

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE

MEETING OF THE  
CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE

BURTON W. CHACE PARK  
COMMUNITY ROOM  
13650 MINDANAO WAY  
MARINA DEL REY, CALIFORNIA

THURSDAY, OCTOBER 17, 2013

9:00 A.M.

Reported by: Jacqueline Denlinger

A P P E A R A N C E S

Committee Members

Hamid Bahadori, Chairman

Mark Greenwood, Vice Chairman

John Ciccarelli

Rick Marshall

Larry Patterson

Lt. David Ricks

Bill Winter

Alternate Committee Members in Attendance

Michael Kenney

Rock Miller

Sam Morrissey

Caltrans Staff - Sacramento Office

Devinder Singh, Committee Secretary

Johnny Bhullar

A P P E A R A N C E SAlso Present

Janet Zaldua  
Tiffany Miller  
Marina del Rey Convention and Visitors Bureau

Jim Lissner  
Hermosa Beach Resident

Jim Baross  
California Bicycle Advisory Committee to Caltrans  
and League of American Bicyclists

Dave Royer  
University of California  
Institute of Transportation Studies,  
Technology Transfer Program

Leo Espelet  
Kimley-Horn and Associates, Inc.  
Representing City of National City

John Fisher

Jay Beeber  
Safer Streets LA  
and Pedestrian Advisory Committee for the City of Los  
Angeles

Cynthia Alvarez  
The Office of the Honorable Adrin Nazarian  
Member of the California State Assembly

Conrad Lapinski  
City of Dana Point

Kevin Korth  
US Department of Transportation  
Federal Highway Administration

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1 Admiralty Way. That is being administered by my department,  
2 Public Works. I was mentioning to some of the members  
3 earlier, maybe we do have an item on our agenda today about  
4 temporary traffic control; so it wasn't intended to be a  
5 field trip to go look at some examples of temporary traffic  
6 control. But as always, I value the input of my colleagues  
7 as they get around to these, these types of events and see  
8 how traffic is handled in different parts of the state.

9 I do want to acknowledge I have asked some  
10 speakers to join us this morning to give you a little more  
11 of an idea of what the marina is for Los Angeles County.  
12 And so if I could ask maybe Janet Zaldua or Tiffany Miller  
13 or both to come forward and I'll turn it over to you.

14 MS. ZALDUA: Great, well thank you. Good morning,  
15 everybody. I am Janet Zaldua, the Executive Director for  
16 the Marina del Rey Convention and Visitors Bureau and this  
17 is Tiffany Miller, she is our Director of Operations. We  
18 are really excited that you are having your meeting here in  
19 Marina del Rey.

20 The role of the Convention and Visitors Bureau,  
21 basically we promote tourism for the community, for Marina  
22 del Rey. We try to bring meetings to the area and promote  
23 the area as a destination to business travelers and leisure  
24 travelers and so we are very excited that you are meeting  
25 here with us.

1           We hope that while you're here -- I don't know  
2 where many of you are coming from but we hope that you will  
3 have an opportunity to dine in some of our restaurants.  
4 We've got beautiful restaurants that all have breathtaking  
5 views of the waterfront.

6           And if you have some extra time maybe you can try  
7 your hand at parasailing. It is not that scary. I've been  
8 here -- I'm actually new to the marina, I started about  
9 three months ago after the former director retired, and I  
10 have already gone parasailing twice. And I was scared to  
11 death at first but it is actually so much fun, it's very  
12 peaceful while you're up there. There's lots of activity on  
13 the waterfront if you have a chance to stay a little longer  
14 or if you come back to visit. You know, jet-skiing, paddle  
15 boarding, lots of great fun activities in the area. So we  
16 hope you'll come back and visit and take advantage of a lot  
17 of the activities that we have here.

18           We do provide support to visitors that are here.  
19 As you come up -- as you are driving up to this area here  
20 you'll see the little building, that's our Visitor Center.  
21 So there's lots of brochures and maps and visitor  
22 information if you'd like to take advantage of that.

23           Just some interesting tidbits about the marina.  
24 We are 807 acres, half of which is underwater. We are a  
25 manmade phenomenon. And in 2015 will be our 50th

1 anniversary so the marina will be gearing up for a really  
2 big celebration that will take place throughout the year so  
3 we're excited about that milestone.

4           We do very much value the public transportation  
5 and all that you guys do. We do have challenges here in  
6 Marina del Rey, only because we some limited public  
7 transportation so I'll just highlight what we do currently  
8 have. We have metro buses number 108 that goes from Pico  
9 Rivera to Marina del Rey, we've got Santa Monica's Blue Bus  
10 number 3 which goes from Brentwood to El Segundo through  
11 Marina del Rey. Culver City bus number 7 takes -- that goes  
12 from Culver City to Marina del Rey, it operates weekdays  
13 only. And we have the LA DOT number 437 which goes from  
14 downtown LA to Venice to Marina del Rey. So our biggest  
15 challenge in terms of public transportation is that we  
16 really need access from the LAX area to Marina del Rey. So  
17 if you guys can pull some strings and make that happen we  
18 would be so appreciative.

19           But basically we just really want to thank all of  
20 you for -- yes.

21           COMMITTEE MEMBER CICCARELLI: Actually the  
22 (indiscernible) is going from LAX.

23           MS. ZALDUA: Great, wonderful. And I guess we  
24 have Bill to thank for the roadwork on Admiralty Way. That  
25 has really ruffled quite a few feathers. But as the

1 Convention and Visitors Bureau we are trying to make some  
2 lemons out of lemonade. We're actually coming up with a  
3 really fun promotion to help some of the businesses along  
4 the area, some of the restaurants that have been impacted by  
5 the -- by the construction.

6           And we are coming up with a really fun promotion  
7 that is going to be called the Marina Dining Zone. And we  
8 are sending out about 20,000 postcards probably by the first  
9 week of November to the locals, to folks in the Playa Vista  
10 area to really encourage them to -- and we have actually on  
11 the cover will be our mascot which is a -- what is he, like  
12 a sea -- he's a pelican. And he's got an orange cone and a  
13 hard hat and a tool belt and he is going to encourage people  
14 to, you know, support the restaurants during this  
15 construction. Because a lot of the feedback that we've  
16 heard is that people don't want to get stuck in that and  
17 they just don't bother coming to the restaurants at that  
18 7:00 o'clock rush hour. It has impacted some of the  
19 restaurants so we're making lemons out of lemonade, we're  
20 coming up with a really fun promotion and we're encouraging  
21 the restaurants to offer deals and discounts during that  
22 time until February to encourage folks to, you know, support  
23 our local restaurants.

24           So we're really excited about the -- we'll be  
25 excited to see that completed because we have actually seen

1 the reference of what it's going to look like when it's  
2 finished with the landscape and everything so it will be a  
3 really big improvement. So we're just going through a  
4 little bit of growing pains right now but we're, like I  
5 said, our goal is to make lemons out of lemonade and still  
6 make it -- kind of poke a little fun at it and just, you  
7 know, do some fun promotions while the construction is  
8 taking place. But we'll refer people.

9 COMMITTEE MEMBER WINTER: I'll give you my card.

10 MS. ZALDUA: Yes, we'll refer people to you.

11 We're trying to put a positive, a very positive spin on it.

12 but again, we are very encouraged and excited to have you  
13 all here and I hope that you'll take advantage of the time  
14 that you're here and enjoy the restaurants and some of the  
15 activities and hope you'll come again very soon.

16 MS. MILLER: I think quickly just ask if anyone  
17 had any questions with respect to transportation as it  
18 relates directly to Marina del Rey.

19 COMMITTEE VICE CHAIRMAN BAHADORI: Members, do you  
20 have any questions?

21 COMMITTEE MEMBER PATTERSON: We would be afraid to  
22 ask if we did. We have an image to maintain.

23 COMMITTEE MEMBER WINTER: We do have a Class 1  
24 bike trail that runs through the length of the marina. It  
25 ties into the Ballona Creek bike trail --

1 MS. MILLER: Absolutely.

2 COMMITTEE MEMBER WINTER: So we are becoming  
3 increasingly more bike-friendly here in the area.

4 MS. MILLER: Absolutely. From El Segundo all the  
5 way through Ventura they're coming directly through Marina  
6 del Rey.

7 COMMITTEE MEMBER WINTER: So if parasailing -- if  
8 parasailing isn't for the group maybe a nice bike ride up  
9 along the beach would be something for you to consider.

10 MS. MILLER: That's right.

11 MS. ZALDUA: You can go to Fisherman's Village and  
12 rent a bike.

13 MS. MILLER: That's right. The number we have  
14 there at the Visitors Bureau and the Visitors Center on  
15 Mindanao and Admiralty Way; stop in at any point. And we'll  
16 leave some business cards and please call us if you have any  
17 further needs. Okay, thank you, guys.

18 MS. ZALDUA: Thank you very much.

19 COMMITTEE VICE CHAIRMAN BAHADORI: Thank you,  
20 thank you very much.

21 Okay, with that said we are going to go back to  
22 our regular agenda. We are going to go through the  
23 introductions and I am going to start with Marshall.

24 COMMITTEE MEMBER MARSHALL: Thank you. I am Rick  
25 Marshall, I'm from the County of Napa and I am here

1 representing the northern counties.

2 COMMITTEE MEMBER WINTER: And again, Bill Winter,  
3 Los Angeles County. I believe this is my first meeting as  
4 the primary member representing the southern counties.

5 COMMITTEE MEMBER GREENWOOD: I'm Mark Greenwood; I  
6 am the Director of Public Works for the City of Palm Desert.  
7 I am representing the League of California Cities southern  
8 section of the state representative.

9 COMMITTEE VICE CHAIRMAN BAHADORI: I am Hamid  
10 Bahadori representing Automobile Club of Southern  
11 California.

12 COMMITTEE SECRETARY SINGH: I am Devinder Singh,  
13 the Secretary for the Committee and also acting today as a  
14 voting member for Caltrans.

15 COMMITTEE MEMBER RICKS: David Ricks, California  
16 Highway Patrol.

17 COMMITTEE MEMBER PATTERSON: I'm Larry Patterson,  
18 I'm the -- actually I've currently been demoted to the  
19 Interim City Manager for the City of San Mateo but I find  
20 myself relying on being the Public Works Director more  
21 often.

22 COMMITTEE MEMBER CICCARELLI: I'm John Ciccarelli,  
23 one of two members of the Committee representing the  
24 interests of non-motorized travelers, walkers, bicycles.

25 COMMITTEE VICE CHAIRMAN BAHADORI: And Johnny?

1 MR. BHULLAR: I'm Johnny Bhullar with Caltrans. I  
2 am the editor for CA MUTCD and most of the work and  
3 recommendations that come from here end up in my lap.

4 COMMITTEE VICE CHAIRMAN BAHADORI: And if the  
5 audience, if you can start introducing yourself. And if  
6 there are any specific agenda items you are here for please  
7 say so. And we can start with Cynthia.

8 (Thereupon, members of the audience introduced  
9 themselves away from the microphone.)

10 COMMITTEE VICE CHAIRMAN BAHADORI: Well thank you,  
11 everyone, glad to have you all here.

12 On Item number 2, we have some elections going.  
13 Our former Chairman, Mike Robinson, he retired from being  
14 the manager of the County of San Diego Traffic Engineering  
15 and I am serving today as the Vice Chair. We need to go  
16 through our election process to elect a new chair and vice  
17 chair. And do we have new membership?

18 COMMITTEE SECRETARY SINGH: Mike.

19 COMMITTEE VICE CHAIRMAN BAHADORI: Yeah, Mike, we  
20 already introduced Mike Kenney.

21 Okay, so with that I am going to open the floor  
22 for the nomination for a new chair.

23 COMMITTEE SECRETARY SINGH: In the past, the  
24 history of the CTCDC is that the Vice Chair automatically  
25 becomes the Chair so I nominate Hamid as the Chairman for

1 the next two years.

2 COMMITTEE MEMBER PATTERSON: I second it.

3 COMMITTEE VICE CHAIRMAN BAHADORI: There is a  
4 nomination and a second. Any discussion?

5 Shall we vote? All those in favor?

6 (Ayes.)

7 COMMITTEE VICE CHAIRMAN BAHADORI: Opposition?

8 Okay, thank you very much for your vote of  
9 confidence.

10 COMMITTEE MEMBER PATTERSON: For the Vice Chair I  
11 think that the tradition is --

12 COMMITTEE SECRETARY SINGH: It goes to League, so.

13 COMMITTEE MEMBER PATTERSON: Right, right. So as  
14 a League member I would like to nominate my Southern  
15 California associate with the League of California Cities,  
16 Mark Greenwood, as the next Vice Chairman.

17 COMMITTEE CHAIRMAN BAHADORI: There is a motion  
18 for the nomination of Mark Greenwood as our Vice Chair.

19 COMMITTEE MEMBER: I second.

20 COMMITTEE CHAIRMAN BAHADORI: There is a second.  
21 All those in favor?

22 (Ayes.)

23 COMMITTEE CHAIRMAN BAHADORI: Opposition?

24 Seeing none, thank you. Congratulations, Mark.

25 Okay, under new membership. Mike, you want to

1 share a few words, you're new to the Committee.

2 COMMITTEE MEMBER KENNEY: Thanks for the  
3 opportunity. I've been with the County a very short time as  
4 well, I've been there a year and a half. I've spent the  
5 bulk of my time in consulting but always as a consulting  
6 traffic engineer to small cities. I've had a lot of  
7 experience both with the municipal side and the design side,  
8 the private side too.

9 Looking forward to participating. I don't quite  
10 know what alternates do but whatever the tasks are I'd be  
11 happy to step up. I'll take any questions you might have.

12 I'm happy to be here, thank you.

13 COMMITTEE CHAIRMAN BAHADORI: Thank you very much.  
14 I've had the pleasure of working with Mr. Kenney for a few  
15 years now. Is it already a couple of years you are there?  
16 Two years? Yeah. I serve on their Traffic Advisory  
17 Committee in the County of San Diego and I have the pleasure  
18 of working with him; looking forward to working with you  
19 here too. And you definitely are running a tight ship down  
20 there, a very, very good, efficient operation.

21 I would also like to acknowledge a gentleman who  
22 introduced himself, John Fisher. A longtime member of the  
23 Committee, former Chair of the Committee, I think a couple  
24 of rounds, maybe more.

25 MR. FISHER: The longest years.

1 COMMITTEE CHAIRMAN BAHADORI: The longest years,  
2 yeah. Mine is on the tenth, you were probably longer. How  
3 many years were you on the Committee?

4 MR. FISHER: I think 12.

5 COMMITTEE CHAIRMAN BAHADORI: Twelve years, yeah.  
6 Well, congratulations on that accomplishments and glad to  
7 have you here.

8 Okay, we are moving on to approval of the minutes  
9 of the July 25th meeting that we had in Napa.

10 COMMITTEE MEMBER: Move approval.

11 COMMITTEE CHAIRMAN BAHADORI: There is a motion  
12 for approval of the minutes.

13 COMMITTEE MEMBER: Second.

14 COMMITTEE CHAIRMAN BAHADORI: There is a second.  
15 Any discussions?

16 All those in favor?

17 (Ayes.)

18 COMMITTEE CHAIRMAN BAHADORI: Opposition?

19 Seeing none the motion passes unanimously.

20 On public comments. At this time members of the  
21 public may comment on any item that is not on our agenda  
22 today. Matters presented under this item cannot be  
23 discussed or acted upon by the Committee at this time. For  
24 items appearing on the agenda please wait until we call that  
25 item. Any person addressing the Committee will be limited

1 to a maximum of five minutes so that all interested parties  
2 have an opportunity to speak. At this time are there any  
3 members of the audience who wish to address the Committee?

4 Mr. Lissner.

5 MR. LISSNER: Hi, my name is Jim Lissner, I live  
6 in Hermosa Beach. My letter about this issue is over on the  
7 table. But first I want to put in a little bit more plug  
8 for Hermosa Beach for you guys coming to Hermosa Beach. We  
9 have a Council Chambers which is available to you. It has a  
10 complete audio system already there, all you have to do is  
11 show up with your name tags. There is a video system in  
12 there. The City will record your meeting for \$13 an hour,  
13 that's what they charge. The City -- you couldn't get it  
14 cheaper and it's a beautiful system, very reliable, and we  
15 would welcome you in Hermosa Beach.

16 Okay. Last year -- let me back up. Red light  
17 camera systems are supposed to, according to the industry,  
18 have a halo effect. Namely, if you put red light cameras in  
19 your town or if people think that there are red light  
20 cameras around your town they'll supposedly behave all over  
21 town, be on their good behavior, even where there aren't  
22 cameras.

23 Last year there was a new bill, a supposed claimed  
24 reform bill for red light cameras, SB 1303 by Senator  
25 Simitian, and it had one unanticipated defect in it.

1 Namely, it changed where you have to put the warning signs  
2 for the cameras. The former requirement was that you could  
3 either put them at the main entrances to town or you could  
4 put them at the intersections, all four ways. Even if you  
5 just had one or two cameras there it would have to be all  
6 four ways. But you had the option to put them at the  
7 entrances to town or at the intersections, you didn't have  
8 to do both.

9           The bill changed it to where you have to put the  
10 cameras -- pardon me -- the warning signs at the  
11 intersection. You only have to put one warning sign per  
12 camera so of if you just have one direction enforced at an  
13 intersection just one camera there. You no longer have to  
14 put them at the entrances to town. Pardon me, you now  
15 longer have the option to put them at the entrances to town.  
16 You have to put a warning sign wherever there is a camera.

17           That sounds good. I mean, that sounds fairer. At  
18 first blush it sounds fairer because if you're driving into  
19 a strange city you're going to be warned if you're coming to  
20 a red light camera. It sounds like a good idea.

21           Bad idea. The reason is that if you're driving  
22 into that strange city and you have a scofflaw attitude that  
23 you're in a big hurry and don't care what happens, you know,  
24 selfish and don't care what happens to anybody else, under  
25 the new rules you will know that if you don't see a big, fat

1 warning sign right in front of you, you can blow through  
2 that intersection. You could blow through any intersection  
3 where you don't see the sign because there has to be a sign  
4 where there's a camera. So we're basically -- it's  
5 basically like telling people, you know, putting up a big  
6 sign that says "cop hiding here." We're telling them, you  
7 know, where they have to behave and telling them, you know,  
8 anywhere else where you don't see the sign you can blow  
9 through the lights and hit somebody, mayhem, whatever.

10           So if there ever was a halo effect from these  
11 cameras that bill basically and the implementation of this  
12 change in the warning signs is going to destroy that.  
13 Because now the effect is that, you know, unless you see the  
14 sign you can blow through the lights.

15           I recognize that you can't change legislation but  
16 I hope that in a future meeting you will bring this up and  
17 you will make a recommendation that allows that, you know,  
18 some state senator or assemblyman can latch onto and do a  
19 bill to fix this problem. And that's why I'm here, thank  
20 you very much.

21           COMMITTEE CHAIRMAN BAHADORI: Okay, thank you,  
22 Mr. Lissner.

23           Any questions for Mr. Lissner?

24           Okay, any other members of the public who wish to  
25 address the Committee on a non-agendized item? Jim.

1 MR. BAROSS: Good morning, I'm sorry I'm late.  
2 This is public comment time?

3 (Affirmative responses.)

4 MR. BAROSS: Great. I'm Jim Baross, I am Vice  
5 Chair of the California Bicycle Advisory Committee to  
6 Caltrans. And at our last meeting Devinder was kind enough  
7 to attend and explain for us what I hope is going to be  
8 resolved as to the order of events when a bicycle project is  
9 brought forward for experimentation or to be brought forward  
10 to the California Traffic Control Devices Committee.

11 Just a little bit of history. Well, heck, you  
12 don't need the history. What we're hoping at the California  
13 Bicycle Advisory Committee is that you get the benefit of  
14 the review of the California Bicycle Advisory Committee  
15 before it gets here. Previously we had an opportunity to  
16 come and sit as a pro team or -- I can't remember the term.

17 To participate on the Committee. And that's changed now  
18 that we have the wonderful representation by the non-  
19 motorized transportation folks. But we still think it's  
20 important and hope that there will be a process that is  
21 formalized so that the CBAC, California Bicycle Advisory  
22 Committee, has the benefit and you get the benefit of their  
23 review. That's it, thanks.

24 COMMITTEE CHAIRMAN BAHADORI: Thank you very much.

25 COMMITTEE SECRETARY SINGH: Thank you.

1           COMMITTEE CHAIRMAN BAHADORI: On that one, just  
2 what happened was that exactly as Jim suggested was that  
3 previously all the bicycle items that used to come to the  
4 Devices Committee, they would go through the CBAC first.  
5 And we would like to hear the CBAC recommendations. The  
6 Devices Committee not all the time has concurred with the  
7 CBAC recommendations but we always had the benefit of  
8 knowing what they thought about it. But after we changed  
9 the organization and the membership of the Devices Committee  
10 it was Caltrans' decision to say that since the Director now  
11 appoints two members from non-motorized modes that they  
12 didn't feel that it needs to go through the CBAC before  
13 coming here.

14           Again, I would like to defer that to Caltrans and  
15 they can take it under advisement and see what works best  
16 for their process. Because we are both advisory committees  
17 to Caltrans' Director. Anyway, thank you for sharing your  
18 thoughts.

19           We have an item that is added, Item 13-10. It's  
20 been passed around and you should have a copy. It's an  
21 amended item and there is a handout there. And when we get  
22 to it we'll discuss it.

23           With that let me -- okay, if we don't have any  
24 other items we are going to start our regular agenda. Just  
25 to let everyone know, today at 10:17 in the morning we have

1 a California earthquake exercise. Bill Winter is an  
2 Emergency Manager for the County Public Works and we are  
3 going to abide by that so that's probably a good time also  
4 to break. So at 10:17 we are going to have the drill, the  
5 earthquake preparedness drill.

6 Okay, we will start the public hearing Agenda Item  
7 number 13-10, Reduced Speed Limits in TTC Zones, and it's  
8 submitted by Caltrans. Devinder, do you want to introduce  
9 the item?

10 COMMITTEE SECRETARY SINGH: Mr. Chairman, I am  
11 going to invite Johnny Bhullar, my coworker who is  
12 responsible for the CA MUTCD and he is also in charge of  
13 Traffic Part 6 of the CA MUTCD to discuss this item.

14 COMMITTEE CHAIRMAN BAHADORI: Okay. With that,  
15 Johnny.

16 MR. BHULLAR: Good morning, everyone. It's nice  
17 coming out to this location.

18 As you know, speed limits is always a very, I  
19 would say, involved issue so hopefully we will just get to a  
20 good start here and see how the morning goes. I am Johnny  
21 Bhullar, editor for CA MUTCD.

22 For this one we had amended agenda. For those of  
23 you following it on the main agenda there is a separate  
24 handout so I would appreciate if you would use that.

25 Basically here what is happening is that there has

1 been some, I would say, errors in the current policy for  
2 work zone speed limit reductions as well as there is an  
3 opportunity for making some changes.

4           So what has happened here is that Caltrans has a  
5 Construction Partnering Steering Committee through which we  
6 have been looking at improving safety for workers in a  
7 number of areas and this happened to be one of the 16 items  
8 that construction wanted us to look at. In addition to that  
9 the Strategic Highway Safety Plan's Challenge Area 14 had  
10 also identified this as one of the areas that needs  
11 improvement. So as a result of both of those actions that's  
12 the reason why we have at least proposed these changes that  
13 you see in this proposal.

14           Secondly, when we look at the issue. In  
15 California what we have done in the manual -- and it wasn't  
16 by design but it happened by the way we adopted it -- but we  
17 had one set of signs that we used to use for local agencies  
18 back prior to 2004. So in the handout if you go to -- the  
19 pages are not numbered but if you go to page -- the C17  
20 signs, these ones here. So these signs, C17, were for use  
21 on local --

22           COMMITTEE CHAIRMAN BAHADORI: Johnny?

23           MR. BHULLAR: Yes.

24           COMMITTEE CHAIRMAN BAHADORI: Are you referring to  
25 the amended handout?

1 MR. BHULLAR: Yes.

2 COMMITTEE SECRETARY SINGH: Yes.

3 MR. BHULLAR: So the C17 signs prior to 2004 were  
4 not to be used on the Caltrans or state highway system but  
5 only for local agencies. And then when we adopted the  
6 manual, the Federal MUTCD, at that time what we did is we  
7 were trying to resolve some of these "on state highway do  
8 this, on local agency roadways do another set of standards."  
9 So what we have done is, then after that we said that the  
10 C17 signs can be used on state highways as well as local  
11 agency roadways.

12 And now what has happened is we have two sets of  
13 signs. One is the regular speed limit sign, primary, I  
14 would say when we reduce speeds in the construction zone  
15 when it's going to be around the clock. And if it's only  
16 temporary for a few hours during the day we are using the  
17 C17.

18 So looking at this, FHWA had raised the concerns  
19 with our C17 sign primarily because of the letter height on  
20 the word "ROAD WORK." It is below the minimum that is  
21 required but we did get grandfathered in initially when we  
22 were adopting it. So even though as part of the grandfather  
23 clause the signs are okay now, but now when we are looking  
24 at it the motorist is confronted with two sets of signs and  
25 we expect the reaction is the same. So we are taking this

1 as an opportunity to correct that issue as well.

2           And in addition to that there was an error in our  
3 current policy where -- the third page of the proposal. And  
4 if you go down to paragraph number 14a. The current policy,  
5 the way it's written right now is that you are required to  
6 have an Engineering and Traffic Survey for reducing speeds  
7 in work zones. And that was in error so we are trying to  
8 correct that as well. Because as per Caltrans' legal  
9 opinion, the California Vehicle Code 21367 and 22362 are all  
10 the authority you need in the work zone to reduce speed  
11 limits. So that's another amendment we are doing.

12           And let me see if I missed anything. So on page  
13 number four of the handout in paragraph -- paragraph number  
14 18 is crossed out but below that you will see two California  
15 Vehicle Code sections. 22362, what 22362 does is that it  
16 allows or gives the authority to the agency for reducing  
17 speeds in work zones when the worker is in danger. He's  
18 close to traffic, and that's when you will use the 22362.

19           The Vehicle Code 21367 is when the motorist  
20 normally traveling through a work zone, the work is reducing  
21 the conditions in such a way that you cannot travel at a  
22 higher speed. So the worker is normally behind a physical  
23 barrier so in this case you will use 21367 as the Vehicle  
24 Code cite authority to reduce speeds in work zones for 24  
25 hour, around the clock type of situation.

1           So there are two different scenarios that you will  
2 be reducing speeds for. One of them is a few hours during  
3 the day, maintenance-type of activity and there is no  
4 physical barrier between the worker and the motorist, versus  
5 the other one is where construction activity is such that  
6 there is a curvature or geometric constraints that have been  
7 introduced to the work activity and the motorist now cannot  
8 continue to travel at the same speed that they were used to  
9 before and for their safety they need to be slowed down  
10 through that work zone. So two type of scenarios. However,  
11 we are trying to come up with just one single package.

12           So if we continue with these amendments. I do  
13 apologize, I should have explained. The black text that you  
14 see is National MUTCD text of our current policy. The blue  
15 text that you see is our current California created  
16 amendments to official policy. The red text is -- if it's  
17 being deleted it's our current policy that we are proposing  
18 to delete and the red text by itself is the changes or  
19 revisions that we are proposing to this policy.

20           So go down to this table here. So on this table  
21 what I have done is -- what I am trying to sort out is the  
22 size of the signs. So if you look at the first -- the  
23 second column there it says "Current Policy." In this case,  
24 following this table it's like our current policy for long-  
25 term duration closure, which I mean is overnight or more

1 than one daylight period. So in that case if you have any  
2 -- and there is a physical barrier separating the motorist  
3 and the worker you will use CVC 21367 and the regular speed  
4 limit sign with the work zone plaque above that. And below  
5 that I had come up with the size of that package.

6 The next column is for the C17 signs. And again  
7 the current policy is for short-term we use the C17s.

8 The last column is our proposed policy which does  
9 away with the C17s and for both conditions the sign package  
10 is the same.

11 And the primary issue here also is, while we start  
12 discussing it, I want to make everyone aware that the C17,  
13 the advantage of that is that it's a smaller sign and it can  
14 go in a Type A barricade, even three feet. So on those  
15 barricades, that's how agencies are normally using it.

16 Now with our current proposed policy we are going  
17 to go with the R2-1 speed limit sign with a work zone  
18 plaque. So rather than 24 by 24 inch it's going to be 24  
19 inch by 28 inch. So they will not be able to use a Type A  
20 barricade for these signs.

21 Working with some, I would say, on the field side  
22 to see if the speed limit sign and the work zone plaque,  
23 making it 24 by 48, if a regular portable sign stand can be  
24 adapted for that purpose. But I'll be honest, still we are  
25 working on it, I'm not sure about it will go. But if you go

1 with a Type 3 barricade, it's a big barricade but that's the  
2 one you would use; at least on that one it does fit in for  
3 that.

4           And then further down. I would say on this page  
5 here. I am just showing how the current -- this is page  
6 1118, I believe, from the manual. And I'm trying to show  
7 the C17s being crossed out so I'm just trying to show in the  
8 figure that they are being amended.

9           And the last couple of pages are the exact sign  
10 specs for the signs that show you the letter heights and the  
11 rest of the information. So with that, any questions that  
12 you have?

13           COMMITTEE CHAIRMAN BAHADORI: Any questions for  
14 Mr. Bhullar?

15           COMMITTEE SECRETARY SINGH: Johnny, do you want to  
16 add why you amended this item compared to the original  
17 agenda item?

18           MR. BHULLAR: Oh, I see, yeah. Basically what  
19 happened here is that when initially we had proposed the  
20 item. And for those of you who want to follow here,  
21 basically we were trying to come up with, I would say, not a  
22 novelty but trying to come up with a package which was  
23 loosely based upon, I would say, the -- they call it  
24 enhanced conspicuity. So they're trying to have a speed  
25 limit sign that in a work zone will have some enhanced

1 conspicuity-type of features.

2           So if you go with the regular agenda let me show  
3 you what we had originally proposed. Let's see. Page  
4 number 20 and 21 of your agenda. So that was our initial  
5 proposal. But the good fortune that we have is now Kevin is  
6 here in the room from FHWA and he has filled in for Steve  
7 Pyburn. So while we were working on it we did consult with  
8 FHWA and they did voice their opposition to both of these  
9 designs and they said they were not in compliance with the  
10 National MUTCD.

11           So for that reason rather than come here and then  
12 change it for the next meeting what we did it is we took it  
13 upon ourselves and said, okay, since FHWA is letting us know  
14 up front that these designs will not work, so we modified  
15 the proposal to address their needs.

16           COMMITTEE CHAIRMAN BAHADORI: Thanks, Johnny.

17           MR. BHULLAR: Sure.

18           COMMITTEE CHAIRMAN BAHADORI: Any questions from  
19 members? Rock.

20           COMMITTEE MEMBER MILLER: I just want to make sure  
21 I understand where the FHWA concerns came from and what the  
22 alternatives to this are. They expressed a lot of concern  
23 over the modified sign designs that you just showed, which I  
24 kind of agree with them on that. The current sign is  
25 grandfathered. There may be a problem with letter size but

1 it is, in fact, a standard sign. Have they expressed a  
2 concern over the existence or presence of that grandfathered  
3 sign so large that it would jeopardize the consistency with  
4 the federal version?

5 MR. BHULLAR: Well, since it's grandfathered in.  
6 The issue was since we were making -- proposing some changes  
7 to it, that's when the issue was raised effectively again.  
8 And they, at that time, made us aware that the letter height  
9 does not comply with the minimum letter height that is  
10 needed for these signs. So since we are now touching that  
11 policy in that sign so they do not recommend then to second  
12 time again now bless the sign.

13 COMMITTEE MEMBER MILLER: So if we don't touch the  
14 design of that sign, I don't know if that's an option or  
15 not. But if we don't touch the design, and suppose we did  
16 everything else, do we still have a FHWA issue?

17 MR. BHULLAR: I'm going to let Kevin probably  
18 speak to that rather than speaking on behalf of FHWA when  
19 the time comes.

20 COMMITTEE SECRETARY SINGH: The main purpose,  
21 Johnny, as you explained, you know, instead of two signs we  
22 want one sign used.

23 MR. BHULLAR: See that's the -- also the intent is  
24 that why do we have a motorist confronted with two different  
25 packages when we are expecting the same reaction from the

1 motorist? So I am not, I would say, in favor of one or the  
2 other, it's just that we should confront them with just one  
3 when we are expecting the same reaction.

4 COMMITTEE CHAIRMAN BAHADORI: Any other questions  
5 from members? John?

6 COMMITTEE MEMBER CICCARELLI: No questions, I just  
7 had some edit corrections and suggestions which I'll pass to  
8 you without comment.

9 MR. BHULLAR: Okay.

10 COMMITTEE CHAIRMAN BAHADORI: Okay, now I open it  
11 to the public since it's a public hearing item. Any members  
12 of the public who wishes to share their views of this item  
13 with the Committee? Mr. Royer.

14 MR. ROYER: David Royer here representing the  
15 University of California's Tech Transfer Program. A couple  
16 of items here, I hope I've got everything in order after you  
17 changed the paperwork on me.

18 First of all, I totally concur with the intent and  
19 concur with getting rid of that C17 sign. The problem we  
20 have with the C17 sign is the wording that's in 22362. The  
21 wording in 22362 says the agency has the authority to do it  
22 or a contractor working for the agency has the authority to  
23 do it. Nothing in there says that you need to have approval  
24 of the agency.

25 So what we find is some maintenance laborer goes

1 out and takes -- and this was on a state highway. Took a 50  
2 mile an hour zone and permanently posted 25 miles an hour  
3 throughout the whole reach. Fortunately, the driving public  
4 totally ignored it because any time you drop below -- 10  
5 miles an hour below the posted speed limit you're not going  
6 to get any compliance, you know, unless you really go  
7 through that stage where you drop it piece by piece by  
8 piece.

9           What I wish we could do, since we have now 21367,  
10 that was added later, that allows for permanent posting of  
11 speed limits, which is very good. I wish we could get rid  
12 of 22362 because everything in 22362 is actually covered by  
13 21367. It would be good to get rid of the C17 sign and get  
14 the wording for the C17 sign out of the Vehicle Code.

15           I tried to research it once. I can absolutely  
16 find -- in fact, Paul Power and I tried to research it at  
17 one time and we could not find how that C17 sign and the  
18 wording ever got its way into the Vehicle Code; it's been in  
19 there for years and years and years.

20           So, again, I concur with getting rid of the C17  
21 but I wish we could get rid of the wording because it allows  
22 the contractor to make that decision.

23           In some of the other wordings. On -- the pages  
24 aren't numbered. In the handout that was just given out on  
25 6C.01. All the way down to the Standard, which is -- you

1 see it blue.

2 COMMITTEE SECRETARY SINGH: Zero-nine.

3 MR. ROYER: Oh, 09, zero-nine.

4 COMMITTEE SECRETARY SINGH: Yes.

5 MR. ROYER: Line 09. I agree with the word  
6 "shall." That, you know, a "modified plan shall have the  
7 approval of the Engineer." I think that -- like we did with  
8 the speed limits. I would like to see the words "Civil  
9 Engineer" since this is a plan and it's being built. In  
10 California we don't have just professional engineers, we  
11 have a lot of other people that are allowed to be called  
12 engineers, nuclear engineers and agricultural engineers and  
13 all sorts of people -- and even practice actually --  
14 chemical engineers. It really should be the approval of the  
15 civil engineer of the public agency.

16 Going down to line 14a, "The justification for the  
17 reduced speed limit shall be documented in writing." I  
18 concur with that totally. But I would like to have that  
19 said by a civil or traffic engineer. Since setting speed  
20 limits is required -- you know, if you lower the speed limit  
21 in the existing CA MUTCD we say that the speed limit shall  
22 be reduced by the -- by a civil or traffic engineer.  
23 Prepare that report to lower the speed limit. And so to be  
24 in the same concurrence, since you're reducing the speed  
25 limit, I believe it should be the same wording, documented

1 in writing by a civil or a traffic engineer.

2 Let me just check one more thing before I leave to  
3 make sure I haven't left anything out. I had marked up the  
4 original one. I think I've covered everything.

5 By the way, I particularly like the chart that  
6 Caltrans put together showing the signs and the sizes. On  
7 my way down here as I was sitting for two hours on the top  
8 of the hill there I got to look at the work zone signs which  
9 are above the speed limit signs on the freeway. They did  
10 not follow the CA MUTCD. They put the word "work zone"  
11 horizontally so to me driving it looked like it was quarter-  
12 inch high letters. So hopefully better diagramatics of how  
13 and the sizes of everything put together you won't have  
14 that.

15 Also up in Santa Barbara, which is not District 7,  
16 that's 4 or 5, they put the work zone underneath the speed  
17 limit instead of on top; I don't know why they did that. A  
18 little more uniformity in how you do it.

19 It is very visible. The work zone sign, these  
20 other proposals that Caltrans had with the orange on the top  
21 of the speed limit sign and the little border around the  
22 speed limit sign, yeah, they'd have had to go to FHWA and  
23 get approval to experiment with this new sign and all of  
24 that. And you don't need it. The big, proper orange  
25 placard on top of that speed limit sign with the proper size

1 lettering is very, very visible and I think it is going to  
2 significantly enhance work zones in the state of California,  
3 both for cities and for Caltrans as well.

4 That's it. Any questions?

5 COMMITTEE CHAIRMAN BAHADORI: Any questions for  
6 Mr. Royer? Rock.

7 COMMITTEE MEMBER MILLER: Question. I know you're  
8 an expert in construction science. Is there a practical way  
9 to post this proposed sign on a temporary basis for just,  
10 say, a couple of hours?

11 MR. ROYER: Yes, by using a sign stand. A sign  
12 stand will support it. You know, it has the spring so the  
13 wind will blow it a little bit. Not as simple as that. And  
14 again, if you get -- if you get it approved by the agency  
15 when they set this up they can use it on the same signs.  
16 you know, Road Work Ahead, that's a sign stand; Right Lane  
17 Closed Ahead, that's on a sign stand. This sign can be  
18 supported on a -- on a -- on a sign stand.

19 COMMITTEE MEMBER MILLER: I know those others are  
20 normally supported on a barricade.

21 MR. ROYER: You're right, yeah. The other one is  
22 just 2 feet by 2 feet. And that was not -- that is not in  
23 the 22362 or whatever it is. The size is not in it. That  
24 was developed by the old Caltrans Traffic Manual. That was  
25 a California-designed sign, the size is not required.

1           But the contractor has to be using sign stands to  
2 do his lane closures so the contractors should be putting  
3 this sign on there.

4           And another thing too, those type of signs, you  
5 will have a one piece sign. In fact, in a lot of work zones  
6 I imagine they make, make this a one piece sign rather than  
7 posting two signs. But particularly for -- and that's why  
8 it's important for the agency to set that speed limit, so  
9 that the -- you know, an agency is more apt to set it at no  
10 more than 10 miles an hour below the posted speed limit and  
11 then it's very effective. And that sign, by the way, when  
12 you use -- the agency uses it, it can't be more than 400  
13 feet in advance of the work area.

14           So there's a lot of restrictions to 22362. That's  
15 why I'd like to see 22362 come out of the Vehicle Code and  
16 go with the later one, which is 21367. The verbiage in  
17 21367 covers both situations. In my opinion.

18           COMMITTEE CHAIRMAN BAHADORI: Any other questions  
19 for Mr. Royer? Larry.

20           COMMITTEE MEMBER PATTERSON: Just a quick  
21 question. Your recommendation -- 22362 places the  
22 responsibility for setting -- you'd prefer to place the  
23 responsibility for setting the speed limits with the local  
24 agency or the agency responsible for the facility and not  
25 with the contractor.

1 MR. ROYER: Absolutely.

2 COMMITTEE MEMBER PATTERSON: And I was trying to  
3 think if there was a tradeoff between then, obviously,  
4 having that responsibility and maybe having more reliability  
5 in terms of setting the speed limit, trading that off for  
6 the potential of some liability over the contractor's  
7 traffic control plan that's actually in place.

8 MR. ROYER: Well first of all, if the contractor  
9 really had a traffic control plan the signs and the use of  
10 that sign would be in the plan and that would probably be  
11 approved by the agency. What happens is a contractor is  
12 going out and -- say he's a striping contractor and he's  
13 putting in some pavement markings or something on the road.

14 So that contractor, and the way it's worded now, that  
15 contractor is working for the agency, it's a contractor of  
16 the agency. But the contractor can go out and make that  
17 decision and the contractor doesn't have the expertise to  
18 make that decision. That's my, that's my big concern.

19 So what we have seen over the years is massive  
20 violation of good traffic engineering. Again, you know, a  
21 50 mile an hour speed limit and saying, go 25 miles an hour,  
22 nobody is going to do that. But we find it very effective,  
23 if you just come down 10 then it's very effective. Most  
24 engineers will just come down 10.

25 Sometimes in the long-term, and this is the other

1 advantage of the newer Vehicle Code section. There are some  
2 times that you will have a 65 mile an hour freeway and there  
3 is no way you can properly design your transitions because  
4 you're coming from one bridge and trying to go under another  
5 bridge. And so in that case engineer or Caltrans or the  
6 agency, whoever is doing the design, would then step that  
7 down. You'd have road work, at 65 the next one is going to  
8 be road work, 55 then the next one would be road work, 45.  
9 Because he has -- it's going to be posted for -- well, like  
10 the 405 freeway here, you know, it's going to take 10 years  
11 to build that project. So it's going to be long, long term.  
12 And that's all done by the engineers and you step the speed  
13 limit down. I'm not sure how effective it is but sometimes  
14 you could utilize that new sign for a very complex situation  
15 you couldn't design for 65 or even 55.

16 COMMITTEE CHAIRMAN BAHADORI: Thank you.

17 MR. ROYER: But that's why I'd like to see that  
18 come out of the Vehicle Code. It's duplicative.

19 COMMITTEE MEMBER CICCARELLI: That one, just  
20 getting it out of the Vehicle Code is a very simple task.  
21 We can just attach it to an omnibus bill and it's just going  
22 to go through next year. It's just a matter of persuading  
23 people that you really don't need it. I still don't hear  
24 that so maybe we can discuss it later, if we still need to  
25 keep it there or not.

1 MR. ROYER: Yeah. I have a feeling when 21367,  
2 the later one, came in, they didn't even know 22362 existed  
3 or they would have modified 22362.

4 COMMITTEE CHAIRMAN BAHADORI: Yeah, yeah.

5 MR. ROYER: And in fact, we have all known about  
6 22362. In fact, Caltrans, did. It was a Caltrans attorney  
7 who found that 22367 was actually also in the Vehicle Code.  
8 I never knew about it, nobody I have ever trained called it  
9 to my attention. Nobody knew 21367 even existed.

10 COMMITTEE CHAIRMAN BAHADORI: That's an old one.

11 MR. ROYER: And I'd like to get the old one out  
12 and replace it just with the new one.

13 COMMITTEE CHAIRMAN BAHADORI: That's a 1970 law  
14 and it makes sense maybe -- if you don't mind we'll discuss  
15 it later.

16 MR. ROYER: Yeah.

17 COMMITTEE CHAIRMAN BAHADORI: The cities and the  
18 counties, if you share your thoughts also. For us it's  
19 relatively easy as part of our legislative work to go and  
20 amend the Vehicle Code.

21 MR. ROYER: Right.

22 COMMITTEE CHAIRMAN BAHADORI: If there is a need.

23 MR. ROYER: Okay.

24 COMMITTEE CHAIRMAN BAHADORI: Any other questions  
25 for Mr. Royer?

1           On the question of the engineer, your suggestion  
2 on the engineer. We have had this issue on other items  
3 previously. And it's Caltrans typically that objects to  
4 having "civil or traffic" because they have electrical  
5 engineers also.

6           MR. ROYER: Well, put electrical in.

7           COMMITTEE CHAIRMAN BAHADORI: And as part of --

8           MR. ROYER: I could maybe --

9           COMMITTEE CHAIRMAN BAHADORI: And as part of the  
10 rotational program sometimes their electrical engineers who  
11 are licensed engineers end up in departments in Caltrans  
12 that are in charge of traffic control plans or other things  
13 so they would like to use the term "engineer" rather  
14 loosely. So on that one we'll stay out.

15           MR. ROYER: I wouldn't have any problem because of  
16 that, I wouldn't have any problem with that. Just like for  
17 the speed limits. A lot of agencies are not -- a civil  
18 engineer is not the one who is going to prepare the report  
19 to reduce the speed limit so we said civil or traffic.  
20 Because the traffic engineer is the one who is going to  
21 prepare the report to reduce the speed limit so we said  
22 civil or traffic. Because the traffic engineer is usually  
23 the one that does that and it's not a design so a traffic  
24 engineer can do that. I wouldn't have any problem on the  
25 original design of having a civil or electrical put in that.

1 COMMITTEE CHAIRMAN BAHADORI: Okay, thank you very  
2 much. Any other questions?

3 MR. ROYER: As long as the practice -- I couldn't  
4 see a chemical, perhaps. Okay.

5 COMMITTEE CHAIRMAN BAHADORI: Thank you. Any  
6 other members of the public who wish to speak on this item?

7 Hearing and seeing none we close the public  
8 hearing part of it, bring it back to the Committee. And  
9 Mr. Bhullar, you want to comment on what Mr. Royer said?

10 MR. BHULLAR: Yes. I just wanted to thank David  
11 Royer for, at least, his vote of confidence because -- on a  
12 number of changes that we did last year on work zones. And  
13 I'm sure you might recall that he was quite instrumental in  
14 reviewing and giving us the comments because of the agencies  
15 that touches through his work with the ITS Tech Transfer.  
16 It does also help us on some of these changes so I really  
17 thank him.

18 COMMITTEE CHAIRMAN BAHADORI: Thank you. Okay,  
19 bringing it back to the Committee for discussion and the  
20 possibility of a motion. So what do you guys think?

21 COMMITTEE MEMBER MILLER: Since I asked all the  
22 questions. I don't think the local agencies know that this  
23 action eliminates the C17 sign. I think a lot of local  
24 agencies do it. I am not sure if it's effective or not. I  
25 was relieved by Mr. Royer here that there is a way to do

1 this larger sign in a routine, two-hour construction zone.

2 I continue just getting worried that things that  
3 are on our agenda, that it isn't clear to the cities that  
4 we're representing and counties that we're representing,  
5 that they may not realize that. And I do know a handful of  
6 cities that routinely use the sign in their construction  
7 zones. It concerns me; I am not sure -- I'm going to think  
8 when I hear what other people have to say and I'm going to  
9 vote but I am concerned that the cities and counties that  
10 are probably using the sign do not realize we are voting on  
11 its fate today.

12 COMMITTEE CHAIRMAN BAHADORI: Yeah, that's one of  
13 the challenges we have had with some of our items. We have  
14 reps from the County Association and the League of Cities so  
15 the hope is that these issues in the agenda are communicated  
16 so the cities can -- Devinder, you have something?

17 COMMITTEE SECRETARY SINGH: Mr. Chairman, during  
18 the Palm Desert meeting there was a question how we  
19 communicate with the counties and cities. I met with the  
20 League. And whenever I send anything out I send an e-mail  
21 to the League and they are sending to all the agencies and  
22 counties too. So we are communicating with the local  
23 agencies through the League and counties.

24 COMMITTEE CHAIRMAN BAHADORI: It's just like any  
25 other changes, for example, when the Legislatures make it up

1 in Sacramento. For this Committee it is impossible to  
2 verify that all the counties and all the cities always know  
3 that what's on the agenda and if they shared their concerns.

4 That's why their reps from the county associations and the  
5 League has their representatives of those entities. And the  
6 idea is that it is going to be shared back and forth and the  
7 reps from the cities and the counties will speak on behalf  
8 of the majority of the cities and the counties.

9 We still haven't found the perfect solution, even  
10 in the age of electronics. Which is so easy for everyone  
11 just to click on the Device Committee agenda and check the  
12 agenda and see what's on the agenda but people just don't do  
13 it. Mark.

14 COMMITTEE VICE CHAIRMAN GREENWOOD: Being a  
15 representative of one of the cities. You know, the fact  
16 that the cities are using this sign I don't think is  
17 justification to continue using it. You know, we have all  
18 used it and we have all know it was ineffective every single  
19 time we used it. If it's in a congested slow area you can't  
20 see the sign because it's down at ground level. If it's a  
21 fast speed street it's too small to have any effect. So the  
22 fact that we use it isn't justification or the fact that we  
23 have used it is not justification to continue using it.

24 We are out of compliance with the National Manual.  
25 I think it should be one of our big goals to get more and

1 more in line with the National Manual so I don't have a  
2 problem eliminating the C17s.

3           Also using the term "civil engineer or traffic  
4 engineer." I don't think it's the purpose of the manual to  
5 regulate engineering, it's up to the individuals to control  
6 themselves and to regulate themselves. If they end up  
7 practicing civil engineering when they are not allowed to  
8 that's their problem. Recently I heard -- actually while  
9 doing an investigation for one of the items on today's  
10 agenda that the City Engineer, the person with the title  
11 "City Engineer" need not be a licensed engineer. So there  
12 are probably many cities out there who don't have an  
13 engineer, period. So I don't think that we can use the  
14 manual to require an engineer.

15           COMMITTEE CHAIRMAN BAHADORI: Devinder?

16           COMMITTEE SECRETARY SINGH: Mr. Chairman, I move  
17 the motion, you know, adopt the item that is proposed by  
18 Caltrans.

19           COMMITTEE CHAIRMAN BAHADORI: There is a motion to  
20 approve the recommended changes to CA MUTCD as recommended  
21 by Caltrans, is there a second?

22           COMMITTEE VICE CHAIRMAN GREENWOOD: Second.

23           COMMITTEE CHAIRMAN BAHADORI: There is a motion  
24 and a second.

25           Discussions? Tom.

1           COMMITTEE MEMBER CICCARELLI: I just wanted to say  
2 that as a motorist myself I -- yes, believe it or not. I  
3 rely on the presence of a significant amount of orange to  
4 notify me that I'm entering a work zone. I don't  
5 necessarily -- you know, text. If I see orange signs or if  
6 I see an orange plaque it's perceptible to me, then I key on  
7 that and start to increase my radar. So I am relieved to  
8 see the two Caltrans signs, which I looked at the impact and  
9 found it to be ineffective, I have never seen them actually,  
10 are to be replaced by a solidly visible, perfectly sized  
11 work zone plaque above a sign that I know the meaning of.

12           COMMITTEE CHAIRMAN BAHADORI: Okay, any other  
13 discussions on the motion?

14           Seeing none, let's vote. all those in favor of  
15 the motion, approving the recommended changes to CA MUTCD as  
16 shown in the amended report handout say aye.

17           (Ayes.)

18           COMMITTEE CHAIRMAN BAHADORI: Opposition?

19           Seeing none the motion passes unanimously. Thank  
20 you.

21           We are moving to requests for experimentation,  
22 knowing that in about -- okay, we are going to go fast  
23 forward in time using Einstein's theory. Let's call this  
24 10:17 in Marina del Rey so we can do our earthquake exercise  
25 so we don't get in trouble. Mr. Winger, you want to tell us

1 what we have to do?

2 COMMITTEE MEMBER WINTER: Okay. Well rather than  
3 me telling you what to do I'll tell it to this recording.

4 (Thereupon a recording was played and the  
5 Great ShakeOut Earthquake Drill was performed.)

6 COMMITTEE MEMBER WINTER: And as you know we are  
7 close to the ocean. I am going to note that there are  
8 tsunami signs that are out there that the county and the  
9 city of LA worked on.

10 COMMITTEE MEMBER PATTERSON: While we were under  
11 the table I think we began to feel some liquefaction here.

12 (Laughter.)

13 COMMITTEE CHAIRMAN BAHADORI: There you go. Well,  
14 thank you for that drill. And hey, we were just talking  
15 before the meeting started and somebody said that there is a  
16 -- I think Rick, it was you who said that there is actually  
17 a house in the Science Foundation Museum in San Francisco  
18 where you can go and they actually simulate the 1906  
19 Earthquake. And I was telling him, well, it's just a matter  
20 of time, you know, that we were going to have the big one  
21 here. It's not if, it's when, so we need all the  
22 preparation that we can go to and this is one of them.  
23 Thank you; thank you for reminding us, Mr. Winter.

24 Going back on the agenda, request for  
25 experimentation. The first one is a Request to Experiment

1 with Bike Boxes. Mr. Greenwood, it's a request from  
2 National City and you sponsored it.

3 COMMITTEE VICE CHAIRMAN GREENWOOD: Yes. And I  
4 think the final says it all so I'm just going to introduce  
5 Leo Espelet from the consultant for the project who is here  
6 to represent National City.

7 MR. ESPELET: Good morning, everyone. First of  
8 all I want to say, like Mark said, I'm Leo Espelet, I'm the  
9 traffic engineer on the project. The traffic engineer from  
10 the city, who is now acting as the city engineer also, Steve  
11 Manganiello, wasn't able to attend the meeting. They are  
12 going through a public works relocation project that needs  
13 to be done within a month and a half so he's extremely busy  
14 with that so I am here representing him.

15 So I brought a quick presentation and we go right  
16 to the question, thank you. Let me go back to the  
17 beginning.

18 I just want to give you a quick introduction to  
19 the overall project so you kind of understand the context of  
20 where these bicycle boxes will be installed.

21 First of all really quick, we are the City of  
22 National City. This is part of the -- it's a city within  
23 the County of San Diego. It's about five miles south of  
24 downtown San Diego, for those of you who have been there,  
25 and about ten miles north of Baja California and it's right

1 by the San Diego Bay; about 58,000 is the population.

2           And one item that is interesting is that 63  
3 percent of the population of National City is Hispanic so  
4 maybe that's why I do some work there, I can talk to them in  
5 Spanish also, and 10 percent is white. But I think that has  
6 an impact on the type of project that the City is trying to  
7 accomplish in the way of complete street transportation  
8 projects and increasing the pedestrian and the bicycle  
9 facilities. It's trying to accommodate a Hispanic  
10 population that would take, would take benefit of that.

11           A couple of documents that I think are important  
12 to mention. In 2011 the City adopted the General Plan. And  
13 within the General Plan the City established community  
14 corridors. Which as the definition of the community  
15 corridors, several streets within the city, the intent of  
16 being more complete streets, the encouragement of on-street  
17 angle parking in some locations, streetscape improvements,  
18 pedestrian enhancements as well as facility -- bicycle  
19 facility improvements.

20           Within that time frame the City prepared the  
21 Bicycle Master Plan. And as part of the Bicycle Master Plan  
22 the City created a prioritization of corridor improvements.

23           And the three projects that we're talking about now,  
24 they're the top five projects within that prioritization of  
25 projects. The two that are not included here are Class I

1 facilities so these are the top three Class II facilities  
2 that the City has as part of the Bicycle Master Plan.

3           So really quick, I'm going to go through the three  
4 corridors. One is the 18th Street Community Corridor. The  
5 importance of this corridor is the connection, the east-west  
6 connection between -- and it's hard to see through the  
7 figure but as part of SANDAG, which is this new association  
8 of government as part of the regional transportation plan,  
9 there are several future Class I facilities that are  
10 intended to be more regional facilities. And the intent of  
11 these east-west connections are to connect those regional  
12 facilities. So important also -- not so much -- no only for  
13 the City alone but also as a regional element.

14           So through those corridors the projects basically  
15 are going to implement several traffic calming devices, pop-  
16 outs at intersections, rapid rectangular flashing beacons or  
17 traditional lighted crosswalks. Included are the bicycle  
18 boxes that we're talking about. So really the intent of  
19 these projects are to add the Class II bicycle facilities,  
20 take advantage of extra-wide lanes, 18 feet in some  
21 locations, to be able to stripe and add the Class II bicycle  
22 facilities.

23           The next project is the four street core of the  
24 project, similar to 18th just a few blocks north. Similar  
25 type of devices being installed out on 4th Street. Similar

1 situation, wide lanes, taking advantage of the lanes to  
2 provide the Class II bicycle facilities. And in some  
3 locations also providing a two-way left turn lane.

4           The last corridor is the Avenue Corridor, which is  
5 more of the north-south connection, parallel to National  
6 City Boulevard, which is the major corridor for the City,  
7 which is also parallel to I-5. So there's two east-west  
8 connections and one north-south connection. All three of  
9 these corridors are -- you can see through the images these  
10 are either next to schools, all the pink areas are schools  
11 or parks. Part of the funding for these projects was  
12 through Safe Routes to School projects, Safe Routes to  
13 School grants through federal and the state. Similar to the  
14 other corridors, several other devices like a raised median  
15 and pop-outs that will be implemented. One inclusive of a  
16 roundabout in one of the locations, that's a Safe Routes to  
17 School grant as well.

18           So the reason for the bike boxes. Well, first of  
19 all I think the first reason is because we're going to be  
20 adding about 6.5 miles of new Class II facilities at  
21 locations where drivers are not used to seeing bicyclists.  
22 And the intent of the project is to increase bicycle  
23 ridership, cyclist ridership. So that's the goal and that's  
24 what we're hoping. So in order to accomplish the increased  
25 visibility of the bicyclist and provide additional safety we

1 think that the bicycle box is a good device to do that and  
2 we are proposing to do bicycle boxes at the signalized  
3 intersections.

4           And obviously the second reason, besides  
5 preventing -- increasing the visibility is to prevent right  
6 turn conflicts. In several of these locations we don't have  
7 exclusive right turn lanes so the bicyclists will be on the  
8 right side of the lane. So increased visibility to prevent  
9 and eliminate right turn conflicts.

10           There will be installed at several locations two  
11 in each -- the 4th Street corridor has more signalized  
12 intersections so we will be installing them at four  
13 locations.

14           I won't go through in detail of the concept of  
15 each intersection, I don't know if you have the time, but  
16 the bottom line is at every signalized intersection we will  
17 be installing bicycle boxes. And there are different  
18 features at each location. So of them have a left turn.  
19 Like in D Avenue and 18th Street we are proposing to put a  
20 bicycle box in the left turn lane. Part of that is because  
21 this is the one location where the two corridors combine,  
22 the 18th and the D Avenue, we hope to have a lot of left  
23 turns. There is parking on most of the intersections, at  
24 the intersections.

25           So as you can see from the detail, what we are

1 proposing to do -- and I'll go back to the national  
2 guidelines for bicycle boxes -- the bottom -- the bottom  
3 exhibit is basically the national guidance of the  
4 installation of bicycle boxes and the detail on the top is  
5 what we have in our construction drawing. So it's basically  
6 the same, the same distance, same devices, everything is  
7 almost identical.

8           So like I say, there are seven locations. The ADT  
9 on all these corridors, just as a point of reference,  
10 roughly between 4,000 and 8,000 vehicles per day, the speed  
11 limit is about 30 miles per hour.

12           So as part of the experiment, obviously, there is  
13 a (indiscernible) component. And as part of -- one thing I  
14 forgot to mention, these projects are funded through Safe  
15 Ride to School funds, through grants, but also through  
16 active transportation grants from SANDAG. And as part of  
17 the SANDAG requirement for those grants we had to do before  
18 and after data collection. But that data is mostly  
19 concerned with the increase in ridership. So we just  
20 completed the media collection for all three corridors and  
21 we are going through the summary of the data just to have a  
22 good understanding of what is the ridership that we have  
23 today before the project is implemented. And then we will  
24 complete that once the project is implemented. So that is  
25 just a SANDAG requirement for data collection.

1           As part of this request to experiment we have a  
2 list of other things that we are going to be observing and  
3 collecting data for that are more specific to the behavior  
4 and the operations of the bicycle boxes.

5           There are several of those items that are listed  
6 on the bottom that were included in our request for  
7 experiment and subsequent to that I had conversation with  
8 John, direct conversation with him. He had some comments  
9 and some additional data that he suggested for us to add so  
10 that was added. We think that it's a good idea to do. And  
11 those had to do more with the passive travel of the  
12 bicyclists as they egress the bicycle box. If they enter  
13 the egress lane or not and how the bicycles behave through  
14 that. Also observations of the left turns from the bicycle  
15 box. So there are several things that were added from the  
16 -- from the request that you have as part of the agenda  
17 package.

18           And that's basically it. And the specifics about  
19 the data collection. What we envision to do is collect  
20 video with the use of video cameras, record the boxes. And  
21 then the City has an internship program that we are hoping  
22 to use for the summary of the data. That's what we're doing  
23 for the before data collection. The project -- the state we  
24 are in right now. And we're hoping to do that. We are  
25 proposing to do that as part of the, the experiment.

1           And with that, that concludes my presentation.

2           COMMITTEE CHAIRMAN BAHADORI: Thank you. Any  
3 questions for the speaker? Rock.

4           COMMITTEE MEMBER MILLER: Have you received the  
5 federal request to experiment approval?

6           MR. ESPELET: Not yet.

7           COMMITTEE MEMBER MILLER: Have you applied for it?

8           MR. ESPELET: Yes, we have.

9           COMMITTEE CHAIRMAN BAHADORI: Any other questions?

10          COMMITTEE MEMBER CICCARELLI: Yes. What, if any,  
11 is the phasing or staging of the various elements of the  
12 bike box in the deployment and testing?

13          MR. ESPELET: I know that was part of the  
14 conversations we had. One of the questions that John had  
15 was whether or not we could face the implementation of the  
16 egress lane so we could do the bicycle box. But as far as  
17 the bicycle box through the intersection, we will put  
18 extensions -- extension stripes through the intersection,  
19 that will be the white dashed lines. And there is a section  
20 that the first half of the -- of the lane will be green.

21          So the comment from John was whether or not we  
22 could implement in a phasing program each of those  
23 components so we could have better data. The challenge with  
24 that is because of the funding and because this is a grant  
25 and we had to -- you know, basically we have one shot to

1 implement it through the contract that we have with the  
2 contractor, that's really not an option to do a phase-in  
3 unless the City can have additional funding later on through  
4 the projects to do those phases.

5 Now one suggestion that we had was -- that we  
6 would like to discuss is the fact that maybe we don't do the  
7 green section through the intersections, just do the dashed  
8 line so that way we could have better data as a whole. Or  
9 maybe select different locations within the corridor in  
10 where we do the green in some intersections and some others  
11 we don't, so that way we have a contrast.

12 COMMITTEE MEMBER CICCARELLI: I'll speak to that  
13 in my comments.

14 MR. ESPELET: Okay.

15 COMMITTEE CHAIRMAN BAHADORI: Any other questions?  
16 Mark.

17 COMMITTEE VICE CHAIRMAN GREENWOOD: I noticed in  
18 the data you collected crash data wasn't included. I would  
19 certainly hope that we would review before and after crash  
20 data for bicyclists and vehicles. And it would seem that  
21 the delay for all users would be a reasonable thing to  
22 measure as well, the delay, the bicyclists, vehicles,  
23 pedestrians, before and after, to compare the total effects  
24 of the project.

25 MR. ESPELET: Yeah, I agree. I don't know if that

1 was added. Again, that was one -- our intent was to add  
2 certain things that weren't included in the request.

3 The bicycle and vehicle collision type and  
4 frequency was included so that's something that we would  
5 look at as part of the request. But I know you and I talked  
6 about the delay and that's something that we will try to  
7 also observe and calculate.

8 COMMITTEE MEMBER CICCARELLI: In experiments like  
9 this that I have been familiar with I would not expect there  
10 to be any or maybe one or two at most, in even a large  
11 study, actual collisions. But what is really important to  
12 collect is near-misses. So that's really good that you're  
13 collecting video. And training the analysts, the volunteers  
14 to look for near-misses I think is perhaps much more  
15 important than counting collisions. I don't expect there to  
16 be collisions. But the safety pyramid says for every  
17 fatality there's 10 serious injuries, there's 100 minor  
18 injuries, et cetera. and down at the bottom of the pyramid  
19 is the near-miss. The near-miss is an eventual collision  
20 just waiting to happen. So not only the presence, the count  
21 the near-misses but what is the nature of the near-miss.

22 I wanted to speak to the architecture of the bike  
23 box in a more extended comment because i think there's a  
24 couple of places you can look for near misses where I expect  
25 them to happen. Not only near misses but changes in the

1 relative positioning and timing of the driver, the  
2 motorist's movement to the left and the bicyclist's movement  
3 to the right.

4 Mr. Chair, is it appropriate to offer detailed  
5 comment at this time?

6 COMMITTEE CHAIRMAN BAHADORI: Pardon me?

7 COMMITTEE MEMBER CICCARELLI: I want to go through  
8 an overview of the elements of the bike box to inform the  
9 discussion.

10 COMMITTEE CHAIRMAN BAHADORI: Of course.

11 COMMITTEE MEMBER CICCARELLI: Could you bring up  
12 those --

13 COMMITTEE CHAIRMAN BAHADORI: You want the exhibit  
14 back on?

15 COMMITTEE MEMBER CICCARELLI: Yes, could you turn  
16 the projector back on.

17 COMMITTEE CHAIRMAN BAHADORI: Johnny, could you  
18 please put that back on.

19 COMMITTEE MEMBER CICCARELLI: I know it's right in  
20 your face, Hamid.

21 COMMITTEE CHAIRMAN BAHADORI: That's okay, I'll  
22 look the other way.

23 COMMITTEE MEMBER CICCARELLI: And go to the slide  
24 that has the NACTO figure.

25 Will my voice be able to recorded if I speak loud

1 enough if I go to the screen?

2 COMMITTEE CHAIRMAN BAHADORI: I'm sorry?

3 COMMITTEE MEMBER CICCARELLI: Will my voice be  
4 able to --

5 COMMITTEE CHAIRMAN BAHADORI: You can do that.

6 COMMITTEE MEMBER CICCARELLI: -- I don't want to  
7 be standing there.

8 COMMITTEE CHAIRMAN BAHADORI: I think it's up to  
9 the recorder. Can you hear him if he's here?

10 (Discussion regarding Member Ciccarelli  
11 using a portable microphone.)

12 COMMITTEE MEMBER CICCARELLI: While we're waiting  
13 for the visual to come up I want to preface it with a little  
14 bit of history and engineering of bike lanes themselves.  
15 Bike lanes, I think most of us can agree, have certain  
16 advantages. They make things more comfortable for most  
17 bicyclists to travel between intersections by preserving a  
18 space for them to travel.

19 The devil is in the details of the intersections,  
20 though. If bike lanes do something at intersections without  
21 dedicated right turn lanes that traffic engineers never do.

22 So it's a trade-off for preserving some of that space at  
23 the intersection then you create a situation that is  
24 unfamiliar to motorists. Imagine the figure is not here.  
25 What we have approaching an intersection, let's say this is

1 the limit line. This is a motor vehicle lane and a bike  
2 lane and no dedicated right turn lane.

3 Now let's start with the experiment by saying,  
4 what if these were two travel lanes and there was no bike  
5 lane? By default at an intersection where right turns are  
6 permitted the right-most lane, the curb lane, would be an  
7 option lane. It serves both the through movement and the  
8 right turn movement, okay.

9 A traffic engineer would never make the lane to  
10 the left, the number one lane, also a through/right option.

11 But now if you transform this turn lane into a bike lane  
12 that's exactly what you have, you have an option lane  
13 because the bicyclist can make a through movement from the  
14 bike lane at the curb, the bicycles can also make a right  
15 turn, though, which is not as significant for safety issue.

16 But the motorist is in an option lane, okay.

17 So this is compensated for by Vehicle Code  
18 considerations, two Vehicle Code sections, 22100 requires  
19 right turns to be made from the right edge of the roadway;  
20 21717 specifically requires that the motorists merge into  
21 the bike lane, whether or not it's dotted, before the turn  
22 is made.

23 One concern about bike boxes, because they  
24 intensify what appears to many cyclists to be a permissive  
25 market. I'm supposed to be there, I don't have to look.

1 Then it could exacerbate the right turn conflict that  
2 already exists with bike lanes.

3           If you take out the egress lane, if you take out  
4 the reserve area here and you take out the color you have  
5 the conventional bike lane situation at an intersection with  
6 no right turn lane. So the conflict is there is a through  
7 right movement here with a through bike movement right next  
8 to it. So one observation that would be very valuable for  
9 the experiment to conduct would be the extent to which the  
10 motorist having either positioned here on a red or  
11 approached here on a green does indeed move towards the curb  
12 before making the turn.

13           Now, you might think that's unsafe for the  
14 bicyclists but they're supposed to move to the curb in order  
15 to block the bicyclists from advancing on their right. so  
16 the accepted gap in checking for the presence of a bicyclist  
17 behind and to the right, move towards the curb to block the  
18 bicyclist from advancing on the right as they come to the  
19 conflict point and then make their turn.

20           So what might affect the propensity of the  
21 motorist to merge to go right and a bicyclist to stand and  
22 be vigilant for a motorist that may or may not do that move.

23           Well, the presence or absence of color and dotted color are  
24 two things that might do that.

25           In the conventional use of lane lines we use a

1 dotted lane line, a high-frequency dotted lane line to  
2 indicate an impending change in lanes, such as an exit  
3 movement we call "follow the tracks". We use a low-  
4 frequency dotted lane line to indicate that you may move  
5 across it, such as a lane line between two travel lanes. We  
6 use a solid lane line to discourage moving but still legally  
7 permitted. We use double adjacent lane lines to indicate  
8 that you may move across it such as where there is a merge  
9 and you want people to drive parallel and be vigilant before  
10 they leap.

11           The more intense the marking and the more  
12 continuous the marking the less is supposed to be a vigilant  
13 situation. So one concern I have with the NACTO design for  
14 this is that unlike the Federal Highways interim approval  
15 for the use of green-colored bike lanes, all areas where  
16 green is applied here are solid green. In the conflict  
17 areas it's very important. This is where the right hook  
18 happens. The right hook is the name given to the motorist  
19 failing to notice the cyclist and turning right in front of  
20 them. This is the hook area right here. FHWA's interim  
21 approval would have the green applied only where there's  
22 white. So the result here, because the white is skip-  
23 striped, would be that the green would be also skip-striped.  
24       So it's a design choice.

25           NACTO has gone -- NACTO is the National

1 Association of City Transportation Officials. It's an  
2 organization that existed long before they got into the  
3 business of designing bikeway designs. But their designs  
4 tend to be very literal in their application of green and  
5 not really differentiating between conflict areas and the  
6 relatively non-conflict areas. So that's a variable in the  
7 application that could be looked at.

8           Okay. So the concern is that the bike box may, in  
9 fact, rather than reducing the right hook collision, make it  
10 more likely, okay. Now, bike boxes are used at signalized  
11 intersections and so the signal goes through phases and  
12 relatively speaking, different parts of the phases,  
13 including the transitions between signal states, signal  
14 indications, are worth noting in terms of what might be the  
15 less safe times. So a bicyclist could approach when the  
16 light is red and the motorist is stopped here and the  
17 motorist and bicyclist are both stopped and they start off  
18 on a fresh green. That doesn't seem intuitively, to me, to  
19 be a relatively unsafe situation because they are both aware  
20 of each other.

21           The concern is in two other parts of the signal  
22 cycle. The first part is what we call the stale green.  
23 Excuse me, the stale red, okay. The bicyclist is  
24 approaching, the light is about to turn green. The motorist  
25 is watching the red light, not for the cyclist, and as soon

1 as the red light turns to green the motorist begins the  
2 right turn movement without looking. And the cyclist,  
3 failing to notice that, enters the intersection. In Europe,  
4 in parts of Northern Europe there is a fourth signal phase,  
5 a fourth signal indication called pre-green where the red  
6 and yellow go on briefly together to announce to all parties  
7 that the green is imminent. And that is something that  
8 would certainly, you would think, affect the behavior of a  
9 cyclist in this case.

10           The other part of the single-cycle that is  
11 concerning that would be well worth differentiating in your  
12 analysis of this video is when you're in the middle of the  
13 green, okay. Does the cyclist cease to be vigilant when a  
14 motorist coming up to this doesn't stop to wait here because  
15 it's green and they execute the right turn and bump the  
16 cyclist. So looking for near-misses and conflict behavior,  
17 avoidance behavior, both in the middle of the green and in  
18 the late green -- the late red and transition to green I  
19 think would be very good. You might think that this has all  
20 been settled because we have a nice graphical figure. But  
21 in fact, this is one of the most critical, as yet thoroughly  
22 researched traffic control devices that is being proposed in  
23 the bike world. So late red, new green.

24           And then the staged application of color. In an  
25 ideal world with a ton of experimentation money you phase

1 this thing like crazy. One way that you could phase it,  
2 perhaps, because you have so many intersections that you're  
3 going to apply it at and so many approaches, is to do the  
4 treatment at some and not at others. The egress lane and  
5 the presence or absence of the egress lane could be done  
6 that way.

7 But if I had to prioritize one thing and you  
8 couldn't phase anything I'd say, please give us a good  
9 analysis of the conflict behavior and the near-miss behavior  
10 of evasive action, that sort of thing, and tie it to the  
11 signal placement in single-phase. And that's what I have.

12 COMMITTEE CHAIRMAN BAHADORI: Thank you, John.

13 COMMITTEE MEMBER CICCARELLI: Thank you.

14 COMMITTEE CHAIRMAN BAHADORI: Any other members of  
15 the Committee who have questions for the speaker or comments  
16 on what John just shared with us?

17 COMMITTEE MEMBER MARSHALL: Yes.

18 COMMITTEE CHAIRMAN BAHADORI: If not I'll ask --

19 COMMITTEE MEMBER MARSHALL: Yes.

20 COMMITTEE CHAIRMAN BAHADORI: Rick.

21 COMMITTEE MEMBER MARSHALL: I have a question,  
22 potentially for the speaker or potentially for Caltrans. I  
23 know we have recently approved an experiment for bike boxes  
24 for the City of Davis and I suspect we may potentially have  
25 others. You know, based on the list in today's agenda

1 package that's the only one I found.

2 I want to know if National City is aware of Davis  
3 and ask you, is what you're proposing the same or are there  
4 differences? And then I want to ask Caltrans, am I right,  
5 are there others out there besides Davis?

6 COMMITTEE CHAIRMAN BAHADORI: Let's go first with  
7 the speaker. Are you aware of the experimentation that was  
8 just approved for Davis?

9 MR. ESPELET: Yeah, I believe I was. I think I  
10 saw something on-line, I think Davis was on-line. I am also  
11 aware of Long Beach.

12 COMMITTEE MEMBER MARSHALL: Okay.

13 MR. ESPELET: I think by talking to John I found  
14 out -- I believe Santa Monica also has an experiment for  
15 bike boxes so I think there are several agencies.

16 COMMITTEE MEMBER MARSHALL: Okay.

17 MR. ESPELET: I haven't yet, and this is -- I  
18 tried to contact Long Beach and tried to find out their  
19 experimentation and what is the data that they are  
20 collecting but I haven't reached out to Davis or Santa  
21 Monica to compare the data and make sure that we are  
22 consistent or understanding the differences.

23 COMMITTEE MEMBER MARSHALL: I am interested in not  
24 only how you compare with what data you're collecting but is  
25 the physical layout also the same or different.

1 MR. ESPELET: Right.

2 COMMITTEE MEMBER PATTERSON: Hamid?

3 COMMITTEE CHAIRMAN BAHADORI: Yes.

4 COMMITTEE MEMBER MARSHALL: Just a follow-up  
5 question to the discussion. With your camera locations for  
6 the data collection can the signal phasing be observed?

7 MR. ESPELET: Right. I was thinking as John was  
8 talking about that, we need to make sure that we understand  
9 that. A lot of -- the data that we are collecting right  
10 now, the camera is on the far side of the intersection  
11 looking at the near side. So our goal would be to put it  
12 far enough where we could actually see the opposite phase of  
13 the signal. And depending on the signal timing we will be  
14 able to tell at each intersection. But it's something that  
15 we need to look at in detail to make sure that we can get  
16 through video data collection, understand what the timing of  
17 the signal is.

18 COMMITTEE MEMBER CICCARELLI: Is the camera going  
19 to be on in a -- or a separate support?

20 MR. ESPELET: No, it will be on a separate pole,  
21 typically on a luminaire pole.

22 COMMITTEE MEMBER CICCARELLI: I see. I was going  
23 to suggest maybe you could wire it to the signal wire so  
24 that you'd have a little LED into that camera's field of  
25 view that would give you the circuit signal view.

1           MR. ESPELET: That could be something we could  
2 look at too, yeah, that's a good idea. A little beyond my  
3 expertise, though.

4           COMMITTEE MEMBER CICCARELLI: I wanted to add one  
5 more suggestion for the video analysis that I forgot that is  
6 critically important. And that is the precedence, absence  
7 of timing, of the cyclist's scanning behavior. By scanning  
8 I mean checking over your shoulder. Most cyclists do not  
9 ride with a bicycle driving mirror. I do, but I also scan  
10 over my shoulder to check that I saw what I thought I saw in  
11 the mirror.

12           It's kind of funny. NACTO, if you read the  
13 promotional material, that's really what it is in the bike  
14 boxes, in some of the advocate literature they're saying,  
15 this is great because I don't have to scan over my shoulder.  
16 That just sends chills down my spine as a safety specialist.

17           Because scanning is checking in conflict areas is entirely  
18 appropriate. And to suggest that a bicyclist doesn't need  
19 that skill anymore and that a low-skilled bicyclist who is  
20 incapable of scanning is empowered by this, that's chilling.

21           So some of the studies that preceded this like the Portland  
22 bike lane, blue bike lane study, did indeed check for  
23 scanning, I think is a critical piece of the analysis. So  
24 not only whether scanning occurs but where it occurs.

25           COMMITTEE CHAIRMAN BAHADORI: Any other questions?

1 Mark.

2 COMMITTEE VICE CHAIRMAN GREENWOOD: A comment.

3 COMMITTEE CHAIRMAN BAHADORI: Sure.

4 COMMITTEE VICE CHAIRMAN GREENWOOD: I appreciate  
5 John Ciccarelli's comments and I agree with all of them. On  
6 the other hand, the current request is to experiment with  
7 the concept of bike boxes as currently understood and John  
8 is going the next step to say, better understanding bike  
9 boxes and refining the design better.

10 And I don't think this particular experiment is  
11 the one to carry, to carry the experimentation that much  
12 further. I think National City is a good example of -- the  
13 character of National City is different than the other  
14 cities that are doing these experiments. So it's a good  
15 place to try to see how another part of the population deals  
16 with bike boxes.

17 COMMITTEE CHAIRMAN BAHADORI: Rock.

18 COMMITTEE MEMBER MILLER: I can't let this go  
19 without making some comments. FHWA will require there be  
20 probably a minimum of 72 hours of continuous video. I think  
21 as long as your camera angle is set up such that you can  
22 tell what phase the signal was probably in based upon the  
23 movement of vehicles it probably is good enough, I don't  
24 think you need to find a way to wire the color of the signal  
25 into the video. And the conflicts are more apt to occur

1 when there is traffic present as opposed to midnight.

2           On the way back to National City go down to Second  
3 Street and Marina Way in Long Beach, check it out yourself.

4       There's another one on Second Street at Bayshore. The City  
5 when they talk about those say the one at Marina way works  
6 fairly well, the one at Bayshore they don't think works  
7 quite as well. They are both on Second Street within a mile  
8 of each other.

9           At the federal level, John may know a little more  
10 about this than I do but the subject of bike boxes was voted  
11 with a fairly strong majority for approval by the bike  
12 technical committee, which is being sent now to the markings  
13 committee. I don't yet know exactly what that means but I'm  
14 thinking we could be maybe one to two years away possibly  
15 from interim approval.

16           COMMITTEE MEMBER CICCARELLI: It's hard to tell  
17 whether FHWA is going with IA -- sorry, Devinder. It is  
18 true that a proposal is advancing through the normal MUTCD  
19 -- NCUTCD process at the federal level. It's unclear  
20 whether FHWA, now having basically at the behest of its  
21 Commissioner said "go ahead and use NACTO" will not also  
22 move faster, that is, towards interim approval instead.

23           I do know that bike signals are moving towards  
24 interim approval, reviewing language for those. That's  
25 likely to happen in the next few months. The trend is to

1 make things go faster.

2 I do know that the proposal that is moving forward  
3 on bike boxes does not have egress lanes. The proposals  
4 coming through the national tend to err on the minimalist  
5 side. Not err but be on the minimalist side because there  
6 is a political process to go through where other committees  
7 and then the National Technical Council may not be as versed  
8 in bicycle stuff.

9 And stuff gets -- tends to get shot down if it has  
10 too many -- if it's a full glory of a proposal. So even if  
11 we were in favor of egress lanes, which in my mind is  
12 questionable, putting it out there puts too much flesh above  
13 the foxhole. So the proposals tend to go through with  
14 enough that it's a sound thing to get out there and test it  
15 and then come back later in a later MUTCD and get  
16 embellished.

17 COMMITTEE MEMBER MILLER: Yeah, I knew there was  
18 some in the works there and appreciate those comments. I am  
19 very interested in seeing the egress lanes tested, actually,  
20 because as you said, that is where the conflict area is.  
21 And one of the questions I was going to ask is, is it  
22 implied if our action to approve a bike box, are we  
23 approving all of the features that they might be thinking  
24 about doing that might not be quite standard at this time,  
25 which would include the egress lanes? Because if you had

1 noded yes I would have said, we should amend it to include  
2 the egress lanes specifically.

3 I don't think I have anything that much more to  
4 say about the subject but that along with FHWA I am in favor  
5 of experimentation on bicycle facilities because I think  
6 that FHWA realizes we need to find solutions to the problems  
7 we know were happening prior to these experiments being  
8 launched.

9 COMMITTEE CHAIRMAN BAHADORI: John.

10 COMMITTEE MEMBER CICCARELLI: I think from my  
11 perspective, looking forward as to what the Committee might  
12 take as action after the experiment is finished, the data is  
13 analyzed and the results come forward, we will be looking at  
14 incorporating the bike box, some or all of the elements that  
15 are being experimented with in a future revision of the CA  
16 MUTCD.

17 So I think it's with great eagerness that I  
18 anticipate seeing the progress reports and the final report  
19 of a well-structured experiment that looks at the traveler  
20 behaviors that are significant to inform our Committee in  
21 its decision down the line to adopt in whole or in part,  
22 perhaps with some elements that turn out to be problematical  
23 deleted from the proposal, this device or set of devices  
24 into the CA MUTCD. What you're doing is very important,  
25 it's very timely, it's not a done deal. As much as NACTO's

1 figures are pretty, they're done by wonderful, talented  
2 artists, they are not backed by the full faith and credit of  
3 experimentation in many cases so you're what we're looking  
4 for.

5 COMMITTEE CHAIRMAN BAHADORI: Larry.

6 COMMITTEE MEMBER PATTERSON: Yeah. I was just  
7 going to kind of piggy-back on a couple of things that have  
8 been said. I think one of the advantages of your particular  
9 experiment is you have sequential intersections, which does  
10 open up the opportunity, I would hope, for some testing of  
11 different treatments. And I think to skip that marking for  
12 the -- especially the conflict area, would be really helpful  
13 to see.

14 I think the other thing, and this is kind of  
15 related to the NACTO stuff. It seems to me that there's  
16 lots of elements to that. The signage would be another area  
17 that I am not sure how effective that really is going to be.

18 And yet we won't know how all of these factors interact.  
19 So you've taken kind of a design concept, which will get the  
20 overall perspective.

21 We may not know which elements are contributing to  
22 the conflicts or the near misses that we see. I've been  
23 sitting here trying to think of a way for you to, in a  
24 practical way, to work around that. I am not sure that that  
25 exists at this point. But I just have some reservations

1 about multiple elements. And I do hope that there's an  
2 opportunity to test the different marking in the  
3 intersection, the extension of the lane, to see if there is  
4 a noticeable difference.

5           And I actually find your -- in contrast of saying  
6 it's a different kind, I actually like the idea. I don't  
7 know enough about National City but my assumption is that  
8 it's not nearly as intense a bicycle capital as Davis. So  
9 you have less-frequent bicycle activity, which really gives  
10 us good information about the bike boxes and the other  
11 elements that are there and how effective they are going to  
12 be in a variety of applications. So from that perspective I  
13 think it's a good project.

14           COMMITTEE CHAIRMAN BAHADORI: Any other Committee  
15 Members before we hear from the public?

16           Just this is kind of new, unlike the other  
17 experimentations that the Committee usually receives.  
18 Usually the tradition of the Committee has been that there  
19 is an identifiable traffic safety problem that the agencies  
20 have tried to solve with what we have in the Manual. And  
21 the existing standards and what we have in the toolbox has  
22 not worked and an agency comes with a potential solution to  
23 mitigate an existing problem.

24           Here in this case we not only don't have a  
25 problem, we don't even have ridership, to your own

1 acknowledgement. And one of the reasons for doing this  
2 experiment is to attract an increased ridership for  
3 bicyclists. So that's going to be a measure by itself  
4 whether things like this are actually effective. And I'm  
5 assuming that the City is combining this with some marketing  
6 scheme also to promote bicycle ridership.

7           And this is actually being used as a behavioral  
8 test to see how people behave in a new environment with a  
9 toolbox being added, whether the bicycle box in whatever  
10 configuration actually improves safety or doesn't improve.  
11 So I am more interested in seeing how we actually want to  
12 measure because you don't have an identifiable traffic  
13 safety problem that you are trying to solve.

14           When we already have some accident record and the  
15 agency comes to us and says, we experimented with whatever  
16 you have given us in the MUTCD and we couldn't solve the  
17 problem and now we have a creative idea and we want to solve  
18 it; this is not that case. In this case you are saying, let  
19 us experiment so that we see how people are going to behave  
20 under different circumstances.

21           So I would like us all to have that in mind, that  
22 this is not a conventional experiment that you go and we  
23 say, okay, you had an accident rate of .7 per million and  
24 now we reduced it to .5, therefore the experiment is a  
25 success. We are just trying to learn how we can better

1 design our intersections. Rock.

2 COMMITTEE MEMBER MILLER: Yeah, I just kind of  
3 need to make a little comment in contrast to what you said.

4 It's pretty well known that the number one reason why  
5 people won't ride bicycles is they feel that it's unsafe.

6 Comment number two. Although it's not the number  
7 one cause of bicycle-related accidents, the right hook is a  
8 very substantial percentage of all bicycle accidents. So I  
9 am a little uncomfortable hearing us say we don't think  
10 there is a problem.

11 There is not an experience of accidents because so  
12 few people are willing to experience the infrastructure.  
13 And the success of an experiment like this would really be  
14 to see an increase in usage and not see a comparative  
15 increase in safety. As long as it stays zero it's a huge  
16 success.

17 COMMITTEE CHAIRMAN BAHADORI: Yeah, I'm just --  
18 let me just clarify. What I meant was that we are faced  
19 with what we are faced. National City is the applicant. I  
20 was hoping that a location that they actually have  
21 demonstrated right hook accidents we can do something and  
22 see how we can eliminate right hook accidents. It's going  
23 to be so difficult here to measure if this is really  
24 effective in eliminating a problem that doesn't exist. But  
25 we don't have an applicant that has an intersection with

1 right hook accidents. We have National City so we have to  
2 deal with this. John.

3 COMMITTEE MEMBER CICCARELLI: A question for Leo.  
4 I should have picked this up in reading the RTE. What is  
5 the base condition before application of any markings? Do  
6 you have any bike lanes there at all right now?

7 MR. ESPELET: No. So the City doesn't really have  
8 anything except for Class 1s and Class 3s. The Class 1s are  
9 kind of by the highway area and within the City it has just  
10 Class 3. So there is no Class 2 anywhere in the city, this  
11 is the first Class 2 lanes.

12 COMMITTEE CHAIRMAN BAHADORI: The suggestion I'm  
13 about to make actually adds to the complexity of your  
14 experiment but it's pretty profound. Have you considered  
15 laying down a conventional bike lane approach treatment as a  
16 first intervention such as, you know, a solid bike lane back  
17 in the intersection. You're going to have that when you get  
18 the bike boxes in. But we're jumping from nothing to bike  
19 box, right? Is it worth considering going to a conventional  
20 bike lane treatment as the phase one, seeing what the  
21 behavior looks like, seeing if you can track cyclists there,  
22 seeing if you get hook behavior there, and then laying all  
23 the fancy green and the reservoir and the feet rests on  
24 there. I think that would be quite a good addition. That  
25 way we're comparing bike box to a conventional bike lane,

1 which is what we have in the manual. That's what most  
2 streets are going to be starting with is bike lane with the  
3 usual dotted line conflict area before the intersection.

4 MR. ESPELET: Right. I'll respond to it. Number  
5 one, again, the same thing with the phasing, I don't think  
6 it's feasible just because of how the funding and the  
7 contract and all that.

8 I think one way that we can do it -- and then  
9 going back to the question you had, Larry. I think there is  
10 -- you know, there is a lot of features on these bicycle  
11 boxes. So I think if we pick one of the features and we  
12 analyze, you know. For instance, we have a corridor which  
13 is Fourth Street, which has four bicycle boxes. Maybe we,  
14 you know, pick one feature. And then on one maybe we don't  
15 do anything, it's just a bike lane, the traditional bike  
16 lane, and the next one we do the bike box without the egress  
17 lane. And the next one we do the egress lane with the  
18 dashed green and the fourth one we do the full, you know,  
19 NACTO design. I mean, that's one way that I think we could  
20 do it in this particular experiment. The phasing mechanism,  
21 like coming back six months later or a year later, I don't  
22 think that's feasible.

23 And then to answer the second question. I think  
24 it's -- the way I looked at it, I think the right hook, the  
25 right turn hook, it is a safety issue that we know.

1 Hopefully not every time we do an experiment it comes out to  
2 an accident. If we as traditional -- you know, as engineers  
3 of these types of facilities we anticipate that there could  
4 be a conflict, that we could prevent it before it happens.  
5 So I think that's the reason why we think bicycle boxes make  
6 sense in these corridors. Hopefully we don't have those  
7 accidents happen in National City. But at least through  
8 this experiment we are able to contribute or provide data to  
9 the industry to see whether or not these are devices that we  
10 should --

11 COMMITTEE CHAIRMAN BAHADORI: My question was --  
12 and again I'm struggling in my mind how to address it. Is  
13 that my question was that when you go through this  
14 experimentation if you have not had a right hook-type  
15 accident at any of these intersections today or in the last  
16 three years, how are we going to determine if this new form  
17 of intersection treatments actually eliminate right hook  
18 accidents because there has been none. We can do some  
19 behavioral observations by your videography but how would we  
20 actually measure if this device is effective in eliminating  
21 something that doesn't exist today. That's the one that I'm  
22 struggling --

23 MR. ESPELET: Right, that makes sense.

24 COMMITTEE CHAIRMAN BAHADORI: I would like to hear  
25 more and then listen to the public. John.

1 COMMITTEE MEMBER CICCARELLI: I think for my mind  
2 the answer to that is the observation of conflict presence.

3 MR. ESPELET: Right.

4 COMMITTEE MEMBER CICCARELLI: Presence, type and  
5 timing.

6 COMMITTEE CHAIRMAN BAHADORI: How people interact,  
7 how the bicycle --

8 COMMITTEE MEMBER CICCARELLI: That's right. If  
9 you can see something that looked like it would have been a  
10 right hook had there been a second change either way then  
11 that's useful in predicting right hooks.

12 COMMITTEE CHAIRMAN BAHADORI: Predicting. You're  
13 going to be predicting because we don't have --

14 COMMITTEE MEMBER CICCARELLI: You're going to be  
15 predicting.

16 COMMITTEE CHAIRMAN BAHADORI: -- data today saying  
17 that we have so many accidents and by doing this we are  
18 going to reduce them. Larry.

19 COMMITTEE MEMBER PATTERSON: Just to add onto  
20 something John said earlier that really resonates with me  
21 and that is that I -- if we could have the liberty of not  
22 having funding constraints and other things that the idea of  
23 starting off with a conventional treatment, observing that;  
24 then the same locations coming back and adding in the  
25 treatments would be my preference for this particular

1 experiment. Because that then says, okay, now you have bike  
2 lanes versus nothing, which you could observe today, to  
3 observe the bike lanes you observe with the box treatment,  
4 and now you have some comparisons. And using the near-  
5 misses and the more analytical approach, not accident counts  
6 or other things. So if it were feasible to do that it would  
7 really, I think it would add dimensions to the study that  
8 aren't there if you go straight for the treatment.

9 COMMITTEE SECRETARY SINGH: Rock, you had a  
10 comment?

11 COMMITTEE MEMBER MILLER: Yeah. I think the  
12 applicant has indicated they are going to consider doing  
13 some sequential variation, perhaps doing something on this  
14 one, something else on that one. I can very much appreciate  
15 the lack of ability to build something one way and then come  
16 back in 6 or 12 months and build it a different way. Even  
17 though it might be as simple as paint it's just -- you're  
18 geared up to do it once, you're not geared up to do it  
19 twice.

20 I also know that the more conventional treatments,  
21 there's plenty of experience with how a conventional bike  
22 lane works. I don't think we really need to create one at a  
23 place where one doesn't exist to develop an experience which  
24 we could obtain from anywhere else. It's really the  
25 variation that is important. And every time I hear this

1 suggestion. I was always asked when I painted some travel  
2 lanes in Long Beach a few years ago, why didn't I put the  
3 sharrows on first and then paint the lane green later.  
4 Well, I don't know what the effect would have been had I put  
5 on the sharrows first but I have seen sharrows on a streets  
6 like that without green paint and it's very easy for anybody  
7 to see from your own experience, the difference.

8 COMMITTEE CHAIRMAN BAHADORI: Okay.

9 COMMITTEE MEMBER MILLER: And had I not done that  
10 we wouldn't know that. So I'm really -- I think you're  
11 hearing our comments but we don't know if you want to go  
12 with all of those. Have a \$2 million research project.

13 COMMITTEE CHAIRMAN BAHADORI: Yeah, hire human  
14 behavior scientists.

15 Okay, any other comments before we open it to the  
16 public or any questions?

17 Okay, at this time any member of the public who  
18 wishes to address the Committee on this item. And Jim, I  
19 saw your hand being raised a few times. Okay, we would like  
20 to hear from you.

21 MR. BAROSS: Good morning. I'm Jim Baross, I'm  
22 here on two behalfts, one on the California Bicycle Advisory  
23 Committee, who did review as much as we could the proposal.

24 We didn't have the advantage of having the more recent  
25 PowerPoint; I'm sorry that National City didn't have a

1 chance to present in front of us. Also I am here because I  
2 am a trainer for the bicycling instructors for the League of  
3 American Bicyclists and I am going to provide comments based  
4 on what we teach bicyclists.

5           And I am probably going to add to the six items I  
6 was going to mention based on the comments that I heard from  
7 you and they were very helpful, thanks. John did a great  
8 job of showing me things.

9           First off, on the subject of whether there's been  
10 crashes or not. I think a better metric for what they're  
11 trying to deal with is if there is no bicycling in a roadway  
12 -- somewhat like the canary in the coal mine, the canary  
13 dies it means there's a problem out there. If there is no  
14 bicycling, or very little bicycling as a mode share on a  
15 road, then it means that there is some problem with that  
16 roadway.

17           Similarly, if there are no crashes, in many cases  
18 it indicates that people have avoided that intersection,  
19 avoided that roadway, realizing it's too dangerous, too  
20 scary to even try to negotiate. So those two metrics are  
21 very difficult to measure, maybe, but should be considered.

22           Also on the subject of the recent memo from FHWA.  
23 There was no endorsement of NACTO guidelines. There was a  
24 recognition that many of the NACTO bike guidelines already  
25 exist in the MUTCD Greenbook or other documents and those

1 that don't are subject to and should be added into an  
2 experimental process. Right? I think there's some  
3 misunderstanding that there was an endorsement of everything  
4 in the NACTO guideline. It was a very strong encouragement  
5 for traffic engineers and others to look for ways to  
6 accommodate more bicycling, make it safer and more  
7 attractive, but it was not an endorsement of everything in  
8 there. Okay, next.

9           The primary issue that the League cycling  
10 instructor program has and the California Bicycle Advisory  
11 Committee have is that if we go forward with a green bike  
12 box as proposed, is there also a proposal to change the  
13 Vehicle Code, change the California Vehicle Code,  
14 specifically 22100 and 21654, which deal with where  
15 motorists and others are supposed to position themselves  
16 when they approach an intersection and make a right turn.  
17 You are all aware that motorists are supposed to move to the  
18 curb as close as practicable before they make their turn.  
19 This green box discourages, at least discourages and may in  
20 some sense prohibit motorists from moving over where they  
21 should be.

22           Also as a League cycling instructor I am going to  
23 need to change the training that we provide to our  
24 instructors if this thing goes into place. We teach  
25 bicyclists to treat an intersection in one of two ways when

1 they approach. One way, which many people use, is to look  
2 ahead and decide, this is too scary for me to treat as a  
3 vehicular operator to get through as a motorist would or as  
4 a bicyclist could, get off their bike, get over to the curb  
5 and cross the intersection as a pedestrian.

6           There are clear understandings for how pedestrians  
7 are supposed to cross the road and how motorists are  
8 supposed to yield to pedestrians. Motorists are -- in some  
9 cases it's much easier to yield to a pedestrian because of  
10 their relatively low speed. Motorists can look over to the  
11 right, see a pedestrian attempting or about to cross and  
12 yield to them.

13           Bicyclists, however, approach intersections at a  
14 much faster speed than pedestrians. A motorist in order to  
15 yield to a bicyclist on their right not only would look  
16 where a pedestrian is but needs to look significantly back  
17 over their right shoulder, which is a non-standard movement  
18 and not very likely of motorists, to see if there is a  
19 bicyclist traveling quickly on their right trying to get  
20 through.

21           This particular kind of treatment encourages that  
22 bicyclists stay at the right to continue at their regular  
23 speed of travel and causes, we think, a problem. Because  
24 what we're teaching the bicyclist that approaches the  
25 intersection as a vehicular operator, which is their right

1 under the California Vehicle Code. Without a bike lane  
2 there or without a bike box they should look over their  
3 shoulder or stand, as John mentioned, look for the traffic  
4 on their left, merge over to the straight-through position,  
5 get out of the way of those who want to turn right and  
6 travel through in the straight-through position in the  
7 middle of the lane.

8           The bike box as proposed by NACTO and Imperial  
9 Beach is not dashed at its approach. A bike lane  
10 approaching an intersection is dashed, for the reasons you  
11 probably all know, to encourage the motorists to move over  
12 as the Vehicle Code requires and to notify the bicyclist  
13 that they may move out of that bike lane to get to the  
14 straight-through position. If this goes forward I would  
15 highly recommend that if a bike -- if we ever get to a place  
16 where bike boxes are approved and found to be useful, that  
17 the bike box approach to the intersection where the bike  
18 lane would dash, becomes dashed. Okay?

19           So my major point and the one from CBAC that I  
20 wanted to make abundantly clear is that the design in place  
21 contradicts the California Vehicle Code. It asks motorists  
22 to do something that the Vehicle Code tells them they are  
23 not supposed to do. They are not supposed to go to the  
24 left, they're supposed to move to the right. So if we're  
25 going to do this be prepared to change the Vehicle Code.

1 Please, so we don't have this confusion.

2           Okay, my notes. Also in NACTO, and it didn't  
3 speak specifically to it but on page 30 of the proposal, the  
4 NACTO guide, which I think they're going to follow and I  
5 think their proposal was to use a non-standard sign. That  
6 sign is non-standard, it shows and tells motorists to yield  
7 to bicyclists on their right. Okay? I would hope that  
8 motorists seeing a bicyclist on their right that intends to  
9 go straight would yield. But please be aware that is a non-  
10 standard sign and should be part of the experimental  
11 process. All right? Which also contradicts the Vehicle  
12 Code.

13           At least one of the intersections there was a left  
14 turn pocket. At least one of the intersections there is a  
15 left turn pocket. And in the proposal I couldn't tell  
16 whether the bike box enters the left turn pocket or not. In  
17 other words, approaching the intersection, in most of the  
18 applications we see the bike box in front of the straight or  
19 right turn lane, the option lane. But where there is a left  
20 turn lane some -- as a matter of fact, in Europe one of the  
21 reasons they put bike boxes in is allow bicyclists to get  
22 ahead for a left turn. And so I am not clear, perhaps you  
23 could answer when I give you a chance and I give you the mic  
24 back, whether that bike box is going to move into the left?  
25       Because if the bike box is not going to be in the left turn

1 pocket and the bike box is sold striped to the intersection,  
2 a bicyclist who wishes to make a vehicular left turn, in  
3 other words, scan, signal and merge over to the left turn  
4 pocket, is not prohibited. I don't know what the rules are  
5 going to be. But they are certainly discouraged from  
6 leaving that space, okay. Next.

7           Of course this emerging or emergent bike lane, the  
8 bike lane in the middle of the intersection, egress lane, is  
9 very confusing to us and we're not sure how the application  
10 could work. Okay.

11           When -- there are other bike experiments that I'm  
12 aware of. The one in San Luis Obispo I am not sure if  
13 they've gone forward with, it's kind of a special situation.

14           The others that were mentioned, I think it would be helpful  
15 to get some convergence, some cross-pollination before we go  
16 too much farther with these.

17           Although I must say, because of the enthusiasm.  
18 There's great enthusiasm among bicycle enthusiasts and those  
19 who are trying to encourage a better mode split to get more  
20 things out there to -- on the one hand encourage bicycling  
21 but also to increase the safety. There's huge encouragement  
22 for this. As a matter of fact, when I go back to San Diego  
23 I am going to be criticized for saying anything critical  
24 about a bike box. That's something I'm going to -- Rock,  
25 you probably deal with this too. It's kind of like beggars

1 can't be choosers and anything is a good thing as long as it  
2 looks like. And having a bunch of green paint out there and  
3 bicycles on it, certainly raises the awareness and that's a  
4 good thing. Hopefully that raising awareness makes safety  
5 but I am pointing out some issues. Okay.

6           In the evaluation I hope one of the things that is  
7 caught on the video is that we get far enough back to note  
8 me and competent bicyclists who are going to be approaching  
9 this intersection. When I approach this intersection as a  
10 bicyclist I am going to be looking over my shoulder, I am  
11 going to be standing, I am going to be signaling to move  
12 into the straight-through lane. Out of the bike box as  
13 early as I can. I am probably going to be in the center of  
14 that straight-through or option lane, either behind or in  
15 front of motorists waiting for the light to change. Will  
16 that be shown? Right.

17           Similarly, if I'm making a left turn I am going to  
18 leave that bike lane, as I am allowed under current law,  
19 early enough to make my merge across two or however many  
20 lanes of traffic to get into that left turn pocket. I think  
21 we should note that that is lawful, that is competent, that  
22 is what we are teaching bicyclists to do and if we should  
23 expect them to try to do that. Let's see.

24           I should have started with congratulations. I  
25 have been involved in San Diego and somewhat with National

1 City for several years and the previous leadership of the  
2 City of National City was unwilling to install bike lanes  
3 for many years for fear that encouraging bicycling would  
4 open them to some liability. There has been a change over  
5 the last five or six years. I applaud this greatly. The  
6 leadership, I am not sure who, retired or was changed out  
7 and then elected, but the change is wonderful. We are glad  
8 to see that. Many people in San Diego transition through  
9 National City and this proposed route will connect with the  
10 routes in Chula Vista and San Diego so there will be a  
11 contiguous route.

12 COMMITTEE CHAIRMAN BAHADORI: Jim, I'd appreciate  
13 if you'd summarize your comments.

14 MR. BAROSS: Yeah. Let's see. Oh, lastly, there  
15 was not a proposal -- there are no bike lanes on this route  
16 now. If instead of this experiment, although we do want to  
17 see the result. If instead of this experiment traditional  
18 bike lanes were put in, dashing them or dropping them at the  
19 approach of the intersection, and if sharrows were used in  
20 the option lane directing people to where they should be if  
21 they're getting through the intersection vehicularly, it  
22 would be an appropriate alternative and it's already  
23 allowed.

24 COMMITTEE CHAIRMAN BAHADORI: Okay, thank you.

25 MR. BAROSS: Thanks for your time.

1                   COMMITTEE CHAIRMAN BAHADORI:  Anyone else?  
2  Mr. Fisher.

3                   MR. FISHER:  Thank you.  I'm John Fisher, for the  
4  record.

5                   I think it is very important that we have a good  
6  understanding of where bike boxes fit into our tool box of  
7  traffic safety measures.  It's the new design.  I don't  
8  think a lot of people really understand where it applies,  
9  where it's beneficial.  I think there is a lot of enthusiasm  
10 to install these but I think we need to do it very  
11 thoughtfully.  And this proposal has a lot of variables in  
12 it.  The way it's structured, I'm afraid, will not give us  
13 the knowledge we need to understand where to apply it in the  
14 future.  There are many variables with regard to non-  
15 standard markings, conflicts with the Vehicle Code, non-  
16 standard signs.  I think if we can reduce some of the  
17 variables we can have a useful experiment here.

18                  I would recommend to you that you require, and  
19 this has been mentioned previously, that you require that  
20 there be standard striping on the approach to the  
21 intersection with the dashed bike lane line.  That's what  
22 the Vehicle Code requires in essence, that motorists must  
23 come near the curb when they're making their right turn and  
24 that's why the bike lane is dashed.

25                  Also there are two non-standard signs here,

1 turning vehicles yield to bikes and some other sign that  
2 shows right turns are to be made by not crossing the bike  
3 lane. Again too many variables here. I think we ought to  
4 stick with standard striping and not introduce those. So I  
5 would propose that we not introduce these two signs and the  
6 solid line on the approach.

7 I think it would be helpful if you first required  
8 that the bike lane be installed and then measured the  
9 conflicts through some video observation, the near-misses.  
10 And then as a second step then you introduce the bike box  
11 and then observe for conflicts. And I think that then gives  
12 you a base and I think that could be very powerful  
13 information to observe the difference in conflicts with the  
14 bike box there.

15 My understanding is as proposed the bike box is  
16 intended to reduce the potential for right hook conflicts.  
17 But there is also a proposal to put "no turn on red" or "no  
18 right turn on red." In theory that would solve the problem  
19 because bike boxes do not address right hook conflicts on  
20 green, only on red. So I would think then if you really  
21 want to measure how effective the bike box is in reducing  
22 right hook conflicts don't have the "no right turn on red"  
23 sign. It seems a duplication. Then once you get the  
24 results if you have both there, the bike box and "no right  
25 turn on red" you can't be sure what caused the reduction, if

1 there is a reduction in conflicts. So it seems like the "no  
2 right turn on red" would be overkill and is duplicative.

3           The last thing that really concerns me is  
4 extending the bike box into the left turn lane. Because I  
5 think this sends a mixed message to the bicyclists and  
6 possibly it can be very dangerous. I think as  
7 Mr. Ciccarelli pointed out, if you approach the intersection  
8 on a red in the bike lane and it's red when you get there,  
9 you've got time to move laterally over into the left turn  
10 lane. And you're first in line, great.

11           But what if you approach on a red and you get very  
12 near the stop line and it goes green? Well your plan to get  
13 into the left turn lane is foiled at that point. So someone  
14 has to decide 300 feet, 200 feet in advance of the  
15 intersection how they're going to get into the left turn  
16 lane. And you never know when the signal is going to  
17 change. So I think it's potentially very dangerous to add  
18 the bike box for the left turns because you can't rely on  
19 it. It'll be there sometimes. But if you depended on it  
20 may not be there. It may not be red when you get there, you  
21 can never know that.

22           So I would not approve the experiment for that  
23 purpose, I would approve it for the purpose of measuring the  
24 right hook conflicts with the other measures that I  
25 described. Thank you.

1 COMMITTEE CHAIRMAN BAHADORI: Thank you,  
2 Mr. Fisher.

3 Anyone else who wishes to address the Committee on  
4 the item? Mr. Beeber.

5 MR. BEEBER: Thank you. Good morning. For the  
6 record, Jay Beeber, I'm the Executive Director of Safer  
7 Streets LA and a research fellow with the Reason Foundation.

8 I want to echo some of the comments that were made by  
9 Mr. Fisher regarding the "no right turn on red." I think  
10 that his comments are well-taken on that but I have also an  
11 additional concern about the "no right turn on red" as a  
12 general policy with bike boxes.

13 As more and more of these are installed you're  
14 going to have more and more places where there's going to be  
15 a prohibition against a right turn on red. That's going to  
16 be a problem in terms of the traffic flow, it's going to be  
17 a problem in terms of the environment. As we know a lot of  
18 the reasons that right turn on red was allowed was to  
19 prevent cars from just sitting and idling for long periods  
20 of time when they could safely otherwise go.

21 There may be many, many times throughout the day  
22 where these -- where there's no bicyclists there and it  
23 would be perfectly safe to make a right turn on red. So I  
24 would also encourage that the prohibition against right turn  
25 on red would not be included, even in whatever policy

1 eventually gets made regarding bike boxes.

2           So I just wanted to make those comments, thank you  
3 very much.

4           COMMITTEE CHAIRMAN BAHADORI: Thank you,  
5 Mr. Beeber. Anyone else? Mr. Morrissey.

6           MR. MORRISSEY: I'm Sam Morrissey with the City of  
7 Santa Monica. I agree with all the discussion about right  
8 hooks and the need to analyze that and I understand the  
9 perspective of the proposal to do the bike lane first and  
10 then the bike box to address it.

11           I just want to offer maybe an alternative  
12 perspective as a small jurisdiction that's implemented a lot  
13 of bike lanes. We do see the bike box as an ability to  
14 help, especially on a single lane roadway, which is shown in  
15 their exhibits. Helping the bicyclists to make a left turn  
16 to the north-south roadways. And in National City this is  
17 an east-west connector so they're looking to kind of provide  
18 a way to get bicyclists across town to other destinations.

19           So perhaps the City is also looking at the bike  
20 boxes as an integral part of more of a complete bicycle  
21 network so it may impede their desires to provide that type  
22 of functionality for all their users. So just bear that in  
23 mind when considering recommending any alterative  
24 approaches. Thank you.

25           COMMITTEE CHAIRMAN BAHADORI: Thank you for

1 sharing your thoughts.

2           Anyone else from the audience who wishes to speak  
3 on this item?

4           Seeing none I close the public comments on the  
5 issue, bring it back to the Committee. Okay, Larry.

6           COMMITTEE MEMBER PATTERSON: Just to start it off.  
7 I guess where I am at now I would not support the  
8 experiment as it's currently proposed for a variety of the  
9 reasons that have been discussed by both the members as well  
10 as those with considerable knowledge on the subject in the  
11 audience. Because I am most nervous about this being kind  
12 of a mis-application of a bike box. Because if I remember  
13 correctly, and I think I was still an alternate so I wasn't  
14 quite as smart as I am now that I'm a member, but I thought  
15 the Davis option was actually, in fact, storing or reserving  
16 a place for bicyclists in the front of the through movement,  
17 which was, I think, an important part.

18           But the idea that we are actually sending a signal  
19 where right turn automobiles can't be up against the curb  
20 where they're supposed to be is a really big concern for me.  
21 And so I would be open to -- I don't know how the rest of  
22 the Committee feels but I would certainly be open to one of  
23 two choices. One is either denying the request or asking  
24 them to kind of go back and provide some redesign of it that  
25 would address some of the concerns that have been expressed

1 here today.

2 COMMITTEE CHAIRMAN BAHADORI: Okay, thank you,  
3 Mr. Patterson. Any other members? John.

4 COMMITTEE MEMBER CICCARELLI: Rock, go ahead.

5 COMMITTEE MEMBER MILLER: I am not opposed to the  
6 request. Right turn on red, I wrote a question mark on my  
7 notes. I know that the draft proposal that is going to move  
8 forward for the interim approval actually calls for  
9 providing a "no right turn on red" unless a right turn  
10 pocket is provided to the right of the pocket. So I am not  
11 sure why that is advancing forward but that is telling me  
12 that whatever preliminary information is being made  
13 available to FHWA is probably concluding that's an  
14 appropriate step. I therefore do think probably that should  
15 be a consideration in the experiment.

16 It was really underscored, the larger view of  
17 this. I hear everybody's desire to come up with a national  
18 solution based upon what one city that happens to have  
19 "National" in their title can do. You just can't do it that  
20 way. In the FHWA's view, as I see it, is they have allowed  
21 this experiment to happen in I think 10 or 12 different  
22 cities and I think they are probably approaching 100 bike  
23 boxes out there now.

24 I am more aware of what's going on in Portland  
25 because they are a lot better at publicizing then results

1 than anybody else is, and they've kind of concluded about 80  
2 percent of them seem to be doing okay, 20 percent of them  
3 seem to be having some issues. And they sent so far as to  
4 observe that the higher speed locations seem to be the ones  
5 that have issues. And on that basis I wouldn't be surprised  
6 if in the end it becomes a treatment that seems to work well  
7 in the lower speed situation, which I think National City  
8 has. And I have been on these streets before.

9 I am therefore not thinking it's that unsuitable  
10 an experiment for that scenario because everything I know  
11 about a subject that I have read everything I could find on  
12 tells me it's probably a good quest. I also know that this  
13 particular configuration, a relatively narrow street that  
14 doesn't have room for a right turn lane, is kind of a model  
15 location. Which if this became standard there's more places  
16 that look like that than there are places that happen to be  
17 wider and have multiple lanes and things like that. So i  
18 don't see a lot of uniqueness here, I really see this as  
19 kind of the standard location and a testing of what could  
20 actually be the standard application.

21 On the left turn pocket I think I agree with Jim  
22 in the audience. I've asked you to go to a location in Long  
23 Beach where you will find the bike box does extend over to  
24 the first lane in which it was possible to turn left. And  
25 it was really to get a bike to that lane was the reason that

1 motivated that particular location, which I do believe the  
2 city considers to be successful.

3           On that basis I think if there is a left turn lane  
4 I think you have flexibility, assuming we approve your  
5 application, to do what you want there. But my personal  
6 suggestion would be to consider putting it into a left turn  
7 lane. I have heard discussions against that but I am going  
8 to leave it to you to decide.

9           MR. ESPELET: Let me answer that because I think  
10 it's a question. We do have one location, which is 18th and  
11 D, which is the one that intersects the two corridors that  
12 would be like Class 2 facilities on both -- on the four legs  
13 of the intersection. In that one location we do have  
14 bicycle boxes on the left turns. On the other locations  
15 where the bike lane is just continuing and there's no bike  
16 lanes on the side streets, we don't. So right now we have  
17 both on our -- on our project.

18           COMMITTEE MEMBER MILLER: The only other thing I  
19 wanted to say in my philosophical opportunity is generally  
20 speaking the way things like this are being evaluated.  
21 again. is on the basis of at a national level a lot of tests  
22 are being approved. That's helping to determine which ones  
23 are working and which ones are not working and it is  
24 therefore important, perhaps, to keep approving permutations  
25 to see if the specific permutation seems to fall in the

1 working category or in the non-working category.

2           The ultimate safety test is really most evident in  
3 what's happening. And again I turn to Portland; it's by far  
4 provided the most information. Portland has probably six  
5 times more bicycling than it had 10 or 15 years ago and yet  
6 it is pretty well known that the raw numbers of bicycle  
7 accidents have held the same. The country, in aggregate,  
8 has seen about a 25 percent increase in bicycle-related  
9 accidents over the last five years, probably because  
10 bicycling is on the increase and bicycling infrastructure is  
11 not on the increase except in places like Portland and the  
12 cities that are experimenting. And I think in the long run  
13 we're going to find that we need to find the tools that  
14 experimenting is helping us to find so that we can achieve  
15 results like we are seeing in Portland everywhere where we  
16 are not seeing those results because the infrastructure is  
17 not being modified. End of speech.

18           COMMITTEE CHAIRMAN BAHADORI: Thank you. John.

19           COMMITTEE MEMBER CICCARELLI: I wanted to respond  
20 to the -- start with the "no right turn on red." I think  
21 it's an essential part of the bike box design. The reason  
22 is because of what I and other motorists do when a right  
23 turn on red is permitted in a situation. We advance to the  
24 limit line, whether that's a setback limit line or the de  
25 facto limit line for the cross walk, we do some scanning,

1 judge a gap and we advance. So our attention is focused on  
2 getting a gap during the red phase to advance and make our  
3 right turn on red to save ourselves time, okay.

4 No rights on red has been a disaster for  
5 pedestrians. It's not a neutral thing to support, it was a  
6 big change. And very urban cities such as New York City  
7 categorically prohibit right turn on red for the safety of  
8 the pedestrians. So I am not going for that whole line of  
9 discussion.

10 I want to say though that for the design of the  
11 bike box with a setback limit line of 14 feet typical,  
12 enacted by -- and I think most practitioners look at 10 to  
13 14 feet as far enough back that a bicyclist can actually  
14 weave into the space when it's safe to do so without having  
15 to make awkward moves if you only made the setback the  
16 length of a conventional bicycle.

17 When a motorist is set back that far and you don't  
18 disallow right turn on red they are not in position to scan  
19 for a gap until they advance, so it defeats the whole  
20 purpose of having that bicycle reservoir here. It's an  
21 essential part of the bike box design. So I am not willing  
22 to support deletion of the right turn on red. And as Rock  
23 noted, that's what the national proposal has going forward  
24 into the markings technical committee. I think it's just  
25 the way the boxes work. It's a place for bicycles to wait.

1 That's going to be defeated by motorists creeping through it  
2 on red, so that's got to be there.

3 I really, the more I think about this, thinking  
4 about Vehicle Code considerations and the difference between  
5 a conventional bike lane treatment on an approach to an  
6 intersection without a right turn lane where we -- detail  
7 39-A, the bike lane stripe at the intersection. I really,  
8 I've come around. I think what I want to see in a default  
9 -- should this be adopted in the CA MUTCD and the federal  
10 MUTCD, I would want the approach to be dotted, okay. So I  
11 want to see about Leo's receptivity to this. Would you be  
12 okay with a solid advanced waiting area, a solid green  
13 there, but dotted per the FHWA interim approval, all the way  
14 to the crosswalk on the approach?

15 MR. ESPELET: Yeah, I don't see a problem with  
16 making that attachment.

17 COMMITTEE MEMBER CICCARELLI: I think that's where  
18 I and others are differing with NACTO at this point. And  
19 someone said it, maybe it was Rock, this thing we call a  
20 bike box is actually a collection of about four elements.  
21 It's the ingress or approach lane, which is what would be  
22 there if none of the other bike box stuff was there. But  
23 absent the decoration, absent the reservoir, the storage  
24 area, absent the green, absent the egress, absent the non-  
25 standard signs, you'd have a standard bike lane and it would

1 be dotted. Okay.

2           So if we are going to potentially adopt this, with  
3 or without green, I think it should be dotted. And  
4 furthermore, where it's dotted I think we should follow  
5 FHWA's well-considered interim approval practice which says,  
6 if the white is dotted it means it's got to be broken. So  
7 element number one, I would like to see the RTE modified so  
8 that the bike lane against the curb is dotted and the green  
9 application, if used, is broken to follow the FHWA interim  
10 approval.

11           I would like-- I am very sympathetic to resource  
12 and mobilization considerations. But to the extent that you  
13 can do it, add some standard bike lanes in there so we  
14 compare. I really think the comparison is not against --  
15 not versus what other cities have found when they put in  
16 bike boxes but what we are really trying to get at here and  
17 tease apart is, how does it differ from the standard bike  
18 lane treatment that has been in the MUTCD for 25, 30 years.

19           So to the extent that you can give us a comparison between  
20 the standard treatment and the decorated treatment, much  
21 better.

22           The signs I think comes back to the Vehicle Code  
23 thing. We're trying to -- that was a Portland-originated  
24 sign. The thing about Portland is, Portland is in Oregon,  
25 okay. Not just Oregon is different from California, Oregon

1 is the only of the 50 states with a different vehicle code  
2 regarding merging to the edge before making a right turn as  
3 a motorist. They prohibit that, okay, which is actually  
4 (indiscernible - someone coughing) practice too. It assumes  
5 that the bicyclist is allowed to -- as a result of Oregon's  
6 vehicle code the bicyclist has the support of the law to  
7 advance along the curb side and know that the motorist is  
8 not supposed to move in front of him. That's not the way it  
9 works in the 49 other states, in California. So I had real  
10 heartburn with the signs. I think I'd like to suggest they  
11 be removed from the RTE for consideration.

12           So what do I want to see in the experiment. Let  
13 me start in the order that I think I want things to be  
14 present. And the first one is not something that impacts  
15 phasing, it's the analysis. I said it before in my previous  
16 remarks, let me just summarize it. I want the video  
17 analysis to look for lateral positioning for the type of  
18 conflicts that occur, specifically the type. Longitudinal  
19 and lateral position and the timing relative to the signal  
20 of those conflicts. I want the RTE analysis to look for  
21 evasive moves and near-misses. And finally, I want the  
22 analysis to look at scanning behavior, checking over the  
23 shoulder.

24           Second higher priority. I think that to the  
25 extent that you have enough approaches to do this I would

1 like to see the uncolored but dotted approach lane, compared  
2 to a colored approach lane. So effectively green on the  
3 approach component. I think that where you have the bike  
4 reservoir, the advanced limit line area, I'm fine with that  
5 being green in all cases in your experiment.

6           Item three. I would like to see testing of the  
7 egress variations, none, dotted only and dotted with green,  
8 but not the solid green. I think, again, because it's a  
9 conflict area we want to communicate to all parties that  
10 there is a conflict area and that vigilance is required. I  
11 do not support the solid green egress area, but I would  
12 support none, dotted, the double detail from behind or a  
13 double skip stripes and skip stripes plus skip green.

14           Item four. To the extent feasible, consider  
15 testing a default case where there is a bike lane, a  
16 conventional bike lane. You may or may not be able to do  
17 that. And I think that's the components.

18           COMMITTEE CHAIRMAN BAHADORI: Okay.

19           COMMITTEE MEMBER MARSHALL: Can I ask a question?

20           COMMITTEE CHAIRMAN BAHADORI: Rick.

21           COMMITTEE MEMBER MARSHALL: I really appreciate  
22 you making a nice, easy to follow list. And the one thing  
23 on my notes that I didn't hear you address was whether or  
24 not to include the left turn pocket in the bike box.

25           COMMITTEE MEMBER CICCARELLI: I'd have to ask Leo

1 because my memory of the one location that has the left turn  
2 issue, is that a single lane bike box at that point? The  
3 bike lane in Long Beach that serves a movement to a left  
4 turn position is a multi-lane bike box, which you are not  
5 proposing here, okay. I have a lot of questions about  
6 those. But that's not what you're asking to test, right?

7 MR. ESPELET: Well, let me understand the multi.  
8 So you have a left turn and a through lane so you have two  
9 lanes with the bicycle box, first of all.

10 COMMITTEE MEMBER CICCARELLI: Well, does the green  
11 storage area span a single lane or multiple?

12 MR. ESPELET: Both, so it would be on both the  
13 left and the through.

14 COMMITTEE MEMBER MARSHALL: Your figure only  
15 showed it going across the through lane, I believe.

16 MR. ESPELET: No, that's -- I don't know if you --  
17 I want to come back. There's one location where you have  
18 basically the two lanes.

19 COMMITTEE MEMBER CICCARELLI: Okay.

20 MR. ESPELET: And then there's -- we have the two.  
21 We have one in --

22 COMMITTEE MEMBER CICCARELLI: I personally have  
23 reservations about it but I would like to see it tested. I  
24 want to see if -- sort of -- what conflicts happen in  
25 practice. We need to put things out there that are a little

1 edgy. I have questions about that application, in part  
2 because the bicyclists has no way of knowing that the red is  
3 stale, but I would like to see it tested.

4 COMMITTEE CHAIRMAN BAHADORI: Okay, any other  
5 comments? Okay, with that let me just share my thoughts.  
6 As I said, you know, the tradition of experimentation is to  
7 solve problems that what we have in the tool box is not  
8 capable of solving. But we have to acknowledge that we  
9 sometimes have to experiment with new things, which is this  
10 case. But in experimenting with new things we have to learn  
11 and we have to come to a conclusion that we can apply across  
12 the broad spectrum of the state of California.

13 This doesn't give me that. I wish there was a  
14 city of LA with 20 intersections were they demonstrated  
15 rider problems with 20 different types of treatments to see  
16 which one is most effective, controlling all the other  
17 factors. But reality is we have these. The City of LA is  
18 not here, the City of San Diego is not here, the City of  
19 Long Beach is not here, the City of National City is here.

20 It could be the best place or it could be the  
21 worst place. It could be the worst place because they don't  
22 even have a tradition of bicycling. To your own  
23 acknowledgement people are not using bicycles in National  
24 City, so you don't have an educated, established bicycling  
25 community. At the same time it could be the best place

1 because we can experiment and see what for the newcomers is  
2 most effective in them.

3           But I would like to echo a little bit on what John  
4 Fisher shared with us. That when we do these experiments we  
5 need to control. We need to know what is effective, what is  
6 it we are measuring. If you throw four or five different  
7 things in the pot in one experiment than we can't do any  
8 measure of which one is effective, which one is appropriate  
9 for one location and not in the other location.

10           So with that I would like to suggest, you know,  
11 along with what everybody else suggested, to kind of -- I  
12 hate to lose the opportunity for experimentation because I  
13 really think we need to know about and learn more about bike  
14 boxes to hopefully come to some kind of agreement and some  
15 kind of standard for California, so the more we do the  
16 better. But if we have just quantity by itself, it's not  
17 going to give us the information. We need to have the  
18 controls, the scientific approach and all that.

19           On the issue of signs, just one footnote. We  
20 cannot invent signs. Signs are regulated by the California  
21 Vehicle Code. The Committee cannot approve even for  
22 experimentation a sign that is not authorized by the Vehicle  
23 Code. So if there is any yield sign when somebody has to  
24 yield to somebody it has to first make it to the Vehicle  
25 Code. They have to say that thou shall yield to the other

1 person or there is a penalty, a moving violation, that the  
2 CHP has a Vehicle Code section to go and cite people for not  
3 yielding. There is no such a yield in the Vehicle Code,  
4 what your sign is recommending, so we categorically cannot  
5 accept such things.

6           If you want any changes in the Vehicle Code, the  
7 way that the drivers and the bicyclists are behaving or have  
8 responsibilities towards each other, first you need to  
9 rectify the Vehicle Code. Then Caltrans brings that section  
10 of the Vehicle Code here and we approve the signs. It  
11 doesn't work the other way. We can't just say, "You have to  
12 do this" and you put the sign up there. And people are not  
13 going to obey it because it's not part of the Vehicle Code  
14 and law enforcement cannot give them a ticket because they  
15 are not violating any section of the Vehicle Code. So if  
16 you are considering signs you need to keep that in mind.

17           I hate to lose the opportunity for this. I hope  
18 that the comments didn't discourage you and the City of  
19 National City. But I quite frankly don't think you are  
20 ready today. You may want to take these back and come back  
21 with a revised, better fine-tuned, more precise  
22 experimentation, taking all the comments that you heard,  
23 especially from John and Rock Miller, whose both opinions I  
24 really value as the experts in the field.

25           Those are my thoughts. I hate to kind of just

1 throw it back at you and say, "Well, it's not a good  
2 experiment" because it is, but I don't think it's ready for  
3 approval. So those are my thoughts, I don't know if anyone  
4 else wants to share something? Bill.

5 COMMITTEE MEMBER WINTER: I only have one, just  
6 one question. You mentioned you were using a Safe Routes to  
7 School grant. And does that have any time constraint to the  
8 use of that grant? Because I -- before you answer it, the  
9 reason I'm asking is because I tend to agree that it sounds  
10 like a good proposal, it's just you've heard a lot of  
11 comment here. And rather than us engineer it for you and  
12 come to a conclusion about just what is going to work, if  
13 you were to bring it back I guess I just would want to know  
14 that you're not under a time constraint to make sure you can  
15 still tap into the grant funds.

16 MR. ESPELET: We are. I think, I think we might  
17 -- we probably have an opportunity to make one set of  
18 changes. One set of changes as long as we can, you know,  
19 make it through like the next, the next meeting or, you  
20 know. I think we have an opportunity to adjust our  
21 experiment at this point and we still have enough time to  
22 complete the project but we don't have much of a luxury.

23 The contractor for the overall project is already  
24 on board and they are starting to do some of the work. The  
25 striping is the last step so we have a little bit of time,

1 but not so much that we can have the luxury of, you know,  
2 taking two or three --

3 COMMITTEE CHAIRMAN BAHADORI: If you have the  
4 time, the verbatim minutes of the meeting are going to be  
5 available on-line.

6 MR. ESPELET: Sure.

7 COMMITTEE CHAIRMAN BAHADORI: So you can go and  
8 read very carefully what people's comments were, especially  
9 John and Rock. Then if I can suggest, if you have time and  
10 it is within your budget, is to actually get together with  
11 those individuals. Because in a 5, 10 minute, 15 minute  
12 span here in the Committee, you are not going to be able to  
13 solve those issues. You need to sit down with them, listen  
14 to their comments, come up with alternatives, pros and cons,  
15 and then bring something that has the support of those  
16 individuals, to the Committee. Because otherwise next time  
17 we are going to go through the same exercise.

18 MR. ESPELET: Sure.

19 COMMITTEE CHAIRMAN BAHADORI: But you are going to  
20 revise your proposal and come here and people are going to  
21 start commenting on it again. John.

22 COMMITTEE MEMBER CICCARELLI: Mr. Chair, I want to  
23 offer an alternate approach but feel free to shoot it down,  
24 though. I wonder whether, given the number of times Leo has  
25 nodded his head indicating receptiveness, and the general

1 agreement I'm hearing for different parts of what we have  
2 been discussing, I might make a motion that would consist of  
3 our requirements as a Committee for a modified proposal and  
4 their request for experiment be allowed to go forward, given  
5 that they make the changes listed in the motion.

6 COMMITTEE CHAIRMAN BAHADORI: I am not sure even  
7 what that's going to be because I heard so many things.

8 COMMITTEE MEMBER CICCARELLI: Okay.

9 COMMITTEE CHAIRMAN BAHADORI: I heard like four  
10 specific items from you, I heard some comments from John  
11 Fisher, I heard some from Rock, some from Larry and so I  
12 personally will not know what I am even voting on.

13 COMMITTEE MEMBER CICCARELLI: I can say --

14 COMMITTEE CHAIRMAN BAHADORI: What is the package  
15 I am voting on?

16 COMMITTEE MEMBER CICCARELLI: I can actually --

17 COMMITTEE CHAIRMAN BAHADORI: And I heard some  
18 from Jim and CBAC's concerns and all that also.

19 COMMITTEE MEMBER CICCARELLI: I am going to go out  
20 on a limb here but I believe I can state it as a motion in a  
21 clear enough way that you will know what you are voting on,  
22 if you are willing to try it.

23 The one thing -- when I made my long comment about  
24 five minutes ago I deliberately took it in priority order  
25 starting with the "no right turn on red" and ending with the

1 one that I thought was least valuable, which is the sign,  
2 okay. So I would, if I were to make a motion, structure it  
3 in a way that the City and its consultant's engineering  
4 judgment could sort of draw the line when the list got long  
5 enough that it doesn't make sense in terms of experimental  
6 architecture. The analysis most important, second in my  
7 book was it must have dotted white instead of solid white  
8 and solid green on the approach, et cetera. So basically if  
9 you decide, based on your judgement, that it's down the line  
10 at number three, which is the egress variations, that's too  
11 much complexity, then we draw the line there. I am not sure  
12 whether we can make that work.

13 COMMITTEE CHAIRMAN BAHADORI: Larry.

14 COMMITTEE MEMBER PATTERSON: I guess the -- and it  
15 may be that that's sufficient for folks. But just for me,  
16 what we're saying is we're going to try to give them some  
17 guidelines in redesigning it then they get to redesign the  
18 experiment and stop where they think they need to stop. And  
19 that doesn't sound to me like the level of direction that  
20 they should be getting from the Committee.

21 COMMITTEE CHAIRMAN BAHADORI: And again, you know,  
22 when we're wording, you know. If you come to us and say  
23 that, well gee, if you don't approve it now the City is  
24 going to lose half a million dollars in grants then I'll be  
25 sensitive. But still, that's not going to be the base for

1 my decision because the City should have foreseen the  
2 schedule and all that. But that would be more sensitive.

3 But if you are telling us that the City is not in  
4 jeopardy of losing money then you can come back in January  
5 or February with a refined, more precise experiment request  
6 considering all the comments. Then I am more inclined to  
7 say, let's wait and do it right, rather than throwing  
8 something and saying, do whatever you want. Rock.

9 COMMITTEE MEMBER MILLER: I was inclined to try to  
10 make a suggestion more similar to what John had in mind. I  
11 know people out there find it really frustrating when we  
12 raise some issues and then end up kicking the ball down the  
13 road a few months. I can remember another government agency  
14 just doing that, now that I think about it.

15 COMMITTEE CHAIRMAN BAHADORI: They're asking us to  
16 ultimately approve something that may end up as a standard  
17 for California for decades to come. So I don't think we --

18 COMMITTEE MEMBER MILLER: Well, and if --

19 COMMITTEE CHAIRMAN BAHADORI: And it has not been  
20 the tradition of the Devices Committee to rush into  
21 decisions. I remember there was a watershed signage, of all  
22 things. A watershed informational signage for the County of  
23 San Diego watershed department. It took them a year and a  
24 half to process it through us.

25 COMMITTEE MEMBER MILLER: Well, I still don't

1 understand the traffic significance of that sign.

2 COMMITTEE CHAIRMAN BAHADORI: Probably nothing.

3 COMMITTEE MEMBER MILLER: But, you know, in this  
4 case, if we are prepared to vote on a series of specific  
5 features that should be either in or out of that design.

6 COMMITTEE CHAIRMAN BAHADORI: Okay.

7 COMMITTEE MEMBER MILLER: I don't think it's right  
8 to put off the decision for a couple months. Now if in the  
9 end we end up voting no to e very feature that's included  
10 then the motion dies. But if in the end, you know, 7 out of  
11 9 of us agree that there should be a right turn on red --

12 COMMITTEE CHAIRMAN BAHADORI: Absolutely.

13 COMMITTEE MEMBER MILLER: That's settled. And I  
14 don't think we need to spend four months trying to figure  
15 out how we would have voted on that.

16 COMMITTEE CHAIRMAN BAHADORI: Absolutely. We are  
17 just discussing the item, there is still no motion on the  
18 floor. If there is a motion it always gets a second and  
19 it's treated like any other motion.

20 COMMITTEE MEMBER CICCARELLI: I want to hear  
21 additional discussion, if it's pleasure, but I've heard a  
22 series of motions in the priority order that I deem them.  
23 The start would be the most important motion. And it does  
24 what Rock says, it --

25 COMMITTEE CHAIRMAN BAHADORI: Before you go with

1 your approach like that to the item, does that mean that if  
2 some of the motions pass, some fail, than the experiment  
3 proceeds with those parts only? Or the experiment goes over  
4 only if all the motions are approved?

5 COMMITTEE MEMBER CICCARELLI: I am not a graduate  
6 level practitioner of Robert's Rules of Order but let me try  
7 one, okay?

8 COMMITTEE CHAIRMAN BAHADORI: Sure.

9 COMMITTEE MEMBER CICCARELLI: The first and  
10 simplest would be: The experiment, the design of the traffic  
11 control must include a prohibition on right turn on red when  
12 the bike box is present.

13 COMMITTEE CHAIRMAN BAHADORI: So there is a --

14 COMMITTEE MEMBER CICCARELLI: That's not a motion,  
15 that's a --

16 COMMITTEE CHAIRMAN BAHADORI: Yeah. I mean, this  
17 is new, we have never, kind of, segmented requests for  
18 experimentation --

19 COMMITTEE MEMBER CICCARELLI: I thought we did.

20 COMMITTEE CHAIRMAN BAHADORI: -- by motion.

21 COMMITTEE MEMBER CICCARELLI: I thought we did a  
22 few in --

23 COMMITTEE CHAIRMAN BAHADORI: We usually vote yes  
24 or no, thumbs up or down on the package.

25 COMMITTEE MEMBER CICCARELLI: That's kind of what

1 I was asking because I can state it that way too.

2 COMMITTEE CHAIRMAN BAHADORI: Yeah.

3 COMMITTEE MEMBER MILLER: I am also not an expert  
4 on Robert's Rules but I think the procedure is actually to  
5 make a motion and then to propose a series of amendments to  
6 the motion.

7 COMMITTEE CHAIRMAN BAHADORI: Yeah, well, there's  
8 a motion.

9 COMMITTEE MEMBER MARSHALL: You vote on the  
10 amendments and then --

11 COMMITTEE CHAIRMAN BAHADORI: There's a motion,  
12 let's see if the motion gets a second.

13 COMMITTEE MEMBER MARSHALL: Let's see if the  
14 motions succeeds.

15 COMMITTEE MEMBER CICCARELLI: That was not a  
16 motion, that was a question.

17 COMMITTEE CHAIRMAN BAHADORI: No? Okay.

18 COMMITTEE MEMBER CICCARELLI: I'm prepared to make  
19 a motion. Mark, go ahead.

20 COMMITTEE VICE CHAIRMAN GREENWOOD: I'll make a  
21 motion. I move that we continue this item to our next  
22 meeting and that Mr. Miller and Mr. Ciccarelli make  
23 themselves available to work with the applicant to work out  
24 these issues. There have been many issues addressed today,  
25 many issues brought up. I think there is a logical

1 experiment to be done here and I think with your help we can  
2 get there at our next meeting.

3 COMMITTEE CHAIRMAN BAHADORI: There's a motion on  
4 the floor, is there a second?

5 COMMITTEE MEMBER: I'd second.

6 COMMITTEE CHAIRMAN BAHADORI: There is a motion  
7 and a second that we continue and the applicant works with  
8 the Committee members who have shown a specific interest to  
9 fine-tune the experiment and come back.

10 Discussions? John.

11 COMMITTEE MEMBER CICCARELLI: I'm prepared to sign  
12 up to work with Rock and Leo to achieve a much-improved  
13 experimental proposal that incorporates a lot of the things  
14 that I think we've agreed on today.

15 I am not prepared to support a motion to continue  
16 because I'm -- since it's the delay issue and the resources  
17 and the mobilization of a small city that's decided to do an  
18 experiment, of course. If it comes to that so much the  
19 better but I think we can solve this today.

20 COMMITTEE CHAIRMAN BAHADORI: There is a -- there  
21 was discussion on the motion; anybody else?

22 COMMITTEE MEMBER MILLER: My comments were John's  
23 comments.

24 COMMITTEE CHAIRMAN BAHADORI: Pardon?

25 COMMITTEE MEMBER MILLER: My comments are John's

1 comments.

2 COMMITTEE CHAIRMAN BAHADORI: Anybody else?

3 COMMITTEE MEMBER MILLER: I still feel we can do  
4 something --

5 COMMITTEE CHAIRMAN BAHADORI: It's a good motion.  
6 Again, I personally wish there was the City of LA with 20  
7 intersections doing the different treatments and it's sad  
8 that larger agencies have not stepped up to the plate. It's  
9 a smaller city but we have you as an applicant and we are  
10 glad to have you. We are not meaning to be difficult, we  
11 just want to get some meaningful result out of the  
12 experiment.

13 Any other discussions? Okay, there is a motion  
14 and a second. We have heard from two members. Let's all  
15 those in favor say aye.

16 (Ayes.)

17 COMMITTEE CHAIRMAN BAHADORI: Opposition?

18 (Nos.)

19 COMMITTEE CHAIRMAN BAHADORI: There are two nos.  
20 There are three nos?

21 COMMITTEE MEMBER MARSHALL: There are three, three  
22 nos.

23 COMMITTEE CHAIRMAN BAHADORI: Okay, let's do a  
24 roll vote. Okay.

25 Mr. Marshall?

1 COMMITTEE MEMBER MARSHALL: No.

2 COMMITTEE CHAIRMAN BAHADORI: Mr. Winter?

3 COMMITTEE MEMBER WINTER: Aye.

4 (Ayes and Nos around the dais.)

5 COMMITTEE SECRETARY SINGH: The motion fails six  
6 to three.

7 COMMITTEE CHAIRMAN BAHADORI: The motion fails, we  
8 need seven votes to pass the motion.

9 COMMITTEE MEMBER MILLER: Wait. That motion  
10 passed.

11 COMMITTEE SECRETARY SINGH: No, it failed.

12 COMMITTEE CHAIRMAN BAHADORI: It failed.

13 COMMITTEE SECRETARY SINGH: We need 75 percent.

14 COMMITTEE CHAIRMAN BAHADORI: We need seven votes.

15 COMMITTEE MEMBER MILLER: Oh, 75. I didn't know  
16 that. I think we're a bloc; I had no idea.

17 COMMITTEE CHAIRMAN BAHADORI: Any action, any  
18 action of the Committee passes by seven affirmative votes  
19 and we're short one.

20 COMMITTEE SECRETARY SINGH: So, is there any  
21 second motion?

22 COMMITTEE CHAIRMAN BAHADORI: Okay, that motion  
23 failed, I'm looking for alternative motions.

24 COMMITTEE VICE CHAIRMAN GREENWOOD: I would like  
25 John to start it.

1 COMMITTEE MEMBER CICCARELLI: I am getting input  
2 from a member of the public and I --

3 COMMITTEE CHAIRMAN BAHADORI: Do you want to break  
4 for five minutes and come back?

5 COMMITTEE MEMBER CICCARELLI: I am ready to move.

6 COMMITTEE CHAIRMAN BAHADORI: You are ready to  
7 move, let's move.

8 COMMITTEE SECRETARY SINGH: Go ahead.

9 COMMITTEE CHAIRMAN BAHADORI: So that motion  
10 failed, okay. Anybody else ready to make a motion?

11 COMMITTEE MEMBER CICCARELLI: I would like to move  
12 a series of recommendations for the experimental design and  
13 that the Committee approve the experiment if it includes  
14 these features.

15 COMMITTEE CHAIRMAN BAHADORI: Okay, there is a  
16 motion. Clarify, please, on the motion that the experiment  
17 will move forward if all of your series of motions are  
18 approved or not.

19 COMMITTEE MEMBER CICCARELLI: I would expect some  
20 amendment-type discussion if there is any heartburn.

21 COMMITTEE CHAIRMAN BAHADORI: Okay. So there is a  
22 motion that we move forward with this item based on the  
23 series of other motions to be followed.

24 COMMITTEE MEMBER CICCARELLI: It's the liberty of  
25 the members and the Committee to make amendments, friendly

1 or otherwise, but I am prepared to make a motion, a detailed  
2 motion, that I would like to see considered.

3 COMMITTEE CHAIRMAN BAHADORI: Is there a second  
4 for your motion?

5 COMMITTEE MEMBER CICCARELLI: I haven't stated the  
6 motion yet.

7 COMMITTEE CHAIRMAN BAHADORI: Oh, you want to make  
8 a series of motions?

9 COMMITTEE MEMBER CICCARELLI: No, I want to make s  
10 single --

11 COMMITTEE CHAIRMAN BAHADORI: Let's everyone calm  
12 down.

13 COMMITTEE MEMBER CICCARELLI: Okay.

14 COMMITTEE CHAIRMAN BAHADORI: Okay, what is it  
15 exactly you're recommending?

16 COMMITTEE MEMBER CICCARELLI: I move approval of  
17 the requested experiment, provided that it include the  
18 following features:

19 Feature number one. For those installations at  
20 which the advanced waiting area is present, "no right turn  
21 on red" must be signed.

22 Element number two. That the analysis of the  
23 video observations include the following four elements. The  
24 presence of near-misses and evasive moves, the type,  
25 longitudinal and lateral position and timing relative to the

1 signal cycle of conflicts. I think I need to add the  
2 scanning behavior of the bicyclist, both whether scanning  
3 occurs and where it occurs in the cyclist's approach to the  
4 conflict area.

5 Element three. That the approach bike lane. That  
6 is, the part of the bike lane with continuous width on the  
7 approach before you reach the storage area in the limit  
8 line, be dotted white rather than solid white. And in that  
9 area if green enhancement is used that the green be broken  
10 as the white is broken per the Federal Highway  
11 Administration's interim approval.

12 Item four. That if the egress lane component is  
13 tested that three variations be tested. No egress lane, a  
14 dotted white egress lane and a dotted white egress lane with  
15 green enhancement; but not a solid green egress lane.

16 And finally, that should the applicant deem it  
17 practical, given their resources, that a standard bike lane  
18 with no green color, no advanced waiting area and no egress  
19 lane, be tested as a base case as one of the installations.

20 That is my motion.

21 COMMITTEE CHAIRMAN BAHADORI: Is there a second?

22 COMMITTEE MEMBER: There is a motion and second.

23 Discussion? Mr. Patterson.

24 COMMITTEE MEMBER PATTERSON: Just one additional  
25 thing. Did you mention the signage in there?

1 COMMITTEE MEMBER CICCARELLI: I did not mention  
2 the signage.

3 COMMITTEE MEMBER PATTERSON: Because that's an  
4 important element for me.

5 COMMITTEE MEMBER CICCARELLI: I'm going to go out  
6 on a limb here and say, and that the experiment not include  
7 the non-standard signs as shown in the NACTO figure for bike  
8 boxes.

9 COMMITTEE CHAIRMAN BAHADORI: There is a motion,  
10 there is a second. Discussion?

11 COMMITTEE MEMBER MILLER: I'd like to offer One  
12 friendly amendment; I'm not sure what a friendly amendment  
13 is. But I think the right turn on red should be where a  
14 separate right turn lane is not present.

15 COMMITTEE MEMBER CICCARELLI: Thank you, Rock.

16 COMMITTEE MEMBER MILLER: Because I think it is  
17 present in a couple of them.

18 COMMITTEE MEMBER CICCARELLI: I accept that  
19 friendly amendment.

20 COMMITTEE MEMBER WINTER: And just building on  
21 that, if I could ask. Is it something to look at as a video  
22 analysis, the rate of violation of that sign if it were to  
23 be installed? It's my experience that it's a heavily  
24 violated sign when it's installed for good reasons, at  
25 skewed intersection or otherwise. But it might be

1 interesting to know if there is a certain rate of violation  
2 to a "no right on red."

3 COMMITTEE MEMBER CICCARELLI: I am sensitive to  
4 the comments of other members regarding the difficulties  
5 with the Vehicle Code and a sign that appears to encourage  
6 behavior contrary to the Vehicle Code and that's why my  
7 motion includes not using that non-standard sign.

8 COMMITTEE MEMBER WINTER: No, I'm talking about  
9 the "no right turn on red." If that sign is installed.

10 COMMITTEE MEMBER CICCARELLI: Yes.

11 COMMITTEE MEMBER WINTER: If that sign is  
12 installed it may be useful to know what rate of violation of  
13 right turners are going on the red anyway.

14 COMMITTEE MEMBER CICCARELLI: I accepted your  
15 friendly amendment, if I understand it correctly, to mean  
16 that where in the experimental installations the "no right  
17 turn on red" sign is posted that the video analysis also  
18 look at violations of that posted sign; is that correct?

19 COMMITTEE MEMBER WINTER: Yes.

20 COMMITTEE MEMBER CICCARELLI: I accept the  
21 amendment.

22 COMMITTEE CHAIRMAN BAHADORI: There is a motion  
23 and a second. Discussion, any more?

24 Well, I personally have to vote no just because I  
25 don't like the experiment, I don't think this is the way the

1 Devices Committee should operate. If an experiment comes to  
2 us and it is not ready in full form, the package, we send it  
3 back. And we have done it many, many times before on issues  
4 much, much less important; actually in my mind, rather  
5 trivial, such as a watershed information sign that's going  
6 to go the side of the freeway. But we want to make sure  
7 that when we vote we have all the Is dotted and all the Ts  
8 crossed. Especially if their experimentation is supposed to  
9 end in a standard some day. We just want to take time.

10 And again, I didn't hear a compelling argument  
11 from the City saying that if you wait until we refine it and  
12 come back to you in January or February you're going to lose  
13 money. And there are a couple of issues still in my mind, I  
14 am not very comfortable with it.

15 But still we have a motion and a second so if  
16 there are no more discussions we go for a vote. Devinder?

17 COMMITTEE SECRETARY SINGH: I agree with you.

18 COMMITTEE CHAIRMAN BAHADORI: We go for a vote.

19 Let's do another roll. You heard the motion. It's been a  
20 long motion but we have the verbatim minutes for future  
21 reference so that the applicant knows exactly what the  
22 motion was. Mr. Marshall?

23 COMMITTEE MEMBER MARSHALL: Yes.

24 COMMITTEE CHAIRMAN BAHADORI: Mr. Winter?

25 COMMITTEE MEMBER WINTER: No.

1 COMMITTEE CHAIRMAN BAHADORI: No.

2 COMMITTEE VICE CHAIRMAN GREENWOOD: Aye.

3 COMMITTEE CHAIRMAN BAHADORI: Mark.

4 I would say No.

5 (No, no, yes, no, yes, around the dais.)

6 COMMITTEE CHAIRMAN BAHADORI: What's the tally?

7 COMMITTEE SECRETARY SINGH: The same thing, the  
8 motion failed, we need seven votes.

9 COMMITTEE CHAIRMAN BAHADORI: Yes, the motion  
10 fails again. And we lost a member so we had better move  
11 before we lose the quorum. How many do we have? We are  
12 still in good shape, we are still in quorum.

13 So, okay. Because Larry had a plane he had to  
14 catch.

15 COMMITTEE MEMBER CICCARELLI: Mr. Chair, I would  
16 like to get the sense of the members that voted no, whether  
17 their reason for voting no was essentially what you so  
18 eloquently stated that you would like to see a completed  
19 modified proposal brought forward?

20 COMMITTEE MEMBER CICCARELLI: I just, for me --  
21 for me -- on the issue, on an issue like this I totally  
22 defer to members like yourself and Rock Miller because I am  
23 bicycle expert. I listen to you guys and I listen to Jim  
24 when he comes as the Chairman of CBAC. And that's where I  
25 do my education and that's where I do the learning.

1           But as a matter of practice, I think when an  
2 experimentation package is in front of the Committee it must  
3 be in full, complete form and we vote thumbs up or down with  
4 minor tweaks sometimes here and there. But we don't go and  
5 fundamentally redesign the request in the Committee so.

6           COMMITTEE MEMBER CICCARELLI: I think this gives,  
7 actually, us an opportunity to get other reasoned input  
8 because CBAC has a meeting in early December. So to the  
9 extent that applicant is able to modify the proposal in time  
10 to run it by CBAC I think their input will be valuable. I  
11 am not suggesting any motion.

12           COMMITTEE MEMBER CICCARELLI: And again, you know,  
13 we don't want to be difficult but what you are doing is  
14 important. It's really important work. So we want to make  
15 sure it gets done right and there is some value in a year  
16 and a half or two years from now that we can take really  
17 some lessons from your experiment and use it to establish a  
18 standard for bike box or other features -- intersection  
19 treatment. Rick, you had something?

20           COMMITTEE MEMBER MARSHALL: Yes, thank you. I am  
21 not adverse to having more time to work on this and improve  
22 it. But my votes reflected my feeling that I really feel  
23 that this is within reach today and I was willing to try to  
24 go there. I considered the motion not really that great a  
25 variation on what had been brought to us as the request so I

1 would consider it within the realm of minor tweaks and that  
2 was my understanding of it. I feel that I have sufficient  
3 understanding of the proposal and the frame of the motion  
4 that I felt it was within reach today.

5 COMMITTEE CHAIRMAN BAHADORI: Thank you.

6 COMMITTEE MEMBER MARSHALL: But if the majority  
7 needs -- if we need to land on the side of taking more time  
8 to get enough votes to pass something I am willing to go  
9 there.

10 COMMITTEE MEMBER CICCARELLI: We don't have a  
11 majority. We have got two motions and both have failed.

12 COMMITTEE MEMBER MARSHALL: I guess what I am  
13 really trying to say is I will change my vote on the earlier  
14 motion if it's restated.

15 COMMITTEE CHAIRMAN BAHADORI: Well, we have voted  
16 on that motion so if there is going to be -- there has got  
17 to be another motion. Do you want to make another motion as  
18 the sponsor of the item?

19 COMMITTEE VICE CHAIRMAN GREENWOOD: I don't know.

20 (Laughter.)

21 COMMITTEE MEMBER CICCARELLI: Could you restate  
22 your earlier motion?

23 COMMITTEE VICE CHAIRMAN GREENWOOD: My earlier  
24 motion was to continue the item to our next meeting and that  
25 Rock and yourself make yourselves available to the applicant

1 to work out the issues we have talked about today and come  
2 back to us with a whole experiment that the Committee can  
3 understand and approve.

4 COMMITTEE MEMBER CICCARELLI: Given that my motion  
5 went down with no vote I would certainly want to take those  
6 actions anyway, I would be glad to support a motion to urge  
7 me to do so.

8 COMMITTEE MEMBER CICCARELLI: Okay, so you have  
9 made the motion. Is there a second on this?

10 COMMITTEE SECRETARY SINGH: I second it.

11 COMMITTEE CHAIRMAN BAHADORI: There is another  
12 motion again, you know, previously repeated, that we  
13 continue with asking the applicant to spend some time with  
14 the individuals who have the expertise and have shown a  
15 specific interest to come back with a fine-tuned and more  
16 detailed final form request for experimentation.

17 Any discussion on that again? Let's go through  
18 the roll.

19 COMMITTEE SECRETARY SINGH: Go to roll.

20 COMMITTEE CHAIRMAN BAHADORI: Let's go through  
21 roll. Mr. Marshall?

22 COMMITTEE MEMBER MARSHALL: Yes.

23 (Yes, Aye, Aye, Yes, Aye, Yes, Aye.)

24 COMMITTEE CHAIRMAN BAHADORI: The motion passes  
25 unanimously. Thank you.

1           Thank you very much. I don't know if this was  
2 your first exposure to the Devices Committee or not.

3           MR. ESPELET: It was.

4           COMMITTEE CHAIRMAN BAHADORI: My first exposure to  
5 the Devices Committee was back in 1993 when I was working  
6 for the City of Orange and we wanted to experiment with the  
7 first solar-powered LED lighted RPM for the first time in  
8 California. And the meeting was in San Diego and I went  
9 there and I went through the same -- similar experience as  
10 you have today and mine was about three hours long. And I  
11 said, I don't want to have anything to do with this  
12 Committee ever in my life and see what happened.

13           (Laughter.)

14           MR. ESPELET: One quick question just on the  
15 practicality of it. What I am asked to do is go back, work  
16 with the City, revise the application, submit it to you as a  
17 formal -- or should I submit to the CBAC first to get their  
18 input?

19           COMMITTEE SECRETARY SINGH: With CBAC you can -- I  
20 will forward to CBAC, okay. When you submit it to me.

21           MR. ESPELET: Right.

22           COMMITTEE SECRETARY SINGH: Try to, you know,  
23 submit it before December's -- the CBAC meeting December --  
24 the first week of December. So if you submit your packet.  
25 And remember, at the same time I will forward it to CTCDC,

1 also to CBAC, and get comments from them.

2 COMMITTEE CHAIRMAN BAHADORI: Actually to follow  
3 the protocol you need to go through your sponsor.

4 MR. ESPELET: Through Mark, okay.

5 COMMITTEE CHAIRMAN BAHADORI: Yes.

6 MR. ESPELET: So I'll follow up with Mark with a  
7 revised request and then the next meeting -- the next --

8 COMMITTEE CHAIRMAN BAHADORI: Is going to be the  
9 end of January or early, the first week of February so we'll  
10 decide at the end of the meeting.

11 MR. ESPELET: Okay,

12 COMMITTEE SECRETARY SINGH: But make sure, you  
13 know, John and Rock are on-board with what you're doing.

14 MR. ESPELET: Yes.

15 COMMITTEE MEMBER MILLER: You know, work with us  
16 whatever way is convenient with you and us

17 COMMITTEE MEMBER CICCARELLI: We'll make ourselves  
18 available.

19 COMMITTEE MEMBER MILLER: I'm sure we'll both love  
20 to help you come up with one proposal.

21 MR. ESPELET: Appreciate it. Appreciate it.

22 COMMITTEE MEMBER MILLER: CBAC, that's -- you have  
23 to go through us You're showing respect for the input you  
24 can get by choosing to go through CBAC and it probably  
25 wouldn't be a bad idea to do so.

1 MR. ESPELET: Okay.

2 COMMITTEE MEMBER MILLER: But the official  
3 procedure is through this Committee.

4 MR. ESPELET: Perfect, thank you. Thanks  
5 everyone.

6 COMMITTEE CHAIRMAN BAHADORI: Thank you all for  
7 your comments and suggestions.

8 COMMITTEE MEMBER CICCARELLI: As far as the CBAC  
9 process, Jim is Vice Chair.

10 COMMITTEE CHAIRMAN BAHADORI: Let me take a very  
11 quick vote here. I think there might be another, what, 15  
12 minutes or so? Do you want to break or --

13 COMMITTEE SECRETARY SINGH: We need a break  
14 because Sam is going to present his PowerPoint.

15 COMMITTEE CHAIRMAN BAHADORI: So if you for like  
16 ten minutes. Be back here at 12:10, thank you.

17 (Off the record from 11:58 a.m. to 12:12 p.m.)

18 COMMITTEE CHAIRMAN BAHADORI: Can we all get back  
19 so we can call the meeting back to order, please.

20 Okay, thank you everyone, let's call the meeting  
21 back to order. We are done with the item number -- okay,  
22 now we are to 11-04, which is Experiment with Rectangular  
23 Rapid Flashing Beacon, versus the existing Circular Rapid  
24 Flashing Beacon. It's a Final Report on the experimentation  
25 that is being Submitted by t he City of Santa Monica.

1           And Mr. Greenwood, this was your item, you want to  
2 introduce it?

3           COMMITTEE VICE CHAIRMAN GREENWOOD: Yes. I'll  
4 introduce Sam Morrissey with the City of Santa Monica and he  
5 is going to give us a brief presentation.

6           MR. MORRISSEY: Thank you everybody.

7           So this is an experiment that was initiated back  
8 in 2010 when I came before the Committee to ask for a  
9 request to experiment with a rectangular rapid flashing  
10 beacon. If you recall at that time FHWA had issued interim  
11 approval of the rectangular rapid flashing beacon device but  
12 the state had not yet adopted it. So during the discussions  
13 with the Committee it was understood that there was a  
14 question as to whether a rectangular shape or a circular  
15 shape was the differentiating factor so we were directed to  
16 experiment with both the rectangular and circular shaped  
17 beacons.

18           Subsequent to our approval the state actually  
19 adopted the FHWA's interim approval for adoption statewide  
20 of the rectangular rapid flashing beacon. I inquired back  
21 to the Committee if we should still keep our experiment  
22 going and the Committee said yes, please do because there is  
23 some interest in seeing whether there really is a difference  
24 in circular devices versus rectangular devices.

25           So on the screen is kind of a picture that we

1 brought to the Committee to say here's the two devices we'll  
2 use. I'll show you later the devices as they were  
3 installed; they are slightly different than what is shown in  
4 the picture.

5 We ended up using the devices at two locations in  
6 Santa Monica, both on Santa Monica Boulevard, the first one  
7 at Princeton Street. This stretch of Santa Monica Boulevard  
8 where we tested it is two lanes in each direction with the  
9 center two-way left turn lane, 30 mile per hour speed limit.  
10 The 85th percentile speeds at both locations is about 32  
11 miles an hour and we have about 28,000 cars per day.

12 So at Princeton Street we installed the --  
13 initially we installed the rectangular beacon and at  
14 Stanford Street we initially installed the circular beacon  
15 but both configurations were relatively similar.

16 We just had to do some modifications to the  
17 devices. Kind of informative to people in cities that  
18 install them but not of much interest to the Committee here  
19 but we did some after-market installation modifications and  
20 then ultimately installed the device. This is a picture of  
21 the device in January of 2012 when we first installed it at  
22 Princeton Street and here it is at Stanford Street with the  
23 circular beacon.

24 So getting right to the heart of our evaluation,  
25 the findings. We ended up doing three different sets of

1 evaluations. We looked at the devices in January of 2012,  
2 May 2012 and November 2012. When we first looked at the  
3 devices in January we noticed that the rectangular beacon  
4 generally had higher rates of yielding response when you  
5 compared it from off versus on. We did see a little odd  
6 occurrence in the dust conditions where the rectangular  
7 beacon actually lowered in yielding response from 85 percent  
8 to 80 percent. We think that was having to do with the fact  
9 that most of that was in the westbound direction with the  
10 setting sun in January being right in people's eyes.

11 We did notice that the circular beacon, the  
12 yielding rates were very high but the change rate was not as  
13 much so we had some questions about maybe the location of  
14 the device. So when we went back in May we actually swapped  
15 locations, we put the circular beacon at Stanford Street --  
16 at Princeton Street, we put the rectangular beacon at  
17 Stanford, switching them. We saw again similar yielding  
18 rates. We saw big jumps from 20 to 45 percent for the  
19 rectangular and circular and both were the same. We did not  
20 see the same drop but we think because in the summer months  
21 the sun is higher in the sky, it wasn't really having the  
22 same impact during dusk conditions.

23 But there was still the fact that with the  
24 circular beacon we weren't seeing as huge of a jump in terms  
25 of yielding response rates, so we felt that maybe it was the

1 fact that the circular beacon was kind of a bigger  
2 structure, kind of looked more like a railroad crossing  
3 signal as we you went up to it, whereas the rectangular  
4 beacon had a very low profile, a small profile.

5           So what we did for the last test is we took the  
6 back plates off of the circular beacons. All the circular  
7 beacons were assembled from standard eight-inch traffic  
8 signals which had back plates. We took those back plates  
9 off to give it a lower profile and we actually modified and  
10 made a back plate for the rectangular beacon to give it kind  
11 of a bigger profile. So in doing that -- and you see the  
12 results.

13           In November we then put the devices back to where  
14 they were but added the back plates. Again we saw very good  
15 yielding response rates in the high percentages. Still we  
16 saw the biggest jumps for the rectangular beacon. We think  
17 it's just because the flashing beacons are very bright for  
18 the rectangular and they are very distinct compared to the  
19 circular rapid flashing beacons which do look like  
20 traditional signals.

21           So our results are posted here and you can see  
22 them in the report on-line. Just for comparative factors we  
23 compared these to the yielding responses that we saw with  
24 our in-roadway warning lights. Which if you go back to our  
25 initial request, we are looking to use these rectangular

1 beacons to replace in-roadway warning lights. And we see  
2 very similar yielding response rates, up in the 80 to 90  
3 percent range.

4 So in conclusion, we really have seven key points.

5 Neither device really appeared to have any effecting in  
6 yielding distance. The yielding distances were consistent  
7 across both devices.

8 We found that the rectangular rapid flashing  
9 beacon was more effective during daytime hours with an  
10 average yielding response increase of 17 percent for the  
11 rectangular beacon during daytime hours.

12 in the dusk it appeared that the circular beacon  
13 was more effective, it had an average increase in yielding  
14 response rates of about 28 percent.

15 And then at nighttime sessions the rectangular  
16 beacon was more effective with an average yielding response  
17 increase of about 35 percent. Really it seemed that the  
18 rectangular beacons were much brighter and much more visible  
19 during nighttime conditions than the circular beacons.

20 The fifth point is that the locations clearly had  
21 some impact and effect on the yielding response rates,  
22 however, we are not clear as to the extent of those effects.  
23 Similar to a lot of other devices in our city we recommend  
24 that future decisions to install any of these beacons are  
25 based on carefully considered factors, field conditions and

1 in conformance with the Manual on Uniform Traffic Control  
2 Devices.

3           Six, we did think that the presence of back plates  
4 did not really have a significant effect on yielding  
5 response rates for the rectangular beacons because the  
6 yielding responses were still in the 80 percent range, both  
7 with and without the back plates on the rectangular beacon.  
8       Again, it's about an overall increase of about 25 percent  
9 for the rectangular rapid flashing beacon.

10           So last, overall, the rectangular beacon seems to  
11 have the greatest positive impact on driver yielding  
12 response rates during all time periods. The functionality  
13 of the device, coupled with its minimalistic design and  
14 overall effectiveness indicates to us that it would be a  
15 welcome addition to our toolbox of pedestrian crossing  
16 enhancements. Furthermore, as the device is now adopted for  
17 interim approval statewide and as a kind of off-the-shelf  
18 device that exists we would pursue utilizing the rectangular  
19 over the circular beacon going into the future.

20           So that's it for my quick report unless there's  
21 any questions.

22           COMMITTEE CHAIRMAN BAHADORI: John.

23           COMMITTEE MEMBER CICCARELLI: Could you backspace  
24 to where you actually show the circular in the field. One  
25 thing that struck me about the RFB when it was first interim

1 approved was how it integrated with the sign package.  
2 That's the highest pedestrian sign I've seen recently, I  
3 guess it's because you don't want to move the street name  
4 sign up. But in the RFB installation you've got the yellow  
5 diamond sign -- yeah, there you go. And then the arrow  
6 sign. So as a motorist or an approaching driver of  
7 bicycles, a bicycle or a motor vehicle, I perceive this as a  
8 single assembly. Whereas in the other configuration that  
9 looks disconnected to me. So I am wondering whether some of  
10 the difference in the results has to do with the layout of  
11 the assembly, frankly.

12           The other aspect of RFBs is, at least one of the  
13 vendors, the cluster is not just going out in a normal  
14 fashion, it's actually tuned so that it appears brightest at  
15 a certain distance on the approach depending on the  
16 calculated approach speed and they actually adjust the  
17 cluster based on the approach speed that you expect. I  
18 don't know that that was the case for your yellow beacon so  
19 that might be an unfair advantage, experimentally, for the  
20 rectangular beacon if it has that focusing effect at a  
21 certain approach distance. Could you comment?

22           MR. MORRISSEY: Yes. First on the location. So  
23 this is when we first put it up in January we did notice the  
24 same factor when we put these up. It was actually where the  
25 little transformer box and battery boxes for the solar panel

1 kind of limited where we put the sign and the street name  
2 sign. So when we went back to subsequent location when we  
3 switched it we actually tried a configuration closer to  
4 this.

5 COMMITTEE MEMBER CICCARELLI: Good.

6 MR. MORRISSEY: I did not include any pictures in  
7 here but a lot of it was related to where the poles were and  
8 what holes were already drilled in the poles and what we  
9 were trying to make use of. So we did try and play with  
10 that configuration a little bit. Especially when we took  
11 the back plates off we were able to condense it all into  
12 more of a stand-alone unit. I will try and put up some  
13 pictures for future presentations.

14 In terms of your second question, which was tuning  
15 and aiming them. I didn't cover it much in our kind of  
16 aftermarket modifications where we -- both of these devices  
17 when we purchased them they were just set to point in one  
18 direction. We were going to drill a hole in our pole and  
19 then that's the direction it would point. We didn't like  
20 that so we actually made mountings for both the rectangular  
21 and the circular that allowed us to fully adjust and angle  
22 and aim the devices at the approach vehicle at the distance  
23 that we wanted for yielding.

24 COMMITTEE MEMBER CICCARELLI: So both of them were  
25 -- they were neutral from that perspective, they both had

1 the aiming advantage.

2 MR. MORRISSEY: Fully articulated and we direct  
3 them to the oncoming traffic.

4 COMMITTEE MEMBER CICCARELLI: Okay.

5 COMMITTEE MEMBER MILLER: I just want to make sure  
6 I understood the thrust of the presentation. Because of the  
7 interim approval for the rectangular beacon and because it  
8 looked like it was a little bit better than the circular the  
9 City is kind of leaning towards not testing the circular  
10 anymore and just going with the rectangular because it seems  
11 that's the way the future is going. Does that summarize --

12 MR. MORRISSEY: Yes.

13 COMMITTEE MEMBER MILLER: Okay, okay. I just  
14 wanted to make sure I understood it right.

15 COMMITTEE MEMBER WINTER: And just so I also  
16 understood. You mentioned in-road lights. Are you  
17 gravitating away from those or are you complementing those  
18 in some way with either of these treatments?

19 MR. MORRISSEY: Yes. When we first came in 2010  
20 the whole reason we were looking at the rectangular beacons  
21 is because we wanted to move away from the in-road warning  
22 lights. And we do see that they're about as equally as  
23 effective.

24 COMMITTEE MEMBER CICCARELLI: One more question.  
25 The RFB light bars that I've seen have a third indication on

1 the -- in the pedestrian sees. So the pedestrian,  
2 especially across the street, could see on the far side  
3 light bar that the device is active. What did you do when  
4 you had this built?

5 MR. MORRISSEY: So the devices we had, the  
6 rectangular beacons did not have the side lights on them.

7 COMMITTEE MEMBER CICCARELLI: Oh, really?

8 MR. MORRISSEY: I think they were an early model  
9 so they were the same as the circular. The newer versions  
10 that we have seen do have that side light, I like that  
11 feature.

12 COMMITTEE MEMBER CICCARELLI: Okay. So you  
13 experimented with both the rectangular device and the  
14 circular device not having the pedestrian indications.

15 MR. MORRISSEY: Yeah, the pedestrians would not  
16 have any knowledge unless they'd come and looked.

17 COMMITTEE MEMBER CICCARELLI: Okay.

18 COMMITTEE SECRETARY SINGH: Sam, both devices are  
19 kind of standard in the federal MUTCD but apparently it was  
20 not in the CA MUTCD but it's interim approval.

21 MR. MORRISSEY: Yes.

22 COMMITTEE SECRETARY SINGH: It's standard, kind  
23 of. Do you recommend any changes to the CA MUTCD or not?

24 MR. MORRISSEY: I haven't really considered that.

25 COMMITTEE SECRETARY SINGH: Okay.

1 COMMITTEE CHAIRMAN BAHADORI: Okay, thank you,  
2 Mr. Morrissey. Any other questions.

3 COMMITTEE MEMBER CICCARELLI: I think as a member  
4 of the Committee -- Devinder raises a good point. Now that  
5 you have had all of this experience, probably the most  
6 experience in California in really looking at the devices  
7 from a research perspective, I would be interested in your  
8 reading of the FHWA interim approval to see whether there's  
9 things we should add to that. Should it be used as the  
10 basis for language in the CA MUTCD?

11 MR. MORRISSEY: I'll take a look.

12 COMMITTEE CHAIRMAN BAHADORI: And you know, that's  
13 just the reason. We do do the experimentation and sometimes  
14 you do experimentation and people just do experimentation,  
15 it doesn't go anywhere. But this tells me --

16 I have two questions. First, why are we even  
17 using circular flashing beacons rom now on?

18 And two, why are we spending, wasting money on the  
19 back plates? If back plates are not effective why are we  
20 wasting money putting back plates on flashing beacons?

21 COMMITTEE SECRETARY SINGH: Due to senior  
22 citizens, back plates.

23 COMMITTEE CHAIRMAN BAHADORI: What's that?

24 COMMITTEE SECRETARY SINGH: Due to senior  
25 citizens.

1           COMMITTEE CHAIRMAN BAHADORI: Those are questions  
2 I have. But what I'm saying is that if you do  
3 experimentation for the sake of experimentation and then we  
4 don't learn anything from it and move forward and make some  
5 changes then what was the point of experimentation?

6           COMMITTEE MEMBER MILLER: I think it's great that  
7 California cities are choosing to join into these national  
8 experiments. I look to the National Committee and the FHWA  
9 to add RFDs to the National Manual as soon as they're pretty  
10 comfortable and I think that's the direction we are going  
11 in. And as soon as it is added into the manual I would say  
12 this Committee should take that up. And I would be  
13 recommending we add it to the state manual as quickly as  
14 possible afterwards because the interim approval sort of  
15 sounds to locals like it's actually going to happen. I  
16 think it could be fine-tuned from what's in there but the  
17 course for me would be, it goes into the manual, then we  
18 take it up and it probably goes into the state manual  
19 because it's in the national.

20           COMMITTEE CHAIRMAN BAHADORI: Anybody else has any  
21 questions or discussions on this?

22           Any members of the audience? I saw Mr. Fisher  
23 raising his hand. You want to share your thoughts with us?

24           Thank you, Mr. Morrissey, very, very good summary  
25 report of your findings, appreciate it.

1           MR. FISHER: John Fisher. I was on the Committee  
2 when this item came to us and I handed it off to Mark. But  
3 I did want to make some comments on this and give a little  
4 bit of background. When the feds gave interim approval for  
5 the flashing --

6           COMMITTEE SECRETARY SINGH: Rectangular.

7           MR. FISHER: Rectangular rapid flashing beacon  
8 with the sign. They tested it in a location. And the only  
9 thing that was tested was this 2 inch by 5 inch lighted  
10 device. So when it cam for approval we asked the question,  
11 well, can you use other shapes, can you use other sizes?  
12 And they said, well, this is effective and this is the only  
13 one we tested so that's what we're going to approve. And I  
14 left open the question, is it really the flash rate or is it  
15 the shape or is it the size? So we really wanted to find  
16 that out. And I really have to thank Sam and the City of  
17 Santa Monica for being willing to do that additional testing  
18 to find out how well the circular flashing beacon works.

19           Now the reason why I wanted to test that anyway  
20 and why I encouraged Santa Monica to do so is because some  
21 agencies may prefer to go with the standard device that is  
22 approved under the interim authority, interim approval, and  
23 that's fine. But I come from a perspective of a large  
24 agency where we have to maintain a stock of pedestrian  
25 signs, we have to maintain a stock of signal sections and

1 lenses. When a sign isn't lit do you call out the signal  
2 crew or the sign crew? We had to deal with all these  
3 issues. And I said, why not have some flexibility? Why not  
4 test to see whether a circular would work just as well.

5 That was the whole reason of going into that,  
6 because you can use circular beacons in the conventional  
7 flash mode, that's already allowed. The question was, can  
8 you use them in the rapid flash mode? And so we wanted to  
9 test that.

10 You can spin statistics and numbers any way you  
11 want but if it's okay with you, Mr. Secretary, I would like  
12 to just distribute a copy of what's in the report. And if  
13 you simply look at the effectiveness, the yielding rate for  
14 the rectangular rapid flash beacon and the circular rapid  
15 flash beacon and you look at just the last time they tested  
16 it, November of 2012, it shows that the rectangular rapid  
17 flash beacon had a yielding rate of 74.3 percent. If you  
18 look at the circular rapid flash beacon it has a yielding  
19 rate of 74.0 percent. They're pretty close. And I know we  
20 can talk about the deltas and things like that but I think  
21 this shows that they're pretty close.

22 And some agencies may have a preference for the  
23 rectangular rapid flash beacon. My whole purpose in  
24 bringing this forward to the Committee was to see if the  
25 circular would work as well and to allow some flexibility in

1 the configuration that jurisdictions may wish to use.

2           So I would suggest that if this matter comes to  
3 you again, maybe through the federal process or if you want  
4 to consider it separately, that you consider allowing the  
5 option of the conventional two inch by five inch rectangular  
6 rapid flash beacon. Or if an agency wishes to use off-the-  
7 shelf equipment, allow a circular rapid flash beacon as  
8 well. Thank you.

9           COMMITTEE CHAIRMAN BAHADORI: John, what are your  
10 thoughts of the back plates having no effect whatsoever,  
11 apparently, according to this limited study?

12           MR. FISHER: I think possibly because they were  
13 relatively low mounted and weren't affected by the ambient  
14 light or the storefronts and the streetlights. You know,  
15 back plates are very helpful when they're mounted fairly  
16 high and you're trying to block out the light to see the  
17 signal. But these were mounted, I don't know what, at the  
18 eight foot level, something like that. So maybe it's  
19 because they were low-mounted that that ambient light and  
20 background light was not a factor.

21           COMMITTEE CHAIRMAN BAHADORI: Okay, thank you.  
22 Any questions? Rock.

23           COMMITTEE MEMBER MILLER: Just a comment. I don't  
24 see any reason why an agency that wanted to continue to test  
25 or use or whatever the status of circular indications

1 shouldn't be free to come forward and do that. I think all  
2 we really heard is that I think Santa Monica is feeling  
3 comfortable with the device that they think is going to  
4 become standard really soon and no longer wishes to be that  
5 agency to test an alternative. But if another agency small  
6 or large wants to test an alternative that's exactly what  
7 the process is for.

8 MR. FISHER: And that's why it's good that this  
9 matter was not only tested with other CTCDC but also the  
10 FHWA, because now they have the benefit of these statistics  
11 as well. And hopefully they'll consider them when they  
12 issue a final recommendation.

13 COMMITTEE SECRETARY SINGH: Thank you.

14 COMMITTEE CHAIRMAN BAHADORI: Thank you. John.

15 COMMITTEE MEMBER CICCARELLI: Just following up on  
16 what Rock just said. Sam, the sense of your conclusion, if  
17 I understand it, sort of rephrasing Rock, is that you wanted  
18 to know whether the circular could be significantly more  
19 effective than the rectangular. And now that you have seen  
20 that basically they are roughly comparable in their  
21 effectiveness the industry adoption and the availability of  
22 the off-the-shelf, multiple vendor RFB means there is no  
23 reason for you to think about circular anymore. Is that a  
24 fair assessment?

25 MR. MORRISSEY: Yeah. I mean, I don't want to

1 simplify too much. Really we're looking at this as an  
2 enhancement to crosswalks for safety.

3 COMMITTEE MEMBER CICCARELLI: Right.

4 MR. MORRISSEY: We see that there is some utility  
5 in the low cost, ease of installation, the look and feel of  
6 these devices. We think it's a nice thing to add to our  
7 toolbox rather than pursuing the -- we could -- we are not  
8 stocking a lot of eight-inch signal heads. We have to go by  
9 a bunch of eight-inch signal heads to construct these  
10 circular devices. We don't see the benefit of going down  
11 the road when we can just buy these rectangular devices off  
12 the shelf now, in compliance with the interim approval.

13 COMMITTEE MEMBER CICCARELLI: My hunch when I  
14 first saw your slides today was that part of the  
15 effectiveness is tied up in where you put this thing. You  
16 know, we take the elements of a warning sign and rearrange  
17 them and it might be a whole lot less effective because of  
18 the way the traveling public reacts to the elements of the  
19 sign. There is a lot of attention that goes into the  
20 arrangement of the graphics on a graphical-based sign. I  
21 think something like that is probably operating here too.  
22 So I like that when you got to the third test in November of  
23 2012 the thing was more integrated with the warning sign and  
24 the arrowed plaque. I suspect that's partly why it was more  
25 effective.

1           MR. FISHER: If I can make just one more comment  
2 that I forgot to mention before. Another reason why we  
3 wanted to test this is that when I was with the City of LA  
4 we had installed maybe close to 100 locations where we had  
5 mast arm mounted rectangular flashing beacons. And while  
6 one could argue and I could see the argument that maybe --  
7 did I say rectangular? I meant circular.

8           COMMITTEE CHAIRMAN BAHADORI: Circular.

9           COMMITTEE SECRETARY SINGH: Circular, yes.

10          MR. FISHER: Okay. I could see why some agencies  
11 would elect to use the rectangular version on a vertical  
12 pole if you're just going to mount it roadside right. If  
13 you have, let's say a three lane approach and you want to  
14 use mast arms for the higher target value, the circular  
15 beacons work out real nice where you've got the ped warning  
16 sign there and then you've got a beacon on each side. So it  
17 makes a nice configuration. I have to admit it looks a  
18 little bulky on just a vertical mounting but on the mast arm  
19 it works out real well. So again, the idea was to allow the  
20 different options to see what best fits the situation.

21          COMMITTEE CHAIRMAN BAHADORI: Thank you. Anyone  
22 else? Mr. Beeber.

23          MR. BEEBER: For the record, Jay Beeber. Actually  
24 my comments now are as a member of the Pedestrian Advisory  
25 Committee for the City of Los Angeles. I just happened to

1 be here today and this particular subject came up. And I  
2 have been a big fan of these rectangular rapid flashing  
3 beacons for -- since 2010. I actually wrote a report for  
4 our neighborhood council on that and it's nice to see that  
5 it's moving forward. I've been describing it to a number of  
6 the council offices and things of that nature.

7           One of the things that I had learned, it may be in  
8 the full report or not, is that a lot of it has to do with  
9 how wide the street is. On really, really wide streets  
10 they're more effective if you have an island in the middle  
11 to put a center, to put one in the center as well. There  
12 may be something -- whatever language eventually ends up  
13 coming from the federal government and then also for  
14 California. You may want to look at some options and say,  
15 you know, on wider or multiple lane streets, you know, the  
16 option is to put one in the center as well.

17           But it's nice to see this is moving forward. It's  
18 great that Santa Monica has tested this and done such a  
19 great job in showing how effective they are so thank you.

20           COMMITTEE CHAIRMAN BAHADORI: Great, thank you.  
21 Anyone else? Seeing none we close that part, bring it back.  
22 John.

23           COMMITTEE MEMBER CICCARELLI: I wanted to build on  
24 what Jay just said. The research that compelled FHWA to  
25 move ahead quickly with an interim approval was conducted in

1 St. Petersburg at 18 sites. And they did specifically  
2 compare what's called a two sign layout, which is roadside  
3 right/roadside left versus a four sign assembly which is  
4 roadside right/median left. And the yielding rates are in  
5 the order of 15 to 20 percent higher for the four sign  
6 assembly, probably because the indication is it effectively  
7 brackets the approach compared to roadside left. So I fully  
8 support what he's saying.

9 COMMITTEE CHAIRMAN BAHADORI: Okay, thank you.

10 Okay, it was a good experiment, we'll see where it  
11 goes. Thanks for sharing the results and I'm sure we're  
12 going to see some changes of the national manual and here  
13 also. With that can I have a motion to receive and file  
14 this?

15 COMMITTEE SECRETARY SINGH: I'm sorry, say again?

16 COMMITTEE CHAIRMAN BAHADORI: It's a motion to  
17 receive and file the final report by City of Santa Monica so  
18 we can close the experimentation.

19 COMMITTEE MEMBER: So moved.

20 COMMITTEE CHAIRMAN BAHADORI: There is a motion, is  
21 there a second?

22 COMMITTEE MEMBER: I said, second, I just didn't  
23 say it loud enough.

24 COMMITTEE CHAIRMAN BAHADORI: There is a motion  
25 and second. All those in favor say aye.

1 (Ayes.)

2 COMMITTEE CHAIRMAN BAHADORI: We close that  
3 experimentation, the final report being received.

4 Okay. I think Items 08-07 and 06-02 are being  
5 removed. Mr. Singh, is that right?

6 COMMITTEE SECRETARY SINGH: Yes, Mr. Chairman.  
7 08-07 was authorized by the Committee back in 2008 and we  
8 never see them, the update from the City of San Francisco.  
9 And they also agreed to remove that sign. I put their  
10 statement on page 38 of 39. So the City has agreed to  
11 remove the sign so I am asking the Committee to make a  
12 recommendation to remove it from the "items Under  
13 Experimentation."

14 COMMITTEE CHAIRMAN BAHADORI: Can we do them both  
15 in one motion or do we need separate motions for each?

16 COMMITTEE SECRETARY SINGH: No, we can do one.

17 COMMITTEE CHAIRMAN BAHADORI: Okay. Can I have a  
18 motion for both items 08-07 and 06-02 to remove those items  
19 from under experimentation.

20 COMMITTEE MEMBER: I will make that motion.

21 COMMITTEE MEMBER CICCARELLI: Second.

22 COMMITTEE CHAIRMAN BAHADORI: There is a motion  
23 and a second. All those in favor?

24 (Ayes.)

25 COMMITTEE CHAIRMAN BAHADORI: Opposed?

1           Hearing none, those two items are removed from the  
2 under experimentation table.

3           How many items do we have there now, probably 20?

4           COMMITTEE SECRETARY SINGH: I want to make one  
5 comment basically. When committee members sponsor an item  
6 that's their responsibility to follow-up with the report. I  
7 am doing it on behalf of you folks but we have some items on  
8 the agenda like four or five years old and there is no  
9 update. So I will continue my effort asking for an update  
10 from the local agencies but it is also your responsibility  
11 too.

12           COMMITTEE CHAIRMAN BAHADORI: And the reason is  
13 that some cities come with requests for experimentation but  
14 they actually don't proceed with it. So they just get the  
15 approval and for whatever reason, don't have money or change  
16 their mind or something, so we need to clean that list.

17           Okay, Item 13-08. That's mine. I am going to be  
18 very brief on this. The last meeting we had the discussion  
19 about the need to maybe have a review of the minimum yellow  
20 timing in the state of California in light of NCHRP 713 and  
21 some statistical data that was presented. And also as  
22 instigated by Assembly Bill 612 introduced by Assemblyman  
23 Nazarian, which would have increased the yellow timing by  
24 one second at signalized intersections.

25           Your committee asked that I form a subcommittee to

1 look at this issue. We did. A subcommittee was formed. An  
2 invitation was sent to many, many people; we have now 19  
3 people on the subcommittee. The subcommittee has had two  
4 conference calls already because we have people even from  
5 out of state and we have people representing all kinds of  
6 jurisdictions in California.

7           Just to give you a flavor of the subcommittee, we  
8 have people from public agencies, consulting, manufacturing,  
9 legislative, north and south of California, even researchers  
10 from outside of California. And with my count, the people  
11 who represent agencies on the subcommittee, their agencies  
12 have about 25 percent to 30 percent of all California's  
13 36,000 signals so they speak with authority. And whatever  
14 comes out of that subcommittee when it comes to you is that  
15 they are the views of people who actually have the -- have a  
16 substantial number of signals and a vested interest in the  
17 issue.

18           Two subcommittee conference calls. The first one  
19 took three hours, the second one about one and a half to two  
20 hours. So we have had about four and a half to five hours  
21 of discussions. Two members present here are members of the  
22 subcommittee, Mr. Winter and Mr. Miller, and they were both  
23 present.

24           The summaries of those subcommittee meetings have  
25 been shared with all of you; Devinder e-mailed it to you

1 yesterday. I don't know if you have had the chance to look  
2 at those summaries which kind of, in detail, outline how the  
3 subcommittee discussions went.

4 To make a long story short, not to repeat what you  
5 can read for yourself in those summaries, where we are today  
6 is that there has been agreement in the following areas by  
7 all the involved parties, all the members of the  
8 subcommittee.

9 The subcommittee as a whole agreed that there is a  
10 need to evaluate the yellow timing in California in light of  
11 the new information and research.

12 The subcommittee as a whole agreed that there is a  
13 very strong indication that we need to increase the minimum  
14 yellow time value for all traffic signals in California.

15 The subcommittee as a whole agreed that it is not  
16 a good idea to have two-tiered yellow timing calculations in  
17 California, one for traffic signals with red light camera,  
18 one for all the other. We have 36,000 traffic signals in  
19 California, only about 400 of them have a red light camera,  
20 so we didn't want to have a two-tiered system for a very  
21 small fraction.

22 And the subcommittee agreed that in light of the  
23 NCHRP 713 and the other information, ironically collected by  
24 the red light cameras as the cities changed the yellow  
25 timing to measure the number of violations, red light

1 running violations, that we need to start introducing new  
2 concepts and new ways of doing minimum yellow timing to the  
3 California MUTCD by not taking away the option that we have  
4 now at Table 4D-102, which is based on the posted speed  
5 limit, but encourage cities and counties and the state to  
6 use the 85th percentile approach speed at the intersections  
7 when they are available or if they have special conditions  
8 to actually go out there and measure them, which are  
9 different than the 85th percentile they do for the posted  
10 speed limit, which is by guidelines farther from the  
11 intersections as must be under free flow condition. And use  
12 the 85th percentile rounded to the highest five mile  
13 increment and use that in the table. In the absence -- if  
14 the posted speed limit is higher than the 85th it will  
15 default to the posted. In the option --

16           Another suggestion is to look at the 4D-102, which  
17 now says posted speed limit, minimum yellow timing and  
18 increase the posted speed limit by a certain number. That  
19 number is yet to be discussed in detail by the members of  
20 the subcommittee. So no if you go and your posted speed  
21 limit is 40, you take 40 and you take the minimum yellow  
22 time corresponding to that.

23           With the new recommendation, if the posted speed  
24 limit is 40, you go and you pick 40 and you add to it by  
25 either +5 -- there are four numbers that have been proposed,

1 5, 7, 8 and 10. And those are to be discussed in the future  
2 conference calls, on the next conference call of the yellow  
3 timing subcommittee scheduled for November 15th. So that  
4 was the other agreement and the concept to increase the  
5 posted speed limit by a certain number, that number yet to  
6 be decided. As I said, anywhere between 5 and 10.

7           And the other issue was to start including the  
8 grade, the consideration for grade at the intersection for  
9 the signalized intersections. And my guess is that's going  
10 to be grades over a certain limit. We don't want to go and  
11 do a two percent and three percent. But my guess is that  
12 probably the subcommittee is more inclined to look at like  
13 more severe conditions when you have four percent and plus  
14 grade approaches, especially if you have downhill, which  
15 really require a longer yellow.

16           And the last item was for the subcommittee to  
17 decide on the details of how we are going to approach the  
18 yellow timing for exclusive turn lanes, which are the right  
19 turns and left turns. Because some of the left turns are  
20 like 700, 800 feet long, so the drivers are approaching the  
21 left turn movement pretty much at the same speed that they  
22 are going for the through movement. So those are fine  
23 tunings that we have to discuss.

24           So we have made good progress, there is still work  
25 to be done. Probably another may two, three other call.

1 Hopefully one, maybe going to a follow-up in December. But  
2 our goal is to hopefully have a consensus of the  
3 subcommittee for a set of recommendations to be brought back  
4 to this Committee in the first meeting in 2014, which is  
5 going to be the last item on the agenda that you are going  
6 to schedule at either the last week in January or the first  
7 week in February.

8           And that will also give some time for us to make a  
9 good recommendation to Caltrans for Caltrans to make a  
10 decision on this issue. But that coincides well with the  
11 legislative calendar also, which Assemblyman Nazarian has  
12 pulled his item, he has made it a two year bill. So he will  
13 know where the Committee and Caltrans is going so he can  
14 decide if he wants to further push his bill or if he wants  
15 to withdraw if the issue is resolved to his satisfaction.

16           SO with that, you have read the items. Bill and  
17 Rock, if I've misstated or if I've missed something please  
18 jump in and fill in.

19           COMMITTEE MEMBER WINTER: No. I'll just say that  
20 it seems to be a very good summary of the discussion of the  
21 subcommittee. I think it's been a very valuable discussion.

22           A lot of opinion coming in to the topic. But yeah, you're  
23 right, we did reach those, those conclusions and then, you  
24 know, more to, more to come.

25           COMMITTEE CHAIRMAN BAHADORI: Thank you. Rock?

1 COMMITTEE MEMBER MILLER: Nothing further to add.

2 COMMITTEE CHAIRMAN BAHADORI: And again, thank you  
3 both for your contributions. I especially have to  
4 acknowledge Mr. Winter's contributions through a very, very  
5 detailed, extensive, very informative spreadsheet about how  
6 the signal timing and yellow issue is addressed for all the  
7 traffic signals in the County of Los Angeles. It was very,  
8 very helpful for the Committee's discussion and information.

9 COMMITTEE SECRETARY SINGH: Next meeting?

10 COMMITTEE CHAIRMAN BAHADORI: Discussion? Anybody  
11 in the public wants to address the Committee on this issue?  
12 Mr. Beeber, as long as you don't repeat what you said in  
13 the Committee.

14 MR. BEEBER: Do we have three hours?

15 COMMITTEE CHAIRMAN BAHADORI: No, no, no. I would  
16 appreciate it if you keep it very brief, to maybe two  
17 minutes because we already have the benefits of your  
18 thoughts in the subcommittee.

19 MR. BEEBER: Absolutely. Actually, I wanted to  
20 first thank Hamid for his chairmanship of not only this  
21 Committee but also the subcommittee because he has done a  
22 phenomenal job of herding cats. It really has been a very,  
23 very good discussion and I want to thank him personally for  
24 that.

25 COMMITTEE CHAIRMAN BAHADORI: You're welcome.

1           MR. BEEBER: I'd also, I did want to mention that  
2 there are some other issues that we will be discussing  
3 having to do with perception and reaction time and some of  
4 those issues.

5           I actually did want to mention something because I  
6 had a conversation with an engineer for the City of Beverly  
7 Hills the other day. And he informed me and I don't know if  
8 this is sort of an open secret or not but I wanted to share  
9 this with you, which was my conversation with him. Which is  
10 that he has been extremely frustrated with the way that the  
11 manual has been written in the past. He has expressed that  
12 there's a lot of political pressure for them to keep not  
13 only the posted speed limits down as low as possible because  
14 -- but then, in this particular instance what we were  
15 talking about, there's a 35 mile an hour speed limit that  
16 drops to 30 miles an hour 170 feet before the red light  
17 camera. So they're using the lower number.

18           COMMITTEE CHAIRMAN BAHADORI: Yes.

19           MR. BEEBER: And he didn't feel that he had the  
20 freedom or the ability to just use a higher number, even  
21 though he felt that it might be necessary.

22           So he was, he was very thankful that we were  
23 taking up this issue to give the engineers out there a  
24 little bit more substance, a little more grounding for their  
25 work so they can maybe have a little bit more behind them

1 when they get this political pressure that they're getting  
2 to keep these things as low as possible for various reasons,  
3 whatever that may be.

4 COMMITTEE CHAIRMAN BAHADORI: Thank you.

5 MR. BEEBER: So thank you.

6 COMMITTEE CHAIRMAN BAHADORI: Thank you. Thank  
7 you for your comments and also thank you for your  
8 contributions to the subcommittee discussions. your paper  
9 and your PowerPoint has been very, very helpful in  
10 discussions. Mr. Fisher.

11 MR. FISHER: Yes. I just wanted to point out that  
12 the CA MUTCD was leading the nation and that the national  
13 manual doesn't have any prescribed times for yellow change  
14 intervals. So California has gone ahead and they put  
15 something out there.

16 I know when we discussed it, it was not a perfect  
17 table, there were a lot of compromises ahead to be made.  
18 But I will point out that where we show the yellow time we  
19 specifically stated "minimum yellow time." Meaning that an  
20 agency could go higher to accommodate things like where they  
21 know that the 85th percentile speed is higher than the  
22 posted speed. And we were hoping they would use engineering  
23 judgment and time their signals accordingly.

24 I am getting feedback that a number of  
25 jurisdictions are not even thinking that through and just --

1 always using the minimum and never going above that. I know  
2 when I was with the City of LA we would always add five  
3 miles an hour to the speed limit and then go to our table  
4 and put a value there so that we had a safety margin. So I  
5 think if people exercise engineering judgment what we have  
6 in the CA MUTCD is not too bad. Certainly it could use some  
7 improvement.

8           You talked about other factor such as grade.  
9 That's going to be a hairy one, I'm not sure how you're  
10 going to resolve it. Because all the streets have a grade,  
11 otherwise the water wouldn't flow. Every street has at  
12 least a two percent grade, I believe. So for the timing guy  
13 to have to go to the civil engineering plans and look at the  
14 grade. And if it's on a vertical curve or a horizontal  
15 curve, you know, which one do you -- at which point do you  
16 pick it? It can become a lot of work. So I'm hoping you  
17 can develop something that is appropriate but doesn't create  
18 a whole lot of more work for the public agency.

19           COMMITTEE CHAIRMAN BAHADORI: And I forgot to  
20 mention that the last time that we looked at this issue back  
21 in 2005-2006, Mr. Fisher was part of a subcommittee that we  
22 put together and very instrumental in developing 4D-102.  
23 And as you said, we developed it, it was not perfect but it  
24 was what was achievable at that time.

25           But I think now we can achieve a little bit more.

1 We make something that's not that bad, maybe a little bit  
2 better, and that's the way we make progress. And a lot of  
3 places already are going over. Like City and County of San  
4 Francisco, they automatically add 5. I think LA County, 60  
5 percent of their signals already are posted +5. And even  
6 City of LA, the representative from the City of LA in the  
7 subcommittee said, we are already doing it anyway so even if  
8 you make a change it doesn't affect us. But we'll see where  
9 it goes. And grade is going to be the hairy one.

10 Ms. Alvarez.

11 MS. ALVAREZ: I just wanted to make a brief  
12 comment.

13 COMMITTEE CHAIRMAN BAHADORI: Introduce yourself  
14 for the record.

15 MS. ALVAREZ: Cynthia Alvarez, I'm with the Office  
16 of Assemblymember Nazarian who originally introduced  
17 legislation AB 612 to increase the timing for yellow time  
18 one second where there is red light cameras.

19 My member is definitely very passionate about this  
20 issue, it's very important to him and his constituency. We  
21 have heard many concerns from different stakeholders,  
22 Caltrans, in regards to how we're going to specifically make  
23 the changes, not just a two tier system within the second.

24 So we decided to work with CTCDC and work with the  
25 subcommittee to make those changes. And we are very excited

1 and we look forward to the continuing conversation in  
2 regards to these changes and we hope that we could talk  
3 about perception reaction time, the grade.

4           And we would like to thank Hamid, Devinder,  
5 Mr. Miller and Mr. Winter for participating in these  
6 conversations and we look forward to having some more  
7 conversations on this.

8           COMMITTEE CHAIRMAN BAHADORI: Thank you, Cynthia  
9 and thank you for your contribution.

10           It's kind of Assemblyman Nazarian acknowledging  
11 that it was not a good precedent and it's not a good  
12 practice to codify in the state law standards or engineering  
13 practices and designs. Because these are matters that are  
14 best designed through a very collaborative, deliberate  
15 science and research and engineering-based approach rather  
16 than through a political process. And we appreciate him for  
17 not pushing to go through and allowing the process to work  
18 its way and thank you.

19           Any other comments?

20           COMMITTEE SECRETARY SINGH: You can send me your  
21 thoughts on this one, you know. You have green arrow, you  
22 have "no right turn red." This is confusing. So if you  
23 have any comments just e-mail it to me.

24           COMMITTEE CHAIRMAN BAHADORI: Okay, discussion  
25 items, none.

1 Tabled items. What is that, Mr. Singh?

2 COMMITTEE SECRETARY SINGH: Nothing, nothing.

3 COMMITTEE CHAIRMAN BAHADORI: Nothing. We skip  
4 over that and we go straight to Item number 9, the next  
5 meeting. How if we go for the first week in February? How  
6 is everyone's calendar for -- any days that you cannot make  
7 it? Johnny?

8 MR. BHULLAR: Johnny Bhullar with Caltrans.  
9 Before you discuss the date I just want to make sure that  
10 you consider a date that is going to have an interplay a  
11 little bit here. Which is that the June 13th of 2014 is the  
12 date by which we will be updating and revising our manual.  
13 So since we are deciding on the January date or February  
14 date and that has an effect on whether -- will we be able to  
15 get another meeting before June 13?

16 COMMITTEE SECRETARY SINGH: Yes, yes, we will.

17 MR. BHULLAR: Okay. Take that into consideration.

18 COMMITTEE CHAIRMAN BAHADORI: So we are up already  
19 for another round of updates.

20 COMMITTEE SECRETARY SINGH: Yes.

21 COMMITTEE CHAIRMAN BAHADORI: We have already been  
22 through three of them.

23 COMMITTEE SECRETARY SINGH: We will have a second  
24 one in early May.

25 COMMITTEE CHAIRMAN BAHADORI: Okay. So if we go

1 -- I see Jim's hand up. Usually on this we don't have  
2 public comments but if you have some issues that you want to  
3 share.

4 MR. BAROSS: Just to note that the CBAC meeting is  
5 the first Thursday in February so February 6 would be  
6 conflict if you chose that.

7 COMMITTEE CHAIRMAN BAHADORI: That's good to keep  
8 in mind to allow the members of CBAC who might be interested  
9 in participating. Any day in there, what do you have?

10 COMMITTEE SECRETARY SINGH: I asked January 30th,  
11 February 6th or 20th. I think the 6th is more better  
12 because then we want to have a second meeting before June.  
13 Any day you can pick, you know, either the 20th, 6th or 30th  
14 of January.

15 COMMITTEE MEMBER WINTER: I cannot make January  
16 30th.

17 COMMITTEE CHAIRMAN BAHADORI: So February 6th or  
18 thereabout. The 7th, 5th?

19 COMMITTEE MEMBER RICKS: I think you should avoid  
20 the 6th, simply because of the CBAC conflict.

21 COMMITTEE CHAIRMAN BAHADORI: Okay, that's nice.

22 COMMITTEE MEMBER RICKS: I'm not hearing any  
23 problems with the 13th from anybody. Although I'm probably  
24 relegated to alternate for that day.

25 COMMITTEE SECRETARY SINGH: The reason I didn't

1 pick the 13th, some people celebrate Valentine's Day, you  
2 know, on the 14th.

3 COMMITTEE MEMBER PATTERSON: We'll be back in  
4 plenty of time.

5 COMMITTEE CHAIRMAN BAHADORI: The 20th? Let's  
6 see. February 20th is going to be the third week. Okay.

7 Ms. Alvarez, I need your help here. I think there  
8 is a deadline. Is that February 24th for the reintroduction  
9 of bills for the legislative 2014?

10 MS. ALVAREZ (AWAY FROM A MICROPHONE): Well,  
11 because we have a little bit more time -- I don't have the  
12 calendar with me. Because the bill is already in the  
13 committee (inaudible).

14 COMMITTEE CHAIRMAN BAHADORI: So you have time.  
15 So the February 24th deadline is not hanging over our head  
16 on that issue.

17 MS. ALVAREZ: I believe not.

18 COMMITTEE CHAIRMAN BAHADORI: We are okay. So if  
19 you can -- that's the reason I wanted to have the meeting in  
20 the earlier part of February, not to close to that deadline  
21 in case we have a --

22 COMMITTEE SECRETARY SINGH: We can change the day.  
23 We always have Thursday, we can have Wednesday, Tuesday if  
24 you prefer.

25 COMMITTEE CHAIRMAN BAHADORI: No, we already have

1 people here. It's easier if you schedule it now. So  
2 February 6 is out. Let's go for February 13th or 20th. By  
3 the way, we don't necessarily have to meet on a Thursday.

4 COMMITTEE SECRETARY SINGH: Yes.

5 COMMITTEE CHAIRMAN BAHADORI: It can be either a  
6 Wednesday or --

7 COMMITTEE VICE CHAIRMAN GREENWOOD: How is the  
8 20th?

9 COMMITTEE CHAIRMAN BAHADORI: so you want to go --  
10 who says 20th? Mark said 20th. Everybody okay with  
11 February 20th? Okay, the next meeting is February 20th.  
12 And Mr. Singh, where do you want to have it?

13 COMMITTEE SECRETARY SINGH: Northern California,  
14 probably Oakland. I will find the location and then  
15 finalize.

16 COMMITTEE CHAIRMAN BAHADORI: Okay, so the next  
17 meeting is February 20th with the location to be determined,  
18 most probably Oakland, but you will be informed in time.

19 Any other items?

20 Thank you all very much. We finished before 1:00  
21 as we wanted.

22 (Thereupon, the meeting of the California  
23 Traffic Control Devices Committee adjourned  
24 at 12:59 p.m.)

25 --oOo--

## CERTIFICATE OF REPORTER

I, Jacqueline Denlinger, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Department of Transportation, California Traffic Control Devices Committee meeting; that it was thereafter transcribed.

I further certify that I am not of counsel or attorney for any of the parties to said meeting, nor in any way interested in the outcome of said matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of November, 2013.

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JACQUELINE DENLINGER

## CERTIFICATE OF TRANSCRIBER

I certify that the foregoing is a correct transcript, to the best of my ability, from the electronic sound recording of the proceedings in the above-entitled matter.

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RAMONA COTA, CERT\*\*478

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November 14, 2013