



## SANTA CRUZ COUNTY TRAFFIC OPERATIONS OVERSIGHT COMMITTEE AND SAFE ON 17 TASK FORCE

Wednesday, March 11, 2015  
10:00am-12:00pm

California Highway Patrol – San Jose Area  
2020 Junction Ave, San Jose, CA 95131

**Teleconference: (712) 775-7031**  
**Meeting ID: 339-754-287#**

1. Introductions
2. Additions or Deletions to the Agenda
3. Approve Draft Minutes of the September 10, 2014 Joint TOS Oversight Committee and Safe on 17 Meeting – **page 3**
4. Senate Bill 344 – Commercial Driver Safety Training Bill – **page 8**
5. Information Items
  - a. FSP Program Update (Ginger Dykaar) - **page 11**
  - b. Cruz 511 Project Update (Tegan Speiser) - **page 14**
  - c. Articles/Public Feedback (Ginger Dykaar) - **page 16**
6. California Highway Patrol – Safe on 17 Program Information
  - a. Review Collision and Enforcement Statistics (San Jose) for August 2014 through January 2015 (Captain Bishop) - **page 20**
  - b. Review Collision and Enforcement Statistics (Santa Cruz) for August 2014 through January 2015 (Officer Sadek) - **page 22**
  - c. 2014 Highway 17 Extra CHP Enforcement Hours Public Information Activities (Officer Sadek and Captain Bishop)
  - d. Extra Enforcement Hours for August 2014 through January 2015 (Ginger Dykaar) - **page 24**
7. Major Incident Review (CHP)
8. Caltrans District 5 Highway 17 Project Update - **page 25**
  - a. Laurel Curve Shoulder Widening Update (Jennifer Wilson/Bertha Roman)
  - b. Hwy 17 Access Management Plan (Brandy Rider/Kelly McClendon)
  - c. Hwy 17 Transportation Concept Report (Kelly McClendon) – **page 27**
  - d. Other Projects - **page 44**
  - e. Maintenance Projects/Updates



9. Caltrans District 4 Highway 17 Project Update
  - a. Highway Projects (Bernard Walik)
  - b. Maintenance Projects/Updates
  
10. Traffic Operations Systems
  - a. Transportation Management Center Update (Ramin Bolourchian)
  - b. Communications Update (Nicole Stewart)
  - c. Hwy 1 and 17 TOS Equipment Update (Jacques Van Zeventer)
    - i. CCTVs
    - ii. Traffic Detection Equipment (Ginger Dykaar)
    - iii. Other
  - d. Caltrans QuickMap Update –(Jacques Van Zeventer)
  
11. Additional Items
  
12. Next Meeting Date: Joint Safe on 17 Task Force & TOS Oversight Committee Meeting – Wednesday, September 16, 2015 10:00 am to 12:00 pm at Santa Cruz County Regional Transportation Commission



JOINT MEETING OF  
 SANTA CRUZ COUNTY TRAFFIC OPERATIONS SYSTEMS (TOS) OVERSIGHT COMMITTEE  
 AND  
 SAFE ON 17 TASK FORCE

**DRAFT MINUTES**  
 Wednesday, September 10, 2014  
 10:00am-12:00pm

**Santa Cruz County Regional Transportation Commission  
 1523 Pacific Ave, Santa Cruz**

**TOS Oversight Committee and Safe on 17 Task Force Meeting Participants**

- Captain Les Bishop, San Jose CHP
- Lt Brian Hawkins, Santa Cruz CHP
- Marshall Ballard, VTA
- Officer D.J.Sarabia, San Jose CHP
- Arthur De La Cerda, Caltrans D4 Maintenance
- Pedro Alcazar, Caltrans D4 Maintenance
- Bertha Roman, Caltrans D5
- Russell Ellingworth, Caltrans D5 Maintenance
- Christopher Cook, Caltrans D5
- Jarrett Winter, Santa Clara County Fire Department
- Ramin Bolourchian, Caltrans D4 TMC
- Mitchell Nelson, representing Supervisor Ken Yeager, Santa Clara County Board of Supervisors
- Bruce McPherson, Santa Cruz County Board of Supervisors
- Kelly McClendon, Caltrans D5, Planning
- Brandy Rider, Caltrans D5, Planning
- Earl Sherman, Caltrans D4
- Officer Brad Sadek, Santa Cruz CHP
- John Leopold, Santa Cruz County District Supervisor
- Bernard Walik, Caltrans D4
- Devin Porr, Caltrans D5
- Nick Saleh, Caltrans D4
- Jacques Van Zeventer, Caltrans D5 (teleconference)
- Colin Jones, Caltrans D5 (teleconference)
- Kim Schultz, Santa Cruz County Regional Transportation Commission
- Amy Naranjo, Santa Cruz County Regional Transportation Commission
- Luis Mendez, Santa Cruz County Regional Transportation Commission
- Ginger Dykaar, Santa Cruz County Regional Transportation Commission



1. **Introductions** – Introductions were made.
2. **Additions or Deletions to the Agenda** – none.
3. **Reviewed and Accepted Minutes of the March 12, 2014 Joint TOS Oversight Committee and Safe on 17 Meeting**
4. **Received Information Items**

Amy Naranjo presented the Freeway Service Patrol (FSP) Program Update. Ladd's Towing is the tow operator for FSP for Hwy 1 and 17 from September 2013 through July 2017. Matching funds for FSP service on Highway 1 and 17 for FY 13/14 have been secured from RSTP funds. During FY 13/14, there were 1,944 hours of FSP service with 792 assists on Highway 17 and on Highway 1, there were 1,746 hours of FSP service with 721 assists.

Amy Naranjo presented the 511 update. RTC staff is developing a 511 website "Cruz 511" to provide traffic condition and multimodal transportation information that is tailored to Santa Cruz County residents and visitors. The website will include traffic condition information using Caltrans QuickMap as well as multimodal, rideshare and emergency information. Quickmap provides information on planned construction projects one week ahead of time.

Ginger Dykaar presented information on the 2013 Safe on 17 Annual Report. The 2013 Safe on 17 Annual Report reviews the work done by the CHP, Caltrans, RTC and other stakeholders to continue to improve safety on Highway 17. The total number of collisions in 2013 tied with 2009 for the lowest on record since 1996. Copies of the report are available on the RTC website ([www.sccrtc.org](http://www.sccrtc.org)).

Articles/Public Feedback – The majority of articles of significance to Hwy 17 in the news were about the big-rig collision near Lexington reservoir on July 10, 2014. In the articles, members of the public expressed concern about the continued use of Hwy 17 for trucks especially during commute hours. Caltrans response to this concern has been that there are no other alternative routes for trucks to travel between SC and the South Bay.

5. **Received Update on California Highway Patrol Safe on 17 Program Statistics and Public Information Efforts**

Captain Bishop with San Jose CHP stated that San Jose CHP will work on distributing the hours for extra enforcement throughout the year. June was a banner month with 984 citations. Officer Sadek of Santa Cruz CHP stated that collision stats and citations for 2014 are on par with previous years.



CHP San Jose and CHP Santa Cruz incorporate the message of safety on highway 17 in all of their public affairs activities, whether it is recruiting booths or information tables, senior or teen driver training classes.

Ginger Dykaar discussed the extra enforcement hours. Santa Cruz CHP extra enforcement hours are distributed fairly evenly throughout the months of the year. San Jose CHP extra enforcement hours were concentrated in the spring of this year with about 2/3 of the total hours for the year during the month of June. She emphasized the importance for having a thought out plan for how best to use these extra resources for minimizing the number of collisions on highway 17.

## **6. Received Major Incident Review**

San Jose CHP Captain Bishop reviewed the big-rig incident on Hwy 17 near Lexington Reservoir. He complemented his lieutenant and Caltrans for working together to set up a contraflow so that at least one lane of traffic was available in each direction during this incident.

## **7. Received Caltrans District 5 Highway 17 Project Update**

Bertha Roman from CT D5 presented the Laurel Curve Shoulder Widening Update –The shoulder in the NB direction, north of the intersection with Laurel Rd will be widened and a retaining wall constructed in order to increase site distance and to allow more time for steering correction around this curve. The radius of the curve will stay the same. The majority of the work will occur during the day but there will not be any lane closures during the daytime. Work should be completed within one year.

Brandy Rider and Kelly McClendon presented the Access Management Study that has begun for the Hwy 17 corridor from the City of Scotts Valley to Summit Rd. The plan will identify issues related to access, mobility and safety, develop potential improvements and assess feasibility of implementation. An executive steering committee as well as a technical advisory committee will be formed to provide input throughout the development of the plan. The plan will be developed over an 18 month to two year period. The end result of the plan will be a number of alternative packages at various different scales that address access, mobility and safety of the Hwy 17 corridor. Caltrans D4 may be interested in being included on this effort as well as VTA.

Commissioner John Leopold asked to make sure that the public was involved at the early stages of the project as well as the middle and end and Ms. Rider assured him that would be the case.

Summit Slide Repair - Construction has been completed and the project will be finalized once plants have been established.

## **8. Received Caltrans District 4 Highway 17 Project Update**



Nick Saleh, Principal Engineer from D4, presented the project update for Santa Clara County side of Hwy 17. There are no major active projects currently for Hwy 17 on the Santa Clara County side. Nick mentioned that good alternate routes to Hwy 17 are not available, as was evident during the big-rig collision on July 10, 2014. There will be highway safety improvement projects on Hwy 9 and Hwy 152 in order to address the safety issues on these alternate routes. Hwy 17 may be affected as traffic is diverted from Hwy 9 and 152.

Caltrans staff stated that the Hwy 85 ramp metering project is schedule to be ready by the end of 2014 or early 2015 which may impact Hwy 17. Marshall Ballard, VTA, is actively seeking funds for additional ramp metering projects on the Santa Clara County side of Hwy 17.

Jarrett Winter from Santa Clara Fire Dept asked about plans for tree trimming on the Santa Clara county side of Hwy 17. Earl Sherman, Caltrans D4, said that maintenance crews have been addressing the trees as a way to reduce the fuel sources that are close to the highway but there are only short windows when trees can be trimmed since work needs to be done during the daytime. Contact information will be exchanged between Jarrett and Earl.

## **9. Received Traffic Operations Systems Updates**

Traffic Management Center (TMC) Update - Ramin Bolourchian stated that if anyone sees any problems with the changeable message signs (CMSs), to please contact the TMC.

Communications Update - Ginger Dykaar stated that she worked with Nicole Stewart from CHP dispatch to evaluate the response times for the CMSs relative to the start of the incidents. For all of these incidents, the CMSs were turned on within 30 minutes of the initial call received from the CHP communicating that there was an incident. There was one incident on Hwy 17 NB where the CMS on Hwy 1 near 41<sup>st</sup> Ave did not turn on likely due to it not being operational.

Equipment Update- Jacques Van Zeventer stated that Caltrans D5 has a project to install closed circuit television cameras (CCTVs) on Hwy 1 between Soquel/Morrissey and Freedom. Not all cameras will appear on Caltrans main website as a live traffic feed due to bandwidth constraints, but they all will be available on the Caltrans Quickmap as images that are refreshed every 2 minutes. Eight cameras are scheduled to be on Quickmap by early 2015. A smaller subset of live streaming videos from the CCTVs may not be available until later in 2015. Funding to maintain the TOS equipment is extremely limited. Jacques will investigate whether Motor Vehicle Detection Systems (MVDSs) are operational between Freedom Blvd and Watsonville.

QuickMap Update - Jacques Van Zeventer discussed Caltrans "QuickMap." Caltrans Quickmap is a traffic map page that contains real-time traffic speed data, lane closures,



CHP incidents, CCTV images and CMS sign messages. He also reported that there is a link available with planned lane closures for motorist who live in an area or commute through an area where construction will take place. He suggests that truckers use this data so that they know what road closures may occur in the future.

**10. Received Additional Items**

Ginger Dykaar stated that the current contract with CHP for extra enforcement goes through June 2015. RTC staff will be discussing with MTC and the RTC a possible three-year extension to the contract.

**11. Approved Next Meeting Date**

Joint Safe on 17 Task Force & TOS Oversight Committee Meeting – Wednesday, March 11, 2014 10:00 to 12:00 at San Jose CHP, 2020 Junction Ave, San Jose, CA 95131.

Respectively submitted by   
Ginger Dykaar

**SB 344 FACT SHEET**  
**SENATOR BILL MONNING**  
**COMMERCIAL DRIVER SAFETY TRAINING**

**PROPOSED BILL**

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Senate Bill (SB) 344 requires those seeking a commercial driver's license (CDL) to complete a course of instruction from a commercial driving institution before being issued a CDL.

The Department of Motor Vehicles (DMV) will certify the course training program meets minimum standards necessary to ensure drivers are proficient in safely operating commercial vehicles.

SB 344 removes the Bureau for Private Postsecondary Education exemption for institutions offering certified CDL courses.

**EXISTING LAW**

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To obtain a valid CDL, you must pass a written test and driving test established by the DMV that complies with the federal Commercial Motor Vehicle Safety Act.

Institutions that charge less than \$2,500 for a course are exempt from Bureau regulation.

**BACKGROUND**

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Commercial vehicles that require a CDL include a variety of motor carriers (trucks) over 26,000 lbs., passenger buses, and vehicles carrying hazardous materials.

Federal law requires the Federal Motor Carrier Safety Administration (FMCSA) to complete a negotiated rulemaking on Entry-Level Driver Training for individuals who want to operate commercial vehicles. States

are allowed to exceed federal standards when adopting CDL programs.

Washington State passed legislation that requires mandatory training for entry level commercial vehicle drivers and ensures driver training schools meet minimum state standards (House Bill 2829, Chapter 219, Laws of 2006).

**NEED FOR LEGISLATION**

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In California, there were 5,327 truck collisions reported in 2012, of which 235 were fatal. Recently, a tragic truck accident on Highway 17 occurred when a truck driver lost control and crashed into 10 cars, injuring 7 and killing 25-year-old Daniel McGuire of Santa Cruz. The truck driver's lack of adequate training and experience was a major factor in the crash.

Without holding commercial vehicles and drivers to the highest safety standards, they can pose a serious safety risk to the public. By ensuring that commercial truck drivers are receiving an adequate standard of training, we will reduce the risk of tragic and fatal commercial vehicle accidents.

SB 344 increases California's CDL requirements to be close to industry best standards and will eliminate truck driving diploma mills, which allow a driver to pass a DMV test without acquiring the driving skills necessary to operate commercial vehicles.

California needs to act now to ensure that new commercial vehicle drivers receive effective training and operate safely on our roads.

SB 344 will improve the CDL program and provides the DMV with the authority to update the program in order to comply with FMCSA requirements.

**SUPPORT**

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None at this time

**OPPOSITION**

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None at this time

**FOR MORE INFORMATION**

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Contact: Ryan Guillen

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Email: [ryan.guillen@sen.ca.gov](mailto:ryan.guillen@sen.ca.gov)

# Senator Monning Introduces Commercial Driving Safety Bill

February 24, 2015

(SACRAMENTO, CA) - Senator Bill Monning (D-Carmel) has introduced legislation to improve road safety by strengthening training requirements for commercial drivers.

“Commercial drivers who lack adequate training put everyone on the road at risk,” Senator Monning said. “Requiring more rigorous training for drivers of big rigs and other large commercial vehicles is a common sense safety measure. This bill will help prevent accidents and...most importantly...save lives.”

In July 2014, a tragic truck accident on Highway 17 occurred when a truck driver lost control and crashed into 10 cars, injuring 7 and killing 25-year-old Daniel McGuire of Santa Cruz. The truck driver’s lack of adequate training and experience was deemed a major factor in the crash.

“Losing our son at the hands of an inexperienced truck driver was entirely preventable,” Gail-Jean McGuire said. “Sufficient behind-the-wheel training for truck drivers is necessary to save countless families from experiencing the tragedy of losing a loved one in a preventable accident.”

Under current law, Californians do not have to take a course of instruction prior to obtaining a commercial driver’s license from the Department of Motor Vehicles (DMV). SB 344 requires those seeking a commercial driver’s license to complete a course of instruction from a commercial driving institution before they can be issued a license by the DMV. The DMV will certify that course training programs meet minimum standards to ensure driver proficiency when operating commercial vehicles.

Currently, institutions that charge less than \$2500 for a commercial driver’s license training course are exempt from regulation by the Bureau for Private Postsecondary Education. In an effort to stop the proliferation of diploma mills, SB 344 removes this cost exemption.

Assemblymember Mark Stone (D-Monterey Bay) is a co-author.

**TO:** Safe on 17 Task Force & Traffic Operation Systems Oversight Committee  
**FROM:** Ginger Dykaar and Amy Naranjo, Transportation Planners  
**RE:** Santa Cruz County Freeway Service Patrol Program Update

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## **RECOMMENDATION**

Receive an update on the Santa Cruz County Freeway Service Patrol Program.

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## **BACKGROUND**

The Santa Cruz County Regional Transportation Commission (RTC) operates the Freeway Service Patrol (FSP) program in Santa Cruz County. This program consists of two tow trucks patrolling Highway 1 from Highway 9 to State Park Drive and Highway 17 from Mount Herman Road to the Santa Clara County Line. Both highway segments are patrolled during weekday commute periods. Traditionally, the Highway 17 segment is also patrolled on Sundays from 1:00 pm to 7:00 pm all year round and Saturdays from 1:00 pm to 7:00 pm during the summer. For the past few summers, Hwy 1 has also been patrolled from 1:00 to 7:00 pm on most Saturdays and Sundays. FSP tow trucks remove disabled vehicles from the highway at no cost to the motorists. The FSP program is designed to reduce congestion, improve safety, and reduce fuel consumption and auto emissions by minimizing the congestion associated with collisions and other incidents.

## **DISCUSSION**

### ***FSP Funding***

Caltrans allocates funds to each FSP program based on a formula that includes population, freeway lane miles and congestion (daily vehicle-hours of delay). Caltrans requires a match of 25% from the administering agencies to support the FSP program. Historically, the FSP matching funds from Santa Cruz County have been about 50% and have been funded from a variety of sources including Santa Cruz County's regional share of State Transportation Improvement Program (STIP) funds, Service Authority for Freeway Emergency (SAFE) funds, and Regional Surface Transportation Program (RSTP) funds. **Matching funds for FSP for FY 14/15 have been secured from RSTP funds.**

### ***Highway 1 and 17 FSP Contract***

The RTC is currently contracting with Ladd's Towing for Freeway Service Patrol on Highway 1 and Highway 17. The term of the contract runs from September 2013 through July 2017. During FY 13/14, there were 1,944 hours of FSP service with 792 assists on Highway 17 and on Highway 1, there were 1,746 hours of FSP

service with 721 assists. So far for FY 14/15 there have been a total of 893 FSP assists.

### Number of FSP Assists per Fiscal Year

	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15 (to date)
<b>Beat 1 HWY 17</b>	762	767	770	762	792	440
<b>Beat 2 HWY 1</b>	713	820	800	784	721	453
<b>TOTAL</b>	1475	1587	1570	1546	1513	893
<b>Percent Change</b>	-9.8%	7.1%	-1.1%	-1.6%	-2.2%	

### Login and Assist Data Devices

As part of tracking FSP service on the two beats in Santa Cruz County, the drivers are provided a device for logging in and logging out of their beat as well as providing information on each assist. The devices previously used were at the end of their useful life. The devices were replaced with iPad Minis that are able to not only collect the data that the driver's enter but also allows the location to be recorded and the time that the data is submitted. This data is then automatically sent to a database when the driver's have access to Wi-Fi. This is a very useful, simple and inexpensive way to track when the drivers are on their beats and the location where they submit their login and logout information. The location data for login and logout is mapped to easily assess the login/logout locations (Figure 1).

### FSP Management Information System

Caltrans analyzes the cost benefits for FSP services throughout the state on a yearly basis. The draft report for the FY 13/14 shows that for Santa Cruz County the most common problem types are mechanical problems (20%) and collisions (16%). There were 25 assists for big rigs and 1,298 were for autos and SUVs. Approximately 60% of the assists were on the right shoulder, 14% in the lane and 6% on the left shoulder. Average duration of the assists was 14 minutes and mechanical problems had the longest average duration of 18 minutes. The assist rate for both beats is the same at 0.41 assists per hour or 1 assist every 2.4 hours.

### SUMMARY

Matching funds for FSP service on Highway 1 and 17 for FY 14/15 have been secured from RSTP funds. Ladd's Towing is the tow company that provides FSP service on Highway 1 and Highway 17 for the contract term September 2013 through July 2017. New data devices have been provided the FSP drivers which allow better tracking of login/out time and location. The assist rates for both beats is 0.41 assists per hour or 1 assist every 2.4 hours.

S:\TOS\TOS2015\March\packet\4a. FSPProgramUpdate.docx

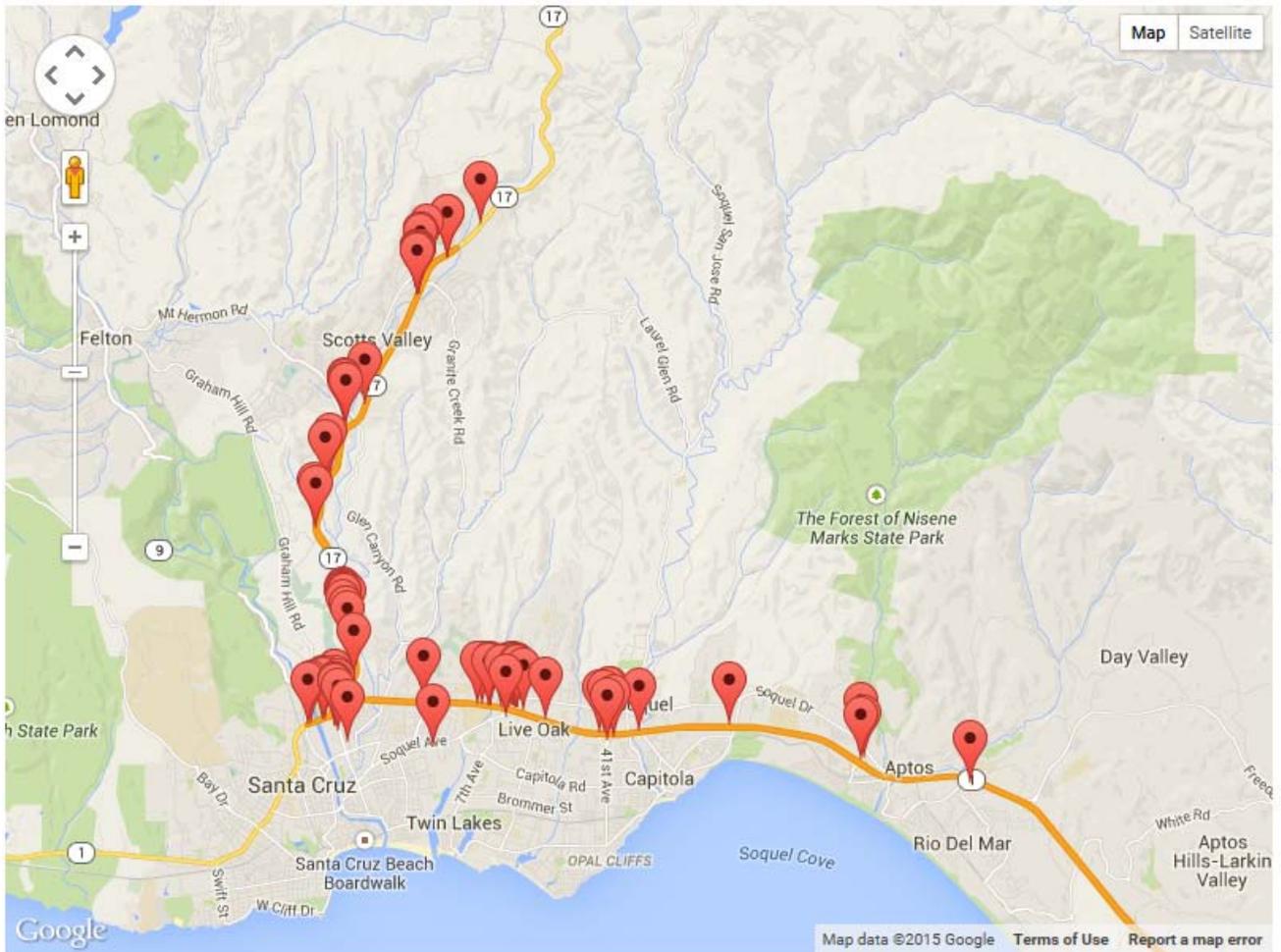


Figure 1. Log in and log out locations for both Highway 1 and Highway 17 beats for month of February, 2015

**TO:** Safe on 17 Task Force & Traffic Operation Systems Oversight Committee  
**FROM:** Tegan Speiser, Transportation Planner  
**RE:** Santa Cruz County 511 Traveler Information Services

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## **RECOMMENDATION**

Receive an update on Santa Cruz County 511 Traveler Information Services.

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## **BACKGROUND**

With the support of a Caltrans Partnership Planning Grant, the Santa Cruz County Regional Transportation Commission (RTC) and the Transportation Agency for Monterey County (TAMC) completed a feasibility study and implementation plan for establishing a 511 traveler information service in the Monterey Bay Area. In December, 2013 the RTC authorized staff to develop and implement a web-based 511 traveler information service for Santa Cruz County as outlined in the 511 Implementation Plan.

## **DISCUSSION**

As a nationally recognized brand for traveler information, 511 provides travelers with easy access to traveler information and empowers people to better plan or adapt their trips based on knowledge about current travel conditions. Communities across California have developed and implemented 511 programs and the Monterey Bay Area is one of the few remaining gaps in this information network.

RTC staff is currently working on Cruz511.org, a Santa Cruz County 511 mobile responsive website designed for viewing on smart phones, and tablets as well as computers. The Cruz511.org website will feature:

- Information on real-time traffic speeds, incident information and traffic cameras using data from Caltrans and CHP
- Multimodal information and trip planning tools
- Specialized transportation
- Emergency alerts and notices
- Rideshare tools and information and
- Links to local transportation providers, services and resources

Progress towards implementing the Cruz511 mobile responsive website is going well with the design and development phase almost complete. Cruz511 will be the umbrella and brand under which all RTC traveler information services will take place including those previously delivered through Commute Solutions. Beta testing of the Cruz511.org website will take place during March 2015 with launch and marketing of the new service planned for late April 2015.

System monitoring is critical to the success of 511 services, and performance metrics are being established for these four categories: usage, reliability, accuracy and customer engagement. Usage information is especially important to marketing and outreach activities and for fine-tuning how information is organized and presented on the website. Web analytics will help RTC gauge consumer response and engagement with 511 services.

Although many good traveler information tools and resources exist in our area, there is significant value in having them all in one place and easy to access. This will also allow the RTC's rideshare program to provide more online and streamlined delivery of information to users of the transportation system. The Santa Cruz County 511 website will be a one-stop shop for traveler information around the clock.

## **SUMMARY**

RTC staff is developing a 511 website, Cruz511.org, to provide traffic conditions and multimodal transportation information that is tailored to Santa Cruz County residents and visitors. Beta testing of the new 511 website begins this month, with launch scheduled for late April 2015.

S:\TOS\TOS2015\March\packet\4b. 511-staff-report.docx

# Highway 17 wildlife tunnel to benefit animals, drivers

By [Samantha Clark](#), Santa Cruz Sentinel

Posted: 12/03/14, 9:49 PM PST | Updated: on 12/04/2014

## [6 Comments](#)

SANTA CRUZ >> For months, a mountain lion traveled across hundreds of acres to Highway 17 near Laurel Curve. However, wildlife cameras showed him turning around repeatedly due to traffic. Then he tried once more, but was struck by a car in late October. On the other side, cameras captured a female mountain lion waiting at the highway's edge. Local wildlife experts say the two possibly were trying to mate. Highway 17 is a deadly obstacle to wildlife, so the Land Trust of Santa Cruz County and Caltrans are building a tunnel underneath the road to help animals cross safely.

In the last seven years, 13 mountain lions have died after being struck by cars while crossing the highway. Deer, bobcats, coyotes, skunks, raccoons and gray foxes have also fallen victim to traffic. "We want to make sure that the habitat within the county is connected," said Jodi McGraw, a consulting ecologist working with the land trust, at a public presentation on the project Wednesday at the Hotel Paradox in Santa Cruz. "Roads can present impediments to wildlife moving through."

The number of wildlife deaths on Highway 17 is higher than other freeways and highways. It lacks bridges and culverts that provide safe passage to the other side. Traffic doesn't move fast on Highway 17, but cars zip around curves. When an animal darts across the road out of nowhere, cars can't stop quickly enough, said Fraser Shilling, codirector of the UC Davis Road Ecology Center. "They're almost guaranteed to get hit any time of day," Shilling said. "The median barrier confuses them a lot. They may get stuck and wander into traffic."

Data show that most animals try to cross the highway in the same locations, which makes those spots good contenders for wildlife crossings. With open space on both sides, Laurel Curve on Highway 17 is a hot spot for deadly wildlife crossings. The proposed 10-by-20-foot tunnel and fencing to funnel animals through would allow safe passage. "There's just tons of deer being hit and every year, a mountain lion or two are hit," Tanya Diamond, a wildlife ecologist at Pathways for Wildlife.

Highway 17 slices through the Santa Cruz Mountains, cutting off wildlife from the other side. McGraw said plants and animals require more room to cope with the shifting conditions of climate change. The fragmenting of habitat is a problem especially for mountain lions. The male cats take up 90 square miles of territory each. And losing one mountain lion has ripple effects on the entire population, including a major loss of genetic diversity.

“It creates an empty territory. The remaining male or female may go searching for a mate,” said Paul Houghtaling, a field biologist with the Santa Cruz Puma Project. “Their whole social scene, how they interact with each other, is really important to them. It’s important for them to safely cross highways because they do cover a lot of territory.” Helping animals avoid traffic is not just about their safety, Shilling said. Collisions with deer and mountain lions can also be fatal for people inside cars. “It’s hard to swerve safely on a curvy road like Highway 17,” he said. “The solution is not to expect animals to adapt to cars but to build structures that allow animals to cross safely and drivers slowing down.” Deer cause about 1,000 reported accidents a year on state highways. However, Shilling estimates there are another 10,000 to 20,000 deer hit in minor collisions. And one accident with a deer costs drivers an average of \$6,600, he said.

So building wildlife crossings are considered a win-win situation. “There are really cost savings with preventing animals from crossing the highway,” said Dan Medeiros, the land trust’s project manager. “This is one of the main reasons why Caltrans is behind this project.” Caltrans is working on a design and a budget proposal for the Laurel Curve wildlife tunnel, which is expected to cost \$2.5 million to \$3 million. Upon approval by the California Transportation Commission expected in 2016, Caltrans would have four years to build the crossing.

“We still have a long way,” Medeiros said. The land trust is currently raising money for the project.

To donate

The Land Trust of Santa Cruz County hopes to raise \$1 million for the Highway 17 Wildlife Crossing project. The nonprofit’s board will match donations Thursday in a \$40,000 challenge. Visit [www.landtrustsantacruz.org](http://www.landtrustsantacruz.org).

# ROUND THE CURVE

WEDNESDAY, 14 JANUARY 2015 12:22 C.J. CANNINO NEWS - LOCAL NEWS Santa Cruz Good Times

[| Print |](#)



Highway 17 drivers can get ready to sound off. CalTrans is going to want to hear from you for an Access Management Plan to help the flow of traffic on the winding stretch of highway between Mount Hermon and Summit roads.

Safety on Highway 17 has consistently improved due to various changes to the roadway, according to Susana Cruz, Public Information Officer for CalTrans District Five (which stretches from Santa Barbara to Santa Cruz County).

But it's not yet time to relax. "There's still accidents on 17, it's not a worry-free highway. It still requires managing," says Cruz.

One possible idea for the future, CalTrans officials say, is to decrease onramps to improve traffic flow and limit accidents.

"CalTrans will be looking for feedback from everyone," says Colin Jones, Public and Legislative Affairs Manager for District Five.

Jones says District Five staff is developing a list of stakeholders in Santa Cruz County that includes public agencies, transportation providers, bicycle and pedestrian groups, emergency responders, environmental groups, and, of course, the Silicon Valley commuters who endure the daily grind.

"We're looking at the corridor holistically," says Brandy Rider, Senior Transportation Planner for District Five. The nuts and bolts of the project, she adds, include how drivers access the highway.

Still in its infant stages, the study is, for now, a pilot project that Santa Cruz County will lead, but the curvy roadway extends into Santa Clara County CalTrans, which is in District Four. Santa Clara County CalTrans will take a look at the results on the Santa Cruz side, before undertaking an access management plan of its own.

"We're looking at a more full-fledged corridor study that plans strategies related to highway safety, access and mobility," said Bernard Walik, Public Information Officer for CalTrans District Four.

Jones says his staff is working on the public engagement strategies for those who live in the Santa Cruz area. He says that could include focus groups or web-based participation. CalTrans will partner with Santa Cruz County and the Regional Transportation Commission (RTC) to reach out to stakeholders. The first workshop is expected to take place sometime this spring. Traffic experts have 18 months left on the study, which began last summer. In addition to public feedback, CalTrans will rely on data collected from traffic sensors, cameras and some field study, like mapping the places where animals cross the road.

Speaking of wildlife crossings, the Land Trust of Santa Cruz County recently secured the purchase of 280 acres east of Highway 17's Laurel Curve, which is the first phase of getting a wildlife tunnel constructed there. The organization met its \$1 million dollar fundraising goal through private donations on Jan. 3.

"I'm ecstatic. Our community really pulled through," says Calah Pasley, Development and Outreach Manager for the Land Trust of Santa Cruz County.

With phase 1 now complete, Pasley says she can see the light at the end of the tunnel.

Phase 2 involves fundraising to buy 190 acres west of Laurel Curve, Pasley says. She expects the Land Trust will partner with the RTC for state grants to get construction of the wildlife crossing under way. According to Pasley, tunnel burrowing could begin anytime after summer 2016, and construction will not interrupt the flow of traffic on Highway 17.

**San Jose Area CHP Collision Summary for SR-17 (Beat 171)**

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
JANUARY	PDO	53	25	24	13	9	12	18	11	19	11	8	5	9	17	6	8	14	15
	INJURY	17	15	8	2	2	5	8	3	2	6	5	4	4	3	3	0	3	4
	FATAL	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
	<b>TOTAL</b>	<b>70</b>	<b>40</b>	<b>32</b>	<b>15</b>	<b>11</b>	<b>17</b>	<b>27</b>	<b>14</b>	<b>21</b>	<b>17</b>	<b>13</b>	<b>9</b>	<b>13</b>	<b>20</b>	<b>9</b>	<b>8</b>	<b>18</b>	<b>19</b>
FEBRUARY	PDO	31	23	32	7	11	8	11	10	7	14	14	12	6	11	8	15	16	
	INJURY	6	14	10	2	5	2	7	5	4	6	6	6	5	2	3	6	7	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>37</b>	<b>37</b>	<b>42</b>	<b>9</b>	<b>16</b>	<b>10</b>	<b>18</b>	<b>15</b>	<b>11</b>	<b>20</b>	<b>20</b>	<b>18</b>	<b>11</b>	<b>13</b>	<b>11</b>	<b>21</b>	<b>23</b>	<b>0</b>
MARCH	PDO	29	18	20	20	5	17	10	19	13	11	5	14	11	17	12	14	12	
	INJURY	18	9	7	5	5	5	9	3	3	3	3	2	5	4	1	8	7	
	FATAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>47</b>	<b>27</b>	<b>28</b>	<b>25</b>	<b>10</b>	<b>22</b>	<b>19</b>	<b>22</b>	<b>16</b>	<b>14</b>	<b>8</b>	<b>16</b>	<b>16</b>	<b>21</b>	<b>13</b>	<b>22</b>	<b>19</b>	<b>0</b>
APRIL	PDO	24	15	23	12	16	16	9	11	15	5	8	10	9	10	16	10	14	
	INJURY	11	7	3	3	4	7	5	4	7	7	3	5	6	3	5	9	8	
	FATAL	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	
	<b>TOTAL</b>	<b>35</b>	<b>22</b>	<b>26</b>	<b>15</b>	<b>20</b>	<b>23</b>	<b>14</b>	<b>15</b>	<b>23</b>	<b>12</b>	<b>12</b>	<b>15</b>	<b>15</b>	<b>13</b>	<b>22</b>	<b>19</b>	<b>22</b>	<b>0</b>
MAY	PDO	40	16	27	16	9	5	13	13	10	5	5	16	11	10	11	2	14	
	INJURY	14	3	10	5	3	2	6	6	7	0	7	5	4	4	2	5	5	
	FATAL	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>54</b>	<b>19</b>	<b>37</b>	<b>21</b>	<b>12</b>	<b>7</b>	<b>20</b>	<b>19</b>	<b>17</b>	<b>5</b>	<b>12</b>	<b>21</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>7</b>	<b>19</b>	<b>0</b>
JUNE	PDO	19	16	17	12	17	10	6	9	13	9	3	13	15	16	20	12	8	
	INJURY	13	7	4	3	4	3	4	3	2	3	4	2	3	4	4	5	4	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>32</b>	<b>23</b>	<b>21</b>	<b>15</b>	<b>21</b>	<b>13</b>	<b>10</b>	<b>12</b>	<b>15</b>	<b>12</b>	<b>7</b>	<b>15</b>	<b>18</b>	<b>20</b>	<b>24</b>	<b>17</b>	<b>12</b>	<b>0</b>
JULY	PDO	10	16	18	12	15	13	17	15	10	9	8	7	16	14	5	12	14	
	INJURY	10	7	5	4	4	4	6	1	5	3	6	2	7	5	8	6	6	
	FATAL	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	
	<b>TOTAL</b>	<b>20</b>	<b>23</b>	<b>23</b>	<b>17</b>	<b>19</b>	<b>17</b>	<b>23</b>	<b>16</b>	<b>15</b>	<b>12</b>	<b>14</b>	<b>9</b>	<b>24</b>	<b>19</b>	<b>13</b>	<b>18</b>	<b>21</b>	<b>0</b>
AUGUST	PDO	19	23	14	13	15	12	9	13	9	13	10	9	8	14	10	15	11	
	INJURY	4	7	5	7	3	6	4	2	1	2	7	2	8	6	4	6	3	
	FATAL	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>23</b>	<b>30</b>	<b>19</b>	<b>21</b>	<b>18</b>	<b>18</b>	<b>14</b>	<b>15</b>	<b>10</b>	<b>15</b>	<b>17</b>	<b>11</b>	<b>16</b>	<b>20</b>	<b>14</b>	<b>21</b>	<b>14</b>	<b>0</b>
SEPTEMBER	PDO	21	12	20	21	3	11	10	6	5	8	10	7	10	9	13	18	17	
	INJURY	6	6	10	4	4	5	4	3	0	1	2	0	4	1	4	5	3	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>27</b>	<b>18</b>	<b>30</b>	<b>25</b>	<b>7</b>	<b>16</b>	<b>14</b>	<b>9</b>	<b>5</b>	<b>9</b>	<b>12</b>	<b>7</b>	<b>14</b>	<b>10</b>	<b>17</b>	<b>23</b>	<b>20</b>	<b>0</b>
OCTOBER	PDO	12	27	14	18	12	19	17	21	13	14	10	8	30	14	12	6	26	
	INJURY	11	4	2	7	2	2	5	8	5	6	3	3	2	5	3	5	4	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>23</b>	<b>31</b>	<b>16</b>	<b>25</b>	<b>14</b>	<b>21</b>	<b>22</b>	<b>29</b>	<b>18</b>	<b>20</b>	<b>13</b>	<b>11</b>	<b>32</b>	<b>19</b>	<b>15</b>	<b>11</b>	<b>30</b>	<b>0</b>
NOVEMBER	PDO	38	31	16	16	10	22	12	11	11	7	20	11	12	9	12	14	17	
	INJURY	12	15	4	1	4	6	3	8	6	3	9	1	6	4	4	7	7	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>50</b>	<b>46</b>	<b>20</b>	<b>17</b>	<b>14</b>	<b>28</b>	<b>15</b>	<b>19</b>	<b>17</b>	<b>10</b>	<b>29</b>	<b>12</b>	<b>18</b>	<b>13</b>	<b>16</b>	<b>21</b>	<b>24</b>	<b>0</b>
DECEMBER	PDO	10	12	15	15	23	20	16	16	10	13	20	11	7	8	10	7	15	
	INJURY	7	7	6	5	5	6	6	6	7	4	3	4	7	1	1	3	5	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
	<b>TOTAL</b>	<b>17</b>	<b>19</b>	<b>21</b>	<b>20</b>	<b>28</b>	<b>26</b>	<b>22</b>	<b>22</b>	<b>17</b>	<b>17</b>	<b>23</b>	<b>15</b>	<b>14</b>	<b>9</b>	<b>11</b>	<b>11</b>	<b>20</b>	<b>0</b>
<b>TOTAL PDO:</b>	<b>306</b>	<b>234</b>	<b>240</b>	<b>175</b>	<b>145</b>	<b>165</b>	<b>148</b>	<b>155</b>	<b>135</b>	<b>119</b>	<b>121</b>	<b>123</b>	<b>144</b>	<b>149</b>	<b>135</b>	<b>133</b>	<b>178</b>	<b>15</b>	
<b>TOTAL INJURY:</b>	<b>129</b>	<b>101</b>	<b>74</b>	<b>48</b>	<b>45</b>	<b>53</b>	<b>67</b>	<b>52</b>	<b>49</b>	<b>44</b>	<b>58</b>	<b>36</b>	<b>61</b>	<b>42</b>	<b>42</b>	<b>65</b>	<b>62</b>	<b>4</b>	
<b>TOTAL FATALITIES:</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	
<b>TOTAL COLLISIONS:</b>	<b>435</b>	<b>335</b>	<b>315</b>	<b>225</b>	<b>190</b>	<b>218</b>	<b>218</b>	<b>207</b>	<b>185</b>	<b>163</b>	<b>180</b>	<b>159</b>	<b>206</b>	<b>191</b>	<b>178</b>	<b>199</b>	<b>242</b>	<b>19</b>	

San Jose Area CHP SR-17 Citation Summary (Beat 171)

Regular Citations

Overtime Citations

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
JANUARY	PCF	258	174	172	102	126	96	150	279	158	69
	Other	36	45	37	26	20	32	40	25	14	21
	Mechanical	15	6	8	5	2	3	13	13	42	34
	<b>TOTAL</b>	<b>309</b>	<b>225</b>	<b>217</b>	<b>133</b>	<b>148</b>	<b>131</b>	<b>203</b>	<b>317</b>	<b>214</b>	<b>124</b>
FEBRUARY	PCF	258	131	95	78	109	94	211	284	59	
	Other	38	31	26	34	23	7	14	7	13	
	Mechanical	6	7	6	1	4	2	26	48	20	
	<b>TOTAL</b>	<b>302</b>	<b>169</b>	<b>127</b>	<b>113</b>	<b>136</b>	<b>103</b>	<b>251</b>	<b>339</b>	<b>92</b>	<b>0</b>
MARCH	PCF	197	302	158	115	114	101	154	276	220	
	Other	75	20	29	32	6	15	19	13	32	
	Mechanical	18	1	12	6	1	10	38	42	30	
	<b>TOTAL</b>	<b>290</b>	<b>323</b>	<b>199</b>	<b>153</b>	<b>121</b>	<b>126</b>	<b>211</b>	<b>331</b>	<b>282</b>	<b>0</b>
APRIL	PCF	216	108	154	121	110	199	114	223	240	
	Other	69	15	31	40	28	9	20	11	30	
	Mechanical	4	4	1	4	2	42	49	43	26	
	<b>TOTAL</b>	<b>289</b>	<b>127</b>	<b>186</b>	<b>165</b>	<b>140</b>	<b>250</b>	<b>183</b>	<b>277</b>	<b>296</b>	<b>0</b>
MAY	PCF	306	325	176	252	242	154	165	324	201	
	Other	72	17	36	88	30	36	32	13	16	
	Mechanical	2	2	3	13	6	33	32	35	42	
	<b>TOTAL</b>	<b>380</b>	<b>344</b>	<b>215</b>	<b>353</b>	<b>278</b>	<b>223</b>	<b>229</b>	<b>372</b>	<b>259</b>	<b>0</b>
JUNE	PCF	307	346	90	153	267	91	267	197	233	
	Other	62	33	32	29	42	12	40	23	15	
	Mechanical	7	1	1	10	6	11	57	58	29	
	<b>TOTAL</b>	<b>376</b>	<b>380</b>	<b>123</b>	<b>192</b>	<b>315</b>	<b>114</b>	<b>364</b>	<b>278</b>	<b>277</b>	<b>0</b>
JULY	PCF	233	223	201	169	174	87	135	155	73	
	Other	63	25	24	32	46	18	14	10	21	
	Mechanical	3	2	3	2	6	7	16	25	34	
	<b>TOTAL</b>	<b>299</b>	<b>250</b>	<b>228</b>	<b>203</b>	<b>226</b>	<b>112</b>	<b>165</b>	<b>190</b>	<b>128</b>	<b>0</b>
AUGUST	PCF	180	178	249	248	124	76	178	154	200	
	Other	45	12	35	36	32	21	9	10	21	
	Mechanical	3	1	6	2	8	18	21	18	31	
	<b>TOTAL</b>	<b>228</b>	<b>191</b>	<b>290</b>	<b>286</b>	<b>164</b>	<b>115</b>	<b>208</b>	<b>182</b>	<b>252</b>	<b>0</b>
SEPTEMBER	PCF	252	188	80	300	125	37	194	193	146	
	Other	52	19	28	58	42	13	14	11	13	
	Mechanical	8	0	2	12	7	21	35	18	30	
	<b>TOTAL</b>	<b>312</b>	<b>207</b>	<b>110</b>	<b>370</b>	<b>174</b>	<b>71</b>	<b>243</b>	<b>222</b>	<b>189</b>	<b>0</b>
OCTOBER	PCF	230	232	105	223	115	101	175	98	167	
	Other	98	21	26	45	27	17	17	24	23	
	Mechanical	3	3	2	10	7	11	55	18	28	
	<b>TOTAL</b>	<b>331</b>	<b>256</b>	<b>133</b>	<b>278</b>	<b>149</b>	<b>129</b>	<b>247</b>	<b>140</b>	<b>218</b>	<b>0</b>
NOVEMBER	PCF	322	372	63	371	79	56	277	116	116	
	Other	81	31	40	69	17	2	16	20	17	
	Mechanical	14	1	2	13	1	5	34	26	20	
	<b>TOTAL</b>	<b>417</b>	<b>404</b>	<b>105</b>	<b>453</b>	<b>97</b>	<b>63</b>	<b>327</b>	<b>162</b>	<b>153</b>	<b>0</b>
DECEMBER	PCF	116	292	626	150	121	90	198	117	97	
	Other	36	38	62	13	49	10	5	6	8	
	Mechanical	2	16	23	4	4	12	61	20	11	
	<b>TOTAL</b>	<b>154</b>	<b>346</b>	<b>711</b>	<b>167</b>	<b>174</b>	<b>112</b>	<b>264</b>	<b>143</b>	<b>116</b>	<b>0</b>

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
JANUARY	PCF	0	0	129	0	0	0	33	1	0	46
	Other	0	0	29	0	0	0	7	49	0	1
	Mechanical	0	0	11	0	0	0	21	19	0	8
	<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>169</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>69</b>	<b>0</b>	<b>55</b>
FEBRUARY	PCF	0	0	0	0	0	0	43	75	0	0
	Other	0	0	0	0	0	0	16	3	0	0
	Mechanical	0	0	0	0	0	0	20	17	0	0
	<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>79</b>	<b>95</b>	<b>0</b>	<b>0</b>
MARCH	PCF	0	75	80	0	0	85	38	58	159	
	Other	0	3	3	0	0	20	7	1	4	
	Mechanical	0	5	14	0	0	14	13	13	21	
	<b>TOTAL</b>	<b>0</b>	<b>83</b>	<b>97</b>	<b>0</b>	<b>0</b>	<b>119</b>	<b>58</b>	<b>72</b>	<b>184</b>	<b>0</b>
APRIL	PCF	0	0	0	0	0	185	59	82	102	
	Other	0	0	0	0	0	31	7	11	14	
	Mechanical	0	0	0	0	0	11	25	30	14	
	<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>227</b>	<b>91</b>	<b>123</b>	<b>130</b>	<b>0</b>
MAY	PCF	0	185	0	0	0	119	89	93	74	
	Other	0	15	0	0	0	1	17	13	6	
	Mechanical	0	14	0	0	0	21	14	21	16	
	<b>TOTAL</b>	<b>0</b>	<b>214</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>141</b>	<b>120</b>	<b>127</b>	<b>96</b>	<b>0</b>
JUNE	PCF	91	192	0	0	50	33	177	78	691	
	Other	6	5	0	0	0	0	19	6	78	
	Mechanical	5	3	0	0	0	5	47	33	145	
	<b>TOTAL</b>	<b>102</b>	<b>200</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>38</b>	<b>243</b>	<b>117</b>	<b>914</b>	<b>0</b>
JULY	PCF	0	70	129	153	0	39	0	0	0	
	Other	0	3	1	2	0	3	0	0	0	
	Mechanical	0	7	1	5	0	12	0	0	0	
	<b>TOTAL</b>	<b>0</b>	<b>80</b>	<b>131</b>	<b>160</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
AUGUST	PCF	0	116	204	0	0	42	0	0	74	
	Other	0	6	1	0	0	4	0	0	4	
	Mechanical	0	8	8	0	0	8	0	0	13	
	<b>TOTAL</b>	<b>0</b>	<b>130</b>	<b>213</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>91</b>	<b>0</b>
SEPTEMBER	PCF	12	40	0	285	0	68	49	0	47	
	Other	0	5	0	8	0	12	4	0	10	
	Mechanical	1	15	0	69	0	19	36	0	13	
	<b>TOTAL</b>	<b>13</b>	<b>60</b>	<b>0</b>	<b>362</b>	<b>0</b>	<b>99</b>	<b>89</b>	<b>0</b>	<b>70</b>	<b>0</b>
OCTOBER	PCF	246	0	0	52	0	49	45	0	49	
	Other	13	0	0	2	0	2	48	0	2	
	Mechanical	30	0	0	30	0	15	2	0	9	
	<b>TOTAL</b>	<b>289</b>	<b>0</b>	<b>0</b>	<b>84</b>	<b>0</b>	<b>66</b>	<b>95</b>	<b>0</b>	<b>60</b>	<b>0</b>
NOVEMBER	PCF	199	352	18	347	0	45	45	0	34	
	Other	11	19	0	9	0	11	5	0	1	
	Mechanical	19	34	0	98	0	16	13	0	11	
	<b>TOTAL</b>	<b>229</b>	<b>405</b>	<b>18</b>	<b>454</b>	<b>0</b>	<b>72</b>	<b>63</b>	<b>0</b>	<b>46</b>	<b>0</b>
DECEMBER	PCF	222	330	621	0	0	7	62	0	43	
	Other	5	5	19	0	0	10	6	0	3	
	Mechanical	11	36	66	0	0	27	19	0	4	
	<b>TOTAL</b>	<b>238</b>	<b>371</b>	<b>706</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>87</b>	<b>0</b>	<b>50</b>	<b>0</b>

ANNUAL TOTALS: 3687 3222 2644 2866 2122 1549 2895 2953 2476 124

871 1543 1334 1060 50 914 986 603 1641 55

**Santa Cruz CHP Collision Summary for SR-17**

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
JANUARY	PDO	40	28	17	14	18	26	21	32	34	19	22	16	24	11	11	11	9	10
	INJURY	27	10	8	5	9	12	6	6	10	9	6	9	13	9	10	3	3	4
	FATAL	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	0	1	0
	<b>TOTAL</b>	<b>68</b>	<b>39</b>	<b>25</b>	<b>19</b>	<b>27</b>	<b>39</b>	<b>27</b>	<b>38</b>	<b>44</b>	<b>28</b>	<b>28</b>	<b>26</b>	<b>38</b>	<b>20</b>	<b>21</b>	<b>14</b>	<b>13</b>	<b>14</b>
FEBRUARY	PDO	36	19	43	14	17	35	41	45	25	28	31	16	20	15	23	8	32	
	INJURY	6	9	9	5	4	9	16	17	4	10	9	15	4	7	10	5	14	
	FATAL	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>42</b>	<b>29</b>	<b>52</b>	<b>19</b>	<b>21</b>	<b>44</b>	<b>58</b>	<b>62</b>	<b>29</b>	<b>38</b>	<b>40</b>	<b>31</b>	<b>24</b>	<b>22</b>	<b>33</b>	<b>13</b>	<b>46</b>	<b>0</b>
MARCH	PDO	21	25	26	22	29	23	11	38	35	18	17	13	26	26	30	16	20	
	INJURY	11	12	6	5	11	9	7	16	14	2	6	13	7	14	20	6	13	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
	<b>TOTAL</b>	<b>32</b>	<b>37</b>	<b>32</b>	<b>27</b>	<b>40</b>	<b>32</b>	<b>18</b>	<b>54</b>	<b>49</b>	<b>20</b>	<b>23</b>	<b>26</b>	<b>33</b>	<b>40</b>	<b>51</b>	<b>22</b>	<b>33</b>	<b>0</b>
APRIL	PDO	39	27	13	24	22	59	16	45	41	22	20	18	28	18	15	13	19	
	INJURY	14	8	9	5	7	16	4	11	11	7	10	12	6	4	9	10	8	
	FATAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>54</b>	<b>35</b>	<b>22</b>	<b>29</b>	<b>29</b>	<b>75</b>	<b>20</b>	<b>56</b>	<b>52</b>	<b>29</b>	<b>30</b>	<b>30</b>	<b>34</b>	<b>22</b>	<b>24</b>	<b>23</b>	<b>27</b>	<b>0</b>
MAY	PDO	43	13	25	19	13	24	15	39	16	24	10	12	26	18	11	11	16	
	INJURY	25	9	15	13	7	11	5	13	8	9	5	16	8	7	6	8	9	
	FATAL	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>69</b>	<b>23</b>	<b>40</b>	<b>33</b>	<b>20</b>	<b>35</b>	<b>20</b>	<b>52</b>	<b>25</b>	<b>33</b>	<b>15</b>	<b>28</b>	<b>34</b>	<b>25</b>	<b>17</b>	<b>19</b>	<b>25</b>	<b>0</b>
JUNE	PDO	23	12	15	14	11	23	6	24	13	15	10	13	11	9	14	11	11	
	INJURY	11	5	3	2	6	4	2	3	6	1	6	6	4	9	10	9	6	
	FATAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	
	<b>TOTAL</b>	<b>35</b>	<b>17</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>28</b>	<b>8</b>	<b>27</b>	<b>19</b>	<b>16</b>	<b>16</b>	<b>19</b>	<b>15</b>	<b>18</b>	<b>24</b>	<b>21</b>	<b>17</b>	<b>0</b>
JULY	PDO	19	8	15	14	20	18	14	9	16	18	14	10	11	19	24	9	12	
	INJURY	5	7	7	8	5	4	5	5	4	4	6	6	9	5	9	10	9	
	FATAL	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>24</b>	<b>16</b>	<b>22</b>	<b>22</b>	<b>25</b>	<b>23</b>	<b>19</b>	<b>15</b>	<b>20</b>	<b>23</b>	<b>20</b>	<b>16</b>	<b>20</b>	<b>24</b>	<b>33</b>	<b>19</b>	<b>21</b>	<b>0</b>
AUGUST	PDO	14	11	22	10	5	17	20	6	16	11	15	8	11	11	9	8	12	
	INJURY	10	2	7	7	4	7	7	4	5	4	4	1	5	2	4	4	5	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>24</b>	<b>13</b>	<b>29</b>	<b>17</b>	<b>9</b>	<b>24</b>	<b>27</b>	<b>10</b>	<b>21</b>	<b>15</b>	<b>19</b>	<b>9</b>	<b>16</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>17</b>	<b>0</b>
SEPTEMBER	PDO	24	16	20	16	12	12	13	4	13	9	5	8	11	7	14	14	22	
	INJURY	13	4	8	4	8	1	6	6	4	3	9	7	7	7	4	5	9	
	FATAL	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>38</b>	<b>20</b>	<b>28</b>	<b>20</b>	<b>21</b>	<b>13</b>	<b>19</b>	<b>10</b>	<b>17</b>	<b>12</b>	<b>14</b>	<b>15</b>	<b>18</b>	<b>14</b>	<b>18</b>	<b>19</b>	<b>31</b>	<b>0</b>
OCTOBER	PDO	17	15	13	20	16	17	44	27	13	21	13	9	12	25	15	17	19	
	INJURY	4	11	8	2	5	9	6	12	3	9	3	5	13	8	10	4	14	
	FATAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>21</b>	<b>26</b>	<b>21</b>	<b>22</b>	<b>21</b>	<b>26</b>	<b>50</b>	<b>39</b>	<b>16</b>	<b>30</b>	<b>16</b>	<b>14</b>	<b>25</b>	<b>33</b>	<b>25</b>	<b>21</b>	<b>33</b>	<b>0</b>
NOVEMBER	PDO	31	29	16	26	23	28	21	47	36	11	19	13	27	16	29	20	39	
	INJURY	10	10	8	13	10	9	8	13	12	8	5	7	11	6	8	3	10	
	FATAL	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
	<b>TOTAL</b>	<b>41</b>	<b>39</b>	<b>24</b>	<b>39</b>	<b>34</b>	<b>38</b>	<b>29</b>	<b>60</b>	<b>48</b>	<b>19</b>	<b>24</b>	<b>20</b>	<b>38</b>	<b>22</b>	<b>37</b>	<b>23</b>	<b>49</b>	<b>0</b>
DECEMBER	PDO	5	13	9	28	48	60	43	43	21	34	21	16	45	7	30	13	20	
	INJURY	13	4	4	11	15	22	10	17	3	19	5	10	16	6	8	2	9	
	FATAL	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	
	<b>TOTAL</b>	<b>18</b>	<b>17</b>	<b>13</b>	<b>39</b>	<b>63</b>	<b>82</b>	<b>53</b>	<b>62</b>	<b>24</b>	<b>53</b>	<b>26</b>	<b>27</b>	<b>61</b>	<b>13</b>	<b>38</b>	<b>15</b>	<b>29</b>	<b>0</b>
<b>TOTAL PDO:</b>		<b>312</b>	<b>216</b>	<b>234</b>	<b>221</b>	<b>234</b>	<b>342</b>	<b>265</b>	<b>359</b>	<b>279</b>	<b>230</b>	<b>197</b>	<b>152</b>	<b>252</b>	<b>182</b>	<b>225</b>	<b>151</b>	<b>231</b>	<b>10</b>
<b>TOTAL INJURY:</b>		<b>149</b>	<b>91</b>	<b>92</b>	<b>80</b>	<b>91</b>	<b>113</b>	<b>82</b>	<b>123</b>	<b>84</b>	<b>85</b>	<b>74</b>	<b>107</b>	<b>103</b>	<b>84</b>	<b>108</b>	<b>69</b>	<b>109</b>	<b>4</b>
<b>TOTAL FATALITIES:</b>		<b>5</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>
<b>TOTAL COLLISIONS:</b>		<b>466</b>	<b>311</b>	<b>326</b>	<b>303</b>	<b>327</b>	<b>459</b>	<b>348</b>	<b>485</b>	<b>364</b>	<b>316</b>	<b>271</b>	<b>261</b>	<b>356</b>	<b>266</b>	<b>334</b>	<b>221</b>	<b>341</b>	<b>14</b>

Santa Cruz Area CHP SR-17 Citation Summary

Regular Citations

Overtime Citations

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
JANUARY	PCF	557	275	129	261	287	396	401	368	413	354
	Other	192	148	106	92	68	84	68	69	43	26
	Mechanical	18	9	3	21	16	30	21	17	73	42
	<b>TOTAL</b>	<b>767</b>	<b>432</b>	<b>238</b>	<b>374</b>	<b>371</b>	<b>510</b>	<b>490</b>	<b>454</b>	<b>529</b>	<b>422</b>
FEBRUARY	PCF	550	359	166	271	303	420	478	309	325	
	Other	213	102	52	59	65	70	68	63	22	
	Mechanical	9	32	29	7	10	19	19	23	38	
	<b>TOTAL</b>	<b>772</b>	<b>493</b>	<b>247</b>	<b>337</b>	<b>378</b>	<b>509</b>	<b>565</b>	<b>395</b>	<b>385</b>	<b>0</b>
MARCH	PCF	501	451	252	262	322	351	422	354	273	
	Other	202	117	66	73	44	42	86	111	29	
	Mechanical	75	42	32	19	21	29	11	20	40	
	<b>TOTAL</b>	<b>778</b>	<b>610</b>	<b>350</b>	<b>354</b>	<b>387</b>	<b>422</b>	<b>519</b>	<b>485</b>	<b>342</b>	<b>0</b>
APRIL	PCF	428	285	191	312	324	431	283	365	346	
	Other	229	76	56	63	86	49	88	29	22	
	Mechanical	64	14	24	11	36	23	15	16	36	
	<b>TOTAL</b>	<b>721</b>	<b>375</b>	<b>271</b>	<b>386</b>	<b>446</b>	<b>503</b>	<b>386</b>	<b>410</b>	<b>404</b>	<b>0</b>
MAY	PCF	345	369	233	454	429	505	455	444	375	
	Other	63	154	78	85	46	82	77	27	22	
	Mechanical	55	26	47	22	69	14	25	45	22	
	<b>TOTAL</b>	<b>463</b>	<b>549</b>	<b>358</b>	<b>561</b>	<b>544</b>	<b>601</b>	<b>557</b>	<b>516</b>	<b>419</b>	<b>0</b>
JUNE	PCF	470	365	271	483	523	391	291	339	303	
	Other	131	152	88	73	42	68	58	29	33	
	Mechanical	10	38	39	9	68	3	13	65	24	
	<b>TOTAL</b>	<b>611</b>	<b>555</b>	<b>398</b>	<b>565</b>	<b>633</b>	<b>462</b>	<b>362</b>	<b>433</b>	<b>360</b>	<b>0</b>
JULY	PCF	303	302	266	396	446	378	288	331	220	
	Other	199	110	74	82	38	67	69	35	21	
	Mechanical	13	44	59	7	82	4	8	74	34	
	<b>TOTAL</b>	<b>515</b>	<b>456</b>	<b>399</b>	<b>485</b>	<b>566</b>	<b>449</b>	<b>365</b>	<b>440</b>	<b>275</b>	<b>0</b>
AUGUST	PCF	244	346	266	470	498	585	317	477	317	
	Other	206	167	47	89	84	35	78	32	56	
	Mechanical	11	75	27	17	24	18	25	34	55	
	<b>TOTAL</b>	<b>461</b>	<b>588</b>	<b>340</b>	<b>576</b>	<b>606</b>	<b>638</b>	<b>420</b>	<b>543</b>	<b>428</b>	<b>0</b>
SEPTEMBER	PCF	359	402	265	424	389	472	334	338	240	
	Other	148	182	24	105	95	37	58	31	43	
	Mechanical	12	5	43	18	32	18	19	31	45	
	<b>TOTAL</b>	<b>519</b>	<b>589</b>	<b>332</b>	<b>547</b>	<b>516</b>	<b>527</b>	<b>411</b>	<b>400</b>	<b>328</b>	<b>0</b>
OCTOBER	PCF	328	194	337	322	307	540	457	381	224	
	Other	155	93	30	79	47	47	57	24	31	
	Mechanical	8	34	43	9	10	14	15	41	32	
	<b>TOTAL</b>	<b>491</b>	<b>321</b>	<b>410</b>	<b>410</b>	<b>364</b>	<b>601</b>	<b>529</b>	<b>446</b>	<b>287</b>	<b>0</b>
NOVEMBER	PCF	274	209	590	270	267	449	327	319	238	
	Other	143	65	48	53	80	25	53	31	24	
	Mechanical	13	47	75	10	15	18	17	47	28	
	<b>TOTAL</b>	<b>430</b>	<b>321</b>	<b>713</b>	<b>333</b>	<b>362</b>	<b>492</b>	<b>397</b>	<b>397</b>	<b>290</b>	<b>0</b>
DECEMBER	PCF	268	215	454	373	209	454	297	264	170	
	Other	167	100	45	64	65	43	75	24	4	
	Mechanical	10	39	84	15	11	16	14	42	16	
	<b>TOTAL</b>	<b>445</b>	<b>354</b>	<b>583</b>	<b>452</b>	<b>285</b>	<b>513</b>	<b>386</b>	<b>330</b>	<b>190</b>	<b>0</b>

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
JANUARY	PCF	45	2	0	0	32	0	49	6	56	0
	Other	18	3	0	0	5	0	6	0	5	0
	Mechanical	1	0	0	0	0	0	0	0	12	0
	<b>TOTAL</b>	<b>64</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>0</b>	<b>55</b>	<b>6</b>	<b>73</b>	<b>0</b>
FEBRUARY	PCF	30	63	40	0	24	0	43	52	55	
	Other	5	17	2	1	5	0	7	2	1	
	Mechanical	0	13	1	0	0	0	1	5	2	
	<b>TOTAL</b>	<b>35</b>	<b>93</b>	<b>43</b>	<b>1</b>	<b>29</b>	<b>0</b>	<b>51</b>	<b>59</b>	<b>58</b>	<b>0</b>
MARCH	PCF	67	64	33	0	16	14	46	57	50	
	Other	15	9	7	0	3	0	4	4	4	
	Mechanical	0	4	5	0	1	0	5	11	11	
	<b>TOTAL</b>	<b>82</b>	<b>77</b>	<b>45</b>	<b>0</b>	<b>20</b>	<b>14</b>	<b>55</b>	<b>72</b>	<b>65</b>	<b>0</b>
APRIL	PCF	47	32	31	39	38	56	40	112	61	
	Other	33	8	8	7	3	6	7	1	4	
	Mechanical	2	1	7	2	0	0	0	2	10	
	<b>TOTAL</b>	<b>82</b>	<b>41</b>	<b>46</b>	<b>48</b>	<b>41</b>	<b>62</b>	<b>47</b>	<b>115</b>	<b>75</b>	<b>0</b>
MAY	PCF	13	48	35	31	24	64	84	112	50	
	Other	7	8	10	3	12	4	9	8	1	
	Mechanical	0	3	4	1	2	0	5	16	2	
	<b>TOTAL</b>	<b>20</b>	<b>59</b>	<b>49</b>	<b>35</b>	<b>38</b>	<b>68</b>	<b>98</b>	<b>136</b>	<b>53</b>	<b>0</b>
JUNE	PCF	71	42	38	25	31	36	47	85	51	
	Other	33	13	3	2	6	8	5	6	5	
	Mechanical	0	2	6	0	2	0	1	14	7	
	<b>TOTAL</b>	<b>104</b>	<b>57</b>	<b>47</b>	<b>27</b>	<b>39</b>	<b>44</b>	<b>53</b>	<b>105</b>	<b>63</b>	<b>0</b>
JULY	PCF	46	43	7	26	27	49	0	64	38	
	Other	32	16	1	1	2	8	0	4	4	
	Mechanical	2	6	2	0	1	0	0	24	10	
	<b>TOTAL</b>	<b>80</b>	<b>65</b>	<b>10</b>	<b>27</b>	<b>30</b>	<b>57</b>	<b>0</b>	<b>92</b>	<b>52</b>	<b>0</b>
AUGUST	PCF	22	25	18	4	15	51	7	107	61	
	Other	13	10	2	0	3	5	4	4	8	
	Mechanical	1	5	3	0	0	2		6	7	
	<b>TOTAL</b>	<b>36</b>	<b>40</b>	<b>23</b>	<b>4</b>	<b>18</b>	<b>58</b>	<b>11</b>	<b>117</b>	<b>76</b>	<b>0</b>
SEPTEMBER	PCF	47	31	22	5	14	46	74	83	47	
	Other	16	8	2	3	1	5	14	0	4	
	Mechanical	0	0	1	0	0	1	5	1	6	
	<b>TOTAL</b>	<b>63</b>	<b>39</b>	<b>25</b>	<b>8</b>	<b>15</b>	<b>52</b>	<b>93</b>	<b>84</b>	<b>57</b>	<b>0</b>
OCTOBER	PCF	20	4	30	19	0	44	87	63	30	
	Other	10	0	2	3	0	11	10	4	4	
	Mechanical	0	0	3	0	0	2	2	2	2	
	<b>TOTAL</b>	<b>30</b>	<b>4</b>	<b>35</b>	<b>22</b>	<b>0</b>	<b>57</b>	<b>99</b>	<b>69</b>	<b>36</b>	<b>0</b>
NOVEMBER	PCF	6	11	134	11	0	49	63	61	59	
	Other	6	4	7	3	0	4	3	7	5	
	Mechanical	0	0	15	1	0	5	0	7	5	
	<b>TOTAL</b>	<b>12</b>	<b>15</b>	<b>156</b>	<b>15</b>	<b>0</b>	<b>58</b>	<b>66</b>	<b>75</b>	<b>69</b>	<b>0</b>
DECEMBER	PCF	34	13	119	11	0	43	37	0	25	
	Other	13	7	4	1	0	1	9	0	1	
	Mechanical	1	0	11	0	0	4	0	0	0	
	<b>TOTAL</b>	<b>48</b>	<b>20</b>	<b>134</b>	<b>12</b>	<b>0</b>	<b>48</b>	<b>46</b>	<b>0</b>	<b>26</b>	<b>0</b>

ANNUAL TOTALS: 6973 5643 4639 5380 5458 6227 5387 5249 4237 422

656 515 613 199 267 518 674 930 703 0

**Extra California Highway Patrol Hours Worked on Highway 17**

**San Jose Area**

	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>JANUARY</b>	0	84	0	0	0	36	40	0	28
<b>FEBRUARY</b>	8	20	0	0	0	44	56	0	
<b>MARCH</b>	44	44	0	0	152	36	44	88	
<b>APRIL</b>	0	0	0	0	232	48	68	84	
<b>MAY</b>	116	0	0	0	180	68	68	56	
<b>JUNE</b>	121	0	0	22	48	132	64	380	
<b>JULY</b>	52	56	0	0	28	0	0	0	
<b>AUGUST</b>	76	104	130.5	0	32	0	0	42	
<b>SEPTEMBER</b>	40	8	204	0	52	56	0	96	
<b>OCTOBER</b>	4	0	36	0	32	60	0	36	
<b>NOVEMBER</b>	248	8	220	0	40	48	0	32	
<b>DECEMBER</b>	200	382	0	0	32	48	0	24	
<b>TOTAL</b>	<b>909</b>	<b>706</b>	<b>590.5</b>	<b>22</b>	<b>828</b>	<b>576</b>	<b>340</b>	<b>838</b>	<b>28</b>

**Santa Cruz Area**

	2007	2008	2009	2010	2011	2012	2013	2014	2015
	6	0	30.5	32	0	48	9	48	0
	90	28	0	24	0	70.5	36	72	
	70.5	38.5	0	28	18	66	61	60	
	42	20	36	28	88	58.5	117.5	64	
	42.5	3	66	42.5	86.5	60	104	44	
	46	50	28	44	64	66	75.5	39	
	56	34	52.25	32.5	81	0	86.5	32	
	36	37.5	20	51	107	6	108.8	71	
	28.5	33.5	34	25.5	84.5	79	97	63.5	
	26	55	53.5	0	57	70	42	45	
	49.5	198	28	0	60	76	75	70	
	72	239	50.5	0	54	81	0	56	
<b>TOTAL</b>	<b>565</b>	<b>736.5</b>	<b>398.75</b>	<b>307.5</b>	<b>700</b>	<b>681</b>	<b>812.3</b>	<b>664.5</b>	<b>0</b>



# PROJECT UPDATE – SANTA CRUZ COUNTY

PREPARED FEBRUARY 5, 2015 SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION MEETING

CONSTRUCTION PROJECTS										
	Project	Location	Description	Construction Timeline	Construction Cost	Funding Source	Implementing Agency	Project Manager (Resident Engineer)	Contractor	Comments
1.	<b>Hwy. 1 Guardrail Upgrade, Concrete Barrier, and improvements (05-0R9104)</b>	Highway 1 from S of South Aptos Underpass to .1 Mi N. of Rt 9 (PM 9.0-17.6)	Upgrade Metal Beam Guard Rail, other improvements	Winter 2013/Winter 2014	\$ 2.3 M	SHOPP	Caltrans	Doug Hessing (KB)	RGW Construction Inc., Livermore	Project consists primarily of overnight work, but intermittent day work as well.
2.	<b>Hwy. 17 Laurel Curve NB Shoulder Widening (1C1804)</b>	In Santa Cruz County near Scotts Valley from 0.3 Miles North of Glenwood Cutoff to 0.5 Miles South of Glenwood Drive	Shoulder Widening/Soil Nail Wall	August 4,2014— Summer 2015	\$3 Million	SHOPP	Caltrans	Steve DiGrazia (BR)	Graniterock Company DBA Pavex Construction Division, San Jose, CA	Work consists of daytime alternating lane closures. No night closures.
3.	<b>Hwy. 17 Summit Slide Repair (1A7104)</b>	In Santa Cruz County near Scotts Valley at 0.2 mile north of Glenwood Dr. (PM 11.0)	Construct retaining wall with concrete slab & barrier, HMA pave	Spring 2013- February 28, 2014-Summer 2015, including 1 year plant establishment	\$2 Million	SHOPP	Caltrans	Steve DiGrazia (BR)	Condon-Johnson & Associates Inc., Oakland	Construction operations completed February 28, 2014, and work was accepted on Nov. 17, 2014. One year of plant establishment will end May, 2015.



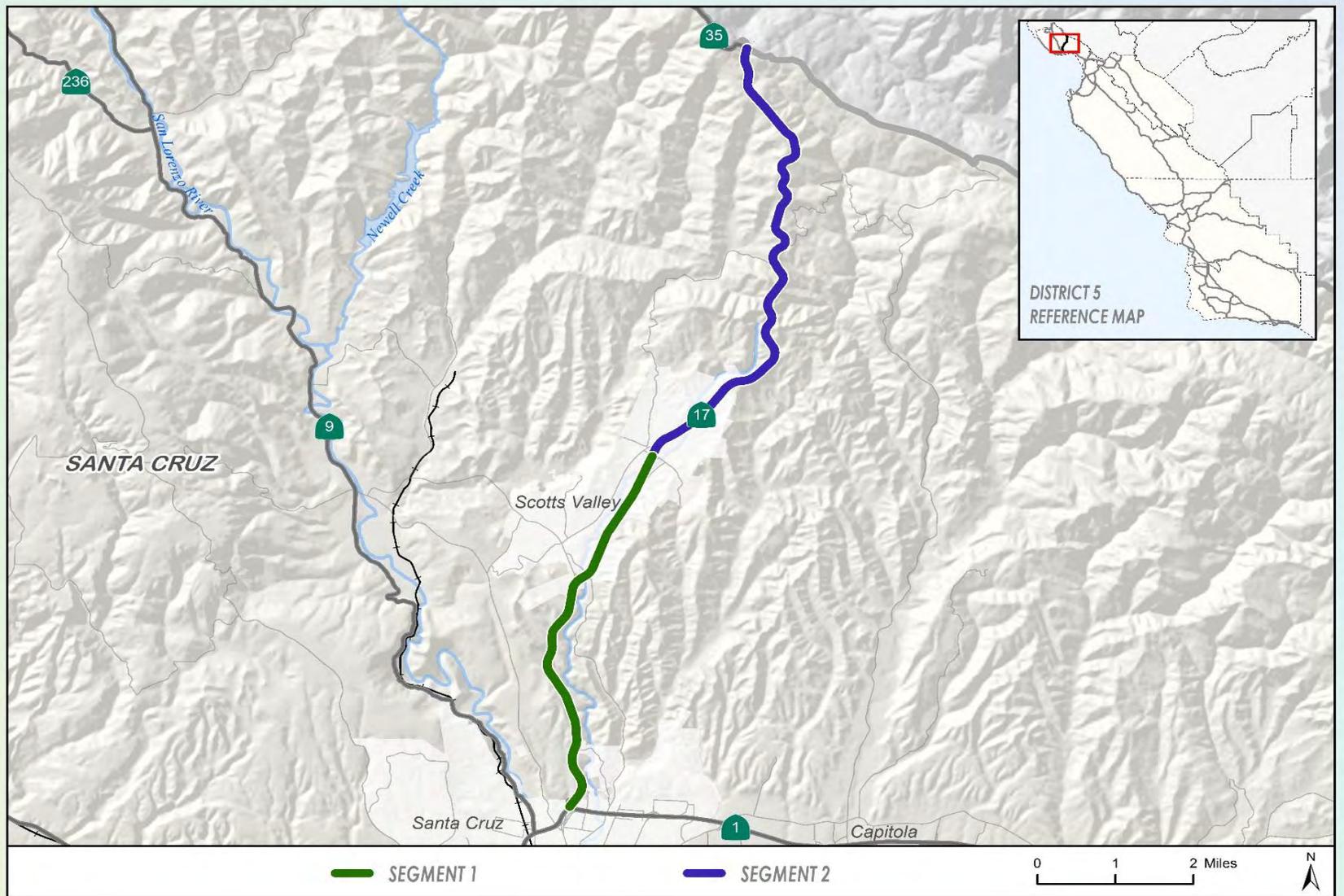
# PROJECT UPDATE – SANTA CRUZ COUNTY

PREPARED FEBRUARY 5, 2015 SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION MEETING

## CONSTRUCTION PROJECTS IN DEVELOPMENT

	Project	Location	Description	Construction Timeline	Construction Cost	Funding Source	Implementing Agency	Project Manager (Resident Engineer)	Contractor	Comments
4.	<b>Hwy. 9 Pollution Source Control (0Q5904)</b>	In Santa Cruz County at and near Boulder Creek at various locations from 0.9 mile south of Glengarry Rd to 0.2 mile north of Mcgaffigan Mill Rd (PM 3.7-18.7)	Construct retaining wall & viaduct structure. Replace drainage pipes. Rehab maintenance turnaround.	Winter 2014-Summer 2015	\$1.8 Million	SHOPP	Caltrans	Doug Hessing (KB)	Granite Rock Company, San Jose, CA	Full closure to begin on February 9. The highway will be fully closed for approximately 6 months (February to July) at Location 1 (PM 3.7, between Santa Cruz and Felton) for construction of the retaining wall and viaduct due to limited access for staging and equipment. A signed detour route directing traffic to Mount Hermon Road and Highway 17 will be provided for autos. A signed detour route will also be provided for bikes.
5.	<b>Hwy. 1 North County Pavement Preservation and Rumble Strips (05-1C860)</b>	Near Santa Cruz from Western Drive to San Mateo C/L	Pavement preservation and install rumble strips	Spring 2015 – Winter 2016	\$10.7 Million	SHOPP	Caltrans	Doug Hessing (PD)	Granite Construction Company	Project is in winter suspension.
6.	<b>Hwy. 152 Pavement Maintenance</b>	Throughout Watsonville city limits	Sealcoating and full dig outs at spot locations	Summer 2015	\$1 Million	Maintenance	Caltrans	Ken Romero	TBD	Bid package expected to be released in Spring 2015. The final list of dig out locations will be identified in the package.

# 4 CORRIDOR DATA SHEET STATE ROUTE 17



CONTENT:	TRAFFIC DATA	PLANNING DATA	APPENDICES
<ul style="list-style-type: none"> <li>- Daily Traffic Data</li> <li>- Peak Hour Traffic Data</li> <li>- Historic AADT by Year</li> <li>- Historic AADT by Location</li> <li>- 2013 Peak Hour Congestion Maps</li> <li>- 2040 Peak Hour Congestion Maps</li> </ul>	<ul style="list-style-type: none"> <li>- Location Description</li> <li>- Highway Type and Designations</li> <li>- Highway Characteristics</li> <li>- Modal</li> <li>- Intelligent Transportation Systems</li> <li>- Freight</li> <li>- Cultural &amp; Scenic</li> <li>- Environmental</li> </ul>	<ul style="list-style-type: none"> <li>- Appendix A: Pavement Conditions</li> <li>- Appendix B: Traffic Performance</li> <li>- Appendix C: Historic AADT Details</li> <li>- Appendix D: Glossary and References</li> </ul>	



# SR 17 Corridor Data Sheet

Prepared by District 5 Transportation Planning

Inputs: PM Peak Hour Analyzed  
Base Year 2013  
Horizon Year 2040  
AMBAG Regional Model 2014

<u>Section:</u>	<u>Page:</u>	<u>Section:</u>	<u>Page:</u>
Segment 1 Traffic Data	4	Appendix A: Pavement Conditions	12
Segment 1 Planning Data	6	Appendix B: Traffic Performance	13
Segment 2 Traffic Data	8	Appendix C: Historic AADT Details	15
Segment 2 Planning Data	10	Appendix D: Glossary and References	16

Last Saved: 2/25/2015

The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this TCR is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 5 System Planning Division makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures and shall not be used as a substitute for project specific analysis, including but not limited to, traffic impact studies, that pertain to any private or public development proposal.

# Segment 1 Traffic Data: SR 17

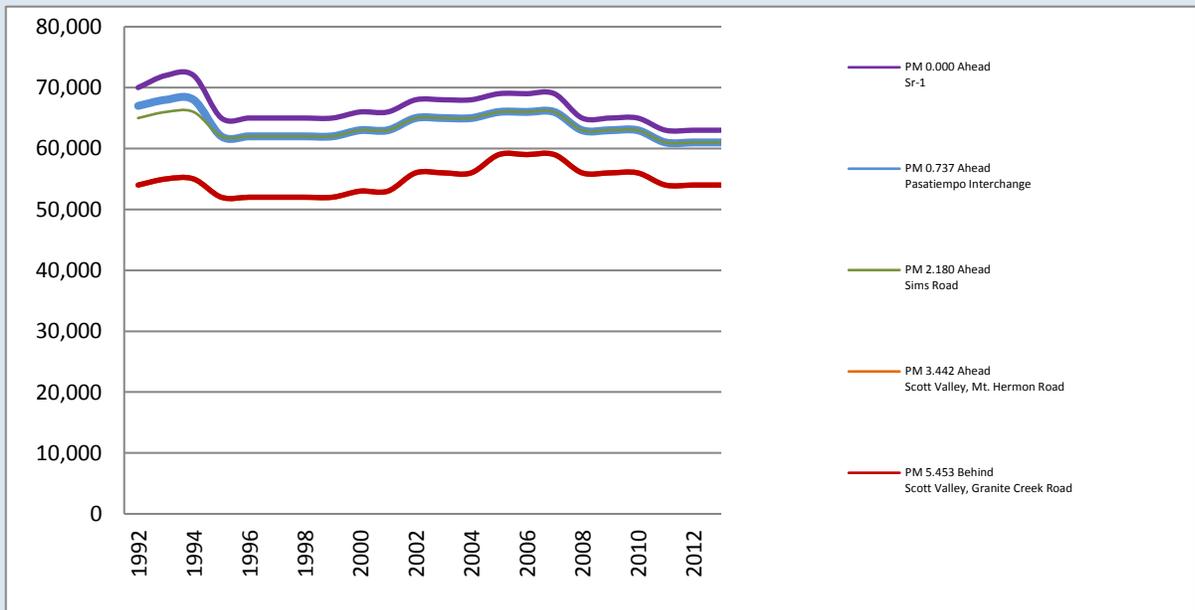
## Daily Traffic Data

AADT Base Year 2013	54,000 to 63,000
AADT Horizon Year 2040	68,200 to 77,100
AADT: Growth Rate (Vehicles/Year)	520 to 710
VMT Base Year 2013	320,000
VMT Horizon Year 2040	389,700

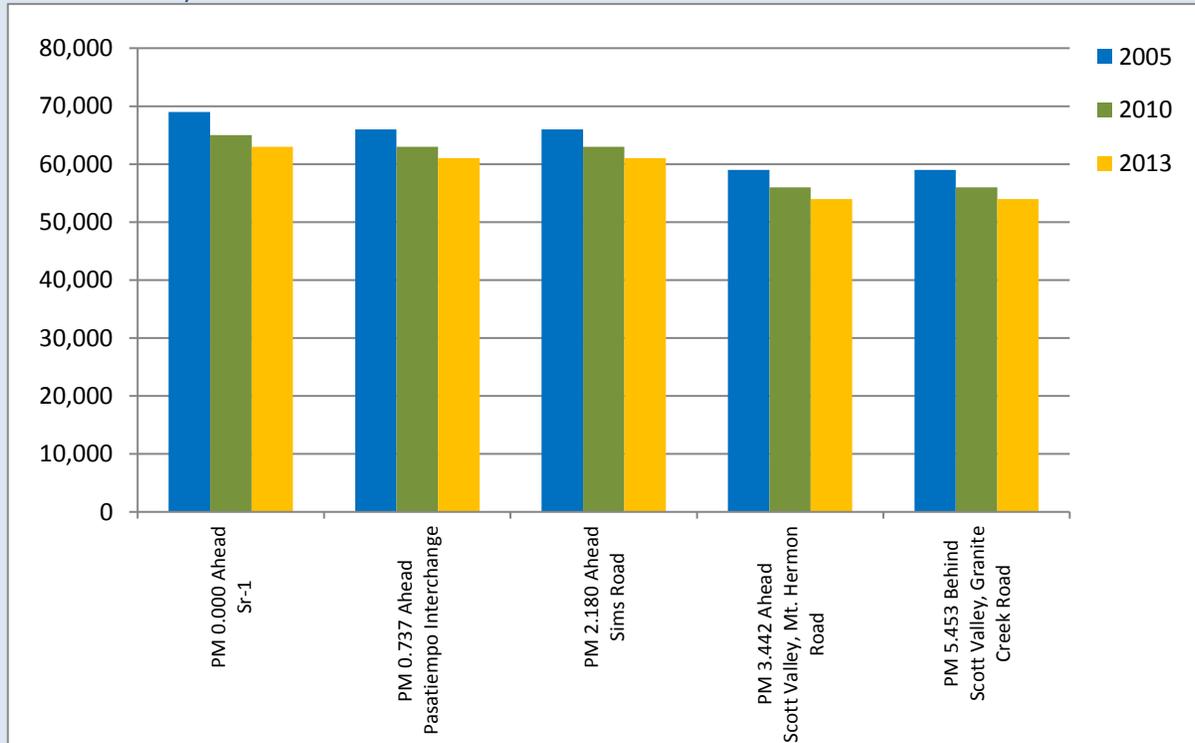
## PM Peak Hour Traffic Data

	Northbound	Southbound
Segment Length (Miles)	5.453	
PM Peak Hour Directional Split Base Year 2013	41.1% to 53.3%	46.7% to 58.9%
PM Peak Hour Directional Split Horizon Year 2040	41.9% to 51.4%	48.6% to 58.1%
PM Peak Hour Volume Base Year 2013	5,200 to 5,700	
	2,100 to 2,900	2,500 to 2,500
PM Peak Hour Volume Horizon Year 2040	6,000 to 6,700	
	2,700 to 3,400	3,100 to 3,700
PM Peak Hour Growth Rate (vehicles/year)	42 to 62	
PM Peak Hour VMT Base Year 2013	13,300	15,800
PM Peak Hour VMT Horizon Year 2040	15,900	19,000
PM Peak Hour VHT Base Year 2013 (Model based)	244	301
PM Peak Hour VHT Horizon Year 2040 (Model)	329	445
PM Peak Hour V/C Base Year 2013	0.468 to 0.662	0.581 to 0.695
PM Peak Hour V/C Horizon Year 2040	0.591 to 0.776	0.712 to 0.817
PM Peak Hour LOS Base Year 2013	B to C	C
PM Peak Hour LOS Horizon Year 2040	C to D	C to D
PM Speed (mph) Base Year 2013 (Model based)	47.4 to 64.8 mph	44.3 to 63.2 mph
PM Speed (mph) Horizon Year 2040 (Model based)	37.5 to 64.0 mph	32.2 to 57.5 mph

## Historic AADT by Year

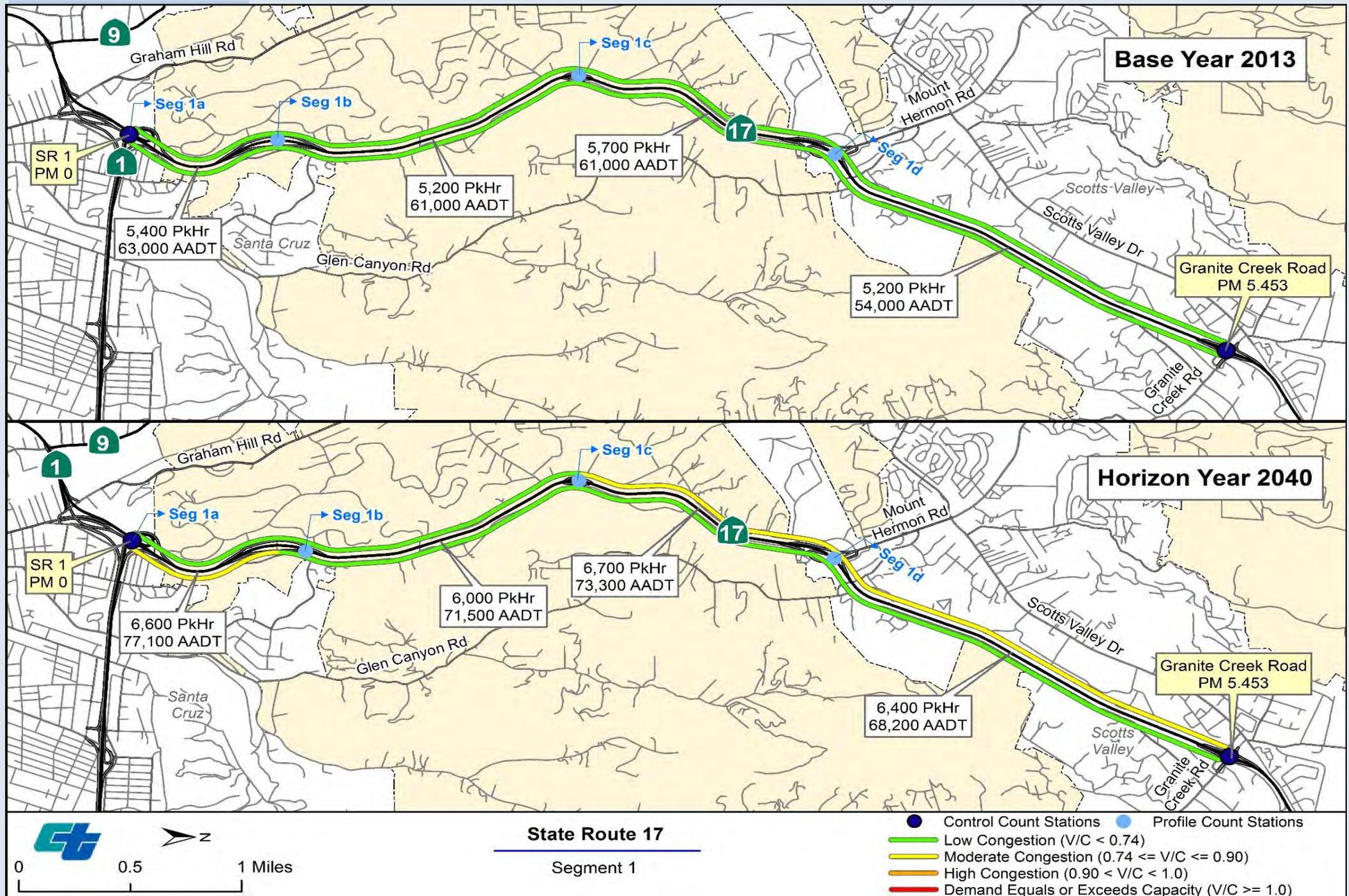


## Historic AADT by Location



# Segment 1 Traffic Data: SR 17

PM Peak Hour Congestion\*\*



\*\*Last Modified: 1/22/2015 3:04:34 PM

# Segment 1 Planning Data: SR 17

## Location Description

Segment Description	From SR 1 to Granite Creek Rd
Urban/Rural	Urban
Local Planning Jurisdiction	SCCRTC/AMBAG
County	Santa Cruz
City	Santa Cruz; Scotts Valley
Prevalent Land Use	Low Density Residential

## Highway Type

Freeway/Expressway System	Yes
Facility Type	Expressway/Freeway
Functional Classification	Freeway or Expressway

## Highway Designations

National Highway System	No
Interregional Road System	High Emphasis Route
Scenic Highway	Eligible

## Highway Characteristics

Number of Lanes	4
Pavement Condition Right	No Distress
Pavement Condition Left	No Distress
Shoulder Width Right (ft)	0 ft @ Madrona Dr; Carbonera Crk o/c
Shoulder Width Left (ft)	8 ft+ all other locations (left & right)

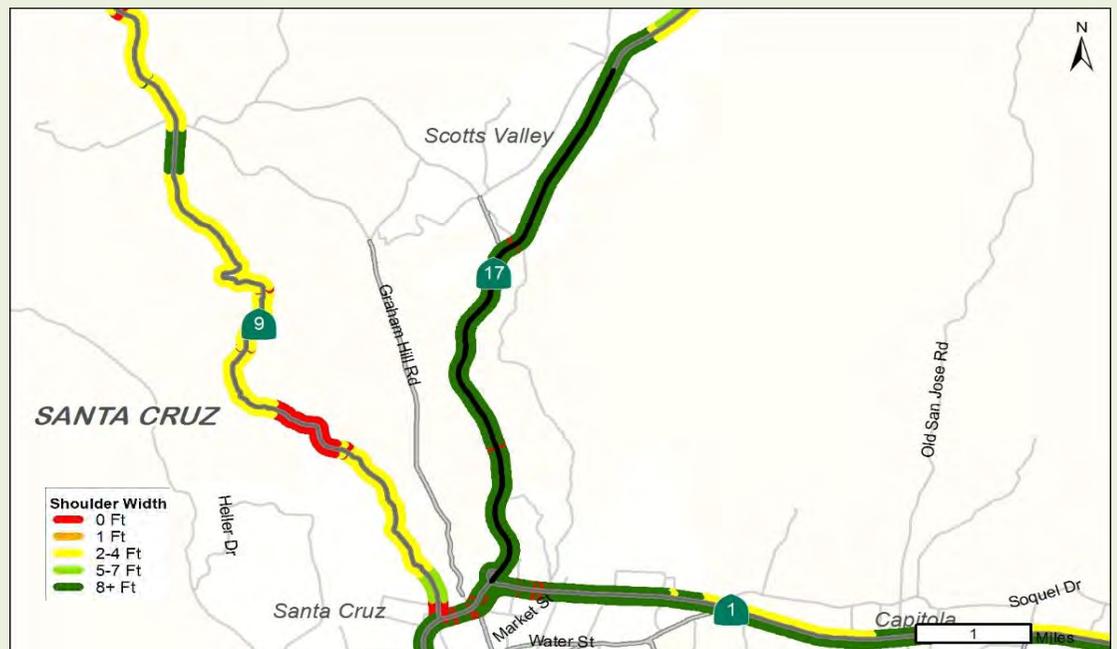
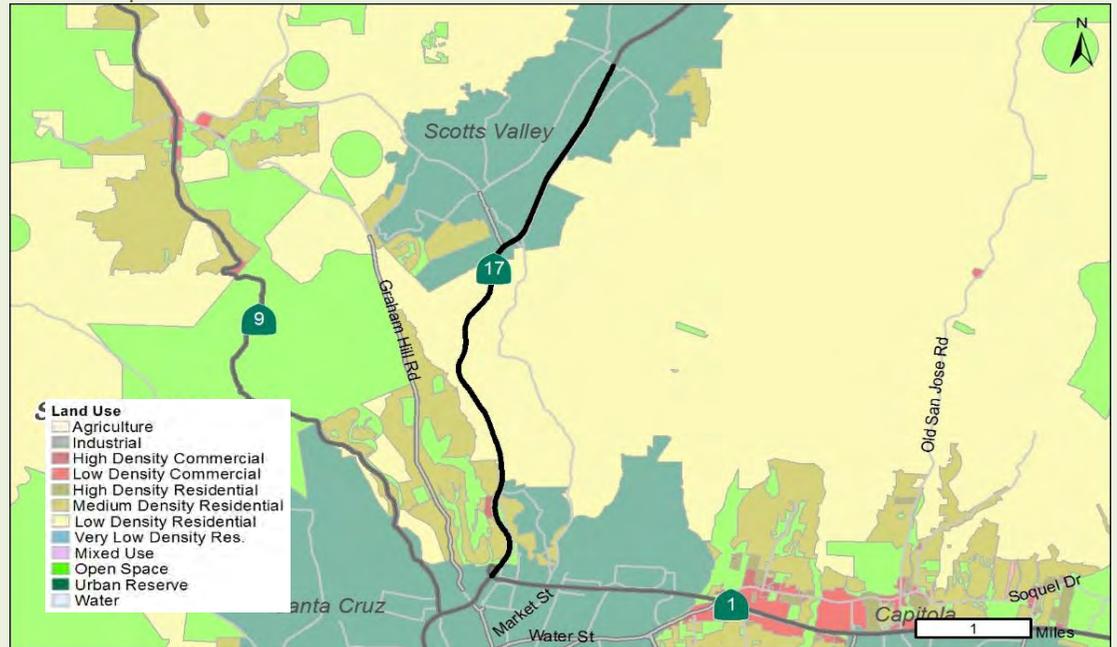
## Modal

Airports Served	N/A
Bicycle Access	Closed
AMTRAK Bus Stations	Cavallaro Transit Center, Scotts Valley
AMTRAK Rail Stations	N/A
AMTRAK Thruway Bus	Yes
Other Adjacent/Near Facilities	17 Express
Rail/SHS Crossings	No
Rail Crossing Description	N/A

## Intelligent Transportation Systems

Signals/Mile	0
Other Features: Call Box(s); Changeable Message Sign(s); Closed Circuit TV; Vehicle Detection	

## Status Map



Shoulder Width  
Page 32

# Segment 1 Planning Data: SR 17

## Freight

Percent Trucks	Approx. 3%
Key Freight Highway	No
California Truck Network	Terminal Access
Annual Freight Tonnage	20,000,001+
Freight VMT	10,001 - 20,000
Reported Freight Issues: SR 17 truck climbing lane project previously denied for environmental concerns.	

## Cultural & Scenic

Historic Bridges	No
Lighthouses	No
Vista Points	No
Parks	N/A
Federal Lands	N/A
Landmarks	N/A

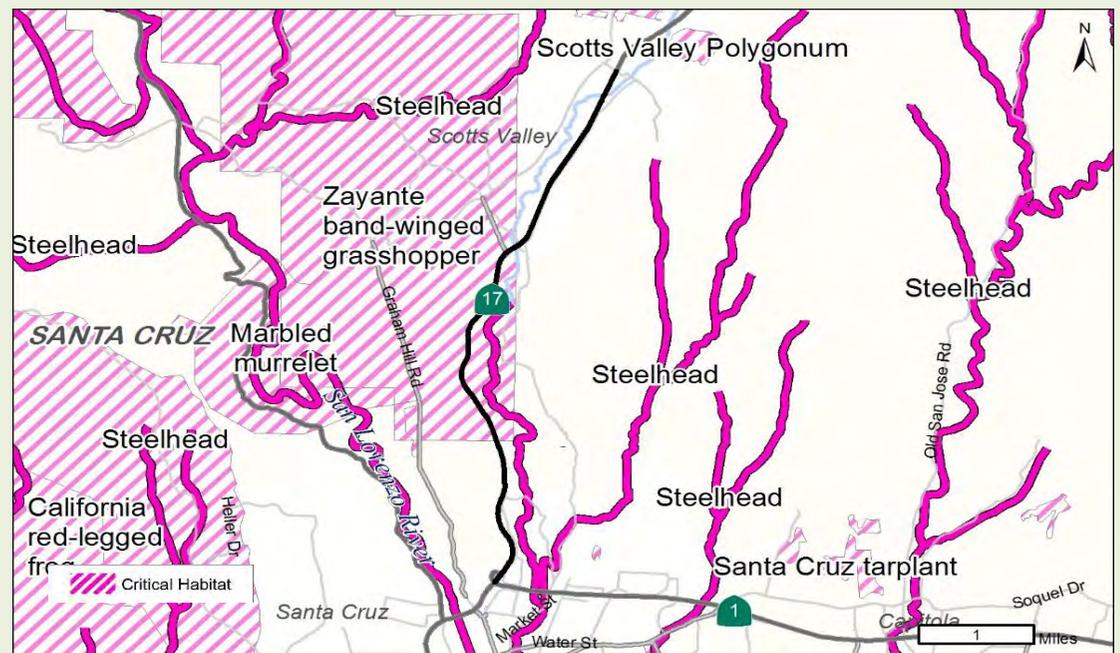
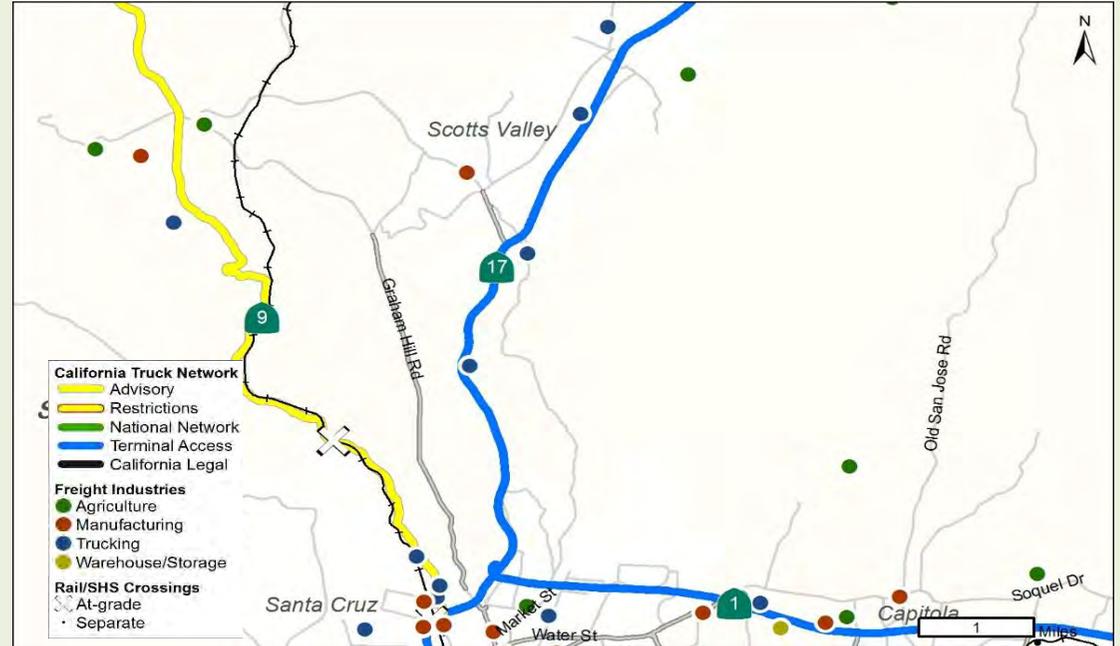
## Environmental

Surrounding Vegetation	Coastal Scrub
Coastal Zone	No
Water Crossing Description	Carbonera Creek
Flood Zone	100 Year Flood Plain @ Carbonera Creek
Critical Habitat	Zayante Band-Winged Grasshopper

## Air Quality Standards: Monterey Bay Unified APCD

Criteria Pollutant	State	Federal
Ozone	Nonattainment	Unclassified/Attain.
Carbon Monoxide	Unclassified/Attain.	Unclassified/Attain.
Nitrogen Dioxide	Attainment	Unclassified/Attain.
Sulfur Dioxide	Attainment	Attainment
Particulate Matter (10)	Nonattainment	Attainment
Particulate Matter (10)	Attainment	Unclassified/Attain.
Lead	Attainment	Unclassified/Attain.

## Culverts



Puma GPS Points

# Segment 2 Traffic Data: SR 17

## Daily Traffic Data

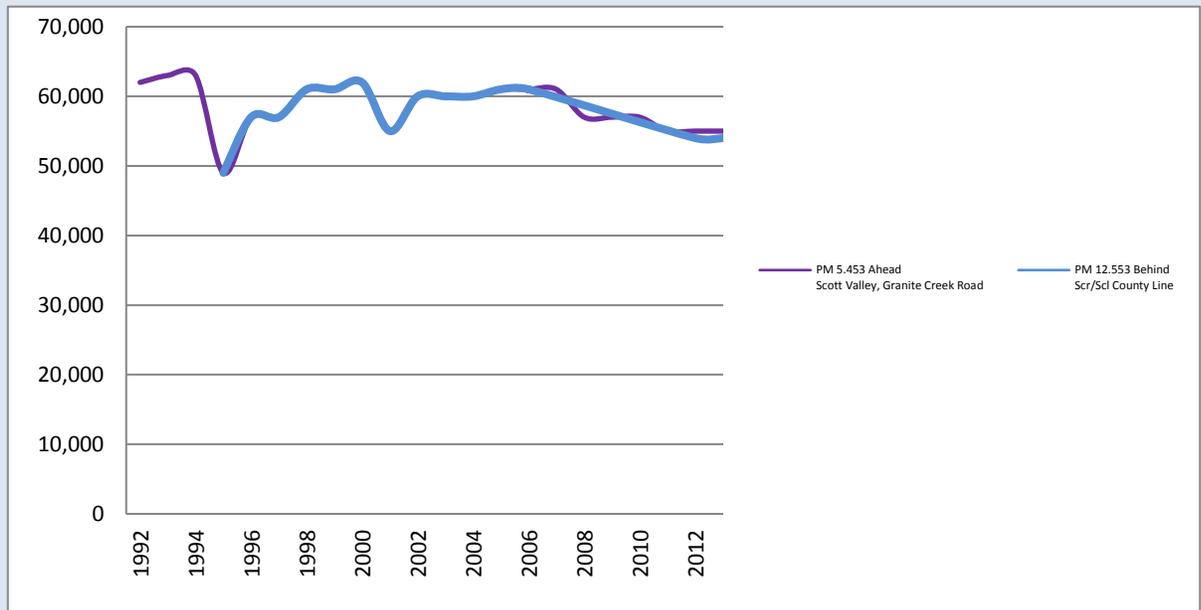
AADT Base Year 2013	54,500
AADT Horizon Year 2040	75,000
AADT: Growth Rate (Vehicles/Year)	1030
VMT Base Year 2013	387,000
VMT Horizon Year 2040	532,600

## PM Peak Hour Traffic Data

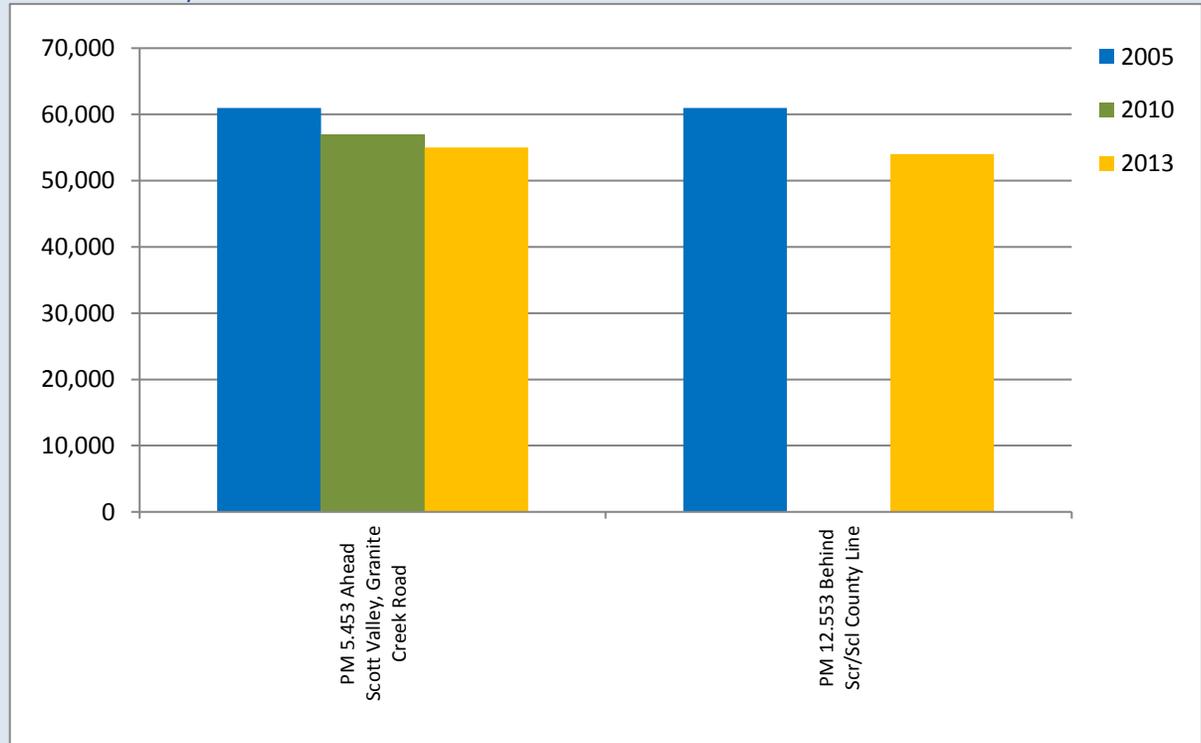
	Northbound	Southbound
Segment Length (Miles)	7.1	
PM Peak Hour Directional Split Base Year 2013	35.9%	64.1%
PM Peak Hour Directional Split Horizon Year 2040	37.1%	62.9%
PM Peak Hour Volume Base Year 2013	4,500	
	1,600	2,900
PM Peak Hour Volume Horizon Year 2040	6,100	
	2,300	3,800
PM Peak Hour Growth Rate (vehicles/year)	79	
PM Peak Hour VMT Base Year 2013	11,500	20,500
PM Peak Hour VMT Horizon Year 2040	16,000	27,200
PM Peak Hour VHT Base Year 2013 (Model based)	240	534
PM Peak Hour VHT Horizon Year 2040 (Model)	355	more than 980*
PM Peak Hour V/C Base Year 2013	0.412	0.761
PM Peak Hour V/C Horizon Year 2040	0.576	1.009
PM Peak Hour LOS Base Year 2013	B	D
PM Peak Hour LOS Horizon Year 2040	C	F
PM Speed (mph) Base Year 2013 (Model based)	47.9 mph	38.4 mph
PM Speed (mph) Horizon Year 2040 (Model based)*	47.9 mph	27.8* mph

\*Speeds and VHT cannot be determined for subsegments with LOS F

## Historic AADT by Year

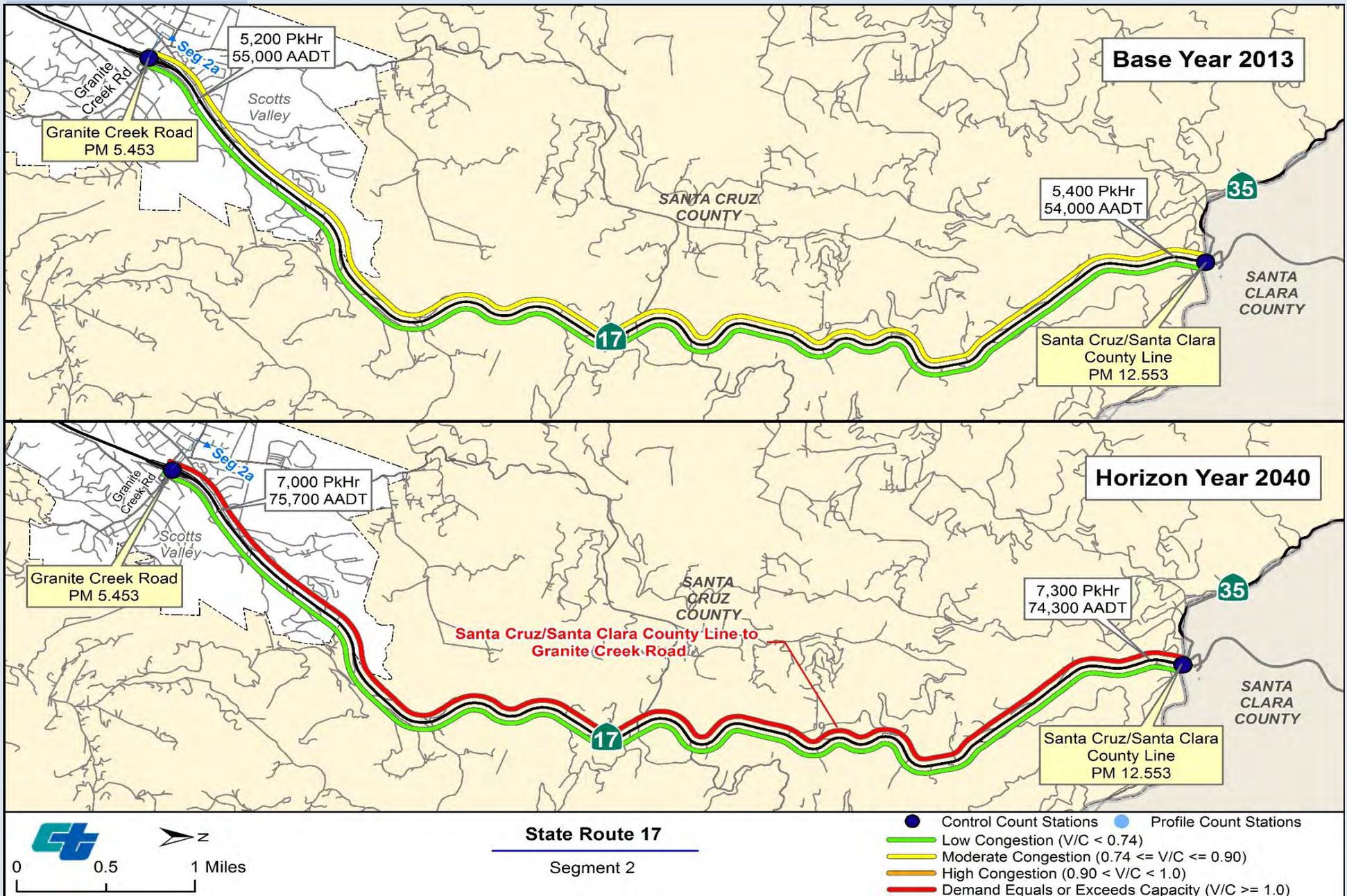


## Historic AADT by Location



# Segment 2 Traffic Data: SR 17

PM Peak Hour Congestion\*\*



\*\*Last Modified: 1/23/2015 11:25:10 AM

# Segment 2 Planning Data: SR 17

## Location Description

Segment Description	From Granite Creek Rd to SCL county
Urban/Rural	Both urban (SV) & rural
Local Planning Jurisdiction	SCCRTC/AMBAG
County	Santa Cruz
City	Scotts Valley
Prevalent Land Use	Low Density Residential

## Highway Type

Freeway/Expressway System	No
Facility Type	Conventional
Functional Classification	Principle Arterial

## Highway Designations

National Highway System	No
Interregional Road System	High Emphasis Route
Scenic Highway	Eligible

## Highway Characteristics

Number of Lanes	4
Pavement Condition Right	Ride
Pavement Condition Left	Major/Ride
Shoulder Width Right (ft)	0-8+
Shoulder Width Left (ft)	0-8+

## Modal

Airports Served	N/A
Bicycle Access	Open
AMTRAK Bus Stations	N/A
AMTRAK Rail Stations	N/A
AMTRAK Thruway Bus	Yes
Other Adjacent/Near Facilities	17 Express
Rail/SHS Crossings	No
Rail Crossing Description	N/A

## Intelligent Transportation Systems

Signals/Mile	0
Other Features: Call Box(s); Changeable Message Sign(s); Closed Circuit TV; Vehicle Detection	

## Status Map



## Shoulder Width

# Segment 2 Planning Data: SR 17

## Freight

Percent Trucks	Approx. 3%
Key Freight Highway	No
California Truck Network	Terminal Access
Annual Freight Tonnage	20,000,001+
Freight VMT	10,001 - 20,000
Reported Freight Issues: SR 17 truck climbing lane project previously denied for environmental concerns.	

## Cultural & Scenic

Historic Bridges	No
Lighthouses	No
Vista Points	No
Parks	N/A
Federal Lands	N/A
Landmarks	Vine Hill Elementary School

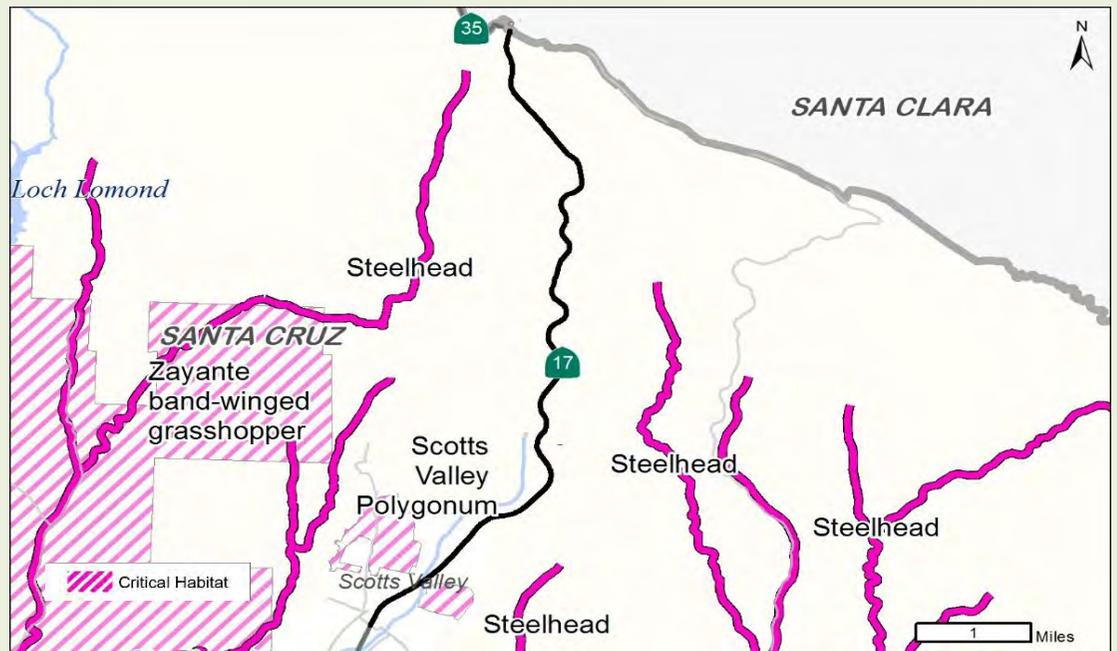
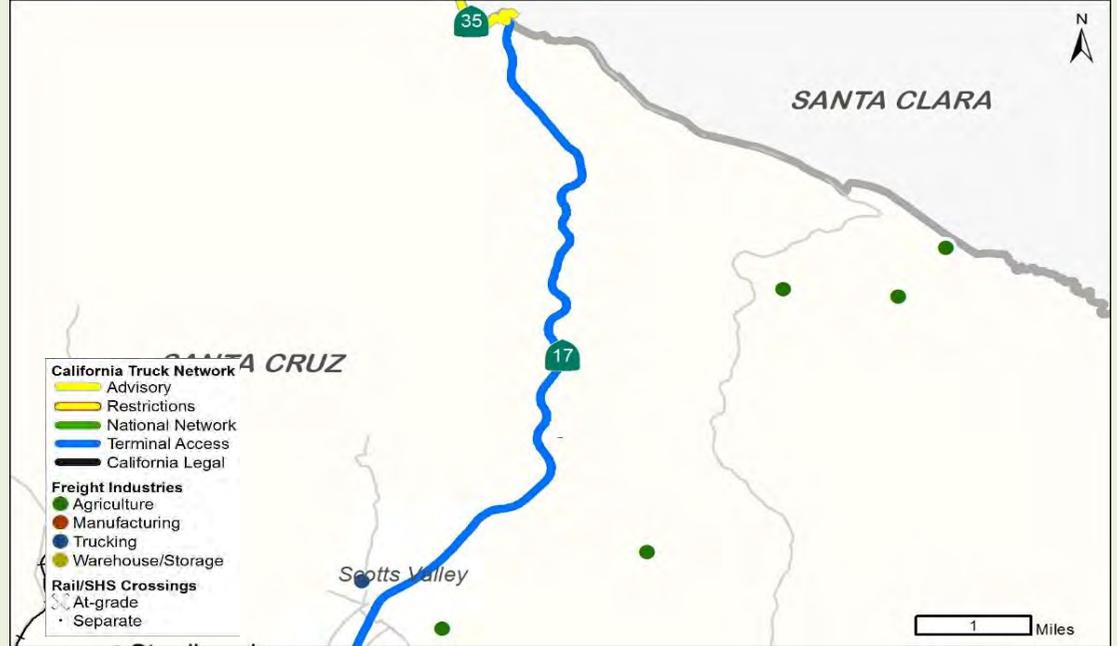
## Environmental

Surrounding Vegetation	Coastal Oak Woodland
Coastal Zone	No
Water Crossing Description	Carbonera Creek
Flood Zone	100 Year Flood Plain @ Carbonera Creek
Critical Habitat	Scotts Valley Polygonum

## Air Quality Standards: Monterey Bay Unified APCD

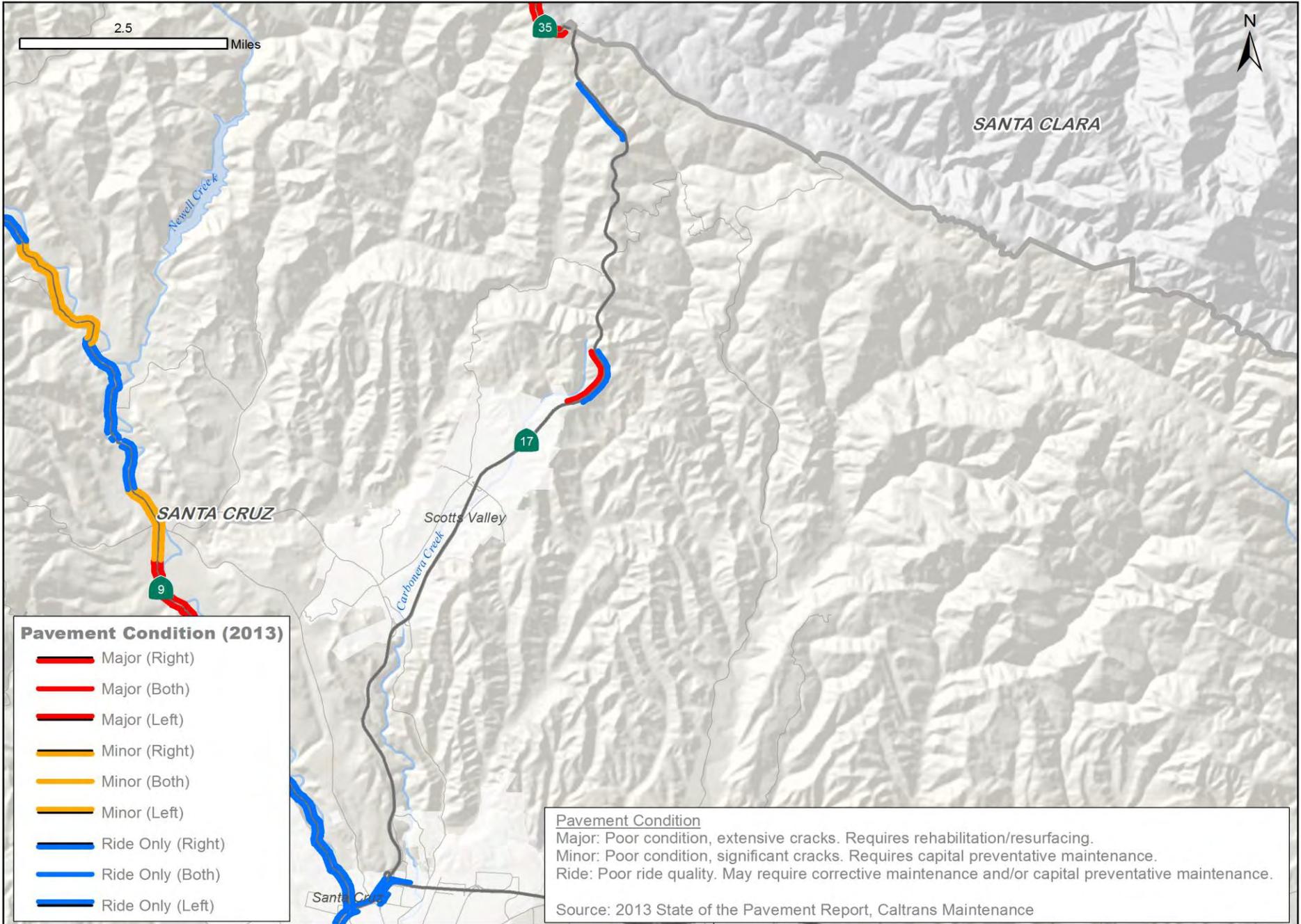
Criteria Pollutant	State	Federal
Ozone	Nonattainment	Unclassified/Attain.
Carbon Monoxide	Unclassified/Attain.	Unclassified/Attain.
Nitrogen Dioxide	Attainment	Unclassified/Attain.
Sulfur Dioxide	Attainment	Attainment
Particulate Matter (10)	Nonattainment	Attainment
Particulate Matter (10)	Attainment	Unclassified/Attain.
Lead	Attainment	Unclassified/Attain.

## Culverts



Puma GPS Points

Appendix A: Pavement Conditions



## Appendix B: Traffic Performance

Segment Label	Begin Co	Rte	Begin PM	End PM	Begin Name	End Name	2013 ADT Volume	2013 Daily VMT	2013 PM Volume	2013 PM NB Volume	2013 PM SB Volume	2013 PM Peak Direction	2013 PM VMT	2013 PM NB VMT	2013 PM SB VMT	2013 PM NB Adjusted Capacity	2013 PM SB Adjusted Capacity	2013 PM NB VC	2013 PM SB VC	2013 PM NB LOS	2013 PM SB LOS	2013 PM NB Model Based Speed	2013 PM SB Model Based Speed	2013 PM VHT (Model)	2013 PM NB VHT (Model)	2013 PM SB VHT (Model)	
AMBAG 2014 SCS Model Growth Rates and Splits																											
1a	SCR	17	0.000	0.737	SR-1	Pasatiempo Interchange	63,000	46,431	5,400	2,880	2,520	NB	3,980	2,123	1,857	4,348	4,335	0.66	0.58	C	C	47.4	49.5	82	45	38	
1b	SCR	17	0.737	2.180	Pasatiempo Interchange	Sims Road	61,000	88,023	5,200	2,521	2,679	SB	7,504	3,638	3,866	4,400	4,400	0.57	0.61	C	C	48.3	44.3	163	75	87	
1c	SCR	17	2.180	3.442	Sims Road	Scott Valley, Mt. Hermon Road	61,000	76,982	5,700	2,574	3,126	SB	7,193	3,249	3,944	4,480	4,500	0.57	0.69	C	C	56.4	50.1	136	58	79	
1d	SCR	17	3.442	5.453	Scott Valley, Mt. Hermon Road	Scott Valley, Granite Creek Road	54,000	108,594	5,200	2,135	3,065	SB	10,457	4,293	6,164	4,560	4,607	0.47	0.67	B	C	64.8	63.2	164	66	97	
2a	SCR	17	5.453	12.553	Scott Valley, Granite Creek Road	Scr/Scl County Line	54,500	386,950	4,507	1,617	2,891	SB	32,001	11,477	20,523	3,920	3,800	0.41	0.76	B	D	47.9	38.4	774	240	534	

**Sources:**

Base Year Peak Hour Volumes - Caltrans Traffic Data Branch and TSN

Growth Rates - AMBAG Regional Model 2014

Directional Splits - Model

## Appendix B: Traffic Performance

Segment Label	Begin Co	Rte	Begin PM	End PM	Begin Name	End Name	PM Growth Rate	ADT Growth Rate	2040 ADT Volume	2040 Daily VMT	2040 PM Volume	2040 PM NB Volume	2040 PM SB Volume	2040 PM Peak Direction	2040 PM VMT	2040 PM NB VMT	2040 PM SB VMT	2040 PM NB Adjusted Capacity	2040 PM SB Adjusted Capacity	2040 PM NB VC	2040 PM SB VC	2040 PM NB LOS	2040 PM SB LOS	2040 PM NB Model Based Speed	2040 PM SB Model Based Speed	2040 PM VHT (Model)	2040 PM NB VHT (Model)	2040 PM SB VHT (Model)
AMBAG 2014 SCS Model Growth Rates and Splits																												
1a	SCR	17	0.000	0.737	SR-1	Pasatiempo Interchange	43	521	77,058	56,792	6,564	3,373	3,191	NB	4,838	2,486	2,352	4,348	4,335	0.78	0.74	D	C	37.5	41.1	124	66	57
1b	SCR	17	0.737	2.180	Pasatiempo Interchange	Sims Road	42	524	71,477	103,142	6,034	2,903	3,131	SB	8,706	4,189	4,518	4,400	4,400	0.66	0.71	C	C	40.3	32.2	244	104	140
1c	SCR	17	2.180	3.442	Sims Road	Scott Valley, Mt. Hermon Road	51	614	73,281	92,480	6,716	3,039	3,676	SB	8,475	3,836	4,640	4,480	4,500	0.68	0.82	C	D	51.8	39.8	191	74	117
1d	SCR	17	3.442	5.453	Scott Valley, Mt. Hermon Road	Scott Valley, Granite Creek Road	62	712	68,245	137,241	6,435	2,697	3,738	SB	12,941	5,423	7,518	4,560	4,607	0.59	0.81	C	D	64.0	57.5	216	85	131
2a	SCR	17	5.453	12.553	Scott Valley, Granite Creek Road	Scr/Scl County Line	79	1,026	75,020	532,643	6,094	2,259	3,835	SB	43,264	16,039	27,225	3,920	3,800	0.58	1.01	C	F	45.2	27.8	1,335	355	980

**Sources:**

Base Year Peak Hour Volumes - Caltrans Traffic Data Branch and TSN

Growth Rates - AMBAG Regional Model 2014

Directional Splits - Model

### Appendix C: Historic AADT Details

AADT	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Segment 1																						
PM 0.000 Ahead Sr-1	70,000	72,000	72,000	65,000	65,000	65,000	65,000	65,000	66,000	66,000	68,000	68,000	68,000	69,000	69,000	69,000	65,000	65,000	65,000	63,000	63,000	63,000
PM 0.737 Ahead Pasatiempo Interchange	67,000	68,000	68,000	62,000	62,000	62,000	62,000	62,000	63,000	63,000	65,000	65,000	65,000	66,000	66,000	66,000	63,000	63,000	63,000	61,000	61,000	61,000
PM 2.180 Ahead Sims Road	65,000	66,000	66,000	62,000	62,000	62,000	62,000	62,000	63,000	63,000	65,000	65,000	65,000	66,000	66,000	66,000	63,000	63,000	63,000	61,000	61,000	61,000
PM 3.442 Ahead	54,000	55,000	55,000	52,000	52,000	52,000	52,000	52,000	53,000	53,000	56,000	56,000	56,000	59,000	59,000	59,000	56,000	56,000	56,000	54,000	54,000	54,000
PM 5.453 Behind	54,000	55,000	55,000	52,000	52,000	52,000	52,000	52,000	53,000	53,000	56,000	56,000	56,000	59,000	59,000	59,000	56,000	56,000	56,000	54,000	54,000	54,000
Segment 2																						
PM 5.453 Ahead Scott Valley, Granite Creek Road	62,000	63,000	63,000	49,000	57,000	57,000	61,000	61,000	62,000	55,000	60,000	60,000	60,000	61,000	61,000	61,000	57,000	57,000	57,000	55,000	55,000	55,000
PM 12.553 Behind Scr/Scl County Line				49,000	57,000	57,000	61,000	61,000	62,000	55,000	60,000	60,000	60,000	61,000	61,000						54,000	54,000

## Appendix D: Glossary and References

**100-YEAR FLOOD** – Areas of 1-percent-annual-chance flooding. Source: FEMA Digital Flood Insurance Rate Map, 2010. [www.fema.gov/msc](http://www.fema.gov/msc)

**500-YEAR FLOOD** – Areas of 0.2-percent-annual-chance flooding. Source: FEMA Digital Flood Insurance Rate Map, 2010. [www.fema.gov/msc](http://www.fema.gov/msc)

**AIR QUALITY STANDARDS** – Designations in relation to the California standards and National standards Source: California Air Resource Board (ARB), 2013. [www.arb.ca.gov/desig/desig.htm](http://www.arb.ca.gov/desig/desig.htm)

**AM/PM PEAK** – The part of day when most traffic congestion occurs. Source: Caltrans Historical Counts.

**ANNUAL AVERAGE DAILY TRAFFIC (AADT)** – Total volume of vehicle traffic for a year divided by 365 days. Source: Caltrans Traffic Operations, 2012. <http://traffic-counts.dot.ca.gov/>

**ANNUAL FREIGHT TONNAGE** – Tons per year. Source: Freight Analysis Framework, 2007. [www.ops.fhwa.dot.gov/freight/freight\\_analysis/faf/](http://www.ops.fhwa.dot.gov/freight/freight_analysis/faf/)

**ATTAINMENT** – Air quality in the area meets the standard. Source: California ARB, 2013. [www.arb.ca.gov/desig/desig.htm](http://www.arb.ca.gov/desig/desig.htm)

**ATTAINMENT/UNCLASSIFIED** – An Environmental Protection Agency (EPA) designation which, in terms of planning implications, is essentially the same as Attainment. Source: California ARB, 2013. [www.arb.ca.gov/desig/desig.htm](http://www.arb.ca.gov/desig/desig.htm)

**BASE YEAR** – The initial year of the forecast period. Source: Caltrans Historical Counts.

**FREEWAY/EXPRESSWAY SYTEM** – Concept of how the route is managed as defined in the Streets and Highways Code §250-257. Source: Caltrans, 2014. [www.leginfo.ca.gov/.html/shc\\_table\\_of\\_contents.html](http://www.leginfo.ca.gov/.html/shc_table_of_contents.html)

**FREIGHT VMT** – Truck Vehicle Miles Traveled. Source: Freight Analysis Framework, 2007. [www.ops.fhwa.dot.gov/freight/freight\\_analysis/faf/](http://www.ops.fhwa.dot.gov/freight/freight_analysis/faf/)

**FUNCTIONAL CLASSIFICATION** – System by which roads are grouped according to the type of service and amount of traffic the facility carries. Used to determine design standards of roads and determines Federal Aid funding eligibility. Source: FHWA, 2012. [http://dot.ca.gov/hq/tsip/hseb/func\\_clas.html](http://dot.ca.gov/hq/tsip/hseb/func_clas.html)

**GROWTH RATE** – The forecasted change in vehicles per year from the base year to the horizon year. Source: AMBAG Regional Model 2014.

**HIGH EMPHASIS ROUTE** – Route with high interregional importance. Source: Caltrans Interregional Transportation Strategic Plan, 2013. [www.dot.ca.gov/hq/tpp/offices/oasp/itsp.html](http://www.dot.ca.gov/hq/tpp/offices/oasp/itsp.html)

**HORIZON YEAR** – 2040 - The future forecast year used in the long range model. Source: AMBAG Regional Model 2014.

**INTERREGIONAL ROAD SYSTEM** – Subset of State Highway System that provides connectivity among all California's regions. Source: Caltrans Interregional Transportation Strategic Plan, 2013. [www.dot.ca.gov/hq/tpp/offices/oasp/itsp.html](http://www.dot.ca.gov/hq/tpp/offices/oasp/itsp.html)

**CALIFORNIA LEGAL** – Trucks up to 65 feet are allowed on the SHS except where otherwise prohibited. Source: Caltrans Traffic Operations, 2013. [www.dot.ca.gov/hq/traffops/engineering/trucks/](http://www.dot.ca.gov/hq/traffops/engineering/trucks/)

**CALIFORNIA TRUCK NETWORK** – California Vehicle Code sections related to trucks, summarized here at the planning level only. Note: Caltrans is not responsible for authorizing commercial trucks, other than issuing permits for oversize or overweight loads. Source: Caltrans Traffic Operations, 2013. [www.dot.ca.gov/hq/traffops/engineering/trucks/](http://www.dot.ca.gov/hq/traffops/engineering/trucks/)

**CRITICAL HABITAT** – Critical habitat for threatened and endangered species . Source: US Fish and Wildlife Service, 2014. [www.fws.gov/gis/data/national/index.html](http://www.fws.gov/gis/data/national/index.html)

**DISTRICT KEY FREIGHT HIGHWAY FACILITY** – Route key to freight operations. Source: California Central Coast Commercial Flows Study, 2012. [www.dot.ca.gov/dist05/planning/goods\\_movement.htm](http://www.dot.ca.gov/dist05/planning/goods_movement.htm)

**FACILITY TYPE** – Description of existing operations. Source: Caltrans TSN, 2011.

**FLOOD ZONE** – Special flood hazard areas. Source: FEMA Digital Flood Insurance Rate Map, 2010. [www.fema.gov/msc](http://www.fema.gov/msc)

**FOCUS ROUTE** – Highest priority routes for completion to minimum facility concept standards Source: Caltrans Interregional Transportation Strategic Plan, 2013. [www.dot.ca.gov/hq/tpp/offices/oasp/itsp.html](http://www.dot.ca.gov/hq/tpp/offices/oasp/itsp.html)

## Appendix D: Glossary and References

**MAJOR (PAVEMENT CONDITION)** – Poor condition, extensive cracks. Requires rehabilitation/resurfacing. Source: Caltrans Pavement Condition Survey, 2013. [http://dot.ca.gov/hq/maint/Pavement/Offices/Pavement\\_Management/index.html](http://dot.ca.gov/hq/maint/Pavement/Offices/Pavement_Management/index.html)

**MINOR (PAVEMENT CONDITION)** – Poor condition, significant cracks. Requires capital preventative maintenance. Source: Caltrans Pavement Condition Survey, 2013. [http://dot.ca.gov/hq/maint/Pavement/Offices/Pavement\\_Management/index.html](http://dot.ca.gov/hq/maint/Pavement/Offices/Pavement_Management/index.html)

**NATIONAL HIGHWAY SYSTEM** – The national system designated by Congress that includes the Interstate Highway System and other nationally significant highways and thoroughfares used for interstate and interregional travel, national defense, intermodal connection, and interstate commerce. Source: Caltrans Highway System Engineering, 2013. <http://dot.ca.gov/hq/tsip/hseb/map21nhs.html>

**NATIONAL NETWORK** – Allows for conventional tractor/semitrailer combinations. Source: Caltrans Traffic Operations, 2013. [www.dot.ca.gov/hq/traffops/engineering/trucks/](http://www.dot.ca.gov/hq/traffops/engineering/trucks/)

**NONATTAINMENT** – Air quality in the area fails to the applicable standard. Source: California ARB, 2013. [www.arb.ca.gov/desig/desig.htm](http://www.arb.ca.gov/desig/desig.htm)

**PAVEMENT CONDITION** – Measurement of surface characteristics including roughness, cracking, and faulting (Caltrans, 2013). Source: Caltrans Pavement Condition Survey, 2013. [http://dot.ca.gov/hq/maint/Pavement/Offices/Pavement\\_Management/index.html](http://dot.ca.gov/hq/maint/Pavement/Offices/Pavement_Management/index.html)

**PEAK HOUR DIRECTIONAL SPLIT** – The percent of traffic volume in the predominant direction of flow as determined from the regional travel model. Source: AMBAG Regional Model 2014.

**PEAK HOUR TRAFFIC VOLUME** – Represents an estimate of the heaviest traffic flow during the peak hour. Source: Caltrans Traffic Operations, 2012. <http://traffic-counts.dot.ca.gov/>

**PERCENT TRUCKS** – Rounded percentage of truck counts. Source: Caltrans Traffic Operations, 2012. <http://traffic-counts.dot.ca.gov/>

**PREVALENT LAND USE** – California County and local government existing land use designations. Source: UC Davis Information Center for the Environment, 2007. [http://ice.ucdavis.edu/projects/land\\_use](http://ice.ucdavis.edu/projects/land_use)

**RAIL/SHS CROSSINGS** – At-grade crossings. Source: National Transportation Atlas Database, 2011. <http://www.rita.dot.gov/bts/>

**RIDE (PAVEMENT CONDITION)** – Poor ride quality. May require corrective maintenance and/or capital preventative maintenance. Source: Caltrans Pavement Condition Survey, 2013. [http://dot.ca.gov/hq/maint/Pavement/Offices/Pavement\\_Management/index.html](http://dot.ca.gov/hq/maint/Pavement/Offices/Pavement_Management/index.html)

**RURAL** – Areas outside urban land uses. Source: US Census, 2000). <http://www.census.gov/>

**SCENIC HIGHWAY PROGRAM** – Program to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. Source Caltrans Landscape Architecture, 2014. [http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/scenic\\_hwy.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm)

**SERVICE ACCESS** – National Network trucks may travel up to one mile from the off ramp to obtain services. Source: Caltrans Traffic Operations, 2013. [www.dot.ca.gov/hq/traffops/engineering/trucks/](http://www.dot.ca.gov/hq/traffops/engineering/trucks/)

**SURROUNDING VEGETATION** – Land cover dataset. Source: US Forest Service & California Department of Forestry and Fire Protection, 1979. [http://frap.fire.ca.gov/data/frapgisdata-land\\_cover.php](http://frap.fire.ca.gov/data/frapgisdata-land_cover.php)

**TERMINAL ACCESS** – National Network trucks may exit and travel on these SHS routes. Source: Caltrans Traffic Operations, 2013. [www.dot.ca.gov/hq/traffops/engineering/trucks/](http://www.dot.ca.gov/hq/traffops/engineering/trucks/)

**UNCLASSIFIED** – Insufficient data to designate area, or designations have not been made. Source: California ARB, 2013. [www.arb.ca.gov/desig/desig.htm](http://www.arb.ca.gov/desig/desig.htm)

**URBAN** - Represent densely developed territory and encompass residential, commercial, and other non-residential urban land uses. Source: US Census, 2000. <http://www.census.gov/>

**VEHICLE HOURS OF TRAVEL (VHT)** – A statistic representing the total number of vehicles multiplied by the total number of hours vehicles are traveling.

**VEHICLE MILES TRAVELED (VMT)** – Number of miles vehicles travel. Can be calculated for the peak hour and/or the entire day.

**VOLUME TO CAPACITY RATIO (V/C)** – The ratio of demand volume to capacity.



# HIGHWAY 17 EROSION & SEDIMENT CONTROL

## Project Description

The project will stabilize the existing cut slope adjacent and above the southbound lanes of SR 17 to reduce sediment discharge into the Carbonera Creek and the San Lorenzo River Watershed. This project will help achieve compliance with the requirements identified by the Central Coast Regional Water Quality Control Board and the Environmental Protection Agency's National Pollutant Discharge Elimination System permit program.

## Project Features

### **Invasive and Native Vegetation Removal**

The non-native invasive acacia trees, which have shallow roots, top-heavy canopy, and expose loose soil when they fall, will be removed and planted with native trees, shrubs and erosion control. Some native trees, removed along the slope due to poor stability, will be replanted with native trees.

### **Drainage System Upgrades**

Existing damaged concrete gutters along the slope will be replaced with new permeable drains that will flow into underground down pipes, which guard against erosion by safely removing water from the slope and into the drainage systems at natural depressions.

### **Rock Slope Protection**

Rock slope protection, rock placed on the surface of the soil to protect against water erosion, will be placed on top of the buried drainage down pipes in natural depressions.

### **Erosion Prevention**

Erosion control blanket, made from coconut fibers, will be used to stabilize and protect the disturbed soils from rainfall and soil erosion, to promote the growth of native hydroseed erosion control and vegetation establishment and to reduce sediment discharge.

### **Soil Stabilization**

Low-visibility wire mesh will be attached to the slope to hold soil in place, manage erosion, allow native seed and vegetation to grow and natural seepage to occur through the mesh.

### **Native Vegetation**

Native grasses along with willow bundles and willow cuttings will be planted along the slopes at the natural drainage depressions. Native shrubs and trees will be planted above the slopes to revegetate the areas where the acacia trees are to be removed.

### **Vegetation maintenance**

Control of invasive vegetation and the establishment of planted native erosion control, shrubs and trees will provide a natural native appearance to the project site after revegetation.



# CALTRANS HIGHWAY 17 EROSION & SEDIMENT CONTROL

## Environmental Document

The environmental study is currently under review and scheduled to be completed in the summer of 2014. The Caltrans study determined that the proposed project would not have significant adverse environmental impacts.

## Construction Information

Periodic southbound closures in the right lane of Highway 17 will occur. Work may occur during either day or night. Construction will take place within Caltrans' right-of way and on an access road at the top of the slope.

**CONSTRUCTION COST ESTIMATE/SCHEDULE:  
\$7.4 million**

### **Construction – Fall 2016**

Invasive vegetation removal, demolition and reconstruction of slope and drainage improvements, erosion control, and 1yr plant establishment and invasive plant species control.

### **Complete Construction & Begin Plant Establishment– Spring 2018**

Native tree and shrub mitigation replacement planting and 3yr plant establishment.

### **Complete 3yr Plant Establishment – Spring 2021**

View of existing slope

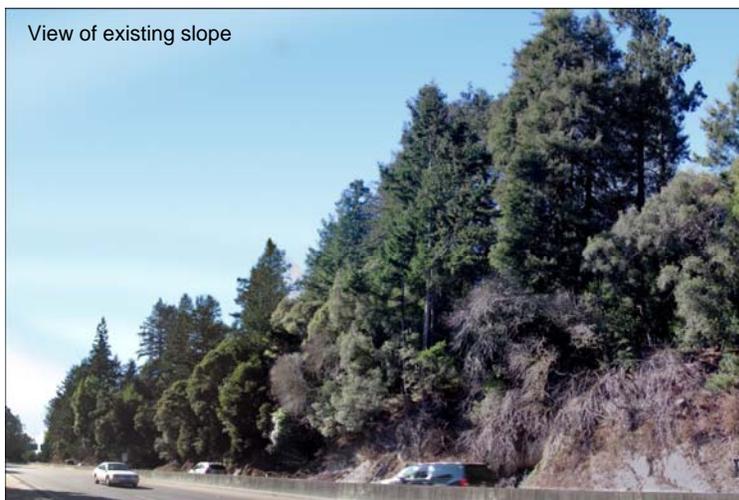
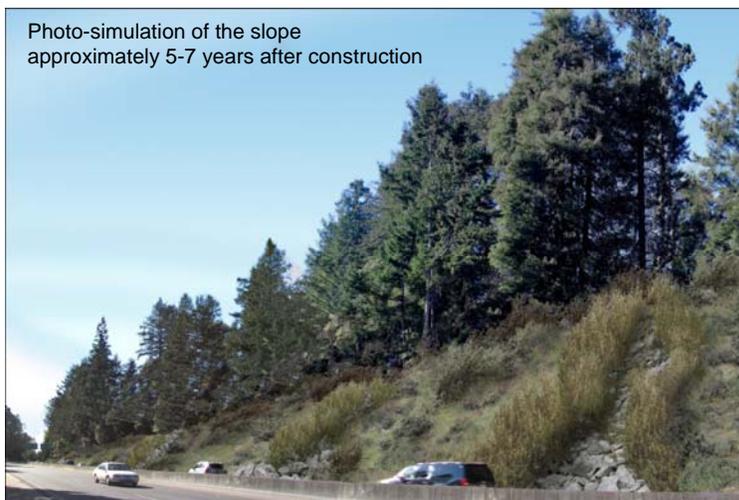


Photo-simulation of the slope approximately 5-7 years after construction



*These images show the existing and proposed views of the slope on the southern portion (above) and the northern portion (left).*

## **ADDITIONAL PROJECT INFORMATION**

### **District Contact:**

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Project Manager  
Doug.Hessing@dot.ca.gov  
(805) 549-3386



**California Department of Transportation  
District 5  
50 Higuera Street  
San Luis Obispo, CA 93401-5415  
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View of existing slope



Photo-simulation of the slope approximately 5-7 years after construction

