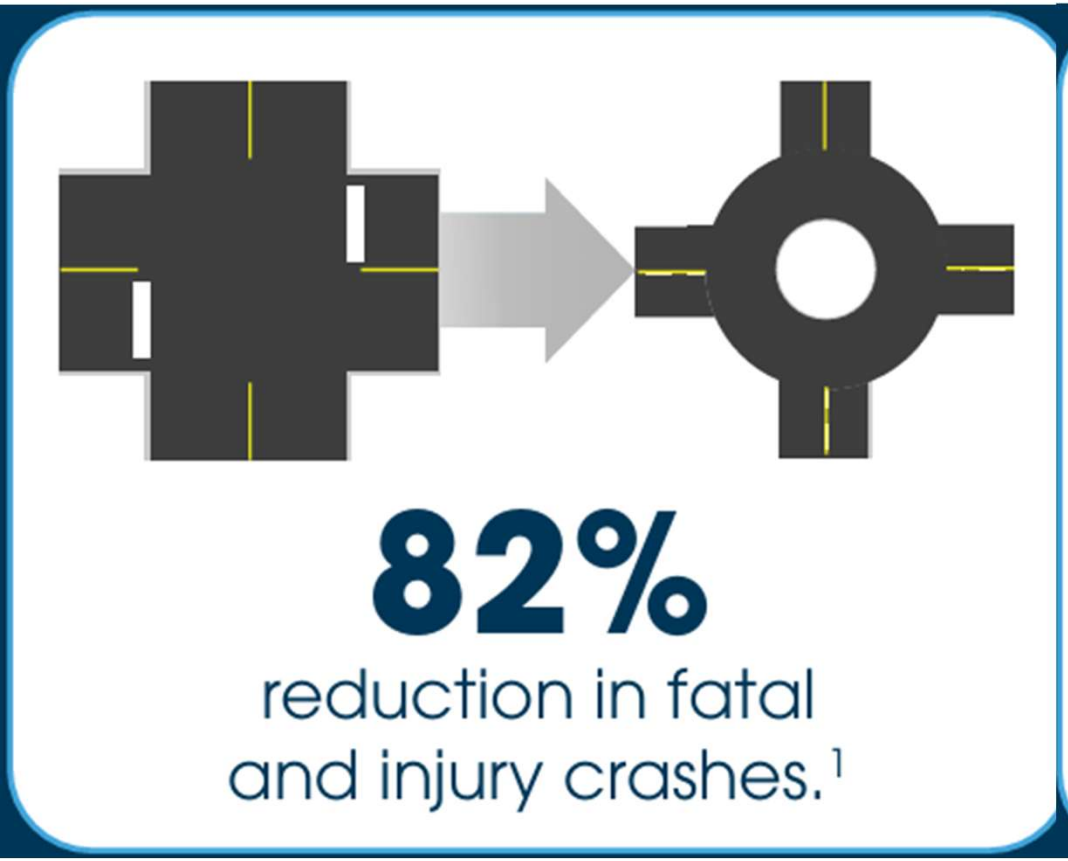


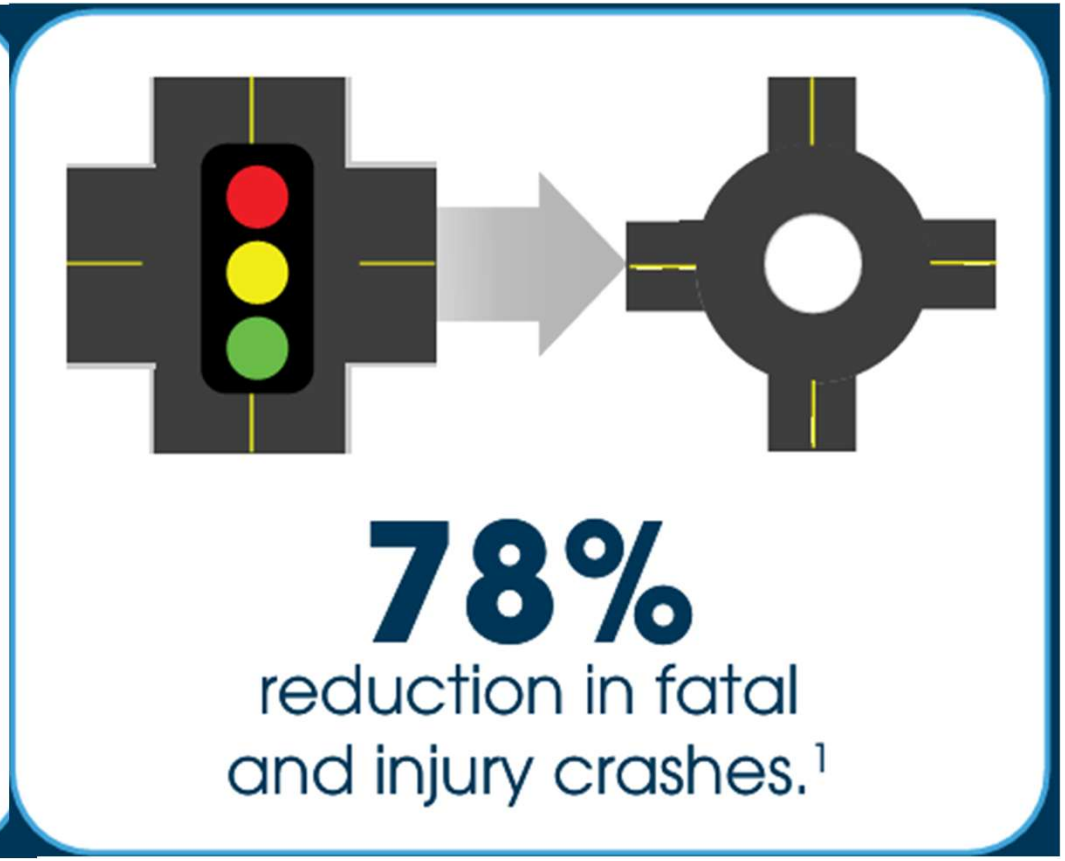
3. Corridor Alternatives & Multimodal Improvements

Corridor Alternatives

1 Stop Control	2 Roundabout Control	3 Signal Control

Roundabout Safety Improvement Factors





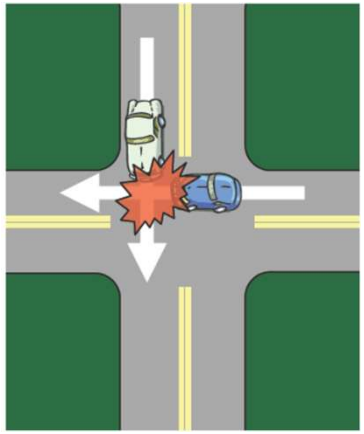
Source: FHWA Office of Traffic Safety Proven Countermeasures. *Roundabouts | FHWA*

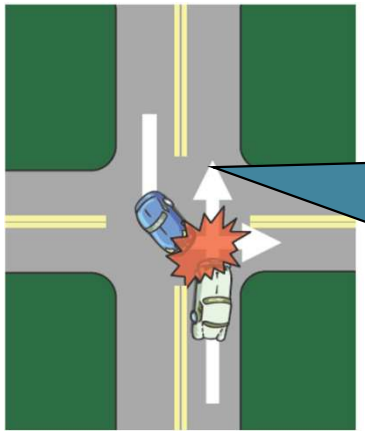
Collision Severity by Speed

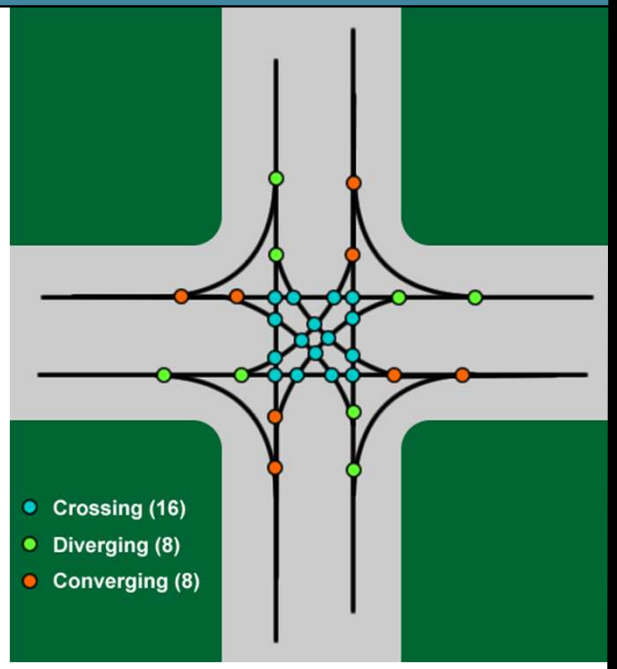
Roundabout Conflicts vs 4-leg Intersection

Typical 4-leg Intersection

HIGH SPEED



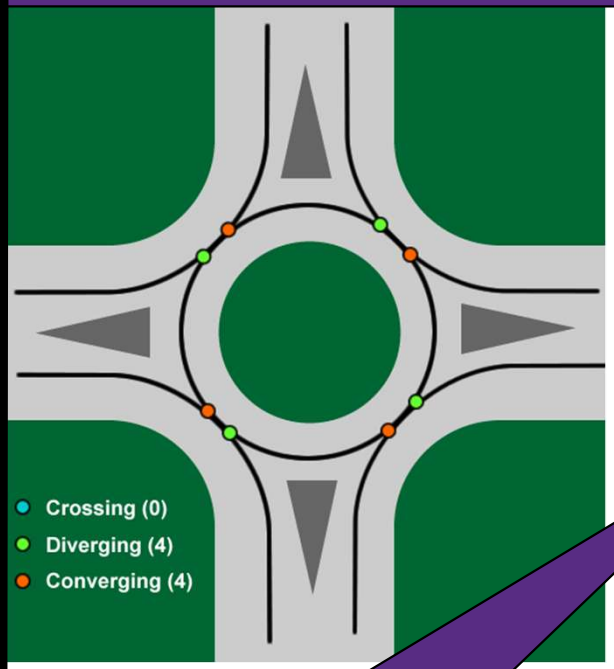


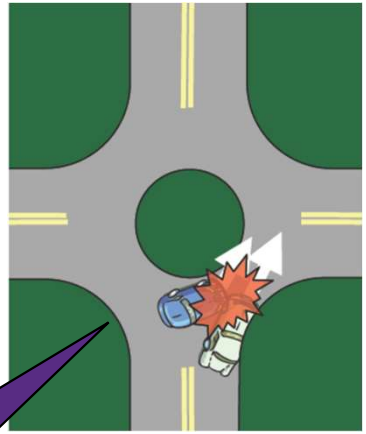


32 Conflict Points

Potential collisions are high severity broadside or head-on impacts

Roundabout





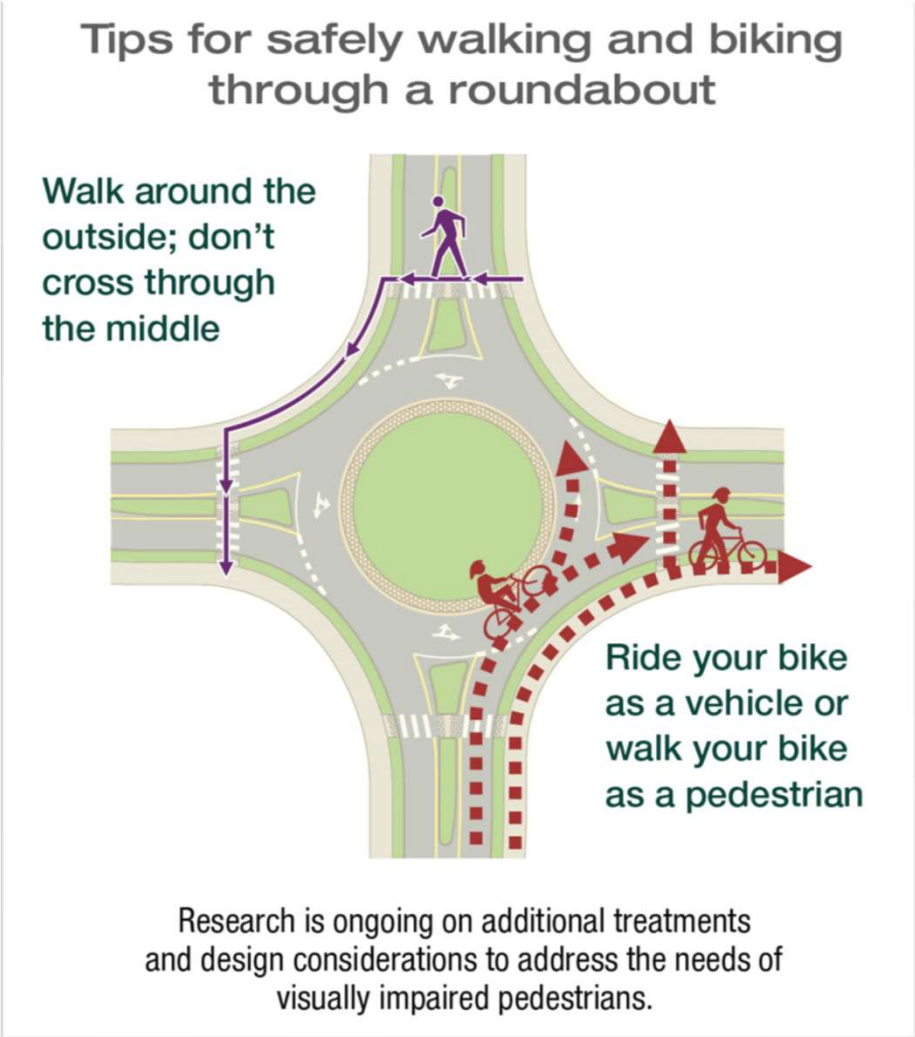
LOW SPEED

8 Conflict Points

Potential collisions are low severity sideswipe or rear-end impacts

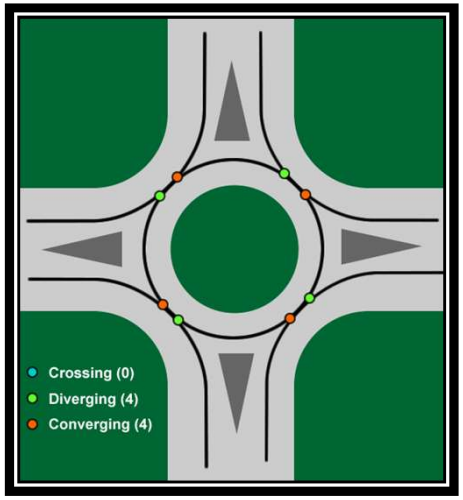
Source: FHWA

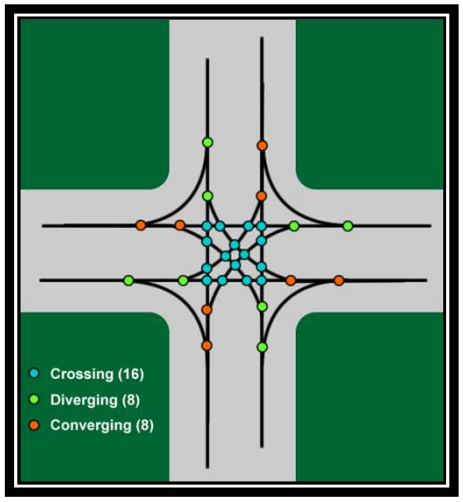
Pedestrian and Bicycle Circulation



Roundabouts are Good for All Drivers

- Lower Speeds through roundabout ~ 15 mph
- Forgiving, mistakes not lethal
- Longer decision-making time
- No demand to accurately judge closing speeds of fast traffic
- Low energy crashes
- No wide visual scans
- Simple decision-making

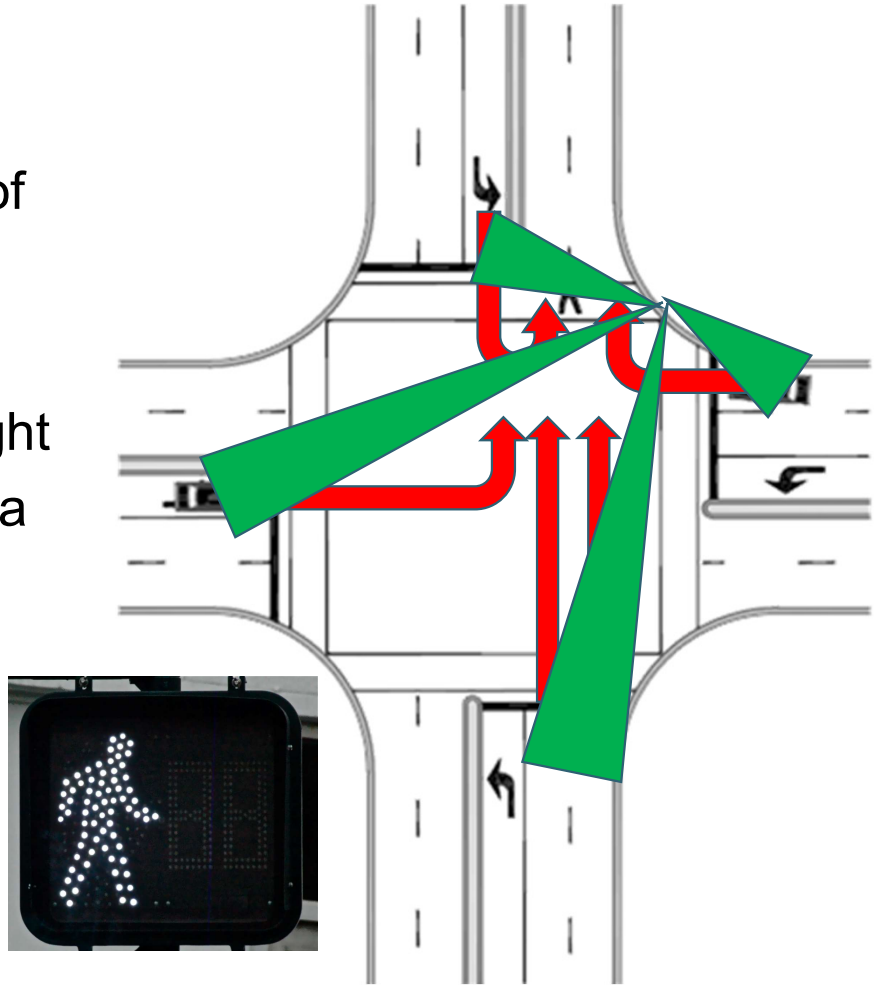




Source: Mark Doctor, P.E., FHWA Resource Center

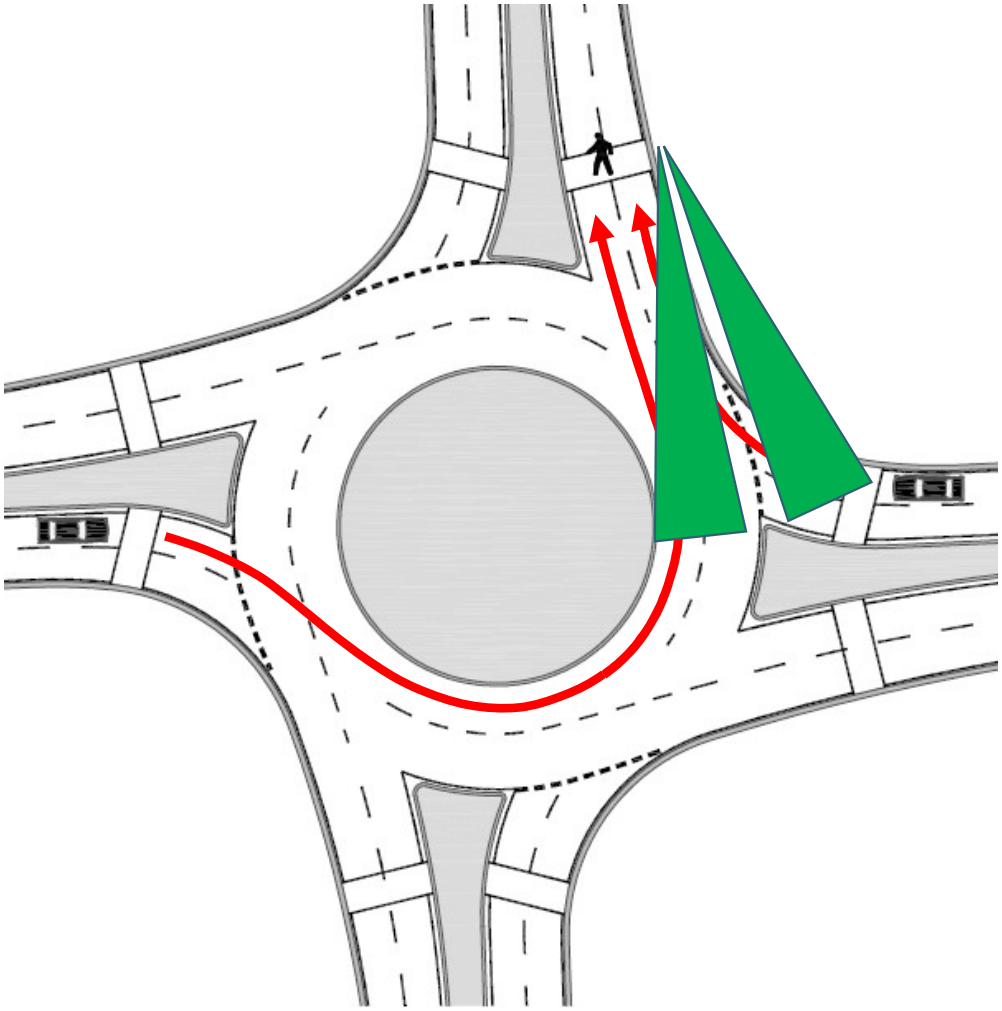
Safety vs. Security at Stop Intersections

- Pedestrian experiences an exaggerated level of security because the STOP signs tell them it's safe to cross, if cars do stop
- Most crashes occur when drivers turn left or right across the crosswalk while the pedestrian has a walk indication



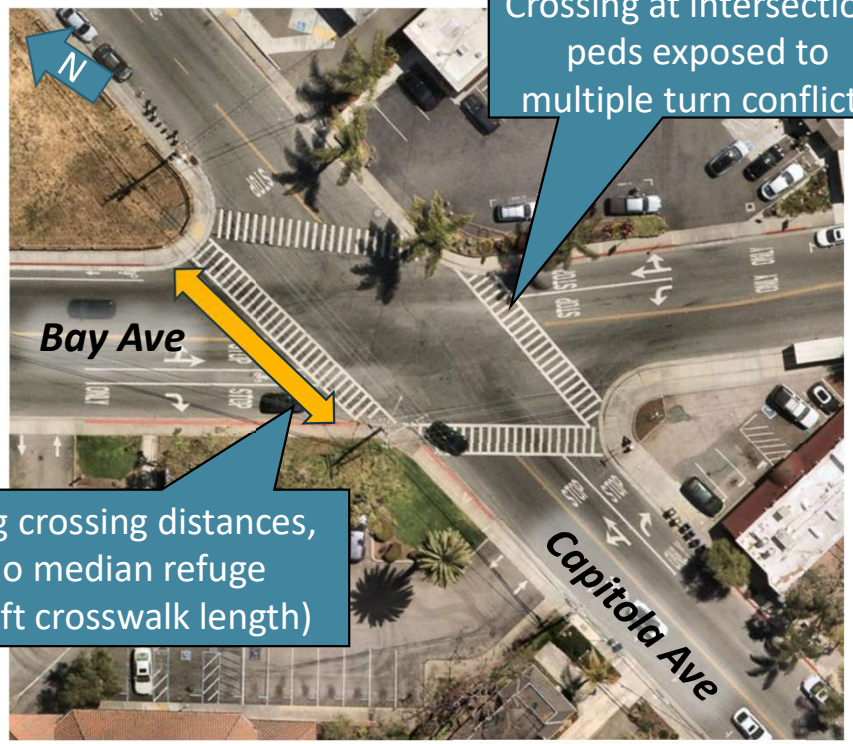
Safety vs. Security at Roundabouts

- Pedestrian feeling of security more closely matches their actual level of safety



Pedestrian Safety Benefits at Bay/Cap Ave

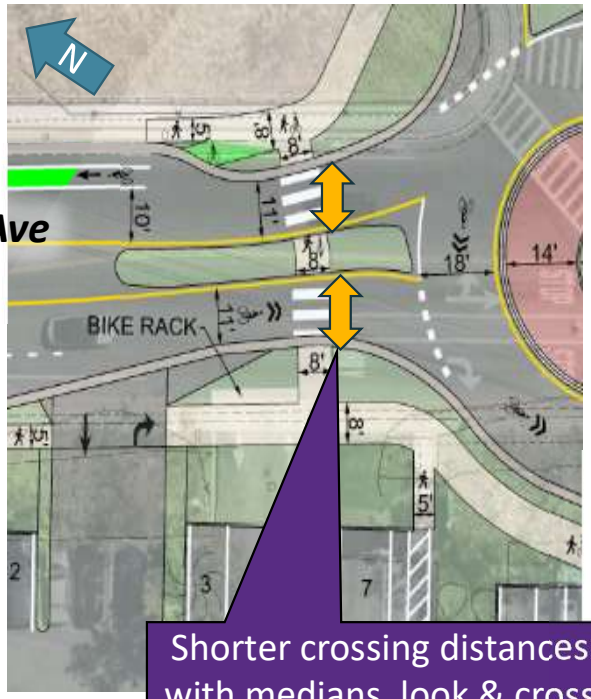
Existing 4-leg Intersection



Crossing at intersection, peds exposed to multiple turn conflicts

Long crossing distances, no median refuge (88-ft crosswalk length)

Roundabout



Shorter crossing distances with medians, look & cross one lane at a time (14-ft crosswalk length)

Roundabouts vs All-Way Stops

Roundabouts

Key Benefits

Safer
Up to 46% reduction in severe crashes*
Fewer conflict points

Better Flow
Less stopping means fewer delays and more consistent traffic movement.

Safer for people walking & biking
Shorter crossing distances, one direction of traffic to look for, and slower speeds.

Cleaner & Quieter
Less Idling and emissions from vehicles stopping and accelerating.

By The Numbers

	Roundabouts	All-Way Stops
Conflict Points (Potential crash points)	8	32
Severe Crash Reduction	Up to 46%	-
Typical Operating Speeds	15 mph	0-15 mph
Pedestrian Crossing Distance	14ft	65-88ft

All-Way Stops

Things to Consider

More Conflicts
More conflict points mean a higher chance of crashes.

Stops & Delays
All vehicles must come to a complete stop increasing delays.

Longer Crossings
Longer crossing distances and multiple directions of traffic to watch for.

More Emissions
More stopping and accelerating means more emissions.

*Source: FHWA CMF Clearinghouse

Alternatives Summary – Safety

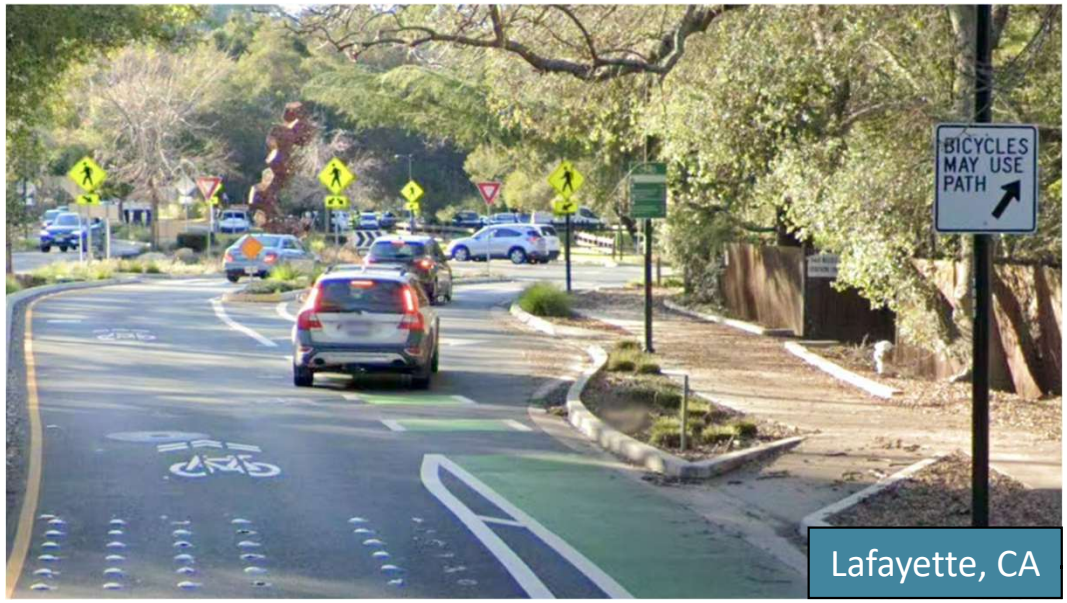
Criteria	Alternative 1 Stop	Alternative 2 Roundabout
Collision Severity Potential	Moderate	Low
Bicycle Access Improvement	Moderate	Good
Pedestrian Access Improvement	Moderate	Good

Alternatives Summary – Operations

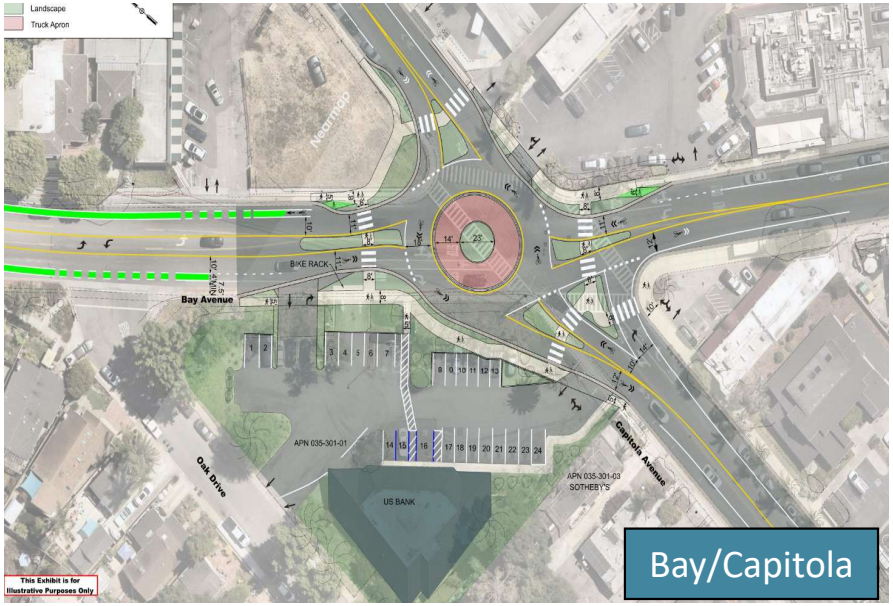
Criteria	Alternative 1 Stop	Alternative 2 Roundabout
Vehicle Delay	High	Low
Transit & Emergency Vehicle Access Improvement	Poor	Moderate
Driver Adaptation Time (Learning Curve)	Low	High

Roundabout Control

- Reduced conflict points & collision severity
- Separated ped & bike facilities improve safety
- Improved operations & capacity
- Tradeoff - higher capital costs & right-of-way impacts



Lafayette, CA

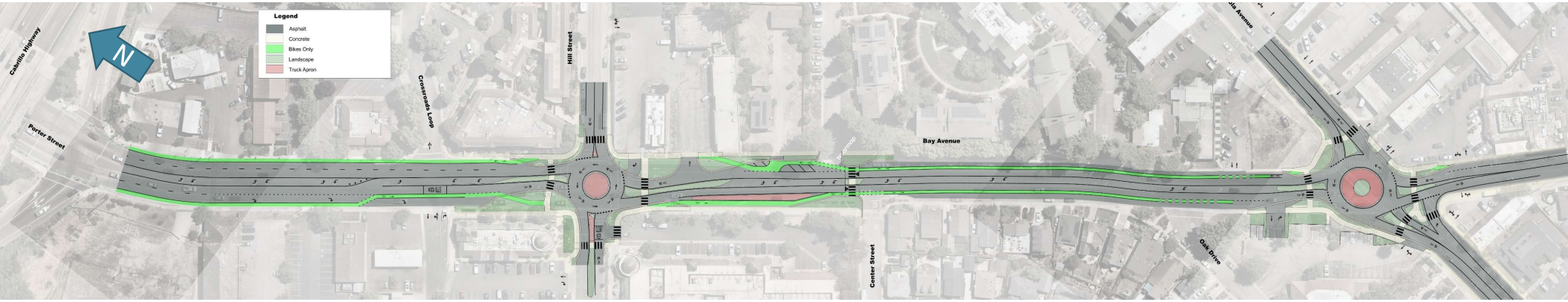


Bay/Capitola

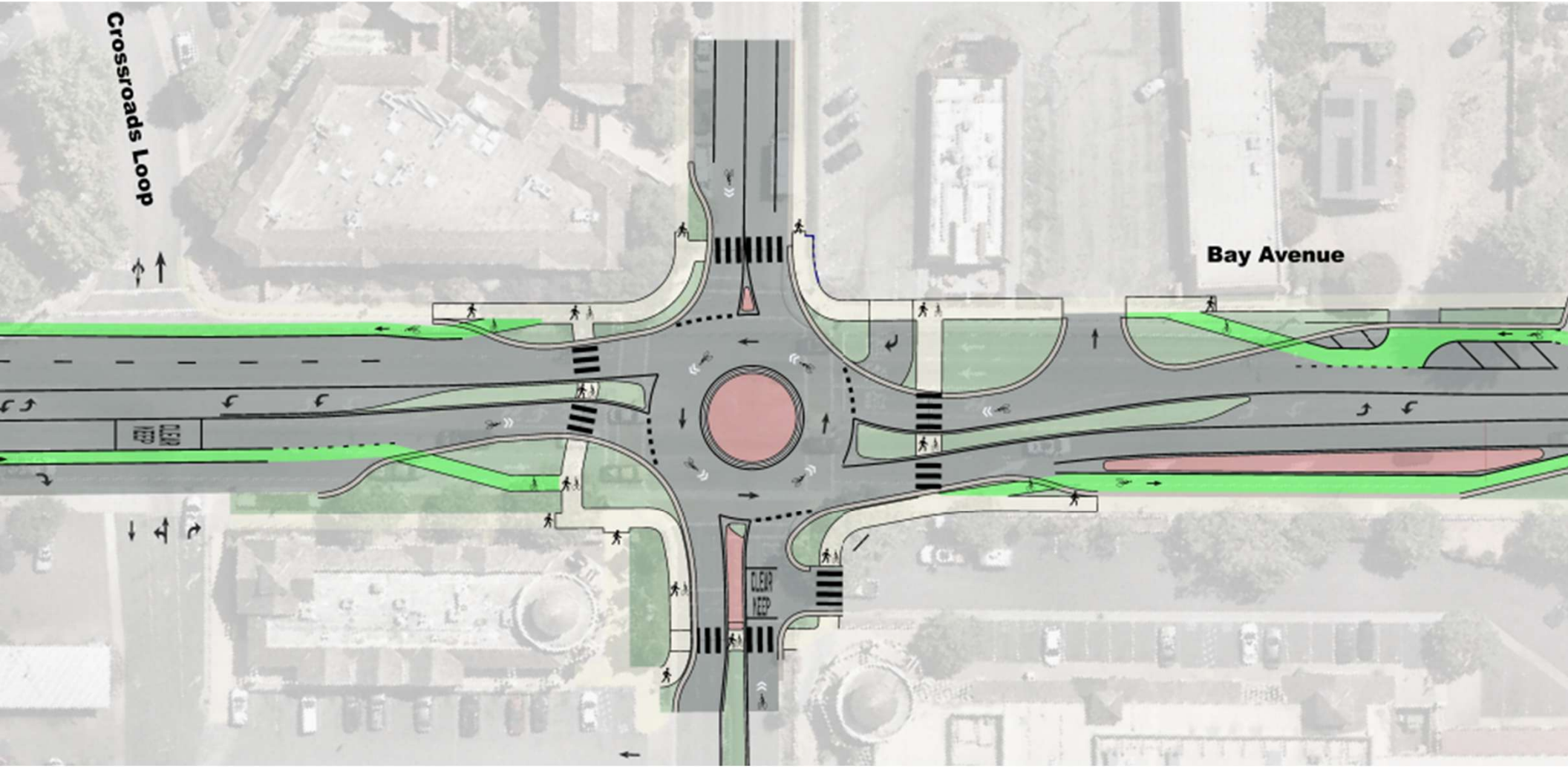
4. Recommended Improvements

- Based on prior Council direction and corridor study findings
- Refined through technical analysis and community engagement
- Focused on long-term safety, operations, and multimodal access

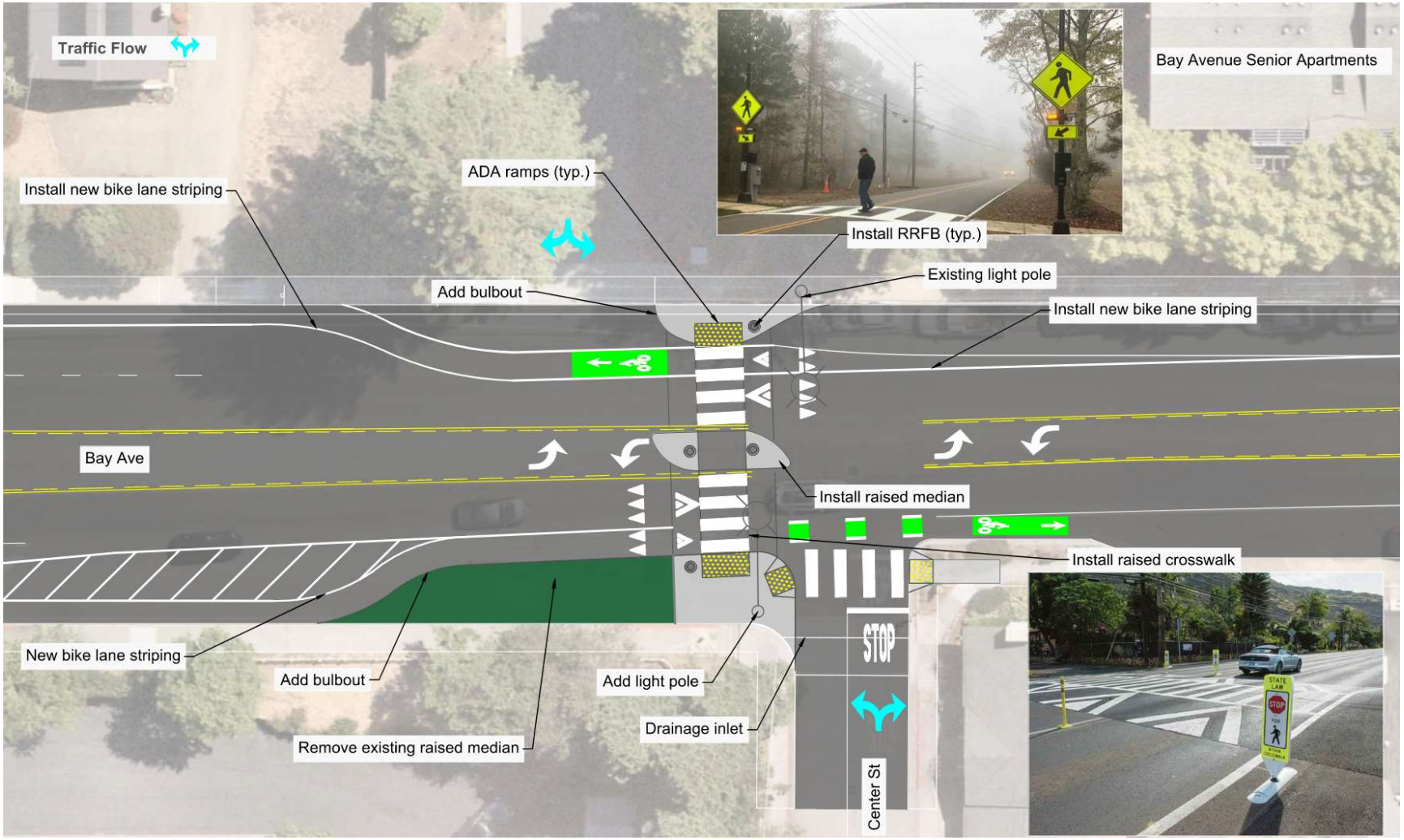
Bay Ave Corridor Concept



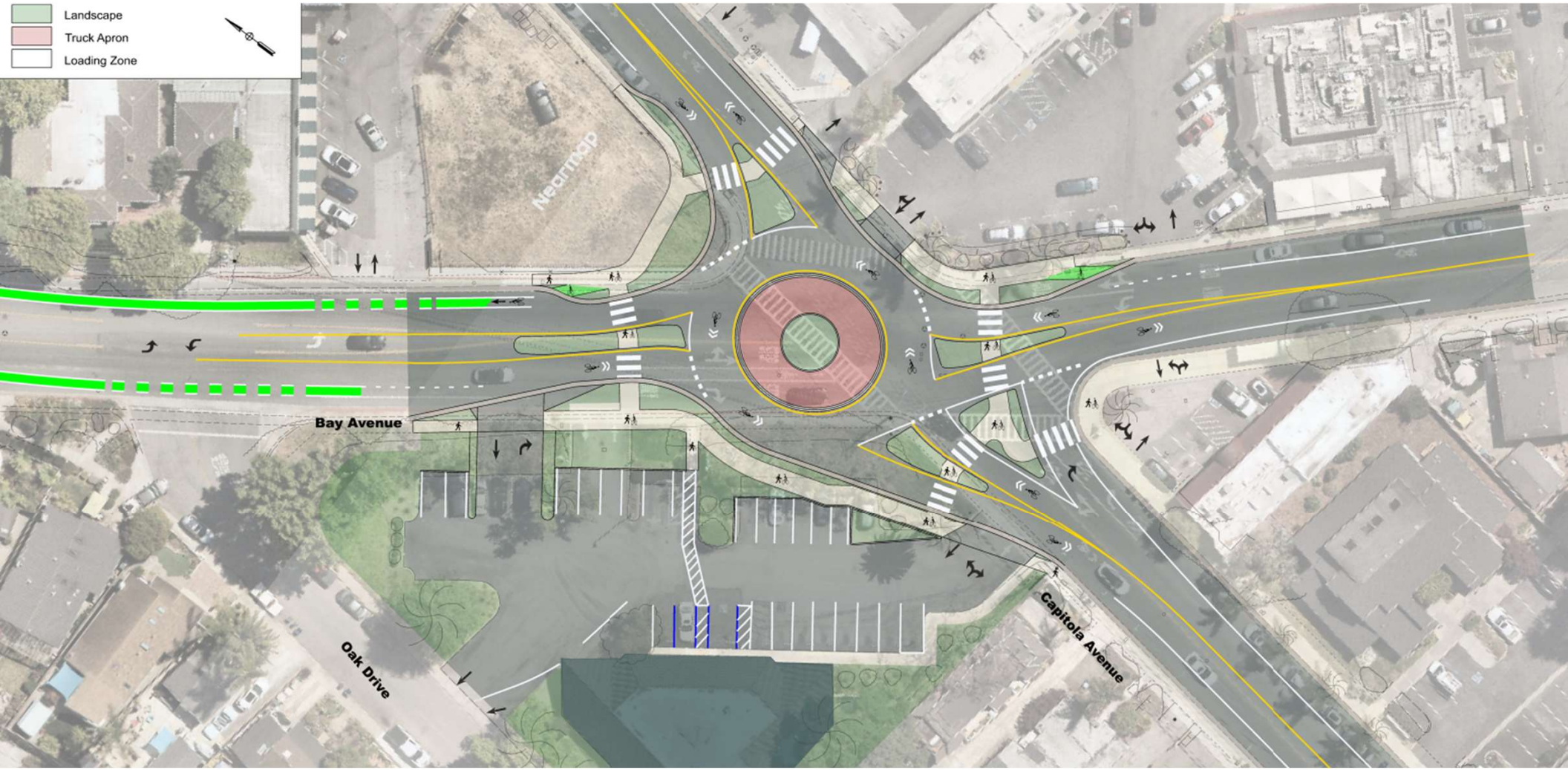
Bay Ave and Hill St Roundabout Concept



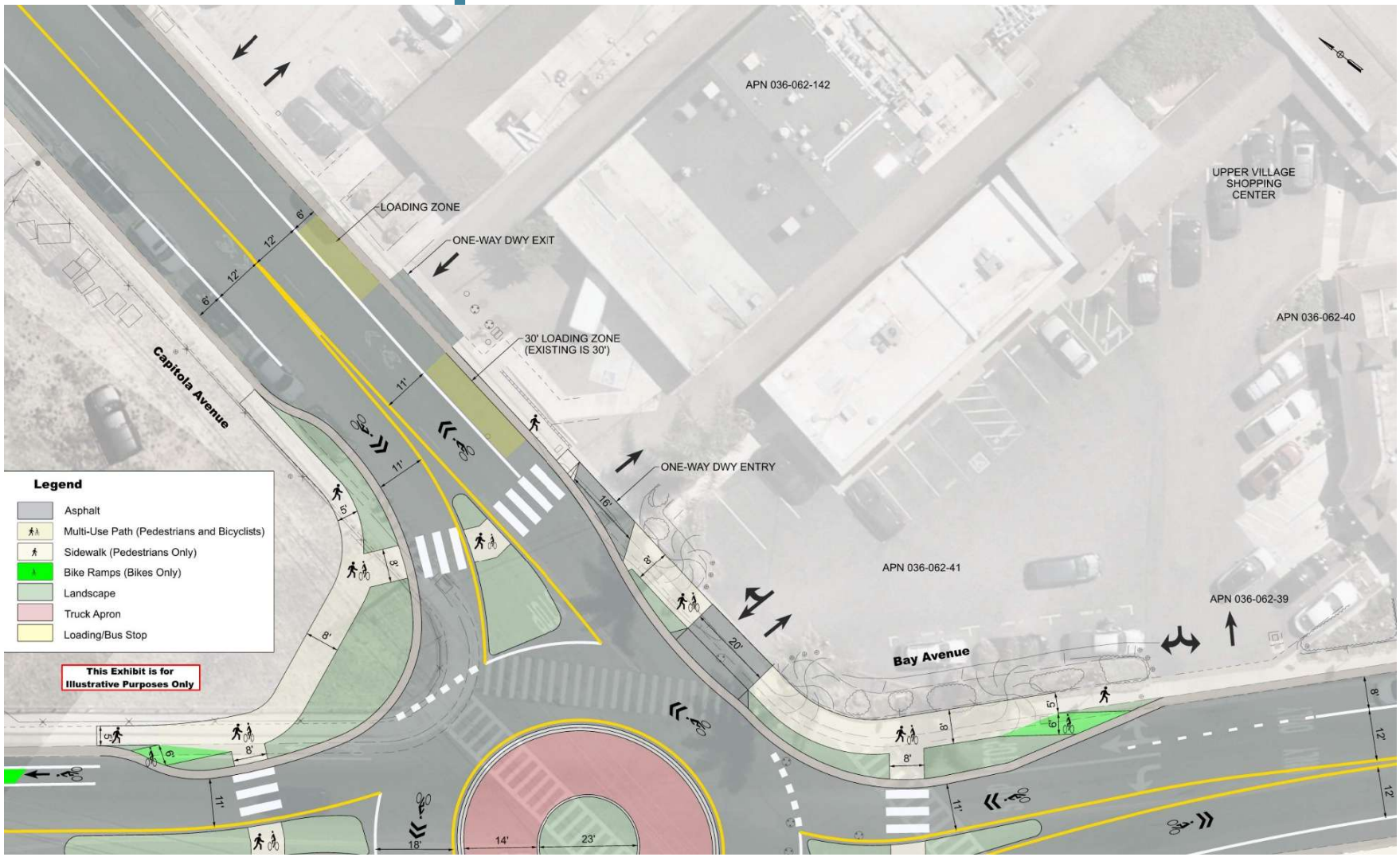
Center St Midblock Pedestrian Crossing Concept



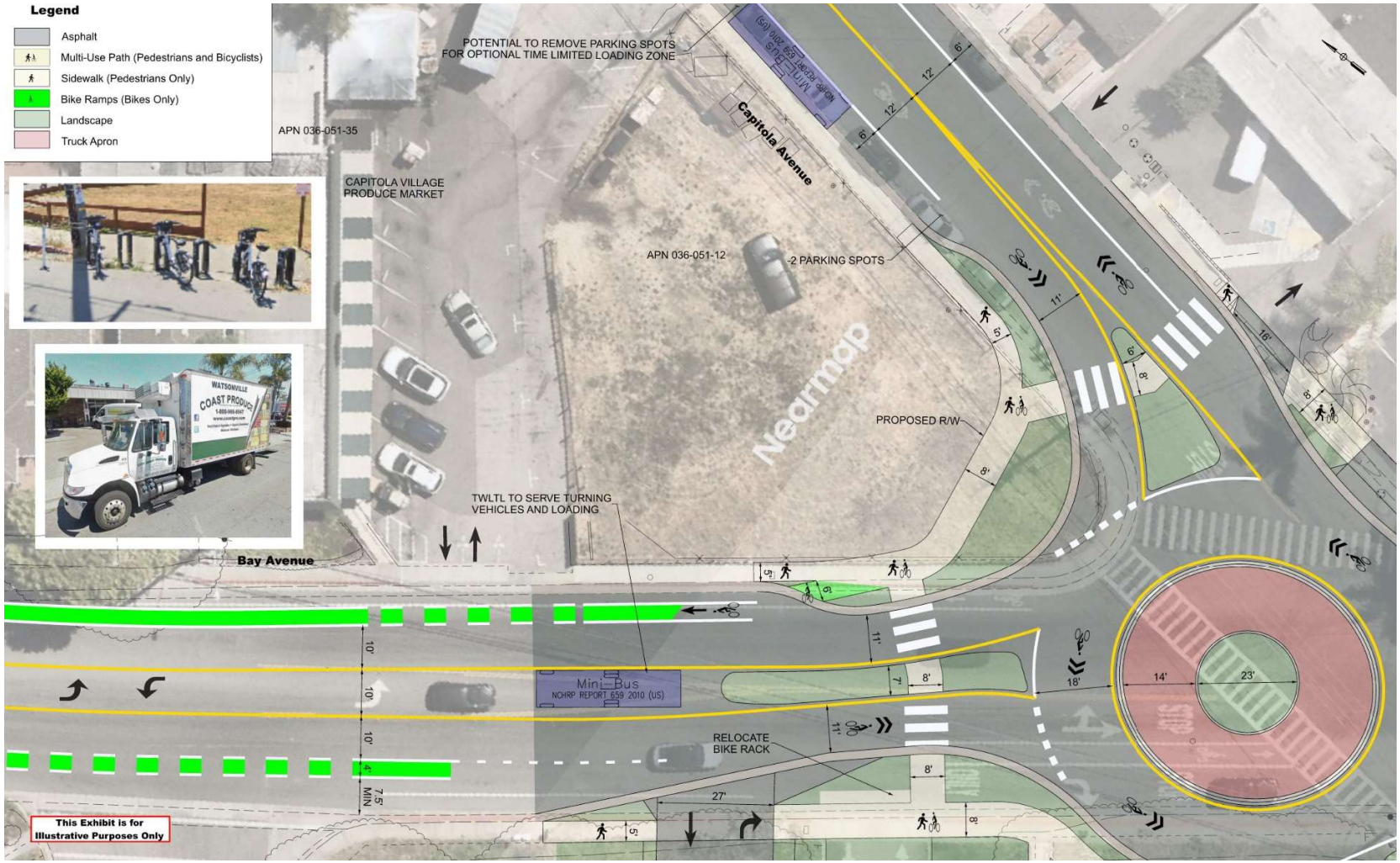
Bay Ave and Capitola Ave Roundabout Concept



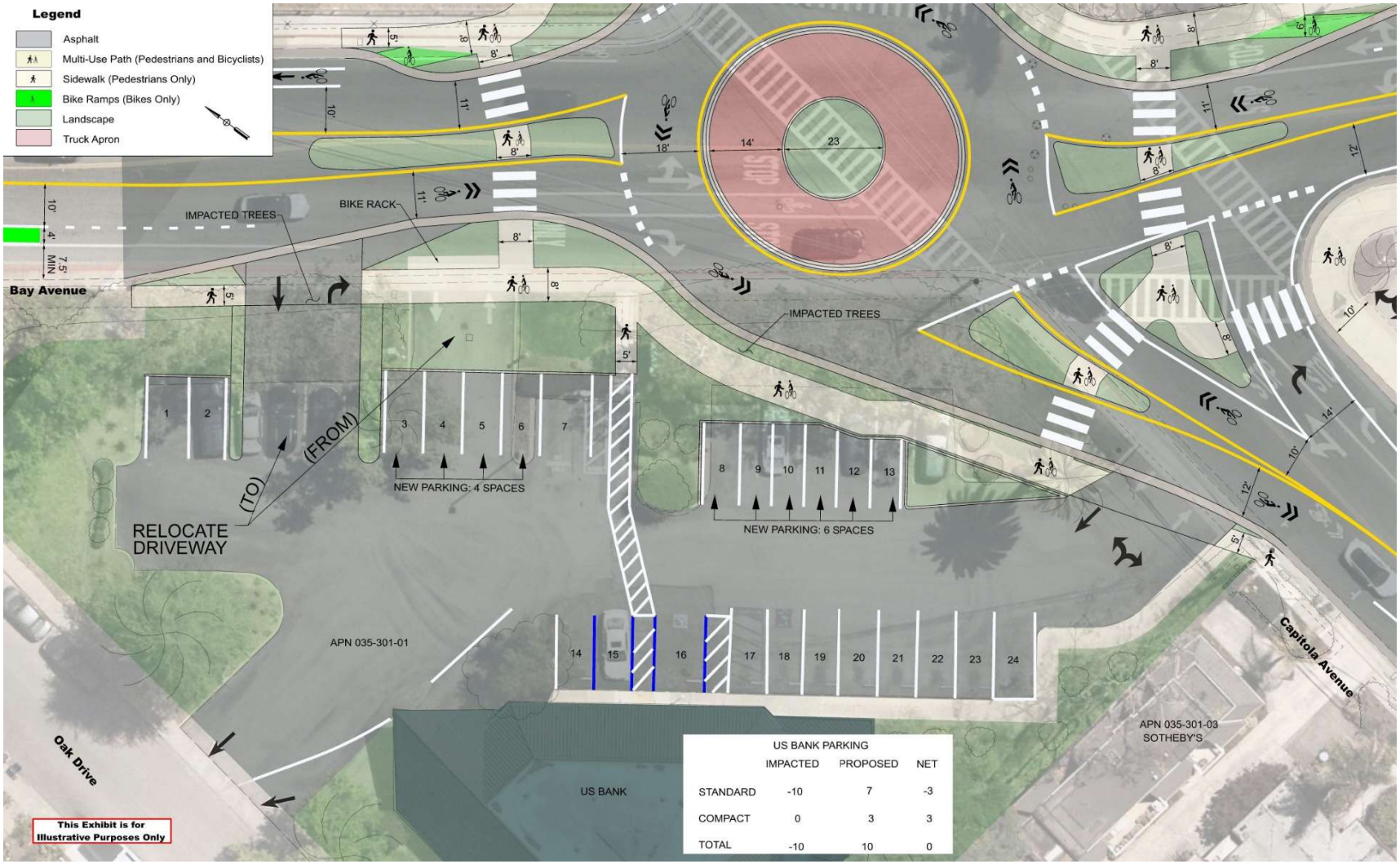
Bay Ave and Capitola Ave: SE Corner



Bay Ave and Capitola Ave: NE Corner



Bay Ave and Capitola Ave: NW Corner



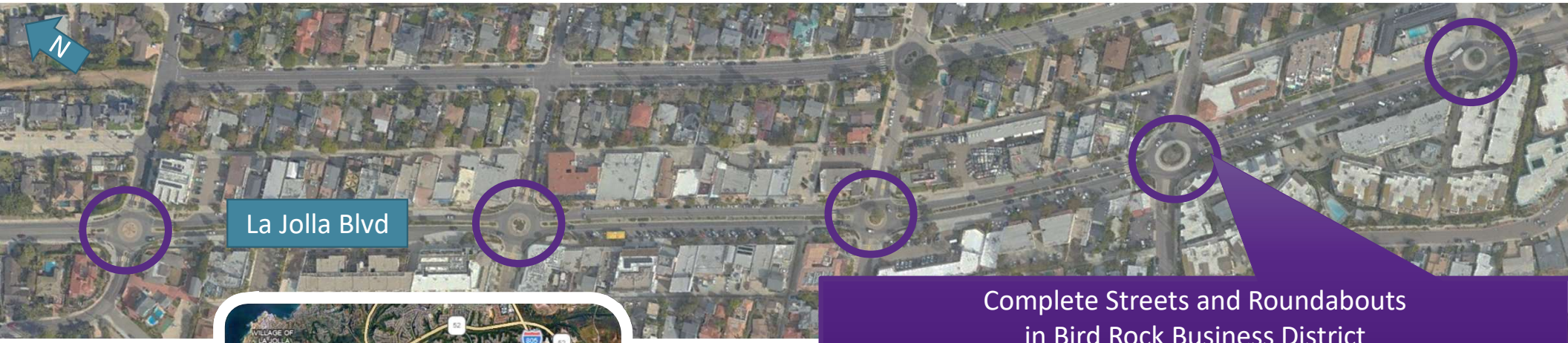
US BANK PARKING

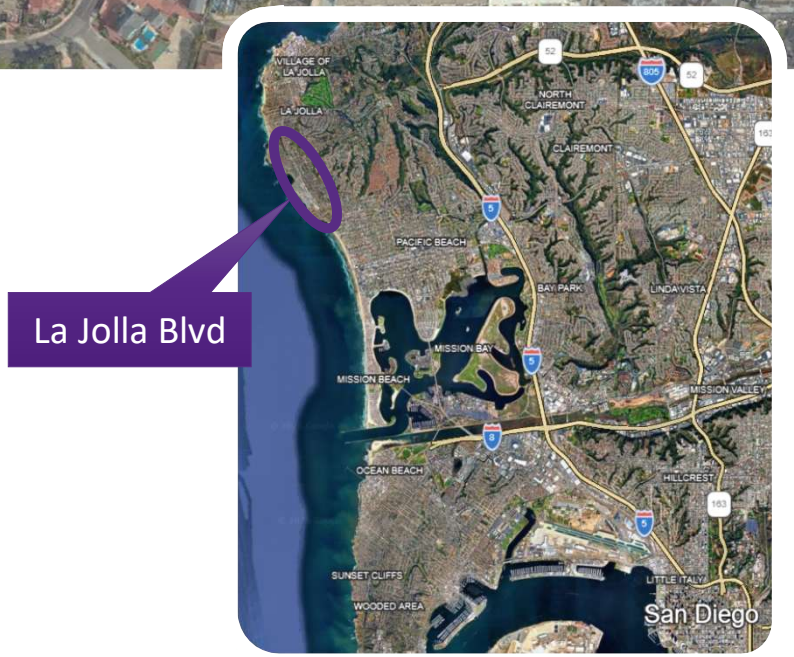
	IMPACTED	PROPOSED	NET
STANDARD	-10	7	-3
COMPACT	0	3	3
TOTAL	-10	10	0

5. Example Projects

- La Jolla Boulevard – San Diego, CA
- City of Marina Roundabouts - Marina, CA
- Grand Avenue – Escondido, CA

La Jolla Blvd – San Diego, CA

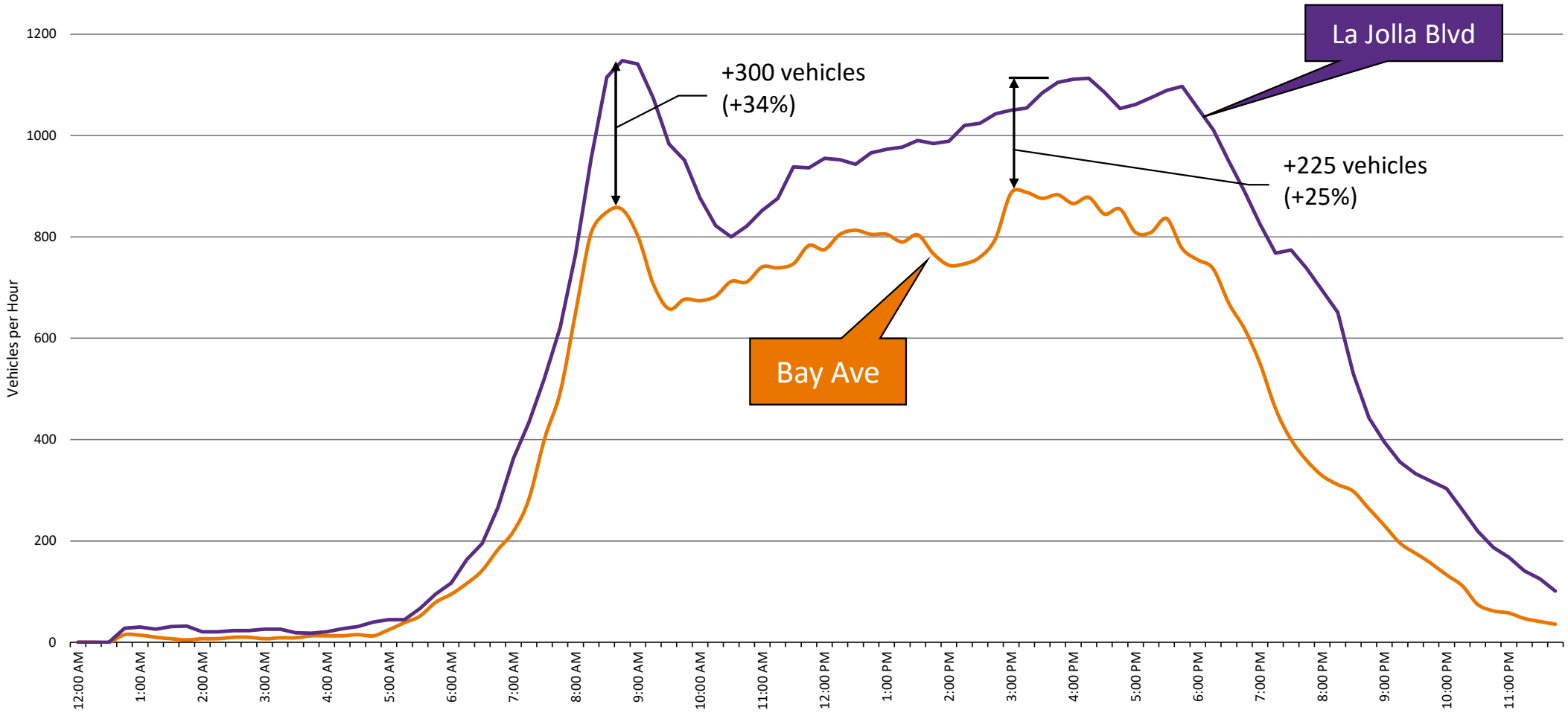




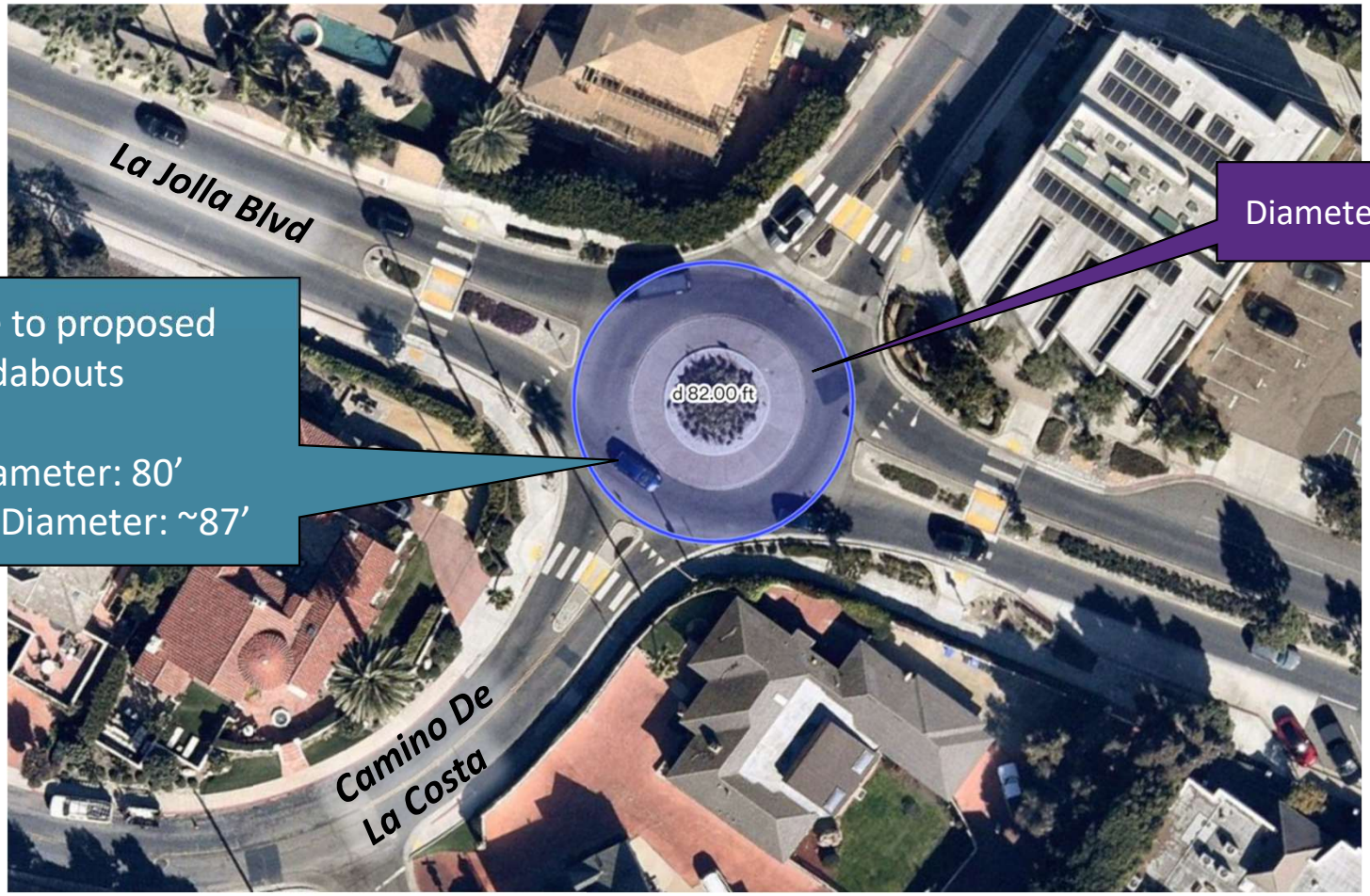
Complete Streets and Roundabouts in Bird Rock Business District

La Jolla Blvd – San Diego, CA

Volume Comparison



La Jolla Blvd – San Diego, CA

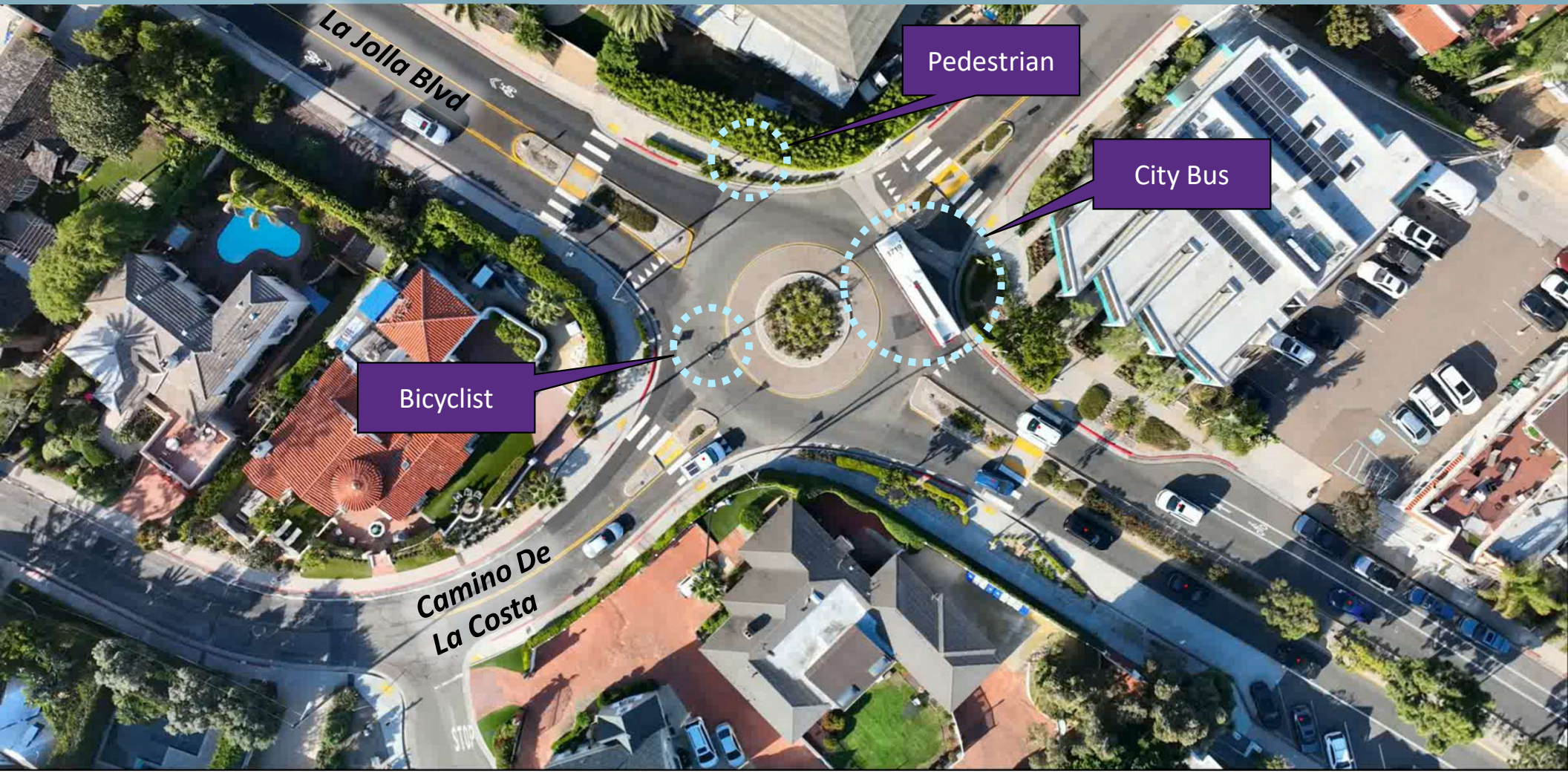


Diameter: 82’

Similar size to proposed roundabouts

Hill St Diameter: 80’
Capitola Ave Diameter: ~87’

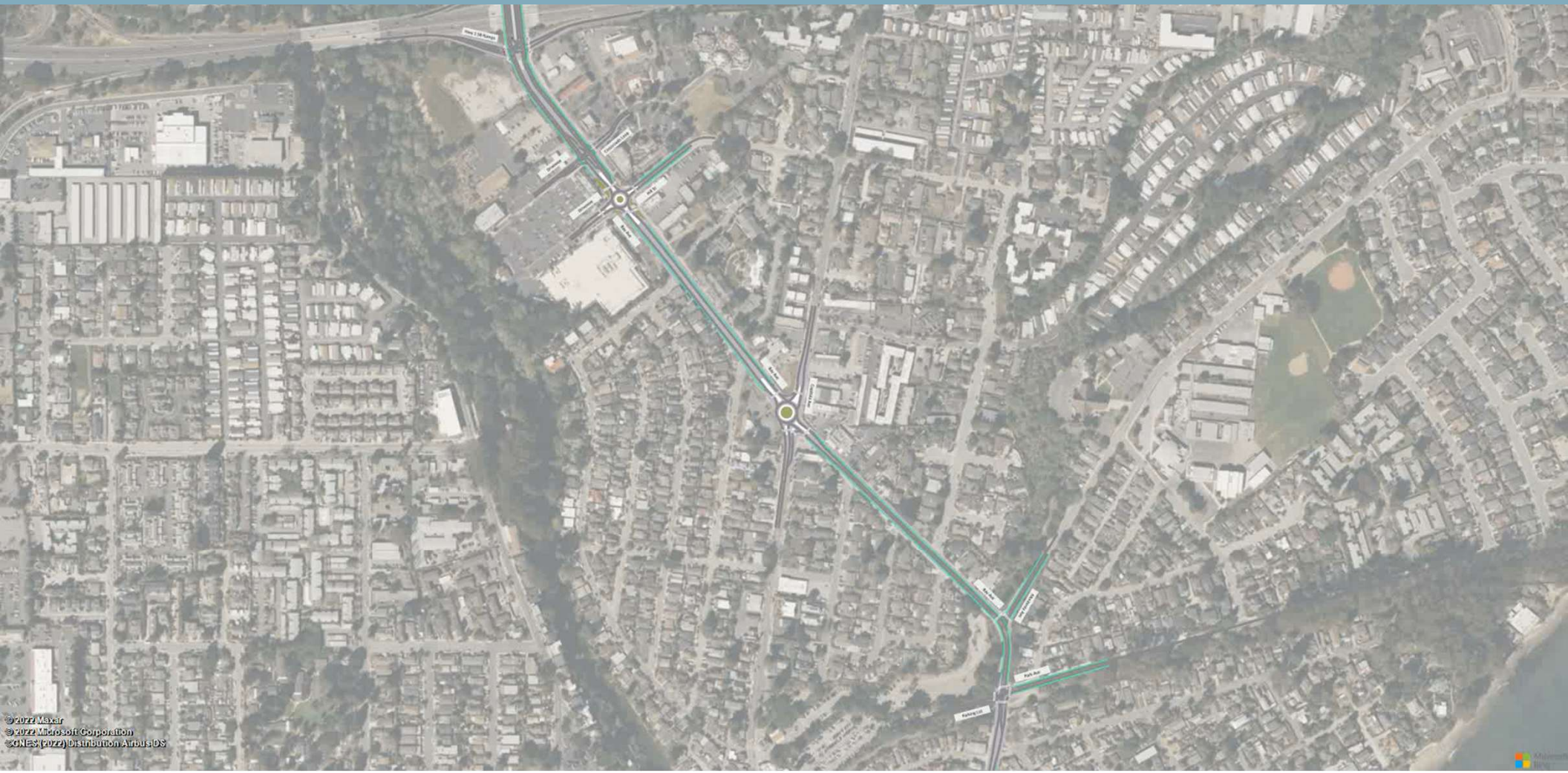
Multi-Modal Access



Multi-Modal Access

Multi-Modal Access

Bay Ave Simulation



City of Marina Roundabouts

Accidents have dropped dramatically. Serious accidents are about zero…they have done wonderful. We love those two roundabouts. They have totally changed the dynamics of that road.

— **Layne Long**, City of Marina, City Manager

See QR code for the video of Layne's interview

Grand Ave – Escondido, CA

The improvements to Grand Avenue have delivered clear and meaningful economic benefits for the City of Escondido and the businesses along the corridor. Since completion, we have seen strong ... ales tax pe... applic... trans... d pedes... ded dwell time, and created a sense of place that supports local merchants and encourages new investment.

…safer, more attractive, and pedestrian-oriented destination has increased foot traffic, extended dwell time, and created a sense of place…

— **Jennifer Schoeneck**, City of Escondido, Director of Economic Development

Funding Resources

- Existing funding identified for early corridor work
  - $500,000 Regional Transportation Improvement Program
  - $250,000 Federal Highway Infrastructure funding
- Existing funds may support:
  - Design
  - Right-of-way activities
  - Grant match requirements
  - Phased construction
- Additional grant opportunities may be pursued
- Full corridor implementation requires additional funding

Rule 20A Coordination Opportunity

- Approximately $3 million in remaining Rule 20A PG&E credits
- Bay Avenue is City's last opportunity to utilize these credits
- Undergrounding could be coordinated with future roadway improvements
- Coordinated construction would:
  - reduce future roadway restoration costs
  - minimize repeat roadway disruption
  - streamline easement acquisition and utility coordination

Key Considerations

Potential Benefits

- Improved pedestrian and bicycle safety
- Reduced conflict points
- Better multimodal access and circulation
- PG&E coordination opportunity
- Future grant competitiveness

Key Tradeoffs

- Significant project cost and phased implementation needs
- Potential right-of-way impacts
- Construction disruption
- Regional congestion challenges remain
- Different community perspectives

7. Council Direction

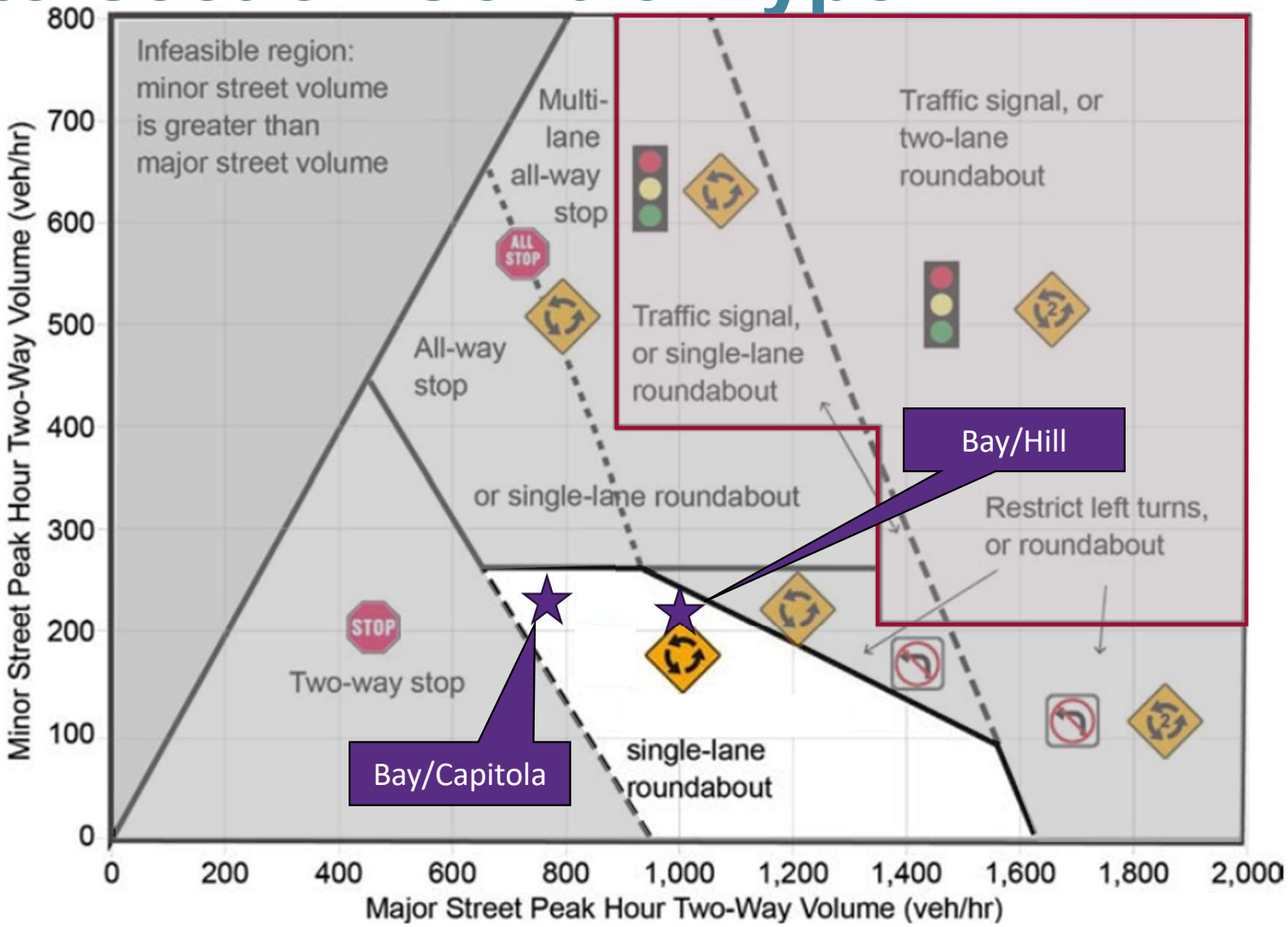
Council Options

1. Direct staff to proceed to final design and seek grant funding for entire corridor project
2. Identify key corridor element projects to prioritize
    1. Continue undergrounding project
    2. Pursue Center St. crosswalk
    3. Pursue one or both roundabouts
3. Direct staff to research feasibility of reallocating project funding to other roadway-related Council priorities

Questions & Discussion

Additional Slides

Choosing Intersection Control Type



Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: City Manager Department

Subject: Transition to By-District Elections

Recommended Action: Receive a presentation on the transition to by-district elections, receive community input, and provide direction to staff and the demographer regarding the composition of voting districts and number of districts.

Background: The City Council members are currently elected under an at-large election system, whereby Council Members are elected by voters of the entire City. On April 23, 2026, the City Council discussed a letter received on March 19, 2026, alleging a violation of the California Voting Rights Act (CVRA) and threatening litigation if the City declines to voluntarily change to a district-based election system for electing Council Members. While the City disputes the allegations in the letter, the Council gave direction to staff to proceed with agendizing the resolution of intent in order to take advantage of the safe harbor provisions of Elections Code Section 10010 and avoid costly litigation.

On April 30, 2026, Council adopted Resolution No. 4482 to declare the City's intent to transition to district-based elections and to take advantage of the safe harbor provisions of Elections Code Section 10010. With the Council's adoption of Resolution No. 4482 to transition to district-based elections on April 30, 2026, a prospective plaintiff may not commence an action within 90 days of the resolution of intention's passage.

Districting Process: As required by Elections Code Section 10010, the City will hold at least two public hearings before drafting potential maps of Council districts. Council will then hold an additional two or more public hearings to solicit public input regarding the content of the draft maps and the proposed sequence of elections. Then, an additional public hearing will be held before the approval of an ordinance implementing a Council election district map.

The May 14, 2026, meeting, which is not one of the hearings required by the Elections Code, is designed to provide information to the public and an overview of future meetings. This meeting will also be the public launch of the City's public mapping tool and interactive map review website, provided by the City's districting consultant (National Demographics Corporation, or NDC). The public mapping tool is intended to be used by the public throughout the entire districting process. The City's demographer will not present any draft maps until after at least two public hearings have been held.

On May 28, 2026, the City will hold the first required public hearing, at which the public is invited to provide input regarding the composition of the districts. Pursuant to Elections Code Section 10010, the public hearing must be scheduled to start at a time certain if it is consolidated with a regular or special meeting of the governing body that includes other substantive agenda items, to begin at a fixed time regardless of its order on the agenda, provided the City Council may "first conclude any item being discussed or acted upon, including any associated public comment, when that time occurs" – the public hearing is scheduled to begin at 6:15 PM.

Discussion: As a part of the transition process, the City needs to hold at least two public hearings over a period of no more than 30 days, at which the public is invited to provide input regarding the composition of the districts. Those meetings are scheduled for May 28, 2026, and June 11, 2026. No official maps can be drawn before completion of these two public meetings, though members of the public may draw and submit their own. Once the initial two meetings are complete, the demographer can begin to officially draw maps that will be considered in the districting process. After all draft maps are drawn, the City must publish and make available for release at least one draft map and, if the City Council will be elected in

their districts at different times to provide for staggered terms of office, the potential sequence of the elections.

The City would then hold at least two additional hearings over a period of no more than 45 days, at which the public is invited to provide input regarding the content of the draft maps and the proposed sequence of elections. The first version of a draft map must be published at least 7 days before consideration at a hearing. If a draft map is revised at or following a hearing, it must be published and made available to the public for at least seven days before being adopted.

Number of Districts: California Government Code Section 34886 enables cities to change to by-district elections by ordinance:

"Notwithstanding Section 34871 or any other law, the legislative body of a city may adopt an ordinance that requires the members of the legislative body to be elected by district or by district with an elective mayor, as described in subdivisions (a) and (c) of Section 34871, without being required to submit the ordinance to the voters for approval. An ordinance adopted pursuant to this section shall comply with the requirements and criteria of Section 21601 or 21621 of the Elections Code, as applicable, and include a declaration that the change in the method of electing members of the legislative body is being made in furtherance of the purposes of the California Voting Rights Act of 2001 (Chapter 1.5 (commencing with Section 14025) of Division 14 of the Elections Code)."

As noted, part of this process is the decision to change to four districts with an elective mayor, or to five districts with a Council-selected rotating mayor. On May 14, 2026, NDC will provide an overview of the benefits and challenges to each scenario.

While not required, staff recommends the Council provide direction on its preference for four districts with a citywide-elected Mayor, or for five districts with a rotating Mayor, no later than the end of the second public hearing (June 11, 2026). Giving such direction early on allows residents to focus on the advantages and disadvantages of specific draft maps at the later hearings. The City's consultant (NDC) reports that in their experience, when both four- and five-district draft maps are up for discussion, resident feedback tends to focus on the choice of four or five districts and little feedback is provided regarding the specific maps.

Role of Mayor: Capitola's Municipal Code (CMC) currently outlines the role of a City Council Member and Mayor. Under CMC 2.04.150, the City Council selects a Mayor and Vice Mayor each year, who presides over City Council meetings. Under California Government Code, the Mayor may call Special Meetings, sign official documents, among other duties. If the Council wishes to further clarify the role of the Mayor, independent of the decision to have an at-large or appointed Mayor, staff recommends adopting an ordinance amending CMC Chapter 2.04 following adoption of the City's election districts.

Public Outreach: The transition to districts requires significant public outreach, and staff has already initiated efforts to make sure that the public is informed throughout the process.

- Staff created a dedicated webpage for district elections. The website is updated with information, documents (like staff reports/presentations from Council meetings), and a section with meeting video footage and a brief summary of action taken: https://www.cityofcapitola.gov/1001/District-Based-Elections
    - A subpage is available for access to the public mapping tool provided by NDC, including access to the printable PDF map for public use.
    - The City's entire website is translatable into multiple languages, ensuring accessibility for non-English speaking residents.
- Staff developed two frequently asked questions (FAQ) documents: one for general district questions (Attachment 1), and one specifically tailored to the discussion about number of districts and the differences between an at-large mayor and rotating mayor (Attachment 2). The FAQ sheet tailored to the number of districts will be updated following the May 14th Council meeting, to incorporate questions/comments that arise from that meeting. Both FAQ sheets will be uploaded to the website the week of May 11th in English and Spanish.

- Staff created a dedicated email address where members of the public can submit questions, comments, or send maps: districts@cityofcapitola.gov
- Staff created a web form where members of the public can submit questions about the transition to districts. A link to the web form is available on the City's webpage, linked above. The questions will be regularly summarized and answered in an updated FAQ document, uploaded to the webpage periodically.
- Staff is preparing to send out the first of two mailers to all residences in Capitola. The mailers will include information about upcoming meeting dates and how to participate in both English and Spanish. The second mailer will be sent out after the publication of the first round of maps.

Fiscal Impact: There is no fiscal impact associated with the current action. The City Council previously allocated a total of $45,000 for this project, including consultant costs and outreach. All activities to date have fallen within this allocated amount.

Attachments:

1. FAQ Sheet –General Districting Process
2. FAQ Sheet – Differences Between an At-Large Mayor and Rotating Mayor

Alignment with 2025-2029 Strategic Plan Priority: Accountable Government

Report Prepared By: Julia Gautho, City Clerk

Reviewed By: Marc Tran, City Attorney

Approved By: Jamie Goldstein, City Manager

FREQUENTLY ASKED QUESTIONS

- **What is districting and "by-district" elections?** Districting is the process of dividing a city into defined geographic areas for electing councilmembers. It replaces an “at-large” system—where all voters vote on every open council seat—with a “by-district” system. Under by-district elections, each area elects one Council Member, who must reside in and be registered to vote within that district.
- **Why is Capitola changing to district-based elections?** The City received a demand letter from a law firm on **March 19, 2026**, alleging that its at-large election system violates the California Voting Rights Act (CVRA). On **April 30, 2026**, although the City disputes this allegation, the City Council unanimously voted to begin the transition to avoid costly litigation and take advantage of "safe harbor" legal protections in the CVRA.
    - **How have other cities responded to CVRA litigation?** Nearly every city facing these allegations has changed its election method to a “by-district” system. Those that attempted to defend at-large systems in court have incurred significant costs, ranging from $220,000 to over $10 million.
    - **Why haven’t cities prevailed in challenging these allegations?** The threshold to establish liability under the CVRA is lower than the Federal Voting Rights Act.
- **What is the "Safe Harbor" timeline?** Under California law, once a city receives a demand letter, it has 45 days to pass a "Resolution of Intent" to transition (which Capitola did on April 30). The city then generally has 90 days to hold public hearings and adopt a final district map to maintain legal protection against high-cost lawsuits.
- **How many districts will be created in Capitola?** State law gives the City Council a degree of flexibility in setting the number of districts. Options are as follows: (1) five, seven, or nine districts (with a rotating Mayor) or (2) four, six, or eight districts, with an elective mayor.
- **How does this affect the Mayor’s position?** Currently, the Mayor in Capitola is not elected directly by voters. Instead, the City Council selects a Mayor and Vice Mayor each year from among its members. Transitioning to district-based elections would not automatically change this structure unless the Council also decides to move to an at-large elected Mayor.
- **When will the first district-based election take place?** The transition is expected to begin with the **November 2028** election. In that cycle, the two seats

currently held by Gerry Jensen and Melinda Orbach will be up for election. As such, two council seats associated with two districts will be up for election. Candidates running for those council seats will need to reside in those districts.

- **Why are district-based elections not being implemented until 2028?** The transition to district-based elections is scheduled for 2028 to ensure the integrity of the public participation process. While the November 2026 election cycle begins in July, finalized district maps must be submitted to the County Elections Department by July 1, 2026, to ensure accurate ballot distribution.

  Because the City's transition schedule overlaps with these statutory deadlines, implementing new districts for the 2026 election would require a compressed timeline. Utilizing the entire "Safe Harbor " timeline allows for a more transparent and inclusive districting process, providing the community with ample time to engage and provide feedback on proposed boundaries.

- **How can the public help draw the maps?** The City will hold a lot of opportunities for public input, including at least 6 meetings where districting is discussed. The first meeting is an informational meeting. The second and third meetings will be the pre-map drawing public hearings. The third and fourth meetings will be the post-map drawing public hearings. The final meeting will be the public hearing in which the Council adopts the ordinance transitioning to districts (including the maps). The first three are "pre-map drawing" meetings/hearings to gather input on where boundaries should go. Please note that this meeting schedule is tentative and may be modified for reasons such as map drawing and noticing requirements.

- **What are "Communities of Interest"?** Under the FAIR MAPS Act, a community of interest is "a population that shares common social or economic interests that should be included within a single election district for purposes of its effective and fair representation. Characteristics of communities of interest may include, but are not limited to, shared public policy concerns such as education, public safety, public health, environment, housing, transportation, and access to social services. Characteristics of communities of interest may also include, but are not limited to, cultural districts, shared socioeconomic characteristics, similar voter registration rates and participation rates, and shared histories. Communities of interest do not include relationships with political parties, incumbents, or political candidates."

- **Do I have to submit a complete map of the whole city?** No. Residents can submit partial maps or just draw boundaries for their specific neighborhood to show where they believe their district should be.

- **What happens to the maps I submit?** Once submitted, maps become public records and will be posted on the city's website for public review. To ensure transparency, the City will identify who prepared and submitted all maps, so long as submitters indicate they're comfortable with their information being released. Members of the public are also welcome to submit maps anonymously.
- **Who decides the final boundaries?** Ultimately, the City Council makes the final decision regarding what map to select and adopts the final map by ordinance.
- **Are district boundaries permanent?** No. Cities are generally required to review and "redistrict" every ten years following the U.S. Census to ensure populations remain balanced.
- **What criteria must the city use to draw the lines?** Capitola must follow the FAIR MAPS Act, which prioritizes:
    - **Geographic Contiguity:** All parts of a district must be connected.
    - **Neighborhoods and Communities of Interest:** Keeping neighborhoods with shared social or economic interests together.
    - **Easily Identifiable Boundaries:** Using major roads, or using geographic features such as Soquel Creek or the coastline.
    - **Geographical Compactness:** Drawn to encourage geographical compactness in a manner that nearby areas of population are not bypassed in favor of more distant populations.
    - Not drawing districts for the purpose of favoring a specific candidate.
- **Are the districts based on the number of voters?** Not exactly. Under the CVRA districts must be nearly equal in total population (including non-citizens and children) based on the 2020 Census data.
- **Do I still get to vote for all Council Members?** No. Once the transition is complete, you will only vote for the one Council Member who represents your specific district. You will vote for a City Council member once every four years when your district's seat is up for election. If a Citywide Mayor is included, each voter would vote for their own district's Council Member and for a Citywide elected Mayor.
- **What happens to current Council Members?** Current members elected in 2024 will serve out their terms until 2028. Council members elected in 2026 will serve until 2030. The transition does not remove anyone from office or shorten any terms; it only changes how their seats are filled when their terms expire.

- **Can I run for Council if I don't live in a district that is "up" for election?** To run for a specific district seat, you must be a registered voter and resident of that district. If your district is not scheduled for an election in 2028, you would have to wait until that seat is triggered in 2030.
- **What happens if no one runs for a seat in a specific district?** If no one runs, the situation is handled in a similar manner as a vacancy.
- **Common Definitions & Acronyms**
    - **CVRA:** California Voting Rights Act.
    - **Demographer:** A professional hired by the city to take census data and public input to create legally compliant map options.
    - **VAP/CVAP:** Voting Age Population (all adults) and Citizen Voting Age Population (adults eligible to vote). These stats help ensure protected classes have a fair opportunity to elect candidates.
    - **NDC:** National Demographics Corporation (a common firm used by cities).
    - **NH:** Non-Hispanic.

FREQUENTLY ASKED QUESTIONS

- **Can Capitola choose the number of districts it has?** Yes, the City may adopt a map that has 5 districts, 7 districts, or even 9 districts. However, the districts must be equal in population size and otherwise meet the requirements of the FAIR MAPS Act. Given Capitola's population (just shy of 10,000), the most common approaches are either 4 districts with an at-large Mayor (elected by voters) or 5 districts with a rotating Mayor (chosen by Council).
- **How does this affect the Mayor's position?** Currently, the Mayor in Capitola is not elected directly by voters. Instead, the City Council selects a Mayor and Vice Mayor each year from among its members. Transitioning to district-based elections would not automatically change this structure unless the Council also decides to move to a Citywide elected Mayor.
- **Can Capitola choose to have a different Mayor structure?** Yes, the Council can choose to either: 1) keep the current structure, where the Mayor is selected by City Council on an annual basis; or 2) choose to have a Mayor elected Citywide.
- **What is the difference between an elected Mayor and the way the current Mayor is appointed? Is an elected Mayor the same as a Strong Mayor?**

	Rotating Mayor	**Elected Mayor (At Large)**	**Strong Mayor**
Reference Cities	Watsonville, Scotts Valley, Los Gatos	Santa Cruz, Pacific Grove, Marina	Los Angeles, San Diego, San Francisco, Fresno, Oakland (5 of 483 cities in the State)
	This is Capitola's current system. The City Council appoints who will serve as Mayor and Vice Mayor each year, typically in December. As the City transitions to district-based elections, it has the option to maintain this appointment system by rotating turns from among its district-elected members.	Another system of selecting a mayor is by having voters citywide elect the mayor (also referred to a mayor at-large). As the City transitions to district-based elections, it has the option to choose to have an at-large elected mayor voted on by all residents.	A "strong mayor" is a commonly used term in practice, but it is not a defined term in the California Government Code. In a strong mayor system, the executive responsibility for the day-to-day administration of city operations is vested in an elected mayor, rather than a professionally appointed city manager. Adopting a strong mayor system would require a fundamental change

			from the current council-manager structure. This form of governance is uncommon in California and, where it exists, is established through individual city charters rather than state statute. Capitola does not have a City Charter, and operates as a General Law City.

- **What is the role of the Mayor? Would it change if the City transitions to an elected Mayor instead of an appointed Mayor?** The City currently appoints a mayor from its Council every year. The Mayor has powers and duties to sign official documents, administer oaths, and preside over meetings. If the City transitions to an elected mayor, the mayor will still have the same powers and privileges, with the addition of appointment power. This appointment power allows the mayor to make appointments to boards, commissions, and committees with the approval of the City Council (GC 40605).
- **What are the advantages of keeping a rotating Mayor position?** It can encourage respect and cooperation among the Council; it's less burdensome on a Mayor who is otherwise employed; leadership perspectives are not limited to a single person for four years; it can avoid strain over roles between the Mayor and staff.
- **What are the advantages of electing a Mayor at-large?** It can provide continuity in leadership and representation with regional agencies; provide a more consistent and prominent ceremonial leader; provide voters with 2 representatives for whom to vote (Mayor + representative Council Member). Also, a key distinction is that an at-large elected mayor is chosen by all voters citywide, whereas an appointed mayor is selected only by the district-elected council members and does not reflect a citywide vote.
- **Can the City choose to elect a Mayor every 2 years?** Yes, that is a possibility. If the mayor were elected every 2 years, it would allow all voters to vote at every municipal election. However, a 4-year term could save money on off-year elections and provide more stability in leadership. The 4-year term also allows the Mayor better continuity in leadership; a 2-year term could present difficulties as the Mayor prepares for election/re-election on a more frequent basis.

TRANSITION TO DISTRICTS

May 14, 2026

Recommended Action

1) Receive presentation from staff & demographer;
2) Receive community input;
3) Provide direction on composition/number of voting districts

Background: Districting Timeline

1. City receives letter alleging violation (3/19)
2. Adopted resolution of intent (4/30) & hired NDC as demographer
3. Informational meeting tonight (5/14)
4. Hold 2 public hearings to receive input on district composition (5/28 & 6/11)
    1. No official maps drawn till after this stage
5. Publish first draft maps for feedback
6. Within 45 days, hold 2 more public hearings to receive feedback/refine maps (6/25 & 7/9)
7. Final maps adopted (7/23) before deadline (7/29)

Dates are subject to change if an extension is obtained

District Phasing

Districts will not be implemented until 2028 election

- 2028 Election:
  - 2 District Seats on Ballot
  - 3 existing at-large Council Members (elected in 2026) remain on Council
- 2030 Election:
  - 3 District Seats on Ballot (or 2 Districts + Mayor)
  - Full Council now Represents Districts (Mayor potentially at-large)

Lack of Candidates/Vacancies

- What happens if an at-large Council Member whos term has not yet expired runs for a districted seat?
  - If they win, creates vacancy in at-large seat & Council chooses how to fill (special election or appointment)

- What happens if nobody runs for district seat?
  - Handled similarly to a how vacancy is handled today

Public Outreach

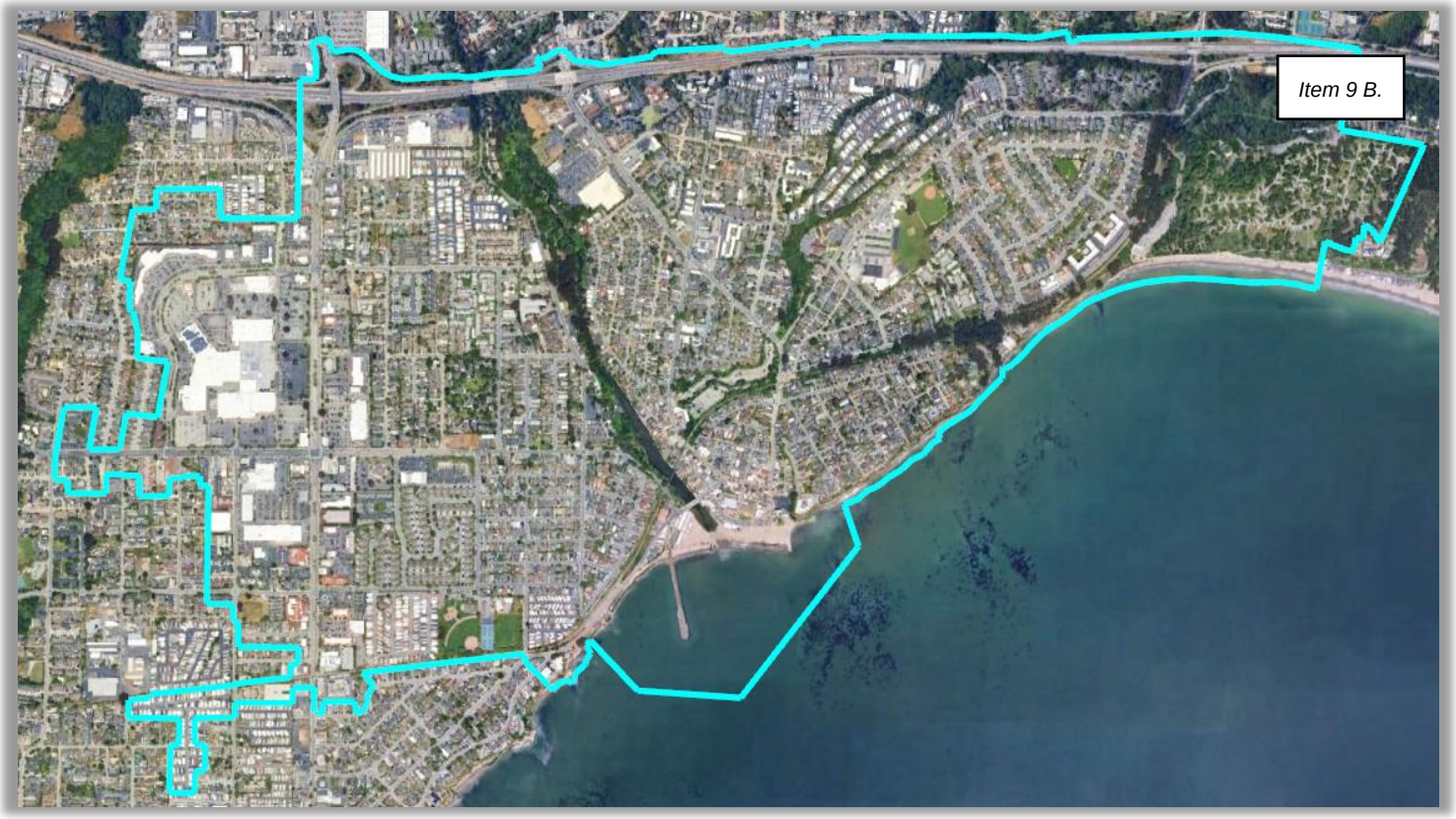
Significant planned outreach:

- Website updates
  - General Districting Info
  - Public Mapping Tool
  - Submit Questions/Comments
- FAQ documents – will continue to create more based on public input
- Dedicated email address: districts@cityofcapitola.gov
- Digital web form where people can submit questions, comments, maps
- Direct mailers to residences of Capitola – coming soon!

Public Mapping Tool

- City/Demographer can **not** draw maps until after 2 public hearings conducted, but public can participate now
- Draw maps using online tool (on website)
- Draw maps using paper tools (available at City Hall and on website)

National Demographics Corporation



City of Capitola
Introduction to Districting

March 14, 2026

Election Systems

1. "At Large"
2. "From District" or "Residence" Districts
3. "By District"

The California Voting Rights Act (CVRA) was written to specifically encourage by-district elections.

CVRA Background

California Voting Rights Act (CVRA)

- Under Federal Voting Rights Act (passed in 1965), a jurisdiction must fail 4 factual tests before it is in violation of the law.

- California VRA makes it significantly easier for plaintiffs to force jurisdictions into "by-district" election systems by eliminating two of the US Supreme Court Gingles tests:
  - ~~Can the protected class constitute the majority of a district?~~
  - Does protected class vote as a bloc?
  - Do voters who are not in protected class vote in a bloc to defeat preferred candidates of protected class?
  - ~~Do the "totality of circumstances" indicate race is a factor in elections?~~

- Liability is now determined only by presence of racially polarized voting and dilution of the protected class's voting strength

- Unclear impact of U.S. Supreme Court's *Louisiana v Callais* (2026) decision.

CVRA Impact

- **Switched (or in the process of switching) as a result of CVRA:**
  - At least 345 school districts
  - 46 Community College Districts
  - 212 cities
  - 1 County Board of Supervisors
  - 78 water and other special districts.

- **Palmdale, Santa Clara and Santa Monica fought "on the merits."**
  - Palmdale spent about $1.8 million, Santa Clara $1.37 million, and Santa Monica over $12 million, just on their defense.
  - Santa Monica plaintiffs requested $22 million in fees.
  - So far, no jurisdiction has won a case.
  - Huntington Beach: awaiting trial court ruling.
  - Santa Monica: back in Superior Court in October.

- **Key settlements:**
  - Palmdale: $4.7 million
  - Santa Clara: $3.8 million
  - Modesto: $3 million
  - Highland: $1.3 million
  - Anaheim: $1.1 million
  - Whittier: $750,000
  - Santa Barbara: $600,000
  - Tulare Hospital: $500,000
  - Camarillo: $233,000
  - Compton Unified: $200,000
  - Madera Unified: about $170,000
  - Hanford Joint Union Schools: $118,000
  - Merced City: $42,000
- **An estimated $20 million in total settlements and court awards so far.**

Districting Process and Rules

(Current) Districting Timeline

Item 9 B.

Step	Description
Adopt Resolution April 30	Approve resolution of intention within 45 days of demand letter.
Initial Discussion May 14	Introduction to process and criteria. Consideration of 5 districts or 4 districts and citywide-elected Mayor.
Two Initial Hearings May 28 & June 11	Held prior to release of draft maps. Education and to solicit input on the composition of districts.
Submit draft maps On/before June 30	Deadline for residents to submit **initial** draft maps for Council consideration at the third hearing.
Post draft maps online July 2	Maps must be posted at least 7 days prior to consideration at a Council hearing.
Two hearings on draft maps June 25 & July 9	Two meetings to discuss and revise the draft maps and to discuss the election sequence. Possible map selection and ordinance introduction July 9.
Map adoption July 23	Map adopted via ordinance or resolution. Final map must be posted at least 7 days prior to adoption. Without an extension, map must be adopted within 90 days of Resolution of Intention (July 29).

Districting Rules and Goals

Item 9 B.

1. Federal Laws

Equal Population

Federal Voting Rights Act

No Racial Gerrymandering

2. California Criteria

In prioritized order:

1. **Geographically contiguous**
2. **Avoid division of neighborhoods and "communities of interest"**
   (Socio-economic geographic areas that should be kept together)
3. **Easily identifiable boundaries**
4. **Compact**
   (Do not bypass one group of people to get to a more distant group of people)

2. California Prohibition

"Shall not adopt election district boundaries for the purpose of favoring or discriminating against an incumbent, political candidate, or political party."

3. Other Traditional Redistricting Principles

Future population growth

Districting Data and Public Tools

Demographic Summary

Lots of data are provided for every district in every draft map.

Category	Field	Total
2020 Census	Total Population	9,949
Total Pop.	Hispanic/Latino	22%
	NH White	65%
	NH Black	2%
	NH Asian/Pac.Isl.	9%
	NH Native Amer.	1%
Citizen Voting Age Pop	Total	7,266
	Hisp	17%
	NH White	75%
	NH Black	2%
	Asian/Pac.Isl.	5%
	Native Amer.	1%
Voter Registration (Nov 2024)	Total	7,005
	Latino est.	15%
	Spanish-Surnamed	14%
	Asian-Surnamed	2%
	Filipino-Surnamed	1%
	NH White est.	80%
	NH Black	1%
Voter Turnout (Nov 2022)	Total	4,465
	Latino est.	11%
	Spanish-Surnamed	10%
	Asian-Surnamed	2%
	Filipino-Surnamed	1%
	NH White est.	85%
	NH Black	1%
Voter Turnout (Nov 2024)	Total	5,642
	Latino est.	14%
	Spanish-Surnamed	12%
	Asian-Surnamed	2%
	Filipino-Surnamed	1%
	NH White est.	83%
	NH Black est.	1%

Category	Field	Total
Age	age0-19	16%
	age20	51%
	age60plus	33%
Immigration	immigrants	14%
	naturalized	41%
Language spoken at home	english	81%
	spanish	13%
	asian-lang	3%
	other lang	3%
Language Fluency	Speaks Eng. "Less than Very Well"	7%
Education (among those age 25+)	hs-grad	44%
	bachelor	29%
	graduatedegree	19%
Child in Household	child-under18	17%
Pct of Pop. Age 16+	employed	62%
Household Income	income 0-25k	10%
	income 25-50k	10%
	income 50-75k	10%
	income 75-200k	39%
	income 200k-plus	21%
Housing Stats	single family	59%
	multi-family	41%
	rented	48%
	owned	52%

Total population data from California's adjusted 2020 Census data. Citizen Voting Age Population, Age, Immigration, and other demographics from the 2020-2024 American Community Survey and Special Tabulation 5-year data. Turnout and Registration data from California Statewide Database. "Latino" figures calculated by NDC using Census Bureau's Latino undercount by surname estimate.

Latino Citizen Voting Age Populatio

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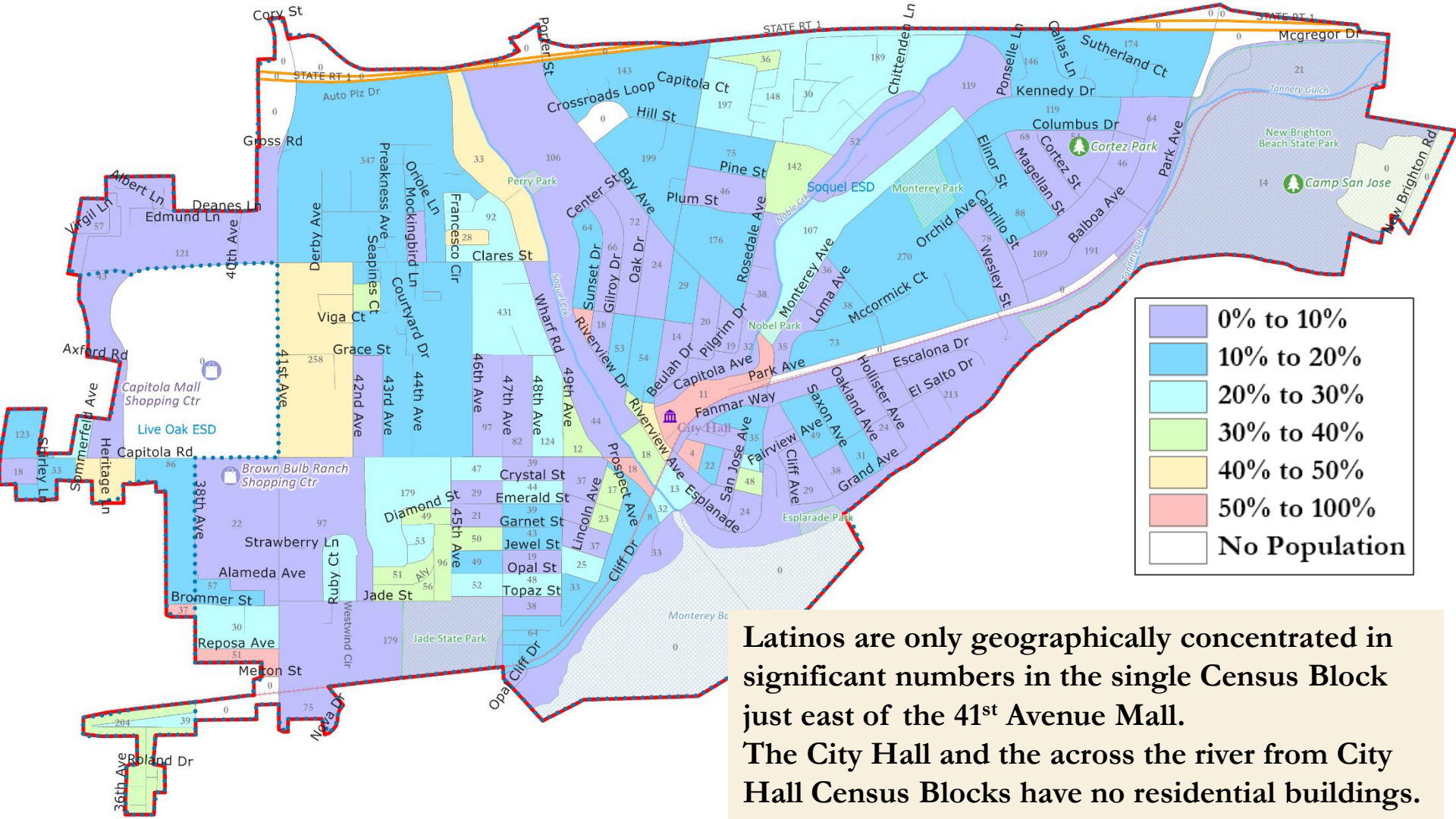
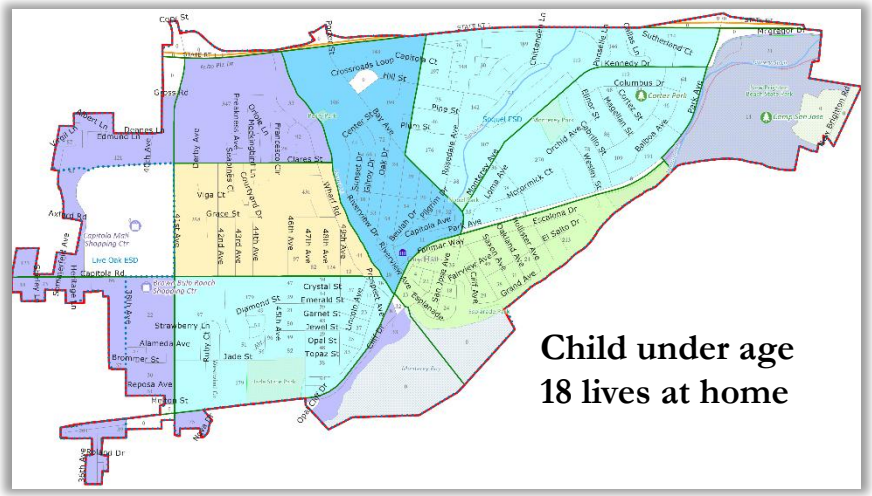


Latinos are only geographically concentrated in significant numbers in the single Census Block just east of the 41st Avenue Mall.
The City Hall and the across the river from City Hall Census Blocks have no residential buildings.

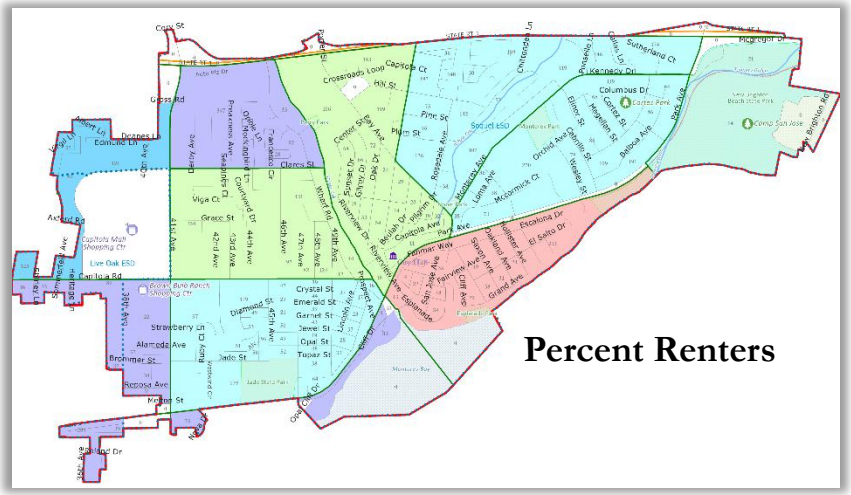
There are no geographic concentrations of Asian-Americans, African-Americans, or Native Americans in the city.

Other Socio-Economic Demographi

Item 9 B.

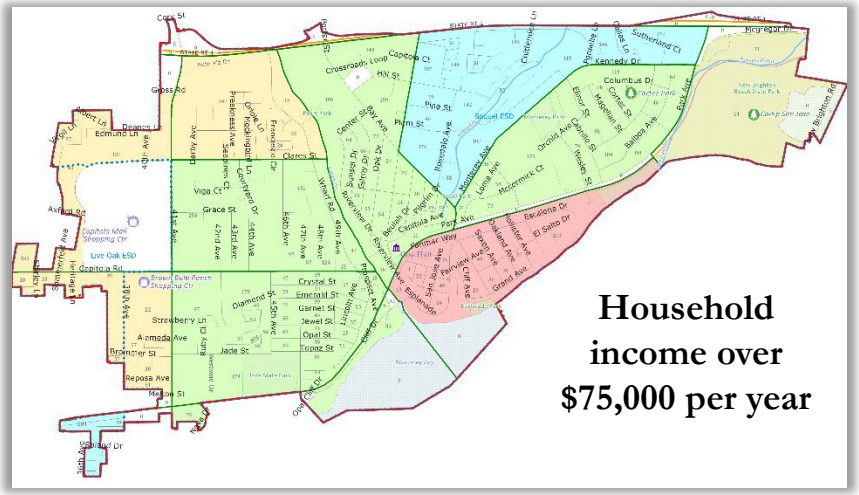


Child under age 18 lives at home



Percent Renters

- 0% to 25%
- 25% to 35%
- 35% to 50%
- 50% to 65%
- 65% to 75%
- 75% to 100%
- No population



Household income over $75,000 per year

In small jurisdictions, Census socio-economic data can have large margins of error.

Defining Neighborhoods

1st Question: How do you describe or name the area where you live?

2nd Question: What are its geographic boundaries?

What other neighborhoods are there?

Examples of physical features defining a neighborhood boundary:

- Natural neighborhood dividing lines, such as highway or major roads, rivers, canals and/or hills
- Areas around parks or schools
- Other neighborhood landmarks

Defining Communities of Interest

California Elections Code Section 21130(c)(2):

A "community of interest" is a population that shares common social or economic interests <u>that should be included within a single district for purposes of its effective and fair representation</u>.

Shared interests may include (but are not limited to):

- Shared public policy concerns such as education, public safety, public health, environment, housing, transportation, and access to social services. cultural districts;
- Shared socioeconomic characteristics;
- Similar voter registration rates and participation rates; and /or
- Shared histories.

Definitions of Communities of Interest may <u>not</u> include relationships with political parties, incumbents, or political candidates.

Public Mapping and Map Review Tools

- **Different tools for different purposes**
- **Different tools for different levels of technical skill and interest**

1. Simple "review draft maps" tool
2. Easy-to-use "Draw your neighborhood" tool
3. Paper-based simple "Draw a draft map" tool
4. Powerful, data-rich online "Draw a draft map" tool

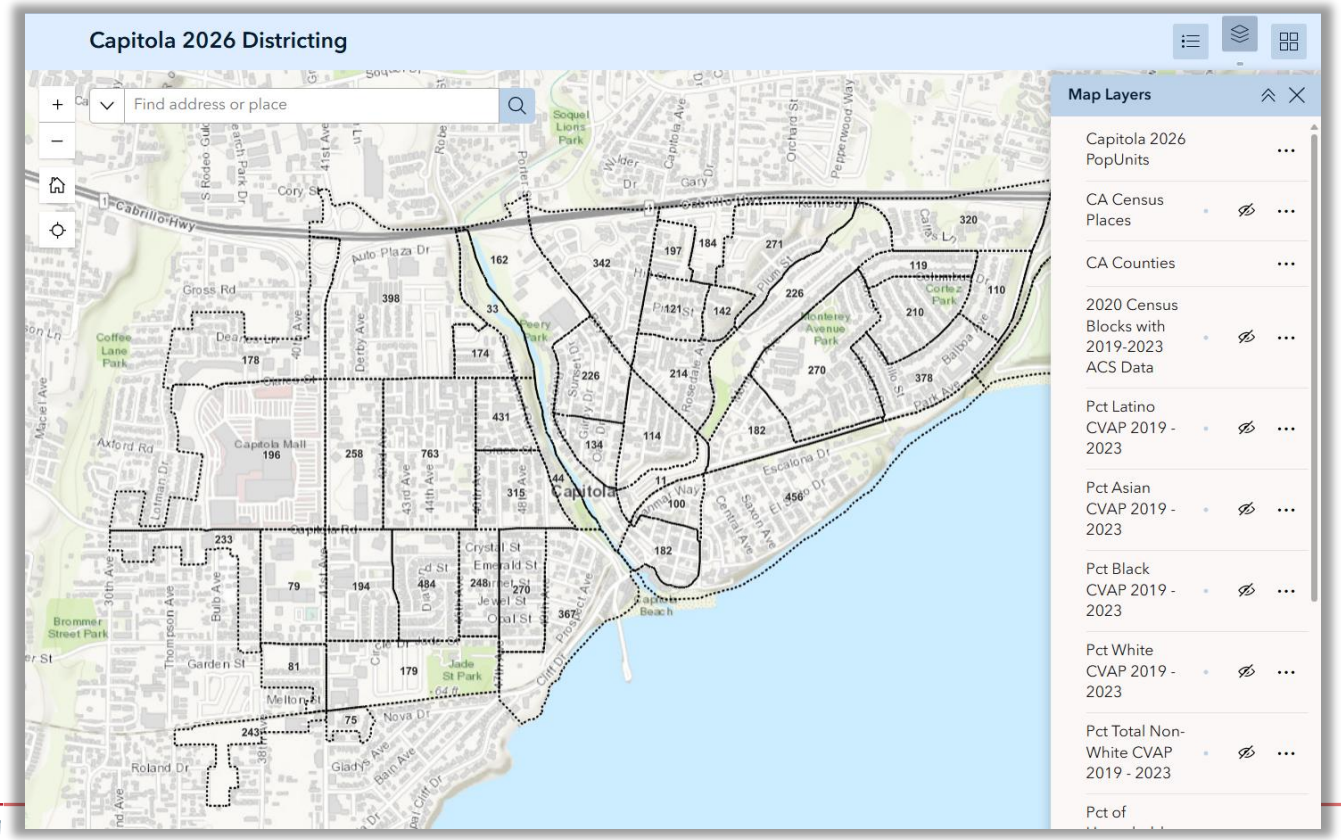
Whether you use the powerful online mapping tool, the paper kit, or just draw on a napkin, we welcome your maps!

Simple Map Review Tool

Item 9 B.

Online Interactive Review Map

- ESRI's "ArcGIS Online" – similar to Google Maps in ease of use
- Used to review, analyze and compare maps, not to create them
- Includes overlays of "community of interest" and other data

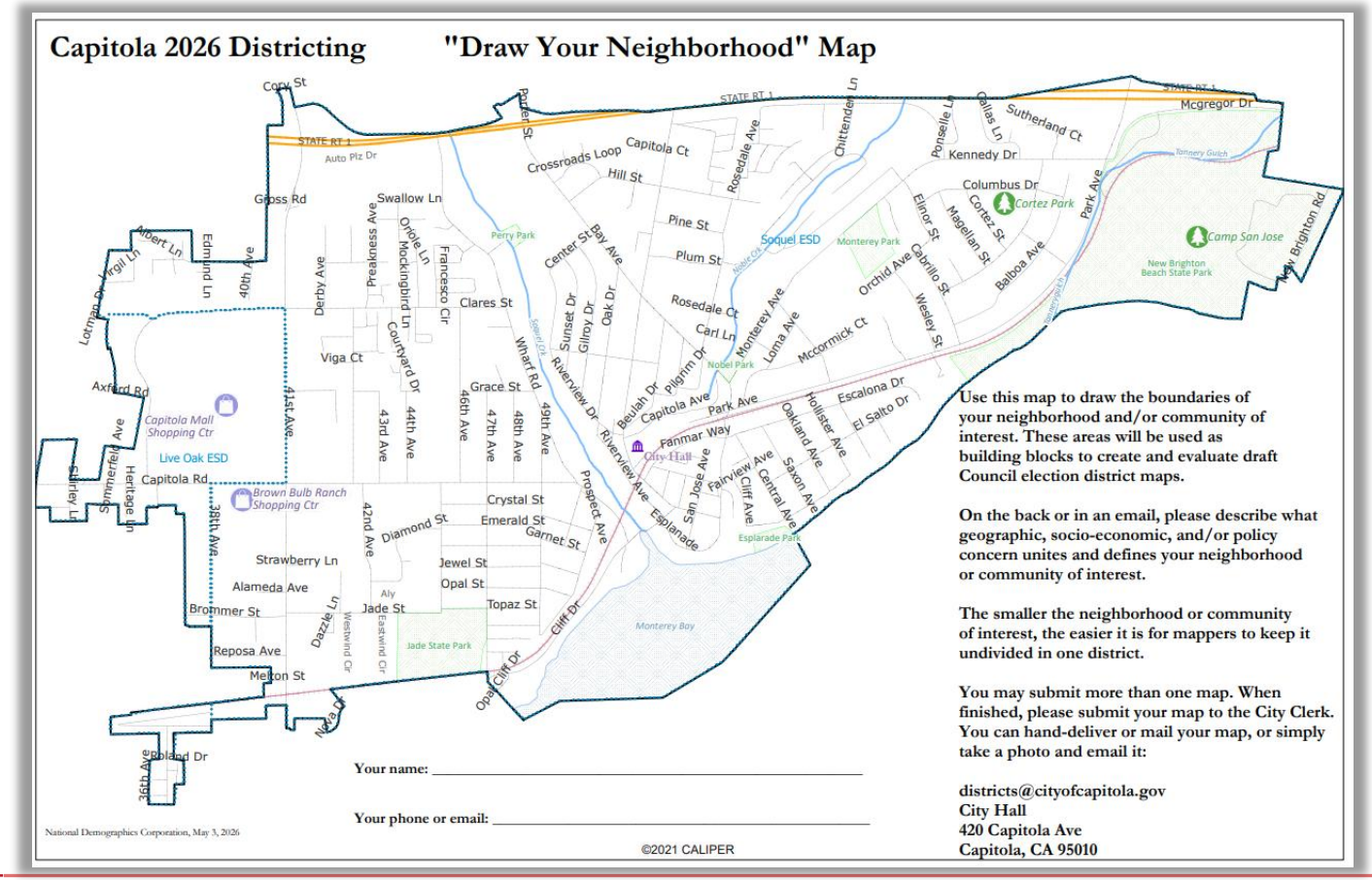


Draw Your Neighborhood Tool

Item 9 B.

Paper PDF Download

- Draw boundaries of your neighborhood or community of interest.
- Submit a statement describing neighborhood or community.

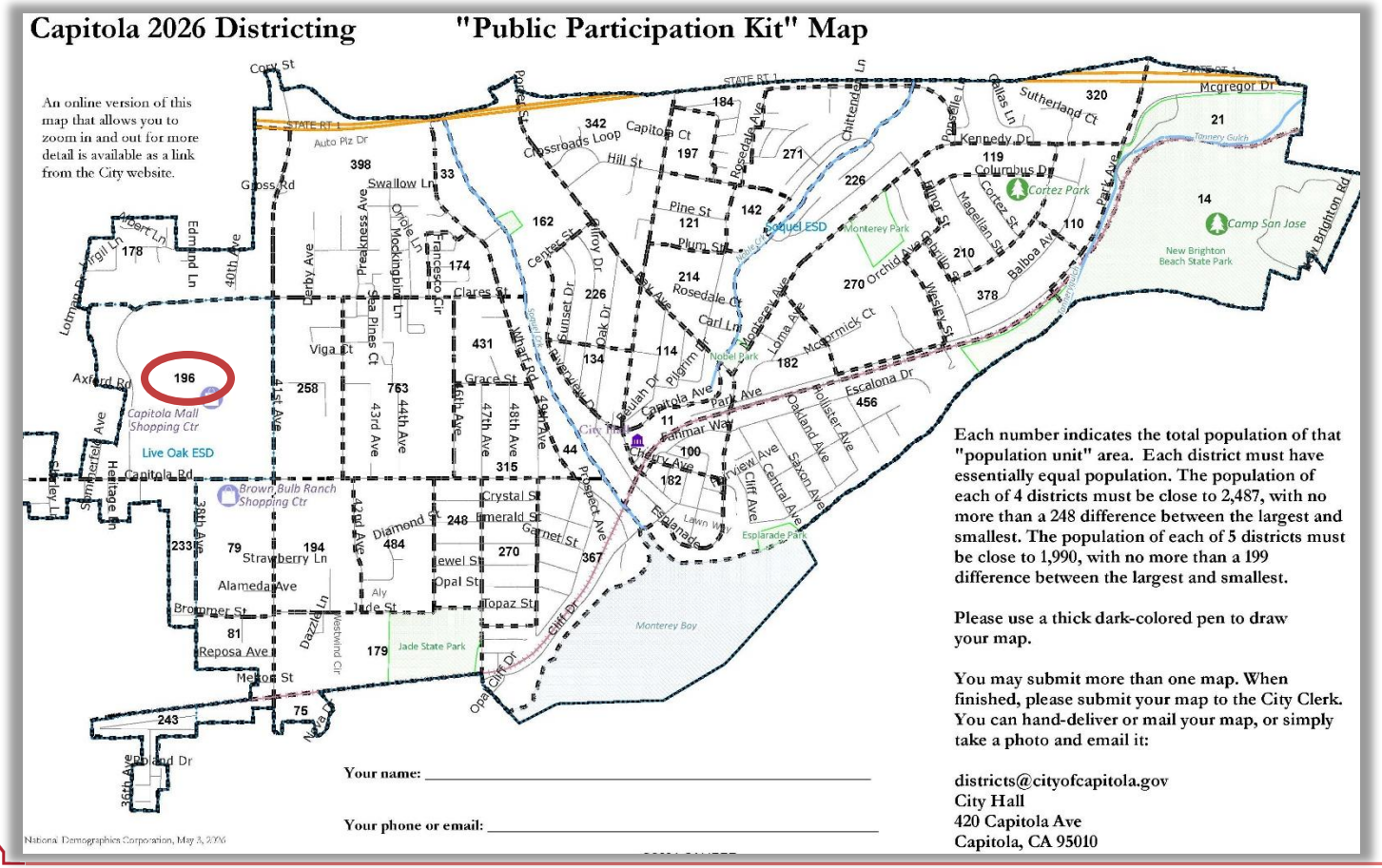


Simple Map Drawing Tool

Item 9 B.

Paper "Public Participation Kit"

- For those without internet access or who prefer paper
- Total Population Counts only – no demographic numbers

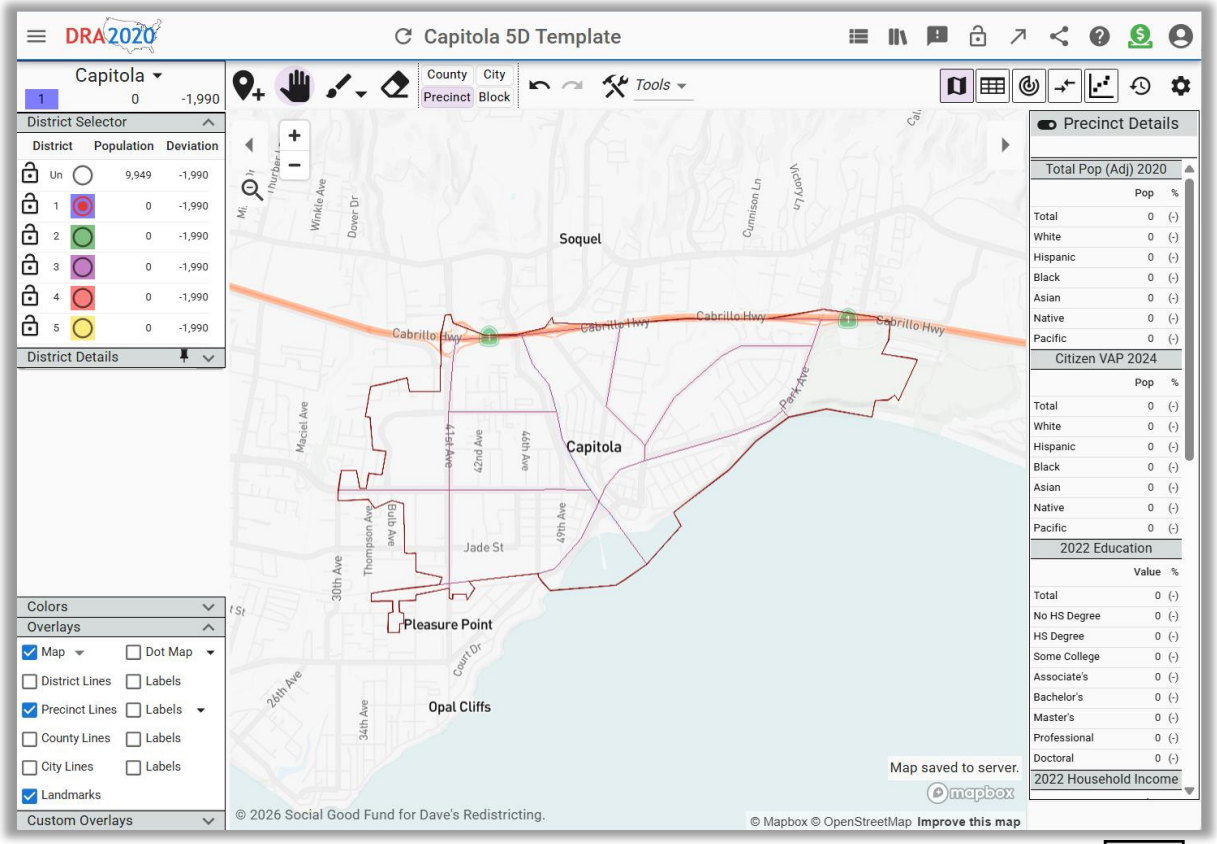


Online Map Drawing Tool

Item 9 B.

Simple "paintbrush & eraser" tool. A 4-minute "how-to" video is on the website.

- Full demographic data available
- Create, collaborate and share your map
- **Remember**: you must send in the link to your map when you finish or the City has no way to know you drew a map.



Four vs Five Districts

Four or Five Districts?

Current System:

- Voters currently vote for five Councilmembers
- Each year, the five Councilmembers decide on a Mayor for the next year
- Commonly referred to as a "rotating Mayor"

"Citywide Elected Mayor" Alternative:

- Mayor post would appear on ballot as a separate office
- Voters would elect their district's Councilmember every four years and a Mayor every 2 or every 4 years
- No major change in Mayor's powers: the city remains a Council – Manager form of government

Options:

Option 1: keep current "rotating Mayor" system and draw 5 Council Districts

Option 2: change to an "Elected Mayor" system and draw 4 Council Districts

Council Dynamics

Five Districts

- Can encourage respect and cooperation among Councilmembers
  - Future turn as Mayor encourages cooperation when out of office
- Leadership perspective is not limited to a single person for four years
- Can avoid strain over roles between Mayor and City Manager

Four Districts + Mayor

- Provides a more consistent and prominent ceremonial leader
- Provides leadership continuity for staff
- Potentially stronger representation in regional agencies
- More opportunity for local to win County or State Legislative office
  - Citywide Mayor has a larger "base" of voters

Average Population per District

	Four Districts	Five Districts
Total Pop	2,487	1,990
Voter Reg	1,751	1,401
2024 Turnout	1,411	1,128
2022 Turnout	1,116	893

When the City's small population is divided among districts, five districts increases the risk that if there are 3 or 4 candidates in a district a Councilmember could be elected with as few as 300 votes.

Impact on Voters and Councilmemb

Five Districts

- Provides opportunities to expand the knowledge and experience of city council members beyond just their district
  - Less important in small cities
- Eliminates there being more than one representative from a single district
  - The mayor and a Council member

Four Districts + Mayor

- Allows all voters to vote in a city election every two years
- Elective Mayor provides constituents with two representatives who must earn their vote
  - The mayor and a Council member
  - It only takes one more vote to get a majority of the Council to support a proposal

.

Mayor's Term

If a Citywide-elected Mayor is chosen, the city must decide if the term will be 2 or 4 years:

Four-Year Term

- Gives an advantage to Council members whose terms do not match the Mayor's (they can run for Mayor without giving up their seat)
- Provides stability in leadership
- Less burdensome on a mayor who is otherwise employed
- Reduces cost to administer elections in non-Mayoral years

Two-Year Term

- Fairness provides all Council members the opportunity to run for Mayor without giving up their Council seat
- Increases direct accountability to the voters

Share Your Thoughts

Website

CityOfCapitola.gov/1001/District-Based-Elections

Phone

(831) 475-7300

Email

districts@cityofcapitola.gov

Recommended Action

1) Receive presentation from staff & demographer;
2) Receive community input;
3) Provide direction on composition/number of voting districts

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: Finance Department

Subject: Amendment to FY 2025-26 City Fee Schedule

Recommended Action: Conduct the duly noticed public hearing on the proposed amendments to the City Fee Schedule for Fiscal Year 2025–26 and adopt a resolution amending the current fee schedule, effective May 14, 2026.

Background: This item proposes adjustments to three City fees, establishing a Senate Bill 330 planning application fee, updating Community Center rental rates, and updating EV charging fees.

This year the City has experienced increased staff costs associated with projects subject to Senate Bill 330. Enacted in 2019, SB 330 introduced significant changes to land use and zoning regulations intended to reduce barriers to housing development in urban areas. Implementation of these requirements has necessitated additional staff time for project review, including calculations and interpretation of applicable housing laws.

In the spring of 2025, the City began the Capitola Community Center renovation project. The project was initiated to modernize and expand the usability of the City's primary community facility. The renovation project is on track for completion in late spring 2026. In addition to interior and exterior building improvements, the project also includes the installation of two EV charging stations, capable of serving up to four vehicles simultaneously.

Additionally, the City has identified that the current electric vehicle (EV) charging rates do not adequately recover the cost of electricity consumed by users. In August 2017, the City implemented a $0.50 per hour fee for EV charging at the City Upper Parking Lot to partially offset both capital and electricity costs. In November 2024, the hourly fee was increased to $1.00 to improve cost recovery for electricity usage at these stations. The City plans to upgrade existing charging stations at the City Upper Parking Lot and add additional charging stations in the future.

State law requires the City conduct a public hearing where testimony can be taken before any fees are added or existing fees are altered.

Discussion: Since implementation of Senate Bill 330 requirements, staff has received two SB 330 applications. Based on a detailed assessment of the time required to perform project-specific calculations and interpret applicable housing law, staff recommends establishing a $1,000 planner cost recovery deposit for all projects that include an SB 330 application. This deposit is intended to recover the costs for additional staff resources required to process these applications.

With the completion of the Capitola Community Center remodel and subsequent opening in late spring, the newly renovated facility will be available to the public. Based on research of neighboring facilities, staff recommends amending the current facility rental rates to align with neighboring facilities and maintain the improved quality of the Community Center as follows:

- Room A - $55 per hour

- Room B - $65 per hour
- Patio Room - $80 per hour
- Room B & Patio Room - $125 per hour
- Patio - $10 per hour
- Kitchen - $45 per hour
- Entire Center - $450 daily, 5+ hours
- Community Center Cleaning Deposit - $300

The EV charging stations being installed at the Community Center will include kWh-based billing capability and user payment functionality. Based on the City's PG&E rate plan, staff recommends establishing a rate of $0.45 per kWh at these stations to recover the cost of electricity consumed, plus the cost of maintaining the charging stations and spaces. No additional parking fees are proposed, as parking at the Community Center will remain free to the public.

The EV charging stations in the City Upper Parking Lot will be replaced this Spring. When the new charging stations are installed they will utilize the same $0.45 per kWh plus the $1.00 per hour for parking as the rest of the Upper Parking Lot

Fiscal Impact: The establishment of the SB330 deposit requirement, Community Center rental rates, and the increased fee for EV charging is intended to offset the cost of providing these services.

Attachments:

1. Resolution
2. FY 2025-26 Amended Fee Schedule
3. FY 2025-26 Amended Fee Schedule Comparison

Report Prepared By: Leda Laidlaw-Hunter, Accountant II

Reviewed By: Julia Gautho, City Clerk; Jim Malberg, Administrative Services Director

Approved By: Jamie Goldstein, City Manager

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CAPITOLA AMENDING THE CITY'S FEE SCHEDULE FOR FISCAL YEAR 2025-26

WHEREAS, Government Code Sections 65104, 65909.5, and 66014 allow the City of Capitola to establish fees to offset the City's costs in processing permits, licenses, subdivision maps and entitlements, and other services; and

WHEREAS, the City provides certain services to its residents and those doing business in the City; and

WHEREAS, the City Council adopted Resolution No. 4451 on August 8, 2025, amending the City's Fee Schedule for Fiscal Year 2025-26; and

WHEREAS, such fees must be adjusted from time to time to reflect the true costs of such services; and

WHEREAS, City staff has researched and analyzed the cost of services provided by the City and determined the appropriateness of these adjusted rates relative to the cost of providing services

WHEREAS, since that amendment, the City has reviewed costs associated with staff time for SB330 applications and City electricity costs related to electric vehicle charging;

WHEREAS, staff is proposing to amend the FY 2025-26 Fee Schedule effective May 14, 2026, as follows:

- Add
  - SB330 Pre-Application - $1,000 min. deposit
  - Electric Vehicle Charing fee (Community Center) - $0.45 per kWh
  - Community Center rental rates
    - Room A - $55 / hour
    - Room B - $65 / hour
    - Patio Room - $80 / hour
    - Room B & Patio Room - $125 / hour
    - Community Center Cleaning Deposit - $300
- Increase
  - Electric Vehicle Charging fee (City Upper and Lower Lots)
    - $1.00 per hour for parking
    - $0.45 per kWh for EV charging
  - Community Center rental rates
    - Patio - $10 / hour
    - Kitchen - $45 / hour
    - Entire Center - $450 daily, 5+ hours

WHEREAS, the adjusted fees do not exceed the cost of providing the related services.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Capitola does hereby adopt the amended City of Capitola Fee Schedule pursuant to the changes in Exhibit A (Fee Schedule 2025-26).

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the above fees become effective upon adoption of this resolution.

I HEREBY CERTIFY that the above and foregoing resolution was passed and adopted by the City Council of the City of Capitola at its regular meeting held on the 14th day of May, 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Margaux Morgan, Mayor

ATTEST:

_____
Julia Gautho, City Clerk

MISCELLANEOUS FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Appeal Fee Appeals to City Council (CMC 2.52)	$609		$609
Capitola Municipal Code	$0.15 / page		$0.15 / page
Capitola Municipal Code Supplement Service (Per year)	$0		$0
Copies:			
1-5 copies	$0		$0
6 or more copies (per copy)	$0.25 / page		$0.25 / page
Gov't Code § 81008 (Political Reform Act) statements/reports (Per copy)	$0.10 / page		$0.10 / page
Simple film permit	$70		$70
Major film permit	$775		$775
Returned Check Fee	$35		$35
Business License Overpayment Refund Fee (resolution 3532, ord 871)	$0		$0
Business License Late Payment Penalty Admin. Fee	$25		$25
Business License Application Fee (Reso. 3532)	$25		$25
Business License - Disability Access and Education Fee (State)	$4		$4
Temporary, Publicly Attended Activities, Application Fee (Municipal Code § 9.36.040)	$34		$34
Public Art (Total Building Valuation $250,000 or more) (Municipal Code Chapter 2.58)	2% of TBV or 1% in lieu to City		2% of TBV or 1% in lieu to City
Notice of Intent to Circulate Initiative Petition (Elections Code § 9103(b))	$200		$200
Outdoor Dining Rental Fees			
Parking Spaces (annually for each space or partial space)	$3,622		$3,622
Sidewalks and non-parking spaces (annually per square foot)	$19		$19
Outdoor Dining Maintenance Deposit			
Sidwalks and non-parking spaces	$500.00		$500
1-2 parking spaces	$1,000.00		$1,000
3-5 parking spaces	$1,500.00		$1,500
Notary Service Fees (State Code)			
Acknowledgment or proof of a deed, or other instrument, to include the seal and writing of the certificate	$15.00 / per signature		$15.00 / per signature
Administering an oath or affirmation to one person and executing the jurat, including the seal	$15.00 / per signature		$15.00 / per signature
Credit Card Transaction Fee	$0		$0
Passport Acceptance Fee	$35		$35
Marriage License	$36		$36
Marriage Ceremony	$120		$120
Marriage Ceremony - Witness Fee	$30		$30

PUBLIC WORKS DEPARTMENT FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Encroachment Permits			
Application Fee	$146		$146
Traffic Control Plan Review - Local Street	$72		$72
Traffic Control Plan Review - Collector Street	$349		$349
Traffic Control Plan Review - Arterial Street	$524		$524
Inspection - Local Street	$72		$72
Inspection - Collector Street	$194		$194
Inspection - Arterial Street	$292		$292
Revocable Encroachment Permit Application- Outdoor Dining	$1,405		$1,405
Temporary (includes materials storage within right-of-way road and sidewalk closures	$24		$24
Village Sidewalk Sign Encroachment Permit	$50		$50
Construction Parking Permit - Village	$28		$28
Construction Parking Permit - City Lot	$14		$14
Construction Parking Permit - Neighborhood	$29		$29
Blanket Permits (repair and maintenance of existing facilitiesm encompassing up to 20 utility instances per year)	$3,305		$3,305
Revocable Encroachment for Private Improvements			
Applications for Minor Revocable Encroachment	$493		$493
Applications for Major Revocable Encroachment	$1,584		$1,584
SPECIAL TRANSPORTATION PERMIT – OVERSIZE LOAD - Single	$16		$16
SPECIAL TRANSPORTATION PERMIT – OVERSIZE LOAD - Single	$92		$92
New Memorial Bench	$2,711		$2,711
Replacement Memorial Bench	$2,646		$2,646
Memorial Plaque	$660		$660
Replacement Plaque	$463		$463
Overhead Banner (ourtisde of special event)	$166		$166
Stormwater Development Review Fee			
Application Fee	$143		$143
Large Project Plan Review Deposit			
Tier 1	$357		$357
Tier 2	$713		$713
Tier 3 & 4	$713		$713
Research Fee - 1/2 hour minimum charge	Cost		Cost
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5% of Permit Fee		5% of Permit Fee
Final Parcel Map	$4,458		$4,458
Final Tract Map	$6,354		$6,354
Certificate of Compliance & Lot Merger	$2,605		$2,605
Boundary Line Adjustment	$2,605		$2,605
Separate Instrument Dedication Fee	$3,021		$3,021
Abandon Excess Public Right-of-Way & Public Easement	$3,021		$3,021
Improvement Plan Review			
Design Permits - Residential Single Family	$232		$232
Design Permits - Residential Multi-Family/Commercial	$1,005		$1,005
Building Permits - Residential Single Family	$394		$394
Building Permits - Residential Multi-Family/Commercial	$1,024		$1,024

POLICE DEPARTMENT FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Special Event Permit	$420		$420
Recurring Special Event Permit - Major	$705		$705
New Major Special Event Permit	$2,089		$2,089
Neighborhood Special Event/Block Party	$208		$208
Special Event Pacific Cove Parking Lot Space Use Rates (upper lot max 232 parking spaces, lower lot max 226 parking spaces)			
Parking space rate per day	$12 / space		$12 / space
Parking space rate per day (nonprofit)	$7.20 / space		$7.20 / space
Special Event Village Closure Rates (max of 191 parking spaces at $24 per space per day)			
Closure of Village for Special Event -full day	$4,584		$4,584
Closure of Village for Special Event -half day	$2,292		$2,292
Closure of Village for Special Event -full day (nonprofit)	$2,750		$2,750
Closure of Village for Special Event -half day (nonprofit)	$1,375		$1,375
Amplified Sound Permit (Municipal Code 9.12.040)	$87		$87
Bandstand Rental Fee	$253 / 4 hrs or $506 / all day deposit $1,500		$253 / 4 hrs or $506 / all day deposit $1,500
Single Entertainment Permit	$208		$208
Minor Entertainment Permit	$208		$208
Regular Entertainment Permit	$743		$743
Bingo Permit	$87		$87
DUI Cost Recovery Fee (Res. 3533)	Not to exceed $12,000		Not to exceed $12,000
Copies of reports: Crime Reports, Special Reports, etc. (Regardless of number of pages)	$0.25 / page		$0.25 / page
Copies of: Citations, Code sections, Ordinances, etc.	$0.25 / page		$0.25 / page
Postage (for copies of reports, citations, code sections, etc, if over 15 pages)	Current Postal Rate		Current Postal Rate
Photographs	$27		$27
Video Tapes, Flash Drive, CD/DVD Production	$68		$68
Firearm Dealer License - City Application	$86		$86
Local Firearm dealers (set by state)			
New application	set by state		set by state
Renewal	set by state		set by state
Second Dealers License (set by state)			
Application	set by state		set by state
Renewal	set by state		set by state
Taxi Fee per application	set by state		set by state
Tobacco retail license	$348		$348
Cannabis Annual License Fee	$2,846		$2,846
Retail Cannabis Application Fee	$1,971		$1,971
Civil Subpoena (per case) (set by state)	set by state		set by state
Parking Permits (separate action by the Council)			
Neighborhoods per year	$25		$25
Village Preferential Permit	$50		$50
Village Preferential Permit - Hotels/Motels	$365		$365
Village Employer/Employee Permit	$50		$50
Morning Village Parking Permit	$55		$55
Electric Vehicle Charging Fee (City Upper and Lower Lots)	$2		$1 / hour plus $0.45 / kWh
Electric Vehicle Charging Fee (Community Center)			$0.45 / kWh
Carrying a Concealed Weapon (CCW) Permit - City Application	$157		$157
Concealed Weapon Permits (set by state)			
Application			
Standard	$0		$0
Judicial	$0		$0
Employment	$0		$0
Renewal			
Standard	$0		$0
Judicial	$0		$0
Employment	$0		$0

POLICE DEPARTMENT FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Firearm Surrender Fees (set by state law)			
1-5 guns	$0		$0
6+guns	$0		$0
Administrative fee to release Impounded / Stored Vehicle	$146		$146
Surf School Permit Fee	$610		$610
Parking Permit Replacement (Lost/Stolen)	$16		$16
Boot Removal	$118		$118
Tow Hearing	$151		$151

PLANNING FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Administration/Documents			
Continuance Request - Applicant (2+)	$167		$167
Staff Billing Rate	Cost		Cost
Appeals-by Applicant	Cost		Cost
Appeals- by City Officials	$0		$0
Appeals- by Other	$1,157		$1,157
Coastal Development Permit Appeal	$0		$0
Appeals -Building/Zoning Code Violations	$1,157		$1,157
Records Search/Research/Special Report	Cost		Cost
Administrative Permits			
Tree Remova l- Staff Review	$167		$167
Tree Removal -- 3 or more trees on a property	$334		$334
Tree Installation Deposit (Refundable)	$514		$514
Tree replacement in-lieu fee (if available)	$617		$617
Tree removal w/ PC approval	$1,320		$1,320
Commercial Sidewalk/Parking Lot Sale Permit	$174		$174
Tenant Use Permit (MCUP)--Staff approval	$174		$174
Transient Rental Occupancy Use Permit	$348		$348
Home Occupation Use Permit	$174		$174
Fence Permit- Staff approval	$87		$87
Fence Permit- PC approval	$1,465		$1,465
Sidewalk vendor permit	$174		$174
Temporary Use Administrative Permit	$174		$174
Sign Permits			
Temporary Signs and Banner Permits	$44		$44
Signs permit - Staff Review	$174		$174
Signs permit - PC Review	$713		$713
Master Sign Program	Cost; $3,000 min. deposit		Cost; $3,000 min. deposit
Village Sidewalk Sign Permit	$50		$50
Design Permits			
Residential Single Family/Minor Design Permit - Staff Review	$994		$994
Residential Single Family - PC Review	$3,303		$3,303
Residential Multi-Family - PC Review	$5,138		$5,138
Commercial - PC Review	$4,110		$4,110
Accessory Dwelling Unit- Staff Review	$482		$482
Accessory Dwelling Unit- PC Review	$1,621		$1,621
Residential Multi-Family/Minor Design Permit - Staff Review	$2,055		$2,055
Commercial Minor Design Permit	$2,055		$2,055
Historic In-Kind Replacement Design Permit	$346		$346
Sidewalk & Street Dining Design Permit	$1,164		$1,164
Use Permits			
Master Conditional Use Permit	Cost; $3,500 min. deposit		Cost; $3,500 min. deposit
Conditional Use Permit/Minor Use Permit - Staff Review (No fee for childcare facilities)	$994		$994
Conditional Use Permit - PC approval	Cost; $3,500 min. deposit		Cost; $3,500 min. deposit
Temporary Use Permit	$119		$119
Subdivisions			
Tentative Parcel Map (Minor Subdivision)	Cost; $3,500 min. deposit		Cost; $3,500 min. deposit
Tentative Map (Major Subdivision)	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Revised Map	$2,055		$2,055
Time Extension	$2,055		$2,055
Subdivision Modification	$2,055		$2,055
Plan Amendments			
General Plan Amendment	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Local Coastal Plan Amendment	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Rezone	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Planned Development Rezone	Cost; $3,500 min. deposit		Cost; $3,500 min. deposit

PLANNING FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Other Discretionary Permits			
Variance	$1,400		$1,400
PC review of minor modifications	$975		$975
Coastal Development Permit	$737		$737
Coastal Permit Exclusion	$737		$737
Mobile home Park Change of Use or Closure	$5,138		$5,138
Development Agreement	$10,276		$10,276
Developer agreement annual review	$2,569		$2,569
Specific Plan	$5,138		$5,138
Permit Time Extension -Staff Review	$425		$425
Permit Time Extension - PC Review	$1,213		$1,213
Permit Amendment (any permit)	50% of original cost		50% of original cost
Annexation	Costs+ overhead / $5,000 min. deposit		Costs+ overhead / $5,000 min. deposit
Environmental Review			
Negative Declaration (and Mitigated ND)	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
EIR Processing	Cost; + 21% of consultant; $10,000 min. deposit		Cost; + 21% of consultant; $10,000 min. deposit
Mitigation/Condition Monitoring Program	Cost + 21%		Cost + 21%
NEPA Compliance	Cost + 21%		Cost + 21%
Other Permits/Fees			
Conceptual Review Fee- PC	$3,014		$3,014
Conceptual Review Fee- PC and CC	$4,126		$4,126
Technical Study Preparation and Review	Cost + 21%		Cost + 21%
NOTE: Third party review costs to be required as necessary	Cost + 21%		Cost + 21%
Code Compliance	Double Application Fees		Double Application Fees
Code Compliance confiscated property recovery fee	$238		$238
Research Fee - 1/2 hour minimum charge	Cost		Cost
Pre-Application Review	$174		$174
SB330 Pre-Application	*new fee*		Cost; $1,000 min. deposit
Building Plan Check & Final Inspection	20% of Building Permit Fee		20% of Building Permit Fee
Major Development Project Fee	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Historical significance determination	Cost + 21%		Cost + 21%
Inclusionary Housing			
Inclusionary Housing - Unit Sale	$765		$765
Inclusionary Housing - Unit Refinance	$765		$765
Other Fees and Assessments			
General Plan Maintenance Fee	0.75%		0.75%
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5.0%		5.0%
Green Building Educational Resource Fund Fee (Municipal Code 17.10.080)	Fee equals .0025 times the overall building permit valuation of the project.		Fee equals .0025 times the overall building permit valuation of the project.
Affordable Housing In-Lieu Fees			
For Sale Housing Developments of two to six units (Municipal Code Chapter 18.02) :			
All Units	$25 per sq. ft.		$25 per sq. ft.
For Sale Housing Developments of Seven or more units			
#Units: 7 #Units Built 1	$0.00		$0.00
#Units: 8-13 #Units Built 1	Total # units minus 7 @ $25 per avg. sq. ft. per unit		Total # units minus 7 @ $25 per avg. sq. ft. per unit
#Units: 14 #Units Built 2	$0.00		$0.00
#Units: 15-20 #Units Built 2	Total # units minus 14 @ $25 per avg. sq. ft. per unit		Total # units minus 14 @ $25 per avg. sq. ft. per unit
#Units: 21 #Units Built 3	$0.00		$0.00
#Units: 22-27 #Units Built 3	Total # units minus 21 @ $25 per avg. sq. ft. per unit		Total # units minus 21 @ $25 per avg. sq. ft. per unit
#Units: 28 #Units Built 4	$0.00		$0.00
Rental Multi-Family	$6 per sq. ft.		$6 per sq. ft.

PLANNING FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Affordable Housing Impact Fees			
For Sale Housing Developments of Six or Less Units: New housing units that are constructed to replace housing units that were demolished less than two years before the project developer applied for a permit to construct the housing development project are exempt	$25 per square foot		$25 per square foot
Rental Multi-Family	$6 per square foot		$6 per square foot
Additional to Housing Units of 50% or more (charged to additional square footage only)	$2.50 per square foot		$2.50 per square foot

NOTES:

1. All Fees are non-refundable.
2. Deposit accounts are billed on a time and material basis. Additional deposits may be necessary depending on the complexity of the project. Any unused monies in a deposit account will be refunded following case closure.
3. The Community Development Director may reduce the total fee/deposit requirements for applications which are unlikely to require the full deposit amounts established herein.
4. Applications which include a fee and a deposit payment will be processed with a single deposit account.
5. Outside agency fees, including but not limited to County recordation fees, State Fish and Wildlife fees, etc. are charged at cost.
6. The Community Development Director may establish a reasonable fee or deposit amount for permit types required by the Capitola Municipal Code or State law which are not included in the fee schedule.
7. Flat fee applications are entitled up to two public hearings. Additional public hearings shall be charged to the applicant at cost
8. The Community Development Director may designate a project as a Major Development Project if it has a valuation of $2M+ or is considered technically

BUILDING FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
The cost of a "building permit"shall be the amounts shown in Table 1-A. A "building permit" is defined as a permit for a scope of construction work regulated solely by a single model code. The model codes are the building code, the plumbing code, the mechanical code and the electrical code.			
Total Valuation			
$1.00 to $500.00	$30.37		$30.37
$501.00 to $2,000.00	$30.37 for the first $500.00 plus $3.94 for each additional $100.00 or fraction thereof.		$30.37 for the first $500.00 plus $3.94 for each additional $100.00 or fraction thereof.
$2,001.00 to $25,000.00	$89.40 for the first $2,000.00 plus $18.08 for each additional $1000.00 or fraction thereof.		$89.40 for the first $2,000.00 plus $18.08 for each additional $1000.00 or fraction thereof.
$25,001.00 to $50,000.00	$505.14 for the first $25,000.00 plus $13.04 for each additional $1,000.00 or fraction thereof.		$505.14 for the first $25,000.00 plus $13.04 for each additional $1,000.00 or fraction thereof.
$50,001.00 to $100,000.00	$831.14 for the first $50,000.00 plus $9.05 for each additional $1,000.00 or fraction thereof.		$831.14 for the first $50,000.00 plus $9.05 for each additional $1,000.00 or fraction thereof.
$100,001.00 to $500,000.00	$1,283.80 for the first $100,000.00 plus $7.24 for each additional $1,000.00 or fraction thereof.		$1,283.80 for the first $100,000.00 plus $7.24 for each additional $1,000.00 or fraction thereof.
$500,001.00 to $1,000,000.00	$4,181.63 for the first $500,000.00 plus $6.13 for each additional $1,000.00 or fraction thereof.		$4,181.63 for the first $500,000.00 plus $6.13 for each additional $1,000.00 or fraction thereof.
$1,000,001.00 and up	$7,249.02 for the first $1,000,000.00 plus $3.32 for each additional $1,000.00 or fraction thereof.		$7,249.02 for the first $1,000,000.00 plus $3.32 for each additional $1,000.00 or fraction thereof.
Building Permit Reinstatement Fee	50% of the original, singular building permit fee or combo building permit fee, whichever is applicable to the permit being reinstated		50% of the original, singular building permit fee or combo building permit fee, whichever is applicable to the permit being reinstated
Stop Work Order Fee	2x the singular building permit fee		2x the singular building permit fee
Greywater System Permit	$0.00		$0.00
Home battery permit (usually with solar)	$0.00		$0.00
a. Level I (120 volts)	$0.00		$0.00
b. Level II (208-240 volts)	$0.00		$0.00
c. Level III (480 volts)	$0.00		$0.00
Solar P.V. System	$439		$439.00
Solar P.V. System (Commercial Sale/Distribution)	$439		$439.00
Solar Hot Water Heater	$0.00		$0.00
Research Fee - 1/2 hour minimum charge	Cost		Cost
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5.0%		5.0%
Temporary Trailer/Mobile Home Occupancy Permit	$324		$324.00
Structural Review of Engineered Plans	cost + 21%		cost + 21%
Outside Consultant Plan Review	cost + 21%		cost + 21%
Grading Plan Review Fees			
50 cubic yard or less	$362		$362.00
51 to 100 cubic yard	$362		$362.00
101 to 1,000 cubic yards	Cost +21%		Cost +21%
1,001 to 10,000 cubic yards	Cost +21%		Cost +21%
10,001 to 100,000 cubic yards	$446.72 for first 10,000 plus $253.33 for each additional 10,000 cubic yards		$446.72 for first 10,000 plus $253.33 for each additional 10,000 cubic yards
100,001 to 200,000 cubic yards	$2,726.77 for first 100,000 plus $133.33 for each additional 10,000 cubic yards		$2,726.77 for first 100,000 plus $133.33 for each additional 10,000 cubic yards
200,001 cubic yards or more	$5,260.15 for first 200,000 plus $73.03 for each additional 10,000 cubic yards		$5,260.15 for first 200,000 plus $73.03 for each additional 10,000 cubic yards

Grading Permit Fees			
50 cubic yard or less	$0.00		$0.00
51 to 100 cubic yard	$0.00		$0.00
101 to 1,000 cubic yards	$194.23 for first 100 plus $28.05 for each additional 100 cubic yards		$194.23 for first 100 plus $28.05 for each additional 100 cubic yards
1,001 to 10,000 cubic yards	$446.72 for first 1,000 plus $7.50 for each additional 1,000 cubic yards		$446.72 for first 1,000 plus $7.50 for each additional 1,000 cubic yards
10,001 to 100,000 cubic yards	$514.27 for first 10,000 plus $253.33 for each additional 10,000 cubic yards		$514.27 for first 10,000 plus $253.33 for each additional 10,000 cubic yards
100,001 to 200,000 cubic yards	$2,794.32 for first 100,000 plus $140.09 for each additional 10,000 cubic yards		$2,794.32 for first 100,000 plus $140.09 for each additional 10,000 cubic yards

PARKS AND RECREATION FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
All fees are evaluated annually to determine if they are competitive with other recreation programs in Santa Cruz County			
Classes			
Activity Fee (Instructor receives 65% of this fee, Department retains 35%)			
Registration Fee - Resident - Department retains this fee	$20		$20
Drop-in and Workshop Registration Fee - Department retains this fee	$10		$10
Online Class Registration fee-Department retains this fee	5.5% of Activity Fee		5.5% of Activity Fee
Non-Resident Fee: in addition to Registration Fee - Department retains this fee	$20		$20
Drop-in Activity Fee	Prorated cost of Session Activity Fee		Prorated cost of Session Activity Fee
Senior Discount	10% of Activity Fee		10% of Activity Fee
Change is registration/reservation	$25		$25
Negotiated Instructor of Private Tennis Lessons Activity Fee (Instructor receives 75% of this fee, Department retains 25%)			
Sports			
League Fees	$645/team		$645/team
League fees will change depending upon number and type of leagues offered, number of games per league, number of officials, amount of equipment needed, field/site prep and maintenance, and whether or not playoffs & awards are offered. Fees are calculated based on direct costs + 30% admin fee.			
After School			
Resident/non resident	$5.75 / $6.50		$5.75 / $6.50
Registration/Change Fee - Resident - Department retains this fee	$30		$30
Late Pick-Up Fee	$1		$1
Parent's Night Out	$25 / $31		$25 / $31
Junior Guards			
Resident/non resident	$311 / $389		$311 / $389
U-19 resident/non resident	$195		$195
Registration/Change Fee - Resident - Department retains this fee	$30		$30
Late Pick-Up Fee	$1		$1
Regionals (does not include USLA Gold Membership)	$115		$115
Camp Capitola			
*Daily rate used only to calculate program fee	$34 / $42		$34 / $42
All day 2 week session, resident/non resident	$336 / $420		$336 / $420
1/2 day 2-week session, resident/non resident	$170 / $210		$170 / $210
All day 1 week session, resident/non resident	$170 / $210		$170 / $210
All day 1 week teen session, resident/non resident	$303 / $378		$303 / $378
Junior Leader program	$72		$72
Registration/Change Fee - Resident - Department retains this fee	$30		$30
Late Pick-Up Fee	$1		$1
Extended Care--daily add on, resident/non resident	$12		$12
AM Extended Care--per 2 week session resident/non resident or AM & PM for 1 week long session	$58		$58
PM Extended Care--per 2 week session resident/non resident	$58		$58
Transportation/Lunch Break fee	$63		$63
Family Camp			
3 night family camp Adult (13+) / Child (3-12)	$358 / $244		$358 / $244
Rapid Weddings			
Event Fee per registration	$400		$400
plus civil ceremony fees found in Admin Fee section	Cost		Cost

PARKS AND RECREATION FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Facility Rentals			
Field and Courts hourly rental; non profit youth groups/other non profit & Cap residents/all others	$15/ $29 / $38		$15/ $29 / $38
~~Jade Street~~ Capitola Community Center			
~~Rooms A&B hourly rent~~	~~$48.00~~		*remove*
~~Room C hourly rent~~	~~$66.00~~		*remove*
Room A	*new fee*		$55 / hour
Room B	*new fee*		$65 / hour
Patio Room	*new fee*		$80 / hour
Room B & Patio Room	*new fee*		$125 / hour
Patio ~~hourly rent~~	$9.50		$10 / hour
Kitchen ~~hourly rent~~	$24.00		$45 / hour
Entire Center ~~hourly rent~~	$173.00		$450 daily, 5+ hours
Non profit discount ~~of Jade Street Facility rents~~	25%		25%
Community Center Cleaning Deposit	*new fee*		$300
~~Community Center Deposit~~			
~~1 to 50 people~~	~~$110.00~~		*remove*
~~51 to 150 people~~	~~$276.00~~		*remove*
~~151 to 250 people~~	~~$554.00~~		*remove*
Lost key fee	$27.00		$27
Event Fees			
Event vendor fee	$111		$111
Merchandise Fee	Cost + 50% administration fee		Cost + 50% administration fee
Plein Air Art Exhibition service fee	30% retained by City, 70% paid to Artist		30% retained by City, 70% paid to Artist
Plein Air Artist Application Fee	$50		$50
Staffing required to prepare for or supervise recreation activities	Cost		Cost
Park Rental Fees			
Park Space Reservation (hourly)	$10		$10
Barbeque permit	$10		$10
Bounce House / Powered Equipment permit	$60		$60
Temporary Structures (more than 100 sq ft) permit	$60		$60
Notes: Resident include Soquel Union Elementary School District			
Costs mean staff costs adjusted for benefits, department overhead, and City overhead as calculated by the City Manager. Costs can also mean direct cost of a consultant. When consultant costs are included 21% of such costs will be charged to cover staff time for contract management. Staff costs do not accrue during an appeal unless appeal is made by applicant.			
Deposits are stated as minimums. Actual deposits depend on the evaluation by staff of an individual project or application. The City Manager may lower minimum deposits if the application or project justifies a lower deposit. When an application involves multiple minimum fees the highest minimum fee applies.			

HISTORICAL MUSEUM FEES

Description	2025-26 Approved Fee Schedule		2025-26 Amended Fee Schedule
Research Fee - 1/2 hour minimum charge	Cost		Cost
Print of an electronically available Photograph in Collection	$8		$8
Digital Copies of Collection Items	$23		$23
Scan High Resolution Tiff File of any collection item for a customer	$27		$27

MISCELLANEOUS FEES

Description	2025-26 Amended Fee Schedule
Appeal Fee Appeals to City Council (CMC 2.52)	$609
Capitola Municipal Code	$0.15 / page
Capitola Municipal Code Supplement Service (Per year)	$0
Copies:	
1-5 copies	$0
6 or more copies (per copy)	$0.25 / page
Gov't Code § 81008 (Political Reform Act) statements/reports (Per copy)	$0.10 / page
Simple film permit	$70
Major film permit	$775
Returned Check Fee	$35
Business License Overpayment Refund Fee (resolution 3532, ord 871)	$0
Business License Late Payment Penalty Admin. Fee	$25
Business License Application Fee (Reso. 3532)	$25
Business License - Disability Access and Education Fee (State)	$4
Temporary, Publicly Attended Activities, Application Fee (Municipal Code § 9.36.040)	$34
Public Art (Total Building Valuation $250,000 or more) (Municipal Code Chapter 2.58)	2% of TBV or 1% in lieu to City
Notice of Intent to Circulate Initiative Petition (Elections Code § 9103(b))	$200
Outdoor Dining Rental Fees	
Parking Spaces (annually for each space or partial space)	$3,622
Sidewalks and non-parking spaces (annually per square foot)	$19
Outdoor Dining Maintenance Deposit	
Sidwalks and non-parking spaces	$500.00
1-2 parking spaces	$1,000.00
3-5 parking spaces	$1,500.00
Notary Service Fees (State Code)	
Acknowledgment or proof of a deed, or other instrument, to include the seal and writing of the certificate	$15.00 / per signature
Administering an oath or affirmation to one person and executing the jurat, including the seal	$15.00 / per signature
Credit Card Transaction Fee	$0
Passport Acceptance Fee	$35
Marriage License	$36
Marriage Ceremony	$120
Marriage Ceremony - Witness Fee	$30

POLICE DEPARTMENT FEES

Description	2025-26 Amended Fee Schedule
Special Event Permit	$420
Recurring Special Event Permit - Major	$705
New Major Special Event Permit	$2,089
Neighborhood Special Event/Block Party	$208
Special Event Pacific Cove Parking Lot Space Use Rates (upper lot max 232 parking spaces, lower lot max 226 parking spaces)	
Parking space rate per day	$12 / space
Parking space rate per day (nonprofit)	$7.20 / space
Special Event Village Closure Rates (max of 191 parking spaces at $24 per space per day)	
Closure of Village for Special Event -full day	$4,584
Closure of Village for Special Event -half day	$2,292
Closure of Village for Special Event -full day (nonprofit)	$2,750
Closure of Village for Special Event -half day (nonprofit)	$1,375
Amplified Sound Permit (Municipal Code 9.12.040)	$87
Bandstand Rental Fee	$253 / 4 hrs or $506 / all day; deposit $1,500
Single Entertainment Permit	$208
Minor Entertainment Permit	$208
Regular Entertainment Permit	$743
Bingo Permit	$87
DUI Cost Recovery Fee (Res. 3533)	Not to exceed $12,000
Copies of reports: Crime Reports, Special Reports, etc. (Regardless of number of pages)	$0.25 / page
Copies of: Citations, Code sections, Ordinances, etc.	$0.25 / page
Postage (for copies of reports, citations, code sections, etc, if over 15 pages)	Current Postal Rate
Photographs	$27
Video Tapes, Flash Drive, CD/DVD Production	$68
Firearm Dealer License - City Application	$86
Local Firearm dealers (set by state)	
New application	set by state
Renewal	set by state
Second Dealers License (set by state)	
Application	set by state
Renewal	set by state
Taxi Fee per application	set by state
Tobacco retail license	$348
Cannabis Annual License Fee	$2,846
Retail Cannabis Application Fee	$1,971
Civil Subpoena (per case) (set by state)	set by state
Parking Permits (separate action by the Council)	
Neighborhoods per year	$25
Village Preferential Permit	$50
Village Preferential Permit - Hotels/Motels	$365
Village Employer/Employee Permit	$50
Morning Village Parking Permit	$55
Electric Vehicle Charging Fee (City Upper and Lower Lots)	$1 / hour plus $0.45 / kWh
Electric Vehicle Charging Fee (Community Center)	$0.45 / kWh

POLICE DEPARTMENT FEES

Description	2025-26 Amended Fee Schedule
Carrying a Concealed Weapon (CCW) Permit - City Application	$157
Concealed Weapon Permits (set by state)	
Application	
Standard	$0
Judicial	$0
Employment	$0
Renewal	
Standard	$0
Judicial	$0
Employment	$0
Firearm Surrender Fees (set by state law)	
1-5 guns	$0
6+guns	$0
Administrative fee to release Impounded / Stored Vehicle	$146
Surf School Permit Fee	$610
Parking Permit Replacement (Lost/Stolen)	$16
Boot Removal	$118
Tow Hearing	$151

PUBLIC WORKS DEPARTMENT FEES

Description	2025-26 Amended Fee Schedule
Encroachment Permits	
Application Fee	$146
Traffic Control Plan Review - Local Street	$72
Traffic Control Plan Review - Collector Street	$349
Traffic Control Plan Review - Arterial Street	$524
Inspection - Local Street	$72
Inspection - Collector Street	$194
Inspection - Arterial Street	$292
Revocable Encroachment Permit Application- Outdoor Dining	$1,405
Temporary (includes materials storage within right-of-way road and sidewalk closures	$24
Village Sidewalk Sign Encroachment Permit	$50
Construction Parking Permit - Village	$28
Construction Parking Permit - City Lot	$14
Construction Parking Permit - Neighborhood	$29
Blanket Permits (repair and maintenance of existing facilitiesm encompassing up to 20 utility instances per year)	$3,305
Revocable Encroachment for Private Improvements	
Applications for Minor Revocable Encroachment	$493
Applications for Major Revocable Encroachment	$1,584
SPECIAL TRANSPORTATION PERMIT – OVERSIZE LOAD - Single	$16
SPECIAL TRANSPORTATION PERMIT – OVERSIZE LOAD - Single	$92
New Memorial Bench	$2,711
Replacement Memorial Bench	$2,646
Memorial Plaque	$660
Replacement Plaque	$463
Overhead Banner (ourtisde of special event)	$166
Stormwater Development Review Fee	
Application Fee	$143
Large Project Plan Review Deposit	
Tier 1	$357
Tier 2	$713
Tier 3 & 4	$713
Research Fee - 1/2 hour minimum charge	Cost
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5% of Permit Fee
Final Parcel Map	$4,458
Final Tract Map	$6,354
Certificate of Compliance & Lot Merger	$2,605
Boundary Line Adjustment	$2,605
Separate Instrument Dedication Fee	$3,021
Abandon Excess Public Right-of-Way & Public Easement	$3,021
Improvement Plan Review	
Design Permits - Residential Single Family	$232
Design Permits - Residential Multi-Family/Commercial	$1,005
Building Permits - Residential Single Family	$394
Building Permits - Residential Multi-Family/Commercial	$1,024

PLANNING FEES

Description	2025-26 Amended Fee Schedule
Administration/Documents	
Continuance Request - Applicant (2+)	$167
Staff Billing Rate	Cost
Appeals-by Applicant	Cost
Appeals- by City Officials	$0
Appeals- by Other	$1,157
Coastal Development Permit Appeal	$0
Appeals -Building/Zoning Code Violations	$1,157
Records Search/Research/Special Report	Cost
Administrative Permits	
Tree Remova l- Staff Review	$167
Tree Removal -- 3 or more trees on a property	$334
Tree Installation Deposit (Refundable)	$514
Tree replacement in-lieu fee (if available)	$617
Tree removal w/ PC approval	$1,320
Commercial Sidewalk/Parking Lot Sale Permit	$174
Tenant Use Permit (MCUP)--Staff approval	$174
Transient Rental Occupancy Use Permit	$348
Home Occupation Use Permit	$174
Fence Permit- Staff approval	$87
Fence Permit- PC approval	$1,465
Sidewalk vendor permit	$174
Temporary Use Administrative Permit	$174
Sign Permits	
Temporary Signs and Banner Permits	$44
Signs permit - Staff Review	$174
Signs permit - PC Review	$713
Master Sign Program	Cost; $3,000 min. deposit
Village Sidewalk Sign Permit	$50
Design Permits	
Residential Single Family/Minor Design Permit - Staff Review	$994
Residential Single Family - PC Review	$3,303
Residential Multi-Family - PC Review	$5,138
Commercial - PC Review	$4,110
Accessory Dwelling Unit- Staff Review	$482
Accessory Dwelling Unit- PC Review	$1,621
Residential Multi-Family/Minor Design Permit - Staff Review	$2,055
Commercial Minor Design Permit	$2,055
Historic In-Kind Replacement Design Permit	$346
Sidewalk & Street Dining Design Permit	$1,164
Use Permits	
Master Conditional Use Permit	Cost; $3,500 min. deposit
Conditional Use Permit/Minor Use Permit - Staff Review (No fee for childcare facilities)	$994
Conditional Use Permit - PC approval	Cost; $3,500 min. deposit
Temporary Use Permit	$119
Subdivisions	
Tentative Parcel Map (Minor Subdivision)	Cost; $3,500 min. deposit
Tentative Map (Major Subdivision)	Cost; $5,000 min. deposit
Revised Map	$2,055
Time Extension	$2,055
Subdivision Modification	$2,055
Plan Amendments	
General Plan Amendment	Cost; $5,000 min. deposit
Local Coastal Plan Amendment	Cost; $5,000 min. deposit
Rezone	Cost; $5,000 min. deposit
Planned Development Rezone	Cost; $3,500 min. deposit

PLANNING FEES

Description	2025-26 Amended Fee Schedule
Other Discretionary Permits	
Variance	$1,400
PC review of minor modifications	$975
Coastal Development Permit	$737
Coastal Permit Exclusion	$737
Mobile home Park Change of Use or Closure	$5,138
Development Agreement	$10,276
Developer agreement annual review	$2,569
Specific Plan	$5,138
Permit Time Extension -Staff Review	$425
Permit Time Extension - PC Review	$1,213
Permit Amendment (any permit)	50% of original cost
Annexation	Costs+ overhead / $5,000 min. deposit
Environmental Review	
Negative Declaration (and Mitigated ND)	Cost; $5,000 min. deposit
EIR Processing	Cost; + 21% of consultant; $10,000 min. deposit
Mitigation/Condition Monitoring Program	Cost + 21%
NEPA Compliance	Cost + 21%
Other Permits/Fees	
Conceptual Review Fee- PC	$3,014
Conceptual Review Fee- PC and CC	$4,126
Technical Study Preparation and Review	Cost + 21%
NOTE: Third party review costs to be required as necessary	Cost + 21%
Code Compliance	Double Application Fees
Code Compliance confiscated property recovery fee	$238
Research Fee - 1/2 hour minimum charge	Cost
Pre-Application Review	$174
SB330 Pre-Application	Cost; $1,000 min. deposit
Building Plan Check & Final Inspection	20% of Building Permit Fee
Major Development Project Fee	Cost; $5,000 min. deposit
Historical significance determination	Cost + 21%
Inclusionary Housing	
Inclusionary Housing - Unit Sale	$765
Inclusionary Housing - Unit Refinance	$765
Other Fees and Assessments	
General Plan Maintenance Fee	0.75%
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5.0%
Green Building Educational Resource Fund Fee (Municipal Code 17.10.080)	Fee equals .0025 times the overall building permit valuation of the project.
Affordable Housing In-Lieu Fees	
For Sale Housing Developments of two to six units (Municipal Code Chapter 18.02) :	
All Units	$25 per sq. ft.
For Sale Housing Developments of Seven or more units	
#Units: 7 #Units Built 1	$0.00
#Units: 8-13 #Units Built 1	Total # units minus 7 @ $25 per avg. sq. ft. per unit
#Units: 14 #Units Built 2	$0.00
#Units: 15-20 #Units Built 2	Total # units minus 14 @ $25 per avg. sq. ft. per unit
#Units: 21 #Units Built 3	$0.00
#Units: 22-27 #Units Built 3	Total # units minus 21 @ $25 per avg. sq. ft. per unit
#Units: 28 #Units Built 4	$0.00
Rental Multi-Family	$6 per sq. ft.

PLANNING FEES

Description	2025-26 Amended Fee Schedule
Affordable Housing Impact Fees	
For Sale Housing Developments of Six or Less Units: New housing units that are constructed to replace housing units that were demolished less than two years before the project developer applied for a permit to construct the housing development project are exempt	$25 per square foot
Rental Multi-Family	$6 per square foot
Additional to Housing Units of 50% or more (charged to additional square footage only)	$2.50 per square foot

NOTES:

1. All Fees are non-refundable.
2. Deposit accounts are billed on a time and material basis. Additional deposits may be necessary depending on the complexity of the project. Any unused monies in a deposit account will be refunded following case closure.
3. The Community Development Director may reduce the total fee/deposit requirements for applications which are unlikely to require the full deposit amounts established herein.
4. Applications which include a fee and a deposit payment will be processed with a single deposit account.
5. Outside agency fees, including but not limited to County recordation fees, State Fish and Wildlife fees, etc. are charged at cost.
6. The Community Development Director may establish a reasonable fee or deposit amount for permit types required by the Capitola Municipal Code or State law which are not included in the fee schedule.
7. Flat fee applications are entitled up to two public hearings. Additional public hearings shall be charged to the applicant at cost
8. The Community Development Director may designate a project as a Major Development Project if it has a valuation of $2M+ or is considered technically

BUILDING FEES

Description	2025-26 Amended Fee Schedule
The cost of a “building permit”shall be the amounts shown in Table 1-A. A “building permit” is defined as a permit for a scope of construction work regulated solely by a single model code. The model codes are the building code, the plumbing code, the mechanical code and the electrical code.	
Total Valuation	
$1.00 to $500.00	$30.37
$501.00 to $2,000.00	$30.37 for the first $500.00 plus $3.94 for each additional $100.00 or fraction thereof.
$2,001.00 to $25,000.00	$89.40 for the first $2,000.00 plus $18.08 for each additional $1000.00 or fraction thereof.
$25,001.00 to $50,000.00	$505.14 for the first $25,000.00 plus $13.04 for each additional $1,000.00 or fraction thereof.
$50,001.00 to $100,000.00	$831.14 for the first $50,000.00 plus $9.05 for each additional $1,000.00 or fraction thereof.
$100,001.00 to $500,000.00	$1,283.80 for the first $100,000.00 plus $7.24 for each additional $1,000.00 or fraction thereof.
$500,001.00 to $1,000,000.00	$4,181.63 for the first $500,000.00 plus $6.13 for each additional $1,000.00 or fraction thereof.
$1,000,001.00 and up	$7,249.02 for the first $1,000,000.00 plus $3.32 for each additional $1,000.00 or fraction thereof.
Building Permit Reinstatement Fee	50% of the original, singular building permit fee or combo building permit fee, whichever is applicable to the permit being reinstated
Stop Work Order Fee	2x the singular building permit fee
Greywater System Permit	$0.00
Home battery permit (usually with solar)	$0.00
a. Level I (120 volts)	$0.00
b. Level II (208-240 volts)	$0.00
c. Level III (480 volts)	$0.00
Solar P.V. System	$439
Solar P.V. System (Commercial Sale/Distribution)	$439
Solar Hot Water Heater	$0.00
Research Fee - 1/2 hour minimum charge	Cost
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5.0%
Temporary Trailer/Mobile Home Occupancy Permit	$324
Structural Review of Engineered Plans	cost + 21%
Outside Consultant Plan Review	cost + 21%
Grading Plan Review Fees	
50 cubic yard or less	$362
51 to 100 cubic yard	$362
101 to 1,000 cubic yards	Cost +21%
1,001 to 10,000 cubic yards	Cost +21%
10,001 to 100,000 cubic yards	$446.72 for first 10,000 plus $253.33 for each additional 10,000 cubic yards
100,001 to 200,000 cubic yards	$2,726.77 for first 100,000 plus $133.33 for each additional 10,000 cubic yards
200,001 cubic yards or more	$5,260.15 for first 200,000 plus $73.03 for each additional 10,000 cubic yards

Grading Permit Fees	
50 cubic yard or less	$0.00
51 to 100 cubic yard	$0.00
101 to 1,000 cubic yards	$194.23 for first 100 plus $28.05 for each additional 100 cubic yards
1,001 to 10,000 cubic yards	$446.72 for first 1,000 plus $7.50 for each additional 1,000 cubic yards
10,001 to 100,000 cubic yards	$514.27 for first 10,000 plus $253.33 for each additional 10,000 cubic yards
100,001 to 200,000 cubic yards	$2,794.32 for first 100,000 plus $140.09 for each additional 10,000 cubic yards

PARKS AND RECREATION FEES

Description	2025-26 Amended Fee Schedule
All fees are evaluated annually to determine if they are competitive with other recreation programs in Santa Cruz County	
Classes	
Activity Fee (Instructor receives 65% of this fee, Department retains 35%)	
Registration Fee - Resident - Department retains this fee	$20
Drop-in and Workshop Registration Fee - Department retains this fee	$10
Online Class Registration fee-Department retains this fee	5.5% of Activity Fee
Non-Resident Fee: in addition to Registration Fee - Department retains this fee	$20
Drop-in Activity Fee	Prorated cost of Session Activity Fee
Senior Discount	10% of Activity Fee
Change is registration/reservation	$25
Negotiated Instructor of Private Tennis Lessons Activity Fee (Instructor receives 75% of this fee, Department retains 25%)	
Sports	
League Fees	$645/team
League fees will change depending upon number and type of leagues offered, number of games per league, number of officials, amount of equipment needed, field/site prep and maintenance, and whether or not playoffs & awards are offered. Fees are calculated based on direct costs + 30% admin fee.	
After School	
Resident/non resident	$5.75 / $6.50
Registration/Change Fee - Resident - Department retains this fee	$30
Late Pick-Up Fee	$1
Parent's Night Out	$25 / $31
Junior Guards	
Resident/non resident	$311 / $389
U-19 resident/non resident	$195
Registration/Change Fee - Resident - Department retains this fee	$30
Late Pick-Up Fee	$1
Regionals (does not include USLA Gold Membership)	$115
Camp Capitola	
*Daily rate used only to calculate program fee	$34 / $42
All day 2 week session, resident/non resident	$336 / $420
1/2 day 2-week session, resident/non resident	$170 / $210
All day 1 week session, resident/non resident	$170 / $210
All day 1 week teen session, resident/non resident	$303 / $378
Junior Leader program	$72
Registration/Change Fee - Resident - Department retains this fee	$30
Late Pick-Up Fee	$1
Extended Care--daily add on, resident/non resident	$12
AM Extended Care--per 2 week session resident/non resident or AM & PM for 1 week long session	$58
PM Extended Care--per 2 week session resident/non resident	$58
Transportation/Lunch Break fee	$63
Family Camp	
3 night family camp Adult (13+) / Child (3-12)	$358 / $244
Rapid Weddings	
Event Fee per registration	$400
plus civil ceremony fees found in Admin Fee section	Cost

PARKS AND RECREATION FEES

Description	2025-26 Amended Fee Schedule
Facility Rentals	
Field and Courts hourly rental; non profit youth groups/other non profit & Cap residents/all others	$15/ $29 / $38
Capitola Community Center	
Room A	$55 / hour
Room B	$65 / hour
Patio Room	$80 / hour
Room B & Patio Room	$125 / hour
Patio	$10 / hour
Kitchen	$45 / hour
Entire Center	$450 daily, 5+ hours
Non profit discount	25%
Community Center Cleaning Deposit	$300
Lost key fee	$27
Event Fees	Event Fees
Event vendor fee	$111
Merchandise Fee	Cost + 50% administration fee
Plein Air Art Exhibition service fee	30% retained by City, 70% paid to Artist
Plein Air Artist Application Fee	$50
Staffing required to prepare for or supervise recreation activities	Cost
Park Rental Fees	
Park Space Reservation (hourly)	$10
Barbeque permit	$10
Bounce House / Powered Equipment permit	$60
Temporary Structures (more than 100 sq ft) permit	$60
Notes: Resident include Soquel Union Elementary School District	
Costs mean staff costs adjusted for benefits, department overhead, and City overhead as calculated by the City Manager. Costs can also mean direct cost of a consultant. When consultant costs are included 21% of such costs will be charged to cover staff time for contract management. Staff costs do not accrue during an appeal unless appeal is made by applicant.	
Deposits are stated as minimums. Actual deposits depend on the evaluation by staff of an individual project or application. The City Manager may lower minimum deposits if the application or project justifies a lower deposit. When an application involves multiple minimum fees the highest minimum fee applies.	

HISTORICAL MUSEUM FEES

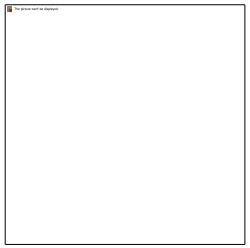
Description	2025-26 Amended Fee Schedule
Research Fee - 1/2 hour minimum charge	Cost
Print of an electronically available Photograph in Collection	$8
Digital Copies of Collection Items	$23
Scan High Resolution Tiff File of any collection item for a customer	$27

Fiscal Year 2025-26 Amended Fee Schedule

May 14, 2026

Background

- FY 2025-26 Fee Schedule
  - Adopted June 26, 2025
  - Amended August 28, 2025
- Senate Bill 330 changes to land use and zoning regulations
- Community Center Renovation Project completion on schedule
- Current EV charging rate recovery inadequate



Proposed Fee Amendments

- SB330 Pre-Application (planner cost recovery)
  - Cost; $1,000 minimum deposit

Proposed Fee Amendments cont.

- Community Center
  - Room A - $55 / hour
  - Room B - $65 / hour
  - Patio Room - $80 / hour
  - Room B & Patio Room - $125 / hour
  - Patio - $10 per hour
  - Kitchen - $45 per hour
  - Entire Center - $1,450 daily, 5+ hours
  - Community Center Cleaning Deposit - $300

Proposed Fee Amendments cont.

- EV Charging Fees
  - City Upper and Lower Lots (upon installation of new chargers)
    - $1.00 per hour parking plus $0.45 per kWh
  - Community Center
    - $0.45 per kWh

Recommended Action

Adopt the proposed resolution amending the fee schedule with corrected daily community center rate for Fiscal Year 2025-26

Capitola City Council

Agenda Report

Meeting: May 14, 2026

From: Finance Department

Subject: FY 2026-27 City Fee Schedule

Recommended Action: Conduct the duly noticed public hearing on the proposed changes to the City's Fee Schedule and adopt a resolution approving the Fiscal Year 2026-27 Fee Schedule.

Background: The annual budget process includes a review of the City's Fee Schedule. Capitola's current fee schedule is based on the comprehensive fee study adopted on November 14, 2024. The consultant recommended the City review the fee schedule annually based on the actual cost of delivering certain services, adjusting rates to match inflation and salary increases. In years prior to the fee study, the City had only accounted for inflation using the annual Consumer Price Index (CPI) to determine fee increases.

State law requires the City to conduct a public hearing where testimony can be taken before any fees are added or existing fees are altered.

Discussion: Staff recommends increasing fees using a combination of the 2025 annual CPI (2.18%) and salary adjustments, as well as adding new fees to facilitate cost recovery. The salaries used in the calculations include the upcoming cost of living adjustments (COLAs), effective July 1, 2026. Additions, deletions, and significant changes to the fee schedule include:

- Miscellaneous:
  - Outdoor Dining Rental Fees removed from fee schedule because the language regarding rents and deposits is included in the individual signed agreements/leases.
- Public Works:
  - Improvement Plan Review fees moved from Public Works to Planning and Building because they are charged in conjunction with building and planning permits.
- Planning:
  - Consultant Billing Rate added to recover costs.
  - Home Occupation Use Permit removed because these permits are no longer issued.
  - Residential Multi-Family 5+ Units planner cost recovery deposit added to Design Permits and Development Review (Public Works) to facilitate full cost recovery for larger projects.
  - Several fees changed from a flat rate to a planner cost recovery deposit to facilitate full cost recovery.
- Building:
  - Building Permit fees increased to recover cost of staff time.
  - Electric Vehicle Charging Permit fees reinstated based on cost of staff time. The permit fees were waived several years ago as an incentive, but now that the technology is commonplace, the fees are being reinstated.

- Several new standardized fees added in an effort to reduce staff time spent on valuation-based calculations and align with regional standards:
  - Residential Water Heater Replacement
  - Re-Roofing
  - Re-Roofing with Solar
  - Demolition
  - Electrical Service
  - Temporary Power Pole
- Four new Administrative and Inspection Fees added to facilitate cost recovery.

- Recreation:
  - Single day fee added to Camp Capitola section for school break time camps.

Fiscal Impact: The Fiscal Year 2026-27 Budget will incorporate the amended fees. Staff will be evaluating fee revenue during the mid-year budget review and will recommend amendments, if any, at that time.

Attachments:

1. Resolution (with Recommended FY 2026-27 Fee Schedule attached as Exhibit A)
2. Fee Schedule Comparison

Report Prepared By: Leda Laidlaw-Hunter, Accountant II

Reviewed By: Julia Gautho, City Clerk; Jim Malberg, Administrative Services Director

Approved By: Jamie Goldstein, City Manager

RESOLUTION NO.

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CAPITOLA ADOPTING THE CITY'S FEE SCHEDULE FOR FISCAL YEAR 2026-2027

WHEREAS, the Government Code of the State of California, Section 66018 requires local agencies to notice and hold at least one open and public meeting prior to levying a new fee or increasing an existing fee; and

WHEREAS, the City Council of the City of Capitola has held a duly noticed public hearing on May 14, 2026, to consider amending existing fees charged for various City services; and

WHEREAS, the City Council adopted Resolution 4402 on November 14, 2024, amending the City Fee Schedule in accordance with the comprehensive fee study also presented to City Council on November 14, 2024; and

WHEREAS, City staff researched and analyzed the cost of services provided by the City and determined the appropriateness of these adjusted rates relative to the cost of providing services; and

WHEREAS, the adjusted rates do not exceed the reasonable cost of providing these services; and

WHEREAS, this fee schedule sets forth the City's cost recovery fee programs, which includes minimum deposits against which staff costs, adjusted for overhead, are assessed; and

WHEREAS, such rates must be adjusted from time to time to reflect the true costs of such services; and

WHEREAS, all flat fees, with the exception of those established by law, may be adjusted annually by the Consumer Price Index (CPI) for the San Francisco, Oakland, San Jose area; and

WHEREAS, the City of Capitola will analyze the fee schedule on a yearly basis to ensure hour estimates and staff costs are reasonable; and

WHEREAS, the City of Capitola has made available to the public the required data pursuant to Government Code Section 66018 for at least ten days prior to adoption of a revised fee schedule.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Capitola does hereby adopt the City of Capitola Fee Schedule to become effective on July 1, 2026; and

I HEREBY CERTIFY that the above and foregoing Resolution was passed and adopted by the City Council of the City of Capitola at its regular meeting held on the 14th day of May, 2026, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Margaux Morgan, Mayor

ATTEST:

_____
Julia Gautho, City Clerk

MISCELLANEOUS FEES

Description	2026-27 Fee Schedule
Appeal Fee Appeals to City Council (CMC 2.52)	$622
Capitola Municipal Code	$0.15 / page
Capitola Municipal Code Supplement Service (Per year)	$0
Copies:	
1-5 copies	$0
6 or more copies (per copy)	$0.25 / page
Gov't Code § 81008 (Political Reform Act) statements/reports (Per copy)	$0.10 / page
Simple film permit	$72
Major film permit	$825
Returned Check Fee	$35
Business License Overpayment Refund Fee (resolution 3532, ord 871)	$0
Business License Late Payment Penalty Admin. Fee	$25
Business License Application Fee (Reso. 3532)	$25
Business License - Disability Access and Education Fee (State)	$4
Temporary, Publicly Attended Activities, Application Fee (Municipal Code § 9.36.040)	$34
Public Art (Total Building Valuation $250,000 or more) (Municipal Code Chapter 2.58)	2% of TBV or 1% in lieu to City
Notice of Intent to Circulate Initiative Petition (Elections Code § 9103(b))	$200
Notary Service Fees (State Code)	
Acknowledgment or proof of a deed, or other instrument, to include the seal and writing of the certificate	$15.00 / per signature
Administering an oath or affirmation to one person and executing the jurat, including the seal	$15.00 / per signature
Credit Card Transaction Fee	$0
Passport Acceptance Fee	$35
Marriage License	$38
Marriage Ceremony	$125
Marriage Ceremony - Witness Fee	$32

POLICE DEPARTMENT FEES

Description	2026-27 Fee Schedule
Special Events & Entertainment	
Special Event Permit	$447
Recurring Special Event Permit - Major	$754
New Major Special Event Permit	$2,232
Neighborhood Special Event/Block Party	$224
Special Event Pacific Cove Parking Lot Space Use Rates (upper lot max 232 parking spaces, lower lot max 226 parking spaces)	
Parking space rate per day	$12 / space
Parking space rate per day (nonprofit)	$7.20 / space
Special Event Village Closure Rates (max of 191 parking spaces at $24 per space per day)	
Closure of Village for Special Event -full day	$4,584
Closure of Village for Special Event -half day	$2,292
Closure of Village for Special Event -full day (nonprofit)	$2,750
Closure of Village for Special Event -half day (nonprofit)	$1,375
Amplified Sound Permit (Municipal Code 9.12.040)	$93
Bandstand Rental Fee	$258 / 4 hrs or $517 / all day deposit $1,500
Single Entertainment Permit	$224
Minor Entertainment Permit	$224
Regular Entertainment Permit	$800
Bingo Permit	$93
Firearms	
Firearm Dealer License - City Application	$92
Local Firearm dealers (set by state)	
New application	set by state
Renewal	set by state
Second Dealers License (set by state)	
Application	set by state
Renewal	set by state
Carrying a Concealed Weapon (CCW) Permit - City Application	$169
Concealed Weapon Permits (set by state)	
Application	
Standard	$0
Judicial	$0
Employment	$0
Renewal	
Standard	$0
Judicial	$0
Employment	$0
Firearm Surrender Fees (set by state law)	
1-5 guns	$0
6+guns	$0
Parking Permits (separate action by the Council)	
Neighborhoods per year	$25
Village Preferential Permit	$50
Village Preferential Permit - Hotels/Motels	$365
Village Employer/Employee Permit - City Parking Lots	$50
Morning Village Parking Permit	$55

Electric Vehicle Charging Fee	
City Parking Lots - EV charging rate (amended 5/14/26)	$4.00 / hour
Community Center - EV charging rate (amended 5/14/26)	$0.45 / kWh
Miscellaneous	
DUI Cost Recovery Fee (Res. 3533)	Not to exceed $12,000
Copies of reports: Crime Reports, Special Reports, etc. (Regardless of number of pages)	$0.25 / page
Copies of: Citations, Code sections, Ordinances, etc.	$0.25 / page
Postage (for copies of reports, citations, code sections, etc, if over 15 pages)	Current Postal Rate
Photographs	$29
Video Tapes, Flash Drive, CD/DVD Production	$74
Taxi Fee per application	set by state
Tobacco retail license	$375
Cannabis Annual License Fee	$2,969
Retail Cannabis Application Fee	$2,122
Civil Subpoena (per case) (set by state)	set by state
Administrative fee to release Impounded / Stored Vehicle	$157
Surf School Permit Fee	$623
Parking Permit Replacement (Lost/Stolen)	$17
Boot Removal	$126
Tow Hearing	$163

PUBLIC WORKS DEPARTMENT FEES

Description	2026-27 Fee Schedule
Encroachment Permits	
Application Fee	$149
Traffic Control Plan Review - Local Street	$74
Traffic Control Plan Review - Collector Street	$357
Traffic Control Plan Review - Arterial Street	$535
Inspection - Local Street	$74
Inspection - Collector Street	$198
Inspection - Arterial Street	$298
Revocable Encroachment Permit Application- Outdoor Dining	$1,461
Temporary (includes materials storage within right-of-way road and sidewalk closures	$25
Village Sidewalk Sign Encroachment Permit	$50
Construction Parking Permit - Village	$29
Construction Parking Permit - City Lot	$15
Construction Parking Permit - Neighborhood	$30
Blanket Permits (repair and maintenance of existing facilities encompassing up to 20 utility instances per year)	$3,377
Revocable Encroachment for Private Improvements	
Applications for Minor Revocable Encroachment	$504
Applications for Major Revocable Encroachment	$1,619
SPECIAL TRANSPORTATION PERMIT – OVERSIZE LOAD - Single (set by state)	$16
SPECIAL TRANSPORTATION PERMIT – OVERSIZE LOAD - Annual (set by state)	$90
New Memorial Bench	$2,770
Replacement Memorial Bench	$2,704
Memorial Plaque	$674
Replacement Plaque	$473
Overhead Banner (ourtisde of special event)	$170
Stormwater Development Review Fee	
Application Fee	$146
Large Project Plan Review Deposit	
Tier 1	$365
Tier 2	$729; $2,000 deposit
Tier 3 & 4	$729; $5,000 deposit
Research Fee - 1/2 hour minimum charge	Cost
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5% of Permit Fee
Final Parcel Map	$4,555
Final Tract Map	$6,493
Certificate of Compliance & Lot Merger	$2,680
Boundary Line Adjustment	$2,680
Separate Instrument Dedication Fee	$3,087
Abandon Excess Public Right-of-Way & Public Easement	$3,087

PLANNING FEES

Description	2026-27 Fee Schedule
Administration/Documents	
Continuance Request - Applicant (2+)	$190
Staff Billing Rate	Cost
Consultant Billing Rate	Cost
Appeals-by Applicant	Cost
Appeals- by City Officials	$0
Appeals- by Other	$1,312
Coastal Development Permit Appeal	$0
Appeals -Building/Zoning Code Violations	$1,312
Records Search/Research/Special Report	Cost
Administrative Permits	
Tree Remova l- Staff Review	$190
Tree Removal -- 3 or more trees on a property	$379
Tree Installation Deposit (Refundable)	$500
Tree replacement in-lieu fee (if available)	$630
Tree removal w/ PC approval	$1,493
Commercial Sidewalk/Parking Lot Sale Permit	$197
Tenant Use Permit (MCUP)--Staff approval	$197
Transient Rental Occupancy Use Permit	$395
Fence Permit- Staff approval	$99
Fence Permit- PC approval	$1,655
Sidewalk vendor permit	$197
Temporary Use Administrative Permit	$197
Sign Permits	
Temporary Signs and Banner Permits	$49
Signs permit - Staff Review	$197
Signs permit - PC Review	$804
Master Sign Program	Cost; $3,000 min. deposit
Village Sidewalk Sign Permit	$50
Design Permits	
Residential Single Family/Minor Design Permit - Staff Review	$1,124
Residential Single Family - PC Review	$3,739
Residential Multi-Family up to 4 Units - PC Review	$5,250
Residential Multi-Family 5+ Units - PC Review	Cost; $6,000 min. deposit
Commercial - PC Review	$4,200
Accessory Dwelling Unit- Staff Review	$545
Accessory Dwelling Unit- PC Review	$1,832
Residential Multi-Family/Minor Design Permit - Staff Review	$2,100
Commercial Minor Design Permit	$2,100
Historic In-Kind Replacement Design Permit	$392
Sidewalk & Street Dining Design Permit	$1,314
Development Review (Public Works)	
Design Permits - Residential Single Family	$237
Design Permits - Residential Multi-Family/Commercial 2-4 units	$1,027
Design Permits - Residential Multi-Family/Commercial 5+ units	Cost; $2,000 min. deposit

Use Permits	
Master Conditional Use Permit	Cost; $3,500 min. deposit
Conditional Use Permit/Minor Use Permit - Staff Review (No fee for childcare facilities)	$1,124
Conditional Use Permit - PC approval	Cost; $3,500 min. deposit
Temporary Use Permit	$135
Subdivisions	
Tentative Parcel Map (Minor Subdivision)	Cost; $3,500 min. deposit
Tentative Map (Major Subdivision)	Cost; $5,000 min. deposit
Revised Map	Cost; $5,000 min. deposit
Time Extension	$2,100
Subdivision Modification	Cost; $5,000 min. deposit
Plan Amendments	
General Plan Amendment	Cost; $5,000 min. deposit
Local Coastal Plan Amendment	Cost; $5,000 min. deposit
Rezone	Cost; $5,000 min. deposit
Planned Development Rezone	Cost; $3,500 min. deposit
Other Discretionary Permits	
Variance	$1,581
PC review of minor modifications	$1,099
Coastal Development Permit	$829
Coastal Permit Exclusion	$829
Mobile home Park Change of Use or Closure	Cost; $10,000 min. deposit
Development Agreement	Cost; $10,000 min. deposit
Developer agreement annual review	$2,625
Specific Plan	Cost; $10,000 min. deposit
Permit Time Extension -Staff Review	$482
Permit Time Extension - PC Review	$1,368
Permit Amendment (any permit)	50% of original cost
Annexation	Costs+ overhead / $5,000 min. deposit
Environmental Review	
Negative Declaration (and Mitigated ND)	Cost; $5,000 min. deposit
EIR Processing	Cost; + 21% of consultant; $10,000 min. deposit
Mitigation/Condition Monitoring Program	Cost + 21%
NEPA Compliance	Cost + 21%
Other Permits/Fees	
Conceptual Review Fee- PC	$3,412
Conceptual Review Fee- PC and CC	$4,666
Technical Study Preparation and Review	Cost + 21%
NOTE: Third party review costs to be required as necessary	Cost + 21%
Code Compliance	Double Application Fees
Code Compliance confiscated property recovery fee	$270
Research Fee - 1/2 hour minimum charge	Cost
Pre-Application Review	Cost; $3,500 min. deposit
SB330 Pre-Application	Cost; $1,000 min. deposit
Building Plan Check & Final Inspection	20% of Building Permit Fee
Major Development Project Fee	Cost; $5,000 min. deposit
Historical significance determination	Cost + 21%
Inclusionary Housing	
Inclusionary Housing - Unit Sale	$847
Inclusionary Housing - Unit Refinance	$847

Other Fees and Assessments	
General Plan Maintenance Fee	0.75%
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5.0%
Green Building Educational Resource Fund Fee (Municipal Code 17.10.080)	Fee equals .0025 times the overall building permit valuation of the project.
Affordable Housing In-Lieu Fees	
For Sale Housing Developments of two to six units (Municipal Code Chapter 18.02) :	
All Units	$25 per sq. ft.
For Sale Housing Developments of Seven or more units	
#Units: 7 #Units Built 1	$0.00
#Units: 8-13 #Units Built 1	Total # units minus 7 @ $25 per avg. sq. ft. per unit
#Units: 14 #Units Built 2	$0.00
#Units: 15-20 #Units Built 2	Total # units minus 14 @ $25 per avg. sq. ft. per unit
#Units: 21 #Units Built 3	$0.00
#Units: 22-27 #Units Built 3	Total # units minus 21 @ $25 per avg. sq. ft. per unit
#Units: 28 #Units Built 4	$0.00
Rental Multi-Family	$6 per sq. ft.
Affordable Housing Impact Fees	
For Sale Housing Developments of Six or Less Units: New housing units that are constructed to replace housing units that were demolished less than two years before the project developer applied for a permit to construct the housing development project are exempt	$25 per square foot
Rental Multi-Family	$6 per square foot
Additional to Housing Units of 50% or more (charged to additional square footage only)	$2.50 per square foot

BUILDING FEES

Description	2026-27 Fee Schedule
The cost of a "building permit"shall be the amounts shown in Table 1-A. A "building permit" is defined as a permit for a scope of construction work regulated solely by a single model code. The model codes are the building code, the plumbing code, the mechanical code and the electrical code. The cost of a "combination building permit" shall be 1.5 times the amounts shown in Table 1-A. A "combination bulding permit" is defined as a permit for a scope of construction work regulated by two or more of the model codes. The model codes are the building code, the plumbing code, the mechanical code, and the eletrical code.	
TABLE 1-A	
Total Valuation	
$1.00 to $500.00	$159.50
$501.00 to $2,000.00	$159.50 for the first $500.00 plus $4.03 for each additional $100.00 or fraction thereof.
$2,001.00 to $25,000.00	$218.60 for the first $2,000.00 plus $18.47 for each additional $1,000.00 or fraction thereof.
$25,001.00 to $50,000.00	$634.44 for the first $25,000.00 plus $13.32 for each additional $1,000.00 or fraction thereof.
$50,001.00 to $100,000.00	$960.44 for the first $50,000.00 plus $9.25 for each additional $1,000.00 or fraction thereof.
$100,001.00 to $500,000.00	$1,412.94 for the first $100,000.00 plus $7.40 for each additional $1,000.00 or fraction thereof.
$500,001.00 to $1,000,000.00	$4,308.94 for the first $500,000.00 plus $6.26 for each additional $1,000.00 or fraction thereof.
$1,000,001.00 and up	$7,373.94 for the first $1,000,000.00 plus $3.39 for each additional $1,000.00 or fraction thereof.
Building Permit Reinstatement Fee	50% of the original, singular building permit fee or combo building permit fee, whichever is applicable to the permit being reinstated
Stop Work Order Fee	2x the singular building permit fee
Electric Vehicle Charging Permits	
a. Level I (120 volts)	$187.25
b. Level II (208-240 volts)	$270.50
c. Level III (480 volts)	based on valuation
Solar P.V. System	$498.00
Solar P.V. System (Commercial Sale/Distribution)	$498.00
Home battery permit (when in combination with Solar PV permit)	$0.00
Solar Hot Water Heater	$0.00
Residential Water Heater Replacement	*$125.00*
Re-Roofing Permit (Residential)	*$455.00*
Re-Roofing Permit (Commercial)	*$540.00*
Re-Roofing with Solar Permit and Replacement	*Standard Fee + $180*
Greywater System Permit	$0.00
Demolition Permit (Residential)	*$228.00*
Demolition Permit (Commercial)	*$675.00*
Electrical Service (up to 400 amp)	*$263.50*
Temporary Power Pole	*$159.50*
Reispection Fee	*$208.00*
Special Inspection or Lapsed Permit	*$215.00*
Permit Extension Fee	*$208.00*
Hourly Rate (Miscellaneous)	*$159.50*
Research Fee - 1/2 hour minimum charge	Cost
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5.0%
Temporary Trailer/Mobile Home Occupancy Permit	$367.00
Improvement Plan Review (Public Works)	
Building Permits - Residential Single Family	$403.00
Building Permits - Residential Multi-Family/Commercial	$1,046.00
Structural Review of Engineered Plans	cost + 21%
Outside Consultant Plan Review	cost + 21%

Grading Plan Review Fees	
50 cubic yard or less	$411.00
51 to 100 cubic yard	$411.00
101 to 1,000 cubic yards	Cost +21%
1,001 to 10,000 cubic yards	Cost +21%
10,001 to 100,000 cubic yards	$456.46 for first 10,000 plus $258.85 for each additional 10,000 cubic yards
100,001 to 200,000 cubic yards	$2,786.21 for first 100,000 plus $136.24 for each additional 10,000 cubic yards
200,001 cubic yards or more	$5,374.82 for first 200,000 plus $74.62 for each additional 10,000 cubic yards

Grading Permit Fees	
50 cubic yard or less	$0.00
51 to 100 cubic yard	$0.00
101 to 1,000 cubic yards	$198.46 for first 100 plus $28.66 for each additional 100 cubic yards
1,001 to 10,000 cubic yards	$456.46 for first 1,000 plus $7.66 for each additional 1,000 cubic yards
10,001 to 100,000 cubic yards	$525.48 for first 10,000 plus $258.85 for each additional 10,000 cubic yards
100,001 to 200,000 cubic yards	$2,855.24 for first 100,000 plus $143.14 for each additional 10,000 cubic yards

PARKS AND RECREATION FEES

Description	2026-27 Fee Schedule
All fees are evaluated annually to determine if they are competitive with other recreation programs in Santa Cruz County	
Classes	
Activity Fee (Instructor receives 65% of this fee, Department retains 35%)	
Registration Fee - Resident - Department retains this fee	$20
Drop-in and Workshop Registration Fee - Department retains this fee	$10
Online Class Registration fee-Department retains this fee	5.5% of Activity Fee
Non-Resident Fee: in addition to Registration Fee - Department retains this fee	$20
Drop-in Activity Fee	Prorated cost of Session Activity Fee
Senior Discount	10% of Activity Fee
Change is registration/reservation	$25
Negotiated Instructor of Private Tennis Lessons Activity Fee (Instructor receives 75% of this fee, Department retains 25%)	
Sports	
League Fees	$659 / team
League fees will change depending upon number and type of leagues offered, number of games per league, number of officials, amount of equipment needed, field/site prep and maintenance, and whether or not playoffs & awards are offered. Fees are calculated based on direct costs + 30% admin fee.	
After School	
Resident/non resident	$5.88 / $6.64
Registration/Change Fee - Resident - Department retains this fee	$30
Late Pick-Up Fee	$1
Parent's Night Out	$26 / $32
Junior Guards	
Resident/non resident	$318 / $413
U-19 resident/non resident	$199
Registration/Change Fee - Resident - Department retains this fee	$30
Late Pick-Up Fee	$1
Regionals	$118
Camp Capitola	
*Daily rate used only to calculate program fee	$35 / $43
All day 2 week session, resident/non resident	$343 / $429
1/2 day 2-week session, resident/non resident	$174 / $215
All day 1 week session, resident/non resident	$174 / $215
All day 1 week teen session, resident/non resident	$310 / $386
Single day a-la-carte	$49
Junior Leader program	$74
Registration/Change Fee - Resident - Department retains this fee	$30
Late Pick-Up Fee	$1
Extended Care--daily add on, resident/non resident	$12
AM Extended Care--per 2 week session resident/non resident or AM & PM for 1 week long session	$59
PM Extended Care--per 2 week session resident/non resident	$59
Transportation/Lunch Break fee	$64

Family Camp	
3 night family camp Adult (13+) / Child (3-12)	$366 / $249
Rapid Weddings	
Event Fee per registration	$409
plus civil ceremony fees found in Admin Fee section	Cost
Facility Rentals	
Field and Courts hourly rental; non profit youth groups/other non profit & Cap residents/all others	$15 / $30 / $39
Capitola Community Center	
Room A	$55 / hour
Room B	$65 / hour
Patio Room	$80 / hour
Room B & Patio Room	$125 / hour
Patio	$10 / hour
Kitchen	$45 / hour
Entire Center	$450 daily, 5+ hours
Non profit discount	25%
Community Center Cleaning Deposit	$300
Lost key fee	$28
Event Fees	
Event vendor fee	$111
Merchandise Fee	Cost + 50% administration fee
Plein Air Art Exhibition service fee	30% retained by City, 70% paid to Artist
Plein Air Artist Application Fee	$50
Staffing required to prepare for or supervise recreation activities	Cost
Park Rental Fees	
Park Space Reservation (hourly)	$10
Barbeque permit	$10
Bounce House / Powered Equipment permit	$60
Temporary Structures (more than 100 sq ft) permit	$60
Notes: Resident include Soquel Union Elementary School District	
Costs mean staff costs adjusted for benefits, department overhead, and City overhead as calculated by the City Manager. Costs can also mean direct cost of a consultant. When consultant costs are included 21% of such costs will be charged to cover staff time for contract management. Staff costs do not accrue during an appeal unless appeal is made by applicant.	
Deposits are stated as minimums. Actual deposits depend on the evaluation by staff of an individual project or application. The City Manager may lower minimum deposits if the application or project justifies a lower deposit. When an application involves multiple minimum fees the highest minimum fee applies.	

HISTORICAL MUSEUM FEES

Description	2026-27 Fee Schedule
Research Fee - 1/2 hour minimum charge	Cost
Print of an electronically available Photograph in Collection	$8
Digital Copies of Collection Items	$23
Scan High Resolution Tiff File of any collection item for a customer	$27

MISCELLANEOUS FEES

Description	2025-26 Adopted Fee Schedule		2026-27 Proposed Fee Schedule
Appeal Fee Appeals to City Council (CMC 2.52)	$609.00		$622
Capitola Municipal Code	0.15 / page		$0.15 / page
Capitola Municipal Code Supplement Service (Per year)	$0.00		$0
Copies:			
1-5 copies	$0.00		$0
6 or more copies (per copy)	$0.25 / page		$0.25 / page
Gov't Code § 81008 (Political Reform Act) statements/reports (Per copy)	$0.10 / page		$0.10 / page
Simple film permit	$70.00		$72
Major film permit	$775.00		$825
Returned Check Fee	$35.00		$35
Business License Overpayment Refund Fee (resolution 3532, ord 871)	$0.00		$0
Business License Late Payment Penalty Admin. Fee	$25.00		$25
Business License Application Fee (Reso. 3532)	$25.00		$25
Business License - Disability Access and Education Fee (State)	$4.00		$4
Temporary, Publicly Attended Activities, Application Fee (Municipal Code § 9.36.040)	$34.00		$34
Public Art (Total Building Valuation $250,000 or more) (Municipal Code Chapter 2.58)	2% of TBV or 1% in lieu to City		2% of TBV or 1% in lieu to City
Notice of Intent to Circulate Initiative Petition (Elections Code § 9103(b))	$200.00		$200
~~Outdoor Dining Rental Fees~~			*Remove*
~~Parking Spaces (annually for each space or partial space)~~	~~$3,622.00~~		
~~Sidewalks and non-parking spaces (annually per square foot)~~	~~$19.00~~		
~~Outdoor Dining Maintenance Deposit~~			
~~Sidwalks and non-parking spaces~~	~~$500.00~~		
~~1-2 parking spaces~~	~~$1,000.00~~		
~~3-5 parking spaces~~	~~$1,500.00~~		
Notary Service Fees (State Code)			
Acknowledgment or proof of a deed, or other instrument, to include the seal and writing of the certificate	$15.00 / per signature		$15.00 / per signature
Administering an oath or affirmation to one person and executing the jurat, including the seal	$15.00 / per signature		$15.00 / per signature
Credit Card Transaction Fee	3%		$0
Passport Acceptance Fee	$35.00		$35
Marriage License	$36.00		$38
Marriage Ceremony	$120.00		$125
Marriage Ceremony - Witness Fee	$30.00		$32

POLICE DEPARTMENT FEES

Description	2025-26 Adopted Fee Schedule		2026-27 Proposed Fee Schedule
Special Events & Entertainment			
Special Event Permit	$420.00		$447
Recurring Special Event Permit - Major	$705.00		$754
New Major Special Event Permit	$2,089.00		$2,232
Neighborhood Special Event/Block Party	$208.00		$224
Special Event Pacific Cove Parking Lot Space Use Rates (upper lot max 232 parking spaces, lower lot max 226 parking spaces)			
Parking space rate per day	$12.00 / space		$12 / space
Parking space rate per day (nonprofit)	$7.20 / space		$7.20 / space
Special Event Village Closure Rates (max of 191 parking spaces at $24 per space per day)			
Closure of Village for Special Event -full day	$4,584.00		$4,584
Closure of Village for Special Event -half day	$2,292.00		$2,292
Closure of Village for Special Event -full day (nonprofit)	$2,750.00		$2,750
Closure of Village for Special Event -half day (nonprofit)	$1,375.00		$1,375
Amplified Sound Permit (Municipal Code 9.12.040)	$87.00		$93
Bandstand Rental Fee	$253 / 4 hrs or $506 / all day deposit $1,500		$258 / 4 hrs or $517 / all day deposit $1,500
Single Entertainment Permit	$208.00		$224
Minor Entertainment Permit	$208.00		$224
Regular Entertainment Permit	$743.00		$800
Bingo Permit	$87.00		$93
Firearms			
Firearm Dealer License - City Application	$86.00		$92
Local Firearm dealers (set by state)			
New application	set by state		set by state
Renewal	set by state		set by state
Second Dealers License (set by state)			
Application	set by state		set by state
Renewal	set by state		set by state
Carrying a Concealed Weapon (CCW) Permit - City Application	$157.00		$169
Concealed Weapon Permits (set by state)			
Application			
Standard	$0.00		$0
Judicial	$0.00		$0
Employment	$0.00		$0
Renewal			
Standard	$0.00		$0
Judicial	$0.00		$0
Employment	$0.00		$0
Firearm Surrender Fees (set by state law)			
1-5 guns	$0.00		$0
6+guns	$0.00		$0
Parking Permits (separate action by the Council)			
Neighborhoods per year	$25.00		$25
Village Preferential Permit	$50.00		$50
Village Preferential Permit - Hotels/Motels	$365.00		$365
Village Employer/Employee Permit - City Parking Lots	$50.00		$50
Morning Village Parking Permit	$55.00		$55
Electric Vehicle Charging Fee			
City Parking Lots - EV charging rate (amended 5/14/26)	$2.00		$4.00 / hour
Community Center - EV charging rate (amended 5/14/26)	$0.45 / kWh		$0.45 / kWh

Miscellaneous			
DUI Cost Recovery Fee (Res. 3533)	Not to exceed $12,000		Not to exceed $12,000
Copies of reports: Crime Reports, Special Reports, etc. (Regardless of number of pages)	$0.25 / page		$0.25 / page
Copies of: Citations, Code sections, Ordinances, etc.	$0.25 / page		$0.25 / page
Postage (for copies of reports, citations, code sections, etc, if over 15 pages)	Current Postal Rate		Current Postal Rate
Photographs	$27.00		$29
Video Tapes, Flash Drive, CD/DVD Production	$68.00		$74
Taxi Fee per application	set by state		set by state
Tobacco retail license	$348.00		$375
Cannabis Annual License Fee	$2,846.00		$2,969
Retail Cannabis Application Fee	$1,971.00		$2,122
Civil Subpoena (per case) (set by state)	set by state		set by state
Administrative fee to release Impounded / Stored Vehicle	$146.00		$157
Surf School Permit Fee	$610.00		$623
Parking Permit Replacement (Lost/Stolen)	$16.00		$17
Boot Removal	$118.00		$126
Tow Hearing	$151.00		$163

PUBLIC WORKS DEPARTMENT FEES

Description	2025-26 Adopted Fee Schedule		2026-27 Proposed Fee Schedule
Encroachment Permits			
Application Fee	$146.00		$149
Traffic Control Plan Review - Local Street	$72.00		$74
Traffic Control Plan Review - Collector Street	$349.00		$357
Traffic Control Plan Review - Arterial Street	$524.00		$535
Inspection - Local Street	$72.00		$74
Inspection - Collector Street	$194.00		$198
Inspection - Arterial Street	$292.00		$298
Revocable Encroachment Permit Application- Outdoor Dining	$1,405.00		$1,461
Temporary (includes materials storage within right-of-way road and sidewalk closures	$24.00		$25
Village Sidewalk Sign Encroachment Permit	$50.00		$50
Construction Parking Permit - Village	$28.00		$29
Construction Parking Permit - City Lot	$14.00		$15
Construction Parking Permit - Neighborhood	$29.00		$30
Blanket Permits (repair and maintenance of existing facilities encompassing up to 20 utility instances per year)	$3,305.00		$3,377
Revocable Encroachment for Private Improvements			
Applications for Minor Revocable Encroachment	$493.00		$504
Applications for Major Revocable Encroachment	$1,584.00		$1,619
SPECIAL TRANSPORTATION PERMIT – OVERSIZE LOAD - Single (set by state)	$16.00		$16
SPECIAL TRANSPORTATION PERMIT – OVERSIZE LOAD - Annual (set by state)	$92.00		$90
New Memorial Bench	$2,711.00		$2,770
Replacement Memorial Bench	$2,646.00		$2,704
Memorial Plaque	$660.00		$674
Replacement Plaque	$463.00		$473
Overhead Banner (ourtisde of special event)	$166.00		$170
Stormwater Development Review Fee			
Application Fee	$143.00		$146
Large Project Plan Review Deposit			
Tier 1	$357.00		$365
Tier 2	$713.00		$729; $2,000 deposit
Tier 3 & 4	$713.00		$729; $5,000 deposit
Research Fee - 1/2 hour minimum charge	Cost		Cost
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5% of Permit Fee		5% of Permit Fee
Final Parcel Map	$4,458.00		$4,555
Final Tract Map	$6,354.00		$6,493
Certificate of Compliance & Lot Merger	$2,605.00		$2,680
Boundary Line Adjustment	$2,605.00		$2,680
Separate Instrument Dedication Fee	$3,021.00		$3,087
Abandon Excess Public Right-of-Way & Public Easement	$3,021.00		$3,087
~~Improvement Plan Review~~			
~~Design Permits - Residential Single Family~~	~~$232.00~~		*moved to planning*
~~Design Permits - Residential Multi-Family/Commercial~~	~~$1,005.00~~		
~~Building Permits - Residential Single Family~~	~~$394.00~~		*moved to building*
~~Building Permits - Residential Multi-Family/Commercial~~	~~$1,024.00~~		

PLANNING FEES

Description	2025-26 Adopted Fee Schedule		2026-27 Proposed Fee Schedule
Administration/Documents			
Continuance Request - Applicant (2+)	$167.00		$190
Staff Billing Rate	Cost		Cost
Consultant Billing Rate	*new fee*		Cost
Appeals-by Applicant	Cost		Cost
Appeals- by City Officials	$0.00		$0
Appeals- by Other	$1,157.00		$1,312
Coastal Development Permit Appeal	$0.00		$0
Appeals -Building/Zoning Code Violations	$1,157.00		$1,312
Records Search/Research/Special Report	Cost		Cost
Administrative Permits			
Tree Remova l- Staff Review	$167.00		$190
Tree Removal -- 3 or more trees on a property	$334.00		$379
Tree Installation Deposit (Refundable)	$514.00		$500
Tree replacement in-lieu fee (if available)	$617.00		$630
Tree removal w/ PC approval	$1,320.00		$1,493
Commercial Sidewalk/Parking Lot Sale Permit	$174.00		$197
Tenant Use Permit (MCUP)--Staff approval	$174.00		$197
Transient Rental Occupancy Use Permit	$348.00		$395
~~Home Occupation Use Permit~~	~~$174.00~~		*remove*
Fence Permit- Staff approval	$87.00		$99
Fence Permit- PC approval	$1,465.00		$1,655
Sidewalk vendor permit	$174.00		$197
Temporary Use Administrative Permit	$174.00		$197
Sign Permits			
Temporary Signs and Banner Permits	$44.00		$49
Signs permit - Staff Review	$174.00		$197
Signs permit - PC Review	$713.00		$804
Master Sign Program	Cost; $3,000 min deposit		Cost; $3,000 min. deposit
Village Sidewalk Sign Permit	$50.00		$50
Design Permits			
Residential Single Family/Minor Design Permit - Staff Review	$994.00		$1,124
Residential Single Family - PC Review	$3,303.00		$3,739
Residential Multi-Family up to 4 Units - PC Review	$5,138.00		$5,250
Residential Multi-Family 5+ Units - PC Review	*new fee*		Cost; $6,000 min. deposit
Commercial - PC Review	$4,110.00		$4,200
Accessory Dwelling Unit- Staff Review	$482.00		$545
Accessory Dwelling Unit- PC Review	$1,621.00		$1,832
Residential Multi-Family/Minor Design Permit - Staff Review	$2,055.00		$2,100
Commercial Minor Design Permit	$2,055.00		$2,100
Historic In-Kind Replacement Design Permit	$346.00		$392
Sidewalk & Street Dining Design Permit	$1,164.00		$1,314
Development Review (Public Works)			
Design Permits - Residential Single Family	$232.00		$237
Design Permits - Residential Multi-Family/Commercial 2-4 units	$1,005.00		$1,027
Design Permits - Residential Multi-Family/Commercial 5+ units	*new fee*		Cost; $2,000 min. deposit
Use Permits			
Master Conditional Use Permit	Cost; $3,500 min. deposit		Cost; $3,500 min. deposit
Conditional Use Permit/Minor Use Permit - Staff Review (No fee for childcare facilities)	$994.00		$1,124
Conditional Use Permit - PC approval	Cost; $3,500 min. deposit		Cost; $3,500 min. deposit
Temporary Use Permit	$119.00		$135
Subdivisions			
Tentative Parcel Map (Minor Subdivision)	Cost; $3,500 min. deposit		Cost; $3,500 min. deposit
Tentative Map (Major Subdivision)	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Revised Map	$2,055.00		Cost; $5,000 min. deposit
Time Extension	$2,055.00		$2,100
Subdivision Modification	$2,055.00		Cost; $5,000 min. deposit
Plan Amendments			
General Plan Amendment	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Local Coastal Plan Amendment	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Rezone	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Planned Development Rezone	Cost; $3,500 min. deposit		Cost; $3,500 min. deposit

Other Discretionary Permits			
Variance	$1,400.00		$1,581
PC review of minor modifications	$975.00		$1,099
Coastal Development Permit	$737.00		$829
Coastal Permit Exclusion	$737.00		$829
Mobile home Park Change of Use or Closure	$5,138.00		Cost; $10,000 min. deposit
Development Agreement	$10,276.00		Cost; $10,000 min. deposit
Developer agreement annual review	$2,569.00		$2,625
Specific Plan	$5,138.00		Cost; $10,000 min. deposit
Permit Time Extension -Staff Review	$425.00		$482
Permit Time Extension - PC Review	$1,213.00		$1,368
Permit Amendment (any permit)	50% of original cost		50% of original cost
Annexation	Costs+ overhead / $5,000 min. deposit		Costs+ overhead / $5,000 min. deposit
Environmental Review			
Negative Declaration (and Mitigated ND)	Cost; $5,000 min deposit		Cost; $5,000 min. deposit
EIR Processing	Cost; + 21% of consultant; $10,000 min deposit		Cost; + 21% of consultant; $10,000 min. deposit
Mitigation/Condition Monitoring Program	Cost + 21%		Cost + 21%
NEPA Compliance	Cost + 21%		Cost + 21%
Other Permits/Fees			
Conceptual Review Fee- PC	$3,014.00		$3,412
Conceptual Review Fee- PC and CC	$4,126.00		$4,666
Technical Study Preparation and Review	Cost + 21%		Cost + 21%
NOTE: Third party review costs to be required as necessary	Cost + 21%		Cost + 21%
Code Compliance	Double Application Fees		Double Application Fees
Code Compliance confiscated property recovery fee	$238.00		$270
Research Fee - 1/2 hour minimum charge	Cost		Cost
Pre-Application Review	$174.00		Cost; $3,500 min. deposit
SB330 Pre-Application (amended 5/14/26)	Cost; $1,000 deposit		Cost; $1,000 min. deposit
Building Plan Check & Final Inspection	20% of Building Permit Fee		20% of Building Permit Fee
Major Development Project Fee	Cost; $5,000 min. deposit		Cost; $5,000 min. deposit
Historical significance determination	Cost + 21%		Cost + 21%
Inclusionary Housing			
Inclusionary Housing - Unit Sale	$765.00		$847
Inclusionary Housing - Unit Refinance	$765.00		$847
Other Fees and Assessments			
General Plan Maintenance Fee	0.75%		0.75%
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5.0%		5.0%
Green Building Educational Resource Fund Fee (Municipal Code 17.10.080)	Fee equals .0025 times the overall building permit valuation of the project.		Fee equals .0025 times the overall building permit valuation of the project.
Affordable Housing In-Lieu Fees			
For Sale Housing Developments of two to six units (Municipal Code Chapter 18.02) :			
All Units	$25 per sq. ft.		$25 per sq. ft.
For Sale Housing Developments of Seven or more units			
#Units: 7 #Units Built 1	$0.00		$0.00
#Units: 8-13 #Units Built 1	Total # units minus 7 @ $25 per avg. sq. ft. per unit		Total # units minus 7 @ $25 per avg. sq. ft. per unit
#Units: 14 #Units Built 2	$0.00		$0.00
#Units: 15-20 #Units Built 2	Total # units minus 14 @ $25 per avg. sq. ft. per unit		Total # units minus 14 @ $25 per avg. sq. ft. per unit
#Units: 21 #Units Built 3	$0.00		$0.00
#Units: 22-27 #Units Built 3	Total # units minus 21 @ $25 per avg. sq. ft. per unit		Total # units minus 21 @ $25 per avg. sq. ft. per unit
#Units: 28 #Units Built 4	$0.00		$0.00
Rental Multi-Family	$6 per sq. ft.		$6 per sq. ft.
Affordable Housing Impact Fees			
For Sale Housing Developments of Six or Less Units: New housing units that are constructed to replace housing units that were demolished less than two years before the project developer applied for a permit to construct the housing development project are exempt	$25 per square foot		$25 per square foot
Rental Multi-Family	$6 per square foot		$6 per square foot
Additional to Housing Units of 50% or more (charged to additional square footage only)	$2.50 per square foot		$2.50 per square foot

BUILDING FEES

Description	2025-26 Adopted Fee Schedule		2026-27 Proposed Fee Schedule
The cost of a "building permit"shall be the amounts shown in Table 1-A. A "building permit" is defined as a permit for a scope of construction work regulated solely by a single model code. The model codes are the building code, the plumbing code, the mechanical code and the electrical code. The cost of a "combination building permit" shall be 1.5 times the amounts shown in Table 1-A. A "combination bulding permit" is defined as a permit for a scope of construction work regulated by two or more of the model codes. The model codes are the building code, the plumbing code, the mechanical code, and the eletrical code.			
TABLE 1-A			
Total Valuation			
$1.00 to $500.00	$30.37		$159.50
$501.00 to $2,000.00	$30.37 for the first $500.00 plus $3.94 for each additional $100.00 or fraction thereof.		$159.50 for the first $500.00 plus $4.03 for each additional $100.00 or fraction thereof.
$2,001.00 to $25,000.00	$89.40 for the first $2,000.00 plus $18.08 for each additional $1000.00 or fraction thereof.		$218.60 for the first $2,000.00 plus $18.47 for each additional $1,000.00 or fraction thereof.
$25,001.00 to $50,000.00	$505.14 for the first $25,000.00 plus $13.04 for each additional $1,000.00 or fraction thereof.		$634.44 for the first $25,000.00 plus $13.32 for each additional $1,000.00 or fraction thereof.
$50,001.00 to $100,000.00	$831.14 for the first $50,000.00 plus $9.05 for each additional $1,000.00 or fraction thereof.		$960.44 for the first $50,000.00 plus $9.25 for each additional $1,000.00 or fraction thereof.
$100,001.00 to $500,000.00	$1,283.80 for the first $100,000.00 plus $7.24 for each additional $1,000.00 or fraction thereof.		$1,412.94 for the first $100,000.00 plus $7.40 for each additional $1,000.00 or fraction thereof.
$500,001.00 to $1,000,000.00	$4,181.63 for the first $500,000.00 plus $6.13 for each additional $1,000.00 or fraction thereof.		$4,308.94 for the first $500,000.00 plus $6.26 for each additional $1,000.00 or fraction thereof.
$1,000,001.00 and up	$7,249.02 for the first $1,000,000.00 plus $3.32 for each additional $1,000.00 or fraction thereof.		$7,373.94 for the first $1,000,000.00 plus $3.39 for each additional $1,000.00 or fraction thereof.
Building Permit Reinstatement Fee	50% of the original, singular building permit fee or combo building permit fee, whichever is applicable to the permit being reinstated		50% of the original, singular building permit fee or combo building permit fee, whichever is applicable to the permit being reinstated
Stop Work Order Fee	2x the singular building permit fee		2x the singular building permit fee
Electric Vehicle Charging Permits ~~(* Note: These fees were added to the fee schedule for FY2011-12, but will be waived per the Green Energy Incentive~~			
a. Level I (120 volts)	$0.00		$187.25
b. Level II (208-240 volts)	$0.00		$270.50
c. Level III (480 volts)	$0.00		based on valuation
Solar P.V. System	$439.00		$498
Solar P.V. System (Commercial Sale/Distribution)	$439.00		$498
Home battery permit (~~usually with solar~~ when in combination with Solar PV permit)	$0.00		$0.00
Solar Hot Water Heater	$0.00		$0.00
Residential Water Heater Replacement	*new fee*		$125.00
Re-Roofing Permit (Residential)	*new fee*		$455.00
Re-Roofing Permit (Commercial)	*new fee*		$540.00
Re-Roofing with Solar Permit and Replacement	*new fee*		Standard Fee + $180
Greywater System Permit	$0.00		$0.00
Demolition Permit (Residential)	*new fee*		$228.00
Demolition Permit (Commercial)	*new fee*		$675.00
Electrical Service (up to 400 amp)	*new fee*		$263.50
Temporary Power Pole	*new fee*		$159.50
Reispection Fee	*new fee*		$208.00
Special Inspection or Lapsed Permit	*new fee*		$215.00
Permit Extension Fee	*new fee*		$208.00
Hourly Rate (Miscellaneous)	*new fee*		$159.50
Research Fee - 1/2 hour minimum charge	Cost		Cost
Information Technology Fee (Resolution No. 3786 adopted 11/12/09)	5.0%		5.0%
Temporary Trailer/Mobile Home Occupancy Permit	$324.00		$367
Improvement Plan Review (Public Works)			
Building Permits - Residential Single Family	$394.00		$403
Building Permits - Residential Multi-Family/Commercial	$1,024.00		$1,046
Structural Review of Engineered Plans	cost + 21%		Cost +21%
Outside Consultant Plan Review	cost + 21%		Cost +21%
Grading Plan Review Fees			
50 cubic yard or less	$362.00		$411
51 to 100 cubic yard	$362.00		$411
101 to 1,000 cubic yards	Cost +21%		Cost +21%
1,001 to 10,000 cubic yards	Cost +21%		Cost +21%
10,001 to 100,000 cubic yards	$446.72 for first 10,000 plus $253.33 for each additional 10,000 cubic yards		$456.46 for first 10,000 plus $258.85 for each additional 10,000 cubic yards
100,001 to 200,000 cubic yards	$2,726.77 for first 100,000 plus $133.33 for each additional 10,000 cubic yards		$2,786.21 for first 100,000 plus $136.24 for each additional 10,000 cubic yards
200,001 cubic yards or more	$5,260.15 for first 200,000 plus $73.03 for each additional 10,000 cubic yards		$5,374.82 for first 200,000 plus $74.62 for each additional 10,000 cubic yards
Grading Permit Fees			
50 cubic yard or less	$0.00		$0.00
51 to 100 cubic yard	$0.00		$0.00
101 to 1,000 cubic yards	$194.23 for first 100 plus $28.05 for each additional 100 cubic yards		$198.46 for first 100 plus $28.66 for each additional 100 cubic yards
1,001 to 10,000 cubic yards	$446.72 for first 1,000 plus $7.50 for each additional 1,000 cubic yards		$456.46 for first 1,000 plus $7.66 for each additional 1,000 cubic yards
10,001 to 100,000 cubic yards	$514.27 for first 10,000 plus $253.33 for each additional 10,000 cubic yards		$525.48 for first 10,000 plus $258.85 for each additional 10,000 cubic yards
100,001 to 200,000 cubic yards	$2,794.32 for first 100,000 plus $140.09 for each additional 10,000 cubic yards		$2,855.24 for first 100,000 plus $143.14 for each additional 10,000 cubic yards

PARKS AND RECREATION FEES

Description	2025-26 Adopted Fee Schedule		2026-27 Proposed Fee Schedule
All fees are evaluated annually to determine if they are competitive with other recreation programs in Santa Cruz County			
Classes			
Activity Fee (Instructor receives 65% of this fee, Department retains 35%)			
Registration Fee - Resident - Department retains this fee	$20.00		$20
Drop-in and Workshop Registration Fee - Department retains this fee	$10.00		$10
Online Class Registration fee-Department retains this fee	5.5% of Activity Fee		5.5% of Activity Fee
Non-Resident Fee: in addition to Registration Fee - Department retains this fee	$20.00		$20
Drop-in Activity Fee	Prorated cost of Session Activity Fee		Prorated cost of Session Activity Fee
Senior Discount	10% of Activity Fee		10% of Activity Fee
Change is registration/reservation	$25.00		$25
Negotiated Instructor of Private Tennis Lessons Activity Fee (Instructor receives 75% of this fee, Department retains 25%)			
Sports			
League Fees	$645/team		$659 / team
League fees will change depending upon number and type of leagues offered, number of games per league, number of officials, amount of equipment needed, field/site prep and maintenance, and whether or not playoffs & awards are offered. Fees are calculated based on direct costs + 30% admin fee.			
After School			
Resident/non resident	$5.75 / $6.50		$5.88 / $6.64
Registration/Change Fee - Resident - Department retains this fee	$30.00		$30
Late Pick-Up Fee	$1.00		$1
Parent's Night Out	$25 / $31		$26 / $32
Junior Guards			
Resident/non resident	$311 / $389		$318 / $413
U-19 resident/non resident	$195.00		$199
Registration/Change Fee - Resident - Department retains this fee	$30.00		$30
Late Pick-Up Fee	$1.00		$1
Regionals	$115.00		$118
Camp Capitola			
*Daily rate used only to calculate program fee	$34 / $42		$35 / $43
All day 2 week session, resident/non resident	$336 / $420		$343 / $429
1/2 day 2-week session, resident/non resident	$170 / $210		$174 / $215
All day 1 week session, resident/non resident	$170 / $210		$174 / $215
All day 1 week teen session, resident/non resident	$303 / $378		$310 / $386
Single day a-la-carte	*new fee*		$49
Junior Leader program	$72.00		$74
Registration/Change Fee - Resident - Department retains this fee	$30.00		$30
Late Pick-Up Fee	$1.00		$1
Extended Care--daily add on, resident/non resident	$12.00		$12
AM Extended Care--per 2 week session resident/non resident or AM & PM for 1 week long session	$58.00		$59
PM Extended Care--per 2 week session resident/non resident	$58.00		$59
Transportation/Lunch Break fee	$63.00		$64
Family Camp			
3 night family camp Adult (13+) / Child (3-12)	$358 / $244		$366 / $249
Rapid Weddings			
Event Fee per registration	$400.00		$409
plus civil ceremony fees found in Admin Fee section	Cost		Cost

Facility Rentals			
Field and Courts hourly rental; non profit youth groups/other non profit & Cap residents/all others	$15/ $29 / $38		$15 / $30 / $39
Capitola Community Center			
Room A (amended 5/14/26)	$55 / hour		$55 / hour
Room B (amended 5/14/26)	$65 / hour		$65 / hour
Patio Room (amended 5/14/26)	$80 / hour		$80 / hour
Room B & Patio Room (amended 5/14/26)	$125 / hour		$125 / hour
Patio (amended 5/14/26)	$10 / hour		$10 / hour
Kitchen (amended 5/14/26)	$45 / hour		$45 / hour
Entire Center (amended 5/14/26)	$450 daily, 5+ hours		$450 daily, 5+ hours
Non profit discount	25%		25%
Community Center Cleaning Deposit (amended 5/14/26)	$300.00		$300
Lost key fee	$27.00		$28
Event Fees			
Event vendor fee	$111.00		$111
Merchandise Fee	Cost + 50% administration fee		Cost + 50% administration fee
Plein Air Art Exhibition service fee	30% retained by City, 70% paid to Artist		30% retained by City, 70% paid to Artist
Plein Air Artist Application Fee	$50.00		$50
Staffing required to prepare for or supervise recreation activities	Cost		Cost
Park Rental Fees			
Park Space Reservation (hourly)	$10.00		$10
Barbeque permit	$10.00		$10
Bounce House / Powered Equipment permit	$60.00		$60
Temporary Structures (more than 100 sq ft) permit	$60.00		$60
Notes: Resident include Soquel Union Elementary School District			
Costs mean staff costs adjusted for benefits, department overhead, and City overhead as calculated by the City Manager. Costs can also mean direct cost of a consultant. When consultant costs are included 21% of such costs will be charged to cover staff time for contract management. Staff costs do not accrue during an appeal unless appeal is made by applicant.			
Deposits are stated as minimums. Actual deposits depend on the evaluation by staff of an individual project or application. The City Manager may lower minimum deposits if the application or project justifies a lower deposit. When an application involves multiple minimum fees the highest minimum fee applies.			

HISTORICAL MUSEUM FEES

Description	2025-26 Adopted Fee Schedule		2026-27 Proposed Fee Schedule
Research Fee - 1/2 hour minimum charge	Cost		Cost
Print of an electronically available Photograph in Collection	$8.00		$8
Digital Copies of Collection Items	$23.00		$23
Scan High Resolution Tiff File of any collection item for a customer	$27.00		$27

Fiscal Year 2026-27 Fee Schedule

May 14, 2026

Background

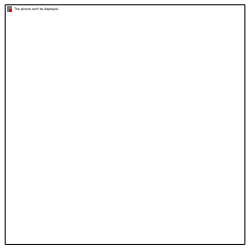
- Annual review of the Fee Schedule as part of the budget process
  - August 28, 2025 - City Council adopted current Fee Schedule
    - Best Management Practices (BMP's) recommend conducting a comprehensive fee study every 5 years
  - Consultant recommended annual review of actual cost of delivering services and Consumer Price Index (CPI) increase
    - San Francisco Bay Area CPI

Discussion

- Staff recommends increasing fees using combination of CPI and salary adjustments
  - FY 2026-27 CPI rate is 2.18% (calendar year 2025)
  - Most fees increasing by CPI
    - Fees requiring significant staff time have higher increases
  - Outdoor dining fees removed from schedule
  - Several planning fees updated or added for cost recovery
  - Building permit fees increased or added for cost recovery and to align with regional standards
  - Recreation added single day camp fee

Fee Comparison Summary

- **Attachment 2** includes:
  - Variance between **current and proposed fees**



Recommendation

Conduct noticed public hearing

- State law requires:
  - Public hearing before adopting or altering any fee
  - Opportunity for public testimony & input

Adopt resolution

- Adopt the Fee Schedule for FY 2026-27 using full cost approach