

State of California

DEPARTMENT OF TRANSPORTATION CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE

Minutes of Meeting
August 8, 2019
City Hall Council Chamber,
915 I Street, 1st Floor,
Sacramento, CA 95814

Committee Members in Attendance:

Robert Bronkall, Chair
Hamid Bahadori, Vice-Chair
Pratyush Bhatia
Lt. Rick Hatfield
Xavier Maltese
Andrew Maximous
Mike Sallaberry
Duper Tong
Rock Miller (Alternate member – Acting in the absence of appointed delegate)
Zoubir Ouadah (Alternate member – Acting in the absence of appointed delegate)

Alternate Committee Member:

Tony Powers
Reza Moghissi

Committee Staff:

Vijay Talada, Executive Secretary
Nestor Cuellar, Transportation Engineer
Arshad Iqbal, Senior Transportation Engineer
Samira Zalekian, Transportation Engineer

Presenters:

Troy Bucko, Caltrans
Sarah Christensen, Santa Cruz County Regional Transportation
David Edrosolan, City of Sacramento

Public Comment

Roger Barnes, Caltrans District 5
Jim Esparza, California Public Utilities Commission
Kira Davis, Mark Thomas
Sid Hedjazi, Optical Signs
Barbara McIntyre, City of Sacramento
Karl Oh, Omni Imagine

Steve Pyburn, FHWA
Craig Rhodes, Traffic Management, Inc. (TMI)
Byron Tang, City of Rancho Cordova
Michael Sprouse, TMI
Bill Williams, PCWA

ORGANIZATION ITEMS

1. Introduction

Chair Bronkall opened the meeting.

David Edrosolan, Interim City Traffic Engineer for the City of Sacramento, welcomed the Committee back to Sacramento.

2. Membership

Secretary Talada reported that there was no change in Committee membership.

3. Approval of Minutes of the January 31, 2019 Meeting

MOTION: Vice-Chair Bahadori moved to approve the January 31, 2019 California Traffic Control Devices Committee Meeting Minutes as reported. Committee Member Maximous seconded. Motion passed with Committee Member Miller abstaining.

4. Public Comments

Sid Hedjazi, Civil Engineer and recently retired Caltrans employee, spoke along with Karl Oh on behalf of Omni Signs. They have developed signs that are more visible to motorists and pedestrians, which can reduce the number of fatalities, accidents, and liabilities. Mr. Hedjazi described the signs in detail. He distributed handouts.

Vice-Chair Bahadori stated that Mr. Hedjazi was present at his request. Vice-Chair Bahadori especially liked the Do Not Enter signs; at freeway offramps those signs have always been a serious challenge for Caltrans. There is still some ambiguity as to whether the signs are fully compliant to the California MUTCD and the federal MUTCD, or whether they need to go to experimentation. The Committee can take a look. If the signs are compliant, the company can market them and improve traffic safety. If not, the company needs to find a municipality that wants to do an experimentation.

Mr. Hedjazi stated that several cities in Southern California are interested in the product. Their first question is whether it is MUTCD-approved. Mr. Hedjazi has answered that it is approved for cities and for its dimensions. He asked the Committee about the next step: an Experimental letter to enable him to start marketing and selling?

Vice-Chair Bahadori mentioned approval of the source of illumination.

Secretary Talada stated that he had informed Mr. Hedjazi that the signs need to comply with the reflectivity and illumination sections of the MUTCD, and with the policy in the CA MUTCD regarding the specific sign.

Committee Member Miller (who is a member of the National Committee on Uniform Traffic Control Devices that advises FHWA) indicated that although the signs appeared to be similar

in design to standard signs, there were features on the signs that potentially were not consistent with the existing Federal MUTCD. He felt that illuminating the standard colors and shapes to enhance visibility seemed very promising, but he noted that the proposed pedestrian crossing sign changes from a non-illuminated dark figure to white illuminated figure will potentially be an issue with the Federal Highway Administration. But he noted that they may be supportive of an experiment following their procedure.

Committee Member Tong stated that Caltrans has a New Product Process that the vendor can go through. His staff can assist. This process is online under Approved Materials List.

Mr. Hedjazi stated that Caltrans District 12 said they are willing to sponsor them.

Chair Bronkall stated that the first step is to work directly with Caltrans on the process described by Committee Member Tong, and if the outcome is that the product is not compliant, the company will need to find a sponsor to request an experimentation.

5. Items under Experimentation

18-16: Experiment closeout – Final Report: Red pavement treatment (Duper Tong). Final Report provided as attachment to the agenda.

Troy Bucko, Caltrans Division of Traffic Operations, reviewed the experiment. It involves use of a red treatment in the approach lane to a bus lane in a median of a freeway segment in San Diego County, due to frequent violations of regular drivers in the lane.

Mr. Bucko reported on the findings. They applied 400-foot sections at the entrance to MTS lanes on Interstate 15.

He showed CHP enforcement totals before and after the red treatment was applied. The numbers showed that the treatment was very effective in keeping people out of the lane.

The treatment is holding up very well under heavy vehicle traffic of about 70 buses per day.

Mr. Bucko showed a short video of driving the lane.

The experimentation is considered a success.

Mr. Bucko stated that they will go to the federal government to present their findings, requesting for the treatment to stay in place in San Diego and have it adopted into the federal manual. He requested the support of the CTCDC.

Committee Questions and Discussion

Vice-Chair Bahadori asked if there are other places in San Diego County along I-15 where they are planning to use this. Mr. Bucko answered that there are no other bus lanes in the median. The MTS agencies have expressed interest in using it on their facilities outside of the freeway sections.

Committee Member Hatfield asked about the CHP enforcement presence: did the amount of enforcement or the numbers of the contract change during the experimental phases? Mr. Bucko replied that the contract stayed the same until recently, when MTS deemed that it was not necessary for officers to be there since the violation numbers were so low.

Committee Member Hatfield asked about any other sources of feedback. Mr. Bucko said it had only been MTS. There had been no negative feedback from the public.

Committee Member Ouadah expressed concern with the marking of BUS versus BUSES, and with the word MTS in the signs and the regulatory marking. The national MUTCD and CA MUTCD are geared more toward the generic marking of TRANSIT. It is important to maintain consistency. Mr. Bucko responded that MTS had wanted to keep out other types of buses from the facility, so they used their engineering judgment to add MTS to the sign. He felt that was outside the effectiveness of the red pavement.

Vice-Chair Bahadori stated that the word TRANSIT would already exclude casino buses, school buses, and tourist buses. He asked if MTS wants to exclude other transit agencies in the area. Mr. Bucko confirmed: it is a facility for MTS. Mr. Bahadori responded that if this is case-specific transit language, we would not put it in the MUTCD. Mr. Bucko felt that if the words were taken out, the red treatment would probably be just as effective.

Committee Member Tong commented that this is experimental, and we will look at those details when it comes time to add it to the California language. The experimental factor is the red pavement.

Secretary Talada stated that the next step for this experiment is to make a recommendation to the FHWA, requesting them to consider adding the red pavement to the national MUTCD. Once they make that change, Caltrans and CTCDC can consider adopting it into the California MUTCD.

Committee Member Sallaberry supported the red pavement marking. We can utilize flexibility in putting different messages down.

Committee Member Ouadah also supported the red pavement marking. He asked if it is an interim approval. Mr. Bucko replied that it is still experimental and requires federal approval to use.

Committee Member Maximous noted that there are currently two other experiments that deal with red pavement. If the internal approval from FHWA moves forward, will they be affected?

Steve Pyburn, FHWA, stated that at this point the red pavement is only being used for transit lane markings (outside of the usual No Parking/fire lane). There are two other experiment locations and there have been requests to use red lane markings in other locations. The office in D.C. is trying to limit their use to exclusive transit lanes.

Vice-Chair Bahadori asked if flexibility can be given to locals as to the text. Mr. Pyburn replied that it would be part of the experiment request. Vice-Chair Bahadori asked if there is any problem keeping the red pavement for transit designation and leaving flexibility to the locals as to the verbiage on the pavement and the sign. Mr. Pyburn replied that if this moves to an interim approval or is included in the MUTCD update, that should be addressed. Proponents of this experiment should request that flexibility. Transit agencies should submit a comment to MUTCD that they want the flexibility for specific buses. Ultimately the rulemaking will state whether you can or can't.

Mr. Pyburn stated that later this year, the MUTCD team will be requesting comments from the public, from public agencies, and from state agencies in general for revisions to the manual.

Committee Member Maximous asked if there is progress in moving from experiment to interim approval. Mr. Pyburn replied that use is limited to experimental situations only. To

get broader application, either it would go to interim approval, or agencies can request that it be added. There is some very vocal opposition in San Francisco to red bus lanes by some business owners. It remains to be seen what the FHWA office in D.C. does with it. For this final report, the D.C. office will take the results along with results of other final reports for similar experiments in California and around the country and make a decision.

Vice Chair Bahadori asked the committee to focus on the technical merits of the devices, the community reaction and political issues should not be something the committee will get into. The local decisions should be dealt with at a local level. The experiment in San Francisco shows that the red pavement for transit is effective, so he hopes the FHWA won't lose sight of that because of local opposition from businesses. Mr. Pyburn agreed.

MOTION: Committee Member Ouadah moved to accept the final report and move it to the FHWA for acceptance. Vice Chair Bahadori seconded. Motion passed unanimously.

AGENDA ITEMS

6. Public Hearing

Consent Items (minor discussion with vote expected)

17-21: Legislative Change by AB 390 and the proposed changes to the CA MUTCD

Arshad Iqbal, Caltrans Senior Transportation Engineer, Division of Traffic Operations, stated that AB 390 has amended section 21456 of the CVC. It allows pedestrians facing a flashing "DON'T WALK" or "WAIT" or approved Upraised Hand symbol with a countdown signal, to enter the crosswalk. The pedestrian is required to complete the crossing in the allotted time.

Mr. Iqbal reviewed the timeline of events leading to the proposal.

He stated that in January 2019 the Committee approved the proposal with exceptions: to keep R10-1 as is, and to continue work on R10-3e and R10-3i. The wording of the latter two signs has been revised as shown by Mr. Iqbal.

Committee Questions and Discussion

Vice Chair Bahadori asked if there is really a need for R10-1 with the new law AB 390. Mr. Iqbal replied that in November 2017 some of the Committee Members had pointed out that some cities still use these signs.

Committee Member Ouadah described the configuration with which San Diego uses R10-1 – it is almost like a T intersection.

Vice Chair Bahadori asked the timeline for changing the many signs that now do not comply with the law. Mr. Iqbal replied that when the standards are updated, we replace the signs at the end of their service life. Vice Chair Bahadori felt that we should give a deadline – in some of the locations the signs will be there for quite a long time. They have a very long service life. Committee Member Sallaberry pointed out that in this case it is not a safety issue, but an inconvenience to the pedestrian.

Committee Member Bhatia asked for clarification on the configuration that Committee Member Ouadah had referred to – shouldn't it have a pedestrian phase going across the

driveway? Committee Member Ouadah confirmed; individually the decision had been made not to put in the pedestrian phase.

MOTION: Committee Member Tong moved for the Committee to accept the signs as proposed by Mr. Iqbal, and make changes to the language in the CA MUTCD. Committee Member Bhatia seconded. Motion passed unanimously.

Information Items (New items that may be voted on or brought back as an Action Item in a future meeting)

19-06: Proposed Change to Section 2B.13

Committee Member Tong reported that with state highways going through multiple city and county jurisdictions, local agencies may change the speed zone but do not inform other agencies of the changes, especially speed zones at signal light intersections. Yellow light timing is very much related to the 85th percentile or the posted speed limits; changes in the posted speed limit will very much affect the signal operations. Committee Member Tong was proposing language for agencies to inform each other when they change the speed limit.

Secretary Talada explained how changes in speed limit may impact the signal timing in the speed zone for yellow lights. If a local agency changes the posted speed limit and that section of roadway intersects with the state highway system, the signal at that intersection may be maintained by Caltrans, who may not have any way to know that the posted speed limit has been changed on the local roadway. This proposed language ensures that the communication between agencies must be done, so timing changes can be made to the signal.

Committee Questions and Discussion

Vice Chair Bahadori explained the ramifications all over California. Freeway onramp/offramp signals are sometimes maintained by Caltrans, but on that arterial, Caltrans has no jurisdiction. If a city or county changes the speed zone, Caltrans may never know. In another example, city boundaries may run in the middle of an intersection. East/west may be in one jurisdiction and north/south in another, and a city may change the speed zone without letting the other agency know.

Chair Bronkall gave an example of a local agency that lowered the speed limit on a road where all the signals were timed to work in sequence. The decision of the traffic engineer was not to change the timing of the signals due to potential liability. This new language will help local agencies that may not know that they should be changing their timing as part of any speed limit change.

Committee Member Ouadah asked if the statement could be more general to include the traffic signals. Vice Chair Bahadori responded that here the issue is only the yellow light timing – other issues are already addressed in the MUTCD.

Committee Member Sallaberry provided an example from Bayshore Boulevard which parallels the freeway. One of the signals on the street is maintained and operated by Caltrans. The City may decide to lower the speed limit from 35 to 30 on Bayshore, and they may change all the signs. The only thing that Caltrans controls is the signal itself, and the City cannot change the signal.

MOTION: Vice Chair Bahadori moved to approve the suggested language and add it to the CA MUTCD.

Committee Member Sallaberry expressed concern about the precedent of listing an item as informational on the agenda, and then voting upon it without giving an opportunity for comments.

CHANGE IN MOTION: Vice Chair Bahadori moved to bring the item back as a Public Hearing next time. Committee Member Sallaberry seconded. Motion passed unanimously.

19-07: Legislative Change by AB 634 and the proposed changes to the CA MUTCD

Committee Member Tong requested to withdraw the item to be brought back for a future meeting.

Request for Experimentation

19-08: Non-standard traffic control device – Signing and pavement markings for Highway 1 bus on Shoulder project

Sarah Christensen, Project Manager, Santa Cruz County Regional Transportation, began with an overview of the project.

The project came about because Highway 1 in Santa Cruz County experiences extreme congestion, which affect transits operators as well as motorists.

A Decision Document was released by Caltrans in 2008. In 2013 an Assembly bill passed authorizing transit buses to use highway shoulders in Santa Cruz and Monterey Counties.

A feasibility study was led by Monterey Salinas Transit in conjunction with the Santa Cruz Metropolitan Transit District to evaluate whether this would work. They concluded that in Santa Cruz County the project is feasible and cost-effective if implemented with the planned auxiliary lanes project on Highway 1.

The project area is about 7½ miles long. Buses will travel in the auxiliary lanes in between interchanges, entering the shoulder at the interchanges. The concept follows the Transit Cooperative Research Program (TCRP) Report 151 methodology, and this report was viewed and accepted by Caltrans Headquarters District 5 and CHP.

The proposal is to implement in phases which were detailed by Ms. Christensen.

The proposed signing and pavement marking follows the FHWA Shoulder Use Guide.

- The proposal includes static ground-mounted signs.
- For the regulatory signs they are proposing black on white rectangular, placed at the beginning and ending of the bus operation and at regular intervals.
- They are proposing to add special signage in advance of the interchanges to add emphasis of the project.
- They are proposing warning signs for the onramps.
- They are proposing pavement markings at regular intervals.

95% of the project is submitted this month. Once the facility is operational, they will be reporting back based on performance monitoring.

Committee Questions and Discussion

Chair Bronkall stated that this item is a result from a change to Streets and Highways Code Section 148.1, which authorizes the agency to implement this project provided there is support from both Caltrans and CHP. He requested the two agencies to indicate where they are in the process of supporting this proposal.

Committee Member Hatfield stated that CHP had recently reviewed the revised version of the Concept of Operations (ConOps) and have been in communication with Ms. Christensen. CHP has submitted comments, most of which have been addressed. The CHP is open to supporting this type of initiative.

Roger Barnes, Caltrans District 5, stated that their District Director Timothy Gubbins has submitted a letter of support for this project to the CTCDC.

Vice Chair Bahadori asked if this will be full-time or only congestion-time use of the shoulder. Ms. Christensen answered that congestion triggers the operation of the facility, so there is no timeframe. It is full-time at the discretion of the bus operator if the traffic is moving slower than 35 MPH. Vice Chair Bahadori noted that they have this in San Diego County also, but it is peak hour only. Committee Member Ouadah added that it is speed-related for when the freeway speed goes down to 35 MPH.

Vice Chair Bahadori noted an issue that CHP had with San Diego County's experimentation request: even though you are designating the shoulder for buses, the primary function is still is still for vehicles to use in emergencies. Ms. Christensen agreed. Vice Chair Bahadori mentioned the visibility issue: the bus driver needs to be able to see disabled vehicles even if there are sharp turns. Ms. Christensen stated that this section of Highway 1 is a full freeway facility, and if there is a vehicle on the shoulder, the bus would merge back into the general purpose lanes. The buses will not be going very fast – 10 or 15 MPH faster than the general purpose lanes, which are usually in gridlock at 0-5 MPH.

Committee Member Hatfield asked about the color of the pavement markings. Ms. Christensen answered that they are not proposing color at this time. The letters would be white.

Committee Member Hatfield asked about the decision to operate being left to the driver. Is there any other manager hierarchy? Ms. Christensen answered that the speed of the traffic would dictate. Drivers would be trained in how to operate in that condition.

Vice Chair Bahadori stated that the project in San Diego has entrance and exit points. The driver does not decide where to get on and off the shoulder. Here, can the driver decide to get on and off at any point? Ms. Christensen affirmed. One key distinction between the two projects is that San Diego converted their shoulder to a Transit Only lane. The Santa Cruz project is a true bus on shoulder facility since they have the legislation in place.

Committee Member Maximous asked if there is an expectation of additional maintenance in those shoulder areas to ensure that it is clear. Ms. Christensen answered that they currently have freeway service patrol on Highway 1. They could ramp it up a bit once the project is operational to help with that concern. They have not had a conversation with the maintenance people at District 5 regarding the shoulder being swept more often, but that topic will come up once they see the plans and the constructability reviews are done.

Committee Member Bhatia asked about any plan to increase the width of the shoulder or improve the structural section for the additional load of the buses. Ms. Christensen replied

that at their facility, the minimum shoulder width is 10 feet. However, they are upgrading to 11 feet or wider where they can. The strength of the shoulder needs more discussion with the geotechnical people at District 5.

Committee Member Ouadah noticed a change in the report wording from the word “Authorized” to “Transit” in the signs. He agreed with the change. He stated that he preferred a time of day sign, because someone driving in a general purpose lane may hesitate to use the shoulder even if they are breaking down. He also stated that placards are generally located below the sign; possibly this should be looked into.

Chair Bronkall suggested that they may want to add Emergency Only parking signs to avoid confusion in how the lane is to be used.

Committee Member Sallaberry noted the variable congestion on Highway 1 in that area. It is not predictable. Having an experiment with use of the shoulder at the bus operator’s discretion would be interesting and valuable information for the CTCDC. He asked if we have seen drivers following buses down the shoulder in other locations – it could be tempting for drivers. Ms. Christensen said that they would work with CHP on enforcement and look out for this trend. They are hoping that the pavement markings will suffice. Chair Bronkall commented that the earlier agenda item showed that some form of enhanced treatment will be necessary to deter the public from using that lane.

Committee Member Hatfield said that public outreach and training would be helpful in delivering that message to the public. He expressed concern with the regulatory signs – they may not meet the criteria for the definition of regulatory sign as indicating or reinforcing a traffic law. Mr. Barnes responded that they had discussed appropriate signage and decided to follow the way the legislation was written. They realize that other buses may use the shoulder but we would be unable to enforce that – we didn’t know how to convey the message without making the signs very large. We can change them if we need to.

Committee Member Sallaberry felt it wise to specify which buses are allowed in the shoulder. It gives enforcement more clarity. Ms. Christensen reiterated that two transit agencies will be using the shoulder.

Committee Member Ouadah suggested a placard naming the specific transit agencies.

Vice Chair Bahadori felt that supplemental signage emphasizing the emergency parking shoulder was needed.

Public Comment

Craig Rhodes, Traffic Management, Inc. and National Temporary Traffic Control Committee, said that the standard shoulder closure in the manual for the standard plans may or may not apply in this situation. District 5 might take a look before the project starts for their own maintenance crews and also for traffic control companies. This is going to be a “travel lane” for the transit buses, not technically a typical shoulder.

Committee Questions and Discussion

MOTION: Vice-Chair Bahadori moved to approve the signs including the comments made by the CTCDC regarding the plaque and the emergency parking for the shoulder.

Committee Member Bhatia asked if it is possible to include the time of operation for the buses. Chair Bronkall felt that is up to their discretion. Ms. Christensen noted that they have a six-hour long peak period – pretty much all the time.

Committee Member Ouadah felt that they could still have a sign indicating the hours of 6:00-6:00 or 6:00-8:00.

Ms. Christensen noted that the bus operators will be trained regarding times of use of the lane.

MOTION: Committee Member Miller seconded.

Chair Bronkall asked for a possible Friendly Amendment. He foresaw similar issues to those encountered in San Diego in which a shoulder being used for designated vehicles will attract non-designated vehicles. A Friendly Amendment could allow District 5 to implement red pavement should they find they have an enforcement issue, so that they do not have to come back to the Committee midway through the experiment.

MOTION WITH FRIENDLY AMENDMENT: Vice-Chair Bahadori and Committee Member Miller accepted Chair Bronkall's suggestion. Motion passed unanimously.

7. Next Meeting

Secretary Talada stated that the November 7 meeting will be held in the city of Eastvale.

Committee Member Ouadah commented regarding the presentation of the agenda items. He requested the use of "....." at the end of the quoted sections proposed for changes, when the succeeding sections will not be changed.

8. Adjourn

Chair Bronkall adjourned the meeting at 11:50 a.m.