State of California

DEPARTMENT OF TRANSPORTATION
CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE

Minutes of Meeting
September 1, 2016

San Diego Caltrans District Office
DOT Gallegos (Conference Room)
4050 Taylor Street
San Diego, CA 92110

Committee Members in Attendance:
Mark Greenwood, Chair
Hamid Bahadori
Lt. Scott Baland
Bryan Jones
Rick Marshall
Emma Olenberger
Mike Sallaberry
Duper Tong
Jay Walter
William Winter

Committee Staff:
Atifa Ferouz, Acting Secretary
Don Howe, Senior Transportation Engineer-Specialist, CalTrans
Devinder Singh
Camille Abou-Fadel

Also Present:
Dr. Ahmed Aburahmah, PTOE Deputy City Engineer, City of San Diego
Jim Baross, President, California Association of Bicycling Organizations
Gayle Chenoweth, California Alliance for Retired Americans
Gilbert Hernandez, City of Riverside
Kevin Korth, U.S. Department of Transportation, Federal Highway Administration
Zoubir Ouadah, County of San Diego
Dave Royer, former Los Angeles DOT
Kevin Schumacher, California Public Utilities Commission
Jim Viega, City of Goleta (Item 16-23)
Samuel Zneimer, City of South Pasadena

ORGANIZATION ITEMS

1. Introduction

Chair Greenwood called the meeting to order. He invited the committee, staff, and members of the public to introduce themselves.

Mr. Tong thanked Caltrans District 11 for hosting the committee meeting. He introduced the District 11 Deputy Director who spoke about the district, which comprises two large counties. He described projects for the year ahead in the district, which include replacing the reflective sheeting on all overhead signage structures, replacing striping on 16½ miles of Highway 78, and deploying some pilot projects on 61 offramps along the I-15 corridor. He looked forward to discussing the ceramic raised pavement markers today.

2. Membership

Committee Member Tong announced that Vijay Talada is the new Editor of the Manual on Uniform Traffic Control Devices and Executive Secretary for the CTCDC.

Committee Member Bahadori requested a status report on the letter to the Senate Transportation Committee replying to their request for a CTCDC recommendation for school zones. Ms. Ferouz replied that Mr. Talada would be drafting it when he begins on September 12. Mr. Singh confirmed that the draft will come back to the committee for finalizing.

3. Approval of Minutes of the June 30, 2016 Meeting

> **MOTION**: Committee Member Walter moved to approve the June 30, 2016 California Traffic Control Devices Committee Meeting Minutes as presented. Committee Member Tong seconded. Motion carried unanimously.

4. Public Comments

Dave Royer of San Bernardino County spoke about an issue he had with 21400 of the California Vehicle Code, which states that traffic control devices all must be approved by the State of California. That section does not refer to the CA MUTCD, where everything approved for use ends up. Further on, 21461 says that regulatory signs that must be obeyed are in the CA MUTCD – someone was able to get that verbiage in. The goal of Mr. Royer, as well as a San Bernardino County judge, was to try to encourage the CTCDC to get some specific reference in 21401 to the fact that approved devices are all contained in the CA MUTCD.

Committee Member Bahadori suggested to Chair Greenwood that the CTCDC should ask Caltrans to look at this, and possibly add the reference during the next legislative cycle; it probably does not need a bill. Chair Greenwood agreed.

Jim Baross, California Bicycle Advisory Committee (CBAC), brought three items.

1. He requested that CBAC's role of doing comprehensive reviews of bicycle issues received from representatives across the state, before the issues come to the CTCDC, would continue.
2. He hoped that the transportation improvements made because of the CTCDC's work would be announced to enforcement personnel across the state. He used the example of shared lane markings.
3. He hoped to find an agency to sponsor an appropriate new sign that would indicate when limited access freeways are open to bicycles.

5. Items under Experimentation

Committee Member Walter stated that the CTCDC had received correspondence from people and businesses in San Francisco, expressing frustration and concern about the experimentation process established for the red transit lanes. Committee Member Walter was concerned from a process standpoint that the experiment had started in 2012 with a much shorter timeframe. The experiment is now expanding beyond its original area. The committee and new Executive Secretary may need to think about this. Committee Member Walter felt that such projects should be completed in a timely way with data available for others to take advantage of.

Chair Greenwood requested for Caltrans staff to look into the original experiment, its status, and its potential expansion, to be placed on the next CTCDC agenda with a Caltrans opinion on the issue. Committee Member Sallaberry reported that staff was hoping to have resolution on the issue to present at the December meeting. He agreed that there are actually a number of experiments upon which the CTCDC does not receive updates. Sponsors should provide updates at every CTCDC meeting.

Mr. Singh reported that staff would bring an experiments older than three years as agenda items to the meetings.

Committee Member Sallaberry reported that San Francisco has been working with the agency in question, which has been responsive. Committee Member Walter stated that he and Committee Member Sallaberry would get together and discuss the agency's plan for their presentation at the December meeting. Committee Member Walter had taken this item over from the original sponsor, former Committee Member Larry Patterson.

AGENDA ITEMS

6. Public Hearing

CONSENT ITEMS (Minor discussion with vote expected)

16-20: Proposal to Clarify 2009 Updates to Chapter 2M

Don Howe, Traffic Signs Branch Chief at Caltrans Traffic Operations, stated that he was not introducing anything new; he was trying to close some loose ends resulting from the adoption of the 2009 MUTCD. Figure 2M-102(CA) included a recreational series of Prohibited signs. In the final cut of what was published in the 2009 MUTCD, the FHWA decided not to include the graphic or the sub-plaques.

He explained the need for a *Do Not Drink* version of the drinking water sign.

He was proposing to add Figure 2M-102(CA) (as displayed) to Chapter 2M of the MUTCD. Mr. Howe stated that language was included in Section 2M-07 that would refer to Table 2M-1 in the federal figure, and Caltrans was adding some annotations to it. Also, Table 2M-1CA shows the correlation between the signs; Mr. Howe explained the campfire sign which was allowed to have a *Prohibited* version. The PS numbers correlate with the recreational series RS-042 sign. The *Prohibited* recreational education plaque series would correlate with it.

Commissioner Questions and Discussion

Committee Member Walter asked about page 10 – how had Mr. Howe decided which signs would have a *Prohibited* alternative versus the ones that wouldn't? Mr. Howe answered that these signs won't usually be found on state highways. The black asterisk suggests non-road

use only. Caltrans has responsibility for adopting specification standards and specifications for all traffic control devices in the State of California – Caltrans often has requests from cities and counties that want to put up signs stating *No Boat Motor*, for example.

Committee Member Winter asked if there had been any consultation with state parks for the non-road-type signs. Mr. Howe replied that his source had been the FHWA Notice for Proposed Amendment. What they originally had in it was the *Prohibited* signs, but they opted not to print that.

Committee Member Winter commented that the reference at the federal level was to imply that they have consulted with the National Parks Service. Mr. Howe responded that the document adopted by the Federal Highway Administration (FHWA) was published by the Federal Parks Service, which is part of a different Cabinet. The Forest Service also uses many of these signs.

Public Comment

Kevin Korth, FHWA, commended Caltrans for addressing this gap in Chapter 2M of the FHWA MUTCD. The National Parks Service is the owner of many of these signs, with the cultural significance shown in brown. The document is comprehensive with the sub-plaque, flags, and prohibitions, and it will be very useful at the state, county, and local level for implementing the signs, whether they are placed on the highway or in a parking lot near trails. The document will probably be shared nationwide with many agencies to answer the question of what to do with Chapter 2M – only a couple of dozen pictures are provided in the MUTCD. Mr. Howe had investigated each sign and included it in the chart.

Mr. Korth offered corrections to the options statement on page 7, paragraph 4; and page 12, note 6 referring to Type 11 sheeting.

Commissioner Questions and Discussion

Committee Member Marshall asked for Mr. Howe's response to note 6. Mr. Howe stated that he would specify to use retro reflective material but not exclusively Type 11. The Caltrans policy for public roadways is to allow Types 8, 9, or 11 for white background signs; for colored background such as brown, they use exclusively Type 11.

Mr. Howe informed Committee Member Marshall that this page was not going into the MUTCD; the page would be amended accordingly and made available as an explanation. Caltrans was proposing to put the recommended language into the MUTCD in Chapter 2M, Section 2M-07. Mr. Howe specified the insertion of the word *may*. Committee Member Tong pointed out that this insertion had already been made in the version of the document included in today's agenda.

Mr. Howe indicated the annotated table and the new table to be inserted.

> **MOTION**: Committee Member Marshall moved approval of the clarifications as recommended, noting that the language correction was in today's printed agenda. Committee Member Tong seconded. Motion carried unanimously.

(Out of order) **7. <u>Request for Experimentation</u>**

16-23: Request to experiment with green-backed sharrow

Jim Biega of the City of Goleta presented the Request for Experimentation. He explained that in the city of Goleta there is one roadway segment for the experiment while in the city of Santa Barbara there are 19. He showed photographs of some of them.

He stated that the FHWA had wanted to add to the request a comparison of locations with an existing shared lane marking versus locations with new green background being added to the shared lane, in order to see if it makes a difference.

Mr. Biega showed a figure for Goleta with a longer road distance at the front end and the tail end. The idea was that it is easy to see parts that are longitudinal but not those that are transverse. Mr. Biega was also proposing the idea of putting a point on the marking, which helps with directionality.

The Request for Experiment would involve before-and-after analysis, using video and traffic counts as well as staff observation, to see how the devices perform with respect to people riding on the sidewalk, or to the right, middle, and left of the marking. Basic accident patterns before-and-after will be analyzed also.

Commissioner Questions and Discussion

Committee Member Sallaberry asked about the current crash data. Mr. Biega answered that they do not have much data, although they know that along Hollister Avenue there are a fair number of accidents. Committee Member Sallaberry commented that generally, the number of mid-block crashes tend to be low, so it will be difficult to get a statistically significant result. Mr. Biega agreed and commented that many of those crashes are not reported. The city might be able to get the police or hospitals to help with data collection.

Committee Member Sallaberry suggested having good before-and-after bicycle count data, because the green sharrows may actually attract more people to the roadway. Mr. Biega agreed and said that they were going to collect detailed 24-hour continuous data. Committee Member Sallaberry suggested doing multiple 24-hour counts of bicycles, as the counts fluctuate by as much as 50% from day to day. He added that doing surveys of bicyclists would be very useful. He also said that it would be best to have the shared lane marking first, then paint it green afterwards – that way you can focus on the effect of the green.

Committee Member Jones stated that he was providing information from the previous meeting regarding positioning sharrows to Mr. Biega.

Committee Member Walter asked if Mr. Biega had contacted other cities that have these markings, to find out their reasons for putting them in as well as any data collected. Mr. Biega responded that he had. Many cities put them in to provide more awareness to the motorist of the bicycle routes. An idea for future experimentation would be to write at the bottom of the marking, “May Use Full Lane” pertaining to bicycles.

Committee Member Winter asked if the lack of center lane marking on two-lane roads was typical. Mr. Biega replied that it was.

Chair Greenwood asked about the FHWA request. Mr. Biega said that they had requested a comparison of streets with existing shared lane markings versus the addition of the green background.

Public Comment

Mr. Baross stated that anything done to increase the conspicuity, existence, and legitimacy of people bicycling in the roadway is certainly a plus. A factor that really helps with the sharrows is legitimatizing the placement of bicyclists in the appropriate position in the roadway. He would like to see data collected on motorist behavior when they encounter bicyclists using the sharrow lane space.

Mr. Korth stated that the FHWA had left it open to the CTCDC to decide whether to add the green to the normal shared lane marking on existing streets, versus placing the standard marking on new streets prior to placing the green background.

Commissioner Questions and Discussion

Committee Member Walter commented that if a number of other cities have these markings in place already, it would be useful to try to gather some data from them. If this is something designed to enhance the visibility of shared lane markings on these types of streets, it is beneficial.

> **MOTION**: Committee Member Bahadori moved approval of the request. [A Committee Member] seconded. Motion carried unanimously.

INFORMATION ITEMS (New items that may be voted on or brought back as Action Items in a future meeting)

16-21: Modify existing sign and propose new sign and word marking for Senior Zone

(Committee Member Jones commented that for bike lanes, Solana Beach on State Highway 1 uses a sign of a bicycle with a human on it rather than just a bicycle.)

Mr. Howe explained Item 16-21. A new *Senior* plaque would go below the Pedestrian Warning sign. *Senior Zone* would go at the top of a conventional speed limit sign. Mr. Howe noted that the SW50 California sign identifying a Senior Citizen facility does not get used much.

Caltrans is being asked to amend SW-50 – crossing it out to be replaced with SW-50-1P.

Mr. Howe showed mock-ups of the *Senior Zone* plaque. There is the option to use a fluorescent yellow-green background as well as the yellow.

Commissioner Questions and Discussion

Committee Member Jones stated that this was tied to legislation from last year, as addressed then by a member of California Walks.

Mr. Howe showed the changes to the MUTCD policy language. The *Senior Citizen Facility* sign would be discontinued. The *Senior Zone* and *Senior* plaques would not be used alone, but in combination with speed limit signs. The *Senior* plaque may be replaced for a *Pedestrian Crossing* warning sign at locations where senior citizens cross the road.

Committee Member Bahadori mentioned a bill to be introduced at the next legislative cycle that would allow the use of speed enforcement cameras in specific areas – school zones, senior zones, and construction zones. As part of that bill, there will be a recommendation to Caltrans to develop warning signs associated with those devices. Committee Member Bahadori suggested leaving the manual alone, and looking at in the context of this upcoming

legislation. Mr. Howe responded that today's item was an information item; Caltrans was not asking for a recommendation.

Committee Member Winter pointed out language on page 23 of the packet, regarding speed limits of 25, 20 or 15, that should be cleaned up eventually.

Acting Secretary Ferouz commented that the California Walks letter had been sent to the CTCDC in 2014, and they are not very happy that the CTCDC has not done anything. Also, the California Vehicle Code (CVC) uses the term "Senior" rather than "Senior Citizen," which is why Caltrans is using that wording.

Committee Member Sallaberry noted that there is not much guidance on when it is appropriate to use the sign – San Francisco has seniors all over the city not confined to one zone – so the city was concerned about proliferation of requests to use the *Senior* signs with every *Pedestrian Crossing* sign.

Committee Member Bahadori felt that a plaque that just reads *Senior* says nothing and is of value to no one.

Acting Secretary Ferouz pointed out that the plaque would be used with the *Pedestrian Crossing* sign.

Committee Member Walter noted that in Lincoln, there is a retirement community with dozens of streets and crossings. How would these signs apply to a community like that? Without the *Senior Citizen Facility* sign – making the sign more general – it might be difficult to try to cover every area where seniors would be likely to walk. He also questioned the value of having the *Senior* plaque, although he felt that the supplemental *Senior* plaque for speed limit signs made sense.

Committee Member Winter had a bigger problem with the *Senior* pavement marking. The simple language is *Ped* crossing to convey all types of pedestrians, but now seniors are being singled out.

Committee Member Bahadori commented that these signs are effective when they are used in places where they are appropriate; more is not better. A proliferation actually diminishes their value. The pace at which the pedestrian crosses the street is irrelevant.

Committee Member Jones suggested going back to the CVC to find what it says to discern whether we need both signs. As a speed limit issue, does the CVC identify where the speed zone can be reduced?

Committee Member Tong proposed having Caltrans look into using the *Senior Zone* warning sign, but to drop the *Senior* plaque. We do need a sign to comply with the law. The *Senior Zone* sign would replace the *Senior Zone Facility* sign.

Committee Member Winter noted that the CVC states a speed of 25 MPH for senior centers.

Public Comment

Gayle Chenoweth, California Alliance for Retired Americans (CARA), spoke of the need to increase protections for pedestrians in California, especially pressing for the 4.5 million seniors in California. Seniors are the largest single age group hit, injured, and killed by automobiles. On behalf of CARA, Ms. Chenoweth requested the CTCSC to adopt an official sign for senior speed zones.

Committee Member Bahadori responded that the law exists enabling local agencies to implement the sign *25 MPH Senior Citizen Facility*. The question is whether that is the best sign, or if it should be different. Ms. Chenoweth answered that the law is not being enforced. The signs should be implemented in areas of senior facilities and centers.

Commissioner Comments and Questions

Committee Member Bahadori stated that he preferred *Senior Citizen Zone* to *Senior Zone*.

Committee Member Walter stated that it seemed the committee preference was not to go forward with the *Senior* pavement marking but only the *Senior* plaque.

> **MOTION**: Committee Member Bahadori moved approval to replace the *Senior Citizen Facility* sign with the *Senior Zone* sign. Committee Member Marshall seconded.

Committee Member Winter stated that he was not supportive of the reference in the meeting packet on page 23 to the SW50-1P sign. He submitted a Friendly Amendment to strike the 20 or 15 MPH speed limit stated in the same sentence, because it was not permissible the way the law is currently structured. Committee Members Jones and Tong agreed to the Friendly Amendment.

Committee Member Walter suggested another possible Friendly Amendment to change *Senior Zone* to read *Senior Facility Zone*. The law is related to the facility.

Committee Member Marshall preferred to reduce the number of words for drivers to read.

Committee Member Jones commented that with the Baby Boomer generation aging, maybe we should start creating safe routes to senior facilities in addition to safe routes to schools – we don't know what will be changing in the future.

Committee Member Jones suggested deleting the word *Zone* to have the sign read *Senior Facility*.

Mr. Singh stated that he would check with the Advocacy Group on whether this could be done.

Committee Member Bahadori stressed that regardless of that decision, nothing on the part of the CTCDC has impeded or hampered the implementation of the law – cities and counties could have implemented the law at any time.

Committee Member Tong withdrew the item in order to address the subject with the Advocacy Group.

Committee Member Walter requested Committee Member Tong to convey to the Advocacy Group that its members are free to lobby their cities for placement of the signs.

Committee Member Bahadori and Committee Member Marshall withdrew the motion.

16-22: Proposal to discontinue the use of non-reflective Pavement Markers

Mr. Abou-Fadel introduced the item. He explained the two types of markers in use: reflective and non-reflective, used on most state highway systems. No changes are proposed for the reflective markers.

Mr. Abou-Fadel showed Detail patterns and uses of striping. He explained that paint striping lasts for about nine months. He stated that as trucks have become heavier, they are wearing out and dislodging the markers much more quickly than in past decades. This has introduced a serious safety issue for Caltrans maintenance.

He showed a graphic depiction of the decreasing life expectancy of the markers.

Caltrans performed a study in District 3 on three routes: 18, 5, and 51. They replaced Botts' dots with stripes, and analyzed accidents and other related results. Based on that study, Caltrans concluded that removing the Botts' dots and replacing them with thermal plastic was best. Thermal plastic lasts three to four years – much longer than paint.

Caltrans is now doing a study on Route 78 from Route 5 to Route 17 (16.5 miles) using a 6″ wide stripe for middle lines, edge lines, and ramps.

Caltrans has found that nationwide, California, Nevada, New Hampshire, and Hawaii are the only states using Botts' dots.

Mr. Abou-Fadel described the results of disengagement incident reports in 2015.

Caltrans recommended to discontinue non-reflective markers in its standards and in the CA MUTCD, with an initial policy change in the CVC. The benefits will be less maintenance, less worker exposure to traffic during installation, less traffic impact during restriping, better for autonomous vehicles, less inventory to track, better for bikes and motorcycles, and more uniformity with other states.

Mr. Abou-Fadel confirmed for Chair Greenwood that the item was informational only.

Committee Member Tong pointed out the change in materials – for the last 15 years District 11 had utilized Botts' dots, but the district now utilizes thermal plastic and tape which last longer. Technology has improved and striping guides vehicles to stay in the lanes. As we move forward we may need to edit the language in the CA MUTCD where it refers to state highways.

Committee Member Bahadori clarified with Committee Member Tong that they did not seek to remove non-reflective raised markers for use by locals on rural roads (some of which have substandard horizontal curbs), but only on state highways.

Acting Secretary Ferouz noted that Botts' Dots are non-reflective – one of the many reasons Caltrans sought to remove them from its Standard Plans. However, they will still be in the CA MUTCD for local roadways. Many other options are now available such as raised thermal plastic and "cookies" that provide audible warnings as well as enhanced visibility in rain and at night.

Committee Member Tong stated that Caltrans does not see Botts' Dots as a traffic control device because they are not reflective.

Committee Member Winter asked if any part of the study differentiated between asphalt and concrete pavement. Mr. Abou-Fadel said that they would take care of that and check the sharrow striping distance.

Zoubir Ouadah, Senior Traffic Engineer from the County of San Diego, commented that if you change the Standard Plans, an uphill battle will ensue among the engineers who design traffic signal and signing striping – they will need to refer to the MUTCD and not the

Standard Plans. Mr. Ouadah also asked about the study: is it for California only or the whole nation? Mr. Abou-Fadel replied that it is for California only.

David Royer, formerly of Los Angeles Department of Transportation, commented that he has trouble following pavement marker details when they have raised pavement markers. They don't represent much of a pattern, particularly two-way left turns, rural road passing zones, and the elephant tracking on tracked lane dashed barrier line markings. Those three markings are very confusing unless they stripe over. Mr. Royer felt that Caltrans is making a wise decision in eliminating them. He had always advised agencies that if they were going to use the markings, they should stripe over the markings and maintain it.

Mr. Baross reminded the committee that a raised barrier is a hazard for bicycling, especially those that are unreflective.

Commissioner Questions and Discussion

Committee Member Bahadori asked if the remaining 40+ states never used Botts' Dots at all, or if they had moved away from them. Mr. Abou-Fadel answered that some never used them, and others stopped using them because of the problem in which they dislodged and caused accidents.

Public Comment

Mr. Korth stated that the FHWA would be supportive of removing non-reflective raised pavement markers from the manual. He suggested for Caltrans to check with Legal regarding the definition of raised pavement markers in the CVC page 26 – does that mean reflective only?

Commissioner Questions and Discussion

Committee Member Marshall commented that this was really trying to amend Caltrans business practice. He advocated for the interest of counties and cities according to Mr. Ouadah's comments. If you are open to leaving the reference in the Standard Plans with a notation that Caltrans business practice does not use them, that would be more convenient for local agencies as they would not have to change their business practice; they could still use this reference material. Committee Member Tong said they would look into it – the Standard Plans needed to remain consistent with the contract.

10-3: City of Riverside pilot project findings

Gilbert Hernandez, City of Riverside Public Works Department, provided a pilot project summary on the static sign that the city deployed regarding trains approaching. The signs had been deployed at 22 railroad crossings, and warned that while the gates are down there is a possibility that additional trains may be approaching. Mr. Hernandez gave the background of the study.

During the course of the study from July 2010 through May 2013 there were seven deaths, of which three were attributed to suicide. Two of the deaths were pedestrians who failed to notice that a second train was approaching.

To compound matters, the city is pursuing a Quiet Zone project to be implemented this fall. It restricts the conductors from blowing their horns. 16 crossings will be impacted, 12 of which have multiple tracks.

In February 2016, the FHWA informed the city that they were not recommending adoption of the static sign, but wanted to conduct additional research to consider adoption of a warning sign. The city would like to keep the static signs installed while looking at other options with the state or federal government.

Commissioner Questions and Discussion

Committee Member Walter asked if Mr. Hernandez's agency considered the experiment completed and a success. Mr. Hernandez replied that they did; a challenge was the lack of good data for some of the older casualties. They had installed CCTD cameras at many of the rail crossings which enabled them to see the factors that led to these sudden incidents. They also had to rely on witness accounts. Mr. Hernandez had gone himself to one of the crossings to try to get a perspective on why pedestrians sometimes cross. He found that because of ambient noise, it is hard to hear the freight train's horn; the light rail train that may be approaching is much quieter still.

Chair Greenwood asked about the procedure to declare the experiment complete. Mr. Singh responded that two or three years ago the experiment was completed. The committee allowed continued use of the signs. Chair Greenwood requested for the committee to be given any updates.

Chair Greenwood asked if Caltrans is considering putting the sign into the Caltrans manual. Mr. Singh replied that they cannot because they must wait for FHWA approval.

Mr. Korth stated that FHWA is not going to pursue the data with the national committee or bring it into the next manual. There was no human factor study done and no comparison to the standard sign package. The favorable results had no baseline comparison.

Committee Member Bahadori felt that the committee has an obligation to the city to make clear whether it is an approved device.

Committee Member Jones commented that double-tracking is a big issue in California communities, especially beach communities where many people have to cross tracks to get to the beach. Much of the problem is pedestrian-related on the sidewalk. Anything we can do to provide information to pedestrians is of benefit.

Committee Member Bahadori agreed; the problem is not for cars but for pedestrians who begin crossing when the gates are still down. Going to a Quiet Zone makes the problem even worse. Saying that we don't have enough information, so the signs should be removed, is not a good approach. At a minimum we should keep the signs.

Dr. Ahmed Aburahmah, City of San Diego, spoke about the city's experience with Quiet Zones and railroad tracks.

Kevin Schumacher, California Public Utilities Commission, Road Crossings Group, stated that they were familiar with the project. The need for the second train signs has been identified over the years. At the national level they recommend research; the PUC did not feel the pedestrian surveys were convincing. The general consensus has been to move toward the active sign, but more research is needed. There is also a cost issue. In short, the PUC does not think the signs are ready for adoption widely but does not have a strong position on whether they remain in Riverside.

Committee Member Jones responded that California has many multi-crossing locations where placing an activated sign unleashes a $400,000 project with the PUC. Some cities are not doing anything because they do not want to introduce this situation. However, just a static sign would help if the activated sign and gate arms are too expensive for the agency.

Mr. Singh suggested that the City of Riverside could use a single existing symbol. Mr. Hernandez agreed that this was the next option – to deploy a standard sign and connect a plaque to that – although it was a less preferred option.

Mr. Hernandez continued that the city had been willing to install pedestrian gate arms on the BNSF line, but BNSF would not allow it. He felt that the signs are good information to share with the public, particularly when we know that some of these pedestrians are not aware of the second trains approaching.

Committee Member Bahadori cautioned that this could be a situation in which the perfect becomes the enemy of the good. The city may not have done enough research and does not have the resources to do enough research. We may want to allow them to keep what they have until the day that the national MUTCD or CA MUTCD have something better to offer.

> **MOTION**: Committee Member Bahadori moved to allow the City of Riverside to keep the signs they have and continue the experimentation until such time as a new standard is approved. Committee Member Walter seconded.

Public Comment

Mr. Ouadah agreed that the sign is exclusively for pedestrians. It could be smaller than the standard 24 x 24″ to gear it more toward pedestrians; it could have its own sheeting, shielding or positioning.

> **VOTE**: The committee voted unanimously to approve the Motion.

7. Request for Experimentation

16-24: Request to experiment with a new modified regulatory sign in the City of Laguna Beach

No one came forward to present the item. Chair Greenwood assigned the item to the next meeting's agenda.

16-25: Request to experiment with through lane bicycle box in the City of South Pasadena

Sam Zneimer, City of South Pasadena, presented the item. He described the two intersections for the experiment. The important thing about this treatment is that at both the intersections they have the same problem: a permitted right turn pocket. The bike box would go into the center lane (Fremont Avenue) and the center/left turn lane (Grand Avenue).

Data collection will focus on how the cyclist takes the lane to stay out of the right turn box; how people are using it in the collision data; and how people move out of the bike box back to the right. It is part of a much larger project of improvements to Mission Street.

Commissioner Questions and Discussion

Committee Member Walter asked if the two intersections were signalized. Mr. Zneimer answered that they were with a driveway at the Grand Avenue intersection.

Public Comment

Mr. Baross spoke as a certified instructor and described the two maneuvers bicyclists can do when they want to travel straight through the intersection. He felt this was a worthy experiment. He urged the city also to consider another approach with shared lane markings.

Commissioner Questions and Discussion

> **MOTION**: Committee Member Jones moved to approve the experiment and recommended consideration of a sharrow to encourage bicyclists to get into the lane. Committee Member Sallaberry seconded.

Committee Member Walter agreed that it sounded like a very good idea, letting the cyclists know they need to get up to the front rather than waiting in the back alongside another vehicle. They can lead off across the intersection, then move back to the right. If the City of South Pasadena decides to add a sharrow, they can document it as part of the experiment.

Committee Member Sallaberry suggested that during data collection, the sharrow could be added first and documented, then the bike box, or vice versa.

> **VOTE**: The committee voted unanimously to approve the Motion.

Mr. Singh suggested that if the city goes along with the recommendation, they should submit it to Caltrans.

8. Discussion Items

16-26: Word Sign Message in Work Zone

Committee Member Tong emphasized that the State Smart Transportation Initiative (SSTI) had asked Caltrans to review its practice for improvement to make its engineering decisions better. One of the recommendations is to discuss having local agencies create their own work message signs for construction zones only.

Committee Member Tong continued that the CTCDC hears from many practitioners who have created their own signs – they are not coming to the CTCDC to obtain approval. Committee Member Tong sought to open the option for the local agency – the practitioners – to use the ability to create its own word message sign.

Committee Member Walter asked about the message that agencies put on these signs. Committee Member Tong replied that an example was to indicate lane splits – which is traffic control.

Committee Member Bahadori clarified that this discussion did not apply to anything in the CVC that a driver can be cited for. One of the best ways to improve safety in construction work zone areas is to standardize, yet at the same time allow innovation. He wanted to consider specific examples.

Chair Greenwood commented that in construction zones, sometimes circumstances align against you in layers; you may not have planned for the need for a sign.

Mr. Singh pointed out that if a device is to be used as traffic control, it needs to be approved by Caltrans. Committee Member Bahadori responded that if Caltrans delegates the authority, it is still legal.

Committee Member Walter agreed with Chair Greenwood that sometimes in a specific situation for a particular project, a unique sign can make a difference. Relating to the SSTI report, he felt that to prepare the committee for this discussion, a section reference would have been helpful.

Committee Member Bahadori noted that the SSTI was a comprehensive evaluation of Caltrans based on the perception that Caltrans is an inefficient organization that has lost its mission and is wasting money. One of the SSTI criticisms was that Caltrans is taking forever to come up with standards. A ramification was that on any given day, there is more than $2 billion in litigation pending against Caltrans. Almost 90% of that is claims that Caltrans did not follow standards or did not use the proper control device. There are consequences for using shortcuts and allowing flexibility: litigation becomes worse and safety is compromised. This was why Committee Member Bahadori wanted to see specific examples for this agenda item.

Chair Greenwood summarized that this item was of great interest to the committee, and they would like more information to be able to give Caltrans feedback.

Mr. Singh clarified that the FHWA does allow local agencies to develop sign ordinances, but Caltrans does not allow it in California.

Public Comment

Mr. Ouadah commented that a resident engineer may think a certain sign is a great idea, but the driver may not comprehend it. That is why research at the national level is so important before we come out with proposals; that is why we limit verbiage on signs.

Commissioner Questions and Discussion

Committee Member Bahadori suggested a follow-up in which cities and counties are asked if they can come up with ideas for specific signs.

The committee agreed to continue the discussion at the December meeting.

9. Tabled Items

None.

10. Next Meeting

Chair Greenwood stated that the county representatives had a conflict with the next scheduled meeting date.

He noted that the CTCDC had met its obligation to meet three times in 2016. He asked the committee to consider whether the December meeting was necessary; they discussed the question. Mr. Singh pointed out that alternate committee members can attend.

The committee agreed to change the meeting date to Tuesday, December 6 in Sacramento. Ms. Olenberger noted that while she herself cannot attend, her Director can attend.

11. Adjourn

Chair Greenwood adjourned the meeting at 12:21 p.m.