



**Santa Cruz County Regional
Transportation Commission's
BICYCLE ADVISORY COMMITTEE**

AGENDA

Monday, February 8th, 2016

6:00 pm to 8:30 pm

**RTC Office
1523 Pacific Ave
Santa Cruz, CA 95060**

COMMITTEE MEMBERSHIP

<u>Member</u>	<u>Alternate</u>	<u>Representing</u>
Kem Akol	Holly M. Tyler	District 1
David Casterson, Chair	Jim Cook	District 2
Peter Scott	Will Menchine	District 3
Amelia Conlen	Vacant	District 4
Rick Hyman	Vacant	District 5
Andy Ward	Daniel Kostelec	City of Capitola
Melissa Ott	Wilson Fieberling	City of Santa Cruz
Lex Rau	Gary Milburn	City of Scotts Valley
Myrna Sherman	Vacant	City of Watsonville
Emily Glanville	Piet Canin	Ecology Action
Leo Jed, Vice Chair	Jim Langley	Community Traffic Safety Coalition

The majority of the Committee constitutes a quorum for the transaction of business

1. Call to Order
2. Introductions
3. Announcements – RTC staff
4. Oral communications – members and public

The Committee will receive oral communications during this time on items not on today's agenda. Presentations must be within the jurisdiction of the Committee, and may be limited in time at the discretion of the Chair. Committee members will not take action or respond immediately to any Oral Communications presented, but may choose to follow up at a later time, either individually, or on a subsequent Committee agenda.

5. Additions or deletions to consent and regular agendas

CONSENT AGENDA

All items appearing on the consent agenda are considered to be minor or non-controversial and will be acted upon in one motion if no member of the Committee or public wishes an item be removed and discussed on the regular agenda. Members of the Committee may raise questions, seek clarification or add directions to Consent Agenda items without removing the item from the Consent Agenda as long as no other committee member objects to the change.

6. Approve draft minutes of the December 14, 2015 Bicycle Advisory Committee meeting (pages 4- 6)
7. Accept summary of Hazard Reports (page 7)
8. Accept letter from Bicycle Advisory Committee to the Regional Transportation Commission and Caltrans regarding the Highway 1 Corridor Tier I and Tier II Environmental Documents (pages 8 -12)
9. Accept letter from the Bicycle Advisory Committee to Caltrans regarding Highway 1 Rumble Strips (page 13- 15)
10. Approve City of Santa Cruz Transportation Development Act FY 15/16 Request for \$25,000 for bikeway maintenance and minor improvements (pages 16 - 22)
11. Accept draft 2016 Bicycle Advisory Committee scheduled and tentative agenda items (page 23 - 24)

REGULAR AGENDA

12. City of Santa Cruz Coastal Rail Trail Preliminary Design – Presentation from Nathan Nguyen, City of Santa Cruz (pages 25 - 26)
13. Community Traffic Safety Coalition's 2013 Bicyclist Injuries and Fatalities for Santa Cruz County Report and 2015 Bicycle Safety Observation Study - Presentation from Tara Leonard, Health Services Agency (pages 27 – 37)
14. Updates related to Committee functions
15. Adjourn

NEXT MEETING: The next Bicycle Committee meeting is scheduled for Monday, April 11, 2016 from 6:00pm to 8:30pm at the RTC office, 1523 Pacific Ave, Santa Cruz, CA.

HOW TO REACH US

Santa Cruz County Regional Transportation Commission
1523 Pacific Avenue, Santa Cruz, CA 95060
phone: (831) 460-3200 / fax (831) 460-3215
email: info@sccrtc.org / website: www.sccrtc.org

AGENDAS ONLINE

To receive email notification when the Bicycle Committee meeting agenda packets are posted on our website, please call (831) 460-3201 or email ccaletti@sccrtc.org to subscribe.

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SERVICIOS DE TRADUCCIÓN/TRANSLATION SERVICES

Si gusta estar presente o participar en esta junta de la Comisión Regional de Transporte del condado de Santa Cruz y necesita información o servicios de traducción al español por favor llame por lo menos con tres días laborables de anticipo al (831) 460-3200 para hacer los arreglos necesarios. (Spanish language translation is available on an as needed basis. Please make advance arrangements (at least three days in advance by calling (831) 460-3200.

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**Santa Cruz County Regional
Transportation Commission's**

BICYCLE ADVISORY COMMITTEE

Minutes - Draft

**Monday, December 14, 2015
6:00 p.m. to 8:30 pm**

**RTC Office
1523 Pacific Ave
Santa Cruz, CA 95060**

1. Call to Order: 6:05 pm
2. Introductions

Members Present:

Kem Akol, District 1
David Casterson, District 2, Chair
Jim Cook, District 2 (Alt.)
Peter Scott, District 3
Will Menchine, District 3 (Alt.)
Amelia Conlen, District 4
Rick Hyman, District 5
Melissa Ott, City of Santa Cruz
Gary Milburn, City of Scotts Valley (Alt.)
Andy Ward, City of Capitola
Daniel Kostelec, City of Capitola (Alt.)
Leo Jed, CTSC, Vice-Chair
Emily Gomez, Ecology Action/Bike to Work

Staff:

Cory Caletti, Sr Transportation Planner
George Dondero, Executive Director
Rachel Moriconi, Sr Transportation Planner
Ginger Dykaar, Sr Transportation Planner
Kim Shultz, Sr Transportation Planner

Unexcused Absences:

Excused Absences:

Holly Tyler, District 1 (Alt.)
Bill Fieberling, City of Santa Cruz (Alt.)
Myrna Sherman, City of Watsonville
Lex Rau, City of Scotts Valley
Piet Canin, Ecology Action/Bike-to-Work (Alt.)
Jim Langley, CTSC (Alt.)

Guests:

Robin Kraut, Member of the Public
Barry Scott, Member of the Public

Vacancies:

District 4 and 5 – Alternates
City of Watsonville – Alternate

3. Announcements – None
4. Oral communications – Andy Ward indicated that he had submitted hazard reports that were not identified in the usual summary. Cory Caletti indicated that she'd investigate.
5. Additions or deletions to consent and regular agendas – None

CONSENT AGENDA

A motion (Ward/Jed) to approve the consent agenda passed unanimously with members Akol, Casterson, Scott, Conlen, Hyman, Ott, Ward, Jed and Gomez voting in favor. No votes were cast in opposition.

6. Accepted draft minutes of the October 19, 2015 Bicycle Advisory Committee meeting
7. Accepted summary of Bicycle Hazard reports
8. Accepted support letter from the Bicycle Advisory Committee for a Caltrans planning grant for a Highway Complete Streets comprehensive plan
9. Accepted support letter from the Bicycle Advisory Committee for a Caltrans planning grant submitted by the Health Services Agency for a Santa Cruz County safe Routes to School project
10. Accepted report submitted by Bicycle Advisory Committee member Rick Hyman on "A Brief History of Santa Cruz County Bicycle Advisory Committee."

REGULAR AGENDA

11. 2016 Sales Tax Measure Consideration – George Dondero, RTC Executive Director, summarized the process to bring a sales tax measure to the 2016 ballot, the package of projects that would receive funding, how this package was arrived at, and what recent polling indicated in terms of anticipated public support. Mr. Dondero reported that another poll would be conducted in the February/March time frame and that many public agencies and private entities are considering, and providing, endorsements.
12. Final Rail Feasibility Summary and Next Steps – Rachel Moriconi, RTC Senior Transportation Planner, summarized the recently completed Rail Feasibility Study and outlined that the next steps to analyzing the possibility of future passenger rail service would be through an Environmental Impact Report that is expected to take 3 years once funding is identified.
13. 2016 State and Federal Legislative Programs – Rachel Moriconi, RTC Senior Transportation Planner, provided the staff report. Members recommended that legislative priorities include the following: support increased funding for the Active Transportation Program and Complete Streets programs; repeal the requirement for cyclists to ride as far to the right as practicable; repeal the requirement for cyclists to ride in the Bike Lane where one is available; and permit motorists to ride across a double yellow line in order to pass.
14. Chanticleer Bicycle and Pedestrian Overcrossing and Highway 1 Draft Environmental Impact Report – Kim Shultz, RTC Senior Transportation Planner, provided an overview of the project and reminded members of previous improvement suggestions that were incorporated in the project, the most important of which being ensuring that the Chanticleer overcrossing accommodate both bicycle riding and pedestrian access. Ad-Hoc Committee members Rick Hyman, Amelia Conlen and Will Menchine, provided an overview of the memo they submitted which outlined recommended comments. A motion was made (Hyman/Scott) to submit the memo with minor changes as official comment on behalf of the Bicycle Advisory Committee to Caltrans and the RTC, with copy to be sent to the Santa Cruz County Public Works Department. The motion passed unanimously with members Akol, Casterson, Scott, Conlen, Hyman, Ott, Ward, Jed and Gomez voting in favor.

15. Development of 2040 Regional Transportation Plan – Ginger Dykaar, RTC Transportation Planner provided an update on the 2040 Santa Cruz County Regional Transportation Plan and sought input on the Goals, Policies and Targets and New Project Ideas. Rick Hyman suggested that, at a minimum, the representative from each jurisdiction review the list and provide input on projects in their jurisdiction. Rick Hyman also suggested including a project to monitor performance over time. Amelia Conlen suggested to separate the bike and walk targets and to have a vision zero target for bike/pedestrian fatalities.
16. Highway 1 Rumble Strips – Leo Jed, Bicycle Advisory Committee. A motion was made (Jed/Akol) to send the letter drafted by the Ad-Hoc Committee and submitted as an ad-on item. The motion passed unanimously with members Akol, Casterson, Scott, Conlen, Hyman, Ott, Ward, Jed and Gomez voting in favor.
17. Member updates related to Committee functions – Will Menchine indicated that he was still pursuing improvements to Graham Hill Road and is in communication with County Public Works. He will follow-up with the Committee at a future date when more information is available.
18. Adjourned – 8:32 p.m.

NEXT MEETING: The next Bicycle Committee meeting is scheduled for **Monday, February 8, 2016**, from 6:00 pm to 8:30 pm at the RTC office, 1523 Pacific Ave, Santa Cruz, CA.

Minutes respectfully prepared and submitted by:

Cory Caletti, Senior Transportation Planner

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February 8, 2016
Hazard Report

Date	First Name	Last Name	Contact Info	Location	Cross Street	City	Category	Additional Comments	Forwarded To	Forwarded Date	Response	Images
01/26/16	Liam	Rose	lrose1@ucsc.edu	High Street		Santa Cruz	debris on shoulder or bikeway, debris on sidewalk	rider states along 520-530 High St, there are several large rocks that have fallen from the hillside	Cheryl Schmitt	01/26/16	From Cheryl - Forwarded to the Assistant Director of Public Works. - 1/26/16	
12/27/15	Linda	Ponzini	linda.ponzini@gmail.com	Mar Monte Ave		La Selva Beach	plant overgrowth or interference	rider states a tree has fallen onto the roadway blocking the entire lane	General Dept of Co of SC	01/14/16		
12/21/15	Cola Chloe	Constantine	831 426 0640	Water St	Market St	Santa Cruz	sidewalk to narrow, hazardous drain, lack of sidewalk	rider states ditch on waterway side of path is dangerous for all. Hazard is open deep ditch next to fencing. Very possible to injure self.	Cheryl Schmitt	12/22/15	From Cheryl - Forwarded to Transportation Manager and Risk Manager - 12/22/15	
12/15/15	Andrew	Ward	andrew.ward@plantronics.com	San Lorenzo River Path		Santa Cruz	not supplied	rider states homeless people lying across bike path at the undercrossings is a recurring problem.	Cheryl Schmitt	12/16/15		
12/15/15	Andrew	Ward	andrew.ward@plantronics.com	Encinal St		Santa Cruz	rough pavement or potholes, railroad hazard	rider states the train track crossing at encinal street has large potholes where cyclists would cross the tracks	Cheryl Schmitt	12/16/15		



SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION

1523 Pacific Ave., Santa Cruz, CA 95060-3911 • (831) 460-3200 FAX (831) 460-3215 EMAIL info@sccrtc.org

January 22, 2016

Regional Transportation Commission
1523 Pacific Ave
Santa Cruz, CA 95060

Caltrans
Matt Fowler, Central Coast Environmental Analysis, Caltrans District 5
Via email

RE: Highway 1 Corridor Tier I and Tier II Document Comments

Dear Regional Transportation Commissioners and Caltrans:

The Bicycle Advisory Committee welcomes the opportunity to review the *Highway 1 Tiered Draft Environmental Documents* and offers the following comments pertaining to cycling. We are appreciative and generally supportive of the bicycle projects planned for both the immediate (Tier II) alternative (i.e., the Chanticleer crossing) and for either long-term (Tier I) alternative, such as the Trevethan and Mar Vista crossings. Furthermore, we are gratified that the Draft EIR commits to installing a Class 1 bicycle and pedestrian facility on Morrissey Boulevard over Highway 1 and bike lanes on Rio Del Mar Boulevard if no long-term highway project happens (Tier I No Project Alternative).

Tier II Comments – Chanticleer bicycle and pedestrian overcrossing

We are thankful for and supportive of several aspects of the Chanticleer crossing plans and staff assurances made to date. Your staff and its consultants are to be commended for having already responded to our earlier request to ensure that bicyclists can conveniently ride across the freeway without dismounting. Please ensure that such design elements are retained in the final plans:

- Sloped curbs around the entire corner to provide 180 degree bike access,
- 12 -14 foot wide bridge;
- Rideable 5 percent or less grade; and
- Negotiable curvature.

Our major long-standing and remaining concern is how northbound Chanticleer cyclists (who will be riding in the bike lane at the right side of the road) will cross Chanticleer to access the new bridge. Cyclists will have to cross both the north and southbound travel lanes close to or at the intersection with Soquel Avenue, which could cause conflicts with motorists. Also, there is the potential for conflict with Soquel eastbound motorists making a right turn onto Chanticleer exactly where cyclists will be crossing onto and off the bridge.

In order to address this and other concerns, we request that the following elements be included in the final project design:

- Pathway lighting (e.g., inset into structure, similar to that on the Arana Gulch bridges);
- Center line striping on the overcrossing;
- Entrance designs, including signing and pavement markings that make clear that motor vehicles are not allowed;

- Railing and structure design that does not obscure sight distance for eastbound drivers on Soquel Avenue approaching Chanticleer; and
- Pavement markings and signing (including green bike lane treatments and green bike boxes) that both alert motorists to cyclists crossing Soquel Avenue and Chanticleer and show cyclists the appropriate crossings;
- Stop sign or traffic signal on eastbound Soquel at Chanticleer to prevent free right turns;
- Consideration of extending a two way bike path on the west side of Chanticleer from the bridge landing at Soquel Avenue south to where a clearly visible and cyclist maneuverable crossing of Chanticleer can be installed (such as at the Staples parking lot entrance intersection with Chanticleer).

In order to ensure that the proposed bridge be bike friendly in these regards, we recommend that the process leading to implementation includes the following:

- Coordination with County Public Works as to Soquel Ave/Chanticleer intersection modifications, such as signing and pavement markings;
- Preparation of two alternative signing and striping plans – one for the current stop sign configuration, one for if the intersection becomes signalized;
- Completion of at least preliminary intersection design before bridge plans are finalized to ensure that the approaches are designed in sync with the pavement marking and signing plans and that any additional right of way needed to ensure smooth transition and access to the overcrossing is concurrently identified and acquired;
- RTC's Bicycle Advisory Committee review of final bridge and street plans;
- If entry for northbound Chanticleer cyclists remains right at the intersection with Soquel, monitoring of potential conflicts with motorists as described above, and if conflicts arise, installing a two way bike path along the first block of Chanticleer so that a crossing of Chanticleer be established further south of the Soquel Avenue intersection where site distances may be better (ex. a 4 way intersection at the Staples driveway);
- Finishing the bridge design and certifying the environmental review of it as soon as possible so that it could be constructed as a stand-alone project (if funding is available) if the remainder of the auxiliary lane is delayed or cancelled;
- Conversely, ensuring that if the Soquel-to-41st Ave auxiliary project is constructed, that this bridge remain an integral part of that project's funding and final design and be concurrently constructed.

Finally, an aesthetically appealing design, worthy of the great Santa Cruz County community, should be designed and utilized.

Tier I comments – HOV, TMS or no project alternatives – Mar Vista and Trevethan and other crossings

At this time we only have some general suggestions for you to consider as the process unfolds. We understand that there will be further environmental review and plan refinement on all project components of whatever long-term alternative is chosen.

Mar Vista bike-ped bridge: Since this project to connect the elementary school with a neighborhood it serves across the freeway is mostly funded, we suggest adding it (and a discussion of any of its impacts) into Tier II (the immediate projects category). Then it could proceed once this EIR was completed. As design progresses we suggest that elements similar to those listed above for Chanticleer be included, again with the objective that cyclists can ride over the freeway without dismounting.

Trevethan bike-ped bridge: We reiterate our long standing recognition of the need to improve or replace the current Morrissey Boulevard crossing. If the Trevethan location remains the preferred replacement and can occur soon, then again we would hope to work with your staff on an appropriate bike-friendly design. If

not, we would look to both short- and long-term improvements for cyclists (and pedestrians) to the Morrissey crossing itself.

Work affecting roads adjacent to and across the freeway: We note that several roads that cross or parallel Highway One will be impacted by future work and some will be partially rebuilt. We recommend that any work done on any of these roads maintain, improve or add bike lanes.

Attached are specific recommendations for EIR revisions to address these concerns.

We look forward to seeing our suggestions incorporated in the final EIR and project plans. The Committee appreciates your pursuit of these highly valuable cycling projects. Please feel free to contact the RTC's Bicycle Program Manager and staff to the Bicycle Advisory Committee Cory Caletti at (831) 460-3201 or by email at ccaletti@scrtc.org for any further discussion about the projects and suggestions mentioned in this letter.

Sincerely,



David Casterson
Bicycle Advisory Committee

Attachment 1:

cc: Santa Cruz County Public Works Department
RTC Bicycle Advisory Committee

ATTACHMENT 1: REQUESTED EIR REVISIONS

p. 2.1.5-12 Comment: The description of the current bike lane network is slightly misleading.

Suggested Revision: “Connecting the communities of Live Oak, Soquel, and Aptos to the cities of Santa Cruz and Capitola is a series of Class II bikeways that runs from the University of California at Santa Cruz campus to Watsonville. Within the study area this network is along major streets including Soquel Avenue, Soquel Drive, and Freedom Boulevard, sometimes running close to and parallel to the freeway while other times being a considerable distance away. Some portions of this route have heavy traffic, on-street parking and/or poor shoulder conditions that can impede safe and efficient bicycle travel. An alternate network of Class II route connects Soquel Drive to Watsonville along San Andreas Road, except that the Bonita Drive segment lacks bike lanes.”

p. 2.1.5-12 Comment: As indicated in the paragraph preceding this one, alternate routes on the map are not official designations.

Suggested revision: “Clares Street within Capitola is ~~designated~~ shown as an alternate route for bicycles seeking access to the Capitola Mall Transit Facility, but lacks bike lanes.”

pp. 2.1.5-12, 2.1.5-20 Comment: The EIR does not discuss interchange crossing issues.

Suggested Revision: Add a discussion about conflicting cyclists and motorists movements at surface street intersections with highway interchanges due to free right turn lanes and vehicle movements and associated ingress and egress speeds, potentially becoming more problematic as freeway traffic increases.

pp. 2.1.5-20 and 2.1.5-28. Comment: As stated, the three new bridges would improve bicycle travel across the freeway, but not along the freeway route. We note that the project plans show work would be done on several of the parallel streets.

Suggested Revision: add a sentence to the bicycle impact discussion: “However, bicycle travel would not be improved along the corridor and may be impacted by any reconfiguration of parallel streets, such as Rooney St., Soquel Ave., Soquel Dr., Kennedy Dr., McGregor Dr., and Bonita Dr., that may occur as part of the highway widening project.”

p. 2.1.5-30 Comment: As indicated, the new Chanticleer bridge “would have a positive effect on multimodal connectivity.” However, effectiveness depends on the final design plans, the corresponding roadway plans that County Public Works has jurisdiction over and whether and when it actually gets built.

Suggested Revision: add a sentence: “However, it will be important to ensure that final overcrossing design plans and corresponding roadway signing, striping and signalization plans allow for cyclists to safely and conveniently ride to, from and on the bridge.”

p. 2.1.5-36 Comment: We are appreciative of the commitment to install “a Class 1 bicycle and pedestrian facility on Morrissey Boulevard overpass at Route 1” if neither the HOV lanes or TSM/auxiliary lanes are built. However, when this may happen is not clear. The EIR time frame is to 2035. We know that there is not money to build the HOV lanes by 2035. Furthermore, the draft sales tax expenditure plan for 30 years (i.e., 2017- 2047) would only fund the Chanticleer and Mar Vista overcrossings, not a new one at Trevethan. So, when and with what funding would the Morrissey Class I overcrossing occur?

Suggested Revision: add more discussion of the current, inadequate conditions for bicyclists and pedestrians at the Morrissey overcrossing; the history of proposals for

improvements at either Morrissey or a new crossing at Trevethan; what improvements might occur in the short, medium and long term; and a realistic time frame for such improvements.

p. 2.1.5-36 Comment: As indicated above there could be some adverse impacts on bicycle travel that would require mitigation.

Suggested Revision: add the following mitigation measures:

1. “Final design plans for the Chanticleer overcrossing and nearby roadways should ensure that cyclists can ride safely and conveniently to, from and on the new bridge, pursuant to the recommendations in the 1/22/2016 letter from the Bicycle Committee.”
2. “Any work performed on or affecting roads parallel to Highway One should maintain and improve, if necessary, existing bike lanes and add bike lanes or paths where there are gaps in a continuous bicycle network along the corridor.”
3. “Where freeway on and off ramps intersect streets, employ sufficient and innovative measures to minimize conflicts between cyclists and motorists, such as green lanes, bike boxes or other pavement markings across intersections; redesigned free right turn lanes; and bicycle-friendly adjustments to traffic signals and detections.”
4. “Ongoing coordination should occur among the RTC, Caltrans and the City of Santa Cruz regarding improvements to make at the current Morrissey overcrossing (or a substitution at Trevethan) for bicyclists and pedestrians in the short, medium and long term.”

p. 2.3.4 #5 Comment: The mitigation measure to “identify nearby alternate routes” “in the event of temporary obstruction of ... bicycle paths” during construction is insufficient. If a bike path is obstructed or a road (with or without a bike lane) is completely closed then this measure should apply; otherwise, routing through the construction zone needs to be provided in accordance with state regulations.

Suggested Revision: ~~“In the event of temporary obstruction closure of pedestrian walkways or bicycle paths or streets,~~ the Transportation Management Plan would identify nearby alternate bicycle and pedestrian routes, including pedestrian routes that meet Americans with Disabilities Act requirements, as appropriate. In the event of temporary obstruction of streets the California Manual on Uniform Traffic Control Devices for Streets and Highways PART 6 Temporary Traffic Control and the Community Traffic Safety Coalition Recommended Guidelines to Protect the Safety of Bicyclists, Pedestrians, and Disabled Travelers during Road Construction” would be followed.

Appendix G Tier I Corridor HOV Drawing HOV4 Comment: This drawing does not have the latest version of the Chanticleer bridge plans.

Suggested Revision: Revise drawing to include the updated rideable curved design that is shown on Sheet T2-L2 in Appendix I.

Appendix G Tier I Corridor HOV Drawing HOV 2 and HOV 12 Comment: The zig zag design illustration for the Mar Vista and Trevethan overcrossings would not be rideable and hence are not acceptable.

Suggested Revision: Revise the bridge designs to look like the latest Chanticleer one, i.e., with enough space and gentle curvature so that riders will not need to dismount.



SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION

1523 Pacific Ave., Santa Cruz, CA 95060-3911 • (831) 460-3200 FAX (831) 460-3215 EMAIL info@sccrtc.org

February 2, 2016

District Director Timothy Gubbins
Caltrans District 5
50 Higuera Street
San Luis Obispo CA 93401

Re: Outstanding Items Related to Highway 1 Rumble Strips

Dear Mr. Gubbins:

The Regional Transportation Commission's Bicycle Advisory Committee serves to assist in the development and maintenance of a complete, convenient and safe regional bicycle and pedestrian network. Such a network increases the opportunity and attractiveness of bicycle trips as an alternative to driving alone. On behalf of the Bicycle Advisory Committee, I wish to provide the attached summary of outstanding issues related to Caltrans' installation of rumble strips on Highway 1 on the north coast.

The Bicycle Advisory Committee has worked with Caltrans to improve the rumble strip project since it was identified a number of years ago and was appreciative of the changes made to the original plan. The full committee appointed an Ad-Hoc Committee to work more closely with Caltrans as the project was implemented and concluded and provided a memo summarizing areas of improvement before project close-out. At the last meeting, the full committee approved the summary and requested that it be sent to Caltrans

RTC staff is appreciative of Caltrans' staff's engagement and attendance at Bicycle Advisory Committee meetings to address this subject. Please feel free to contact the Regional Transportation Commission's Bicycle Coordinator and staff to the Bicycle Advisory Committee, Cory Caletti at (831) 460-3201 or by email at ccaletti@sccrtc.org, for this and any other Bicycle Committee related matters.

Sincerely,

David Casterson
Chair, SCCRTC Bicycle Advisory Committee

cc: Santa Cruz County Regional Transportation Commission
Santa Cruz County Regional Transportation Commission's Bicycle Advisory Committee
Caltrans: Aileen Loe, Jen Wilson, Doug Hessing, Adam Fukushima; Sara Von Schwind; Paul McClintic; Kelly McClendon;

Attachment 1: Memo from Bicycle Advisory Committee's Rumble Strip Ad-Hoc Committee

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Attachment

Reply to CalTrans Hessing's Nov 12 response to RTC's RS concerns

Santa Cruz's Regional Transportation Commission's (RTC) bicycle advisory committee (BAC) is sending this to you for additional consideration because Doug Hessing's response to BAC's letter and email of October 22 and October 25 inadequately addressed our concerns.

Caltrans's DD64-R2 addressing complete streets integration, specifies many considerations for bicyclists and pedestrians specifically summarized in the policy section. There is little evidence that these considerations were incorporated in Mr. Hessing's November 12 letter to David Casterson.

At the BAC's October 19th meeting we presented ten concerns regarding the CalTrans' Hwy One overlay and rumble strip project. Mr. Hessing's November 12 response simply dismissed four items as previously discussed, yet at the meeting he stated he could only listen to the committee's concerns and would not address them until he received guidance from his management. Each issue was presented and documented in the above referenced correspondence. The remaining issues were addressed, although rather briefly.

The four unaddressed issues are: Additional No Parking signage; parking conflicts along the shoulder rumble strip alignment; rumble strip warning signage and edge line placement. We would appreciate a discussion on these issues to achieve a mutual understanding. These concerns are clearly itemized in the 10/22 and 10/26 submittals.

We would appreciate your review and consideration of the addressed issues, however briefly:

-Less than 5 ft. shoulder from rumble stripe (RS): We appreciate planned corrections, which appear to be in process. However, based on new dashed markings there seem to be other locations, along guardrails, with less than five feet. Also, it's not clear why dashed paint markings were placed along most of the overlay alignment. Why are they there?

-Edge line to right of RS: Although there has been conversation about this request, we have not received a written response to October 27th's email to Mr. Hessing, which addresses the opportunities, concerns, and likely increased safety, all raised by Santa Cruz's bicycling community.

-Raised curbs behind catch basins: This has been addressed and we appreciate your work on this.

-Install and upgrade shoulder backing: Although the response states the in place backing meets CalTrans specifications, it is soft, not adequately compacted for potential bicycle run offs, already dug up by vehicle tires, and will continue to deteriorate over time with use.

-Shoulder issues

-Vertical shoulder edge drop offs: Response says just an additional 2.5" of overlay was added. Along many locations the overlay 2.5" results in the difference between a bicyclist being able to negotiate a drop and definitely crashing. These should and can be feathered for a safe transition in emergency situations.

- Sloped shoulders: This concern has not been previously raised by the BAC. Along several sections, with a relatively narrow level shoulder, it then slopes down for varying distances. The ground below the overlay should and could have been filled such that the full shoulder is level.

-Sections without extended pavement or shoulder backing: From our onsite review there are unimproved sections for drainage or catchment. However there are also sections, with narrow shoulder, that do not serve these purposes without material extension

- Drainage Inlets: This issue became known only after the orange matting was removed and therefore previously not identified. Some numbers of drainage grates were installed aligned with the direction of traffic. These appear to be a contractor error. Rather than reinstalling these grates with the channels perpendicular to the roadway, bars were placed across the top grate level. Although this may be a temporary fix, we look forward to its correction. If intended to remain as is, it is an unexpected surprise and hazard to cyclists crossing the grate.

The RTC and its BAC would appreciate serious consideration and concurrence, or at least reasonable discussion, of these concerns. This would go a long way to comply with DD 64-R2.

We look forward to your reply so that these issues can be adequately addressed to everybody's satisfaction.

TO: Bicycle Advisory Committee

FROM: Cory Caletti, Senior Transportation Planner/Bicycle Program Manager

RE: City of Santa Cruz Article 8 Transportation Development Act Allocation Request

RECOMMENDATION

Staff recommends that the Bicycle Advisory Committee recommends that the Regional Transportation Commission approve the City of Santa Cruz's Article 8 FY 15/16 Transportation Development Act allocation claim for \$25,000 for bikeway striping and minor improvements.

BACKGROUND

Each year the Regional Transportation Commission allocates Article 8 Transportation Development Account (TDA) funds to local jurisdictions for bikeway and pedestrian projects. TDA funds allocated to a local jurisdiction may be rolled over from one fiscal year to the next. TDA claims with bicycle amenities must be reviewed by the Bicycle Advisory Committee and those with pedestrian components must be reviewed by Elderly & Disabled Transportation Advisory Committee prior to approval by the Regional Transportation Commission.

DISCUSSION

The City of Santa Cruz submitted a request for \$25,000 in TDA funds for Bikeway Striping and Minor Improvements ([Attachment 1](#)). Annual re-striping of the City's 30 miles of bikeways, maintenance and minor improvements in high use areas within the public right-of-way are supported with TDA funds.

Staff recommends that the Bicycle Committee recommend that the Regional Transportation Commission approve the City of Santa Cruz's allocation requests. The project is consistent with the City Bicycle Transportation and Pedestrian Plans and the 2014 Regional Transportation Plan.

SUMMARY

The City of Santa Cruz is requesting a TDA Article 8 allocation for Bikeway Striping and Minor Improvements (\$25,000). Staff recommends that the Bicycle Advisory Committee recommends that the Regional Transportation Commission approve the City of Santa Cruz's allocation request.

Attachments:

1. City of Santa Cruz Article 8 TDA Allocation Request Letter for FY 15/16
2. TDA Claim Form for Bikeway Striping and Minor Improvements



PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201, Santa Cruz, CA 95060 • 831 420-5160 • Fax: 831 420-5161

November 19, 2015

Mr. George Dondero
Santa Cruz County Regional Transportation Commission
1523 Pacific Avenue
Santa Cruz, CA 95060

RE: City of Santa Cruz – FY 2015-16TDA Article 8 Allocation Request

Dear Mr. Dondero:

Please accept this letter as a FY 2015-16 TDA Article 8 allocation request for the following project:

1. Bikeway Striping and Minor Improvements (\$25,000): This project provides for the annual re-striping of the City's 30 miles of bikeways, maintenance of bikeways and minor bikeway improvements. This project is entirely supported with TDA funds.

The City's remaining unallocated balance will be used to match grant applications, under funded projects, and future bikeway striping and parking projects.

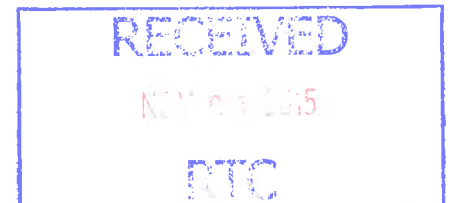
As with all City claims, the City will commit to maintain any facilities provided with these funds for 20 years and will prepare all necessary environmental review for these projects. All of the projects above are consistent with the City Bicycle Transportation and Pedestrian Plans, and the RTP.

Please call me at 420-5422 if you have any questions or need additional information.

Sincerely,

Christophe J. Schneider
Assistant Public Works Director/City Engineer

Attachments: Claim From
cc: Transportation Coordinator (CS)
Finance Department (EC)



**Transportation Development Act (TDA) – Local Transportation Funds
CLAIM FORM
for Bike/Ped Projects**

Submit a separate form for each project.

*If you have any questions about this claim form or would like an electronic copy of the form,
please contact the Santa Cruz County Regional Transportation Commission at 460-3200.*

Project Information

1. Project Title: Bikeway Striping and Minor Improvements
2. Implementing Agency: City of Santa Cruz
3. Sponsoring Agency (if different) – must be a TDA Eligible Claimant:
4. TDA funding requested this claim: \$ 25,000
5. Fiscal Year (FY) for which funds are claimed: FY 15 / 16
6. General purpose for which the claim is made, identified by the article and section of the Act which authorizes such claims (ex. Article 8 Bicycle project): Article 8 – Bicycle and/or pedestrian facility
7. Contact Person/Project Manager: James Burr
Telephone Number: 831-420-5426 E-mail: jburr@cityofsantacruz.com

Secondary Contact (in event primary not available): Rich Smith
Telephone Number: 831-420-5522 E-mail: rsmith@cityofsantacruz.com
8. Project/Program Description/Scope (use additional pages, if needed, to provide details such as work elements/tasks): Annual re-striping of the City's 30 miles of bikeways and minor bikeway improvements.
9. Number of people to be served/anticipated number of users of project/program:
10. Project Location/Limits (attach a map and/or photos if available/applicable, include street names):
Those streets most in need will be striped.
11. Justification for the project. (Why is this project needed? Primary goal/purpose of the project; problem to be addressed; project benefits; importance to the community)

Traffic safety
12. Consistency and relationship with the Regional Transportation Plan (RTP) – please reference Project or Policy number:

2014 RTP Sustainability Policies p. 4-3, see attachment.
13. Measures of performance, success or completion to be used to evaluate project/program:

Traffic safety

14. Impact(s) of project on other modes of travel, if any (ex. parking to be removed):

15. Project Cost/Budget, including other funding sources, and Schedule: *(complete "10a" OR "10b")*

10a. Capital Projects

	Planning	Environmental	Design/ Engineering	ROW	Construction	Other *	Contingency	Total
SCHEDULE (Month/Yr)					4/2016	Bikeway striping		as needed
Total Cost/Phase					\$25,000			
STDA requested								
Source 2:								
Source 3:								
Source 4:								

**Please describe what is included in "Other":*

10b. Non- Capital Projects – Cost/Schedule: List any tasks and amount per task for which TDA will be used. Can be substituted with alternate budget format.

Work Element/ Activity/Task	SCHEDULE (Month/Yr)	Total Cost per Element	STDA requested	\$ Source 2:	Source 3:	Source 4:
Administration/ Overhead						
Activity 1:						
Activity 2:						
Activity 3:						
Activity 4:						
<i>Ex. Consultants</i>						
<i>Ex. Materials</i>						

16. Preferred Method and Schedule for TDA fund distribution, consistent with the RTC Rules and Regulations (a. 90% prior to completion/10% upon completion; or b. 100% after completion):

17. Proposed schedule of regular progress reports:

18. TDA Eligibility:

	YES?/NO?
A. Has the project/program been approved by the claimant's governing body? Attach resolution to claim. (If "NO," provide the approximate date approval is anticipated.)	yes
B. Has this project previously received TDA funding?	yes
C. For capital projects, have provisions been made by the claimant to maintain the project or facility,	yes

or has the claimant arranged for such maintenance by another agency for the next 20 years? (If an agency other than the Claimant is to maintain the facility provide its name: _____)	yes
D. Has the project already been reviewed by the RTC Bicycle Committee and/or Elderly/Disabled Transportation Advisory Committee? (If "NO," project will be reviewed prior to RTC approval).	no
E. For "bikeways," does the project meet Caltrans minimum safety design criteria pursuant to Chapter 1000 of the California Highway Design Manual? (Available on the internet via: http://www.dot.ca.gov).	yes

Documentation to Include with Your Claim:

All Claims

- **A letter of transmittal** to SCCRTC addressed to the Executive Director that attests to the accuracy of the claim and all its accompanying documentation.
- **Resolution** indicating TDA eligible claimants' roles and responsibilities and commitment to maintain facilities as indicated in the submitted plans for a period of 20 years.

Article 3 & 8 Bicycle/Pedestrian Claims

- Evidence of environmental review for capital projects

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SUSTAINABILITY POLICIES	OUTCOMES ADVANCED							
	PEOPLE				PROSPERITY		PLANET	
	Access & Mobility	Health	Safety	Equity	Economic Benefit	Cost Effectiveness	Climate & Energy	Ecological Function
<i>Transportation System Management:</i> Implement Transportation System Management (TSM) programs and projects on major roadways across Santa Cruz County that increase the efficiency of the existing transportation system.	X				X	X	X	
<i>Transportation Demand Management:</i> Expand demand management programs that decrease the number of vehicle miles traveled and result in mode shift.	X	X			X		X	
<i>Transportation Infrastructure:</i>								
Improve multimodal access to and within key destinations.	X	X	X	X	X		X	
Ensure network connectivity by closing gaps in the bicycle, pedestrian and transit networks.	X	X	X		X		X	
Design system to reduce the potential for conflict between bicyclists, pedestrians, and vehicles.	X		X	X	X			
<i>Land Use:</i> Support land use decisions that locate new facilities close to existing services, particularly those that service transportation disadvantaged populations.	X			X		X		X
<i>Safety:</i>								
Prioritize funding for safety projects and programs that will reduce fatal or injury collisions.			X					
Encourage projects that improve safety for youth, vulnerable users and transportation disadvantaged.			X	X				
<i>Emergency Services:</i> Support projects that provide access to emergency services.	X		X		X			
<i>Cost Effectiveness & System Maintenance:</i> Maintain and operate the existing transportation system cost-effectively and in a manner that adapts the current transportation system to maximize existing investments.	X		X			X		
<i>Coordination:</i> Improve coordination between agencies in a manner improves efficiencies, and reduces duplication (e.g. paratransit and transit; road repairs; signal synchronization; TDM programs).						X		

RESOLUTION NO. NS-28,957

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA CRUZ
ADOPTING A BUDGET FOR FISCAL YEAR 2016

BE IT RESOLVED, by the City Council of the City of Santa Cruz, that the budget of the City of Santa Cruz for Fiscal Year (FY) 2016, as proposed in that certain document entitled "City of Santa Cruz Proposed Annual Budget Fiscal Year 2016," on file with the City Clerk, is hereby adopted for FY 2016, effective July 1, 2015, with the amendments and addenda thereto as determined by the City Council and detailed in the attached Exhibits:

Exhibit A - FY 2016 Summary of Budget Additions [\$702,700]

Exhibit B - FY 2016 Council-Approved One-Time Reductions [\$702,700]

Exhibit C - Summary of Expenditures and Other Financing Uses

BE IT FURTHER RESOLVED that the Finance Director is authorized to create additional appropriations in order to provide for necessary commitments carried over from the prior fiscal year, including contract and purchase order encumbrances and unexpended project balances, so long as there is a sufficient fund balance to finance these commitments.

PASSED AND ADOPTED this 23rd day of June, 2015, by the following vote:

AYES: Councilmembers Chase, Terrazas, Comstock, Posner, Noroyan; Vice Mayor Mathews; Mayor Lane.

NOES: None.

ABSENT: None.

DISQUALIFIED: None.

APPROVED: _____

Mayor

ATTEST: _____

City Clerk Administrator

AGENDA: February 8, 2016

TO: Bicycle Advisory Committee

FROM: Cory Caletti, Senior Transportation Planner/Bicycle Program Manager

RE: 2016 Committee Meeting Calendar

RECOMMENDATIONS

Staff recommends that the Bicycle Advisory Committee accept the draft 2016 meeting calendar and tentative agenda items.

BACKGROUND

The Santa Cruz County Regional Transportation Commission's Bicycle Advisory Committee meets every other month to determine planning, funding, and policy with the goal of improving safety and design of the County's bicycle network, and increasing ridership.

DISCUSSION

The Bicycle Advisory Committee draft 2016 Committee meeting calendar identifies six meetings to be held in 2016 and a draft list of meeting topics. Committee meetings are held on the 2nd Monday of every other month from 6 to 8:30pm unless otherwise noticed. The October meeting will be held one week later due to the Columbus Day Holiday on the 2nd Monday. Meetings are typically held in the RTC conference room. Other meeting topics are scheduled for discussion as needed.

RTC staff requests that the Bicycle Advisory Committee accept the draft 2016 committee meeting calendar and tentative agenda items (Attachment 1).

SUMMARY

The Bicycle Advisory Committee meets every other month from 6 pm to 8:30 pm in the RTC conference room unless otherwise noticed. The attached schedule provides dates and tentative agenda items.



Bicycle Advisory Committee

2016 Draft Meeting Schedule

- ***Meetings are held on the 2nd Monday of every other month from 6 pm to 8:30 pm in the SCCRTC Conference room unless otherwise noticed. The RTC is located at 1523 Pacific Avenue, Santa Cruz, CA 95060.***
- ***This is a draft list of meeting topics, both consent (C) and regular(R) agenda items, as well as anticipated announcements. Additional transportation planning, policy and funding items are agendized as needed. Please check the RTC website for the current packet agenda (posted about 4 working days before the meeting).***

February 8

- City of Santa Cruz TDA allocation request (C)
- City of Santa Cruz Coastal Rail Trail preliminary designs (R)
- Announce April Election of Chair/Vice Chair (A)
- Annouce list of appointment expirations and invite members to submit reappointment applications (A)
- 2016 Draft meeting schedule (C)
- Bicyclist Injuries and Fatalities for Santa Cruz County, 2013 (R)
- Bicycle Safety Observation Study 2015 (R)

April 11

- Elect Chair and Vice Chair (A)
- Updated Roster/Membership update (C)
- TDA Claim from Ecology Action for the Bike to Work program (C or R)
- TDA Claims from the Health Services Agency for the Community Traffic Safety Coalition and Ride 'n Stride programs (C or R)
- Draft "What Bicyclist and Pedestrians Want to Know About Each Other" brochure (R)
- Transportation Investment Ballot Measure (R)
- Regional Transportation Plan: Complete Project List (R)
- City of Watsonville Coastal Rail Trail preliminary designs (R)

June 13

TBD

August 9

TBD

October 17

TBD

December 12

TBD

As Needed

- TDA Claims from local jurisdictions
- Other items within the purview of the committee

Future Years

- January 2017: RTP Constrained Project List
- February 2018: Draft RTP and environmental document

The Santa Cruz County Regional Transportation Commission does not discriminate on the basis of disability. If you wish to attend this Bicycle Committee meeting and will require special assistance in order to participate, please contact the Secretary at 460-3200 at least 72 hours in advance of the meeting to make arrangements. As a courtesy to those persons affected, please attend the meeting smoke and scent free.

AGENDA: February 8, 2016

TO: Bicycle Advisory Committee

FROM: Cory Caletti, Senior Transportation Planner/Bicycle Program Manager

RE: City of Santa Cruz Preliminary Coastal Rail Trail Designs

RECOMMENDATION

Staff recommends that the Bicycle Advisory Committee receive a presentation from the City of Santa Cruz on preliminary designs for the Coastal Rail Trail project from Natural Bridges Drive to Pacific Avenue.

BACKGROUND

The City of Santa Cruz is the lead agency on design and construction of the Coastal Rail Trail within its jurisdiction and is working in partnership with the Santa Cruz County Regional Transportation Commission (RTC), owner of the rail right-of-way and responsible for overall implementation of the rail trail project in the county.

DISCUSSION

Over 150 people attended an informal public meeting on Thursday, Jan. 28 for the Coastal Rail Trail within the City of Santa Cruz. The City shared progress plans and drawings of the project including aerials and cross sections. PDFs of all materials are available below. The rail trail project will be a paved, 12 to 16-foot wide multi-use path from Natural Bridges Drive to Pacific Avenue near the wharf. Construction of this 2-mile segment is estimated to start in early 2017 and take one year.

This Coastal Rail Trail segment is the highest priority in the Santa Cruz County Regional Transportation Commission's Monterey Bay Sanctuary Scenic Trail Master Plan. The plan identifies the 32-mile coastal rail corridor from Watsonville to Davenport for an adjacent bike/pedestrian path and another 18 miles of spur trails to provide coastal and neighborhood connectivity. The RTC purchased the Santa Cruz Branch Rail Line to provide the bike/pedestrian trail and to pursue future passenger rail service.

The design and environmental services, construction, construction engineering and management, and permitting for this project is both state and federally funded, with a 20 percent local match. Community groups Friends of the Rail & Trail, Bike Santa Cruz County and Ecology Action have raised private donations as a match to public funds to help build this section of the Coastal Rail Trail. Such contributions demonstrate the strength of the community's engagement in assisting the City on a legacy project.

City of Santa Cruz Project Manager Nathan Nguyen will present preliminary designs and be available to respond to questions.

SUMMARY

The City of Santa Cruz is the lead agency for implementation of the Coastal Rail Trail from Natural Bridges Drive to Pacific Avenue. Staff recommends that the Bicycle Advisory Committee receive a presentation on preliminary project designs.

Attachments (available online on RTC's website):

1. [Natural Bridges Drive to Rankin Aerial](#)
2. [Younglove Ave to Pacific Ave Aerial](#)
3. [Cross Sections – Schematics](#)
4. [Signs and Bridge](#)
5. [Lennox St to La Barranta Park](#)

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AGENDA: February 8, 2016

TO: Bicycle Advisory Committee
FROM: Cory Caletti, Senior Transportation Planner/Bicycle Coordinator
RE: Bicycle Safety Observation Study and Bicycle Injury/Fatality Data

RECOMMENDATIONS

Staff recommends that the Bicycle Advisory Committee reviews and discuss the County of Santa Cruz Health Services Agency 2015 Bicycle Safety Observation Study and 2013 Bicycle Injuries and Fatalities for Santa Cruz County report.

DISCUSSION

The County of Santa Cruz Health Services Agency (HSA) works to reduce bicycle-related injuries in Santa Cruz County. In May and June of 2015, health education staff and community volunteers conducted a countywide Bicycle Safety Observation ([Attachment 1](#)) study to evaluate the impact of educational efforts on bicyclists' behavior. The data was then compared with similar studies done in previous years. Because Bicycle Committee members were among the community volunteers participating in the Bicycle Observation Survey, your feedback is being solicited by HSA staff.

Additionally included in the HSA report for Bicycle Advisory Committee review is the bicycle collision data from the Statewide Integrated Traffic Records System (SWITRS) for 2013 ([Attachment 2](#)). SWITRS is a statewide records system and acts as a centralized accumulation of data for fatal and injury traffic accidents. In addition, a large proportion of the reported property damage-only accidents are also processed into SWITRS. The reports are generated by reports from CHP areas, city police departments, sheriffs' offices and other local jurisdictions or entities.

SUMMARY

Staff recommends that the Bicycle Committee review and discuss the County of Santa Cruz Health Services Agency 2015 Bicycle Observation Survey Results and 2013 SWITRS Bicycle Collision Data.

Attachments:

- 1) County of Santa Cruz Health Services Agency's "Bicycle Safety Observation Study 2015" Report
- 2) Bicycle Injuries and Fatalities for Santa Cruz County – 2013

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County of Santa Cruz Health Services Agency

BICYCLE SAFETY OBSERVATION STUDY 2015

BACKGROUND AND PURPOSE

The Santa Cruz County Health Services Agency (HSA) along with the Community Traffic Safety Coalition (CTSC) and other community partners, has spent more than a decade working to reduce bicycle-related injuries and increase ridership in Santa Cruz County. To evaluate yearly trends in the number of cyclists and their behaviors, and to guide bicycle safety education efforts, this annual countywide survey was conducted during the months of May and June in 2015. Observations were made by HSA Community Health Education staff, members of the CTSC and their South County Bicycle and Pedestrian Work Group (SCBPWG), Santa Cruz County Regional Transportation Commission's (SCCRTC) Bicycle Committee members, and other community volunteers.

The study is designed to observe behaviors considered safe or unsafe by traffic safety experts when riding a bicycle. While some behaviors might be legal, such as those over the age of 18 years choosing not to wear a helmet while cycling, those same behaviors could increase the risk of injury or death and are therefore considered unsafe in this survey. Sidewalk riding, as an example, may be legal in some areas but could increase the risk of collision or conflict with other road users.

METHOD OF DATA COLLECTION

For the 2015 survey, a total of 24 staff and volunteers collected data at 52 locations throughout Santa Cruz County, 30 in North County and 22 in South County. This year the number of school sites observed increased from 17 to 19 with the deletion of Green Acres Elementary School and the addition of San Lorenzo Valley Elementary School, Cesar Chavez Middle School and Pajaro Valley High School. Also added this year was the intersection of Soquel Drive and Trout Gulch Road in Aptos.

The survey included three types of locations: commuter, school, and weekend. The commuter sites were observed on a Tuesday, Wednesday or Thursday, from 4:00 p.m. to 6:00 p.m. School sites were observed for an hour, beginning 45 minutes before each school's start time on a Tuesday, Wednesday or Thursday morning. Weekend sites were observed from 11:00 a.m. to 1:00 p.m. on a Saturday or Sunday. To ensure reliable results, observers were given instructions and a standardized data collection sheet. Data gathered included estimated age and gender, wearing a helmet, riding with traffic, stopping at a stop sign or red light, and riding on the sidewalk. Also recorded were the date, day of the week, and weather conditions. A section was available for observer comments as needed.

SUMMARY OF RESULTS

Significant overall findings for 2015 include:

- A total of 2,548 bicyclists were observed, compared to 2,786 in 2014 and 3,047 in 2013.
- 1,509 people were observed at commuter sites, 633 at weekend sites and 406 at school sites.
- 74% of cyclists were men, 25% were women.
- 58% of cyclists wore a helmet.
- Female cyclists had a helmet use rate of 70% compared to males at 54%.
- 86% of cyclists rode with traffic on the correct side of the road.
- 62% of cyclists stopped at stop signs and red lights.
- 21% of cyclists rode on the sidewalk.
- Safe cycling behaviors were consistently lower in South County than in North County.
- 275 cyclists, the highest number at a single site, were observed at High and Bay Streets in Santa Cruz.

Tables 1, 2 and 3 summarize the results of the 2015 survey by location, age and gender.

Table 1: Santa Cruz County (All 52 sites)

	Sample Size	%	Wore a Helmet	Rode with Traffic	Stopped at signs/ lights	Rode on sidewalk
Total Bicyclists	2548	100%	58%	86%	62%	21%
Males	1897	74%	54%	85%	59%	23%
Females	640	25%	70%	89%	69%	15%
Children (0-12 yrs)	130	5%	72%	67%	83%	67%
Teens (13-17 yrs)	219	9%	50%	72%	63%	47%
Young Adults (18-24 yrs)	579	23%	58%	90%	70%	11%
Adults (25+ yrs)	1608	63%	58%	88%	57%	16%

Table 2: North/Mid County Sites (30 sites)

	Sample Size	%	Wore a Helmet	Rode with Traffic	Stopped at signs/ lights	Rode on sidewalk
Total Bicyclists	2222	100%	63%	89%	64%	15%
Males	1602	72%	60%	88%	62%	16%
Females	609	27%	72%	91%	71%	12%
Children (0-12 yrs)	113	5%	81%	72%	86%	64%
Teens (13-17 yrs)	156	7%	66%	79%	63%	39%
Young Adults (18-24 yrs)	535	24%	62%	92%	74%	6%
Adults (25+ yrs)	1406	63%	62%	90%	59%	11%

Table 3: Watsonville Sites (22 sites)

	Sample Size	%	Wore a Helmet	Rode with Traffic	Stopped at signs/ lights	Rode on sidewalk
Total Bicyclists	326	100%	20%	67%	46%	57%
Males	295	90%	20%	68%	47%	57%
Females	31	10%	26%	60%	39%	63%
Children (0-12 yrs)	17	5%	6%	31%	60%	81%
Teens (13-17 yrs)	63	19%	11%	57%	64%	68%
Young Adults (18-24 yrs)	44	13%	5%	70%	28%	68%
Adults (25+ yrs)	202	62%	28%	73%	44%	50%

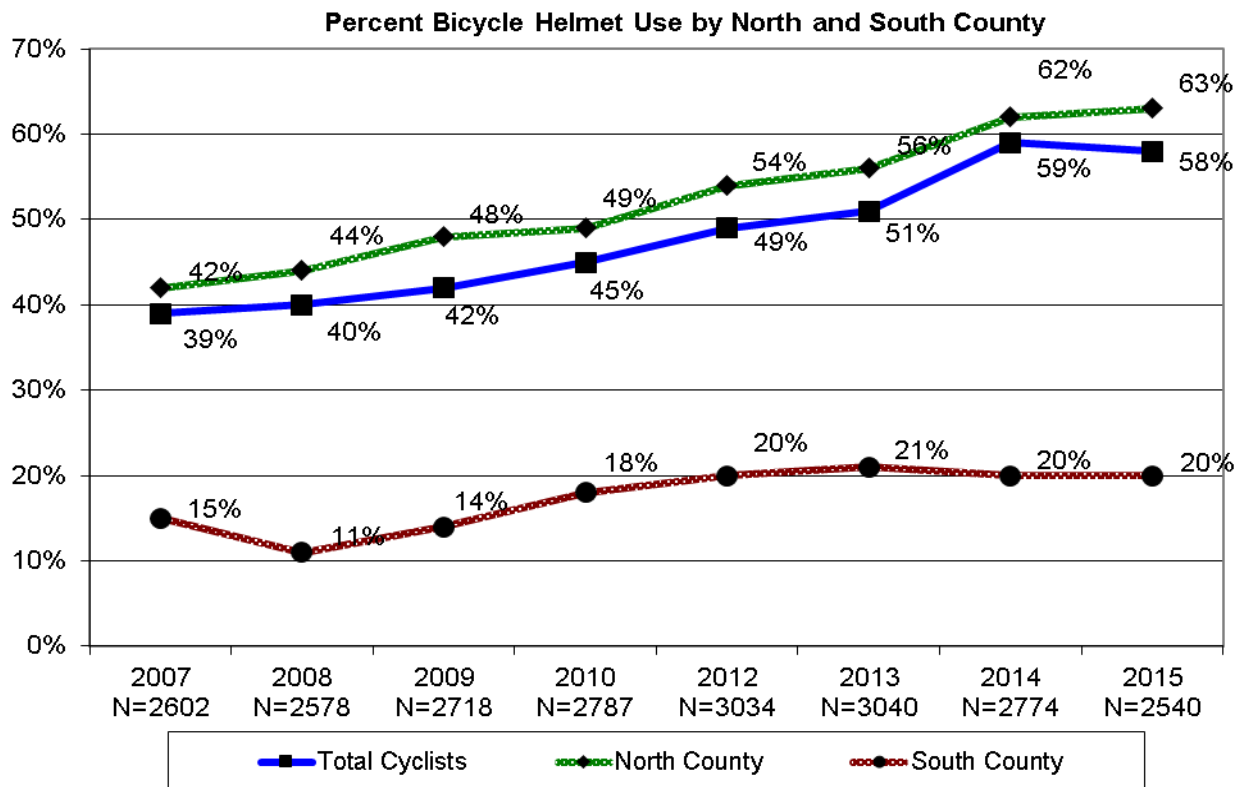
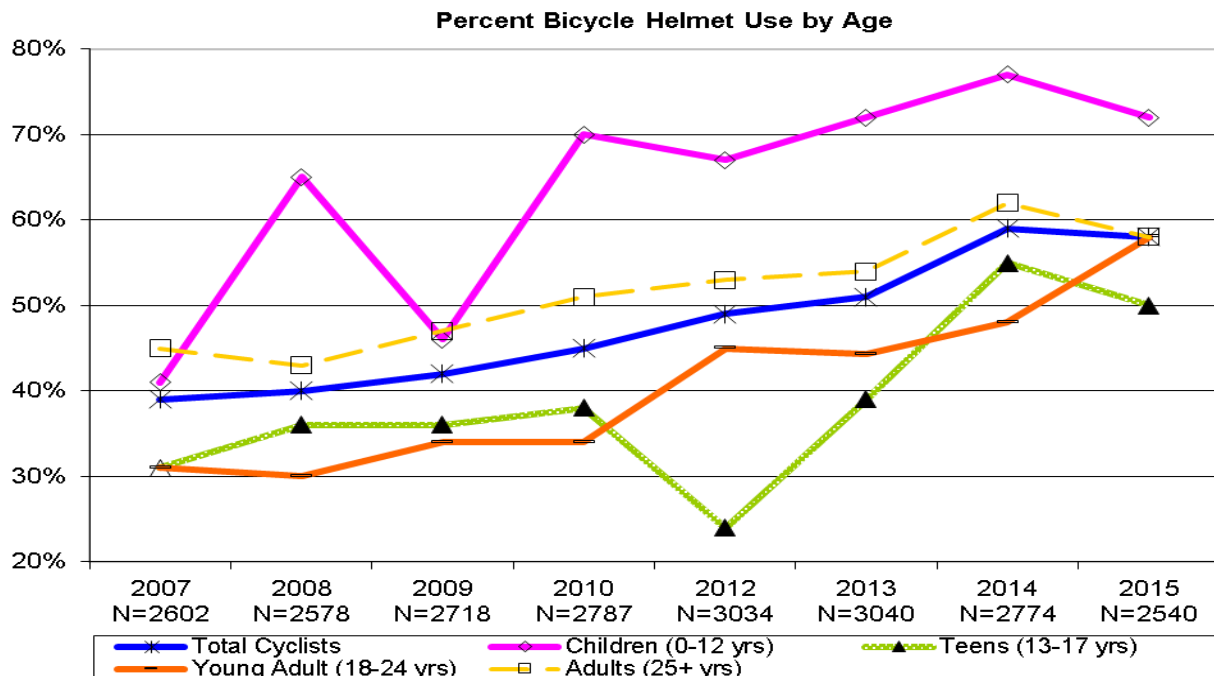
When making comparisons between North and South Counties, it is important to note that 87% (2,222) of the cyclists observed in 2015 were in North/Mid County and 13% (326) in Watsonville/South County.

TRENDS OVER TIME

The following sections compare survey data over a nine-year period from 2007 through 2015 for helmet use, riding with traffic, stopping at stop signs/lights, and riding on the sidewalk by gender and age. The survey was not conducted in 2011. Please note that the behavior fluctuations of some populations, especially children, are due in part to the small sample size observed.

Helmet Use

Although adults are not required to wear a helmet in California, the law requires those under 18 years of age to wear an approved, properly fitted and fastened helmet as an operator or passenger when bicycling, skateboarding, in-line or roller-skating, or riding a non-motorized scooter.

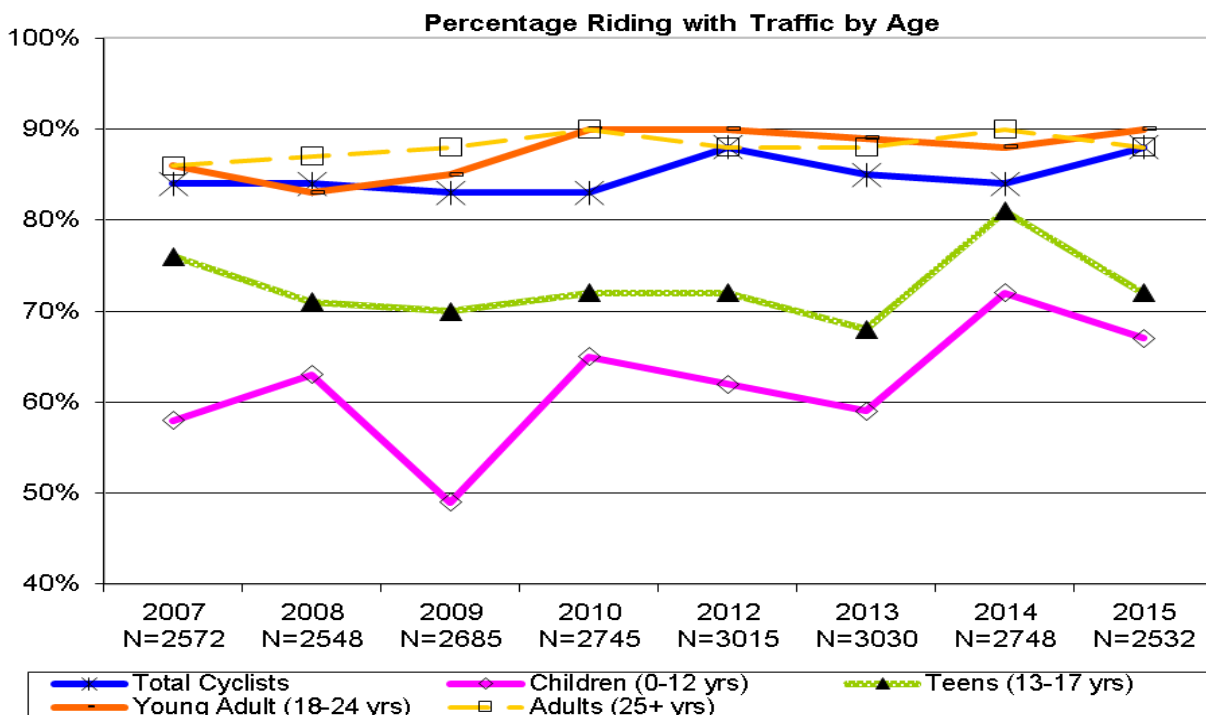


County-wide, children continue to wear helmets far more often than any other age category. Over the past nine years, they have shown an increase of 30 percentage points in helmet use to the current rate of 72%. Adults have seen a consistent but far less dramatic improvement to 58% in 2015. Although teens and young adults have shown a gradual upward trend over time, helmet use remains at less than 60% for both age categories. Females have consistently worn helmets at a higher rate than males in all of the years surveyed.

South County cyclists have had a lower helmet use rate compared to North County each year the survey has been conducted, hovering around the 20% mark for the past five years. In 2015, helmet use among cyclists observed in Watsonville/South County was 43 percentage points lower than among North County cyclists. Among the 17 children observed this year in Watsonville, only one wore a helmet.

Riding with Traffic

Riding with traffic continues to be a relatively safe cycling practice for the majority of cyclists observed. The percentage of children riding in the direction of traffic has been lower than all other age groups over the years surveyed, with a slight upward trend over time. 80 to 90 percent of adults and young adults have consistently ridden with traffic during the years surveyed.



Stopping at Stop Signs and Red Lights

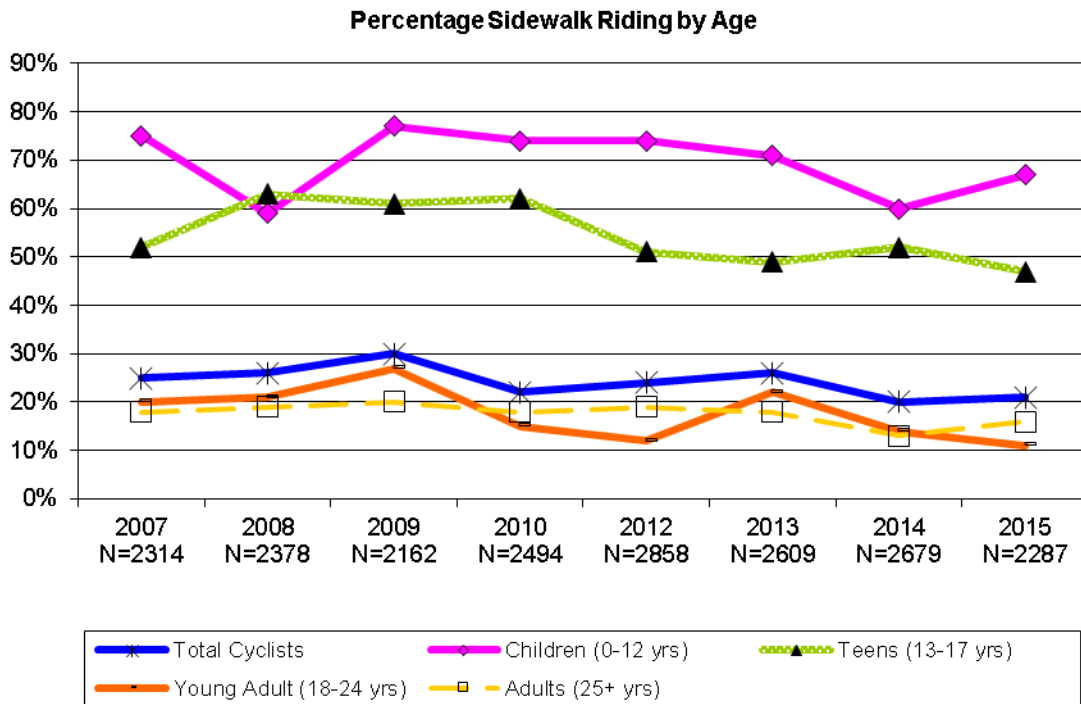
Stopping at stop signs and red lights continues to be a safety challenge for many cyclists. While more than 80% of children were observed stopping in 2015, all other age groups fell between 57 and 70 percent, with minimal improvement over the course of the survey years. Cyclists in South County were less likely to stop at stop signs or red lights (46%) compared to those in North County (64%).

Sidewalk Riding

Local ordinances exist in several jurisdictions in Santa Cruz County related to bicycle riding on the sidewalk. In the cities of Watsonville and Capitola, sidewalk bicycle riding is illegal in all areas. Within

the City of Santa Cruz, sidewalk riding is illegal only in commercial areas. The City of Scotts Valley and the unincorporated areas of the county do not have an ordinance in place.

While it is legal in some areas, sidewalk riding is generally considered unsafe due to poor visibility, the potential for conflict with other sidewalk users, and motorists not expecting a cyclist to come from the sidewalk to cross driveways or enter the roadway. For young children who may not have the operating skills and judgment to ride safely in traffic, practicing their skills on the sidewalk might be a safer option. These children should be supervised by an adult and always ride in the same direction as traffic.



Children have consistently ridden on the sidewalk at far higher rates than other age groups over the years surveyed, followed by teens. Young adults and adults ride on the sidewalk far less often, between 10% and 30% during the course of the survey. 57% of all cyclists observed in Watsonville in 2015 rode on the sidewalk versus 15% for North/Mid-county sites.

CONCLUSIONS

Based on the 2015 observation data, continued efforts are needed to increase safe cycling behaviors throughout Santa Cruz County. Data justify continued focus on youth through programs such as Ride n' Stride and other community partnerships. Outreach and education are particularly necessary in South County, where safe cycling behaviors observed were significantly lower than in North/Mid County, including a 43 percentage point gap in overall helmet use; a 42 percentage point gap in sidewalk riding; a 22 percentage point gap in riding with traffic; and an 18 percentage point gap in stopping at stops signs and lights.

While helmet use has shown a consistent increase over time, a large number of cyclists were still observed without helmets. This includes children and teens, who are required by state law to wear a helmet. Efforts should focus on identifying and disseminating bike helmet messages that appeal to youth, especially young men.

The County of Santa Cruz HSA provides staff to the CTSC, which works with affiliated partners to address bicycle safety in Santa Cruz County. CTSC programs include the Ride n' Stride Bicycle and Pedestrian Education Program, which reaches over 3,000 elementary and preschool students each year, and the South County Bicycle and Pedestrian Work Group to focus efforts in Watsonville, which are funded in part through the Santa Cruz County Regional Transportation Commission (SCCRTC). HSA also administers a Bicycle Traffic School for bicyclists who receive a traffic violation and a train-the-trainer model Helmet Fit and Distribution Site program to distribute free bicycle helmets. Many other bicycle safety efforts are also underway through partner agencies, such as the SCCRTC, Ecology Action, UCSC Transportation and Parking Services (TAPS), The Bicycle Trip, Bike Santa Cruz County, Santa Cruz County Cycling Club, as well as local public works departments and law enforcement agencies. Detailed results of this survey are available by request to inform all bicycle safety efforts in Santa Cruz County.

Funding for this project was provided in part by the Santa Cruz County Regional Transportation Commission and the California Office of Traffic Safety, through the National Highway Traffic Safety Administration. For more information, please contact the Community Traffic Safety Coalition c/o the Community Health Education Unit of the County of Santa Cruz Health Services Agency at 1070 Emeline Avenue, Santa Cruz, CA 95060, (831) 454-4312.

Bicyclist Injuries and Fatalities for Santa Cruz County, 2013

This report presents bicycle injuries and fatalities that occurred in Santa Cruz County in 2013 based on data obtained from the California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS)¹. According to SWITRS, in the 2013 calendar year there were 198 reported collisions that resulted in 197 cyclist injuries and 3 fatalities. Of these incidents, two were pedestrian/bicycle, two were bicycle/bicycle, 41 involved solo bicyclists, and the remainder were motor vehicle/bicycle.

It is important to note that this data was obtained by reviewing all bicycle-involved collisions for Santa Cruz County in 2013 as collected by the CHP in their SWITRS database from all local law enforcement agencies. This data does not include collisions that may have occurred off-road, nor does it examine data from medical providers or allow for self-reporting of incidents. According to hospital data from the California Department of Public Health, there were four fatalities, 622 emergency room visits, and 62 hospitalizations due to involvement in bicycle collisions in 2013 in Santa Cruz County².

In Federal Fiscal Year (FFY) 2013, the California Office of Traffic Safety (OTS) reported 215 cyclist injuries in Santa Cruz County and one death. Based on these numbers, the Santa Cruz County cycling injury/fatality rate per 100,000 was 80, the highest rate in the last ten years and more than double the California state rate of 37 for FFY 2013.

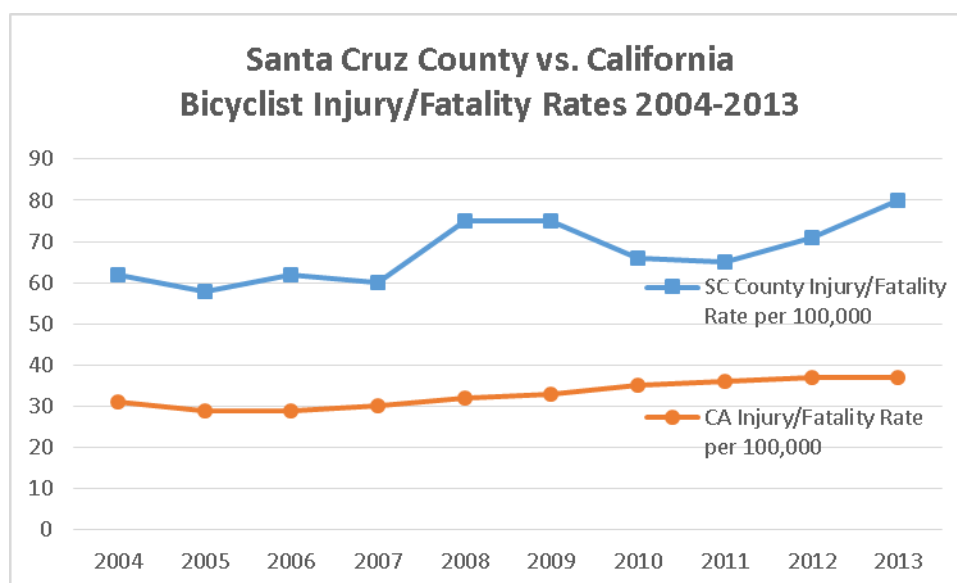


Table One: Bicyclist Injury and Fatality Rates per 100,000 Population 2004-2013

Location	2004	2005	2006	2007	2008	2009*	2020	2011	2012	2013
SCC Inj/Fat	162	152	155	152	191	192	172	173	192	216
SCC Rate	62	58	62	60	75	75	66	65	71	80
CA Inj/Fat	11,092	10,605	10,507	10,714	11,890	12,059	12,862	13,474	14,115	13,795
CA Rate	31	29	29	30	32	33	35	36	37	37

* As of 2009, OTS reports the number of bicyclists injured and killed by federal fiscal year (FFY) rather than calendar year.

Injuries and Fatalities by Jurisdiction

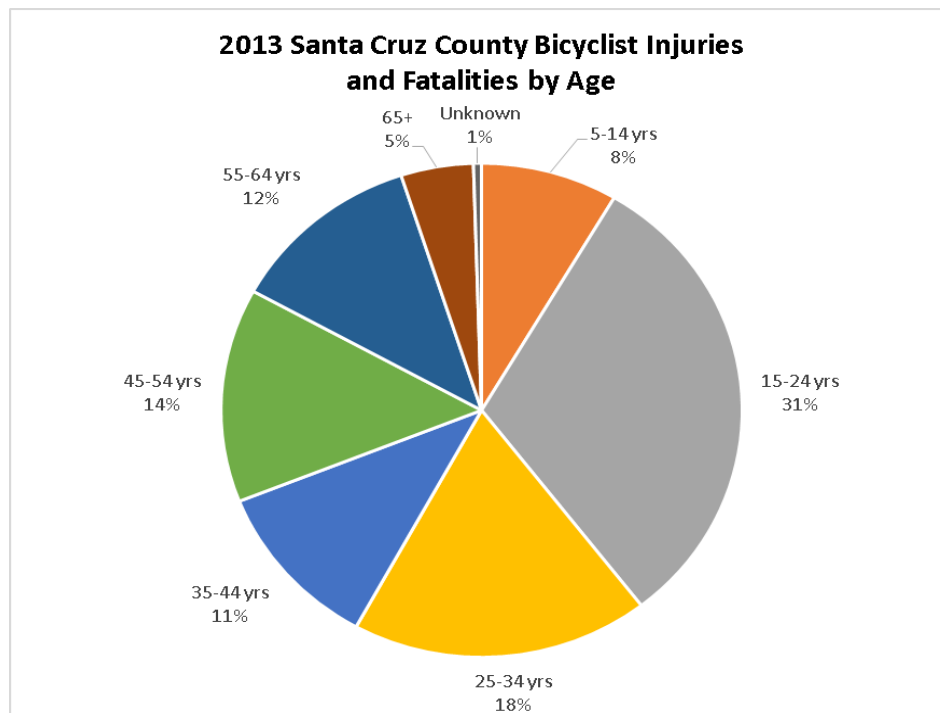
The majority of cycling injuries occurred in the City of Santa Cruz and the unincorporated area of Santa Cruz County. Of the 41 solo crashes, 22 occurred in the City of Santa Cruz. Two of the three deaths occurred in the unincorporated area and one death occurred in Watsonville. This is the first cyclist death in Watsonville since 2009. In the past ten years, neither Capitola nor Scotts Valley have seen a cyclist fatality, while Santa Cruz had a total of five deaths and the unincorporated area seven.

Table Two: SC County Bicycle Injuries/Fatalities by Jurisdiction, 2004-2013 Calendar Year

Jurisdiction	Bicyclists Injured (Killed)									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Capitola	20	7	5	6	8	4	9	9	8	8
Santa Cruz	63	71	82	64 (1)	91 (2)	68	57	70 (1)	91 (1)	112
Scotts Valley	6	2	0	14	4	8	1	2	4	3
Watsonville	17	12	13	3	16	18 (1)	11	17	23	11 (1)
Unincorp.	56	59 (1)	54 (1)	63 (1)	70	76 (2)	69	70	90	59 (2)
UCSC	n/a	n/a	n/a	n/a	n/a	12	11	1	3	4
SCC Total	162 (0)	151 (1)	154 (1)	150 (2)	189 (2)	186 (3)	158 (0)	169 (1)	219 (1)	197(3)

There were a number of locations where multiple bicycle injury collisions occurred. In Santa Cruz, there were eight incidents each on Bay Street, Water Street and Soquel Avenue. In the unincorporated area, 14 injuries occurred on Soquel Drive with one death on Cathedral Drive. There were five incidents on Highway One, including one death near Dimeo Lane. The cyclist death in Watsonville occurred on Beach Street.

Injuries and Fatalities by Age



Countywide, those aged 15-24 years were injured more often than any other age group, accounting for 31% of county cycling injuries and fatalities in 2013. Nationally, those 15 to 24 years of age accounted for 33% of injuries and 15 % of fatalities³. Those aged 25-34 years were the second highest injury group in Santa Cruz County at 18%.

Collision Factors

In examining the SWITRS data for collision factors, the cyclist was listed at fault in 107 (54%) of the crashes, including two of the three fatalities. For cyclists at fault, the primary collision factors were improper turns (22) and unsafe speeds (19), followed by failure to yield to a motor vehicle with the right of way (17). In the deaths where the cyclist was listed at fault, one was due to unsafe speed and the other involved alcohol use by the cyclist. Unsafe speed and improper turns remained the two highest collision factors in incidents that involved a solo cyclist.

Drivers were at fault in 73 crashes, or 37% of the time. The most common factors were improper turns (30) and failure to yield to a cyclist with the right of way (20). In the cyclist death where the driver was listed at fault, improper turning was the primary collision factor. In 9% of collisions, fault was not determined.

A total of 16 hit-and-run injuries involving cyclists were reported in 2013. There were no collisions in which the driver's use of alcohol or drugs was considered the primary factor. There were five collisions in which the cyclist was cited for being under the influence, including four of the solo cyclist crashes and one bike/bike collision. Nationally, alcohol involvement for either the driver or the cyclist was reported in 34% of crashes that resulted in a cyclist's death³.

County and City Bicycle Safety Rankings

In 2013, the California Office of Traffic Safety (OTS) ranked Santa Cruz County second out of 55 counties reporting for cyclists injured or killed⁴. The City of Santa Cruz ranked first among 103 comparable cities for cyclist injuries and deaths and 5th for cyclists under the age of 15. Capitola ranked 7th out of 105 comparable cities for cyclists under 15.

Although Santa Cruz County tends to receive a high ranking for bicyclists injured and killed, the number of people cycling in Santa Cruz is also high. According to the American Community Survey, 0.6% of workers in the United States cycled to work as their primary means of transportation during the five-year period from 2009 to 2013, however 5.4% did so in Santa Cruz County⁵. The OTS rankings are primarily based on population and daily vehicle miles traveled. A more accurate indicator of relative safety or risk would be rankings based on the number of bicyclists or the number of miles traveled by bicycle, but those counts are not currently available.

Conclusions

Continued efforts are needed among traffic safety partners to reduce cyclist injuries and fatalities through education, enforcement and improvements in bicycle-friendly infrastructure in Santa Cruz

County. Based on the 2013 data, outreach and education needs to be directed at both drivers and cyclists about safe behavior on and around Santa Cruz County roads. Particular focus should be given to the City of Santa Cruz, where the majority of injuries occurred, including the majority of solo cyclist crashes. More information is needed to understand the underlying causes of these solo crashes, which in addition to cyclist behavior, may be related to infrastructure problems such as pot holes, narrow travel lanes, etc. Efforts should be made to reach teens and young adults, aged 15 to 24 years, as they are most likely to be injured while cycling. The issue of cycling while under the influence should also be addressed. Improved technology and procedures would ensure that the most accurate injury and fatality data is gathered and analyzed.

References

1. California Highway Patrol, Statewide Integrated Traffic Records System. Retrieved 3/13/15 from <http://iswitrs.chp.ca.gov/Reports/jsp/CollisionReports.jsp>
2. California Department of Public Health <http://epicenter.cdph.ca.gov/ReportMenus/DataSummaries.aspx>
3. National Highway Traffic Safety Administration: Traffic Safety Facts 2013: Bicyclists and Other Cyclists. Retrieved from <http://www-nrd.nhtsa.dot.gov/Pubs/812151.pdf>
4. California Office of Traffic Safety http://www.ots.ca.gov/Media_and_Research/Rankings/default.asp
5. United States Census Bureau, American Community Survey Reports. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

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