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

Wednesday, September 10, 2014
10:00am-12:00pm

Santa Cruz County Regional Transportation Commission
1523 Pacific Ave, Santa Cruz, CA 95060

Teleconference: (712) 432-1212
Meeting ID: 784-712-878#

1. Introductions

2. Additions or Deletions to the Agenda

3. Approve Draft Minutes of the March 12, 2014 Joint TOS Oversight Committee and Safe on 17 Meeting – page 3

4. Information Items
   a. FSP Program Update (Amy Naranjo) - page 8
   b. Cruz 511 Project Update (Amy Naranjo) - page 10
   c. Safe on 17 Annual Report (Ginger Dykaar)
   d. Articles/Public Feedback (Ginger Dykaar) - page 11

5. California Highway Patrol – Safe on 17 Program Information
   a. Review Collision and Enforcement Statistics (San Jose) for January through July of 2014 (Captain Bishop) - page 16
   b. Review Collision and Enforcement Statistics (Santa Cruz) for January through July of 2014 (Officer Sadek) - page 18
   c. 2014 Highway 17 Extra CHP Enforcement Hours Public Information Activities (Officer Sadek and Captain Bishop)
   d. Extra Enforcement Hours for January through July of 2014 (Ginger Dykaar) - page 20

6. Major Incident Review (CHP)

7. Caltrans District 5 Highway 17 Project Update
   a. Laurel Curve Shoulder Widening Update (Bertha Roman)
   b. Hwy 17 Access Management Plan (Brandy Rider) - page 21
   c. Other Projects - page 37
   d. Maintenance Projects/Updates
8. Caltrans District 4 Highway 17 Project Update
   a. Highway Projects (Bernard Walik)
   b. Maintenance Projects/Updates

9. Traffic Operations Systems
   a. Transportation Management Center Update (Ramin Bolourchian)
   b. Communications Update (Nicole Stewart/Ginger Dykaar) - page 38
   c. Hwy 1 and 17 TOS Equipment Update (Jacques Van Zeventer)
      i. CCTVs
      ii. Traffic Detection Equipment
      iii. Other
   d. Caltrans QuickMap Update – (Jacques Van Zeventer)

10. Additional Items

11. Next Meeting Date: Joint Safe on 17 Task Force & TOS Oversight Committee Meeting –
    Wednesday, March 11, 2015 10:00 am to 12:00 pm at San Jose CHP, 2020 Junction Ave,
    San Jose, CA 95131
JOINT MEETING OF
SANTA CRUZ COUNTY TRAFFIC OPERATIONS SYSTEMS (TOS) OVERSIGHT COMMITTEE
AND
SAFE ON 17 TASK FORCE

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

TOS Oversight Committee and Safe on 17 Task Force Meeting Participants
Amy Naranjo, Santa Cruz County Regional Transportation Commission
Robert Rich, Metropolitan Transportation Commission (teleconference)
Captain Les Bishop, San Jose CHP
Officer John Darling, San Jose CHP
Officer John Blencowe, San Jose CHP
Officer Scot Loetscher, San Jose CHP
Officer Kory Seely, San Jose CHP
Lt Scott Wood, Santa Cruz CHP
Officer Brad Sadek, Santa Cruz CHP
Captain Ken Binder, Santa Clara County Sheriff – West Valley
Pedro Alcazar, Caltrans D4
Richard Blacksten, Caltrans D4
Ramin Bolourchian, Caltrans D4 TMC
Earl Sherman, Caltrans D4
Russell Ellingworth, Caltrans D5 Maintenance
Kelly McClendon, Caltrans D5
Scott Morris, Caltrans D5 (teleconference)
Brandy Rider, Caltrans D5
Shayne Sandeman, Caltrans D5
Jacques Van Zeventer, Caltrans D5
Jennifer Wilson, Caltrans D5
Marshall Ballard, VTA
John Leopold, Santa Cruz County District Supervisor (teleconference)
Jeanette MacDonald, Laurel Community

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. Accepted Information Items

Amy Naranjo presented the information items.

Freeway Service Patrol (FSP) Program Update – Ladd’s Towing was selected as the tow operator for FSP for Hwy 1 and 17 from September 2013 through July 2017. Ladd’s Towing also held previous contracts on Hwy 1 and 17. Motorist assists average 700-800 per year on each highway, remaining fairly consistent since 2011.

San Jose CHP acknowledged their gratitude for Freeway Service Patrol, especially on Highway 17 during the summer months when automobiles frequently overheat.

Articles/Public Feedback – There were not many articles this past 6 months. Staff provided a copy of a news release from the Land Trust of Santa Cruz County regarding their purchase of 10 acres on the east side of Highway 17 at Laurel Curve for a wildlife crossing.

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

Captain Bishop with San Jose CHP provided handouts with the latest citation and collision statistics and extra enforcement hours worked on Highway 17. Due to the lack of rain throughout the winter, collisions have remained consistent with non-weather related incidents. There was one fatality in December 2013 and another in 2014. The goal is zero fatalities.

San Jose CHP reported there was a mix-up with distribution of overtime hours for extra enforcement along Highway 17 on the San Jose side. San Jose CHP is working to resolve the mix-up and plans to utilize all their allocated overtime enforcement funding, particularly during the summer months.

Officer Sadek with Santa Cruz CHP reported a slight decrease in collisions on Highway 17, largely due to lack of rain. Officer Sadek reported one fatality in Santa Cruz at Pasatiempo. Santa Cruz CHP has been using their extra enforcement funding equally throughout the year.

CHP San Jose and CHP Santa Cruz incorporate the Safe on 17 program and safety on highway 17 in general into all their public affairs activities, whether it’s recruiting booths or information tables. Safe on 17 is an integral part of their work and they promote it whenever possible. Officer Sadek shared that April 2014 kicks off their Distracted Driving Awareness campaign.
6. Received Major Incident Review

San Jose CHP Captain Bishop reviewed major incidents for the Santa Clara County side of Highway 17. There was a fatal incident just south of Lexington Reservoir near Alma Bridge where the CHP had to shut down lanes to recover the vehicle and conduct their investigation. Captain Bishop stated San Jose CHP received a number of complaints regarding the duration of the lane closures from motorists. CHP tries to minimize lane closures on Highway 17 whenever possible, but at times it is necessary to close lanes to conduct a thorough investigation for fatal incidents and/or vehicle recovery. CHP continues to work with the TMC to get Sigalerts out to motorists.

7. Received Caltrans District 5 Highway 17 Project Update

Laurel Curve Update – Scott Morris provided an update for Paul McClintic. Scott stated that Caltrans just finished a bid opening to widen the northbound shoulder at Laurel Curve and replacing the metal beam guardrail with concrete railing. Drainage will be improved as will the cross slope of the curve. Improvements such as these tend to reduce the severity and frequency of collisions. Also the concrete railing reduces delay to motorists and exposure to Caltrans workers while they repair metal guardrails adjacent to Laurel Road.

Scott also provided additional information about potentially upgrading vehicle detection sensors on the Santa Cruz side to give more reliable data for Caltrans Performance Measurement System (PeMS) and Quickmap.

Jennifer Wilson clarified a contract has been awarded and approved. Construction is expected to start in 2-3 months, depending on the approval process. The majority of construction will take place at night, with some day work and minimal lane closures. Jennifer also clarified that the project will push back the northbound shoulder just after Laurel Curve, smoothing out the radius of the curve. Construction is expected to last one year.

John Leopold asked for more information about public notice to residents in the area. Jennifer Wilson stated more information will become available once the contractor meets with Caltrans, however Caltrans will continue to provide updates via the Caltrans website. Jacques Van Zeventer also noted planned lane closures are viewable using Caltrans QuickMap (quickmap.dot.ca.gov) and are updated daily.

Guardrail/Drainage Projects – Jennifer Wilson provided an update for the Guardrail Drainage Project. The Guardrail Drainage Project is ongoing with 10 locations along Highway 17. She anticipates 2-3 more months of work on the project with the K-rail being picked up within the month. They are waiting for good weather to complete open grade paving. Soil work is being done in the interim.
Hwy 17 Access Management Plan – Brandy Rider provided an update for the Highway 17 Access Management Plan. Brandy stated that Caltrans will work with Santa Cruz County Supervisors and the RTC to establish a charter relationship and develop a long range access plan for the Highway 17 corridor. Public participation is a large component of the access plan, which Caltrans will look to the RTC and County for assistance. Caltrans hopes to engage residents and businesses to tailor outreach efforts and hopes to use the Safe on 17 forum as one mechanism for public outreach. Funding for the Access Management Plan is provided by Caltrans District 5 and will only cover the Santa Cruz County side of Highway 17. The Access Management Plan will include public outreach, actual planning effort, and preliminary feasibility study, and will take between 18-24 months to complete.

John Leopold shared that he and Supervisor Bruce McPherson will be meeting with the CHP and/or Caltrans to talk about access plans. He also requested that no public outreach meetings take place from June through September due to limited public participation.

Maintenance Update – Russell Ellingsworth provided an update for Highway 17 Maintenance. Russell stated portions of the mountain near Waddell Creek are unstable and had a crew working on safely removing a boulder from the area.

8. Received Caltrans District 4 Highway 17 Project Update

Wet Pavement Project – John Thomas was unable to attend the meeting to provide update.

9. Received Traffic Operations Systems Updates

TMC Update - Ramin Bolourchian had no updates. There was positive feedback for CMS messages such as “Pull over in a minor accident”. San Jose CHP Captain Bishop stated it is a good balance between getting a good message out and being a distraction.

Communications Update – Nicole Stewart was not able to attend meeting to provide an update.

TOS Equipment Update - Jacques Van Zeventer provided an update for TOS Equipment. Jacques stated there is a project coming online with additional CCTV cameras between Soquel/Morrissey area and Freedom Boulevard along Highway 1. The contract has already been awarded and construction is expected to begin in July. Not all cameras will appear on Caltrans main website as a live traffic feed due to bandwidth constraints, but will be available on the Caltrans Quickmap.
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 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.

10. Received Additional Items

11. Approved Next Meeting Date
Joint Safe on 17 Task Force & TOS Oversight Committee Meeting – Wednesday, September 10, 2014 10:00 to 12:30 at Santa Cruz County Regional Transportation Commission, 1523 Pacific Ave, Santa Cruz, CA 95060.

Respectively submitted by

Amy Naranjo
AGENDA: September 10, 2014

TO: Safe on 17 Task Force & Traffic Operation Systems Oversight Committee

FROM: Amy Naranjo, Transportation Planner

RE: Santa Cruz County Freeway Service Patrol Program Update

__________________________________________________________________

RECOMMENDATION

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

__________________________________________________________________

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.

### Number of FSP Assists per Fiscal Year

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**SUMMARY**

Matching funds for FSP service on Highway 1 and 17 for FY 13/14 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.
AGENDA: September 10, 2014

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

RECOMMENDATION

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

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 “Cruz 511”, a Santa Cruz County 511 website that is designed for viewing on mobile devices as well as computers and will feature:

- Information on real-time traffic conditions using Caltrans QuickMap;
- Multimodal trip planning;
- Emergency notices;
- Rideshare tools and information; and
- Links to transportation agency websites and local programs and resources.

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. 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 “Cruz 511” to provide traffic condition and multimodal transportation information that is tailored to Santa Cruz County residents and visitors.
Highway 17 fatal crash: Big rig's trailer slid over top of car

By Sharon Noguchi
snoguchi@mercurynews.com
POSTED: 07/12/2014 11:00:00 PM PDT
| UPDATED: 8 DAYS AGO

The man killed in a Highway 17 crash Thursday had been wearing a seat belt, but still was partially ejected from his car, according to a CHP report released Sunday. Daniel McGuire, 25, of Santa Cruz, died after a big rig plowed into the back of a line of northbound traffic. Nicole Annette Albaum, 37, of Royal Oaks in north Monterey County, suffered a lacerated liver in the crash, the California Highway Patrol reported. The collision near Bear Creek Road closed most of Highway 17 for 10 hours Thursday.

McGuire's car was the fifth in a line of 10 vehicles struck. The impact of the collision partially ejected McGuire from his car, CHP Officer Ross Lee said. A preliminary investigation indicates the trailer of the semi slid over the top of McGuire's vehicle and rolled it underneath, Lee said. Besides Albaum, six other people were transported to area hospitals with minor injuries. Among them were drivers of four cars in the crash and two passengers. Drivers of three other cars were not reported as injured. The driver of the semitrailer, Ravenderpal Singh, 23, of Union City, also was uninjured. He told reporters at the scene of the crash that his truck's brakes were smoking and ineffective. The truck was hauling two trailers filled with dirt. "Our officers are still piecing together the sequence of events," Lee said, and haven't yet concluded what happened in the crash.

Editorial: Regulate big rigs on Highway 17

Santa Cruz Sentinel
POSTED: 07/12/2014 07:14:19 PM PDT

Wrong place, wrong time, tragic ending. We're not talking about the death last November of the Google executive after a heroin overdose allegedly administered by a prostitute aboard the executive's yacht in the Santa Cruz harbor. That story has gone, for obvious reasons, viral, making headlines around the country and putting strange Santa Cruz crime back on center stage. And while the combination of a wealthy dead man, drugs and illicit sex might be irresistible to news media outlets and many readers, nothing will change the darker side of human behavior. But the timing and the tragedy from yet another big-rig crash on Highway 17 has drawn a vociferous call for change from many motorists who want large trucks banned from the busy, and dangerous, mountain road that brings tourists to Santa Cruz County and commuters to Silicon Valley. Thursday morning's pileup killed a 25-year-old Santa Cruz man, Daniel McGuire, who worked in Silicon Valley and was beloved by friends, family and co-workers. Mr. McGuire's car was the fifth in a line of 10 vehicles violently struck by the out-of-control big rig; seven other people were injured, with one woman listed in critical condition Friday, but expected to survive. The northbound highway was closed for much of the day. Traffic had slowed to a near standstill when the crash occurred at 7:50 a.m. in the northbound lanes of 17 just south of Bear Creek Road — a time when commuter traffic to Santa Clara County in inevitably heavy on a highway traversed by 54,000 vehicles a day. The driver wasn't arrested or cited and the California Highway Patrol said he was not intoxicated when the crash occurred. But television station KTVU interviewed the driver after the pileup; he told...
them the big rig was loaded with dirt and traveling too fast on too steep a grade. The driver, identified as Rabinderbal Singh, said he saw the stopped traffic ahead, jammed on the brakes, but was unable to sufficiently slow down. Singh told the station he had been a driver for not quite three months. Highway 17, long infamous for its treacherous curves and steep descents, is actually a much safer road than in the fairly recent past. State-funded improvements and focused CHP enforcement have made a difference. Still, many drivers take the road too fast.

It's a fact of Santa Cruz County life that not a lot of roads lead here from Santa Clara County. Which explains why commercial traffic shares the busy highway with commuters and beachbound families. The road also is fairly narrow, which means it's not feasible to set up brake-check turnouts common on Sierra Nevada highways. We're stating the obvious that allowing huge trucks, weighing 80,000 pounds or more, to share a difficult highway with cars during high-traffic hours is inviting tragic outcomes. We understand the trucks bring food, consumer goods, gasoline and other vital products to Santa Cruz County, and that heading south to highways 156 or 129 isn't practical or even that much safer. But neither of those highways bear the traffic loads of 17. We'd like to see state and local transportation officials consider proposals to restrict the hours when big rigs can travel on Highway 17, away from heavy commute or beach-traffic times. They can also consider restricting the maximum weight the trucks area allowed to carry and increase safety checks and driver requirements.

This wasn't the first horrific tragedy on Highway 17 and probably won't be the last. But at least some good can come from it if laws and regulations regarding big rigs are toughened.

Letters, July 17, 2014: Highway 17 needs runaway-truck ramps

Santa Cruz Sentinel

Highway 17 needs runaway-truck ramps

This is in response to the fatal accident last week on Highway 17. Many highways in California that have a steep grade like 17 make a runaway-truck ramp for the sole purpose of trucks with no brakes. I commute 17 everyday and smell burning brakes every morning. I do not know why a runaway-truck ramp does not exist there on Highway 17. An ounce of prevention ...

— Darilyn Green, Scotts Valley

Commute hours, trucks a bad mix on Highway 17

I would wager that all regular commuters have thought at least once that big-rigs should be limited on Highway 17 during regular commute hours. I understand the truckers are making their living driving, but their presence on that road snarls it mightily. Every day a big rig is on that road is a rough commute day. A jam-up! RIP to the young man who lost his life during his commute. Condolences to his loved ones.

— Tina Hunt, Ben Lomond

Restrict big-rigs on local stretch of Highway 17

Last Thursday's fatal accident was tragic and my heart goes out to the family of the young man who lost his life. Restricting the hours that big-rigs can travel over 17 should be mandatory. I realize the road is the only alternative trucks have for travel between the South Bay and Santa Cruz, but their hours of travel should be restricted. I commuted over 17 for 34 years for my job and hated being near big-rigs, especially on curves. You never know when they might drift into your lane and run you off the road or into the divider. Another issue I have is the qualifications of the driver. In last Thursday's accident, I believe speed was a factor as well as inexperience of the driver. No big-rigs on northbound 17 from 6 to 9 a.m. and southbound from 3 to 7 p.m.

— Joy Bertrand, Scotts Valley

Get big-rigs off of Highway 17

I've had it with out-of-control big-rig trucks causing accidents on Highway 17 on the corridor between Los Gatos to Santa Cruz. That pass is treacherous and the thought of these monster trucks with tons of weight that rely on air brakes to stop it from careening out of control is absurd. This recent Highway 17 death really struck a nerve with me! There is an existing truck
route known as Highway 129. I was told by a CHP officer years ago that this is the mandatory route for trucks of a certain weight. Either route will get a driver between Santa Cruz and the Silicon Valley. Why in God's name are big-rigs still allowed to try to navigate the dangerous Highway 17 pass when Highway 129 is available to truckers and safer for all of us?
— Gail Cruse, Watsonville

Roadshow: Highway 17 big-rig ban unlikely
By Gary Richards
grichards@mercurynews.com
Posted: 07/13/2014 12:01:00 AM PDT 20 Comments | Updated: 4 days ago
The cab of a big rig blocks part of Old Santa Cruz Highway that was involved in a fatal accident with several cars on northbound Highway 17 just before the Bear Creek Road exit on Thursday, July 10, 2014. (Dan Honda/Bay Area News Group)
Related Stories
Q Thursday's big rig accident is just more evidence for my pleas to restrict trucks on Highway 17. No big rigs on northbound 17 from 6 to 9 a.m. and southbound from 3 to 7 p.m. They slow traffic, cause accidents and are a menace on our highway.
Wes Peters
Los Gatos
A Thursday's fatal crash, which closed northbound Highway 17 for much of the day, has prompted new calls for a ban on trucks on the curvy, 28-mile four-lane road from Santa Cruz to Los Gatos.
Q Can we now have a serious discussion about limiting sand trucks using Highway 17 to off-peak hours? Besides the obvious safety issues, how does it make sense that the movement of workers, students, educators and trades people to and from Silicon Valley have to be slowed every day by the delivery of sand?
Mike Rhoades
Ben Lomond
A There is virtually no chance that a big-rig ban on Highway 17 will be put in place, Caltrans says. The reason is simple: Trucks have no realistic alternative to travel between the South Bay and the Santa Cruz area. The best alternative is Highway 156 south of Gilroy. As part of the Highway 17 safety program that began 16 years ago, some trucking companies have cut back on trips during peak hours in the commute direction, and that has helped. Trucks over 4.5 tons are banned on Highway 85 because big rigs have other options, such as Highway 101 and Interstate 280. They are also banned on I-580 north of Highway 238 through the East Bay because I-880 and I-680 are nearby. CHP statistics show accidents involving trucks are few compared to those involving automobiles on 17. There were 74 crashes involving big rigs in 1998; today it's less than half that amount.
Q When there is a fatal accident like the one on Highway 17, why does it take so long to reopen a major traffic artery like 17? How much time does it take to gather evidence and collect reports in a situation like that?
Randy Breunling
A It can take a very long time. Emergency crews need be dispatched, set up traffic controls, treat the injured and investigate the site as a potential crime scene since there was a death involved. Only then can damaged vehicles be removed.
Roadshow: Trucker backers say cut big rigs some slack

By Gary Richards
grichards@mercurynews.com

Q I have been reading your column since God invented dirt, and I am seriously frustrated. People complain about big-rig accidents stalling traffic, but did they ever stop to consider why those accidents happened? I'll bet the majority were caused because of some speed-racer or other careless driver, not something a trucker did. Maybe we should prohibit inconsiderate drivers on the road during commute hours.

IrisAnn Nelson
Sunnyvale

A Last week, we heard from many motorists who want to ban truck traffic on some highways and during commute hours after a series of nasty big-rig crashes. Today, the pro-truckers sound off.

Bob Ramorino
Roadstar Trucking

Q In regards to readers who wonder why trucks have to be on the road (Highway 17, the Altamont Pass, etc.) during commute hours, truckers never choose to drive in the middle of rush hour. The shippers and receivers dictate exactly when they need a truckload delivered. Arrive too soon and the destination will not have the space for your load. Arrive 15 minutes late and an assembly line may shut down.

Bob Ramorino
Roadstar Trucking
A Bob's company is based in Hayward.

Q The loads of sand (gravel or other aggregates) traveling over Highway 17 could be headed to a construction project or to a cement plant. Hundreds of workers are waiting for loads to arrive. Cut the conveyor during commute and workers sit idle while the plant waits for material.

Why sand trucks on 17? That's where the local quarries are that supply the region. All the major food distribution centers that supply Bay Area grocery stores are based outside the area, from Sacramento to the Central Valley, if not farther away.

There are basically three ways to get here from there: I-80, I-205 or 101. That's why you see a lot of big rigs on the Altamont Pass and on 80. Trucking is a 24/7-365 industry.

Fuel tankers are driven around the clock by rotating groups of drivers to keep service stations filled. There aren't enough tankers and drivers to do it any other way.

Whenever possible, companies schedule deliveries off-peak. We service a retail clothing chain with 90-plus stores in the area. We arrive as early as 6 a.m. in downtown San Francisco and deliver as late as 7 p.m. Each store must have an associate on duty to receive the product at an appointed time and stock the shelves as we deliver.

Even though we start early, somewhere along the line our driver is in commute traffic. Why can't we pull trucks off the roads during commute hours? Drivers have rigid federal restrictions. They must be off duty for 10 consecutive hours prior to an on-duty maximum 14 hours.

Pull them off the road during the commute and they might run out of hours to complete the trip. But where would they park during commute hours? There are no truck stops anywhere in the Bay Area. Land is just too expensive.

The recent death on 17 was a tragedy. Our local drivers operate 50,000 to 75,000 miles each year and take pride in being safe.

Bob Ramorino

A Between 1975 and 2009, major truck crash rates fell 77 percent in the U.S. In 2009, the overall crash rate of large trucks was 33 percent of that for cars.

Look for Gary Richards at Facebook.com/mr.roadshow, or contact him at mrroadshow@mercurynews.com or 408-920-5335.
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### Monthly Collision Summary

**January**
- PDO: 40
- Inj: 27
- Fat: 1
- Total: 68

**February**
- PDO: 36
- Inj: 6
- Fat: 0
- Total: 42

**March**
- PDO: 21
- Inj: 11
- Fat: 0
- Total: 32

**April**
- PDO: 43
- Inj: 14
- Fat: 1
- Total: 54

**May**
- PDO: 39
- Inj: 25
- Fat: 1
- Total: 69

**June**
- PDO: 23
- Inj: 10
- Fat: 0
- Total: 35

**July**
- PDO: 19
- Inj: 13
- Fat: 0
- Total: 24

**August**
- PDO: 14
- Inj: 11
- Fat: 0
- Total: 24

**September**
- PDO: 24
- Inj: 13
- Fat: 1
- Total: 38

**October**
- PDO: 17
- Inj: 10
- Fat: 0
- Total: 21

**November**
- PDO: 31
- Inj: 10
- Fat: 0
- Total: 41

**December**
- PDO: 5
- Inj: 13
- Fat: 0
- Total: 18

**Total PDO:** 312
**Total Inj:** 149
**Total Fat:** 5

**TOTAL COLLISIONS:** 466

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**Footnotes:**
- PDO: Police-Involved Accidents
- Inj: Injuries
- Fat: Fatalities
- Total: Total Collisions
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*Santa Cruz Area CHP SR-17 Citation Summary*
### Extra California Highway Patrol Hours Worked on Highway 17

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Access Management Background

• Definition
  – Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections (TRB Manual)
Study Overview – Pre-planning stage

Caltrans Project Development

- Corridor/feasibility study
  - Project Study Report
    - Secure Programming
      - Draft Project Report
        - Environmental Studies

- Secure Project Approval
  - Plans, Specifications, & estimates
    - Approvals, agreements, permits
      - Prepare and advertise contract
        - Conduct & complete construction project
          - Project Close-out

Study Overview – Purpose & Study Area

- Purpose:
  - Identify issues relating to access and mobility
  - Develop and analyze potential improvement concepts
  - Investigate feasibility for project initiation

- Study area
Study Team Organization

Executive Steering Committee

- Study Charter
  - Codify joint cooperation
  - Establish shared commitment
  - Identify roles & responsibilities
  - Intention to adopt or implement finalized plan
  - Ensure long-term efficiency of local and state highway networks

Did you know...
69% of corridor management studies have used some kind of cooperative agreement.
-TRB

Study Team Organization

Technical Advisory Committee

- External technical team
  - Identified by respective Steering Committee member
  - Point of contact on day-to-day issues or sharing information
  - Assist with public outreach
  - Local experts
Study Team Organization

- Internal Functional Units and Planning Staff
  - Project coordination
  - Background research
  - Data analysis
  - Public outreach
  - Assemble study document

SR 17 Access Management Plan
Part 2: Summary of Planned Study Activities
**Access Management Plan Overview**

- Literature Review
- Existing Conditions
- Outreach

**Identify Needs**

- Develop Concepts

**Example measures:**

- Objective: Access
- Objective: Mobility
- Objective: Safety

**Concept Development & Package Alternative Grouping**

- Literature Review
- Existing Conditions
- Outreach

**Identify Needs**

- Develop Concepts

**Concept Description**

- Small scale/low cost/short term
- Medium scale/medium cost/interim
- Large scale/high cost/long term

**Examples**

- Median barrier, etc.
- Driveway consolidation, etc.
- Interchange, etc.
Contact information for questions or additional information:

Brandy Rider
(805) 549-3970
Brandy.Rider@dot.ca.gov
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<td>Population density within 1 mile of access point</td>
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State Route 17 Access Management Plan (SR 17 AMP)
Scope of Work

Purpose:
The purpose of this plan is to develop access management strategy recommendations to address access, mobility, and safety needs in the SR 17 corridor.

This plan will be guided by the following objectives:
- Preserve the function and operation of the SR 17 corridor;
- Preserve the function and operation of the local road network;
- Reduce conflict points;
- Coordinate land use and transportation planning in the SR 17 corridor.

Caltrans will be the lead agency for the Access Management Plan, however the success of a corridorwide approach is dependent on partnerships between Caltrans, Santa Cruz County (County) and the Santa Cruz County Regional Transportation Commission (SCCRTC). An Executive Steering Committee representing these three agencies will be instrumental in the development process of the plan. Each agency will participate in the process to determine investment needs and potential impacts. Through approving and implementing this plan, agencies also have the opportunity to adopt policies and resolutions to demonstrate local support for the plan and/or contribute resources toward the final study recommendations and improvements.

Outcomes:
The anticipated outcomes of this planning effort will include the following elements:
- Multi-agency prioritization of a list of improvements that would reduce conflict points within the corridor;
- A funding plan that looks at a variety of funding options implement strategies recommended in the plan;
- Recommended updates to existing planning policies and documents to ensure consistency with the goals and objectives developed in this study.

Activity 1 – Project Management and Team Coordination

Task 1.1 – Project Management and Administration
Description: manage and coordinate study through successful completion.
- Prepare project Scope of Work (SOW), schedule, and budget. Accommodate updates as needed.
Deliverables: final SOW, schedule, and budget.

Task 1.2 – Coordination of Multi-Agency Executive Steering Committee
Description: establish and coordinate committee.
- Convene Executive Steering Committee – identify representatives from key stakeholders (Caltrans, SCCRTC, County) to serve on the committee. Coordinate project kickoff meeting with the committee. Coordinate periodic meetings throughout project.
- Study Charter – develop draft study Charter to establish shared commitment, guide study goals and objectives, and identify roles and responsibilities. Facilitate adoption of the Charter.
- Facilitate review – facilitate review, comment, and finalization of the project deliverables.
Deliverables: Committee agendas, minutes, and study Charter.
Task 1.3 Coordination of Multi-Agency Technical Advisory Committee (TAC)

**Description:** establish and coordinate committee.

- Convene TAC – under the direction of the Executive Steering Committee, identify representatives from key stakeholders. Coordinate project kickoff meeting with the committee. Coordinate periodic meetings throughout project.
- Facilitate review – facilitate review, comment, and finalization of the project deliverables.
- Coordinate tasks and activities – facilitate data collection and sharing of information.

**Deliverables:** Committee agendas and minutes.

Task 1.4 Coordination of Caltrans Project Development Team (PDT)

**Description:** establish and coordinate PDT.

- Convene PDT and coordinate kickoff meeting and periodic meetings throughout project.
- Facilitate review – facilitate review, comment, and finalization of the project deliverables.
- Coordinate tasks and activities – facilitate data collection and sharing of information.

**Deliverables:** Committee agendas and minutes.

Activity 2 – Access Management Study

Task 2.1 – Principles of Access Management

**Description:** review and summarize existing literature.

- Basic principles – develop a summary of access management principles from leading national sources such as the Federal Highway Administration (FHWA), Transportation Research Board (TRB), and the National Cooperative Highway Research Program (NCHRP). Summary will describe definition, purpose, benefits, and techniques of access management.
- Best practices – Develop a summary of best practices from these and other national sources such as state DOTs and/or research organization such as the Mineta Transportation Institute, Texas Transportation Institute, and Center for Urban Transportation Research.
- Corridor-based examples – develop a summary of best practices from corridor-based access management plans, with focus on plans for corridors with similar conditions to SR 17.
- Access management classification – develop a summary of best practices from state or county access management classification systems around the U.S.

**Deliverable:** literature review technical memo.

Task 2.2 – Existing Conditions Analysis: Policy and Land Use

**Description:** conduct technical analysis of existing and future conditions.

**Subtask 2.2.1 – Local land use policy analysis**

- Review existing state, regional, and local policies and programs relating to access management.
- Summarize the legal basis and authority for access management policies and programs. Document existing administrative rules, codes, ordinances, programs, regulations, and statutes that pertain to access management practices.
- Review County General Plan.
  - Circulation Element – identify adopted goals and objectives relating to access management. Identify existing and future function or classification for SR 17 within the county’s transportation system, as defined in the Circulation Element. Identify access standards for the corridor per the respective functional category defined by the Circulation Element.
Land Use Element – Identify adopted goals and objectives relating to access management. Conduct GIS analysis of existing and future land use and land development patterns surrounding the corridor.

- Review Caltrans District System Management Plan, SR 17 Transportation Concept Report, AMBAG MTP-SCS, and RTC Regional Transportation Plan.
  - Document access management strategies identified within adopted plans.
  - Identify existing and desired level of access control for SR 17 defined in adopted plans.
- Identify locations within the study area where access to SR 17 is inconsistent with the defined role and function of the highway as described in adopted plans.
- In collaboration with County and RTC team members, make recommendations for potential updates to recurring plans and documents to ensure consistency with the goals and objectives established by the Executive Steering Committee.

Subtask 2.2.2 – Demographics analysis

- Population – review existing population and development patterns of study area using Census data. Review future population and growth using the sub-regional/regional model forecast. Estimate population densities and approximate population directly served by existing access points.
- Travel characteristics – report basic travel characteristics of study area population from American Community Survey data.

Subtask 2.2.3 – Environmental considerations

- Data collection – review environmental resources in the study area. Potential resources may include Santa Cruz County Climate Action Strategy, Santa Cruz Land Trust Biological Resources GIS data, Santa Cruz Land Trust Conservation Blueprint, Caltrans Preliminary Environmental Analysis Report, and Caltrans Regional Wildlife Corridor and Habitat Connectivity Plan.
- Physical constraints – analyze GIS data of terrain and elevation and identify constraints.
- Wildlife connectivity – Identify California Essential Habitat Connectivity (CEHC) areas. Collect Marxan Analysis results data for study area from District Connectivity study.
- Right of Way (ROW) – identify and map existing Caltrans ROW. Estimate ROW availability at existing access points.

Deliverable: policy and land use analysis technical memo.

Activity 3 – Engineered Feasibility

Task 3.1 – Existing Conditions Analysis: Transportation
Description: conduct technical analysis of existing and future conditions.

Subtask 3.1.1 – Access management characteristics

- Data collection – collect data on highway characteristics, potentially including but not limited to interchanges, intersections, driveways, medians, median barriers, conflict points, acceleration lanes, deceleration lanes, merge lanes, turn lanes, shoulders, and turnouts.
- Facility information
  - Document freeway agreements in study area
  - Describe existing corridor role and function, including functional classification of SR 17 and functional classification of local cross roads.
Subtask 3.1.2–Traffic analysis

- Data collection – collect data on a series of metrics, potentially including but not limited to volume (AADT), capacity, v/c, VMT, VHT, speed, LOS, peak AADT, peak v/c, peak VMT, peak VHT, peak speed, peak directional split, peak LOS. Present data in tables, graphs, maps, etc. as necessary.
- Existing conditions – produce key findings on existing corridor performance.
- Regional/Sub-regional Model coordination – coordinate travel demand model analysis with study partners.
- Future conditions – using the travel demand model, produce output depicting forecasted traffic metrics for data items listed above (Data collection).

Subtask 3.1.3–Safety analysis

- Data collection – collect historical data from sources, potentially including but not limited to National Highway Traffic Safety Administration, California Office of Traffic Safety, CHP, Transportation Injury Mapping System (TIMS), and Statewide Integrated Traffic Records System (SWITRS). Present data in tables, graphs, maps, etc. as necessary.
- Safety effectiveness of access management techniques and strategies – document conclusions from previous national research regarding general impacts of access management. Examples may include collision experience by median type, collision experience by access density

Subtask 3.1.4–Operational analysis

- Data collection – utilize Miovision counter data (or other data sources such as license detection or mobile device data from Streetlight, Inrix, etc., if applicable). Identify access-related volumes, including average and peak hour turning movements. Present data in tables, graphs, maps, etc. as necessary.
- Operational effectiveness of access management techniques and strategies – document conclusions from previous national research regarding general impacts of access management. Examples may include delay experience by median type, delay experience by access density,
- Operation conditions – inventory existing operational conditions at intersections, driveways, and mainline segments. Study operational adequacy of existing infrastructure based on Miovision and other traffic data (i.e. bottlenecks, channelization, horizontal and vertical alignment, queue length, sight distance, etc.).

Subtask 3.1.5–Proposed improvements

- Programmed projects – identify projects on SR 17 currently programmed for funding in all applicable programs (Caltrans SHOPP, Caltrans STIP, SCCRTC RTP, etc.). Identify programmed projects on the local road network adjacent to SR 17.
- Planned projects – identify planned projects not currently programmed for funding in all applicable programs (Caltrans SHOPP, Caltrans STIP, SCCRTC RTP, etc.). Identify programmed projects on the local road network adjacent to SR 17.

Subtask 3.1.6–Other considerations

- Maintenance – collect input from District Maintenance Office and report maintenance considerations.
- Intelligent Transportation Systems (ITS) – document existing ITS infrastructure and discuss potential for study of additional ITS solutions.
• Transit – document existing transit service and amenities in the study area.

Deliverable: existing conditions analysis technical memo.

Task 3.2 – Identify Needs and Concepts
Description: develop measurable criteria to identify needs and develop concepts to address needs.
• Synthesize findings – organize pertinent data collected from the policy analysis, transportation analysis, and public input.
• Develop evaluation framework – based on the Goals established by the Executive Steering Committee, identify draft evaluation measures within the PDT.
  o The evaluation measures will use the collected data to identify locations for improvement opportunities within the study area.
  o Develop evaluation matrix – create evaluation process for each measure. Organize individual evaluation measures into groups corresponding to study Goals. Document how evaluation is calculated.
  o Provide the draft evaluation measures to the multi-agency advisory committee for review and comment. Provide to Executive Steering Committee for final review and approval. Document additional data needs for potential expansion and/or refinement of the measures for future efforts, if necessary.
• Develop concepts – produce sketch-level project concepts to address needs in locations identified by the evaluation.
  o Concept identification may include projects that will proactively incorporate access management techniques or projects to retrofit existing infrastructure. Examples may include interchange projects, over- and under-crossing projects, intersection modification projects, consolidation of access points, and locations of access acquisition. Present draft concepts at workshop (Task 4.2).

Deliverables: evaluation matrix, evaluation process methodology, project descriptions, conceptual designs, diagrams, maps, etc.

Task 3.3 – Concept Evaluation
Description: evaluate concepts and create implementation strategy.
• Qualitative evaluation – applying findings from the literature review, provide brief qualitative evaluation of concepts.
• Quantitative evaluation.
  o Analyze concepts – assess feasibility of concepts based on estimated costs and estimated transportation benefits.
• Organize concepts – organize concepts into logical packages to maximize efficiency by created a long-term, coordinated strategy. Packages will be grouped according to evaluation result, implementation timeframe, and geographic distribution.
• TAC and Steering Committee Review – report preliminary evaluation outcome at the PDT, TAC, and Steering Committee levels. Discuss outcome and findings and receive input and suggestions. Make additional adjustments to concept groupings based on professional judgment, local knowledge, and information and/or data not directly applied within the initial evaluation.
• Prioritized list – create list of prioritized concepts recommended to advance to the Project Initiation phase, the next stage in long-range planning. Present final implementation strategy at workshop (Task 4.3).

Deliverables: draft and final prioritized list of concepts.
Activity 4 – Community Outreach

Task 4.1 – Develop Outreach and Information Sharing Tools

**Description:** prepare materials for meetings and workshops.

- Website – create and maintain webpage with project information.
- Displays – develop posters, flyers, powerpoint presentation, etc. for meetings and workshops.
- Community input tools – develop tools to facilitate input. Tools may include activities, survey instrument, comments template, etc. depending on need.

**Deliverables:** website contents, meeting and workshop materials.

Task 4.2 – Public Workshops and Other Activities

**Description:** conduct public workshops.

- Coordinate with County and RTC – support local partners, who will be the lead for recommending schedule and location of outreach activities. Support local partners in sending notice of the workshops to general public. Support local partners in moderating and staffing workshops.
- Workshop milestones – organize workshops concurrent with specific project milestones.
  - Kickoff – notify public of plan initiation. Present high-level summary on existing conditions of the corridor. Provide overview and solicit feedback on proposed study purpose, goals and objectives, and methodology. Gather input and anecdotal comments on perceived issues and needs.
  - Concept identification – present full range (draft) of proposed concepts prior to detailed evaluation. Solicited feedback and comments.
  - Evaluation results and final recommendations – present concept findings, long range recommendations, and next steps toward implementation.

**Deliverable:** memo summarizing public involvement activities and findings.

Activity 5 – Recommendations & Action/Implementation Plan

Task 5.1 – Complete Final Plan

**Description:** complete final plan based on activities and tasks

- Executive Summary – produce Executive Summary depicting the highlights from the completed technical memos. This section will also present a general overview of the corridor, gathered from the Transportation Concept Report (scheduled for update during the study timeframe).
- Policy analysis recommendations – Provide sample ordinance relating to access management (if necessary). Provide sample access management classification system as a resource for future updates to the Circulation Element (if necessary).
- Develop an implementation plan for feasible concepts. Identify anticipated Project Initiation Document resources available to District 5. Establish a schedule outlining near-term PID development for most viable concepts.

**Deliverable:** final plan.
## Construction Projects

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Location</th>
<th>Description</th>
<th>Construction Timeline</th>
<th>Construction Cost</th>
<th>Funding Source</th>
<th>Implementing Agency</th>
<th>Project Manager (Resident Engineer)</th>
<th>Contractor</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hwy. 1 Guardrail Upgrade, Concrete Barrier, and improvements (05-0R9104)</td>
<td>Highway 1 from S of South Aptos Underpass to .1 Mi N. of Rt 9 (PM 9.0-17.6)</td>
<td>Upgrade Metal Beam Guard Rail, other improvements</td>
<td>Winter 2013/Winter 2014</td>
<td>$2.3 M</td>
<td>SHOPP</td>
<td>Caltrans</td>
<td>Doug Hessing (KB)</td>
<td>RGW Construction Inc., Livermore</td>
<td>Project consists primarily of overnight work, but intermittent day work as well.</td>
</tr>
<tr>
<td>Hwy. 17 Laurel Curve NB Shoulder Widening (1C1804)</td>
<td>In Santa Cruz County near Scotts Valley from 0.3 Miles North of Glenwood Cutoff to 0.5 Miles South of Glenwood Drive</td>
<td>Shoulder Widening/Soil Nail Wall</td>
<td>August 2014— Summer 2015</td>
<td>$3 Million</td>
<td>SHOPP</td>
<td>Caltrans</td>
<td>Steve DiGrazia (BR)</td>
<td>Graniterock Company DBA Pavex Construction Division, San Jose, CA</td>
<td>Work consists of overnight closures and one-way reversing traffic control.</td>
</tr>
<tr>
<td>Hwy. 17 Summit Slide Repair (1A7104)</td>
<td>In Santa Cruz County near Scotts Valley at 0.2 mile north of Glenwood Dr. (PM 11.0)</td>
<td>Construct retaining wall with concrete slab &amp; barrier, HMA pave</td>
<td>Spring 2013-Winter 2014</td>
<td>$2 Million</td>
<td>SHOPP</td>
<td>Caltrans</td>
<td>Steve DiGrazia (BR)</td>
<td>Condon-Johnson &amp; Associates Inc., Oakland</td>
<td>Project completed and accepted February 28, 2014. One year of plant establishment will end in December 2014.</td>
</tr>
</tbody>
</table>

## Construction Projects in Development

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Location</th>
<th>Description</th>
<th>Construction Timeline</th>
<th>Construction Cost</th>
<th>Funding Source</th>
<th>Implementing Agency</th>
<th>Project Manager (Resident Engineer)</th>
<th>Contractor</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hwy. 9 Pollution Source Control (0Q590_)</td>
<td>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)</td>
<td>Construct retaining wall &amp; viaduct structure. Replace drainage pipes. Rehab maintenance turnaround.</td>
<td>Winter 2014-Summer 2015</td>
<td>$1.8 Million</td>
<td>SHOPP</td>
<td>Caltrans</td>
<td>Doug Hessing (KB)</td>
<td>TBD</td>
<td>The highway will be fully closed for up to 5 months 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. Bids open August 27.</td>
</tr>
<tr>
<td>Date</td>
<td>Hwy</td>
<td>Incident Description</td>
<td>Incident ID</td>
<td>Initial Call Time</td>
<td>CHP arrive on Scene</td>
<td>Sigalert sent out by CHP</td>
<td>Incident cleared</td>
<td>Time from initial to sigalert</td>
<td>CMS sign</td>
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<tr>
<td>9/3/2014</td>
<td>NB 17</td>
<td>the #1 and #2 lanes are blocked but in different locations due to 3 traffic collisions</td>
<td>L29m</td>
<td>5:12</td>
<td>5:18</td>
<td>5:52</td>
<td>7:35</td>
<td>40 min</td>
<td>17N-Granite Creek</td>
</tr>
<tr>
<td>7/27/2014</td>
<td>NB 17</td>
<td>all lanes blocked due to solo motorcycle minor injury accident</td>
<td>L137m</td>
<td>9:13:00</td>
<td>9:24:00</td>
<td>9:35TMC</td>
<td>10:38</td>
<td>22 min</td>
<td>1N-41st</td>
</tr>
<tr>
<td>6/16/2014</td>
<td>NB/SB 17</td>
<td>Northbound SR-17 all lanes are blocked due to a fallen tree and power lines. Southbound SR-17 lanes #2 and #3 are blocked, #1 lane is open.</td>
<td>L346m</td>
<td>17:55/18:02</td>
<td>18:02</td>
<td>18:36</td>
<td>19:58</td>
<td>34 min</td>
<td>1N-41st</td>
</tr>
<tr>
<td>6/12/2014</td>
<td>E-152</td>
<td>Overturned vehicle blocking both east bound lanes</td>
<td>Log 440</td>
<td>21:24</td>
<td>21:50</td>
<td>21:43TMC</td>
<td>22:47</td>
<td>19 min</td>
<td>-</td>
</tr>
<tr>
<td>6/8/2014</td>
<td>NB 1</td>
<td>At Rio Del Mar, Lane #2 closed due to major injury roll-over incident</td>
<td>L162m</td>
<td>11:23</td>
<td>11:33</td>
<td>11:38</td>
<td>14:02</td>
<td>15 min</td>
<td>-</td>
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