

# City of Capitola

## City Council Meeting Agenda

### Thursday, February 13, 2025 – 6:00 PM



City Council Chambers  
420 Capitola Avenue, Capitola, CA 95010  
201 'Ōhūa Avenue, Honolulu, Hawaii 96815

**Mayor:** Joe Clarke  
**Vice Mayor:** Alexander Pedersen  
**Council Members:** Gerry Jensen, Margaux Morgan, Melinda Orbach

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### Closed Session – 5 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. CONERENCE WITH LABOR NEGOTIATORS (Gov. Code § 54957.6)  
Negotiator: Jamie Goldstein, City Manager  
Employee Organizations: Police Officers Association
- ii. CONFERENCE WITH REAL PROPERTY NEGOTIATORS (Gov't Code § 54956.8)  
Property: Esplanade Park (APN 035-26-209)  
City Negotiator: Jamie Goldstein, City Manager  
Under Negotiation: Lease of Real Property

### Regular Meeting of the Capitola City Council – 6 PM

*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.*

#### 1. Roll Call and Pledge of Allegiance

Council Members Gerry Jensen, Margaux Morgan, Melinda Orbach, Alexander Pedersen, and Mayor Joe Clarke.

#### 2. Additions and Deletions to the Agenda

#### 3. Presentations

*Presentations are limited to eight minutes.*

- [A.](#) Presentation - Project Completion of the Monte Foundation Pump Track

#### 4. Report on Closed Session

#### 5. Additional Materials

*Additional information submitted to the City after distribution of the agenda packet.*

- [A.](#) Item 6 - Correspondence Received

- B.** Item 9A - Staff Memo Continuing the Item to Another Meeting Date & Correspondence Received
- C.** Item 9B - Staff Memo Continuing the Item to Another Meeting Date & Correspondence Received
- D.** Item 9C - Correspondence Received
- E.** Item 9D - 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 regular meeting on January 30, 2025, and the special meeting on February 4, 2025.
- B.** 2025 City Council Meeting Schedule  
Recommended Action: Adopt a resolution amending the regular meeting schedule for 2025.

## 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 Study  
Recommended Action: Staff recommends the City Council 1) identify Alternative 2 as the preferred long-term improvement alternative for the Bay Avenue corridor; 2) authorize staff to proceed with public engagement and conceptual design refinement; and 3) direct staff to pursue grant funding opportunities for final design and construction. **(Continued to February 27, 2025)**
- B.** Bay Avenue and Hill Street Traffic Safety Update  
Recommended Action: Provide direction on short-term modifications to the Bay Avenue and Hill Street intersection. **(Continued to February 27, 2025)**
- C.** Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options



Recommended Action: Review options for Coastal Rail Trail improvements in the Park Avenue right-of-way and identify Option A (as described in the staff report) as the preferred alternative for further analysis.

**D.** Appointments to City and Regional Advisory Bodies

Recommended Action: Review City Council appointments to regional and multi-jurisdictional advisory bodies; review City Council appointments to City advisory bodies; and review appointments of members of the public to City advisory bodies.

**10. Adjournment** - *The next regularly scheduled City Council meeting is on February 27, 2025, at 6:00 PM.*

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**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

**To Join Zoom Application or Call in to Zoom:**

Meeting

link: <https://us02web.zoom.us/j/83328173113?pwd=aVRwcWN3RU03Zzc2dkNpQzRWVXAydz09>

Or dial one of these phone numbers: **1 (669) 900 6833, 1 (408) 638 0968, 1 (346) 248 7799**

Meeting ID: **833 2817 3113**

Meeting Passcode: **678550**

**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@ci.capitola.ca.us](mailto:citycouncil@ci.capitola.ca.us) and they will be included as a part of the record for the meeting. Please be aware that the City Council will not accept comments via Zoom.

**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.**

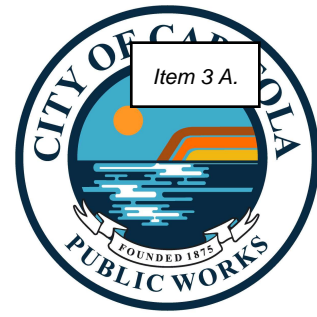
**Agenda Materials Distributed after Distribution of the Agenda Packet: Pursuant to Government Code §54957.5, materials related to an agenda item submitted after distribution of the agenda packet are available for public inspection at the Reception Office at City Hall, 420 Capitola Avenue, Capitola, 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 envíe un correo electrónico a [jgautho@ci.capitola.ca.us](mailto:jgautho@ci.capitola.ca.us).**

**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.**

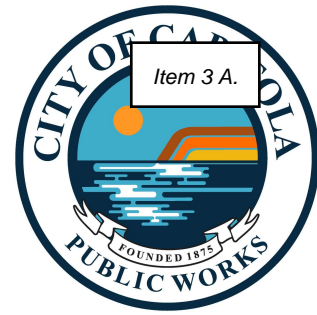


# MCGREGOR PARK PUMPTRACK





# PREVIOUS USE





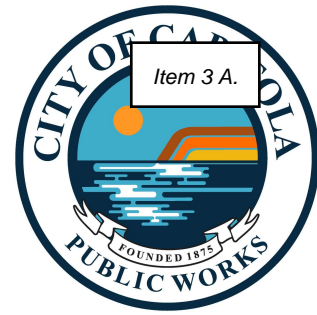


# CONSTRUCTION 2024





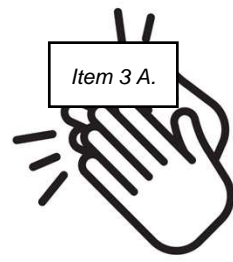
# CURRENT USE



PUMP TRACK MAP:







# THANKS



**Gautho, Julia**

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**From:** Michael routh <qwakwak@icloud.com>  
**Sent:** Saturday, February 8, 2025 5:33 PM  
**To:** City Council  
**Subject:** Cell phone use during meeting

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Communications for 2/13/25 council mtg

Council members,

Its become apparent the Council member Orbach routinely observes her cell phone during meetings. It raises questions - is she receiving texts suggesting how she responds to specific issues? This appears to border on violations of the Brown Act, having predetermined how she will vote on public hearing items before the council. Any communications received during the course of a meeting should be revealed as part of the public record.

I would request the Mayor and Council add a ban on cell phone use by the council during meeting to their ethics policy.

Mick Routh

Sent from my iPhone



**Public Works Department**

# Memo

To: City Council  
From: Jessica Kahn, Public Works Director  
Date: February 13, 2025  
Re: Items 9A (Bay Avenue Corridor Study) and 9B (Bay Avenue and Hill Street Traffic Safety Update)

---

Staff recommends continuing Items 9A (Bay Avenue Corridor Study) and 9B (Bay Avenue and Hill Street Traffic Safety Update) to the City Council meeting scheduled for February 27, 2025, to allow for additional public outreach. Staff is arranging meetings with local businesses to gather feedback. These items will return to the Council with updated public input at the rescheduled meeting date.

Any public comments received on the items will be included in the agenda packet for the rescheduled meeting date.

**Gautho, Julia**

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**From:** John <jxmuly@gmail.com>  
**Sent:** Friday, February 7, 2025 4:33 PM  
**To:** City Council; Gautho, Julia  
**Subject:** Item 8A 8B 8C 8D

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hey Neighbors

8A A roundabout is the gold standard and the only non flow interruptive option. Less traffic, shorter pedestrian crossings, will help with e-bikes on the main school route. We will get the money for this in state grants it's not that much and the state Loves roundabouts.

Please choose option 2.

8B whatever we do, please do not make it a two car drag race towards the senior housing complex. It's the major school route. It's already dangerous as is.

Make it a forced right turn into Nob Hill at the main entrance. It was nice having a mildly safe street there. I walk there often as Dancecenter a 40 year old business catering to children is right there too. Path to the library. Do your best.

Raised Crosswalks there across Bay Ave and then at Fanmar/Escalona and Monterey Ave (the rail trail as it will soon be) ever my dream. Cheap too.

8C not Alternative 1

Staff is making a good rec here. We save a ton of money as a county, leaves the track area in better shape for a train. Most of the trail will be diverted from the corridor in Capitola already. 100%ish. Why not here too.

I suggest a class IV bike lane. We will get money for it. Great long term ROI on such a project these days. Plus Rail Trail is supposed to be Class I. We deserve at least a IV there to honor the voters (minus Measure L).

8D Looks exciting to me.

nulla trahentium per villa JM



**Gautho, Julia**

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**From:** John <jxmuly@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:17 AM  
**To:** City Council; Gautho, Julia; Goldstein, Jamie (jgoldstein@ci.capitola.ca.us)  
**Subject:** Follow up Bay through Park

Neighbors

This is our main school route and the primary arterial through the lower village. Bay/Hill, Bay/ Capitola, and pretty much all of Park are quite dangerous. A rail trail through the Lower Village on Sharrows won't help matters.

Bay/Hill needs permanent calming. Raised crosswalks. Real curb bulb outs. Less conflicts and a forced right turn into Nob Hill minimum. This is a cheap date.

Bay/Capitola needs a roundabout. State will pay. We already invested a bunch. That intersection screams roundabout. We'll prob get an award for it.

The goal should be wider sidewalks. Bollards everywhere (like Gayle's parking lot and building has). Shorter crossings.

And then comes Class IV bike lanes on all major routes. Protected and Connected bike lanes show true demand. Solves the e-bike thing a little too. Folks always so worried about that one.

But the real key is always slowing the cars down. Park is a drag track with a roller coaster used by commuters and zoom zoomers and kids. Let's slow it down with a median. We will get that paid for too by RTC.

Be smart. Make the city livable for residents. Solve the demo crisis. Solves the budget one.

Warmly JM



**Public Works Department**

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8D Looks exciting to me.

nulla trahentium per villa JM

**Gautho, Julia**

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**From:** Omar Etcheverry <omar.oakleyinc@gmail.com>  
**Sent:** Tuesday, February 11, 2025 12:50 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Hi,

I am a home owner in Capitola and I WANT THE TRAIL ON THE RAIL.

I have 3 kids. They are not allowed to ride their bikes or walk on Park Avenue because there are so many accidents on that road. It is dangerous! Having the trail on the rail will be so much safer for them and others. Thank you!

**Omar Etcheverry**

**Oakley Sales Representative**  
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Sent from my iPhone

**Gautho, Julia**

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**From:** Gary Sultana <g5948sultana@gmail.com>  
**Sent:** Tuesday, February 11, 2025 12:15 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Keep the trail on the rail corridor. SAFTEY FIRST. Ahead of private special interests.

Gary Sultana



**Gautho, Julia**

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**From:** joshatar@gmail.com  
**Sent:** Tuesday, February 11, 2025 11:57 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Just writing to express my opinion that the trail on the rail corridor should remain there as planned and not move to a dangerous detour on Park Avenue.

thank you!

josh

**Gautho, Julia**

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**From:** shahe moutafian <shahemoutafian@gmail.com>  
**Sent:** Tuesday, February 11, 2025 11:47 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail

Dear council members,

I believe you have a responsibility to not allow diverting coastal trail travel by bicycle or foot onto unsafe Capitola village streets. The congestion which exists already will be magnified and increase the likelihood of accidents.

Although I think that it may be possible to provide a trail on the south side of Park Avenue, it is not an ideal route given the speeds at which cars travel on the roadway. There has been a history of non-enforcement of speed and noise infractions on this stretch of Park Avenue.

I am a proponent of converting the rail corridor to a safe trail for bikes and pedestrians. I believe with cost overruns, environmental and safety concerns, the idea of a rail and trail in the existing corridor is an unrealistic endeavor.

Yours sincerely,

Shahe Moutafian, resident at 420 McCormick Ave, Capitola, CA 95010

**Gautho, Julia**

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**From:** Tati <sugarkanebr@gmail.com>  
**Sent:** Tuesday, February 11, 2025 11:39 AM  
**To:** City Council  
**Subject:** Rail trail

*To whom it may concern,*

*I ride my bike through Capitola on a regular basis (commuting, riding for fun, as well as dining/shopping in Capitola Village). A Rail Trail detour on Park Avenue would be very dangerous to myself and many others.*

*Please keep the Rail Trail on the rail corridor as proposed.*

*Thanks,*

*Tatiana Lima*  
Sent from my iPad

**Gautho, Julia**

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**From:** jeremy@orvik.com on behalf of jeremy <jeremy@orvik.com>  
**Sent:** Tuesday, February 11, 2025 11:17 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

To whom it may concern/RTC-

In a suprise to absolutely no one, we cannot build both a train and a trail upon the railroad tracks through Capitola and the Boardwalk areas- additionally, the costs for this train continue to exorbitantly spiral out of control. A train requiring elevated tracks through the Boardwalk and Watsonville areas is bad enough- but now you want divert the "trail" onto city streets AND attempt to pass a sales tax to support it?

A new sales tax?  
 In Santa Cruz?  
 With our rents, and PG&E bills that cost more than my car payment?

You have known for YEARS this would be the outcome and have either lied to your public or at best done a monumentally poor job of communicating this project's cost/ limitations.  
 The voters voted for a TRAIL. We never agreed to this.

Do your jobs. Be honest with the public, including the very distinct possibility that we can not- and never could! Actually build this train.

The Greenway organization has seen this coming for years without your delays and millions of dollars in "studies".

Why didn't our transportation committee?

Tell the truth.  
 Serve your public.  
 Be transparent.  
 Or resign.

Most sincerely,  
 Dr. Jeremy Orvik  
 Emergency Physician  
 And sick of this.  
 Build the trail- so that my daughter can ride a goddamned bike safely in the neighborhood she was born in.

Sent from my iPhone

**Gautho, Julia**

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**From:** Jean Mahoney <jmahoney2028@gmail.com>  
**Sent:** Tuesday, February 11, 2025 11:15 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

The trail needs to be on the rail corridor, not on Park Avenue

Jean Mahoney



**Gautho, Julia**

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**From:** Bill Gray <graybil@gmail.com>  
**Sent:** Tuesday, February 11, 2025 11:12 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

As a capitola resident, I am outraged that you would consider detouring trail traffic into the town. Voters were clear that bike traffic should not be detoured, rather it should continue to be routed over the trestle. Stop this continued nonsense and follow the direction of the voters. Now.

Bill Gray  
1440 Prospect Ave  
Capitola  
509/9919292

**Gautho, Julia**

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**From:** Peter Cook <peter@lighthouse Realty.net>  
**Sent:** Tuesday, February 11, 2025 10:43 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Dear Capitola City Council,

It would be a huge mistake to put your section of trail through The Village and along Park Avenue. I live on the Westside where our trail is car free; it's awesome!!! It is heavily used by cyclists as a transportation route including many children going to and from school. You definitely want a similar dedicated car free path in Capitola like we have on the Westside. My son uses the Westside path to and from school every day. I am very thankful that the Westside has this path.

Having bikes go through Capitola Village or on Park Avenue instead of on the rail corridor would be a huge mistake for several reasons. It would be less safe for cyclists and drivers. It would be unsafe for pedestrians in the Village. It would exacerbate traffic conditions in the village. It would direct more e-bikes through the village.

Having a path on the Capitola trestle would be a huge asset for the communities on both sides of the crossing. Residents in the Cliff Wood Heights neighborhood (and all resident further south) would have a great car free route to 41<sup>st</sup>, Pleasure Point and beyond.

As a Westside resident I would be much more likely to bike the path to south county if it was located on the trestle and along the rail corridor. If you put this path on city streets and through the crowded village my family will be much less inclined to use the path.

Having a cross-county path that is car free will be an incredible asset for our entire county.  
Please don't mess this up for everyone!!!!

Thank you.



# Lighthouse

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**Gautho, Julia**

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**From:** Steve Duke <sduke575@gmail.com>  
**Sent:** Tuesday, February 11, 2025 10:49 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Hello City Council,

I am a Capitola homeowner and voter and I **do not** support putting the rail trail bike portion onto Park Ave. Please do not approve this. It is unsafe and not what we supported on Measure L.

Thank you,

Steve Duke

916 Sir Francis Ave.

Capitola CA 95010

**Gautho, Julia**

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**From:** kelly pelot <kpelot4@gmail.com>  
**Sent:** Tuesday, February 11, 2025 10:33 AM  
**To:** City Council  
**Subject:** I oppose the rail trail diversion

Dear City Council,

I oppose the plan to divert the bike path on to surface streets like Park ave. It's already too busy and has been under intense, continual construction for many many months. (not to mention the whole area on Soquel Ave and Park due to numerous housing projects) .The plan for the interim trail which rail banks or lays the path over the tracks is more economical and safer.

Thank you for your time,

Kelly Pelot

Soquel resident who lives off Park Ave.

**Gautho, Julia**

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**From:** Gayle Ortiz <gayle@gocapitola.com>  
**Sent:** Tuesday, February 11, 2025 10:30 AM  
**To:** City Council  
**Subject:** Agenda item 9C

Dear Council,

I ask that you postpone this agenda item until after the RTC fiscal report comes out in late March.

From what I've heard, the findings in the report will make it virtually impossible for the rail/trail to be built. Why not wait to make such important decisions until we know?

Thank you,  
Gayle Ortiz

**Gautho, Julia**

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**From:** david allen <dav\_allen@hotmail.com>  
**Sent:** Tuesday, February 11, 2025 10:25 AM  
**To:** City Council  
**Subject:** Please keep the Rail Trail

Hi,

I ride my bike through Capitola on a regular basis (commuting, riding for fun, as well as dining/shopping in Capitola Village). A Rail Trail detour on Park Avenue would be very dangerous to myself and many others.

Please keep the Rail Trail as proposed on the rail corridor.

Thanks,  
David Allen

**Gautho, Julia**

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**From:** GARY CARR <scuffers@comcast.net>  
**Sent:** Tuesday, February 11, 2025 9:53 AM  
**To:** City Council  
**Subject:** Please go for the interim trail

To the City Council,

Please make the interim trail happen! I am an Aptos resident and I am completely in favor of implementing the interim trail. I have been following this debate for years and I realize that "perfect is the enemy of good". Our communities need to get this trail in place. I am afraid that if we do not take action on the Interim Trail that the powers insisting on the gold plated version with imaginary trains will have effectively stopped all progress.

I am a walker and biker and am looking forward to the day my wife and I can jump on the trail across the street and ride our bikes to Capitola to have some great fish and chips at Britannia Arms - without ever having to get in my car. My wife can get hand made jewelry at Lumen Gallery as well. The positive benefit for residents and businesses seem obvious, and the delays help no one.

Thank you for your consideration,  
Gary Carr  
Aptos



**Gautho, Julia**

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**From:** Rachel Adney <rachel.l.adney@gmail.com>  
**Sent:** Tuesday, February 11, 2025 9:45 AM  
**To:** City Council  
**Subject:** Please vote for the interim trail option

It is my opinion that the Capitola City Council should reject the RTC's plan to reroute the trail onto surface streets. Instead, the RTC must advance the INTERIM Trail Option, which has been proposed as an alternative in the Environmental Impact Report. The INTERIM Trail Option will build the trail on the existing railbed, can be constructed at a fraction of the cost, is more environmentally friendly as it avoids clear-cutting trees, does not require eminent domain of private property, does not redirect the trail onto surface streets, converts the Capitola Trestle into a Trail, aligns with Measure L requirements, can be built without causing traffic disruptions and RTC has enough funding to complete the INTERIM Trail Option Segments 9-12.

Thank you,  
Rachel Adney

**Gautho, Julia**

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**From:** Jack Brown <jack.b.brown@gmail.com>  
**Sent:** Tuesday, February 11, 2025 9:30 AM  
**To:** City Council  
**Subject:** Upholding Measure L – Keep the Bike Trail on the Rail Corridor

Jack Brown - Executive Director, Coastal Trail Conservancy of Santa Cruz County  
 PO Box 1666  
 Aptos, CA 95003  
[jack.b.brown@gmail.com](mailto:jack.b.brown@gmail.com) [coastaltrail.org](http://coastaltrail.org)

February 11, 2025

Capitola City Council  
 Capitola City Hall  
 420 Capitola Ave  
 Capitola, CA 95010

Subject: Upholding Measure L – Keep the Bike Trail on the Rail Corridor

Dear Mayor Clarke and Capitola City Council Members,

I am writing to express my organization's strong opposition to the RTC's plan to divert the Coastal Rail Trail onto Capitola city streets and to urge you to uphold the will of the voters by ensuring the trail remains on the rail corridor, as affirmed by Measure L.

The residents of Capitola have already made their voices clear through Measure L, which explicitly supports keeping the trail on the rail corridor and protecting the integrity of our community's transportation future. Any attempt to divert the trail onto our city streets disregards this democratic decision and poses significant safety, environmental, and economic concerns.

### **Safety Concerns**

Diverting the trail onto city streets will increase conflicts between cyclists, pedestrians, and vehicles, particularly in high-traffic areas such as Capitola Village. A dedicated trail along the rail corridor ensures a safe, protected route for cyclists and pedestrians, reducing the risk of accidents and injuries.

### **Environmental and Community Impact**

The rail corridor provides a unique, scenic, and uninterrupted greenway that supports sustainable transportation and recreational use. Moving the trail onto city streets would diminish the environmental benefits and discourage use by families, children, and seniors who seek a safe and peaceful path. Additionally, increased bike and pedestrian traffic on city streets may lead to congestion and disrupt local businesses.

### **Extremely High Cost of Construction**

The proposed diversion of the trail onto city streets would require the construction of a 1,500-foot retaining wall at an exorbitant cost. This unnecessary expenditure diverts crucial funds away from other pressing community needs while imposing a financial burden on taxpayers. Keeping the trail on the rail corridor is not only the safer and more logical choice but also the most fiscally responsible decision. Based on prior poor estimation by the RTC, please take whatever financial number they provide and triple it, then double that number to account for the financing costs that will be borne from the expenditure.

**Respecting Voter Intent**

Measure L was passed by Capitola voters with a clear directive to keep the trail on the rail corridor. Ignoring this mandate undermines public trust in local government and sets a troubling precedent. The City Council has a duty to respect and uphold the decisions made by its constituents.

I urge you to reject any proposal that diverts the trail onto Capitola streets and to advocate for a solution that aligns with Measure L. Please stand with the residents who voted to preserve the trail’s rightful place on the rail corridor. Your leadership in protecting this vision will be remembered as a commitment to safety, sustainability, and democratic integrity.

Thank you for your time and consideration. I look forward to your decision that reflects the best interests of Capitola’s residents, the community of Santa Cruz County and future generations.

Sincerely,

Jack Brown

Executive Director - Coastal Trail Conservancy of Santa Cruz County

**Gautho, Julia**

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**From:** Tim Brattan <timbrattan@yahoo.com>  
**Sent:** Tuesday, February 11, 2025 9:25 AM  
**To:** City Council  
**Cc:** Pedersen, Alexander; felipe.hernandez@santacruzcountyca.gov; info@sccrtc.org; kimberly.deserpa@santacruzcountyca.gov; Manu Koenig; manu.koenig@santacruzcountyca.gov; fkeeley@santacruzca.gov; monica.martinez@santacruzcountyca.gov; eduardo.montesino@watsonville.gov; caldridge@scmetro.org; Michael Rotkin; Kimberly.DeSerpa@santacruzcountyca.gov; Fifth.District@santacruzcountyca.gov; Sarah Christensen  
**Subject:** Build the Interim Trail Option

Dear Capitola City Council members,

I lived for many years in Pleasure Point and was a frequent Capitola visitor. I still frequent Capitola, both as a visitor from Santa Cruz and bike commuter forced to descend into the village, navigate through pedestrians and cars to then climb back out on Monterey and Park Ave next to fast moving vehicles.

What a shame the unused rail corridor and Capitola Trestle - by far the safest and most efficient way to walk/ride through town won't be accessible to me and thousands of others because the RTC plans to divert us all onto unsafe streets. Most will continue to choose driving over riding because of this lack of safety.

The question for your Council is if the RTC's plan is smart policy and allowable for use of the CTC grant money? The active transportation (ATP) funding application submitted to, and approved by CTC stated that:

**“This project uses best practices to completely separate bicyclists and pedestrians from motor vehicle traffic constructing a 12-foot wide multiuse path in the rail right of way.”**

The project is described to be 4.15 miles which is the whole length (sections 10 & 11) less the Capitola Trestle.

It looks like the RTC may have made a typo here because a “path” is required to have shoulders (2 feet each side). A 12-foot path creates a 16-foot wide trail - which is the width of the preferred “Interim Trail” that keeps the trail entirely within the corridor. Could CTC believe we're building the Interim Trail?

The fact is that a train and trail don't fit. You can't have both. What could you get and what's it going to cost? Can you pay for it? Is what the RTC is proposing a **Class 1 trail** that separates bikes, pedestrians and persons with a disability from cars? **Is a Class 1 trail possible on 48th Ave, through the Village, or on Park Ave?**

There is no evidence that a passenger train will ever run on the tracks. Not a single study has found a an in-county passenger train to be feasible, cost-effective or have enough ridership to impact existing traffic, and the upcoming ZEPRT study is even less likely to do so.

Your Council should reject the RTC's plan to reroute the trail onto surface streets, which would result in the Coastal Trail never existing within Capitola City limits, and move forward with the Interim Trail Option, which has been proposed as an alternative in the Environmental Impact Report for the Santa Cruz Coastal Trail.

The Interim Trail Option will construct the trail on the existing railbed at a fraction of the cost, is environmentally friendly as it avoids clear-cutting trees, allows for future transit options on the corridor, does not require eminent domain of private property, does not redirect the trail onto surface streets, converts the Capitola Trestle into a Trail, can be built without causing traffic disruptions, AND RTC has enough funding to complete Segments 9-12.

Sincerely,

Tim Brattan

**Gautho, Julia**

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**From:** Pacific Door <pacific.door@yahoo.com>  
**Sent:** Tuesday, February 11, 2025 8:38 AM  
**To:** City Council  
**Subject:** Coastal Trail

City Council Members:

Please reject the RTC's plan to reroute the coastal trail onto surface streets.

Instead, the RTC should advance the Interim Trail Option, which has been proposed as an alternative in the Environmental Impact Report. The Interim Trail Option will build the trail on the existing railbed, can be constructed at a fraction of the cost, is environmentally friendly, avoids cutting so many trees, does not require eminent domain of private property, does not redirect the trail onto surface streets, converts the Capitola Trestle into a Trail, aligns with Measure L requirements, can be built without causing traffic disruptions and RTC has enough funding to complete the INTERIM Trail Option Segments 9-12.

Please do not let the RTC stop the construction of the Santa Cruz Coastal Trail through Capitola and please vote no to their proposed request to divert the Coastal Trail around Capitola City limits.

Please support the Interim trail option.

Thank you,  
P.Purpuri  
Soquel, CA

**Gautho, Julia**

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**From:** Will Mayall <will@mayall.com>  
**Sent:** Tuesday, February 11, 2025 7:19 AM  
**To:** City Council  
**Subject:** Rail corridor is best way into the Village

Capitola City Council,

We raised our family in Cliffwood Heights and regularly walked into the Village. The unused rail corridor is by far the safest and most comfortable way to walk into town.

It makes no sense to consider an alternative when there is no evidence that a passenger train will ever run on the tracks. Not a single study has found a passenger train to be cost-effective, and the upcoming study is even less likely to do so.

This is a strange time to consider such a complex and expensive issue, especially when the upcoming \$9 million study will almost certainly confirm that our small county cannot afford a zero-emissions passenger train.

It is mind-bogglingly obvious that the rail corridor should be railbanked, which would legally protect it for future trains while allowing immediate use as a trail.

Yours,  
Will Mayall

**Gautho, Julia**

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**From:** Matteus Olmedo <matteusolmedo@gmail.com>  
**Sent:** Tuesday, February 11, 2025 6:37 AM  
**To:** City Council  
**Subject:** Park Avenue trail amendment

I am aware that the council is voting this Thursday regarding a design amendment that would allow the coastal trail to run along Park Ave. I beg the council to vote down this amendment and instead focus on a pedestrian/ bike only coastal trail that protects its users by keeping the trail far away from busy and dangerous streets. A pedestrian/bike trail can be built on the existing railbed, can be constructed at a fraction of the cost, is more environmentally friendly as it avoids clear-cutting trees, does not require eminent domain of private property, and does not redirect the trail onto surface streets. Thank you for your consideration.

**Gautho, Julia**

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**From:** Brian Peoples <brian@trailnow.org>  
**Sent:** Tuesday, February 11, 2025 5:58 AM  
**To:** City Council  
**Cc:** Pedersen, Alexander; felipe.hernandez@santacruzcountyca.gov; info@sccrtc.org; Kimberly De Serpa; Manu Koenig; fkeeley@santacruzca.gov; sclark@scottsvally.gov; Monica Martinez; eduardo.montesino@watsonville.gov; Corey Aldridge; Brian Peoples  
**Subject:** Reject RTC Proposal to divert Coastal Trail around Capitola

Capitola City Council,

The Santa Cruz County Regional Transportation Commission (RTC) has proposed to divert the Coastal Trail around Capitola because both the ULTIMATE Trail Option and train cannot co-exist along the corridor, legal challenges by adjacent private-property owners will delay trail for years, California Coastal Commission restrictions may prevent construction of the elevated walls that block beach access and the results of the RTC Rail study show that a new passenger train will never be viable along the Santa Cruz Coastal Corridor.

The Capitola City Council should reject the RTC's plan to reroute the trail onto surface streets, which would result in the Coastal Trail never existing within Capitola City limits. We ask the Capitola City Council to reject the RTC plan and recommend to the RTC that they move forward with the INTERIM Trail Option, which has been proposed as an alternative in the Environmental Impact Report for the Santa Cruz Coastal Trail.

The INTERIM Trail Option will build the trail on the existing railbed, can be constructed at a fraction of the cost, is more environmentally friendly as it avoids clear-cutting trees, allows for future transit options on the corridor, does not require eminent domain of private property, does not redirect the trail onto surface streets, converts the Capitola Trestle into a Trail, can be built without causing traffic disruptions and RTC has enough funding to complete the INTERIM Trail Option Segments 9-12.

Note that the INTERIM Trail Option was proposed by former RTC Executive Director Guy Preston as part of his recommendation to railbank the Santa Cruz Branch Line, which would preserve the railline as a publicly owned transportation asset. In addition, the Federal Railbanking process is a standard approach used by communities across the county to allow for reuse of abandoned railroad systems.

- RTC Agenda Packet Recommended Plan: <https://sccrtc.org/wp-content/uploads/2022/01/2022-02-03-RTC-agenda-packet.pdf>
- News Article: <https://californialocal.com/localnews/santa-cruz/ca/article/show/3023-regional-transportation-commission-rail-banking/>

Also, current RTC Executive Director Sarah Christensen recommended the Capitola Trestle be converted into a trail in September 2021:

- Reference:

- RTC Agenda Packet: <https://sccrtc.org/wp-content/uploads/2021/08/2021-09-02-RTC-agenda-packet.pdf>

Please do not let the RTC stop the construction of the Santa Cruz Coastal Trail through Capitola and vote no to their proposed request to divert the Coastal Trail around Capitola City limits.

Best regards,

Brian Peoples





Item 5 D.

**Gautho, Julia**

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**From:** Gary Sultana <g5948sultana@gmail.com>  
**Sent:** Monday, February 10, 2025 10:38 PM  
**To:** City Council  
**Subject:** Interim trail option now. Do not divert the trail onto city streets.

Gary Sultana

**Gautho, Julia**

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**From:** MARK WEGRICH <wegrich@comcast.net>  
**Sent:** Monday, February 10, 2025 9:03 PM  
**To:** City Council  
**Subject:** Interim Trail in Capitola

Your attention please,

Please support the Interim Trail at this Thursdays Council Meeting. The ultimate Trail is a County financial boondoggle. Reviewing the financial status of light rail systems across the country makes it clear Santa Cruz County is heading into a financial black hole to the financial benefit of consultants on the backs of taxpayers. It won't work and will destroy what should be a world class bike and pedestrian trail. Business in the Village will surge with the influx of visitors to experience the trail. Safety would be much improved over the current situation while the Ultimate Trail would worsen public safety. Every crossing poses a risk to pedestrians and cyclists. Does Capitola want to assume the risk of massive lawsuits that will inevitably follow?

Sincerely,

Mark Wegrich  
524 Pine St.(Seacliff)  
Aptos

**Gautho, Julia**

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**From:** james cook <jcookster999@hotmail.com>  
**Sent:** Monday, February 10, 2025 8:03 PM  
**To:** City Council  
**Subject:** Trail

Please o please keep us safe by providing a bike path that is separate from cars and can be built in a timely and affordable manner. Enough with the ultimate non sense. Interim now!!!!  
James cook

**Gautho, Julia**

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**From:** chris amsden <amsdenfinance@yahoo.com>  
**Sent:** Monday, February 10, 2025 7:50 PM  
**To:** City Council  
**Subject:** Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options

I am writing to express disappointment in the recommended actions of the City staff to divert what the citizens were promised as a "rail and trail" that ran along the coastal corridor and existing train tracks, to now be diverted onto Park Ave. Segments 10 and 11 of the Rail Trail, as approved by the Board of Supervisors in April 2024, included a trail alignment that was *on the coastal side of the existing tracks between Monterey Avenue and Coronado Street*.

Now, due to massive cost overruns and incompetence on the part of the County and RTC, the citizens of Capitola are expected to have Segments 10 and 11 of the Rail Trail diverted to the Park Ave. roadway that already has a perfectly functioning bike lane.

Capitola voters approved Measure L in 2018. Measure L is codified in Chapter 8.72 of the Capitola Municipal Code. Its purpose is to enhance pedestrian, bicycle, and traffic safety within the City by encouraging the development of the Monterey Bay Sanctuary Scenic Trail. What is absolutely insulting is the City staff's argument that this detour "in Option A and/or Option B is not a "detour" because the Trail does not exist and has no "direct course" in the City. Moreover, Option A and/or Option B are consistent with Measure L because they do not propose the construction of the Trail on Capitola's streets or sidewalks". The intent in Measure L was clearly expressed by the voters - we do not want the "rail trail" being diverted through our city streets.

Please send a message to the County and RTC and say no to diverting the RTC's boondoggle "rail trail" onto Park Ave. Capitola should not suffer the consequences of their mismanagement and should not have the "rail trail" diverted through our city streets. Whether this be routing the trail through Capitola Village rather than across Soquel Creek Trestle, or creating a new path along Park Ave. that already has a bike lane.

**Sincerely,**

**Chris Amsden**  
**Phone: (408) 386-7484**

**Gautho, Julia**

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**From:** jennifer harris-anderson <buzznjen@comcast.net>  
**Sent:** Monday, February 10, 2025 7:19 PM  
**To:** City Council  
**Subject:** Rail Trail through Capitola

Council,

My great grandfather built a home on Blue Gum Ave a hundred years ago. I have been following the rail trail debate for a decade. Please do not approve a diversion of the trail within the Capitola city limits. As per usual, the City of Santa Cruz gets a dedicated trail while Mid-County, Capitola and points South get a fragmented, unsafe version. All because of exorbitant costs and the fallacy of a commuter train that will serve only a privileged few. Capitola should demand that the RTC rail bank the corridor and build the a wider, continuous trail down the center at a fraction of the cost, utilizing the Capitola Trestle and other constricted sections. Hundreds of communities across the country have used rail banking as a solution to active transportation. Rail banking protects the community from any right-of-way lawsuits and allows for a future train if decided upon by the citizenry. Capitola could and should lead the way on this issue. Do the right thing and push back against the bullying tactics of the RTC and the City of Santa Cruz.

Sincerely,

Buzz Anderson  
831-566-2100

**Gautho, Julia**

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**From:** Rob Martin <rob1007@sbcglobal.net>  
**Sent:** Monday, February 10, 2025 6:58 PM  
**To:** City Council  
**Subject:** Coastal Trail

Dear City Council,

Please do not vote to run the coastal trail along Park Ave. This does not seem a good idea. We believe the most viable option is to proceed with the Interim Trail plan, as it can be constructed at a fraction of the cost, is more environmentally friendly as it avoids clear-cutting trees, does not require eminent domain of private property, does not redirect the trail onto surface streets, converts the Capitola trestle into a trail, can be built without causing traffic disruptions.

Sincerely,

Rob and Stella Martin

149 Farallon Ct.

Aptos 95003



**Gautho, Julia**

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**From:** Jaakko Mella <jaakko831@gmail.com>  
**Sent:** Monday, February 10, 2025 6:31 PM  
**To:** City Council  
**Subject:** Rail and trail

Dear Capitola city council,

I would like to ask you to really consider SC RTC recommendation for a trail next to the road. Please don't fall for trail only proposal. Let save the rail for future.

Thank you

Jaakko Mella

**Gautho, Julia**

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**From:** Ann Benvenuti <annanana1956@gmail.com>  
**Sent:** Monday, February 10, 2025 6:23 PM  
**To:** City Council  
**Subject:** Reject re-routing

Please don't allow this to happen our Cliffwood heights neighborhood has already been subjected to massive increases in traffic. Don't dump pedestrians and cyclists on us. Enough is Enough! Ann Benvenuti Sent from my iPhone

**Gautho, Julia**

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**From:** Dan <dbt33@hotmail.com>  
**Sent:** Monday, February 10, 2025 6:17 PM  
**To:** City Council  
**Subject:** Proposed re-routing trail

As a homeowner near Park Av for over 28 years I strongly recommend that the council reject the re-routing of trail into areas existing streets. The streets are already overcrowded with traffic this would only make an existing situation even worse. Just look at all the recent traffic issues and efforts to remedy them. These are very controversial and now we are considering making it more congested. Mandatory rezoning will also create future increases in traffic. The only solution is to allow the trail along the existing rail and forget the stupid train at this time. It's just common sense! Daniel Benvenuti.  
Sent from my iPhone

**Gautho, Julia**

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**From:** Mark Murphy <mmsurf1@comcast.net>  
**Sent:** Monday, February 10, 2025 5:45 PM  
**To:** City Council  
**Subject:** Keep the trail on the rail line through Capitola

To Capitola City Council,

Citizens passed Measure L that states our Council members and city staff should not put any funds, time, effort into "Shifting" from the rail corridor on to our city streets.

It appears that those pushing for the "Ultimate Trail Configuration " have no regard for an actual trail and instead would rather route bicycle and pedestrians onto Cliff Ave, through the village causing increased congestion and potential for dangerous intersections with vehicles. I strongly support a "trail on rail, interim trail" using the existing trestle and not wasting millions of dollars for the hopes of having a commuter rail and no trail along this portion of the route.

Please, don't vote to have the trail running through the already congested village.

Thanks for your consideration.

Mark Murphy  
426 Rosedale Ct  
Capitola, CA 95010

**Gautho, Julia**

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**From:** Glenda Luening <glendal@sbcglobal.net>  
**Sent:** Monday, February 10, 2025 5:22 PM  
**To:** City Council  
**Subject:** No on Ultimate Trail

Enough with this costly boondoggle. Stop the bleed. Stop the cutting down of trees and ugly retaining walls for a train that is never coming.

Vote Yes on the Interim Trail.

Glenda Luening.



**Gautho, Julia**

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**From:** Kevin Maguire <kmaguire831@gmail.com>  
**Sent:** Monday, February 10, 2025 8:41 AM  
**To:** City Council  
**Subject:** [PDF] Fwd: 2.13.25 Council Meeting Agenda 9C: Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options  
**Attachments:** Fixed-Speed-Safety-Cameras.pdf

I encourage all of you on the City council to get on a bicycle and ride Park Ave, Ride on Monterey to Bay, ride in front of Gayles on a busy morning, Ride though the Village when there is traffic. You will see how this Painted line "Buffer" is not safe at all. Coming down Monterey to Bay, at 8 am, all those cars drive in the bike lane while turning right. In front of Gayles you go from a Bike lane, going 20 mph passing Cars that are stopped to then No bike lane, Cars parked in front of Gayles, and cars backed up at the stop sign, this is super Un-Safe and skecty. We need a dedicated Lane for bikes To and Thru the Stop sign!

We need more LOCAL Input, a lot of us on connecting Streets didnt get a change to participate in the survey as you only sent it to previous recipients. We already have Cut through traiff issue!

This Traffic Calming is the city's way to circumvent Measure L. Since council member are on the RTC, and voting for items that violate Measure L, that is not allowed. We will be requesting all meeting meetings from RTC past meetings to view Measure L violations.

The proposals to reduce speed "Traffic Diet" Doesnt address the removal of parking spots off street, it just mentions that there could be... Can you broadcast that point better to the community and residents on Park and connecting streets? What impact that will have and all of us!

If 85% of drivers are speeding on Park, can we get Capitola Police Ticket data? Shouldnt CPD be station there all day long and write 100s of tickets!!??

Missing in the Peak traffic times is 7-8 AM and 5-6 PM data, which is truly the Peak times. And during those times, traffic is slow, so how is it that 85% of drivers are going 37 MPH? The Commute time with traffic backed up would skew/bring those averages down. So is it non peak hours 50% of those vehicles going 37 MPH? Or 85% of all traffic?

The latest survey was sent to people that took that before, so the rest of us never got this or an opportunity to give input. Thats not good!

I live on Monterey, and we have the same issue, and more Kids on bikes going to School. Lets make Monterey SAFE as Well!! I asked about Speed bumps and was told that is not allowed... But its allowed on Clares?

Traffic studies was from 2022, so that data is old and not reflect where we are today.

The proposed Traffic Calming doesn't address Coronado to Kennedy, Why not? That needs to be included for both directions for Bikes and Traffic Diet/calming efforts.

Class II Bike lanes is what we currently have in parts (Just a line) Some of these proposals reduces Bike lane from 7 or 8 feet down to 5 feet with another 2 Foot 'Buffer" Line... Bike Safety laws says a car should give bikes 3 Feet! So making the Vehicle lane smaller and only having this 2 foot buffer violates that law.

Best for Safety would be a Class IV Dedicated Bike Lane with Physical Barriers. Class I is a mixed use Trail which is better than Class II. but with Bikes going 20-25 mph and people walking/running, its not the safest.

SF and San Jose are starting to implement Speed Cameras. That is really the main way to reduce speeds and make it safe. <https://www.sfmta.com/blog/why-were-introducing-speed-safety-cameras-first-california> Or have some police officers giving out 100s of tickets a day! Why are we not enforcing laws, if you are going over 25mph that should be a Ticket!! Why is SAFTEY not our top priority??

Here is the company SF and San Jose is using. Lets get a Demo of this, since we already have FLOCK Cameras, lets truely make it Safe!! The Traffic Diet will make it dangerous with that lane shift coming down hill, trying to control a vehicle, and narrow lanes, will give drivers anxiety!

<https://www.verramobility.com/government/speed-enforcement/>

**WHAT DOES SPEED ENFORCEMENT DO?**



Reduce Speeding.



Change Driver Behavior.



Build Safer Communities.

**SPEEDING ISN'T JUST A TRAFFIC VIOLATION; IT'S A DEADLY THREAT ON OUR ROADS.**



Automated Safety Camera Programs Create Safer Roads and Save Lives

One remarkable feature of automated enforcement is its ability to remove officers from dangerous traffic stops.

**COMPREHENSIVE SAFETY SOLUTION: HOW AUTOMATED CAMERA PROGRAMS WORK**



## COMPREHENSIVE SAFETY SOLUTION: HOW AUTOMATED CAMERA PROGRAMS WORK

Speed safety camera programs utilize advanced technology to detect speeding vehicles and capture photographic and video evidence. These programs offer versatile deployment options. Beyond capturing speeding vehicles, these programs deliver significant safety benefits:

### Proven to Change Driver Behavior

- The presence and operation of safety cameras raise driver awareness of speed limits, encouraging long-term compliance.

### Safer for Everyone

- Reduced speeding creates safer environments for drivers, pedestrians, and cyclists. Lower speeds mitigate crash severity and increase survival chances.

### Public Education and Awareness

- Effective programs integrate public awareness campaigns that highlight the dangers of speeding and the importance of obeying speed limits. This multi-faceted approach fosters a culture of safe driving habits.

Real-world data supports the effectiveness of speed safety camera programs. Communities across the country and the globe are using automated safety programs to enforce speed limits and enhance safety in and around schools, parks, intersections, neighborhoods, major roadways, and work zones.

- Kevin



# FIXED SPEED SAFETY CAMERAS

## SLOW TRAFFIC & ENHANCE SAFETY



**Reduce Speeding**



**Change Driver Behavior**



**Enhance Situational Awareness**



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\*Optional Verra Mobility LIVE subscription

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- Construction
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- Payment support
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- Public awareness

### FEATURED TECHNOLOGY

- 3DHD tracking radar
- High-resolution images
- High-definition video
- LED illumination
- Secondary speed validation



**Gautho, Julia**

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**From:** Kevin Maguire <kmaguire831@gmail.com>  
**Sent:** Monday, February 10, 2025 8:29 AM  
**To:** City Council  
**Subject:** 2.13.25 Council Meeting Agenda 9C: Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options

## Capitola City Council Meeting 2.13.2025 Agenda Item 9C Response Highlighting the City of Capitola's Attempt to Circumvent Measure L

**Introduction** This document outlines concerns regarding the City of Capitola's approach to implementing traffic and trail improvements, which appear to circumvent Measure L's clear mandate to maintain the Monterey Bay Sanctuary Scenic Trail (Trail) within the rail corridor and prohibit detours onto Capitola streets. The City's use of the term "shifting" rather than "detour" seems to be a deliberate effort to find a legal loophole, **undermining voter intent.**

### Key Points of Concern

#### 1. Measure L's Intent and Requirements

Measure L was enacted to protect and utilize the Santa Cruz Branch Line Rail Corridor for active transportation and recreation. It explicitly directs the City to:

- *"Take all steps necessary to preserve and utilize the Corridor and Trestle for active transportation and recreation."*
- *"Prohibit the expenditure of any City funds or resources for the construction, operation, or maintenance of a detour of the Trail onto Capitola streets or sidewalks." [41†source]* .

The measure's language clearly prioritizes keeping the Trail within the designated rail corridor.

#### 2. City's Use of "Shifting" as a Loophole

The City Council's agenda report proposes moving the trail from the rail corridor to Park Avenue, describing this as "shifting" the alignment rather than a "detour" [40†source] .

This semantic distinction is troubling because:

- A shift implies a permanent relocation, not a mere temporary adjustment.
- Despite claiming otherwise, this shift fundamentally removes the Trail from its intended rail corridor alignment, placing it adjacent to and physically separated from Park Avenue.

By framing this as a cost-saving strategy, the City attempts to argue that the Trail has no "direct course" and thus cannot have a "detour." This interpretation is contrary to the spirit and clear intent of Measure L.

#### 3. Measure L's Definition of a Detour

The City argues that since the Trail does not yet exist, there is no "direct course" to be detoured from [40†source] . However, the measure's intention is clear: to prevent moving the Trail off the rail corridor and onto city streets or sidewalks. The proposed Park Avenue

alignment effectively functions as a detour by diverting the Trail from its original planned path within the rail corridor.

#### 4. Traffic Diet as a Disguise for Bypassing Measure L

The City is attempting to disguise its efforts to bypass Measure L by incorporating a "Traffic Diet" on Park Avenue as part of the Coastal Rail Trail alignment shift. This strategy involves narrowing vehicle lanes by one foot each and reducing the size of Class II bike lanes [40†source]. However, this plan is unlikely to significantly reduce vehicle speeds, which contradicts the stated goal of improving traffic safety. Instead, the narrowed lanes may create new safety concerns by squeezing different modes of transportation closer together without providing a meaningful deterrent to speeding.

#### 5. Conflict of Interest Concerns

It is important to question whether City Council members who also serve on the Board of the Regional Transportation Commission (RTC) may face a conflict of interest when proposing or supporting efforts to bypass Measure L. The RTC's role in funding and developing trail projects, including the proposed Park Avenue alignment, creates a potential conflict when council members vote on measures that could circumvent voter-approved mandates. Transparency and accountability are essential to ensure that decisions are made in the public's best interest, without undue influence from overlapping roles.

**6. Accountability Questions for the City** To ensure the City's compliance with Measure L's requirements, the following questions should be posed to hold the City accountable:

- **Preservation of the Rail Corridor:** What specific steps has the City taken to preserve and utilize the Rail Corridor and Trestle for active transportation and recreation, as required by Measure L? Please provide documentation of these efforts.
- **Expenditure of Resources:** Has the City expended any funds or resources, including staff time, related to the proposed alignment shift to Park Avenue? If so, how is this expenditure justified given Measure L's prohibition on funding for detours?
- **Legal Interpretation:** On what legal basis does the City differentiate "shifting" from "detouring" the Trail, and how does this interpretation align with the intent of Measure L?
- **Environmental Impact:** How has the City assessed the environmental impact of shifting the Trail to Park Avenue, and how does this align with Measure L's preservation goals?
- **Community Engagement:** How has the City involved the community in discussions regarding this proposed alignment, and how has feedback been incorporated?
- **Traffic Safety Data:** What evidence does the City have to support the claim that the Traffic Diet will significantly improve safety, given the minimal reduction in lane widths and Class II bike lane modifications?
- **Transparency:** Will the City commit to publishing detailed reports on its efforts to comply with Measure L and its rationale for the Park Avenue alignment?

#### 7. Impact of the Proposed Realignment

- **Loss of Rail Corridor Usage:** The shift to Park Avenue undermines the vision of utilizing the rail corridor for continuous active transportation.

- **Traffic and Safety Concerns:** The relocation may increase interactions between trail users and vehicular traffic, contrary to Measure L’s safety goals.
- **Environmental Impact:** Although the City claims reduced tree removals [40†source] , the environmental consequences of rerouting the trail and associated construction remain significant.

**8. Legal and Community Implications** The impartial analysis of Measure L already highlighted potential legal ambiguities and enforceability concerns [42†source] . By exploiting these ambiguities, the City risks undermining public trust and voter intent. The community’s strong preference, as expressed in Vision Capitola 2016, was to use the Corridor for active transportation [41†source] .

### Recommendations

1. **Adhere to Measure L:** The City should honor the clear directive to keep the Trail within the rail corridor and avoid any actions that could be interpreted as circumventing this mandate.
2. **Clarify Definitions:** The City Council should engage with legal experts to clarify the definitions of "detour" and "shift" to prevent semantic loopholes from undermining voter-approved measures.
3. **Community Engagement:** Provide transparent updates and seek meaningful community input before making decisions that contradict Measure L’s objectives.
4. **Alternative Cost Solutions:** Explore innovative solutions to reduce construction costs within the rail corridor without relocating the Trail to city streets.

### Conclusion

The City’s attempt to "shift" the Trail alignment to Park Avenue is a thinly veiled effort to bypass Measure L’s prohibition on detours. Incorporating a "Traffic Diet" as part of this strategy does little to meaningfully improve traffic safety and instead risks creating additional hazards. Potential conflicts of interest involving City Council members who also serve on the RTC further undermine public trust. Upholding the spirit and intent of Measure L is essential to maintaining public trust and ensuring that Capitola remains committed to safe, sustainable, and voter-approved transportation solutions.

Capitola Resident  
Kevin Maguire

**Gautho, Julia**

---

**From:** John <jxmuly@gmail.com>  
**Sent:** Friday, February 7, 2025 4:45 PM  
**To:** City Council; Gautho, Julia  
**Subject:** I meant 9 Julia Re: Item 8A 8B 8C 8D

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

I read this stuff on the quick. My time is highly limited.

Warmly JM

> On Feb 7, 2025, at 4:33 PM, John <jxmuly@gmail.com> wrote:

>

> Hey Neighbors

>

> 8A A roundabout is the gold standard and the only non flow interruptive option. Less traffic, shorter pedestrian crossings, will help with e-bikes on the main school route. We will get the money for this in state grants it's not that much and the state Loves roundabouts.

>

> Please choose option 2.

>

>

>

> 8B whatever we do, please do not make it a two car drag race towards the senior housing complex. It's the major school route. It's already dangerous as is.

>

> Make it a forced right turn into Nob Hill at the main entrance. It was nice having a mildly safe street there. I walk there often as Dancecenter a 40 year old business catering to children is right there too. Path to the library. Do your best.

>

> Raised Crosswalks there across Bay Ave and then at Fanmar/Escalona and Monterey Ave (the rail trail as it will soon be) ever my dream. Cheap too.

>

>

>

> 8C not Alternative 1

> Staff is making a good rec here. We save a ton of money as a county, leaves the track area in better shape for a train. Most of the trail will be diverted from the corridor in Capitola already. 100%ish. Why not here too.

>

> I suggest a class IV bike lane. We will get money for it. Great long term ROI on such a project these days. Plus Rail Trail is supposed to be Class I. We deserve at least a IV there to honor the voters (minus Measure L).

>

>

>

> 8D Looks exciting to me.

>

>

>

> nulla trahentium per villa JM

>

Item 5 D.

**Gautho, Julia**

---

**From:** John <jxmuly@gmail.com>  
**Sent:** Friday, February 7, 2025 4:33 PM  
**To:** City Council; Gautho, Julia  
**Subject:** Item 8A 8B 8C 8D

**Follow Up Flag:** Follow up  
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8D Looks exciting to me.

nulla trahentium per villa JM



**Gautho, Julia**

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**From:** Ellen Martinez <ellen@ellenmartinez.com>  
**Sent:** Tuesday, February 11, 2025 4:47 PM  
**To:** City Council  
**Subject:** The Coastal Rail Trail Needs to be located on the Rail Corridor!

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Capitola City Council,

The Coastal Rail Trail must be located on the rail corridor. Moving it onto Park Avenue is both dangerous and costly--and contradicts what the Capitola City Council has stated for years. Instead of a safe route on the railbed, cyclists will be forced onto a busy street.

The cost to operate a train on the rail corridor is now in the billions of dollars. There is no real path to funding. It's time to get real.

Capitola voters, residents and visitors all support the coastal rail trail being located on the rail corridor. Listen to them. Please get this done NOW.

Thank you.

Ellen Martinez  
25 year full-time resident of Aptos CA  
ellen@ellenmartinez.com

**Gautho, Julia**

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**From:** Susan Westman <susan@bestwestman.com>  
**Sent:** Tuesday, February 11, 2025 4:41 PM  
**To:** City Council  
**Subject:** Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options

Dear Mayor and City Council,

I find the timing of the Park Avenue improvements in relation to the Coastal Rail Trail option rather peculiar.

The RTC has announced that they will be discussing the new rail/trail study at their March 20th meeting. This study, which residents have been informed will determine the feasibility of a passenger train along the 32-mile rail corridor, is a critical decision point. If passenger rail proves to be a viable option, it could provide an excellent new transportation alternative for Santa Cruz County. However, if it is deemed unfeasible, then it would be prudent to explore whether developing a pedestrian and bike trail along the corridor would be a more beneficial use of the space.

With March 20th just 35 days away, it seems illogical to decide on a \$3–\$5 million for a trail on Park Avenue this Thursday night, even if it is RTC money, when the long-awaited study results will be available in just over a month. At the very least, the citizens of Capitola deserve the impression that their best interests are being considered—waiting to review the findings of the \$9.2 million study before making a decision would demonstrate a more thoughtful and responsible approach.

Thanks for considering this.

Susan Westman

**Gautho, Julia**

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**From:** Daniel Brune <danbrune@me.com>  
**Sent:** Tuesday, February 11, 2025 4:21 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Dear Capitola City Council,

It's difficult to understand why the RTC continues to push for a train idea, when multiple expensive studies ignore several examples showing that trains are not feasible for smaller populations, especially Santa Cruz county, with no space for a railroad siding to allow the operation of two or more trains.

Building a new Capitola Trestle for a passenger train will effectively shut down tourism and commerce in the village for a long period of time. Routing bicyclists through the village, especially during peak tourism times, is extremely dangerous.

Has the Coastal Commission even been consulted on this idea? Destroying beautiful old-growth trees along Park Avenue, and installing retaining walls costing millions in other areas, makes no sense. And tracks just above the beach at La Selva appear to be on very questionable ground already.

This will be another extra taxation boondoggle where fares will need to be subsidized for the few who will ride a train for a few miles. Very few even ride our current Metro bus system, which is better at getting riders to their destination than a train that only stops at stations.

I hesitate to ask for another study, but where will riders park their cars to ride the train? They will certainly have to walk many blocks to do that in Aptos and Capitola, not the best idea for senior citizens. Will they need to spend even more to hire Uber and Lyft to get them to the stations?

Best,  
Dan Brune

**Gautho, Julia**

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**From:** jeff anderson <andersonjeff1957@gmail.com>  
**Sent:** Tuesday, February 11, 2025 4:15 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

I live in the Live Oak area, and am a bike rider. I have completed many multi day rides. I have enjoyed rides in the US on converted Rails to Trails paths, enjoying the safety and beauty these routes provide. The idea of building a light rail system in Santa Cruz County is a waste of taxpayers money. A realistic cost and time frame for such a system should be published for the taxpayers to understand, then put it out for a vote and see who is interested.

I am strongly against the light rail and all funds and effort should be put towards building a safe pedestrian and bike path on the rail corridor.

Jeff Anderson

**Gautho, Julia**

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**From:** Stef's Gmail <stephanie.tetter@gmail.com>  
**Sent:** Tuesday, February 11, 2025 3:51 PM  
**To:** City Council  
**Subject:** Trail

I've always heard lots of confusion about this issue: it feels like pretty much everyone WANTS a trail for biking, walking, and running through Capitola and pretty much no one wants the trail diverted to either the Village or Park Avenue. (And most people think passenger rail isn't a reasonable option).

Cliffwood Heights is already impacted to the point of being gridlocked with traffic. PLEASE do not vote for diverting traffic to either Village or Park Ave.

Thank You.  
Stephanie Tetter

**Gautho, Julia**

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**From:** Malia Horn <maliahorn@yahoo.com>  
**Sent:** Tuesday, February 11, 2025 3:48 PM  
**To:** City Council  
**Subject:** Park Avenue improvements don't improve safety

Dear Council Members,

Thank you for your dedication to serve our community.

As a parent and home owner who live in the Cliftwood heights neighborhood I utilize Park Avenue daily. Our family walks the dog, bikes, and drives along Park Ave. and understand the dynamics of traveling around this area. Park Avenue is a busy road!

I am very concerned about rerouting cyclist off the trail to surface streets and adding a train to an already busy thoroughfare.

I have seen cyclist hit at the Park ave/ Monterey intersection. Cars rear ended at the lit up crosswalk at Cabrillo St. Cars that have flow over the hill by the 600 Park Ave apartments. Pushing the biking to surface streets will add more to an unsafe area and committing to a train will ruin the our small town.

A safer addition to the community, is adopting the Interim Trail (no train and trail where the tracks are) and would be an amazing asset to our community. Our Capitola Community voted for measure L in 2018, to use the tracks for a **TRAIL ONLY**, use the trestle for cyclist and pedestrians. Please reject this solution from the RTC and listen to the people of Capitola.

Thanks,

Malia Horn

**Gautho, Julia**

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**From:** Mark Murphy <mmsurf1@comcast.net>  
**Sent:** Tuesday, February 11, 2025 3:42 PM  
**To:** City Council  
**Subject:** PLEASE!!!!!! REJECT RTC PROPOSAL TO DIVERT COASTAL TRAIL AROUND CAPITOLA!!!

Capitola City Council,

The Santa Cruz County Regional Transportation Commission (RTC) has proposed to divert the Coastal Trail around Capitola because both the ULTIMATE Trail Option and train cannot co-exist along the corridor, legal challenges by adjacent private-property owners will delay trail for years, California Coastal Commission restrictions may prevent construction of the elevated walls that block beach access and the results of the RTC Rail study show that a new passenger train will never be viable along the Santa Cruz Coastal Corridor.

The Capitola City Council should reject the RTC's plan to reroute the trail onto surface streets, which would result in the Coastal Trail never existing within Capitola City limits. We ask the Capitola City Council to reject the RTC plan and recommend to the RTC that they move forward with the INTERIM Trail Option, which has been proposed as an alternative in the Environmental Impact Report for the Santa Cruz Coastal Trail.

The INTERIM Trail Option will build the trail on the existing railbed, can be constructed at a fraction of the cost, is more environmentally friendly as it avoids clear-cutting trees, allows for future transit options on the corridor, does not require eminent domain of private property, does not redirect the trail onto surface streets, converts the Capitola Trestle into a Trail, can be built without causing traffic disruptions and RTC has enough funding to complete the INTERIM Trail Option Segments 9-12.

Note that the INTERIM Trail Option was proposed by former RTC Executive Director Guy Preston as part of his recommendation to railbank the Santa Cruz Branch Line, which would preserve the railline as a publicly owned transportation asset. In addition, the Federal Railbanking process is a standard approach used by communities across the county to allow for reuse of abandoned railroad systems.

RTC Agenda Packet Recommended Plan: <https://sccrtc.org/wp-content/uploads/2022/01/2022-02-03-RTC-agenda-packet.pdf>

News Article: <https://californialocal.com/localnews/santa-cruz/ca/article/show/3023-regional-transportation-commission-rail-banking/>

Also, current RTC Executive Director Sarah Christensen recommended the Capitola Trestle be converted into a trail in September 2021:

§ Reference:

o RTC Agenda Packet: <https://sccrtc.org/wp-content/uploads/2021/08/2021-09-02-RTC-agenda-packet.pdf>

Please do not let the RTC stop the construction of the Santa Cruz Coastal Trail through Capitola and vote no to their proposed request to divert the Coastal Trail around Capitola City limits.

Respectfully,

Mark Murphy

426 Rosedale Ct

Capitola CA 95010

Sent from my iPhone





**Gautho, Julia**

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**From:** Barry Scott <barry\_scott@sbcglobal.net>  
**Sent:** Tuesday, February 11, 2025 3:22 PM  
**To:** alexander.dean.pedersen@gmail.com; Gerry Jensen; Melinda Orbach; City Council  
**Subject:** RTC Presentation to City Council this week

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear Council members,

I believe the RTC will make a presentation to you this Thursday about an alternative for the trail to bring it to available space adjacent to Park Avenue. I hope to attend and speak in support of this solution.

I have always been an advocate of this alternative so that the trail is free of the fences and on street level, connecting to side streets yet separated from Park Avenue by a 3-foot wide buffer.

It can be built sooner and at a much lower cost. See attached pics.



**The earlier design would have been fenced in and hard to build, and required significant excavation and tall retaining walls below the homes on Escalona. Please support the new easily built alternative adjacent to but no on Park Avenue.**



--  
Barry Scott  
Office: 831.612.6574  
Mobile: 209.482.5663

**Gautho, Julia**

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**From:** Tom Kellogg <tmakellogg@yahoo.com>  
**Sent:** Tuesday, February 11, 2025 1:25 PM  
**To:** City Council  
**Cc:** Brian Peoples; greenway@sccgreenway.org  
**Subject:** Trail on Capitola Trestle

Bicycling has been my preferred mode of transportation for 65 years so I have an opinion based on thousands of miles of experience worldwide.

I am a retired Certified Safety Professional and Certified Industrial Hygienist (CSP, CIH) and I know from 30 years of professional experience that reducing risk is a way to reduce cost to all involved. Usually reducing risk means spending more up front but in this case of putting the bike/walking path on the Capitola trestle it would both reduce cost and reduce risk of injury.

- **Public safety must come first.** Building a bike path along Park Avenue instead of across the Capitola trestle is a very dangerous choice. I ride through Capitol Village regularly and would love to be able to ride over the trestle instead.
- **A pedestrian train is an illusion** - it would cost billions \$ and will take may decades to build.
- **Listen to the will of the people:** Measure L was clear; voters mandated the trail stay on the trestle.
- Do not allow the construction of a bike path along Park Avenue. The time building this would cause traffic congestion and increase risk of injury during the time of construction.
- **Support putting the path on the Capitola trestle**

Tom Kellogg

**Gautho, Julia**

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**From:** ROBERT STEPHENS <awranch@aol.com>  
**Sent:** Tuesday, February 11, 2025 1:26 PM  
**To:** City Council  
**Subject:** Rail Trail in Capitola

Capitola City Council  
Capitola City Hall  
420 Capitola Ave  
Capitola, CA 95010

Subject: Upholding Measure L – Keep the Rail Trail on the Rail Corridor

Dear Mayor Clarke and Capitola City Council Members,

I am writing to express my strong opposition to the RTC's plan to divert the Coastal Rail Trail onto Capitola city streets and to urge you to uphold the will of the voters by ensuring the trail remains on the rail corridor, as affirmed by Measure L.

It seems pretty obvious to me that a train is not coming to Santa Cruz anytime soon. It is time to use common sense and build the rail trail in the corridor. Why would anyone won't to build an inferior trail out of the corridor and then have the rail corridor sit forever.

The Capitola trestle is a classic example of something that can be used now for a trail that will divert bikes and pedestrians out of the village and not cost much to convert to a trail. How much will it cost to replace this trestle for a train? How will this affect Capitola? Where are the funds for this and the other 26 trestles that need to be replaced?

If you are not sure about this, delay your vote until the real price of a train comes out in the next train study net month.

Sincerely,

Robert Stephens

**Gautho, Julia**

---

**From:** Alex Vartan <alex.vartan@gmail.com>  
**Sent:** Tuesday, February 11, 2025 1:33 PM  
**To:** City Council  
**Subject:** Trail on Park

I think this is an absolutely braindead move, and the project is increasing costs asymptotically even as the public is getting a worse and worse trail.

**Gautho, Julia**

---

**From:** Jessica Hansen <jvhansen3@gmail.com>  
**Sent:** Tuesday, February 11, 2025 1:39 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Council members,

As a long term resident of Capitola, I am writing to strongly oppose the proposition to add the rail/trail to the current stretch of Park Avenue. The idea of trying to fit a train and bike/hike trail on Park Ave is an unwise and dangerous proposition.

I cannot be at Thursday's Council Meeting, so I write today appealing to your better judgment, wisdom and care for our community that is cherished by not only those of us who live here, but also those who visit for whom Capitola provides healthy outdoor activities and social engagement. Our City is not a thoroughfare.

Sincerely,

Jessica Hansen  
Capitola

**Gautho, Julia**

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**From:** Jim Cavanagh <jim.cavanagh@yahoo.com>  
**Sent:** Tuesday, February 11, 2025 1:49 PM  
**To:** City Council  
**Subject:** RailTrail

PLEASE. Take the tracks off the trestle and run the tail over it. A detour through the village is so wrong on so many levels. The detour onto Park Avenue is unfortunate, but necessary with the requirement of retaining the rails. There will NEVER be a need for a train along the coast.

Do what you can to change this insanity!. PLEASE!

Jim Cavanagh  
408 Pilgrim Drive

Living the dream...  
jim.cavanagh@yahoo.com

**Gautho, Julia**

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**From:** Alex M <wa2til@hotmail.com>  
**Sent:** Tuesday, February 11, 2025 2:05 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

The greatest hazard to bike commuters and bike tourists is having to interact with car and truck traffic. Please keep the greenway trail separate from the vehicles on Park Avenue and Capitola Village.  
Alex Miller, Aptos

**Gautho, Julia**

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**From:** Capitola Child Care <capchildcare@gmail.com>  
**Sent:** Tuesday, February 11, 2025 2:06 PM  
**To:** City Council; felipe.hernandez@santacruzcountyca.gov; info@sccrtc.org; kimberly.deserpa@santacruzcountyca.gov; manu.koenig@santacruzcountyca.gov; fkeeley@santacruzca.gov; monica.martinez@santacruzcountyca.gov; eduardo.montesino@watsonville.gov; caldridge@scmetro.org; Fifth.District@santacruzcountyca.gov  
**Subject:** Keep the Trail on the Tracks, and Reduce speed on Monterey ave as well!!

I run an in home child care, and Safety of the children and my children should be the City and our County's number one priority!

Look at the emails sent in 31 in favor of Trail on the tracks and NOT on park ave. Only about 2 that said to detour, shift, or as the City stated in the orange post card "Potential Adjustments"

We need a Class IV protected bike lane, we need the Trail build on the tracks, we need to limit not put more traffic in our village and streets. We deserve Trail on the Coastal side of the tracks and on the Trestle. Yes the city doesnt own the trestle or the tracks, the RTC does, and the RTC can give the green light to build a Trail on the Trestle.

Since we have City council members on the RTC, they should be advocating for that. Can we get an Audit of those records, can we get a debrief of what our representatives have been doing in those meetings?

Also concern is roundtable in front of nob hill, how will we be able to cross durning peak times? Will you install a flashing cross walk to stop traffic? There is a lot of traffic 730-9 am and 3pm - 6pm with that constant flow it will be impossible to cross especially for those mobility impaired.

The four lanes and stop signs worked well. The collision data that is reference most is over 5 years old, some as old as 10-12 years! That is not accurate data.

Lets hire more police to give out more tickets, or put in those automatic speed cameras. Lets put class IV bike lanes on Monterey ave to give kids Safe school route

I believe this council is trying to circumvent measure L, and use this traffic diet to move forward their agenda and not the people! Violation of Measure L. Again look at the people in Capitola and close by in Aptos and Soquel. 31 to 2 in favor of the Trail on the tracks not on Park Ave. that is over 90%

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*Thank you,  
 Teresa Maguire  
 Owner / Director  
 Capitola Child Care  
 831-247-8925*





Item 5 D.

**Gautho, Julia**

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**From:** Ted Burke <TedBurke@shadowbrook-capitola.com>  
**Sent:** Tuesday, February 11, 2025 2:20 PM  
**To:** City Council  
**Subject:** FW: Upholding Measure L – Keep the Rail Trail on the Rail Corridor

Dear Mayor Clarke and Capitola City Council Members,

I regret that a scheduled family reunion event keeps me from attending Thursday's City Council meeting and personally voicing my strong objection to diverting the RTC trail through Capitola away from the existing rail line and onto city streets, including Park Ave.

I hope that the Capitola Council members need not be reminded that they work for and represent the interests of the Capitola Community and are expected to stand up to over-reaching **directives** by outside agencies when they occur. Capitola voters elected you in great part because they believed that you would protect and promote the very best, the safest, and the wisest transportation network through our city. It is time once more that you honor that faith and provide safe, effective, and commonsense transportation **solutions** for all Capitola citizens, young and old, walkers and bicyclists, able and challenged, no matter the desires or pressure of other governmental agencies and bodies.

Sincerely,

*Ted*

**Ted Burke**  
 Shadowbrook Restaurant, Co-Owner  
 P.O. Box 65, Capitola, CA 95010  
 831-475-1222 (Office)  
**408-663-5322 (Direct)**  
 831-332-0010 (Mobile)  
[tedburke@shadowbrook-capitola.com](mailto:tedburke@shadowbrook-capitola.com)



[www.shadowbrook-capitola.com](http://www.shadowbrook-capitola.com)



**Gautho, Julia**

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**From:** Mark Ban <markban@sbcglobal.net>  
**Sent:** Tuesday, February 11, 2025 2:51 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

We were promised a rail trail not a bicycle lane. Hold the RTC to a trail. Get priorities straightened out. A trail north of Santa Cruz is great but how about using the money to build where the people are. For safety and convenience keep Park Avenue for cars and a trail for bicycles and pedestrians.

Mark Ban

I am a 45 year resident of Capitola and a bicycle enthusiast.

Sent from my iPhone

**Gautho, Julia**

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**From:** Eric Olsen <drericolsen@gmail.com>  
**Sent:** Wednesday, February 12, 2025 10:07 AM  
**To:** City Council  
**Subject:** I support the staff recommend recommendations for the Rail Trail

The staff of the City of Capitola, Santa Cruz County, and the Regional Transportation Commission (RTC) have developed two options for the trail between Capitola Village and New Brighton State Beach. Both options place the trail on an elevated path between Park Avenue and the railroad tracks. I urge you to adopt either one of these options. The funds are available for the trail and I among many others in the community plan to use it for bike transportation in lieu of driving a car. Thank you very much for your consideration.

Eric Olsen  
Aptos

**Gautho, Julia**

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**From:** Brendan Quirk <brendanbquirk@gmail.com>  
**Sent:** Wednesday, February 12, 2025 10:03 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Thank you for proposing wide, safe trail options for our community!

I want a trail sooner not later (or never) and we have the grant money to build this so please choose option A or B.

I also want ocean views!

Thanks!

Brendan Quirk

Get [Outlook for iOS](#)

**Gautho, Julia**

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**From:** Dee Roe <deeroe12@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:57 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. I live nearby and can't wait to have easy access to Capitola village from my home. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks seem well planned. Plan A or B will work. I love it that your council is making the effort to protect our Monarchs and it sounds like the money is there. This is great for Capitola business as well. Can't wait to get on my bike!

Dee Roe

**Gautho, Julia**

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**From:** Sandra Baron <sandybar3@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:56 AM  
**To:** City Council  
**Subject:** Destruction of an incredible local asset of world class beauty

The county voted for a train before any plans or budgets were created. Everyday, "promises" are switched to less desirable options. We could have been riding and walking on a beautiful rail trail for the last 10 (or more) years while the train idea was studied. We could have had tourists coming here and spending money at restaurants along the way. This would have been the logical way to go, protect what you have and research what you want.

Don't think a bike lane through Park Ave and through Capitola Village is going to be accepted by our community now after all the promises. Don't think that cutting down the trees along the route is helpful for a low carbon future. See the nonsense and money wasted on plan after plan trying to fit something into a space where it just doesn't fit. Give us a true accounting for infrastructure changes, all the bridges that need to be replaced. How can you go ahead with any of it before knowing the estimated cost and configuration of the whole project?

Sandra Baron  
Santa Cruz County



**Gautho, Julia**

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**From:** John Caletti <john@caletticycles.com>  
**Sent:** Wednesday, February 12, 2025 9:54 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Many thanks,

John Caletti

Caletti Cycles  
Custom bicycles handcrafted in Santa Cruz, CA  
**caletticycles.com** 831-426-0575  
Instagram: @caletticycles

Member: 1% For The Planet - *We give 1% of sales to nonprofits working to protect and restore the environment.*

**Gautho, Julia**

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**From:** Scott Farmer <s.farmer82@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:53 AM  
**To:** City Council  
**Subject:** Let's act together! I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward! The new plans for the trail are great! I'm glad that the staff has developed options for the trail that can realistically be built with the existing funding.

As a local small business owner, I am excited to see the influx of locals and tourists coming out to enjoy, what will surely be, this beautiful attraction! Let's act to create multi-modal transportation options across our County and reap the benefits to our small business community and local tourism industry.

Please avoid any unnecessary delay and approve one of the options your staff developed. To me, either is fine, I am writing to simply request you take action, as opposed to reassessing or further considering additional options that could result in delays. Let's work together across jurisdictions to make this project real! Let's take a step forward! I can't wait!

Thank you for your consideration,

Scott Farmer

**Gautho, Julia**

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**From:** Paula Bradley <pbradley2004@sbcglobal.net>  
**Sent:** Wednesday, February 12, 2025 9:47 AM  
**To:** City Council  
**Subject:** Item #9C Park Ave Traffic calming and Coastal Trail Options – support Option B

Dear Mayor and City Council members,

I ride this area frequently and I support Option B provided that the trail is separated from traffic and protected, a Class 1 bike path. It makes sense to divert the trail from the rail right of way in this area (0.7 miles) to achieve a more cost effective, that will preserve trees and will be more scenic. There is no point having a trail on the inland side (Option A).

The trail only people are misleading the public, you cannot take the funds awarded for one project (Coastal Rail Trail) & use them for another (trail only). For trail only, the approved coastal trail project under construction would halt, awarded grants returned (black mark on county), and attempt to get a legal right to rail ROW. It would be ten plus years before any trail would be constructed. There are funds for multi-modal transportation, few funds for a recreational trails only. The fastest way to get a trail is to build the trail, keep the rail. Preserve the rail for public transit for the future of our county.

Sincerely,

Paula Bradley, resident and cycling advocate

Paula Bradley (she/her)  
P. O. Box 1146 Capitola CA 95010

**Gautho, Julia**

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**From:** geri lieby <glieby@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:47 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,  
Please choose option A or B. The grant money is there. A project for now and the future.  
Geri Lieby

## Gautho, Julia

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**From:** Wyatt, Rosie  
**Sent:** Wednesday, February 12, 2025 9:44 AM  
**To:** Gautho, Julia  
**Subject:** Additional material

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Additional material for City Council below.

*Rosie Wyatt*  
Acting Deputy City Clerk  
831.475.7300 x 206



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**From:** Capitola CA via Capitola CA <capitola-ca@municodeweb.com>  
**Sent:** Wednesday, February 12, 2025 9:41 AM  
**To:** Wyatt, Rosie <rwyatt@ci.capitola.ca.us>  
**Subject:** Form submission from: Contact Us

Submitted on Wednesday, February 12, 2025 - 9:41am  
Submitted by anonymous user: 35.151.55.124

Submitted values are:  
CONTACT INFORMATION  
Full Name Frank Rimicci  
Email frankeej@msn.com  
Phone Number 8317246710

Question/Comment

Greetings council members, Today I wish to comment on the proposal to divert part of sections 10 and 11 of the Coastal Rail trail project. I feel the alignment constraints and high costs, among other issues are reasons the proposal to place the trail on the coastal side of the roadway in the area between Monterey Ave. and Coronado are a true remedy and will help to bring the reality of a connecting trail to other segments sooner and more affordable. The plan to use the already cycled roadways in the areas in question, including the village, will bring safer transit for recreational and commuting cyclists. This option also means less cars needed to bring more folks into the village itself. It also makes no sense to build the trail along the unsafe trestle until such time that the needed replacement is built. The proposal also preserves the corridor for all transportation options on the branch rail line which includes zero emission rail transit in the future. Thanks for Your considerations, Frank

The results of this submission may be viewed at:  
<https://www.cityofcapitola.org/node/7/submission/34281>



**Gautho, Julia**

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**From:** Jessica Guild <jessguild@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:43 AM  
**To:** City Council  
**Subject:** Rail trail options between Capitola Village and New Brighton State Beach

Dear Capitola City Council Members,

My name is Jessica Guild, and I am a homeowner in Live Oak. I have been following the rail trail development closely and learned that you plan to hear comments this week about the Capitola Village to New Brighton State Beach section of the rail trail.

I am writing to express my support of the two options that the City of Capitola, Santa Cruz County, and RTC staff have developed. From my understanding, either of the two options (a 12 foot elevated path on a raised curb that protects monarch habitat and allows for a 5 foot buffer zone between the trail and the street) sound like they would work well for the area.

I also hear that these options are fully funded and ready to build. Please do not delay in moving forward with this important infrastructure project in our community.

Thank you very much for your time and consideration of my comments.

Best,

Jessica Guild  
2001 Halterman Ave, Santa Cruz, CA 95062

**Gautho, Julia**

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**From:** Lowel Hurst <lhurst@baymoon.com>  
**Sent:** Wednesday, February 12, 2025 9:31 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,  
Congratulations, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail! Keep leading the way to a better and more accessible future !  
Lowell Hurst

Sent from my iPhone



**Gautho, Julia**

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**From:** Maria Hastings <mariahast@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:25 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Take care,  
Maria Hastings

**Gautho, Julia**

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**From:** Steve Lustgarden <slustgarden@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:21 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great.

I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Many thanks for your support of this project!

Steve Lustgarden

Santa Cruz

**Gautho, Julia**

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**From:** Daijaku <daijaku@aol.com>  
**Sent:** Wednesday, February 12, 2025 9:18 AM  
**To:** City Council  
**Subject:** Trail decision - Do NOT route through streets

Dear Capitola City Council,  
Thank you for all your work and dedication to our city. This train business is ill conceived and way way too expensive with money better spend elsewhere.  
So on to the trail.

Safety is foremost. **Do not shift trail to streets.** There are already too many tricky situations and this will make it much worse. I see them all the time - in and out of my car. In my opinion if you route the trail on streets, you can count on injuries, likely serious ones with an increase in people negotiating the trail

Just do the trail, it will be a benefit to all of us who live here - and a major draw to people who visit.  
I hope you listen to us and just do this thing.

Yours, Judith Kinst  
Jade St. Capitola

**Gautho, Julia**

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**From:** Donna Thomas <donna0sue@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:17 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,  
I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Donna Thomas, Live Oak



**Gautho, Julia**

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**From:** Joyce Nicholson <sundaygarnet@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:13 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Option A or B both look good to me, providing a safe and wide trail for all.

Thanks,

Joyce Nicholson

800 Brommer St. Spc 9

95062

**Gautho, Julia**

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**From:** Ann Whitlock <whitlock.as@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:10 AM  
**To:** City Council  
**Subject:** Rail/trail

Please keep the bike trail on the rail corridor, not on Park Ave. I have waited too long already in order to bike safely from my home in Aptos. Please find a good solution.

Ann Whitlock

**Gautho, Julia**

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**From:** David Lieby <dlieby@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:08 AM  
**To:** City Council  
**Subject:** Rail Trail, item number 9c on the agenda

Whenever my wife and I ride our tandem bicycle around town we see many bicycles piloted by parents and carrying children about. People are also hauling groceries and the like. All of the people doing this are reducing vehicle traffic at some risk due to lack of good bike lanes. Creation of the trail will reduce risk and increase the use of bicycles for all sorts of reasons. It will help keep our population of non-polluters safe.

Thanks,  
David Lieby  
310 Everson Dr, Santa Cruz, Ca 95060

PS:  
Yes, we ride to Capitola to eat at our favorite restaurant quite often and it would be great to be out of traffic.

**Gautho, Julia**

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**From:** Cynthia Sharpe <cssharpe063@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:07 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Thank you for proposing wide safe trail options for our Community.  
We have the grant money and I want the trail sooner rather than never, so please choose option A or B.

I want easy access and ocean views and the ability to get to this place so PLEASE choose option A or B, thank you.

Sincerely,  
Cynthia Sharpe



**Gautho, Julia**

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**From:** Tim Miller <ti\_miller@att.net>  
**Sent:** Wednesday, February 12, 2025 9:05 AM  
**To:** City Council  
**Subject:** Rail Trail Staff Recommendation Support

Dear City Council and Mayor,

As a family homeowner on Prospect Ave for 75yrs, we are happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue including the railroad tracks are great. I'm glad that the staff has developed options for the trail that are realistic, and can be built with the existing funding. I can't wait to get on this section of the trail! We encourage you all to come to an agreement on either of the 2 Staff recommendations, and to come up with a long term solution using the Trestle to bypass additional congestion in downtown Capitola.

Thank you for your consideration.

Tim Miller

**Gautho, Julia**

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**From:** Limit Info <pretzel05@comcast.net>  
**Sent:** Wednesday, February 12, 2025 9:02 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I live near a segment of the Rail trail and have walked it many times. There is a great deal of bicycle and walking on this current trail and it is of high quality for both activities with safe zones for crossing that have saved many lives.

Please pick one of the two choices for beginning the next segment through Capitola. This will be fully funded and many many people have worked on it to supply the best plans possible. Do not let the naysayers make you doubt your decision. Just come and visit the finished segments of the Rail Trail, take a walk and enjoy the safety off the streets for all involved to get across town.

Many thanks for considering the Rail Trail options and make a wise choice.

Linda Koval

128 Nevada St.

Santa Cruz, CA 95060

**Gautho, Julia**

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**From:** Peter Whitford <lightningfeetpete@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:59 AM  
**To:** City Council  
**Subject:** Let's Move the Rail Trail Forward!

Dear City Council and Mayor,

I can't wait for the new fully funded trail to start construction between Capitola and New Brighton State Beach! I'm also thrilled that both options maintain the critical rail component which is an incredible asset for the ever growing county to move people around. As an avid bike commuter, I can envision our family becoming a 1 car family if we were able to move up and down the corridor with our bikes, creating access to all of the many businesses, schools, and events that we visit throughout the year.

Thanks!  
Peter Whitford

**Gautho, Julia**

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**From:** Denise Ryan <denisearyan8@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:58 AM  
**To:** City Council  
**Cc:** Christopher O'Connell  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

My name is Denise Ryan and I have been a homeowner, full time resident of Capitola for 35 years. I have raised a family here and understand the personality of our beautiful community. We are ready for a rail and trail. I am so excited to know that my family and grandchildren will enjoy the rail and trail.

I will try to make the meeting on Thursday, weather permitting.

I thank you for your service to our community.

Warmly,  
Denise

**Gautho, Julia**

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**From:** Ros Munro <ramunro55@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:58 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding.

I can't wait to ditch my car, and use the commuter train. Strolling along the trail will be such a bonus too!

Thanks

Ros Munro

**Gautho, Julia**

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**From:** Mary Alsip <santacruz88@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:57 AM  
**To:** City Council  
**Cc:** Alsip Braxton; Chibisova Olga  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I own a home in Capitola, which is located in the Brookvale Terrace mobile home park. My son lives there with his two children and his wife and they bicycle everywhere. Please make sure that there are safe paths available for them as they mature!

Sincerely Yours, Mary Alsip

**Gautho, Julia**

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**From:** Alexis Konevich <alexiskonevich@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:55 AM  
**To:** City Council  
**Subject:** Rail Trail options

Dear Capitola City Council,

Thank you so much for engaging with experts to come up with alternate options for the rail trail. Speaking for myself and many of my friends, our desire is to have a trail as soon as possible. I think options A and B seem suitable, given that they still provide adequate separation from vehicular traffic and space for people to walk and bike safely. I urge you to move forward with either of these options so our families can enjoy the rail trail as soon as possible.

Thanks!  
Alexis

**Gautho, Julia**

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**From:** Geoffrey Flavell <gflavell1@me.com>  
**Sent:** Wednesday, February 12, 2025 8:54 AM  
**To:** City Council  
**Subject:** Rail Trail - LET'S GO!

Dear City Council and Mayor,

The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are fantastic!

The people voted and they want a Rail and Trail, which now seems like ages ago.

Our local government experts have come forward with viable options with easy public access and ocean views for the City Council to choose from.

The nay sayers should have voice as always, but not allowed to stall the project on topics already vetted.

Kindly be laser focused in moving this project forward.

I would like to see this project realized before I'm dead.

Thank you,  
Geoffrey Flavell  
2970 Pleasure Point Dr.



**Gautho, Julia**

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**From:** Pete Kennedy <pjkkennedy@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:54 AM  
**To:** City Council; info@railandtrail.org  
**Subject:** Rail Trail

Please vote in support of the Rail Trail. We need to keep those rails for future use.

I'm a City of Santa Cruz Planning Commissioner, and we are building thousands of apartments up here to provide housing for folks. This relieves the pressure on YOU to build housing in Capitola. We are happy to shoulder the burden of housing.

What I need your help with is providing the infrastructure so that our welcome newcomers can travel through our County both now and in generations to come. We have to do this together to reach a better future.

Thank you for supporting our efforts. I am the third generation of Kennedys to support the rail trail up here in SC. My kids are the fourth. I dearly hope they'll be able to afford to live here, as I've been lucky enough to.

Don't be afraid, the vast majority of people in this community are all in for housing, rail & trail.

Best

Pete Kennedy

**Gautho, Julia**

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**From:** Baymoon <maku@baymoon.com>  
**Sent:** Wednesday, February 12, 2025 8:47 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great.

I currently ride several times weekly on the Westside portion of the rail-trail, and am eager to ride further south as it expands.

I'm glad that the staff has developed options (A or B) for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the Capitola portion of the trail!

Thanks!  
Mary Anne (she/her)  
Kramer-Urner

**Gautho, Julia**

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**From:** Curt Coleman <curtcoleman@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:51 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward in Capitola. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are the answer we have needed. I look forward to using this segment of trail!

Curt Coleman

**Gautho, Julia**

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**From:** A. Marm Kilpatrick <marmkilpatrick@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:46 AM  
**To:** City Council  
**Subject:** support for Rail trail between Capitola Village and New Brighton State Beach

Dear City Council,

I'm writing in support of the rail trail options being proposed by the City of Capitola, Santa Cruz County, and the Regional Transportation Commission (RTC). Either of the two options would be great for our community and would provide both a safe way to commute and a great option for recreation which will bring people to support the local businesses. I urge you to support these plans and keep the project moving forward!

thank you,

Auston Marm Kilpatrick

**Gautho, Julia**

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**From:** dieter@mac.com  
**Sent:** Wednesday, February 12, 2025 8:44 AM  
**To:** City Council  
**Cc:** Dieter Siegmund  
**Subject:** Capitola section of the Rail Trail

Dear City Council and Mayor,

I'm writing to voice my support for both rail trail options between Capitola Village and New Brighton State Beach.

It's exciting to see the well-designed trail plans, and I'm looking forward to being able bike the trail from Santa Cruz to Capitola and beyond.

With funding available, let's keep making progress on this section of the rail trail.

Best regards,  
Dieter Siegmund  
Santa Cruz

**Gautho, Julia**

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**From:** Ryan Tamm <cheese4nachos@yahoo.com>  
**Sent:** Wednesday, February 12, 2025 8:39 AM  
**To:** City Council  
**Subject:** In support of the Rail Trail

Hello City Council members,

I'm so excited about the progress on bringing the rail trail down to our house in Aptos! The sooner we can get the trail built, the better. It will help relieve traffic, support our local businesses, and improve the health and wellbeing of our community members while providing a beautiful ocean view.

I encourage you to please choose option A or B - let's get this project built ASAP!

Thank you,  
Ryan Tamm

**Gautho, Julia**

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**From:** Brad Wiles <brad@wilesinjurylaw.com>  
**Sent:** Wednesday, February 12, 2025 8:36 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I support options A and B and would love to see the rail trail move forward as quickly as possible. Don't be swayed by the small handful that are opposed to the entire rail trail that will benefit the entire county. Thank you. Brad Wiles.

Sent from my iPad

**Gautho, Julia**

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**From:** Linda White <squigett@hotmail.com>  
**Sent:** Wednesday, February 12, 2025 8:36 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

We do NOT want the trail to divert through Capitola Village and Park Ave. !! Leave the plans as original. We are long time residents and voters. Leave the Stockton bridge intact also.

Respectfully,  
Mike and Linda White  
2235 Wharf Road  
Capitola

Get [Outlook for iOS](#)



**Gautho, Julia**

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**From:** Phil Kaplan <noattitudes@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:34 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

**Gautho, Julia**

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**From:** Kate Clark <kclark@cruzio.com>  
**Sent:** Wednesday, February 12, 2025 8:33 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Thank you for proposing wide, safe trail options for our community  
I want a trail sooner not later (or never) so please choose option A or B.  
We have the grant money to build this so please choose option A or B.  
I want ocean views so please choose option A or B.

I would use this segment of trail to get to my volunteer job at the Capitola History Museum, so choose option A or B.

Thank you.

-Kate Clark

**Gautho, Julia**

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**From:** Ernesto Anguiano <ernestoanguiano2222@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:30 AM  
**To:** City Council  
**Subject:** Rail Trail -Item 9C

Dear Council Members,

Thank you for proposing wide, safe trail options for our community.

I want a trail sooner rather than later (or never), so please choose Option A or B. Both options protect monarch butterfly habitat, provide users with ocean views, and offer easy access between neighborhoods and the trail. Both are raised on a curb, similar to a sidewalk, and include a 12-foot-wide trail with a 5-foot buffer zone between the trail and the street. Most importantly, with the latest construction grant, either of these options will be fully funded and ready to build. I would use this section of the trail to get to and from my home, visit the village, and spend my hard-earned money at local businesses.

Thank you,

Ernesto Anguiano

**Gautho, Julia**

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**From:** neil@blondeguy.com  
**Sent:** Wednesday, February 12, 2025 8:29 AM  
**To:** City Council  
**Subject:** I support the Rail Trail proposal

As I understand it, the proposal is to put the trail on a new elevated path between the Park Avenue roadway and the railroad tracks. That would work for me.

I am one of the group of jugglers that entertain people on the esplanade some afternoons. I would use this segment of trail in this way, so choose option A or B.

best regards,  
Neil

**Gautho, Julia**

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**From:** Cynthia Dzendzel <cyndzen@earthlink.net>  
**Sent:** Wednesday, February 12, 2025 8:26 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Thank you for supporting Option A or B, which will allow the trail to be built sooner rather than later. I am hoping it will be built before I am unable to use it! I am not getting any younger. :)

Cynthia Dzendzel

**Gautho, Julia**

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**From:** Lizann Keyes <lwestkeyes@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:22 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Thank you! I want the Rail Trail to move forward so that I will be able to use it as soon as possible. I support the environmental vision of the Rail Trail.

Thank you for your support,

Lizann Keyes  
1511 Hidden Terrace Court  
Santa Cruz, CA 95062

**Gautho, Julia**

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**From:** Deborah Christie <mountainhigh58@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:22 AM  
**To:** City Council  
**Subject:** staff recommendations for the Rail Trail

Dear City Council and Mayor,

Thank you for helping the Rail Trail move forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are a great plan.

I see that the protection of the Monarch habitat has been taken into consideration. I support staff recommendations. We have the existing funding to do so. I am an avid hiker and walker and look forward to using the trail as much as possible.

Sincerely,

Deborah Christie  
136 S Park Way, Santa Cruz, CA 95062

**Gautho, Julia**

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**From:** Allison Cruz <alli@cruzkidz.com>  
**Sent:** Wednesday, February 12, 2025 8:20 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Please do your best to listen openly to both sides this Thursday, while carefully extinguishing disinformation.

Thank you,  
Allison Cruz  
420-1991



**Gautho, Julia**

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**From:** Peter Matthew Reed <petermreed@gmail.com>  
**Sent:** Wednesday, February 12, 2025 8:15 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Thank you,

Peter Reed

**Gautho, Julia**

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**From:** ANDREA RATTO <andrearatto@sbcglobal.net>  
**Sent:** Wednesday, February 12, 2025 7:27 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

As a bike rider I am not comfortable riding on Park Avenue. There will be even more cars on the road once the housing for Cabrillo and UCSC students is built in the area and traffic during the summer and most weekends through the village and Park Avenue is so congested. Maybe it's time to scrap this I'll thought out plan to run a tourist train from the Boardwalk to Seascape. It will not serve the community members who are taxed with financially burdened with this costly and inefficient project. We will never vote for any tax increase to support this project Sent from my iPad

**Gautho, Julia**

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**From:** Gary Sultana <g5948sultana@gmail.com>  
**Sent:** Tuesday, February 11, 2025 10:44 PM  
**To:** City Council  
**Subject:** Rail Service

Rail service in Santa Cruz County would be wonderful if the population were four times what it is now. Residents would have to use it, and we could afford an efficient connection to San Jose.

This is not reality. We cannot afford a train now. We need to complete a trail system now and railbank for the future.

Gary Sultana

**Gautho, Julia**

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**From:** Bud Colligan <bud@colligans.com>  
**Sent:** Tuesday, February 11, 2025 10:42 PM  
**To:** City Council  
**Subject:** OBJECTION TO PLAN TO PUT TRAIL ON PARK AVE

Dear Capitola City Council,

I am completely against the current plan to put the bike and pedestrian trail on Park Avenue and also to detour the trail into Capitola Village.

For many years, the RTC has told us and you that the corridor was wide enough for both a train and trail. It appears that years of lies have now caught up with the actual plans, and the hope is that the citizens of Capitola will not notice this underhanded sleight of hand. **WE HAVE NOTICED!**

For starters, the plan to detour the trail through Capitola Village is **DIRECTLY** in conflict with the will of Capitola voters expressed in Measure L, the 2018 ballot initiative to preserve the trestle for bikes and pedestrians. It is much less costly and supports public safety to keep kids going to school, cyclists, senior citizens, families and all pedestrians on a continuous safe pathway. You will be guaranteeing serious injuries and deaths to take hundreds of cyclists and pedestrians per day up/down steep Cliff Drive and Monterey Ave and through a Village impacted by an enormous amount of traffic. Anyone with common sense can see that this is a dangerous plan which will lead to serious injuries and deaths. Public safety should override all considerations in this decision. We elected you to follow the laws in our city and support the safety of our citizens.

Secondly, the Park Ave plan is another bait and switch. The RTC has said *for years* that the corridor is wide enough for a train and trail. Now, it's not wide enough anymore! According to the new information from the RTC, it's not wide enough for the ENTIRE LENGTH OF CAPITOLA. Shouldn't this major flaw in the plan have been pointed out years ago? A trail on the corridor can be built for \$3M to \$4M per mile. Now with retaining walls and expensive infrastructure, the RTC trail is approaching \$25M per mile. It will be the most costly trail ever constructed in the United States. All to preserve a train that will never be built because its cost will be shown to be in excess of \$1.5 BILLION. There is no funding for a train. This madness must stop. The voters will take matters into their own hands if you continue to ignore common sense and support this egregious malpractice of transportation policy. You have the power to stop this insanity or the voters will do so.

I sincerely hope that all the new data that you are receiving will result in the "a-ha" moment that you have been consistently misled by the Board majority on the RTC . It's time to get real answers to the tough questions. Let's not prolong this fantasy any longer.

Sincerely,

Bud Colligan  
1840 41st Ave  
Capitola, CA 95010

**Gautho, Julia**

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**From:** Leslie Nielsen <lpbeach21@gmail.com>  
**Sent:** Tuesday, February 11, 2025 10:39 PM  
**To:** City Council  
**Subject:** ITEM 9C Public Comment

Dear Capitola City Council,

The staff report for Item 9C is flawed, misleading and not neutral. One could interpret it to be a marketing piece for the RTC Pro Train initiative;

- “Finally, the Park Avenue Coastal Rail Trail alignment is designed to avoid possible conflicts with potential future transportation uses in the rail corridor”
- “Space constraints in the existing rail corridor may limit the ability to accommodate both the Rail Trail and other future transportation uses”
- "Shifting the trail out of the rail corridor minimizes the risk of future modifications or removals that could arise if other transportation projects, such as those studied in the ZEPRT project are pursued in the corridor."

Why not just say, we need to set everything up to make sure the future of the train is secure and nothing is constructed to get in the way. It is disappointing to see this be more important than safety. You are proposing to give away City land (right of way) and lose valuable parking for the RTC to save money by promoting a project that flies in the face of Measure L.

Measure L – Codified in MC 8.72.040 (B) says, “No city of Capitola department, agency, or employee shall expend any funds or resources related to the construction, reconstruction, operation, maintenance, financing, MARKETING, or signage for a detour of the Trail onto Capitola City Streets or sidewalks”.

This staff report clearly took some time to put together, a violation of Measure L.

To suggest the definition of the word detour concludes that the City is “not proposing the construction of the Trail on Capitola’s streets or sidewalks” is insulting.

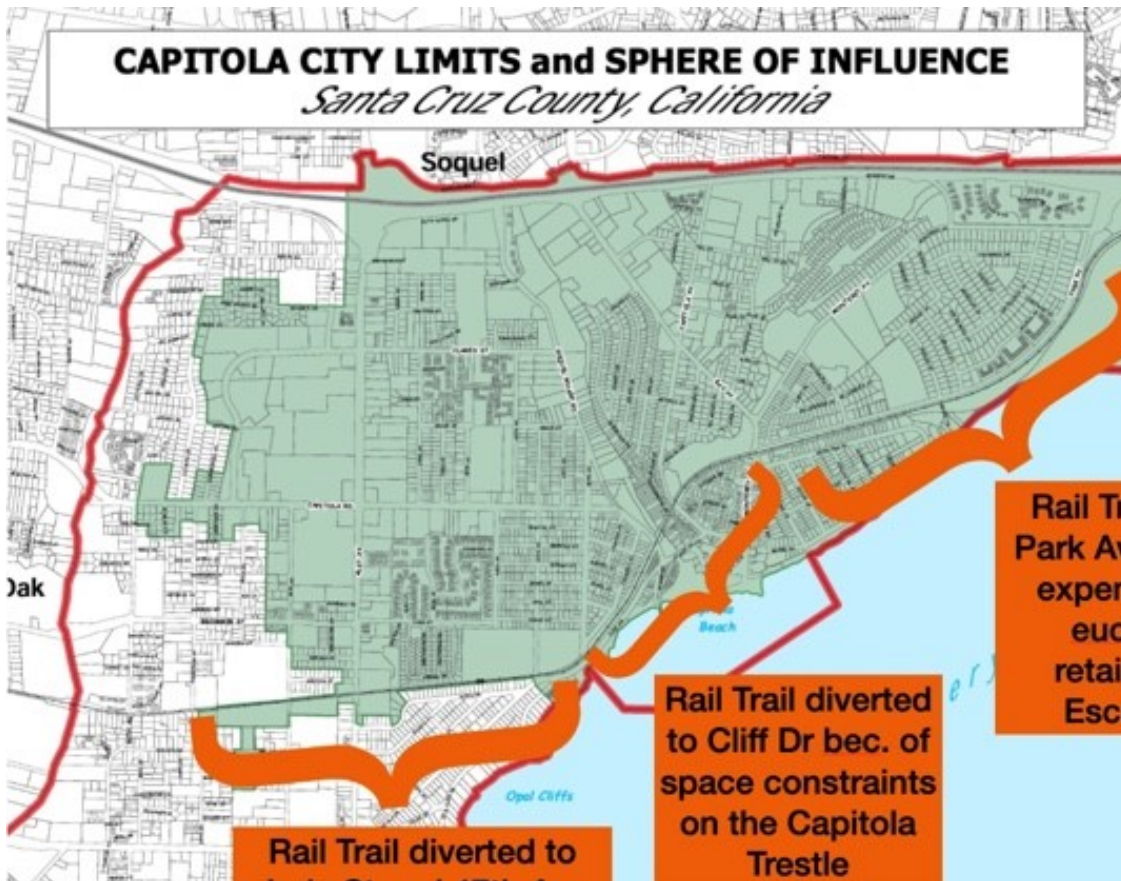
The shifting of a TRAIL out of the corridor and on to Park Ave. is absolutely NOT “taking all steps necessary to preserve and utilize the corridor and Trestle for active transportation and recreation” as required my Measure L MC 8.72.024 (A)

The RTC has identified significant cost estimate overruns for this segment. Capitola should not be lawless in implementation of Measure L nor promote unsafe infrastructure developments to help the County and the RTC with their project cost challenge.

The Santa Cruz County Regional Transportation Commission will hear updated cost estimates on passenger rail at its March 20th meeting. The last time a formal cost estimate was done for the rail project was 2015.

You do not need to put the wheels in motion this week on a matter this significant before understanding it in the greater context of the Rail Trail project and pending update on the cost estimates and related implications. If the City was neutral in this matter, the staff report would have included additional options including not moving forward with a consolidated Park Ave. Coastal Rail Trail alignment project designed by entities outside the City, notably the RTC, but rather stay the course on the Park Ave. traffic calming project.

The City has budgeted for and allocated funds to continue the Park Ave. calming initiatives and should be looking forward to a greatly reduced amount of multi modal traffic on the streets when the corridor trail is completed as promised when we voted for Measure D. We have heard you say, votes matter. It doesn't feel like they do when Capitola is experiencing an almost complete diversion of the trail off the corridor after voting for both Measure L and Measure D.



This is clearly being set up to be precedent setting and evidence of past practice for the next round of proposed actions to make improvements for multi modal bike and pedestrian traffic through the Capitola Village.

For the City to be suggesting that this proposed action is not illegal is misleading. After the City sued to try to keep Measure L off the ballot in 2018, Judge John Gallagher ruled on 8/20/2018 in favor of Greenway petitioners allowing the Measure L ballot initiative to proceed in the Nov. 2018 election.

Measure L passed. It's the law. The city had the language reviewed by an administrative law judge and codified it in the Municipal Code. If the City believes violating the code is not illegal, THEY need to do the necessary work to take this to the voters to have it amended or deleted. In the meantime, you must be lawful council members representing your community.

### **Is it illegal for a city council member to intentionally violate municipal code?**

Yes, it is generally considered illegal for a city council member to intentionally violate municipal code, as doing so would constitute a violation of the law and could result in potential legal consequences, including fines, removal from office, or even criminal charges depending on the severity of the violation and the specific local



ordinances involved.

I would strongly encourage each of you on this council to take this to heart and postpone any action on agenda item 9C as the staff proposed options A and B are both clearly in violation of Measure L.

Best regards,

Leslie Nielsen

**Gautho, Julia**

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**From:** Brett Graessle <graessles@gmail.com>  
**Sent:** Tuesday, February 11, 2025 9:05 PM  
**To:** City Council  
**Subject:** Trail Support

Dear Capitola City Council,

I am writing in STRONG support of the Trail Now initiative. Please vote Thursday to reject the RTC proposal to divert the coastal trail around Capitola.

As a Capitola resident for over 27 years, we have witnessed tremendous progress and enjoyed decades of unparalleled community spirit and camaraderie.

In 2018, the people of Capitola voted for Measure L, keeping the trail on the current path. We continue to support this. Having raised 5 children in this special village, we have seen firsthand the great importance of safe bike travel through our town. City streets are not a safe alternative. The trail would be a treasure for our citizens, visitors, children and families, students, commuters .... a benefit for all. Please vote to support this trail ON the trail - no detours.

Thank you,  
Molly Graessle

**Gautho, Julia**

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**From:** Nancy Becker <nnbecker@gmail.com>  
**Sent:** Tuesday, February 11, 2025 8:59 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Hello,

We want the bike trail safely on the RAIL corridor, not the street. You should follow the voters' mandate to do that. We have bike lanes on streets already. Cancel the train before you scrap the bike trail on the rail.

Thank you,  
Nancy Becker

**Gautho, Julia**

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**From:** Tom Davis <snorkers@pacifedgeclimbinggym.com>  
**Sent:** Tuesday, February 11, 2025 8:57 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options 13 February Meeting

Greetings,

I am writing to support keeping the Rail Trail on the the railbed/ trestle property. Diverting bicycle traffic off the rail line would be a disaster, in terms of public safety, and the quality of the final trail. Measure L made it clear. The trail must stay on the rail line.

If we can ever get his project completed, it will be the most amazing, positive, and the most utilized public works projects of the last 70 years.

The best solution is to build the trail NOW, on the trestle and railbed, If the train ever becomes a reality, then do the necessary upgrades at that time.

Sincerely,  
Tom Davis  
CEO, Co-Owner  
Pacific Edge Climbing Gym

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Tom Davis  
(831) 464-9284 Santa Cruz  
(760) 648-8036 Silver Meadow

**Gautho, Julia**

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**From:** Mike Sargenti <mikesargenti@att.net>  
**Sent:** Tuesday, February 11, 2025 8:43 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

To whom it may concern,

As a Santa Cruz County resident and homeowner I am upset about moving the rail trail to Park Avenue. The reasons are listed below. We need to scrap the train and build the trail now!

- **Measure L was clear.** Capitola voters mandated the trail stay on the trestle. The Council is ignoring the will of the people.
- **A Park Avenue trail is LESS SAFE for cyclists.** Instead of a safe, direct route on the railbed, cyclists will be forced onto busy roads.
- **Bringing cyclists into Capitola Village is dangerous.** This isn't a hypothetical concern—serious injuries and fatalities will happen. Public safety must come first.
- **A train is an illusion.** The cost would be in the billions, and there is no real path to funding it. It's time to get real.

Sincerely,  
Agostino Sargenti

**Gautho, Julia**

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**From:** Buff McCharen <buffmccharen@gmail.com>  
**Sent:** Tuesday, February 11, 2025 8:34 PM  
**To:** City Council  
**Subject:** RAIL TRAIL

Dear Capitola Councilmen,

Please keep the bike trail on the rail corridor as planned. Park avenue is NOT a viable option!

Respectfully, Buff & Victoria McCharen, Aptos residents

**Gautho, Julia**

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**From:** Jennie anderson <jahacove@gmail.com>  
**Sent:** Tuesday, February 11, 2025 7:34 PM  
**To:** City Council  
**Subject:** Rail Corridor

City Council,

I'm surprised that the council would consider diverting the rail trail through the Capitola Village and along Park Avenue. In effect, the city would be obstructing active transportation in the Mid County area. A segmented trail would be a detriment to pedestrians, bicyclists and e-bike commuters and cause significant safety concerns within the city. Would you like your children to be confronted with more congestion in the village and along a dangerous Park Ave? The solution is to pressure the RTC to rail bank the corridor and build an affordable, wide trail down the center of the corridor, utilizing the Capitola Trestle. This would insure a trail that could be constructed soon and still allow for a future train if voted on by the residents. Rail banking has been in effect in hundreds of communities across the country with outstanding results. We should be able to enact it in our community. Don't let the train lobby dictate a flawed scenario for Capitola.

Sincerely,  
Jennifer Harris-Anderson  
831-566-3367

**Gautho, Julia**

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**From:** Gary Lew <gary\_lew@hotmail.com>  
**Sent:** Tuesday, February 11, 2025 7:26 PM  
**To:** City Council  
**Subject:** Bike (Not Rail) Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

I live in Depot Hill and support a bike trail on the existing rail line with minimal disruption to the Trestle, roads, private property and the natural landscape. I have used the Iron Horse Trail in Danville and the Los Gatos to Campbell trail. Santa Cruz/Capitola/Aptos would benefit from a similar trail. Please approve the interim solution of a bike trail on the existing track bed with no expansion to the right-of-way which will benefit the most people at the lowest cost, fastest implementation time and lowest environmental impact.

I do not support a billion dollar plus boondoggle involving a train line (that will sit unutilized next to the proposed obtrusive bike trail), a train will never get used as dreamed, will certainly be over budget and environmentally destructive. Additionally, commuters or whoever the RTC fantasizes will ride this train should look at the empty buses that are currently running and see that trains will be 100x more expensive yet just as empty.

Gary Lew  
925-209-0538



**Gautho, Julia**

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**From:** E Chen <ifeachhen@gmail.com>  
**Sent:** Tuesday, February 11, 2025 6:54 PM  
**To:** City Council  
**Subject:** Please keep the Rail Trail on the rail corridor

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear Capitola City Council,

A Rail Trail detour on Park Avenue is dangerous to many and would discourage people from riding their bicycles. With the crazy drivers who are texting/talking on their phones and speeding and weaving through traffic and with police who could care less about this behavior, many people hop on their bicycles. Please keep the Rail Trail on the rail corridor as proposed. It provides safety and a means for us to stay healthy while keeping our environment clean. It is the smart and kind thing to do.

Eefei

**Gautho, Julia**

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**From:** grinell smith <grinell@gmail.com>  
**Sent:** Tuesday, February 11, 2025 5:29 PM  
**To:** City Council  
**Subject:** Keep the Rail Trail on the rail corridor

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

I am an avid cyclist who rides through and around Capitola on a regular basis. A Rail Trail detour on Park Avenue would be very dangerous both for cyclists and cars, and would diminish everyone's experience overall. Please keep the Rail Trail on the rail corridor as proposed.

Thanks,  
Grinell Smith

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Sent from my HAL 9000

**Gautho, Julia**

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**From:** Matthew O. Sloan <mosloan@gmail.com>  
**Sent:** Tuesday, February 11, 2025 5:27 PM  
**To:** City Council  
**Subject:** Rail Trail, yes please, and thank you!

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

*Hello Dear Capitola City Council,*

*I ride my bike through Capitola regularly - commuting, riding for fun, and dining/shopping in Capitola Village. A Rail Trail detour on Park Avenue would be very dangerous to myself and many others.*

*Please keep the Rail Trail on the rail corridor as proposed.*

*Many Thanks,*

*Matthew Sloan*

**Gautho, Julia**

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**From:** Rita <ritalaw75@gmail.com>  
**Sent:** Wednesday, February 12, 2025 10:32 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

**Gautho, Julia**

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**From:** Diego Graglia <diego@diegograglia.net>  
**Sent:** Wednesday, February 12, 2025 10:23 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear City Council and Mayor,

Like many Santa Cruz County residents, I am so happy to see the Rail Trail moving forward. The new plans for an elevated and protected trail between Park Avenue and the railroad tracks are great. They protect Monarch habitat, are realistic, and can be built with the existing funding. I can't wait to get on the trail and stop to take in the views of the Cement Ship, La Selva, Moss Landing and beyond!

I often travel between Live Oak and Soquel/Seacliff and I would highly prefer to be able to do it on a safe bikeway rather than by traffic-creating, air-polluting personal transportation.

Please let's move sooner rather than later towards a new vision for the county, where Santa Cruz shows California and the whole country that we can get off of our fossil-fuel habits and take advantage of healthier, sustainable modes of transport. Please choose option A or B.

**Diego Graglia**

Live Oak homeowner and resident  
[diego.graglia@gmail.com](mailto:diego.graglia@gmail.com)

**Gautho, Julia**

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**From:** Jim Weller <jweller@cruzio.com>  
**Sent:** Wednesday, February 12, 2025 10:22 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great.

I prefer Option A, as it would include an enhanced bike/pedestrian lane along the north side of Park Avenue in addition to the rail trail along the south side of the street. Either option would be a win-win-win compared with the option to locate the rail trail below Park Avenue within the railroad corridor. The general public and the neighborhood would benefit from traffic calming and greater pedestrian/cycling safety on Park Avenue; the City of Capitola would benefit fiscally because the street improvements would be paid for with non-municipal funds; and the RTC would benefit from greatly reduced construction costs compared with the rail corridor option.

Jim Weller  
1970 46th Avenue  
Capitola

Sent from my iPad

**Gautho, Julia**

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**From:** Dave Evans <djevans4@gmail.com>  
**Sent:** Wednesday, February 12, 2025 10:19 AM  
**To:** City Council  
**Subject:** Rail Trail in Capitola - YES!

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Dear City Council and Mayor,**

I'm a 20 year fulltime local resident. My church is in Capitola and I have many dear friends in Capitola, Aptos and Watsonville. I am also advisor to the CEO of Digital NEST, and supporter of MBEP - non-profits dedicated to supporting a sustainable quality of life for ALL local residents.

The plans for the Rail Trail segment in Capitola along Park Ave are brilliantly conceived and worthy of your support. Either Plan A or B provide safe setbacks from the road, stable wide footing for users of all ages and types, ocean views, monarch habitat sustainability, and much needed through access for the overall trail system.

**Please support either Plan A or B.**

Opposition has made false claims about roadway incursion and other impacts which are untrue and misleading and will no doubt animate many residents - but unfortunately animate them inaccurately and without real basis. Please lead with forward thinking and fair objectivity - both of which will take you to approval of Plan A or B.

Thank you - respectfully,

Dave Evans  
600 Pelton Av, SC 95060

**Gautho, Julia**

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**From:** Mary Kay Zaineab <raiderradgal@gmail.com>  
**Sent:** Wednesday, February 12, 2025 10:16 AM  
**To:** City Council  
**Subject:** Park Ave section of Rail Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear Councilmembers,

I am writing in support of the proposed options for the trail running between Capitola Village and New Brighton State Beach.

Please move forward with either of the two options for this important part of the long awaited Rail Trail. This is a great opportunity, as grant money is in place.

I feel the trail would be used a great deal for recreation and travel from Capitola Village to New Brighton State Beach by residents of Capitola as well as residents from surrounding areas and tourists. Although I live in Watsonville, I would love to make use of the trail.

Mary Kay Zaineab  
Watsonville, Ca.



**Gautho, Julia**

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**From:** Rex Page <drrexp@ gmail.com>  
**Sent:** Wednesday, February 12, 2025 10:52 AM  
**To:** City Council  
**Subject:** Rail Trail, item 9c, Feb 13 mtg agenda

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

I want to see the Rail Trail project, which was favored by a two-to-one margin by voters, move forward, without delay. To ensure this, the Council must choose one of the two plans (A or B) produced after due consideration by the RTC, Santa Cruz County, and Capitola. The proposed projects a can be completed with funding already approved.

You should, under no circumstances, follow the advice of those who were overwhelmingly defeated by the voters and are now spreading inaccurate (to put it mildly) information about both of rail/trail plans developed and proposed by RTC and other elected representatives of the voters.

People need and deserve to have the trail they voted for available for their use without further delay, especially bureaucratic delays caused by nefarious operatives trying to throw sand in the gears. Facilities delayed are facilities denied.

Rex Page,650-533-3663,[drrexp@ gmail.com](mailto:drrexp@ gmail.com)  
1505 42nd Ave #22  
Calitola CA 95010

**Gautho, Julia**

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**From:** Kevin Maguire <kmaguire831@gmail.com>  
**Sent:** Wednesday, February 12, 2025 10:51 AM  
**To:** City Council  
**Subject:** 2.13.25 Agenda 9 C. - Mayor Clarke support of Measure L, Judge rules for Greenway Capitola, Village Business Support of Measure L

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Lets not forget what was campaigned on, vision, heart, promises, and what connected with the People, the Citizens of Capitola.

- Prior to becoming Mayor, Joe Clarke endorses Measure L
- Many Capitola Village Business owners included Daniel Castagnola, Matt Artur endorse Measure L
- The Coastal Commission
- RTC Director Guy Preston
- Former Mayor Gayle Ortiz
- Former Mayor Sam Story
- Traffic & Parking Commissioner Nels Westman and President of Capitola Village Resident Association
- Former City manager and Planning Commissioner Susan Westman
- The Santa Cruz Count Business Council
- And the 1000s of residents that voted for Measure L,

While the best use of the Rail Corridor would be the Interim Trail, Mayor Brown at the time advocate for the Ultimate Trail, Trail next to Rail.

So now we will get No Trail on the Rail Corridor? I mean very limited, from 38th to 47th? Coronado to Kennedy? Really!! That is not what is suppose to happen!

RTC can spend the 600k to update the Trestle, and have a World Class Trail now..



Greenway Capitola

October 8, 2018 · 🌐

MAYOR CLARKE

Thank you to retired Sergeant and Santa Cruz County Sheriff for endorsing YES on L—SAVE OUR TRESTLE!





Seal

## City of Capitola City Council Councilmember Joe Clarke

Overview City Council Commissions ▾ Departments ▾ News Articles & Digest Announcements & Events

Address: 420 Capitola Ave, Capitola, CA 95010

Official Links: WEBSITE CALENDAR BUDGET FACEBOOK NEWSLETTER SIGNUP

Santa Cruz County Government Listings > City of Capitola > City Council > Vice Mayor Joe Clarke

### City Council



#### Vice Mayor Joe Clarke

JClarke@ci.capitola.ca.us

[VICE MAYOR'S WEBSITE](#)

The third-place vote-getter in an extremely tight race for Capitola City Council, Joe Clarke was sworn in as an at-large councilmember. The longtime local gathered endorsements from outgoing Capitola Mayor Sam Storey as well as former mayors Gayle Ortiz, Bruce A. Termini.

A retired sergeant with the Santa Cruz County Sheriff's Office, Clarke has extensive experience in public safety. He's been a K-9 deputy, managed the search and rescue unit, and was a SWAT team member and hostage negotiator. He also was director of police services at Cabrillo College.

During the election, Clarke spoke about his dream for Capitola in Santa Cruz Local's Election Guide. A recreational surfer, Clarke said

**SANTA CRUZ LOCAL™**

NEWSLETTER

#### Meet Joe Clarke

- **Residence:** Near 41st Avenue
- **Age:** 61
- **Occupation:** Retired Santa Cruz County Sheriff's sergeant
- **Work and local government experience:** Clarke said his roles in the Sheriff's Office gave him an understanding of how cities and counties work. Clarke has been a K-9 deputy, he has managed the search and rescue unit, he was a SWAT team member and hostage negotiator, he supervised deputies at Santa Cruz County Superior Court and he was director of police services at Cabrillo College.
- **What local issues affect you that make you want to run for this office?** "Historically, Capitola has been well managed. The people before us in the city council have done a great job of keeping Capitola a quaint seaside town. And that's the biggest reason I want to get involved in our local politics is because I don't want to see it lose any of that. You know, we have all these state mandates about how we're supposed to grow as a city and do these other things. We



Joe Clarke

## Judge rules for Greenway Capitola

[https://www.santacruzsentinel.com/2018/08/22/judge-rules-for-greenway-capitola/?fbclid=IwY2xjawlZyP1leHRuA2FlbQlXMQABHaScLcBg0SEE6W5le3caH2cL3jaX6vO01Ybihz2es5PjNkSjnwnZkCGVhw\\_aem\\_yvmsb9RHEisOclRY5YHhzQ](https://www.santacruzsentinel.com/2018/08/22/judge-rules-for-greenway-capitola/?fbclid=IwY2xjawlZyP1leHRuA2FlbQlXMQABHaScLcBg0SEE6W5le3caH2cL3jaX6vO01Ybihz2es5PjNkSjnwnZkCGVhw_aem_yvmsb9RHEisOclRY5YHhzQ)

CAPITOLA >> City voters will get their say on a [citizen initiative](#) that could direct city officials to preserve the aging Capitola Village rail trestle for use as a trail and bar city investment in detouring the trail onto city streets or sidewalks.

Santa Cruz County Superior Court Judge John Gallagher ruled Monday for a group called Greenway Capitola and against the city of Capitola.

**"It is the duty of the courts to 'jealously' guard the people's initiative power," his ruling said.**

The City Council, believing there were conflicts between the initiative and existing local planning documents, had [filed a lawsuit](#) against Santa Cruz County Clerk and Elections Manager Gail Pellerin to keep the measure off the Nov. 6 ballot and asked for an expedited review.

Capitola officials contended the initiative **would prohibit the council from budgeting or planning for improvements to facilitate bike and pedestrian through the village from the rail trestle.**

The trestle, which looms over the seaside village, was built circa 1875 and is not in use, as at least \$600,000 in repairs are needed.

Gallagher, who expedited his decision at the city's request, quoted a letter from Ryan Moroney, district supervisor for the California Coastal Commission, that the agency "would not interpret the initiative language to prevent the city from providing much needed safe bicycle and or pedestrian access from Cliff Drive, through the Village core, and up to Park Avenue or otherwise."

Moroney's letter continued, "Rather it appears that the initiative language solely limits the city's ability to fund redirection of the main MBSST (**Monterey Bay Sanctuary Scenic Trail**) line specifically while still being able to fund bike and pedestrian improvements elsewhere in the city."

Greenway Capitola volunteers led by Tom Evans and Juan Escamilla had [collected 1,117 signatures](#) to reach 10 percent of the registered voters required to qualify the measure for the ballot; they met that goal when 618 signatures were certified.

**"The people of Capitola clearly want to vote on how they would like to see the trestle and corridor used,"** said Escamilla. "It was sad to see so many roadblocks in an attempt to prevent this vote. Luckily, the court protected our rights."

Evans added, **"Many Capitolans have been dreaming about a safe pathway across the trestle for years."**

Greenway Capitola is an offshoot of Greenway Santa Cruz County, which favors converting the rail into a trail for people on foot or on bikes.

“The City of Capitola took an extreme view in its reading of this proposed initiative, misreading its purpose and attempting to undermine the public’s role in making land use decisions in the process,” said attorney Sara Clark of Shute, Mihaly & Weinberger, which represented Greenway Capitola.

**City Manager Jamie Goldstein** provided a response from the city.

“It is disappointing that the court did not help clarify for voters whether the proposed language in the petition is legally enforceable,” he said. “However the city looks forward to working with the Regional Transportation Commission regarding future uses on its rail corridor that benefit our community.”





**Greenway Capitola**

September 27, 2018 · 🌐

Thank you to Daniel Castagnola, owner of Castagnola Deli & endorsing Measure L!





**Greenway Capitola**

September 25, 2018 · 🌐

Thank you to Gayle Ortiz, former Mayor of Capitola and owner of Bakery & Rosticceria, for endorsing Measure L! Like 2016's Visit Capitola which Gayle helped organize, Measure L will give community members a voice in Capitola's future.



© Keana Parker



**Greenway Capitola**

September 21, 2018 · 🌐

Thank you **SCCBC - Santa Cruz County Business Council** for your endorsement of Measure L! Your support demonstrates that this is the best solution for local business and our tax dollars.



SANTA CRUZ COUNTY  
**BUSINESS COUNCIL**





Greenway Capitola

September 20, 2018 · 🌐

Thank you Susan and Nels for your endorsement of Measure L. Thank you for many years of service to our community.



**NELS WESTMAN**  
TRAFFIC & PARKING COMMISSION  
PRESIDENT CAPITOLA VILLAGE  
ASSOCIATION

**SUSAN WESTMAN**  
FORMER CAPITOLA CITY MANAGER



Greenway Capitola

September 18, 2018 · 🌐

Thank you [Sam Storey](#) for your endorsement! We're excited to have you the best in your city council campaign.



**SAM STOREY - FORMER  
OF CAPITOLA 2010 & 2014  
COUNCIL CANDIDATE 2018**

"I believe that Capitola and visitors deserve to have a safe and scenic pedestrian and bicycle path that goes over the trestle. If you support my vision, I encourage you to vote 'Yes' on Measure L."

**Gautho, Julia**

---

**From:** Scotty Brookie <scotty@cruzio.com>  
**Sent:** Wednesday, February 12, 2025 11:00 AM  
**To:** City Council  
**Cc:** Scotty Brookie; Andrew Purchin  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am a driver, cyclist and walker. I bike and walk a lot. I use existing parts of the rail/trail system often. So I am very happy to see the Rail Trail moving forward.

The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Both options A and B look good to me. Pick either one, especially since the grant funding is already in place to build them. The sooner the better!

Thank you!

Scotty Brookie

**Gautho, Julia**

---

**From:** Alicia L. Amaro <aamaro@fentonkeller.com>  
**Sent:** Wednesday, February 12, 2025 11:18 AM  
**To:** City Council  
**Cc:** Clarke, Joe; Pedersen, Alexander; Gerry Jensen; Margaux Morgan; Melinda Orbach; Gautho, Julia; Herlihy, Katie (kherlihy@ci.capitola.ca.us); Goldstein, Jamie (jgoldstein@ci.capitola.ca.us); Kahn, Jessica; Mozumder, Kailash; Derric G. Oliver  
**Subject:** [PDF] Letter to Capitola City Council (2-12-25) Morrissey Public Comments on Agenda Item 9c (Measure L)  
**Attachments:** LTT Capitola City Council 2-12-25 Morrissey Public Comments on Agenda Item 9c (Measure L) (01697783).pdf

Good morning,

Please see the attached letter, providing public comments from Mike and Meghan Morrissey, on agenda item 9c of the City Council’s meeting on February 13, 2025.

Thank you,

*Alicia L. Amaro*

**Alicia L. Amaro**  
**Administrative Assistant to**  
**Alex J. Lorca, Derric G. Oliver &**  
**Rebecca J. Saathoff**  
**FENTON & KELLER**  
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ANDREW B. KREEFT  
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ALEX J. LORCA  
DERRIC G. OLIVER  
MARCO A. LUCIDO  
CHRISTOPHER M. LONGCAROL S. HILBURN  
GLADYS RODRIGUEZ-MORALES  
BRADLEY J. LEVANG  
CHRISTOPHER J. NANNINI  
TARA L. CLEMENS  
MATTHEW D. FERRY  
EMMANUEL PEREA JIMENEZ  
MARIA A. AIELLO  
REBECCA J. SAATHOFF  
ALYSSA CARBONEL MATSUHARA

DERRIC G. OLIVER

Doliver@fentonkeller.com  
ext. 207

February 12, 2025

**VIA EMAIL ONLY** ([citycouncil@ci.capitola.ca.us](mailto:citycouncil@ci.capitola.ca.us))Capitola City Council  
Capitola City Hall  
420 Capitola Avenue  
Capitola, CA 95010Re: Public comments on Agenda Item 9c (Measure L)  
Capitola City Council meeting 2-13-25  
Our File: 35278.34203

Dear Capitola City Councilmembers:

This law office represents Capitola property owners and residents, Michael and Meghan Morrissey, in connection with the above-referenced subject. This letter offers the Morrisseys' objections to City Staff's Agenda Report for Agenda Item 9c, advocating for a proposed relocation of Segments 10 and 11 of the Monterey Bay Sanctuary Scenic Trail (aka Coastal Rail Trail) ("Trail") off the Santa Cruz Line Branch Line Rail Corridor ("Corridor") in violation of Measure L, codified as Capitola Municipal Code ("CMC") Chapter 8.72, entitled "Greenway Capitola Corridor."

In the Staff Report, City Staff correctly acknowledges the validity and enforceability of Measure L, which was duly and overwhelmingly passed by City voters in 2018. However, City Staff misinterpret the plain and unambiguous language and express purpose of Measure L in several important respects:

1. In the Staff Report (page 5; agenda packet page 296), City Staff erroneously refer to the "goals" of Measure L. However, Measure L contains no "goals." Rather, Measure L expressly imposes limits on the Trail, including by providing that the "purpose" of Measure L is "keeping" the Trail exclusively on the Corridor. (CMC § 8.72.010.)

Capitola City Council  
 February 12, 2025  
 Page 2

2. City Staff indicates, on page 6 of the Staff Report (agenda packet page 297), “There are no City funds being invested in the project.” This ignores that City funds have been, and are continuing to be, expended on paid City Staff time (and, presumably, other expenditures of “funds or resources,” such as on attorneys’ fees, consultants’ fees, office space, materials, etc.) to coordinate, consider, publicly support and advocate for (including in the Staff Report; i.e., “marketing”) a project (“detouring” or “shifting” a portion of the Trail outside the Corridor) that would violate Measure L if constructed. Such expenditures of City funds, in and of themselves, violate Measure L. (CMC § 8.72.040.) This proposed detour of the Trail off the Corridor would presumably require expenditure of additional City “funds or resources,” as prohibited by Measure L, in the form of City grants of City-owned land (e.g., easements, dedications) to facilitate the proposed detour of the Trail off the Corridor.

3. City Staff erroneously contends the proposed rerouting of the Trail onto non-Corridor land (i.e., Park Avenue) does not “implicate” Measure L because the relocation is not a “detour” as that term is defined in the dictionary. City Staff’s reliance on the dictionary definition of “detour” is a red herring and runs afoul of the first rule of statutory construction to look no further than, and give effect to, the plain meaning of a statute’s clear and unambiguous language. (*Lake Lindero Homeowners Assn., Inc. v. Barone* (2023) 89 Cal.App.5<sup>th</sup> 834, 848.) As such, based on the plain and unambiguous language of Measure L, any expenditure of City funds or resources relating to the proposed relocation of the Trail off the Corridor (e.g., onto a portion of Park Avenue) violates the express purpose of Measure L: “to improve safety and reduce traffic by keeping the [Trail] in the [Corridor].” (CMC § 8.72.040; emphases added.)

4. City Staff erroneously states that the relocation/detour (as proposed by Option A and Option B) “do not propose the construction of the Trail on Capitola’s streets or sidewalks,” as the proposed detour, post-construction, would be partially located on a portion of Park Avenue (i.e., a City street) proposed to be eliminated. This rear-view mirror argument is fundamentally flawed. Again, the fact that the proposed detour would result in the loss of a portion of Park Avenue conflicts with the express terms of Measure L.

5. City Staff’s reliance on the purported/perceived benefits of detouring the Trail off the Corridor, and/or the purported/perceived drawbacks of not doing so, provide no legal justification for violating Measure L. Indeed, Measure L contains no provisions allowing for consideration or balancing of any such benefits or drawbacks of complying with its plain terms.

In conclusion, the Morrisseys—consistent with the City’s citizens’ overwhelming approval of Measure L—demand and expect the City to fully comply with all limits set forth in Measure L, the express “purpose” of which is to “keep” the Trail “in” the Corridor “to improve safety and reduce traffic.” (CMC § 8.72.010.) Indeed, Measure L “shall not be amended or repealed except by vote of the people.” (CMC § 8.72.050.)

\* \* \* \* \*

Capitola City Council  
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Page 3

Thank you in advance for your review and consideration of the Morrisseys' public comments on this item of great importance to the safety, welfare, traffic, parking, and aesthetics of their great City.

Very truly yours,  
FENTON & KELLER  
A Professional Corporation



Derric G. Oliver

DGO:ala

cc: Clients

Joe Clarke, Mayor ([JClarke@ci.capitola.ca.us](mailto:JClarke@ci.capitola.ca.us))

Alexander Pedersen, Vice Mayor ([APedersen@ci.capitola.ca.us](mailto:APedersen@ci.capitola.ca.us))

Gerry Jensen, Council Member ([GJensen@ci.capitola.ca.us](mailto:GJensen@ci.capitola.ca.us))

Margaux Morgan, Council Member ([mmorgan@ci.capitola.ca.us](mailto:mmorgan@ci.capitola.ca.us))

Melinda Orbach, Council Member ([MOrbach@ci.capitola.ca.us](mailto:MOrbach@ci.capitola.ca.us))

Julia Gautho, City Clerk ([jgautho@ci.capitola.ca.us](mailto:jgautho@ci.capitola.ca.us))

Katie Herlihy, Community Development Director ([kherlihy@ci.capitola.ca.us](mailto:kherlihy@ci.capitola.ca.us))

Jamie Goldstein, City Manager ([jgoldstein@ci.capitola.ca.us](mailto:jgoldstein@ci.capitola.ca.us))

Jessica Kahn, Public Works Director ([jkahn@ci.capitola.ca.us](mailto:jkahn@ci.capitola.ca.us))

Kailash Mozumder, Public Works Project Manager ([kmozumder@ci.capitola.ca.us](mailto:kmozumder@ci.capitola.ca.us))

**Gautho, Julia**

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**From:** painterph@gmail.com  
**Sent:** Wednesday, February 12, 2025 11:50 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I already walk along the rail corridor south (east) of the New Brighton campground and would love to be able to walk safely all the way to Capitola Village! Please choose either option A or B and let's get this DONE!

Thank you so much,

Virginia Hughes, Aptos Resident

**Gautho, Julia**

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**From:** Erik Elias <slperik@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:48 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Yes, PLEASE continue to support either of the raised trails currently proposed; it will be an excellent addition to the area in so many ways.

Erik Elias  
137 Toledo St, Unit A, Santa Cruz, CA 95060



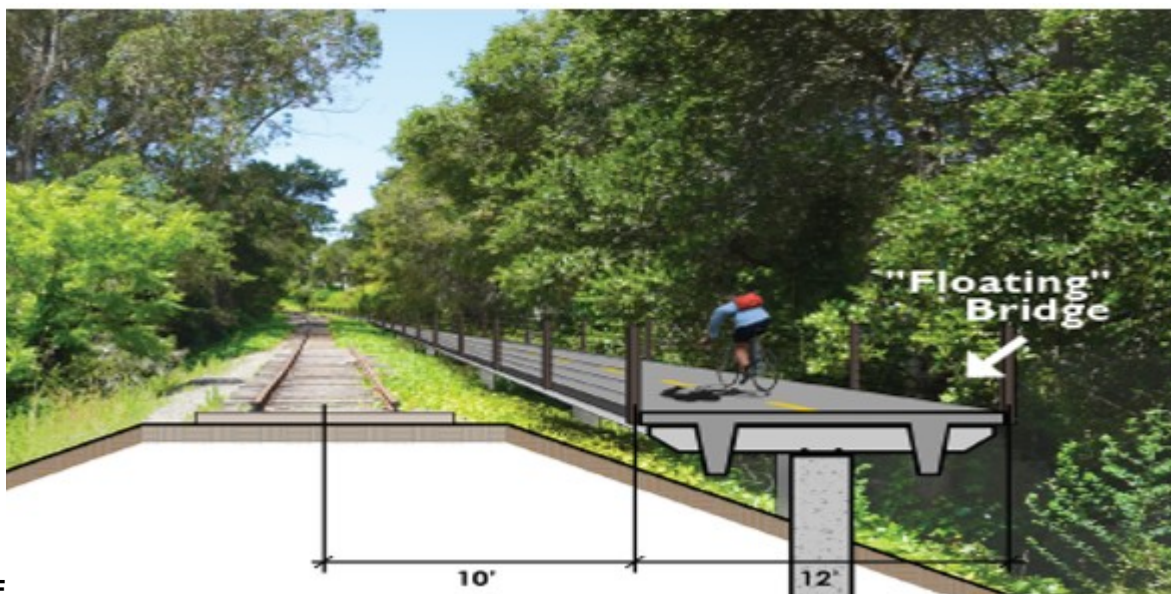
**Gautho, Julia**

**From:** Alfred carlson <alcarlton@aol.com>  
**Sent:** Wednesday, February 12, 2025 11:37 AM  
**To:** Alfred Carlson; City Council; Kahn, Jessica  
**Subject:** Re: RAIL / TRAIL

AL CARLSON. 5000 JEWEL ST.



**WE NEED TO DO THE SAME THING SANTA CRUZ DID AND PUT IT ON OUR RAIL**



**BRIDGE**  
**THE FLOATING BRIDGE NEXT RAIL WOULD ALSO WORK**



## Action Alert for Capitola Trail

Dear ALFRED,

It's a good news/bad news situation.

**The Good News:** The staff of the City of Capitola, Santa Cruz County, and the Regional Transportation Commission (RTC) have developed two great options for the trail between Capitola Village and New Brighton State Beach. They will be presenting these two alternatives at this Thursday's Capitola City Council Meeting. We're excited about these options. **They both put the trail on a new elevated path between the Park Avenue roadway and the railroad tracks.** Both options protect monarch butterfly habitat, provide users with ocean views, and provide easy access between the neighborhoods and the trail. Both are raised on a curb, similar to a sidewalk. Both include a 12-foot wide trail with a 5-foot buffer zone between the trail and the street. Most importantly, with the latest construction grant, either one of these options will be fully funded and ready to build. **We want to thank the planning staff who have developed these options.** We would be delighted to see either of them built.

**Now for the Bad News:** Rail opponents have been ramping up a disinformation campaign to attack this section of the trail. They have been writing negative letters to the Capitola City Council and are planning to come out to oppose the trail plans at the meeting on Thursday. They have been making wild claims about the trail being moved into the street, in an effort to drum up public opposition. This means, unfortunately, that there will be people at the meeting who don't understand the plans but will show up to oppose them. **This creates a lot of pressure on City Council Members.** Thursday's presentation is an information item, and the City Council won't be voting at the meeting. But what they hear from the public at this meeting will affect how they vote later.

### Take Action to Support the Trail!

#### Now: Email the Capitola City Council

Send your comments of support right now to [citycouncil@ci.capitola.ca.us](mailto:citycouncil@ci.capitola.ca.us). Comments must be received before 5pm Wednesday.

#### Thursday: Attend the Meeting, See the Presentation, and Speak to Support the Trail

**When:** The City Council meeting starts at 6 pm and the Rail Trail is item number 9c on the agenda.

**Where:** Capitola City Council Chambers, 420 Capitola Avenue, Capitola, California, 95010.

*Note: To speak at the meeting you must attend in person, Zoom attendees can only observe.*

**Things you might say in your comments:**

Thank you for proposing wide, safe trail options for our community

I want a trail sooner not later (or never) so please choose option A or B.

We have the grant money to build this so please choose option A or B.

I want easy access from the neighborhood so choose option A or B.

I want ocean views so please choose option A or B.

I would use this segment of trail in this way, or to get to this place, so choose option A or B.

I support option A or B and have additional design suggestions.

**Please send an email now, and come to the Capitola City Council this Thursday evening. I hope to see you there!**

-Matt Farrell, Board Chair, Santa Cruz County Friends of the Rail & Trail

## Gautho, Julia

---

**From:** Kevin Maguire <kmaguire831@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:32 AM  
**To:** City Council; Goldstein, Jamie (jgoldstein@ci.capitola.ca.us); Gautho, Julia; Kahn, Jessica  
**Subject:** [PDF] 02.13.2025 Agenda 9 C. "DETOUR"!! FAQ from SCCRTC: Capitola Trestle on the Santa Cruz Branch Rail Line  
**Attachments:** FAQ\_Capitola-Trestle.pdf

Not sure who in Public Works wrote the message about the Dictionary definition of "Detour" This is a disingenuous attempt deviate from what we want and voted for! This will not fly! Do not insult us! You are on notice!

Yes, a **shift** and an **adjustment** can conceptually fall within the same realm as a **detour**, depending on the context and intent behind the change. Let's break it down:

### Definitions & Comparisons:

- **Shift:** A change in position or direction, often implying a movement away from an original course.
- **Adjustment:** A modification that can be small or large, but typically suggests fine-tuning rather than a fundamental change.
- **Detour:** A deviation from a planned or expected route, typically used when the original path is blocked or intentionally bypassed.

**" The RTC, in partnership with local jurisdictions, is pursuing development of a dedicated bicycle and pedestrian facility, referred to as the Coastal Rail Trail, within the rail right-of-way. "**

The City of Capitola appears to be reframing the discussion around potential adjustments to the Coastal Rail Trail by arguing that since a trail does not currently exist within the rail right-of-way, any modification to its planned route is not a "**detour**" but rather a shift in the project's implementation. This language minimizes the perception that they are changing or going against the voters' intent from Measure L, which called for the trail to remain within the rail corridor.

However, the Santa Cruz County Regional Transportation Commission (SCCRTC) has **consistently stated that its goal**, in partnership with local jurisdictions, is to develop a dedicated bicycle and pedestrian facility **within the rail right-of-way**, referring to it as the "**Coastal Rail Trail**." This aligns with Measure L's directive that the trail should remain within the rail corridor, ensuring that any adjustments or alternative routes should not move the trail away from its originally planned alignment.

Ultimately, the City of Capitola is using strategic wording to downplay their deviation from Measure L's intent, likely in an effort to justify a route that does not stay within the rail corridor. Meanwhile, SCCRTC has maintained its commitment to keeping the trail within the right-of-way, reinforcing the fact **that voters wanted the trail to follow the rail line—not city streets**.

[https://sccrtc.org/wp-content/uploads/2023/10/FAQ\\_Capitola-Trestle.pdf?utm\\_source=chatgpt.com](https://sccrtc.org/wp-content/uploads/2023/10/FAQ_Capitola-Trestle.pdf?utm_source=chatgpt.com)





## FREQUENTLY ASKED QUESTIONS

Update

# Capitola Trestle on the Santa Cruz Branch Rail

### Background

The Santa Cruz Regional Transportation Commission (RTC) owns the Santa Cruz Branch Rail Line, which is a freight rail line in need of structural repairs on several bridges, including the Capitola Trestle. In partnership with local jurisdictions, the RTC is pursuing development of a dedicated bicycle and pedestrian trail, referred to as the Coastal Rail Trail, within the rail right-of-way. The RTC is also pursuing development of a passenger rail within the rail right-of-way as part of the Zero Emission Passenger Rail and Trail Project. The Capitola Trestle complex is comprised of 5 individual, but connected, bridges, each made of concrete and steel materials. The Capitola Trestle provides an elevated rail crossing of Soquel Creek, Wharf Road, Avenue, and Capitola Avenue. Repairs to the Capitola Trestle complex are needed before the line can be used for freight or passenger service.

### FAQS

#### Can a bicycle and pedestrian bridge be attached to the existing Capitola Trestle to provide bicycles and pedestrians access across Soquel Creek within the rail line right-of-way?

A bicycle and pedestrian bridge cannot be attached to the existing Capitola Trestle. The Capitola Trestle complex is made up of 5 bridges including two concrete spans, two multi-span open deck timber trestles, and an open deck wrought iron bridge that spans Soquel Creek. The wrought iron bridge and timber trestles do not have a location suitable to connect a cantilevered bicycle and pedestrian bridge and do not have adequate structural capacity to support the added weight. Therefore, a bicycle and pedestrian bridge, like the one cantilevered from the San Lorenzo River Trestle, is not feasible on the Capitola Trestle complex.

#### Can a separate bicycle and pedestrian bridge be constructed across Soquel Creek within the rail line right-of-way?

A new Capitola Trestle complex. The Zero Emission Passenger Rail and Trail Project Conceptual Study will evaluate the feasibility and cost of a combined rail and trail bridge to replace the Capitola Trestle complex. To date, no cost estimate has been developed for a new combined rail and trail bridge to replace the current Capitola Trestle complex.

#### Can the Capitola Trestle be repurposed into a bicycle and pedestrian trail bridge?

The 2021 Capitola Railroad Bridge Rehabilitation Conceptual Study analyzed the feasibility of converting the Capitola Trestle from a freight rail bridge to a bicycle and pedestrian trail bridge. The study determined that, from a constructability engineering standpoint, the Capitola Trestle can be repurposed into a bicycle and pedestrian trail bridge. However, significant structural repairs are required, including the replacement of the wrought iron bridge, timber bracing, and 30-40% of the timber trestles. Once structural repairs are completed, the decking, and ballast could be removed and replaced with a steel and fiber-reinforced polymer deck.

Here is the heart of Measure L:

### Key Points of Concern

#### 1. Measure L's Intent and Requirements

Measure L was enacted to protect and utilize the Santa Cruz Branch Line Rail Corridor for active transportation and recreation. It explicitly directs the City to:

- "Take all steps necessary to preserve and utilize the Corridor and Trestle for active transportation and recreation."
- "Prohibit the expenditure of any City funds or resources for the construction, operation, or maintenance of a detour of the Trail onto Capitola streets or sidewalks." [41†source]

The measure's language clearly prioritizes keeping the Trail within the designated rail corridor.

#### 2. City's Use of "Shifting" as a Loophole

The City Council's agenda report proposes moving the trail from the rail corridor to Park Avenue, describing this as "shifting" the alignment rather than a "detour" [40†source].

This semantic distinction is troubling because:

- A shift implies a permanent relocation, not a mere temporary adjustment.

• Despite claiming otherwise, this shift fundamentally removes the Trail from its intended rail corridor alignment, placing it adjacent to and physically separated from Park Avenue.

By framing this as a cost-saving strategy, the City attempts to argue that the Trail has no "direct course" and thus cannot have a "detour." This interpretation is contrary to the spirit and clear intent of Measure L.

**3. Measure L’s Definition of a Detour**

The City argues that since the Trail does not yet exist, there is no "direct course" to be detoured from [40†source] . However, the measure’s intention is clear: to prevent moving the Trail off the rail corridor and onto city streets or sidewalks. The proposed Park Avenue alignment effectively functions as a detour by diverting the Trail from its original planned path within the rail corridor

maintenance, financing, marketing, or signage for a detour of the Trail onto Capitola streets or sidewalks.

RTC’s proposal to construct the Trail within the City’s Park Avenue right-of-way is consistent with Measure L for several reasons.

First, Measure L directs the City to take “all steps necessary to preserve and utilize the Corridor for active transportation and recreation” (CMC § 8.72.040(A)). The City does not own the Corridor, so the Coastal Rail Trail Segment 11 Project is the only foreseeable opportunity for the City to advance Measure L’s goals. The Coastal Rail Trail Segment 11 project advances Measure L’s goal of preserving and utilizing the Corridor for active transportation and recreation because it provides a path to construct the Trail on portions of the Corridor. If the City does not approve Option A or Option B, the City understands that the County may be unable to construct the segment of the Coastal Rail Trail Segment 11 project that runs through Capitola at all. Interpreting Measure L to preclude the City from approving Option A or Option B would thus undermine, rather than advance, Measure L’s goals. Indeed, if the City does not approve the project, the capitola segment of the Corridor will not be utilized for active transportation and recreation at all.

Second, the section of Measure L that prohibits the expenditure of resources on a “detour of the Trail onto Capitola streets or sidewalks” is not implicated by Option A or Option B (CMC 8.72.040(C)). The dictionary defines a “detour” as a “departure from a direct course” or a “roundabout way for replacing the regular route.” Designing and construction of Coastal Rail Trail Segment 11 as proposed in Option A and/or Option B is not a “detour” because the Trail does not exist and has no “direct course” in the City. Moreover, Option A and/or Option B are consistent with Measure L because the



## For Council Consideration- Park Avenue Transportation Improvements

The City Council will consider design options for Park Avenue from Monterey Avenue to Coronado Street at its February 13 meeting, beginning at 6 PM

At this meeting, City staff, the Regional Transportation Commission (RTC), and the County of Santa Cruz will present background information and the current alternatives under consideration, which include pedestrian and bicycle improvements including potential adjustments to the Coastal Rail Trail alignment along this section of Park Avenue. This discussion follows previous public outreach efforts focused on traffic calming measures in the area.

The meeting agenda and staff report can be found at: [cityofcapitola.org](http://cityofcapitola.org)

[capitoladpw@ci.capitola.ca.us](mailto:capitoladpw@ci.capitola.ca.us)

Sincerely,  
Kailash Mozumder  
City of Capitola Public Works Project Manager

**Gautho, Julia**

---

**From:** John Gallagher <4eyrshmen@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:32 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

John Gallagher

Sent from my iPad



**Gautho, Julia**

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**From:** Rattlebrain <jamiet@rattlebrain.com>  
**Sent:** Wednesday, February 12, 2025 11:32 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Gautho, Julia**

---

**From:** Jennifer Young <millsyoung@cruzio.com>  
**Sent:** Wednesday, February 12, 2025 11:28 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am delighted to see the Rail Trail moving forward. The new plans for an elevated, wide, safe, buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. So exciting that grant funds are already available for this.

I fully support both options A and B. I hope that you will vote to move forward with one of them.

Looking forward to using the trail!

*Jennifer Young*  
Ben Lomond

**Gautho, Julia**

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**From:** Delphine Foo-Matkin <delphinef@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:25 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I fully support the Rail Trail, including the portion along Park Avenue between Capitola Village and New Brighton State Beach.

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I want the Rail Trail now and not later.

I know many folks who support the Rail Trail but didn't know that it was still in danger due to opposition — due to news and the Rail Trail being voted through on the ballots, they thought it was settled. So please consider that for every single letter of support you receive, there are probably 5 to 10 people who do support it who don't realize that they need to keep being very actively vocal about their support!

Thank you very much,

Delphine Foo-Matkin

**Gautho, Julia**

---

**From:** Bob F <bobfif@hotmail.com>  
**Sent:** Wednesday, February 12, 2025 11:22 AM  
**To:** City Council  
**Cc:** Pedersen, Alexander; felipe.hernandez@santacruzcountycalifornia.gov; info@sccrtc.org; Kimberly De Serpa; Manu Koenig; fkeeley@santacruzcalifornia.gov; sclark@scottsvally.gov; Monica Martinez; eduardo.montesino@watsonville.gov; Corey Aldridge  
**Subject:** Quality of Life 101

For years for-profit groups have been trying to deceive our county that by setting aside a multitude of millions of tax dollars (and pushing aside a means for families including tourists to FINALLY get safely across much of Santa Cruz County at their chosen pace) that in a distant future, a single-track train "could" alleviate congestion upon our Highway 1. Please contemplate the many commonsense responses to that and follow through on, "What would BART be if it were downgraded to only a single track? How long before the next 57 passengers find themselves in the wrong place at the wrong time and lose their lives?"

Not everyone is being fooled by greedy opportunists who are seeking to divert funds from the naive into their own pockets. (Billionaires through deception Bernie Madoff and Theranos founders come to mind who were put in prison for their outrageous greediness at the expense of others.)

There has always been only room for one track upon the limited "Rail **AND TRAIL** Corridor". This puts those who had depended upon FINALLY having a safe means to ride a bicycle across much of Santa Cruz County at peril. If it is decided that "a promise" of a single-track "commuter" train in some distant future is more important and the "TRAIL" gets fragmented, I probably will avoid making use of what could have been a GEM for pleasantly getting across much of Santa Cruz County. (In my 74 years I have already been hit by an **at fault car** twice and I don't want to make the next one my last moment in this world.)

The other aspect is that many already realize that the single track will (at best in reality) default to its original intention of over 100 years ago (before it went default) but now at taxpayer expense. This was a slow-moving freight and tourist train that will now only benefit Roaring Camp & Co. (as well as B.S. & Co. with his "wannabe bus" that even if it could go faster than 10 MPH will be forever tethered to a RR track). The likelihood of a safe viable expeditious commuter train system is nonexistent upon the corridor.

**implementing the Santa Cruz County version of Trail PLUS Rail would be a mistake!**

**On the other hand, road space has been gained over on Highway 1 for a promising alternative if the meridian can accommodate just one bus lane. This would allow strategic non-stop mass transportation between Watsonville and Santa Cruz in under 20 minutes 24/7.**

Please note my latest Letters to the Sentinel on 11/6/24 and the Good Times on 1/8/25. The latter one concludes with:

**"Implementing a strategic bus system would better alleviate congestion on Highway 1 (and at less cost) as well as free up a Peoples Corridor to FINALLY safely accommodate local traffic of families of bicyclists and those on foot.**

**Perhaps such real-world "Interim" solutions will prove worthy until a means is found to transport people from where they are to where they want to be at the speed of light 24/7 for no cost."**

With flexibility and strategic efficiency, a promising mass transportation system can be implemented at low cost with buses that already exist in our community. Riding upon non-stop buses could be indistinguishable from the best of train travel when improvements that rival the plushness of passenger train cars could also be phased in (with appropriate fares attached).

A VERY concerned resident of Santa Cruz County,  
Bob Fifield

**Gautho, Julia**

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**From:** Rattlebrain <jamiet@rattlebrain.com>  
**Sent:** Wednesday, February 12, 2025 11:21 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Sent from my iPhone

**Gautho, Julia**

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**From:** Rich Mick <rikibana@yahoo.com>  
**Sent:** Wednesday, February 12, 2025 11:19 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

The Rail Trail is moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. The staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding.

We have the funding ready and I wish to see Plan A or B implemented in Capitola.

Thank you,  
Richard Mick

**Gautho, Julia**

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**From:** Karl Forest <karlforest1@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:17 AM  
**To:** City Council  
**Subject:** Support for Plans A & B for Trail Between Capitola Village & New Brighton Beach

Hello,

My name is Karl Forest and I live at 516 Oak Dr, Capitola. Amie, my partner, and I hike around Capitola all the time, including between Capitola Village and New Brighton State Beach.

I would like to support both plans A and B for the elevated path between Park Avenue and the existing tracks recommended by city staff and the RTC. The funds are ready and all that is needed is your approval.

I ask that you carefully examine claims by both sides of this issue, especially those opposed to any rail/trail development at any cost. Their claims need to be carefully vetted for accuracy for you to be able to make the most informed decision. I think city staff have done a marvelous job presenting you with two viable plans.

Thank you for taking time to consider this important issue to our community.

Respectfully,

Karl Forest



**Gautho, Julia**

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**From:** Michael Matkin <mgfmatkin@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:17 AM  
**To:** City Council  
**Subject:** I strongly support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I'm thrilled to see the Rail Trail moving forward. However, I'm concerned that a recent disinformation plan falsely stating the trail will be moved into the street will cause bad actors along with mis- and uninformed community members to sway opinion against this important community project.

The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. So, please recognize the threat of dis- and misinformation in your considerations and support one of the excellent options to get the rail trail built soon. I can't wait to get on the trail!

Very Best,

Michael Matkin  
755 14th Ave, #103, Santa Cruz, CA 95062

**Gautho, Julia**

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**From:** JRE <jessevansfiddler@gmail.com>  
**Sent:** Wednesday, February 12, 2025 1:42 PM  
**To:** City Council  
**Subject:** Excited for the Rail Trail in Capitola

Dear City Council and Mayor,

In summer, we love to ride our bikes to visit Capitola Village from our house in Santa Cruz It's such a great outing. We bring the kids and get ice cream, or go out to lunch. The only thing holding us back from doing this more often is the stress of dealing with traffic on the bike ride. The rail trail is going to make visiting Capitola more appealing, because the bike ride will be safer and nicer.

It's also going to be so amazing to be able to ride a bike easily to and from Capitola Village and Cabrillo College. When I was a student at Cabrillo I lived in the Park Avenue apartments. It would have been so great to have the Rail Trail to be able to safely go to and from home to school and to the Villiage on my bike.

The new plan to build the Rail Trail from the Village to New Brighton in the space between the tracks and Park Avenue, on a safe, elevated, buffered 12-foot wide path, has lower cost, less tree removal, and lower environmental impact than the first idea of building the path down in the ditch next to the tracks. The new plan makes the trail realistic and affordable. And it's going to be beautiful! Please give my congratulations to the staff members who made the new plan. Please give the plan your support.

Warm regards, Jessica Evans.

**Gautho, Julia**

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**From:** Kevin Kinkor <kevin@kinkorconsulting.com>  
**Sent:** Wednesday, February 12, 2025 1:28 PM  
**To:** City Council  
**Subject:** [SPF Softfail] Rail/Trail

Hey City Council,

I was excited to hear we have money and plans in place for the trail. With that said, I hear there is a challenge on having the rail. The rail part is critical to transportation in Santa Cruz County. In the absence of the rail, our county will remain in gridlock every day (like it is now). From widening the freeway, to trail, to key bus routes and rail, we will have transportation options to support our community for decades to come. Please approve both trail and rail.

Thank you,

[Kevin Kinkor](#)  
CEO



[RPO](#) | [HR Consulting](#) | [Outplacement](#) | [Calendly](#)

**Gautho, Julia**

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**From:** Russell Weisz <russweisz1@gmail.com>  
**Sent:** Wednesday, February 12, 2025 1:21 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

thanks,

Russell Weisz  
319 Laguna St, Santa Cruz, CA 95060  
8312461770

**Gautho, Julia**

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**From:** Katherine McCamant <katherine.mccamant@gmail.com>  
**Sent:** Wednesday, February 12, 2025 1:17 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, this is going to be a wonderful place for my family to use all the time! I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding.

Thank you for proposing wide, safe trail options for our community  
I want a trail sooner not later (or never) so please choose option A or B.  
We have the grant money to build this so please choose option A or B.  
I want easy access from the neighborhood so choose option A or B.  
I want ocean views so please choose option A or B.  
Sincerely, Katherine McCamant  
I can't wait to get on the trail!!!

Sent from my iPhone

**Gautho, Julia**

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**From:** Terre Thomas <terra12@cruzio.com>  
**Sent:** Wednesday, February 12, 2025 1:13 PM  
**To:** City Council  
**Subject:** Park Avenue on 2/13/25 Agenda

Dear Council and the RTC,

Having received notification Saturday, your offices being closed Monday (so being unable to talk to anyone til yesterday) and being unable to access this agenda item on my computer today, I am writing you now to voice my serious concerns regarding the RTCs plans for Park Avenue, not knowing how long I might have to voice them at the meeting tomorrow. First, as a fifty plus year resident on Park Avenue, I believe it is much more important NOT to put in another sidewalk along the ocean side of the street, resulting in the removal of 25 parking spaces (for residents, visitors, Wharf to Wharf and the Art and Wine Festival), plus many trees. The only pedestrian traffic coming from Capitola Village Eastward would be local residents and those going to New Brighton Beach. Any other walking destination would be too far, so one sidewalk, which already exists, would be more than sufficient.

If you cleaned up the existing bike paths and narrowed the driving lanes it would accommodate all needs. As far as safety is concerned, we have asked that four speed tables be put in front of the two residential driveway areas, as much needed ticketing along this corridor is very rare. So please put them on your "budget wish list", as they are sorely needed.

As for the pedestrian and bike trail from Prospect to Park being "abandoned" by the RTC, so it can go through the Village, there is no reason why it can't be put on the Trestle, since people don't weigh very much, the Trestle isn't subject to Rail Banking, and the tracks will need to be removed anyway. And it would be in keeping with City Ordinances, as well as avoiding losing more parking in the Village.

Please don't ram Option A or B down our throats that we the public had little to say about until now, at a poorly notified meeting, that will cost more money than is available.

Please postpone any decision regarding the Capitola segment of the Rail/Trail until such a time as there is more input provided, including that of the RTCs fiscal report.

Thank you,

Terre Thomas

Former Planning Commissioner

Sent from my iPhone

**Gautho, Julia**

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**From:** Ann Baier <annhbaier@gmail.com>  
**Sent:** Wednesday, February 12, 2025 1:13 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I visit this area often. Thank you for proposing wide, safe trail options for our community. I want a trail soon, so please choose option A or B!

(BTW, I'll also be so happy to see a reduction in non-native invasive ivy and eucalyptus trees, as these present an extreme fire hazard to the community, and take the place of native species and habitat.)

Ann Baier

**Gautho, Julia**

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**From:** Tera Ebert <teraebert01@gmail.com>  
**Sent:** Wednesday, February 12, 2025 1:07 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. It is so beautiful to see the ocean view from that area. What a treasure to think that all ages can enjoy it. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Tera Ebert  
Santa Cruz native of 68 years

2670 17th Ave.  
Santa Cruz, CA. 95065



**Gautho, Julia**

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**From:** Madeline Horn <madelinehorn@gmail.com>  
**Sent:** Wednesday, February 12, 2025 1:05 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I worked for years at Capitola Museum, was born and raised in Santa Cruz, my son attends Main St School and will be at New Brighton next year. I fully support the creation of more rail options in our city and county.

Sincerely,

Madeline Horn

**Gautho, Julia**

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**From:** Cory Ray <coryray@gmail.com>  
**Sent:** Wednesday, February 12, 2025 12:57 PM  
**To:** City Council  
**Subject:** Support for the Staff Recommendations for the Rail Trail.

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

As an owner of three rental properties in Capitola and a former resident of Capitola and an avid E-Bike rider, I want to express support for Option A or B.

There is grant money for one of these options, they provide easy access and are altogether better choices. I also believe that your staff did an excellent job and deserve your support in their recommendations.

I look forward to riding Option A or B!

With Regards,

Cory Ray

**Gautho, Julia**

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**From:** B Jordan <bkjtennis@gmail.com>  
**Sent:** Wednesday, February 12, 2025 12:56 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Date: February 12, 2025**

**Item 9c – February 13 - Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options**  
 Recommended Action: Review options for Coastal Rail Trail improvements in the Park Avenue right-of-way and identify Option A (as described in the staff report) as the preferred alternative for further analysis.

**Subject: I support the Staff memo on Alternatives for the Rail Trail in Capitola**

Dear Capitola City Council:

Thank you for taking the time to read my message. I am writing related to your consideration of Item 9c, related to the Coastal Rail Trail improvements in Capitola.

A great deal of misinformation is being spread. Many well intentioned residents will be in the audience, in response to this misleading information. An anti train group active for years in SC County, claims that the new bike and pedestrian trail in Capitola is to be moved onto Park Avenue. This misinformation is intended to create alarming visions of cars, bikes and walkers all jockeying for space on the existing pavement of Park Avenue.

**That is not what the proposals under consideration will do!** In either option before City Council, the new trail will be next to the street and bikes and walkers and will **be physically separated from traffic on Park Avenue.** **Please make that clear to the public!**

**Here is part of the relevant language from the staff Memo on this item – which is being ignored.**

“Moreover, Option A and/or Option B are consistent with Measure L because they **do not propose the construction of the Trail on Capitola’s streets or sidewalks.** As explained above, RTC proposes to construct a new Class I bike path within a portion of the right-of-way that is **adjacent to and physically separated from Park Avenue.**” **(emphasis added).**

Again, in each proposal, the new trail will keep bikes and pedestrians **SEPARATED** from the existing roadway!

Let’s not fall for this game.

Sincerely, B Jordan

PS. I am sorry that this entire process is so easily misinterpreted by the public, in part by so many long and technical memos at each step of the rail trail process. I hope that someone can encourage the RTC to insert executive summaries in the front part of public memos, which are simple, clear and easily understood by the average lay person. That at least gives concerned citizens a fighting chance to get accurate information on projects and to squash the rumor mill.

**Gautho, Julia**

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**From:** Kevin Norton <kwnorton@gmail.com>  
**Sent:** Wednesday, February 12, 2025 12:55 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding.

Thank you for proposing wide, safe trail options for our community  
I want a trail sooner not later (or never) so please choose option A or B.  
We have the grant money to build this so please choose option A or B.  
I want easy access from the neighborhood so choose option A or B.  
I want ocean views so please choose option A or B.  
I would use this segment of trail in this way, or to get to this place, so choose option A or B.  
I support option A or B and have additional design suggestions.

I can't wait to get on the trail!

Best regards,

Kevin

**Gautho, Julia**

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**From:** Ann Carr <skyeranch@mac.com>  
**Sent:** Wednesday, February 12, 2025 12:52 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Please keep the trail along the rail corridor. That is the safest place for it ! It has been too long ! There is no place safe for bicycles. Trail now !

Please 🙏. On old train tracks.

If you have to have a train put it down the middle of the freeway.

Ann Carr  
Aptos Hills

Sent from my iPhone

**Gautho, Julia**

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**From:** Judith Rohrbaugh <judithrohrbaugh@gmail.com>  
**Sent:** Wednesday, February 12, 2025 12:35 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Please be cautious of negative and untruthful complaints to the contrary.

The completeness of this project has been years in the making and was voted on by the residents of Santa Cruz County. Please stay the course.

Sincerely,  
J.A. Rohrbaugh

**Gautho, Julia**

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**From:** Tory Delfavero <tory.delfavero@sbcglobal.net>  
**Sent:** Wednesday, February 12, 2025 12:30 PM  
**To:** City Council  
**Subject:** February 13th Agenda Item 9

Dear Council,

I kindly request that the City postpone action on the rail trail until a community meeting can be held and the public has the opportunity to review the RTC fiscal report due in March.

The rail trail is a significant community change and should be treated like other important topics such as the Draft Zoning Code Updates or ADA transition plan. It's concerning that information about the Rail Trail isn't easily found in Community News, while other proposals like the Stockton Bridge replacement are highlighted.

The trail's impact on Capitola residents requires community discussion, just as other initiatives do. The current process is not accessible for working parents, which contradicts your new strategic plan's pillar of an accessible government. It's difficult for people with multiple responsibilities to engage and be informed.

For example, I received the agenda packet on Tuesday February 11th. Balancing work, family commitments (PTA Meeting Tuesday evening & kids soccer game Wednesday evening) make it incredibly hard in 48 hours to properly review such a significant proposal. Try searching "rail trail" on the City's website. This is not just about Park Avenue. The community deserves the opportunity to hear about the entire "rail trail" package through Capitola.

This rushed process isn't necessary. Please postpone the item, hold a community meeting, and wait for the RTC fiscal report to ensure our community has the information they need on this project.

Tory Del Favero  
Capitola Resident

**Gautho, Julia**

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**From:** Kaki Rusmore <krusmore@gmail.com>  
**Sent:** Wednesday, February 12, 2025 12:19 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Warm regards,  
Kaki Rusmore

PS. I'm from Aptos, but just across the city limits, so this really matters to me!



**Gautho, Julia**

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**From:** Andrew Dyer <ampdyer@gmail.com>  
**Sent:** Wednesday, February 12, 2025 12:19 PM  
**To:** City Council  
**Cc:** info@railandtrail.org  
**Subject:** I support the staff recommendations for the Rail Trail

Dear Capitola City Council and Mayor,

With the Rail Trail moving forward, the dream of a safe bike and pedestrian pathway through our community becomes closer to reality. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are a great solution. The skilled staff has developed options for the trail that will protect Monarch habitat, that are realistic, and can be built with the existing funding.

Please support this vital community asset that will improve the lives of so many people, from children to the elderly, from rollers to walkers, locals and visitors, in many many ways.

I would like to see the momentum of this project maintained so please choose option A or B as you see best fitting from your perspective as leaders and locals.

Thank you,  
Andrew Dyer  
Santa Cruz, CA

**Gautho, Julia**

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**From:** lynora lwine <lynorarose@gmail.com>  
**Sent:** Wednesday, February 12, 2025 12:12 PM  
**To:** City Council  
**Subject:** Park ave.

Please leave the area by the train tracks as is. I don't want my property taxes spent on this expensive project that will only create an unnecessary mess. People voted against it so please listen to what the people want. Thank you. Lynora Lwine

**Gautho, Julia**

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**From:** Don Lauritson <donlauritson49@gmail.com>  
**Sent:** Wednesday, February 12, 2025 12:02 PM  
**To:** City Council  
**Subject:** SUPPORT OPTION A OR B TRAIL BETWEEN CAPITOLA VILLAGE AND NEW BRIGHTON STATE BEACH

CITY COUNCIL MEMBERS,

PLEASE SUPPORT ONE OR BOTH OF THESE TRAIL OPTIONS. I OFTEN WALK IN THE VILLAGE AND AT NEW BRIGHTON STATE BEACH. THESE TRIAL OPTIONS WILL ALLOW A SAFE TRAIL BETWEEN THE TWO. I UNDERSTAND THAT GRANT MONEY IS AVAILABLE TO CONSTRUCT THIS TRAIL SEGMENT. LET'S GET GOING AND BUILD THIS SEGMENT WHICH WILL PROVIDE A SIGNIFICANT BENEFIT TO THE WALKING AND BIKING PUBLIC.

THANKS,

DON LAURITSON

**Gautho, Julia**

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**From:** Susan D <sgd@baymoon.com>  
**Sent:** Wednesday, February 12, 2025 1:50 PM  
**To:** City Council  
**Subject:** I support staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I appreciate the work you are doing to ensure we have a safe, wide, beautiful trail for our entire community to use. I would like to see a trail sooner, not later, so please choose option A or B. Option A and B also offer ocean views so please choose either. I would use this segment to get around Capitola and the nearby areas and feel A or B offer the best options.

Thank you for your dedication to our community.

Kind regards,  
Susan Dahlgren

**Gautho, Julia**

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**From:** Clostergren <clostergren@protonmail.ch>  
**Sent:** Wednesday, February 12, 2025 1:52 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward; the overwhelming voters in Santa Cruz county have supported the rail trail for years now.

The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I support this idea and urge you to approve either of the options for the elevated trail; this is brilliant thinking. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding.

Please support what the majority of citizens of Capitola and Santa Cruz county want and need!

Carol Ostergren  
706 Gilroy drive  
Capitola CA

**Gautho, Julia**

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**From:** Brad Burkhart <bradburkhart13@gmail.com>  
**Sent:** Wednesday, February 12, 2025 1:53 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

**Gautho, Julia**

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**From:** Diane Cowen <cowend@santacruzpl.org>  
**Sent:** Wednesday, February 12, 2025 1:57 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I work in Capitola, and am very much looking forward to the completion of this project.

Since this section is fully funded, I hope you will continue forward and not be swayed by misinformation disseminated by the anti-rail folks.

Diane Cowen

**Gautho, Julia**

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**From:** Ed Spurr <edspurr@yahoo.com>  
**Sent:** Wednesday, February 12, 2025 1:58 PM  
**To:** City Council  
**Subject:** Agenda Item 9C - Trail on Right of Way

Dear Council Members,

In reading the draft Strategic Plan 2.0, it is apparent that the study favors the idea of a commuter train and it is feasible in the next 5, 10, 20 years even though our most recent study is not due until next month. The right of way is not wide enough for tracks and a reasonable trail, especially as our concept of transportation is evolving (ie electric bikes that were not a thing just a few years ago).

I implore you to support the idea of Measure L and not take the trail through the village with a loss and gain of elevation and the vehicle and pedestrian congestion, especially on weekends and rush hour. The proposal to remove the forest along Park Avenue and build a narrow trail system with 16 foot concrete wall to support it, is not looking to the future. As our town becomes a small city, the need for safe recreational opportunities will increase exponentially. An expensive and narrow trail will not meet those needs.

When I look at the disrepair of Monterey Avenue on the East side of the village, I cannot imagine a worse place for a trail and I shudder at the number of accidents and fatalities that will ensue.

As a Point of observation, Measure D (2016) raised our taxes to help maintain our roads and I would think it a very hard sell to get voters to approve another increase to pay for the building and managing of a new railroad. So let's rail bank the tracks until we have a better understanding of the transportation possibilities to come and build a world class trail system that meets the needs of our citizens now and is in harmony with the Strategic Plan 2.0..

Thank you for your service...

**Ed Spurr**

831.479.1139

*There is only one Earth....*



**Gautho, Julia**

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**From:** Barbara Roettger <bqnbarbara@gmail.com>  
**Sent:** Wednesday, February 12, 2025 2:25 PM  
**To:** City Council  
**Subject:** Honor the will of your constituents

Dear members of the Capitola City Council,

It has come to my attention that some City Council members want to divert the trail down onto Park Avenue and into Capitola Village. This is the most ridiculous choice anyone could make. Already the Village is super congested with cars and pedestrians and it would be very dangerous for everyone if people commuting on bikes had to pedal down into the Village. There is no way I would send a child on a bicycle down into the Village. Please respect the will of the voters and keep the trail running along the rail! Capitola voters mandated in Measure L that the trail stay on the trestle. This proposal is ignoring the will of the people.

Keeping the trail on the trestle is safer, cheaper and faster and easier with just a 2-3% change in gradient.

We all know that a railway, used over a century ago to bring one train in to transport lumber and the same train exits on the same single track, is antiquated and obsolete for today's needs. With the advent of e-bikes and popularity of cycling in general, a genuine rail rail trail (like the popular rails to trails model) would be a major asset to to the citizens of Santa Cruz county and for tourists alike.

Sincerely,

Barbara Roettger  
Santa Cruz  
831-421-2830

**Gautho, Julia**

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**From:** Peter Julber <peterjulber@gmail.com>  
**Sent:** Wednesday, February 12, 2025 2:33 PM  
**To:** City Council  
**Subject:** Regarding the trail between Capitola Village and New Brighton State Beach.

This email is in support of the Regional Transportation Commission's current two great options for the trail between Capitola Village and New Brighton State Beach.

Thank you for proposing wide, safe trail options for our community.

I live in Soquel (N Rodeo Gulch Rd), and work in Aptos (Estates Dr / Aptos Warehouse Complex).

Having a safe way to commute via bicycle between these two locations is a high priority for me.

We have the grant money to build this so please choose one of the existing two options.

I will not be able to attend the city council meeting this Thursday, so please consider this as my voice of support for one of the two options already on the table.

Please do not let those who oppose these two great options sway the meeting this Thursday with dis-information.

Thank you,

Peter Julber  
831 824 4176

**Gautho, Julia**

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**From:** Dianne <blueiris@gmail.com>  
**Sent:** Wednesday, February 12, 2025 2:36 PM  
**To:** City Council  
**Subject:** Please approve the trail proposal along Park Avenue

Mayor and Council Members,

As a daily walker I am looking forward to the proposed improvements for pedestrians along Park Avenue. I read the staff report and was very pleased to see plans for an elevated, buffered and protected trail between Park Avenue and the rail tracks. Both walkers and bicyclists will have a safer and more enjoyable experience on this proposed path.

Funding is available for this project as part of the rail transit plan, which our county will definitely need in the future. I urge you to approve the staff's proposal and move forward quickly with construction.

Thanks for your consideration,  
Dianne Dryer

**Gautho, Julia**

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**From:** Katharine P. Minott <kpminott@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:03 PM  
**To:** City Council  
**Subject:** Agenda Item 9c: Support Rail Trail Options A&B: Rail Trail

Dear Members of the Capitola City Council,  
I have been very pleased to read and learn about not just one, but TWO thoughtful, buildable options for the trail between Capitola Village and New Brighton State Beach.

- Each Option, A & B, places the trail on a new elevated path between the Park Avenue roadway and the railroad tracks.
- Each Option, A & B is on a raised curb, similar to a sidewalk.
- Each Option, A & B includes a 12-foot wide trail with a 5-foot buffer zone between the trail and the street.
- Additionally, Option A or Option B will be fully funded by the recent construction grant and is, frankly, ready to build.
- Moreover, each Option, A & B, protects monarch butterfly habitat,
- Each Option, A & B, provides users with ocean views,
- Each Option, A & B provides easy access between the neighborhoods and the trail.

As a longtime resident in the west Seacliff neighborhood, I am looking forward to welcoming the Rail Trail that is closer to my house and my neighborhood!

Sincerely,  
~ *Kate Minott*

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*Katharine P. Minott  
West Seacliff Neighborhood, Aptos  
Master of Urban and Regional Planning  
San José State University*

**Gautho, Julia**

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**From:** Mary McKenna <maryzmckenna13@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:08 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Please vote for option A or B, since they support all of the good design ideas mentioned above.

Thank you, Mary McKenna

Sent from my iPhone

**Gautho, Julia**

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**From:** Kitty Hansen <kittyhansen674@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:13 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Please choose option A or B, because:

1. I want a trail SOONER, not later
2. The grant money is there!
3. I live pretty close to that area, and I would use this trail for regular bike rides from my house to Aptos and Seacliff State Beach.
4. The ocean view would be an amazing bonus!

Thanks so much for all your hard work,

K Hansen  
Hill Street, Capitola

**Gautho, Julia**

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**From:** Eugene Tsuji <eugenetsuji@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:16 PM  
**To:** City Council  
**Subject:** Rail Trail options A or B please

Dear City Council and Mayor,

As a frequent shopper to Capitola from Aptos, I prefer to visit by bicycle and strongly support options A or B. Many of the negative comments often show a clear fear of any change and often talking points from a disinformation campaign. I trust in the council and mayor to support options A or B for a better future

thanks

Eugene Tsuji

370 Poppy Way, Aptos, CA 95003

**Gautho, Julia**

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**From:** ross rossbryan.net <ross@rossbryan.net>  
**Sent:** Wednesday, February 12, 2025 3:20 PM  
**To:** City Council  
**Subject:** I strongly support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

It's GREAT to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are just right. This will be a practical and beautiful addition to our community and I can't wait to get on the trail! So exciting!

Please ignore the anti-progress, not-in-my-back-yard people who are afraid. Be bold!

**Ross Bryan, MA MFT**  
*Psychotherapist*  
CA MFT license # 51858

*“The good life is a process, not a state of being. It is a direction, not a destination.”*

*- Carl Rogers*

Important:

This e-mail message may contain confidential information and is intended solely for the individual or individuals to whom it is addressed. If you are not the intended recipient, do not read, copy, or distribute it or any of the information it contains. Please notify me by return email and delete it immediately.



**Gautho, Julia**

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**From:** PERRY MCCULLY <pmccully3@cox.net>  
**Sent:** Wednesday, February 12, 2025 3:26 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!  
Perry McCully

**Gautho, Julia**

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**From:** Myles Corcoran <mylescor@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:26 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great.

I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

We have the grant money to build this so please choose option A or B.

Sincerely,

Myles F. Corcoran

**Gautho, Julia**

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**From:** Sally Arnold <sallya@cruzio.com>  
**Sent:** Wednesday, February 12, 2025 3:31 PM  
**To:** City Council  
**Subject:** I support Option B for the Rail Trail

Dear City Council and Mayor,

I am so pleased to see the Rail Trail moving forward. Though both options A & B are good, I support Option B because it seems to protect more of the monarch habitat. Though an inland bike lane (Option A) could be nice, it doesn't seem necessary when we'll have a 12 foot, 2 way, protected bike trail on the ocean side of the road.

I have a couple of design suggestions. First, it appears that the buffer zone varies in width depending on the available room. It seems to me that maximizing the trail width in those wider spots would have more value. I suggest keeping the buffer a steady 5 feet and making the trail even wider than 12 feet where you can.

My second suggestion has to do with protecting the pedestrians and cyclists using the trail. The curb and the buffer are great. Even better would be adding an attractive vertical element. This might be a low fence, a hedge of native plants, a trellis with a native vine growing on it.... Something like this would serve a few purposes. It would make the trail feel more safe and separated from the traffic. It would be a visual clue to cars to stay away. It would prevent impulsive pedestrians, cyclists and skateboarders from shooting out into traffic whenever they get the notion. I think an attractive 3-4 foot barrier would greatly improve safety for all users of Park Avenue whether in their cars or using active transportation.

Thank you for your work on this. I can't wait to get on the trail!

Sally Arnold

**Gautho, Julia**

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**From:** John Martorella <martorella1115@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:45 PM  
**To:** City Council  
**Subject:** Bay Ave. & the trail

Hello Mayor and council,

Here's a few things to consider:

- Put back Bay ave. to its original configuration. This experiment is another failure and waste of money from a shoot from the hip reaction.
- Install raised crosswalks @ Bay ave. and Hill st. that is well illuminated.
- Eliminate street parking @ 750 Bay Ave. from Capitola ave to Hill. The tenants at the complex have plenty of parking in the rear of the complex. This will help with cyclists by having dedicated marked lanes in each direction.
- Roundabouts won't work at Bay and Cap ave as it sits now, you would have to purchase property from 4 differnt owners to maybe make it work. Please don't waste our money on another study!
- Don't agree to a "trail" through the city streets, who comes up with crap like that?

Lastly, get another council member to represent Capitola on the RTC, our current member is lost in high weeds.

Thank you,  
John Martorella

**Gautho, Julia**

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**From:** vivianfennerevans@yahoo.com  
**Sent:** Wednesday, February 12, 2025 3:46 PM  
**To:** City Council  
**Subject:** REJECT RTC's PROPOSAL

To whom it may concern:

Please do not overthrow the will of the voters by passing measure L which rejected the diversion of unusable train tracks for an unfunded train project. The loss of hundreds of trees would be devastating. I once took a tourist from Spain on this walk and she said it reminded her of the most beautiful area in Spain! This is not a cost saving measure because \$120 million dollars in grants still can't and wont pay for the project to preserve tracks that are unusable.

**I urge you to reject the RTC proposal.** This path is called the **spiritual cathedral** by locals. I urge each on of you to walk this trail and you will see both walkers and bicyclists getting along on one of the most beautiful trails in all of the county.

Vivian Fenner-Evans  
 Soquel Resident who spends every week walking on this trail

This is what we are looking at with the misinformation of "Rail and Trail: We can have both!" The loss of hundreds of mature trees and natural beauty that many have enjoyed as a tall for a 1500 foot long retaining wall cavern. What was a safe, separated wide corridor for bikes and pedestrians will become a narrow bike lane with no bollards or protection from speeding vehicles distracted by the coastal view. Voters in 2018 passed Measure L rejecting this diversion, yet the Capitola City Council will be attempting to overthrow the will of the voters at an extremely high expense masquerading as a "cost saving measure" as over \$120 million in grants still can't pay for the ridiculous project to preserve unusable train tracks for an unfunded train project. Demand the city council reject the RTC's proposal by writing to them today at [citycouncil@ci.capitola.ca.us](mailto:citycouncil@ci.capitola.ca.us) or by attending tomorrow evening's city council meeting and using the public comment session to speak out.

**Gautho, Julia**

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**From:** Tina Andreatta <tina.marieotr@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:46 PM  
**To:** City Council  
**Subject:** Build the trail adjacent to Park Avenue

Dear Capitola Mayor, Vice-Mayor and City Council Members,

I am grateful for the planning staff for their hard work, dedication and expertise. Follow the professional advice from Santa Cruz County Regional Transportation Commission. Most importantly, with the latest construction grant, either alternative A or B options will be fully funded and ready to build.

Alternative A or B options are safer, protect monarch butterfly habitat, the trail will be built much quicker, and less expensive.

Alternative A or B options offer pedestrians; cyclists; wheelchairs with ocean views. Both options include a 12-foot wide trail with 5-foot buffer zone between the trail and Park Avenue.

Either alternative option is superior as the trail is free of the fence and level with Park Avenue. The trail will easily connect to numerous Capitola side street neighborhoods.

Best regards,

Tina Andreatta

**Gautho, Julia**

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**From:** Betsy Kodad <betsybelton@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:58 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

I haveDear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Sent from my iPhone. I have lived in santa cruz county since 1984. I love to go on trains. They are so much fun. I have voted for these train options an every ballot! Please know I am hoping to live long enough for these trains to be running.! They are fun for kids and Adults. Less cars on the roads too. Please know many of us want this! ASAP! I'm 74 now. Trying to stay positive! Sincerely , Elizabeth Belton

**Gautho, Julia**

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**From:** Melinda Geisler <melindageisler@gmail.com>  
**Sent:** Wednesday, February 12, 2025 3:59 PM  
**To:** City Council  
**Subject:** Rail line

Please stop promoting this train. It will be a nightmare, barging through our village and neighborhoods! Train horns sounding at each crossing, the clang clang of the crossing gates, the trees removed! It's a terrifying thought. And the residents who will lose their homes, low income residents living in mobile homes. You can't justify this! A train will not be used and it is not necessary. A trail will attract tourists and be used by residents. It will improve Capitola and Santa Cruz. Just like the trail in Monterey, which is used to promote that city. Don't let us down, please stop spending money on crazy studies for a project no one wants but the politicians Thank you Melinda Geisler  
300 Plum St.  
Capitola, Ca  
95010  
Sent from my iPhone



**Gautho, Julia**

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**From:** Julia M Dye <julia@jhulphers.com>  
**Sent:** Wednesday, February 12, 2025 4:03 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Thank you for proposing wide, safe trail options for our community  
I want a trail sooner not later (or never) so please choose option A or B.  
Thank you.  
Julia

**Gautho, Julia**

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**From:** Tanya Pouls <tanyapouls@sbcglobal.net>  
**Sent:** Wednesday, February 12, 2025 4:14 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear Capitola City Council Meeting members.

I am a resident of Capitola who does a lot of walking. I am grateful that both of the options you are considering for the trail between Capitola Village and New Brighton State Beach protect the monarch butterfly habitat, provide users with ocean views, and provide easy access between the neighborhoods and the trail. I'm also excited that both options will be fully funded and are ready to build.

I would like to see the trail built sooner than later so please choose either option A or B.

Thank you for considering my opinion on this issue.

Sincerely,

Tanya Pouls  
2235 Albert Lane  
Capitola, CA

**Gautho, Julia**

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**From:** Harrison, Alexis@Wildlife <Alexis.Harrison@Wildlife.ca.gov>  
**Sent:** Wednesday, February 12, 2025 4:28 PM  
**To:** City Council  
**Cc:** Robert Tidmore; Mozumder, Kailash; gblakeslee@sccrtc.org  
**Subject:** Support for Option B - Coastal Rail Trail Segments 10 & 11

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear Capitola City Council,

My name is Alexis Harrison, and I am an Environmental Scientist for the California Department of Fish and Wildlife (CDFW) conducting environmental review and permitting in Santa Cruz County. CDFW owns and manages the Escalona Gulch monarch butterfly habitat, which is adjacent to the proposed Coastal Rail Trail Segments 10 and 11 project. As the land managing agency, our goal is to preserve and enhance the functionality of the monarch habitat.

The County of Santa Cruz, RTC, and City of Capitola staff have been coordinating the alignment of the Coastal Rail Trail in this area with myself and other CDFW staff in order to reduce potential impacts to monarch habitat. I am writing to you to express my support for the Park Avenue alignment, and specifically for Option B, which eliminates the inland bike lane along Park Ave and therefore reduces the removal of windbreak eucalyptus trees along Park Avenue that are essential for the overwintering monarch population.

Thank you,  
 Alexis

**Alexis Harrison** (she/her)  
 Environmental Scientist  
 Bay Delta Region – R3 | California Department of Fish & Wildlife  
[alexis.harrison@wildlife.ca.gov](mailto:alexis.harrison@wildlife.ca.gov)



**Gautho, Julia**

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**From:** Lola Ross <lolabones@gmail.com>  
**Sent:** Wednesday, February 12, 2025 4:34 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I visit New Brighton regularly, and I'm excited for a safe walking path in the neighborhood that protects Monarch habitat, that is realistic, and that can be built with the existing funding. I can't wait to get on the trail!

Please support Option A or Option B when it is time to vote!

Sincerely,  
Lola Ross  
126 Auburn Ave  
Santa Cruz, CA 95060

**Gautho, Julia**

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**From:** Martha Macambridge <mmacambridge@gmail.com>  
**Sent:** Wednesday, February 12, 2025 4:34 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward.

I want a trail sooner than later (or never) so please choose option A or B.

**We have the grant money to build this.**

I cycle from Santa Cruz to Aptos on a regular basis. I have experienced MANY close calls with vehicular traffic, far to many close calls. I urge you to proceed without delay with this section of the Rail and Trail.

Reminder, close to 80% of voters want the Rail and Trail. Please follow the wishes of the voters.

Thank you,  
-Martha

**Gautho, Julia**

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**From:** Joan Speckert <jspeckert@hotmail.com>  
**Sent:** Wednesday, February 12, 2025 4:36 PM  
**To:** City Council  
**Subject:** Alternative A/ B options

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear Council Members,

Please follow the professional advice of The Santa Cruz RTC.

Either alternative option is superior as the trail is free of the fence and level with Park Avenue. Offering pedestrians, cyclists and wheelchairs ocean views.

Alternative A or B are safer and the trail can be constructed quicker and more cost effective.

Thank you Joan Speckert

Sent from my iPhone

**Gautho, Julia**

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**From:** David Schonbrunn <David@Schonbrunn.org>  
**Sent:** Wednesday, February 12, 2025 4:40 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear City Council and Mayor,

The Train Riders Association of California is pleased to see the Rail Trail moving forward. We are concerned by efforts by opponents of rail, who were voted down by an overwhelming majority of county voters, to raise issues, concerns and opposition to the new options.

Please proceed to work with those options. Do not be deterred by the opponents. Even if they get loud, they are still a tiny minority.

--David

David Schonbrunn, Vice President  
Train Riders Association of California (TRAC)  
P.O. Box 151439  
San Rafael, CA 94915-1439

415-370-7250 cell & office  
[President@calrailnews.org](mailto:President@calrailnews.org)  
[www.calrailnews.org](http://www.calrailnews.org)

**Gautho, Julia**

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**From:** grace Voss <1452grace@gmail.com>  
**Sent:** Wednesday, February 12, 2025 4:42 PM  
**To:** City Council  
**Subject:** rail trail letter

Subject: Item # Park Ave Traffic calming and multi-use path – support Option B

Dear Mayor and City Council members:

I ride this area frequently, and I support Option B provided that the trail is separated from traffic and protected, a Class 1 bike path. It makes sense to divert the trail from the rail right of way in this area (0.7 miles) to achieve a more cost effective, that will preserve trees and will be more scenic. There is no point having a trail on the inland side (Option A).

The trail only people are misleading everyone, you cannot take the funds awarded for one project (Coastal Rail Trail) & use them for another (trail only). For trail only, the approved coastal trail project under construction would halt, awarded grants returned (black mark on county), and attempt to get a legal right to rail ROW. It would be ten plus years before any trail would be constructed. There are funds for multi-modal transportation, few funds for a recreational trail only. The fastest way to get a trail is to build the trail, keep the rail. Preserve the rail for public transit for the future of our county.

Sincerely,

Grace Voss



**Gautho, Julia**

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**From:** Valerie Mishkin <vmishkin@baileyproperties.com>  
**Sent:** Wednesday, February 12, 2025 4:44 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I appreciate the Rail Trail moving forward **sooner than later**. The plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are ideal. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. **Either option A or B is a welcome solution.** The future of how we live in urban communities is shifting toward a more traditional lifestyle of walking neighborhoods and using mass transportation. As a senior with less walking in my future, the public transportation option will become more important as well. For my children and their families the trail is a fundamental piece to my grandchildren gaining independence.

**Gautho, Julia**

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**From:** Board Chair Friends of the Rail Trail <executive@railandtrail.org>  
**Sent:** Wednesday, February 12, 2025 4:55 PM  
**To:** City Council  
**Subject:** [PDF] Comment Letter on Item 9c  
**Attachments:** FORT Park Avenue Alignment Letter 02122025 Final.pdf

Please accept our comment letter on Item 9c

Matt Farrell  
Friends of the Rail and Trail



February 12, 2025

**To:** Mayor Clarke and Capitola City Councilmembers

**From:** Santa Cruz County Friends of the Rail & Trail

**Re:** Support for Staff's Recommendation on Item 9c. Park Avenue Traffic Calming and Coastal Rail Trail Options

Mayor Clarke and Councilmembers,

Santa Cruz County Friends of the Rail Trail (FORT) thanks you for the opportunity to offer comments on the proposed Traffic Calming and Coastal Rail Trail Options. Along with the support expressed by the Regional Transportation Commission (RTC) Bicycle Advisory Committee (BAC), which includes representatives from all cities and the five supervisorial districts, we believe that staff's recommendation of the Park Avenue alignment balances the city's goals of calming traffic on Park Avenue and supporting both local access to and active use of the rail corridor.

While our board has not taken a position regarding Option A or Option B, we do support a protected trail design which includes a fence, barricades, vegetation or other protection between the trail and the roadway. This protection was also supported by the BAC.

We agree with the project team's analysis that either of the Park Avenue alignments provides significant cost savings over the proposed coastal alignment and has less environmental impact on the existing monarch habitat. We also believe that the Park Avenue alignment is more feasible than pursuing a trail alternative which would remove the existing rail line, require railbanking, face significant resistance and delay, and which was decisively rejected by voters in the city of Capitola and countywide with a countywide 73% voter majority rejection of the June 2022 Measure D election.

We want to thank city staff, county staff and RTC staff for the time and effort they have spent in public and stakeholder outreach. The proposed Park Avenue alignment, and its options, is a considered response to the city's interest in meeting traffic calming and active transportation goals.

Sincerely,

*Matt Farrell*

Matt Farrell, Board Chair  
Santa Cruz County Friends of the Rail Trail



**Gautho, Julia**

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**From:** Iwalani Faulkner <equitytransitsantacruz@gmail.com>  
**Sent:** Wednesday, February 12, 2025 4:59 PM  
**To:** City Council  
**Subject:** [PDF] Attached: Public Comments of Capitola City Council Agenda for Feb 13, 2025  
**Attachments:** 2025-02-12\_Capitola City Safe Streets Trail Alignmentdocx.pdf

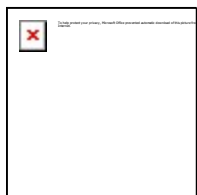
Dear City Council Members,

Please find attached comment from Equity Transit in regards to the Capitola City Council Agenda for Feb 13, 2025 in support of proposed staff recommendations for Bay Avenue and Park Avenue safe streets and rail-trail alignments.

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Best regards,

Lani Faulkner, Director  
Equity Transit - Tránsito de Equidad  
[www.EquityTransit.org](http://www.EquityTransit.org)  
831-278-1007





1840 41<sup>st</sup> Ave, Ste 102, #227  
Capitola, CA 95010  
831-278-1007

Capitola City Council Members  
420 Capitola Ave  
Capitola, CA 95010  
February 12, 2025

RE: Proposed Safe Street alignments along Bay Avenue and Park Avenue

Dear Honorable Capitola Council Members:

Thank you for your work on behalf of our Capitola community members and businesses.

As a past youth mountain biking coach, we've spent over 7 years taking groups of kids out onto our City Streets several times a week. We ride on the city streets regularly and can attest to the fact that our roads are designed for the SPEED of cars, not for the SAFETY of everyone. Our business address is less than 2 miles from Capitola Village and we frequently bicycle the route along East Cliff down into Capitola Village and along Park Avenue to make our way to Seacliff Beach in Aptos. We are grateful to the Capitola Staff for proposing infrastructure on our roads that will slow traffic and provide protected bike and pedestrian lanes. Both are necessary.

**Santa Cruz County has some of the deadliest surface streets in the State of California!** There are 3 main ways in which we can address our traffic violence issue; education, enforcement, and **infrastructure**. We know that physical infrastructure is often the most effective at calming dangerously fast speeding traffic and we also know that a high percentage of speeding oversized vehicles also contribute to a higher rate of death and serious injuries in a crash, especially to our pedestrians and cyclists.

Every 2-3 days someone is killed or seriously injured in a crash on our streets! This problem has worsened over the past 5 years. The rate of traffic violence has increased 30% during Covid years after a stunning 65% increase in traffic violence in the 10 years leading up to 2019! **Speed kills!** Typical surface road infrastructure in the United States and in Santa Cruz County allows for cars to travel at speeds far beyond what is posted or safe, and **our most vulnerable**, our children biking to school, our elderly crossing the streets, and people with disabilities, wheelchair users and people who are blind, **are at greatest risk**. Our pedestrians and people riding bikes face a serious threat every time they cross the street or bike along the road. This has resulted in our community being a place where people who might want to walk and bike do not do so because they **do not feel safe**. The more we can make our roads safer for **ALL** community members, the more people will feel safe getting out and biking and walking for leisure, to work and school in our community.

Regarding Items 9a and 9b, Equity Transit approves of the research done on these high-risk intersections and we look forward to the implementation of traffic calming as well as raised pedestrian cross walks and additional staff recommendations proposed in this report. Well-designed traffic circles are a gold standard for creating safe intersections and therefore whenever possible, we recommend their use.

Regarding Item 9c, Equity Transit approves of the staff recommendation for Park Avenue **Alternative 3** with median features in the roadway and either staff recommended **Options A or B** which moves the fully separated coastal rail-trail from the cliffs on the ocean side of the railroad tracks onto Park Avenue, providing a fully separated two-way 12-foot bike and pedestrian access with a 3-foot raised buffer. **Alternative 3** includes more physical and visual incentives for drivers to slow down along Park Avenue. Simply using lateral shifts in roads, as



1840 41<sup>st</sup> Ave, Ste 102, #227  
Capitola, CA 95010  
831-278-1007

shown in Alternative 2, results in speeding being more likely and thus more dangerous for pedestrians and cyclists. **Alternative 1** would not provide physical structures which would enhance traffic calming and would rely on driver behavior which could lead to dangerous speeding and passing.

Equity Transit approves of the two newly proposed alignments along Park Avenue for the Rail-Trail, both Choice A or B, as either option will offer a number of benefits; **1**-The newly proposed alignments, either A or B, will result in a 12-foot wide trail, fully separated from traffic by a 3-foot wide physical buffer via a curb as a barrier, **2**-the newly proposed alignments, both A and B, would allow for a faster more affordable implementation of the Rail-Trail making possible for people to have a safe mode of travel along this route months to years sooner than the prior oceanside rail-trail option, **3**- the newly proposed alignments would move the Rail-Trail away from the cliffside which dramatically reduces the costs needed to shore up the cliffside and reduces the risk of losing the Rail-Trail to erosion over time thus reducing costs over time while still providing a superior quality pedestrian and bike trail, and **4**- the newly proposed alignments, both A and B, would reduce destruction of monarch habitat and also offer improved access to neighborhoods. Both options A and B offer a safe high quality fully separated trail with vista views along the route.

Thank you for your consideration. On behalf of local community members who have guided numerous youth groups throughout our county streets and advocate for safe equitable alternatives to driving, we are excited about the proposed staff recommendations.

Sincerely,

Lani Faulkner, Director

**Gautho, Julia**

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**From:** Matt Miller <millerneary@gmail.com>  
**Sent:** Wednesday, February 12, 2025 5:01 PM  
**To:** City Council  
**Subject:** Park Avenue Rail Trail Alignments

Dear Capitola City Council,

I am writing in support of the Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options. Option A or B both offered a grade separated, high quality, multi use path with improved/added road crossings to neighborhood streets. Elevating the trail also affords you views of the ocean which are impeded in the rail bed. The car travel lanes will also be narrowed which has a traffic calming effect.

While at the whole project level I support the trail alongside the rail in the corridor, in this particular instance I support the value engineering that was done to work with the grant funding allocation and getting this into construction as soon as possible.

Thank you,

Matt Miller



**Gautho, Julia**

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**From:** Taylor Seamount <taylorseamount@gmail.com>  
**Sent:** Wednesday, February 12, 2025 5:20 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

Thank you so much for the new plans for increased safety and elevated buffer between Park Ave and the railroad tracks. I have wanted to bike to my job in Santa Cruz from Aptos but the current options for navigation are just too dangerous for me. I'm anxious for the rail/trail to be done so that this dream can finally be realized. Also as someone who has watched the monarch populations decrease throughout my life I'm so stoked that you've developed options that will protect their habitat. **Please choose option A or B.** Please don't delay.

Thank you for your excellent work,

Taylor

**Gautho, Julia**

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**From:** Linda Felicio <zenergy@bellsouth.net>  
**Sent:** Wednesday, February 12, 2025 5:33 PM  
**To:** City Council  
**Subject:** Rail trail New Brighton

Hello City Council members, I am a resident living in Capitola for the last 8 years. I do walk to New Brighton Beach through that corridor of beautiful trees and birds! The way the trees have formed a canopy as the docents at Henry Cowell refer to the redwoods it is a “spiritual cathedral” of peace, and form of sanctuary for a few miles.

There are so few places to experience with beauty and the oneness with nature and this trail is one of them. Please keep it in it’s place! You know the e-bikes will ruin that peacefulness and there is a ruggedness about that trail they makes you think you are out in the wilderness.

I agree with Jack Brown who has written to you and pointed out all the reasons why the trail should not be built or disturb the natural beauty that is along the tracks. People can actually meditate along that part of the trial it has a remarkable energy!

Thank you for your consideration and please make the right decision.

With gratitude for all of your hard work,

Linda Felicio RN, MSW

Situ Linda Felicio RN MSW  
Certified Tai chi Master Practitioner  
[zenergy@bellsouth.net](mailto:zenergy@bellsouth.net)  
Tai chi Spirit  
831-239-0000

**Gautho, Julia**

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**From:** beth braun <bethbraun22@gmail.com>  
**Sent:** Wednesday, February 12, 2025 5:54 PM  
**To:** City Council  
**Subject:** Rail on Park Ave

What are you crazy! This has to stop immediately!  
No rail just trail. \$\$\$\$\$\$ why over budget & getting higher by the day. Just ridiculous stop the madness!!!!  
Sent from my iPhone

**Gautho, Julia**

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**From:** Eva <evacyclessf@yahoo.com>  
**Sent:** Wednesday, February 12, 2025 6:15 PM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Hello Council,

I am a resident of Capitola and home owner , voter , and an avid cyclist. Please do not move the rail trail to Park Ave, keep it on the railroad trestle. Cycling on the trestle is safer for cyclists than Park Ave.

I hope this rail trail is completed in my life time.

Mary Sherman  
Capitola, CA

**Gautho, Julia**

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**From:** Andrew Hurchalla <ahurchalla45@gmail.com>  
**Sent:** Wednesday, February 12, 2025 7:40 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Legitimately. It is something that will transform this County for the better. Doing this will help alleviate congestion on Hwy 1, likely reducing the demand to continue widening it (which will assuredly cause far worse environmental impact than continuing with the Rail Trail). It's a no brainer with the majority of the

Thank you,

-Andrew Hurchalla

**Gautho, Julia**

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**From:** Savarna Wiley <savarna.wiley@icloud.com>  
**Sent:** Wednesday, February 12, 2025 8:44 PM  
**To:** City Council  
**Subject:** please no rail

Dear council members

When I first heard of the rail trail idea, I thought it would be wonderful, but as I learned more about the traffic back ups the need for parking along any rail routes and the destruction of trees and encroaching upon peoples property , etc., etc. . It seems like a very bad idea. Also, I have been making a point of looking at how many people are riding the buses throughout the county. They're mostly empty. If our bus system -public transportation was full to the brim and we really had a need for more I could see more reason to create another mode of public transportation, but as it is, I don't think it'd be very practical. On the other hand, a trail where the bikes and walkers could enjoy ,the route seems like a real boon for the county

I've lived here since 1975 and would love to see the trail plan to come into effect.

Thank you

Savarna Wiley

Savarna Wiley MA CCHT

[HealingJourneysHypnotherapy.com](http://HealingJourneysHypnotherapy.com)

6233 Soquel Dr. Suite B

Aptos CA 95003

831.345.3849



"Then it is only kindness that makes sense anymore...."

Naomi Shihab Nye

**Gautho, Julia**

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**From:** Maureen O'Connell <mloc@earthlink.net>  
**Sent:** Wednesday, February 12, 2025 8:47 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am thrilled you are having a meeting with the community about the Rail-Trail. I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. There is a lot of very intentional misinformation being spread right now by those with a greed-driven Greenway agenda, so a public meeting is really necessary.

I can't wait to get on the trail! And at some point in time, I hope, I really look forward to boarding a resurrected Santa Cruz County train!

Maureen O'Connell  
Davenport, CA 95017



Email from M.L.O'C.  
Sent from my iPhone

**Gautho, Julia**

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**From:** nitroxbaby@gmail.com  
**Sent:** Wednesday, February 12, 2025 9:20 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am an avid bicycle rider so I'm thrilled to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail! Please do everything you can to keep this project moving forward. Thank you!

Sincerely,  
Colleen Young



**Gautho, Julia**

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**From:** Concerned Citizens Of Capitola <concernedcitizensofcapitola@gmail.com>  
**Sent:** Wednesday, February 12, 2025 9:29 PM  
**To:** Gautho, Julia; City Council  
**Cc:** Welch, Troy (TJ) (noworries4TJ@mac.com)  
**Subject:** 2.13.2025 Council Meeting Item 9C-Park Ave

Mayor, City Council Members,

The Park Ave. calming issue before you is simple. Don't let the City Attorney, City Manager or City staff report complicate it for you with misinformation about the Coastal Rail Trail, what a detour is, or if it is a trail at all. Oddly enough, It's called the TRAIL REALIGNMENT in the staff report. This is about supporting a "RTC Project" OR Capitola City Law.

1. There is no Measure D, it did not pass. There is only a project known as the RTC Coastal Rail/trail. Which the County stated would reside on RTC property.
2. To say voters on Measure D, trumped Measure L is completely false. It's apples and oranges. Measure D, which failed, was a ballot measure about a project. While Measure L, which passed, was codified into Capitola law and you took an oath to uphold.
3. But, for those of you who want to compare votes, Measure D lost in Capitola by 2,044 votes. Compare that to Measure L, which won with 2,526 votes. Measure L still wins.
4. Simply put, Capitola residents chose the safety for our children and others, by telling you to keep the Rail Trail on the RTC corridor.
5. But there is good news! Both Measure L, now Municipal code 8.72 and the Coastal Rail Trail can live harmoniously.
6. The Answer is to vote against the Park Ave trail realignment and have the RTC keep the Coastal Trail on RTC corridor. Just like they said they were going to do when this project started.
7. Don't forget that our Community Development Director recommended to support the Ultimate Trail on behalf of our City. That is, keeping the trail next to the tracks on the RTC corridor.
8. Now we are asking you to do your part!
9. Park Ave already has sidewalks and a bike path.

10. Your vote tonight is not about the County's problems with the Coastal Rail Trail. It is about upholding the laws of Capitola.

You received many comments on this topic,. Many based on a FORT Alert that do not live in Capitola. Put aside their politics!

Support the Capitola residents you serve! Do not approve Option A or B. Vote NO on all options and the Park Ave Rail Trail realignment.

Respectfully,

TJ Welch  
Capitola Resident

**Gautho, Julia**

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**From:** Richard Spencer <rspencercapitola@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:12 PM  
**To:** City Council  
**Subject:** Trail Diversion

My wife and I have lived on Coronado overlooking New Brighton for twenty-three years. We watch people by the hundreds, at all hours, daily, walk across the tracks to the beach. People will be very much put off by the development of a train that would inevitably block this passage to the beach. The loss in tourism could be a great. We have been waiting a long time for the trail to be built, while assuming the train idea is simply to get government funding. My wife and I ride bikes regularly. We have never really believed that a train corridor by Park is a viable option. Frankly, there are so many trees that will need to be dealt with and Capitola has not demonstrated any interest in keeping Park Ave. trees trimmed safe and tidy. The street is strewn with 20 foot long panels of eucalyptus bark both on the ground and hanging from the limbs of the trees. Branches fall regularly. Honestly even if a trail can be built we have little confidence in it being properly maintained. If it is built we will be loving it and using it regularly.

**Gautho, Julia**

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**From:** DJ Timpany <timpanydj@gmail.com>  
**Sent:** Wednesday, February 12, 2025 11:20 PM  
**To:** City Council  
**Subject:** Rail trail

To members of Capitola City Council,

Thank you for proposing wide, safe trail options for our community. Since I and many members of the community want a trail sooner, not later and we have the grant money now, please choose option A or B.

Thank you,  
Joan Timpany  
Santa Cruz County resident

**Gautho, Julia**

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**From:** H Bryce <helen.s.bryce@gmail.com>  
**Sent:** Thursday, February 13, 2025 1:13 AM  
**To:** City Council  
**Subject:** Item 9C

Dear City Council Members and the RTC,

Regarding the RTC proposal to "shift" the trail onto Capitola streets. This is a really bad idea for so many reasons, not the least of which is safety.

If it's not obvious to you, it's certainly clear to the rest of us that the RAIL/TRAIL project is a mess. It simply cannot happen as originally envisioned. There is never going to be enough money to finish the project. You know that money that you told us would be coming, just isn't going to arrive. In the meantime, the cost of things keeps going up (and what do we now hear about steel and aluminum?)

Stop thinking that we're stuck with the Rail / Trail! Even if by some miracle it was finished, there would not be the ridership to support it. In the meantime, you're talking about cutting down hundreds of trees, building a huge ugly retaining wall, displacing people from their homes, destroying the beauty of our precious neighborhoods, and ruining people's views -- all for an expensive pipedream.

I pray that our city council will say NO to ALL this nonsense. Forget the Rail! Put the trail where the tracks are (as Monterey County has done). Build a world class scenic trail and will be enjoyed by people of all walks of life.

Say no to the retaining wall, say no to removing trees.

Say YES to the trail. Build the trail now!

Thank you!!

Helen Bryce

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(If anyone needs to reach me quickly, please call instead of relying on an email response. Thank you for your patience.)

831-428-8530

**Gautho, Julia**

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**From:** Mary Ripma <maryaustinripma@gmail.com>  
**Sent:** Thursday, February 13, 2025 6:16 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

I am discouraged by the pushback the Rail Trail is receiving after our community has voted for it. Please remember that the majority of us want it and ignore the continuing pushback from a minority.

Sincerely

Mary Ripma  
131 Santa Cruz Street  
Santa Cruz CA 95060  
831-334-2223

Sent from my iPhone12 Mini

**Gautho, Julia**

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**From:** publisher@rim-of-the-world.com  
**Sent:** Thursday, February 13, 2025 7:05 AM  
**To:** City Council  
**Subject:** Fwd: Rail Corridor

>  
>  
> City Council,  
>  
> I'm surprised that the council would consider diverting the rail trail through the Capitola Village and along Park Avenue. In effect, the city would be obstructing active transportation in the Mid County area. A segmented trail would be a detriment to pedestrians, bicyclists and e-bike commuters and cause significant safety concerns within the city. Would you like your children to be confronted with more congestion in the village and along a dangerous Park Ave? The solution is to pressure the RTC to rail bank the corridor and build an affordable, wide trail down the center of the corridor, utilizing the Capitola Trestle. This would insure a trail that could be constructed soon and still allow for a future train if voted on by the residents. Rail banking has been in effect in hundreds of communities across the country with outstanding results. We should be able to enact it in our community. Don't let the train lobby dictate a flawed scenario for Capitola.  
>  
> Sincerely,  
> Jennifer Harris-Anderson  
> 831-566-3367

**Gautho, Julia**

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**From:** Jeff Comcast <jmw1025@comcast.net>  
**Sent:** Thursday, February 13, 2025 8:45 AM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, as a 60 year property owner in Aptos (plus 130 years in San Jose) I and my family are so happy to see the Rail Trail moving forward.

The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

We voted for it, let's move it forward (with light rail) and NOT make the same mistakes San Jose has with its lack of rail infrastructure.

Highway 1 is a MESS!

Thank you, Jeff Whalen, Aptos and Los Gatos.

Sent from my iPad



**Gautho, Julia**

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**From:** chris amsden <amsdenfinance@yahoo.com>  
**Sent:** Thursday, February 13, 2025 8:47 AM  
**To:** City Council  
**Subject:** Rail Trail on Park Ave?

Dear City Council Members,

When discussing and (hopefully) debating the detour of the "rail trail" onto Park Ave., please ask yourselves: Who are the true stakeholders?

While outside voices may have opinions on this project, it is the **residents of Capitola** who will live with the consequences every single day. Outside organizations, consultants, or developers will not have to navigate increased traffic, safety concerns, or changes in neighborhood livability—**we will**.

Council members should weigh public opinion accordingly:

- Primary Stakeholders: Capitola residents, homeowners, and local businesses affected by the trail detour.
- Secondary Stakeholders: Regional visitors and organizations who may use the trail but do not live here.

If outside voices outweigh local concerns, then the council is failing in its duty to **serve those who elected you**. We - the residents of Capitola - will be the ones that will have to live with these decisions, and will be the ones that vote in the next City Council election. We urge you to please say NO to detouring the "rail trail" onto our city streets.

**Sincerely,**

**Chris Amsden**  
**Phone: (408) 386-7484**

**Gautho, Julia**

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**From:** Dunn Silvey <dunns50@gmail.com>  
**Sent:** Thursday, February 13, 2025 9:28 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Morning Capitola City Council

We are writing to all of you regarding

changing the already voted on issue of the trail to be on the trestle. This is the will of the voters keep the trail on the trestle. Enough already.

There are numerous other reasons the trail to be on the trestle safety more congestion on already impacted streets etc etc. Please keep the trail where it should be and not put more of a burden on the neighborhood.

Thank You

Dunn and Renate Silvey

**Gautho, Julia**

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**From:** Dave Montgomery <bykerscott@yahoo.com>  
**Sent:** Thursday, February 13, 2025 9:54 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Good Morning,

Please scrap the crazy idea of a train! It seems every neighborhood is trying to eliminate the trail portion on the existing track location. There are hundreds of examples of rail to trail conversions that are far less costly and have almost immediate benefits for the communities they serve. There are only a few new train systems attempted that have been hugely expensive and not widely used. Common sense tells us a train from "downtown" Pajaro to "downtown" Davenport will not ever be viable. One track, not enough space, slow speed and road crossings are just a few of the problems. The "Train to Nowhere" will never happen. Too expensive, too much fighting from NIMBA's, and no demand. Throw the train under the bus!

Most Sincerely,  
David J Montgomery DDS

**Gautho, Julia**

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**From:** James Quist <jmquist850@gmail.com>  
**Sent:** Thursday, February 13, 2025 9:56 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

City Council Members -

As voting residents of Capitola residing on Park Avenue, we are adamantly opposed to bringing the rail trail off of the rail corridor and on to Park Avenue. The citizens of Capitola clearly articulated their desires concerning the location of the rail trail with the passage of Measure L. Do not ignore the will of the people. Keep the rail trail off of Park Avenue and on the rail corridor trestle as your constituency has demanded. To do otherwise is dangerous and wrong.

Thank you,

James and Cynthia Quist  
850 Park Avenue - Unit 14B  
Capitola, CA 95010

**Gautho, Julia**

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**From:** crescent.f.s. <crescentsmith@gmail.com>  
**Sent:** Thursday, February 13, 2025 10:48 AM  
**To:** City Council  
**Subject:** Rail trail

Please keep the rail trail on the rail corridor as proposed!

Thank you,  
Crescent Smith

**Gautho, Julia**

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**From:** Diana Chase <ddchase@cruzio.com>  
**Sent:** Thursday, February 13, 2025 10:56 AM  
**To:** City Council  
**Subject:** Coastal Rail Trail Options

Please keep the trail off of Park Avenue! I expected the trail alongside the tracks in that area to be one of the few stretches without street crossings.

Seems that your current plan for the trail through Capitola is no improvement at all.

Respectfully,  
Diana Chase  
Member of Santa Cruz County Cycling Club

Sent from my iPhone

**Gautho, Julia**

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**From:** Suzanne B Cochran <smb.cochran@me.com>  
**Sent:** Thursday, February 13, 2025 11:50 AM  
**To:** City Council  
**Cc:** Suzanne Cochran  
**Subject:** Do Not Support Proposed Trail Plans for Capitola

Dear Capitola Council Members,

I am a Capitola homeowner and full time resident of Capitola. Please do NOT use Park Avenue or Capitol Village for the trail. It is a very unsafe alternative when there is existing trail in place. It is completely unsafe to have 800-1500 people gong through the village or Park Avenue on any given day with cars on busy streets..

Recommendation - Use the existing trail corridor and place trail over rail, including the trestle.

Regards,

Suzanne Cochran  
4530 Garnet Street

**Gautho, Julia**

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**From:** Dean Cutter <deandelanycutter@gmail.com>  
**Sent:** Thursday, February 13, 2025 12:45 PM  
**To:** City Council  
**Cc:** Lauren Jo Cutter  
**Subject:** Keep trail on the trestle

Dear Council,

We need to keep the trail on the rail right-of-way including the Trestle. It is the safest, most sensible, and most economical option.

Measure D promoters promised us a trail on the rail right-of-way and a train. However, RTC studies now tell us 48% of the rail corridor cannot include a trail. And, Capitola gets virtually no trail at all! Capitols are getting taxed for a trail we were promised but we will never receive.

One part of the current proposal is to route the trail from 41st Ave into dense neighborhoods down the length of Nova Drive. Parking on Nova and nearby streets is already a challenge. Nova will become a parking nightmare as much of the parking must be eliminated to accommodate a trail for cyclists and pedestrians in both directions. At the end of Nova, the trail will somehow discharge its users onto the high speed junction of Portola by Jade Street Park, cross two busy intersections, then side along the edge of Cliff Drive alongside car commuters into the town.

I have walked to work on Cliff Drive 5 days a week for 10 years. I have observed collisions of cars, bicycles, motorcycles, skateboards and many near misses. It is a wonder only 1 pedestrian has been killed on this section. There is simply not enough room for cars, pedestrians, bicycles, and ebikes coming downhill to pass uphill users. I have seen families walking downhill step aside for uphill users into the road and bike lane without looking behind and nearly get killed by an overtaking car or ebike. Adding more users by diverting the rail trail onto this section will be deadly.

Lastly, Measure L was passed by voters to use and protect our Iconic Trestle. You might hear opponents say Measure L somehow doesn't count; that the community of Capitola should have no say in what happens the this Iconic structure in the heart of their town because it is technically owned by the RTC, not Capitola. In response I say Capitola matters. We voted to keep our beloved Iconic Trestle and to provide it for the larger community to use. It makes economic sense. It keeps us safe. And it is practical.

The taxpayers of Capitola deserve a trail just like the rest of the county. Keep the trail on the rail right-of-way and on the Trestle.

Sincerely,

Dean Cutter  
 4165 Nova Dr  
 Capitola, CA 95062  
 831 346-6416





**Gautho, Julia**

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**From:** PitchIn Santa Cruz <pitchinsc@gmail.com>  
**Sent:** Thursday, February 13, 2025 1:00 PM  
**To:** City Clerk  
**Subject:** Requesting the Clerk send the attached letter to all Capitola City Council Members  
**Attachments:** 21325 cityclerk.docx

Dear City Clerk.

I respectfully request that you send the attached letter to all members of the Capitola City Council.

With Gratitude,

Sally-Christine Rodgers  
Trash Talkers Organizer

**Eliminate Litter and Illegal Dumping**



[pitchinsantacruz.org](http://pitchinsantacruz.org)

[cityclerk@ci.capitola.ca.us](mailto:cityclerk@ci.capitola.ca.us) Request that this letter be sent to all City Council members.

We would like to give you some background on the County-wide Pitch In Initiative on litter and illegal dumping. The increase in litter and illegal dumping in our region led to the creation of a coalition of agencies called the *Trash Talkers*. This coalition includes elected officials, the county, the cities, the Community Foundation, the Farm Bureau, the Land Trust, Santa Cruz METRO, the Department of Fish and Wildlife, CALTRANS, State Parks, law enforcement, nonprofits, rotaries chambers and others. We meet once a month and have for three years.

The Trash Talkers coalition created the Pitch In Initiative. Our Mission:

*Eliminate litter, abandoned encampments, dumping on roadways, waterways, and agricultural land.*

*Educate and engage community, nonprofits, schools, and local governments*

*To improve the health well-being economic value and beauty of our region.*

Our strategies include:

- Posting Pitch In signage in our City and County Parks, at trailheads, beaches, libraries, the harbor, on farmland and other locations to create a unifying, consistent message across all sectors to raise awareness and help change the behavior of littering. The QR code links to the county-hosted [pitchinsantacruz.org](http://pitchinsantacruz.org) website.
- In partnership with the County, we have deployed cameras to seek prosecution for illegal dumping.
- We work with nonprofits environmental education programs in schools to create a “Litter Literacy” curriculum, tying into the Pitch In Message which then provides continuity when youth see the signs in parks and other locations.
- We are working with chambers, rotaries, and business associations to support this effort by engaging their staff and educating their customers.

Last year the Board of Supervisors unanimously passed our resolution for an all-county cleanup day. Each city has passed similar resolutions so that the entire county could have a uniform message and engage community participation.

We are working now to engage as many residents and visitors as possible to participate in the second annual ***Pitch In All-Santa Cruz County Cleanup Day on May 10th***. We would appreciate your support in helping us amplify this message to your constituents. More information will be posted on the [pitchinsantacruz.org](http://pitchinsantacruz.org) website as we get closer to the date.

Respectfully,

Sally-Christine Rodgers  
Trash Talkers Organizer



**Gautho, Julia**

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**From:** Ringler <sring@cruzio.com>  
**Sent:** Thursday, February 13, 2025 1:28 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor,

I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail!

Please support RTC project Option A. Even though I live in Watsonville, the Rail & Trail means a lot to those of us who commute to Santa Cruz from Watsonville and back. Even getting a few of us off on Hwy. 1 would help with congestion. Please don't be the obstacle here.

Sarah Ringler  
814 Cynthia Dr. Watsonville, CA 95076

**Gautho, Julia**

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**From:** MARK WEGRICH <wegrich@comcast.net>  
**Sent:** Thursday, February 13, 2025 1:42 PM  
**To:** City Council  
**Subject:** bike trail

Your attention please,

Please support the Interim Trail at this Thursdays Council Meeting. The ultimate Trail is a County financial boondoggle. Reviewing the financial status of light rail systems across the country makes it clear Santa Cruz County is heading into a financial black hole to the financial benefit of consultants on the backs of taxpayers. It won't work and will destroy what should be a world class bike and pedestrian trail. Business in the Village will surge with the influx of visitors to experience the trail. Safety would be much improved over the current situation while the Ultimate Trail would worsen public safety. Every crossing poses a risk to pedestrians and cyclists. Does Capitola want to assume the risk of massive lawsuits that will inevitably follow?

Sincerely,

Mark Wegrich

524 Pine St.(Seacliff)

Aptos

**Gautho, Julia**

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**From:** Bud Colligan <bud@colligans.com>  
**Sent:** Thursday, February 13, 2025 1:46 PM  
**To:** Gautho, Julia  
**Cc:** gerry4capitola@gmail.com; melindaorbachforcitycouncil@gmail.com;  
margauxforcapitola@gmail.com  
**Subject:** voluminous input on Park Ave decision

Dear Capitola City Council members,

As you consider written input submitted from Capitola residents and listen to input this evening, please consider the source of the input you are receiving. The overwhelming written input from Capitola residents is to reject the staff proposal and RTC plan regarding a Park Ave bike path. It appears the same is true regarding routing the trail through Capitola Village. Many of the letters from actual Capitola residents are unique, heartfelt and carefully considered.

Most of the written input in support of the Park Ave bike lane comes from residents who do NOT live in Capitola and appear to have submitted a form letter from Friends of the Rail and Trail. We have discovered the same pattern of meddling from primarily District 3 residents in several electoral campaigns in Districts 1 & 2. It's imperative that Capitola makes its own decisions, free from organized meddling from District 3. You represent the residents of Capitola, not the city of Santa Cruz.

Sincerely,

Bud Colligan  
1840 41st Avenue  
Capitola, CA 95010

**Gautho, Julia**

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**From:** Ann Bolger Peruzzi <ann@thetuscansun.com>  
**Sent:** Thursday, February 13, 2025 1:51 PM  
**To:** City Council  
**Subject:** New Brighton tree tunnel

I am writing to REJECT RTC's proposal for demolishing the new Brighton tree tunnel for the "rail/trail".

Thanks

Ann Peruzzi



**Gautho, Julia**

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**From:** Kieran Horn <kieranehorn@gmail.com>  
**Sent:** Thursday, February 13, 2025 2:09 PM  
**To:** City Council  
**Subject:** Coastal Trail: City Council Meeting Thur, Feb 14

Hi City Council Members,

As a Capitola resident, I am writing to oppose the latest proposed rerouting of the rail trail on to Park Avenue. I am unable to attend tonight's meeting, so I am providing my input in writing.

As someone that lives in Cliffwood Heights, I am concerned this new plan goes against the Measure L decision and the safety of pedestrians and cyclist. Additionally, the trail should avoid Capitola village, which is too congested and a very dangerous place to bicycle.

The idea of a train seems to be an illusion that keeps dragging on. If it was realistic, progress would have been made by now. Please support progress towards a safe bicycle trail and not a dream of a one-route train that will not carry passengers to their final destinations.

Best regards,  
Kieran Horn

**Gautho, Julia**

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**From:** Christi Dalke <cdalke23@yahoo.com>  
**Sent:** Thursday, February 13, 2025 2:14 PM  
**To:** City Council  
**Subject:** Support Rail!

Please do not listen to the big tech and real estate money.  
I live on 47th Ave, I would hear the train and I WANT TO HAVE A TRAIN!

All these emails you are getting that say the exact same thing are just copy/paste. ("It would be my dream...." like who really talks like that???)

I have lived here 14 years and it would be wonderful to reduce the tourist car traffic and have a rail option come through our village. Use the existing trusses in the village.

This email, including attached files, may contain confidential information and is intended only for the use of the individual and/or entity to which it is addressed. If you are not the intended recipient, disclosure, copying, use, or distribution of the information included in this email is prohibited

**Gautho, Julia**

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**From:** Cary Seiden <carybenseiden@gmail.com>  
**Sent:** Thursday, February 13, 2025 2:19 PM  
**To:** City Council  
**Subject:** I support the staff recommendations for the Rail Trail

Dear City Council and Mayor, I am so happy to see the Rail Trail moving forward. The new plans for an elevated buffered and protected trail between Park Avenue and the railroad tracks are great. I'm glad that the staff has developed options for the trail that protect Monarch habitat, that are realistic, and can be built with the existing funding. I can't wait to get on the trail! Please make an informed decision aided by a close reading of Trail Option A and/or B...reiterating, EITHER OPTION IS FUNDED!

Great Thanks.

Cary Seiden

A resident of Santa Cruz County for 51 years and an avid cyclist.

Sent from my iPad

**Gautho, Julia**

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**From:** Hernan Valencia <valencia.design@gmail.com>  
**Sent:** Thursday, February 13, 2025 2:19 PM  
**To:** City Council  
**Subject:** Rail trail support

Dear City of Capitola council,

Thank you for proposing wide, safe trail options for our community. I want a trail sooner not later so please choose option A or B.

Thank you,

Hernán Valencia  
4255 Jade St, Capitola, CA 95010

**Gautho, Julia**

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**From:** Katharine Parker <katharinep3@gmail.com>  
**Sent:** Thursday, February 13, 2025 3:27 PM  
**To:** City Council  
**Subject:** Proposed Trail Diversion

I would like to add my voice to the public comments regarding a proposed change to the trail along Park Avenue. I know that corridor well (walking, driving and bicycling) and the numerous comments regarding fast traffic are right on. Also, the comments from the Coastal Trails Conservancy representative are also right on. The rail trail is the last off road "nature trail" in Capitola (there is the Riverview Trail but it's more suburban and short). Many city & county residents and tourists use this trail not just for convenience but because it's calming and pretty. Walking along Park may be convenient but it's definitely not calming.

In the City's Draft Plan "collaborative engagement", responsible growth, and public safety are all listed as core mission and values. I believe that if these values are a part of the City mission, the City and City Council will respond to the public outcry for safety and environmental responsibility and leave the trail as it is.

Respectfully,

Katharine Parker

**Gautho, Julia**

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**From:** Debby Molina <dmlolina\_2000@yahoo.com>  
**Sent:** Thursday, February 13, 2025 3:54 PM  
**To:** City Council  
**Subject:** Diverted trail????

Dear Capitola City Council-

If only someone had measured and determined that the railbed wasn't wide enough to accommodate a train and a trail. Why didn't someone mention the extra cost associated with trying to shore up eroding coastline so we could keep obsolete train tracks? Gee- I wish someone had thought about all the many trees that will need to be cut to keep this boondoggle train dream going forward. Perhaps the citizens of Capitola should vote on whether they want to use the trestle as a trail. And of course, sure would have been smart to realize that without the above, bike traffic would need to be diverted alongside busy roads and down through bustling Capitola.

If you're thinking- hey wait- all of those issues were stated again and again- and AGAIN! We have known that there isn't enough space or money to have both tracks and trail. The trestle vote was passed and the trestle bridge should be used to make sure people are safe and away from cars. And- The interim trail money is there. None of this is new information!

We want a continuous trail, across the trestle. No diversions onto streets that will surely lead to accidents and injuries. We want a funded, safe, gorgeous trail that our community can use for transportation and recreation. It just makes sense!

Thank you!  
Deb Molina

[Sent from Yahoo Mail for iPhone](#)

**Gautho, Julia**

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**From:** Jennifer Harrison <j.harrison@comcast.net>  
**Sent:** Thursday, February 13, 2025 5:01 PM  
**To:** City Council  
**Subject:** Trail not Train-Come on people!

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hello Capitola City Council,

Consider your community please!

It is clear (study after study after study) that a train is not cost effective and causes congestion. This is a going to create a huge pedestrian and cycling safety issue.

Read the room and do the right thing. Please.

Harrison Family  
(Including a member born and raised in Capitola)

**Gautho, Julia**

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**From:** Ariel Braswell Gray <arielbgray@gmail.com>  
**Sent:** Thursday, February 13, 2025 5:34 PM  
**To:** City Council  
**Subject:** Park Ave and Bay Ave traffic improvements

Hello - my apologies for the late communication. A few thoughts on items on the agenda for today:

Bay Ave

- I may be in the minority who likes the current stop control & road diet. It seems to have made people slow down and take better care at the intersection. There are some times of day where the line of cars is longer than others, but I have never found it egregious or unmanageable. Ultimately I would support a roundabout there, but would prioritize a roundabout at Bay and Capitola Ave intersection first -- that one seems to be the more congested and unruly.

Park Ave

- I prefer Option B, as option A seems to do little to address car speed and bike safety for those who would be biking on the inland bike lane. In option A, the lanes will be less wide, which I am not sure will actually slow any cars, but will make it harder to give bikes the 3 foot berth that some cars don't even do now. I prefer option B, with the inclusion of sharrows for the travel lane so bikes can still use that lane if they desire. I also think we need additional traffic calming measures on Park like speed tables/raised crosswalks at Cabrillo and probably another something at Washburn.

Thanks!

Ariel Gray

Capitola Resident (Cliffwood Heights)



**Gautho, Julia**

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**From:** Howard Egan <howa@howa.net>  
**Sent:** Thursday, February 13, 2025 7:06 PM  
**To:** City Council  
**Subject:** Park Ave corridor

Hello:

My name is Howard Egan, a Cliffwood Heights resident.

I am currently watching the Feb 13 city council meeting regarding the Rail Trail and Traffic calming on Park Ave. I was pleased to see such a great solution being put forth. However, I must say I STRONGLY support option B NOT option A as the staff recommends. I ride my bike on Park Avenue several times a week westbound and I would not ever use the "old" bike lane in the presence of a new safer multi-use path on the south side of Park Avenue.

I urge the city council to only support option B.

Howard Egan

219 Elinor Street  
Capitola, CA

**Gautho, Julia**

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**From:** John <jxmuly@gmail.com>  
**Sent:** Friday, February 7, 2025 4:33 PM  
**To:** City Council; Gautho, Julia  
**Subject:** Item 8A 8B 8C 8D

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hey Neighbors

8A A roundabout is the gold standard and the only non flow interruptive option. Less traffic, shorter pedestrian crossings, will help with e-bikes on the main school route. We will get the money for this in state grants it's not that much and the state Loves roundabouts.

Please choose option 2.

8B whatever we do, please do not make it a two car drag race towards the senior housing complex. It's the major school route. It's already dangerous as is.

Make it a forced right turn into Nob Hill at the main entrance. It was nice having a mildly safe street there. I walk there often as Dancecenter a 40 year old business catering to children is right there too. Path to the library. Do your best.

Raised Crosswalks there across Bay Ave and then at Fanmar/Escalona and Monterey Ave (the rail trail as it will soon be) ever my dream. Cheap too.

8C not Alternative 1

Staff is making a good rec here. We save a ton of money as a county, leaves the track area in better shape for a train. Most of the trail will be diverted from the corridor in Capitola already. 100%ish. Why not here too.

I suggest a class IV bike lane. We will get money for it. Great long term ROI on such a project these days. Plus Rail Trail is supposed to be Class I. We deserve at least a IV there to honor the voters (minus Measure L).

8D Looks exciting to me.

nulla trahentium per villa JM

# Capitola City Council Agenda Report

**Meeting:** February 13, 2025  
**From:** City Manager Department  
**Subject:** City Council Meeting Minutes



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**Recommended Action:** Approve minutes from the regular meeting on January 30, 2025, and the special meeting on February 4, 2025.

**Background:** Attached for City Council review and approval are the draft minutes from the regular meeting on January 30<sup>th</sup> and the special meeting on February 4<sup>th</sup>.

**Attachments:**

1. Regular Meeting Minutes 1/30/2025
2. Special Meeting Minutes 2/4/2025

**Report Prepared By:** Julia Gautho, City Clerk

**Approved By:** Jamie Goldstein, City Manager

# City of Capitola

## City Council Meeting Minutes

### Thursday, January 30, 2025 – 6:00 PM



City Council Chambers  
420 Capitola Avenue, Capitola, CA 95010

**Mayor:** Joe Clarke

**Vice Mayor:** Alexander Pedersen

**Council Members:** Gerry Jensen, Margaux Morgan, Melinda Orbach

### 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 Jensen, Orbach, Pedersen, and Vice Mayor Clarke.*
2. **Additions and Deletions to the Agenda** – *None*
3. **Additional Materials**
  - A. *Item 4A – 43 emails received after publication of the agenda packet and Staff Memos Regarding Withdrawal of Two Applicants.*
  - B. *Item 8A – 1 email received after publication of the agenda packet.*
  - C. *Item 8B - Staff Memo Regarding Applicant Withdrawal and 1 email received after publication of the agenda packet.*
4. **City Council Vacancy**
  - A. Appointment of Successor to Vacant City Council Seat  
Recommended Action: 1) Review applicants to fill the vacancy left on the City Council by former Mayor Yvette Brooks, 2) assess and discuss applicants, and 3) by motion, select and appoint a successor to fill the vacancy.  
  
***City Clerk Gautho presented the staff report.***  
  
***The Vice Mayor shortened the public comment time to one minute per person due to the number of speakers. Public Comments:***
    - ***Leslie Nielsen***
    - ***Goran Klepic***
    - ***Enrique Dolmo Jr.***
    - ***Rachel Neuman***
    - ***Tori***
    - ***Public Speaker***
    - ***Susan Westman***
    - ***Megan Morrissey***
    - ***Public Speaker***
    - ***Mike Morrissey***
    - ***Heidi Kellison***
    - ***Linda Smith***

- **Keith Cahalen**
- **Ed Bottorff**
- **Jacques Bertrand**
- **Marilyn Garrett**
- **Margaux Morgan**
- **Lunamar Harter**

**The City Council thanked the community for attending the meeting and participating in this process. They shared the personal criteria they used while reviewing applications.**

**Motion to appoint Margaux Morgan to fill the vacant City Council seat, with a term expiring in December 2026: Council Member Orbach**

**Second: Council Member Pedersen**

**Voting Yea: Council Members Jensen, Orbach, Pedersen, Vice Mayor Clarke**

**The City Council took a three-minute recess at 6:43 PM.**

**B. Oath of Office Ceremony**

**Recommended Action:** Administer the oath of office and receive comments from newly appointed Council Member.

**Public Comments:**

- **Goran Klepic**
- **Christine McBroom**

**The City Clerk swore in Margaux Morgan.**

**C. City Council Reorganization for 2025**

**Recommended Action:** Nominate and appoint a new Mayor and Vice-Mayor.

**City Clerk Gautho presented the staff report.**

**Public Comments:**

- **TJ Welch**

**Council Member Pedersen responded to comments made by TJ Welch.**

**Motion to appoint Joe Clarke to serve as Mayor for 2025: Council Member Orbach**

**Second: Council Member Jensen**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Pedersen, Vice Mayor Clarke**

**Motion to appoint Alexander Pedersen to serve as Vice Mayor for 2025: Council Member Orbach**

**Second: Council Member Morgan**

**Voting Yea: Council Members Morgan, Orbach, Pedersen**

**Voting Nay: Council Member Jensen, Mayor Clarke**

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

- **Keith Cahalen**
- **Marilyn Garrett**
- **Jondi Gumz**
- **Kevin Maguire**

**6. Staff / City Council Comments**

- *City Manager Goldstein advised the public that there is a recruitment for a Capitola representative on the Measure Q Citizens Oversight Advisory Committee; shared that he had been in contact with other local cities concerning e-bike safety regulations.*
- *Assistant City Attorney Marc Tran clarified some of the points brought up in public comment regarding California residency and the requirements to run for City Council.*
- *Community Development Department Director Herlihy provided an update on the implementation of the City's Zoning Code Update.*
- *Council Member Morgan thanked the City Council and the public for their support in her appointment; and requested that staff continue to work on e-bike safety and provide an update to the City Council.*
- *Council Member Jensen provided a verbal report on his attendance at the California League of Cities New Mayor and Councilmember Academy; he also requested that staff consider issuing a local government academy in non-election years.*
- *Council Member Orbach provided a verbal report on her attendance at the California League of Cities New Mayor and Councilmember Academy; shared that she has been appointed as the Chair of the Library Financing Authority Board; and wished the public a happy Lunar New Year.*
- *Mayor Clarke requested that staff research term limits for the City's advisory bodies.*

## 7. Consent Items

- A. City Council Meeting Minutes  
Recommended Action: Approve minutes from the regular meeting on January 9, 2025, and the special meeting on January 16, 2025.
- B. City Check Registers  
Recommended Action: Approve check registers dated December 06, 2024, December 13, 2024, December 20, 2024, January 03, 2025, and January 10, 2025.
- C. State Division of Boating and Waterways Grant Application for the Cliff Drive Resiliency Project  
Recommended Action: Adopt a resolution authorizing the submittal of an application for the Shoreline Erosion Protection Grant from the State of California Department of Parks and Recreation, Division of Boating and Waterways. **(Resolution No. 4412)**
- D. Park Reservation Permit Review  
Recommended Action: Receive a six-month progress report on Administrative Policy V-21: Park Reservation Permit Use Policy.
- E. RFP for Climate Action Plan Updates  
Recommended Action: Authorize staff to issue a Request for Proposals (RFP) to seek a consultant to update the City's Climate Action Plan.
- F. Affordable Housing Development Loan Amendment  
Recommended Action: Adopt a resolution rescinding Resolution No. 4393 and reauthorizing the City Manager to execute an Amended and Restated \$1,600,000 Loan Agreement with MP Rail Trail Associates, LP to fund development of 52 residential units affordable to low-income households at 1098 38<sup>th</sup> Avenue and allocating \$449,376 of PLHA Funds and \$900,624 of Housing Successor Agency Funds thereto, and amending the FY 2024-25 Budget. **(Resolution No. 4413)**

***Motion to approve the Consent Calendar: Council Member Morgan***

***Second: Vice Mayor Pedersen***

***Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke***

## 8. General Government / Public Hearings

### A. Short Term Wharf Events

**Recommended Action:** Receive report regarding the City events held on the Capitola Wharf during 2024 and provide direction regarding plans for 2025.

**Community Services and Recreation Department Director Bryant presented the staff report.**

**Public Comments:**

- **Mary Beth Cahalen**
- **Marilyn Garrett**

**The City Council discussed the costs required to host events on the Wharf and discussed the possibility of alcohol-free events. The Council requested that staff work with the Chamber of Commerce and the CVWBIA to explore the possibility of partnership for future events on the Wharf.**

### B. City Council Appointments to City Advisory Bodies

**Recommended Action:** Appoint members of the public to the City of Capitola’s Art and Cultural Commission, Commission on the Environment, Finance Advisory Committee, and Historical Museum Board; appoint a member of the public as an alternate to the Santa Cruz County Regional Transportation Commission Bicycle Advisory Committee.

**Deputy City Clerk Wyatt presented the staff report.**

**Public Comments:**

- **Mary Beth Cahalen**

**Motion to appoint Karin Anderson to the Art and Cultural Commission for a term expiring December 2026: Council Member Morgan**

**Second: Council Member Orbach**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke**

**Motion to appoint the following members of the public to the Commission on the Environment: Council Member Morgan**

**Second: Council Member Jensen**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke**

- **Clarke Appt., Term Expiring 12/2026: John Mulry**
- **Jensen Appt., Term Expiring 12/2026: Dennis Norton**
- **Pedersen Appt., Term Expiring 12/2026: Michael Maroney**
- **Morgan Appt., Term Expiring 12/2026: Michelle Beritzhoff-Law**

**Motion to appoint the following members of the public to the Finance Advisory Committee: Council Member Morgan**

**Second: Council Member Orbach**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke**

- **Regular Member, Term Expiring 12/2026: Emeline Nguyen**
- **Regular Member, Term Expiring 12/2026: Anthony Rovai**
- **Regular Member, Term Expiring 12/2026: Keith Cahalen**

- **Business Rep. Member, Term Expiring 12/2026: Leslie Neilsen**
- **Business Rep. Member, Term Expiring 12/2026: Matt Arthur**

**Motion to nominate Christopher O’Connell to serve as an alternate to Capitola’s representative on the SCC RTC Bicycle Advisory Committee: Council Member Morgan**  
**Second: Vice Mayor Pedersen**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke**

C. CDBG Program Income Funds

Recommended Action: 1) Conduct a public hearing and receive public comment regarding Program Income and its eligible uses; 2) adopt a resolution allocating \$160,240.62 of Program Income for the Community Center Rehabilitation Project; and 3) adopt a resolution amending the FY 2024-25 budget.

**Community Development Department Director Herlihy presented the staff report.**

**Public Comments: None**

**Motion to adopt Resolution Nos. 4414 and 4415: Council Member Morgan**

**Second: Council Member Orbach**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke**

D. Community Center Renovation Project

Recommended Action: Staff recommends the City Council: 1) approve the construction contract for the Capitola Community Center Renovation Project with SSB Contracting, Inc. in the amount of \$4,726,000, including selected additive alternates.; 2) authorize the Public Works Department to issue a notice to proceed upon final contract execution; 3) approve Amendment 3 to the Professional Services Agreement with Boone Low Ratliff Architects for design consultant services for the Project in the amount of \$18,320, for a total contract amount of \$579,033; and 4) adopt a resolution adopting the NEPA and CEQA determination and amending the FY 2024-25 Budget.

**Public Works Department Director Kahn presented the staff report.**

**Public Comments:**

- **Leslie Nielsen**

**The City Council discussed inclusion of the Community Center generator as a contingent item for the Project; discussed the needs and anticipated costs of maintaining Capitola’s infrastructure.**

**Motion to approve the construction contract with SSB Contracting, Inc.; authorize staff to issue a notice to proceed; approve Amendment 3 to the agreement with Boone Low Ratliff Architects; and adopt Resolution No. 4416: Council Member Orbach**

**Second: Council Member Morgan**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke**

E. City Council Representation on Regional Boards & City Advisory Bodies

Recommended Action: Review appointments of City Council representatives on regional boards and committees and City advisory bodies.

**City Clerk Gautho presented the staff report.**



**Public Comments: None**

**Motion to appoint the following Council Members to represent Capitola on the following groups: Council Member Morgan**

**Second: Council Member Jensen**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke**

**Advisory Council of the Area Agency on Aging:**

- **Council Member Jensen**

**AMBAG:**

- **Vacant (Continued to February 13, 2025, meeting)**
- **Alternate: Council Member Orbach**

**Community Action Board:**

- **Kristen Brown, resident**

**Children’s Network:**

- **Council Member Orbach**

**Motion to appoint the Mayor and Vice Mayor to the City of Capitola’s Finance Advisory Committee: Council Member Orbach**

**Second: Council Member Morgan**

**Voting Yea: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, Mayor Clarke**

**9. Adjournment** - *The meeting adjourned at 9:04 PM. The City Council will hold a special meeting on February 4, 2025, at 12:00 PM. The next regularly scheduled City Council meeting is on February 13, 2025, at 6:00 PM.*

**ATTEST:**

\_\_\_\_\_  
Joe Clarke, Mayor

\_\_\_\_\_  
Julia Gautho, City Clerk

# City of Capitola

## Special City Council Meeting Minutes

### Tuesday, February 04, 2025 – 12:00 PM



City Council Chambers  
420 Capitola Avenue, Capitola, CA 95010

**Mayor:** Joe Clarke

**Vice Mayor:** Alexander Pedersen

**Council Members:** Gerry Jensen, Margaux Morgan, Melinda Orbach

### Special Meeting of the Capitola City Council – 12:00 PM

1. **Roll Call and Pledge of Allegiance** – *The meeting was called to order at 12:00 PM. In attendance: Council Members Jensen, Morgan, Orbach, Vice Mayor Pedersen, and Mayor Clarke.*

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

3. **Additional Materials**

A. *Item 6A – Two emails received after publication of the agenda packet.*

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

- *Goran Klepic*

5. **Staff / City Council Comments** – *None*

6. **General Government / Public Hearings**

A. Strategic Plan Draft Review

Recommended Action: 1) Receive a presentation from the City's Strategic Plan consultant, BerryDunn; 2) review the draft Strategic Plan and provide feedback; and 3) authorize staff to release the draft Strategic Plan for public review.

*City Manager Goldstein, Assistant to the City Manager Woodmansee, and Project Consultant Maddi Powers from BerryDunn presented the staff report. BerryDunn moderated review and discussion of the strategic plan.*

*Public Comment was limited to one minute per speaker by the Mayor. Public Comments:*

- *Leslie Neilsen*
- *Matt Arthur*

*City Council provided feedback on the Strategic Plan.*

*Motion to incorporate City Council comments into the draft Strategic Plan and authorize staff to release the draft Strategic Plan for a period of public review: Council Member Orbach*

*Second: Council Member Morgan*

*Voting Yea: Mayor Clarke, Vice Mayor Pedersen, Council Members Jensen, Morgan, and Orbach*

- 7. Closed Session** – *The City Council adjourned to Closed Session at 3:00 PM.*
  - i. CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION  
Significant Exposure to Litigation Pursuant to Govt. Code § 54956.9(d)(2)  
One Case
- 8. Report on Closed Session** – *The City Council met and discussed one item on the Closed Session agenda. No reportable action was taken.*
- 9. Adjournment** – *The meeting adjourned at 5:12 PM. The next regularly scheduled City Council meeting is on February 13, 2025, at 6:00 PM.*

# Capitola City Council

## Agenda Report

**Meeting:** February 13, 2025  
**From:** City Manager Department  
**Subject:** 2025 City Council Meeting Schedule

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**Recommended Action:** Adopt a resolution amending the regular meeting schedule for 2025.

**Background:** At the end of each calendar year, staff prepares the regular City Council meeting schedules for the following year. Regular meetings of the City Council are held on the second and fourth Thursday of the month. The City Council adopted the 2025 meeting schedule on December 12, 2024.

**Discussion:** The August meeting date in the previously adopted meeting schedule was listed as August 21<sup>st</sup>. The fourth Thursday of that month is August 28<sup>th</sup>.

Upon approval, the meeting schedule will be posted on the City's website and at City Hall. It will also be distributed to newspapers and interested parties.

**Fiscal Impact:** None.

**Attachments:**

1. Resolution
2. Amended 2025 Meeting Schedule

**Report Prepared By:** Julia Gautho, City Clerk

**Approved By:** Jamie Goldstein, City Manager

**RESOLUTION NO. XXXX**  
**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CAPITOLA**  
**ESTABLISHING THE CITY COUNCIL MEETING SCHEDULE FOR CALENDAR YEAR 2025**

**WHEREAS**, the City Council shall set an annual City Council meeting calendar to establish dates and times for the City Council to conduct the peoples' business; and

**WHEREAS**, pursuant to the Capitola Municipal Code, the following calendar is established, notwithstanding the scheduling of additional meetings as required upon proper notice under the Brown Act; and

**WHEREAS**, the City Council may set aside additional time periods for closed session before the open session portion of each regular meeting.

**WHEREAS**, the City Council adopted the 2025 meeting calendar on December 12, 2024. This calendar listed the August meeting date incorrectly, and an updated meeting calendar is included as Exhibit A.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CAPITOLA HEREBY RESOLVE AS FOLLOWS:**

SECTION 1: The City Council hereby establishes 6:00 PM as the regular meeting time for each regular meeting. Only closed sessions may be held before a regular meeting. No closed session of the regular meeting will be held unless the posted agenda of the regular meeting indicates that such closed session will take place at a particular time. In the absence of such notification on the agenda, the open session portion of the regular meeting shall commence at 6:00 PM.

SECTION 2: The City Council establishes the amended 2025 Regular Meeting Schedule as listed in Exhibit A.

SECTION 3: With proper notice during the year, meetings may be cancelled, rescheduled, or added as necessary pursuant to California law.

**I HEREBY CERTIFY** that the foregoing Resolution was passed and adopted by the City Council of the City of Capitola on the 13<sup>th</sup> day of February, 2025, by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

**ABSTAIN:**

\_\_\_\_\_  
 Mayor

**ATTEST:**

\_\_\_\_\_  
 Julia Gautho, City Clerk

**2025 CITY OF CAPITOLA  
City Council Regular Meeting Dates  
Meetings Begin at 6:00 PM**

<b>MEETING DATES</b>
JANUARY 9
JANUARY 30
FEBRUARY 13
FEBRUARY 27
MARCH 13
MARCH 27
APRIL 10
APRIL 24
MAY 8
MAY 22
JUNE 12
JUNE 26
JULY 24
AUGUST 28
SEPTEMBER 11
SEPTEMBER 25
OCTOBER 9
OCTOBER 23
NOVEMBER 13
NOVEMBER 20**
DECEMBER 11

Items received less than two weeks prior to the meeting date may be scheduled for the next available agenda.

*\*\*May be cancelled depending on agenda forecast.*

# Capitola City Council

## Agenda Report

**Meeting:** February 13, 2025

**From:** Public Works Department

**Subject:** Bay Avenue Corridor Study



**Recommended Action:** Staff recommends the City Council 1) identify Alternative 2 as the preferred long-term improvement alternative for the Bay Avenue corridor; 2) authorize staff to proceed with public engagement and conceptual design refinement; and 3) direct staff to pursue grant funding opportunities for final design and construction.

**Background:** The Bay Avenue Corridor Study was initiated to evaluate potential long-term improvements along Bay Avenue, from Highway 1 to Monterey Avenue. The study examines multimodal safety, traffic operations, and community livability. The corridor is a key arterial that supports local businesses, residential neighborhoods, and regional traffic, with existing challenges related to congestion, multimodal safety, and access.

In 2024, a “quick-build” project at the Bay Avenue and Hill Street intersection was implemented to test a road diet and gather feedback. This interim project involved reducing travel lanes, modifying striping, and adding pedestrian safety measures. The feedback from this project, combined with detailed traffic analysis and engineering assessments, has informed the alternatives considered in this study. The study aligns with Capitola’s General Plan goals to enhance mobility and economic development along Bay Avenue while improving safety for all users.

The study also includes traffic projections for 2045, indicating that several intersections will exceed acceptable congestion thresholds under current conditions. Without improvements, key intersections, such as Bay Avenue at Hill Street and Capitola Avenue, are projected to operate at LOS E or worse, leading to increased delays and longer vehicle queues.

**Discussion:** The Bay Avenue Corridor Study evaluates three primary alternatives, each with distinct benefits and trade-offs.

The study utilized multiple data sources and analytical methods to assess current and future traffic conditions. Existing conditions were analyzed using traffic count data from 2024, including peak-hour intersection movements and roadway classifications. Data collection included automated and manual counts at key intersections, as well as pedestrian and bicycle counts. The analysis also incorporated projected growth rates, future development impacts, and traffic simulation models to estimate how corridor operations would evolve under each alternative. Traffic operations were analyzed using Synchro, Sidra, and VISSIM software to model vehicle delay, intersection queuing, and multimodal interactions under different scenarios. A detailed breakdown of methodology is included in Attachment 1 (Bay Avenue Corridor Study Report).

### Alternative 1: Stop Control & Road Diet

- Converts current quick build configuration into permanent improvements, implementing a "road diet" to calm traffic and improve bicycle and pedestrian access.
- Includes concrete curb bulb-outs to shorten pedestrian crossing distances and enhanced striping for improved visibility.
- Buffered bike lanes provide a dedicated space for cyclists, improving safety and encouraging multimodal travel.
- Trade-offs include increased vehicle travel times and longer queues at intersections. This alternative is the most cost-effective but does not improve vehicle congestion.

### Alternative 2: Roundabout Control

- Converts key intersections at Bay/Hill and Bay/Capitola into single-lane roundabouts to reduce vehicle delay and conflict points.
- Provides a continuous flow of traffic, improving efficiency and reducing emissions by minimizing idling.
- Enhances pedestrian and bicycle safety through protected crossings and designated bike facilities.
- Requires higher upfront capital investment and potential right-of-way acquisition.
- High potential for grant funding
- Similar projects, such as the La Jolla Boulevard corridor redesign in San Diego, have shown significant safety and operational benefits from roundabouts.

### Alternative 3: Signal Control

- Installs new traffic signals with designated pedestrian crossing phases at key intersections.
- Provides clear right-of-way assignments to improve traffic efficiency and multimodal safety.
- Increases vehicle queuing at signals, leading to higher vehicle idling and emissions.
- Higher ongoing maintenance costs due to required signal equipment upkeep.
- Less impact on existing right-of-way but may require upgrades to sidewalk and crossing infrastructure.
- Highest potential for high severity collisions.

The alternatives were analyzed based on multiple performance metrics. The staff report simplifies this into a summary table; however, the full analysis (see Table ES-1 in the study) also includes right-of-way impacts, economic effects, and aesthetic considerations.

**Table 1. Operations Summary Comparison**

Criteria	Alternative 1 Stop Control & Road Diet	Alternative 2 Roundabout	Alternative 3 Signal Control
Vehicle Delay	High	Low	Moderate
Pedestrian Safety	Moderate	Good	Moderate
Bicycle Safety	Moderate	Good	Moderate
Capital Cost	Low	High	High
Maintenance Cost	Low	Moderate	High
Greenhouse Gas Emissions	Moderate	Low	Moderate

Based on the analysis, Alternative 2 (Roundabout Control) provides the greatest safety benefits and operational efficiency but comes with the highest capital cost (grant funding may potentially offset some costs) and potential right-of-way impacts. Alternative 1 (Stop Control & Road Diet) offers an incremental improvement at a lower cost but does not significantly enhance traffic flow. Alternative 3 (Signal Control) improves operations but introduces maintenance, potential safety and aesthetic challenges.

### Public Engagement Plan

The Bay Avenue corridor serves as a key regional connector, linking Highway 1 to multiple destinations, including the Capitola Village, local schools, and surrounding neighborhoods. Given its broader impact beyond the immediate area, staff recommends an engagement strategy that reaches a wider community audience while maintaining targeted outreach to directly affected properties.

To gather broad input, staff will conduct an online survey, which has proven to be an effective engagement tool in recent traffic projects to reach a broader audience. This approach ensures accessibility and allows for participation from residents, business owners, and commuters who regularly use the corridor.



Additionally, staff will continue stakeholder meetings with property owners at key intersections who may experience direct impacts from potential improvements. Regular updates will also be provided at City Council meetings, ensuring ongoing opportunities for public comment.

Following Council direction, staff will refine the conceptual layouts and incorporate public feedback before advancing to preliminary engineering and funding identification.

Fiscal Impact: The cost to finalize the conceptual design will depend on the preferred alternative selected. Staff is coordinating with consultants to develop more precise cost estimates. Preliminary cost estimates from the study indicate that roundabout installations could range from \$3 million to \$5 million per intersection, while traffic signals would require an estimated \$1.2 million per intersection, with additional long-term maintenance expenses.

Potential funding sources include:

- **State and Federal Grants** – Opportunities such as the Active Transportation Program (ATP) and Highway Safety Improvement Program (HSIP).
- **Regional Transportation Funds** – Allocations from the Santa Cruz County Regional Transportation Commission (SCCRTC).
- **Local Capital Improvement Budget** – Consideration for phased implementation as funding becomes available.

No immediate budget allocation is requested at this time. Staff will return with detailed cost estimates and funding strategies based on Council direction.

Attachments:

1. Bay Avenue Corridor Study

Report Prepared By: Jessica Kahn, Public Works Director

Reviewed By: Julia Gautho, City Clerk; Samantha Zutler, 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 multimodal 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
<b>Operations</b>				
Vehicle Delay	<u>High</u> Stop control creates delay for intersection approaches	<u>High</u> Stop control creates delay for intersection approaches	<u>Low</u> Yield control reduces average delay	<u>Moderate</u> Signal control reduces average delay
Vehicle Travel Time	<u>Long</u> Stop control creates delay for intersection approaches	<u>Long</u> Stop control creates delay for intersection approaches	<u>Short</u> Yield control reduces average delay	<u>Moderate</u> Signal control reduces average delay
Vehicle Queue Length	<u>Long</u> Long queues and spillback into adjacent intersection	<u>Long</u> Long queues and spillback into adjacent intersection	<u>Moderate</u> Yield control generates average queues	<u>Moderate</u> Signal control generates average queues
Transit and Emergency Vehicle Access Improvement	<u>Poor</u> Slower average travel times and higher VHT	<u>Poor</u> Slower average travel times and higher VHT	<u>Moderate</u> Faster average travel times and lower VHT	<u>Moderate</u> Opportunity for emergency vehicle preemption
Driver Adaptation Time	<u>Low</u> Existing conditions on corridor	<u>Low</u> Existing conditions on corridor	<u>High</u> New traffic control in City for users	<u>Moderate</u> Existing conditions on corridor
<b>Safety</b>				
Collision Severity Potential	<u>Moderate</u> Numerous conflict points with stop control at intersection	<u>Moderate</u> Numerous conflict points with stop control at intersection	<u>Low</u> Fewer conflict points and controlled lower speeds at intersection	<u>High</u> Higher vehicle speeds and numerous conflict points at intersection
Bicycle Access Improvement	<u>Poor</u> No Build scenario would not improve conditions	<u>Moderate</u> Buffered bike lanes and markings	<u>Good</u> Buffered bike lanes and markings. Shorter and protected crossings	<u>Moderate</u> Buffered bike lanes and markings. Designated crossing phases
Pedestrian Access Improvement	<u>Poor</u> No Build scenario would not improve conditions	<u>Moderate</u> Shorter crossings with traffic calming	<u>Good</u> Shorter and protected crossings	<u>Moderate</u> Designated crossing phases
<b>Economic</b>				
Capital Construction Cost	<u>Low</u> No Build scenario would not improve conditions	<u>Low</u> Updates to existing infrastructure	<u>High</u> New infrastructure and utility coordination	<u>High</u> New infrastructure and signal equipment
Right of Way Impact	<u>Low</u>	<u>Low</u>	<u>High</u>	<u>Moderate</u>

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	<u>Low</u> No Build scenario would not improve conditions	<u>Low</u> Landscaping	<u>Moderate</u> Landscaping	<u>High</u> Signal equipment, electricity
Greenhouse Gas Emissions	<u>Moderate</u> Vehicle idling with stop traffic control	<u>Moderate</u> Vehicle idling with stop traffic control	<u>Low</u> Less vehicle idling with yield traffic control	<u>Moderate</u> Higher speeds & vehicle idling with signal traffic control
Aesthetics & Community Character Improvement	<u>Poor</u> No Build scenario would not improve conditions	<u>Moderate</u> Opportunities for art and landscaping with traffic calming	<u>Good</u> Opportunities for art and landscaping at intersection	<u>Moderate</u> Requires signal poles and cabinets
Grant Funding Opportunity	<u>Poor</u> No Build scenario would not improve conditions	<u>Moderate</u> Multimodal safety improvement	<u>Good</u> Multimodal safety improvement, traffic congestion reduction, environmental impact	<u>Moderate</u> Traffic congestion reduction
General Benefits	<ul style="list-style-type: none"> <li>Lower initial capital cost and ongoing maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Improved driver certainty</li> <li>Lower initial capital cost</li> <li>Improved bike &amp; ped safety</li> </ul>	<ul style="list-style-type: none"> <li>Reduction collision severity</li> <li>Improved bike &amp; ped safety</li> <li>Improved operations</li> <li>Reduced GHG emissions</li> </ul>	<ul style="list-style-type: none"> <li>Improved operations &amp; capacity</li> <li>Provides designated crossing times and driver certainty</li> </ul>
General Challenges	<ul style="list-style-type: none"> <li>Decreased operations</li> <li>Increased queues</li> </ul>	<ul style="list-style-type: none"> <li>Decreased operations</li> <li>Increased queues</li> </ul>	<ul style="list-style-type: none"> <li>High initial capital cost and potential ROW impact</li> <li>Driver adaptation to new traffic operations</li> </ul>	<ul style="list-style-type: none"> <li>High capital and maintenance costs</li> <li>Increased queues and collision severity potential</li> </ul>



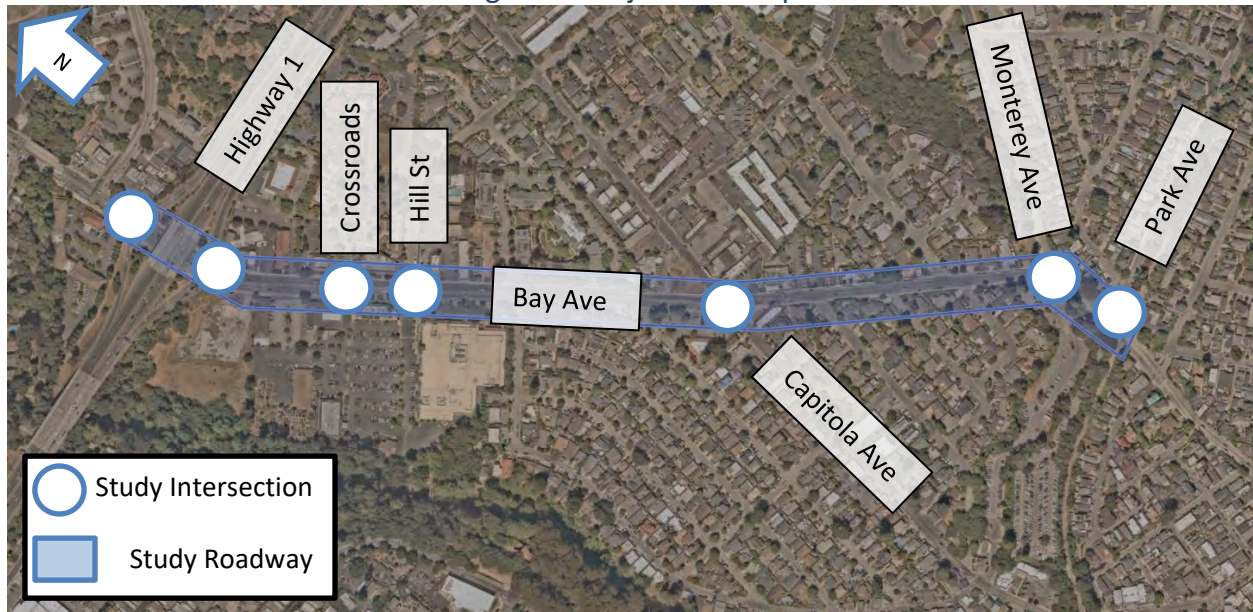
## 1. Project Description and Corridor Study Scope

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 7<sup>th</sup> 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 6<sup>th</sup> 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





## **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)

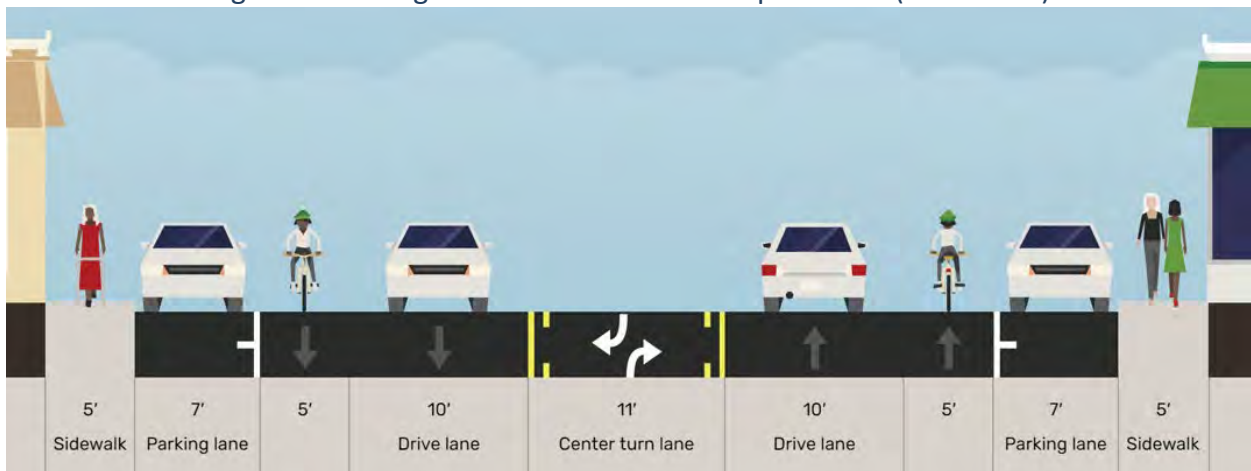


Figure 6: Existing Section – Capitola Ave to Burlingame Ave (56-ft ROW)



Figure 7: Existing Section – Burlingame Ave to Monterey Ave (56-ft ROW)

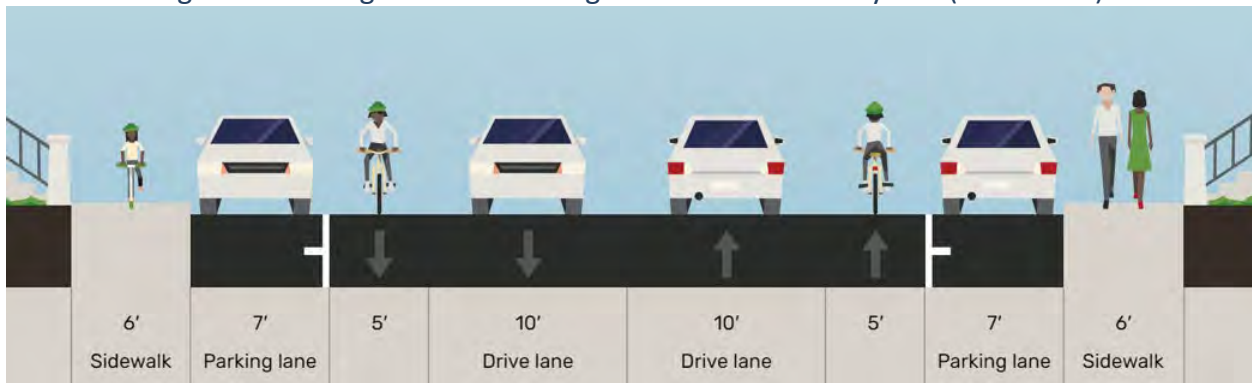
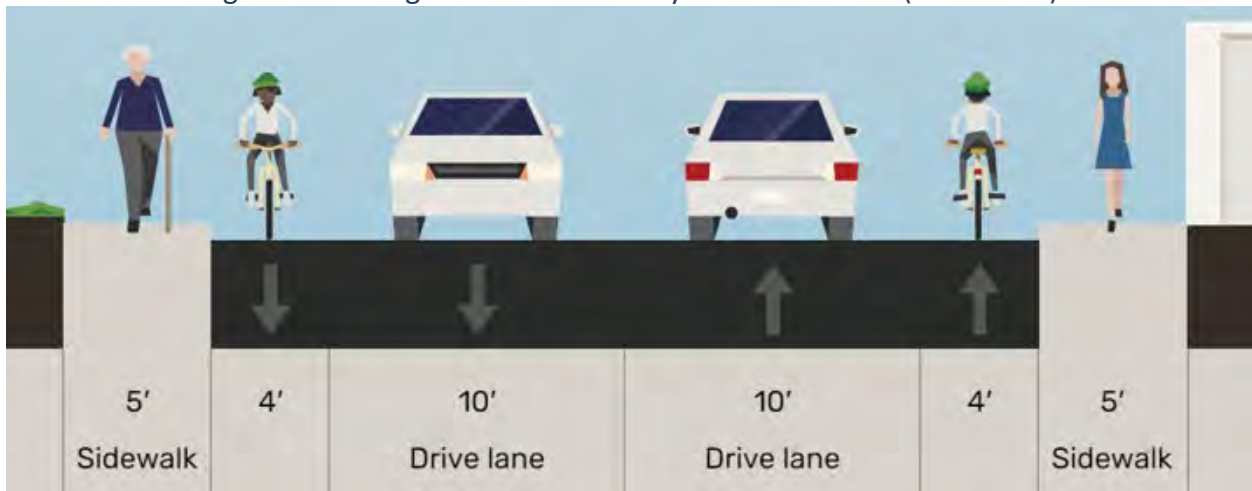


Figure 8: Existing Section – Monterey Ave to Park Ave (38-ft ROW)



### 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
50 <sup>th</sup> Percentile Speed (mph)	26	26.7	25.5	27
85 <sup>th</sup> Percentile Speed (mph)	29.6	30.6	29.4	30.7
95 <sup>th</sup> 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 85<sup>th</sup> 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)

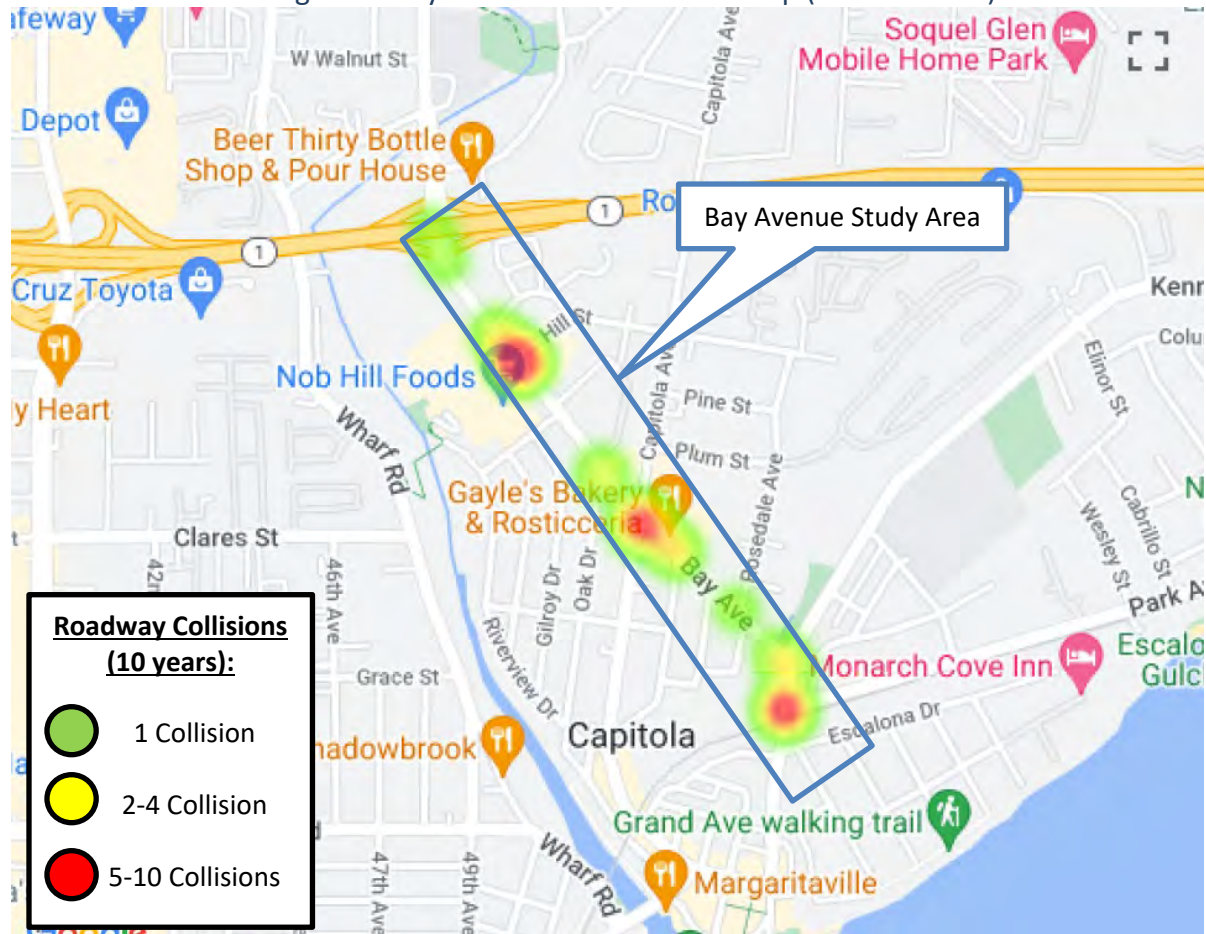
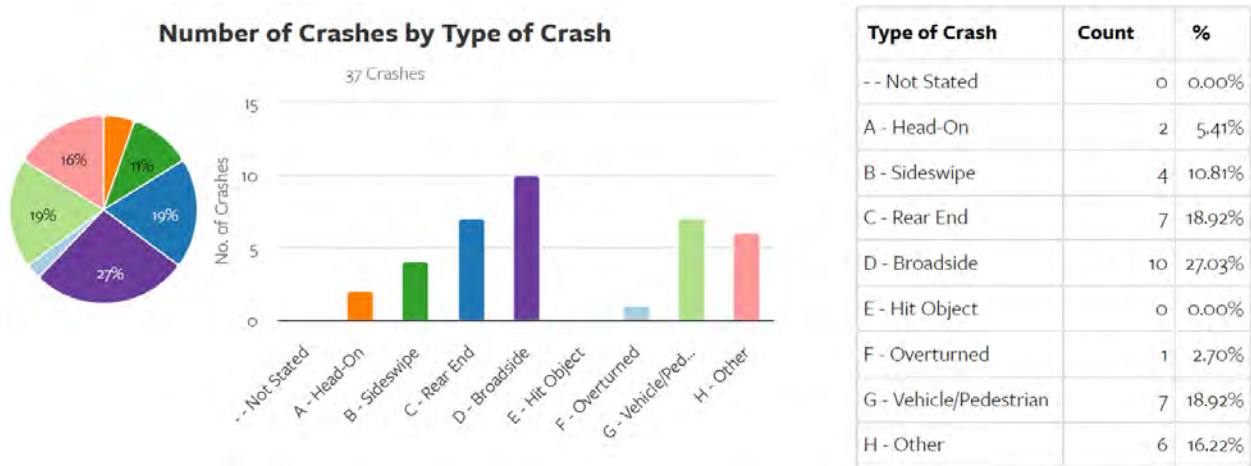


Figure 10: Bay Avenue Collision Types (2013 to 2024)



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
<b>Total</b>						<b>10</b>	<b>8</b>	<b>1</b>	<b>35</b>

Note: Bicycle Collision = Green, Pedestrian Collision = Yellow

### 3.5 Signal Warrant Analysis

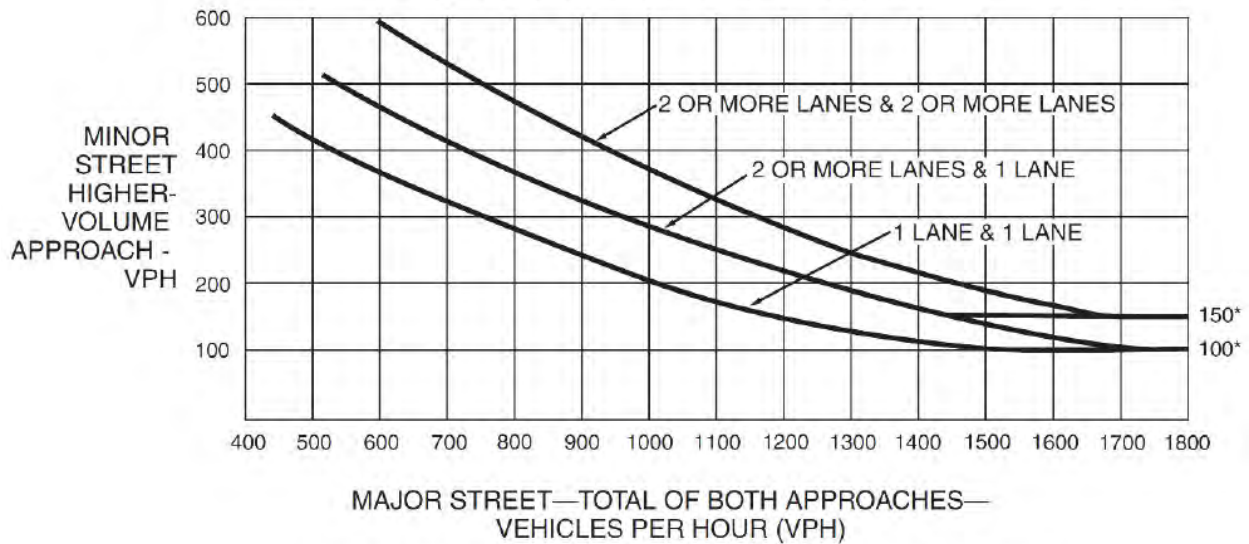
Chapter 4C of the California Manual on Uniform Traffic Control Devices (CAMUTCD) states that an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified 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

**Figure 4C-3. Warrant 3, Peak Hour**



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Table 6: CA MUTCD Signal Warrant #3 Assumptions – Year 2024 Existing Conditions

Major Street			Minor Street			Meets MUTCD Warrant 3 Criteria?
Street Name	# Lanes	Volume (Total of Both Approaches)	Street Name	# Lanes	Volume (Higher Volume Approach)	
<b>AM Peak</b>						
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
<b>PM Peak</b>						
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			Meets MUTCD Warrant 3 Criteria?
Street Name	# Lanes	Volume (Total of Both Approaches)	Street Name	# Lanes	Volume (Higher Volume Approach)	
<b>AM Peak</b>						
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
<b>PM Peak</b>						
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.

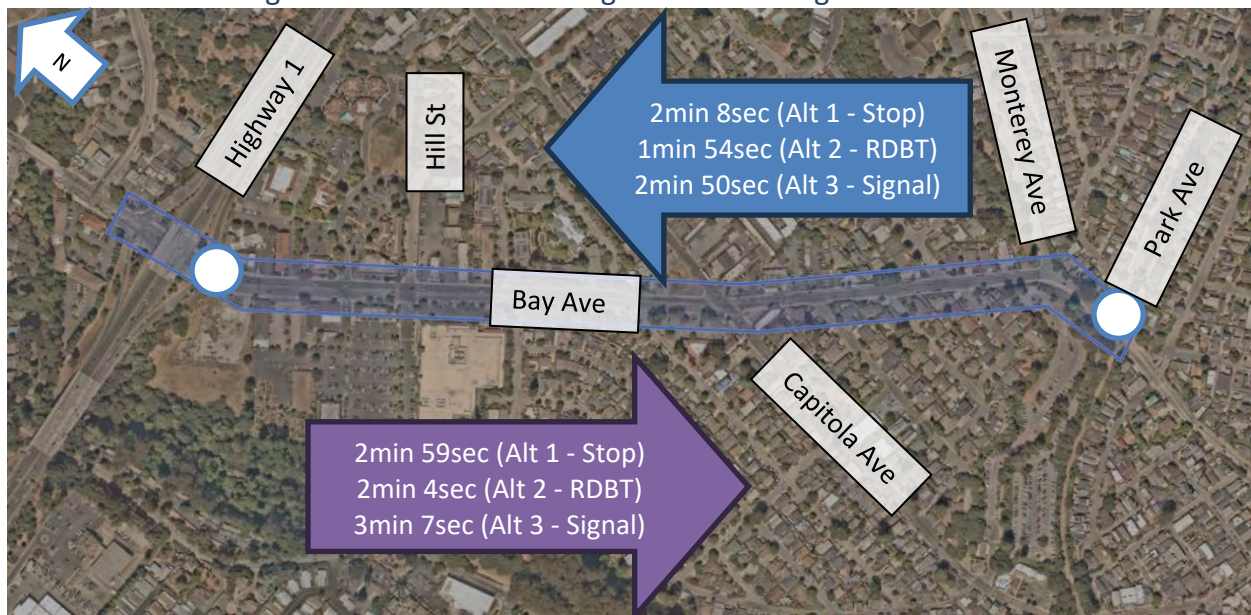
Overall, for the Existing and Cumulative scenarios, the Alternative 2 roundabout option would provide the most optimal intersection configuration to accommodate and minimize the anticipated peak hour vehicle queues along the Bay Avenue corridor.

### 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.

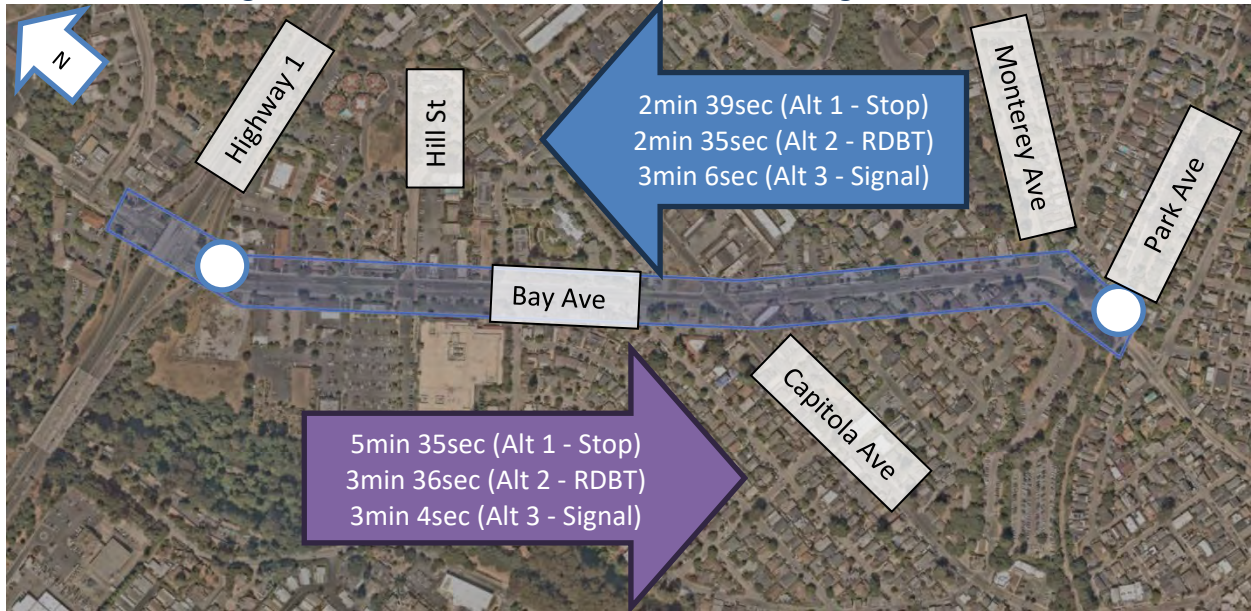


For both travel directions, the Alternative 2 Roundabout layout would generate fewer VHT and provide a faster average travel time compared to the Alternative 1 Stop and Alternative 3 signal layout. This is because roundabouts are yield controlled and allow for faster continuous movement of vehicles compared 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]
<b>NB - N. of Park Ave to S. of Highway 1 SB Ramps</b>		<b>0.62 Travel Distance (mi)</b>		
<b>AM Peak</b>	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
<b>PM Peak</b>	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
<b>VHT Estimation</b>	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]
<b>SB - S. of Highway 1 SB Ramps to N. of Park Ave</b>		<b>0.62 Travel Distance (mi)</b>		
<b>AM Peak</b>	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
<b>PM Peak</b>	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
<b>VHT Estimation</b>	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]
<b>NB - N. of Park Ave to S. of Highway 1 SB Ramps</b>		<b>0.62 Travel Distance (mi)</b>		
<b>AM Peak</b>	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
<b>PM Peak</b>	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
<b>VHT Estimation</b>	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]
<b>SB - S. of Highway 1 SB Ramps to N. of Park Ave</b>		<b>0.62 Travel Distance (mi)</b>		
<b>AM Peak</b>	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
<b>PM Peak</b>	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
<b>VHT Estimation</b>	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***

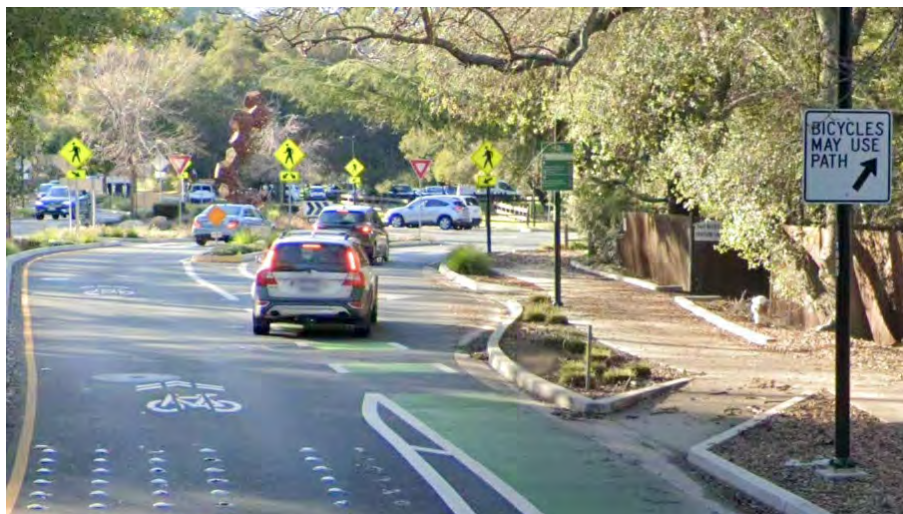
- Road Diet Transition: Converting Bay Avenue from a four-lane to a two-lane roadway reduces vehicle speeds and minimizes the number of lanes pedestrians and cyclists must cross.
- Enhanced Pedestrian Crossings: Installation of curb bulb-outs and enhanced pedestrian crossings shortens the crossing distance 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
<b>Operations</b>				
Vehicle Delay	<u>High</u> Stop control creates delay for intersection approaches	<u>High</u> Stop control creates delay for intersection approaches	<u>Low</u> Yield control reduces average delay	<u>Moderate</u> Signal control reduces average delay
Vehicle Travel Time	<u>Long</u> Stop control creates delay for intersection approaches	<u>Long</u> Stop control creates delay for intersection approaches	<u>Short</u> Yield control reduces average delay	<u>Moderate</u> Signal control reduces average delay
Vehicle Queue Length	<u>Long</u> Long queues and spillback into adjacent intersection	<u>Long</u> Long queues and spillback into adjacent intersection	<u>Moderate</u> Yield control generates average queues	<u>Moderate</u> Signal control generates average queues
Transit and Emergency Vehicle Access Improvement	<u>Poor</u> Slower average travel times and higher VHT	<u>Poor</u> Slower average travel times and higher VHT	<u>Moderate</u> Faster average travel times and lower VHT	<u>Moderate</u> Opportunity for emergency vehicle preemption

Criteria	Alternative 0 – No Build	Alternative 1 – Stop & Road Diet	Alternative 2 – Roundabout	Alternative 3 - Signal
Driver Adaptation Time	<u>Low</u> Existing conditions on corridor	<u>Low</u> Existing conditions on corridor	<u>High</u> New traffic control in City for users	<u>Moderate</u> Existing conditions on corridor
<b>Safety</b>				
Collision Severity Potential	<u>Moderate</u> Numerous conflict points with stop control at intersection	<u>Moderate</u> Numerous conflict points with stop control at intersection	<u>Low</u> Fewer conflict points and controlled lower speeds at intersection	<u>High</u> Higher vehicle speeds and numerous conflict points at intersection
Bicycle Access Improvement	<u>Poor</u> No Build scenario would not improve conditions	<u>Moderate</u> Buffered bike lanes and markings	<u>Good</u> Buffered bike lanes and markings. Shorter and protected crossings	<u>Moderate</u> Buffered bike lanes and markings. Designated crossing phases
Pedestrian Access Improvement	<u>Poor</u> No Build scenario would not improve conditions	<u>Moderate</u> Shorter crossings with traffic calming	<u>Good</u> Shorter and protected crossings	<u>Moderate</u> Designated crossing phases
<b>Economic</b>				
Capital Construction Cost	<u>Low</u> No Build scenario would not improve conditions	<u>Low</u> Updates to existing infrastructure	<u>High</u> New infrastructure and utility coordination	<u>High</u> New infrastructure and signal equipment
Right of Way Impact	<u>Low</u> No change to existing conditions	<u>Low</u> Updates to existing infrastructure	<u>High</u> Property impacts to accommodate design	<u>Moderate</u> New infrastructure and signal equipment
Operation & Maintenance Costs	<u>Low</u> No Build scenario would not improve conditions	<u>Low</u> Landscaping	<u>Moderate</u> Landscaping	<u>High</u> Signal equipment, electricity
Greenhouse Gas Emissions	<u>Moderate</u> Vehicle idling with stop traffic control	<u>Moderate</u> Vehicle idling with stop traffic control	<u>Low</u> Less vehicle idling with yield traffic control	<u>Moderate</u> Higher speeds & vehicle idling with signal traffic control
Aesthetics & Community Character Improvement	<u>Poor</u> No Build scenario would not improve conditions	<u>Moderate</u> Opportunities for art and landscaping with traffic calming	<u>Good</u> Opportunities for art and landscaping at intersection	<u>Moderate</u> Requires signal poles and cabinets
Grant Funding Opportunity	<u>Poor</u> No Build scenario would not improve conditions	<u>Moderate</u> Multimodal safety improvement	<u>Good</u> Multimodal safety improvement, traffic congestion reduction, environmental impact	<u>Moderate</u> Traffic congestion reduction

Criteria	Alternative 0 – No Build	Alternative 1 – Stop & Road Diet	Alternative 2 – Roundabout	Alternative 3 - Signal
General Benefits	<ul style="list-style-type: none"> <li>Lower initial capital cost and ongoing maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Improved driver certainty</li> <li>Lower initial capital cost</li> <li>Improved bike &amp; ped safety</li> </ul>	<ul style="list-style-type: none"> <li>Reduction collision severity</li> <li>Improved bike &amp; ped safety</li> <li>Improved operations</li> <li>Reduced GHG emissions</li> </ul>	<ul style="list-style-type: none"> <li>Improved operations &amp; capacity</li> <li>Provides designated crossing times and driver certainty</li> </ul>
General Challenges	<ul style="list-style-type: none"> <li>Decreased operations</li> <li>Increased queues</li> </ul>	<ul style="list-style-type: none"> <li>Decreased operations</li> <li>Increased queues</li> </ul>	<ul style="list-style-type: none"> <li>High initial capital cost and potential ROW impact</li> <li>Driver adaptation to new traffic operations</li> </ul>	<ul style="list-style-type: none"> <li>High capital and maintenance costs</li> <li>Increased queues and collision severity potential</li> </ul>

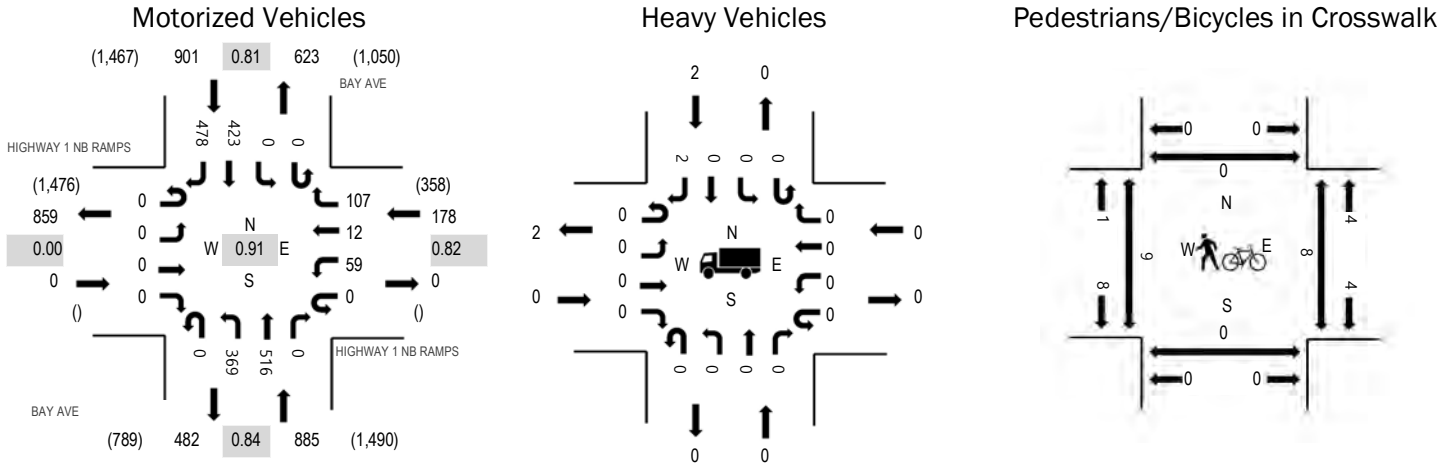
**6. Appendix**

- 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

**Peak Hour**



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

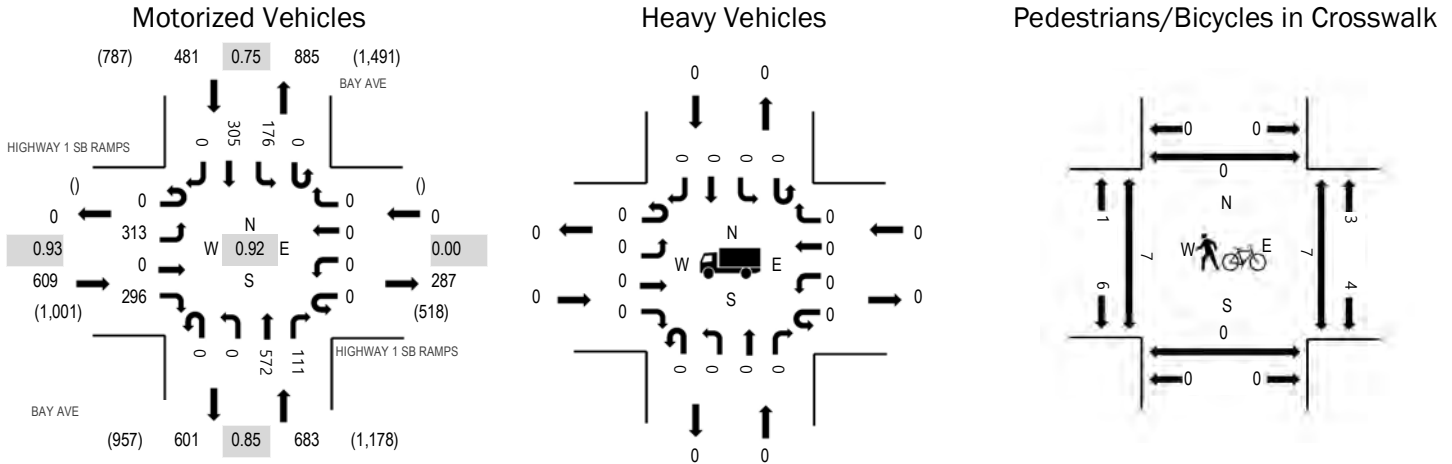
**Traffic Counts - Motorized Vehicles**

Interval Start Time	HIGHWAY 1 NB RAMPS Eastbound				HIGHWAY 1 NB 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	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

**Peak Hour**



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

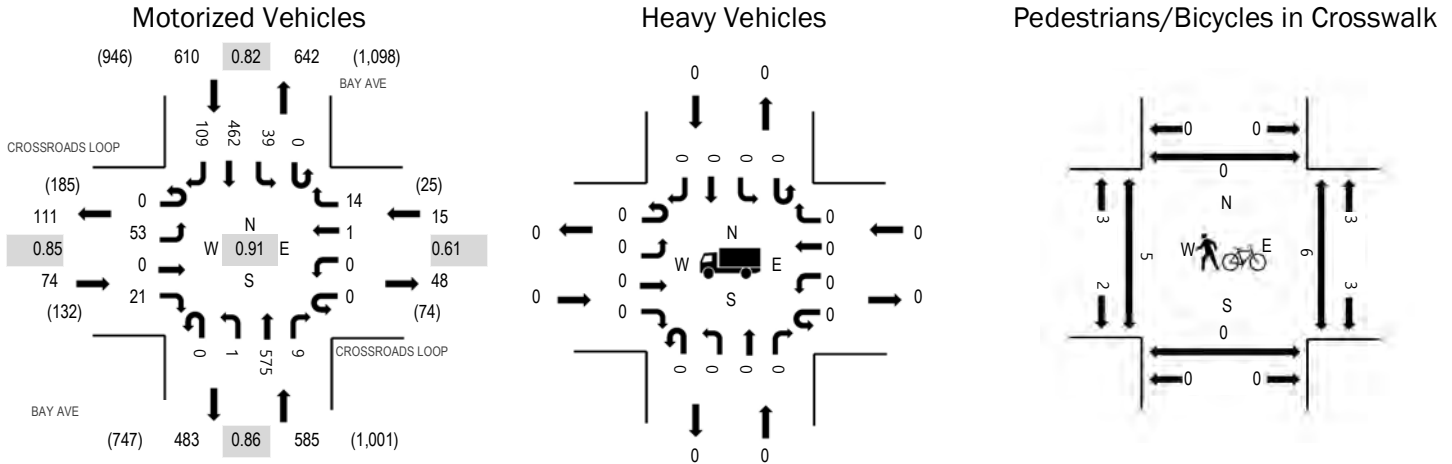
**Traffic Counts - Motorized Vehicles**

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
<b>8:00 AM</b>	<b>0</b>	<b>96</b>	<b>0</b>	<b>68</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>167</b>	<b>35</b>	<b>0</b>	<b>41</b>	<b>75</b>	<b>0</b>	<b>482</b>	<b>1,773</b>
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
<b>8:00 AM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8:00 AM</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>8:00 AM</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>5</b>
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	1	1	8:30 AM	0	0	3	0	3
8:45 AM	0	0	0	0	0	8:45 AM	0	1	0	1	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

**Peak Hour**



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

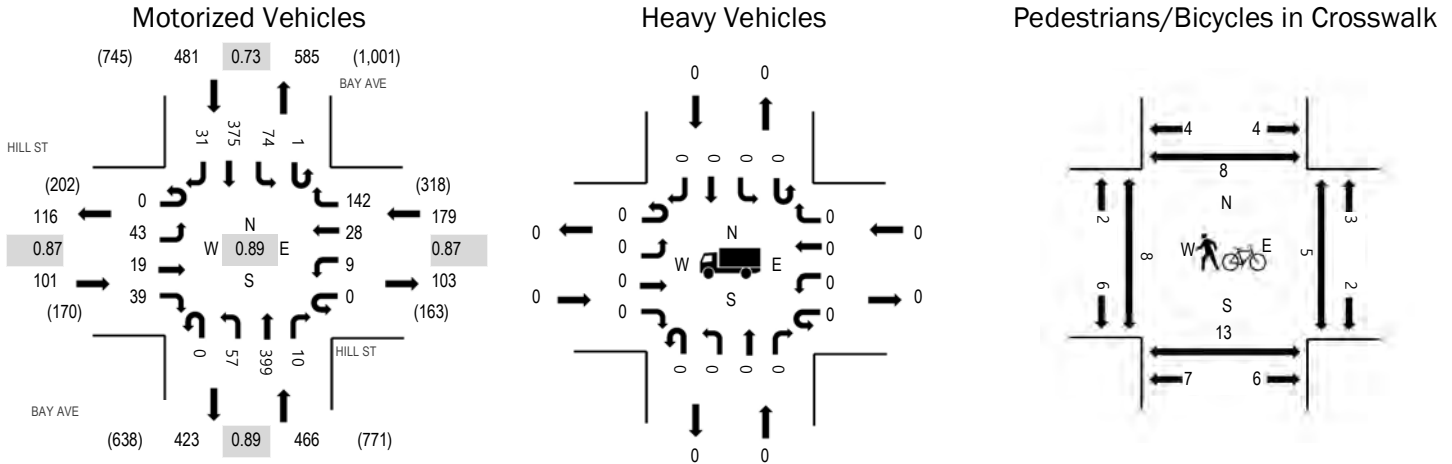
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

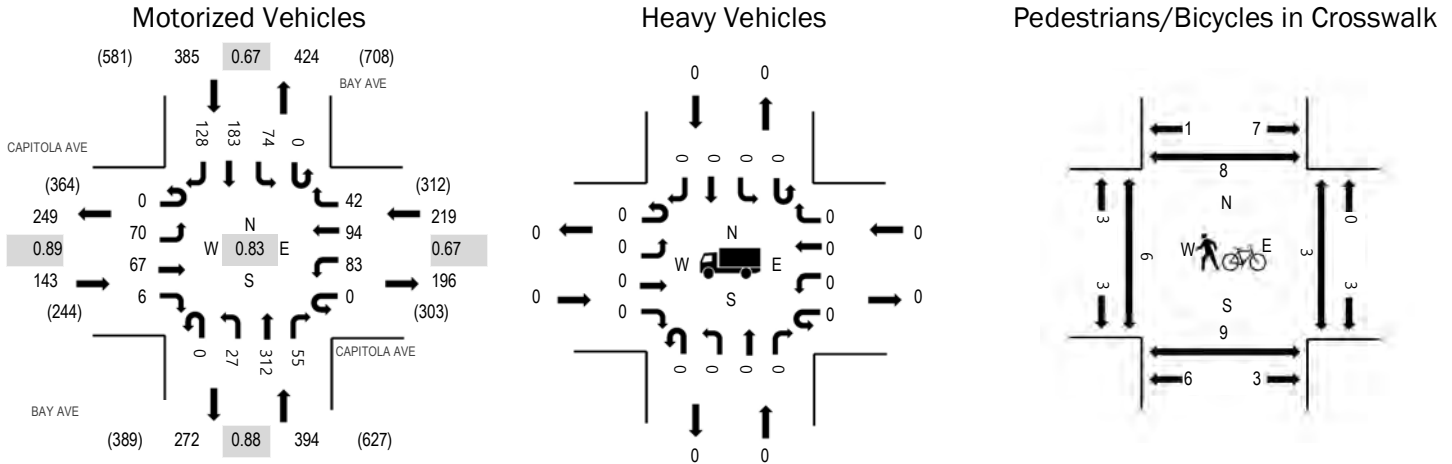
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

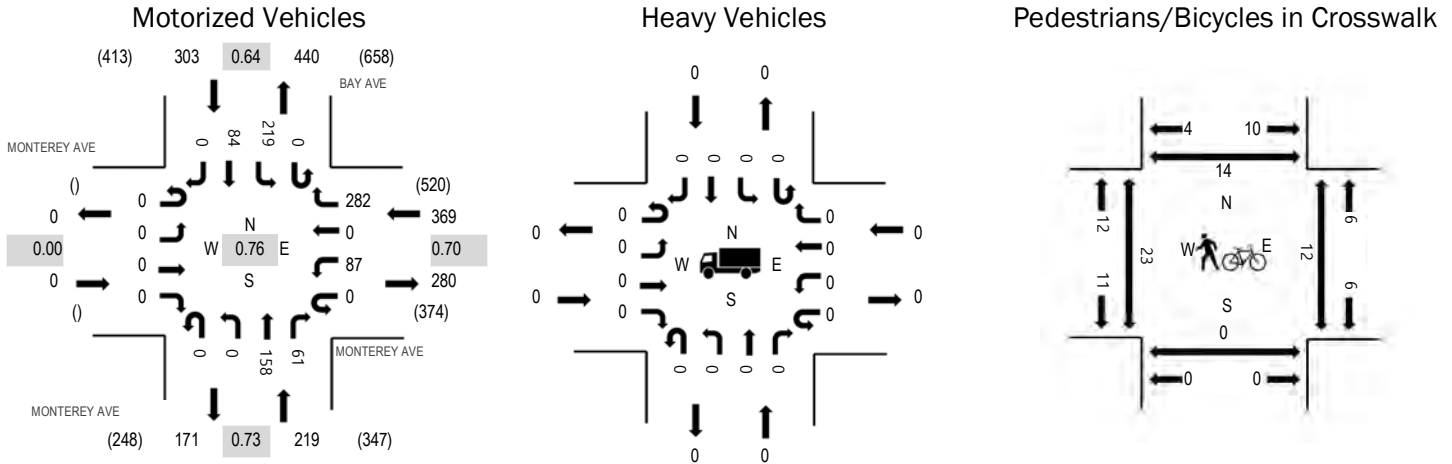
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

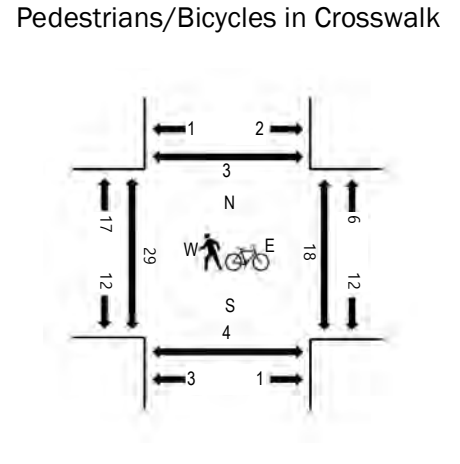
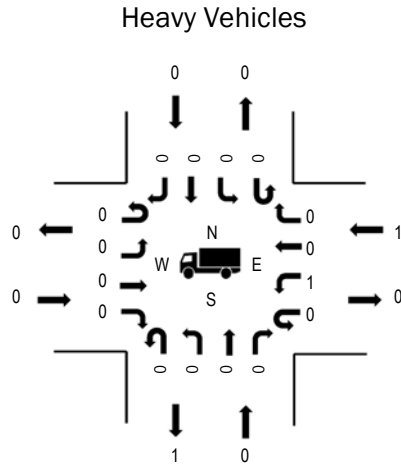
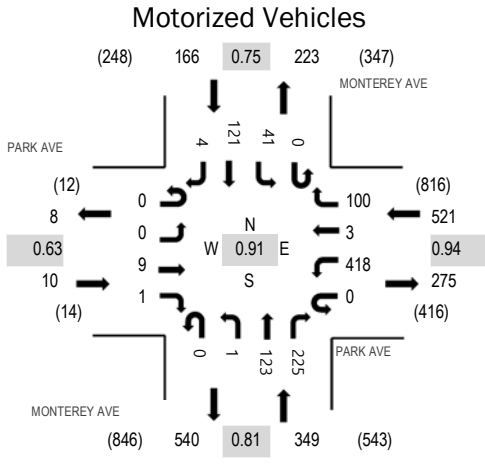
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

**Traffic Counts - Motorized Vehicles**

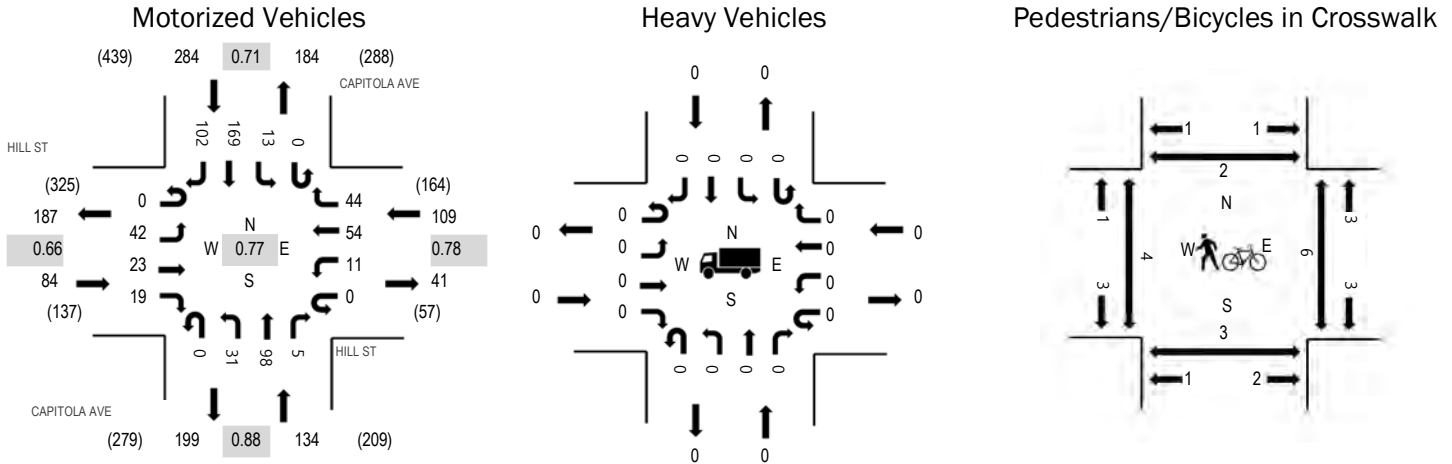
Interval Start Time	PARK AVE Eastbound				PARK AVE Westbound				MONTEREY AVE Northbound				MONTEREY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	35	0	8	0	0	13	10	0	0	10	0	76	575
7:15 AM	0	1	0	0	0	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



**Peak Hour**



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

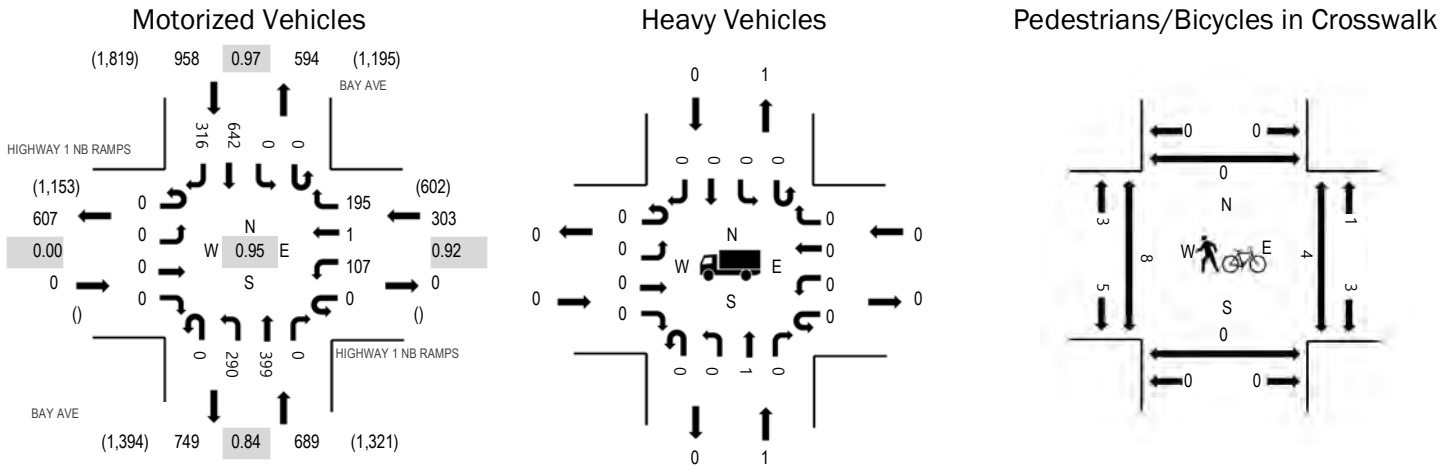
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

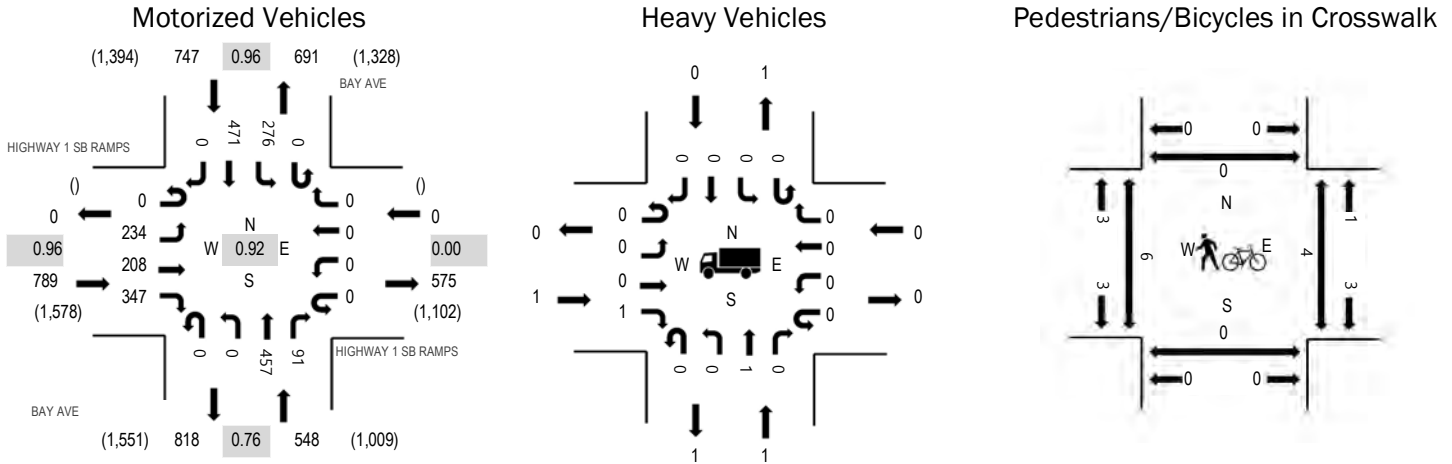
**Traffic Counts - Motorized Vehicles**

Interval Start Time	HIGHWAY 1 NB RAMPS Eastbound				HIGHWAY 1 NB RAMPS Westbound				BAY AVE Northbound				BAY AVE Southbound				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	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

**Peak Hour**



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

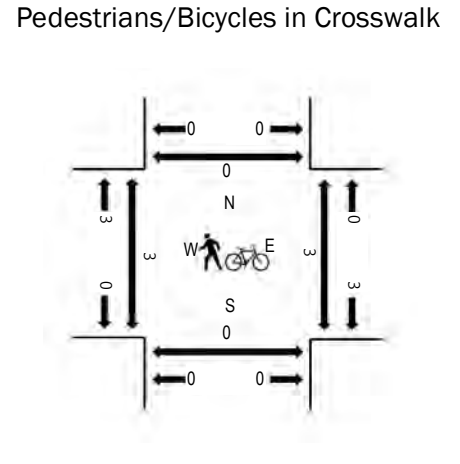
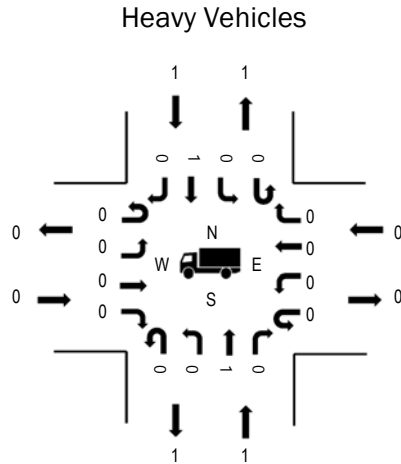
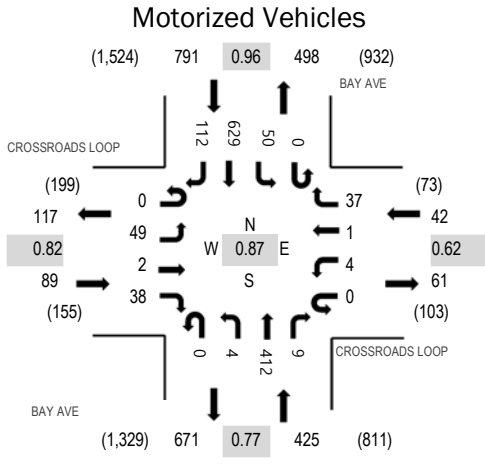
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

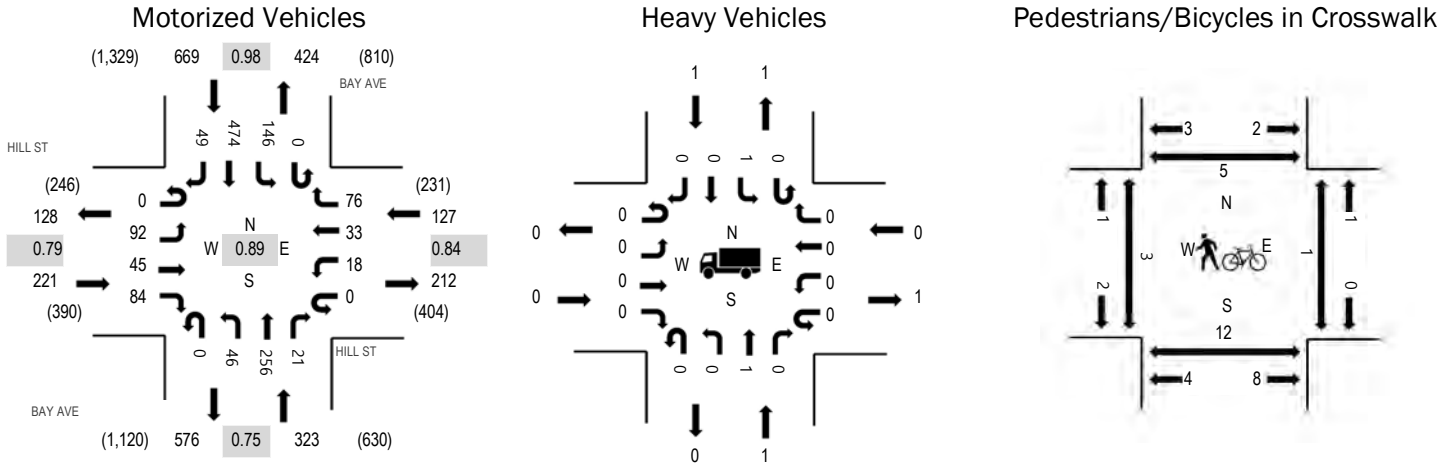
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

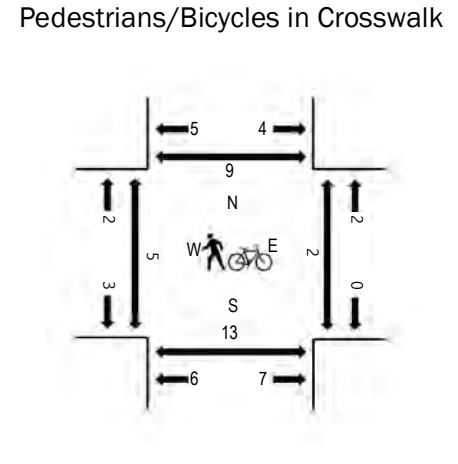
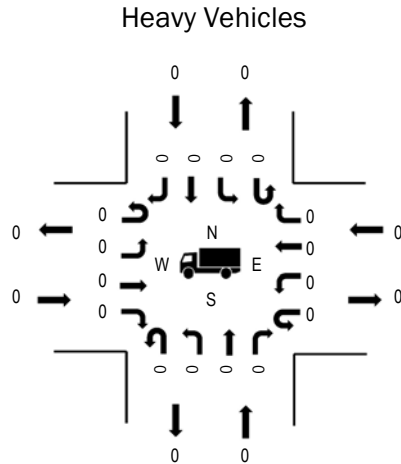
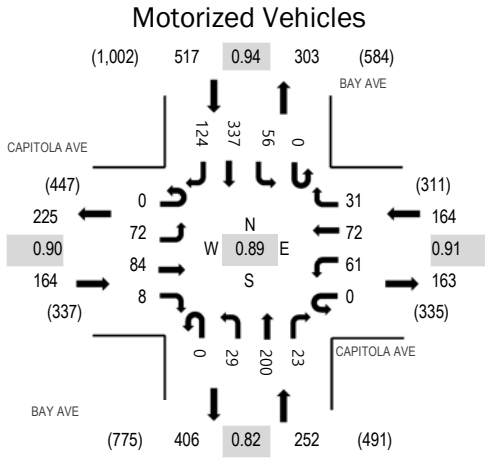
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

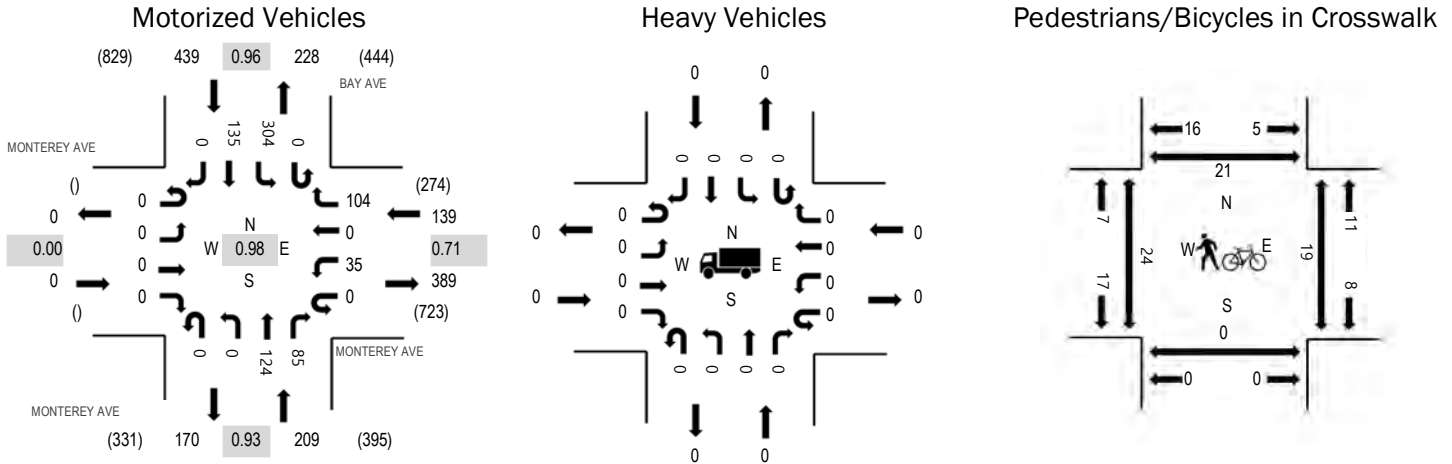
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

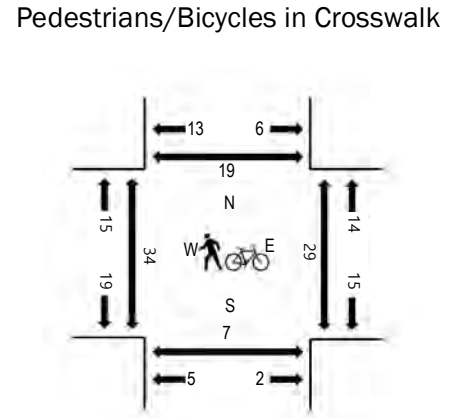
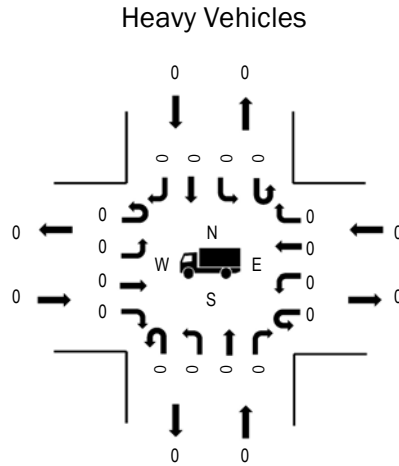
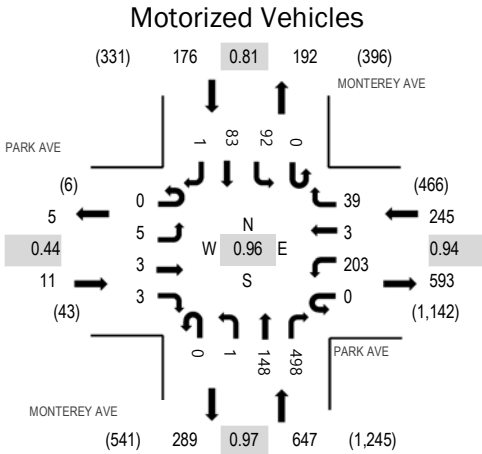
**Traffic Counts - Motorized Vehicles**

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

**Peak Hour**



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

**Traffic Counts - Motorized Vehicles**

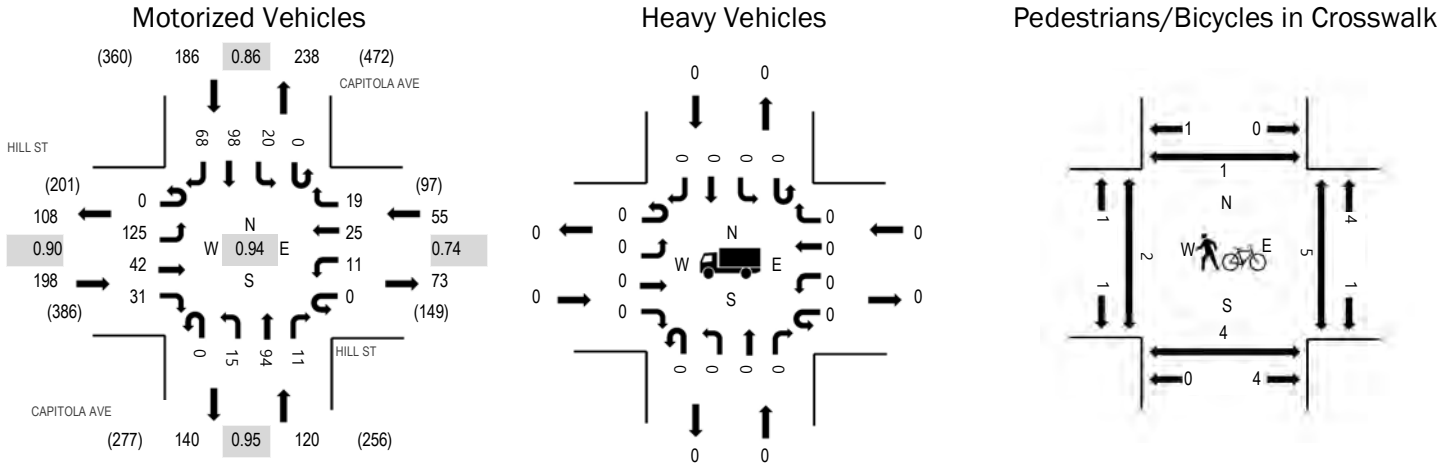
Interval Start Time	PARK AVE Eastbound				PARK AVE Westbound				MONTEREY AVE Northbound				MONTEREY AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	4	1	0	0	51	0	6	0	0	34	128	0	22	31	1	278	1,079
4:15 PM	0	0	0	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



**Peak Hour**



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

**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	

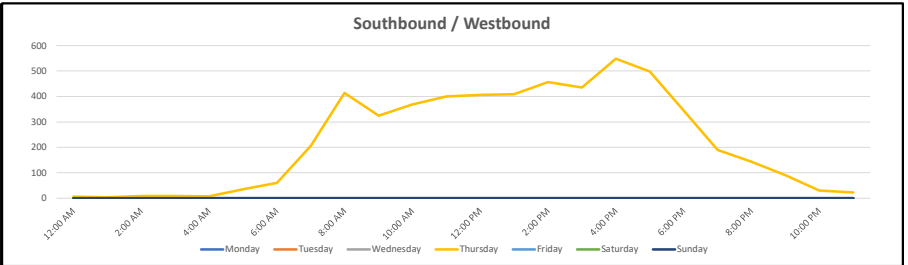
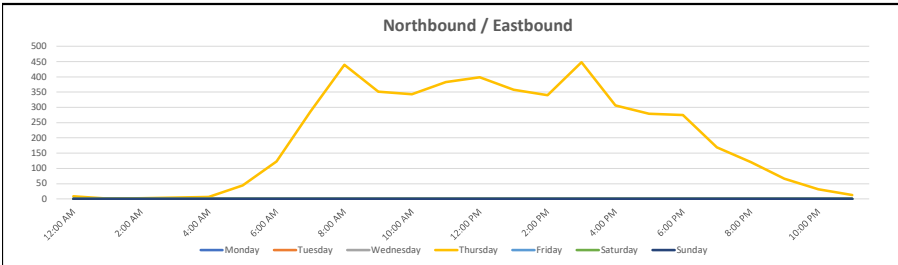
**Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles in Crosswalk**

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 3/14/24			Friday 3/15/24			Saturday 3/16/24			Sunday 3/17/24			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+
<b>Northbound</b>	4801	22	52	183	1617	2314	544	60	6	3	0	0	0	0	0	0	0	0	0	0	0
<i>Percent</i>	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%
<b>Southbound</b>	5415	51	59	210	1446	2657	878	103	10	1	0	0	0	0	0	0	0	0	0	0	0
<i>Percent</i>	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%
<b>Total</b>	10216	73	111	393	3063	4971	1422	163	16	4	0	0	0	0	0	0	0	0	0	0	0
<i>Percent</i>	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

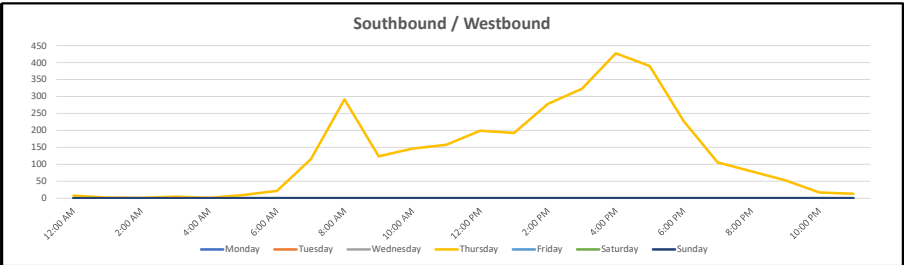
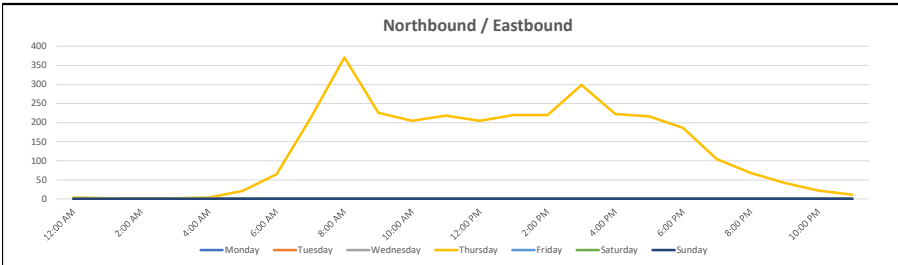
**Vehicle Speed Report (Southbound - 03/07/2024)**

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 3/14/24			Friday 3/15/24			Saturday 3/16/24			Sunday 3/17/24			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+
<b>Northbound</b>	3145	66	39	179	1108	1372	345	30	3	3	0	0	0	0	0	0	0	0	0	0	0
<i>Percent</i>	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%
<b>Southbound</b>	3182	39	35	100	759	1630	552	56	8	3	0	0	0	0	0	0	0	0	0	0	0
<i>Percent</i>	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%
<b>Total</b>	6327	105	74	279	1867	3002	897	86	11	6	0	0	0	0	0	0	0	0	0	0	0
<i>Percent</i>	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

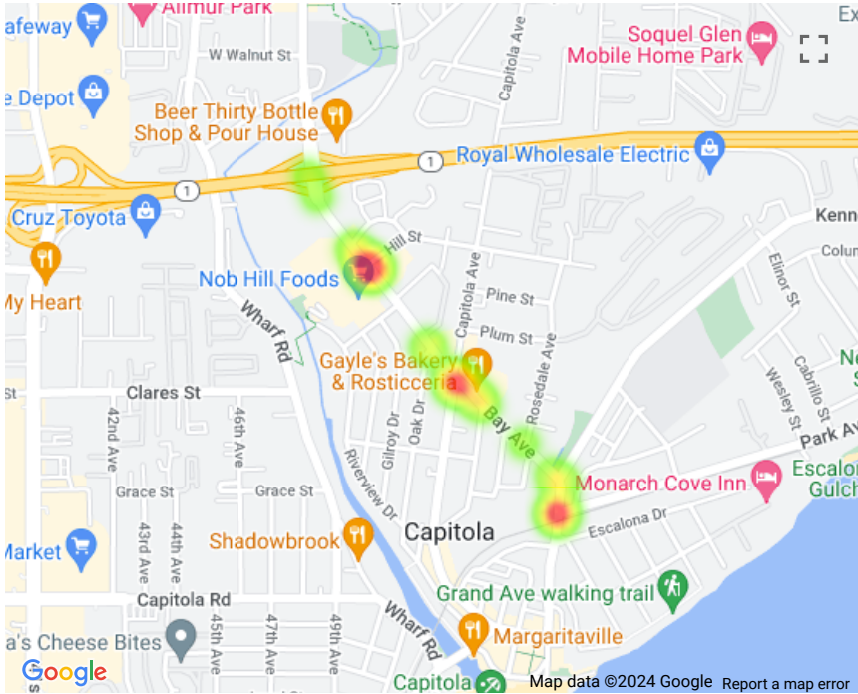
This report was created with the help of The Transportation Injury Mapping System (TIMS). TIMS has been developed by UC Berkeley SafeTREC to provide quick, easy and free access to California crash data, the Statewide Integrated Traffic Records System (SWITRS), that has been geo-coded by SafeTREC to make 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%)

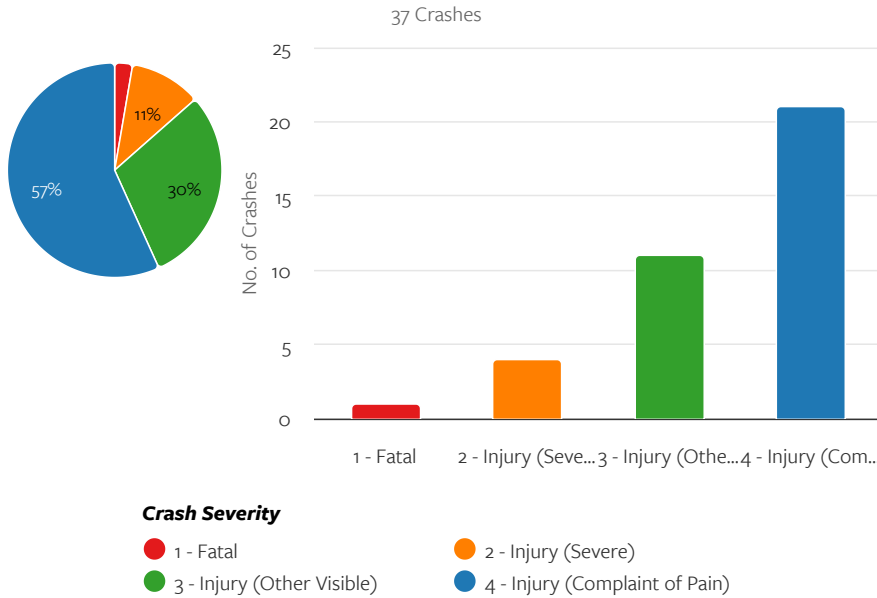


37 of 37 (100%) Crashes are geocoded and mapped.

Crash Summary

By Crash Severity

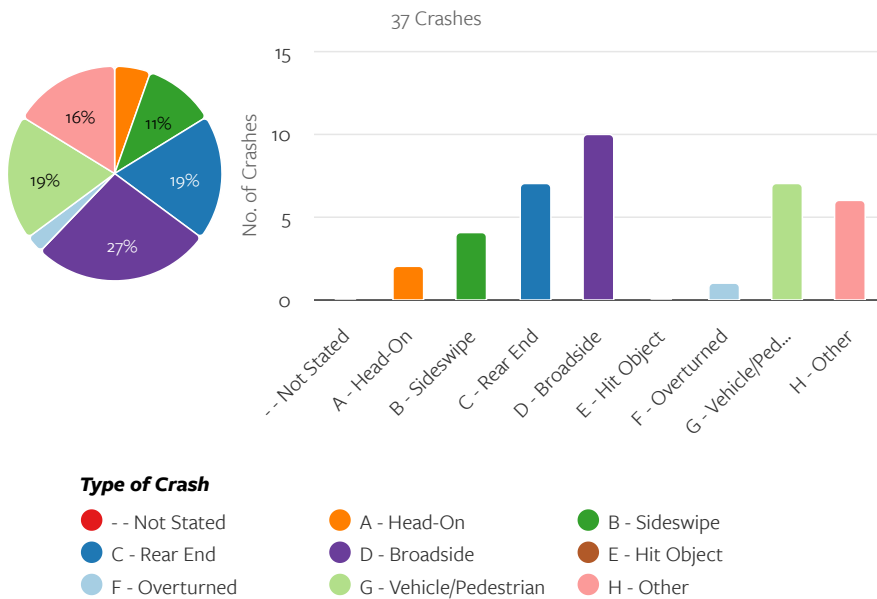
Number of Crashes by Crash Severity



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

Number of Crashes by Type of Crash

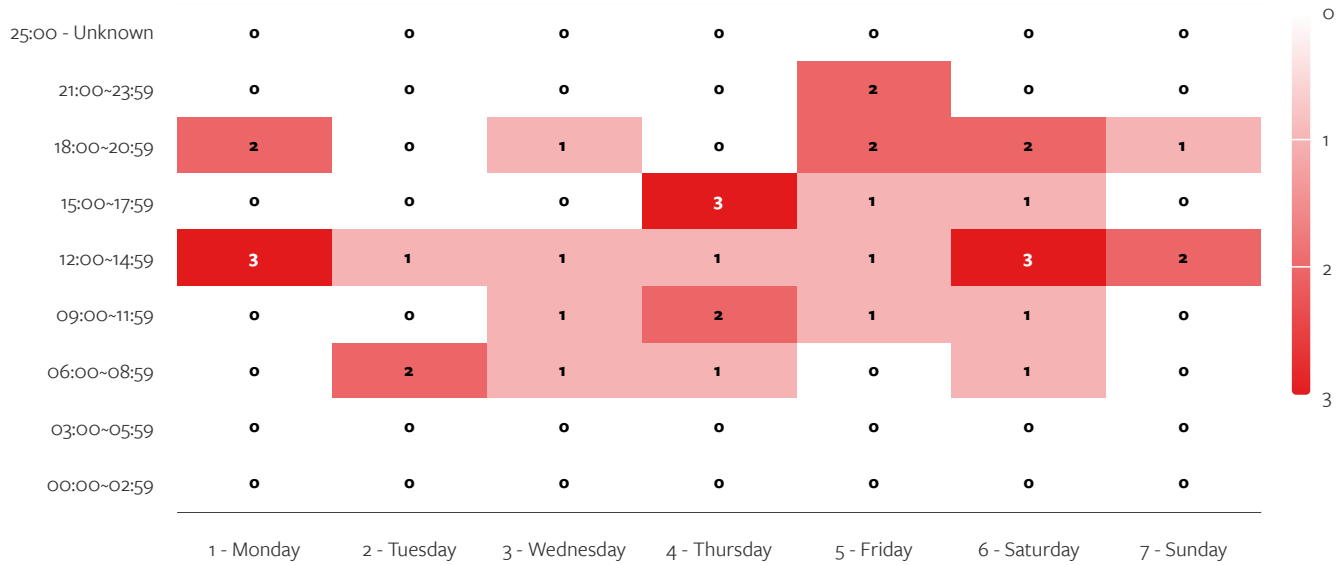


Type of Crash	Count	%
-- Not Stated	0	0.00%
A - Head-On	2	5.41%
B - Sideswipe	4	10.81%
C - Rear End	7	18.92%
D - Broadside	10	27.03%
E - Hit Object	0	0.00%
F - Overturned	1	2.70%
G - Vehicle/Pedestrian	7	18.92%
H - Other	6	16.22%

By Day of Week and Time

**Number of Crashes per Day of Week per Time**

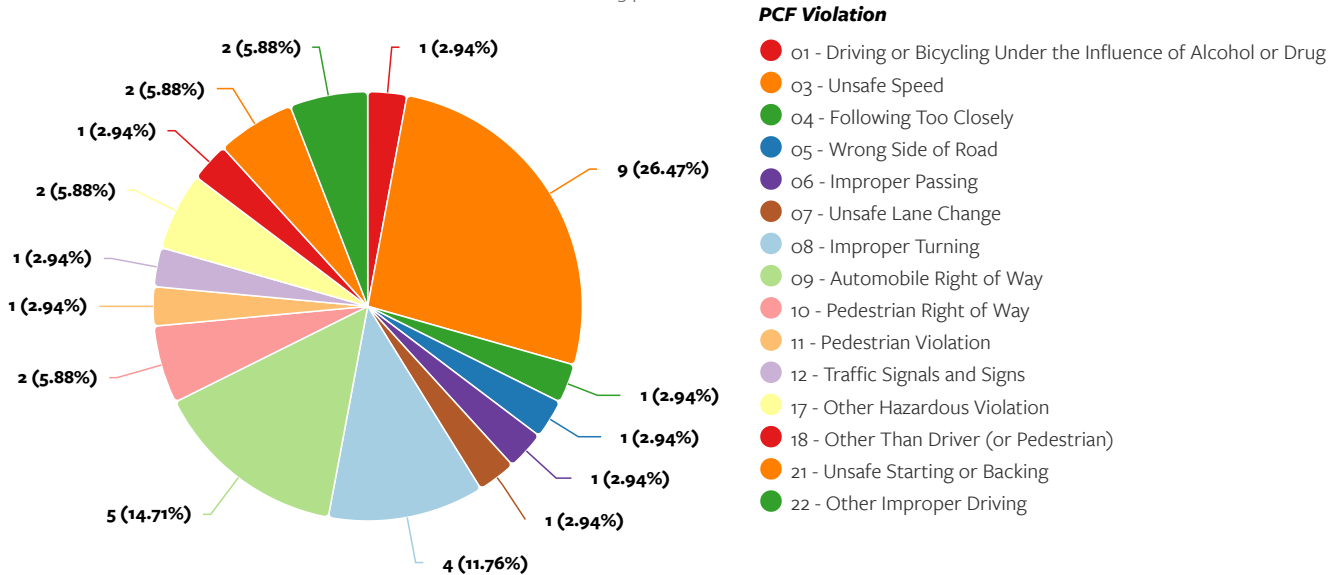
37 Crashes



By Primary Crash Factor (PCF) Violation

**Number of Crashes by PCF Violation**

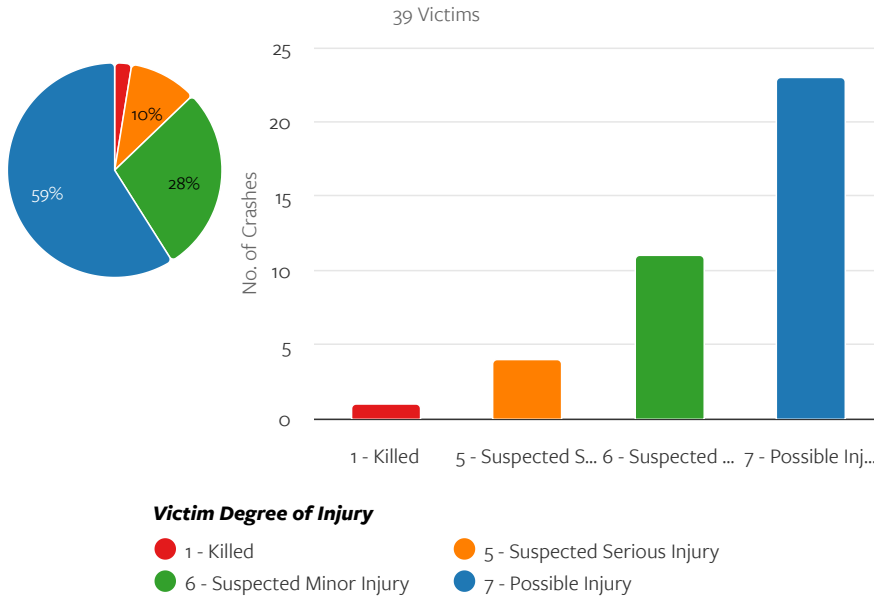
34 Crashes



Victim Summary

By Victim Degree of Injury

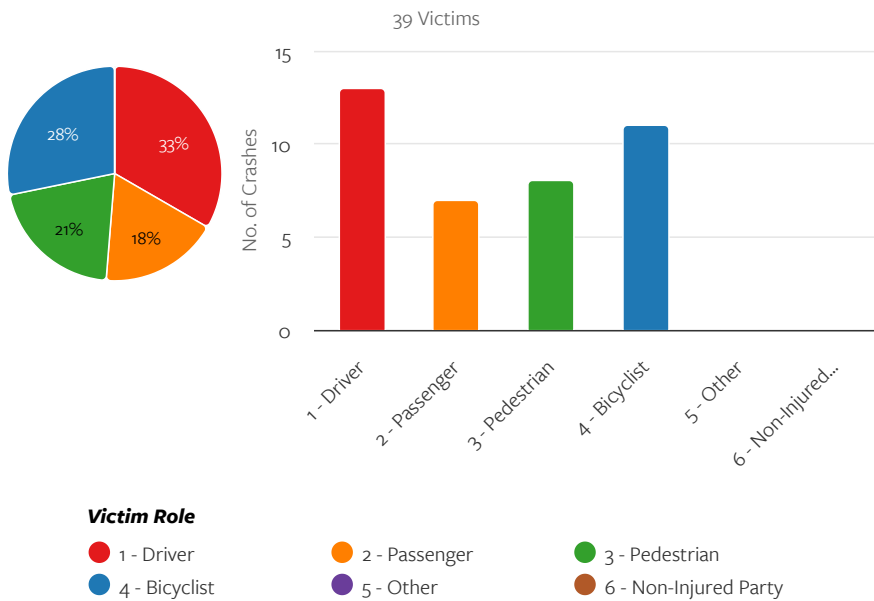
Number of Victims by Victim Degree of Injury



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

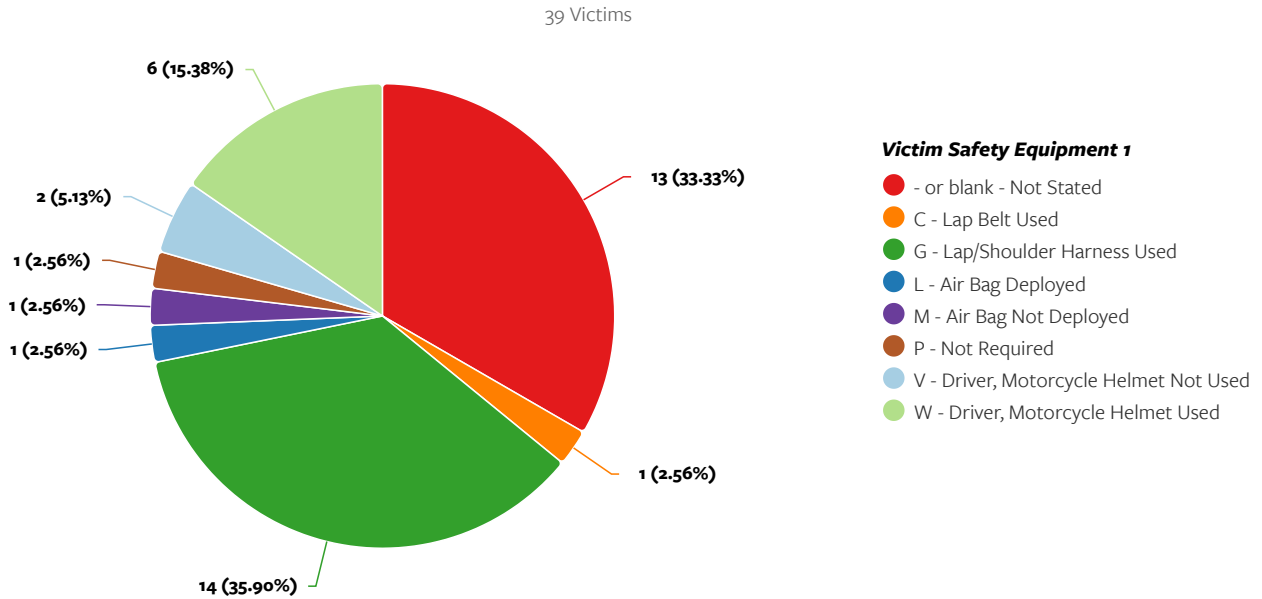
Number of Victims by Victim Role



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%

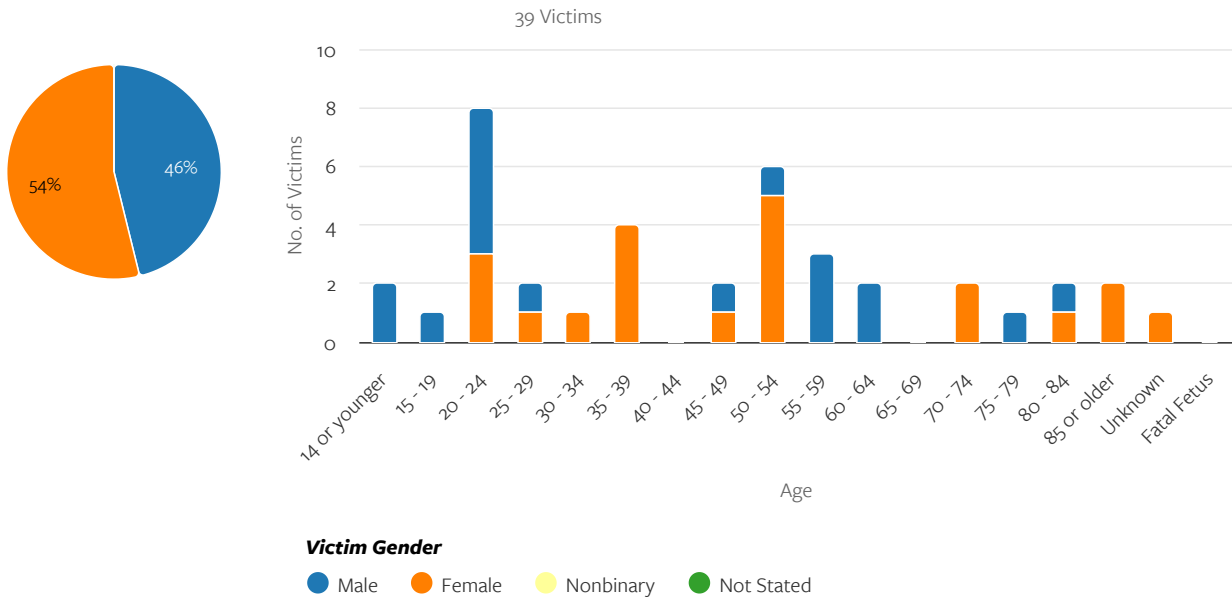
By Victim Safety Equipment 1

Number of Victims by Victim Safety Equipment 1



By Victim Gender and Age

Number of Victims by Victim Gender and Age

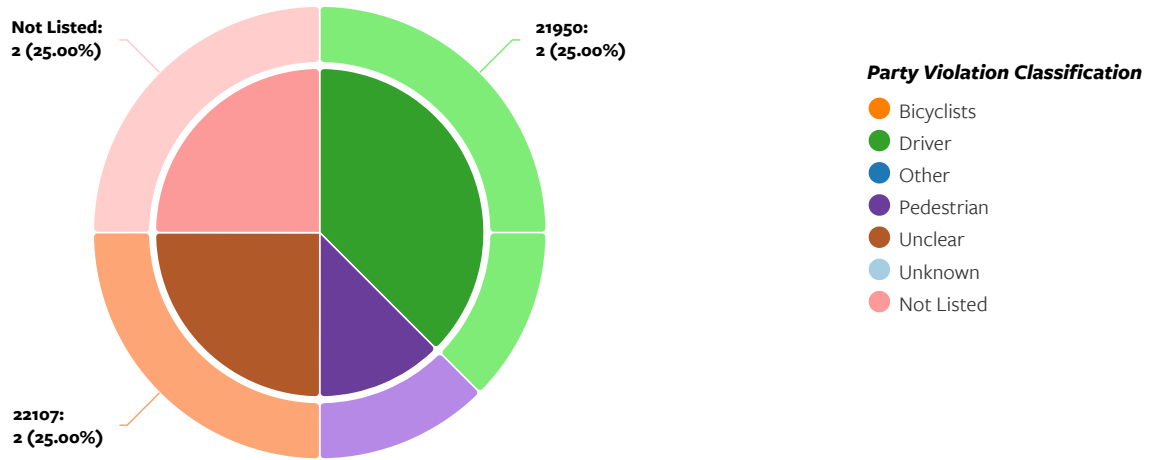


**Ped Crash Summary**

By Type of Violation

**Number of Crashes by Type of Violation**

8 Crashes

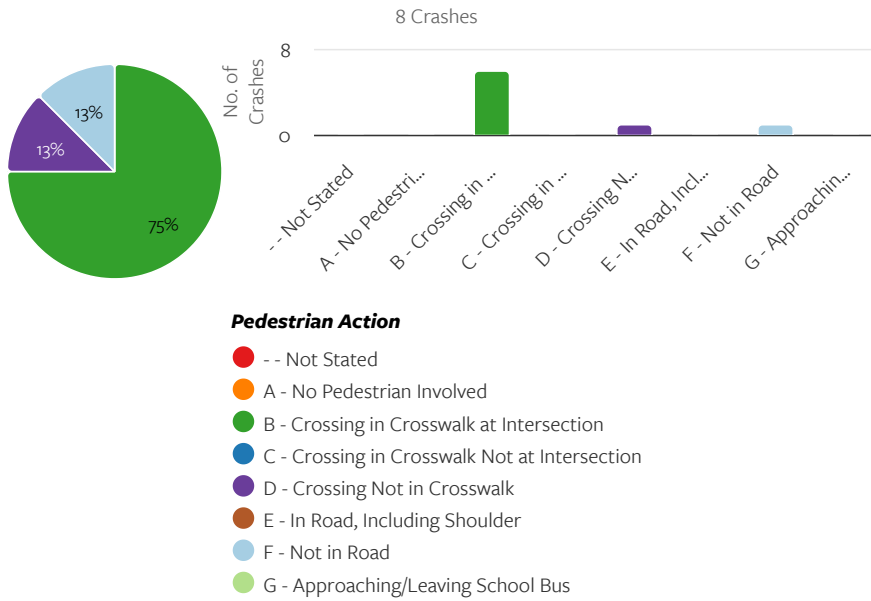


Party Violation Classification	Type of Violation	Description	Count	%
Driver	21950	Driver failure to yield right-of-way to pedestrians at a marked or unmarked crosswalk	2	25.00%
Unclear	22107	Unsafe turning or moving right or left on a roadway Turning without signaling	2	25.00%
Not Listed	Not Listed	Violation 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

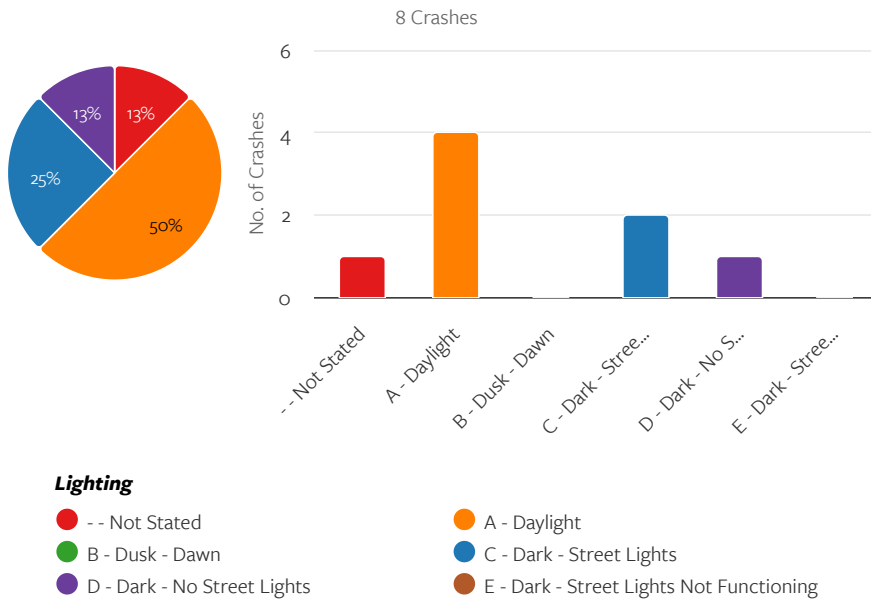
Number of Crashes by Pedestrian Action



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

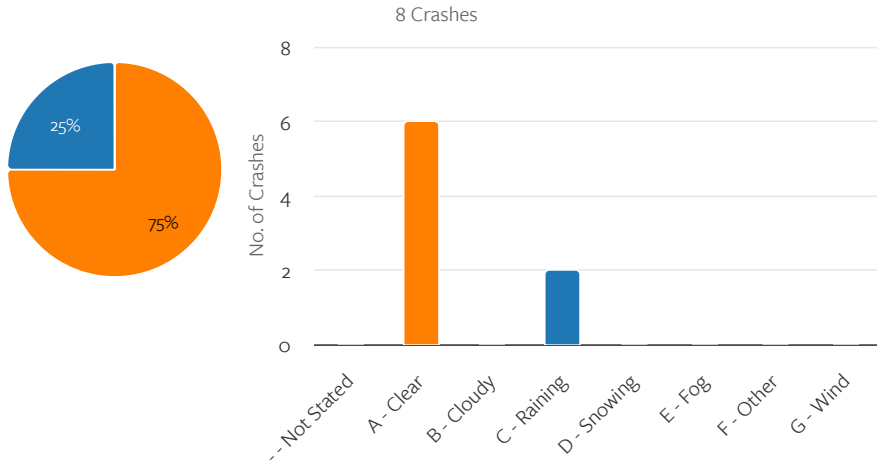
Number of Crashes by Lighting



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

**Number of Crashes 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%

**Weather**

- -- Not Stated
- A - Clear
- B - Cloudy
- C - Raining
- D - Snowing
- E - Fog
- F - Other
- G - Wind

# 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

# Crash Details for: Case ID 5769463

## Crash Information

<b>County</b>	Santa Cruz		
<b>City</b>	Capitola		
<b>Date &amp; Time (M/D/Y)</b>	07/30/2012 12:40		
<b>Location (Intersection)</b>	Capitola Av & Bay Av		
<b>Dist. &amp; Dir. from Intersection</b>	80.00 ft West		
<b>State Highway</b>	No		
<b>Geocoded Location</b>	36.9784681, -121.9531876		
<b>Type of Crash</b>	C - Rear End		
<b>Motor Vehicle Involved With</b>	C - Other Motor Vehicle		
<b>Crash Severity</b>	4 - Injury (Complaint of Pain)		
<b>PCF Violation Category</b>	01 - Driving or Bicycling Under the Influence of Alcohol or Drug		
<b>Weather</b>	A - Clear		
<b>Alcohol Involved</b>	Yes		
<b>Pedestrian Crash</b>	No	<b>Bicycle Crash</b>	No
<b>Motorcycle Crash</b>	No	<b>Truck Crash</b>	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

# Crash Details for: Case ID 5926906

## Crash Information

<b>County</b>	Santa Cruz		
<b>City</b>	Capitola		
<b>Date &amp; Time (M/D/Y)</b>	02/02/2013 14:01		
<b>Location (Intersection)</b>	Rt 1 & Bay Av		
<b>Dist. &amp; Dir. from Intersection</b>	200.00 ft North		
<b>State Highway Info</b>	Route Number 1 Side of Hwy S Postmile 13.230 Location Type H - Highway		
<b>Geocoded Location</b>	36.983175, -121.957233		
<b>Type of Crash</b>	C - Rear End		
<b>Motor Vehicle Involved With</b>	C - Other Motor Vehicle		
<b>Crash Severity</b>	4 - Injury (Complaint of Pain)		
<b>PCF Violation Category</b>	04 - Following Too Closely		
<b>Weather</b>	B - Cloudy		
<b>Alcohol Involved</b>	No		
<b>Pedestrian Crash</b>	No	<b>Bicycle Crash</b>	No
<b>Motorcycle Crash</b>	No	<b>Truck Crash</b>	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



# 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

# 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

# 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

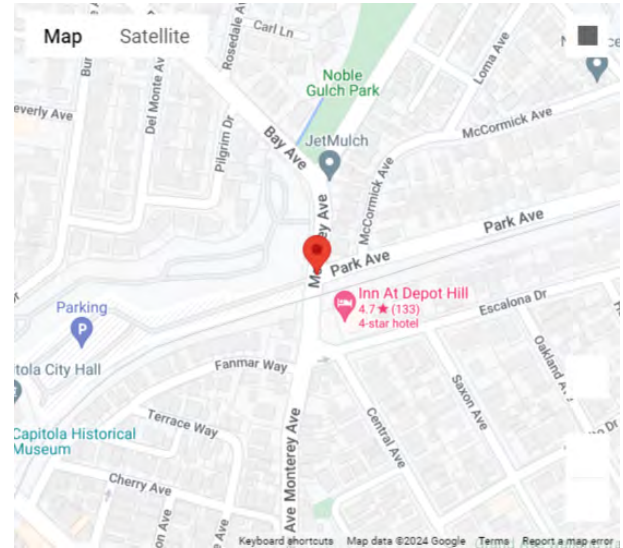


# Crash Details for: Case ID 7075959

## 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

# 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

# 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



# Crash Details for: Case ID 8593314

## Crash Information

<b>County</b>	Santa Cruz		
<b>City</b>	Capitola		
<b>Date &amp; Time (M/D/Y)</b>	02/13/2018 07:50		
<b>Location (Intersection)</b>	Bay Av & Hill St		
<b>Dist. &amp; Dir. from Intersection</b>	203.00 ft North		
<b>State Highway</b>	No		
<b>Geocoded Location</b>	36.9815369, -121.9559402		
<b>Type of Crash</b>	D - Broadside		
<b>Motor Vehicle Involved With</b>	C - Other Motor Vehicle		
<b>Crash Severity</b>	4 - Injury (Complaint of Pain)		
<b>PCF Violation Category</b>	09 - Automobile Right of Way		
<b>Weather</b>	A - Clear		
<b>Alcohol Involved</b>	No		
<b>Pedestrian Crash</b>	No	<b>Bicycle Crash</b>	No
<b>Motorcycle Crash</b>	No	<b>Truck Crash</b>	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

# 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

# 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



# 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

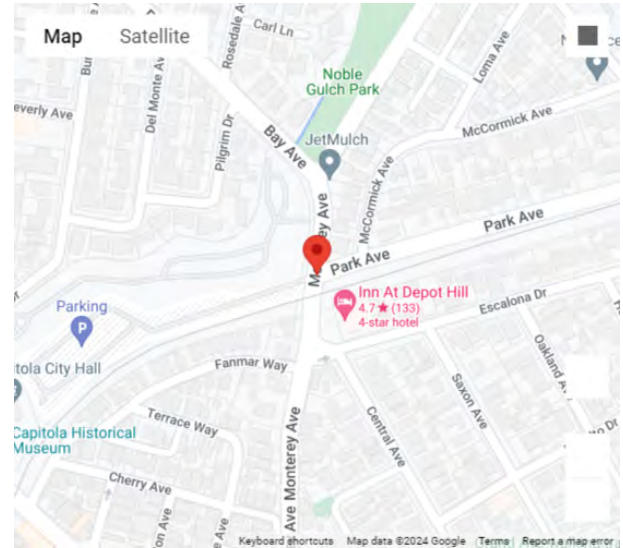
Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	F - Female	52	7 - Possible Injury

# 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



# 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

# 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

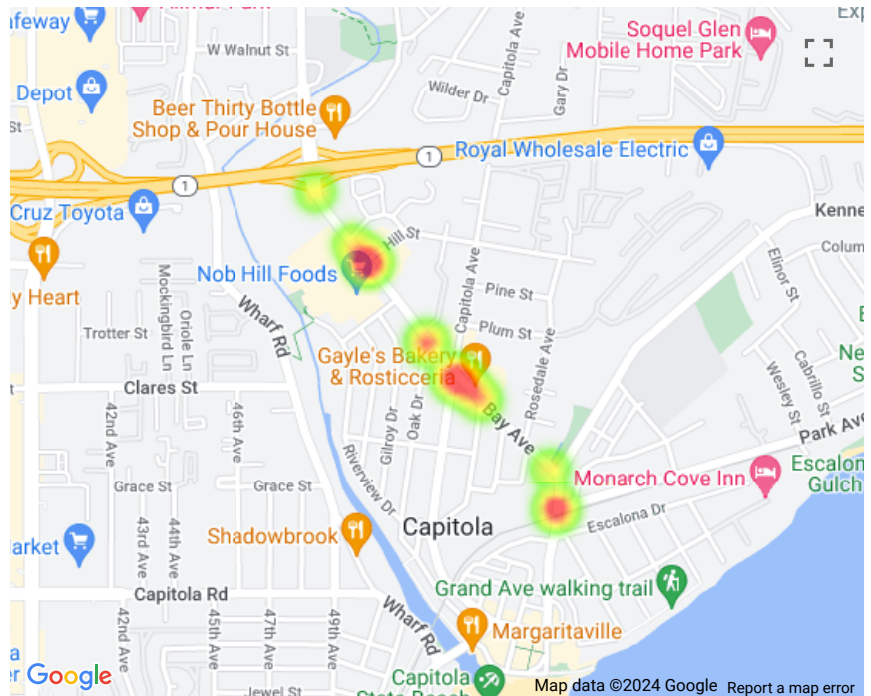
This report was created with the help of The Transportation Injury Mapping System (TIMS). TIMS has been developed by UC Berkeley SafeTREC to provide quick, easy and free access to California crash data, the Statewide Integrated Traffic Records System (SWITRS), that has been geo-coded by SafeTREC to make 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

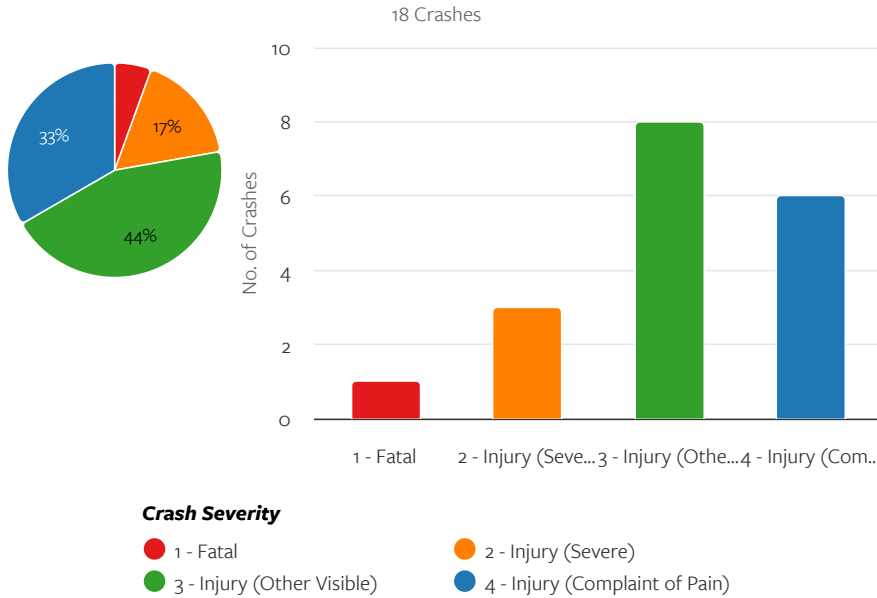


18 of 18 (100%) Crashes are geocoded and mapped.

### Crash Summary

By Crash Severity

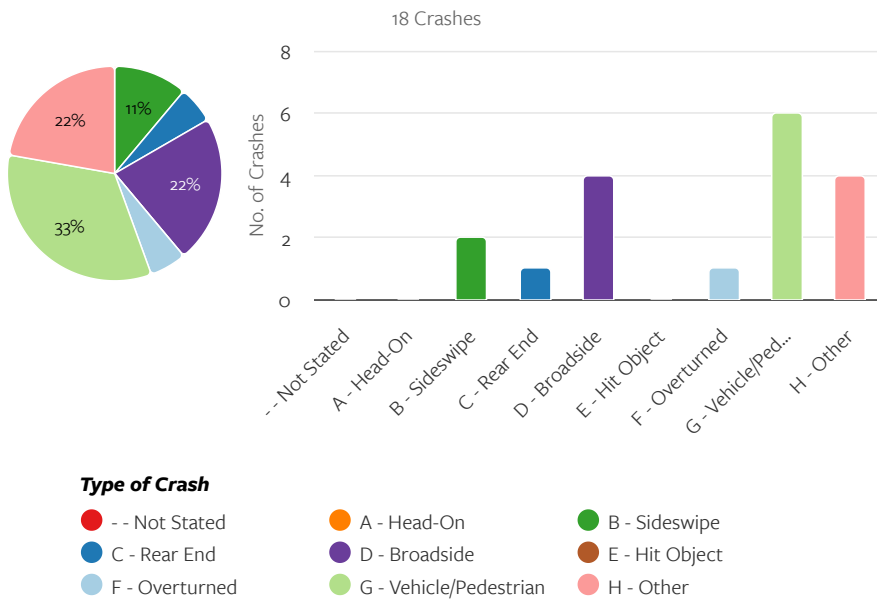
Number of Crashes by Crash Severity



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

Number of Crashes by Type of Crash

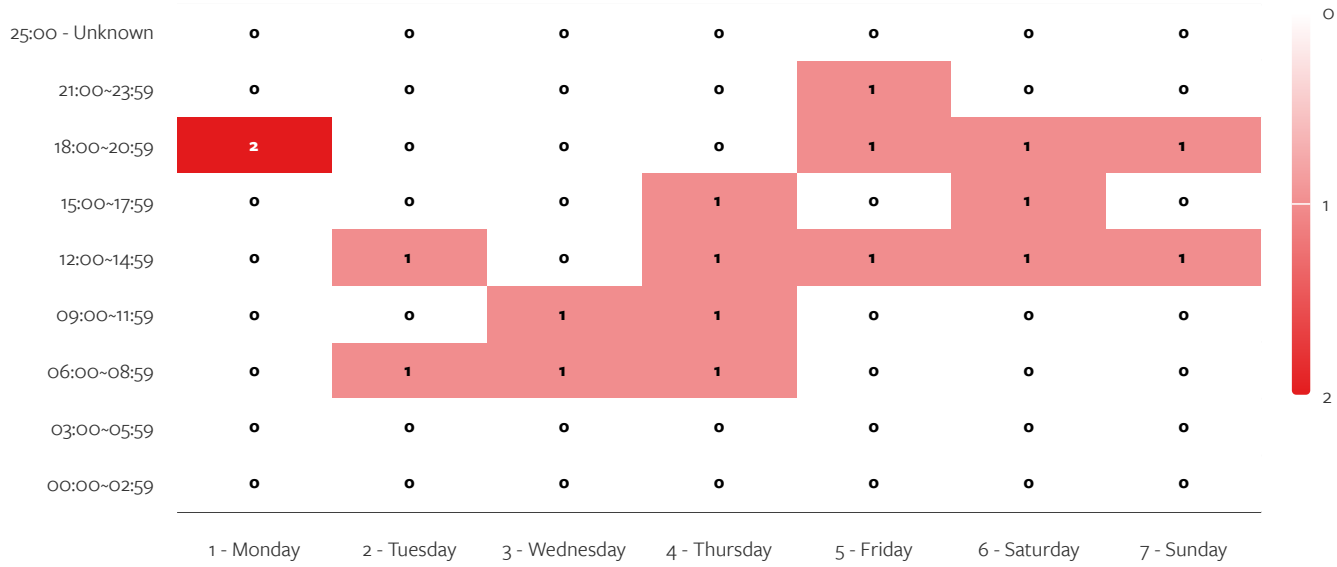


Type of Crash	Count	%
-- Not Stated	0	0.00%
A - Head-On	0	0.00%
B - Sideswipe	2	11.11%
C - Rear End	1	5.56%
D - Broadside	4	22.22%
E - Hit Object	0	0.00%
F - Overturned	1	5.56%
G - Vehicle/Pedestrian	6	33.33%
H - Other	4	22.22%

By Day of Week and Time

Number of Crashes per Day of Week per Time

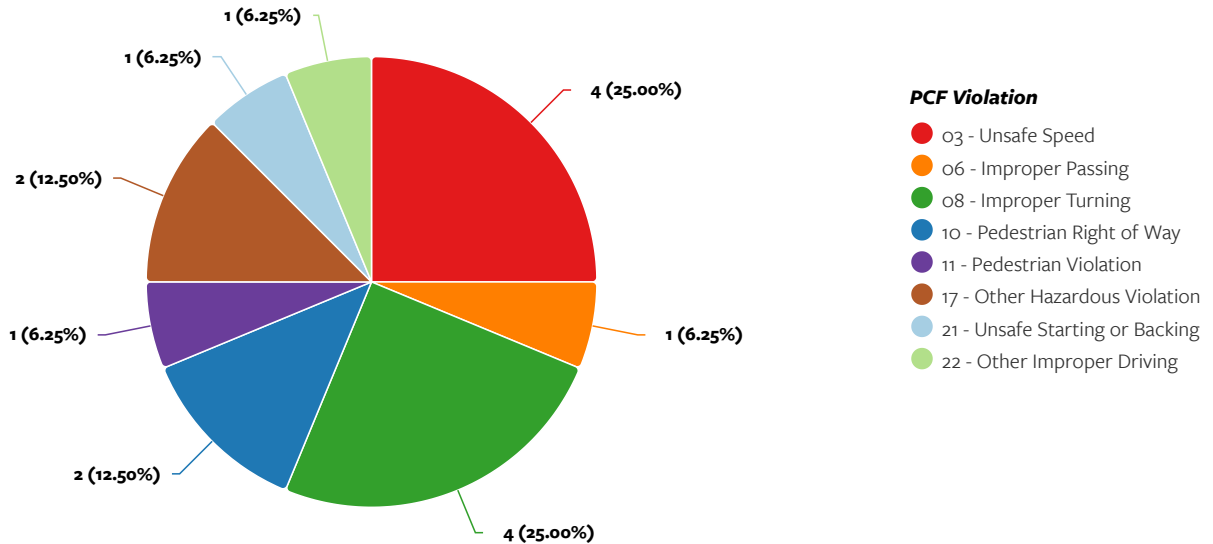
18 Crashes



By Primary Crash Factor (PCF) Violation

Number of Crashes by PCF Violation

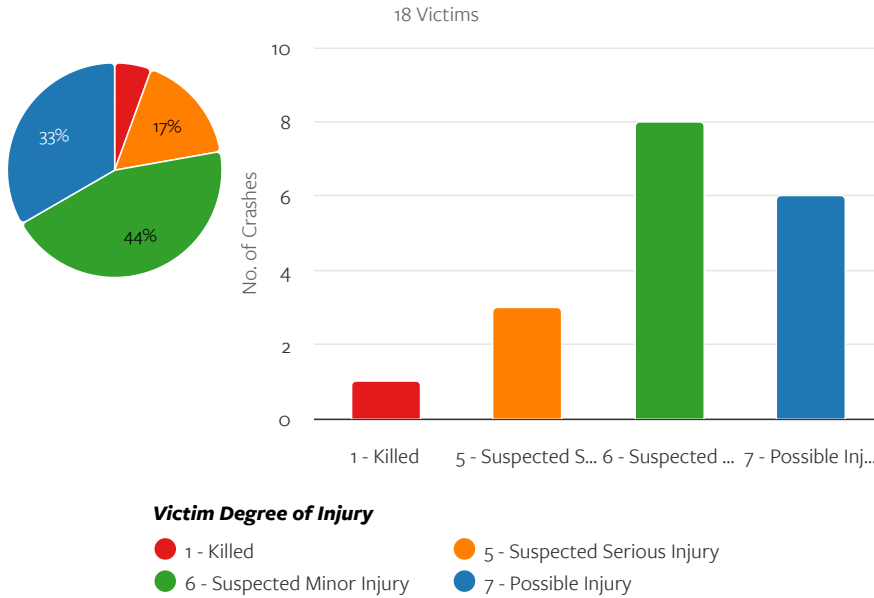
16 Crashes



## Victim Summary

By Victim Degree of Injury

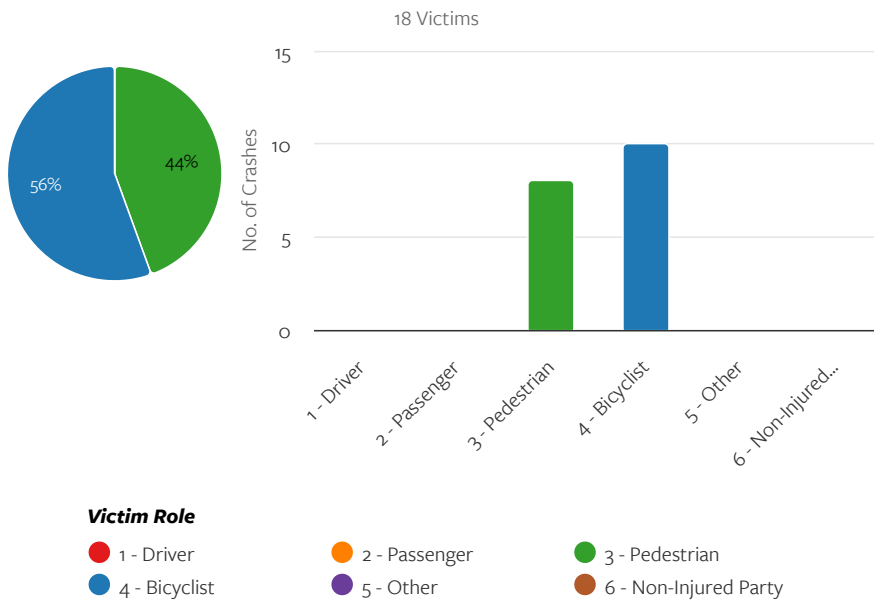
Number of Victims by Victim Degree of Injury



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

Number of Victims by Victim Role

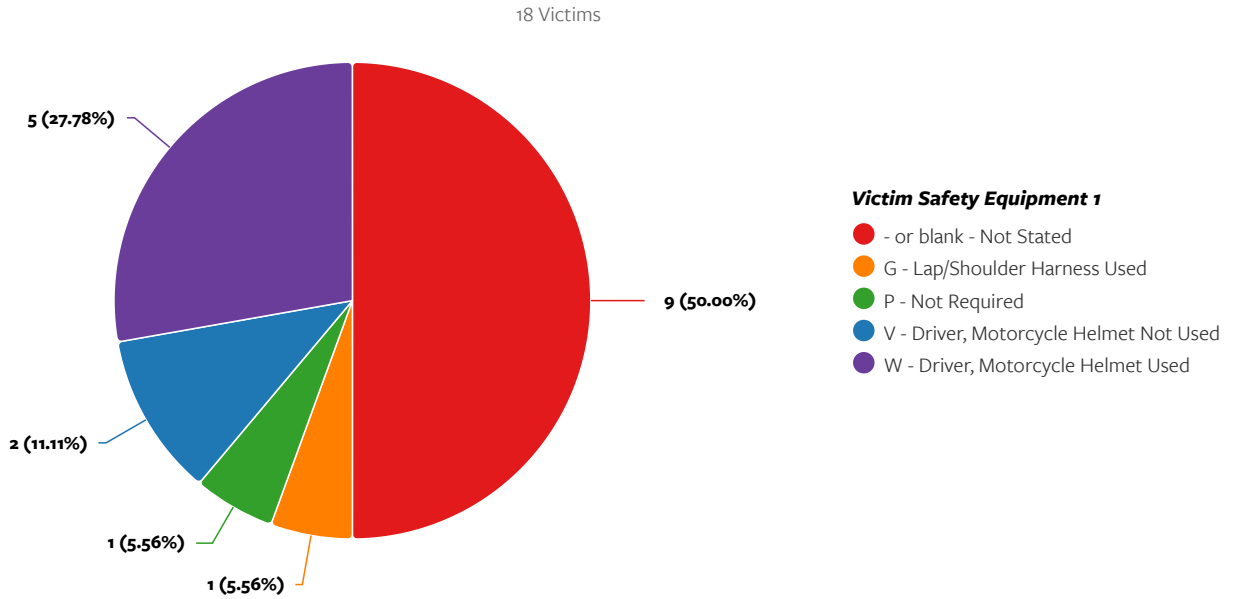


Victim Role	Count	%
1 - Driver	0	0.00%
2 - Passenger	0	0.00%
3 - Pedestrian	8	44.44%
4 - Bicyclist	10	55.56%
5 - Other	0	0.00%
6 - Non-Injured Party	0	0.00%



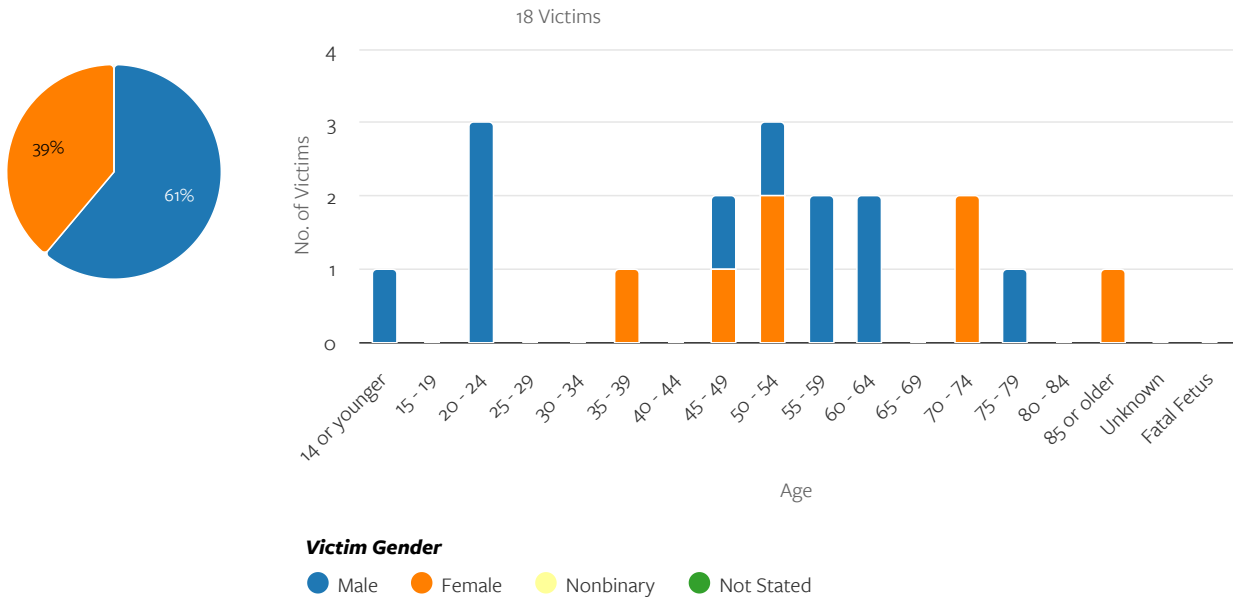
By Victim Safety Equipment 1

Number of Victims by Victim Safety Equipment 1



By Victim Gender and Age

Number of Victims by Victim Gender and Age

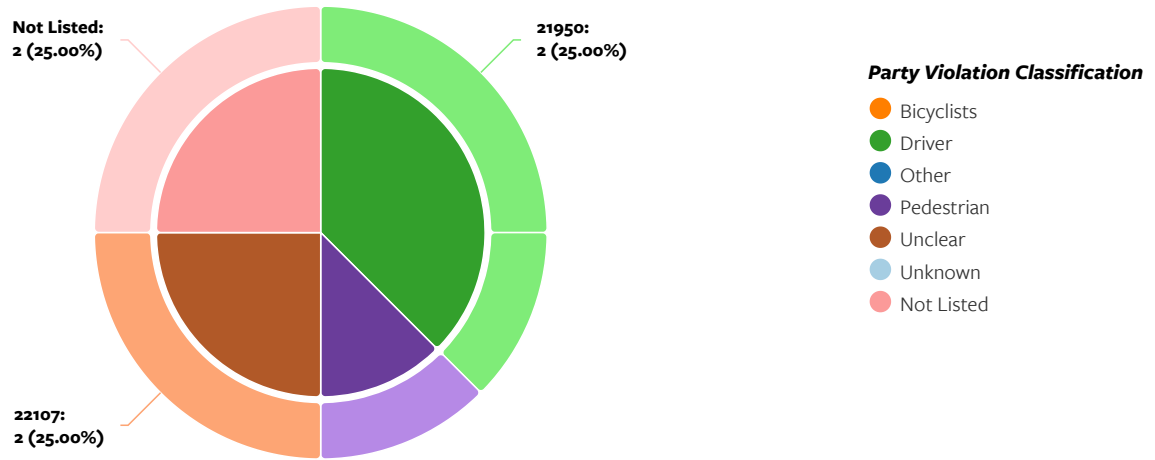


## Ped Crash Summary

By Type of Violation

### Number of Crashes by Type of Violation

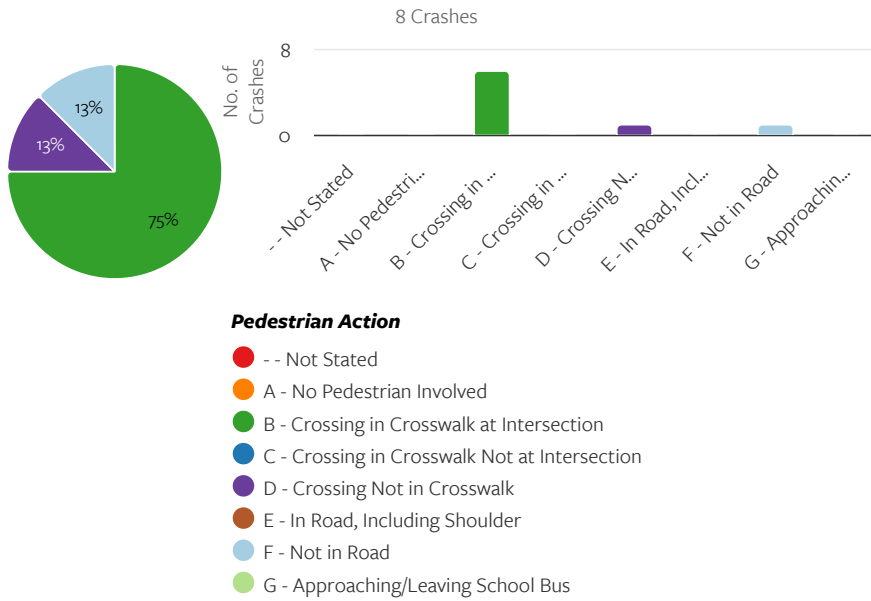
8 Crashes



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

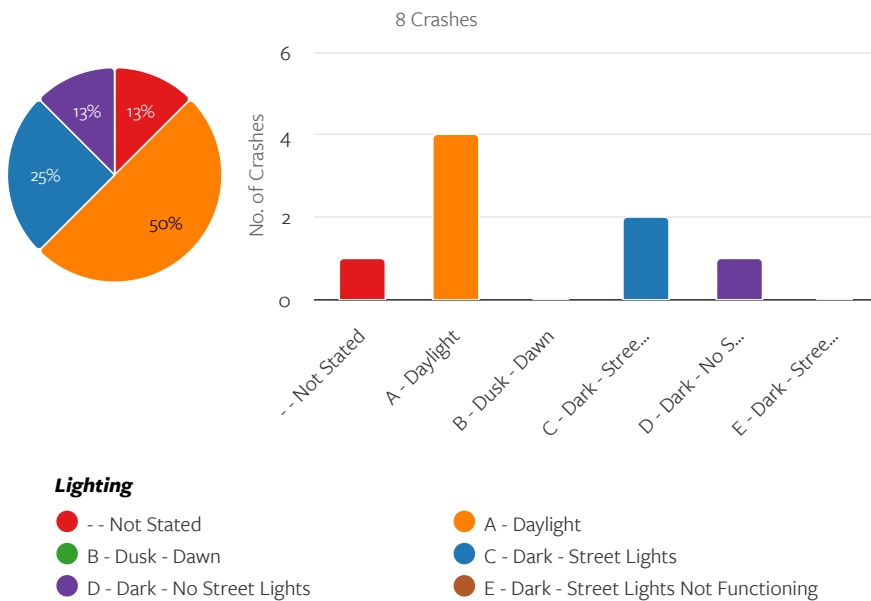
Number of Crashes by Pedestrian Action



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

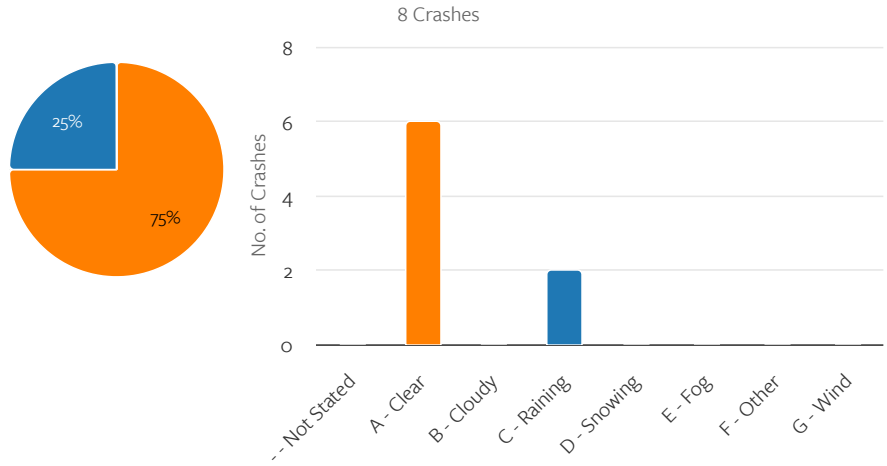
Number of Crashes by Lighting



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

Number of Crashes 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%

Weather

- -- Not Stated
- A - Clear
- B - Cloudy
- C - Raining
- D - Snowing
- E - Fog
- F - Other
- G - Wind

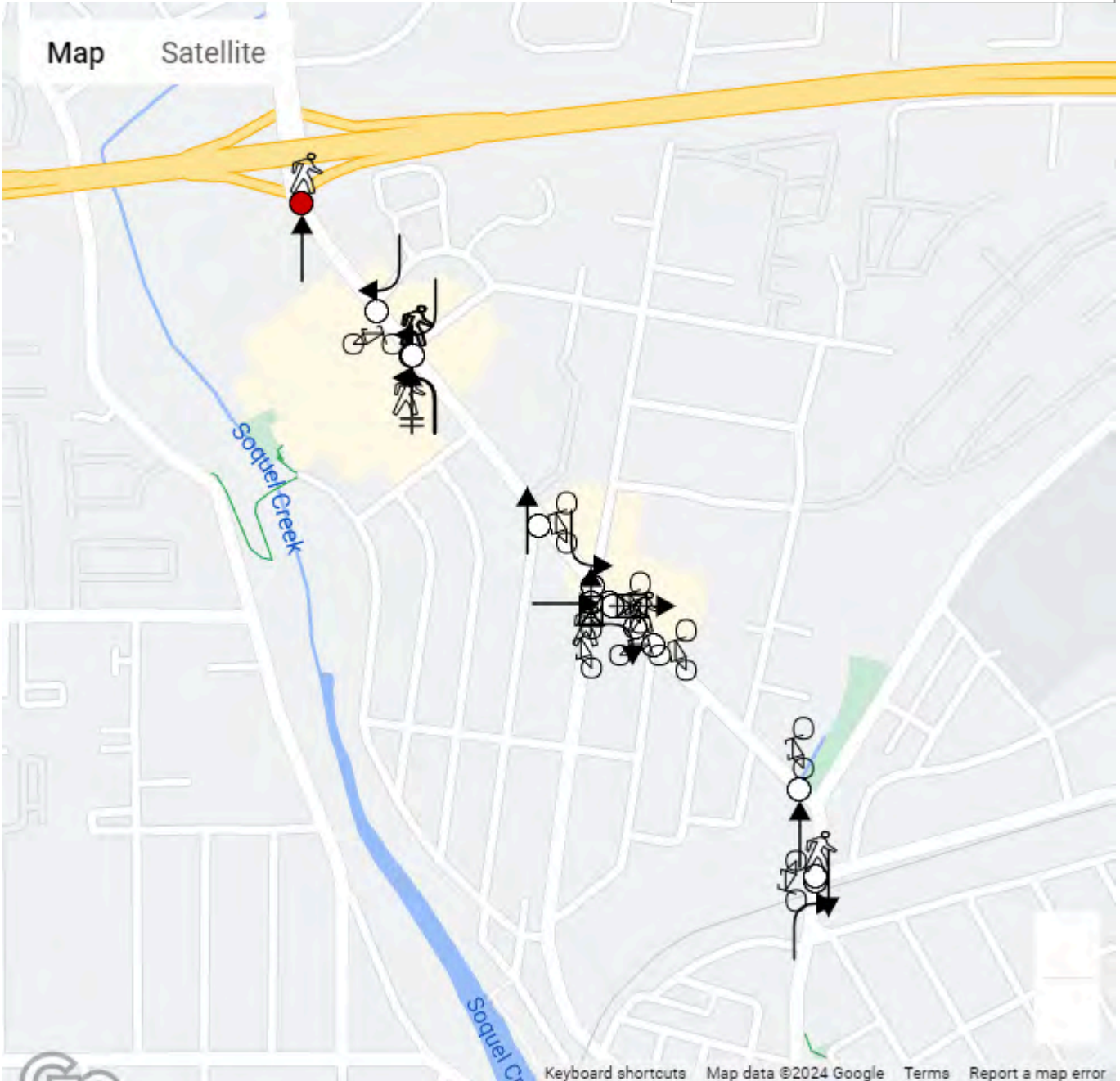
# CRASH DIAGRAM

Primary Street: \_\_\_\_\_  
 Secondary Street: \_\_\_\_\_  
 Time Period: \_\_\_\_\_  
 Agency Name: \_\_\_\_\_

Mapping Summary:

Fatal Crash	1
Injury Crash	15
Mapped	16
Not Drawn	2
Total	18

→ Straight	🚶 Pedestrian
↶ Left Turn	🚲 Bicycle
↷ Right Turn	☒ Object
↶ U-Turn	● Fatal Crash
↶ Overturned	○ Injury Crash
↘ Ran Off Road	
⊞ Stopped	
☒ Parked	



Date Created: 06/06/2024

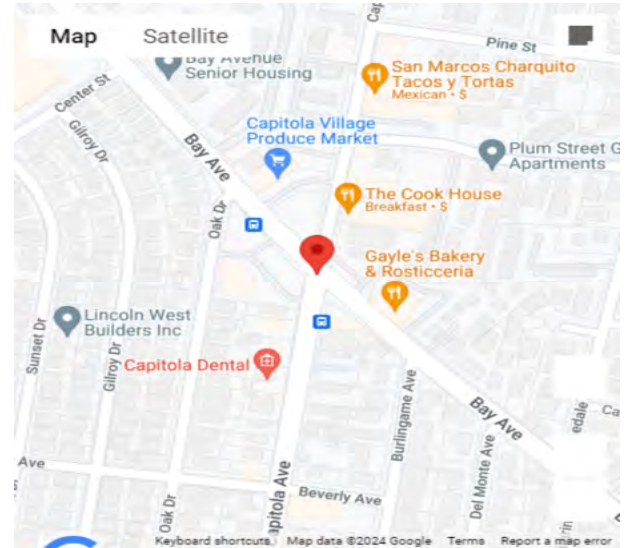
Created by TIMS (<https://tims.berkeley.edu>) © UC Regents, 2014-2024

# 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

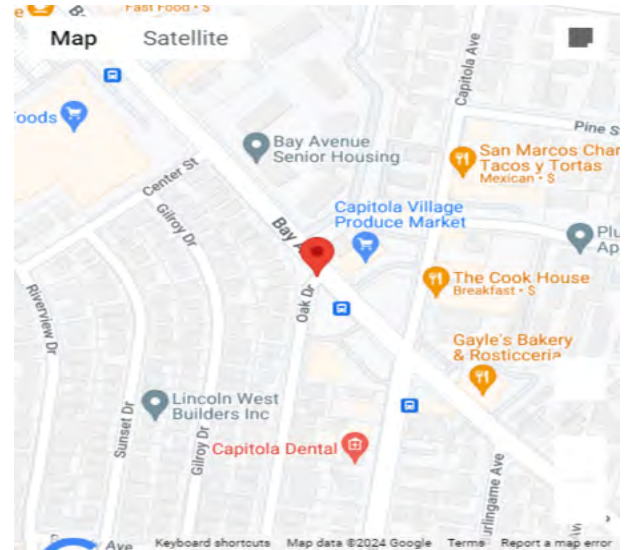


# Crash Details for: Case ID 6487930

## 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

# 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

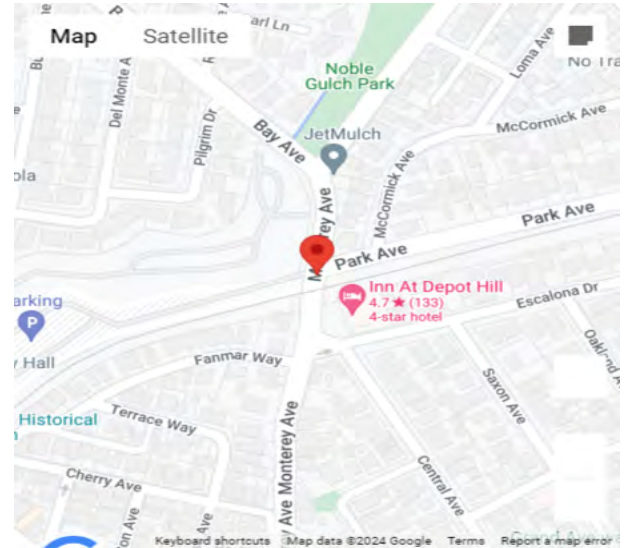


# Crash Details for: Case ID 6748318

## 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

# 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

# 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

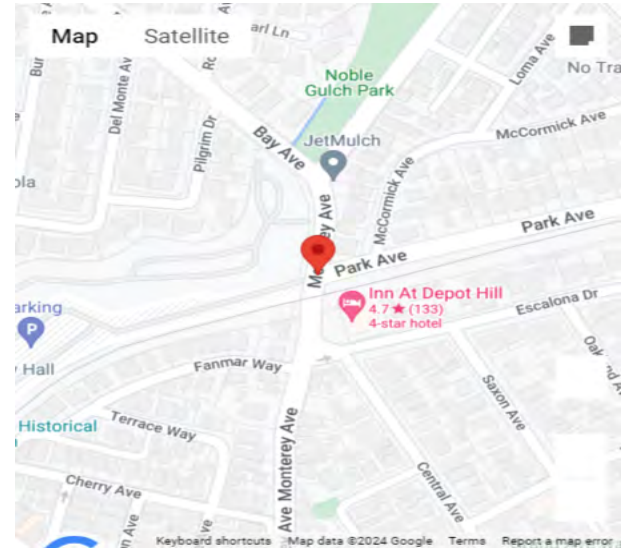


# Crash Details for: Case ID 7063888

## 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

# 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

# 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

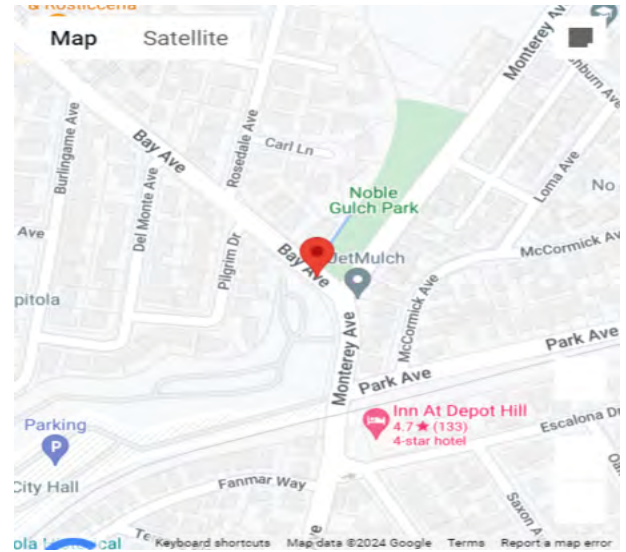


# Crash Details for: Case ID 90781844

## 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

# 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



# 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

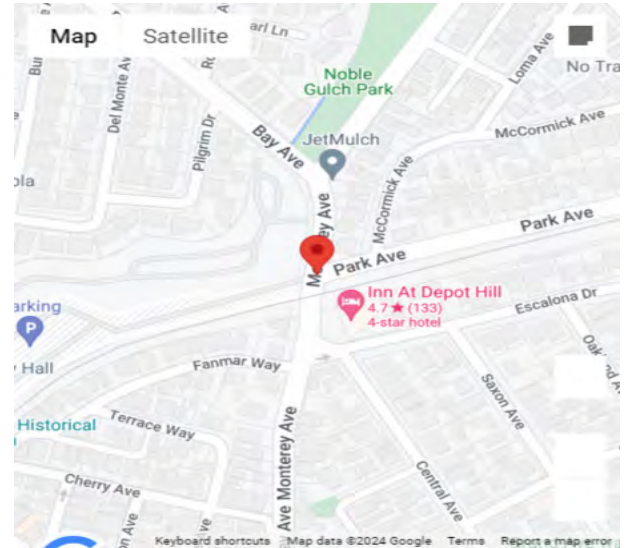
Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	3 - Pedestrian	M - Male	59	1 - Killed

# 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

# 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



# 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

# 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

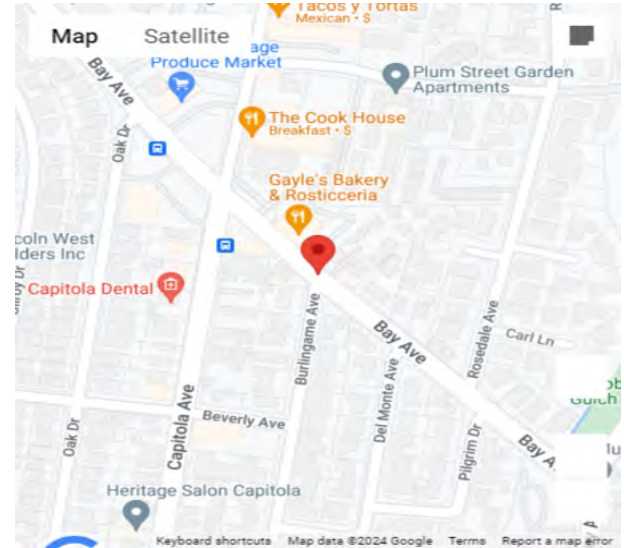
Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	3 - Pedestrian	F - Female	74	5 - Suspected Serious Injury

# 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



# 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)

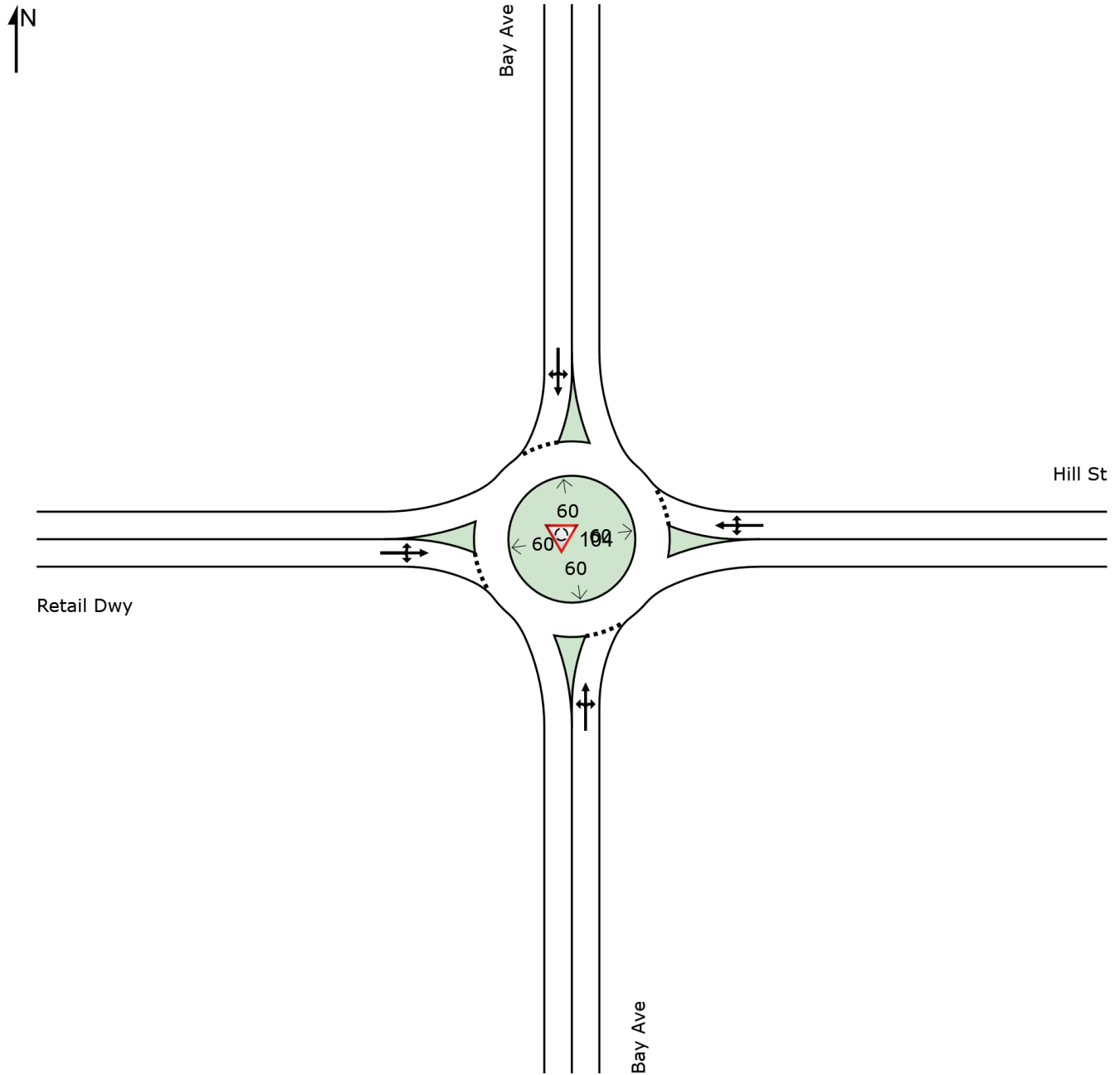


# SITE LAYOUT

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.

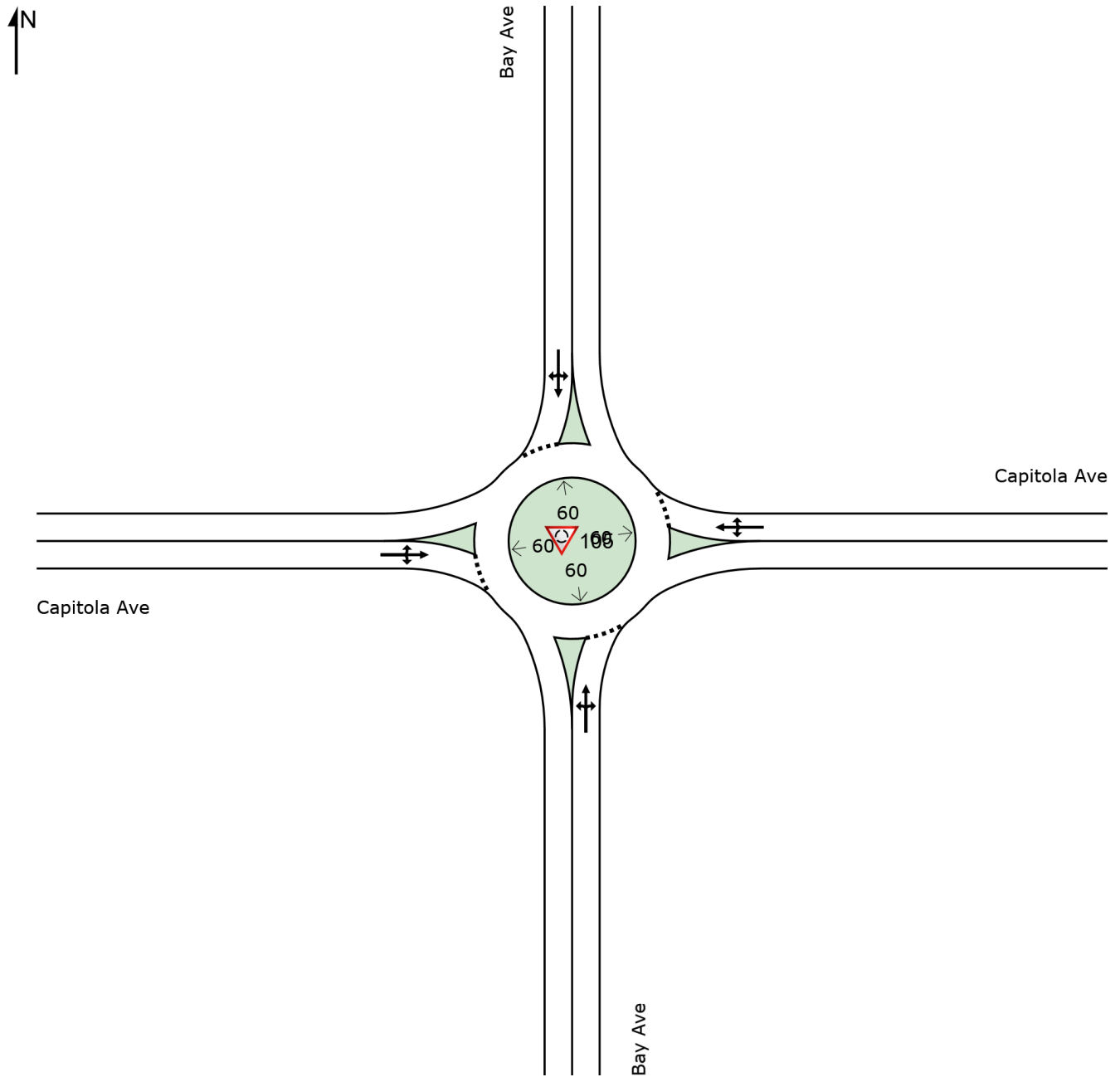


# SITE LAYOUT

 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.

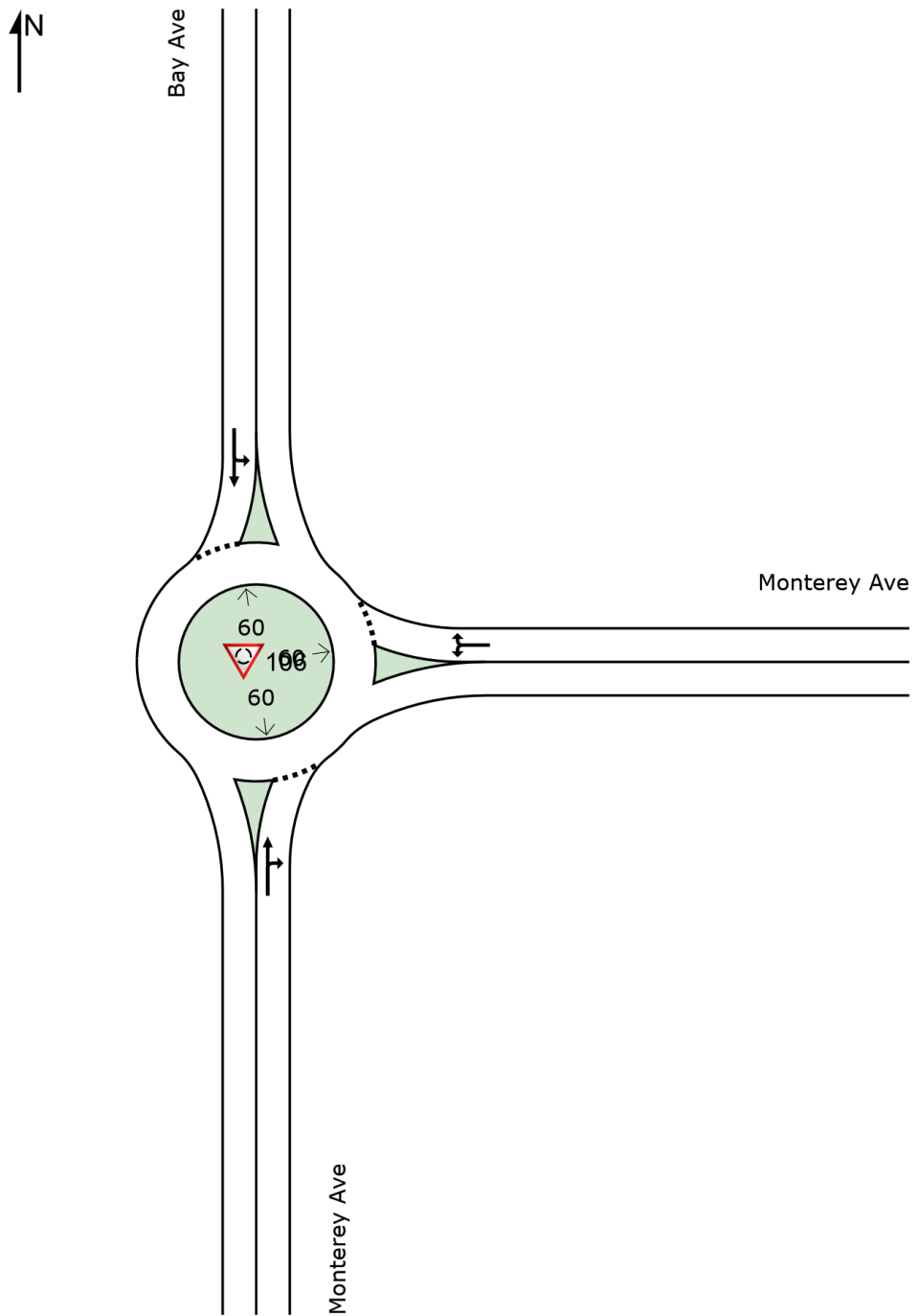


# SITE LAYOUT

Site: 106 [Bay/Monterey (Site Folder: 2024 Existing AM)]

Alt 3 Roundabout  
Site Category: Base Year  
Roundabout

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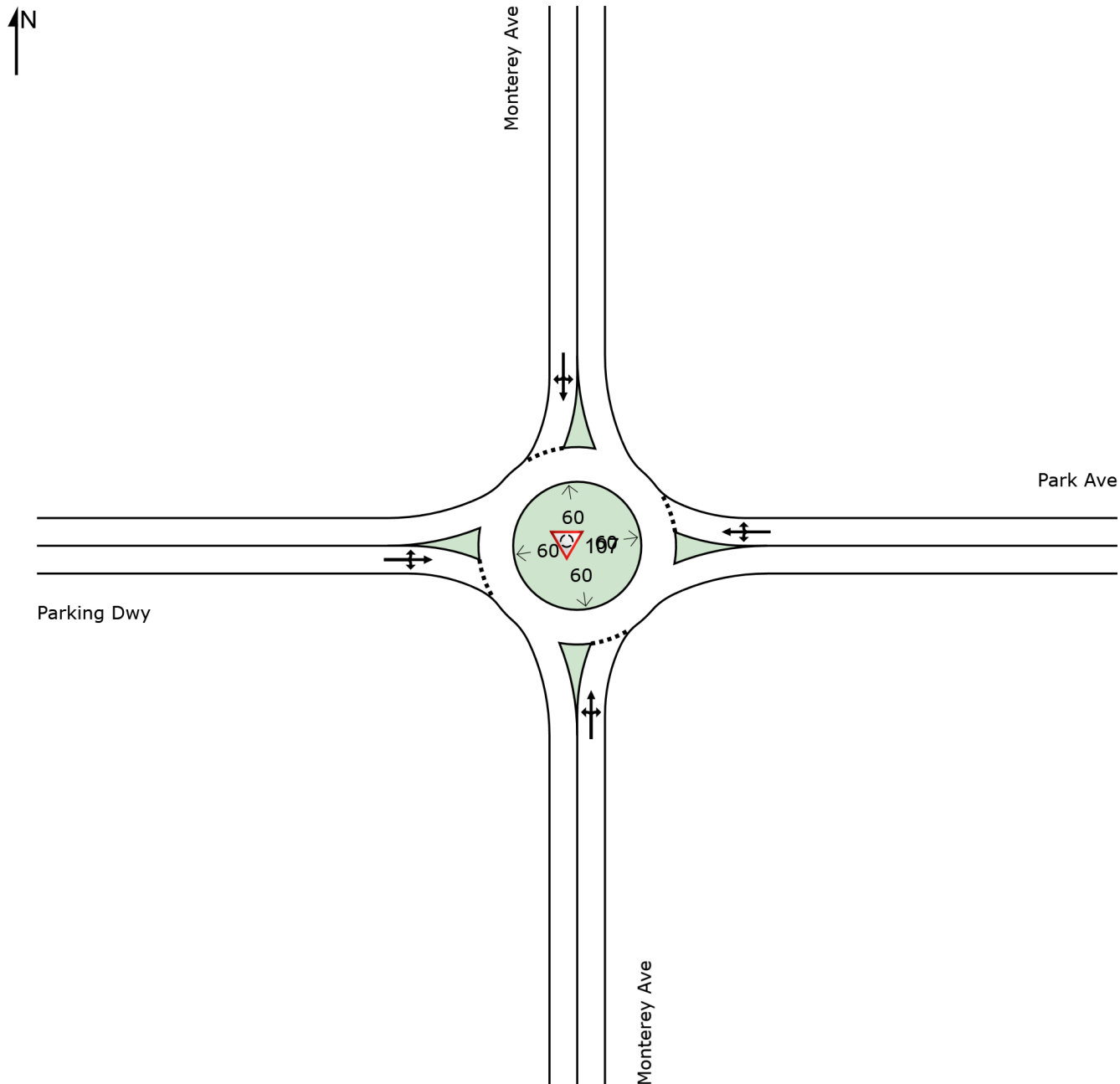


# SITE LAYOUT

 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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h	HV %	[ Total veh/h	HV %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV %	[ Total veh/h	HV %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV %	[ Total veh/h	HV %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[ Total veh/h	HV ] %	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] ft				
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 (sec)	LOS	Avg. Queue (ft)	Max. Queue (ft)	Volume (vph)		Avg. Delay (sec)	LOS	Avg. Queue (ft)	Max. Queue (ft)	Volume (vph)		Avg. Delay (sec)	LOS	Avg. Queue (ft)	Max. Queue (ft)	Volume (vph)		Avg. Delay (sec)	LOS	Avg. Queue (ft)	Max. Queue (ft)				
			Count	Served					Count	Served					Count	Served					Count	Served					Count	Served		
			Count	Served	Count	Served	Count	Served	Count	Served	Count	Served	Count	Served	Count	Served	Count	Served	Count	Served	Count	Served	Count	Served	Count	Served	Count	Served		
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	NBL	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	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	37	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			

**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
<b>NB - N. of Park Ave to S. of Highway 1 SB Ramps</b>				
<b>Alternative 1</b> AWSC	Average Travel Time (mins)	0.62	1.5	2.27
	Average Travel Speed (mph)		25	16
<b>Alternative 2</b> Roundabout	Average Travel Time (mins)	0.62	1.5	1.91
	Average Travel Speed (mph)		25	20
<b>SB - S. of Highway 1 SB Ramps to N. of Park Ave</b>				
<b>Alternative 1</b> AWSC	Average Travel Time (mins)	0.62	1.5	2.11
	Average Travel Speed (mph)		25	18
<b>Alternative 2</b> Roundabout	Average Travel Time (mins)	0.63	1.5	1.89
	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
<b>NB - N. of Park Ave to S. of Highway 1 SB Ramps</b>				
<b>Alternative 1</b> AWSC	Average Travel Time (mins)	0.62	1.5	2.01
	Average Travel Speed (mph)		25	18
<b>Alternative 2</b> Roundabout	Average Travel Time (mins)	0.62	1.5	1.89
	Average Travel Speed (mph)		25	20
<b>SB - S. of Highway 1 SB Ramps to N. of Park Ave</b>				
<b>Alternative 1</b> AWSC	Average Travel Time (mins)	0.62	1.5	3.87
	Average Travel Speed (mph)		25	10
<b>Alternative 2</b> Roundabout	Average Travel Time (mins)	0.63	1.5	2.25
	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	15	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
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
		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						Alternative 2 AM						Alternative 1 PM						Alternative 2 PM											
			AWSC			RAB			AWSC			RAB			AWSC			RAB			AWSC			RAB								
			Volume (vph)	Avg. Delay (sec)	LOS	Avg. Queue (ft)	Max. Queue (ft)	Count	Volume (vph)	Avg. Delay (sec)	LOS	Avg. Queue (ft)	Max. Queue (ft)	Count	Volume (vph)	Avg. Delay (sec)	LOS	Avg. Queue (ft)	Max. Queue (ft)	Count	Volume (vph)	Avg. Delay (sec)	LOS	Avg. Queue (ft)	Max. Queue (ft)	Count						
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	606	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	NBL	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	257			251	0%	33.8	C	55	235	251	251	0%	33.0	C	49	224	370	369	0%	49.9	D	109	261	370	375	1%	50.9	D	119	285		
SBR	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	0	888	751	-24%	1.9	A	3	113	988	749	-24%	5.8	A	15
		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	0	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%	7.2	A	9	135				
Overall	1339	1183	-12%	21.0	C			1339	1339	0%	17.4	C			2048	1701	-18%	26.2	D			2048	1725	-18%	12.9	B						
5	Bay Ave & Capitola Ave	NBL	17	27	0%	8.5	A	1	36	17	27	0%	2.6	A	0	58	23	28	-3%	9.5	A	1	38	20	29	0%	4.9	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																										



## 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
<b>NB - N. of Park Ave to S. of Highway 1 SB Ramps</b>				
<b>Alternative 1</b> AWSC	Average Travel Time (mins)	0.62	1.5	2.09
	Average Travel Speed (mph)		25	18
<b>Alternative 2</b> Roundabout	Segment	0.62	1.5	1.88
	Average Travel Speed (mph)		25	20
<b>SB - S. of Highway 1 SB Ramps to N. of Park Ave</b>				
<b>Alternative 1</b> AWSC	Average Travel Time (mins)	0.62	1.5	5.26
	Average Travel Speed (mph)		25	7
<b>Alternative 2</b> Roundabout	Average Travel Time (mins)	0.63	1.5	2.21
	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
<b>NB - N. of Park Ave to S. of Highway 1 SB Ramps</b>				
<b>Alternative 1</b> AWSC	Average Travel Time (mins)	0.62	1.5	3.20
	Average Travel Speed (mph)		25	12
<b>Alternative 2</b> Roundabout	Average Travel Time (mins)	0.62	1.5	3.29
	Average Travel Speed (mph)		25	11
<b>SB - S. of Highway 1 SB Ramps to N. of Park Ave</b>				
<b>Alternative 1</b> AWSC	Average Travel Time (mins)	0.62	1.5	5.89
	Average Travel Speed (mph)		25	6
<b>Alternative 2</b> Roundabout	Average Travel Time (mins)	0.63	1.5	4.99
	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			Alternative 2			Alternative 3			Alternative 1			Alternative 2			Alternative 3				
			AWSC (VISSIM)			Roundabout (VISSIM)			Signal (Synchro)			AWSC (VISSIM)			Roundabout (VISSIM)			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)	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		
WBT	400			36	227	400	30	205	400	88	159	400	4	76	400	4	75	400	185	451		
WBR	400			36	227	400	30	205	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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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/v26.93		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 6.8		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	Y		P			4
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	2.4	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/veh25.1  
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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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/v39.65		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	-	-

HCM 7th AWSC  
4: Bay Ave & Retail Dwy/Hill St

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

<b>Intersection</b>												
Intersection Delay, s/veh20.5												
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 RightNB		SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay, s/veh4.9		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	Y		P			Y
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 Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	9.7		13.4	17
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					
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			32.8									
HCM 7th LOS			C									
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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	4.5		17.2	23.8
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	Y		P			4
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

<b>Intersection</b>												
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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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/165.89		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

<b>Intersection</b>												
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 0.9		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	Y		B			A
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	0.8	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 Right NB		SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	1.8	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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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/v24.04		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	6.8	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	Y		B			A
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	2.2	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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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/v35.33		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	4.9		15.3	15.3
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	Y		P			4
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 Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	9.6		13.3	17.1
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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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/v44.16			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	4.5		17.2	23.8
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	Y		P			4
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						
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh				64.7								
HCM 7th LOS				E								
<b>Notes</b>												
* 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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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/v63.37		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	14.7		15.8	
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	Y		P			4
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	2.2	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					
<b>Intersection Summary</b>												
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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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						
<b>Intersection Summary</b>													
HCM 7th Control Delay, s/veh			13.4										
HCM 7th LOS			B										

# HCM 7th Signalized Intersection Summary

## 5: Bay Ave & Capitola Ave

Item 9 A.

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				
<b>Intersection Summary</b>												
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
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			17.4			
HCM 7th LOS			B			

# HCM 7th Signalized Intersection Summary

## 7: Monterey Ave & Park Ave

Item 9 A.

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				
<b>Intersection Summary</b>												
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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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		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				
<b>Intersection Summary</b>												
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/ln1673	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/ln0.6	0.0	0.0	0.6	0.0	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				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			6.7									
HCM 7th LOS			A									



# HCM 7th Signalized Intersection Summary

## 6: Monterey Ave & Bay Ave



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
<b>Intersection Summary</b>						
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/ln1720	0	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/ln0.0	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				
<b>Intersection Summary</b>												
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					
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh				71.2								
HCM 7th LOS				E								
<b>Notes</b>												
* 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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

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/v39.07		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				
<b>Intersection Summary</b>												
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		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				
<b>Intersection Summary</b>												
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
<b>Intersection Summary</b>						
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				
<b>Intersection Summary</b>												
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						
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh				71.1								
HCM 7th LOS				E								
<b>Notes</b>												
* 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.

HCM 7th TWSC  
3: Bay Ave & Croosroads Loop

01/06/2025

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				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh			26.5									
HCM 7th LOS			C									

# HCM 7th Signalized Intersection Summary

## 5: Bay Ave & Capitola Ave

Item 9 A.

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				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh				7.3								
HCM 7th LOS				A								



# HCM 7th Signalized Intersection Summary

## 6: Monterey Ave & Bay Ave



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
<b>Intersection Summary</b>						
HCM 7th Control Delay, s/veh			7.1			
HCM 7th LOS			A			

# HCM 7th Signalized Intersection Summary

## 7: Monterey Ave & Park Ave

Item 9 A.

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/ln1455	0	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(l)	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/ln0.1	0.0	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				
<b>Intersection Summary</b>												
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
<b>Total</b>	<b>IV</b>		<b>113.5</b>	<b>44.4</b>	<b>157.9</b>	<b>0.64</b>	<b>14.5</b>	<b>C</b>

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
<b>Total</b>	<b>IV</b>		<b>134.5</b>	<b>58.0</b>	<b>192.5</b>	<b>0.73</b>	<b>13.7</b>	<b>C</b>

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
<b>Total</b>	<b>IV</b>		<b>33.9</b>	<b>16.9</b>	<b>50.8</b>	<b>0.14</b>	<b>10.1</b>	<b>D</b>

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
<b>Total</b>	<b>IV</b>		<b>34.7</b>	<b>31.5</b>	<b>66.2</b>	<b>0.15</b>	<b>8.0</b>	<b>E</b>

**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
<b>Total</b>	<b>IV</b>		<b>113.5</b>	<b>42.6</b>	<b>156.1</b>	<b>0.64</b>	<b>14.7</b>	<b>C</b>

**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
<b>Total</b>	<b>IV</b>		<b>134.5</b>	<b>52.9</b>	<b>187.4</b>	<b>0.73</b>	<b>14.1</b>	<b>C</b>

**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
<b>Total</b>	<b>IV</b>		<b>33.9</b>	<b>8.5</b>	<b>42.4</b>	<b>0.14</b>	<b>12.1</b>	<b>D</b>

**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
<b>Total</b>	<b>IV</b>		<b>34.7</b>	<b>19.0</b>	<b>53.7</b>	<b>0.15</b>	<b>9.8</b>	<b>D</b>

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
<b>Total</b>	<b>IV</b>		<b>113.5</b>	<b>86.9</b>	<b>200.4</b>	<b>0.64</b>	<b>11.5</b>	<b>D</b>

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
<b>Total</b>	<b>IV</b>		<b>134.5</b>	<b>74.2</b>	<b>208.7</b>	<b>0.73</b>	<b>12.6</b>	<b>D</b>

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
<b>Total</b>	<b>IV</b>		<b>33.9</b>	<b>9.7</b>	<b>43.6</b>	<b>0.14</b>	<b>11.8</b>	<b>D</b>

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
<b>Total</b>	<b>IV</b>		<b>34.7</b>	<b>31.9</b>	<b>66.6</b>	<b>0.15</b>	<b>7.9</b>	<b>E</b>

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



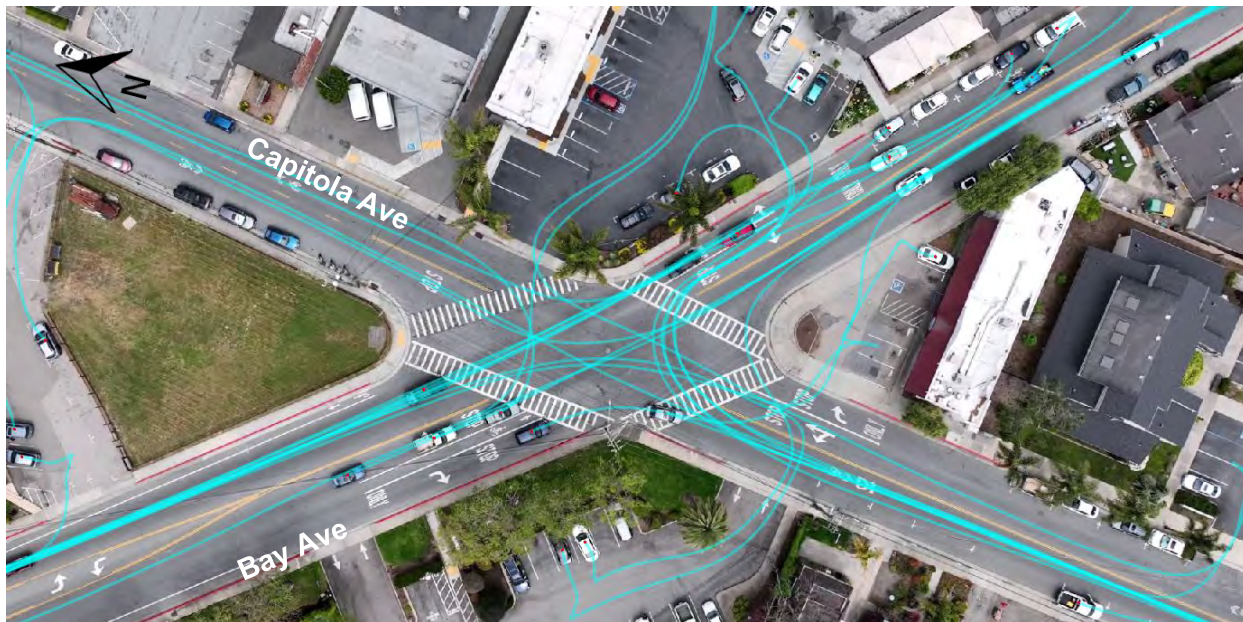


Figure 2: Pixel Tracing Software for PM School Pick-up Video

### 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.

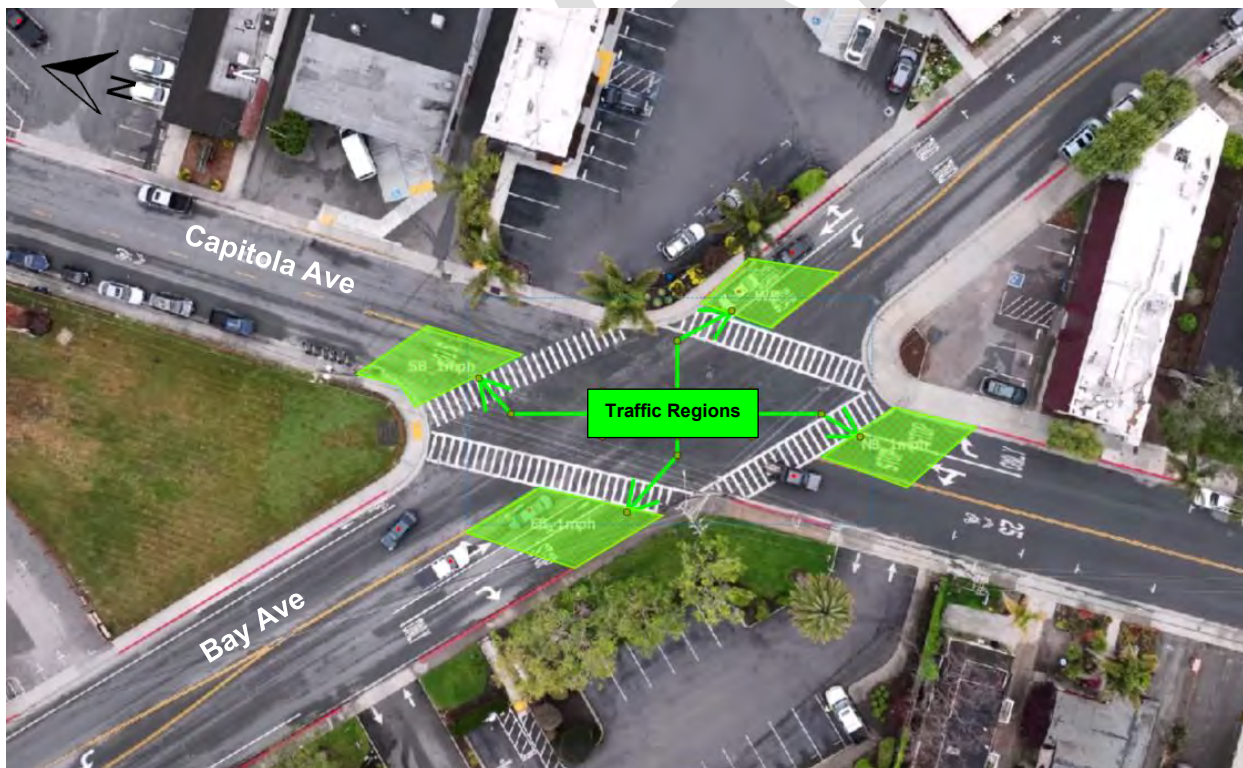


Figure 3: Speed Measurement Gates

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%

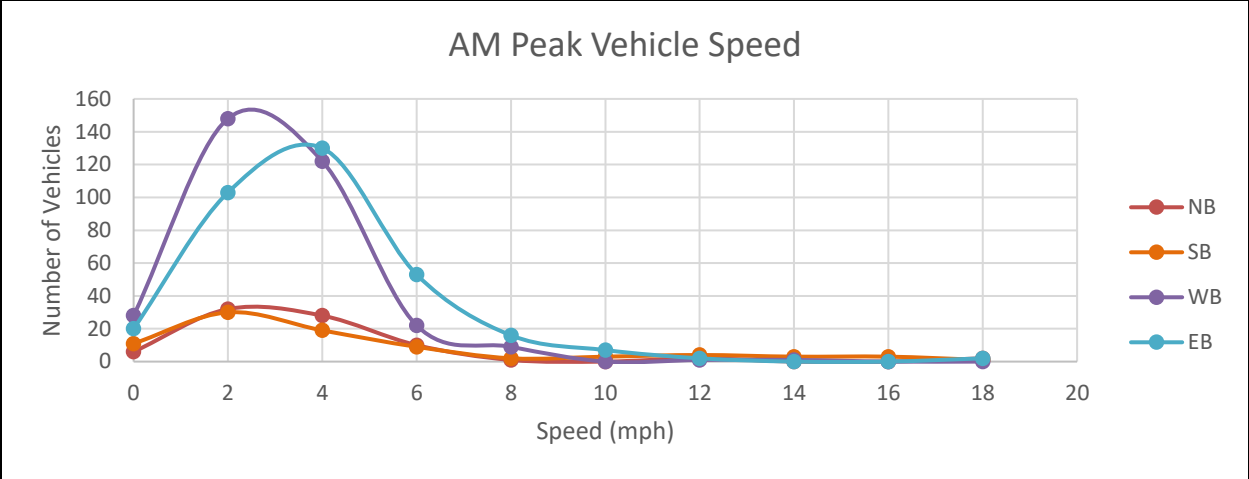
The tables above summarize approaching vehicles that did and did not meet the criteria of traveling 0 to 1 mph. The tables identify the percentage of vehicles not making a complete stop at the intersection along each directional approach. The PM evening off-peak period had the highest recorded percentage of 66.3% of vehicles not making a complete stop.

### Measured Vehicle Speed

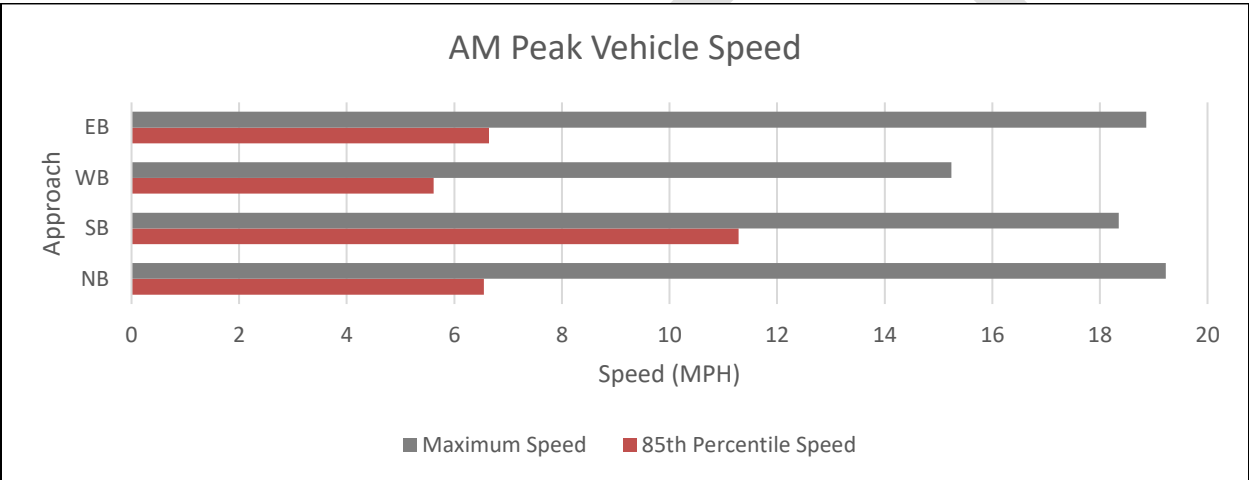
Vehicle speeds within the designated traffic regions were further analyzed to capture the maximum and 85th percentile speed entering the region. These speeds are summarized below in **Table 7** for each studied time period combined. The vehicle speeds were further reviewed for each studied time period by directional approach and are graphically shown in **Figure 4** through **Figure 11**.

**Table 7: Total Intersection Measured Vehicle Speed**

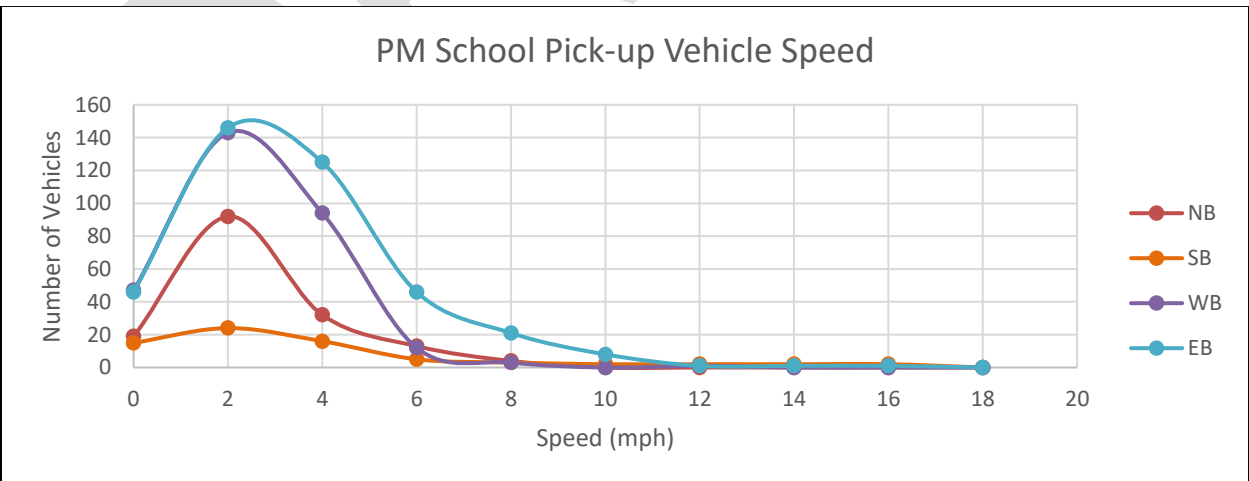
All Observed Periods		AM Peak/ School Drop-off Periods		PM School Pick-up Period		PM Peak Period		PM Evening Off-Peak Period	
Speed	Total Vehicles	Speed	Total Vehicles	Speed	Total Vehicles	Speed	Total Vehicles	Speed	Total Vehicles
0	235	0	65	0	127	0	39	0	4
2	1088	2	313	2	405	2	307	2	63
4	932	4	299	4	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
<b>Max Speed</b>									
19.223969		19.223969		17.837877		17.749456		18.966279	
<b>85th Percentile</b>									
6.5047956		6.4144871		5.8644825		6.7806282		7.5144739	



**Figure 4: Vehicle Speed per Approach (AM Peak/School Drop-off)**

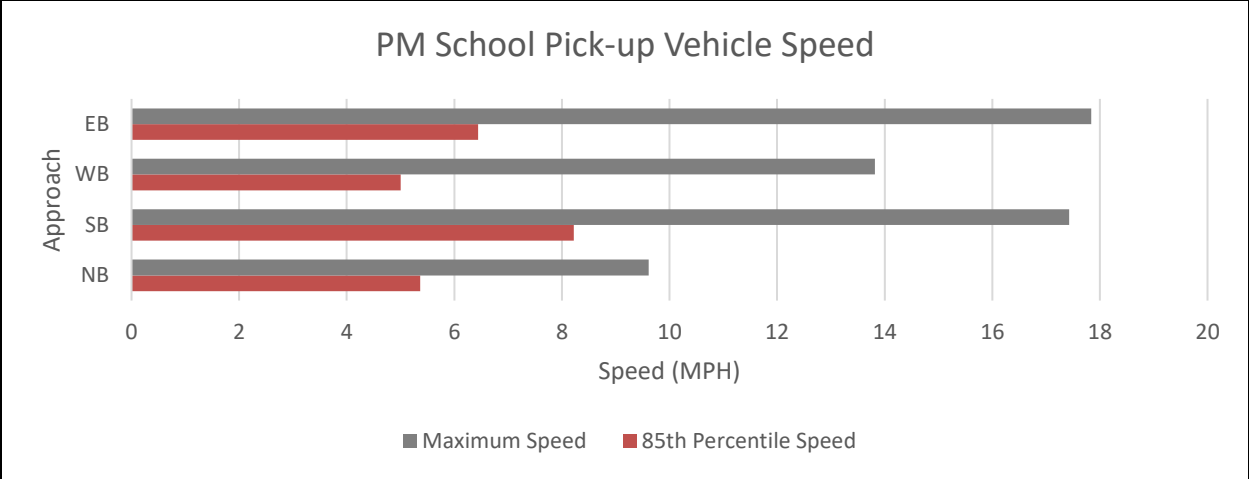


**Figure 5: Maximum Speed and 85<sup>th</sup> Percentile Speed (AM Peak/School Drop-off)**

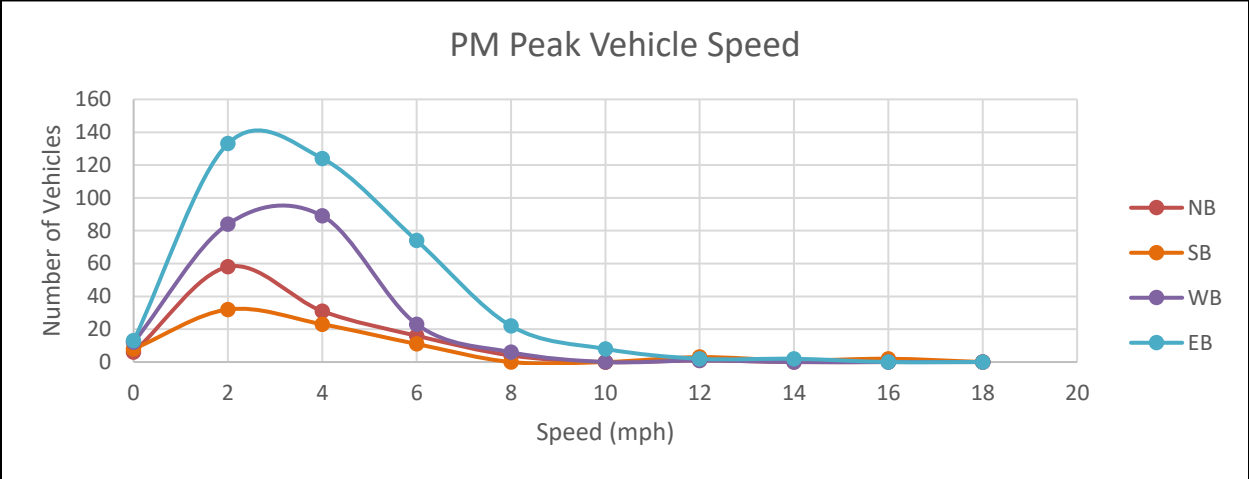


**Figure 6: Vehicle Speed per Approach (PM School Pick-up)**

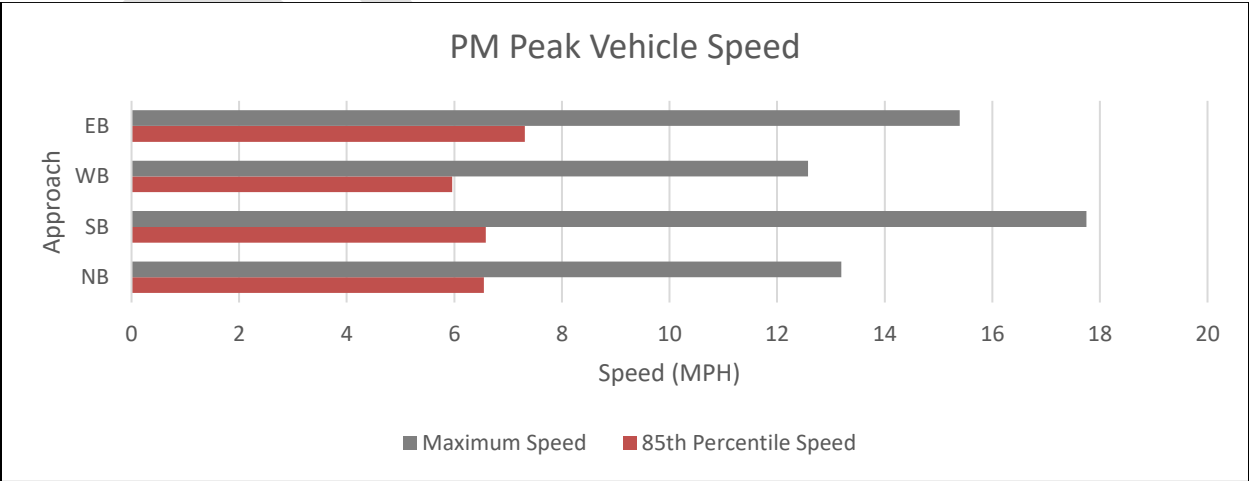




**Figure 7: Maximum Speed and 85<sup>th</sup> Percentile Speed (PM School Pick-up)**



**Figure 8: Vehicle Speed per Approach (PM Peak)**



**Figure 9: Maximum Speed and 85<sup>th</sup> Percentile Speed (PM Peak)**

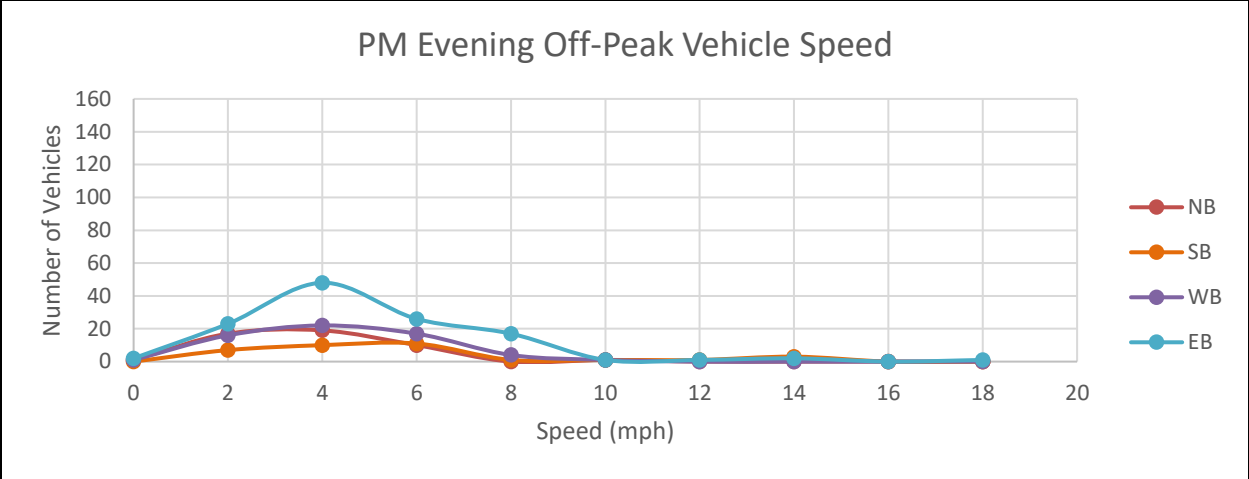


Figure 10: Vehicle Speed per Approach (PM Evening Off-Peak)

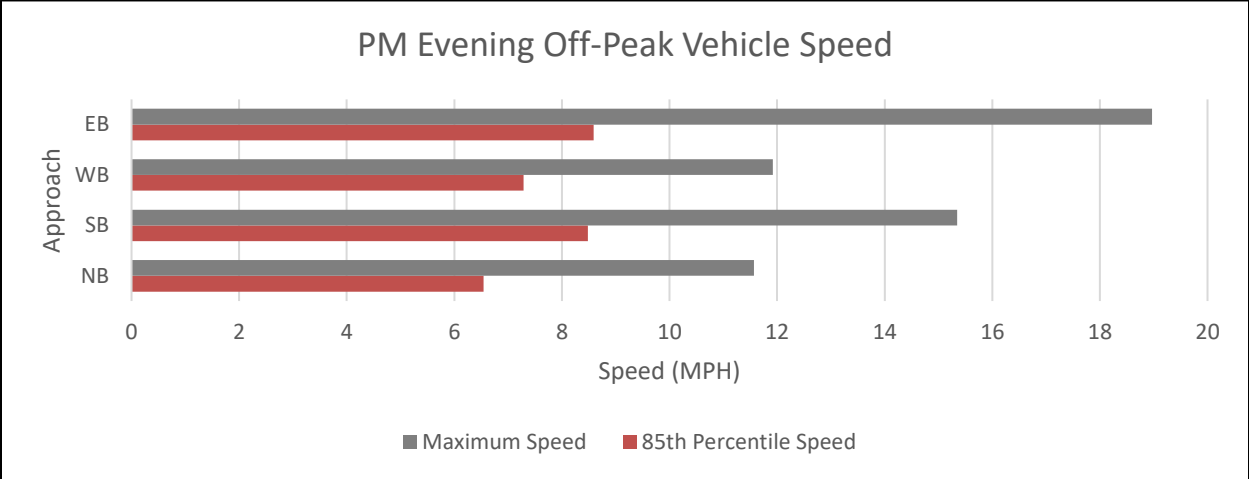


Figure 11: Maximum Speed and 85<sup>th</sup> Percentile Speed (PM Evening Off-Peak)

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<sup>2</sup>. 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<sup>2</sup>. **Figure 17** illustrates the rapid deceleration of the vehicle over the short period of time.





Figure 16: Heavy Braking

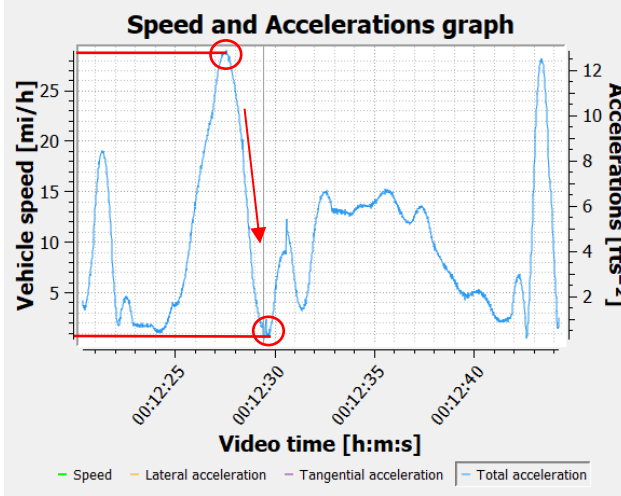


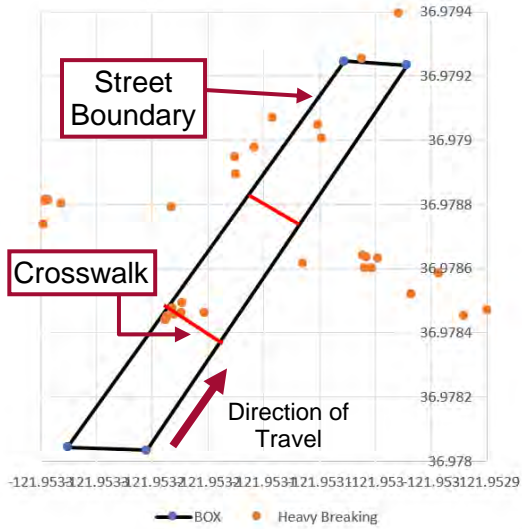
Figure 17: Car Deceleration

The number of vehicles identified as meeting the heavy braking criteria are summarized in Table 8 below.

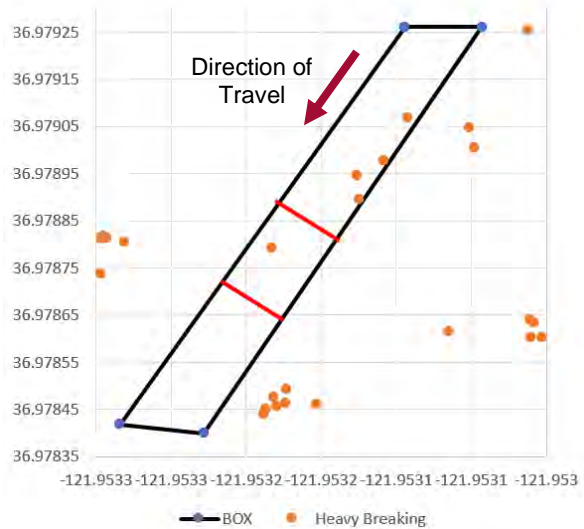
Table 8: Heavy Braking Summary

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%				

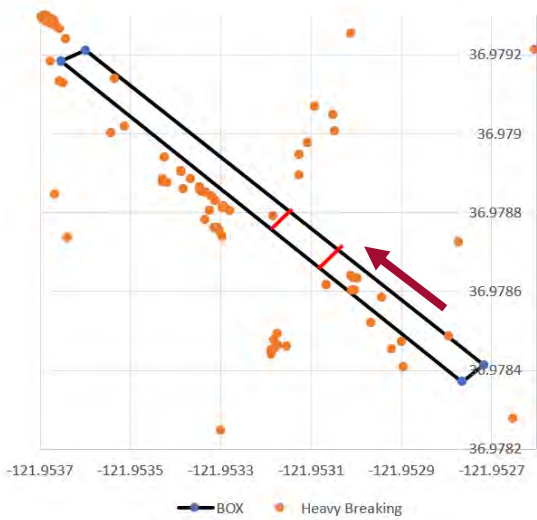
Figure 12 through Figure 15 illustrate the vehicle position and direction of travel of each identified heavy braking incident. Approach and departure crosswalks are identified to reference the vehicle position.



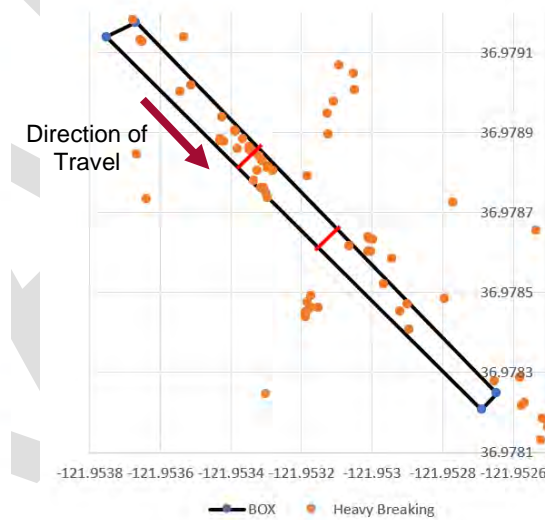
**Figure 12: Northbound Heavy Braking**



**Figure 13: Southbound Heavy Braking**



**Figure 14: Westbound Heavy Braking**

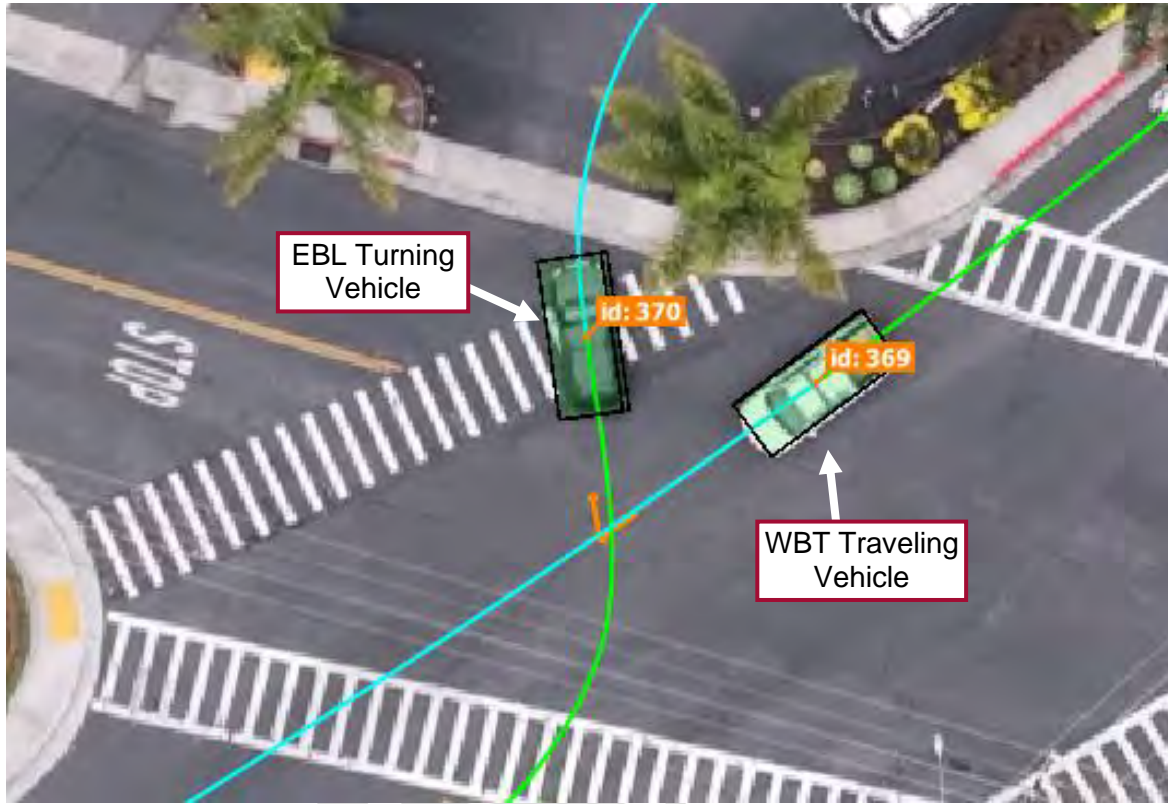


**Figure 15: Eastbound Heavy Braking**

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
<b>Total</b>	<b>35</b>

**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.



# Capitola City Council

## Agenda Report

**Meeting:** February 13, 2025

**From:** Public Works Department

**Subject:** Bay Avenue and Hill Street Traffic Safety Update



**Recommended Action:** Provide direction on short-term modifications to the Bay Avenue and Hill Street intersection.

**Background:** On November 21, 2024, the City Council discussed the Quick Build Project at Bay Avenue and Hill Street, implemented in late July/early August 2024. The project introduced lane reductions, enhanced crosswalk markings, and temporary bulb-outs to improve pedestrian safety and manage traffic flow.

Since implementation, community feedback, technical evaluations, and further Council discussions have identified areas for improvement. During the November 21<sup>st</sup> meeting, staff was instructed to remove the current configuration in spring 2025 and implement specific modifications. These modifications include extending striping for a continuous bike lane, examining costs for raised crosswalks, expanding the crosswalk by adjusting the stop sign line, and determining whether bollards can remain at all intersection corners.

The City Council also directed staff to collect additional data to enable a comparison between the current Quick Build Project configuration and the proposed new layout. The Council requested that staff return in early 2025 to present updated findings and assess whether the new configuration could be implemented in coordination with the upcoming Bay Avenue Corridor Study.

**Discussion:** Following Council direction, staff collected updated traffic data to evaluate the current intersection configuration.

Traffic volume data was gathered on a single non-rainy day during regular school schedules to maintain consistency. While seasonal variations may impact certain modes of travel—such as lower bicycle volumes in colder months—the methodology ensures a reliable baseline for comparison. The data confirms that this intersection remains a high-use location for both vehicles and pedestrians, emphasizing the need for effective safety measures.

### Traffic Data Summary

#### Bicycle Volumes (Total at Intersection)

Bike Volume Intersection Total				
Count Date	Timeline	AM Peak	Mid-Day Peak	PM Peak
2/15/2022	Before QB	24	25	19
3/7/2024	Before QB	19	N/A	15
10/24/2025	After QB	49	23	23
1/25/2025	After QB	31	22	20

#### Pedestrian Volumes (Total at Intersection)

Pedestrian Volume Intersection Total				
Count Date	Timeline	AM Peak	Mid-Day Peak	PM Peak
2/15/2022	Before QB	31	51	49
3/7/2024	Before QB	34	N/A	21
10/24/2025	After QB	18	57	61
1/25/2025	After QB	32	48	40

Vehicle Traffic – Bay Avenue Approach (Southbound)

Vehicle Traffic Bay Avenue Approach Southbound				
Count Date	Timeline	AM Peak	Mid-Day Peak	PM Peak
2/15/2022	Before QB	435	635	633
3/7/2024	Before QB	481	N/A	669
10/24/2025	After QB	484	538	545
1/25/2025	After QB	501	521	570

Vehicle Traffic – Bay Avenue Approach (Northbound)

Vehicle Traffic Bay Avenue Approach Northbound				
Count Date	Timeline	AM Peak	Mid-Day Peak	PM Peak
2/15/2022	Before QB	462	485	392
3/7/2024	Before QB	466	N/A	323
10/24/2025	After QB	477	418	417
1/25/2025	After QB	502	444	380

**Intersection Level of Service (LOS) Observations**

The Level of Service (LOS) analysis indicates the intersection's performance in January 2025 is expected to be similar to October 2024. The primary factors influencing LOS at this location are the northbound (NB) and southbound (SB) vehicle volumes along Bay Avenue.

Between October 2024 and January 2025, northbound traffic increased by approximately 5% during the morning and mid-day peak hours but saw a slight 4% decrease in the evening peak. Conversely, southbound traffic decreased by about 3% in the morning and mid-day, while remaining unchanged in the evening.

Despite these fluctuations, the changes are not significant enough to impact the overall LOS rating. While minor variations in vehicle delay (1–2 seconds) may occur, the intersection’s letter grade classification (e.g., A, B, C) remains consistent.

**Evaluation of Proposed Modifications**

The City’s traffic consultant, Kimley Horn, prepared a comparison which outlines the proposed modifications to the Bay Avenue and Hill Street intersection (Attachment 1). These modifications aim to enhance pedestrian and cyclist safety while balancing traffic operations and community needs. Below is an evaluation of key options under consideration:

Option	Benefits	Challenges	Staff Consideration	Estimated Cost
Raised Crosswalks	Safer, ADA access.	Cost, drainage, delays.	Worth considering (varies by material).	\$6K–\$25K each (asphalt, brick, stamped concrete).
Additional Green Bike Lanes	Improves bike safety.	Cost, driver confusion.	Possible improvement (includes striping removal).	\$15–\$30/sq. ft.
Bollards	Adds buffer, slows turns.	Maintenance, large vehicles.	Could be explored (durability concerns).	\$50–\$200 each
Staggered Stop Bars	May help visibility.	Minimal impact.	Not recommended	\$8–\$20/ft.

Staff recommends integrating the evaluation of these modifications into the broader context of corridor improvements. This approach will ensure that any short-term changes to the Bay Avenue and Hill Street intersection align with long-term strategies for the corridor.

Council is requested to provide direction to staff on the following:

1. Whether to proceed with short-term modifications, such as continuous green bike lanes, while awaiting the corridor study's final recommendations.
2. Identify any additional data collection or analysis required to further refine the proposed intersection changes.
3. Remove all quick-build components and return intersection to pre-project conditions.

Fiscal Impact: Costs for proposed modifications will depend on the selected measures. Based on preliminary estimates from the City's traffic consultant (Attachment 1):

- Raised crosswalks are estimated at \$6,000 – \$25,000 per location, with additional costs for brickwork, stamped materials, and drainage modifications.
- Continuous bike lanes (green thermoplastic striping) are estimated at \$15 – \$30 per square foot, including existing striping removal.
- Bollards for bike lane separation and pedestrian safety are estimated at \$50 – \$200 per bollard, depending on size and durability.
- Staggered stop bars are estimated at \$8 – \$20 per linear foot for white thermoplastic striping.
- Removing all quick build components will cost approximately \$40,000.

Staff will incorporate approved actions into the annual Pavement Management Project budget for Council consideration on February 27, 2025.

Attachments:

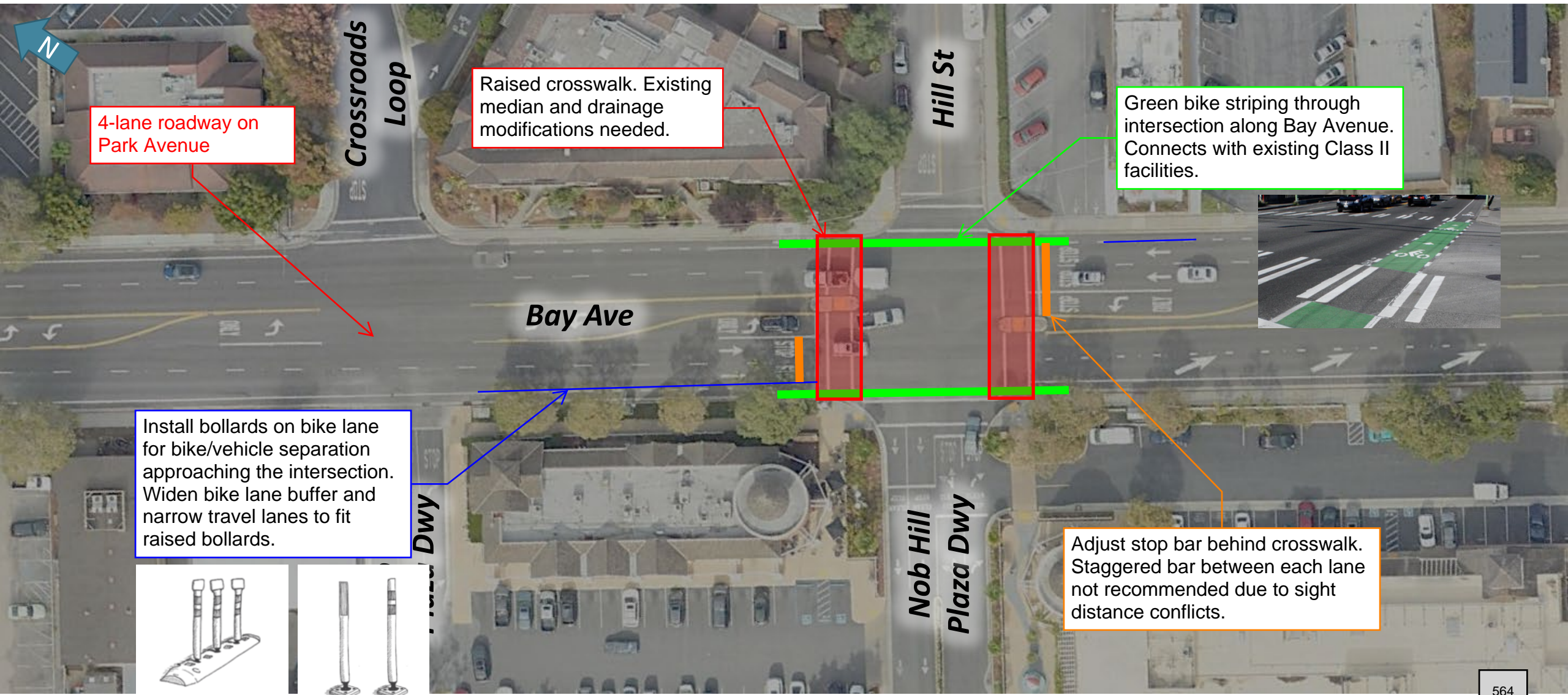
1. Potential Improvement Matrix

Report Prepared By: Jessica Kahn, Public Works Director;

Reviewed By: Julia Gautho, City Clerk; Samantha Zutler, City Attorney

Approved By: Jamie Goldstein, City Manager

# 11/21/2024 CC Notes



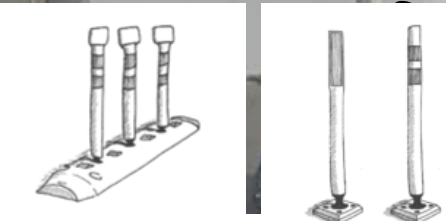
4-lane roadway on Park Avenue

Raised crosswalk. Existing median and drainage modifications needed.

Green bike striping through intersection along Bay Avenue. Connects with existing Class II facilities.


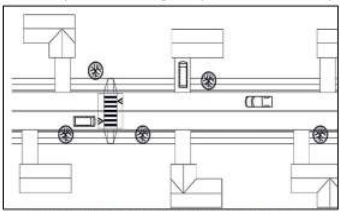
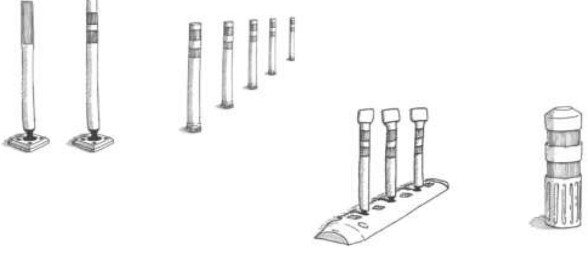
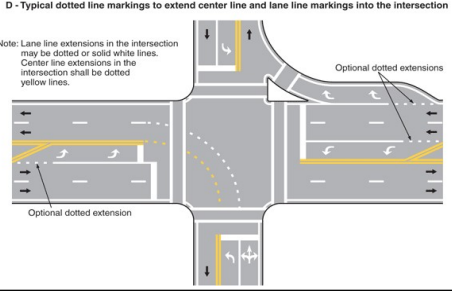



Install bollards on bike lane for bike/vehicle separation approaching the intersection. Widen bike lane buffer and narrow travel lanes to fit raised bollards.



Adjust stop bar behind crosswalk. Staggered bar between each lane not recommended due to sight distance conflicts.



12/10/2024 21:21 Potential Improvements at Bay Avenue / Hill Street Intersection (Per 11/21/2024 City Council)								
Criteria	Raised Crosswalk		Raised Bollards		Stagger Stop Bar for Bay Ave Travel Lanes		Continuous Bike Intersection Crossing Markings	
	Physical Measure		Physical Measure		Striping / Signing Measure		Striping / Signing Measure	
	Benefits	Challenges	Benefits	Challenges	Benefits	Challenges	Benefits	Challenges
<b>Pedestrian &amp; Bike Safety</b>	Identified traffic calming measure that increases visibility to approaching vehicles Increased driver-yield compliance at crossing from vertical deflection Improved ADA access since crosswalk at same elevation as the sidewalk		Increased visibility to approaching vehicles Provides physical separation buffer between vehicle and bike/ped areas on roadway		Potential improved sight lines of bike/peds on crosswalk for driver in the forward staggered lane	For adjacent movements, stop bars staggered different distances between lanes would improve sight lines for the forward vehicle but reduce sight lines for back vehicle in next lane. No net improvement to overall safety (Bay Avenue 4-lane road)	Increased visibility and identification of bike space and intended path of travel within the intersection and at the approaches Reinforces bikes have priority over turning vehicles in conflict areas Provides connectivity to existing bike facilities	
<b>Traffic Operations</b>	Reduced vehicle speeds through crosswalk due to grade change improves bike/ped safety	Increased average vehicle delay and travel times through intersection due to slower speeds to traverse crosswalk	Bollards used to create curb extension / reduce curb radius will reduce vehicle turning speeds at corners			Potential impact to sight lines (see above)	No anticipated impacts	
<b>Vehicle Queues &amp; Vehicle Access</b>	No impact to non-emergency vehicles	Potential increase in queues to traverse through intersection from slower speeds Typically not appropriate for primary emergency vehicle routes. Requires coordination with fire & police	No impact to non-emergency vehicles	Posts at intersection corners may potentially be struck from large delivery or emergency vehicles	No anticipated impacts		No anticipated impacts	
<b>Design, Construction, &amp; Maintenance</b>	Recommended on streets with posted speed up to 30mph Existing raised crosswalks implemented in Capitola (Clares St and Jewel Box neighborhood)	Modification of drainage design along the curb needed to prevent ponding Increase noise due to vehicle acceleration/braking over crosswalk Recommend improvement to nighttime visibility for approaching vehicles / bikes	For bike lanes, center delineator within the buffer zone along the edge of the bikeway. Typical spacing is every 8 - 20 ft, depending on the thoroughfare's design speed / bikeway configuration. Allow a minimum of 1.5 ft. clear width for installation of smaller delineators	Ongoing maintenance from vehicle strikes. Smaller bollard sizes have lower durability and will require more replacement. For Bay Avenue with 4-lane geometry, wider bike lane buffer width (1.5' min) recommended to use bollards	Recommend stop lines to be placed at least 4-ft in advance of crosswalk (no stagger between adjacent lanes)	Staggered stop bar between left turn and through lanes permitted in MUTCD to increase turning radius clearance for large vehicles making a left turn. This issue is not present at Bay/Hill intersection (see example below).	Provides benefit on northbound and southbound Bay Avenue approaches with existing Class II bike facilities	May not be applicable to install on for the eastbound and westbound Nob Hill and Hill Street approaches due to lack of existing bike facilities/striping
<b>Cost Range</b>	\$6,000 to \$25,000 per crosswalk location (Asphalt) Additional costs for brickwork, stamped material, concrete ramps, and other enhancements used at pedestrian crossings		\$50 to \$200 per bollard or segment (depending on size and type) Flexible delineator post < High performance delineator < Raised lane separator < K71 Delineator Post		\$8 to \$20 per linear foot (white thermoplastic striping) Includes removal of existing striping		\$15 to \$30 per square foot (green thermoplastic striping) Includes removal of existing striping	
<b>Examples</b>	 <small>(Source: Google Maps, Boulder, Colorado)</small>	 <small>(Source: Delaware Department of Transportation)</small>		 <small>D - Typical dotted line markings to extend center line and lane line markings into the intersection Note: Lane line extensions in the intersection may be dotted or solid white lines. Center line extensions in the intersection shall be dotted yellow lines. Optional dotted extensions</small>				
<b>Source</b>	<a href="https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer/module-3-part-2#3.14">https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer/module-3-part-2#3.14</a> <a href="https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/">https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/</a> <a href="http://www.pedbikesafe.org/BIKESAFE/countermeasures_detail.cfm?CM_NUM=27">http://www.pedbikesafe.org/BIKESAFE/countermeasures_detail.cfm?CM_NUM=27</a>		<a href="https://tacticalurbanismguide.com/materials/raised-lane-separator/">https://tacticalurbanismguide.com/materials/raised-lane-separator/</a> <a href="https://tacticalurbanismguide.com/materials/flexible-delineator-post/">https://tacticalurbanismguide.com/materials/flexible-delineator-post/</a>		<a href="https://mutcd.fhwa.dot.gov/hm/2009/part3/part3b.htm">https://mutcd.fhwa.dot.gov/hm/2009/part3/part3b.htm</a>		<a href="https://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/intersection-crossing-markings/">https://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/intersection-crossing-markings/</a>	

# Capitola City Council

## Agenda Report



**Meeting:** February 13, 2025

**From:** Public Works Department

**Subject:** Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options

**Recommended Action:** Review options for Coastal Rail Trail improvements in the Park Avenue right-of-way and identify Option A (as described in the staff report) as the preferred alternative for further analysis.

**Background:** Park Avenue is a principal arterial road in Capitola, supporting vehicle, bicycle, and pedestrian traffic. Caltrans designates it as part of the Pacific Coast Bike Route, making it vital for both local and regional transportation. Following a traffic study conducted in January 2020, the City Council identified the need for speed reduction measures due to perceived safety concerns along this corridor.

In response, City staff engaged its on-call traffic engineering firm, Kimley Horn, to evaluate traffic calming alternatives. These options were presented to the City Council on [September 8, 2022](#), and focused on reducing vehicle speeds and enhancing safety for all users. Traffic calming strategies included: speed bumps/tables, adding curves, physical barriers, road diets, and signage (Attachment 1).

Separately, during this same timeframe, the County of Santa Cruz (County), in coordination with the Santa Cruz County Regional Transportation Commission (RTC), developed preliminary design plans and completed an environmental review for Segments 10 and 11 of the Rail Trail, which runs from 17<sup>th</sup> Avenue to State Park Drive, traversing the length of the City of Capitola. This project is funded by a combination of state and federal grants and Measure D-Active Transportation funds, with no financial contribution required from the City of Capitola. The County and the RTC previously presented project updates to the City Council on [March 23, 2023](#), and [October 26, 2023](#). During the October 26, 2023, meeting, the City Council consented to a consolidated Coastal Development Permit. This project is funded by a \$67.6 million grant from the California Transportation Commission, \$8.5 million in federal Rebuilding American Infrastructure with Sustainability and Equity (RAISE) funding, and local Measure D-Active Transportation funds. Cost estimates in 2023 indicated the project was over budget by approximately \$27 million (not including the recently announced RAISE grant funding of \$8.5 million).

### Discussion:

#### **Park Avenue Traffic Calming Community Outreach**

In late 2023, the City conducted a survey to gather input on proposed traffic calming measures and received around 100 responses. This effort was complemented by a virtual public meeting in January 2024, which attracted significant participation. A summary of public outreach is included in Attachment 2. Key findings from the outreach include:

1. **Parking Issues:** Concerns were raised about potential reductions in parking availability, particularly affecting families with multiple vehicles.
2. **Traffic Safety:** Residents advocated for physical barriers to separate bicycles from vehicles, radar signs, and enhanced speed enforcement. Speed bumps or speed tables were also suggested to discourage speeding.
3. **Support for Road Diet:** There was strong support for narrowing car lanes and widening bike lanes to improve safety for cyclists, pedestrians, and school children.

4. Community Engagement: Residents expressed the need for continued transparency and opportunities for input.
5. Traffic Patterns: Concerns about unsafe conditions due to cut-through traffic were highlighted.
6. Visual Concerns: Some community members worried about aesthetic impacts on the area's natural beauty.

The City's project team incorporated feedback from the community outreach process into a final design for the Traffic Calming Project, which was completed in October 2024 (Attachment 3). The elements of this project would include:

1. Restriping the entire roadway to narrow vehicle lanes down to 10.5 feet
2. Add a buffered bike lane for outbound Park Avenue starting at Washburn Avenue and terminating at Coronado Street
3. Add a buffered bike lane for inbound Park Avenue starting at Coronado Street and terminating at Wesley Street. Due to project budget constraints and challenges associated with leaf litter in the project area, a physical barrier to separate bicycles from vehicles was not included.
4. Adding green bike markings at all intersections
5. Improving the intersection at Park and Monterey Avenues with updated bike and pedestrian markings
6. Improving the intersection at Park Avenue and Kennedy Drive by switching the crosswalk locations to match with the existing curb ramps and creating a small painted bulbout
7. Installing additional speed feedback signs
8. Considering, but not implementing, speed tables/crossings/cushions. These could be implemented at a later date when funding is available.

The Traffic Calming Project was primarily a restriping effort that was not planned to include any treatment to road or sidewalk conditions, nor the fully separated bicycle facility that was requested by members of the public during the community outreach phase. Items 5 and 6 listed above are being completed as part of the City's coordinated work with the Pure Water Soquel Project and the Upper Village Parking Lot Sidewalk Project.

### **Coastal Rail Trail Alignment Options**

As stated above, during the same time period that the City has been preparing its Traffic Calming Project, the County of Santa Cruz and RTC have been developing the Coastal Rail Trail. Segments 10 and 11 of the Rail Trail, as approved by the Board of Supervisors in April 2024, included a trail alignment that was on the coastal side of the existing tracks between Monterey Avenue and Coronado Street, within the rail right-of-way. This alignment is consistent with the Monterey Bay Sanctuary Scenic Trail Master Plan from 2013. The County and RTC presented this design to the Capitola City Council on October 26, 2023. Due to existing topography and right-of-way constraints, constructing the trail on the coastal side of the tracks between Monterey Avenue and Grove Lane requires the construction of significant infrastructural components, including approximately 1,500 feet of retaining walls up to 16 feet high and a 240 foot long viaduct across Escalona Gulch. Similarly, constructing the trail on the coastal side of the rail between Grove Lane and Coronado Street also requires significant infrastructure, including approximately 950 feet of retaining walls up to 8 feet high, and a 330 foot long viaduct on steep slopes above the New Brighton State Beach parking lot.

Because of the extensive infrastructure required by the original design, the County and RTC are proposing to revise the Coastal Rail Trail Segment 11 alignment between Monterey Avenue and Coronado Street (approximately 0.7 miles) to the Park Avenue right-of-way, in the City of Capitola. The County and RTC are also proposing to coordinate the realigned segment of the trail with Capitola's Park Avenue Traffic Calming Project. Shifting the Coastal Rail Trail alignment to the Park Avenue right-of-way will enhance bicycle and pedestrian safety while improving connectivity between neighborhoods, the Coastal Rail Trail, and Capitola Village. This alignment serves as a cost reduction strategy identified in

the value engineering analysis. Finally, the Park Avenue Coastal Rail Trail alignment is designed to avoid possible conflicts with potential future transportation uses in the rail corridor.

Since the approved designs were developed in 2022-2023, additional information has emerged that should be considered as part of the trail and rail corridor's development.

1. Updated cost estimates for the Coastal Rail Trail Segments 10 & 11 showed significant increases in construction costs and right-of-way costs, which increased the project costs for these two phases from \$78.3 to \$104.4 million. The potential cost increase necessitated the need for value engineering to reduce costs. The RTC completed a value analysis study for the project in June 2024, which included a cost reduction strategy to route the trail along the Park Avenue right-of-way.

Space constraints in the existing rail corridor may limit the ability to accommodate both the Rail Trail and other future transportation uses. Routing the trail along the Park Avenue right-of-way provides a long-term solution that avoids potential conflicts within the rail right-of-way while ensuring the trail remains a viable and continuous active transportation route. Additionally, shifting the trail out of the rail corridor minimizes the risk of future modifications or removals that could arise if other transportation projects, such as those studied in the Zero Emission Passenger Rail and Trail Project, are pursued in the corridor.

2. As mentioned earlier, the City was independently developing lower-cost traffic-calming options along Park Avenue to help slow vehicular traffic and improve bicycle and pedestrian safety.

As a result of this new information, the County and RTC have recommended shifting Coastal Rail Trail Segment 11 from between Monterey Avenue and Coronado Street (approximately 0.7 miles) to the Park Avenue right-of-way. City staff supports this recommendation.

The proposed realignment would include a new 12-foot-wide Class I multi-use path adjacent to Park Avenue on the coastal side of the roadway and includes a minimum 3-foot buffer between the vehicular travel lane and trail. The design includes improvements from Capitola's Park Avenue Traffic Calming Project, such as narrowed travel lanes and speed feedback signs. The Coastal Rail Trail project will also add crosswalks with push-button activated rectangular rapid flashing beacons (RRFB), similar to the newly installed crosswalk at Cabrillo Street, that would connect the trail to the surrounding neighborhood at McCormick Avenue, Washburn Avenue, and the 600 Park Avenue driveway. Intersection lighting will also be upgraded at new crosswalks and trail lighting could also be installed.

In coordination with Capitola staff, the Rail Trail Project team developed two Coastal Rail Trail alignment options along the Park Avenue right-of-way. Option A (Attachment 4) extends the Park Avenue footprint further towards the coast to add the Coastal Rail Trail on the coast side of Park Avenue in order to preserve the existing on-street Class II bike lane on the inland (inbound) side of Park Avenue. Option B (Attachment 5) shifts the Park Avenue roadway alignment inland in order to maximize the use of the existing Park Avenue right-of-way for development of the Coastal Rail Trail and eliminates the Class II bike lane on the inland (inbound) side. Option B is expected to reduce environmental impacts when comparing the two Park Avenue alignments and will reduce project costs. With Option B, cyclists traveling towards Capitola Village would utilize the Class 1 multi-use path on the coast side of Park Avenue instead of the existing Class II bike lane on the inland side of Park Avenue. This would require local bicycle traffic from the Cliffwood Heights neighborhood to cross Park Avenue to access a bike path. Option A would maintain the existing Class II bike lane on the inland side of Park Avenue and allow local users direct access to a bike path for westbound trips without crossing Park Avenue.

Under either option, the existing on-street Class II bike lane on the coastal (eastbound) side of Park Avenue will be eliminated to accommodate the Class I trail. Similarly, from Grove Lane to Coronado

Street, the existing sidewalk on the coastal side of the street would be converted to a portion of the Class I trail under either option. Sections of that sidewalk are currently deficient.

As noted above, this trail alignment along the Park Avenue right-of-way and outside of the rail right-of-way is consistent with cost reduction strategies identified in the value engineering analysis. Attachment 6 shows both options.

Both Park Avenue alignments include a ramp from Park Avenue to the rail line at Coronado Street. The feasibility of a trail alignment on Park Avenue and on the inland side of the rail right-of-way between Grove Lane to Coronado Street is subject to the California Public Utilities Commission (CPUC) approval of a new formal pedestrian crossing of the existing rail line at Coronado Avenue. This is because in either of the above scenarios, a new formal crossing is needed to shift the trail from the inland side of the rail right-of-way to the coastal side of the rail right-of-way at Coronado Street, where the trail is above the New Brighton State Beach parking lot. From Coronado Street, through New Brighton State Park to Mar Vista Avenue, the trail is on the coastal side of the tracks. This crossing is needed to connect these two portions of the project and facilitate the trail crossing from the inland to the coastal side of the tracks. Although the existing informal crossing is heavily used, CPUC approval is needed to construct the trail crossing. Initial discussions between the County of Santa Cruz, RTC, Capitola, and CPUC staff indicate that the CPUC would approve a new crossing of the rail line at Coronado Street given existing conditions. Should the CPUC not approve the new crossing of the existing rail line at Coronado as part of the Rail Trail Project, the County of Santa Cruz and RTC could consider a partial alignment of the trail on Park Avenue from Monterey Avenue to Grove Lane that transitions the trail from Park Avenue to the coast side of the tracks at the existing Grove Lane crossing.

Both Park Avenue alignment options aim to reduce tree removals, especially the trees that function as a windbreak to the Escalona Gulch monarch butterfly habitat. To that end, both Park Avenue alignment options include reconstruction of the existing sidewalk, curb, and gutter along the 600 Park Avenue frontage to move the sidewalk approximately 4 feet inland to the edge of the City-owned right-of-way. This allows the roadway centerline to shift inland in the area directly adjacent to Escalona Gulch, reducing tree removals to the maximum extent possible.

The previously approved coastal alignment required the removal of 78 trees between Monterey Avenue and Grove Lane and 63 trees between Grove Lane and Coronado Street, for a total of 141 tree removals. Option A is estimated to require the removal of approximately 122 trees (105 trees between Monterey Avenue and Grove Lane and 17 trees between Grove Lane and Coronado Street), and Option B is estimated to require the removal of approximately 94 trees (79 trees between Monterey Avenue and Grove Lane and 15 trees between Grove Lane and Coronado Street). Either Park Avenue alignment therefore would result in overall less tree removal than the coastal alignment.

Some of the trees that would be removed with either Park Avenue alignment option function as important windbreak trees for the Escalona Gulch monarch butterfly habitat, and their removal could result in increased impacts to that habitat. The Rail Trail Project team is working with City staff, regulatory agencies, and local monarch butterfly experts to understand the potential impacts to the Escalona Gulch monarch butterfly habitat, and ways to both minimize impacts through design of the trail and to enhance the long-term health of the habitat through enhanced mitigation.

RTC staff, in coordination with County and City staff, will seek input on the alignments from the RTC's Bicycle Advisory Committee on February 10<sup>th</sup> and the Elderly and Disabled Technical Advisory Committee on February 11<sup>th</sup>. Results from the advisory committee meetings will be shared by County and RTC staff as part of their presentation to the City Council for this agenda item.

The County of Santa Cruz staff is seeking City Council input on the preliminary design of the Park Avenue alignment and recommends identifying Option B as the preferred alternative, citing reduced tree removals and cost savings. City staff, however, recommends Option A to preserve the existing Class II bike lane on the inland side of Park Avenue, ensuring continued on-street bike access toward Capitola Village.

Regardless of the selected option, the preferred alignment will proceed with additional environmental analysis to implement alignment of the Coastal Rail Trail along Park Avenue. If approved, the project

team will conduct additional environmental analysis in order to environmentally clear the Coastal Rail Trail Park Avenue alignment, including potential impacts to the monarch butterfly habitat at Escalona Gulch. Depending on the impact analysis of the new alignment, the additional environmental review will be an addendum to the environmental impact report (EIR) or a supplemental EIR. Once ready, the analysis will be brought back to the Council as part of the City’s consideration of the project’s final EIR. This is estimated to occur in Summer 2025.

**Measure L**

Capitola voters approved Measure L in 2018. Measure L is codified in Chapter 8.72 (Greenway Capitola Corridor) of the Capitola Municipal Code. Its purpose is to enhance pedestrian, bicycle, and traffic safety within the City by encouraging the development of the Monterey Bay Sanctuary Scenic Trail (Trail) within the Santa Cruz Branch Line Rail Corridor (Corridor) (CMC §§ 8.72.010, 8.72.030). CMC section 8.72.040, which contains the “implementation” sections of Measure L, provides:

- A. The city of Capitola, through its constituent departments, shall take all steps necessary to preserve and utilize the Corridor and Trestle for active transportation and recreation.
- B. No city of Capitola department, agency or employee shall expend any funds or resources related to the construction, reconstruction, operation, maintenance, financing, marketing, or signage for a detour of the Trail onto Capitola streets or sidewalks.

RTC’s proposal to construct the Trail within the City’s Park Avenue right-of-way is consistent with Measure L for several reasons.

First, Measure L directs the City to take “all steps necessary to preserve and utilize the Corridor and Trestle for active transportation and recreation” (CMC § 8.72.040(A)). The City does not own the Trail or the Corridor, so the Coastal Rail Trail Segment 11 Project is the only foreseeable opportunity that the City has to advance Measure L’s goals. The Coastal Rail Trail Segment 11 project advances Measure L’s goal of preserving and utilizing the Corridor for active transportation and recreation because it proposes to construct the Trail on portions of the Corridor. If the City does not approve Option A or Option B, staff understand that the County may be unable to construct the segment of the Coastal Rail Trail Segment 11 project that runs through Capitola at all. Interpreting Measure L to preclude the City from approving Option A or Option B would thus undermine, rather than advance, Measure L’s goals. Indeed, without the project, the capitol segment of the Corridor will not be utilized for active transportation and recreation at all.

Second, the section of Measure L that prohibits the expenditure of resources on a “detour of the Trail onto Capitola streets or sidewalks” is not implicated by Option A or Option B (CMC 8.72.040(B)). The dictionary defines a “detour” as a “departure from a direct course” or a “roundabout way temporarily replacing the regular route.” Designing and construction of Coastal Rail Trail Segment 11 as described in Option A and/or Option B is not a “detour” because the Trail does not exist and has no “direct course” in the City. Moreover, Option A and/or Option B are consistent with Measure L because they do not propose the construction of the Trail on Capitola’s streets or sidewalks. As explained above, RTC proposes to construct a new Class I bike path within a portion of the right-of-way that is adjacent to and physically separated from Park Avenue.

**Summary of Considerations**

Capitola, County of Santa Cruz, and RTC staff recommend approval of the Park Avenue alignment for Coastal Rail Trail Segments 10 and 11 for the following reasons:

1. Traffic Safety: The Coastal Rail Trail project will provide a grade-separated facility for pedestrians and cyclists, improving safety and reducing conflicts along Park Avenue. The trail project will also narrow vehicular lanes and install speed feedback signs, helping to reduce vehicle speeds.

2. **Community Engagement Consistency:** Extensive outreach has already been conducted as part of the City's Traffic Calming Project, with notifications sent to participants of previous Park Avenue outreach efforts, and the improvements proposed as part of the Rail Trail's Park Avenue alignment are consistent with community feedback. Principal themes from community outreach were a request to provide as much separation from vehicles for pedestrians and bicycles as possible, enhancing visibility of crosswalks, reducing roadway width to slow vehicle speeds, and introducing minimal visual impact.
3. **Improved Neighborhood Connectivity:** The Park Avenue alignment for the Coastal Rail Trail will improve connectivity to the surrounding neighborhoods, since it will be accessible from Park Avenue and connecting streets. In addition, the Coastal Rail Trail will install crosswalks with RRFBs to allow neighbors to directly and safely access the trail from connecting streets.
4. **Reduced Cost:** The Park Avenue is expected to reduce Coastal Rail Trail construction costs compared to the previously approved coastal alignment.
5. **Avoids Conflict with Potential Future Transportation Options:** The Park Avenue alignment ensures the long-term viability of the Coastal Rail Trail by reducing conflicts within the rail corridor and avoiding potential throw-away costs if future transportation projects, such as those in the Zero Emission Passenger Rail and Trail Project, are pursued.
6. **Pedestrian Enhancements:** Addresses deficiencies in the existing sidewalk section along Park Avenue between Coronado Street and Cabrillo Street.

City staff recommends approval of Option A, as it preserves the existing Class II bike lane on the inland side of Park Avenue. Maintaining this lane ensures continued access for on-street cyclists, particularly those accustomed to riding in a standard bike lane rather than a shared-use path and local users who are traveling westbound.

If the Capitola City Council authorizes further analysis of the Park Avenue alignment, City staff will defer the Park Avenue Traffic Calming improvements to save City costs, since the traffic calming improvements will be included with the Coastal Rail Trail Project Segments 10 and 11.

### **Interim Measures**

Staff does not recommend implementing previously considered alternatives (road diet, buffered bike lanes, and green striping) as an interim measure due to costs (estimated at approximately \$160,000) and the anticipated Rail Trail Project improvements.

**Fiscal Impact:** The City allocated \$100,000 for the Park Avenue Traffic Calming Project in the FY 2024-25 CIP budget. To date, \$19,500 has been spent on design alternatives and public outreach, leaving \$80,500 available. If Council opts to proceed with the Coastal Rail Trail Project improvements, these funds could be reallocated to another street project or to the General Fund.

The Coastal Rail Trail Project, including Park Avenue improvements, will be funded by state and federal grants and Measure D-Active Transportation funds from the RTC. There are no City funds being invested in the project. Without the realignment, the City would not be funding or installing these improvements independently. The bicycle and pedestrian improvements proposed as part of the Rail Trail alignment along Park Avenue have an estimated value of \$3 to \$5 million dollars. This is a large investment that will significantly improve bicycle and pedestrian safety and infrastructure on Park Avenue that does not require the use of any City funding and would be unlikely to be funded otherwise.

**California Environmental Quality Act (CEQA):** The Coastal Rail Trail Segment 10 and 11 Project's Final EIR was certified by the County on March 26, 2024, and the project was approved on April 30, 2024. The modified trail alignment along Park Avenue will require additional environmental review to analyze impacts. Once additional environmental review for this alignment is completed, staff will bring the final EIR, including any modifications required by the additional environmental review, to the City Council for acceptance. The County's Final EIR can be accessed at the following link:

[cdi.santacruzcountyca.gov/Portals/19/pdfs/RailTrail/RTS1011\\_FEIR\\_Vols\\_1-3\\_COMBINED.pdf](http://cdi.santacruzcountyca.gov/Portals/19/pdfs/RailTrail/RTS1011_FEIR_Vols_1-3_COMBINED.pdf)

Attachments:

1. Public Outreach Presentation Slides
2. Public Outreach Results
3. Traffic Calming Plans October 2024
4. Park Avenue Alignment Option A: Preserving the Inland Class II Bike Lane
5. Park Avenue Alignment Option B: Maximizing Right-of-Way for the Coastal Rail Trail
6. Comparative Perspectives of Alignment Options on Park Avenue

Report Prepared By: Kailash Mozumder, Public Works Project Manager

Reviewed By: Jessica Kahn, Public Works Director, Julia Gautho, City Clerk

Approved By: Jamie Goldstein, City Manager

Manager



# Park Avenue Public Workshop #1



## Traffic Calming Presentation January 2024





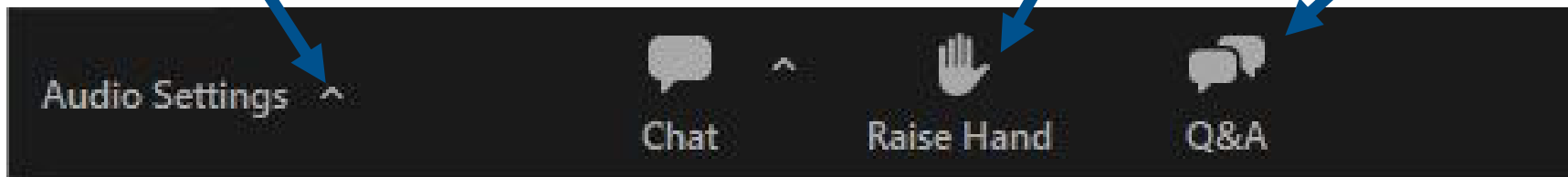
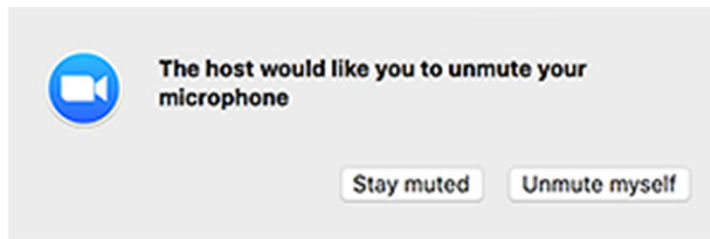
# Park Avenue Virtual Meeting Controls

**Audio Settings:** Change your [audio settings](#). You can also click the upward arrow (^) next to change your speaker.

**Unmute/Mute:** When the host gives you permission, you can unmute and all participants will be able to hear you talk. If the host allows you to talk, you will receive this notification - **click “unmute myself”**

**Raise Hand:** [Raise your hand](#) in the webinar to indicate that you want to make a verbal comment. Function is under Reactions.

**Question & Answer:** Open the chat window, allowing you to ask questions only to the host. The host will collect these questions and respond after the meeting.



# Park Avenue Virtual Meeting Controls



- Meeting participants are on mute until unmuted by Host for Q&A
- There is a Q&A feature at the bottom of the screen for participants to type their questions in advance. You can “raise your hand” to be unmuted to speak.
- If you are calling in on a landline, please press \*9 to “raise your hand” and we will unmute you when it is your turn to speak. Press \*6 to speak.
- We will devote up to 3 minutes per question/comment and please keep comments related to the project.
- Please allow others an opportunity to speak before “raising your hand” again.



# Park Avenue Public Workshop #1



## Traffic Calming Presentation January 2024



# Park Avenue Workshop Agenda



- Project background
- Overview of project features
- Open discussion and public comment on project layout

# Park Avenue Project Background

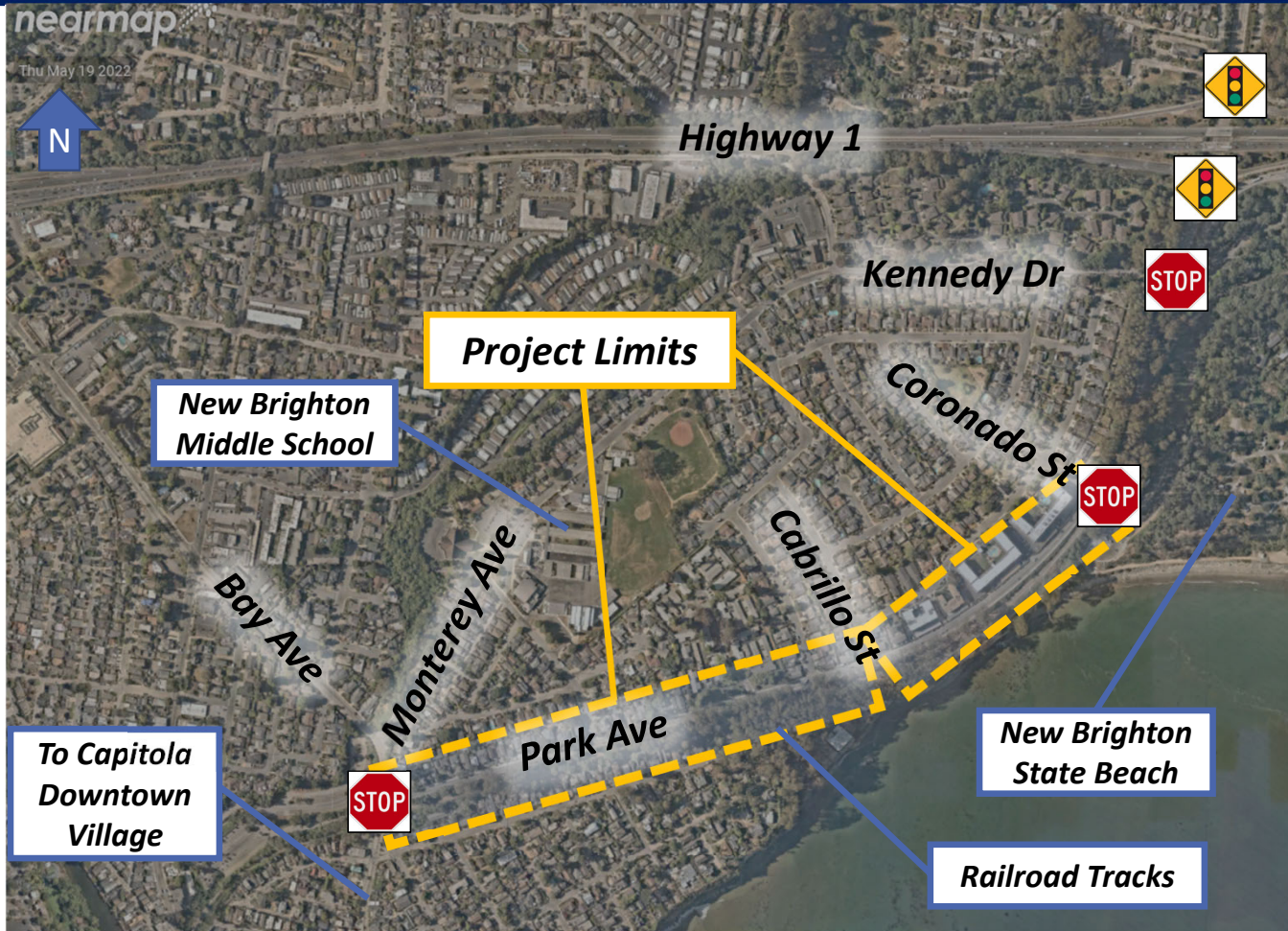


- Project purpose and goals:
  1. Enhance pedestrian and bicycle accessibility
  2. Reduce vehicle speeds
  3. Minimize construction timing delays to existing residents
- Project identified in City Capital Improvement Program (CIP)
  - Neighborhood Traffic Advisory Committee Project (N10)





# Park Avenue Project Overview Map





# Park Avenue Existing Conditions (Monterey to Cabrillo)



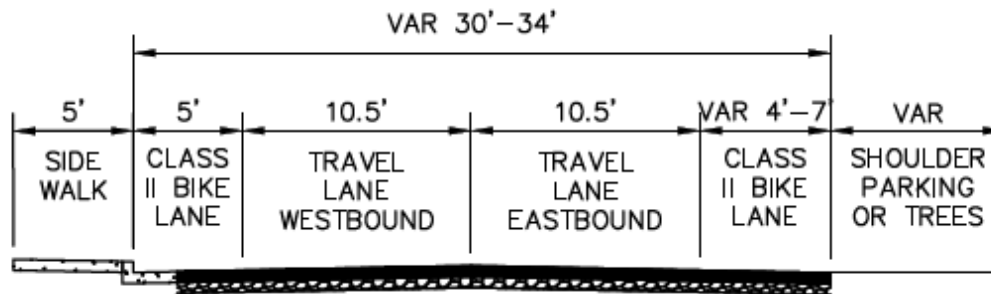
Sidewalk and striped crosswalks on north side



Residential driveway access on north side



Vehicle parking on south side







# Park Avenue Existing Conditions (Cabrillo to Coronado)



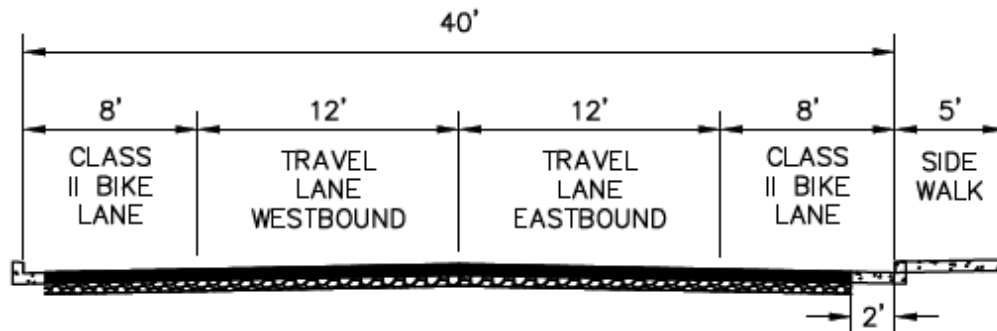
Flashing beacon pedestrian crosswalk at Cabrillo



Sidewalk and speed feedback on south side



All way stop control and crosswalk at Coronado





# Park Avenue Traffic Volumes (2022)

Description	Year 2022 Traffic Count		
	Eastbound To Coronado	Westbound To Monterey	Total Traffic Volume
Average Daily Traffic (ADT)	4,614	3,138	7,752
Morning Peak (8-9 AM)	278	433	711
School PM Peak (3-4 PM)	534	267	801
Evening Peak (4-5 PM)	606	217	823







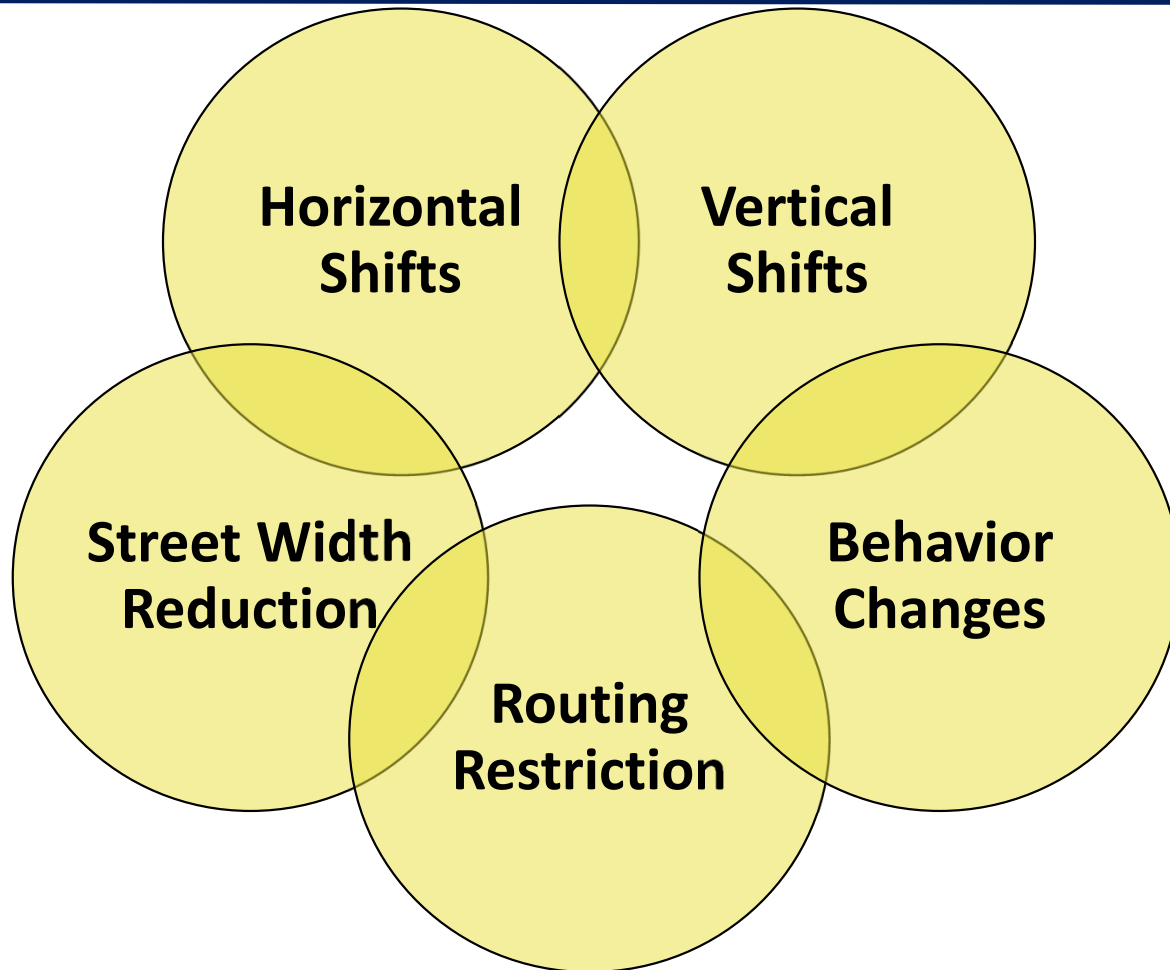
# Park Avenue Vehicle Speeds (2022)

Description	Year 2022 Traffic Count	
	Location 1 - West of Washburn Ave	Location 2 - East of Cabrillo St
Posted Speed Limit (mph)	25	25
85% Speed Eastbound (to Coronado)	34	36
85% Speed Westbound (to Monterey)	34	38
Is Speeding Significant?	Yes	Yes



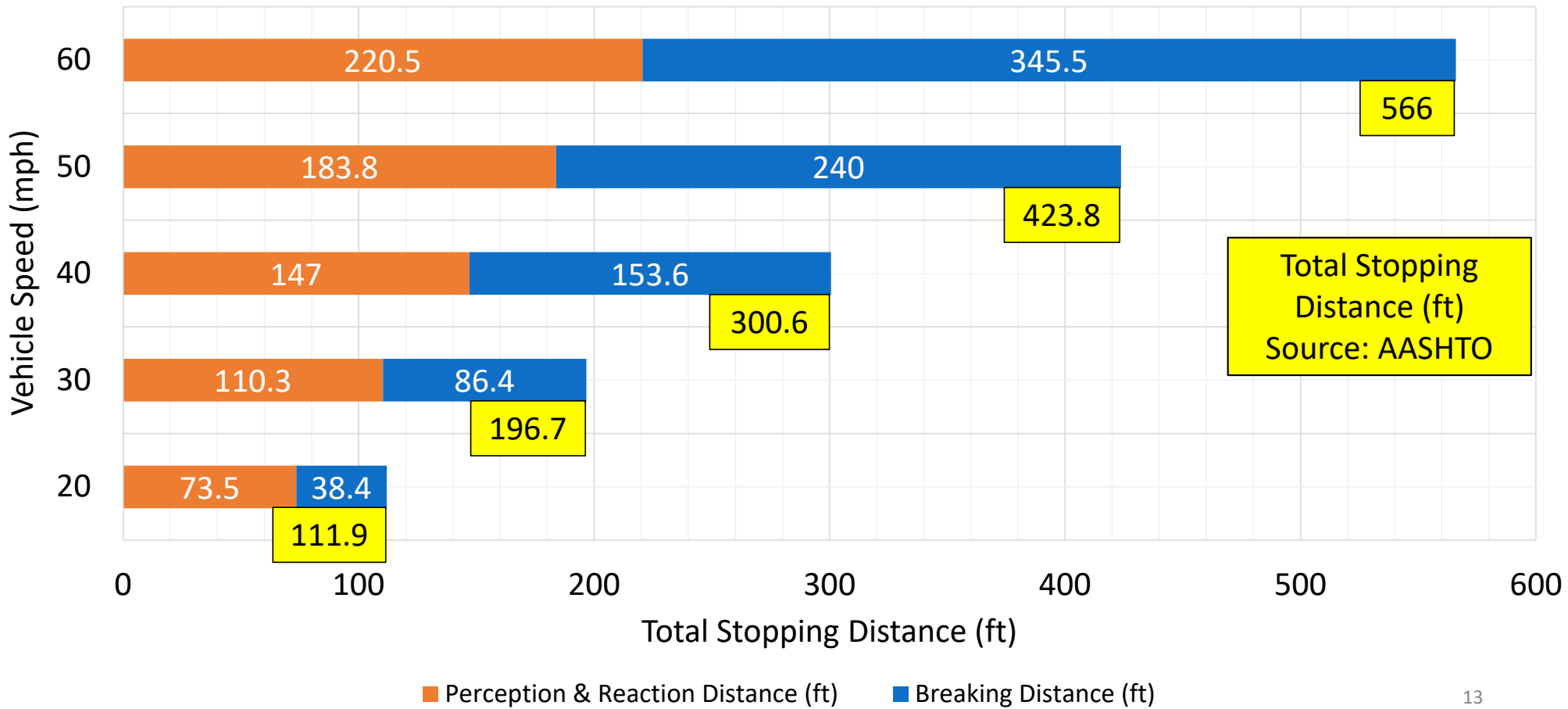


# Park Avenue Traffic Calming Toolbox



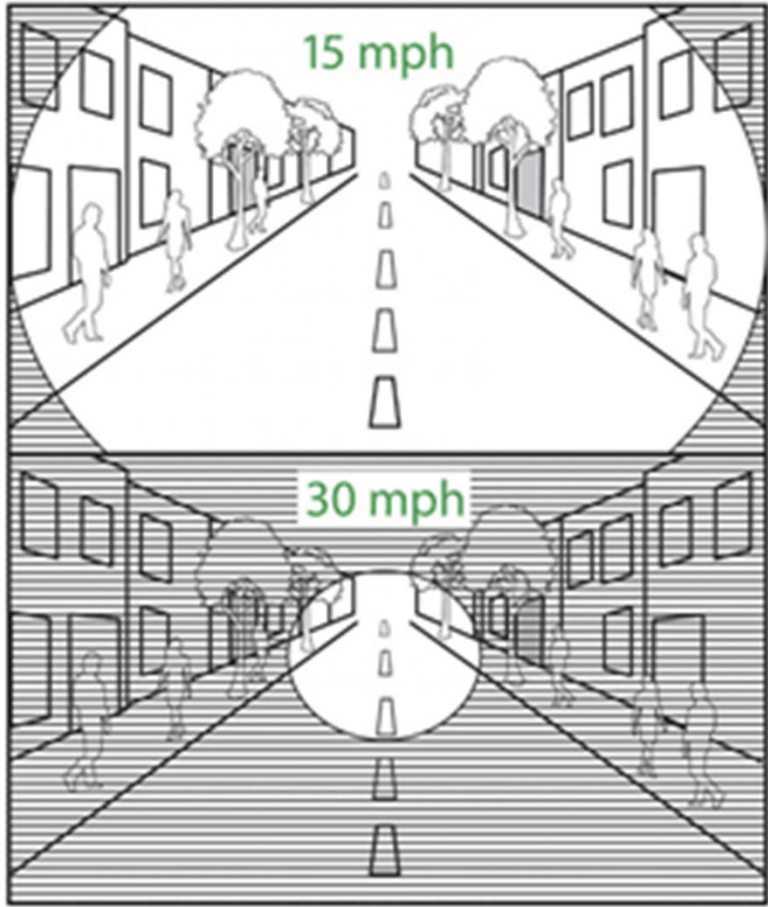


# Park Avenue Travel Speed Impact to Stopping Distance





# Park Avenue Travel Speed Impact to Driver Vision



Source: ITE



# Park Avenue Travel Speed Impact to Pedestrian Fatality

● If hit by a person driving at:      ● Person Survives the Collision      ● Results in a Fatality



Source: ITE





# Park Avenue Alternative 1 – Road Diet Striping







# Park Avenue Road Diet

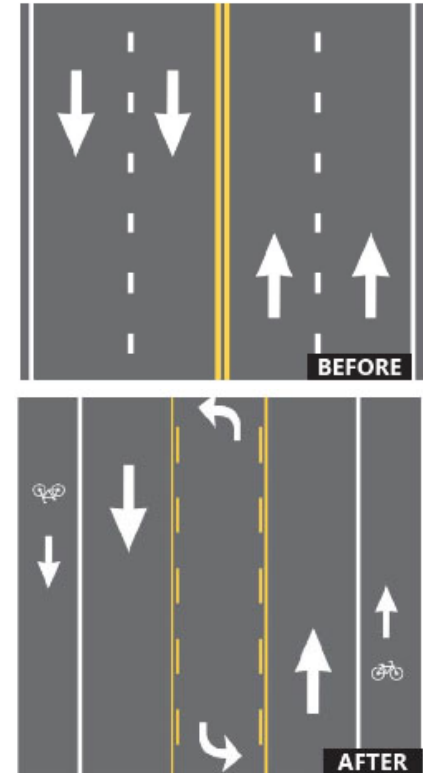
Conversion of undivided roadway to a cross-section with fewer or narrower vehicle travel lanes. Street width reduction measure.

## Benefits

- Reduction in lanes allows inclusion of pedestrian, bike, and transit facilities
- Slight reduction in vehicle speeds

## Drawbacks

- Requires lane and sign reconfiguration at intersections





# Park Avenue Speed Feedback Sign

Displays regulatory speed limit sign with radar speed feedback sign with real-time speed of an approaching vehicle. Behavioral traffic calming measure.

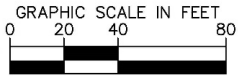
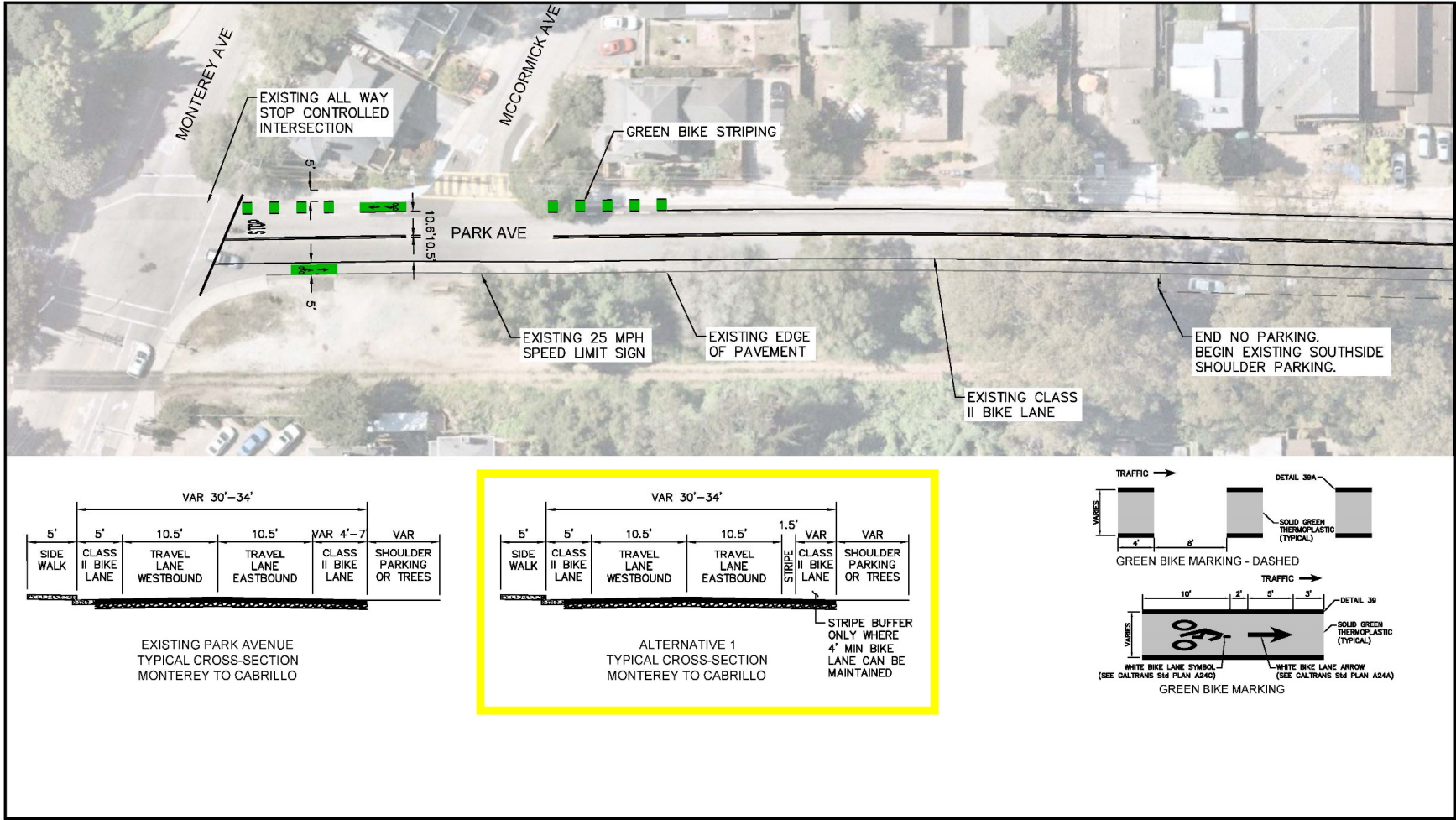
## Benefits

- Does not physically restrict driver maneuvers
- Involves a standard traffic control device that drivers can easily recognize

## Drawbacks

- Creates light pollution



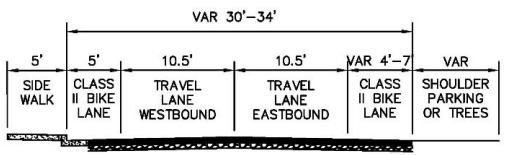
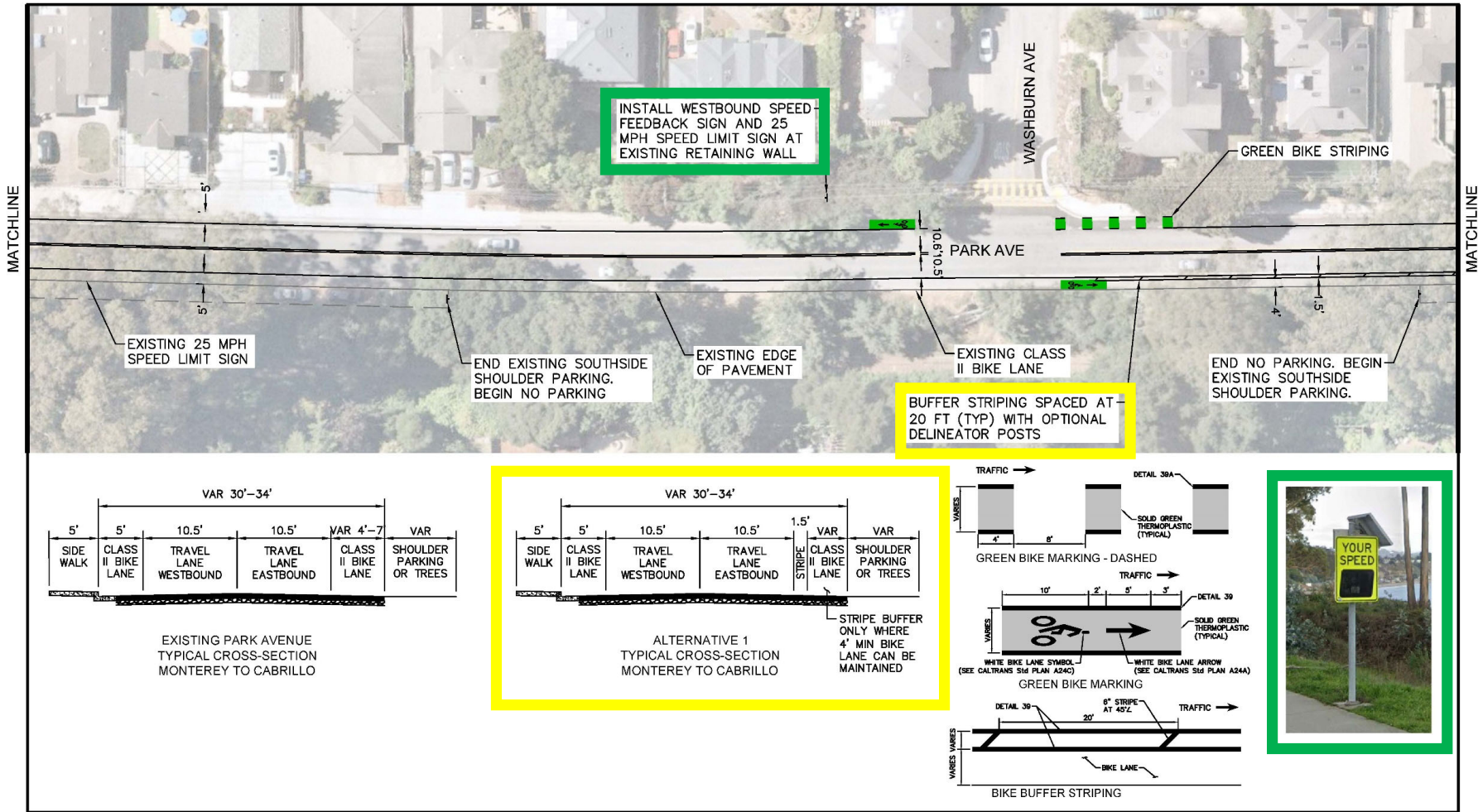


CONCEPT LAYOUT FOR PLANNING PURPOSES. NOT FOR CONSTRUCTION

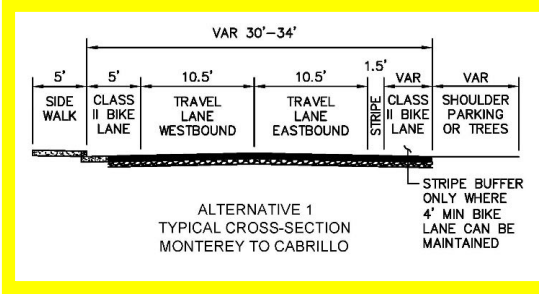
ALTERNATIVE 1 - ROAD DIET STRIPING  
PROPOSED TC LAYOUT - SHEET 1

CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING

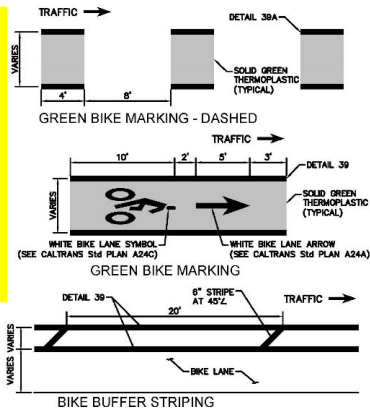


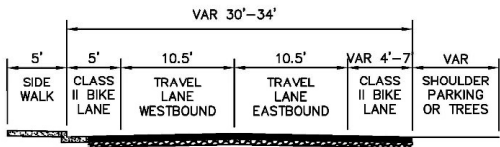
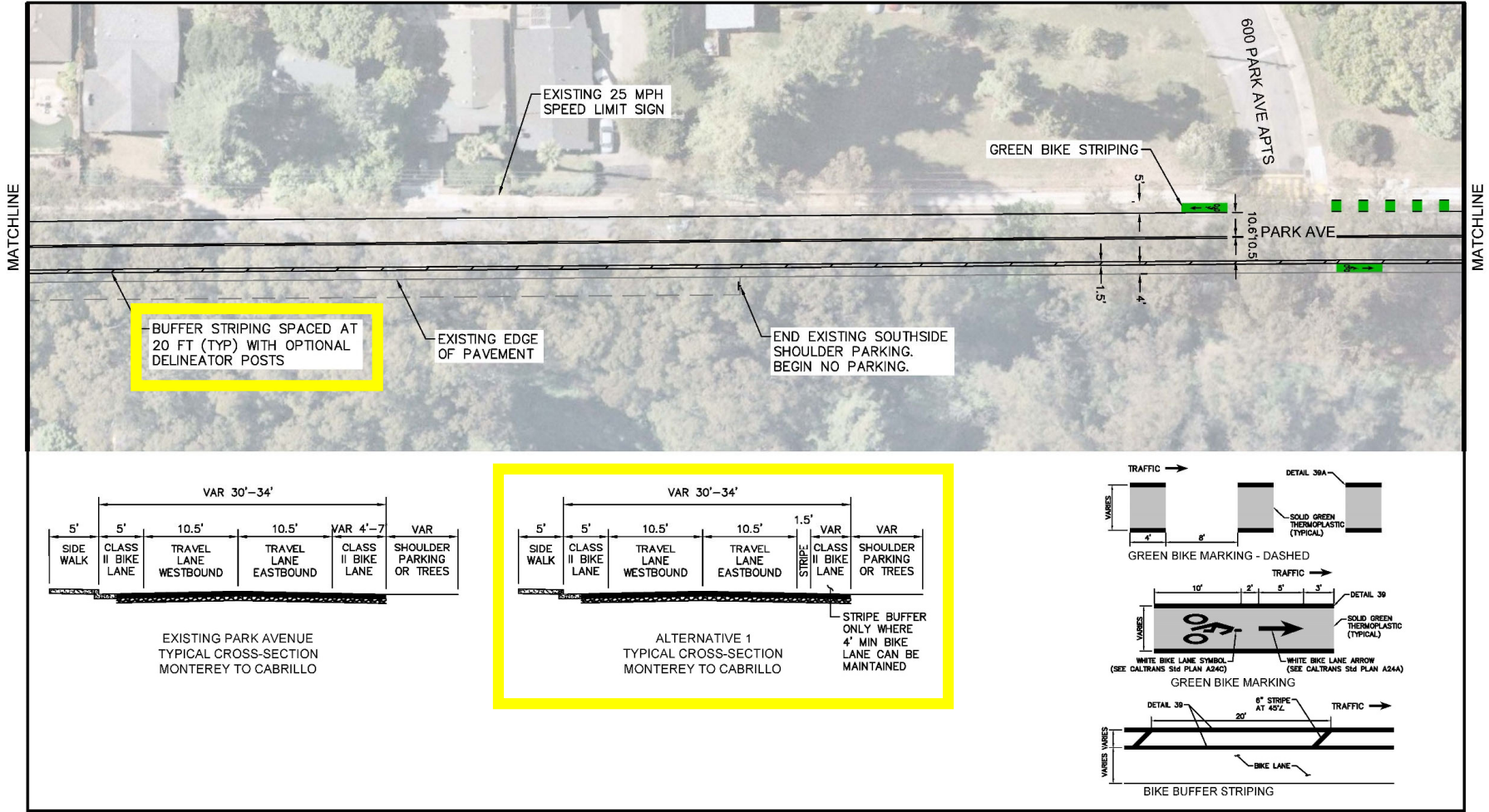


EXISTING PARK AVENUE TYPICAL CROSS-SECTION MONTEREY TO CABRILLO

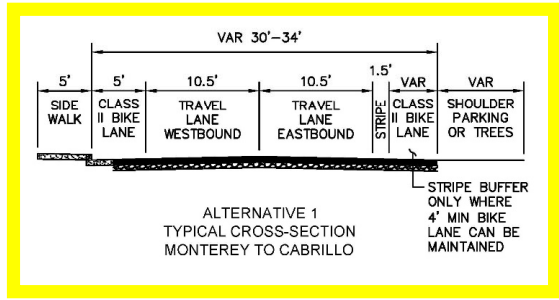


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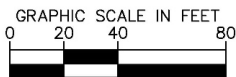
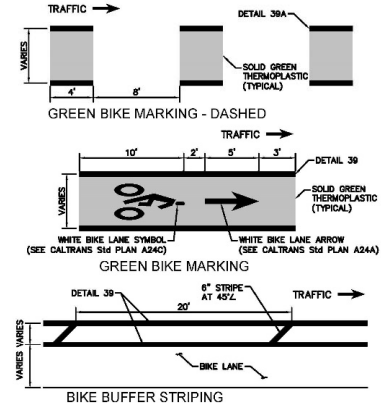




EXISTING PARK AVENUE TYPICAL CROSS-SECTION MONTEREY TO CABRILLO



ALTERNATIVE 1 TYPICAL CROSS-SECTION MONTEREY TO CABRILLO

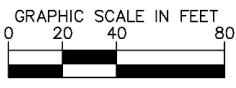
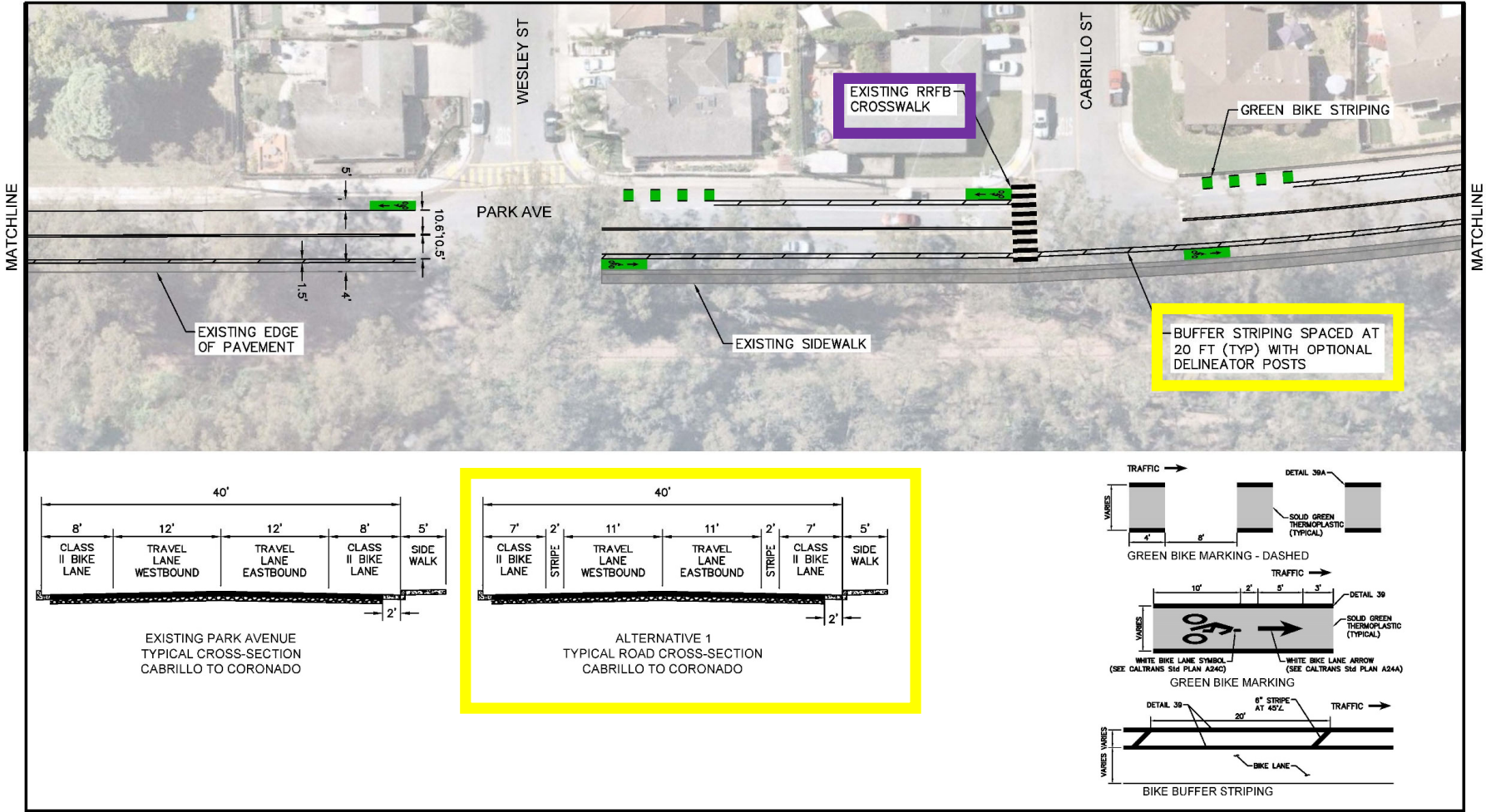


CONCEPT LAYOUT FOR PLANNING PURPOSES. NOT FOR CONSTRUCTION

**ALTERNATIVE 1 - ROAD DIET STRIPING PROPOSED TC LAYOUT - SHEET 3**

CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING

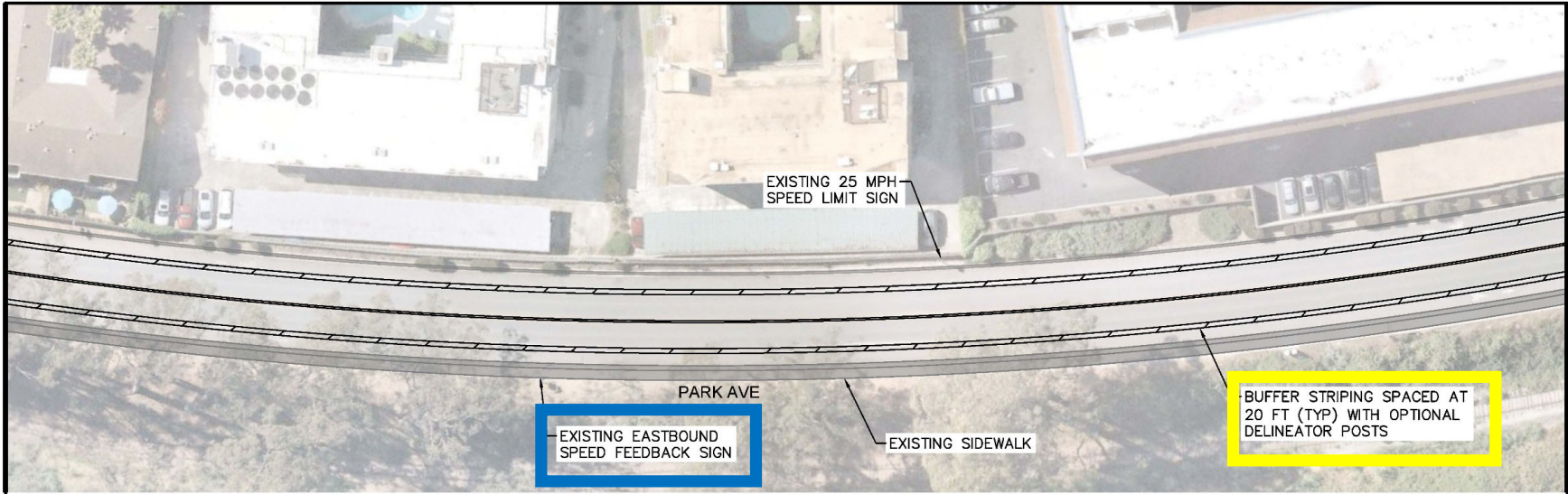




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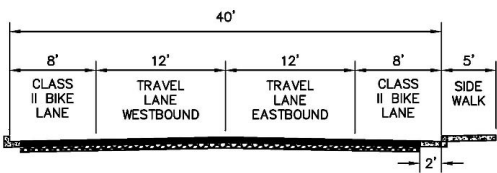
**ALTERNATIVE 1 - ROAD DIET STRIPING  
PROPOSED TC LAYOUT - SHEET 4**

CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING

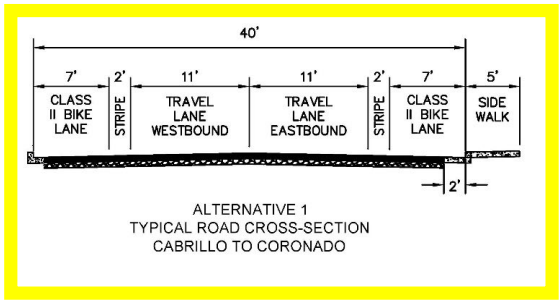


MATCHLINE

MATCHLINE

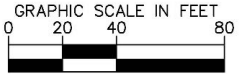
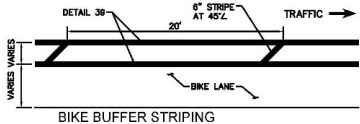


EXISTING PARK AVENUE TYPICAL CROSS-SECTION CABRILLO TO CORONADO



ALTERNATIVE 1 TYPICAL ROAD CROSS-SECTION CABRILLO TO CORONADO

· BUFFER STRIPING SPACED AT 20 FT (TYP) WITH OPTIONAL DELINEATOR POSTS



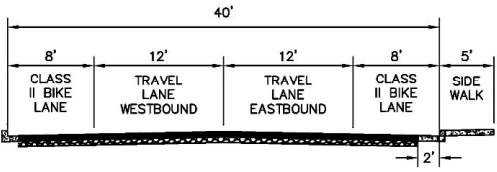
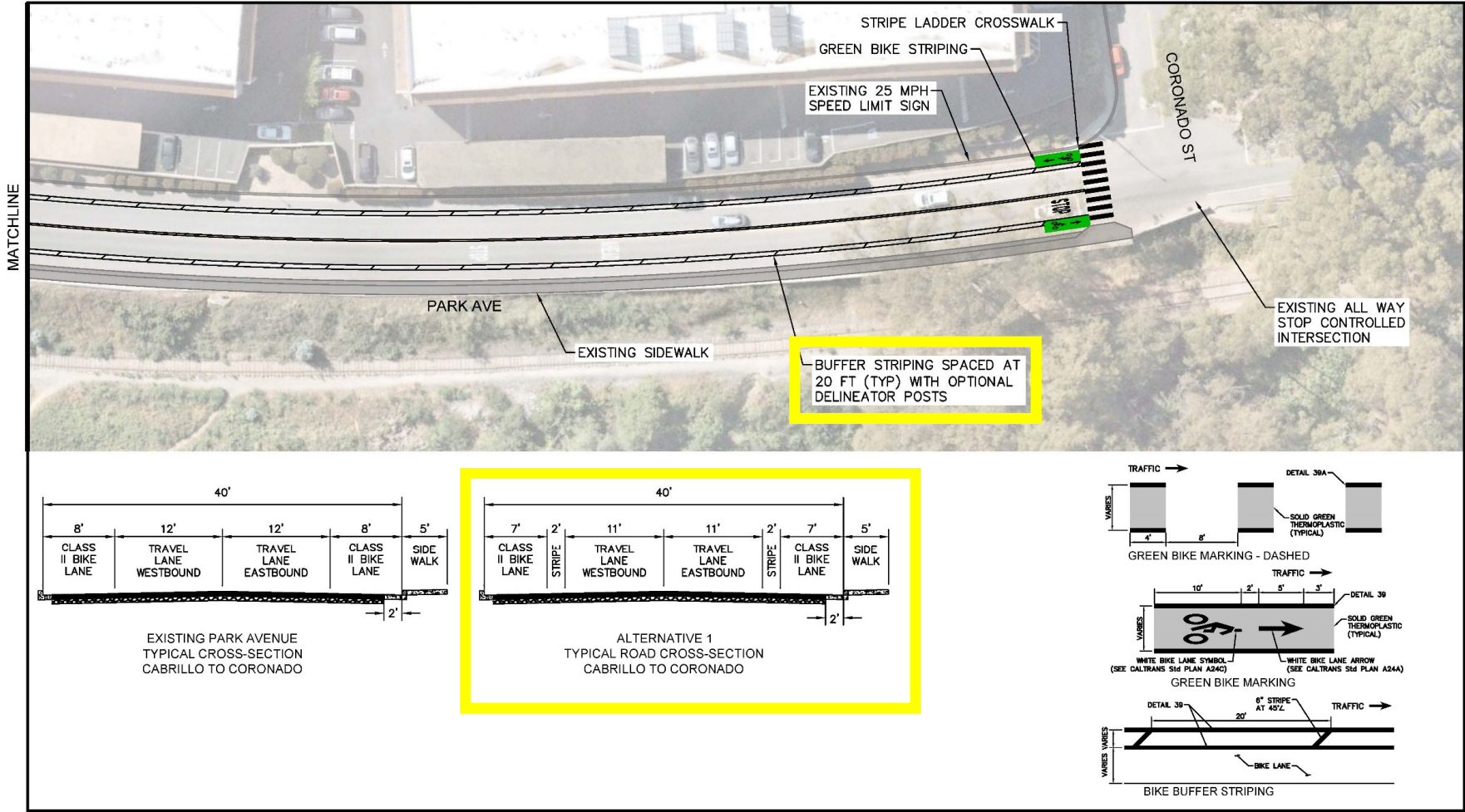
CONCEPT LAYOUT FOR PLANNING PURPOSES. NOT FOR CONSTRUCTION

ALTERNATIVE 1 - ROAD DIET STRIPING PROPOSED TC LAYOUT - SHEET 5

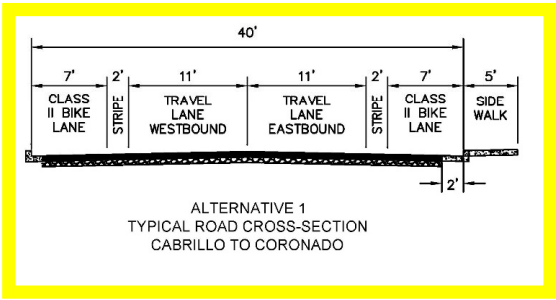
CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING

References

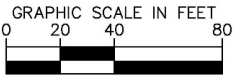
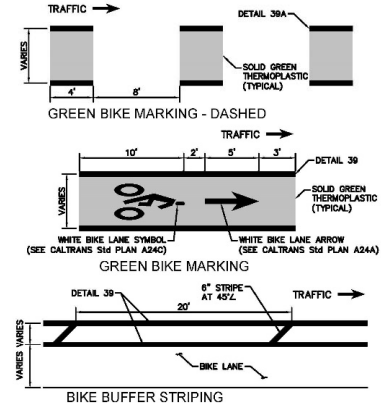




EXISTING PARK AVENUE TYPICAL CROSS-SECTION CABRILLO TO CORONADO



ALTERNATIVE 1 TYPICAL ROAD CROSS-SECTION CABRILLO TO CORONADO



CONCEPT LAYOUT FOR PLANNING PURPOSES. NOT FOR CONSTRUCTION

ALTERNATIVE 1 - ROAD DIET STRIPING PROPOSED TC LAYOUT - SHEET 6

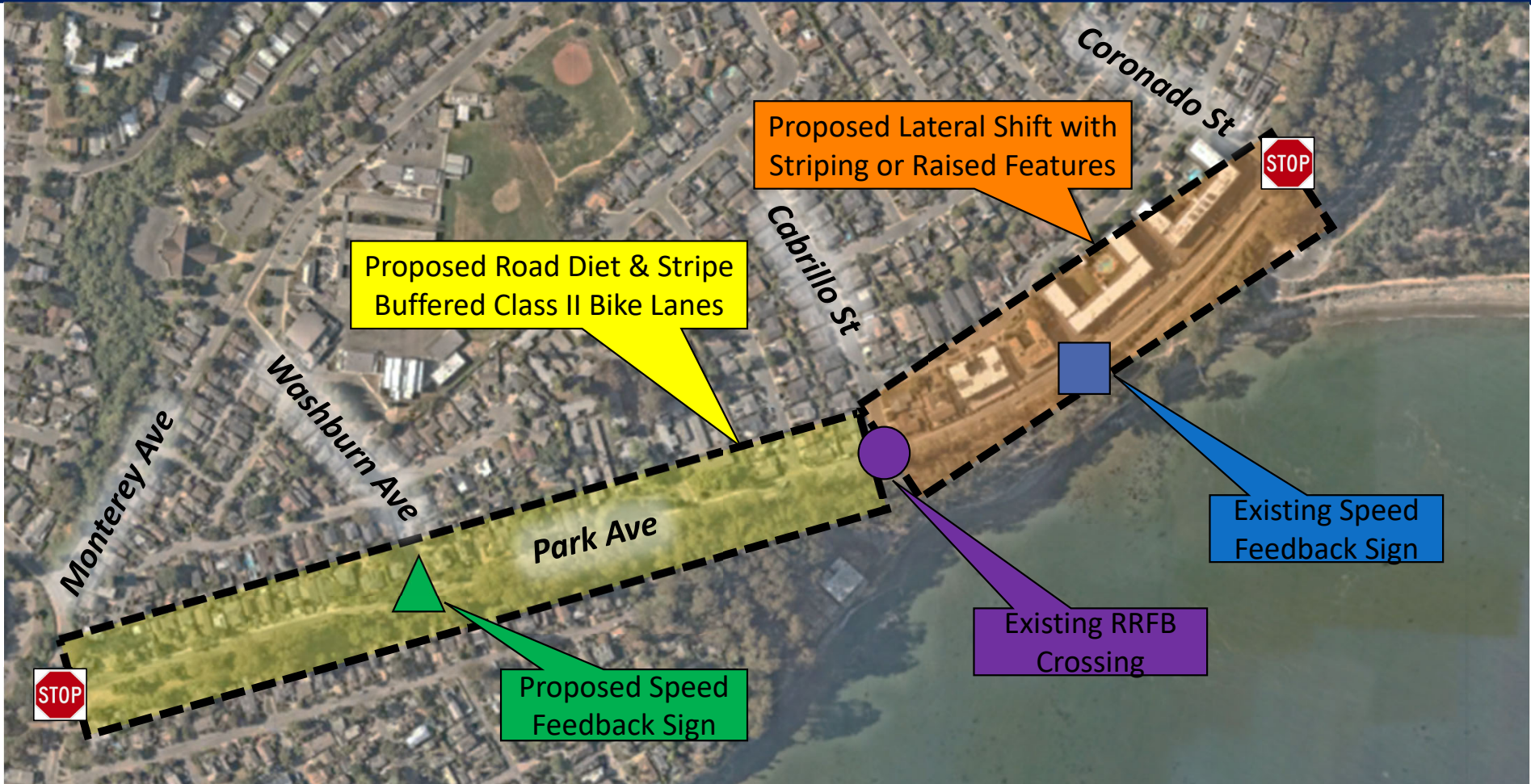
CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING





# Park Avenue

## Alternative 2 – Road Diet & Lateral Shift



# Park Avenue Chicane / Lateral Shift



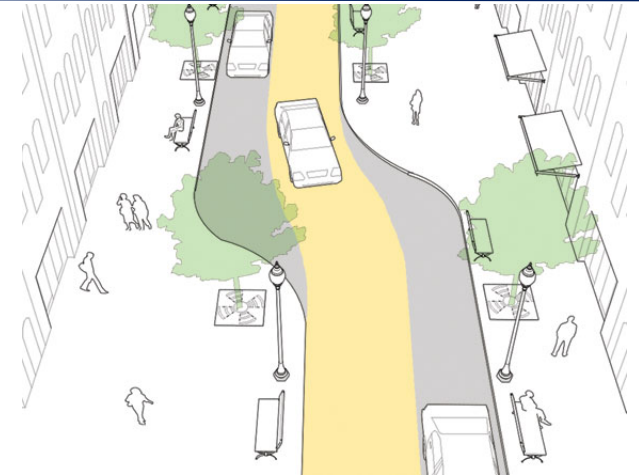
Horizontal deflection consisting of a series of alternating curves or lane shifts to force a motorist to steer back and forth out of a straight travel path

## Benefits

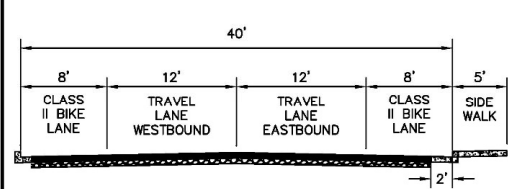
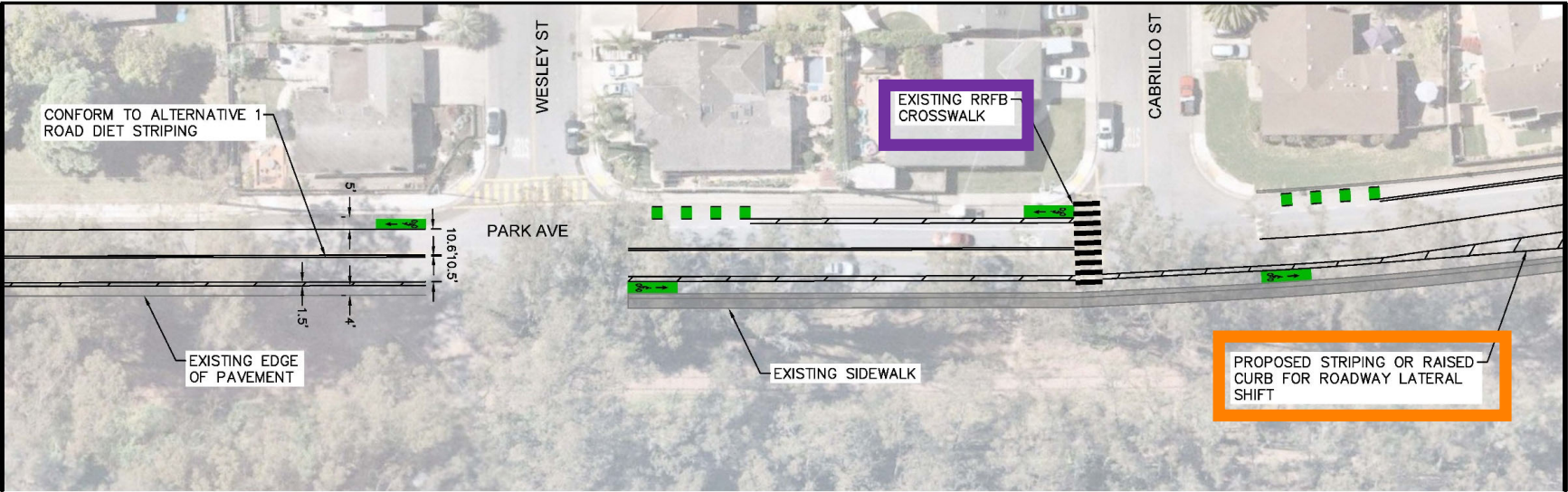
- Slight reduction in vehicle speeds
- Opportunities for landscaping with raised features

## Drawbacks

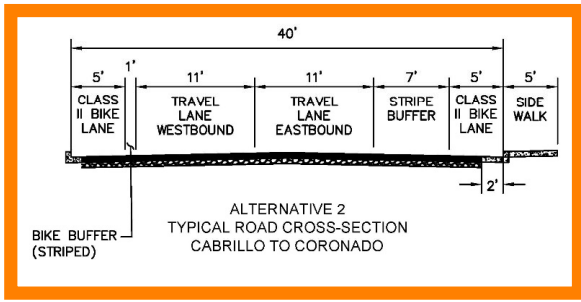
- May require removal of on-street parking
- Potential impacts to existing drainage and utilities



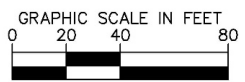
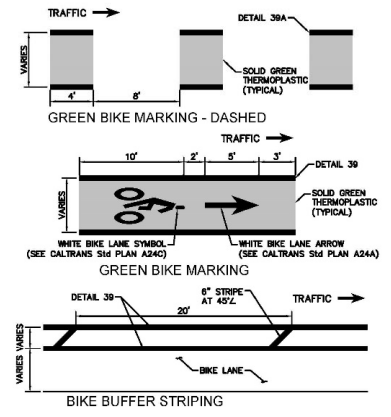




EXISTING PARK AVENUE  
TYPICAL CROSS-SECTION  
CABRILLO TO CORONADO



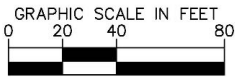
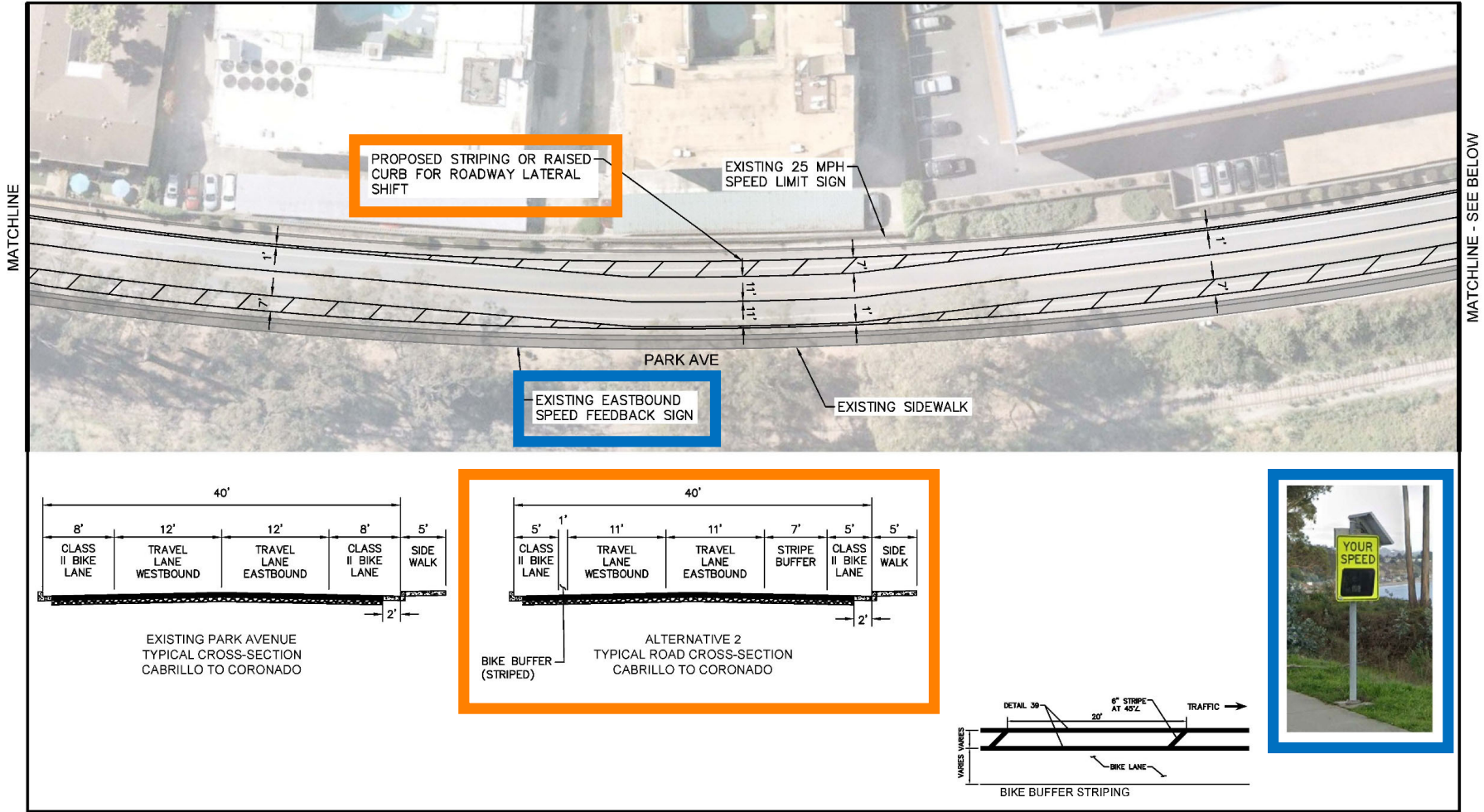
ALTERNATIVE 2  
TYPICAL ROAD CROSS-SECTION  
CABRILLO TO CORONADO



CONCEPT LAYOUT FOR  
PLANNING PURPOSES.  
NOT FOR CONSTRUCTION

ALTERNATIVE 2 - LATERAL SHIFT  
PROPOSED TC LAYOUT - SHEET 4

CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING

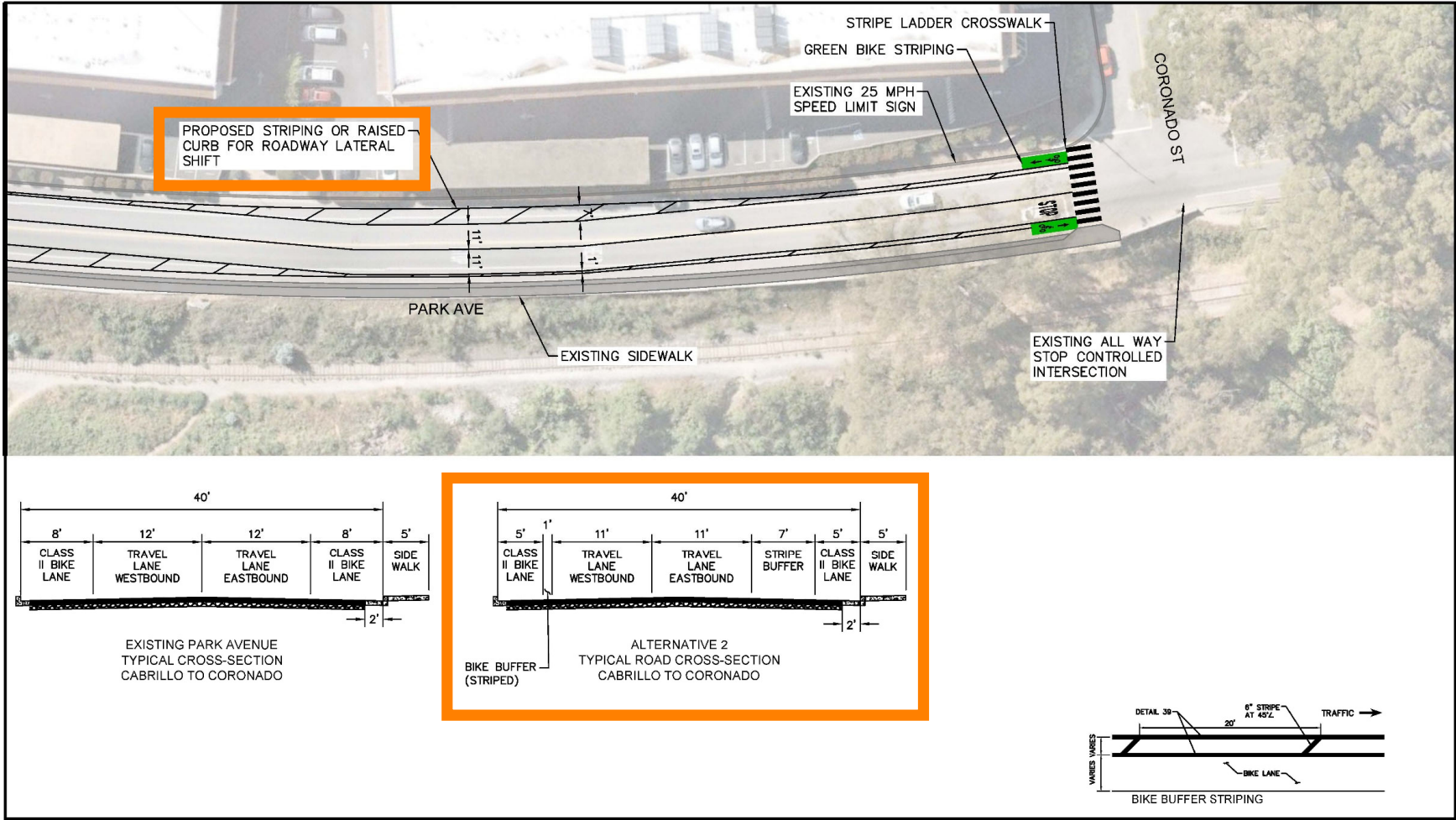


CONCEPT LAYOUT FOR PLANNING PURPOSES. NOT FOR CONSTRUCTION

ALTERNATIVE 2 - LATERAL SHIFT PROPOSED TC LAYOUT - SHEET 5

CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING





CONCEPT LAYOUT FOR PLANNING PURPOSES. NOT FOR CONSTRUCTION

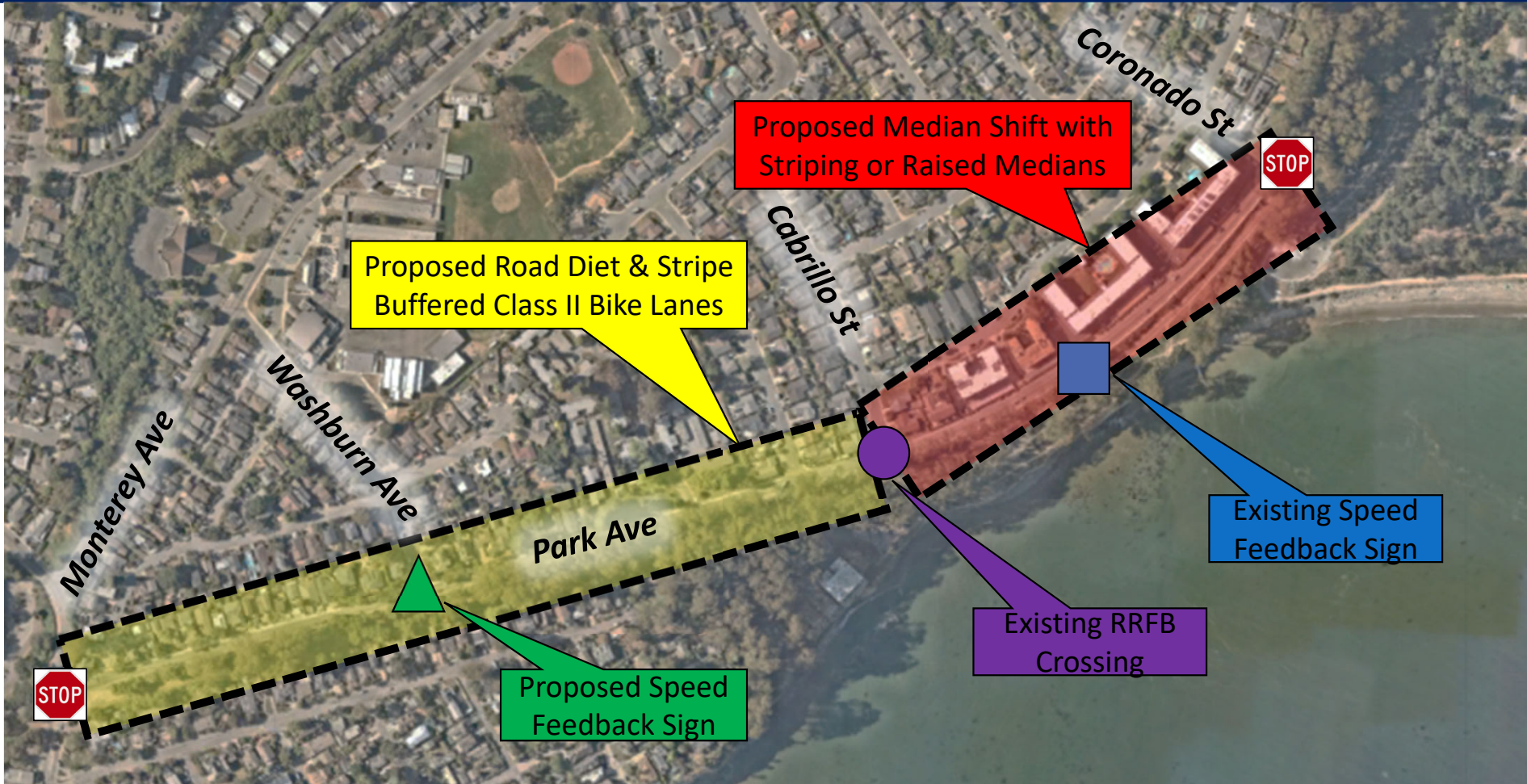
ALTERNATIVE 2 - LATERAL SHIFT PROPOSED TC LAYOUT - SHEET 6

CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING



# Park Avenue

## Alternative 3 – Road Diet & Median Shift







# Park Avenue Median Shift

Horizontal deflection consisting of a series of median features in the roadway center to force a merging and diverging path of travel for each direction

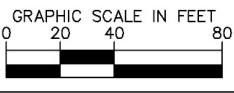
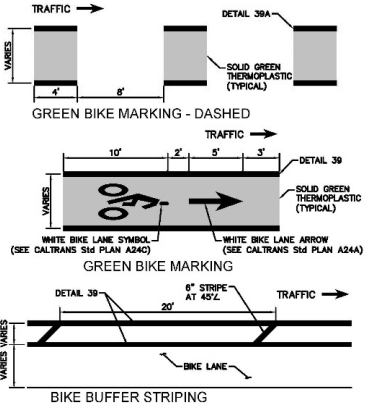
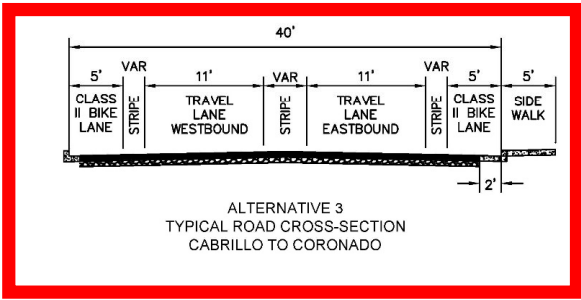
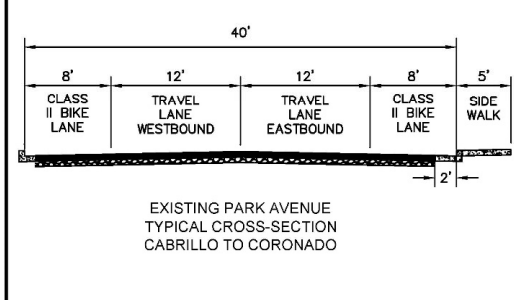
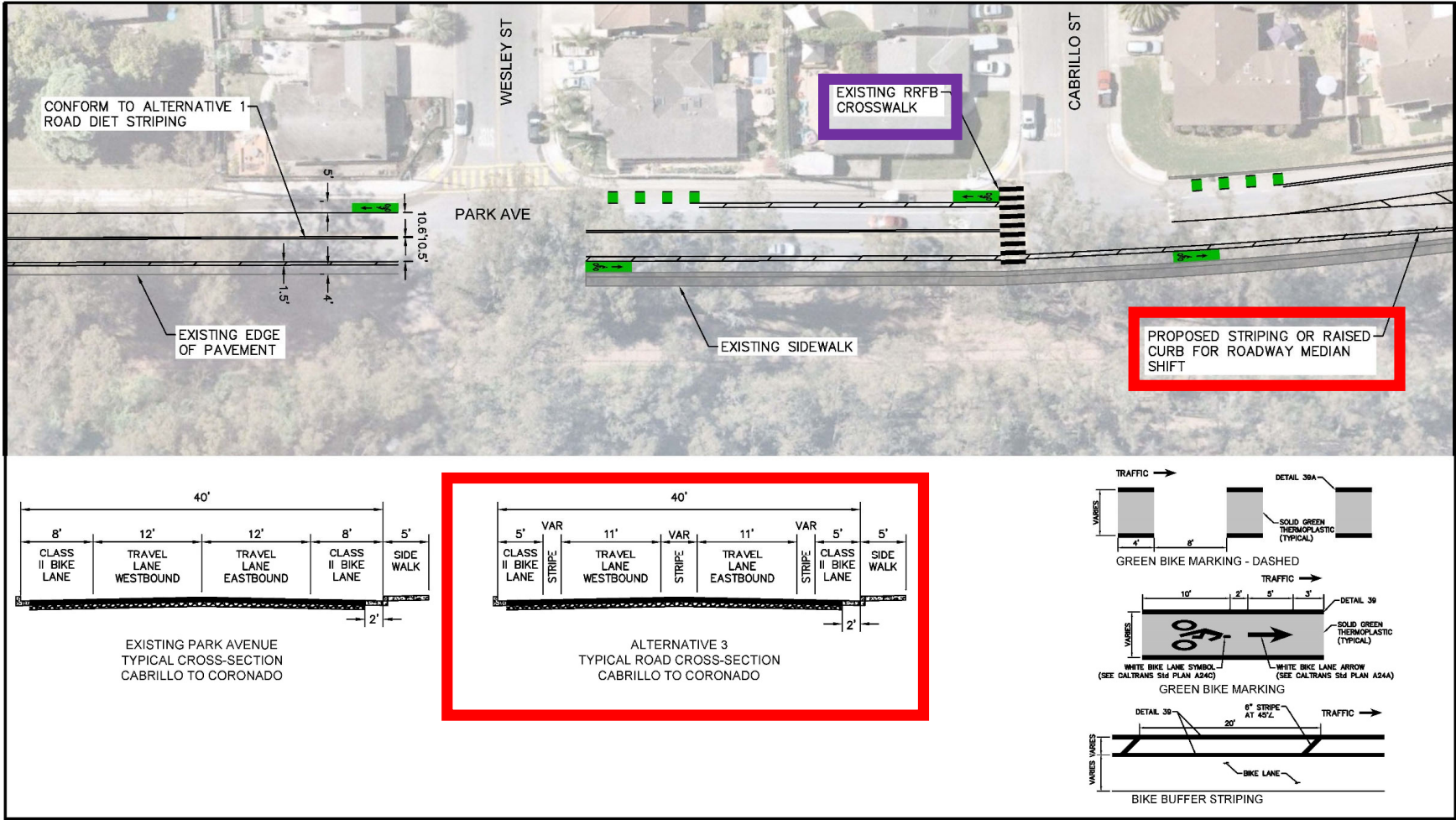
## Benefits

- Slight reduction in vehicle speeds
- Opportunities for landscaping with raised features

## Drawbacks

- May require removal of on-street parking
- Potential impacts to existing drainage and utilities



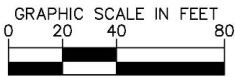
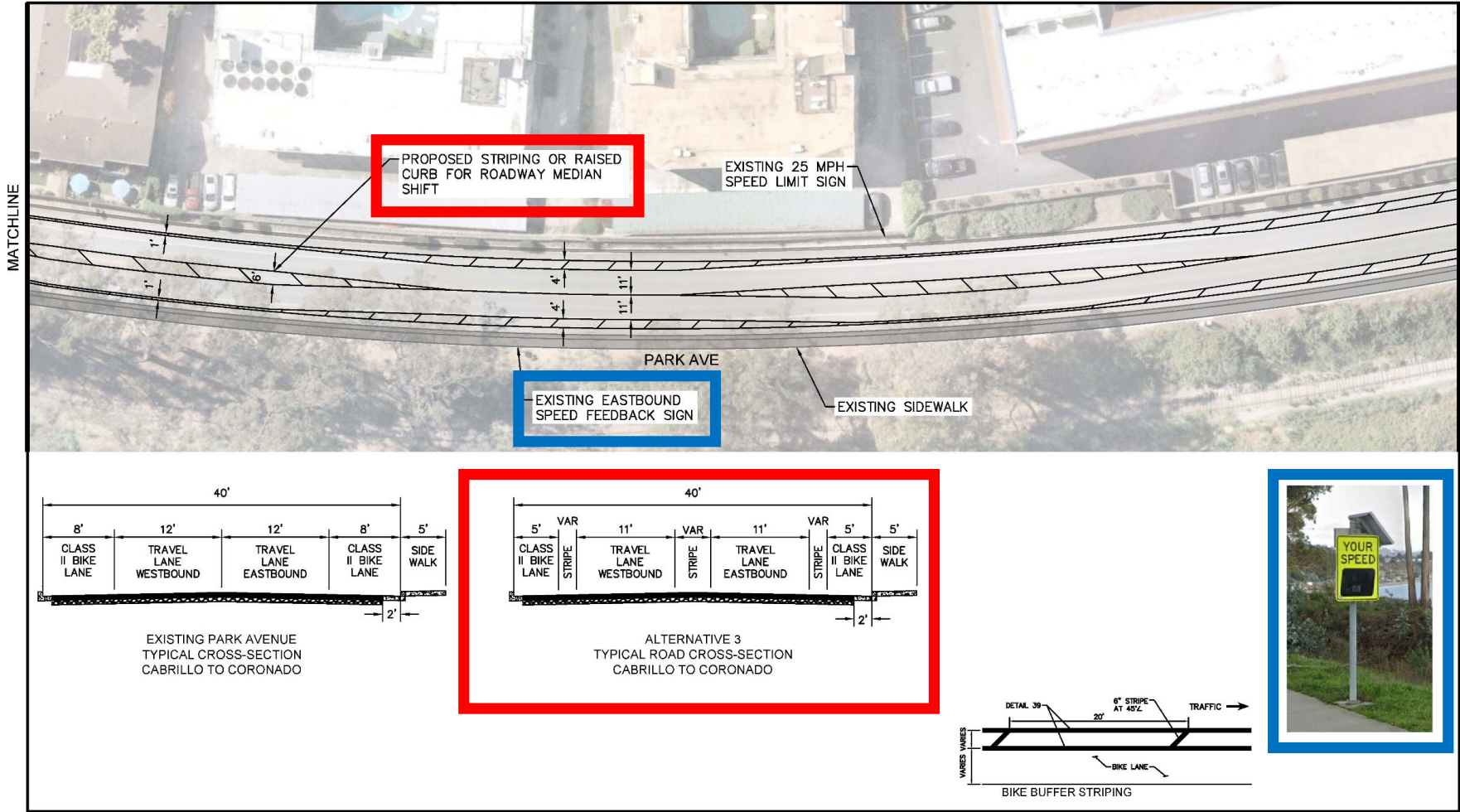


CONCEPT LAYOUT FOR  
PLANNING PURPOSES.  
NOT FOR CONSTRUCTION

ALTERNATIVE 3 - MEDIAN SHIFT  
PROPOSED TC LAYOUT - SHEET 4

CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING

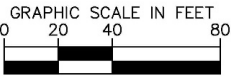
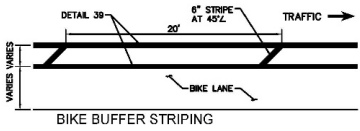
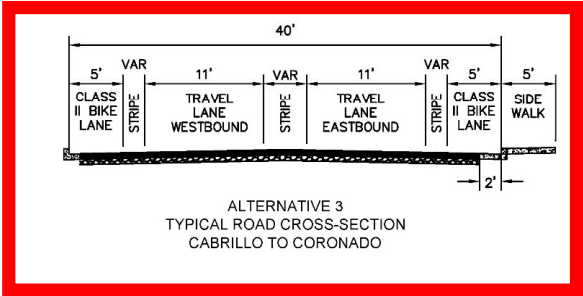
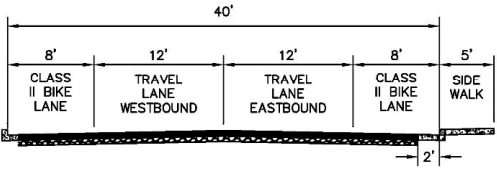
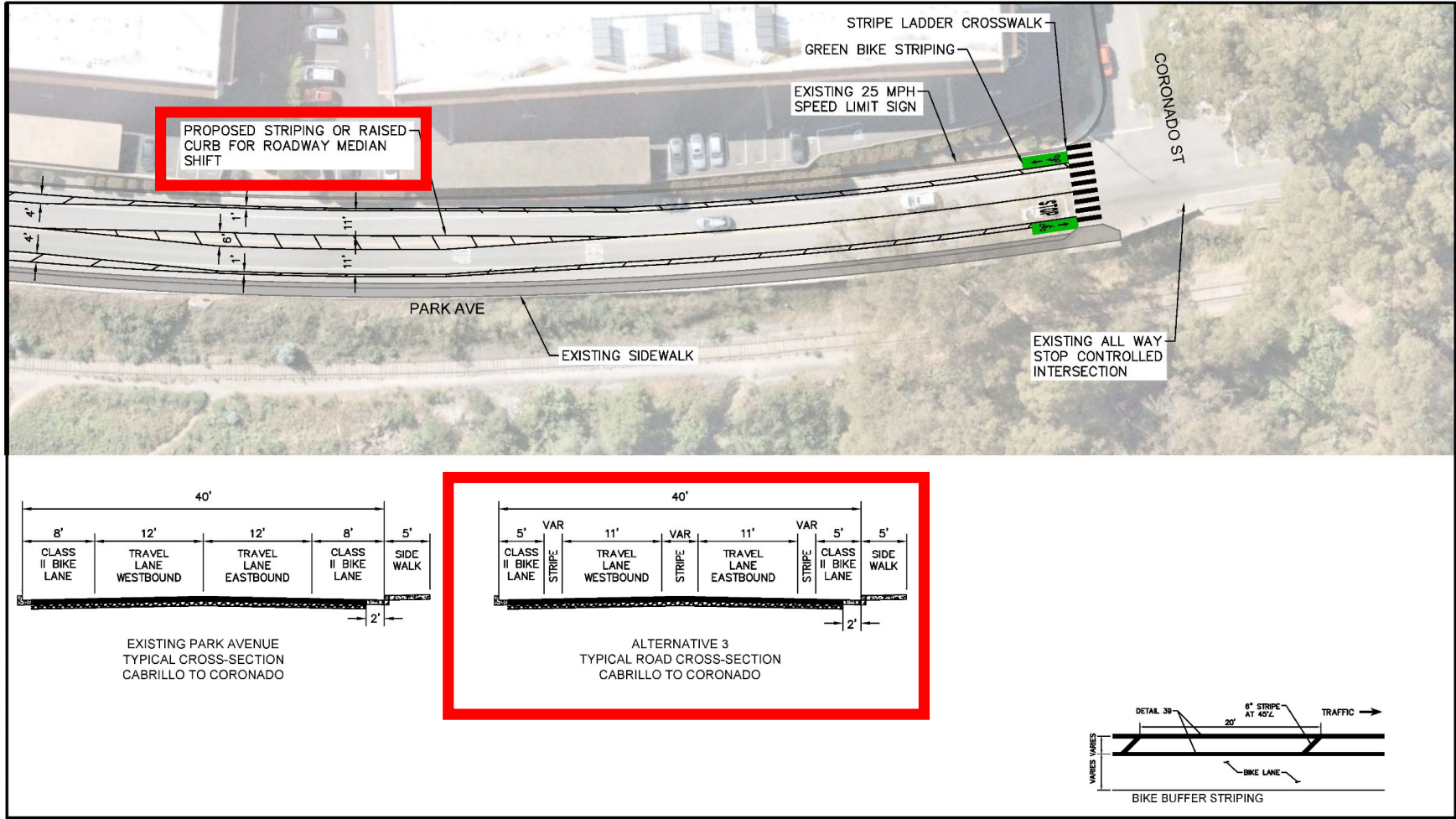




CONCEPT LAYOUT FOR PLANNING PURPOSES. NOT FOR CONSTRUCTION

ALTERNATIVE 3 - MEDIAN SHIFT PROPOSED TC LAYOUT - SHEET 5

CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING



CONCEPT LAYOUT FOR PLANNING PURPOSES. NOT FOR CONSTRUCTION

ALTERNATIVE 3 - MEDIAN SHIFT PROPOSED TC LAYOUT - SHEET 6

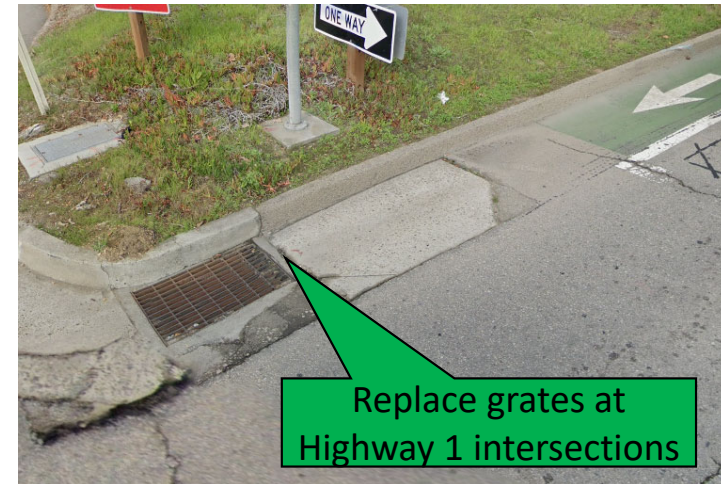
CITY OF CAPITOLA - PARK AVENUE TRAFFIC CALMING





# Park Avenue Additional Bicycle Features

- Existing Class II bike lanes would be restriped
- Addition of striped buffered bike lanes
- Addition of green pavement markings in conflict zones
- Reconstruct pavement sections and install bike friendly drainage grates





# Park Avenue Estimated Project Schedule

Timeline	Milestone
Summer 2024	Complete Engineering Design
Fall 2024	Bid Project for Construction
Winter 2024 – Spring 2025	Construct Project



# Park Avenue Community Survey

We want your input. Please complete a survey for the proposed Park Avenue Traffic Calming improvements.

[https://www.surveymonkey.com/r/capitola\\_park\\_tc1](https://www.surveymonkey.com/r/capitola_park_tc1)

QR Code Link



# Park Avenue Next Steps



- Collect workshop and survey responses from community
- Refine project design based on public comments and direction from City
- Coordinate project with utilities and stakeholders
- Complete engineering plans



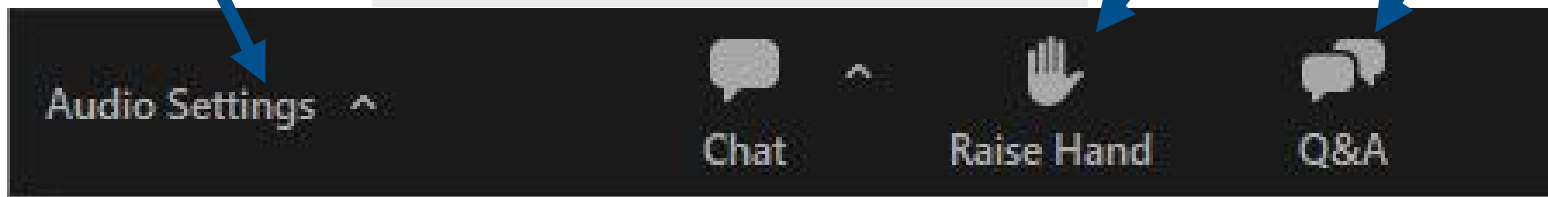
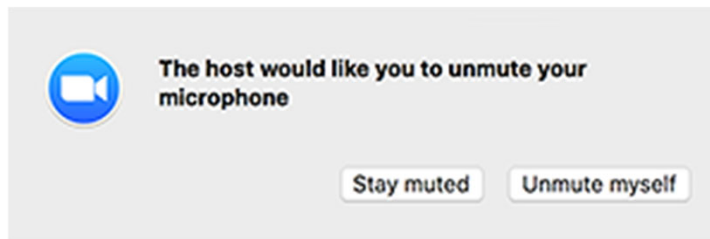
# Park Avenue Open Discussion

**Audio Settings:** Change your [audio settings](#). You can also click the upward arrow (^) next to change your speaker.

**Unmute/Mute:** When the host gives you permission, you can unmute and all participants will be able to hear you talk. If the host allows you to talk, you will receive this notification - **click “unmute myself”**

**Raise Hand:** [Raise your hand](#) in the webinar to indicate that you want to make a verbal comment. Function is under Reactions.

**Question & Answer:** Open the chat window, allowing you to ask questions only to the host. The host will collect these questions and respond after the meeting.



SurveyMonkey Link  
[https://www.surveymonkey.com/r/capitola\\_park\\_tc1](https://www.surveymonkey.com/r/capitola_park_tc1)



# Park Avenue



# THANK YOU!



**Kimley»»Horn**



Frederik Venter & Derek Wu

Jessica Kahn & Kailash Mozumder

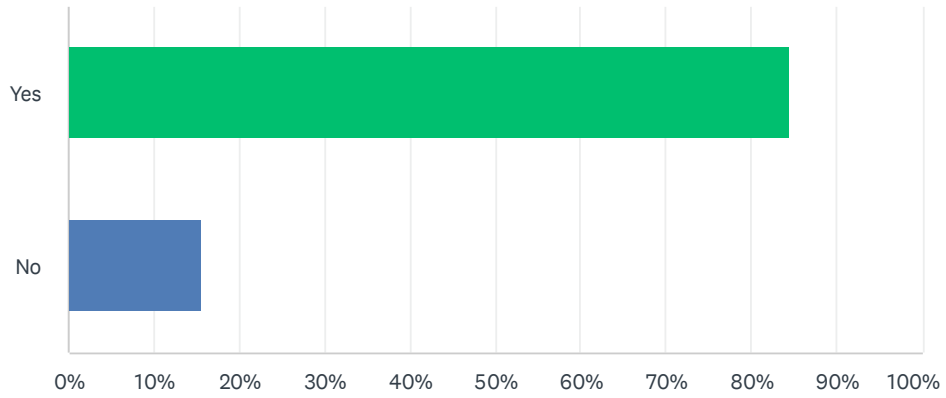


# Park Avenue



## Q1 Are you a resident of Capitola?

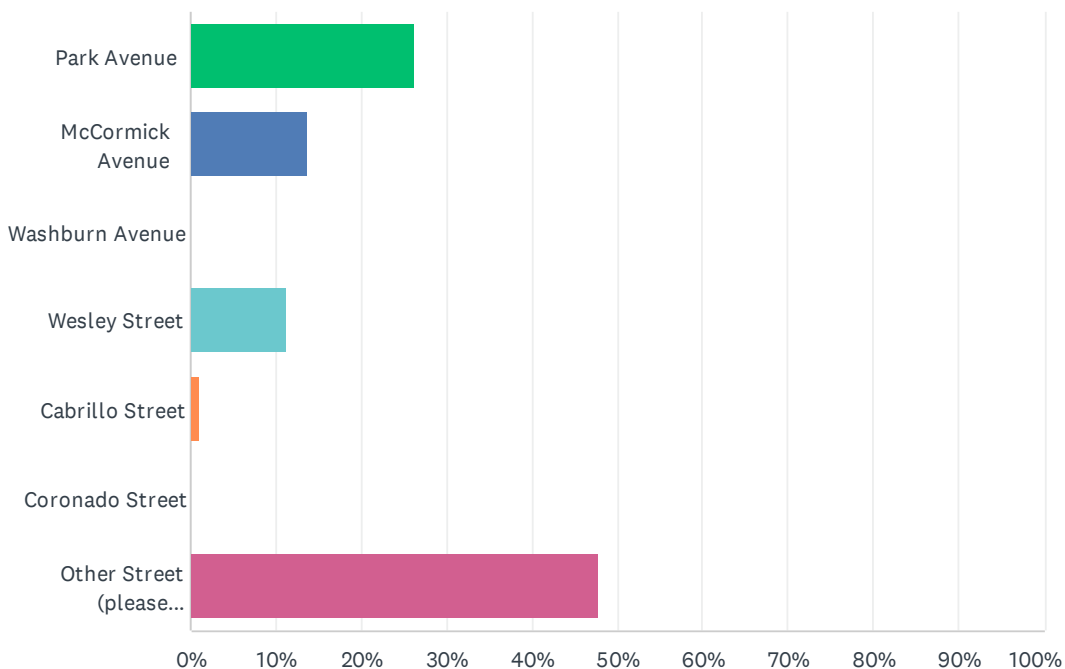
Answered: 97 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	84.54%	82
No	15.46%	15
TOTAL		97

## Q2 What street in Capitola do you live on?

Answered: 88 Skipped: 10



ANSWER CHOICES	RESPONSES	
Park Avenue	26.14%	23
McCormick Avenue	13.64%	12
Washburn Avenue	0.00%	0
Wesley Street	11.36%	10
Cabrillo Street	1.14%	1
Coronado Street	0.00%	0
Other Street (please specify)	47.73%	42
<b>TOTAL</b>		<b>88</b>

#	OTHER STREET (PLEASE SPECIFY)	DATE
1	Bay	1/22/2024 4:49 PM
2	Balboa Ave.	1/19/2024 3:47 PM
3	I live on the West Side, but love riding my bike through this area!	1/19/2024 10:23 AM
4	McCormick Court	1/18/2024 8:51 PM
5	Escalona Dr	1/18/2024 8:38 PM
6	Balboa Avenue	1/18/2024 4:47 PM
7	Main St., Soquel	1/18/2024 5:21 AM

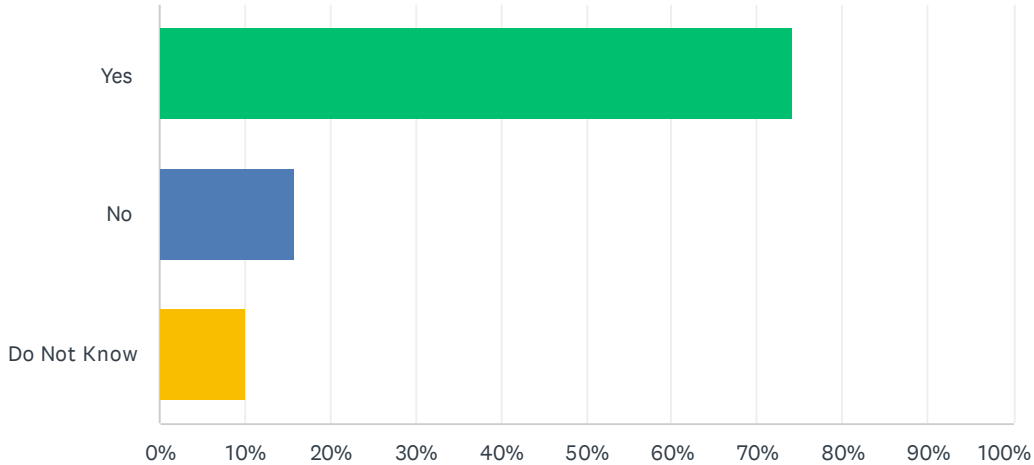
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Item 9 C.

8	Rosedale Ave	1/17/2024 10:07 PM
9	Fannar	1/17/2024 6:11 PM
10	Loma Ave	1/17/2024 5:50 PM
11	crystal	1/17/2024 3:53 PM
12	Have lived on Park Ave for 50 years	1/17/2024 2:33 PM
13	Soquel	1/16/2024 6:40 PM
14	Grand Avenue	1/16/2024 5:18 PM
15	Sills Ct	1/16/2024 3:48 PM
16	34th Ave	1/16/2024 2:52 PM
17	Kennedy dr	1/16/2024 2:41 PM
18	Clares	1/16/2024 9:56 AM
19	Plum St	1/15/2024 12:52 PM
20	Cortez	1/14/2024 10:52 AM
21	Oak Drive	1/13/2024 10:49 AM
22	300 Plum St	1/12/2024 2:05 PM
23	gross road	1/12/2024 11:15 AM
24	Capitola Avenue	1/12/2024 9:34 AM
25	Riverview Drive	1/12/2024 7:32 AM
26	Oak Drive	1/12/2024 5:09 AM
27	Nearby in Aptos	1/11/2024 11:40 PM
28	McCormick Court	1/11/2024 9:13 PM
29	Monterey Avenue	1/11/2024 9:08 PM
30	Monterey	1/11/2024 9:04 PM
31	Cortez	1/11/2024 5:31 PM
32	Balboa Ave	1/11/2024 5:04 PM
33	Junipero court	1/10/2024 4:39 PM
34	Columbus Dr.	1/8/2024 9:39 PM
35	Central Ave	1/7/2024 10:33 AM
36	Balboa	1/6/2024 4:35 PM
37	Pine	1/6/2024 9:16 AM
38	Magellan st	1/5/2024 9:39 PM
39	Jewel	1/5/2024 7:56 PM
40	Carl Ln	1/5/2024 6:45 PM
41	42nd Ave	1/5/2024 4:16 PM
42	Junipero Court	1/5/2024 3:43 PM

### Q3 Do you think the idea of adding buffered bike lanes on Park Avenue will enhance bicycle access and safety? See example photo above.

Answered: 89 Skipped: 9



ANSWER CHOICES	RESPONSES	
Yes	74.16%	66
No	15.73%	14
Do Not Know	10.11%	9
<b>TOTAL</b>		<b>89</b>

#	COMMENTS (OPTIONAL)	DATE
1	Bollards may take up valuable space and create hazards.	1/19/2024 3:51 PM
2	Widening the bike lanes (and eliminating the gutter as part of the lane) would narrow the car lanes.	1/19/2024 2:48 PM
3	real physical barriers Toronto style or at minimum concrete bollards at all crossings and narrowing lanes to create perceived friction and slow the cars down	1/18/2024 8:45 PM
4	Adding obstacles does not seem to make it safer.	1/18/2024 4:56 PM
5	Best choice; separates bikes from cars.	1/18/2024 8:42 AM
6	Physical barriers	1/18/2024 6:52 AM
7	Physical barrier would be the safest.	1/18/2024 6:52 AM
8	Anyone who has ever ridden a bike on Park Ave. knows how challenging it is to feel safely away from cars, particularly late afternoon commuters rushing to hwy 1 or Soquel Dr.	1/18/2024 5:27 AM
9	Inclusion of a physical barrier is important to making such lanes safe. A buffer with no protection is just paint.	1/17/2024 11:33 PM
10	Capitola streets are a thoroughfare for vehicles trying to avoid Hwy 1 traffic	1/17/2024 7:41 PM
11	We absolutely need this for the safety of the bike riders and the cars.	1/17/2024 5:53 PM
12	Unfortunately, many bike riders do not stay in the bike lanes	1/17/2024 2:35 PM

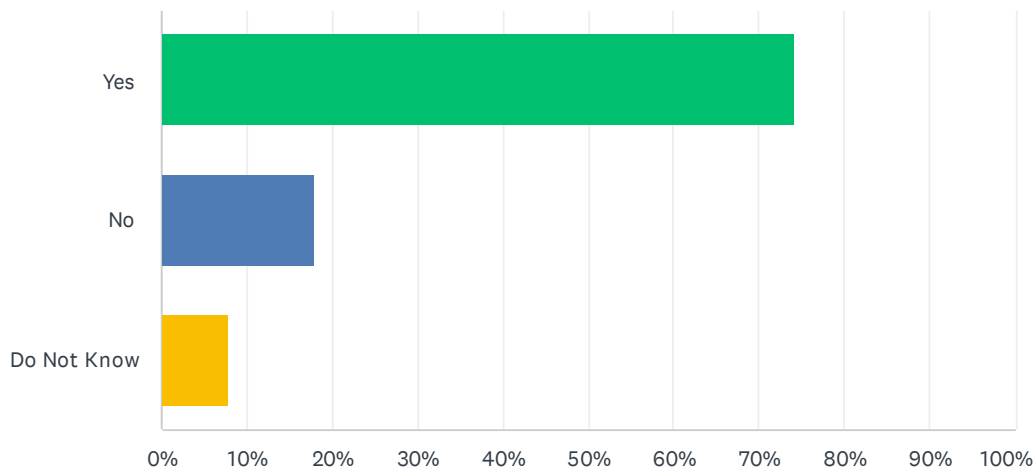
City of Capitola - Park Avenue Traffic Calming Public Workshop 1

Item 9 C.

13	I think they could help so long as they include some kind of physical protective facility and not just a painted buffer.	1/17/2024 8:38 AM
14	Please add a physical buffer. Cars drive over paint and raised reflectors. Let's make this beautiful street safe for our community.	1/16/2024 8:19 PM
15	Yes. Please add bollards or some other physical barrier to the plans for real separation.	1/16/2024 6:41 PM
16	Add plastic bollards in striped median	1/16/2024 6:34 PM
17	Green bike lanes and speed humps, just like on Clares.	1/16/2024 5:20 PM
18	Only if there are bollards for protection!	1/16/2024 5:10 PM
19	I live at 310 park ave and am the 4th driveway up from Bay ave. We and our neighbors have to enter Park ave backwards we stop short of the eastbound lane and are always straddling a portion of the bike lane before we turn west bound on Park ave. We never try to back across the east bound lane because of the fast traffic on Park Ave and the danger of crossing two lanes. To go east on Park Ave we have to circle around on Monterey Ave to Park Ave east bound at the Stop . The white posts may prevent an exit west bound our only option now to exit our house. The posts would disrupt mail service as the postman drives down the bike lane and our drive ways for the entire block. All our drive ways are continuous for an entire block with now room for white posts. Parcel deliveries would also stop traffic in the Posts are installed. The exiting of our homes would just become to dangerous with this proposal.	1/16/2024 2:59 PM
20	Does this include motorized bicycles?	1/15/2024 2:56 PM
21	But I do not like the aesthetics	1/15/2024 12:57 PM
22	Even though we recognize that buffered bike we don't want them near our driveway and not where cars now park in designated areas.	1/14/2024 8:07 PM
23	But probably not necessary on Park Avenue	1/12/2024 7:34 AM
24	The raised delineators should really help, but concerned about electric bikes speeding in the bike lane	1/12/2024 5:14 AM
25	I think it will make the road too narrow	1/11/2024 9:14 PM
26	Only if the bicyclists will stay in them	1/11/2024 5:06 PM
27	No body pay attention to speed limit, it's already hard to cross the street.	1/10/2024 6:26 PM
28	As a cyclist I've observed raised delineators make car drivers more nervous and agitated making them prone to errors of judgement	1/10/2024 2:42 PM
29	I like the idea of the buffered bike lane but not sure how that would look. I live on Park and have experienced cars recklessly swinging into the bike lane using the dirt and gravel portion to swing around my car while I'm waiting to be able to make a left in to my driveway. Are you going to take the parking out? That would be a bummer.	1/10/2024 2:13 PM
30	I think that design may cause vehicles to run into barriers potentially causing accidents	1/10/2024 12:28 PM
31	Coronado to Kennedy is extremely dangerous and has a dropoff with no bike lane down to the park road. This needs to be addressed!	1/6/2024 4:35 PM
32	Dont use those plastic stanchions that break off and never get repaired or replaced. They are ugly. This scenic route deserves better.	1/5/2024 7:59 PM

### Q4 Do you think the the idea of adding green bike lanes on Park Avenue will enhance bicycle access and safety? See example photo above.

Answered: 89 Skipped: 9



ANSWER CHOICES	RESPONSES	
Yes	74.16%	66
No	17.98%	16
Do Not Know	7.87%	7
<b>TOTAL</b>		<b>89</b>

#	COMMENTS (OPTIONAL)	DATE
1	Enforcement on auto drivers???	1/19/2024 3:51 PM
2	How costly is that?	1/19/2024 2:48 PM
3	If there are real physical barriers yes otherwise paint is not multimodal infrastructure - buy a minim street sweeper like Encinitas they are tiny too	1/18/2024 8:45 PM
4	Paint does not provide real protection and does not prevent vehicles from striking people on bikes, walking, or other mobility devices.	1/18/2024 8:38 PM
5	Need to see the statistics on this one.	1/18/2024 8:42 AM
6	Physical barriers	1/18/2024 6:52 AM
7	But we also need physical barriers because cars just drive over the green.	1/18/2024 6:52 AM
8	I think safety will only minimally be improved. Again, commuters in particular race along Park Ave.	1/18/2024 5:27 AM
9	I think green bike facilities are fine when combined with physical protective facilities but by themselves provide little to no safety as tag to cyclists as drivers will still ignore or miss them in many instances.	1/17/2024 8:38 AM
10	Grain paint is nice. But please invest in a bollard as a physical barrier to keep our bicyclists safe..	1/16/2024 8:19 PM
11	Please also add bollards or physical separation for optimal safety	1/16/2024 6:41 PM

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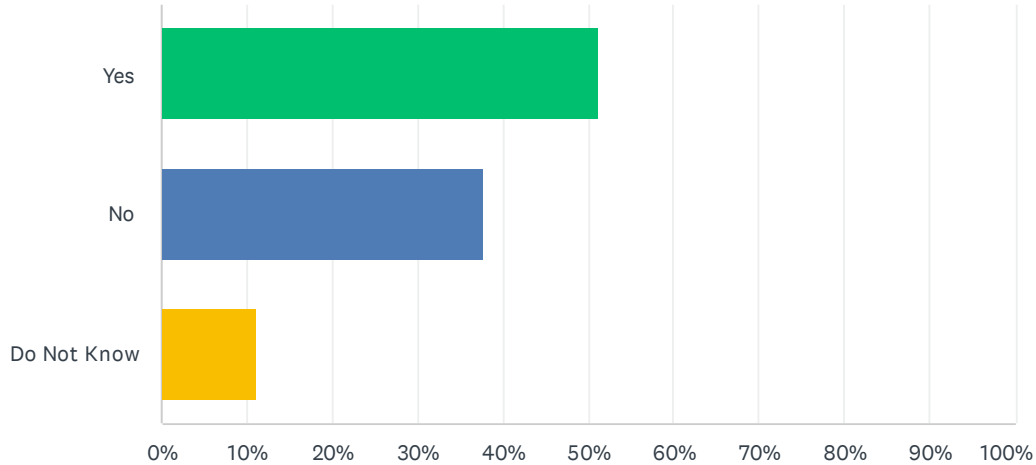
Item 9 C.

12	Not as much as buffered lanes, though	1/16/2024 5:20 PM
13	Green bike lanes and speed tables just like on Clares.	1/16/2024 5:20 PM
14	not best option but better than current	1/16/2024 2:53 PM
15	But not as much as a protected bike lane	1/16/2024 2:21 PM
16	I think this is more aesthetically pleasing than the prior example but not as protective.	1/15/2024 12:57 PM
17	We would be in favor of this approach to added bike safety.	1/14/2024 8:07 PM
18	If you put the buffers why do you need to paint the road?	1/14/2024 3:43 PM
19	Ppl stop in the bike lanes constantly, no one stops for the stop signs already	1/10/2024 6:26 PM
20	It is clear without adding visual impediments.	1/10/2024 2:42 PM
21	More visibility of bike lane would make drivers take heed of bicycles and slow down traffic	1/10/2024 12:28 PM
22	Coronado to Kennedy is extremely dangerous and has a dropoff with no bike lane down to the park road. This needs to be addressed!	1/6/2024 4:35 PM



### Q5 Do you think the the idea of adding speed feedback signs on Park Avenue will slow down vehicle speeds? See example photo above.

Answered: 90 Skipped: 8



ANSWER CHOICES	RESPONSES
Yes	51.11% 46
No	37.78% 34
Do Not Know	11.11% 10
<b>TOTAL</b>	<b>90</b>

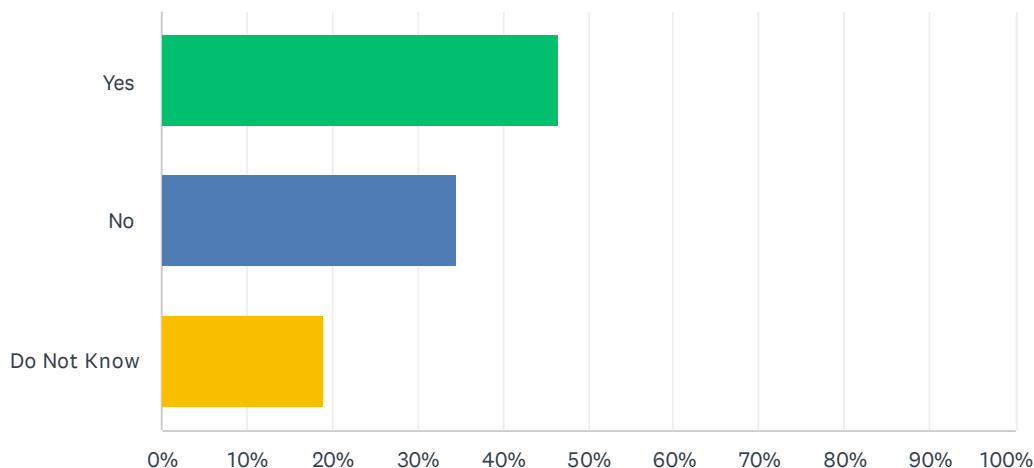
#	COMMENTS (OPTIONAL)	DATE
1	Additional signage may help but enforcement is needed.	1/19/2024 3:51 PM
2	There needs to be more where there are driveways, especially near Washburn, where there is some sunlight to power the device. I have observed that when some cars see how fast they are going, tend to slow down. So they are effective. There needs to be more in both directions.	1/19/2024 2:48 PM
3	We need to have engineered controls for speed like chicanes, speed bumps, or narrower lanes. Signage is ignored by drivers. Per the speeding information table, most people go over the speed limit and disregard the posted speed limit. You need to design the road for the speed you want. This section of Park is too flat, wide, and straight to stop speeding with signage.	1/19/2024 10:23 AM
4	Science says such signs have little impact but to distract drivers	1/18/2024 8:45 PM
5	Signs do not change human behavior in a significant way. Better road design will. We should prioritize funds towards proven safety strategies like buffered lanes and improved road designs	1/18/2024 8:38 PM
6	motorists ignore radar signage, but would slow down if there was a police car/motorcycle with a radar gun, or at least a ghost police car	1/18/2024 7:30 PM
7	There are currently two signs on Park Ave. As a frequent pedestrian on Park Ave, I see little reaction from drivers to the signs.	1/18/2024 4:56 PM
8	These signs are common and generally ignored.	1/18/2024 8:42 AM
9	Maybe automatic tickets would reduce speed better	1/18/2024 6:52 AM
10	Something is better than nothing particularly for drivers who happen to want to be careful of	1/18/2024 5:27 AM

bicyclists. Look at the speeds on Wharf Rd. just about any hour of the day.

11	There needs to be a couple more IN EACH DIRECTION. I have observed that some cars actually slow down when they see how fast they are going.	1/17/2024 2:35 PM
12	The existing one has done nothing. Strict and consistent enforcement of 25 mph would be effective.	1/17/2024 8:43 AM
13	There already is a speed feedback sign on park Avenue and it seems to have a negligible effect on vehicle speeds. Because the road is wide and relatively straight, people are going to drive fast regardless of speed limit and signage.	1/17/2024 8:38 AM
14	This is a good idea but we need physical barriers to protect bicyclists.	1/16/2024 8:19 PM
15	You have already installed these and people just drive faster to make them flash red for fun. Enforcement is key!	1/16/2024 8:18 PM
16	Narrowing the road and other design changes will be more effective	1/16/2024 6:41 PM
17	Get one with a white flash that looks like a camera when you speed and do enforcement	1/16/2024 6:34 PM
18	Green bike lanes and speed tables, just like on Clares.	1/16/2024 5:20 PM
19	there already is one - it reminds me to slow down	1/16/2024 2:53 PM
20	Since 35 mph doesn't feel fast, seeing that I'm going 35 wouldn't change my behaviour. I think you drive to the speed that feels safe on the road, not what's posted on speed limit signs	1/16/2024 2:21 PM
21	Additional stop signs need to be considered as well.	1/15/2024 2:56 PM
22	Seems unlikely to help, especially with commuters.	1/15/2024 12:57 PM
23	Adding feedback signs is a good idea, especially soon after cars leave the village and head toward Coronado.	1/14/2024 8:07 PM
24	Unless it's issuing tickets. It's a waste of money	1/14/2024 3:43 PM
25	One is already there and drivers can see they are going 45 mph. Unless the thing is equipped with a camera and issuing speeding tickets, it's a waste off money.	1/14/2024 3:26 PM
26	I think that this is especially helpful when school is in session and the sign reflects that	1/12/2024 11:18 AM
27	I sit by the window and I see the Speed Feedback sign on Capitola Avenue towards Hill Street and all it shows me is that I'm correct and everyone is speeding and no one slows down and many people speed up. Very, very sad.	1/12/2024 9:35 AM
28	I think drivers are ignoring speed limit so not sure this will help	1/12/2024 5:14 AM
29	The ones installed don't deter people from speeding. I've been behind people who flash 40mph+ on it and don't bother to slow until they hit the stop sign at Monterey	1/11/2024 5:06 PM
30	No one pays attention to speeds, ppl speed up on the hill, very hard to cross the street. Maybe if it takes photos for tickets.	1/10/2024 6:26 PM
31	I believe the current ones are helping	1/10/2024 2:42 PM
32	I think the signs are helpful for me. I am able to regulate my speed especially when heading west. But honestly I don't think the majority of the drivers pay attention to it.	1/10/2024 2:13 PM
33	People blow those signs off.If anything I sometimes see vehicles speed up. I am serious on that comment	1/10/2024 12:28 PM
34	Coronado to Kennedy is extremely dangerous and has a dropoff with no bike lane down to the park road. This needs to be addressed!	1/6/2024 4:35 PM
35	It always slows me down, but I don't know if others would.	1/6/2024 9:17 AM
36	Waste of money - no one paysxattention to them and they detract from a scenic drive.	1/5/2024 7:59 PM

## Q6 Do you think the proposed traffic calming features shown in the layouts below will slow down vehicle speeds? (Alternative 1 from Monterey to Cabrillo)

Answered: 84 Skipped: 14



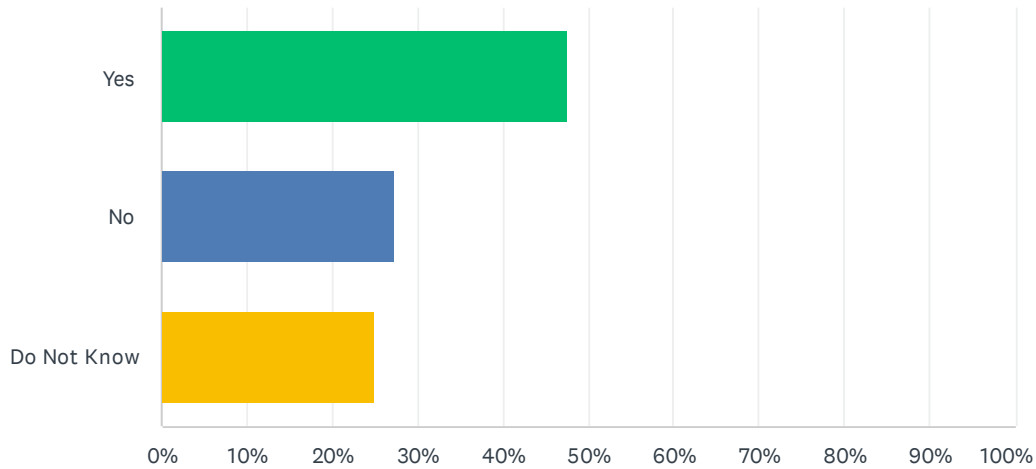
ANSWER CHOICES	RESPONSES
Yes	46.43% 39
No	34.52% 29
Do Not Know	19.05% 16
<b>TOTAL</b>	<b>84</b>

#	COMMENTS (OPTIONAL)	DATE
1	Yes, possibly. Again, enforcement is the key.	1/19/2024 4:00 PM
2	Removing off street parking on Park would be problematic for residents whose visitors need the extra space. Just widening the bike lanes will do the job.	1/19/2024 2:55 PM
3	Yes. This is the only serious option. Narrow the lanes 1ft. Add bollards at crossings.	1/18/2024 8:47 PM
4	Eliminate the suicide lane. A road diet will help but a suicide lane will create other issues.	1/18/2024 8:41 PM
5	More visible law enforcement would help more.	1/18/2024 4:59 PM
6	Need to include a physical barrier (curbs or posts)	1/18/2024 8:44 AM
7	And physical barriers	1/18/2024 6:55 AM
8	Add something physical to protect bike riders like kids	1/18/2024 6:55 AM
9	This would be an improvement over the current situation but what I'd really like to see would be some sort of a physical barrier (e.g., curbs or posts) to protect bikers.	1/18/2024 5:31 AM
10	This is my first choice, Yes!	1/17/2024 5:54 PM
11	Your example shows 4 lanes, Park Ave is a 2 lane st. You can't make a decision on inaccurate information	1/17/2024 2:36 PM
12	Making it more narrow would be dangerous for both vehicles and pedestrians	1/17/2024 8:48 AM

13	I like this design, reducing travel lane width seems like a good way to reduce vehicle speeds. While I know the corridor west of Cabrillo is somewhat space constrained, it would be nice to see continuous buffered/protected bike lanes along the whole corridor. Additionally, curb bulb outs to reduce right turn speed and crossing distances would be good to see.	1/17/2024 8:42 AM
14	And please make the delineator posts required (not optional). Let's keep the bikers safe.	1/16/2024 8:23 PM
15	Narrow lanes to 10 feet	1/16/2024 6:36 PM
16	Green bike lanes and speed tables, just like on Clares.	1/16/2024 5:20 PM
17	do not use the words "road diet" - people dislike diets and it implies giving something up. Also this has to be paired with better intersections - roundabouts, etc.	1/16/2024 2:57 PM
18	This is not ideal on an already slim strip of road. Please don't do this!	1/15/2024 2:59 PM
19	I think it could help, but it's unclear how much and if it is with the investment.	1/15/2024 1:07 PM
20	Moreover, it is critical that onstreet parking not be removed	1/15/2024 7:27 AM
21	This increases and promotes more 2 am street racing. Drivers already do it with the 2 lanes now.	1/14/2024 3:46 PM
22	It will only create more danger in the neighborhood. More space on this road will give drivers more road to race down. And the middle will allow road ragers to use it to pass drivers going the speed limit.	1/14/2024 3:33 PM
23	Turning into a street already upsets ppl who are speeding. I believe it will make it hard to cross the street. No one wants to stop or slow down.	1/10/2024 6:29 PM
24	Coronado to Kennedy is extremely dangerous and has a dropoff with no bike lane down to the park road. This needs to be addressed!	1/6/2024 4:38 PM

### Q7 Do you think the proposed traffic calming features shown in the layouts below will slow down vehicle speeds? (Alternative 1 from Cabrillo to Coronado)

Answered: 84 Skipped: 14



ANSWER CHOICES	RESPONSES
Yes	47.62% 40
No	27.38% 23
Do Not Know	25.00% 21
<b>TOTAL</b>	<b>84</b>

#	COMMENTS (OPTIONAL)	DATE
1	Minimally	1/19/2024 4:00 PM
2	By the time you get to Cabrillo, there are no more driveways to worry about, so just widening the bike lanes and not having the gutter part of it, will narrow the car lanes.	1/19/2024 2:55 PM
3	I think the bike lanes need to be buffered and have a curb instead of just a stripe	1/19/2024 10:24 AM
4	Yes. Add barriers to the bike lanes and narrow the lanes 1ft and it will work like a charm	1/18/2024 8:47 PM
5	Class 2 bike lanes do not provide enough protection. Class 4 would be preferred. Bike lane is in the path of opening car doors.	1/18/2024 8:41 PM
6	More visible law enforcement would be more helpful.	1/18/2024 4:59 PM
7	Need to see statistics on the impact of this design.	1/18/2024 8:44 AM
8	And physical barriers	1/18/2024 6:55 AM
9	As long as there are physical barriers	1/18/2024 6:55 AM
10	We can only hope . . .	1/18/2024 5:31 AM
11	can't hurt, might help	1/17/2024 2:36 PM
12	put a stop sign on Cabrillo St. and speed bumps on park ave eastbound before grove lane and Wesley St. This is where most accidents occurred	1/17/2024 12:14 PM

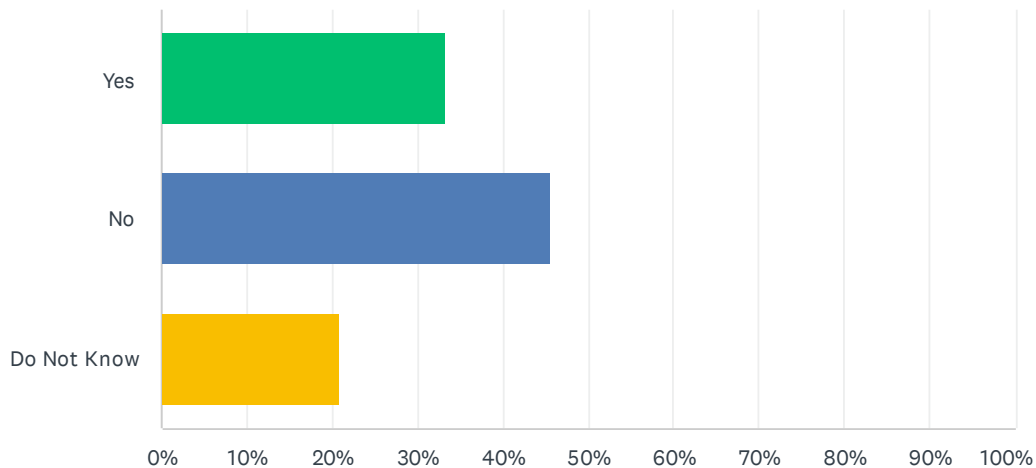
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13	Cars will continue to disregard speed limit.	1/17/2024 8:48 AM
14	I'm glad this section has the buffered/protected bike lanes	1/17/2024 8:42 AM
15	The delineator posts are key to our safety.	1/16/2024 8:23 PM
16	Not much. Consider speed humps. At least raised cross walks at Cabrillo and Coronado	1/16/2024 6:36 PM
17	Green bike lanes and speed tables, just like on Clares.	1/16/2024 5:20 PM
18	It may help the Bike lane but it won't slow traffic.	1/16/2024 3:22 PM
19	Buffers create perceived friction and will possibly slow traffic - why are you asking teh public to weigh in on what should be the traffic engineers job?	1/16/2024 2:57 PM
20	Yes, but please see additional comments at the end of survey.	1/15/2024 2:59 PM
21	I think it could help, but it's unclear how much and if it is with the investment.	1/15/2024 1:07 PM
22	Moreover, it is critical that onstreet parking not be removed	1/15/2024 7:27 AM
23	The center lane will encourage drivers to use it as a passing lane.	1/14/2024 3:46 PM
24	No the only thing that will stop speeders is to add speed bumps/humps on Park Ave and using them as cross walks for pedestrians.	1/14/2024 3:33 PM
25	Ticketing is the only thing that will slow speeding vehicles down.	1/12/2024 9:38 AM
26	Speed bumps would be better	1/10/2024 6:29 PM
27	Open road means speed up to commuters going home	1/10/2024 1:53 PM

### Q8 Do you think the proposed traffic calming features shown in the layouts below will slow down vehicle speeds? (Alternative 2 from Cabrillo to Coronado)

Answered: 81 Skipped: 17



ANSWER CHOICES	RESPONSES
Yes	33.33% 27
No	45.68% 37
Do Not Know	20.99% 17
<b>TOTAL</b>	<b>81</b>

#	COMMENTS (OPTIONAL)	DATE
1	Lane shifting may cause more issues than it would solve.	1/19/2024 4:03 PM
2	It appears to be unnecessary and could prove more dangerous.	1/19/2024 2:57 PM
3	I prefer barriers for the bike lane. Separation and barriers plus narrow lanes but the barriers solve enough problems. It's an arterial at this point. Treat it like one.	1/18/2024 8:52 PM
4	Yes but you need bollards or or some other design feature to prevent cars from avoiding the lateral design and risking the lives of those in the bike lanes	1/18/2024 8:42 PM
5	The swerving of cars around the curves might cause squeezing of the bikes	1/18/2024 7:33 PM
6	As a frequent pedestrian, I don't think shifting traffic lanes is a good idea Drivers are not paying attention as it is.	1/18/2024 5:03 PM
7	Drivers cut corners creating threat to bikes.	1/18/2024 8:46 AM
8	Squishes bikes	1/18/2024 6:56 AM
9	Seems like bikes will get hit in this model	1/18/2024 6:56 AM
10	This increases danger for bikes and pedestrians	1/17/2024 7:43 PM
11	This is a accident waiting to happen, No!	1/17/2024 5:55 PM
12	Probably create more harm (accidents) than good	1/17/2024 2:36 PM

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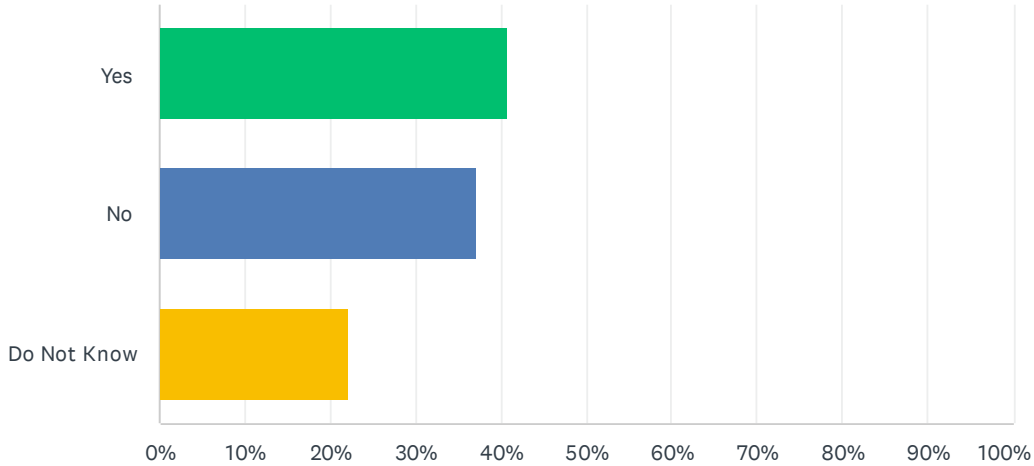
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13	Cars will continue to disobey posted speed limit	1/17/2024 8:50 AM
14	I don't think this would be as effective as the reduced travel lanes. The inconsistent buffer/protection zone for the bike lanes seems less effective and without physical barriers, it seems likely drivers will utilize the large buffer zones at the lateral shift points to straighten the curve by partially driving in them.	1/17/2024 8:44 AM
15	I am very concerned that lateral shifts present a danger for bicyclists at it narrows the bike lane at times and directs drivers towards bike lanes at times.	1/16/2024 8:23 PM
16	Build mountable medians	1/16/2024 6:37 PM
17	I propose speed tables btwn Monterey & Washburn and Wedley & Coronado. Just like the ones you did on Clares.	1/16/2024 5:20 PM
18	this is worst proposal because of what it does to traffic, I would propose speed tables	1/16/2024 5:08 PM
19	It may slow cars a bit but we still have large trucks coming off the freeway and going to the freeway on Park Ave and lane curves and width reduction are asking for trouble.	1/16/2024 3:23 PM
20	Buffers are better. People drive fast on wide straight streets. Again - shouldn't the traffic engineer present the best option. What is the concept with public input here?	1/16/2024 2:58 PM
21	But only if there is adequate space for buffered bike lanes on both sides with the lateral shifts	1/16/2024 2:37 PM
22	I'm in favor of trying this alternative.	1/15/2024 3:25 PM
23	Restriping the road will not stop speeders. There needs to be additional stop signs on this stretch of road. There is also zero nighttime lighting. This new road diet will create more accidents on this stretch of road.	1/15/2024 3:01 PM
24	Moreover, it is critical that onstreet parking not be removed	1/15/2024 7:28 AM
25	Adding parking spaces for the village isn't addressing the speeding and traffic congestion.	1/14/2024 3:47 PM
26	No your only goal with this is to create more parking spaces for the village. That is not addressing the speeding in this area for adding any relief to the congestion of traffic in this area.	1/14/2024 3:35 PM
27	Important to preserve South side off street parking. Heavily used by locals an Capitola Village workers	1/13/2024 2:23 PM
28	Be prepared for citizens to complain and vandalize like they did on Portola Drive.	1/12/2024 9:39 AM
29	I think this will have more ppl to park on the curbs/sidewalk	1/10/2024 6:39 PM
30	Maybe, but I don't think it's a good idea.	1/6/2024 9:20 AM
31	put the posted speed back to 35 as it was before. leave the road alone- no striping, etc.	1/5/2024 9:43 PM
32	Traffic shifts confuse drivers and create hazards. Look at Soquel Ave - people often go straight where the road jogs.	1/5/2024 8:01 PM



### Q9 Do you think the proposed traffic calming features shown in the layouts below will slow down vehicle speeds? (Alternative 3 from Cabrillo to Coronado)

Answered: 81 Skipped: 17



ANSWER CHOICES	RESPONSES
Yes	40.74% 33
No	37.04% 30
Do Not Know	22.22% 18
<b>TOTAL</b>	<b>81</b>

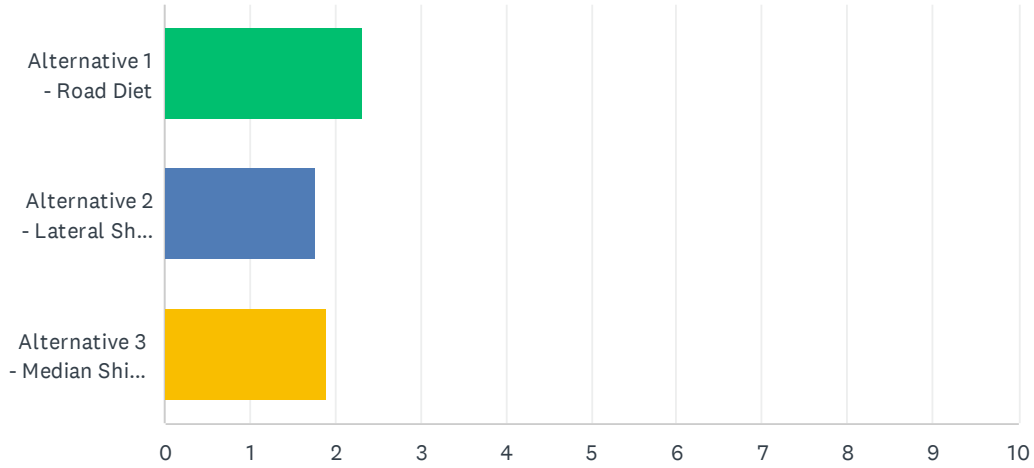
#	COMMENTS (OPTIONAL)	DATE
1	Possibly, but safety issues would be a major concern with the lack of space for all concerned due to narrowing of lanes.	1/19/2024 4:07 PM
2	Again, there are no driveways in that section, but narrowing the vehicle lanes would help. By the time you get to this section, there is little danger.	1/19/2024 2:59 PM
3	It's not even at a crossing where it has value. Put a real median down the center (continuous) and add some native plants bushy ones even canopy and see it become a slow driven world class stretch of road	1/18/2024 8:54 PM
4	Would squeeze bikes at curves and pinch points. Straight is better	1/18/2024 7:34 PM
5	Very bad idea.	1/18/2024 5:11 PM
6	It squishes the bikes	1/18/2024 6:56 AM
7	Seems unsafe for bikes	1/18/2024 6:56 AM
8	tough call, I can see it causing more accidents, but would probably force some drivers to slow down	1/17/2024 2:36 PM
9	This as well as all the other options only address a fraction of Park av. Cars will continue to disregard speed limits before and after proposed modifications, if not along the entire park av	1/17/2024 8:54 AM
10	I think this would be effective if physical medians were installed but if it is just striping, I don't	1/17/2024 8:46 AM

believe it will be as effective, drivers are more likely to dip into the bike lanes in areas where the median is expanded and the traffic calming effect seems like it would be stunted by drivers driving over the striped areas.

11	I am very concerned that medians will narrow the bike lanes at times and direct vehicles towards bike lanes at times. A scary example of this is the new median on Laurel that squeeze the traffic and the cars drive right through the bike lane.	1/16/2024 8:24 PM
12	Worried about this median eating into the bike lane.	1/16/2024 6:43 PM
13	Cut thru traffic will ignore striping eventuall. Buy an electric small street sweeper	1/16/2024 6:38 PM
14	Green bike lanes and speed tables, just like on Clares.	1/16/2024 5:20 PM
15	It may make speed limit more noticed which is good. I don't like the narrowed lane. It brings trucks and RV s going to New Brighton to close to bikes.	1/16/2024 3:24 PM
16	place the median where crosswalks exist - allows pedestrians a place of refuge.	1/16/2024 2:59 PM
17	Same as for last question- I think the most important feature is buffered bike lanes, so would only want median shift if buffered bike lanes can fit too	1/16/2024 2:37 PM
18	This could be very effective.	1/15/2024 3:34 PM
19	This seems like the best alternative presented so far.	1/15/2024 1:10 PM
20	Moreover, it is critical that onstreet parking not be removed	1/15/2024 7:29 AM
21	This only adds curb appeal. It is not addressing speeding or congestion in the area	1/14/2024 3:48 PM
22	If your are going to add this why can't you just add speed bumps. This only adds curb appeal to the street not addressing the problem of congested traffic and speeders.	1/14/2024 3:37 PM
23	It's not really going to solve the speeding problems.	1/10/2024 6:43 PM
24	Medians can take up space from bicycle travel, on this stretch there are many pedestrians and joggers that use the bike lane.	1/10/2024 2:54 PM
25	These are good ideas but what about the large large work trucks with construction equipment and large delivery vehicles. Would this lessen that?	1/10/2024 2:25 PM
26	Maybe, but not a good idea.	1/6/2024 9:21 AM
27	leave the road as it is, make the speed limit 35 as it was until recently	1/5/2024 9:44 PM

Q10 Which traffic calming concept presented in this survey is your favorite / preferred choice? Please rank each concept by most favorite (1) to least favorite (3) by moving the boxes up or down.

Answered: 78 Skipped: 20



	1	2	3	TOTAL	SCORE
Alternative 1 - Road Diet	56.41% 44	19.23% 15	24.36% 19	78	2.32
Alternative 2 - Lateral Shift & Road Diet	12.82% 10	52.56% 41	34.62% 27	78	1.78
Alternative 3 - Median Shift & Road Diet	30.77% 24	28.21% 22	41.03% 32	78	1.90

## Q11 Please provide any additional comments or feedback on this project (Optional).

Answered: 48 Skipped: 50

#	RESPONSES	DATE
1	Reducing parking anywhere in Capitola is a problem. We have too much street parking now and finding parking for residences is a challenge. Family of 4 = 4 cars with 1 on property spot	1/22/2024 4:55 PM
2	While we don't live in Capitola we live in Seacliff and ride this route daily. Please implement Alternative 1 and extend improvements to State Park Drive!!!	1/19/2024 6:07 PM
3	I think the shifting ones could lead to driver confusion and more accidents.	1/19/2024 5:10 PM
4	Enforcement is the key. Speed signage stating "enforced by radar" (if possible) or having Capitola PD much more involved. Mailing citations (or warnings) to violators would have an impact. Just parking a PD car along the way would slow drivers down. Park Ave. is like a highway at times and must be dealt with. Perhaps look into diverting some of the traffic from Hiway 1 onto Bay or 41st Avenues. Personally, as a frequent walker in the specified area, I'd like to see additional well marked crosswalks at Park and Columbus along with blinking red lights around the circumference of existing stop signs. Most drivers stop at the intersection, some slow down to almost a stop, but a few go thru as though the stop signs weren't observed. Knowing that law enforcement is at a premium, enforcement is a must. However, almost anything will be an improvement. Thank you for the opportunity to provide input.	1/19/2024 4:38 PM
5	None of the above. Widening the bike lanes to narrow the car lanes, and installing several more speed feedback signs would help a lot. Also, having the police patrol, use radar guns, and ticket more often would help too. I believe that another workshop regarding the subject when all the Park Avenue and nearby residents are properly notified would also be paramount, as I know this is a major concern.	1/19/2024 3:14 PM
6	Barriers on the bikes lanes Toronto style can be done very cheap and narrow all the lanes including the suicide lane, bollards at crossings to create friction and snap drivers into awareness where pedestrians are crossing. Make it a realistic commuter path and someday build it out all the way to Seacliff would be fire and is within our economics over time/ skate park kids could bike too safely would be a game changer and there are TWO skate parks on that path	1/18/2024 8:58 PM
7	A road diet would help improve safety for all and create a more walkable and enjoyable street. It has such a exccellejt view but can hardly be enjoyed with people speeding in their cars. I would really like to see some class 4 bike lanes with the road diet implemented. Anything that doesn't change the design of the road and relies on signage and behavior changes will not work. Thank you for taking this project on and working towards making our community a safer place	1/18/2024 8:44 PM
8	Though not in the scope of this project, I have concerns as a regular bicyclist/commuter of more hazardous areas in the immediate vicinity. Monterey Ave. from railroad tracks to village requires signage and pavement paint warning drivers of narrowing roadway which often sqweezes bicyclists into the curb!!!!!! Monterey Ave. from stop sign at the New Brighton middle school towards Park Ave. needs signage to protect bicyclists, as well paint on the pavement. Bay Avenue north bound in front of Gayles and south bound in front of Grady's market NEED signage and pavement paint to alert drivers to slow down and not sqweeze bicyclist.	1/18/2024 7:41 PM
9	Increased visibility of law enforcement would be a good idea to slow down traffic.	1/18/2024 5:13 PM
10	Physical barias and not largarla or median shifts	1/18/2024 6:58 AM
11	Bikes need protected bike lanes. Those curves are currently on Laurel and it's LESS safe for bikes now.	1/18/2024 6:57 AM
12	I think it's long past time to meaningfully improve safety for cyclists and pedestrians.	1/18/2024 5:33 AM

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13	Please include physical protection for people walking and biking in any solution put forward.	1/17/2024 11:30 AM
14	We have many citizens using bikes in Capitola and there needs to be a barrier between riders and cars to make it bike friendly. The fact that the middle school is in this area makes it imperative to make biking more safe.	1/17/2024 7:47 PM
15	I don't care for 2 or 3 at all. I feel strongly that 1 is the safest and best choice.	1/17/2024 7:43 PM
16	Road diet all the way. Thank you.	1/17/2024 5:56 PM
17	A physical barrier between cars & bikes is important	1/17/2024 4:00 PM
18	#3 is the most visually appealing #2 2nd place #1 Not sure where you are getting the 4 lands or room for a turning lane. Feel free in calling us since we have lived on Park Ave for 50 years and have seen much in the way of accidents and our thoughts. Apparently Speed Bumps seem to be out of the question, but would definitely slow things down.	1/17/2024 2:36 PM
19	Most speeding and consequently accidents happen eastbound coming down the hill on park ave just before and at the intersection of grove lane and Wesley St. A stop sign and speed bump here will reduce speeding and accidents.	1/17/2024 12:24 PM
20	The issue here is that the vast majority of vehicles use Park as an alternate to highway 1. If it was just the residents there would not be an issue. The bike and pedestrian alternatives are a waste in light of the more favorable conversion of the existing railroad tracks. Perhaps making park av one way from highway to bay and Monterey av one way from bay to highway with the addition of minimum of 3 traffic lights along Monterey would be a much better option.	1/17/2024 9:04 AM
21	I like the idea of a road diet but I think the best way to implement it is a more extreme road diet with continuous protected bike lanes in order to keep vehicle traffic towards the center of the road and offer greater space and protection for pedestrians and cyclists.	1/17/2024 8:48 AM
22	This stretch of Park Ave is truly stunning with its views of the ocean. Let's make this safe for everyone by adding physical barrier delineator posts between the cars and the bikes. I also would urge you to look at the intersection of McCormick Ave and Park Ave. There is a very dangerous situation where kids biking to New Brighton School in the morning are coming north on Monterey out of the village, then they turn right on Park and make an immediate left on McCormick. The cars do not expect this left turn and are overtaking the kids just as they turn left. This is urgent and needs our full attention.	1/16/2024 8:29 PM
23	This options seem pretty poor, it's frustrating to see our tax dollars paying a firm to not think outside the box. Unused train tracks adjacent to Park Ave? That would provide a very secure and safely path for walkers and cyclists. Then provide the road wouldn't need to be in such a "diet".	1/16/2024 8:25 PM
24	Thanks for your efforts !	1/16/2024 6:44 PM
25	No 3 is best with additional protection for bikes	1/16/2024 6:39 PM
26	I bike and drive this road daily and it needs to be safer. I'm for any option that proves to be the safest for pedestrians and cyclists.	1/16/2024 5:28 PM
27	I don't approve of any of those 3 choices. I want green bike lanes and speed tables, just like on Clares.	1/16/2024 5:20 PM
28	this alternative table does not allow me to make all choices #3, I live on Park Ave, I watch the traffic every day.	1/16/2024 5:14 PM
29	Need to prioritize walking/biking room on this street!	1/16/2024 5:12 PM
30	Why is there no mention of speed enforcement? If it is beyond the scope of our police can we apply for a camera enforcement? Speed bumps?	1/16/2024 3:28 PM
31	Why is the public ranking designs? Crazy! Each of these solutions should have been created by a traffic engineer who knows what they are doing. One of these options is presumably better than the others or possibly elements from all three options? You might need to hire a European traffic engineer - American traffic engineers and planners have proven themselves to be morons.	1/16/2024 3:02 PM
32	My family and I live in Pleasure Point and my kids bike to school at Montessori, so go down this stretch of Park Ave. If it were safer they would definitely bike more (as would a few of their	1/16/2024 2:43 PM

friends) and traffic would go down proportionally. We are all in favor of a road diet, especially if it includes a buffered bike lane with bollards. We are in favor of the lateral and median shift plans as long as they can also include a buffered bike lane. It would also be nice to include pedestrian crosswalk bulb outs at Cabrillo St. We will support any intervention that you think will increase bike/pedestrian safety, as long as it relies on structural changes that induce drivers to slow down intuitively rather than depending on signage and enforcement.

33	My biggest concern is to slow traffic on Park from Bay Avenue and beyond Washburn. It seems like you will have effective methods to slow traffic from Coronado to Cabrillo, but I'm concerned that what is proposed will not sufficiently slow traffic from Bay and beond.	1/15/2024 3:37 PM
34	As a resident of Park Ave., thank you for addressing the safety concerns on this heavily trafficked road. It has been hair-raising to watch cars compete for space with pedestrians, bicycles and motorized bikes. This stretch of road suffers from lack of STOP signs and traffic sign reminders. The available parking under the eucalyptus trees also needs addressing since people park here and party, do drugs, and park overnight as they take advantage of the beach and village activities. I am in agreement that this area should be utilized to create safe bike access and to quell these activities as it is very disruptive to the residents. Also, I implore you to look into nighttime lighting as Park Ave is completely pitch black at night. We have had several major accidents at night as people don't slow down and are caught out coming over the hill. So again thank you for seeking to make Park Ave a more safe road for all to enjoy!	1/15/2024 3:20 PM
35	I think think the median shift requires drivers to slow down and would look nice, but I would also like to see a bike lane buffer and more lighting on the street to provide additional safety for pedestrians, bicyclists and drivers.	1/15/2024 1:14 PM
36	Moreover, it is critical that onstreet parking not be removed	1/15/2024 7:29 AM
37	Add buffers for bike lanes and install speed bumps. I prefer you stop traffic going to the freeway between 3-6 pm like on Topaz and 43rd Ave.	1/14/2024 3:51 PM
38	My preference would be simply to add speed humps and feedback signs rather than reduce existing off street parking	1/13/2024 2:27 PM
39	If you want to see the biggest change, the laws need to be enforced. Drivers no longer follow most rules because there is no consequence for their actions. As a parent, I am hyperaware of the many dangerous spots around town and people no longer care because they realize they don't have to follow the rules because there is no danger of being ticketed/caught/fined. All the suggestions help, but until people assume responsibility for their actions the overall affect will be minimal.	1/12/2024 9:43 AM
40	I think option 3 is best for cars but not sure if it will create barriers that bikes have difficulty navigating	1/12/2024 5:24 AM
41	Speed bumps slow traffic down	1/11/2024 9:51 AM
42	Having a turning lane will cause ppl it to pass ppl because they want to wait. Having speed bumps would be a better option. Turning in apartments down at the bottom of the hill is where ppl like to speed and cause problems. Ppl run the walk cross lights, stop signs. They don't care to slow down even to the 25 mile per hour limit. Speeding cameras would be a better option if you want to gain money. Crossing the street and almost getting hit makes it hard to enjoy walking across.	1/10/2024 6:49 PM
43	I bike this stretch nearly every day, one of my greatest concerns is pedestrians walking/running in bike lane, and drivers making turns onto streets or to park, or pulling out of a parking space.	1/10/2024 2:57 PM
44	Thank you for working on this. I hope we can somehow slow things down. After all it is a residential street. I believe the sidewalk has made Park Ave a safer space for residents and visitors.	1/10/2024 2:32 PM
45	Park is used as a commute alternative, especially when the freeway is impacted. Speeds in this case will usually be above the limit. This will just create another challenge for frustrated and aggressive drivers., not to mention the complete fiasco of the school traffic.	1/8/2024 9:48 PM
46	Coronado to Kennedy is extremely dangerous and has a dropoff with no bike lane down to the park road. This needs to be addressed!	1/6/2024 4:39 PM
47	This stretch of Park Ave has a beautiful view of the bay. please don't alter it with stripes or	1/5/2024 9:55 PM

little islands. the speed limit there was 35 until recently. when the limit was reduced to 25, it naturally makes it seem like there is now a speeding problem. there is no reason to make these road changes. it's bad enough the rail trail, in any form, will be cutting down trees on park ave. we don't need to change everything in the county!

---

48	How about increased enforcement? Please dont clutter pPark Ave with those ugly electronic speed signs	1/5/2024 8:04 PM
----	---	------------------

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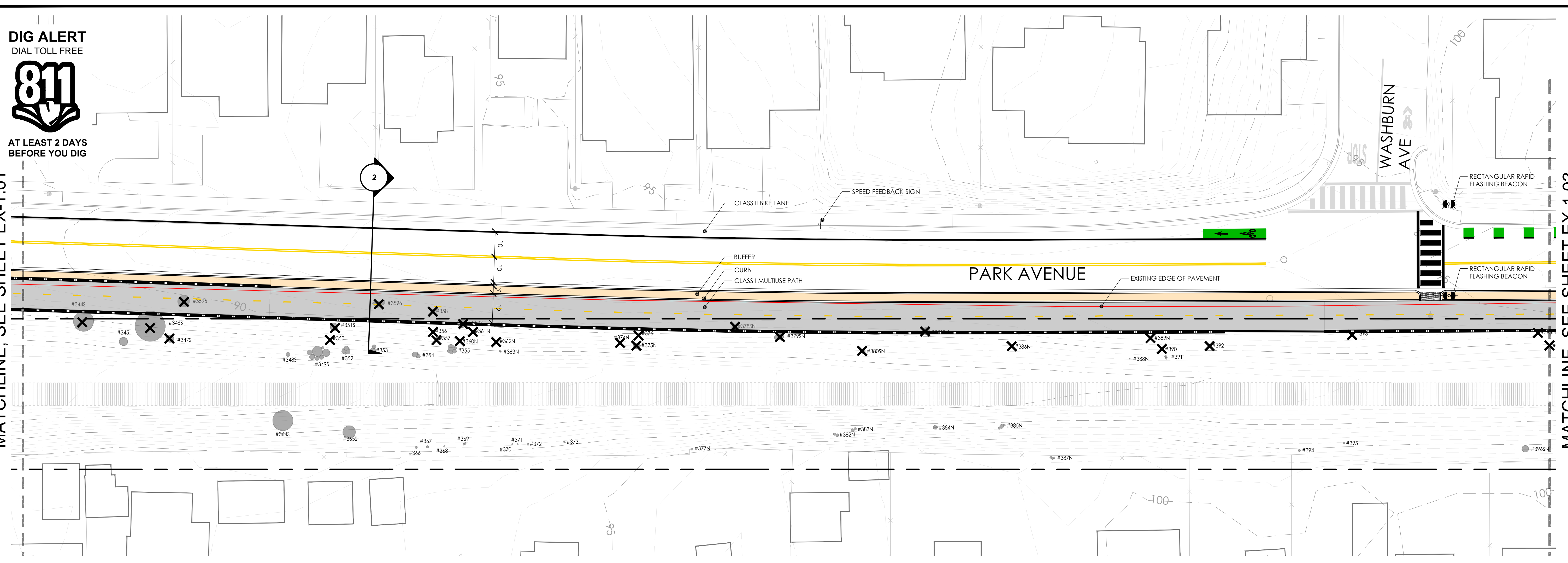




**DIG ALERT**  
DIAL TOLL FREE  
**811**  
AT LEAST 2 DAYS  
BEFORE YOU DIG

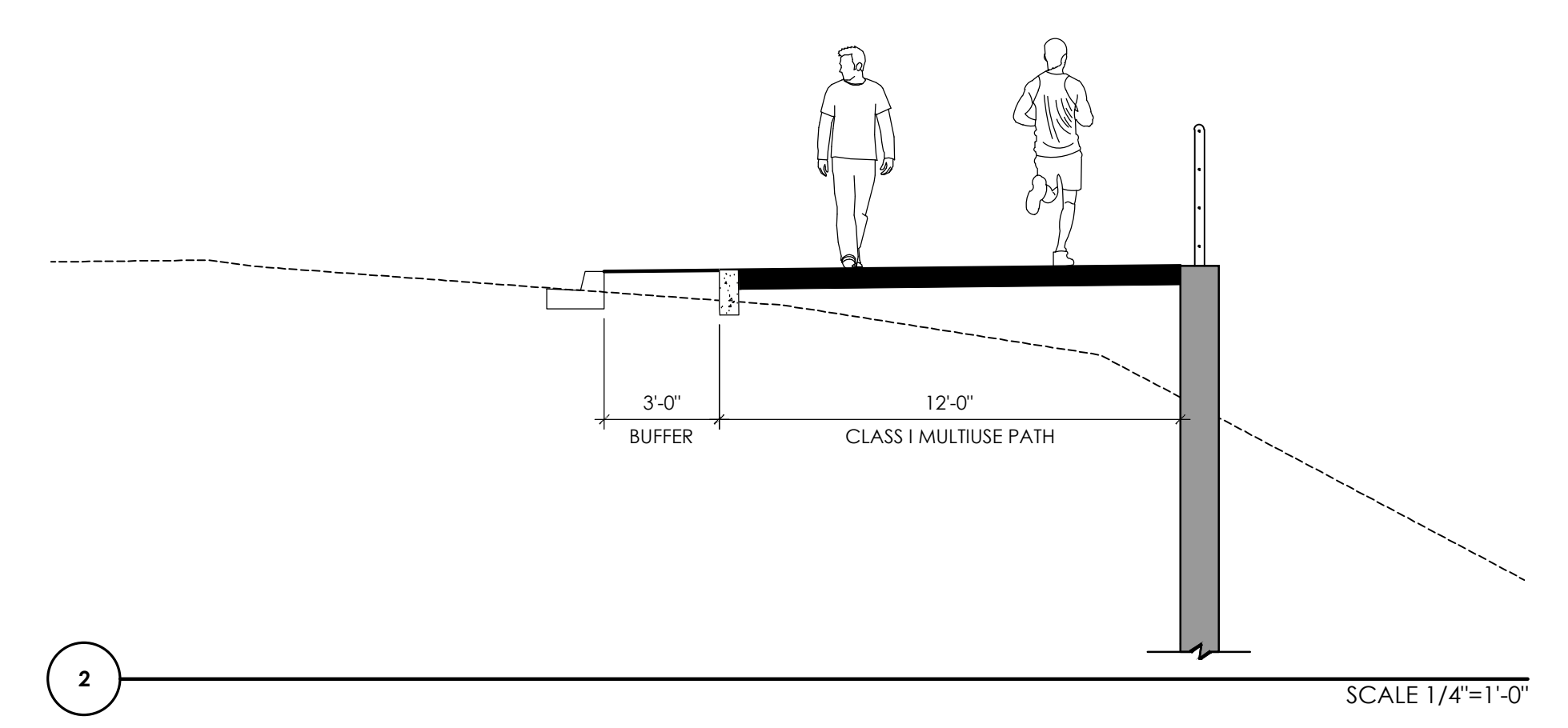
MATCHLINE, SEE SHEET EX-1.01

MATCHLINE, SEE SHEET EX-1.03



**LEGEND**

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING EDGE OF PAVEMENT
	RETAINING WALL
	TRAIL BUFFER
	CLASS I MULTIUSE PATH
	CONCRETE PAVEMENT
	TREE REMOVAL



PRELIMINARY  
NOT FOR CONSTRUCTION

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DEPARTMENT OF PUBLIC WORKS  
701 Ocean Street, Room 410  
Santa Cruz, CA 95060

**RAIL TRAIL SEGMENTS 10 & 11**  
MONTEREY TO CORONADO SCHEMATIC DESIGN ALTERNATIVES  
OPTION A

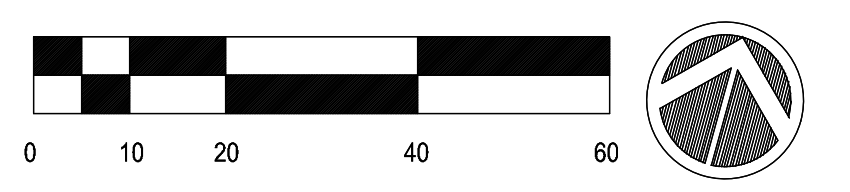
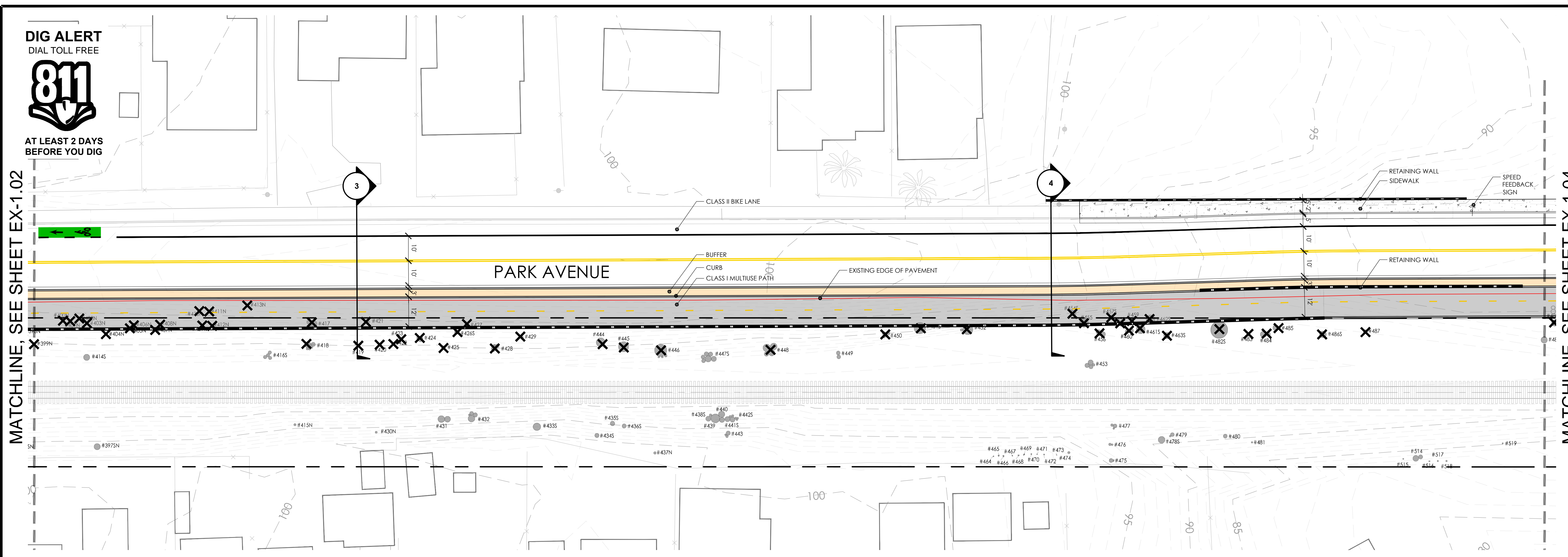
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FIELD BOOK:	DRAWN	MS	EX-1.02	
DRAWING #:	DESIGN	KS/MS	VAULT NO.	
	CHECKED	MS		

DATE	01/21/2025	SCALE	AS SHOWN
DRAWN	MS	EX-1.02	
DESIGN	KS/MS	VAULT NO.	
CHECKED	MS		

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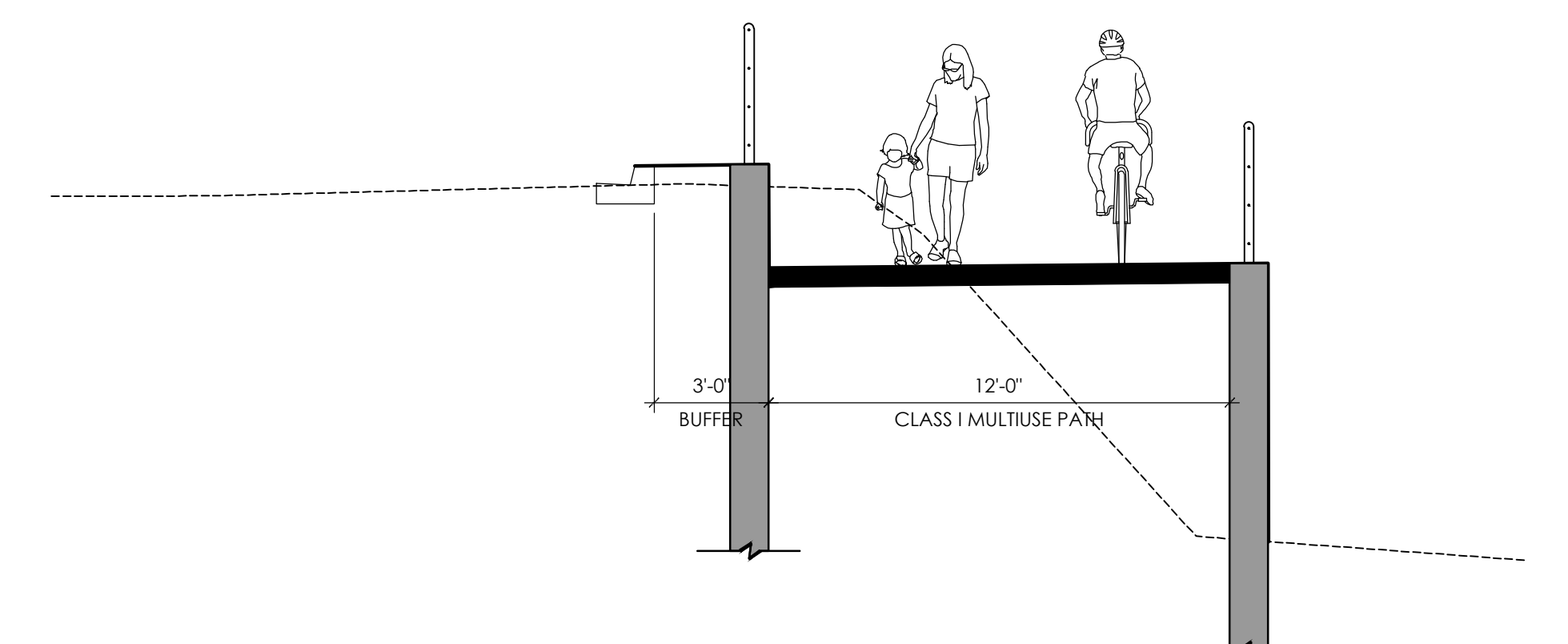
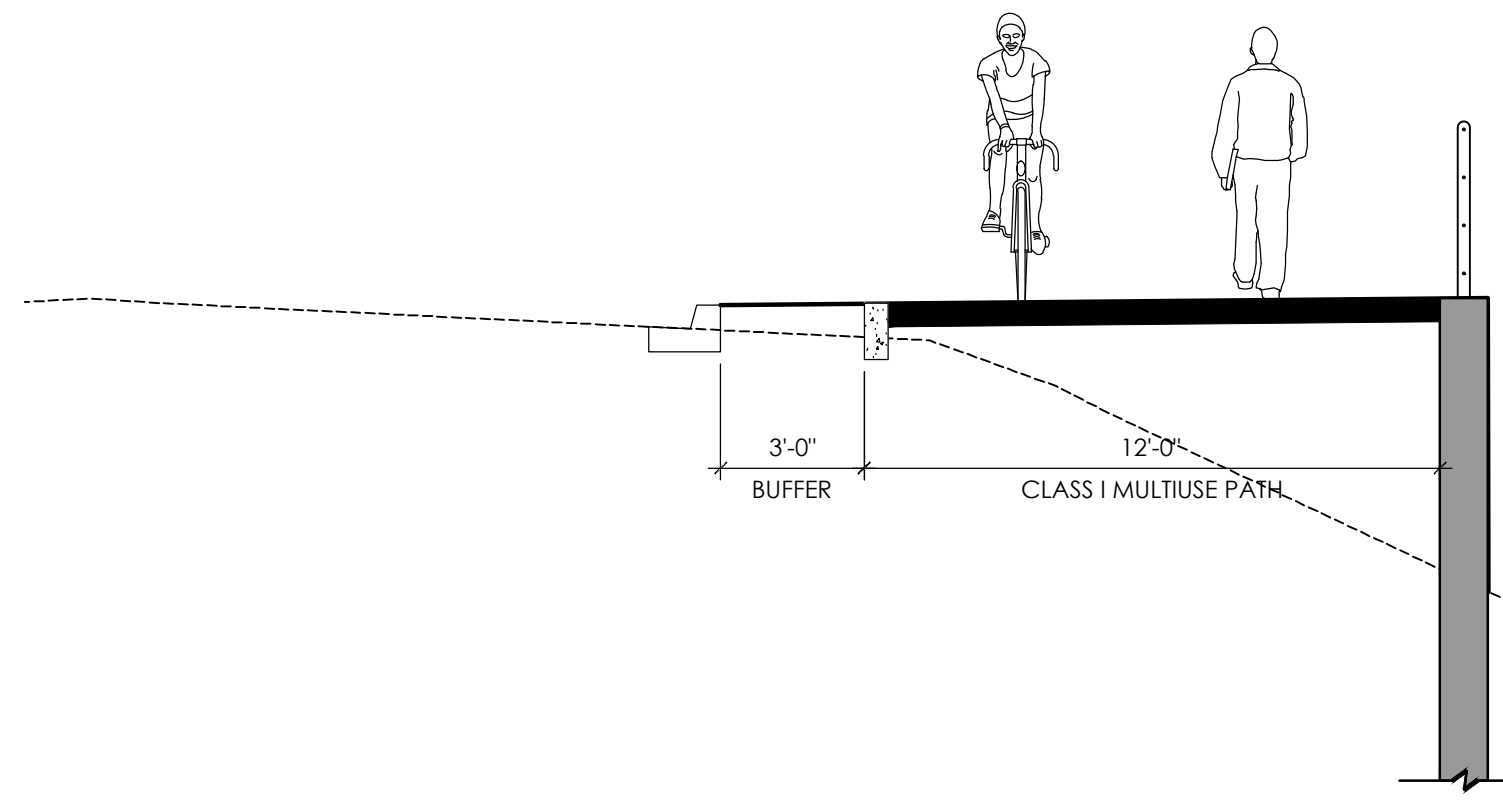
MATCHLINE, SEE SHEET EX-1.02

MATCHLINE, SEE SHEET EX-1.04



**LEGEND**

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING EDGE OF PAVEMENT
	RETAINING WALL
	TRAIL BUFFER
	CLASS I MULTIUSE PATH
	CONCRETE PAVEMENT
	TREE REMOVAL



3

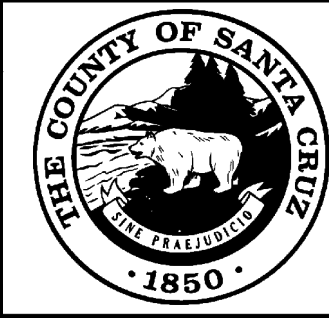
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SCALE 1/4"=1'-0"

SCALE 1/4"=1'-0"

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MONTEREY TO CORONADO SCHEMATIC DESIGN ALTERNATIVES  
OPTION A

REFERENCES  
FIELD BOOK:  
DRAWING #:

DATE 01/21/2025  
DRAWN MS  
DESIGN KS/MS  
CHECKED MS

SCALE AS SHOWN  
**EX-1.03**  
VAULT NO.



















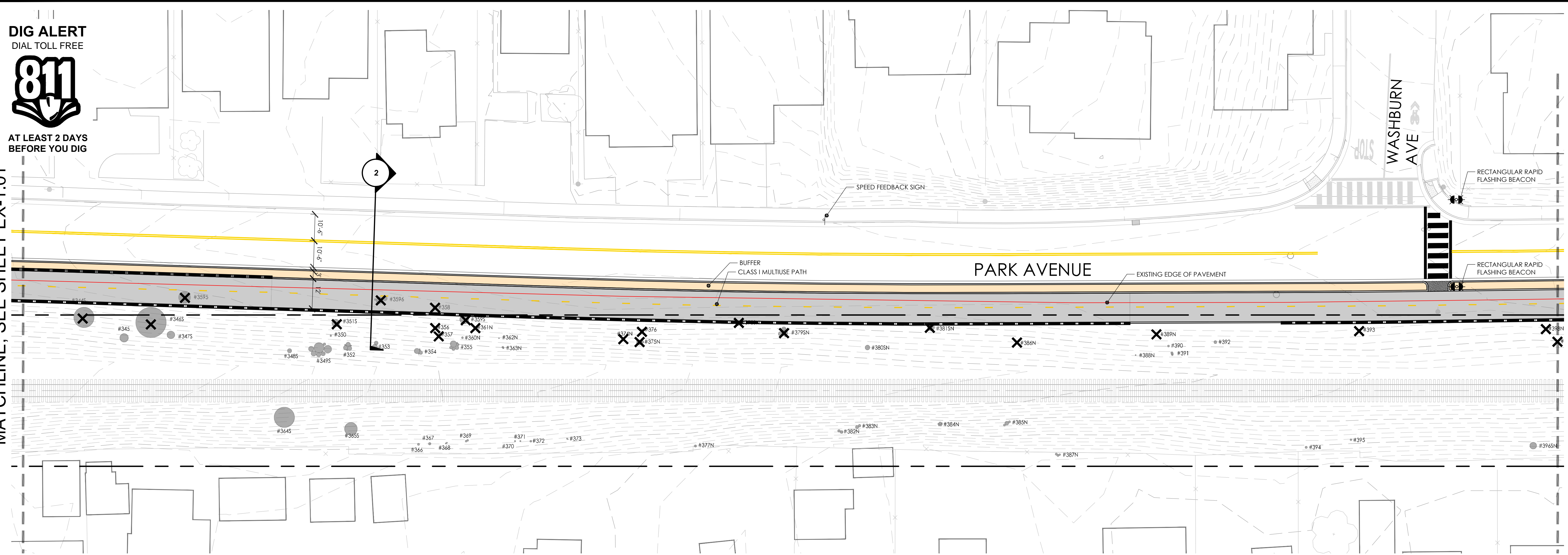




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**811**  
AT LEAST 2 DAYS  
BEFORE YOU DIG

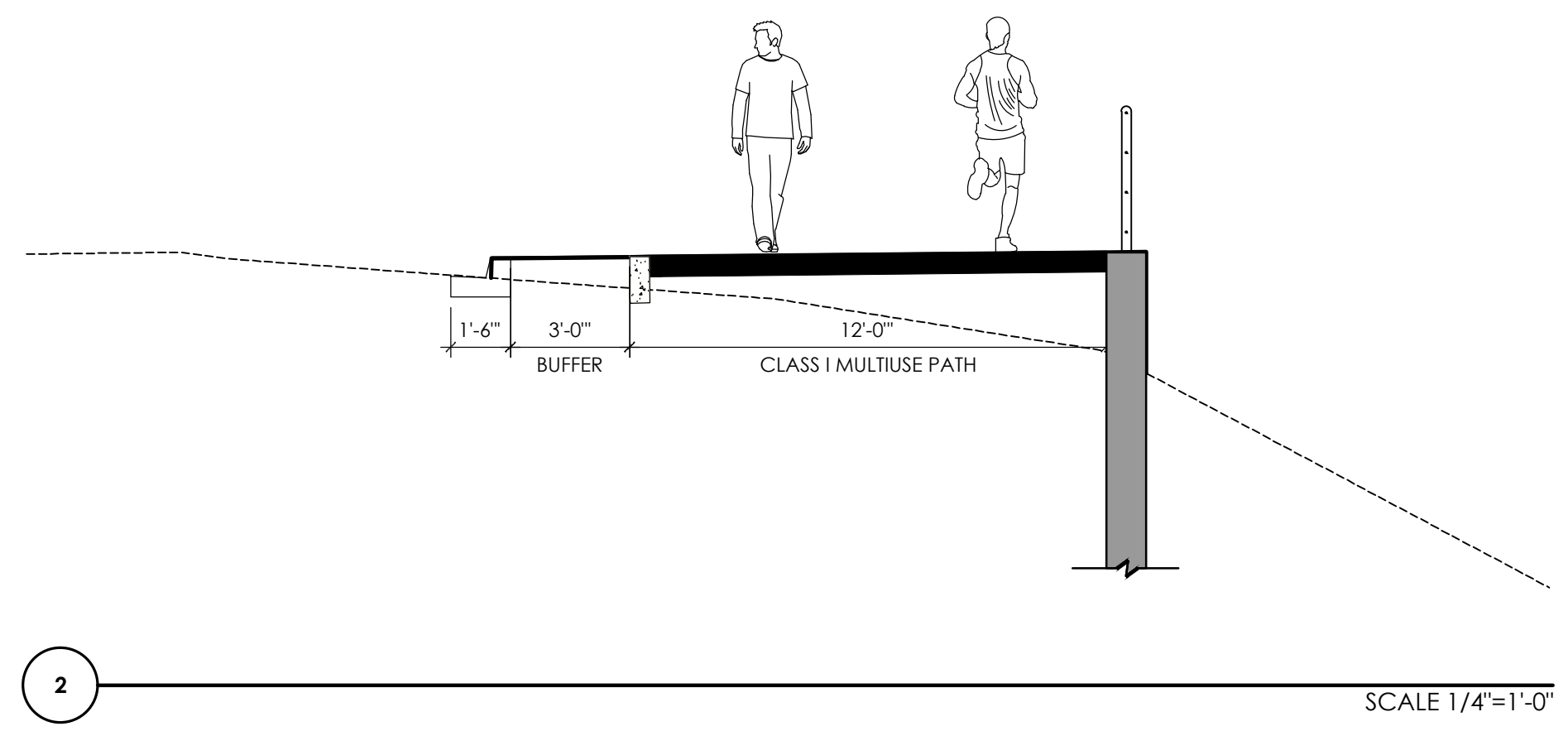
MATCHLINE, SEE SHEET EX-1.01

MATCHLINE, SEE SHEET EX-1.03



**LEGEND**

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING EDGE OF PAVEMENT
	RETAINING WALL
	TRAIL BUFFER
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	TREE REMOVAL



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**RAIL TRAIL SEGMENTS 10 & 11**  
MONTEREY TO CORONADO SCHEMATIC DESIGN ALTERNATIVES  
OPTION B

REFERENCES

FIELD BOOK:

DRAWING #:

DATE	01/21/2025
DRAWN	MS
DESIGN	KS/MS
CHECKED	MS

SCALE	AS SHOWN
	<b>EX-1.02</b>
Vault No.	



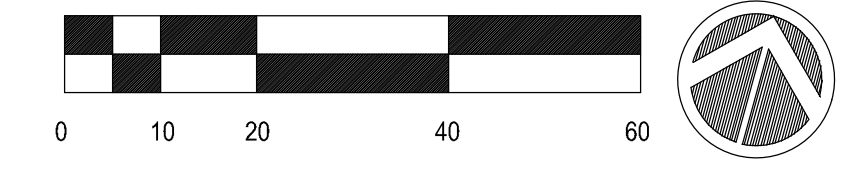
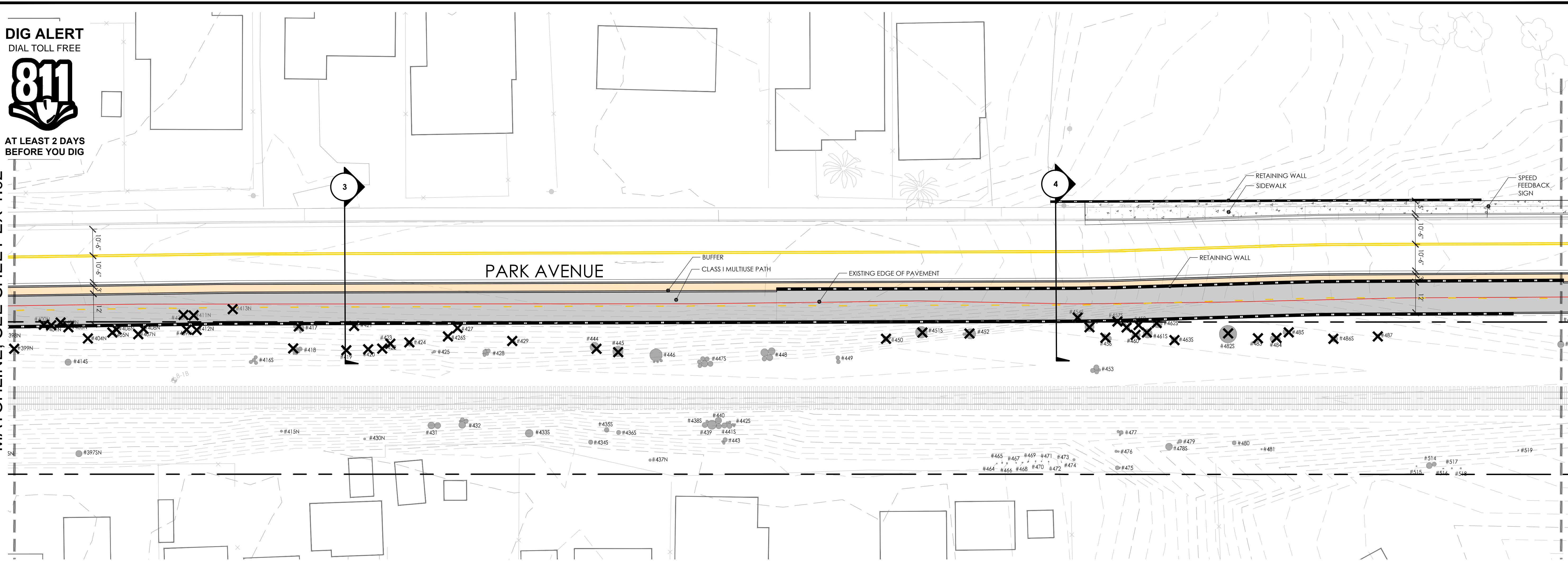
DIG ALERT  
DIAL TOLL FREE



AT LEAST 2 DAYS  
BEFORE YOU DIG

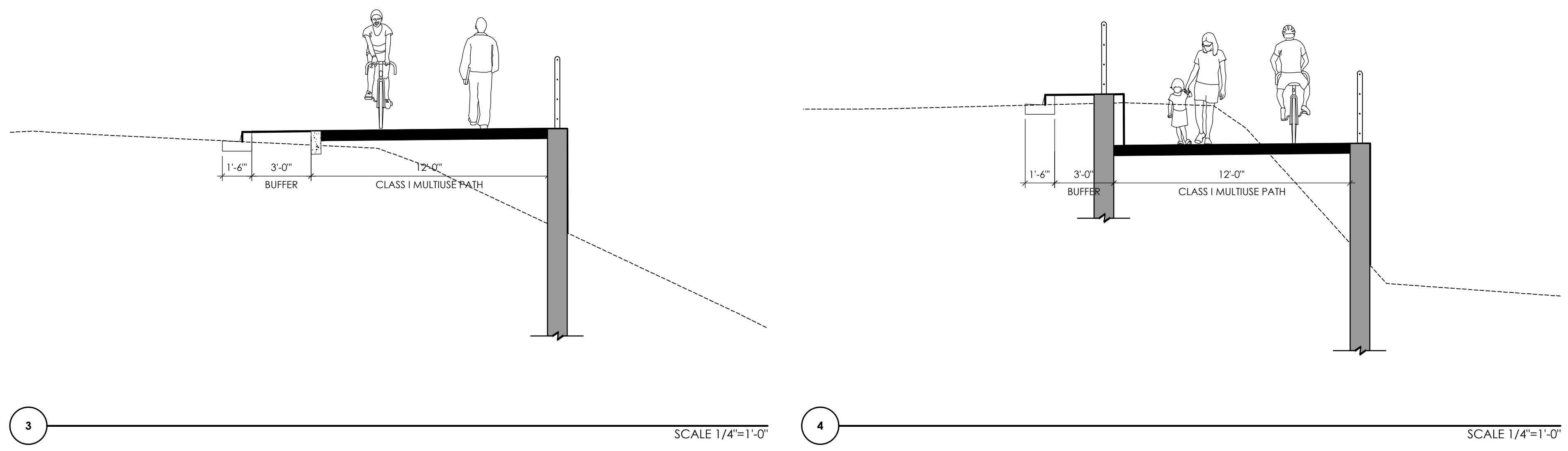
MATCHLINE, SEE SHEET EX-1.02

MATCHLINE, SEE SHEET EX-1.04



LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
	EXISTING FENCE
	EXISTING EDGE OF PAVEMENT
	RETAINING WALL
	TRAIL BUFFER
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	TREE REMOVAL



SCALE 1/4"=1'-0"

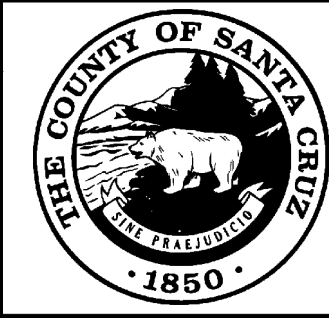
SCALE 1/4"=1'-0"

PRELIMINARY  
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REVISIONS

NO.	DATE	DESCRIPTION



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**RAIL TRAIL SEGMENTS 10 & 11**  
MONTEREY TO CORONADO SCHEMATIC DESIGN ALTERNATIVES  
OPTION B

REFERENCES  
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DRAWING #:

DATE 01/21/2025  
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DESIGN KS/MS  
CHECKED MS

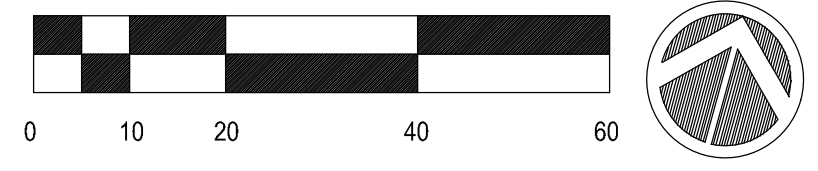
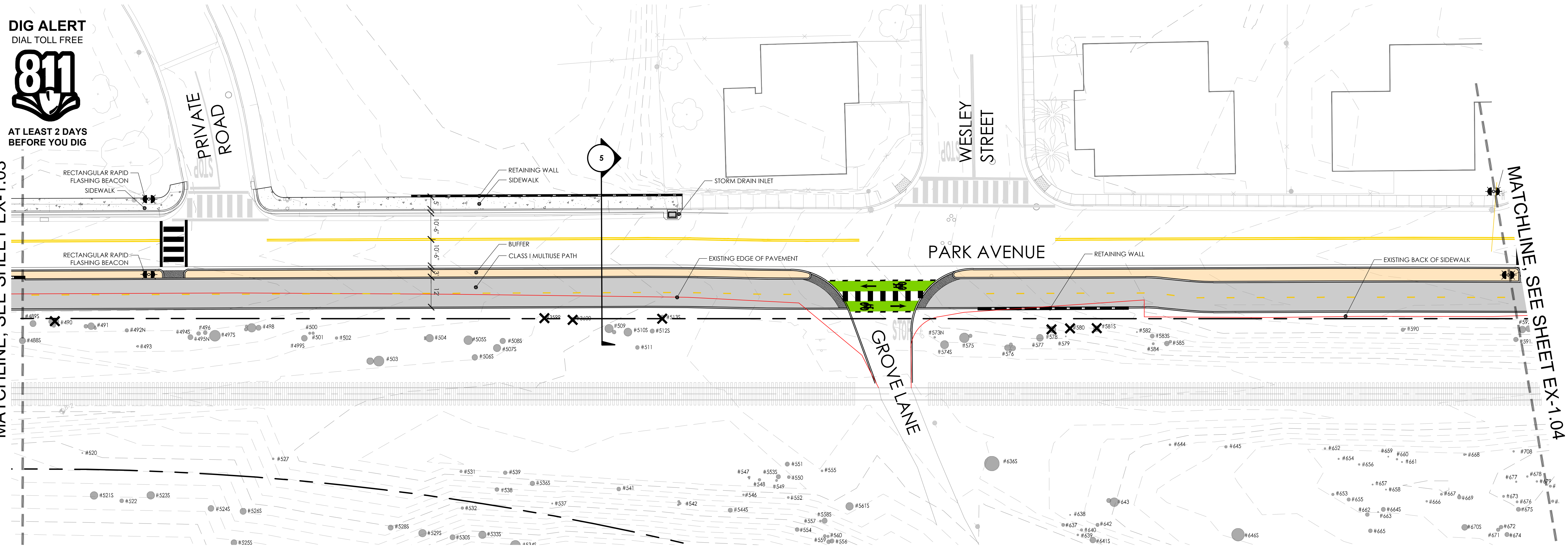
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VAULT NO.





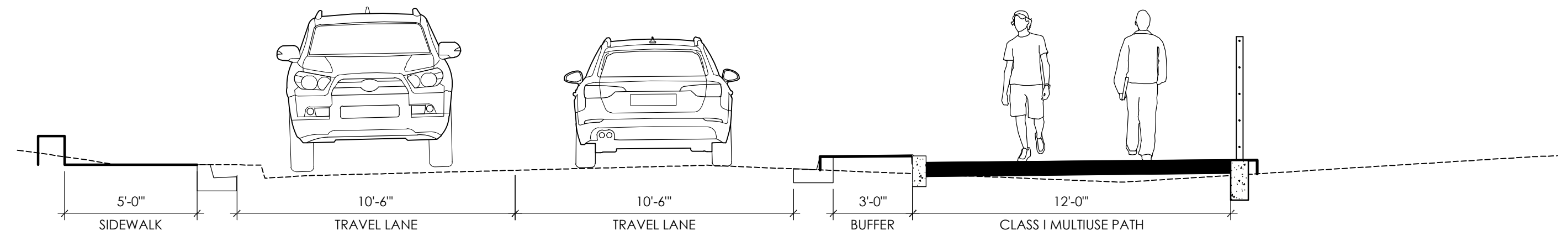
MATCHLINE, SEE SHEET EX-1.03

MATCHLINE, SEE SHEET EX-1.04



LEGEND

SYMBOL	DESCRIPTION
	SCCRTC RIGHT OF WAY
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	EXISTING EDGE OF PAVEMENT
	RETAINING WALL
	TRAIL BUFFER
	CONCRETE PAVEMENT
	HMA PAVEMENT (TRAIL)
	TREE REMOVAL



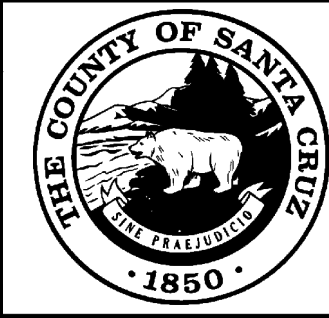
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SCALE 1/4"=1'-0"

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NO.	DATE	DESCRIPTION



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**RAIL TRAIL SEGMENTS 10 & 11**  
MONTEREY TO CORONADO SCHEMATIC DESIGN ALTERNATIVES  
OPTION B

REFERENCES  
FIELD BOOK:  
DRAWING #:

DATE 01/21/2025  
DRAWN MS  
DESIGN KS/MS  
CHECKED MS

SCALE AS SHOWN  
EX-1.04  
VAULT NO.















# PARK AVENUE TRAFFIC CALMING IMPROVEMENTS

## SANTA CRUZ COUNTY CAPITOLA, CALIFORNIA

TO BE SUPPLEMENTED BY THE PROJECT SPECIFICATIONS, CITY OF CAPITOLA  
STANDARD DRAWINGS, CALTRANS REVISED STANDARD PLANS DATED JANUARY  
22, 2024, AND CALIFORNIA MUTCD REV 8 DATED JANUARY 11, 2024.

SHEET INDEX		
SHEET No	DRAWING No	SHEET CONTENTS
1-2	T-1 TO T-2	COVER SHEET AND GENERAL NOTES
3-6	SS-1 TO SS-4	SIGNING AND STRIPING PLANS

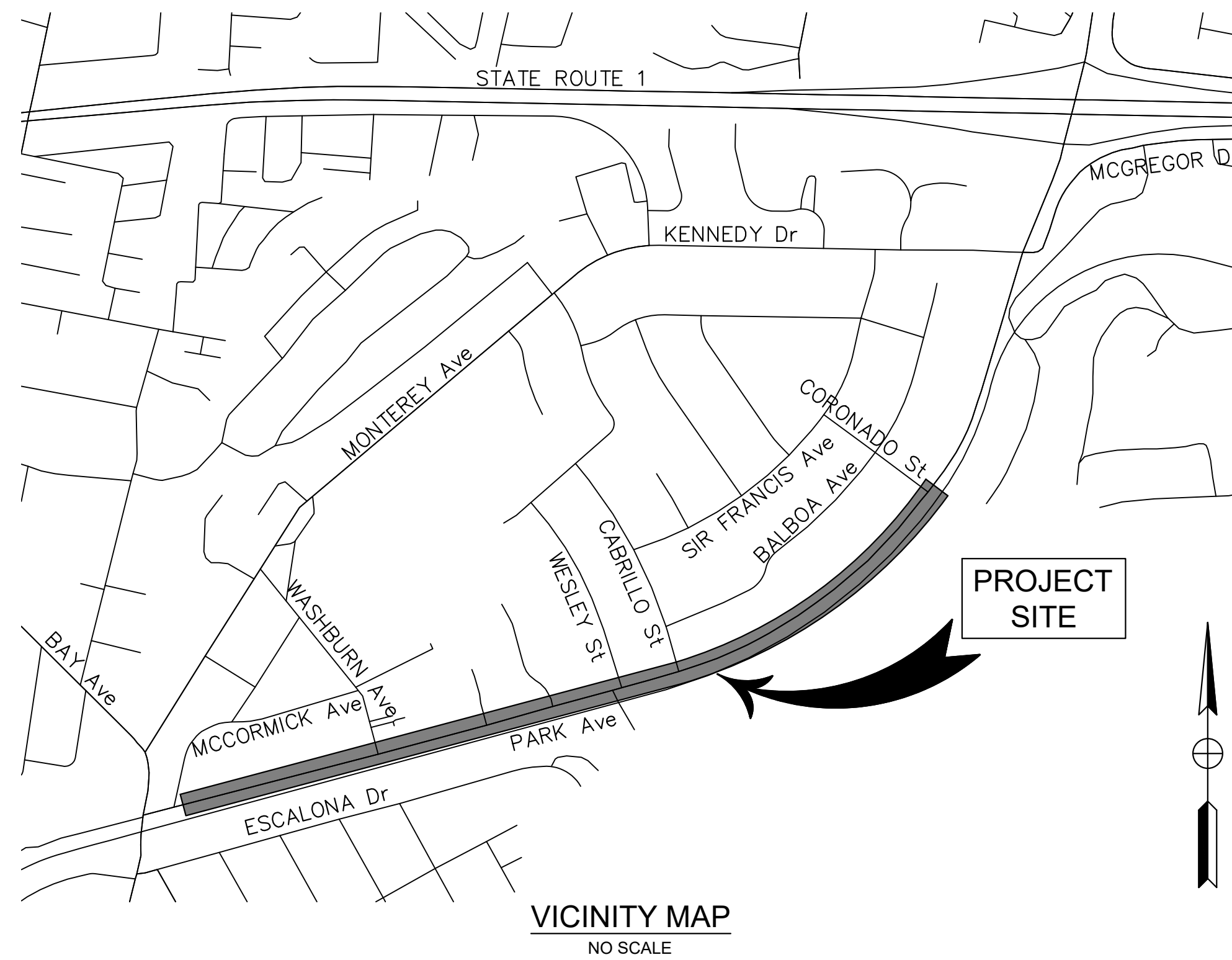
### PROJECT DESCRIPTION

PROVIDE TRAFFIC CALMING IMPROVEMENTS ON PARK AVENUE FROM MCCORMICK AVENUE TO CORONADO STREET TO REDUCE VEHICLE SPEEDS AND IMPROVE ACCESSIBILITY FOR BIKES AND PEDESTRIANS ALONG THE CORRIDOR.

### BASIS OF BEARINGS AND ELEVATIONS

HORIZONTAL DATUM IS BASED UPON THE CALIFORNIA COORDINATE SYSTEM ZONE 3, NAD 83 AS ESTABLISHED FROM TIES TO GPS POINTS 1 & 18 AS SHOWN ON THAT CERTAIN RECORD OF SURVEY ENTITLED "SECOND ORDER CONTROL SURVEY SANTA CRUZ COUNTY" FILED FOR RECORD IN BOOK 81 OF MAPS AT PAGE 11 IN THE OFFICE OF THE SANTA CRUZ COUNTY RECORDER. COORDINATES AND DISTANCES SHOWN HEREON ARE GRID, HOWEVER THE SCALE FACTOR THROUGHOUT THE PROJECT AREA IS INSIGNIFICANT AND CAN BE IGNORED FOR ALL PRACTICAL PURPOSES.

VERTICAL DATUM IS BASED UPON SANTA CRUZ COUNTY BENCHMARK #233, A BRASS TAG IN THE WEST END OF A CONCRETE DITCH NEAR THE OVERSIDE DRAIN, ABOUT 30' EAST OF THE NEW BRIGHTON BEACH ACCESS ROAD AND 55' WEST OF THE CENTERLINE OF THE SOUTHERN PACIFIC RAILROAD TRACKS; ELEVATION TAKEN AS 66.91 NAVD88.



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WWW.KIMLEY-HORN.COM

KHA PROJECT  
097763139

DATE  
10/29/2024

SCALE AS SHOWN

DESIGNED BY DW

DRAWN BY DW

CHECKED BY KM

### PARK AVENUE TRAFFIC CALMING IMPROVEMENTS

PREPARED FOR  
**CITY OF CAPITOLA**

SANTA CRUZ COUNTY CA



# TITLE

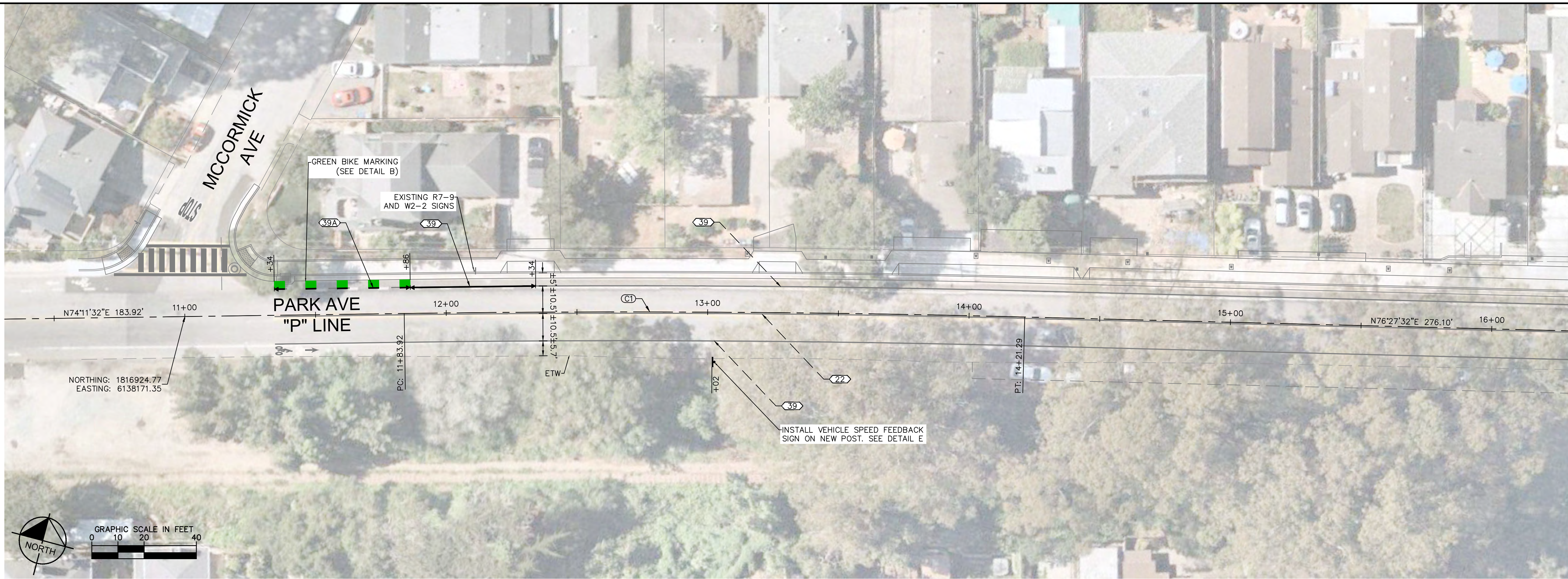
SHEET NO.   1    
OF   6   SHEETS

## T-1









MATCH LINE 16+31 SEE SHEET SS-2

**GENERAL SIGNING AND STRIPING NOTES**

- ROADWAY ALIGNMENT SHOWN FOR PAVEMENT DELINEATION STATIONING GENERATED WITHOUT EXISTING MONUMENT OR BENCHMARK BASIS. ENGINEER ON SITE SHALL VERIFY STRIPING LOCATION PRIOR TO INSTALLATION.
- ALL EXISTING SIGNS SHALL BE PROTECTED IN PLACE UNLESS SPECIFIED FOR REMOVAL OR RELOCATION.
- ALL EXISTING SIGNS SPECIFIED FOR REMOVAL SHALL NOT BE REMOVED UNTIL NO LONGER PERTINENT TO TRAFFIC CONTROL.
- ALL EXISTING PAVEMENT DELINEATION CONFLICTING WITH PROPOSED STRIPING SHALL BE REMOVED PRIOR TO NEW STRIPING INSTALLATION.
- ALL PAVEMENT DELINEATION MUST BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE CALIFORNIA MUTCD AND CALTRANS STANDARD PLANS.
- ALL STRIPING DIMENSIONS SHOWN ARE MEASURED FROM STRIPE CENTERLINE TO STRIPE CENTERLINE OR TO TOP OF CURB TO STRIPE CENTERLINE WHICHEVER SCENARIO IS CLOSER.

**LEGEND**

- EXISTING SIGN
- PROPOSED SIGN
- EXISTING STRIPING DETAIL
- PROPOSED STRIPING DETAIL
- STRIPING CHANGE
- STRIPING LIMIT
- ANGLE POINT
- PAVEMENT MARKING

**STRIPING AND MARKING TABLE**

DETAIL	PATTERN OR LEGEND	LF	SQFT
22	CENTERLINE	1227	-
39	BIKE LANE LINE (INCLUDES BUFFER)	7681	-
39A	INTERSECTION LINE (BIKE LANE)	128	-
PM	"STOP" MARKING	-	22
PM	STOP BAR MARKING	-	16
PM	BIKE LANE SYMBOL WITH PERSON	-	56
PM	BIKE LANE ARROW	-	28
PM	GREEN PAINT FOR BIKE LANE	-	1168
TOTAL		9036	1290

**SIGN TABLE**

DETAIL	DESCRIPTION	EA
-	VEHICLE SPEED FEEDBACK SIGN	3
R1-6	PEDESTRIAN CROSSWALK SIGN	2
TOTAL		5

**ALIGNMENT CURVE TABLE**

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	6000.00'	237.37'	N75°19'32"E	237.35'	2°16'00"	118.70'
C2	5000.00'	258.56'	N74°58'39"E	258.53'	2°57'46"	129.31'
C3	12000.00'	234.75'	N74°03'23"E	234.74'	1°07'15"	117.38'
C4	2011.84'	1328.56'	N56°08'51"E	1304.55'	37°50'11"	689.52'

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KHA PROJECT  
097763139  
 DATE  
10/29/2024  
 SCALE AS SHOWN  
 DESIGNED BY DW  
 DRAWN BY DW  
 CHECKED BY KM

**PARK AVENUE TRAFFIC CALMING IMPROVEMENTS**  
 PREPARED FOR  
**CITY OF CAPITOLA**  
 SANTA CRUZ COUNTY CA

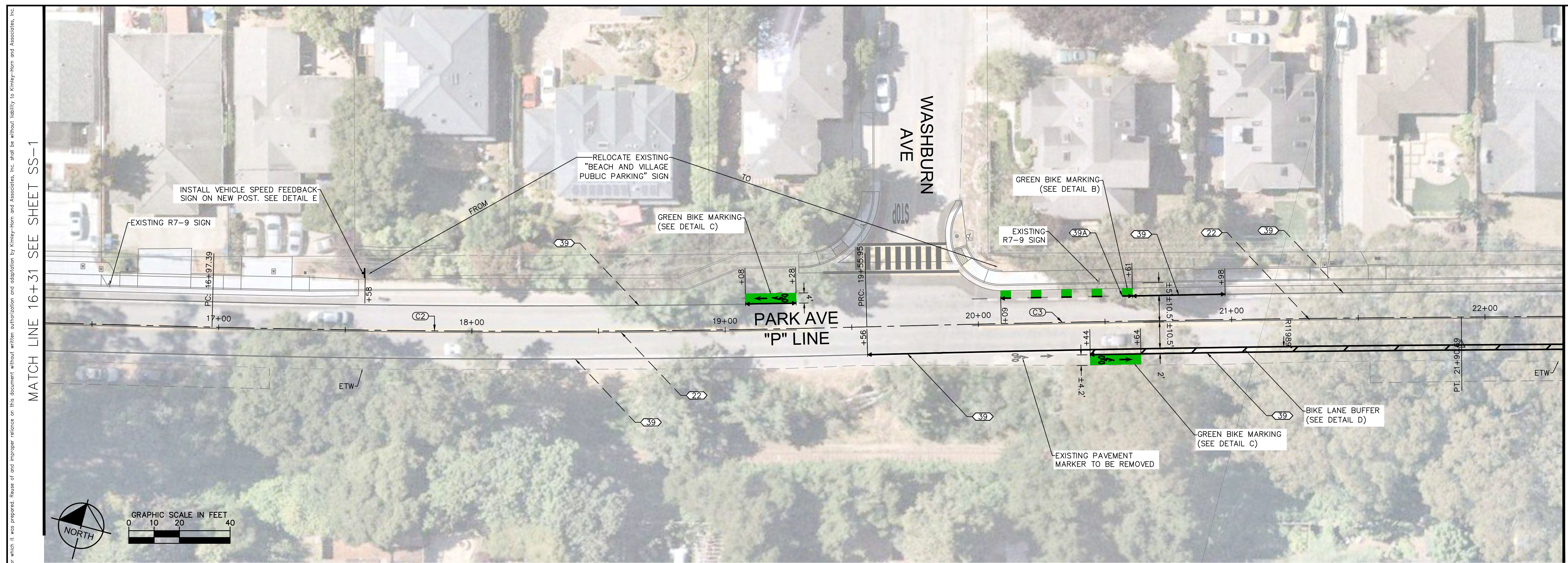


**SIGNING AND STRIPING**

SHEET NO. 3  
OF 6 SHEETS

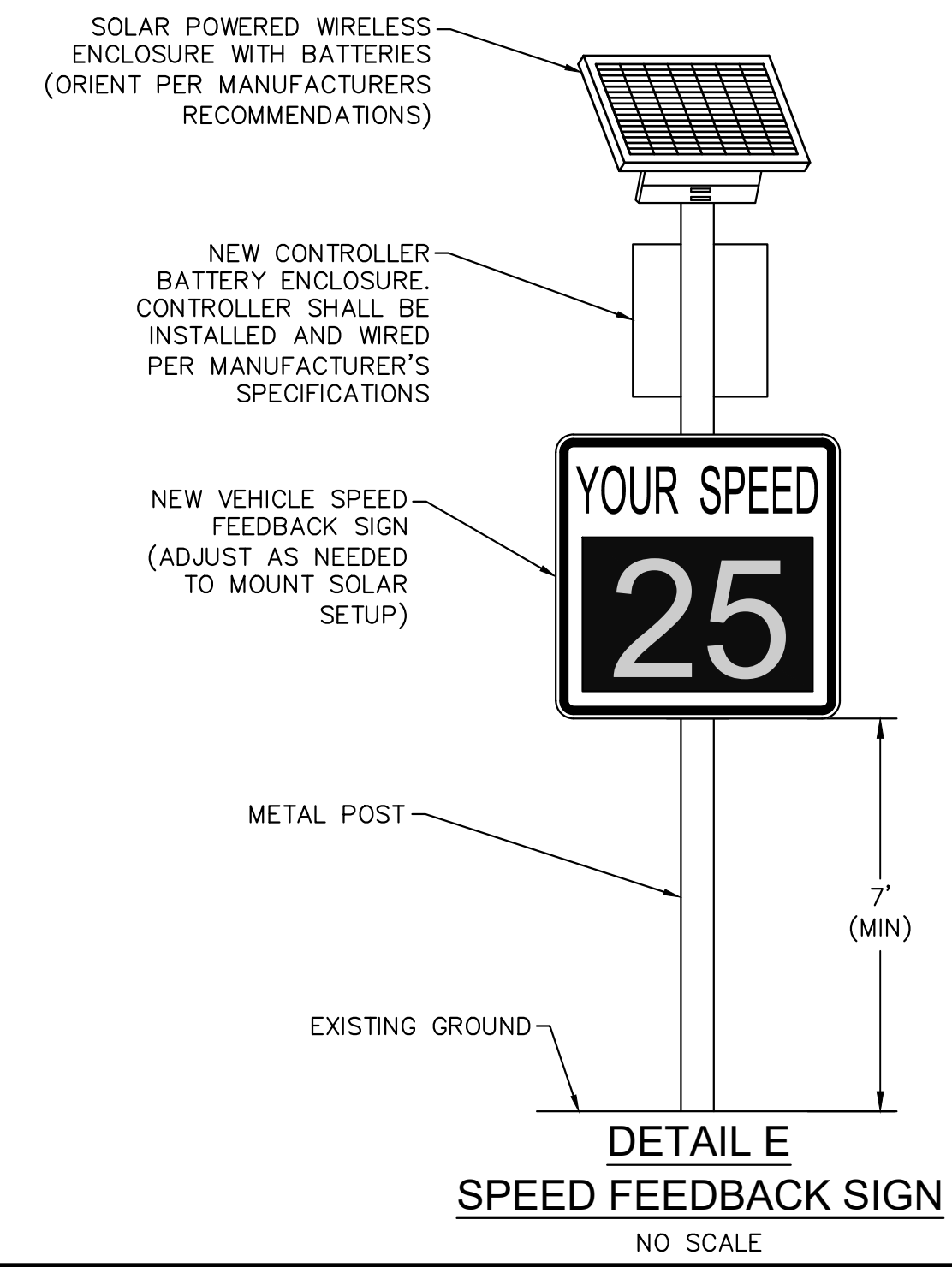
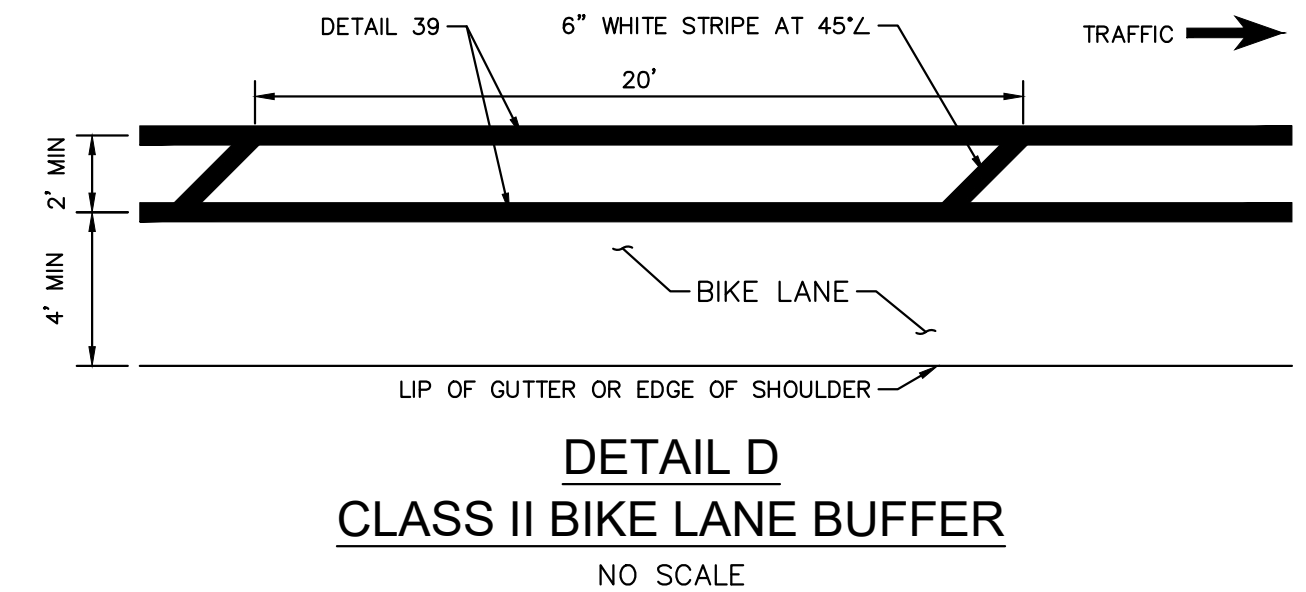
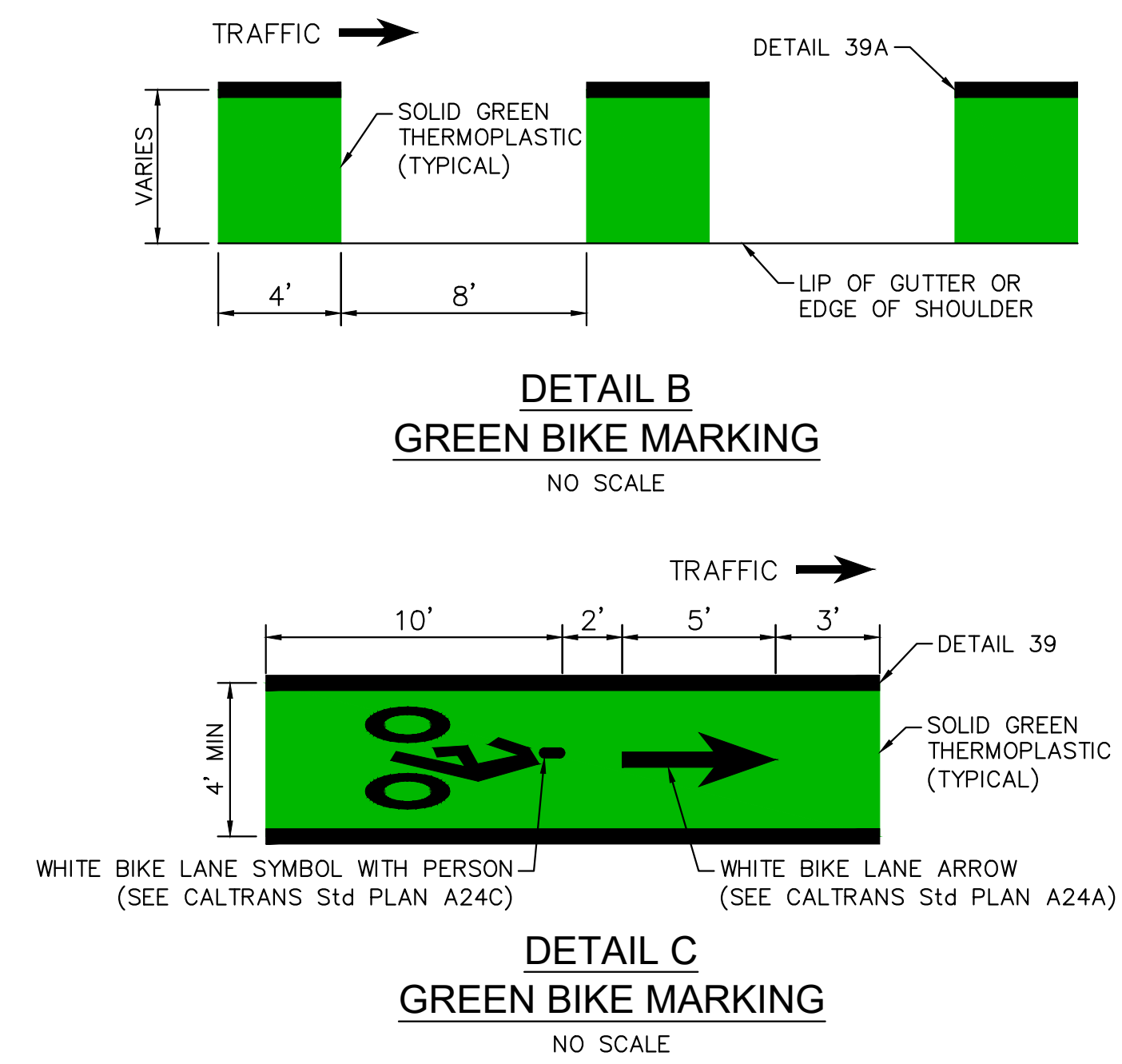
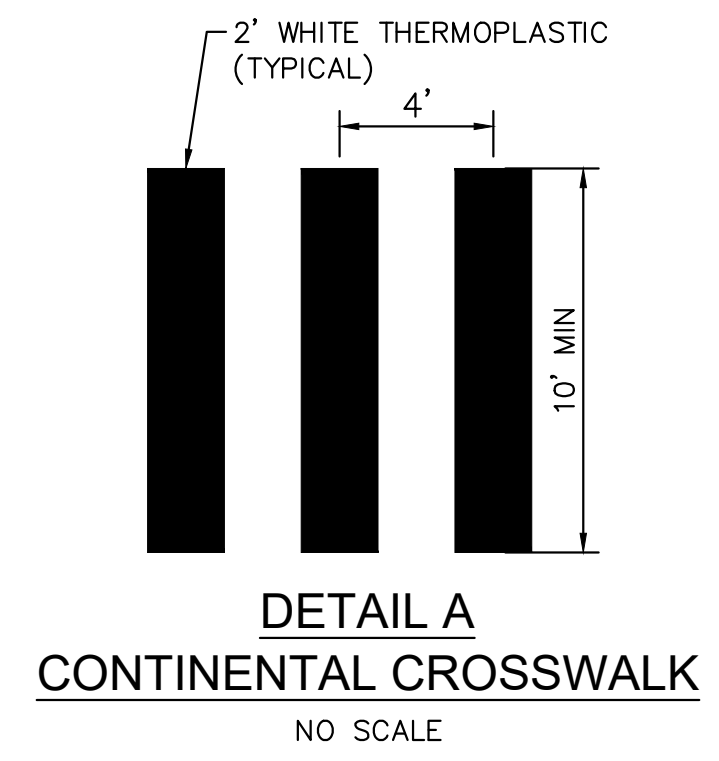
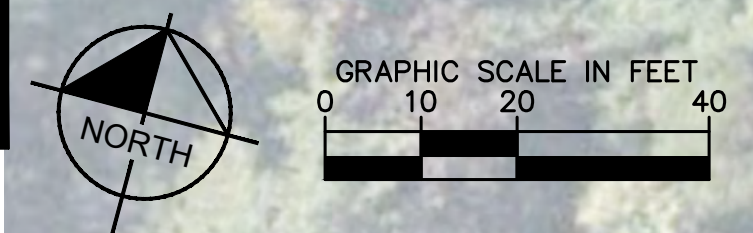
**SS-1**





MATCH LINE 16+31 SEE SHEET SS-1

MATCH LINE 22+31 SEE SHEET SS-3



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SCALE AS SHOWN  
DESIGNED BY DW  
DRAWN BY DW  
CHECKED BY KM

**PARK AVENUE TRAFFIC CALMING IMPROVEMENTS**  
PREPARED FOR  
**CITY OF CAPITOLA**  
SANTA CRUZ COUNTY CA



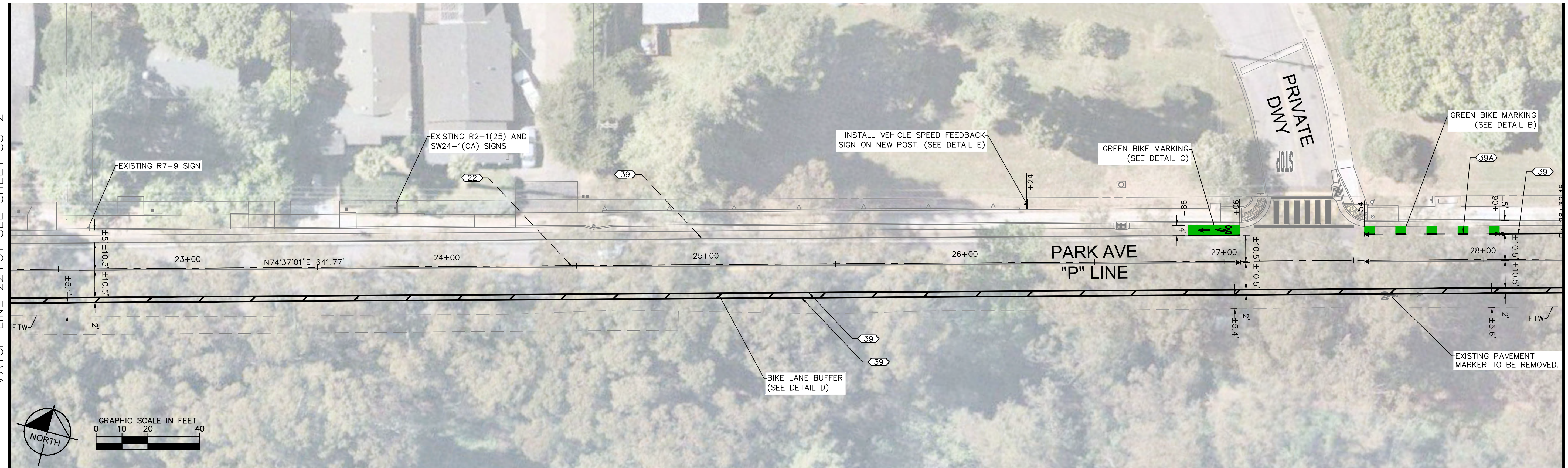
**SIGNING AND STRIPING**

SHEET NO. 4  
OF 6 SHEETS  
**SS-2**



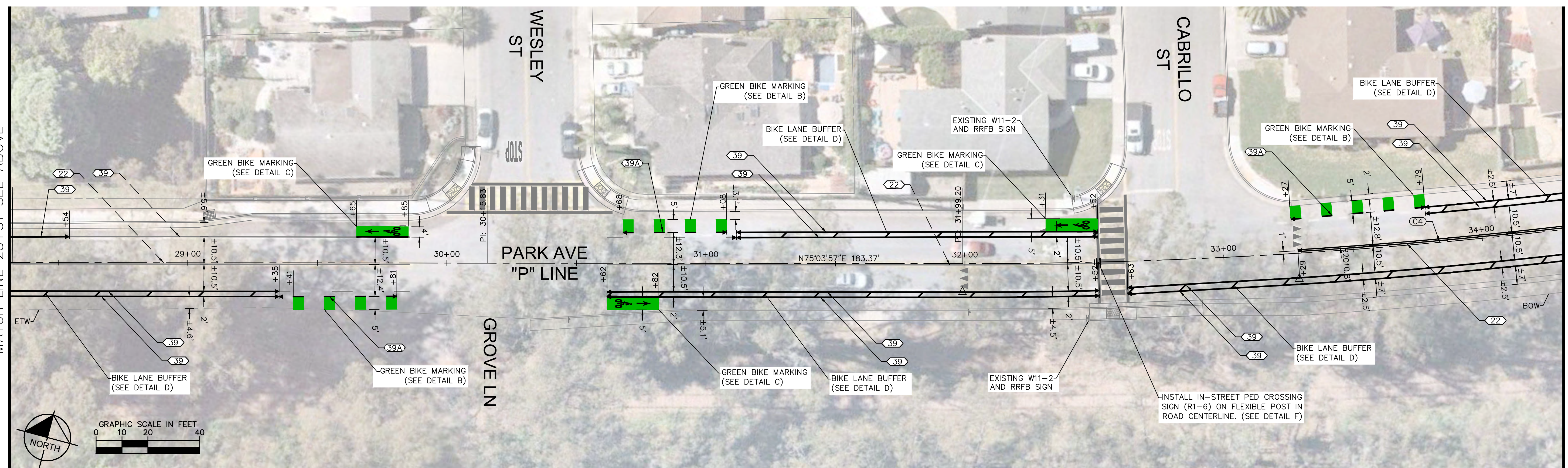
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MATCH LINE 22+31 SEE SHEET SS-2



MATCH LINE 28+31 SEE BELOW

MATCH LINE 28+31 SEE ABOVE



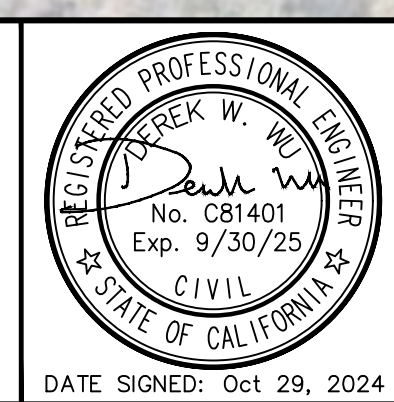
MATCH LINE 34+31 SEE SHEET SS-4

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**PARK AVENUE TRAFFIC CALMING IMPROVEMENTS**  
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 SANTA CRUZ COUNTY CA



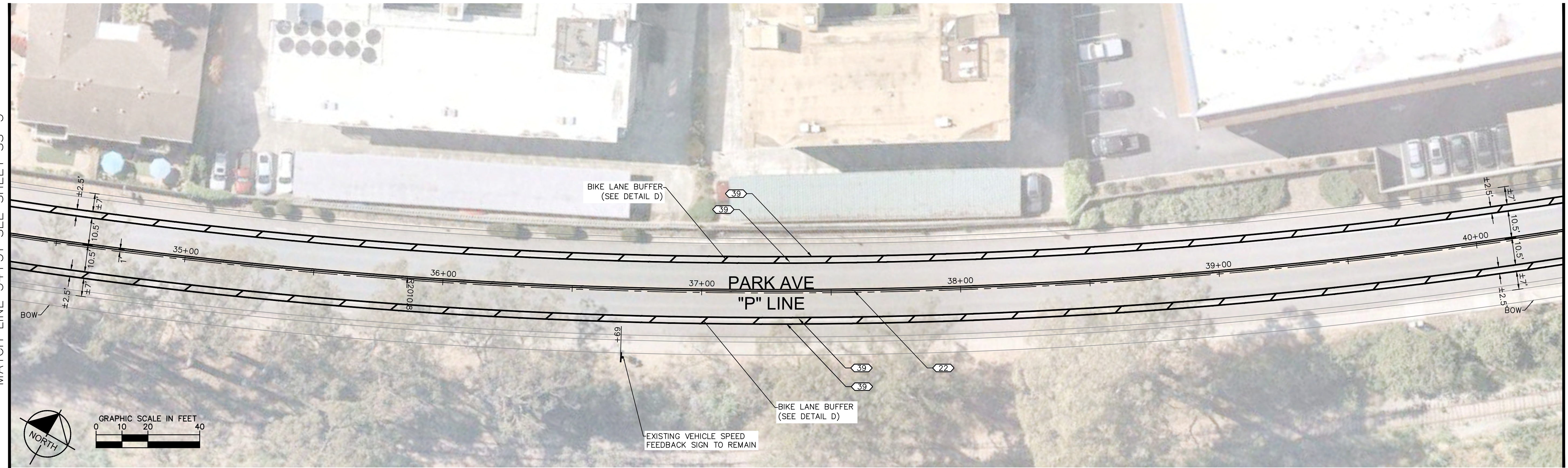
**SIGNING AND STRIPING**

SHEET NO. 5  
 OF 6 SHEETS  
**SS-3**



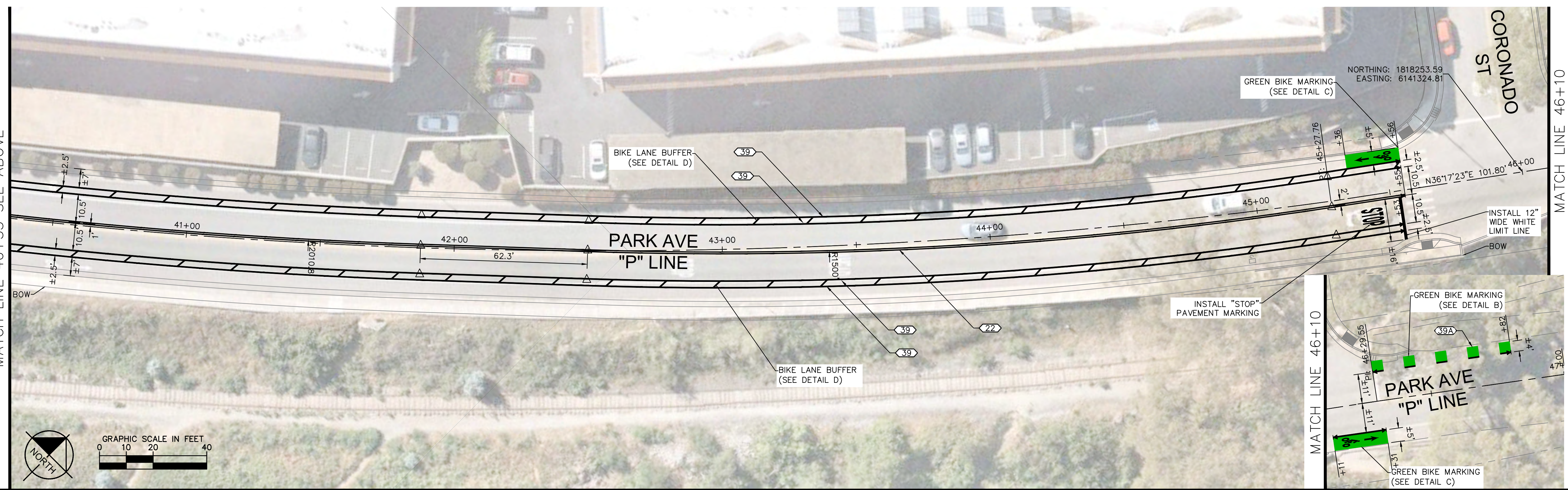
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MATCH LINE 34+31 SEE SHEET SS-3



MATCH LINE 40+33 SEE BELOW

MATCH LINE 40+33 SEE ABOVE



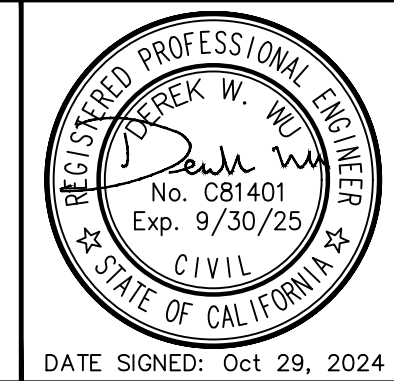
MATCH LINE 46+10

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 CHECKED BY KM

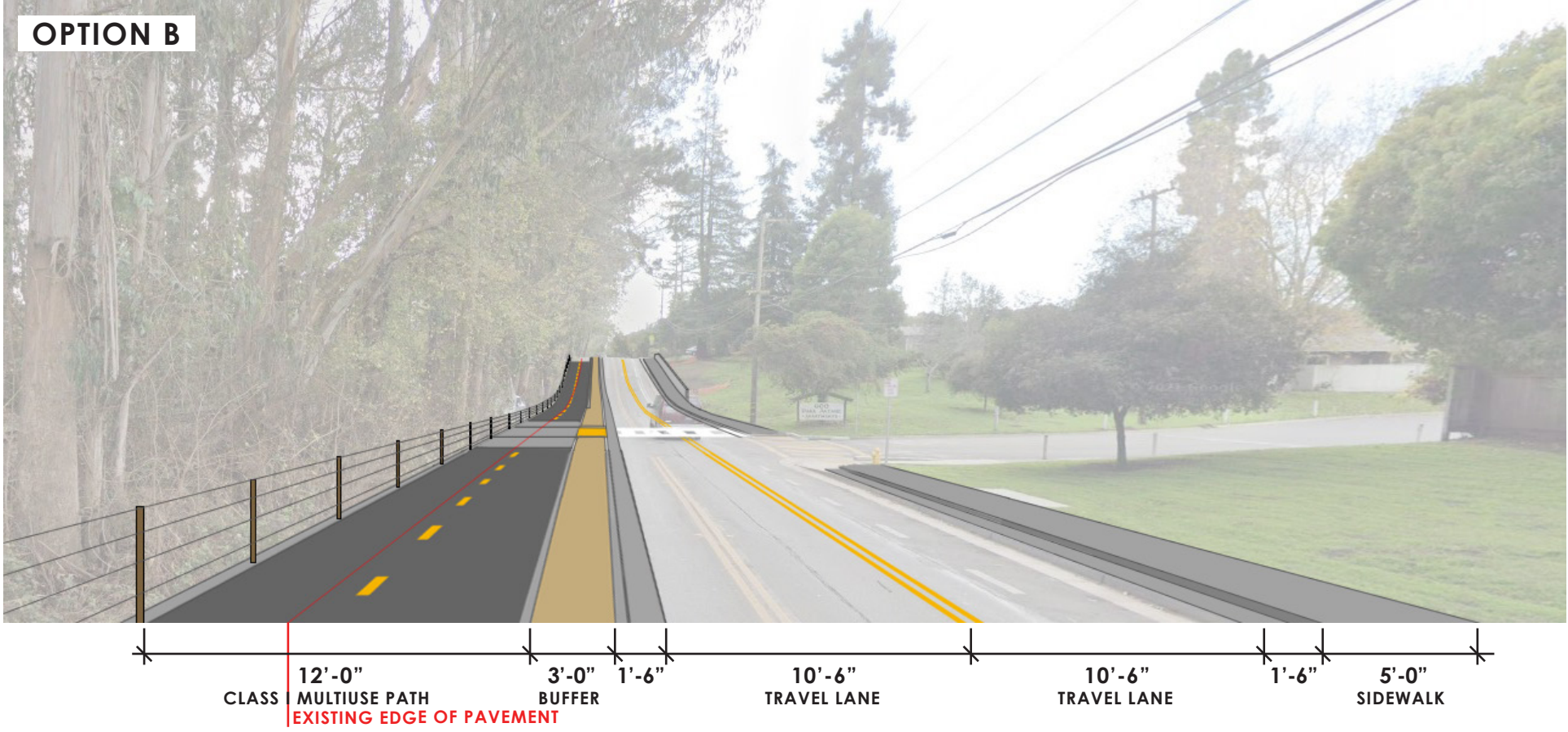
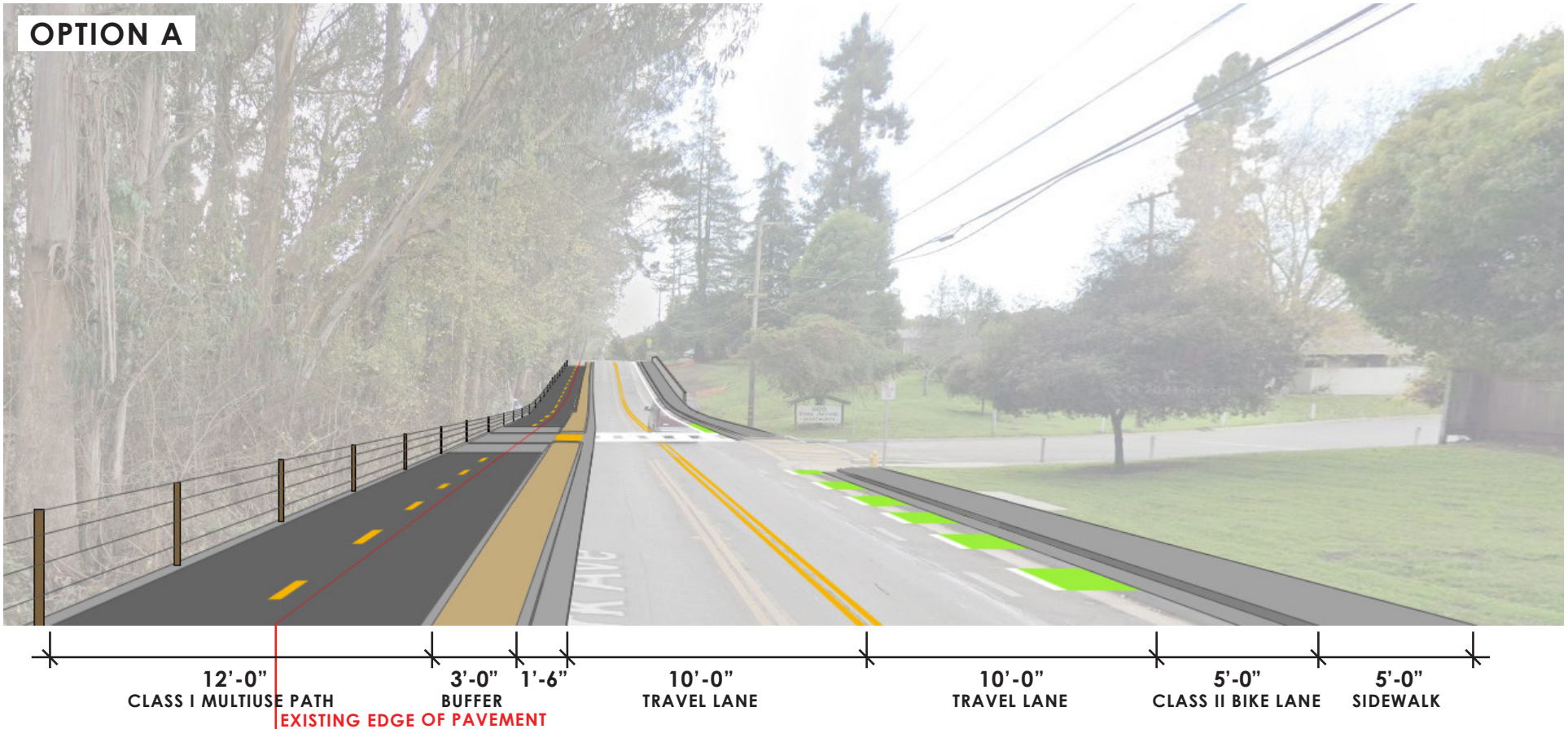
**PARK AVENUE TRAFFIC CALMING IMPROVEMENTS**  
 PREPARED FOR  
**CITY OF CAPITOLA**  
 SANTA CRUZ COUNTY CA



**SIGNING AND STRIPING**

SHEET NO. 6  
 OF 6 SHEETS  
**SS-4**





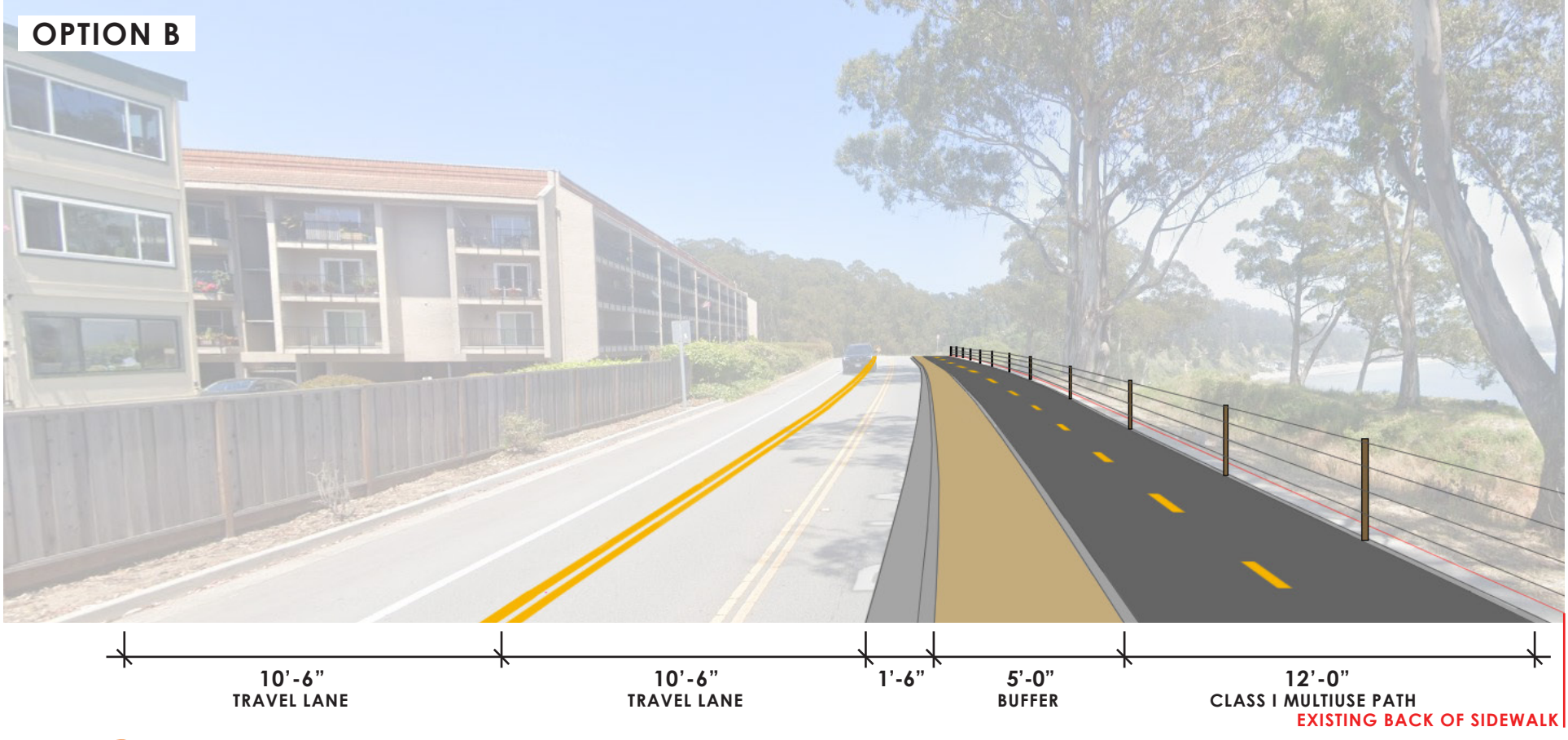
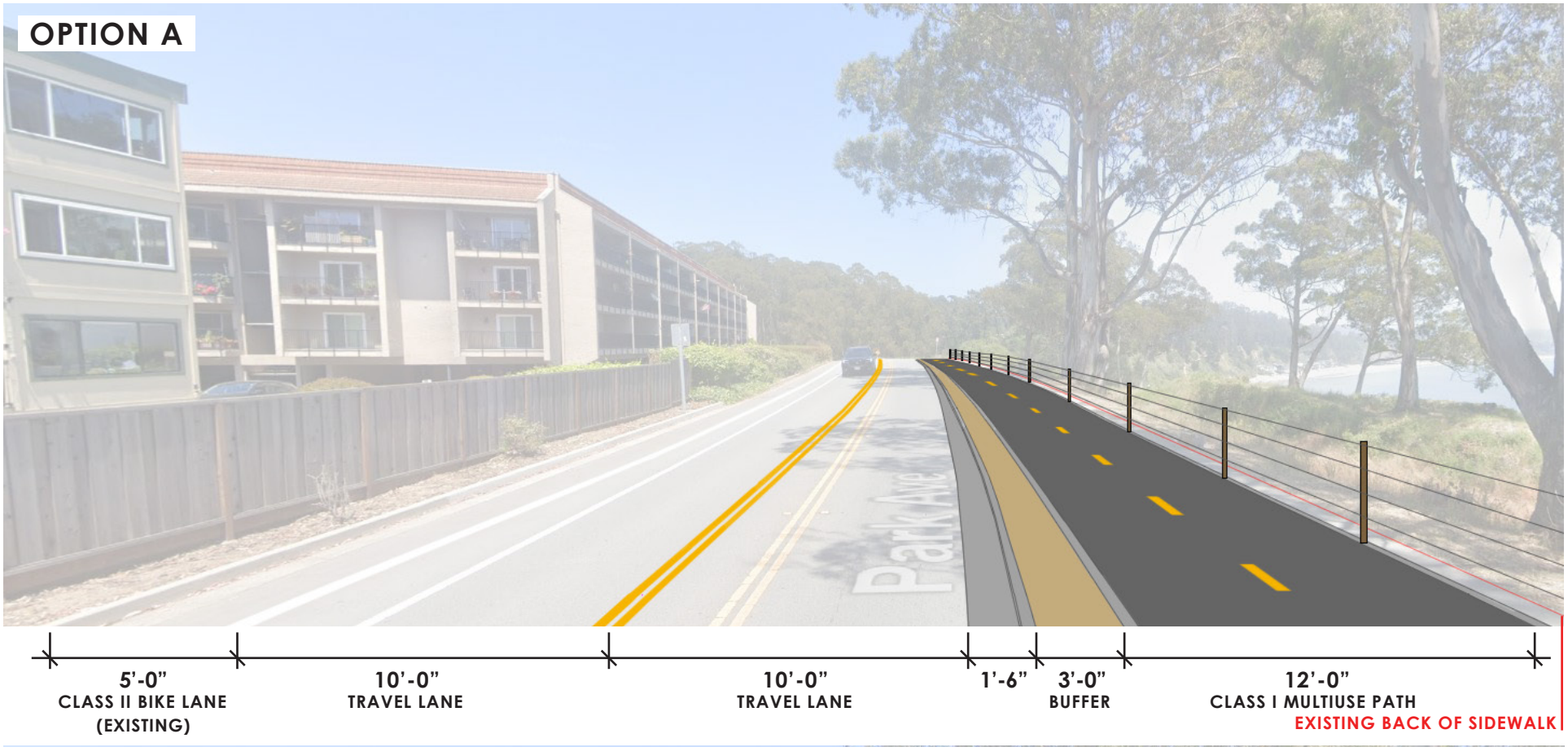
# SANTA CRUZ RAIL TRAIL PARK AVE ALIGNMENTS - VIEW 1

CAPITOLA, CA

Background image: Google Earth. [Imagery date: December 2021]. Retrieved January 8, 2025, from <https://earth.google.com/>







# SANTA CRUZ RAIL TRAIL PARK AVE ALIGNMENTS - VIEW 2

CAPITOLA, CA

Background image. Google Earth. [Imagery date: June 2024]. Retrieved January 10, 2025, from <https://earth.google.com/>







# **Park Avenue Traffic Calming Improvements with Coastal Rail Trail Options**

**City Council  
February 13, 2025**

# Presentation Summary

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## Park Avenue Project History

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## Coastal Rail Trail (County/SCCRTC)

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## Moving Forward



# Park Ave Traffic Calming & Rail Trail Background

## Park Avenue

- Principal arterial road
- Pacific Coast Bike Route

## Traffic Investigations

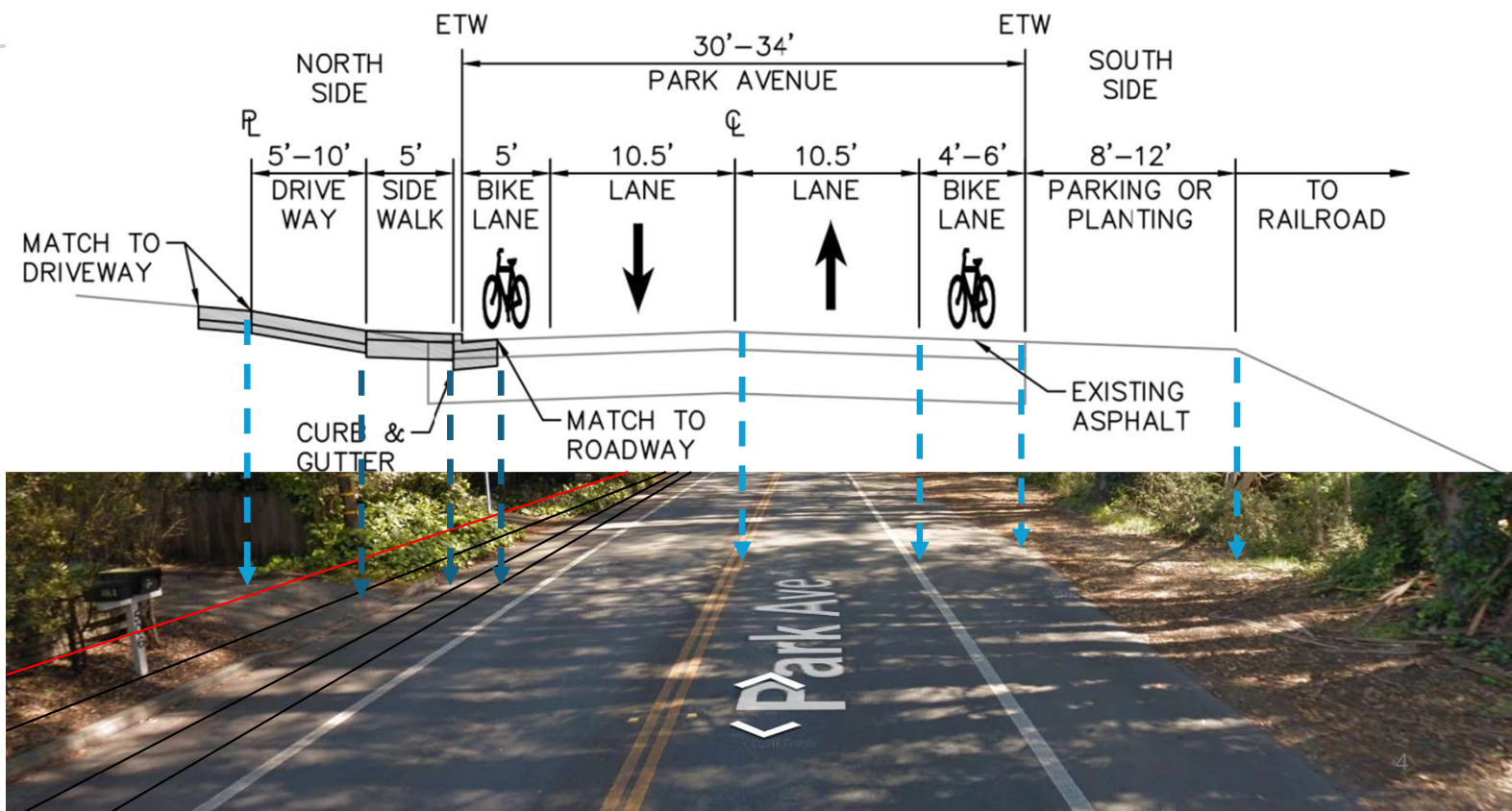
- 2020 Traffic Study: Identified perceived need for speed reduction measures
- September 8, 2022: Initial traffic calming options presented to Council

## Rail Trail Project Segments 10 & 11

- Coordinated by County & RTC, traversing the length of Capitola



# Park Ave Traffic Calming & Rail Trail Existing Conditions



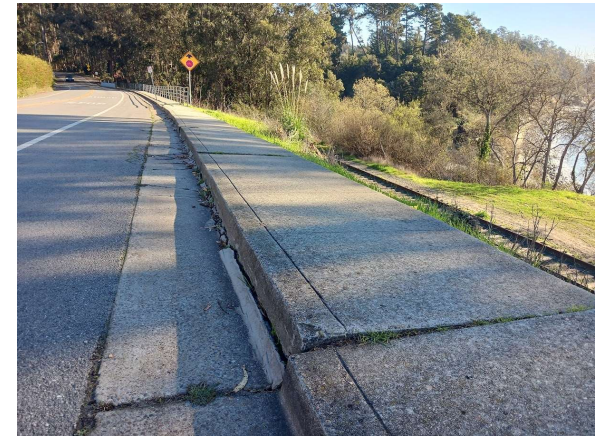
# Park Ave Traffic Calming & Rail Trail Existing Conditions



**SZS**  
ENGINEERING

City of Capitola - Pedestrian Facility

Field Date:	9/7/2017	Report Date:	7/18/2018	Barrier #:	8852B
Facility:	City of Capitola				
Location:	Park Ave - S Sidewalk				
Official Responsible:	Brian Van Son, ADA Coordinator				
Facility Function:	Public	Dwg:	N/A		
Barrier Area:	Sidewalks	Remediation:	Required		
Barrier Type:	Abrupt Change in Level - > 1/2"				
Barrier Description:	Change in level greater than 1/2"				
Code References:	CBC 11B-403.4 and 2010 ADAS 403.3				
As Built Description:	2-1/2" lip in sidewalk surface				

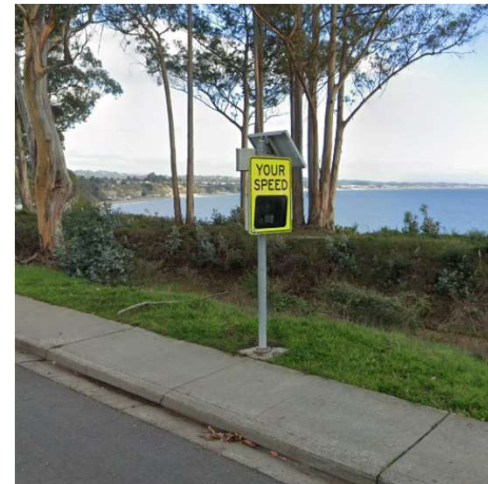


- Failing sections of sidewalk
- Inconsistent bike lane width and conditions
- Undefined road edge

# Park Ave Traffic Calming & Rail Trail

## Community Outreach Findings

- Parking Issues: Concerns about reduced availability
- Traffic Safety: Support for speed enforcement & barriers
- Road Diet Support: Support for lane narrowing
- Outreach: Requests for continued engagement
- Traffic Patterns: Concerns about cut-through traffic
- Aesthetic Concerns: Impact on area's natural beauty





# Park Ave Traffic Calming & Rail Trail

## DRAFT City Traffic Calming Plan



Narrow vehicle lanes to 10.5 feet



Buffered bike lanes



Green bike markings at intersections



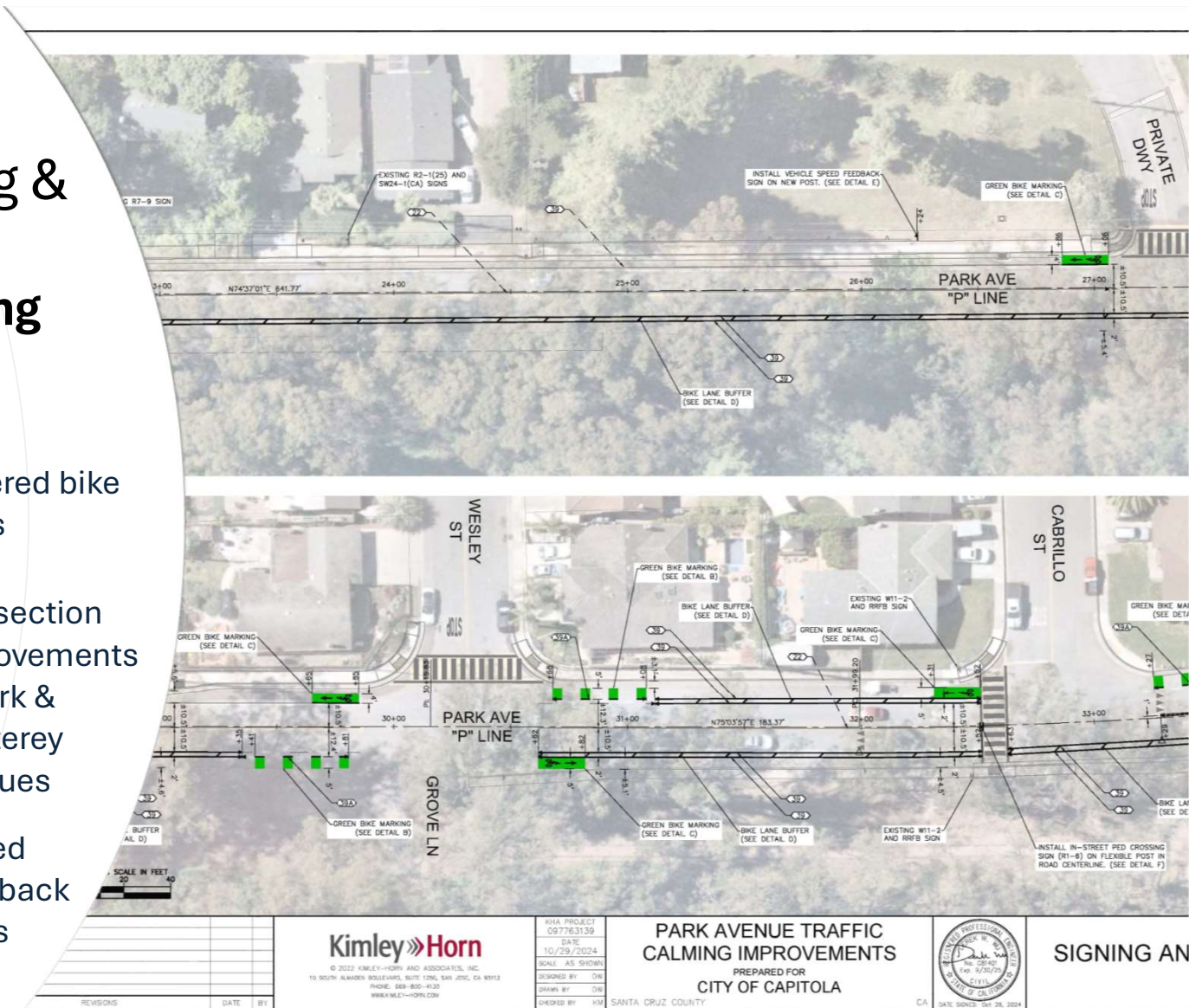
Intersection improvements at Park & Monterey Avenues



Enhanced pedestrian safety measures



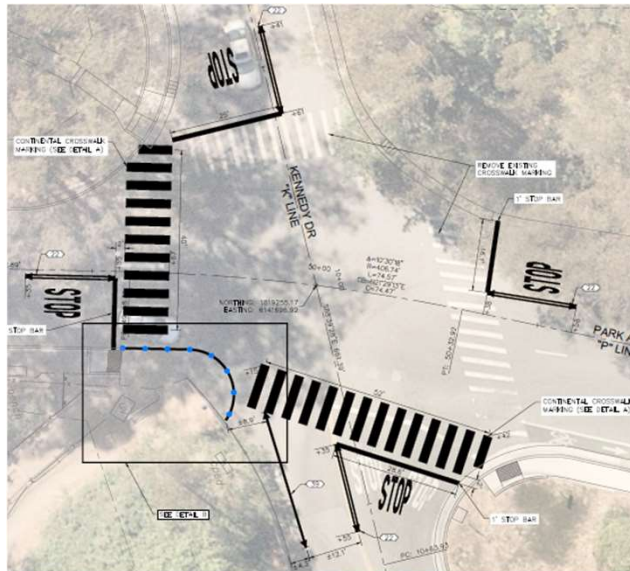
Speed feedback signs



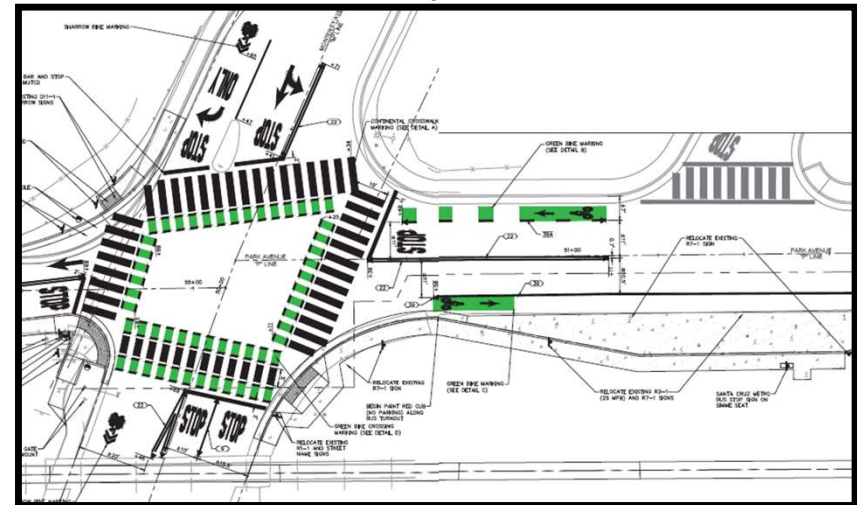
# Park Ave Traffic Calming & Rail Trail Completed/In-Progress Improvements

- New ADA ramps
- Crosswalks and intersections updated
- Green markings

Pure Water Soquel



Upper Village Parking Lot Sidewalk Project



# COASTAL RAIL TRAIL SEGMENTS 10 AND 11 PROJECT

CAPITOLA CITY COUNCIL  
MEETING

February 13, 2025







# PRESENTATION OUTLINE

- Coastal Rail Trail Overview
- Park Avenue Area
- Project Benefits
- Next Steps



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# COASTAL RAIL TRAIL OVERVIEW





## PROJECT OVERVIEW

# BACKGROUND & CONTEXT

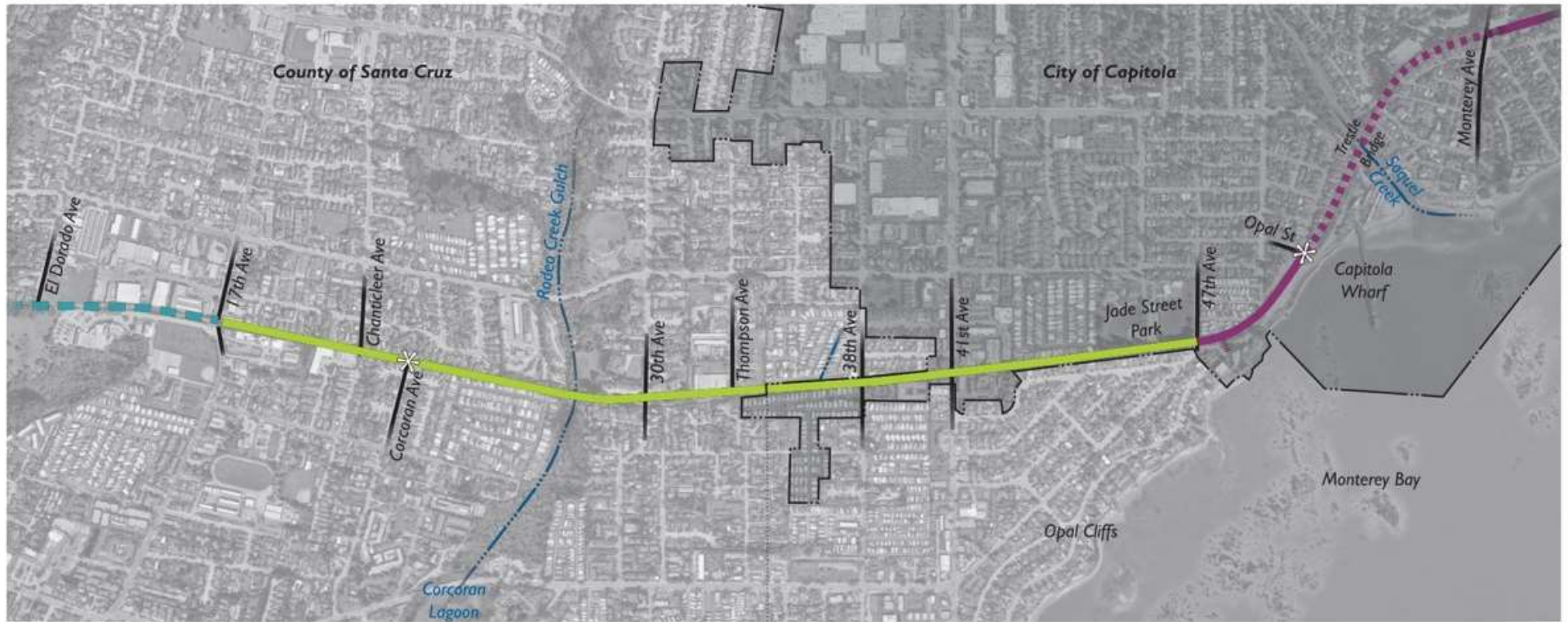
- Monterey Bay Sanctuary Scenic Trail (MBSST)
  - Trail Master Plan
  - 50-mile trail network
  - Connects to Monterey County
  - 32-mile Coastal Rail Trail/Santa Cruz Branch Line
  - Adopted by City of Capitola in 2015



# The Coastal Rail Trail

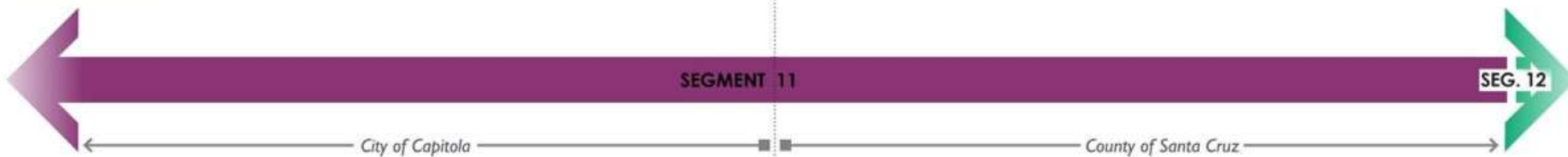
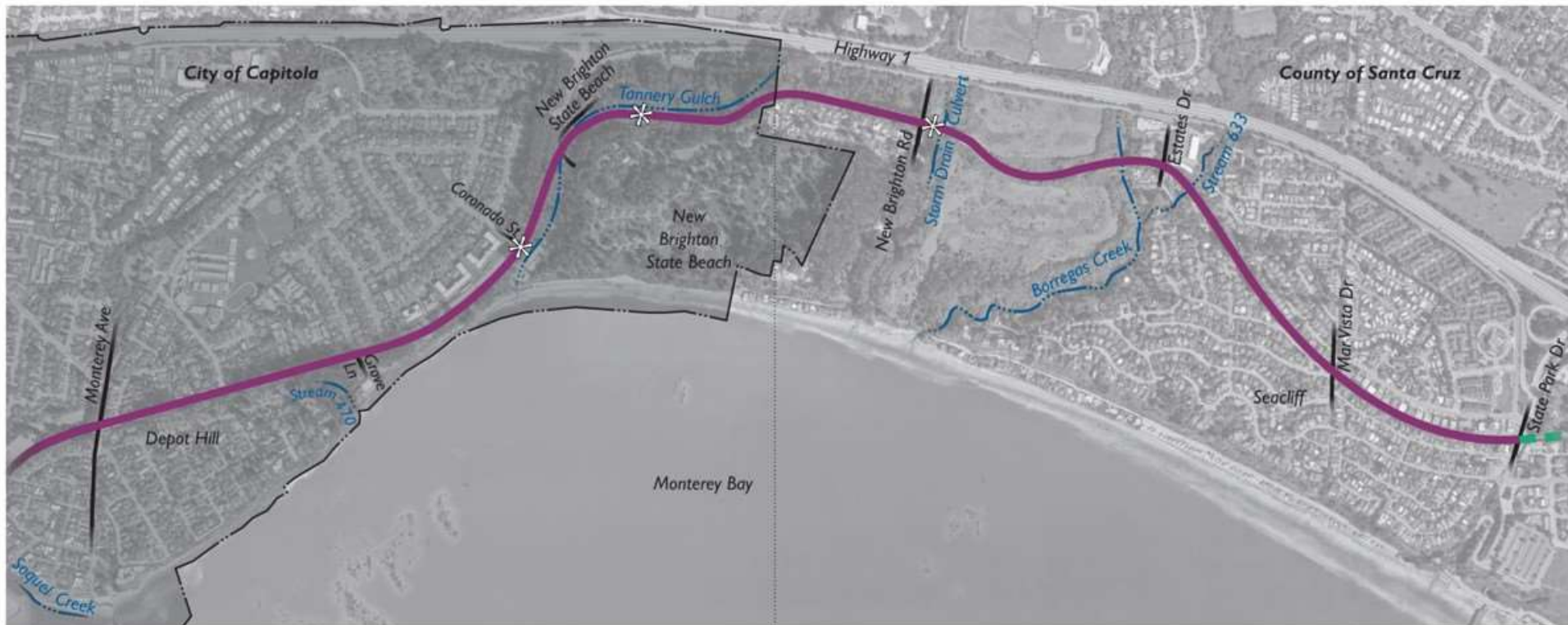


# SEGMENT 10 ALIGNMENT





# SEGMENT 11 ALIGNMENT





## PROJECT OVERVIEW

# PUBLIC OUTREACH TO DATE

- October 12, 2021 – Rio Del Mar Improvement Association
- November 17, 2021 – NOP Scoping Meeting
- January 13, 2022 – Mid County Democrats
- February 17, 2022 – RTC Transportation Policy Workshop
- April 6, 2022 – Virtual Schematic Design Open House
- April 11, 2022 – RTC Bicycle Advisory Committee
- April 12, 2022 – RTC Elderly and Disabled Technical Advisory Committee
- April 13, 2022 – In-person Schematic Design Open House
- April 19, 2022 – Online survey posted for 60 days to allow the public to comment on the design
- May 17, 2022 – Walk for Wellness Live Oak event
- May 19, 2022 – Bike and Walk to School Day at Live Oak Elementary
- May 19, 2022 – Boys & Girls Club Live Oak End of Year event
- May 23, 2022 – Live Oak Resource Center Food Distribution event
- May 24, 2022 – Family Drop-In Day at Chanticleer Park
- May 27, 2022 – Walk for Wellness Capitola event
- June 6, 2022 – Parks and Recreation Commission
- March 14, 2023 – Seacliff Improvement Association
- **March 23, 2023 – Capitola City Council**
- **October 26, 2023 – Capitola City Council**
- November 16, 2023 – Draft EIR Public Meeting
- March 26, 2024 – Final EIR Certification



# PROJECT OVERVIEW

## Ultimate Trail Configuration (Trail next to Rail Line)

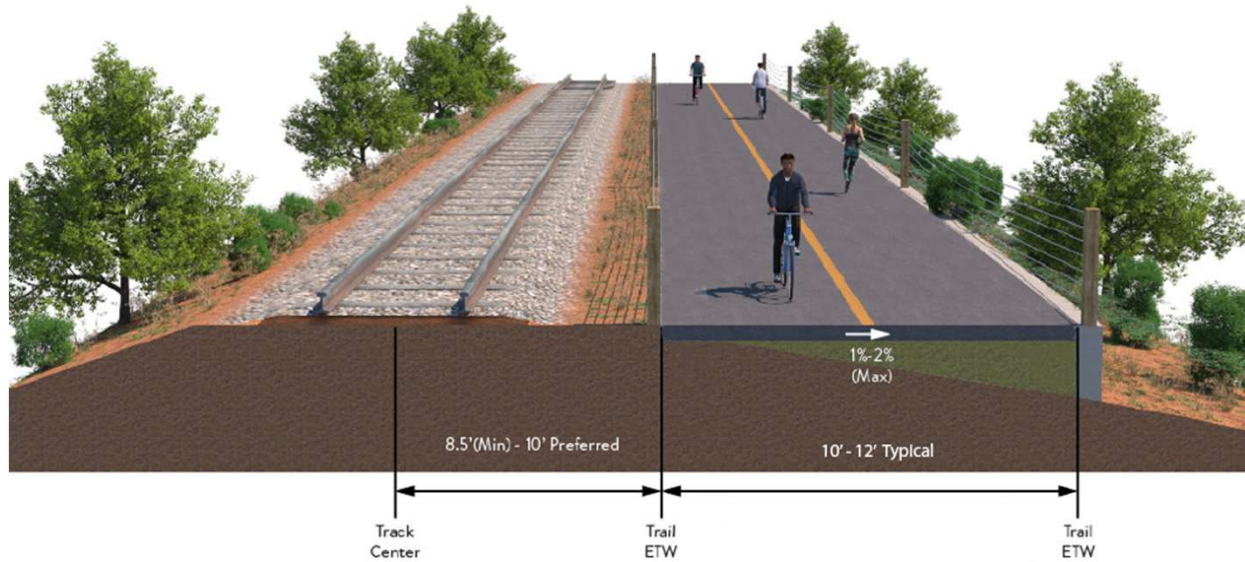
Park Ave

- Generally 12' wide, 4.2 miles long
- Consistent with MBSST Master Plan
- Alignment included in the ATP Grant



Escalona

Park Ave area





# 41<sup>ST</sup> AVENUE AREA



Existing



Ultimate Trail



## ESTIMATED COSTS (2023)

Phase	Description	Estimated Cost	Funding Needed (Estimated)
<b>PAED</b>	Project Approval and Environmental Documentation	\$4.5 million	
<b>PSE</b>	Plans, Specifications, and Estimate	\$2.9 million	
<b>ROW</b>	Right-of-Way	\$8.2 million	\$6.4 million
<b>CON</b>	Construction	\$96.2 million	\$21.6 million
<b>NI</b>	Non-Infrastructure	\$0.995 million	
<b>TOTAL</b>		<b>\$111.7 million</b>	<b>\$27-28 million</b>





# KEY DECISIONS

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## March 26, 2024 Board of Supervisors Meeting

- Certify Final EIR

## April 18, 2024 RTC Meeting

- Affirm support for the Ultimate Trail Configuration
- Negotiate agreement w/ Roaring Camp for track relocation
- Commit to fully funding project w/ state, federal, and local funding
- Accept Final EIR

## April 30, 2024 Board of Supervisors Meeting

- Approve Project in Ultimate Trail Configuration



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# PARK AVENUE AREA



# ALIGNMENT CONSIDERATIONS

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- Reduced Cost
- Conceptual ZEPRT Alignment
- Capitola Park Ave Traffic Calming Project





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# PARK AVENUE AREA

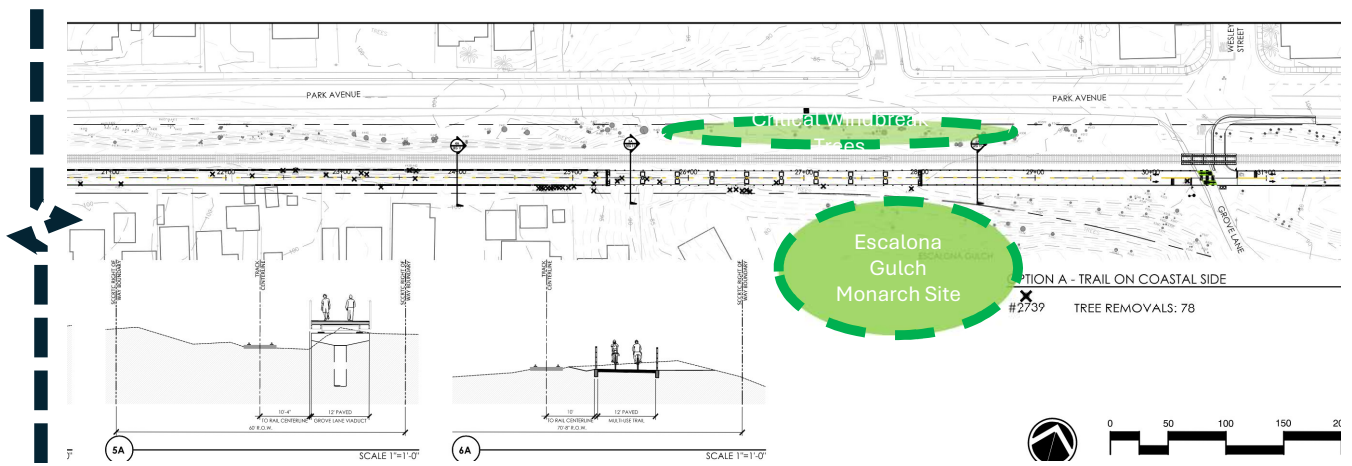
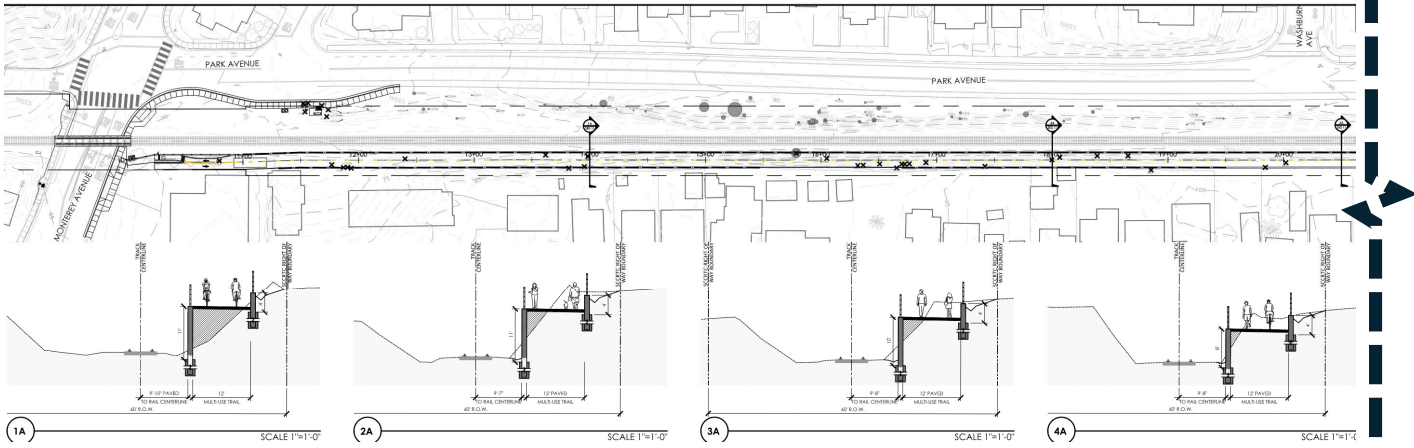
## MONTEREY AVE TO GROVE LANE



# MONTEREY AVE TO GROVE LANE PREVIOUS DESIGN – COASTAL ALIGNMENT

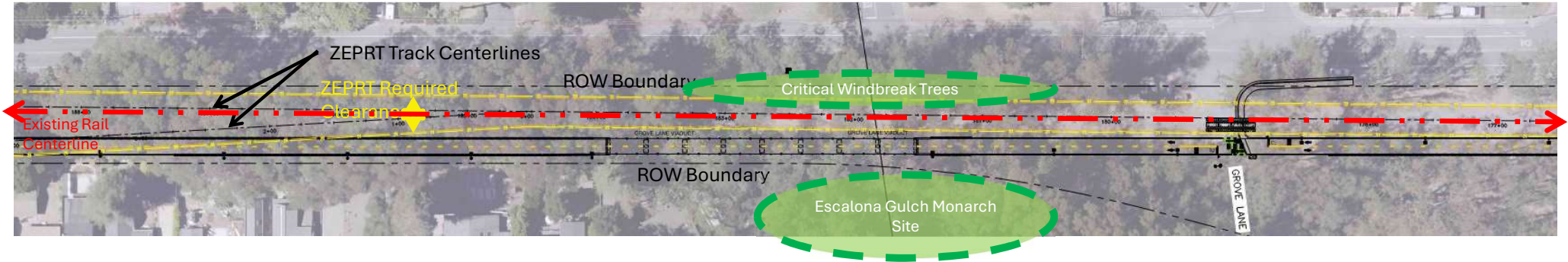
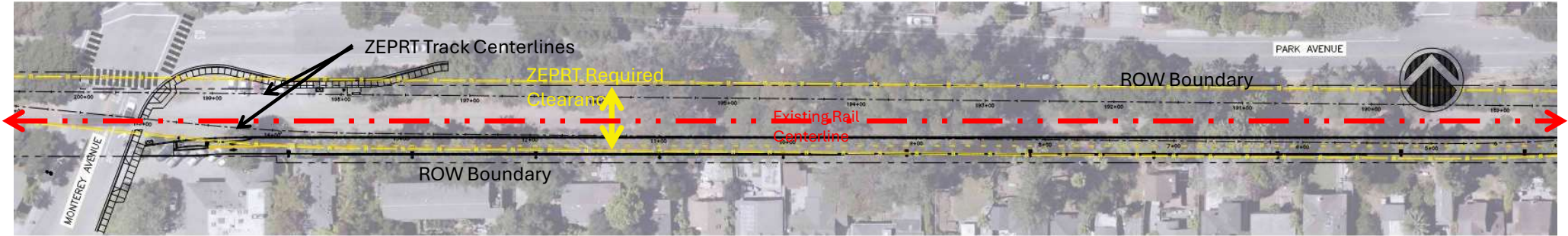


# MONTEREY AVE TO GROVE LANE - PREVIOUS DESIGN

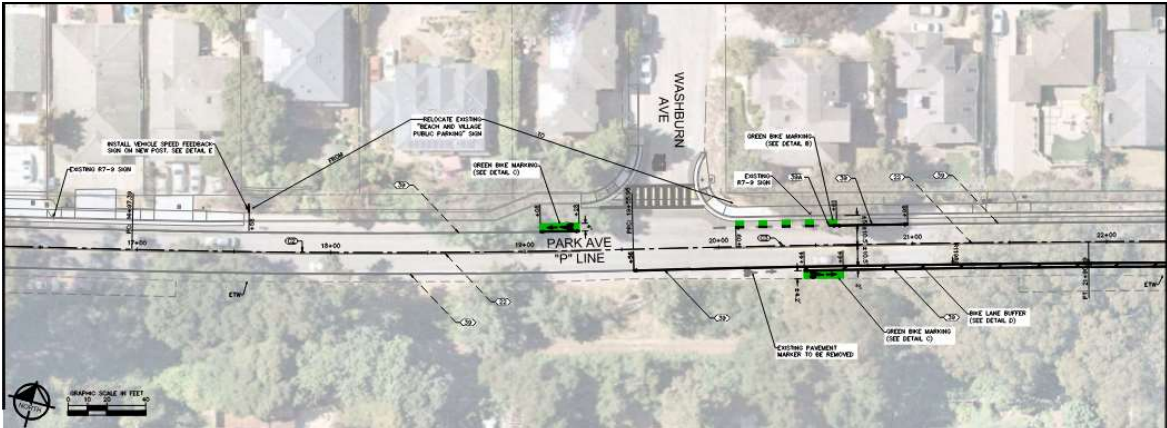
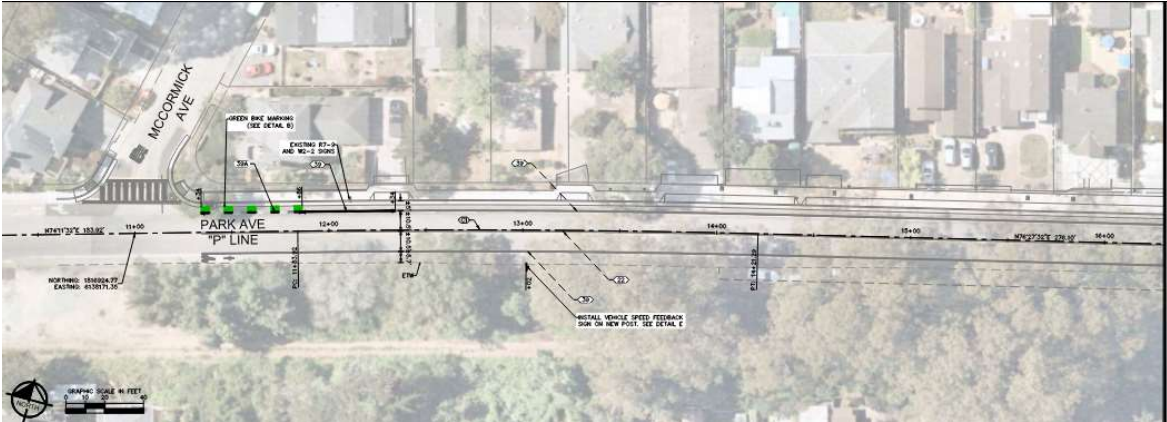




# MONTEREY AVE TO GROVE LANE ZEPRT COORDINATION



# MONTEREY AVE TO GROVE LANE TRAFFIC CALMING COORDINATION



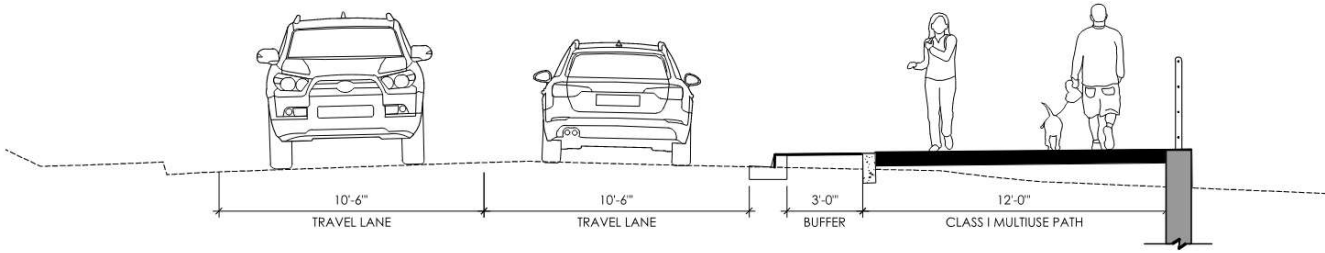


# MONTEREY AVE TO GROVE LANE PARK AVE ALIGNMENT





# MONTEREY AVE TO GROVE LANE PARK AVE ALIGNMENT

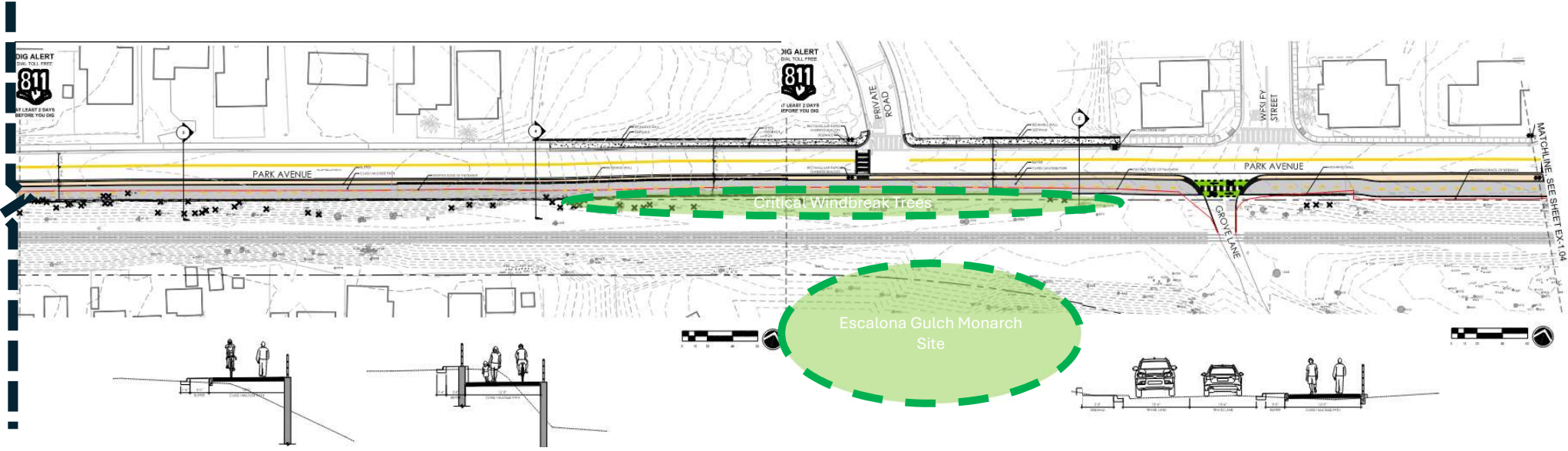




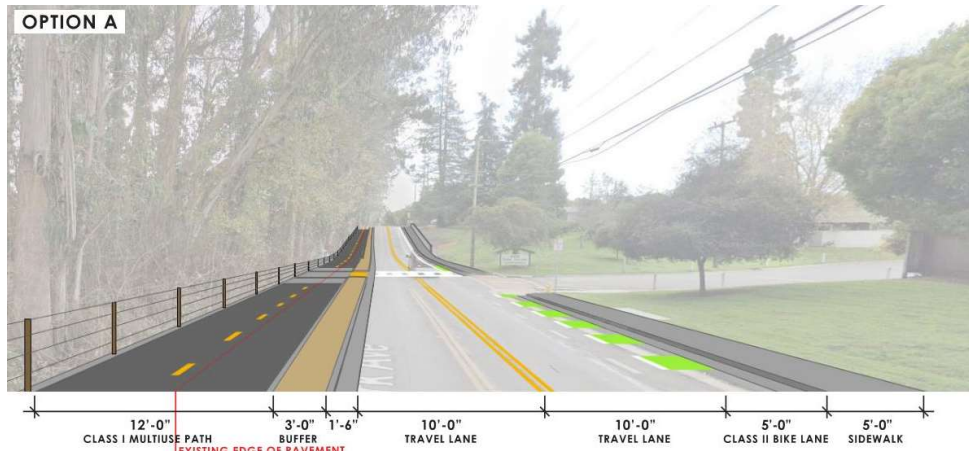
# MONTEREY AVE TO GROVE LANE PARK AVE ALIGNMENT



# MONTEREY AVE TO GROVE LANE PARK AVE ALIGNMENT



# MONTEREY AVE TO GROVE LANE PARK AVE ALIGNMENT OPTIONS



- Option A – preserves inland bike lane



- Option B – maximizes use of ROW for trail



# MONTEREY AVE TO GROVE LANE PARK AVE ALIGNMENT – BIKE LANE ACCESS





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# PARK AVENUE AREA

## GROVE LANE TO CORONADO ST



# GROVE LANE TO CORONADO ST PREVIOUS DESIGN – COASTAL ALIGNMENT





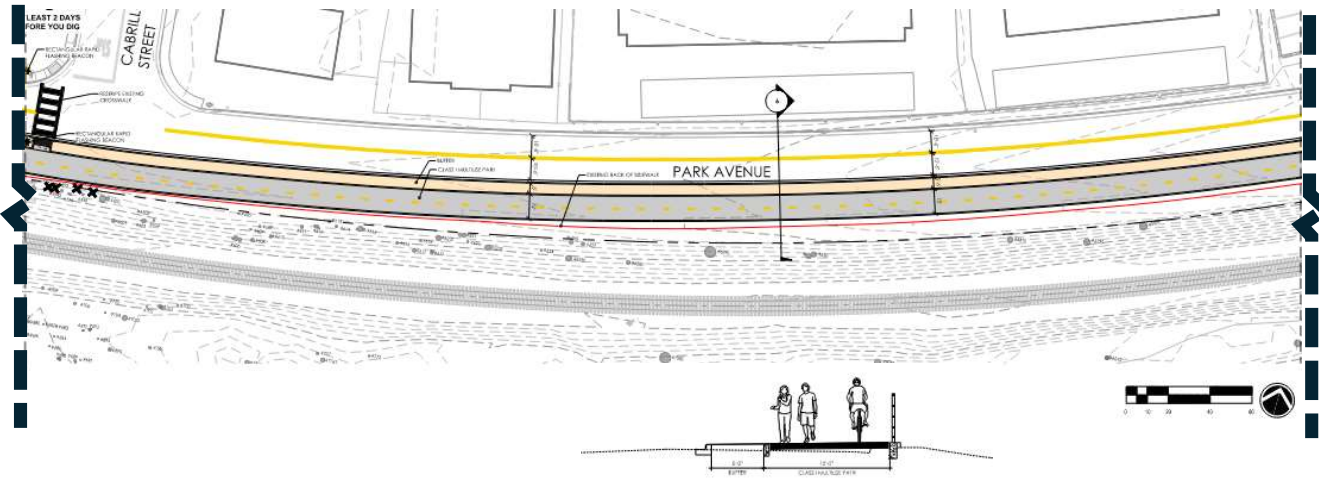
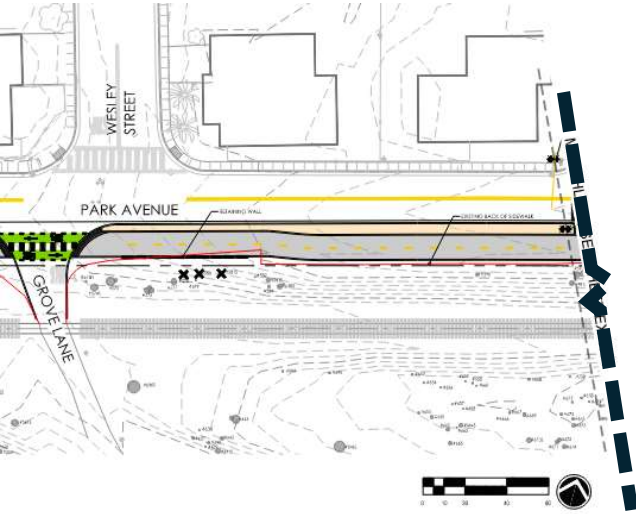


# GROVE LANE TO CORONADO ST PARK AVE ALIGNMENT

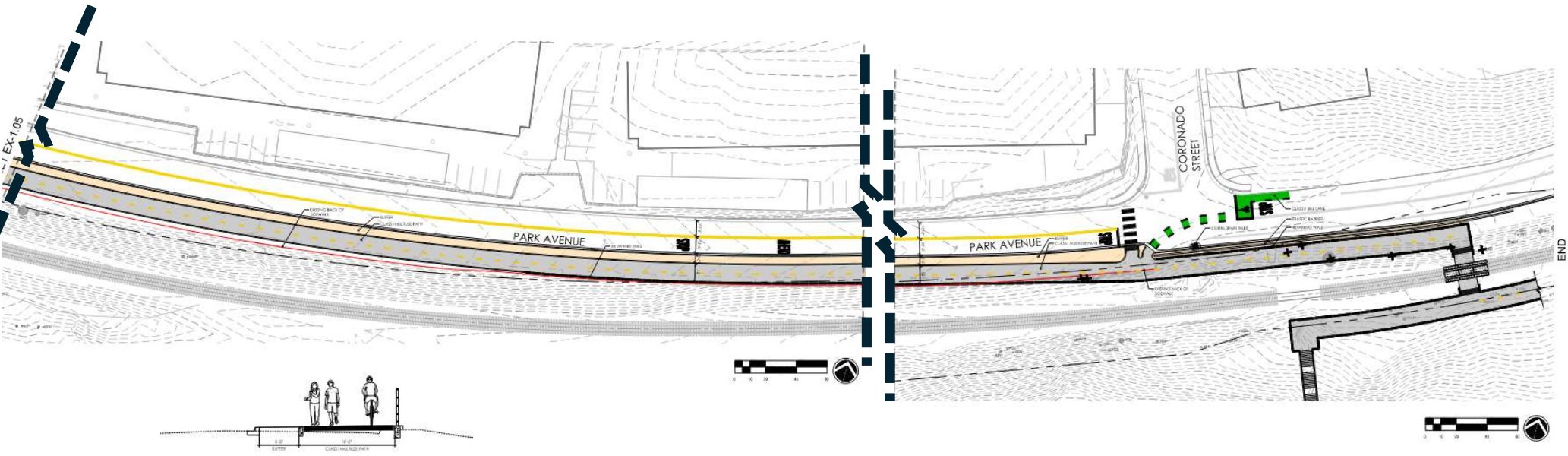




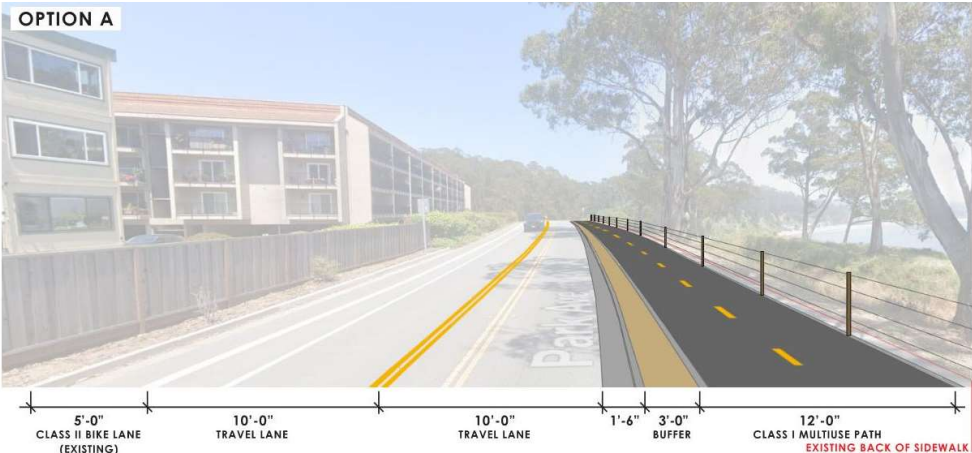
# GROVE LANE TO CORONADO ST PARK AVE ALIGNMENT



# GROVE LANE TO CORONADO ST PARK AVE ALIGNMENT



# GROVE LANE TO CORONADO ST PARK AVE ALIGNMENT OPTIONS



- Option A – preserves inland bike lane



- Option B – maximizes use of ROW for trail



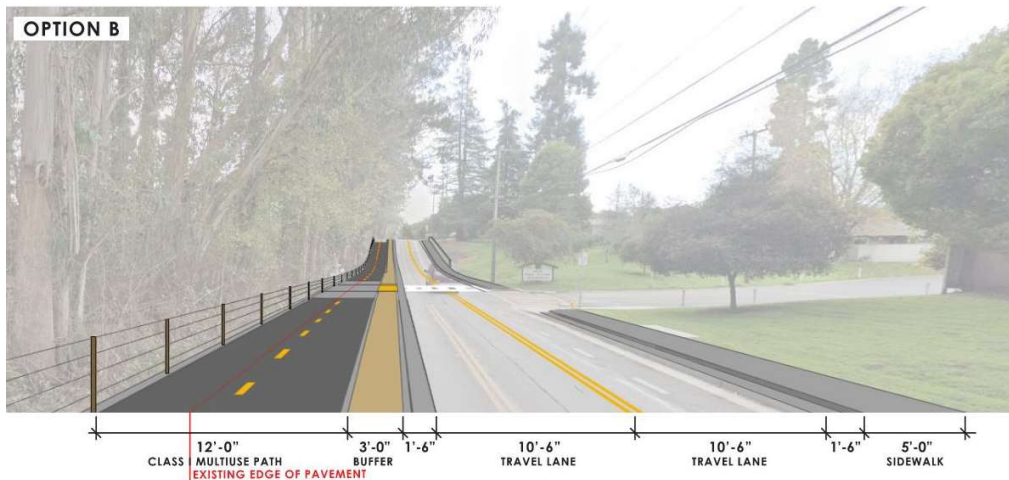
# GROVE LANE TO CORONADO ST PARK AVE ALIGNMENT – BIKE LANE ACCESS





# PARK AVE ALIGNMENT OPTION B

Monterey to Grove



Grove to Coronado





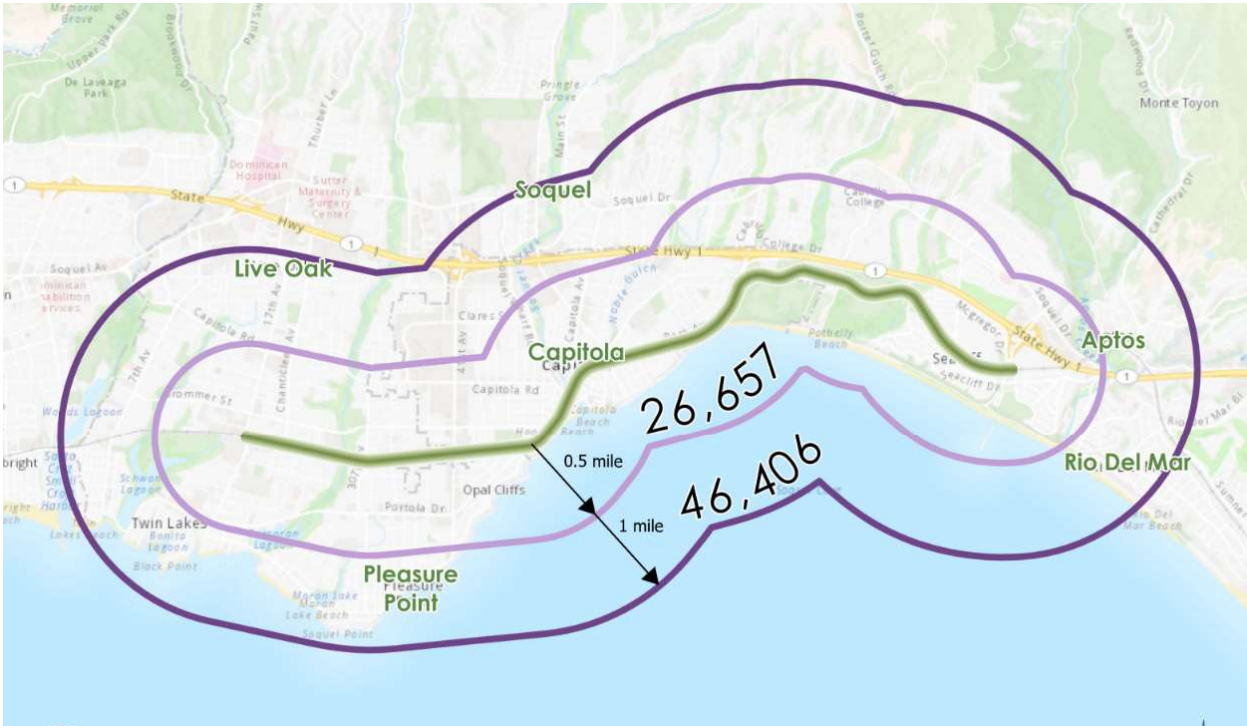
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# PROJECT BENEFITS



# PROJECT BENEFITS

- 26,000 people live within a 10-minute walk of the project
- 46,000 live within 1-mile

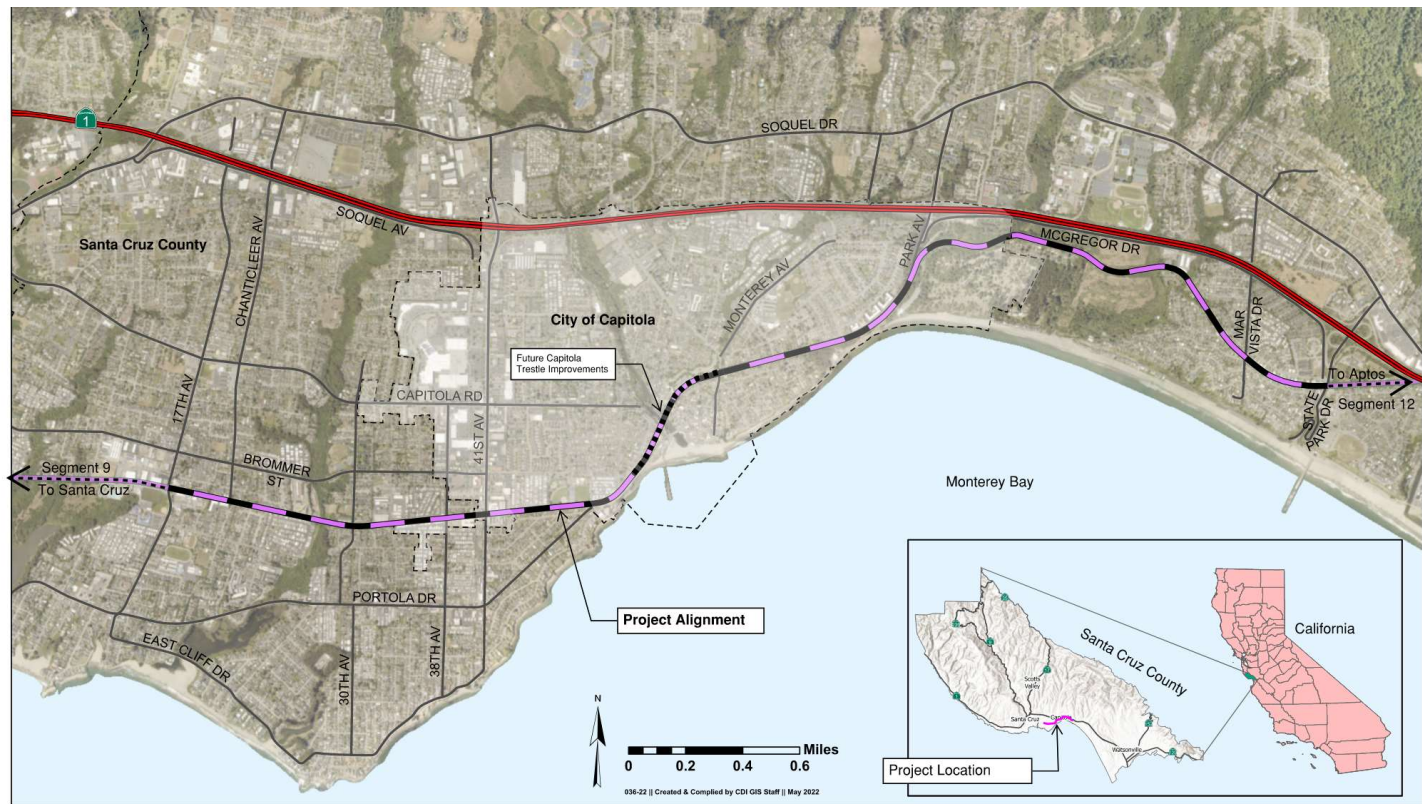






# PROJECT BENEFITS

- Trail traverses the entire length of the City

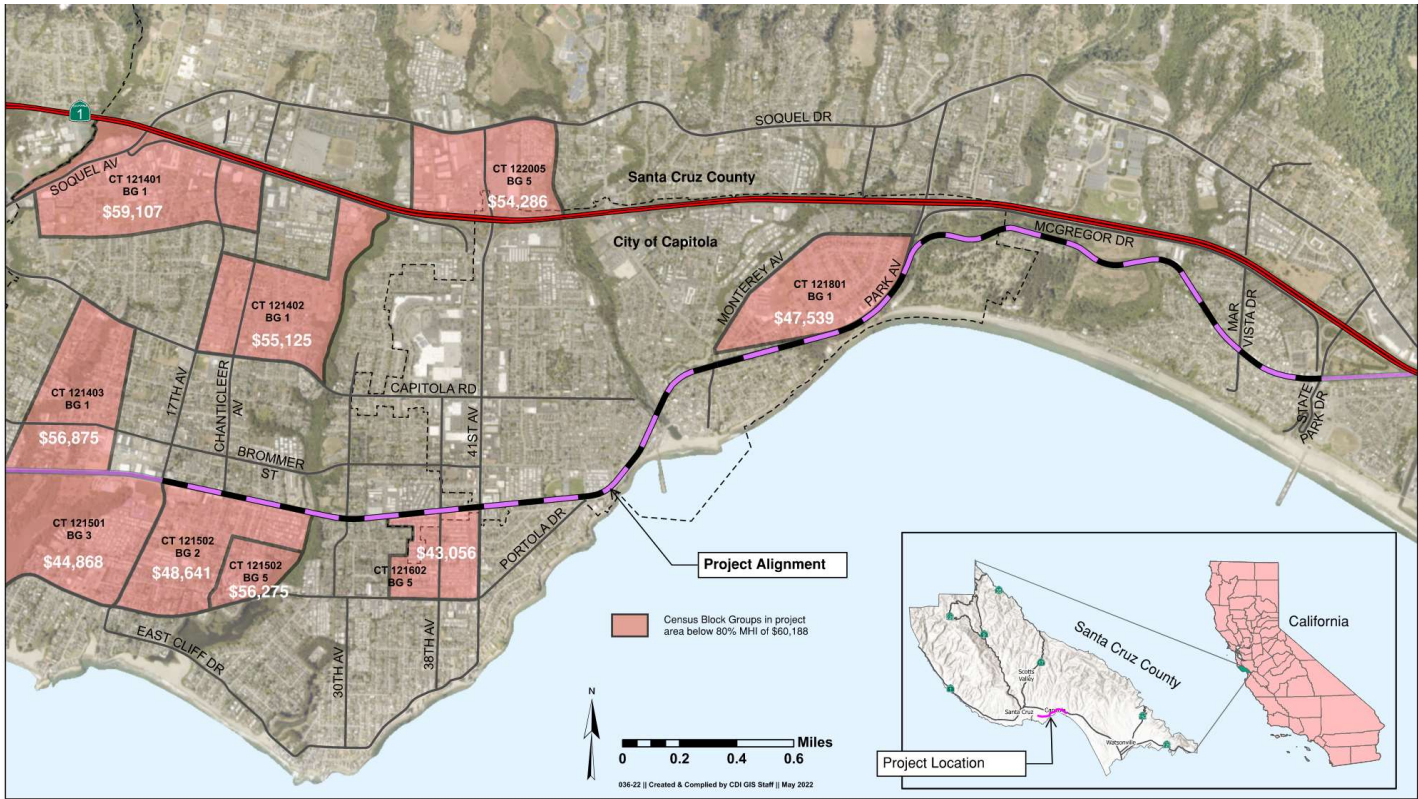






# PROJECT BENEFITS

- Directly connects to low-income areas of the community

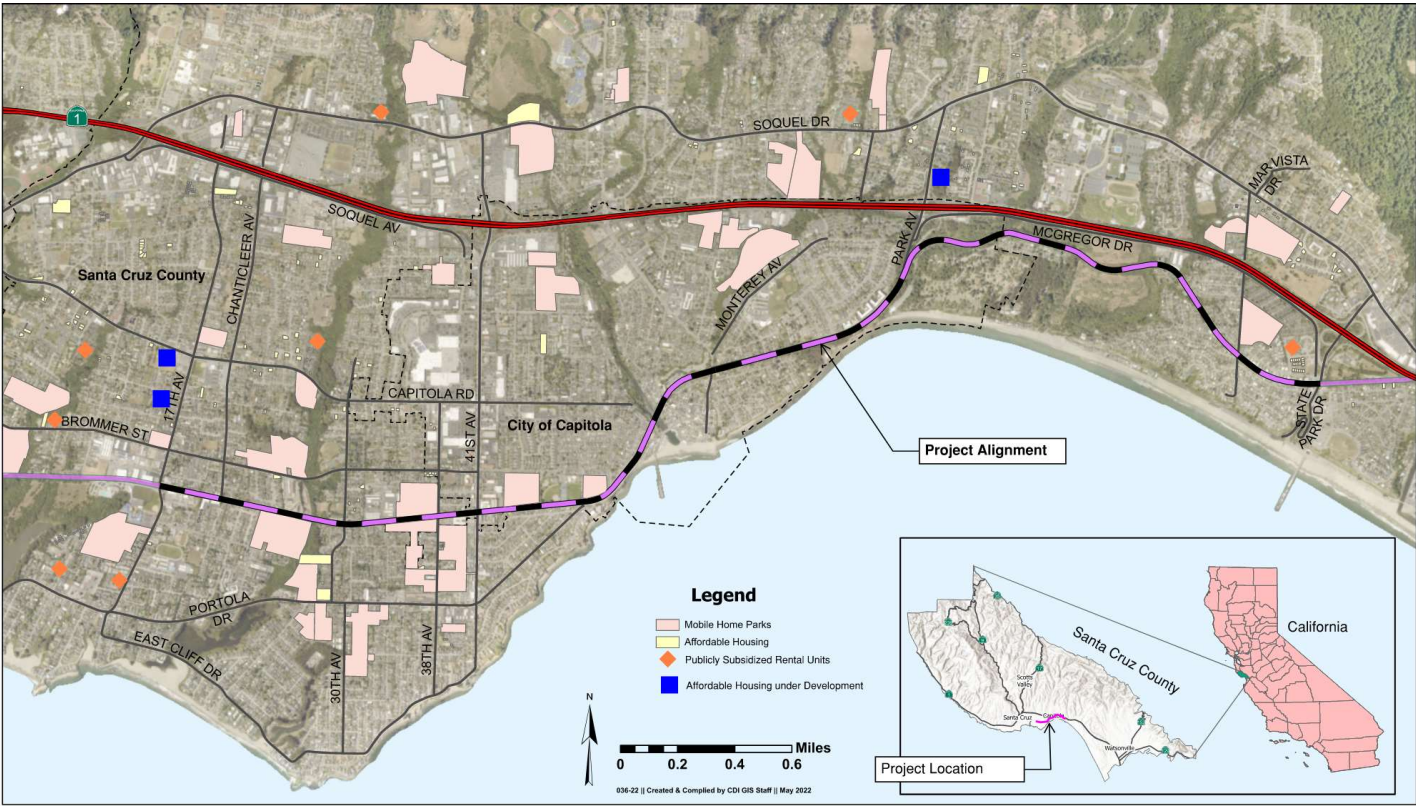






# PROJECT BENEFITS

- Directly connects to existing and proposed affordable housing

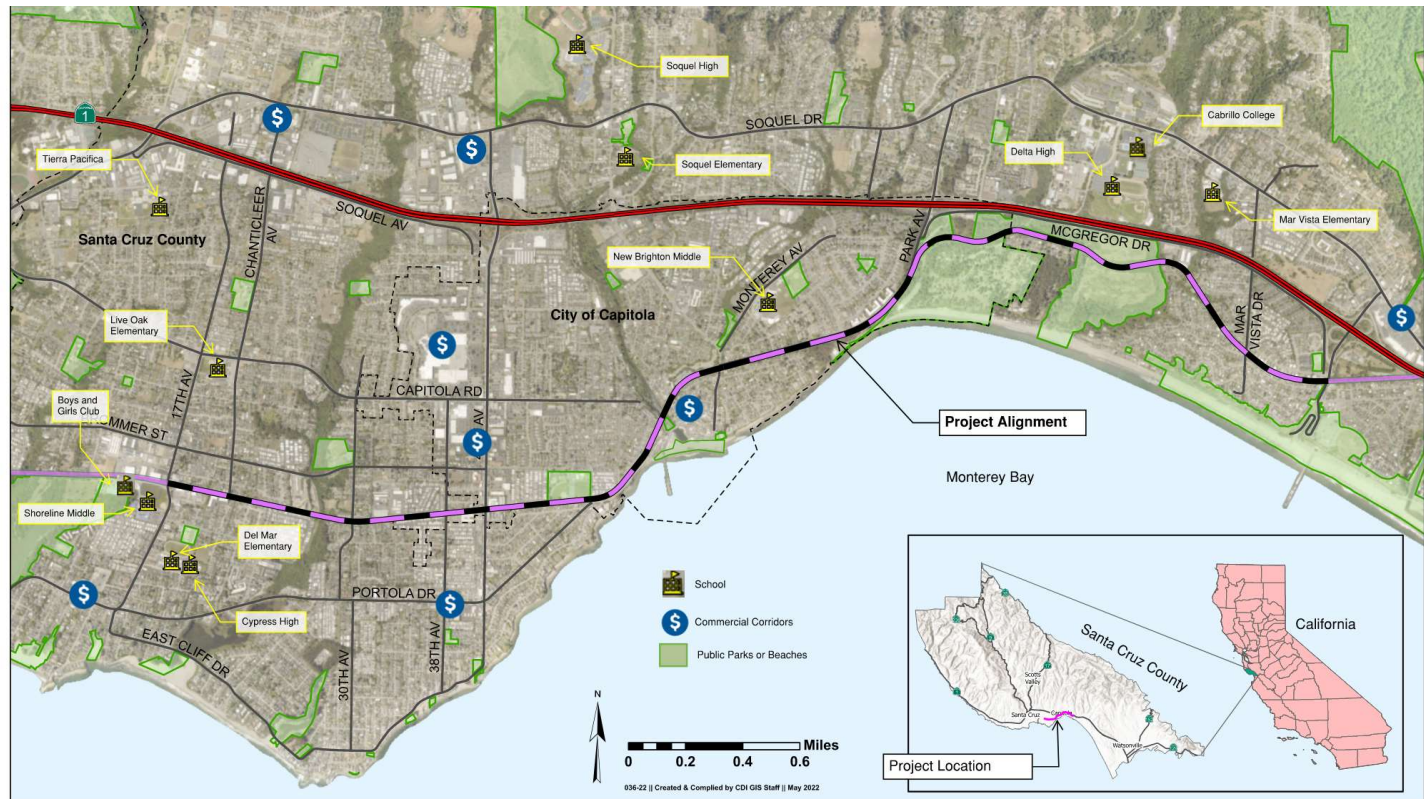






# PROJECT BENEFITS

- Directly connects to schools, parks, and commercial centers

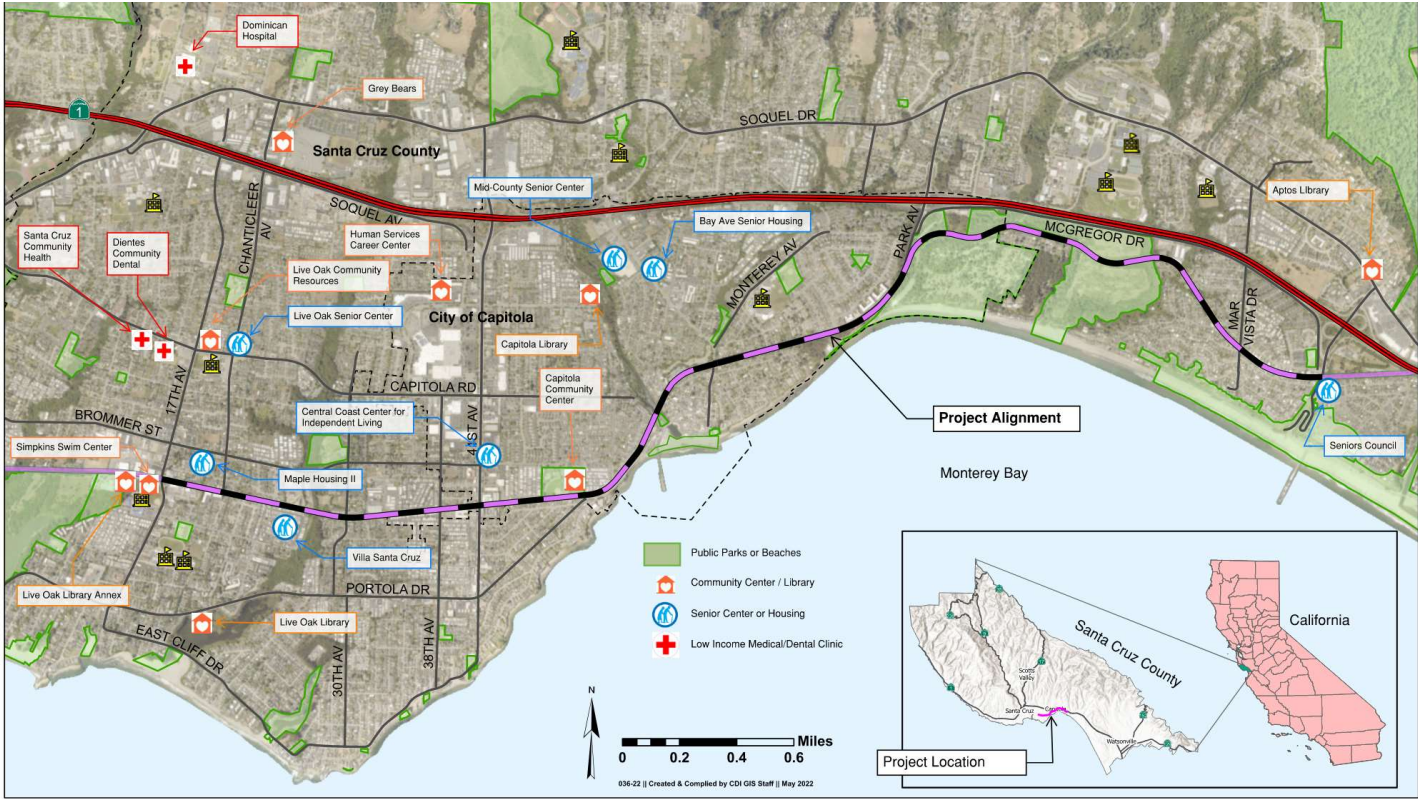






# PROJECT BENEFITS

- Directly connects to libraries, community centers, senior centers and clinics

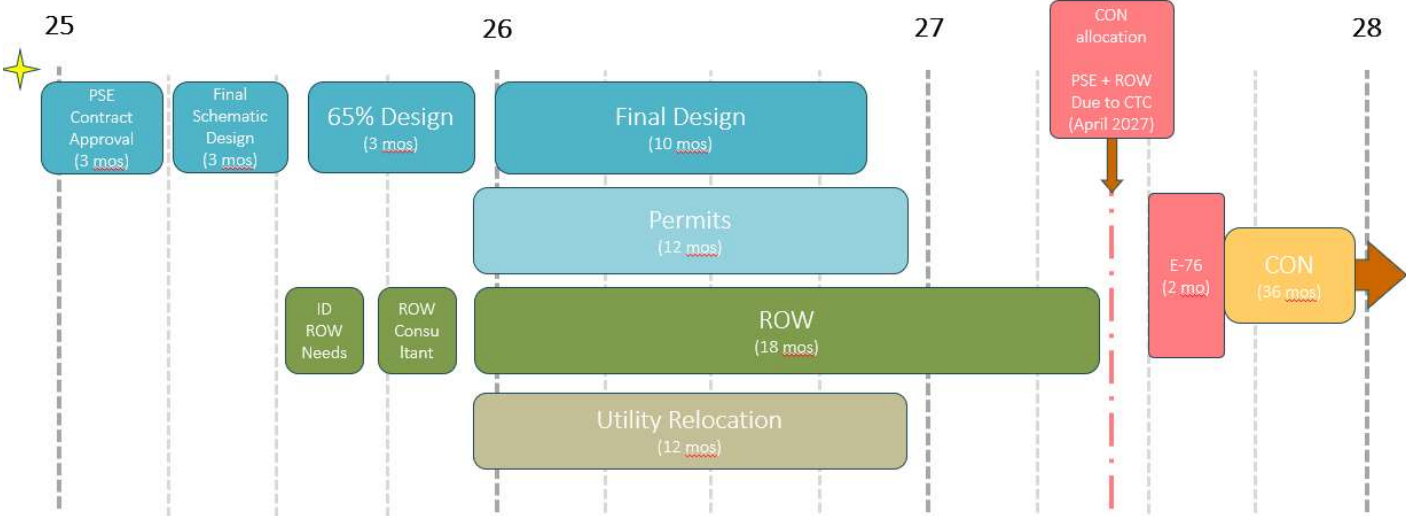




# NEXT STEPS

- Additional Environmental Review
- Return for EIR Acceptance in Summer

## DRAFT Project Schedule





# Park Ave Traffic Calming & Rail Trail

## Measure L (CMC Chapter 8.72)

### Measure L

- Approved by Capitola voters in 2018
- Codified in Chapter 8.72 of the Municipal Code

### Purpose

- Support active transportation in the rail corridor and enhance safety for pedestrians and cyclists

### Key Provisions (CMC § 8.72.040)

- Preserve & utilize the Corridor & Trestle for active transportation & recreation
- No City Funds for trail detours onto Capitola streets/sidewalks

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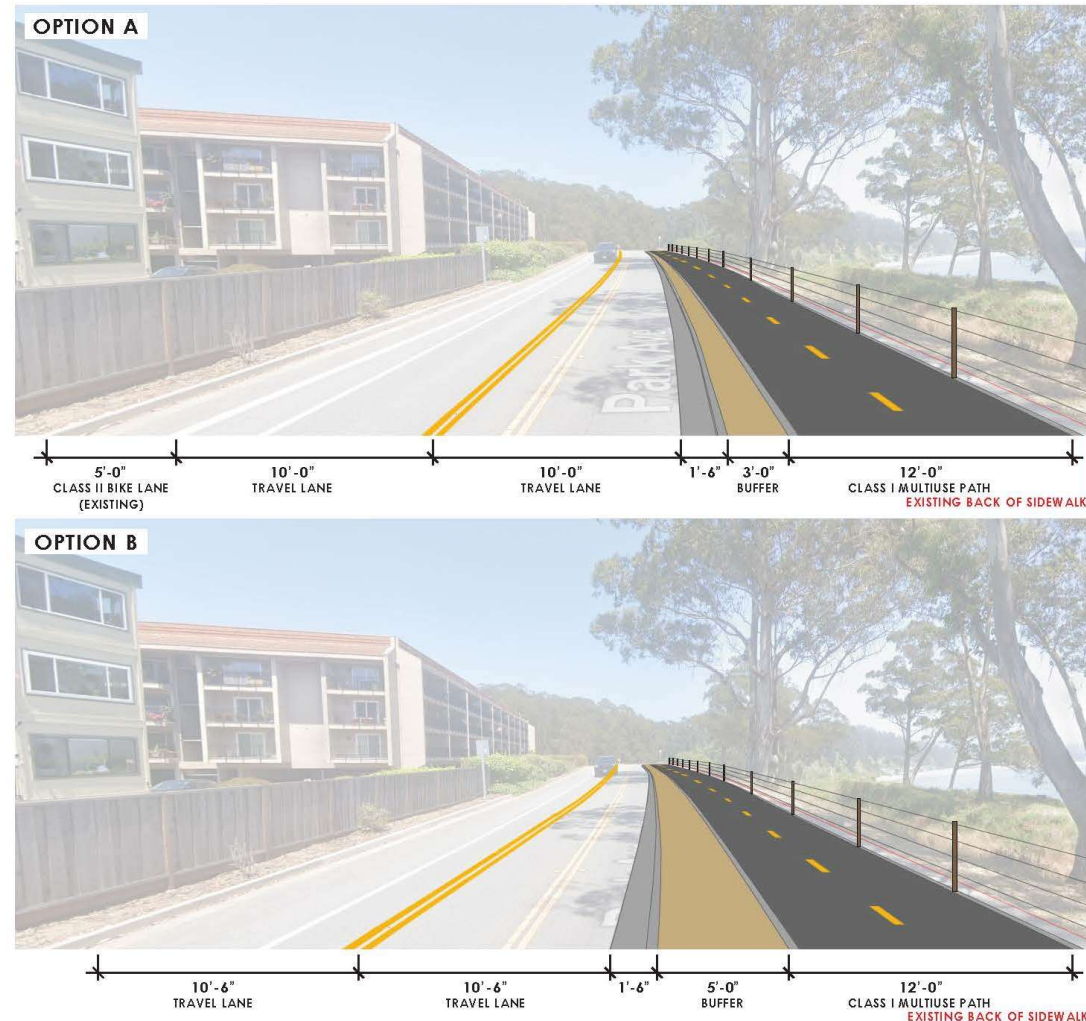
## Park Ave Traffic Calming & Rail Trail Fiscal Impact

- **City Budget:** \$100K allocated for Traffic Calming; \$80.5K remaining
- **No City funds required** for Coastal Rail Trail improvements
- **Estimated cost of new active transportation/recreation trail along Park Ave: \$3M–\$5M**



## Park Ave Traffic Calming & Rail Trail Next Steps

- Council to select preferred alignment
- Proceed with additional environmental review
- Return in Summer 2025 for Final EIR review
- Finalize design and coordinate construction timeline



### NTA CRUZ RAIL TRAIL K AVE ALIGNMENTS - VIEW 2

OLA, CA

round image, Google Earth. [Imagery date: June 2024]. Retrieved January 10, 2025, from <https://earth.google.com/>



# Park Ave Traffic Calming & Rail Trail Recommendation

## Approve Park Avenue Coastal Rail Trail

- City staff recommends Option A - Preserves the Class II bike lane for direct cyclist access
- RTC & County staff recommend Option - B Maximizes right-of-way, reduces costs and environmental impacts

## Defer Traffic Calming Project

- \$80,500 can be used for alternative street-related expenditures



# Capitola City Council

## Agenda Report

**Meeting:** February 13, 2025

**From:** City Manager Department

**Subject:** Appointments to City and Regional Advisory Bodies



**Recommended Action:** Review City Council appointments to regional and multi-jurisdictional advisory bodies; review City Council appointments to City advisory bodies; and review appointments of members of the public to City advisory bodies.

**Background:** On January 16<sup>th</sup> and 30<sup>th</sup>, the City Council made appointments of members of the public to City advisory bodies and appointed City Council Members to represent Capitola on regional and multi-jurisdictional advisory bodies.

While most of the vacancies have been filled, there remains a need to appoint a City Council representative to the Association of Monterey Bay Area Governments.

**Discussion:** Staff recommends that the City Council review all current appointments.

Applications from members of the public for the City's advisory bodies remain on file for one year. Current applications can be found at the link listed as Attachment 3.

**Fiscal Impact:** None.

**Attachments:**

1. City Advisory Body Appointments
2. Regional Advisory Body Appointments
3. <https://www.dropbox.com/scl/fo/fz7qtmk1ubx1tal7icwa/ABeBTms6St-musROjybP57s?rlkey=b5wxl9umzysyfo0ur1512stih&st=wwzbtwbl&dl=0>

**Report Prepared By:** Julia Gautho, City Clerk

**Approved By:** Jamie Goldstein, City Manager

## 2025 COUNTY/MULTI-COUNTY BOARDS CAPITOLA REPRESENTATIVES LIST

Name of Board – Meeting Information	Capitola Representative(s)
Advisory Council of the Area Agency on Aging -Seniors Council of Santa Cruz & San Benito Counties <i>(Meets: 2<sup>nd</sup> Wednesday of each month            except for August and December, at 10            AM in Aptos)</i>	<p style="text-align: center;"><i>No Alternate, No Term Limits.            Recommended to review appts. every 2            years.</i></p> <ul style="list-style-type: none"> <li>• Gerry Jensen (Appt. Jan. 25)</li> </ul>
Arts Council Santa Cruz County <i>(Meeting dates are variable;            Wednesdays 4:30-6:30 PM)</i> <i>Not a dedicated Capitola seat</i>	<p style="text-align: center;"><i>No Alternate. No Term Limits</i></p> <ul style="list-style-type: none"> <li>• Roy Johnson (A&amp;C) (Appt. Jan. 24)</li> </ul>
Association of Monterey Bay Area Governments (AMBAG) ▲ ◆ <i>(Meets: 2<sup>nd</sup> Wednesday of each month at            6 PM in Monterey)</i>	<p style="text-align: center;"><i>No Term Limits. Recommended to review            appts. every 2 years.</i></p> <ul style="list-style-type: none"> <li>• Vacant (formerly Yvette Brooks)</li> <li>• Melinda Orbach (<i>Alternate</i>)</li> </ul>
Bicycle Advisory Committee of the SCCRTC (Santa Cruz County Regional Transportation Commission)	<p style="text-align: center;"><i>2-year term, expires 2025</i></p> <ul style="list-style-type: none"> <li>• Paula Bradley (Appt. Feb. 24)</li> <li>• Alternate: Christopher O’Connell            (Appt. Jan. 25)</li> </ul> <p><i>Recruited through RTC, City Council            reviews applications and provides            nomination.</i></p>
Capitola Community Safety Foundation	<p style="text-align: center;"><i>No Alternate, No Term Limits, no fixed            term</i></p> <ul style="list-style-type: none"> <li>• Joe Clarke (Appt. Dec. 24)</li> </ul>
Central Coast Community Energy Policy Board <i>(Meets: Meeting dates are variable,            virtual option in SC County)</i>	<p style="text-align: center;"><i>Shared seat with Scotts Valley, Chosen by            City Selection, No Term Limits. Terms last            2 years.</i></p> <ul style="list-style-type: none"> <li>• Yvette Brooks (Appt. Dec. 24)</li> <li>• Vacant (<i>Alternate</i>)</li> </ul>
Community Action Board of Santa Cruz County <i>(Meets: 3rd Wednesday of each month at            6:15 PM)</i>	<p style="text-align: center;"><i>2-year terms</i></p> <ul style="list-style-type: none"> <li>• Kristen Brown (Appt. Jan. 25)</li> </ul>
Community Television of Santa Cruz County Board of Directors <i>(Meets: Monthly at 5:30 PM)</i>	<ul style="list-style-type: none"> <li>• Chloe Woodmansee, Assistant to            the City Manager</li> </ul>

<p>Criminal Justice Council of Santa Cruz County ♦ <i>(Meets: Quarterly at 3 PM)</i> 2 seats, 1 Council and 1 Council, CM, or ACM</p>	<p><i>Review following seating of new Council</i></p> <ul style="list-style-type: none"> <li>• Joe Clarke (Appt. Dec. 24)</li> <li>• Gerry Jensen</li> </ul>
<p>LAFCO (Local Agency Formation Commission) ▲ ♦ <i>(Meets: 1<sup>st</sup> Wednesday of each month except for July, at 9 AM in the County Board of Supervisors Chambers, 701 Ocean Street, Santa Cruz)</i></p>	<p><i>Share voting seat with Scotts Valley. Ex-officio when not holding voting seat. 2-year terms. Term ends 2027.</i></p> <ul style="list-style-type: none"> <li>• Joe Clarke (Appt. Jan. 25)</li> </ul>
<p>League of California Cities <i>(Meets: Monterey Bay Division meets on the 1st Monday of every other month at 7 PM at various locations.)</i></p>	<p>Open to All Council Members</p>
<p>Monterey Bay Unified Air Pollution Control District (MBUAPCD)▲ <i>(Meets: 3rd Wednesday of each month at 1:30 PM at the District Office: 24580 Silver Cloud Ct., Monterey)</i></p>	<p><i>Chosen by Selection Committee, rotates between all cities in County. Council should review and recommend every 2 years.</i></p> <p>Gerry Jensen (Appt. Jan. 25)</p>
<p>Santa Cruz County Children’s Network <i>(Meets five times a year at noon in the County Office of Education)</i></p>	<p><i>No Term Limits. Council should review and recommend every 2 years.</i></p> <ul style="list-style-type: none"> <li>• Melinda Orbach (Appt. Jan. 25)</li> </ul>
<p>Santa Cruz County Conference &amp; Visitors Council <i>(Meets: Last Wednesday at 3:00 PM every other month except for November when meeting is TBD, at Goodwill Industries, 350 Encinal Street, Santa Cruz)</i></p>	<p><i>Chosen by City Selection Committee, rotates between Cap, Wat, SV. Council should review and recommend every 2 years.</i></p> <p>Not currently Capitola</p>

<p>Santa Cruz County Flood Control &amp; Water Conservation District, Zone 5 ▲ ◆ <i>(Meets: Quarterly on the 4<sup>th</sup> Tuesday at 10 AM in the County Board of Supervisors Chambers, 701 Ocean Street)</i></p>	<p><i>Council to review appointments annually</i></p> <ul style="list-style-type: none"> <li>• Joe Clarke (Appt. Dec. 24)</li> <li>• Melinda Orbach (<i>Alternate</i>)</li> </ul>
<p>Santa Cruz County Hazardous Materials Advisory Commission <i>(Meets: 4th Wednesday of every other month at 9 AM at Capitola City Hall Community Room)</i></p>	<p><i>Four-year term expires in April 2027</i></p> <ul style="list-style-type: none"> <li>• Nicholas Brown (Appt. Apr. 23)</li> </ul>
<p>Santa Cruz County Library Financing Authority ◆ <i>(Meets: Semi-annually, in January and June, Main Library)</i></p>	<p><i>Council to review appointments annually</i></p> <ul style="list-style-type: none"> <li>• Melinda Orbach (Appt. Dec. 24)</li> <li>• Joe Clarke (<i>Alternate</i>)</li> </ul>
<p>Santa Cruz Public Libraries Library Advisory Commission <i>(Meets: Monday evenings, various branches)</i></p>	<p><i>4-year term, expires March 2027</i></p> <ul style="list-style-type: none"> <li>• Mike Termini (Appt. Jan. 23) <i>Recruited through Library, City Council reviews applications and provides appointment.</i></li> </ul>
<p>Santa Cruz Public Libraries Joint Powers Authority Board ▲ (LJPA) <i>(Meets: 1st Monday of each month at 7:30 PM at the Main Library Community Room)</i></p>	<p><i>City Manager is appointed by JPA</i></p> <ul style="list-style-type: none"> <li>• Jamie Goldstein</li> </ul>
<p>Santa Cruz County Integrated Waste Management Local Task Force <i>(Meets: Quarterly)</i></p>	<ul style="list-style-type: none"> <li>• Erika Senyk (Appt. Dec. 24)</li> <li>• Alexander Pedersen (<i>Alternate</i>)</li> </ul>
<p>Santa Cruz County Regional Transportation Commission (SCCRTC) ▲ ■ <i>(Meets: 1st Thursday of each month except for July, at 9 AM at various locations)</i></p>	<p><i>No Term Limits. Council should review and recommend every 2 years.</i></p> <ul style="list-style-type: none"> <li>• Alexander Pedersen (Appt. Dec. 24)</li> <li>• Joe Clarke (<i>Alternate</i>)</li> </ul>

<p>Santa Cruz County Sanitation District ▲ ◆ <i>(Meets: 1st &amp; 3rd Thursday of each month at 4:45 PM at the East Cliff Pumping Station on Lode St., Santa Cruz)</i></p>	<p><i>Council to review appointments annually</i></p> <ul style="list-style-type: none"> <li>• Joe Clarke (Appt. Dec. 24)</li> <li>• Gerry Jensen (Alternate)</li> </ul>
<p>Santa Cruz Metropolitan Transit District Board ▲ ■ <i>(Meets: 3rd Friday of each month at 8:15 AM at various locations)</i></p>	<p><i>Four-year term, expires December 31, 2024</i></p> <ul style="list-style-type: none"> <li>• Melinda Orbach (Appt. Dec. 24)</li> <li>• Alexander Pedersen (alternate)</li> </ul>
<p>Santa Cruz Regional 911 Board ▲ <i>(Meets: Every other month at 1:30 PM)</i></p>	<p><i>City Manager is appointed</i></p> <ul style="list-style-type: none"> <li>• Jamie Goldstein, City Manager</li> </ul>
<p>Housing for Health Partnership Policy Board</p>	<p><i>Two-year term, rotates with Scotts Valley, term expires Fall 2026</i></p> <p>Not currently Capitola</p>
<p>Santa Cruz County Animal Services Agency</p>	<p>Chief Ryan</p>

- ▲ = Members are required to File Statements of Economic Interest, Form 700
- = Members are required to complete AB 1234 Ethics Training
- ◆ = Council Member appointment required

Revised: 1/31/2025 JG



# CITY OF CAPITOLA

## 2025 Local Appointments List of Boards, Commissions, and Committees

### NOTICE TO THE PUBLIC

[Chapter 11, §54972 of the California Government Code]

**NOTICE IS HEREBY GIVEN** that the City of Capitola encourages public participation in local government through its advisory bodies. These boards, commissions, and committees deal with a variety of issues and make recommendations to the City Council. All persons interested in serving on any committee shall submit to the City Clerk a boards and commissions application. The City may appoint community members to represent it on the boards of other agencies. Interested persons are encouraged to visit the City’s website at [www.CityofCapitola.org](http://www.CityofCapitola.org).

Name of Board/Commission/ Committee – Membership Information	Community Members & Term Expirations																																
<p><b>Art &amp; Cultural Commission ▲ ●</b></p> <p>Commission members have an interest in promoting the arts and public art projects within the City.</p> <p>9 Members 2-Year Term Membership: 1 City Council member; 1 Planning Commissioner; 1 artist/arts organization representative; 1 arts professional and 5 at-large members. Members are preferably residents of Capitola who are 18 years of age or older and may be reappointed for successive 2-year terms with a maximum of 3 terms.</p> <p><i>Meets: 2<sup>nd</sup> Tuesday of each month at 6:30 p.m. in the City Hall Council Chambers</i></p>	<table border="1"> <thead> <tr> <th style="text-align: left;"><i>Incumbents with Expiring Terms</i></th> <th style="text-align: left;"><i>Appointed</i></th> <th style="text-align: left;"><i>Expires</i></th> </tr> </thead> <tbody> <tr> <td>Mary Beth Cahalen [At Large Member]</td> <td>1/16/25</td> <td>12/31/26</td> </tr> <tr> <td>Esther Sylvan [At Large Member]</td> <td>1/16/25</td> <td>12/31/26</td> </tr> <tr> <td>Laurie Hill [At Large Member]</td> <td>1/16/25</td> <td>12/31/26</td> </tr> <tr> <td>Jill Payonzeck-Lengre [At Large Member]</td> <td>1/16/25</td> <td>12/31/26</td> </tr> <tr> <td>Karin Anderson [At Large Member]</td> <td>1/30/25</td> <td>12/31/26</td> </tr> <tr> <td>Roy Holmberg [Artist]</td> <td>1/16/25</td> <td>12/31/26</td> </tr> <tr> <td>Roy Johnson [Art Professional]</td> <td>1/16/25</td> <td>12/31/26</td> </tr> <tr> <td>Joe Clarke [Council Rep.]</td> <td>12/12/24</td> <td>12/31/26</td> </tr> <tr> <td>Courtney Christiansen [Planning Rep.]</td> <td>1/22/25</td> <td>12/31/26</td> </tr> </tbody> </table>			<i>Incumbents with Expiring Terms</i>	<i>Appointed</i>	<i>Expires</i>	Mary Beth Cahalen [At Large Member]	1/16/25	12/31/26	Esther Sylvan [At Large Member]	1/16/25	12/31/26	Laurie Hill [At Large Member]	1/16/25	12/31/26	Jill Payonzeck-Lengre [At Large Member]	1/16/25	12/31/26	Karin Anderson [At Large Member]	1/30/25	12/31/26	Roy Holmberg [Artist]	1/16/25	12/31/26	Roy Johnson [Art Professional]	1/16/25	12/31/26	Joe Clarke [Council Rep.]	12/12/24	12/31/26	Courtney Christiansen [Planning Rep.]	1/22/25	12/31/26
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<p><b>Commission on the Environment ●</b></p> <p>Commission members have an interest in protecting and enhancing the City’s natural environment.</p> <p>5 Members 2-Year Term Membership: 1 City Council member and 1 appointee from each of the remaining 4 City Council members. Members are preferably residents of Capitola who are 18 years of age or older.</p> <p><i>Meets: A minimum of 4 times a year as needed on the 4<sup>th</sup> Wednesday of a month at 6 p.m. in the City Hall Community Room</i></p>	<table border="1"> <thead> <tr> <th style="text-align: left;"><i>Incumbents with Expiring Terms</i></th> <th style="text-align: left;"><i>Appointed</i></th> <th style="text-align: left;"><i>Expires</i></th> </tr> </thead> <tbody> <tr> <td>Melinda Orbach [Council Rep.]</td> <td>12/12/24</td> <td>12/2026</td> </tr> <tr> <td>Michelle Beritzhoff-Law [Morgan Appointee]</td> <td>1/30/25</td> <td>12/31/26</td> </tr> <tr> <td>Dennis Norton [Jensen Appointee]</td> <td>1/30/25</td> <td>12/31/26</td> </tr> <tr> <td>Michael Maroney [Pedersen Appointee]</td> <td>1/30/25</td> <td>12/31/26</td> </tr> <tr> <td>John Mulry [Clarke Appointee]</td> <td>1/30/25</td> <td>12/31/26</td> </tr> </tbody> </table>			<i>Incumbents with Expiring Terms</i>	<i>Appointed</i>	<i>Expires</i>	Melinda Orbach [Council Rep.]	12/12/24	12/2026	Michelle Beritzhoff-Law [Morgan Appointee]	1/30/25	12/31/26	Dennis Norton [Jensen Appointee]	1/30/25	12/31/26	Michael Maroney [Pedersen Appointee]	1/30/25	12/31/26	John Mulry [Clarke Appointee]	1/30/25	12/31/26												
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- = Committee also may include non-voting youth members

<p><b>Finance Advisory Committee ●</b></p> <p>The Committee provides financial and budget alternatives and advice to the City Council.</p> <p>7 Members 2-Year Term Membership: Mayor and Vice Mayor (or other appointed Council Members); 1 appointee from each of the remaining 3 City Council members, and 1 or 2 Capitola Businessperson/Capitola Resident representing the business community as recommended by the Capitola Soquel Chamber of Commerce. Council appointees must be City residents.</p> <p><i>Meets: 3<sup>rd</sup> Tuesday of every other month at 6 p.m. in the City Hall Council Chambers</i></p>	<table border="1"> <thead> <tr> <th><b><i>Incumbents with Expiring Terms</i></b></th> <th><b><i>Appointed</i></b></th> <th><b><i>Expires</i></b></th> </tr> </thead> <tbody> <tr> <td>Joe Clarke [Mayor]</td> <td>1/30/2025</td> <td>12/2026</td> </tr> <tr> <td>Alexander Pedersen [Vice Mayor]</td> <td>1/30/2025</td> <td>12/2026</td> </tr> <tr> <td>Emeline Nguyen [Council Appointee]</td> <td>1/30/2025</td> <td>12/2026</td> </tr> <tr> <td>Keith Cahalen [Council Appointee]</td> <td>1/30/2025</td> <td>12/2026</td> </tr> <tr> <td>Anthony Rovai [Council Appointee]</td> <td>1/30/2025</td> <td>12/2026</td> </tr> <tr> <td>Leslie Nielsen [Business Rep.]</td> <td>1/30/2025</td> <td>12/2026</td> </tr> <tr> <td>Matt Arthur [Business Rep.]</td> <td>1/30/2025</td> <td>12/2026</td> </tr> </tbody> </table>	<b><i>Incumbents with Expiring Terms</i></b>	<b><i>Appointed</i></b>	<b><i>Expires</i></b>	Joe Clarke [Mayor]	1/30/2025	12/2026	Alexander Pedersen [Vice Mayor]	1/30/2025	12/2026	Emeline Nguyen [Council Appointee]	1/30/2025	12/2026	Keith Cahalen [Council Appointee]	1/30/2025	12/2026	Anthony Rovai [Council Appointee]	1/30/2025	12/2026	Leslie Nielsen [Business Rep.]	1/30/2025	12/2026	Matt Arthur [Business Rep.]	1/30/2025	12/2026
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<p><b>Historical Museum Board ●</b></p> <p>Board members have an interest in preservation and promotion of the City's history and oversee operations of the Historical Museum.</p> <p>7 Members 3-Year Term Membership: Preferably City residents, 18 years of age or older.</p> <p><i>Meets: 1<sup>st</sup> Thursday of each month at 5:30 p.m. in the Community Room</i></p>	<table border="1"> <thead> <tr> <th><b><i>Incumbents with Expiring Terms</i></b></th> <th><b><i>Appointed</i></b></th> <th><b><i>Expires</i></b></th> </tr> </thead> <tbody> <tr> <td>Emmy Mitchell-Lynn [President]</td> <td>8/25/22</td> <td>6/30/25</td> </tr> <tr> <td>Roger Wyant [Vice President]</td> <td>1/12/23</td> <td>6/30/27</td> </tr> <tr> <td>Gordon Van Zuiden [At Large Member]</td> <td>8/25/22</td> <td>6/30/25</td> </tr> <tr> <td>Enrique Dolmo [At Large Member]</td> <td>1/12/23</td> <td>6/30/25</td> </tr> <tr> <td>Antonia Alldredge [At Large Member]</td> <td>7/25/24</td> <td>6/30/27</td> </tr> <tr> <td>Brian Legakis [At Large Member]</td> <td>7/25/24</td> <td>6/30/27</td> </tr> <tr> <td>Vacant [At Large Member]</td> <td></td> <td>6/30/25</td> </tr> </tbody> </table>	<b><i>Incumbents with Expiring Terms</i></b>	<b><i>Appointed</i></b>	<b><i>Expires</i></b>	Emmy Mitchell-Lynn [President]	8/25/22	6/30/25	Roger Wyant [Vice President]	1/12/23	6/30/27	Gordon Van Zuiden [At Large Member]	8/25/22	6/30/25	Enrique Dolmo [At Large Member]	1/12/23	6/30/25	Antonia Alldredge [At Large Member]	7/25/24	6/30/27	Brian Legakis [At Large Member]	7/25/24	6/30/27	Vacant [At Large Member]		6/30/25
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<p><b>Planning Commission ▲ ■</b></p> <p>The Commission issues development permits on behalf of the City Council and advises the City Council on land use and policy issues.</p> <p>5 Members 2 -Year Terms Membership: 5 individual council appointees.</p> <p><i>Meets: 1<sup>st</sup> Thursday of each month at 7 p.m. in the City Hall Council Chambers</i></p>	<table border="1"> <thead> <tr> <th><b><i>Incumbents with Expiring Terms</i></b></th> <th><b><i>Appointed</i></b></th> <th><b><i>Expires</i></b></th> </tr> </thead> <tbody> <tr> <td>Courtney Christiansen [Brooks Appointee]</td> <td>12/12/24</td> <td>12/31/26</td> </tr> <tr> <td>Matthew Howard [Clarke Appointee]</td> <td>12/12/24</td> <td>12/31/26</td> </tr> <tr> <td>Susan Westman [Jensen Appointee]</td> <td>12/12/24</td> <td>12/31/26</td> </tr> <tr> <td>Nathan Kieu [Orbach Appointee]</td> <td>12/12/24</td> <td>12/31/26</td> </tr> <tr> <td>Paul Estey [Pedersen Appointee]</td> <td>12/12/24</td> <td>12/31/26</td> </tr> </tbody> </table>	<b><i>Incumbents with Expiring Terms</i></b>	<b><i>Appointed</i></b>	<b><i>Expires</i></b>	Courtney Christiansen [Brooks Appointee]	12/12/24	12/31/26	Matthew Howard [Clarke Appointee]	12/12/24	12/31/26	Susan Westman [Jensen Appointee]	12/12/24	12/31/26	Nathan Kieu [Orbach Appointee]	12/12/24	12/31/26	Paul Estey [Pedersen Appointee]	12/12/24	12/31/26						
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Posted January 31, 2025  
 Julia Gautho, City Clerk  
 420 Capitola Avenue, Capitola, CA 95010  
 (831) 475-7300

This local appointments list shall remain posted until 12/31/2025.  
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