STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE

MEETING OF THE

CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE

CALTRANS DISTRICT 4 OFFICE

AUDITORIUM

111 GRAND AVENUE

OAKLAND, CALIFORNIA

THURSDAY, SEPTEMBER 25, 2014

9:00 A.M.

Reported by: John Cota

A P P E A R A N C E S

Committee Members

Hamid Bahadori, Chairman

Mark Greenwood, Vice Chairman

John Ciccarelli

Bryan Jones

Rick Marshall

Lt. David Ricks

Devinder Singh, Committee Secretary

Duper Tong

Jay Walter

William Winter

Alternate Committee Members in Attendance

Robert Bronkall

Michael Kenney

Caltrans Staff - Sacramento Office

Johnny Bhullar

Jerry Champa

Chris Engelmann

Don Howe

A P P E A R A N C E S

Caltrans Staff - District 4

Bijan Sartipi, District Director

Sean Nozzari, Deputy District Director for Traffic Operations

Beth Thomas, Pedestrian/Bicycle Branch Chief

California State Transportation Agency

Kate White, Deputy Secretary of Environmental Policy and Housing Coordination

Also Present

Eric Anderson
City of Berkeley

Jim Bittner
City of San Jose

Tony Dang
California Walks

David Grant
California Alliance of Retired Americans

Kevin Korth
US Department of Transportation
Federal Highway Administration

Rafat Raie
One Smart Light

Mike Sallaberry
San Francisco Municipal Transportation Agency (SFMTA)

Massoud Saberian
City of Santa Rosa

Dave Snyder
California Bicycle Coalition

Alan Wachtel
California Association of Bicycling Organizations (CABO)

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P R O C E E D I N G S

9:03 a.m.

COMMITTEE CHAIRMAN BAHADORI: Good morning. Let's call to order the meeting of September 25th of the California Traffic Control Devices Committee.

I am going to start the meeting going down the agenda. We start with the introduction.

My name is Hamid Bahadori. I represent the Automobile Club of Southern California and I have the honor and privilege of chairing the Committee this year.

So I am going to start from Mr. Marshall over there.

COMMITTEE MEMBER MARSHALL: Good morning. I am Rick Marshall, Deputy Director of Public Works for Napa County Public Works. I represent northern counties on the Committee.

COMMITTEE MEMBER CICCARELLI: Good morning. I am John Ciccarelli, Bicycle Solutions, San Francisco, representing non-motorized travelers on the Committee.

COMMITTEE SECRETARY SINGH: Devinder Singh, I am the Secretary for the Committee.

COMMITTEE MEMBER TONG: My name is Duper Tong, I am the Office Chief of Traffic Engineering for Caltrans.

COMMITTEE MEMBER RICKS: David Ricks, Lieutenant, California Highway Patrol.

COMMITTEE VICE CHAIRMAN GREENWOOD: Mark Greenwood, I am the Director of Public Works for the City of Palm Desert; representing southern cities.

COMMITTEE MEMBER WINTER: Bill Winter, Deputy Director for Los Angeles County Public Works, representing southern counties.

Before we go to the audience for the introductions so that we know who we have here and what agenda items you are interested in so we can give you priority if you have other commitments -- just for the record, we are missing three of the committee members. But we have the required quorum according to our bylaws so we are going to proceed with the meeting until our colleagues show up. Hopefully they will.

If you would please introduce yourselves and tell us who you represent. And if any agenda item you are here for we will do our best to accommodate your items, out of order if needed, not to have too much burden on your schedule.

And before we go with the introduction with the audience we have Mr. Sean Nozzari, who is the Deputy Director for District 4, and we would like to wholeheartedly thank you for allowing us to be here and offering us this fabulous facility. Mr. Nozzari.

MR. NOZZARI: I am Sean Nozzari, I am the Deputy

District Director for Traffic Operations here in the Bay Area. On behalf of Caltrans Director Malcolm Dougherty and Bijan Sartipi, our District Director here, I would like to thank you for choosing Oakland for the place to meet and also to welcome you here.

This is a great opportunity for us. Just in the last few months I had the opportunity to serve a tour of duty in Sacramento as the Acting Division Chief for Traffic Operations and I got to know firsthand the work, the wonderful work that you guys do with our staff in Sacramento to help us update our traffic control devices standards.

So this is a very exciting year for us. We have just updated our mission in Caltrans. We have also endorsed the NACTO guidelines. And the work that you do is going to help us get to very good results in providing safety and mobility in California. Thank you very much for being here.

COMMITTEE CHAIRMAN BAHADORI: Thank you, Mr. Nozzari, looking forward to working with you. And again, thanks for providing the wonderful facility we have here.

With that I am going to start from Mr. Howe and then if you would just introduce yourself. And more importantly, you don't need to all walk to the microphone, you can speak out loud. More importantly, please tell us if there is any specific item you want to speak on.

MR. HOWE: Thank you. My name is Donald Howe, I work for the Division of Traffic Operations in Sacramento. And I am here for agenda item 14-17.

COMMITTEE CHAIRMAN BAHADORI: Okay.

(The members of the audience introduced themselves away from the microphone.)

COMMITTEE CHAIRMAN BAHADORI: Thank you. And one of our committee members arrived later. Mr. Jones, you want to introduce yourself?

COMMITTEE MEMBER JONES: Bryan Jones, non-motorized representative for Caltrans.

COMMITTEE CHAIRMAN BAHADORI: Okay, perfect, thank you, thank you all for taking time and coming.

We can move on to Item number 2, Membership. Mr. Singh, you want to elaborate on that? We have a new member but he is not here.

COMMITTEE SECRETARY SINGH: He just called and he is stuck in traffic, he will be late.

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE SECRETARY SINGH: So Jay Walter is a voting member. He represents Northern California cities and this is his first meeting. He will be late.

COMMITTEE CHAIRMAN BAHADORI: We will introduce him when he arrives.

Item number 3, approval of minutes for our meeting

of May 14th. Colleagues, we have verbatim minutes but still sometimes you may want to clarify or add or edit. Any comments or any motion for approval?

COMMITTEE MEMBER MARSHALL: Mr. Chairman, I'll move approval.

COMMITTEE CHAIRMAN BAHADORI: There is a motion. A second? Nobody wants to second approval of the minutes?

COMMITTEE VICE CHAIRMAN GREENWOOD: I'll second.

COMMITTEE CHAIRMAN BAHADORI: Okay, there is a motion and a second. All those in -- discussion? All those in favor say aye, please.

(Ayes.)

COMMITTEE CHAIRMAN BAHADORI: Opposition?

Seeing none, the motion passes unanimously. The minutes of May 14th are approved as recorded.

Now we go to Item number 4, which is our public comments. And I need to read this to make it right, to get it right: At this time, members of the public may comment on any item not appearing ont he agenda. Mattes presented under this item cannot be discussed or acted upon by the Committee at this time. For items appearing on the agenda, the public is invited to make comments at the time the item is considered. And I would like to respectfully request that you limit your comments to a maximum of five minutes so that we have time to hear all those who might be interested.

Anyone who wishes to address the Committee under this item? Sir, please, if you would step forward, introduce yourself and your affiliation.

MR. RAIE: Good morning. My name is Rafat Raie. I am wearing two hats, I am the city's traffic engineer for the City of Walnut Creek. And on behalf of the City of Walnut Creek I would like to thank you for your hard work and for picking Northern California. I had the pleasure of hosting one of your meetings many years ago, actually so many that I don't want to disclose. We hosted the meeting in Walnut Creek when we were looking for the in-pavement flashing -- in-pavement flashing warning devices.

But the reason I am here today is I want to introduce you to a product that is sure to change the face of traffic signals. This as a product is unique. It allows colorblind people to recognize the traffic signals much better. It has some significant savings, economically, statewide and nationwide, actually globally.

To change the traffic signal from the typical three-section head that weighs about 47 pounds on the average, to a 7 pound single head that changes -- it's a tricolor LED. When it changes between red, yellow and green it also changes the color.

And if you open the centerfold of the brochure you will see the picture tells a thousand words. You can be

replacing a typical six-section head with a two head.

I think, and we believe, that it is going to introduce options for the designers and have significant sustainability benefits throughout all the projects in California.

We have -- we are in contact with a couple of public agencies that are interested in doing a demonstration project. And hopefully we will be submitting an application to this committee in November, where we will be making a full request for experimentation. We are also talking with other agencies. It might be an experimentation request that involves at least three agencies.

The reason I am here today is just to give you an introduction. Please look through the brochure. If you have any questions my name is record, please let me know.

And I am open to any questions. I know that during public communications you can't discuss the product.

I would understand any red flags from the Committee Members. My first reactions when I saw this were red flags and I expect the same red flags to be going on in your minds right now.

I would like to point your attention to a very specific feature here when it comes to the arrow, the treatment of the arrows. The arrow head is different than the sold head. The arrow changes the shapes as well as the

arrow. The prototype is ready. Hopefully in November we will be able to demonstrate the prototype.

I would like to also announce that we are meeting with the governor. This has large scale implications on the economic feasibility of all traffic signals statewide. We will also talking to other states to try to promote and install this revolutionary product as soon as possible.

I will be happy to answer any questions.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Any members have any questions from the presentation?

If you would please stay there.

John.

COMMITTEE MEMBER CICCARELLI: Yes. I wonder whether you are in discussions with the Federal Highway Administration? Because otherwise it's 50 separate conversations, number one.

Number two, there are federal research partnerships, such as with the Texas Transportation Institute, Turner-Fairbank Highway Center in the DC area, where research is conducted using driving simulations. And do you plan to or have you already arranged such testing? Because that would be something that I believe the state would rely on before we lead the world.

MR. RAIE: Definitely, definitely, very well -- very well said. We are planning. We have initiated the

steps to engage with FHWA. We will be looking towards doing a human reaction study in conjunction with the experimentation. We will follow all the federal guidelines and we will seek, you know, any help or any previous research.

Our goal is to enhance safety. The safety benefits of having the red 27 percent larger than the existing red on an existing 12-inch head, what this -- this is a scalable product that we can even go bigger. We realize that there are safety benefits and some serious economic benefits that we can gain from this product.

And you are very well aware that now with the over-45 miles an hour on mast arms, you have to have a head per lane. Or even on three lane approaches you need to have -- it's suggested that yo have three heads.

You know, we are adding so much on the poles and the poles are getting bigger and bigger and the poles themselves are becoming a traffic hazard.

COMMITTEE MEMBER CICCARELLI: I am supportive of the technology direction. But if there is one thing I have learned in 12 years serving on the national and state committees it's that things that make sense to us as engineers and designers may not be interpreted the same way by the person operating the driving simulator, the general public. So I look forward to the results.

MR. RAIE: Thank you so much. Any other questions?

COMMITTEE CHAIRMAN BAHADORI: Any other members, any questions?

Thank you very much. I echo John's comments. Very, very promising technology; looking forward to see how it plays out.

Any other member of the audience who wishes to address the Committee? Sir, if you would please step to the podium. Introduce yourself and your affiliation.

MR. GRANT: Good morning, gentlemen, thanks for the opportunity to speak today. My name is David Grant; I am representing the California Alliance for Retired Americans. CARA is California's largest senior group, there were 900,000 people associated with the organization. We have 16 local chapters across the state.

In 2011 our organization adopted pedestrian safety as one of our priority issues to work on. In large part this is because as seniors each and every one of us recognizes that we have gotten older day by day. I'm sure you all share the same feeling. And as such we move more slowly in crosswalks, we can't just out of the way as fast. Perceptual difficulties present seeing vehicles rushing through intersections.

This morning on my way here, on the MUNI in San

Francisco, I went by the site where just a week ago a woman was killed in a crosswalk at 10 o'clock in the morning on a busy street with signals controls up the wazoo, by a driver in the City. Over 700 people are hit in San Francisco every year and over 2,000 are struck in the MTC service area, the nine county area.

The reason why we are concerned, CARA, is that 40 percent of the seniors hit -- 40 percent of the people hit in San Francisco are seniors. People who move more slowly are more likely to be struck by vehicles. And when they are struck are much more likely to be severely injured.

We cooperated with the University of California at San Francisco in a study a couple of years ago looking at the cost and impact of this. UCSF was in an ideal position to do this because in San Francisco every single pedestrian injury goes to the same place.

So there wasn't a sampling question, it was simply a matter of counting up the cost. Approximately $6,000 per emergency room visit and approximately $74,000 per hospital stay. And when the people injured were senior we were looking at outcomes, approximately a third of the people went home from the hospital. Twenty percent of them died. The other forty-plus percent were placed in institutions for rehabilitation at a colossal cost to the city and the state.

So we are looking at this from an issue of

individual, I don't want to be hit by a car; we are looking at it from a public policy point of view, what can we do?

I was struck a couple of years ago when the Center for Disease Control came out to the Department of Public Health in San Francisco and made a presentation. And the CDC man stood up in front of the room and said to us, every single one of these injuries is preventable. Nobody needs to die from being hit by a car. It's not like disease, it's not like weather, it's not like lightening, it's something that is entirely in our hands. So we have come to you today to talk about two particular issues we would like you to look at.

First, a year or so ago we got a bill passed by the Legislature authorizing the state to pay for "senior speed zone" signs. This was a little-known law that was passed in 1999, which allowed local jurisdictions to designate the zones, 25 mile an hour speed zones. But there was no provision to pay for the sign, So the law was passed, kind of a landmark in Sacramento, nobody voted against it from either party The Governor was shocked, but he signed it anyway.

We'd like to ask you, though. The question is, now we need the CTCDC to designate a sign. There are -- we have looked at over a dozen signs in use around the country, the typical fluorescent yellow and so forth. We would like

you to consider as quickly as possible the idea of choosing an appropriate sign for California so that local jurisdictions can move ahead to buy them and put them in place.

As advocates we looked to the idea that local communities ought to be able to determine these speed zones themselves. But having done so, we shouldn't have this obstacle of not being able to figure out what sign to put up and where.

The second issue we would like you to look at has to do with crossing times. This is actually on the agenda later. There's a number of suggestions in Item 14-15 that we District 4 Committee suggested so I won't go into them in detail. But I will say that as seniors we are really concerned about this crossing speed time of 2.8 feet per second. Currently it's in the document. We'd like to see it moved up from option to guidance so that the state can look at this, local governments.

We had an example in Placer County this year where our group in Placer met with people from the City. They talked about how we could set up a senior speed zone. They lived in a senior development that was across the street from a nursing home and next to another senior development, on an arterial roadway with a 45 mile an hour speed limit, if not 50 or 60 most of the time.

The City people came out, they were very positive. They said -- the first thing they said was, "Well, the MUTCD says" and we said, "Yes, but. That's a policy manual. The state allows you to set up a senior speed zone." The second thing they said was, "But our city council has adopted this as policy." So we'd like to have you look at Chapter 4 and encourage you to make the change to include this in a way that local governments can read it, see that it's a legitimate option, and when advocates in the community speak up, move ahead in a positive way.

Again, remember the idea that we talked about. Not one single person needs to be hit by a car. Not one single person needs to be killed as a pedestrian. And when seniors are hit and injured, oftentimes the outcome is dramatically worse than you would see under any other members of the population. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much. Just for the record, and I would like to hear from Caltrans staff on this, is that when legislation passes regarding any traffic issues and an item is added to the California Vehicle Code, then when signage is needed to implement or enforce that provision of the law, Caltrans comes with a recommendation for signage. As you have, for example, today for the three foot clear law that became effective. So on this one, the senior speed, Mr. Howe or Mr. Bhullar or any

reps from Caltrans, are you planning to bring any signage to allow the local jurisdictions to establish these zones?

COMMITTEE SECRETARY SINGH: We'll go back and look into it.

MR. GRANT: Okay, great.

COMMITTEE SECRETARY SINGH: And if signs are needed we'll bring next time.

MR. GRANT: Thank you. I can tell you we did a series of focus groups in Sacramento last year and the most popular sign was one that said "geezer crossing".

(Laughter.)

MR. GRANT: I'm not kidding you. That was the one everyone liked, all the seniors. In part because they all said, if you see that you'll recognize it and remember it, it just doesn't fade into the background.

I encourage you to consider that once we get something from Caltrans that we really need to move head on this. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you. So Caltrans will take it under advisement. Of course, not specifically in that language.

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: But we are looking forward to the proposed signage coming from Caltrans so the locals can start establishing these zones as is allowed by

the law. Okay.

Anyone else, members of the public, wishes to address the Committee? Yes, sir.

MR. SNYDER: Good morning, Chairman and Committee Members. My name is Dave Snyder, I am the Executive Director of the California Bicycle Coalition.

There are a lot of items on your agenda today having to do with bicycling and I commend you for that. It's indicative of the increased attention that you are giving to bike safety so thank you.

I am here specifically for the 3 foot sign. There's a lot of interest around the state, surprising even to me, with the importance of encouraging motorists to give three feet. We had thirty-some newspaper articles and TV shows, TV news segments about that last Tuesday when the bill came into effect. The public really cares about this.

The installation of a 3 foot -- you know, "you must give 3 feet" sign on the roadway is probably the most important aspect of the law. It is probably the aspect that is going to have the biggest impact and is most likely to get through to motorists because we can put those signs exactly where they are most needed. So I encourage you to consider carefully the sign and to adopt one as soon as possible. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you, Mr.

Snyder. That item is also on the agenda and if you -- if your schedule allows you to stay around you can address the Committee specifically when the item comes up.

Anyone else? I don't see any hands so I'll close the public comment part of the agenda.

Sometimes we have special presentations by state officials and today we have one by Deputy Secretary for Environmental Policy and Housing Coordination but I don't see her here yet. So I am going to skip that item and when Secretary White gets here we are going to go back to that.

A few members joined after the introductions. Anyone who came after we went through introductions. I see Mr. Kenney. You want to introduce yourself?

MR. KENNEY: Good morning, Mike Kenney, I am the County Traffic Engineer for the County of San Diego and I'm an alternate to the Committee for the Southern Counties.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much. Anybody else? I think you came.

MR. SANTIAGO: I'm Raymond Santiago with the Golden Gate Bridge Highway and Transportation District.

COMMITTEE CHAIRMAN BAHADORI: Thank you. And the lady?

MS. THOMAS: Beth Thomas, Caltrans District 4, Pedestrian and Bicycle Planning and Coordination Branch Chief.

COMMITTEE CHAIRMAN BAHADORI: Thank you. And yes, of course.

MR. KORTH: Kevin Korth, Federal Highways, California Division Office.

COMMITTEE CHAIRMAN BAHADORI: Okay. Anybody else?

Okay. And now we have our new member. Devinder, do you want to introduce our new member? It's our tradition for the Secretary to introduce the new member and then the new member shares a few words.

COMMITTEE SECRETARY SINGH: Mr. Jay Walter, this is his first meeting, and he is appointed by the League of the Northern California Cities.

COMMITTEE CHAIRMAN BAHADORI: Welcome.

COMMITTEE MEMBER WALTER: Thank you, Committee Members; it's a pleasure to be joining you. I know I have some very large shoes to fill, Larry Patterson, who has gone on to greener pastures with the City of San Mateo as their City Manager. So I will try to live up to his august work ethic and efforts that he put forth on the commission; glad to be here.

COMMITTEE CHAIRMAN BAHADORI: Great. I hope you follow Mr. Patterson's shoes and you are going to be a City Manager soon. But we don't want to miss you now.

So we are going to skip over Item 4a and we are going to get back to that when Secretary White gets here.

Now we are going to go through our agenda items and we are going to Category 5, our public hearings. Item 13-05 we are not going to discuss it, we are pulling it off agenda. Is there anybody here for that item?

Okay, nobody wanted to speak on that so we are going to skip and go over to 14-05, which is to adopt --

Okay, before we get into a lengthy discussion on 14-05, I see Secretary White here. Welcome.

MS. WHITE: Thank you.

COMMITTEE CHAIRMAN BAHADORI: So at this time we are going to go back to Item 4a. And this is at times we have presentations by high-ranking officials of the administration who want to share thoughts, views, suggestions, recommendations with the Committee. And we are fortunate this morning to have the Honorable Kate White, who is the Deputy Secretary for Environmental Policy and Housing Coordination. Welcome.

MS. WHITE: Okay, great, thank you.

COMMITTEE CHAIRMAN BAHADORI: Glad to have you here and the floor is yours.

MS. WHITE: Apologize for my delayed arrival. Ironically, maybe not, I was stuck in traffic coming from Sacramento.

First of all I just wanted to thank you, all the members of the Committee, for having me here today and also

for your service on this important entity. It's really important in terms of the public guidance of our MUTCD and everything we are doing on the road, so thank you very much for your service.

Again, I am Kate White, I am Deputy Secretary at the State Transportation Agency. If you are not paying attention to what is going on in Sacramento, we are relatively new. We were born a year ago last July, a little over a year ago, and for the first time we consolidated all the state transportation entities under one umbrella. So we have the High Speed Rail Authority not out on its own but actually under our agency, as well as Caltrans, of course, DMV, CHP and several other departments. So that's a little bit about the State Transportation Agency.

My boss, Secretary Brian Kelly, sends his regards. He wanted me to comment and share a little bit about what we are doing in Sacramento around Caltrans reform and so I am going to share a few thoughts with you.

I was hired about a year ago, really to try to bring in better alignment the sustainability/environmental goals of the state with the transportation sector. So that has been my charge over the last year. And we are making some progress, I would say, and I wanted to tell you a little bit about it.

So I was thinking about this picture on my way in

the last two and a half hours sitting in traffic; just to make the point that we have a lot of challenges ahead. A lot of what we have built in California, and I would say unfortunately still have on the books to build, looks something like this. And it is really not sustainable on many levels any way you look at sustainability.

From an environmental perspective, of course, we are burning fossil fuels; and building more freeway lanes can really increase the pressure and attractiveness on outlying areas and leading to more sprawl development.

From an economic perspective we really don't have funding to keep up the infrastructure we have now and so we are getting very behind in terms of the state of good repair of our system.

And then from the sort of social perspective. Thank you for telling me where the pointer was because I wanted to say, if you live here and you work here, it is very difficult to get there without getting in your car and getting jumbled up in the traffic and the overpasses, et cetera. So from a social perspective, people are living further from their jobs, not having as much time with their families. The high cost of car ownership is really putting a burden on families. And of course, driving can be quite dangerous for kids and the elderly.

Electric vehicles are, luckily, making a very good

progress in California in terms of cleaning up the air. But you can, you know, get hit by an electric vehicle just like you can a standard vehicle. Fatalities of children, it's one of the -- being hit by cars is one of the leading causes of death for kids in America, several tens of thousands annually.

So all that to say that we need a real shift in priorities in terms of infrastructure investments in California. We can't continue with business as usual. We literally can't build our way out of congestion so that is the challenge ahead.

So I wanted to talk a little bit about what the -- so the California Transportation Agency has been looking at these new concepts to think about transportation.

In February Secretary Kelly published a new Transportation Infrastructure Priorities report that is on our website there at CalSTA.ca.gov. And it really illuminates these three concepts, preservation, innovation and integration. And I wanted to talk briefly about each of those; touch on some of the Caltrans improvement project that we are working on; and then of course, talk about the CTCDC's role.

So if you could go to the next slide, please. These concepts, the first concept is preservation. And Secretary Kelly's top priority, really in many ways, is fix

it first. The current system, basic safety projects that we are estimated at about 8 billion annually is needed for the next 10 years to bring our current state highway system up to a state of good repair, and we are currently only putting about 2.3 billion a year. Local roads, of course, face similar challenges, so do a lot of transit agencies that are quite stretched.

So the idea here is preventative maintenance. What can we do to save money in the long-term. It's like preventative health, you know. If you eat better and you exercise and you take care of yourself you're going to live longer. We see 10-to-1 savings with preventative maintenance versus waiting until things are in really bad shape. so that's number one, fix it first, preservation.

And if you could go to the next slide, please. The second concept is innovation. And this really is about mobility choice. Of course, you might have heard of the governor's little choo-choo train. That's supposed to be a joke.

(Laughter.)

MS. WHITE: We're moving way ahead with the high speed rail program. We have had some great wins just over the last few weeks in terms of settling legal battles, getting new funding. So we are on track by 2030 to be from San Francisco to LA, 520 miles in under 3 hours; 14 new

stations through the state.

And then of course it's not just high speed rail. There's all kinds of interesting innovation going on in the transportation sector. I was part of starting the City Car Share back down on the left here in the Bay Area back in 2001. Now we have 20,000-30,000 people sharing about 400 cars. But there has really been an explosion.

I put the iPhone on there because a lot of your mobility options you can access right now on your phone. And these, while they can be controversial, Uber, Lyft, all these new services, are really -- especially for the next generation, Millenials, making actually a huge dent in both car ownership, they are not getting their driver's licenses early, and in the number of vehicle miles that they are traveling.

On the upper right we had an opportunity -- that's Undersecretary Brian Annis there checking out the bike sharing in San Francisco a few months back.

So all of these things really combined and all the innovation that is happening with technology is really making a car-free lifestyle not only viable but actually preferable. And again, Millenials especially are showing that it's, you know, cooler, more fun, more relaxing and certainly cheaper than owning a car or two cars or three cars. So that's innovation.

And then on integration. This is really Secretary Kelly's commitment to our regional entities across the state that have been working very hard over the last few years. SB 375 passed in 2008, which required every regional transportation planning organization to come up with not only a transportation plan but a sustainable community strategy, so a land use plan as well, and knit those together for the first time.

And so these sustainable community strategies really are -- and I can speak coming from the Bay Area over the last few years, are really game changers. It's completely changed the dialogue, completely changed how we think about regional transportation planning. So a lot of what Secretary Kelly is thinking and engaged on now is, how can the state better integrate and enhance these plans in the regions with funding, with technical assistance, with alignment of our inter-regional transportation infrastructure investments. And all are priorities, including preservation and innovation, which I talked about already, which should help reinforce the strength of cities and towns across California. So that's the concept with integration. So those are the three main concepts.

And then in terms of what we are actually doing. Go to the next slide, please. We are really trying to align priorities and funding. You saw some of that with this

year's budget.

We have some great news on the active transportation program, which was launched this year.

We have awarded the first $180 million to 130 projects across the state. But we received actually 700 applications so there's still a great need out there for biking/walking infrastructure.

Some funding, new funding of the cap and trade program will go to active transportation but also to clean vehicles, clean fuels, transit and rail and sustainable communities. So the cap and trade funding has opened the doors for a lot of these type of smart investments.

So next slide. I wanted to just briefly touch on what we are doing with Caltrans reform. As a Caltrans-appointed entity you guys should make sure that you're -- and I guess I can say "guys", are well aware of this report and our efforts on Caltrans reform.

So the State Smart Transportation Initiative is an institute out of the University of Wisconsin that -- I actually wasn't familiar with them before this job but I've gotten to know them quite well. What they are, are former and current DOT, state DOT directors from across the country, so they are a very knowledgeable group. They have been -- a number of them have been quite successful in reinventing their state DOTs.

So in January they -- after eight months of many interviews, maybe some of you were interviewed, over 100 interviews and a lot of internal assessment that the Governor and Secretary Kelly called for of Caltrans, this report came out. Again, it's on our website, CalSTA.ca.gov, it's also on the Caltrans website. And it called for modernizing Caltrans in the areas of mission and goals, alignment of resources and skills and management systems. So in each of those areas there's a total of about 40, 50 different types of specific recommendations, which e are now following up on.

So the next slide. One of the early action items was to call for a new mission for Caltrans. And hopefully you're all aware of this but it's on every page of the Caltrans website now. But our new mission is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. So there's a lot of the concepts that I have been talking about this morning are integrated into our new mission.

And also next slide, we came up with, collectively both the Caltrans executive team with lots of input and agency, we came up with new goals for Caltrans. And these are safety and health, stewardship and efficiency, sustainability, livability and economy, system performance and organizational excellence. And for each of those goals

we are now working very closely hand-in-hand, Agency and Caltrans, to come up with specific performance measures to be able to document our progress on each of these goals. So that's on the Caltrans new mission and goals.

Another early action item, if you want to go to the next slide, was the NACTO endorsement. Hopefully you heard about this. This is quite relevant for your work here at the CTCDC. The National Association of City Transportation Officials is a newish organization, i think it started in the late '90s. It is a group of cities across the country that were kind of frustrated with some of the limitations on maybe the lack of -- sometimes lack of creativity or innovation coming out of the AASHTO guides. So they were piloting a bunch of best practices, really encouraging biking, walking and transit use in cities, and decided, you know, let's learn from all these pilots across the country and put together another guide.

So the urban streets design guide and there is also a bicycle infrastructure design guide, I forget exactly what it's titled. There's two different guides that NACTO has published over the last few years.

And in April - and that's Caltrans Director Malcolm Dougherty down on the bottom left in a video you can watch on YouTube with him on his bicycle. And that's also him on the right as well, shaking hands -- I don't know if

you can see the big smile on Dave Snyder's face. I show this picture everywhere, Dave, you'll be happy to hear. Because I like to show the big smile and how this was a really big moment for bicycling and walking in California. That there's an endorsement of this guide for use for cities to be able to use these. Also for Caltrans district staff to use these guides to make sound engineering judgment on what is the best transportation solution for particular corridors, particularly for urban centers and town centers, small town downtown centers. So that is the NACTO guide.

Along with the endorsement was actually a memo from Tim Crass who is the Chief of Division of Design talking more specifically about what the endorsement means and how to make sure that you document your decision so that you are in good position for design immunity should you go ahead with something that is in this book that maybe is not in the Highway Design Manual or the MUTCD. So I'll pass those to the Committee.

And I'm happy to answer questions on all of this, by the way. I'm almost done.

The next slide just talks about the work groups that are underway to continue with the forty-plus recommendations. The Strategic Direction Group, Director Dougherty and Brian Kelly are co-chairing that and then under that there's these five work groups that are tackling

the various recommendations.

And I am co-chairing the one on the bottom left, Innovation Flexibility, with Chief Engineer Carla Sutliff. So that's why I'm here today, because we're working on those issues around specifically design flexibility. And I see Duper is here. I have been working with him and a number of you here, Sean, to tackle those recommendations and really turn them into action items.

But the other four work groups, just real quick. There's one on human resources, which is really on performance management. There is one on smart investments, which is really looking about where are we spending our money, does it make the most sense from -- to be aligned with these new priorities in terms of fix it first, innovation, multi-modal goals that we are shooting for.

Strategic partnerships, again, is really about looking at all the relationships we have at Caltrans with different entities, both regional, local, industry and how to strengthen those and make sure that we really are a good partner moving forward with transportation projects, planning and projects.

Communication is both internal and external. The one thing I have certainly learned while I have been on the job is there's a lot of great things happening at Caltrans and I think communication externally is sometimes -- we

don't tell our story very well, so a lot of that is about communication, telling our story better. But also internal communication. It's a large organization, there's 20,000 employees, and we need to make sure that these messages that I am sharing with you here today get through the whole organization through all the districts, et cetera.

So on Innovation and Flexibility specifically. There's, I think, some specific tasks that we were given, assignments. And if you'd go to the next slide. These nine or so recommendations from the SSTI report were given to us. I'll just briefly go through them. I am not going to read everything.

Number one is really about updating our Highway Design Manual and the MUTCD. So that's a big focus of our work group.

Number two is relinquishing oversight of bike facilities on locally owned streets. Luckily, Assemblyman Phil Ting just introduced a bill, the Governor signed it this week, which actually did that. So that we can actually check off. So bike facilities are now under the local control in terms of the design. There still will be some signage and traffic operations issues that will be coming to you and I'll be talking about that in the next slide, regarding bike facilities. But in terms of the design and the authority it's local now.

The next recommendation is Caltrans should give designers the options of using NACTO. As I already stated, we can check that one as well.

The next one, 5.4, we should rethink our approach to facilities in metro areas and town centers. This is really, as a lot of our facilities come sort of at the end of their useful life or they are in really bad disrepair, can we -- or we are rehabbing them anyway. How can we rethink the design to truly be multi-modal, road diets kind of things. And really what we're talking about here is not elevated, separate freeways, though a lot of those will probably stay for quite a while, but it's really surface roads. And we actually own, the state owns 50,000 miles of roads in California and about a third of those are surface streets that run through cities and towns. So those are really what we are focused on in terms of how we would need to rethink the design and operation of those.

Building more flexibility into our processes. That's very, hopefully, relevant for you guys on the CTCDC. I think that this entity needs to make sure that we are being supportive of proposals that come forward that are trying to advance the mode shift that we are looking for as a state and so I hope that you will honor that recommendation.

5.7, the next one, is rethinking our legal

guidance. That is something we are looking very carefully at and making sure that we have all the backing that we need as we move forward with new street designs to make sure both our lawyers internally at Caltrans and the state as well s local district lawyers and local entity lawyers understand how they position themselves best for design and unity. And that really comes down to documenting your engineering judgment, making sure that you build per your design. If you follow those kind of basic legal principles you are in very good shape for design immunity should you be sued, which we are sued all the time.

And then the next one -- the next three, really, providing room for innovative actions that further state departments and goals, benchmarking practices against best practices everywhere; working to integrate resources. Those are all about how can we infuse more innovation in the department and how can we learn from best practices from around the country or even around the world and integrating our research program to evaluate those best practice and bring those concepts to Caltrans. So those are our small assignments over the next 12 to 8 months.

And the last slide is really specifically on your role. And I'm sorry that this is a little hard to see. Basically again I want to thank you, Committee Members, for your service as a public advisory group to Caltrans in

considering changes to the MUTCD and pilot projects.

And I wanted to share with you today, hopefully I did a little bit, about where we hope to move transportation in this administration and the contacts for the environmental, human, economic health efforts in how transportation relates to those things and what can be done, specifically in the realm of, for your purposes, traffic signage and devices to encourage the mode shift that we are looking for.

This image is kind of a before and after of a streetscape and includes -- obviously a lot of it is design, HDM, Highway Design Manual, type stuff. But there's also new lighting, new paving, new signage, new crosswalks, pedestrian bulb outs, et cetera, that make it safer, more inviting for bicyclists, pedestrians to use the street.

And so I am calling on you today as the CTCDC to consider this vision for transforming our streets to really community-serving purposes, and particularly those streets that are surface streets that run through cities and towns and primarily serves local traffic. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you, Secretary White, for a very, very interesting, thought-provoking and challenging presentation, we appreciate it. Before we engage in discussion with you - and we appreciate your time first of all, coming down here and sharing your thoughts

with us and Secretary Kelly's directions - I would like to recognize my good friend, Mr. Sartipi, Mr. Bijan Sartipi.

COMMITTEE MEMBER WINTER: Hi Bijan.

COMMITTEE CHAIRMAN BAHADORI: He just arrived when you started your presentation. he is the District Director for district 4. Again, thank you for providing the facilities, we appreciate it.

Secretary White, thank you very much for the presentation and for the time. And colleagues, if you have any questions or thoughts that you would like to share with Secretary White before I make my comments. I'll start from the right, Mr. Marshall.

COMMITTEE MEMBER MARSHALL: No, thanks.

COMMITTEE CHAIRMAN BAHADORI: Mr. Jones.

COMMITTEE MEMBER JONES: Thank you very much for coming and sharing all the movement that Caltrans is making as a state. I think it's a great thing that the Governor just signed SB 743 for CEQA changes in transportation and how we look at transportation in a more sustainable manner, so I think that's a great move in the right direction for the state of California.

A couple of areas. We know speed kills in California and you are more likely to die on our roadways in California than in a violent crime in many of our communities. So ways that we can look at reducing speeds to

a safer speed for our non-motorized users and active transportation users on our roadways is -- a lot of our design standards are designed for the efficiency and speed of vehicles at the expense -- and I know Caltrans has something about like 25 percent of the fatalities on the roadways involve pedestrians. So looking at how we build our infrastructure to more about people rather than just people is a great suggestion.

And then if there is anything we could do, since you oversee the CHP and have some influence there, if we can increase the laws or the penalties for killing people on our roadways. That would be a great step in the right direction. I think some of the -- we have such strict crimes for killing somebody with a gun, but with a car you can almost walk away from the manslaughter charge and we are losing a lot of people on our roadways. And so -- I know a lot of other states are increasing their judicial capabilities of how that is and if you could have any impact over that, that would be wonderful. I think having both the education, the engineering and the enforcement capabilities will make our roadways in our state safer and encourage more people to use active transportation as their mode of getting around the state. Thank you.

MS. WHITE: Thank you for that comment. Evaluating speeds is actually on our work plan.

COMMITTEE MEMBER JONES: Right.

MS. WHITE: Under each of those items that we are doing we have a bunch of sub-action items and evaluating the speed standards is absolutely part of the work that's going on so thank you for that reinforcement on that.

COMMITTEE MEMBER JONES: Yes.

MS. WHITE: And the CHP point is great too.

COMMITTEE MEMBER JONES: Right.

COMMITTEE CHAIRMAN BAHADORI: John.

COMMITTEE MEMBER CICCARELLI: I want to thank the Department for -- and the new Department at that -- for its work in helping to craft AB 1193, Bill Ting's bill. I think that that little change to Streets and Highways Code 891 is appropriate. I think that local engineers with the guidance that we on our Committee and Caltrans with its own manuals can provide to supplement the guidelines such as NACTO's work, can be appropriately applied by local engineers while maintaining the uniformity that is important for people to experience similar features in similar ways throughout the state, and the nation for that matter.

So I want to commend the Department for an obscure language step but a profound result, hopefully, in allowing the locals to move forward with the treatments that have been on the ground in places like San Francisco, where I live, and really proven by experience. This also will let

things evolve quicker.

Having served on the national technical committee for bicycling and been part of the process that's been used for 50 years to evolve traffic control devices I t can tell you that it's too slow. And I think that this change to the Streets and Highways Code will allow the vast amount of engineering expertise and judgment in the state of California to be used much more effectively, to evolve things in parallel, rather than forcing them through a very narrow opening called the government process.

MS. WHITE: Thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Duper.

COMMITTEE MEMBER TONG: Yes. I would like to thank Secretary White for coming to join us today. I want to say at Caltrans we'll do the active role working with CTCDC and the state agency to work on those items. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Chief, any comments?

COMMITTEE MEMBER RICKS: I got promoted.

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: You've always been a chief to me.

COMMITTEE MEMBER RICKS: Oh yeah.

I want to thank you for your overview of the Caltrans program. As the spokesman for the California

Highway patrol, we look forward to providing whatever assistance we can in any of these endeavors that are going forward. You know, speed issues and whatever, obviously we an provide some assistance in that.

MS. WHITE: Great, thank you.

COMMITTEE CHAIRMAN BAHADORI: Mr. Greenwood?

COMMITTEE VICE CHAIRMAN GREENWOOD: No comment.

COMMITTEE CHAIRMAN BAHADORI: Mr. Winter?

COMMITTEE MEMBER WINTER: Again, thank you for the presentation today. I do believe this week Caltrans issued changes to the Highway Design Manual, I believe I saw that. I still haven't paged through that to see if maybe the Chapter 1000 and other non-motorized components of that were changed. Again, there are innovations and we certainly on the Committee look forward to working through those innovative practices.

MS. WHITE: Great, thank you.

COMMITTEE CHAIRMAN BAHADORI: Our new member, Mr. Walter.

COMMITTEE MEMBER WALTER: Yes. Thank you for your presentation. As a former Caltrans employee, a lot of that is very familiar. I appreciate very much the efforts now being made to create flexibility with local agencies in the decisions that they have to make because oftentimes one size does not fit all. So we are looking forward to that.

There is a lot of interest in our community, I know, for sustainable solutions and things like that. And because Caltrans has state highways running right through the middle of our city they will be a very important part of the solutions that we come up with, so thank you.

COMMITTEE CHAIRMAN BAHADORI: Secretary White, thank you very much. We appreciate your time. Just a few thoughts.

Sadly, in this country we have come to accept what we used to call "traffic accidents". And we changed the terminology, now we call it "traffic crashes" because they are not accidents, they are all preventable. We have plateaued for the last, more than a decade. We are killing about 33,000-34,000 people every year in all kinds of traffic crashes in the United States. It's just equivalent to a jumbo jet, 747 fully loaded, crashing every single day. If that would have happened nobody in this country would get on an airplane, on a commercial airplane, yet we every day get in our cars. And sadly, more than half of those are DUI-related.

I hear a lot, not from Joe Average but a lot of our colleagues and so-called experts, that they say, this is just the cost of doing business. Absolutely not. If you look at other countries, if you look specifically at Europe and Japan, they are making great strides. In the UK, in

England, they have been reducing their traffic fatalities and injuries significantly, a lot. And we have a lot to learn from our European friends in the industry on things that we can do, not only focusing on bicycle and pedestrians, which are important, but in general on reducing the number of fatalities and injuries that we have been unsuccessful for the last -- more than a decade we haven't done a dent, we have stayed.

I applaud your initiative, I applaud the work you are doing and Secretary Kelly's leadership and I know the Governor himself is very interested in the issue.

And as far as this committee goes, we are an advisory committee to Caltrans. Thank you for sharing with us the new mission and the new goals and the policy directives that you shared with us specifically. We will keep those in mind as we are furthering our discussions on all these issues.

MS. WHITE: Great. thank you for your time and again, for your service, and I look forward to sitting through most of the meeting today.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much for your time.

Okay, since it's an agendized item, if anyone wishes to address the Committee on that specific item only I have to allow that opportunity also. Anyone?

Okay, seeing none we are moving now to agenda items going to public hearing. We pulled Item 13-05, we are going to 14-05. That is to adopt interim approval issued by FHWA for Optional Use of a Bicycle Signal Face - Submitted by Caltrans Non-Motorized Member. Mr. Ciccarelli will present the item.

COMMITTEE MEMBER CICCARELLI: Thank you, Mr. Bahadori.

First of all I want to address the title of this agenda item. This was originally the title when we began discussion on this a meeting or two ago. but I want to make clear that what is being proposed by this agenda item is not to adopt interim approval 16 for the use of bicycle signal faces because of several reasons.

First is, California and its MUTCD already have bicycle signal faces defined; they are currently called bicycle signals. So we have signals on the ground in California with bicycle indications. We had been thinking for some time about how to make that more effective.

We also see two particular restrictions. One especially but two restrictions within the Federal Highway Administration's interim approval for use of bicycle signal faces, that would hamper much-needed installations in California.

We think we have technical developments that can

address the concerns that led FHWA to exclude those from its interim approval and we wish to move forward with discussion of California-specific language that we consider to be a change to the existing CA MUTCD.

So to clarify, this is not a request to adopt the interim approval with its restrictions but rather to expand the CA MUTCD's coverage of bicycle signal faces.

California had added bicycle signal faces to the manual but prior to that the content was in the traffic manual; and prior to that the experiments that led to this were done by the city of Davis back in the 1990s. When I researched history with the MUTCD on this, with the California Traffic Devices Committee I found that this went back into the early '90s. So what ended up in the California manual was a very restrictive section.

Number one, the bicycle signal face. First, some signals terminology. We use the word "signals" but there are pieces to a signal. If a signal has several approaches that it addresses, each approach sees a face of the signal, so that's the term "face."

Within a signal -- thank you, Don. Within each face are indications. To date there have only been round, also known as "ball" indications and arrow indications.

California added in its adoption of bicycle signals the bicycle-shaped signal indication. This is

routinely used in Europe, all over Northern Europe especially, to indicate movements that are specific to bicycles. So when you want to show that a bicycle, for example, can move forward and advance into the intersection but that other traffic cannot, what you would do is perhaps present a green bicycle signal indication in the location on the signal face where a green indication would be expected and hold a red indication for motor traffic, for non-bicycle traffic. So this is what's been done in Europe and in California for almost two decades now.

What the FHWA proposal was doing was responding in part to something that the Deputy Secretary referred to, which is work done by many large cities in California to move forward innovative treatments for bicycling, specifically called the NACTO, the National Association of City Transportation Officials, Urban Bikeway Design Guide. NACTO has bicycle signals in it.

Cities such as San Francisco and other large cities in California have been using bicycle signals in ways that conform -- I would say conform substantially to not only NACTO but accepted engineering practice in the MUTCD for many years now. We have lots of experience on the ground. I personally use these signals when I bicycle in California and other cities. And so we wanted to bring that expertise to bear.

Bicycle signals are a bicycle-specific traffic control device, but they have to operate in the context of other traffic control devices that direct operations of motor traffic and pedestrians.

For many years there has been a large hole in the spectrum of traffic control devices available for directing the movements of pedestrians. There have been passive signs, there have been flashing beacons, which are generally regarded as only marginally effective in directing the attention of motorists to yield to pedestrians. But on major roadways with multi-lane approaches, with crosswalks across those approaches, where the approaches are uncontrolled, that is motor traffic does not have a traffic signal or a stop sign to stop, it has been challenging to get motorists to stop or to yield for pedestrians as is required by law. This gets even harder when the approach is two or three lanes.

Fortunately two -- in the last decade two devices have been introduced into practice. The first is for use with less-intense crossing environments where a yield is all that is sufficient. And this is a flashing device that fits between the diamond warning sign and the downward-pointing arrow that indicates the location of a crosswalk. It's called the rapid-flashing beacon. This was interim approved by the Federal Highway Administration. And interim approval

means the device has such merit that no more experimentation is required, but it is too late to get into the latest revision of the manual. The manual is revised every five or six years so it takes a long time to wait for the next manual.

The other device is used -- it is much more traffic signal-like. It looks like a firehouse signal. It has two reds over a yellow. It's called a pedestrian hybrid beacon. And actually the two red over yellow face is not turned to the pedestrian, it's shown to the motor traffic on the major street. It stops traffic with a double red indication and allows pedestrian traffic to see a pedestrian signal on the crosswalk.

Why this is so important is that there is really no other way to allow pedestrians across a major street other than to put in a full traffic signal for pedestrians. And there are high conditions for approval of such a signal so that it doesn't get applied where it might be used. In my work with the Pedestrian Safety Assessment Program in the state I see many locations with big, big roads that are hard to cross and yet it's 1,000 feet to walk to the next signal.

Why is this relevant to bicycles? Because on streets where not only pedestrians cross these major uncontrolled locations but bicycles would like to cross, perhaps because it's a minor street, it's disconnected

across the major street. It would be good to integrate with this new pedestrian hybrid beacon device, a bicycle signal face on the cross-movement.

Federal Highways' Interim Approval 16 for the use of bicycle signal faces specifically disallows the use of bicycle signal faces in that context and the reason given was that the experimentation has not been conducted. One of the California cities, the City of Berkeley, has done substantial, technical work in creating a phasing sequence that we believe will work well with this particular context, that is a bicycle signal face on the cross-movement where the pedestrian sees the pedestrian signal.

Why is this a concern? Because the pedestrian is still walking into the intersection, into the crosswalk during the flashing "don't walk" indication when the countdown signal is displayed. But bicyclists seeing a flashing indication may think that the situation is just like a regular traffic signal where cross traffic, that is the motor traffic, has a red. in the pedestrian hybrid beacon it does not have a red.

So to circle back. We felt it important in California, if we are going to add content for bicycle signal faces, that the specific case of the pedestrian hybrid beacon context be addressed and we think we have a good, technical approach.

The other exception to the interim approval and the national language, which I'll describe in a minute, is that what is called a "scramble phase" is specifically disallowed. We are familiar with pedestrian scramble phases. Here in Oakland just a few blocks from here in Chinatown there are several pedestrian-intensive locations where all motor and wheeled traffic is held off while pedestrians are allowed to use all crosswalks, and in fact, all cross-diagonal movements to proceed through the intersection. It's safer for all concerned if pedestrians do their thing and then the wheeled traffic gets its way.

That application is specifically prohibited in the interim approval for bicycle signal faces. We think that with appropriate specification of a yellow flashing indication, rather than a green indication, and with specific, restrictive language in our proposed change to the CA MUTCD that we sufficiently cover the concerns of a bicycle scramble phase.

So what you have before you is a long proposal that is not written from whole cloth. It draws heavily, in fact almost entirely, on language that was laboriously put together by two national level technical committees.

At the state level we have this committee, which reviews all proposed changes to traffic control devices. At the national level the organization is bigger and different.

At the national level there is a council, which is sort of a top level umbrella organization that guides the process and ultimately approves what technical committees below it have crafted.

Two technical committees worked on the bicycle signal faces proposal at the national level and I was part of the initial discussions of that while I still served on that committee. Those two technical committees are the Bicycle Technical Committee and the Signals Technical Committee. They had already been working on bicycle signals when Federal Highway issued its interim approval late last year. They responded to the interim approval with draft federal MUTCD language that is now adopted by the national council and on its way to adoption in the federal rulemaking process that will lead to the next federal MUTCD, perhaps in 2016.

If we were to wait for that adoption it would most likely be 2018 before we could adopt those changes from the federal manual in California, which is how it is usually done. California waits for the next federal manual, say 2016, and then there is a two-year window for us to come into conformance with this and make changes that are specific to California. This was the process that was done at the 2009 federal manual, which became the 2012 federal manual. So it introduces another four years of delay.

Because we are proceeding from a manual in California that already has bicycle signal faces content, we thought we would work on the good work of the federal technical committees and/or the national level technical committees and see about using their already approved at national council level, proposal, editing it and presenting it to this committee for adoption or discussion for the CA MUTCD.

And so if you look at the agenda, the multiple pages devoted to this proposal, page 18 of 71 has the logo of the National Committee on Uniform Traffic Control Devices. And the pages that follow are indeed the approved of the adopted work of the national committee. In green I have edited or proposed edit changes to add the California permissions that we want, restrict things that we don't want in California, and basically build on this good work.

What we are not, though, doing, is to adopt the NCUTCD proposal. It was convenient for me to do the edits on the document that came from NCUTCD, but this is to be considered for discussion by this Committee to be new text that uses the style of markups of the federal MUTCD but is not from the national committee.

If the Committee deems this a good approach and Caltrans works with us, what we gain is four years head start on content that has already been adopted at the

federal level, with what we think are very reasonable and technically supportable ways of supporting this pedestrian hybrid beacon context and the scramble context. These signals are up and running and we think that engineering expertise and judgment should be brought to bear four years earlier on this.

And so I a submitting for your discussion, fellow Committee Members, much new content for the bicycle signal faces, including the ability to use bicycle signal faces that consist also of arrow indications; bicycle signal faces that according to the federal proposal are the content barred from the federal proposal, use circular signal indications rather than bicycle-shaped signal indications. But with the addition of a bicycle signal sign to make it clear that that face applies only to bicycle movements. And that's what we have before us.

COMMITTEE CHAIRMAN BAHADORI: Thank you. I would like to applaud your initiative in trying to make these available in California ahead of time that it would have become if we do the normal process. And as we were challenged by our previous speaker, Undersecretary White, we are tasked to do things better, more efficient.

Before I ask our colleagues on the committee to discuss this, Mr. Bhullar or representatives from FHWA, do you have any thoughts you want to share with us in terms of

the logistics and the process and all that?

MR. KORTH: Kevin Korth, Federal Highway Administration.

I just want -- I'll wait until we go through the discussion by the Committee and all the other pages about individual comments on the proposal but I just wanted to make a few comments based on what John said about timing of manuals and head starts.

The interim approval process is something I would use to help supplement innovation in-between manuals. So the pedestrian hybrid beacon, these bicycle signals, the EV plug, the general service sign, the blue sign with the EV plug, those are all things that we provided interim approval before we get to the next manual to allow an agency to request -- here in California we have the statewide approval letter that needs to go through first through the CTCDC on those interim approvals and then from there the local agencies just need to contact Caltrans about using those signs and documenting it. So that once it goes into -- it does go into the next manual and stays strong, cities and counties in the state can continue using that sign. But if there is a reason to pull back the interim approval then there's documentation there of what locations you had those devices there. Because if those devices were to stay up and they didn't make it through the federal rulemaking process

then you'd be open to tort liability because there is no federal blessing per se, of those devices.

The technical committee, the national committee that John is referring to, that's a non-governing body. They are just a technical committee that is providing recommendations to Federal Highway to be considered into the federal rulemaking process. This isn't a federal approval, this is an interest committee that is providing a recommendation to Federal Highway. So it's not a federal approval, these are approvals of a committee providing information to Federal Highway.

So that's all I had about what the -- how the national committee works and interim approvals work at this time. I'll wait until we talk more about this topic to provide further comment.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Mr. Bhullar.

MR. BHULLAR: Johnny Bhullar with Caltrans, the Editor for CA MUTCD. I'm glad you're asking the process here actually.

What I would like to share first is that -- just echoing a little bit of what Kevin is talking about that the national committee, I have Maurice here who is a national committee member, myself included and John. But the national committee is pretty much an advisory committee to

the FHWA.

So here what we are looking at is -- first I think we should look at it in two different ways. One is the interim approval by itself that the feds have. Because every interim approval that the feds come up with, we should have a stand on whether that is acceptable for California or not.

And in terms of if it's acceptable, then we should be seeking a blanket approval so that it can get started. So here we are digressing from an interim approval that the feds have issued by not even accepting or rejecting it, but digressing into another avenue, I would say.

So secondly, since FHWA has the rights to give us either substantial conformance on any of these policies when we include them into the manual or not. So once the CTCDC makes a commendation and we go back with this item, I would say Kevin and FHWA is in the room and they have had the luxury of reviewing this. So at the end of the item today i would like to at least seek their opinion on whether we will get substantial conformance or not.

But looking at this item, I do like it in terms of what the agency wants to do, what the department wants to do. And as long, I would say, that we -- in this item we are meeting the minimum and are not lowering any of the national MUTCD standards. At least that way the innovation

should not, I would say, stop us from going in this direction as long as we are not violating or lowering a national MUTCD standard. That's my hope.

So in that regard, if we can take this item in that direction and probably adopt it we can address that.

COMMITTEE CHAIRMAN BAHADORI: Mr. Bhullar, can I just ask you a question of clarification? A hypothetical. If we just decide to adopt whatever is in front of us today, it doesn't affect our compliance with the national MUTCD, does it?

MR. BHULLAR: Well that's my question to Kevin, does it lower any of the current standards of the national MUTCD if we go in that direction? And I could give you my answer.

COMMITTEE CHAIRMAN BAHADORI: I don't see -- I don't see different than being lower.

COMMITTEE SECRETARY SINGH: There is no policy in the national MUTCD, at this point there is no policy. We do have policy in the CA MUTCD.

MR. BHULLAR: And that is my opinion too, that in my opinion it does not. But I will let FHWA make the decision.

COMMITTEE CHAIRMAN BAHADORI: Yes, because this is a very interesting concept and a different way of doing things. And these are like -- these are some very serious,

good recommendations. Before we start spending, going through pages and items and paragraphs I just want to make sure that we are clear that just being different than the national MUTCD doesn't make us any less, it's just different. And if they are silent on certain things and we introduce specs or standards in those areas, we are still in compliance, or at least general compliance.

MR. BHULLAR: That's my hope.

COMMITTEE CHAIRMAN BAHADORI: I'll let the FHWA speak for themselves.

MR. KORTH: Kevin Korth, Federal Highway Administration. I'd say just because there are -- In Section IA.10 there's -- it's all about the interim approvals, interpretations, requesting an experiment. Just because -- on any device within the manual, in any of the parts if the manual is silent on something, it may or may not be allowed. So just because the manual is silent on a certain device that you've created it doesn't mean you can just put it out there. It still needs to go through a human factor study. Just like -- I caught the tail end but it sounded like there was a device that was being proposed during the public comment period and they were told they needed to have a human factor study before they bring it to the Committee.

So in this instance, even though the 2009 MUTCD is

silent on bicycle signals we have provided an interim approval so we have established a position on bicycle signals. So my recommendation would be that as far as the exemptions that were in the manual, I'll give you a little bit of background about why we excluded pedestrian hybrid beacons. It was because there was only one experiment that was documented to Federal Highway and that was in Oregon on integrating a bicycle signal with a pedestrian hybrid beacon. And we felt at the time that the regional preference of just what is going on in Oregon with that one study wasn't enough to provide a national approval on using these hybrid beacons. So what we were wanting to see is that if an agency such as the City of Berkeley has a proposal on how to handle pedestrian hybrid beacons that they would request an experiment from us based off that interim approval to provide that application.

And I have some e-mails from a similar scenario that occurred in Portland where Portland provided how the phasing and operation was going to go for a pedestrian hybrid beacon with the bicycle signals and Federal Highway did approve that experiment. So if an agency within California, once there was the statewide interim approval, had for the scramble phase or the pedestrian hybrid beacon, if they had a process that they felt should be applied, they could request an experiment against that exemption in the

interim approval. That way we have it documented and the agency could use that device and be covered under tort liability by having that approved experiment from the Federal Highway Administration.

COMMITTEE CHAIRMAN BAHADORI: Okay, thank you. Mr. Ciccarelli, do you have anything to add or a question or a comment on this? Do you want to be heard?

COMMITTEE MEMBER CICCARELLI: I am going to rely on the editor of the MUTCD, frankly, and his deep experience negotiating with FHWA for how this goes with regard to substantial conformance.

I personally see it as an expansion of existing CA MUTCD content and the federal interim approval has a stipulation that it's all or nothing. We cannot adopt or request that Caltrans adopt IA.16 without also accepting the restrictions, and thus putting the pedestrian hybrid beacon application in the Request to Experiment category. And we think -- that's why I wanted to put the proposal on the table.

It's important with regard to not removing restrictions in the federal manual. This is not directly on topic but in the sense that the signals technical committee especially was very concerned that this new device at the federal level, or any level, work with the way motorists and other users and bicyclists and pedestrians interpret signal

faces. It's important that it not behave differently, that it follow the same expectations with regard to color, alignment of the indications within a face, the sequencing; and I rest on their good work.

Instead of having two members of our committee dedicated to non-motorized issues you're talking about the efforts of probably 50 technical professionals at the national level. So this is well technically grounded. Great care has been taken to ensure that it harmonizes with the existing federal MUTCD.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much.

Okay, colleagues, let's just start discussing it.

Let me see if anybody in the public has anything quick that they want to share with us. Anybody? Okay. Sir, if you would step to the podium, please. Okay, I opened a Pandora's Box, we have a long line.

Colleagues, I thought it may help us listen to the folks first in the audience before we bring it for discussion so that we can have the benefit of their advice also and address their comments.

So sir, if you would please introduce yourself, your affiliation and share with us.

MR. ANDERSON: Sure.

COMMITTEE CHAIRMAN BAHADORI: And due to the number I'd appreciate if you'd limit your comments and stay

focused to the point; thank you.

MR. ANDERSON: My name is Eric Anderson, I am the Pedestrian and Bicycle Planner for City of Berkeley and one of the members of the Caltrans District 4 Bicycle Advisory Committee who has worked with John to craft this language.

And I just wanted to say that in berkeley we are very interested in this proposal because, as you may be aware, we have a bike lane network that is based on residential street bicycle boulevards. And excluding the use of bicycle signal faces and pedestrian hybrid beacons effectively eliminates a very important tool from our toolbox for making these critical arterial roadway crossings for bike boulevards. That is not only important to Berkeley but it's important to many cities across California which have bicycle boulevards.

And the last thing I would say is that in our mind, allowing the use of bicycle signal faces with the pedestrian hybrid beacon actually fixes something that is currently broken with the pedestrian hybrid beacon, which is that this is a device that is not currently bicycle friendly.

And John made a sort of brief description of the experience of what it's like to approach a pedestrian hybrid beacon from the side street as a cyclist. Typically as a cyclist you're conditioned when you see the flashing DON'T

WALK to think of that as your countdown for your green time. So, you know, if you see 20 seconds on a countdown you think, I have 20 seconds to get through this intersection and I'm clear, there's a stop condition on the intersecting street. That's a completely different and counter-intuitive situation with the pedestrian hybrid beacon where the flashing DON'T WALK in fact means exactly the opposite, that as a cyclist you need guidance to stop and assign the right-of-way to whoever is entering the intersection.

COMMITTEE MEMBER CICCARELLI: Let me clarify. That's because during the countdown on the pedestrian hybrid beacon displayed to the pedestrian, the motorist is getting a flashing red, which is legally a stop sign, stop and proceed.

MR. ANDERSON: So currently pedestrian hybrid beacons are actually not bicycle accessible or bicycle friendly and I believe they present significant safety hazards to cyclists and this proposal actually remedies those issues. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Any questions from the speaker? Thank you for your time, sir.

MR. DANG: Hi, Tony Dang representing California Walks. I am also a member of the Caltrans District 4 Pedestrian Advisory Committee and I just have a question/concern.

In the development of the integration with the bicycle signal phasing, let's say that there is a pedestrian and bicyclist arriving at the pedestrian hybrid beacon at slightly different times and precluding one from kind of activating it when they arrive. I am just curious what sort of reset procedures are for the beacon because, you know, since pedestrian hybrid beacons are generally installed on high-volume, high-speed roads, we don't want to increase the delay to either a pedestrian or a cyclist arriving if they just happen to miss that cycle that was activated by the other user.

COMMITTEE MEMBER CICCARELLI: I hear two concerns. I hear -- the first concern is how is the device to be activated? The second concern is whether there is timing appropriate for one class of user that is not appropriate for the other class of user?

As I understand it, and perhaps Eric can comment if needed, the way a pedestrian hybrid beacon is activated is by pedestrian detection. Currently that's been either a push button or -- and I have never hear of a PHB being activated by a passive device such as a microwave. You really want the pedestrian to physically request the crossing.

I would assume that if bikes were integrated that this -- that a similar activation would be present for the

bicyclists because you want -- the device differs from a traffic signal in that it rests green for the motor leg. It has to be requested before it goes into its flashing yellow, solid yellow and then solid red phase that allows the minor movement to cross. So I would assume that the bicyclist would be expected, if arriving first, to either press the pedestrian call button or to press a separate bicycle activation button.

Further, I would not expect, and I rely on the signals experts on the Committee on this, that the timing would be different because the sequence is going to be the same. A pedestrian should be able to depend on the same behavior if they arrive after the bicyclist has pressed the call button. So I would not expect a bicycle call button, if present, to call for different timing.

MR. DANG: Well I think that -- so once the entire cycle is complete are there any restrictions on whether the beacon could be activated immediately again? I think that's my --

COMMITTEE MEMBER CICCARELLI: That's up to the signal operations engineer. You would not in general want to do this, especially on a coordinate arterial, because it would just mess up the performance of the road. You've got to balance the needs of getting motor traffic through on what is, by definition, a more major street so I would

assume there would be site-specific considerations.

COMMITTEE CHAIRMAN BAHADORI: Okay, any questions from the speaker?

Hearing none, thank you, sir.

MR. SALLABERRY: Good morning, Committee Members, thank you for having us. My name is Mike Sallaberry, I'm with the San Francisco Municipal Transportation Agency; I'm a Senior Engineer with that agency. I've been working for 15 years on traffic operations, bicycle/pedestrian projects throughout those 15 years.

I think this is a very well-written item, I applaud your efforts on that, and I suggest that it be adopted as proposed. We have been using bike signals at 11 different locations for a while now and we find them to be very intuitive, they work like regular signals, and this language reflects that intuitive operation.

And I think what this language does is, California was a leader in bicycle signals because of the good work that Davis and that you all did in adopting bicycle signals. what this does is it gives really clear guidance on the proper use of those signals, so it's a great tool. And what this does is it gives practitioners very clear guidance on how to use that tool. We don't have many pedestrian hybrid beacons in San Francisco, in fact the only one we have was installed by Caltrans so thank you Caltrans.

But I do support the use of bicycle signals at those beacons because it makes sense. All of this makes sense. And I think without guidance that practitioners may veer in wrong directions and this gives us the proper guidance to do our job well and safely. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Any questions from the speaker? Thank you for your time, sir.

MR. WACHTEL: I am Alan Wachtel, I represent the California Association of Bicycling Organizations, or CABO, on the California Bicycle Advisory Committee or CBAC, which is chartered by the Department to advise it on bicycle issues, and I have been authorized to represent CBAC at today's meeting.

CBAC has not had an opportunity to look at this proposal. It was not available at our last meeting on August 7th, we are meeting again next week. We have reviewed several previous proposals but they were substantially different from this one. So I am unable to offer you any comments from CBAC, any official comments from CBAC, although the Committee still would appreciate an opportunity to review the proposal at greater length.

I do have some comments representing CABO but these are not official CBAC comments.

Bicycle signals can be very useful in certain situations. As a member of CBAC I collaborated with the

City of Davis in developing the statutory language regulating bicycle signals and with Caltrans in developing the warrants for their use.

I have some concerns about their use that are not adequately addressed, in my opinion, by this proposal. Normally we understand what it means to say that traffic facing a signal indication is controlled by that indication. An indication will face a particular lane or lanes or approach to traffic. There is no ambiguity about that. It controls only those directions of travel facing it and it controls all the traffic that faces it.

If a bicycle signal is used to regulate an off-road facility such as a shared-use path then it's clear that it regulates the traffic on that path and all the traffic on that path. if the bicycle signal faced a lane of traffic that was shared by bicycles and vehicles an ambiguity would arise if the bicyclist were required to obey the bicycle signal in preference to the vehicular indication. For instance, assuming that the lane is too narrow for bicycles and vehicles to share side-by-side. It's conceivable you could have a situation where a bicycle is at the head of the line facing a red indication while vehicles in line behind the bicycle faced a green indication, or the opposite. And no one knows exactly what would happen but I suspect you'd find a lot of traffic cutting around to get to the head of

the line in that situation.

I don't expect anyone intentionally to use a bicycle signal in such a situation. But there is room for confusion, ambiguity and misinterpretation if it's not clear that the bicycle signal head regulates only bicycle traffic on a particular facility, such as a shared-use path. If it's understood to regulate other bicycle traffic on the roadway or bicyclists on the roadway decide that it would be favorable to them to observe the bicycle signal rather than the vehicular signal, then you're going to have unexpected movements and confusion. And although the proposal has guidance in this direction it's only guidance where it should be a standard.

The interim approval makes a statement that bicycle signal faces shall not be used for controlling any bicycle movement that is sharing a lane with motor vehicle traffic. Statements such as that are absent from this proposal.

The use of the proposal to regulate traffic in a bicycle lane may be problematic because a typical bicycle lane on the right side of the roadway although it's exclusively for bicycles, between intersections becomes shared-use at an intersection where vehicles are permitted and required to merge into it to initiate a right turn. And it is not clear to me how different indications for the

vehicular and bicycle traffic would operate there if traffic is permitted to make the ordinary movement of merging into the lane.

I think that some of the modifications to the national committee's proposal here are intended to deal with the issues of pedestrian hybrid beacons and scramble phases. It is not clear to me how the pedestrian hybrid beacon would operate with a bicycle signal. I am not concerned about the phasing of the beacon and the bicycle signal but about the interaction with possible existing traffic controls at the intersection where the bicyclists are crossing.

I am also not clear about the use of the scramble phase with a flashing yellow in all directions. A combination of indications that is normally prohibited. Where would the origins and destinations of the bicyclists using a scramble phase be? Would they be off the road, would they be on the road? And is it likely that bicyclists on the road would obey vehicular indications rather than bicycle indications.

There are a number of places in the proposal where I think the wording could be improved to address these concerns; but of course I don't want to go through them now for reasons of time.

COMMITTEE CHAIRMAN BAHADORI: Thank you, Mr. Wachtel.

MR. WACHTEL: I appreciate the characteristically thorough work of Mr. Ciccarelli on these issues -- on this proposal, but these are concerns that I would like to see addressed and that I would like CBAC to have a chance to consider.

COMMITTEE CHAIRMAN BAHADORI: Thank you, Mr. Wachtel. And for the record, these are your opinion and do not reflect necessarily CBAC's recommendations.

MR. WACHTEL: That's correct. CBAC has not had an opportunity to consider this proposal.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much.

Any questions? Okay, Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: I would like to respond to a few things. First of all I wanted to make clear that Alan did offer his comments as a representative of the California Association of Bicycling Organizations.

MR. WACHTEL: Yes.

COMMITTEE CHAIRMAN BAHADORI: Although not CBAC.

Specifically addressing the bike lane merge when a bike lane is brought to an intersection that has no dedicated right turn lane. Typically -- well, motorists are required to merge into the bike lane before making a right turn. I would assume, although assuming is probably a bad idea, that if a bike signal is to be used to control separate progression into the intersection by bicyclist

versus motorist, that: A, there would be no right turn on red; and B, that the bike lane would be striped differently to indicate that a merge is not desired.

I could think of an analogous situation in San Mateo where a motor vehicle flow from the freeway is brought to the Third Avenue signal at the end of the ramp. And it is not a bicycle context but it's two separate approaches within a single approach that are signalized differently because it is unsafe for them to go in parallel. One gets to turn left across the other and turn right across the other. It's sort of analogous to the bike lane situation.

So I would see this being used with prohibitions on turning or actually prohibitions on any movement from the bicycle side while the motor vehicle side is operating and vice versa. But it is clear that the language needs to make that clear.

With respect to shared-lane usage. I'll need to review the proposal. There is a bike signal sign which is new, would be new for California application. There is no such sign in the CA MUTCD right now. It was introduced in the federal technical work because of the desire to use certain circular faces and arrow signal indications and arrow signal indications where it might not be clear otherwise that it is a signal face that applies only to bicycle movements. I would certainly hope that such a sign

be present to resolve the ambiguity.

Bicyclists are already, I believe in California, required to obey the indication of the bicycle signals where present. And where that signal is present with a vehicular indication. So I think we are already conditioned, at least in the limited cases where bike signals have been applied, to know that we are not supposed to proceed with a vehicular indication where there is a bike signal present

MR. WACHTEL: Well this is my concern, bicyclists facing the bicycle indication are required to observe it. But there might be bicycles in other locations on the road other than those facing the bicycle signal, if the signal regulates only an off-road path or a bicycle lane. And the use of the bicycle signal sign again raises the question of whether bicyclists will understand that these indications regulate only bicyclists on a particular approach or all bicyclists on the roadway, and that may not be its intent.

COMMITTEE CHAIRMAN BAHADORI: Okay, thank you. Thank you very much, Mr. Wachtel.

Next speaker.

MR. BITTNER: Good morning, my name is Jim Bittner with the City of San Jose. I had three, three elements that I wanted to discuss.

The first was relative to that, the bike signal sign. Where it would be recommended, where it would be

maybe required? My concern for that is, 120 feet away from the stop bar versus 80 to 120 feet versus closer than that. How visible that symbol is to the bikes approaching as well as the vehicles approaching the intersection. There is the option of putting the signal on the near side as well. That is something where I would like to get a little more guidance with possibly diagrams of how that would look because you are going to have a near-side signal for regular traffic as well. Are they side-by-side, are they above each other, are they on separate poles? Are there guidance, are there standards?

Visibly would really help a lot in trying to understand how to implement these. Where the bike signals would be on the far side of the intersection versus the rest of the signals at the intersection. I think visibly that really, really helps cities to understand the best practices of where to implement things. Even if it's just a guidance and it's not required it gives us a starting point and then we can modify it how we need to on each case.

Another question that I had for maybe for some clarification is on the figure that shows the phases on a pedestrian hybrid signal. My concern on that is on the proposed duration times for the Phase 2 yellow, steady yellow, and the Phase 4A, the four-way stop condition. For both of those it has specific times on them. On the yellow

it says "Proposed duration 3 seconds." I suggest that that just go back to what a standard signal would be, whatever the standard yellow time would be based on the speeds on that street. And on the Phase 4A it says "Proposed duration 14 seconds." That should be for whatever the flashing DON'T WALK countdown would be based on the length of the street. So those are my comments.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

COMMITTEE MEMBER CICCARELLI: Responding to the last item first. I have to apologize because this was drawn from work done by the City of Berkeley. I am not blaming it on Berkeley, it's blaming it on me not catching that it needed to be generalized for standards application. Clearly this is the Ashby/Hillegass technical proposal that was brought to the citizens of Berkeley so that needs to change when this is included in the manual.

Specific to the near-side supplemental signal. If I recall the language in the federal technical work, the posting of a near-side signal is only to be supplemental to the far-side signal, so the bike signal always has to be mounted far-side. But optionally, in cases specified in the language, may also be a near-side signal so the bicyclists have something closer to them that can -- that they don't have to rely on exclusively looking across the intersection.

MR. BITTNER: What I was trying to clarify in that

is how it's placed next to the near-side signals for regular vehicular traffic as well.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much.

Next speaker?

MR. SABERIAN: Good morning, Massoud Saberian, City of Santa Rosa.

The reason I wanted to address the Board is my Oregon connection. I was on the Oregon Traffic Control Devices Committee for a number of years, including the Chair, two or three years ago when the issue of the City of Portland came before us. And I encourage the Board or members who are actively involved with this to check with Mr. Rob Busch, City of Portland Traffic Engineer. I think there are two intersections, Northeast 41st at Glisan and Burnside that has implemented the HAWK (phonetic) signal in combination with the bicycle signal head. I just wanted to bring that to your attention so you can get a lot of information on that. As the Federal Highway Administration gentleman mentioned, they have either in their experimental reports or other information available that could benefit.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much for the information.

Sir, you already spoke but you have some clarification you want to make?

MR. SALLABERRY: Yes.

COMMITTEE CHAIRMAN BAHADORI: Very briefly, please, because we need to move on.

MR. SALLABERRY: Sure, very briefly. Thank you for the opportunity to comment again. Just because we've used the signal so much I just wanted to share --

COMMITTEE CHAIRMAN BAHADORI: And if you'd please introduce yourself again because we are recording.

MR. SALLABERRY: Sure. My name is Mike Sallaberry, it's my second time speaking on this item.

So because we have used the signal a lot I can offer the experiences we've had.

One of the speakers talked about confusion between motorists and cyclists seeing the same signal or the wrong cyclist with the wrong approach seeing the signal.

That I would say is the number thing that I think of as a practitioner is, "Am I meeting the visibility of the signal to the people who should see it?" So I think this language addresses that, due to the discussion on program visibility. We used visors, we used angled visors, vertical louvers. Various ways to keep the visibility separate. But these are -- the issues that one of the speakers talked about, are easily addressed by existing tools. So it is an issue but I think through engineering judgment and design that they can be easily addressed.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much.

Anybody else in the audience who wishes to address the Committee on this item?

Seeing none I close the public hearing part of the item and bring it back to the Committee. Colleagues, we have been here for two hours. Anyone here who needs a break? Do you want to break? Okay. Because we can be discussing this for quite some time.

Let's break for -- now I have 11:00. How about if we are back her at 11:10? Thank you. We recess for 10 minutes, thank you.

(Off the record at 10:57 a.m.)

(On the record at 11:10 a.m.)

COMMITTEE CHAIRMAN BAHADORI: Thank you. Let's call the meeting back to order. It's 11:10 and we had a nice break.

Before I forget, Mr. Bhullar just reminded me that whatever we do today, and whatever is approved, will make it into the new manual. Is that true? Do you want to clarify, Johnny?

COMMITTEE SECRETARY SINGH: We will try. Something controversial like Kevin is saying is not in compliance, maybe we'll keep on the side. Something easier to go in we'll include in new standards.

COMMITTEE CHAIRMAN BAHADORI: Okay, good, thank you. Thank you. So I am glad for that clarification. So

let's see if we can get something non-controversial approved so we earn our money today.

Thank you all who shared with us your thoughts and comments and suggestions on the item about the interim approval for the bicycle signals, Item 14-05. I have closed it to the public now and I am bringing it back to the Committee.

So members. Mr. Ciccarelli, you heard all the comments from FHWA and our colleagues in the industry and all that so how wish you to proceed with the item?

COMMITTEE MEMBER CICCARELLI: I'd like to hear the members' discussion but I would like to -- is it appropriate to formulate a motion at this point?

COMMITTEE CHAIRMAN BAHADORI: Okay, before you -- you can formulate a motion and get a second and then as part of the discussion, listen to colleagues. But colleagues, if you have any thoughts or suggestions before making a motion you may want to share it so it's included and incorporated in the motion so we don't go back and start amending the motion. I'll start from our new member, Jay. Any comments, suggestions on how to approach the item itself and if you have any specific comments on the language that's in front of us, which is pretty long?

COMMITTEE MEMBER CICCARELLI: Let me make one sentence.

COMMITTEE CHAIRMAN BAHADORI: Just one second. Go ahead, John.

COMMITTEE MEMBER CICCARELLI: Okay. To circle back to how I began my presentation, this is not going to be a motion to approve -- to recommend approval of the interim approval. This is going to be a motion, when it comes forth, to propose the content that's in the agenda for inclusion and modification of the CA MUTCD. So we are proposing to disregard Interim Approval 16 and to instead propose new California content that is, however, based on technical work at the federal -- at the US level.

COMMITTEE CHAIRMAN BAHADORI: So that will be the potential motion when it is made. Go ahead, Mr. Walter.

COMMITTEE MEMBER WALTER: Okay. So, Mr. Chair, then actually my question really would be then, okay, what's the next step from here? As I had a chance to review this I had probably a number of, say, questions and wording modification suggestions, those kind of things, but yet I am not sure that there is value in one by one. Maybe that's something that if this takes, another step where we can submit those and then potentially that's something that John looks at and sees or we have some discussion in that regard. Because being that this is the first time that I have seen it I am not -- I am not entirely comfortable with it if we just simply approve it on its face today.

COMMITTEE CHAIRMAN BAHADORI: Absolutely.

COMMITTEE MEMBER WALTER: So my question really would be, what is our next step with this and potentially how long is it before it becomes approved, say to be submitted and put in with the MUTCD in California?

COMMITTEE CHAIRMAN BAHADORI: Mr. Winter?

COMMITTEE MEMBER WINTER: Just a question, I guess I had and maybe one of the speakers had asked that question, which is: if there is any intent here to have a diagram or some other representation of a plan of just how the configuration of what is in the narrative is going to be placed. Because I don't see that in the agenda packet but I don't know if there was something to help practitioners understand just specifically what is being discussed?

Because I know in my circumstance with -- and we don't use -- in Los Angeles County we have not had opportunity or desire to use hybrid beacons. But my expectation is some of those devices would just be at -- typically those devices are at mid-block locations. So as you're talking about bicyclists coming up upon them from a minor approach it might help if there was a representation of the plan view that just described what that -- what that would represent.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

Mr. Greenwood?

COMMITTEE VICE CHAIRMAN GREENWOOD: I am struck that CBAC has yet to weigh in on this and it has been our habit to wait for their opinion and wisdom on these items and so, like Mr. Walter, I think there might be a little bit of work to do. This feels rushed and I'd rather wait. Wait to hear from CBAC and have an opportunity to review this more thoroughly.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

Lieutenant Ricks? I took the promotion back, how about that?

(Laughter.)

COMMITTEE MEMBER RICKS: What happened?

COMMITTEE CHAIRMAN BAHADORI: Are you happy now?

COMMITTEE MEMBER RICKS: I'll rely on the rest of the Committee Members for their expertise on the concerns that are involved with this. My only thought just right up front, and it sounds like it was addressed, was the fact of the confusion between the vehicular traffic and the bicycle traffic. It sounds like that may be addressed in the proposal so that would probably clarify that issue for me. But as far as the other aspects of it I'll rely on you all.

COMMITTEE CHAIRMAN BAHADORI: Duper?

COMMITTEE MEMBER TONG: Yes. I would like to see the concept. I support the concept of this proposal. And thank you, John, who proposed that. Caltrans Signal

Committee also reviewed it and preliminary it looks practical and feasible to use. But I would like to spend some time working with John to come up, like other committee Members said, to create some kind of diagram to illustrate how to do the application of those different signals. How they are arranged, get it together. So I would like to work with John to get more detail of that.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

Mr. Jones?

COMMITTEE MEMBER JONES: Nothing to add.

COMMITTEE CHAIRMAN BAHADORI: Mr. Marshall?

COMMITTEE MEMBER MARSHALL: Thank you, Mr. Chairman. I just want to let the rest of this Committee know that one of the other things I do in my professional work is represent local agencies on the Caltrans District 4 Bicycle Advisory Committee. In fact, borrowing terminology you used earlier, I have the honor of serving as the Chair of that committee currently.

And so I want to thank John for working with colleagues of mine on that organization, many of whom you heard from in our speakers today, and I want to thank them for the work they did. I don't get any of the credit just because I'm the chair of the committee, I wasn't actually part of the subcommittee that did the work that led to this proposal. But I wanted to let you all know I have this

connection between the two voices being heard from.

So I am supportive of what is being proposed. I have been taking lots of notes about the input from the speakers as well as from our own committee here. I am supportive of addressing the suggestions that the other Committee Members have raised so far and don't have any others to put on the table than what has been expressed.

COMMITTEE CHAIRMAN BAHADORI: Thank you. I for one would like to applaud Mr. Ciccarelli for bringing this to us and putting it on the agenda and doing things a little bit different and not waiting on those infamous four or five year cycles that we wait for the feds to do something and then we go through a couple of years of workshops that Mr. Bhullar is leading us. And we do -- sometimes I wish I was at the dentist getting a root canal, but hey, that's the process, we've got to do that.

And sometimes it gets pretty tedious but for good reasons. Those of us who are practicing, pretty much all of us in this room, we know how important the significance of a comma and a period and a semicolon can be if you're going through a court hearing. And if you're serving as an expert witness for either the industry or for the local jurisdiction that you work for, Caltrans or city or the county. So we take it very, very seriously because we don't want to be putting -- not only endangering the public by

introducing inconsistency and confusion but also not putting our colleagues into a precarious position of defending their decisions because of ambiguities and confusions that we potentially have in our design manuals.

So our work is serious, it's tedious, it takes time but it's all for a good reason. But at the same time it should not be used as an excuse for delay and not getting things done and not being responsive for the actual needs on the ground. So I applaud you for bringing it to us.

You heard everyone here. And I think it's a good -- it's a very good proposal. I am not sure if we are ready to do any vote on the specific language. But how do you suggest we go from here?

COMMITTEE CHAIRMAN BAHADORI: It seems clear to me that a round of technical review is needed. I am hearing, not to speak for the Committee, I am hearing in-general support for what is before us but also a concern that there are some details, not only textual details but figures that might be added, they should be considered. We had several good specific comments from speakers that I think should be addressed.

And it seems to me that a round of that activity, perhaps with a subcommittee, as we have done for other substantive issues such as the yellow timing, would be fruitful. With such work by a subcommittee to be concluded

in time for getting this before CBAC. Now CBAC's next meeting is too soon, it's October 2nd. However, I would guess that CBAC's meeting, which is on an every two, first Thursday's basis, would be before our next, roughly, quarterly meeting. I am not sure whether we have a meeting date for our next meeting. But if it's after the first week in December then that would allow us time for CBAC review of the work product of the subcommittee.

COMMITTEE CHAIRMAN BAHADORI: That's an excellent suggestion. Are you volunteering to chair that subcommittee?

COMMITTEE MEMBER CICCARELLI: I do.

COMMITTEE CHAIRMAN BAHADORI: And anybody here? I assume, Mr. Jones, you're going to be interested.

COMMITTEE MEMBER JONES: I would love to be on it.

COMMITTEE CHAIRMAN BAHADORI: Any other member? Mr. Marshall?

COMMITTEE MEMBER MARSHALL: I will certainly help, yes.

COMMITTEE CHAIRMAN BAHADORI: And Mr. Kenney and Johnny Bhullar, I see two hands from that side. Mr. Walter.

Okay, so you have your task. You are going to chair the subcommittee of Mr. Marshall, Mr. Jones, Mr. Kenney, Mr. Bhullar and Mr. Walter and then in collaboration with the CBAC.

COMMITTEE MEMBER CICCARELLI: So to clarify, because the subcommittee will do its work and needs to conclude its work in order for CBAC review, we will not bring our work back for formal review by the Committee as a whole.

COMMITTEE CHAIRMAN BAHADORI: Correct.

COMMITTEE MEMBER CICCARELLI: Instead we will probably run it by you.

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE MEMBER CICCARELLI: And then take it forward to --

COMMITTEE CHAIRMAN BAHADORI: To CBAC.

COMMITTEE MEMBER CICCARELLI: To CBAC via Caltrans' liaison to CBAC.

COMMITTEE CHAIRMAN BAHADORI: Absolutely. And then having chaired a couple of those, one on the speed limit and one on the yellow timing, I wish you luck.

(Laughter.)

COMMITTEE MEMBER CICCARELLI: I'll further connect, and I believe my schedule allows this, to present the item before CBAC.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much for your leadership on the issue and thank you.

Mr. Wachtel, I have closed it but due to your position on CBAC please come -- but be very brief.

MR. WACHTEL: Just a procedural question, in any case, it's not a substantive comment.

COMMITTEE CHAIRMAN BAHADORI: Yes, sure.

MR. WACHTEL: I am just wondering whether you would like CBAC's comments next week on the current draft, with the understanding that it will be revised? So that you could use those comments and inform --

COMMITTEE CHAIRMAN BAHADORI: I don't think it's going to be a good use of CBAC because the draft will be revised.

MR. WACHTEL: All right.

COMMITTEE CHAIRMAN BAHADORI: You may want to wait until the subcommittee does their work and then they will share the revised draft with CBAC.

MR. WACHTEL: Understood.

COMMITTEE CHAIRMAN BAHADORI: Is that better, Mr. Ciccarelli?

COMMITTEE MEMBER CICCARELLI: I actually would like any comments that CBAC has on the current draft because -- for a couple of reasons. First of all, I would guess that substantial parts of the current draft will --

COMMITTEE CHAIRMAN BAHADORI: Stay the same.

COMMITTEE MEMBER CICCARELLI: -- remain. Particularly the parts in red that are wholesale additions to the proposed federal language. I think it would help our

subcommittee be more productive to have -- even though it means another round of consideration by CBAC at its December meeting.

MS. THOMAS: Can District 4 staff ask a question of Headquarters staff?

COMMITTEE CHAIRMAN BAHADORI: Ma'am, hold on a second, hold on a second.

COMMITTEE SECRETARY SINGH: We will add one person from our Traffic Signal Committee too to the subcommittee.

COMMITTEE CHAIRMAN BAHADORI: So one representative from Caltrans' Signal Design Operations, at the discretion of Caltrans, will serve on the subcommittee as the signal technical expert.

We have closed it to the public but if you have something important I would love to hear that, ma'am. Sorry to cut you off.

MS. THOMAS: I'm District 4 staff and --

THE REPORTER: We need her at the mic if it's going to be on the record.

MS. THOMAS: So that I can report this back to the overall District 4 Bicycle Advisory Committee.

COMMITTEE SECRETARY SINGH: State your name.

MS. THOMAS: My name is Beth Thomas, I am the District 4 Pedestrian/Bicycle Branch Chief.

My understanding was anything approved here today

was going to be in the 2014 CA MUTCD to be issued this month. So my question is, how, with this item needing further review and development, how would that affect the timing in terms of utilization for the cities of whatever you eventually recommend? What does this mean that they are waiting until 2016 or even 2018 because of the --

COMMITTEE CHAIRMAN BAHADORI: No, no. Just know things that get approved, and Mr. Bhullar can further expand on that. Sometimes Caltrans issues policy directives, it doesn't need to wait for the cycle. Mr. Bhullar, you want to expand on that? You don't need to wait until 2016, I can tell you that. Go ahead.

MR. BHULLAR: Johnny Bhullar with Caltrans, Editor for CA MUTCD.

Basically you are correct in that whatever gets recommended today and those we will try to be making it into the next manual, which should be released in the next couple of weeks. However, if something is critical after that, even though we have a revision cycle of the CA MUTCD that varies between two to five years, however what we do is we can issue a Traffic Operations Policy Directive with our Division Chief's signature and that becomes official policy right then when it happens So that's the avenue we can take.

COMMITTEE CHAIRMAN BAHADORI: And due to the

importance of this item, once it is formally approved by this body and is recommended -- by the way, we are an advisory body to Caltrans, whatever we recommend ultimately has to be approved by Caltrans' Director. And assuming that the recommendations are approved then, a policy directive will be issued, you don't need to wait until the next round of the MUTCD.

MS. THOMAS: I just wanted a very, quick, quick question. How do you, how do you handle if the policy directive has anything that contradicts what is in the printed or the -- what's in the adopted manual? That is the volume warrants that are in the adopted manual. So if a policy directive says that -- has guidance not to use the volume warrants, how does that handle when they contradict each other?

COMMITTEE CHAIRMAN BAHADORI: Let Johnny say and then we'll come to John.

MR. BHULLAR: Johnny Bhullar with Caltrans. Basically the way we handle it is on most -- all of our Traffic Operations Policy Directives that are related to the CA MUTCD, we always show the exact language, how it's supposed to be, going into the CA MUTCD with the cross-outs of the existing language that is out there. So the way it will show is it will be crossing out the existing, current official CA MUTCD language and the new language. So it will

show the cross-outs as well as the new language, and that's how we have done it.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: And if you look at the draft proposal that is in the agenda, that is, indeed done. The existing CA MUTCD sections with the volume warrant and the collision warrant are stuck. So that would be taken forward into the final proposal that would loop back to this Committee at its next quarterly meeting.

COMMITTEE CHAIRMAN BAHADORI: So there is precedent, we have done this before in issues that are of importance to traffic safety operation in the state. We don't wait for the regular cycles of the MUTCD. Caltrans issues policy directives and it becomes effective as soon as its signed.

COMMITTEE MEMBER JONES: Mr. Chairman?

COMMITTEE CHAIRMAN BAHADORI: Yes, Mr. Jones.

COMMITTEE MEMBER JONES: I just wanted to highlight two things. I want to highlight Berkeley and San Francisco for being innovative communities in our transportation profession and helping push the state and the federal government to make changes; and I think that is very commendable of both of them and thank you for being here today.

The second thing is, if we know we want to remove these bicycle warrants and collision warrants from the CA MUTCD, or if that is something we want to consider, could we take up that part of this item here right now so that the CA MUTCD could be cleaner when it is published and then the language for the bicycle traffic signal could be produced?

COMMITTEE CHAIRMAN BAHADORI: I, for one, hate to piecemeal important things. But if you have support on the Committee and if you think it's going to help I would like to hear from other people who know more than I do about this.

COMMITTEE SECRETARY SINGH: This item is not on the agenda so we cannot put something on the agenda.

COMMITTEE MEMBER JONES: Okay, that's clear.

COMMITTEE CHAIRMAN BAHADORI: And it's better to just do a comprehensive approach and get it done right rather than poking it from different sides.

COMMITTEE MEMBER JONES: Sure.

COMMITTEE CHAIRMAN BAHADORI: Thank you. But that's a good suggestion, thank you.

Okay, done with Item 14-05, we have a subcommittee and the subcommittee will start its work when the Chairman calls the first meeting of that subcommittee; and they will work with CBAC also. Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: Mr. Bahadori, so to

close that I would assume that after the subcommittee has done its work and Caltrans has routed it through CBAC and we have CBAC's second round of comments from their December meeting, that we would agendize this for action at our next meeting.

COMMITTEE CHAIRMAN BAHADORI: And next time it will be voted by this committee. I see the FHWA representative standing up. When the federal government wants to speak, I listen. Yes, sir.

MR. KORTH: Kevin Korth, Federal Highway, point people to Figure 1-0-1 again, the interim approval.

I just want to remind the Committee of the three options that are available as listed in the CA MUTCD: They can accept the interim approval outright and then let -- once they receive that statewide approval, individual agencies can request experiments on any modifications. And we kind of discussed today, a lot of people in the audience here had their own individual perception of bicycle signals, so they could use the experimental process for that.

Bicycle signals could be declined outright. But then the middle trail you see on that figure where the CTCDC requests some modifications to the interim approval and they would submit that to Federal Highway to say, we want our statewide blanket approval and these are like our modifications to that interim approval; will Federal Highway

accept our statewide blanket approval with these terms and conditions.

So that is one option that is, it's usually a little bit more time-consuming and not as successful when a state agency does that. It's usually a better path to accept the interim approval and then go to the experimental process. But if the CTCDC and the statewide committee would like to have statewide guidance, that would be the trail that they would want to pursue is provide the modifications to the interim approval and then request that statewide blanket approval with those terms and conditions from Federal Highway.

COMMITTEE CHAIRMAN BAHADORI: Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: I think that's a very useful piece of input, Kevin. However, the interim approval -- I want to clarify my own understanding. IA-16 was issued in December of last year and it was issued before the language on which I have based this proposal, which is in response to the interim approval. Furthermore, the interim approval doesn't have the level of specificity with regard to specific standard guidance option language that is in the draft that went through NCUTCD council. so our course of action that we seem to be going towards it to base our California edit on what's gone through NCUTCD council. If we were to take the track instead of requesting a

modification to IA-16, we would have less-specific language in the California manual. That's the clarification question.

And then on top of that I wonder whether it would be valuable from a practitioner's perspective to have California also pursue the avenue that you just outlined, which is a modified interim approval at some later date than the track that we are taking, that we seem to be taking? So in other words, we'd have probably a top-D (phonetic) in the 2015 time frame with substantially what has been before us today. But on a separate track we might consider asking FHWA for modification of IA-16 so that before the next federal manual and before the next California manual we have the additional coverage offered by an interim approval, as modified. Please comment.

MR. KORTH: As far as seeing the recommendation from the national committee, for the 2016 MUTCD, the Notice for Proposed Rulemaking is expected to come out in December or just past the new year on what Federal Highway sees as the revisions to the next manual. That would be provided to the nation to provide comment.

COMMITTEE MEMBER CICCARELLI: This year?

MR. KORTH: Yes.

COMMITTEE MEMBER CICCARELLI: Okay.

MR. KORTH: December of this year or into the

winter season here. So if the Committee was to wait, at that time they would have -- could have a better understanding of how much of the national committee's recommendation that was voted on back in June the Federal Highway took into consideration in our proposal to be put into that 2016 manual. So that might help provide further revisions and additional work by the Committee if they were to wait until this winter for that federal Notice of Proposed Rulemaking to go out with bicycle signals -- seeing where bicycle signals fall on that notice, what the proposed language is.

COMMITTEE CHAIRMAN BAHADORI: Sure.

MR. KORTH: That could be an additional step, just to wait.

COMMITTEE CHAIRMAN BAHADORI: And I think timing-wise it is going to work. Probably we are not going to have a -- we still haven't decided on the next meeting for the devices committee but probably we are not going to have another one this year, probably it's going to be pushed to January. So the timing is just going to work.

COMMITTEE MEMBER CICCARELLI: It would be useful and will be useful. It will be useful to see your agency's feedback on what went through the national committee. However, for the work of the subcommittee to take it, to conclude our work in order to get it through CBAC at its

December meeting, the state Bicycle Advisory Committee meeting, it seems to me that we probably will not have the federal feedback in hand by that time.

COMMITTEE CHAIRMAN BAHADORI: But before coming to the Devices Committee if there are changes you want to make you can still make in your final report from the subcommittee to the whole committee here. We'll see.

Thank you for your comment. This is an important item. I don't mean to rush it but we have a long agenda so I have to keep moving on. If we are going to --

Why did you want me to go to 14-16? Do you have someone here who wants to speak or?

COMMITTEE SECRETARY SINGH: No, that's okay.

COMMITTEE CHAIRMAN BAHADORI: Okay, so I go in the order, I stay on the agenda order. We go to Item 14-15, it's another one by our member Mr. Ciccarelli. It's a proposal to amend various Sections, 2A.15, 3B.18, 4E.06, 7A.01 and et al, of the CA MUTCD, submitted by Caltrans District 4. Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: Hopefully this one will be a little less controversial.

What this is is a grab-bag of changes to the pedestrian sections of the manual that were not incorporated in time to make it into the last CA MUTCD. And so at the initiation of the Caltrans District 4 Pedestrian Advisory

Committee under the guidance of Branch Chief Beth Thomas, who had spoken earlier, we are bringing forward a set of changes, California-specific changes, to the pedestrian sections, which range from 2, Part 2 is Signs, Part 3 is Markings, Part 4 is Signals, Part 7 is Schools, of the CA MUTCD. And that's what's before us as Item 14-15.

COMMITTEE CHAIRMAN BAHADORI: These are several changes. So let me, let me ask first. I don't want to do one at a time with the public because that is going to take forever. So anybody who wishes to address the Committee on any of the proposed changes in this item, if you would please come forward. And be specific as to what of the changes your comment is pertaining to, and preferably what page, so that good notes are taken. We are not going to get in a debate, we are just going to take it as part of comments when we discuss it in the Committee. Go ahead, sir.

MR. GRANT: Thank you. My name is David Grant, I am representing the California Alliance for Retired Americans. I also served as the co-chair of this committee during the preparation of these recommendations so my comments are to ask your support for each and every one of them.

Specifically, we carefully went through at some length what we thought would be tweaks, changes, small

modifications, updates to the MUTCD to reflect our interest in serving pedestrians and people with disabilities, seniors, families with children. All of the non-motorized users of the public roadways in California who would like to avoid being hit by cars and injured and killed.

So the recommendations we have here, we went through very carefully to look at what were the tweaks we could make, what were the suggestions we could specifically encourage. I mentioned earlier in my comments at the beginning the change from "option" to "guidance" for the 2.8 feet per second and that's one of the recommendations. There's a number of others.

I would encourage the Committee to think that the group that we worked with which represented consumer, citizens, city governments, a vast leadership -- as with Caltrans to talk about what was done, Focused on the idea that these were changes we had made. We considered them for two years and put together what we thought was the effective, minimal interventions to tweak the MUTCD to better reflect our focus on pedestrian safety.

COMMITTEE CHAIRMAN BAHADORI: Have you submitted written comments on this item?

COMMITTEE SECRETARY SINGH: The did in 2011.

MR. GRANT: Yes.

COMMITTEE CHAIRMAN BAHADORI: In 2011, not

recently. Your comments were in 2011. Okay, thank you.

MR. GRANT: Yes. The committee put together a lengthy letter and then we reviewed -- when the first cycle didn't go through we came back with these specific recommendations.

COMMITTEE CHAIRMAN BAHADORI: Okay. And Mr. Singh, those comments are --

COMMITTEE SECRETARY SINGH: They were not addressed during the 2012 adoption system so we are addressing all those comments.

COMMITTEE CHAIRMAN BAHADORI: Okay, thank you.

COMMITTEE MEMBER MARSHALL: Mr. Chairman, could I ask a question of the speaker?

COMMITTEE CHAIRMAN BAHADORI: Mr. Marshall.

COMMITTEE MEMBER MARSHALL: Did your group see the minor suggestions that were provided us from FHWA? They're really fairly minor but I wanted -- I'll hand you this if you haven't seen it already.

COMMITTEE SECRETARY SINGH: I have a copy.

MR. GRANT: I should point out that I am actually no longer on the committee, my term expired.

COMMITTEE MEMBER MARSHALL: Okay, then I won't give it to you.

MR. GRANT: I would encourage you to ask Beth if she is going to speak on it because she could tell you

specifically on that.

COMMITTEE MEMBER MARSHALL: Okay.

COMMITTEE CHAIRMAN BAHADORI: Okay. Mr. Singh is going to hand you a copy.

The next speaker, please.

MR. DANG: Hi, Tony Dang representing California Walks and I am a current member of the District 4 Pedestrian Advisory California.

For California Walks, we strongly urge the Committee to adopt all of these proposals because they are straightforward, common sense, long overdue clarifications and improvements to the MUTCD language. They will go a long way towards improving pedestrian safety. And as has been highlighted by Committee Member Jones, pedestrians now make up nearly a quarter of all traffic fatalities and these changes will really go a long way towards improving pedestrian safety.

I wanted to highlight two of the proposals because they are extremely important. One section --

COMMITTEE CHAIRMAN BAHADORI: It helps if you refer to the page number.

MR. DANG: Yes. Page 34, Section 3B.18 on Crosswalk Markings. This change in the wording clarifies longstanding practitioner misinterpretation of an FHWA study on when to include additional safety enhancements to new

marked crossings.

And on page 36 for Section 4E.06. As David mentioned, changing the walking speed for older adults and people with disabilities. The 2.8 feet per second from "optional" to "guidance" is extremely important for these populations.

So once again, I urge the Committee to adopt all of these proposals because they are simple, easy to do and we really want them to be included in the 2014 MUTCD. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Okay, thank you very much.

COMMITTEE MEMBER CICCARELLI: Thank you.

COMMITTEE CHAIRMAN BAHADORI: Next speaker, please.

MR. BITTNER: Jim Bittner, City of San Jose. I had a few comments and requests for clarification.

On page, Section 3B.18, it lists that these crosswalks should be enhanced for -- where the speed limit exceeds 40 miles per hour. In our practice we would recommend that it's for 35 and higher. In general, 35 miles per hour streets are main roads in cities. Most of the time they are multi-lane roads or higher volume roads; higher speed roads just -- they go together. So I would recommend that be 35 or higher.

And one other element at the bottom. We have A and B that are for four lanes and 12,000 and 15,000 vehicles per day. I would also recommend that you consider three lanes or more if it is one direction, if you have a three lane one way street. That is a condition that we use in the City of San Jose for enhancing crosswalks.

On page 36 there is one clarification I would recommend that actually looks like it would put it to align with the following paragraph. It's Section 4E.06, Section 10. The second line says: "a walking speed of less than 3.5 feet per second should be considered in determining the pedestrian clearance time." The next sentence that's in red says: "a walking speed of 2.8 feet per second should be used". I would recommend that "considered" be changed to "used" to make it a stronger sentence in when it should be implemented, just to align with the following sentence.

And I think I had one more. One more comment is on the last page, page 40. The last section of 7C.02. The Guidance says: "These diagonal or longitudinal markings should be considered when the crosswalk is marked at an uncontrolled crossing intersection." I'd recommend that that be aligned to the previous section, 3B.18 where it looks at multi-lane roads and higher volumes and higher speeds and not be a "should be" condition for any uncontrolled crosswalk. Because we reserve those for the

larger roads to gain the drivers' attention, not in residential areas where we have our controlled crosswalks to schools. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: 3B.18, you focused in on the volume and the speed. This looks like the existing manual's text draws from the matrix that Charlie Zegeer had in his 2001 study of 1,000 marked and unmarked uncontrolled crosswalks. I am grateful for the information from the City of San Jose about the current state of their state of practice. I am supportive of the change that you specify.

Also, it has always bugged me that lanes of travel be used in the technical language when in fact it's the lanes of the approach that count. We don't care how much, how many departing lanes there are, we care how many approaching lanes there are with regard to the threat.

With regard to your suggested change to 4E.06, Intervals and Signal Phases. The change proposed here is actually to strike 10a as an option and include it as a subsequent paragraph in the guidance, so it's strengthening it. And 10a, paragraph 10a specifically calls out older or disabled pedestrians. Whereas 10, which is sort of the base case, has to do with pedestrian speed.

So the way I read this is both of them will now

appear under guidance. You will first state that, as the manual already does, that pedestrians who walk slower than 3.5 feet per second or who use wheelchairs be considered. And subsequent to that, and within the same guidance, older or disabled pedestrians get their own consideration for the 2.8. So it all gets wrapped under guidance.

MR. BITTNER: Thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you. I see Mr. Bhullar wants to make some clarification on this issue.

MR. BHULLAR: Johnny Bhullar with Caltrans. I just want to comment on the suggestion regarding the speed. Last time in the 2009 manual when the things were changed that was one criteria, which was the ADT of 12,000 vehicles and multi-lane and at the same time the speed being 40 miles or over. In all these three scenarios a number of changes were done throughout the manual. Some changes dealt with the increase of the sign sizes, others dealt with the markings and others dealt with the signals. And on all three the criteria was the same, ADT of 12,000 or more and multi-lane, meaning four or more, and also the speed being 40 miles or more. So I would be very careful in case we were to try to change any of that because they dealt with a number of changes.

COMMITTEE SECRETARY SINGH: This is not part of the agenda so I don't know -- first of all we can't --

MR. BHULLAR: Because of the suggestion I am just trying to comment on the suggestion.

COMMITTEE CHAIRMAN BAHADORI: That's fine. That's fine. It's just a comment made by a member of the audience, it's not a motion. But thank you for the clarification, thank you.

Anybody else from the public who wishes to address the Committee?

Okay, seeing none I close it and bring it back. Mr. Ciccarelli, you heard some comments; and as you heard also, some of the suggestions are not on the agenda item so the Committee cannot take an action if they are not publicly notified. So what say you?

COMMITTEE MEMBER CICCARELLI: I would like to move that the Committee approve the changes as stated, however, that the proposal that the agenda be reconciled by Caltrans staff, pedestrian staff, relative to comments submitted subsequently by FHWA Kevin Korth because I think these technical and edit suggestions are valuable.

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

COMMITTEE MEMBER JONES: I will second it with the caveat if the first would amend to reduce it from 40 to 35 miles an hour as Jim Bittner from the City of San Jose requested. Because the difference between people surviving

at 30 miles an hour and 40 miles an hour is pretty significant in our designs of our roads.

COMMITTEE CHAIRMAN BAHADORI: So there is -- you are making a second but you're suggesting a change to the motion so first the maker of the motion has to agree with that. Do you agree with what he said, considering what both Mr. Bhullar and Mr. Singh are bringing to your attention?

COMMITTEE MEMBER CICCARELLI: Should I consider it as a friendly amendment?

COMMITTEE CHAIRMAN BAHADORI: Well, you can consider it as a friendly amendment but I would like to hear first if logistically we can do it because the agencies did not know that we want to make that change. It's not on our agenda. If we are making that change, nobody else knew it, we are just making the decision right here right now.

COMMITTEE SECRETARY SINGH: Where are we looking at the 40 mile speed? Which page, which section?

COMMITTEE CHAIRMAN BAHADORI: And then I would like to ask Mr. Bhullar --

Kevin, do you have something you want to add or you just came forward?

COMMITTEE SECRETARY SINGH: And we cannot add to it because this is not on the CTCDC agenda, it is not part of the proposal.

COMMITTEE MEMBER JONES: Okay.

COMMITTEE SECRETARY SINGH: You have to put in a proposal to make changes.

COMMITTEE CHAIRMAN BAHADORI: Typically the way it works is that if we are making substantial changes that are not editorial in nature, if it is not publicly advertised then we are putting the agencies and the stakeholders in a disadvantageous position because they didn't know that we were even considering making some changes.

COMMITTEE MEMBER JONES: So maybe we could consider it for the next --

COMMITTEE SECRETARY SINGH: For the future.

COMMITTEE MEMBER JONES: For the future.

COMMITTEE SECRETARY SINGH: We are acting only on the red language and this is black text.

COMMITTEE MEMBER JONES: That's my -- then I have a second without that.

COMMITTEE CHAIRMAN BAHADORI: Okay, there has been some discussion. I hate to do this but, Mr. Ciccarelli, would you please restate your motion.

COMMITTEE MEMBER CICCARELLI: My motion is that the Committee approve the changes as stated in the agenda item, however, refer the approved changes to Caltrans for reconciliation with comments received from FHWA.

COMMITTEE CHAIRMAN BAHADORI: Okay, we have a motion, is there a second now?

COMMITTEE MEMBER JONES: Yes.

COMMITTEE CHAIRMAN BAHADORI: There is a motion and a second, discussion. Okay, colleagues, let's start from the left. Mr. Greenwood.

COMMITTEE VICE CHAIRMAN GREENWOOD: Thank you, Mr. Chair. I support the bulk of the proposal here but I am troubled by the changes to 4E.06 on page 36. The current option language describes a situation where disabled pedestrians routinely use a crosswalk and a 2.8 feet per second time may be used. So the terms "routinely" and "may" are joined.

When we step that "may" up to a "should" I believe that there is a great deal of liability for cities. You know, every dollar that we spend in court is a dollar we don't spend out on the street and I think this is an invitation to spend a lot more dollars in court. I think a mitigating factor of that is that instead of saying "should be used" if we say "should be considered" that softens it and allows the agency to consider it without necessarily implementing if they don't find it's necessary.

COMMITTEE CHAIRMAN BAHADORI: Are you referring to paragraph 10 or 10a or both?

COMMITTEE VICE CHAIRMAN GREENWOOD: I would think if we modified the proposed 10a to say: "Where older or disabled pedestrians routinely use the crosswalk, a walking

speed of 2.8 feet per second should be considered in determining the pedestrian clearance time."

COMMITTEE CHAIRMAN BAHADORI: That's 10a in red, right?

COMMITTEE VICE CHAIRMAN GREENWOOD: Yes.

COMMITTEE CHAIRMAN BAHADORI: Okay, so your suggestion is to change that word "Used" to "considered". Okay, anybody else, any other comments? Mr. Walter.

COMMITTEE MEMBER WALTER: Thank you, Mr. Chairman. And I would agree with Committee Member Greenwood on that because I believe that makes it consistent with the "should be considered" language in paragraph 10, so I would agree with that. But otherwise agree with the bulk of these recommended changes, have no significant objections to them.

COMMITTEE CHAIRMAN BAHADORI: Okay, Mr. Winter.

COMMITTEE MEMBER WINTER: And since I am in the middle of this I'll take the opportunity to just echo what my colleagues to my left and right have said. I support the bulk of it with that change as suggested by Mr. Greenwood to say "considered" instead of "should".

COMMITTEE CHAIRMAN BAHADORI: I thought you said you're in the middle, you're going to split the difference. But there is no difference, they are both agreeing.

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: Anybody else on the

left side?

Going to the right side, Mr. Marshall or Mr. Jones, any comments or any thoughts on what the other three colleagues just mentioned?

COMMITTEE MEMBER JONES: Having served in the public and the private I can appreciate the time spent in court. And to be consistent with 10, I could see where "considered" and that would allow more engineering judgment to be used in deciding where to use that 2.8 seconds as an additional tool rather than a required tool.

COMMITTEE CHAIRMAN BAHADORI: Mr. Marshall.

COMMITTEE MEMBER MARSHALL: I concur with the suggestion and support the rest of the changes as proposed in the motion.

COMMITTEE CHAIRMAN BAHADORI: Okay. Mr. Ciccarelli, there is a suggestion for some changes -- actually only one specific change in your motion. That on page 36, paragraph 10a in red, the word where it says "2.8 feet per second should be used" the word "used" be changed to "considered."

COMMITTEE MEMBER CICCARELLI: I accept the suggested change because 10, which is also going to be -- two things are happening here. First of all, 10a was formerly an option, which is a soft, it may be used. It becomes part of guidance by striking the option heading so

it becomes a should instead of a may, that's the difference between an option and a guidance. So we are strengthening already.

And to the extent that 10 under the first paragraph under guidance already uses the words "should be considered" instead of "should be used" I am comfortable with that.

COMMITTEE CHAIRMAN BAHADORI: So you are going to amend your motion?

COMMITTEE MEMBER CICCARELLI: The motion is amended to change --

COMMITTEE CHAIRMAN BAHADORI: That word changed from "used" to "considered".

COMMITTEE MEMBER CICCARELLI: -- that one word change from "used" to "considered" in the proposed paragraph 10a.

COMMITTEE CHAIRMAN BAHADORI: Mr. Jones, you seconded the motion; do you concur?

COMMITTEE MEMBER JONES: I concur per the reasons eloquently stated.

COMMITTEE CHAIRMAN BAHADORI: Okay, perfect. So now we have a revised motion and amendment and I see the federal government raising again. You have comments?

MR. KORTH: Kevin Korth, Federal Highway. I didn't have -- the one comment that I had not regarding the

crossing one. But I had a comment on page 40 of the agenda and I saw it wasn't listed in my initial comments back to you so I just wanted to double-check on that. The suggestion is to edit to paragraph 05 as a guidance statement but paragraph 5 is a option statement. So I would recommend that sentence get added to paragraph 6, not paragraph 5, if you want it to be guidance.

COMMITTEE SECRETARY SINGH: We will rearrange that one. That's rearranging the paragraph so there is no conflict, it should be in a sequence.

MR. KORTH: Well it's -- the suggestion was to put it into an option statement but it shows is as a guidance statement. So I wasn't sure in which direction the Committee is going on that one, if it's going to be an option or guidance. It's listed as guidance on the proposal but in the background information it talks about putting it into the option statement.

COMMITTEE CHAIRMAN BAHADORI: That is true.

COMMITTEE MEMBER CICCARELLI: Could I suggest that this be considered as part of FHWA's comments and to be --

COMMITTEE CHAIRMAN BAHADORI: To be resolved.

COMMITTEE CHAIRMAN BAHADORI: -- addressed when Caltrans resolves this.

COMMITTEE CHAIRMAN BAHADORI: Absolutely. Is that satisfactory for you, Kevin? Okay, thank you.

COMMITTEE MEMBER CICCARELLI: And the specific detail of his comment just now has been recorded?

COMMITTEE CHAIRMAN BAHADORI: Yes.

COMMITTEE MEMBER CICCARELLI: Good.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much. I just love these verbatim minutes that we are keeping so it is all clear who said what. You can't go and deny it later.

Okay, so there is an amendment motion and duly seconded. Any more discussion?

Seeing none, all those in favor please say aye.

(Ayes.)

COMMITTEE CHAIRMAN BAHADORI: Any opposed?

Seeing none, the motion passes unanimously. Thank you.

COMMITTEE MEMBER JONES: This is a record, three hours in for the first vote.

COMMITTEE CHAIRMAN BAHADORI: There you go.

(Laughter.)

COMMITTEE MEMBER WINTER: Well we approved the minutes earlier.

COMMITTEE CHAIRMAN BAHADORI: You're getting better.

Okay, colleagues, now I have 12 o'clock, I need to ask you this. Anybody has an early afternoon flight they must catch? How early is that?

COMMITTEE VICE CHAIRMAN GREENWOOD: I have to leave here at 2:00.

COMMITTEE CHAIRMAN BAHADORI: You have to leave here at 2:00. So I am very sure we are not going to have you for the full duration because I don't think we are going to be done at 2:00.

So what is your pleasure, do you want to break for lunch or do you want to work through?

COMMITTEE SECRETARY SINGH: Let's take the next item, then we'll see.

COMMITTEE CHAIRMAN BAHADORI: Okay. Since I don't see anybody starving here we are not going to break for lunch, at least not now.

Let's move to the next item. We are moving to Item 14-16, which is a proposal to amend Section 4C.01, Studies and Factors for Justifying Traffic Control Signals. This actually could be quite controversial but we'll see, we'll see. It can affect the way we do business. Go ahead, sir.

MR. CHAMPA: Okay. Good morning, still.

COMMITTEE CHAIRMAN BAHADORI: It's still morning.

MR. CHAMPA: I am Jerry Champa with Caltrans Division of Traffic Operations and I will be presenting this proposed revision on behalf of Caltrans. And I want to thank the Committee for the opportunity to present and

discuss this proposed division.

So let me just mention that this proposed revision, or at least the concept, was shared with the Committee back in December of 2012, I think at the meeting in Santa Cruz, by John Liu, the Caltrans District 6 Deputy Director for Operations. I think it was an information item at that meeting. And at that time Caltrans was preparing to issue a Traffic Operations Policy Directive, which we refer to as Intersection Control Evaluation. And that was the first step toward a change or the change that I will be presenting today and I'll give you a little more background on that later.

And there are two parts to this. The very first part of this -- this is a very simple proposal revision or addition and I'll cover that in general. And then if necessary, as an option, I am prepared to present an overview on roundabout intersections. And that is to ensure that the Committee and the members of the public are adequately informed as to the difference between roundabouts and other circular intersections. Usually something that gets in the way of decision-making.

With that - thank you, Don. So this is, again -- I think it starts on, what, page 41. And this is the proposed addition to the standard on the -- again, the studies. Section 4C.01, Studies and Factors for Justifying

Traffic Control Signals. And again, I'll just read it, it's short. The engineering study that is to be conducted to justify signals. "The engineering study shall include consideration of a roundabout. If the roundabout is determined to provide a viable and practical solution, it shall be studied in lieu of, or in addition to a traffic signal." So it is the consideration of roundabouts that is really the focus of this proposed revision.

And what I want to do is just explain briefly why this proposal came forward.

It does go back a few years ago and that was through our Strategic Highway Safety Plan effort, in which we realized that roundabouts had become, basically a proven safety countermeasure as well as a proven intersection control treatment. And beyond just proven but actually proven to be a good solution for many situations.

However, in spite of that, learning that and aware of the role, the expanding role of roundabouts around the country and the world. They were, at least for state highway intersections and interchanges, they were not often even considered as an alternative. That was, in part, because we had not yet integrated the roundabout or yield-control concept into our design manual and into the CA MUTCD, so that people understood that it was not just an alternative but a good alternative.

So again that Strategic Highway Plan effort i what produced our Intersection Control Evaluation Policy.

Key changes there, again, into the Caltrans engineering process. It integrated yield-control and safety performance evaluation or analysis into our evaluation framework. So part of the traffic study for Caltrans intersections or the engineering study related to intersections, new intersection and intersection control changes. It now involves a safety analysis or collision analysis, which we consider not just delay, not just level of service and queuing but also safety performance. And I am prepared to share a couple of case studies on how this intersection control policy has worked in a couple in particular. I'm going to skip over that for now.

What is being proposed is not a update, a comprehensive update, as we did to our engineering process, which we call ICE. Rather it is kind of an interim step towards that, simply by mentioning or asking that roundabouts be considered whenever traffic signals are being contemplated.

So I also wanted to just mention again why, a little bit more in detail, we say that roundabouts have been proved to often be a better traffic engineering solution. And again, part of the reason is outlined here. Talking about compared to multi-way stop control, roundabouts can be

much more efficient, that is, incur much less delay.

And compared to signalized intersections with comparable size, then the roundabout will often incur less control delay and fewer severe collisions.

And also in increasingly important aspect to our infrastructure decision-making is roundabouts, compared to traffic signals, are often considered more sustainable because they do actually require a smaller footprint in a lot of cases. That is, less overall pavement and less pavement dedicated to motor vehicle traffic. Fewer lanes, basically, than traffic signals, which require left turn channelization, right turn channelization. even additional through lanes because of intersection control and the capacity related to that.

So again, this would be the second part here. If you wish, unless you want to ask questions now, to talk about how roundabout intersections are a unique and evolved form of circular intersections. And I can go on now or I can see if you want to stop there.

MR. HOWE: How long is it?

MR. CHAMPA: Oh, I can go another five minutes, at most.

Just for perspective, to show the difference between roundabout traffic circles, rotaries and neighborhood calming circles.

The blue thing there is kind of a relative version here. That's the size of a roundabout.

The green can be, that can be the size of a traffic circle or rotary intersection, okay. And again, traffic circles and rotaries may have different controls, signals, stop control or no control for vehicles that enter.

The red, again relative to the blue, shows you the size of what we would call a mini-neighborhood calming circle.

So this revision proposal, of course, refers only to roundabouts. And again, they are the size basically to accommodate the largest vehicle that is expected through there, no larger than that.

By the way, that little bar up on the left, I think that's 75 feet, the black, skinny bar. Showing that the circle -- a roundabout is typically 150 foot but can go either lower or more than that. And the larger blue rectangle there is about the size of a truck, a California vehicle, design vehicle.

So let me just mention again how unique. Again, I mention the size. Roundabouts are distinguished because they are a certain size.

Their speed management characteristics. Basically this is why roundabouts work so well. The geometry, the design of the roundabout is what will control speeds through

the conflict areas where pedestrians cross and where motor vehicles and bicycles will mix as well. And that lower speed and consistent speed among all those different modes is why they are both able to produce, in many cases, better safety performance, but also a higher capacity. And that is because at that speed people are more likely to accept short gaps and therefore people are constantly moving through the roundabout.

And again, yield on entry. The last of the bullets there, distinguish roundabouts from all other circles. Yield control is what entering vehicles are asked to follow. And that means no stopping unless there is a vehicle conflicting circulating in front. So again, that gives you a less-controlled lane.

So again, the other types of intersections there. No need to really go into detail, just some pictures of what those are. At the bottom is the mini-neighborhood circle. Just a tiny, little traffic diverter.

So again, I think I already covered how and why they work. Again, the reduced speed environment being the most important and the yield control.

The benefits I think I have already gone over. I just wanted to review those again.

The applications, again. Whenever signals are considered and more. So we are seeing roundabouts proposed

and built at intersections. Local streets. Main streets a part of road diets.

And again, one of the interesting statistics that has come from research, repeated research on safety in the US and California and internationally has shown that you get dramatic reductions in severe collisions. Again, when they are installed and designed correctly at locations that had had problems.

Again, vehicle conflict points, another reason why roundabouts work so well. Reducing all those crossing movements. Eliminating crossing movements and instead converting those to basically a low-speed, right-in, right out as vehicles move through the intersection.

The pedestrian -- and this is just the statistic related to pedestrian fatalities related to speed when pedestrians are hit by motor vehicles. Showing that at the lower speed the chance of survival is great. At that 20 mile an hour, 5 percent of the collisions would typically result in a fatality And as the speed increases the chances of survival really diminish. So at the 40 mile an hour collision the pedestrians will -- basically will be killed about 85 percent of the time.

So roundabouts are designed intentionally to lower speeds in those conflict areas to between 15 to 20, 25 miles an hour at most, depending on the type of roundabout.

And the application that I just want to bring to everyone's attention here that we have seen, again case studies. Part of road diets as well as just part of intersections is basically we are able to reduce the roadway width between intersections when roundabouts are installed.

As I mentioned before, they incur less queuing. There is less delay, therefore there is less queuing. There is less need for storage and channelization as you would -- so on the left a before picture of an intersection; this is in North Carolina, Asheville. And they were able to convert that intersection and still accommodate the traffic demand with a single lane roundabout. And what they did, of course, was re-purpose the pavement in that corridor for parking, for aesthetics, for bike lanes, and as I said, still accommodate the demand of vehicular traffic. We have done this in California as well, at least a couple of locations. Bird Rock is an example in San Diego.

And again, that's just a better picture. I might come back to this in a minute again just to show you how roundabouts have been built around the country, interchanges. And again, preserving land and reducing the amount of pavement. You will see here that the actual over-crossing structure at this interstate freeway interchange did not have to be widened. It was two lanes wide and after the project it still is two lanes wide, so no bridge work.

And the last example here in terms of land impact. Because it's kind of counter-intuitive to think that roundabouts require less right-of-way. But this is a schematic or plan drawing of a typical interchange project where we are at incapacity by widening. So with these closely spaced intersections we are widening and widening for signal capacity.

An alternative to this was developed in which roundabouts were used. And the fuchsia color there represents the additional widening and width needed for the signal alternative compared to the roundabout alternative.

So again, both alternatives meeting the need, and in this case, the roundabout probably estimated to provide better safety and it's a less-controlled way and then requiring less revenue.

So those are all some of the good, the advantages and why roundabouts are being considered, and in some cases selected as the alternative.

Again, school zone application. Just the other end of the spectrum, besides interchanges. We have seen Safe Route to School projects where roundabouts have been installed in order to reduce the speeds between the -- along the frontage of the school, in this case.

I think I'll stop there and, again, go back to the basic proposal, again, to almost require the consideration

of roundabouts when traffic signals are being studied.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much.

Any questions before we open to the public? This pretty much is a "shall" statement, introduces a new requirement under the standard in the signals section. That when you look at the intersection for a signalized intersection you shall include consideration of roundabouts.

Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: As one of the two members appointed by Caltrans to look out for the issues and needs of non-motorized travelers I am highly supportive of this. I have my own experience as a design reviewer and a design contributor on roundabout projects.

Two that you didn't point out as strongly as I would have liked to have heard them. The Asheville slide, if we could go back to that just a minute.

MR. HOWE: Would that be the pedestrian?

COMMITTEE MEMBER CICCARELLI: The one that -- yes, the after condition in Asheville.

MR. HOWE: Okay.

COMMITTEE MEMBER CICCARELLI: That one, thank you.

Because of the ability of the roundabout to eliminate the need for turn lanes and multiple approach lanes in many conditions for the through movement, it allows the cross-section of the roadway to be changed between

intersections. It is one of the most -- we think about roundabouts as something to consider at the intersection, which is what the MUTCD change that you're proposing is, but the real effect is not only at the intersection but away from the intersection. This lets you transform the mid-block.

And much of California, northern and southern, has long stretches of arterials in commercial corridors where you've got a five, six, seven lane cross-section. I just finished a report, a TSA report for Temecula and Escondido. You've got a seven lane, 107 foot cross-section with signal spacing of 1200 feet. Ain't nobody going to walk to the signals. So we're thinking about pedestrian hybrid beacons in-between to cross 107 feet. And I am not saying that a roundabout could work for the volume of that particular street. But if it could, it lets' you drop out all the storage lanes so suddenly you have got fewer lanes to cross, you've got a place to put median refuges.

And that's the second point. Every leg of the roundabout has a pedestrian refuge. And we know from pedestrian safety considerations that if a pedestrian can divide a single, long, two-directional decision into two, separate one-directional decisions, they make much better decisions when they can separate those in time. So it's huge. Not only for safety of the motorists and reduction of

motor vehicle-involved collisions and severity but it's huge for pedestrians for that reason. This is a city transformer. This is exactly what we want in the toolbox for the state transportation.

COMMITTEE CHAIRMAN BAHADORI: Thank you, Mr. Ciccarelli. Colleagues, any other questions for Mr. Champa? Mr. Jones.

COMMITTEE MEMBER JONES: I don't think I could have said it any better, John. I think from a sustainability perspective roundabouts will reduce the number of travel lanes. A lot of our turning pockets are just parking lots for the traffic control device and then we have to maintain those. So a lot of jurisdictions are maintaining, and Caltrans included, a lot of additional pavement because of a traffic signal. And when we are looking for innovative ways to be more sustainable with our money, maintaining lanes for a traffic signal is not one of them.

Our roadways do not provide property tax. If we can get that land back into economic development in the state of California where developers can provide a revenue source that we can maintain our transportation system better in our local jurisdictions, that would be a great opportunity.

Then going into the speed for pedestrians and

bicyclists. At 20 miles an hour versus 40 miles an hour and reduction from 32 conflict points to 8 conflict points, I think that is just a game-changer for local jurisdictions. Having implemented about 12 to 15 roundabouts in my career in different -- in all three major jurisdictions that I have worked in, I have seen firsthand the improvements that are made both to economic prosperity as well as moving people safely.

Roundabouts also provide 24 hour enforcement. What we find in a lot of jurisdictions is that at 10:00 o'clock at night at a traffic signal when you're stopping at a red light there's a great attempt, when there is no one else there, to run the red light, which is where we're having a lot of collisions. Or when somebody doesn't see the red light and causes a T-bone fatality collision and then takes out the pedestrian standing at the curb return. Those are -- you know, when you have a 4,000-6,000 pound car colliding at you, it is a pretty dangerous situation in our traffic signals.

It reduces the width that a pedestrian has to cross, it helps connect both sides of the roadway. Whereby -- which some of our vehicle trips might be reduced because to cross a 7 to 12 lane roadway, which is many of our roadways when you include the left turn lanes and the right turn lanes, you have pretty much made pedestrians a moot

point at that intersection and that's why many of our intersections are sterile of pedestrians and bicyclists. And they are getting in their car to cross the roadway rather than -- the old joke of why did the chicken cross the roadway? Because they are chicken to cross that roadway.

In that case I think -- I commend Caltrans for taking this leadership role in saying, let's consider roundabouts in a lot of cases. Because as you said, your bridges are some of your most expensive assets or liabilities and maintaining those and keeping those narrower really enhances your ability to expand your transportation mobility.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: One more minor point. You had a school zone slide. I wanted to bring up one advantage that you didn't state in that particular way.

A roundabout is a u-turn machine, okay. Anyone who has tried to improve safety in a school zone knows one problem is child pedestrians being dropped off on the wrong side of the street and having to cross the street. When a parent can whip a U-ie safely at the end of the block with no delay and come back and drop on the correct side of the street and then whip another U-ie to go back to work, it changes their behavior in a way that strongly favors the

child pedestrian. We don't have to worry so much about engineering safe crosswalks across pick-up and drop-off streets, which are crazy places for 15 minutes in the morning and 15 minutes in the afternoon. Instead, if you let them do the two U-turns it's magical.

COMMITTEE CHAIRMAN BAHADORI: Thank you. On the left, anybody?

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: No, I don't mean the political right or left, I mean just the physical left or right.

COMMITTEE SECRETARY SINGH: Democrat.

COMMITTEE CHAIRMAN BAHADORI: Mr. Greenwood.

COMMITTEE VICE CHAIRMAN GREENWOOD: I'm a little concerned that we are required to consider a roundabout, yet there is no guidance whatsoever as to what data confirms where a roundabout is the right choice. So we are -- again, looking at this from a local perspective. We are requiring a local traffic engineer to consider the roundabout without telling him what signals the proper location of a roundabout.

So I'd rather see this -- rather than go all the way to a "shall" I'd rather show it as a "should" so that engineers can get used to considering them before going to this step.

COMMITTEE CHAIRMAN BAHADORI: That's one -- when I read the language that was my first reaction, to just say, okay, if I'm a signal design engineer I just look at this and add one sentence in my report and say, "roundabout is not feasible" and I have fulfilled my obligation according to the standard.

So anybody else on the left side, the left side physically?

COMMITTEE MEMBER WINTER: No comments.

COMMITTEE CHAIRMAN BAHADORI: No comments. Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: In response to Mark's concern, and it is a good concern if it is the first time you have ever been compelled to consider a roundabout. I was involved as a secondary reviewer on the first FHWA roundabout guide and I was pleased to see how the guide was organized. In one of the early chapters before you get to the technical nitty-gritty and the geometric specifics and all that stuff, is a real nice readable by the layperson chapter that gives a quick and dirty checklist. It says, "You've got serious cross slopes?" "No." "You've got a vertical curb?" "No." You've got this, you've got that. So there's an easy checklist to rapidly rule out or rule in a roundabout for further consideration.

I am not sure how that very effective and probably

first choice guidance can be referenced in the manual but that's what I would hope that the first thing the practitioner would pick up would be Chapter, I think it's 3, in the FHWA Roundabout Guidance. Which is now California's own roundabout guidance.

MR. CHAMPA: I do want to expand on that, again, by referencing Caltrans's approach, which is similar to other state DOTs, which has been -- we developed basically a program to support this in two ways.

Number one, we have collected and assembled the guidance, organized that at a website. And we have developed what we call a technical assistance program. That is, people who have been trained, and in some cases experts from the FHWA are participating initially in this program. Because it is absolutely necessary for people to take that extra step the first time through.

It's very tempting to say -- especially with the word "should" it is very tempting. And what we have seen repeatedly is, I thought about it and I don't need to go any further. And because they need help. The first time you do anything it's going to be extra work.

And that actually -- and part of the problem has been the mis-perceptions about roundabouts. People will assume, well, I know they don't work here because they're too big. Well, they may not know exactly how big.

So the guidance is in place. Everything you want to know about roundabouts, the FHWA has assembled that information and updated that information. There are models, there are tools.

And again, as I said, the key to this is to have some type of technical support. So we are working through the LTAP and we are working internally, of course, to continue to expand to have this kind of technical expertise available on request.

But as yo point out, the first time a city that doesn't have any familiarity, they're going to have to hire somebody or they are going to have to rely on Caltrans or someone else that does have some knowledge and experience about roundabouts.

COMMITTEE CHAIRMAN BAHADORI: Okay, thank you.

I need now to open it to the public. Any member of the public who wishes to address the Committee on this issue if you would please step forward.

Seeing none, there are no comments, we close it and bring it back. Okay.

COMMITTEE MEMBER MARSHALL: Mr. Chairman, I do have some comments.

COMMITTEE CHAIRMAN BAHADORI: Sure. Go ahead, Mr. Marshall.

COMMITTEE MEMBER MARSHALL: I haven't had a chance

yet. I'm hesitating because I don't want to sound like I fear I'm going to sound.

I completely understand and support all of the many, many good reasons why roundabouts are a good tool and a good design solution for a lot of locations. I agree with everything the speaker has presented. But let me be the lone voice of small, rural agencies on this committee and say, none of the examples that were presented have anything to do with our world.

None of those pictures look anything like the traffic engineering situations that I deal with in a small rural county. We are not talking about 17 lane arterials, we are not talking about freeway interchanges. We're talking about intersections where there are no pedestrians because we're in very rural settings with very low density surrounding land uses. We are not talking about roads that have more than one lane in each direction.

We're talking about roads with tiny existing right-of-way. And we are not proposing to expand the roadway but sometimes they need traffic signal control. And I am very concerned that this proposal has the effect of making a policy change through the device of a technical committee rather than what feels to me like should have been a legislative process.

To me it feels very similar to what was just done

with SB 743 that was mentioned earlier in our meeting today where agencies will now have to look at the evaluation of transportation impacts for proposed land use development a different way. And I think that appropriately came through the legislative process and now is beginning a technical process to implement.

But this seems to be starting here. I don't think that's the right process and I can't support it. I think it's a big problem for small, rural agencies and I can't support this proposal.

COMMITTEE CHAIRMAN BAHADORI: I understand, Mr. Marshall. I just want to understand -- if I understand the proposal correctly. And as I said and I was not kidding, if I just write on a piece of paper as a registered engineer that the roundabout at this intersection is not feasible and sign it and stamp it, I have complied fully with the standard requirement; is that true?

MR. CHAMPA: Yes. Well, I would expect there to be a little bit of a reasoning given.

COMMITTEE CHAIRMAN BAHADORI: If I have a good day I may do that. But if I do that, but if I just write that in my professional engineering opinion -- because this only says that the engineering is studied.

MR. CHAMPA: Yes.

COMMITTEE CHAIRMAN BAHADORI: And we over and over

have said that anything that an engineer signs and stamps is an engineering study. So if I just write on a piece of paper that roundabout at this location -- this goes back to Mr. Marshall's comments. That if you just say that I looked at this location and the roundabout is neither needed nor feasible and you sign it and stamp it you are in compliance with MUTCD. Is that -- am I over-exaggerating the case?

MR. CHAMPA: No, that is correct. That is happening today with our own policy, actually, the Caltrans policy applying to state highway intersections. It is up to the engineer to conduct whatever due diligence and then to decide if it is practical and viable as a solution for a given situation.

I do want to add again that part of the reason this proposal came forward through the strategic highway safety planning effort was primarily because of high-speed rural intersections. And that probably the best application from a safety standpoint for a roundabout is, instead of a signal. So the difference in collision performance between signals and roundabouts in high-speed corridors is dramatic. So that is one of the best applications that are being used. That doesn't address the initial cost and the impact on the right-of-way.

But we do have experience, and I'll just cite one district in particular. Our Fresno area District 6, they

are now up to 20 roundabouts. And basically they have a lot of high-speed rural highways. And instead of traffic signals in the last 19 proposals that could have been signals -- the last 19 are going to be roundabouts. So I just wanted to demonstrate the application is there.

COMMITTEE CHAIRMAN BAHADORI: A lot of signals -- I don't want to speculate but I would say that 90 percent of locations where we put signalized intersections, they will still get traffic signals, because roundabouts are not going to work at all locations. Maybe at best 5 to 10 percent of locations or maybe we change.

But I share your concern that we are not forcing upon the agencies a lot of costs. To do $50,000 engineering studies to say a roundabout is feasible or not. So that's why I want clarification.

Anybody else? Mr. Winter and then Mr. Walter.

COMMITTEE MEMBER WINTER: And I will be brief. I just -- again, with Los Angeles County, we are a very large, rural county as well. And I do have one community that prides itself that they do not have any traffic signals and they would never want me to recommend a traffic signal in their community. We have multi-way stops at a variety of intersections as a result of that.

I do see potential in the future that I would like to present to them, if they are open-minded to it, to

consider roundabouts in their community. I see this as some further acknowledgment that that becomes a viable alternative by having it in the manual, basically in the same section of the manual as traffic signals are mentioned.

So while I do understand what Mr. Marshall is saying about that it could create some constraint to us that we'd have to study it and review it, I do know we have studied plenty of intersections anyway and so this just is helping to take another tool in the toolbox.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

Mr. Walter.

COMMITTEE MEMBER WALTER: Thank you, Mr. Chairman. I guess my general comment on this would be that I don't think this is really necessary to be put in the manual. I think that the concept of roundabouts is very clear. I think Jerry's presentation highlights all the potential benefits of roundabouts versus traffic signals. I think there is always going to be a place for both of them in the -- we'll call it the tool kit for traffic practitioners. And I think they're becoming now more widespread.

There's a lot more data available. So I think that your -- I'll call them your progressive traffic professionals -- are going to consider them anyway. So at least in my opinion I don't think this is necessary to include in the manual to say, it shall be considered, with

that engineering study.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Any other comments?

Okay. And we had no public comment so is somebody ready to make a motion?

COMMITTEE MEMBER CICCARELLI: I have a comment.

COMMITTEE CHAIRMAN BAHADORI: Go ahead. A comment from Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: I want to -- I want to offer a countervailing viewpoint. The purpose of 4C.01 is to make a decision between a traffic signal and not a traffic signal and that's really what 4C is all about.

It seems to me that absolutely the most logical place to state that you shall consider this other option, because right now it's down between, typically, stop sign control and traffic signal control. If it's going to go in the manual it belongs here.

Furthermore, I strongly believe it should be a "shall". And I Hear the considerations about agency capabilities and agency resources, but we need to trigger this process by which agencies educate themselves. This is not rocket science. It has been in the manual, the federal manual for two or three revisions right now and the guidance has been further refined. We need to get this out into practice. The safety advancements are so compelling.

Furthermore, if we put it in as a shall, that does two things. First of all, the engineer has to sign off that they considered it. If they do that casually and cavalierly, they can be taken to court and challenged saying, a crash happened. A roundabout solution would have been safer. You didn't really give this serious consideration. And I think "shall" cuts both ways.

With regard to rural, there's whole chapters and sections in the roundabout manual about rural considerations. And it's worth pointing out that in rural situations, especially in towns where there's not a lot of resources to do comprehensive community design, you're stuck with a state highway intersection and a major signal with high speeds. This has the potential to really transform the rural environment, not only at your major intersection but the school is often along a rural highway. So I think this should be a "shall".

The other reason I think this should be a "shall" is in the bicycle history. Caltrans, to its great commendation, put out something about a decade ago called Deputy Directive 64. And 64 was putting the Department on record as looking out for the needs of non-motorized travelers, pedestrians and bicyclists. But the original 64-DD had soft language in it. A lot of wiggle room for, "Oh yeah, yeah, we considered it, sure." 64-R-1, which came

out a few years ago, substantially strengthened the language and that's really when those of us that have been working to improve conditions for bicycling and walking felt that it finally had the teeth to gain the notice of practitioners and when the practitioners started to take it seriously.

So I think a "shall" -- I think it's appropriate to have it in 4C.01. I think it's appropriate for it to be a "shall." I think a "should" is far too much wiggle room. We've got the -- we know to build these things, we know how to design these things. It doesn't require an engineering study, it requires paying attention to the manuals.

COMMITTEE CHAIRMAN BAHADORI: One of the things, you know, just some of the people from Southern California that when they saw this item they shared with me, they were pretty much along the same concerns that Mr. Marshall had. So I am trying to see how we can put those fears at ease a little bit.

They were saying, "So if I am looking at any intersection, now I've got to hire somebody, pay them $25,000-30,000 to do a roundabout design and do a right-of-way evaluation and utility relocation evaluation and all those things and then prove that Caltrans is not needed?" And I said, "That's not my understanding of this." But how do you kind of give assurance to locals that they don't have to go and spend $30,000-40,000 at every signal intersection

to say a roundabout is not feasible?

Go ahead, Mr. Champa.

MR. CHAMPA: I just want to again respond. Mr. Walter is correct, the question about whether or not this actually is needed. The question I think comes down to the fact that if there is an omission. I think the issue here is there was an omission because we have such prominent discussion about traffic signals and stop control and the only thing about roundabouts is how to sign and stripe them once a decision is made. So by the absence of roundabouts being talked about in this useful, potential application, especially with signals, there is going to be a big impact.

And really this is really primarily about education because we know that people will not really understand and begin to really pursue roundabouts until they understand what they are. They won't understand them unless they consider them and start to get educated on them.

So it's this -- I think the difference is we will be accelerating the consideration in the use of roundabouts because we have seen 20 years go by and still a lot of areas, districts in Caltrans don't have roundabouts, and that's kind of the missed opportunity. So I think it really is more about helping with education.

And I think, again, our Highway Design Manual, finally after 12 years of having some type of roundabout

policy, we finally added that to our Chapter 400 so that people actually now will consider. And we have agencies that often say, "If it's not in the manual it must not be important."

COMMITTEE CHAIRMAN BAHADORI: Okay, thank you. Mr. Jones.

COMMITTEE MEMBER JONES: Having worked with John Liu and have a lot of respect for him in District 6, I think he is doing a lot of great things to reduce the rural fatalities that are occurring in Fresno County. They have a lot of high-speed rural county roadway/state facility roadway collisions occurring out there where there's only two cars on the roadway and somehow they have a magnet towards each other and collide at 55 miles an hour because either the stop sign or the traffic signal isn't visible or, you know, a DUI impairment or whatnot; and a roundabout is significantly reducing those fatality rates. And there are benefits to bicyclists and pedestrians when the state facilities have way out of proportion fatality rate for bicyclists and pedestrians on their facilities, is a great benefit for consideration.

I think the "shall" encourages people to make that consideration. I think it belongs in this 4C.01 because it's where studies and factors for justifying traffic control signals and it almost would suggest studies and

factors for adjusting traffic control devices. But since it's for traffic control signals, stating in there, "Hey, a roundabout is an alternative or an option that should be considered or shall be considered when you're looking at traffic signals" so you just don't go to a traffic signal. Because I think we jump to that conclusion a little too fast. And oftentimes we are putting in traffic signals because of the collisions that are happening at the intersection and a roundabout could be a collision reducer at that intersection.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

Any other comments?

Okay, now I need a motion.

COMMITTEE MEMBER CICCARELLI: Move approval.

COMMITTEE MEMBER JONES: I'll second.

COMMITTEE CHAIRMAN BAHADORI: There is a motion and a second. And since I anticipate maybe not a unanimous vote why don't we show by raise of hand. All those in favor please raise your hands; and Mr. Singh, if you'd count.

COMMITTEE SECRETARY SINGH: One, two, three, four, five, six. The motion failed, we need seven.

COMMITTEE CHAIRMAN BAHADORI: We have six votes and for all motions on the Devices Committee agenda to pass we need seven votes.

Is there an alternate motion to see what else we

can do?

COMMITTEE MEMBER WINTER: Can I suggest, can I suggest something?

COMMITTEE CHAIRMAN BAHADORI: Mr. Winter.

COMMITTEE MEMBER WINTER: Okay. Perhaps if a statement is made in 1a that if a traffic signal is determined to be warranted. So in other words, if some of the hesitancy of my colleagues is that you'd have to study in tandem. At an intersection that is not currently signalized if you would have to study both the concept of a traffic signal in tandem with the study to see if a roundabout is feasible or viable or practical. That if a caveat in 1a is made that you've studied first to determine that a traffic signal is warranted, and then from that basis to look and see just how viable or practical a solution a roundabout would be as an alternative.

I don't know if that was some of the hesitancy here, the dual competing studies, competing theories of what to do. Because while you may have, say, a major approach that has no traffic control on it today and maybe the minor approach has a stop control. And you may come to the conclusion after doing a traffic signal warrant that you don't meet traffic signal warrant requirements but that yet a roundabout in a situation where you may have a rural road that has no stop control on the major approach you may say,

well, maybe a roundabout is better for whatever crash data or whatever instances you have there.

COMMITTEE CHAIRMAN BAHADORI: Let me share with you what I have been hearing in the industry and among the locals. That may shed a little light why -- I mean, what's the problem that we may want to solve.

What happened was that Caltrans used to have a -- we used to have policies and standards for Caltrans and then we used to have it for everybody else. And then when we transitioned into MUTCD then everything became one document. For good reasons. We said, if it's good for Caltrans it's good for everyone else.

Now people in the cities and in the counties, at least a dozen or so that have talked to me about this item, they said, this is something Caltrans wants to do so why don't they just go and do it? They tell their own engineers that any location you look at a signal, look at the roundabout at the same time. Why are they forcing us? Like for example, Mr. Marshall mentioned, I'm in a rural county, I don't need it. Or I'm in downtown LA. I'm never going to put a roundabout in downtown LA, it's just not feasible, so why do I have to look at this? So I think that may be some of the hesitance I see on the parts of my colleagues here from cities and counties to support it.

I don't know what is the solution. Maybe what Mr.

Winter suggested. Mr. Winter, do you have like a -- I see your hand there, Mr. Walter.

COMMITTEE MEMBER WALTER: Mr. Chairman, I'll maybe explain a little bit about why I think this is something that doesn't need to be included in the manual and I'll use an example. So you have two intersecting streets. And obviously a traffic signal could be potentially considered for those two intersecting streets, as could a roundabout, but also could be the grade separation of one of those streets over the other.

And we are not putting in here that you shall consider a grade separation of those streets before you make your final decision, so that's why I think that we shouldn't get too specific on this to say, you shall consider a roundabout. I think the practitioners will look at those potential options and that will be the things that we'll see. They'll settle on the one that's right. So that's why I think this specifically doesn't need to be included here, that's my reasoning.

COMMITTEE MEMBER JONES: May I ask? If the word "shall" was changed to "should" could we get another vote? To just have the language in there to present it to people that might not be otherwise made available to?

MR. CHAMPA: Yes.

COMMITTEE MEMBER CICCARELLI: I have a question of

Mr. Winter. I want to understand specifically what he is suggesting with his alternate language.

COMMITTEE MEMBER WINTER: Well, what I was just saying is if in paragraph 1a, the proposed red text, if it starts with a statement that says "If at the conclusion of an engineering study a traffic signal is warranted at a particular location, then consideration should further be given as an alternative to use a roundabout to that traffic signal."

COMMITTEE CHAIRMAN BAHADORI: I think that pretty much is going to say what it's saying now.

COMMITTEE MEMBER CICCARELLI: So basically you have to fail warrants before you could consider a roundabout?

COMMITTEE MEMBER WINTER: Well, if it fails warrants for a traffic signal you don't even do a roundabout study, in other words, is what I'm saying. Because it seems like the way this is written currently, that you would be studying and it may fail warrants for a signal but you may still -- as I read 1a and this has been the interpretation, I suppose --

COMMITTEE MEMBER CICCARELLI: So let me understand your suggestion. That you would say if it passes warrants for a signal then you'd also consider a roundabout?

COMMITTEE MEMBER WINTER: Then you would at that

point decide, is the alternative of a roundabout something that you would install in lieu of the traffic signal.

COMMITTEE SECRETARY SINGH: A short statement is acceptable. Mark, are you okay with the "should", changing "shall" to "should"?

COMMITTEE VICE CHAIRMAN GREENWOOD: I'm okay with changing "shall" to "should" but I also have a concern that the introductory material here references the FHWA guide, references some Caltrans documents, frankly that I'd never heard of, yet they are not included in the proposal. The item we approved over an hour ago now, had numerous external references to those documents. I don't understand why they wouldn't be included in this case. Where those other things are very well understood by traffic practitioners, this is less understood yet we give them no guidance.

MR. CHAMPA: That certainly can be added. And should be, I agree.

COMMITTEE CHAIRMAN BAHADORI: Okay. At this point I have two choices, we either just -- actually three choices. We either just terminate the item; or ask you to go and, having heard the comments, bring back a new proposal, and in conversation with the cities and counties, specifically members of the cities and counties that sit on this committee, to kind of address their comments; or ask for an alternative motion today. So which way do you want

to go?

COMMITTEE MEMBER CICCARELLI: I have a question. I thought I heard Mr. Greenwood say that his no vote would become a yes vote if the word was "should" instead of "shall"; is that correct?

COMMITTEE VICE CHAIRMAN GREENWOOD: Yes. And guidance was included. Specific links to guiding documents on how to conduct the study.

COMMITTEE MEMBER CICCARELLI: As a member I would be pleased to vote yes on such a motion.

COMMITTEE CHAIRMAN BAHADORI: Then please remember that if you change the "shall" to "should" then it cannot be under a Standard paragraph, you have to move it to a Guidance.

Okay, as I said, the three options, we either kill the item or bring it back revised or go with a new motion.

COMMITTEE MEMBER CICCARELLI: Shall we see how it flies? I propose a motion to the extent that Mark proposed, which is that what was proposed in the proposal as a standard 1a be moved to Guidance and changed to "should". And in that guidance, reference to the FHWA's roundabout guide or its Caltrans equivalent to be submitted by Jerry, be included.

COMMITTEE MEMBER JONES: I'll second that.

COMMITTEE CHAIRMAN BAHADORI: There is a new

motion and there is a second. Any discussion on the new motion?

I start from Mr. Walter to the left.

COMMITTEE MEMBER WALTER: So Mr. Chairman, just a quick point of clarification as we go to page 44. There is also a proposed change there that has "shall" language in it. Should -- Should we change that as well as Mr. Greenwood has suggested the first point be changed?

COMMITTEE CHAIRMAN BAHADORI: So which page are you --

COMMITTEE SECRETARY SINGH: Page 44.

COMMITTEE MEMBER WALTER: Page 44, the final paragraph.

COMMITTEE CHAIRMAN BAHADORI: The last one, yes, page 44.

COMMITTEE SECRETARY SINGH: So that will be changed too, yes.

COMMITTEE CHAIRMAN BAHADORI: Yes, that standard also needs to be changed to a guidance if you are going to ask roundabout and that shall also be a "should".

MR. CHAMPA: And/or omitted.

COMMITTEE CHAIRMAN BAHADORI: Which is basically making the recommendation. Johnny Bhullar is the master in making sure we are consistent. That this is not going to be a standard, this is going to be a guidance in the MUTCD.

So that is going to be the new motion and there is a second for that. Any discussion on that?

Seeing none I would appreciate if you have another hand vote so that we have a good count. All those in favor of the new motion please raise your hand; and Mr. Singh, if you would please count the votes.

COMMITTEE SECRETARY SINGH: It is 8, 8 to 1.

COMMITTEE CHAIRMAN BAHADORI: Any opposed?

COMMITTEE SECRETARY SINGH: Eight to 1.

COMMITTEE CHAIRMAN BAHADORI: Okay, we have eight to one and the motion passes. Thank you all.

COMMITTEE MEMBER JONES: Thank you, Jerry, for the great presentation.

MR. CHAMPA: Thank you, everybody.

COMMITTEE CHAIRMAN BAHADORI: Thank you for your patience.

Colleagues, I have 10 minutes to 1:00. I have four items to go and one of them could be quite lengthy because we are introducing a new sign. So do you want to break for lunch or what?

COMMITTEE SECRETARY SINGH: Half an hour.

COMMITTEE CHAIRMAN BAHADORI: Half an hour? Okay, it's 10 to 1:00. Let's make it 35 minutes. Let's be back here at 1:25, please, thank you.

(Off the record at 12:50 p.m.)

A F T E R N O O N S E S S I O N

1:29 p.m.

COMMITTEE CHAIRMAN BAHADORI: As they are making their way back to their seats we are going to call the meeting back to order. Let's call the meeting back to order; it's about 1:30. Mr. Howe, the floor is yours.

MR. HOWE: Okay, thank you. In the interest --

COMMITTEE CHAIRMAN BAHADORI: Let me actually introduce the item. It's Item 14-17, which is a proposal to create an ALTERNATIVE FUEL VEHICLE PARKING ONLY sign by amending Section 2I.05 of CA MUTCD, it is an item submitted by Caltrans. Go ahead, sir.

MR. HOWE: Thank you. I am Donald Howe from Caltrans. In the interest of time I'll skip through most of what I prepared just to get to the heart of the matter.

We are proposing something pursuant to Governor's Executive Order B-16-2012 and signed into law Assembly Bill 2583 in 2012 by Blumenfeld. It directed state agencies, namely the California Department of General Services and Caltrans, to support and facilitate the rapid commercialization of zero emission and alternatively fueled vehicles. This includes developing and implementing vehicle parking programs in public parking facilities of 50 spaces or more to incentivize the purchase and use of zero emission and alternatively fueled vehicles.

So what we have come up with is a -- I guess we need to answer the question, what is an alternatively fueled vehicle? Per the Resources Code -- we basically repeated this in the support statement that we are proposing. But it basically identifies those as hybrid, plug-in hybrid, battery electric, natural gas or fuel cell vehicles and including those vehicles described in Section 5205.5 of the Vehicle Code.

So jumping to that. Section 5205.5 identifies the Clean Air vehicle decals program and over time we have had the yellow decal that hybrid vehicles had up until July 1st of 2011. That's no longer an operative program. Nevertheless, hybrid vehicles still are listed in this Resources Code section.

There is also the green decal which is now for plug-in hybrid vehicles and then the white decal is for qualifying battery electric like your Nissan Leaf, natural gas or hydrogen fuel cell vehicles.

So basically what we are looking at is the permissive -- it's a permissive regulatory sign. What we have put together is modeled after the HIGHWAY PATROL PARKING ONLY of the S-34-CA sign that looks like this. It was taken from the General Service sign for Highway Patrol.

This is the sign we're proposing. It's green on white. It says "ALT FUEL VEHICLE". "ALT" is an approved

abbreviation for "alternative" for signing in the CA MUTCD and it's to promote the incentive program for parking spaces in park-and-ride lots and in Department of General Services lots that have 50 or more parking spaces. Typically we would identify two spaces in a 50-space lot group as these preferred parking spots.

Are there any questions?

COMMITTEE CHAIRMAN BAHADORI: Any questions for Mr. Howe? Mr. Jones.

COMMITTEE MEMBER JONES: Just a point of clarification on the word "alternative." Pedestrians and bicyclists used to be called alternative to vehicles and it almost puts it as a secondary thought or something or not the primary thought. And if we always want to encourage somebody to do something maybe we call it the preferred fuel vehicle parking rather than the alternative. But just a nuance that, you know, bicycles and pedestrians didn't like to be called alternative modes of transportation when they were invented before the automobile. And actually electric vehicles were invented before the fuel vehicles. But neither here nor there.

MR. HOWE: Okay.

COMMITTEE MEMBER JONES: Yes, I know.

MR. HOWE: We're just qualifying it according to the Public Resource Code.

COMMITTEE CHAIRMAN BAHADORI: Mr. Greenwood.

COMMITTEE VICE CHAIRMAN GREENWOOD: On paragraph 30 you identify Public Resource Code 25722.9 as the definitions of alt fuel vehicles and then you go on to list the types of vehicles, hybrid, plug-in hybrid, battery electric. I wonder if it's necessary to list those types as the definition of hybrid vehicles changes as technology evolves. Couldn't we just refer to the Public Resources Code and not go into those details so we don't develop an internal conflict?

MR. HOWE: We are entirely open to the recommendation of the Committee.

COMMITTEE CHAIRMAN BAHADORI: Just a question. So what's the enforcement clause that goes with this? I'm sure it's in the AB 2583, maybe I don't recall. Are these subject to fine or tow-away?

MR. HOWE: No. The reason why we're proposing this for Chapter 2I is because it's a general information sign. But as far as enforcement, there is no enforcement clause in the Vehicle Code pursuant to any sign related to this program.

COMMITTEE CHAIRMAN BAHADORI: That's what I was going to ask. So if somebody installs one of these and says "ALT FUEL VEHICLE PARKING ONLY" and I park there, technically there's no legal teeth? There's nothing they

can do? I don't get a ticket or I don't get towed away?

MR. HOWE: The statutory law does not provide any fee or schedule for a fine.

COMMITTEE CHAIRMAN BAHADORI: So AB 2583 is just a feel-good law? It doesn't have any legal --

MR. HOWE: It's an incentive program.

COMMITTEE CHAIRMAN BAHADORI: It's an incentive program. So there's no legal enforcement associated with the sign, even though we are introducing a regulatory sign in the --

COMMITTEE SECRETARY SINGH: It's not regulatory.

COMMITTEE CHAIRMAN BAHADORI: You're putting black on white, that's a regulatory sign.

MR. HOWE: Actually, it's green on white.

COMMITTEE SECRETARY SINGH: It's green.

COMMITTEE CHAIRMAN BAHADORI: It's green on white, okay.

MR. HOWE: We're putting it in Chapter 2I, which is not the regulatory sign section.

COMMITTEE CHAIRMAN BAHADORI: Okay.

MR. HOWE: That's similar to the HIGHWAY PATROL PARKING ONLY sign for safety roadside rests where there is an area or an office for the CHP to come and park.

COMMITTEE SECRETARY SINGH: It's green over white.

COMMITTEE CHAIRMAN BAHADORI: Green over white.

Okay, so any other questions? Mr. Walter.

COMMITTEE MEMBER WALTER: I guess as you've described, Mr. Howe, this is something which is -- it can be related to the various decals that are assigned to those types of vehicles by DMV, correct?

MR. HOWE: The DMV program, decal program, has those decals but those are not symbols that we use on our signs. Those are not symbols recognized by Federal Highway Administration. We don't want to include any reference to the HOV lane access program for parking.

COMMITTEE MEMBER JONES: And you don't need one of those decals to use -- park in a space, do you?

MR. HOWE: That's correct. Because I have a 2008 Honda Civic hybrid that would have at one time qualified for a yellow sticker but that sticker is no longer operative.

COMMITTEE MEMBER WALTER: So I guess my question was going to be, why don't we include a decal on the sign? Because I think that what we are starting to see now in shopping center parking lots, for example, are signs that say "fuel efficient vehicle parking". And so something very nebulous but yet not defined to say, well if you've got the sticker you can park here. But if you don't, who is going to enforce it, who actually belongs here? I am not sure this does anything to clarify it at all. So it's like a sign that has no meaning, no value, there is no enforcement

provision. I am not sure, I am not really sure why we would want to do it.

MR. HOWE: The best answer I can give you is this is an optional sign that would be standardized with specifications and perhaps at a later date better minds at the Legislature could recognize that and create an incentive -- well, some kind of a penalty for parking if you don't qualify.

COMMITTEE MEMBER WALTER: Fair enough.

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE MEMBER MARSHALL: Mr. Chairman?

COMMITTEE CHAIRMAN BAHADORI: Yes, Mr. Marshall.

COMMITTEE MEMBER MARSHALL: Can you go back in the slides to the section that talks about the sticker program. This is 5205.5, right?

MR. HOWE: Yes.

COMMITTEE MEMBER MARSHALL: I got a little confused. Why does the proposed language two different sections of statute?

MR. HOWE: Well, the support statement, we basically used the definition that they have for alternatively fueled vehicles in the Public Resource Code, which refers to that section of the Vehicle Code, which is he decals program for DMV.

COMMITTEE MEMBER MARSHALL: I think it seems to

imply, right or wrong, that it ties the use of the sign to the decal program and I think that's not what is intended. It's just to simply say --

MR. HOWE: You are correct, that was not intended.

COMMITTEE MEMBER MARSHALL: That's just a way to know what kinds of vehicles we're talking about.

MR. HOWE: I am just trying to answer the question, what is an alternatively fueled vehicle according to this definition and there was two statutes.

COMMITTEE MEMBER MARSHALL: I think it might be simpler to take out the reference to the section that's tied to the decal program because that, I think, is making it more complicated. In particular I think a value of that is the decal program is not really substantially present statewide. It is really a feature primarily of the major metropolitan areas that have HOV lanes. And outside of those areas a few people have decals because they travel to those places but they could still have alternatively fueled vehicles but have no awareness of the decal program. So separating the two I think would be most helpful.

MR. HOWE: I in no way meant to confuse anybody by doing that.

COMMITTEE MEMBER MARSHALL: Sure.

MR. HOWE: But I just wanted to give, here is the background on that Vehicle Code section that does refer to

the decals.

COMMITTEE MEMBER MARSHALL: Okay.

COMMITTEE CHAIRMAN BAHADORI: Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: I am in support of efforts to reduce emissions and I am in support of alternate fuel vehicles, especially ones that run on burritos. But having said that, I am a little concerned that, A, the intended user of the parking space, and B, the intended enforcer of the parking space, is not going to know what's allowed to park there. The decal would be a very clear indication of a difference in the vehicle. Absent that, no one is going to look up the Resource Code, I didn't even know it existed.

I don't see how it's going to -- I mean, clearly, CHP PARKING ONLY, it's a cruiser, right? A CHP cruiser. But I don't see how people are going to know that they are an alt fuel vehicle if they didn't pay attention and how an enforcer is going to know whether the vehicle that's parked there is a hybrid or not if it doesn't say "hybrid" on the side. So I think it's questionable whether the sign is specific. Not because the wording isn't specific but because how do you tell what is and what isn't such a vehicle?

MR. HOWE: What I can say to that is the different types of vehicles, we do have some, like we have a hydrogen

sign, we have a General Services sign. We don't have one for hybrids. So at that juncture we decided, let's keep it very simple. Keep it a word message and we'll use the appropriate alternative --

COMMITTEE MEMBER CICCARELLI: Right. But I buy a car and I don't pay attention to it, I bought it on price. It happens to be a hybrid. More and more as time goes on most of the drive trains are going to move towards hybrid. If I don't know that do I know that I can park there if it doesn't say "hybrid" on the back, like "Toyota hybrid synergy drive" or something?

MR. HOWE: What I could offer is that there could be an educational plaque that would supplement this sign that would go up there for a time frame that would identify the bulleted items that we mentioned, hybrid, plug-in hybrid, battery electric. Or we could just basically say, all hybrids, electric vehicle, natural gas or fuel cell. But that would be a supplemental plaque that would go on for educational purposes.

COMMITTEE CHAIRMAN BAHADORI: Is this the only preferential or restricted parking sign that doesn't have any enforcement attached to it, to your knowledge?

MR. HOWE: The only other one was the HIGHWAY PATROL PARKING ONLY.

COMMITTEE CHAIRMAN BAHADORI: But this one I'm

just -- I'm just a little concerned that we are, that we are trying to regulate something without having any enforcement teeth in it at all. No fine, no tow-away. But that's the law. We didn't make the law, somebody else wrote that part.

Okay. So let me open it to the public, see if anyone wants to share their wisdom. Any member of the public who wishes to address the committee on this item please come forward.

Seeing none we close the public hearing part and bring it back to the Committee. Mr. Marshall.

COMMITTEE MEMBER MARSHALL: Mr. Chairman, I think we are kind of over-thinking this. It's just simply we are trying to do a good thing, we've offered up a nice, simple suggestion. I don't think it really hurts anything. There's lots of private parking facilities that are already doing stuff like this and I don't think -- in fact, I'm parked in one today, next door. I'd like to see this move forward because I don't think it's worth the time and trouble to do it over.

COMMITTEE SECRETARY SINGH: That's your motion?

COMMITTEE MEMBER MARSHALL: I would move approval. Frankly, I am not even concerned about the thing I raised so I would move approval as presented.

COMMITTEE SECRETARY SINGH: Thank you.

COMMITTEE CHAIRMAN BAHADORI: There is a motion,

is there a second?

COMMITTEE MEMBER TONG: Second.

COMMITTEE CHAIRMAN BAHADORI: There is a motion and a second that we approve the sign as recommended by Caltrans. Any discussion?

Seeing none, all those in favor say aye.

(Ayes.)

COMMITTEE CHAIRMAN BAHADORI: Opposition?

COMMITTEE MEMBER WALTER: No.

COMMITTEE CHAIRMAN BAHADORI: There is one "No" noted, Mr. Walter. The motion passes 8 to 1. Thank you.

MR. HOWE: Thank you, Committee Members.

COMMITTEE CHAIRMAN BAHADORI: Thank you. I think this is -- in all my career this is the first time I see a parking restriction sign that has no legal enforcement. But hey, okay.

We are moving on now to the next item, Item 14-18. And this is a proposal to create a new Regulatory & Warning Sign, both for motorists to give 3 feet to bikes. This is a new law that was passed.

The agency/organization I represent and work for, we were heavily involved in both the bill and in the educational campaign that goes with it. There is a little card, informational card, and then there are these bumper stickers. We have distributed already about 250,000 of

each, so we'll see how many of the 250,000 actually ends up on the bumpers of the vehicles to educate people about the new law that was just passed and has become effective.

With that, since this is now a new law in the Vehicle Code we need to have appropriate signs to go with that section of the Vehicle Code so Caltrans and local agencies can use it to sign if they choose. So this is a Caltrans item and who is going to be presenting this?

COMMITTEE MEMBER CICCARELLI: I'm sorry, it's your item, Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: Thank you.

COMMITTEE CHAIRMAN BAHADORI: I am used to Caltrans bringing up sign requests for new CVC sections.

COMMITTEE MEMBER CICCARELLI: I think it's because it's a bicycle-related sign.

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE MEMBER CICCARELLI: I took, took the lead on this.

AB 1371 Bradford was signed into law by the Governor about a year ago, it became effective September 16. It's known as the Three Feet for Safety Act. It modifies the Vehicle Code, updating Section 21750, which is "Overtake and Pass to the Left" and adding a new Section 21760 with key language. Basically the intent is to encourage passing that does not interfere with the safe operation of the

overtaken bicycle. In other words, not to have passes that are too close for comfort or too close for safety.

It stipulates three feet. There are exceptions if three feet can't be achieved but it's called the three foot law. It's not unlike other laws adopted by over 20 states at this point, going on 25, so this is not a California first thing.

There is a tracking website that is in the proposal. The bike league, which is the League of American Bicycles, kind of like Hamid's organization but for bicyclists, based in DC, tracks this sort of thing.

LAB's summary says that 22 states plus DC have such laws. Two states have laws that stipulate a different distance, two feet or four feet.

There is no national standard sign addressing this. There is interest in such a sign but the national committee has not taken action on it, they have had other fish to fry such as bicycle signals and whatnot.

I did some research and found a couple of examples. There are lots of examples, if you do a Google image search, for example, of purported three foot passing laws. But some of these were put together by advocates and floated as images.

There's one in Wisconsin that I ran across - I visit Wisconsin because my girlfriend's folks are there -

there was a sign outside Mount Horeb, Wisconsin on a state highway. It was a sign of a type that appears in my examples page, page 49. And I was curious. I said, this is great, this is the first time I have seen one of these actually in place in a state and not just in a research proposal. so I called up the Wisconsin State DOT folks for the local office and they said, "We haven't seen it." So I called up the town engineer and he said, "Oh yeah. Our buddy over in public works here, he saw that on the web and had a sign made up by our sign shop." So I didn't want to get in the middle of that.

With regard to the design of signs. Just like any other traffic control device, it has to be effective. That means it has to be, in the case of something with a graphic or text or both, it has to be recognizable, with sufficient time and size to take action. The action has to be understood by the reader, the traveling public, and this isn't something that you can stop and park your car and consider until you understand it. You have to be able to glance, recognize it and take appropriate action. So the more complex a sign is graphically the more questions you might rightly have as to whether that can be achieved.

For example, the bottom sign. If you could scroll up to the bottom of that page. That's a sign that appears on a highway in New Hampshire that clearly fails the glance/

recognition test. It really requires some contemplation before you understand what that sign is trying to say.

The conditions for an effective traffic control device are set out in an early chapter and section of the MUTCD. And so there is a threshold.

If a sign is strictly a word message, that means it has no graphics whatsoever, it's allowed to be enacted much more easily than a sign that has symbols.

So Florida has done some research. If you scroll down a little bit to the middle of the page. Florida has done some recent research on recognizability of relatively standard looking signs like the ones on the right versus the new three foot minimum signs on the left and they had some interesting results.

What we are proposing here in this California proposal is not to even go that far because research hasn't been done at the federal level yet to see whether the car/arrow/3 foot/bicycle formulation that Florida tested is effective enough.

The other two simpler examples that I found in my research were a regulatory sign at the top middle there that purported to be for Utah. I'll come back to "purported". And then a warning formulation of the same thing on the right side under the well-known W11-1 bicycle warning diamond sign. It says, "MOTORISTS GIVE 3 FT". That one for

sure. When an element is mounted below a sign it's called a plaque. So Utah has a WS16-1aP plaque that says "MOTORISTS GIVE 3 FT".

Even though that's a regulatory message, it's a statement of law or a paraphrase of law, they have chosen to make it available in their sign manual because it can specifically replace another plaque that is in the manual that says "SHARE THE ROAD". Share the road sounds great but it is unfortunately misunderstood by a great amount of the traveling public.

As a bicyclist who understands how to bike on an urban roadway, or suburban, I think "share the road" means that motorists should give me enough space to operate the way I know I need to operate to keep my bicycle and me safe. A less-experienced bicyclist might think "share the road" means I should get out of the way of motor vehicles and a significant fraction of motor vehicle drivers also think the same thing. So "share the road" is a failure as a traffic control device if you think about it that way. It would be nice to have something that's more specific.

I think Utah must have felt that "MOTORISTS GIVE 3 FT" was much more specific. So even though it's a regulatory message they have created a plaque that's yellow, hence it's a warning and not a regulatory thing, and specifically in their sign manual said, it can be and should

be considered as an alternative to the "SHARE THE ROAD" plaque under the bicycle warning sign.

I asked numerous times the Utah DOT to respond to me on the white sign to its left, "MOTORISTS GIVE 3 FT TO bicycle symbol" and did not get a definitive answer as to whether this is actually a Utah sign. The most recent information I have is their 2012 sign manual, it doesn't appear in there, so I've got conflicting information on that.

Florida has a sign to its left that is actually in use. It has a yellow plate up at the top, or an element up at the top that says "FLORIDA LAW" with a bicycle icon. but the rest of the sign is regulatory and it's word message only except for the use of a separator bar.

So Florida has something in operation. Utah definitely has the right hand warning formulation and there may also exist in Utah the middle formulation.

This is a regulatory message. It should have a black and white sign at the very least. optionally, I think the warning formulation is also useful. So the substance of my proposal is to enhance the CA MUTCD with basically the middle sign on the top there, done exactly like that, with the appropriate sign proportion and text sizes. And also to have a warning plaque that is like the one on the right under the W11-1 warning sign.

The proposal furthermore -- the letter of the CA MUTCD says that even if the only non-textual element on the sign is the bicycle symbol that is already in use on the sign such as the R4-11 "bikes may use full lane", which is "bike symbol MAY USE FULL LANE". You still have to either wait for it to be in the federal manual or you have to submit for experimentation.

Part of my proposal takes a little different twist on that and I wanted to get the sense of the Committee on this. I personally think that the use of the bicycle symbol on its own line in a sign that's otherwise completely word message really constitutes the use of a word. That bicycle means bicycle or bicyclist or cycles but it doesn't mean anything else.

Contrast that with the use of the bicycle and rider symbols on the Florida experimental signs or the much larger sign at he bottom where you really have t think about the semantics of the sign before you decide that that symbol means bicyclist. So in my mind, "motorists give three feet to bicycle symbol" means "motorists give three feet to bicycles."

So one aspect of my proposal is to consider a change to 2A.06, which is where word message signs are defined in the manual, to specifically allow the use of the bicycle symbol to compose a word message sign without the

otherwise applicable requirement to submit to experimentation.

So to the proposal. Other parts of the proposal. On page 52 in the agenda is a table. I started to consider, well where might such signs be used and do they make sense in the right context when a bicyclist who understands how to keep himself safe on the road decides where to ride in a lane. A bicyclist first and foremost considers the width of the lane. And if the width of the lane is too narrow to be safely passed then a bicyclist that understands that this is the right thing to do will occupy enough of the lane to force the pass to be delayed or to use a different lane. That's the intent of the R4-11 sign, bikes may use full lane. If the lane is too narrow for safe passing, this gives reinforcement to the bicyclist and information to the motorist to expect bicyclists to occupy enough of the lane to deter passing. So if we are considering a new sign that supports the three foot law, does it work in both the wide lane case where I can be passed safely within the lane, and the narrow lane case where I can't? I think it does. So that's what that table is all about.

To further complicate this, what is the motorist expected to do if they can't pass within the lane because the lane is not wide enough to support that. If there is more than one lane in that direction of travel the motorist

has another lane available. If there is not another lane in the direction of travel they may have a passing permitted center line that allows them to move into the opposite direction of the roadway safely to pass. So that table that I put in there with the four cases is a thought experiment to justify to myself that the sign would work in all those contexts.

To the proposal itself, starting on page 53. The first proposed change is to 2A.06, the design of signs. And it is to introduce a new option paragraph that says: "For purposes of constructing a word message sign, a sideways-facing bicycle symbol, as used in the R4-11, is considered to be a word when all of the following conditions apply:"

It "appears within what is otherwise a word message sign." That is, it has no other symbols.

It "appears on its own line with no other text."

And it "is used to replace the single word BICYCLE, BICYCLES, BIKE, BIKE, BICYCLIST or BICYCLISTS."

So basically this is attempting to lay the groundwork to use the symbol in this proposed word message sign.

Number two, to propose a regulatory sign using that symbol and a word message plaque, a warning plaque in yellow, that does not.

To add text to Section 9B, which is the bicycle

facilities part of the MUTCD. 9B is bicycle facilities signs. This would define the "motorists give three feet to bikes" signs.

And then to add to Section 2C.60, which already addresses the existing, federally-recognized share the road plaque, W16-1P, to stipulate that within California for supplementing the bicycle warning sign as -- the top right image there. Basically substituting for the SHARE THE ROAD W16-1P. You would be allowed to use this new plaque.

And finally, in Section 9B.19, which is an existing section of other bicycle warning signs, to add an option stating how you would use the three feet for safety sign. And the option says: "In situations where there is a need to remind motorists to pass bicyclists with sufficient lateral clearance in compliance with CVC 21760 (Three Feet for Safety Act), the "MOTORISTS GIVE 3 FT" plaque figure may be used in conjunction with the W11 sign." And in support it would say, where a SHARE THE ROAD plaque is currently used, the new "MOTORISTS GIVE 3 FT" plaque may provide a clearer message t motorists. So this option in 9B.19 would be to encourage use of the plaque in new installations and to encourage the use of the plaque as an alternative to the "SHARE THE ROAD" plaque, which I personally consider ineffective, wherever it exists or might be considered.

So there's several elements to this. There's the

regulatory sign, there's the warning plaque, there's the possible modification of 2A.06 to allow -- and this is new -- to allow the use of the bicycle symbol to substitute for a word. And then there is the usual option and support that would go into the manual for any such sign or plaque.

The action requested is that Caltrans adopt the recommended policy change. That's action requested number one, to 2A.06. So that's specifically the policy change to allow the bicycle symbol to substitute for a word, with restrictions. And action requested number two at the end of the proposal is the rest of the proposal. Basically to do the MUTCD modifications in support of the new sign and plaque.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Thank you for bringing it. My first reaction and then as we go through discussion I'd like clarification from both the CHP and Caltrans that if it is a section of the Vehicle Code, I think we need to stay with the regulatory; I don't think the warning will do. Because if you put a warning and then you give a ticket, then somebody can challenge it in the court that, you confused me. It's a warning sign, why are you giving me a ticket? But the regulatory sign. The sign is overdue because the law passed.

Anyway, let's open it to the public and see if anyone has any thoughts to share with us and then we'll

bring it back to the Committee. If anyone in the public wishes to address the Committee on this issue please come forward, state your name, your affiliation and share with us your thoughts on this item. Go ahead, sir.

MR. WACHTEL: Alan Wachtel representing CBAC. CBAC looked at this proposal on August 7th. The committee didn't take any official action but did make a number of comments that I was asked to transmit to you. When I say "we" I generally mean some members of the committee made this comment and there wasn't any strong opposition, but it doesn't necessarily imply the same members each time.

There is a desire for a new sign because the law went into effect last week.

We generally prefer a regulatory sign because the law is regulatory.

The word "give" did not seem to most members of CBAC to convey a clear message to motorists. It is not part of the statute. It is not used on any other traffic sign in a relevant sense. It is not exactly clear what it means. The committee prefers to use words such as "pass at" or a graphic indicating the passing distance.

The committee also noted that three feet is only a minimum and the sign should reflect that, either through use of the word "minimum" or by adding a plus sign to the three.

And there was also a question about the scope of

the regulation. One of the other objections to the SHARE THE ROAD plaque is that you could possibly say, if there is no SHARE THE ROAD plaque then I don't have to share the road. And motorists might conceivably say, "Well, here there's a three foot sign, I've got to pass at three feet, if there is no sign I don't have to pass at three feet." That issue can be addressed by including the state law legend on a header panel, because the words "state law" there would imply that it's law everywhere, not just where the sign is present. But again, that would require a regulatory sign.

And finally, if a graphic is used then there is a preference for the side view of the bicycle rather than the rear view. And in fact, in the Florida State study that Mr. Ciccarelli cites, signs that used the side view of the bicycle were better recognized and understood than signs that used a rear view. That study also found that the presence of a sign -- in a driving simulation test, the presence and type of sign made no difference to passing distance. Which was sufficient in all cases but it still had educational value. That's it.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

Next speaker, please.

MR. BITTNER: Jim Bittner, City of San Jose. I want to echo his previous comments regarding preference for

keeping this a regulatory-only sign since it's an enforceable sign under the California Vehicle Code.

One thing to note is between the two signs, assuming they are the same width, the regulatory sign is going to be a lot larger than the current "bikes may use full lane" sign that's out right now. So I think that that regulatory sign is going to be a lot more noticeable than even what's out there right now. So having the regulatory-only sign would be my preference as well.

I would also like to echo his comments about saying "state law" at the top of the sign so that it's not a situational sign. If it's in cases where we determine that engineering judgment, that this is an appropriate place to put it, we are reactionary so we only go the places that we hear about. There are other places that we may just not know about, nobody has told us about and we are not aware of. So by putting "state law" it also means across other agencies within the state people will be more cognizant when they see these signs elsewhere.

One other thing I had was in the verbiage he referenced saying three-plus or minimum three feet and not really preferring he word "give". I was considering, maybe instead of saying "give three feet to" say "keep three-plus feet from". Just there's a slight difference instead of "give." People hear "keep three feet from" it's a little

more common knowledge, common verbiage to using a sign. And that was my comments.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Especially your suggestion for the state law. That's good because then it serves for educational purposes also.

Next speaker, please.

MR. SALLABERRY: Good afternoon, Committee, Mike Sallaberry with the City of San Francisco. And I forgot to mention earlier, I am also a representative on the D-4 BAC. So I have a number of comments on this.

I support the replacement or removal of a certain road plaque. I think, as John eloquently explained, that it's an ambiguous sign.

My overall comment regarding the three feet rule and the sign that accompanies it is that it is a challenging message to convey very succinctly and I think this sign is a little bit too wordy. I actually like the Florida sign in Section D, but I understand, I guess, that would require a little more human factors testing. Seeing that almost half the states in the United States use that -- have that law now, maybe there is an FHWA effort that could study that sign. But I think that sign gets closer to conveying something succinctly and clearly with symbols. But if we are looking for a sign that we need in t he near-term I would suggest just to simplify. Reduce the number of

letters, maybe replace "motorists" with "drivers". I think most people think of themselves as drivers and not motorists and it has two fewer letters so you can use a larger font.

And I also agree with the comments about the "give three feet". That's not very clear. So anything that you can use to replace that or more clearly explain that I would support. And that's it, thank you.

COMMITTEE CHAIRMAN BAHADORI: Just one question. The Florida sign that you're supporting, is that the one that has two symbols and says "three foot minimum"?

MR. SALLABERRY: Yes, because I think it --

COMMITTEE CHAIRMAN BAHADORI: But that doesn't say whose responsibility it is.

MR. SALLABERRY: Well, the reason I --

COMMITTEE CHAIRMAN BAHADORI: No, I'm just curious because it doesn't say, it just says, "three foot minimum".

MR. SALLABERRY: Well I guess it would be whoever is overtaking.

COMMITTEE CHAIRMAN BAHADORI: Yes, it's the state law.

MR. SALLABERRY: They are in control of that situation.

COMMITTEE CHAIRMAN BAHADORI: I'm just thinking about enforcement. And consistency with the law. Because the sign that whatever we, Caltrans prepares on whatever we

recommend for approval, it has to -- we cannot change the law, the sign must actually say exactly what the law says.

MR. SALLABERRY: Right.

COMMITTEE CHAIRMAN BAHADORI: And it does say -- in this case it says "motorist must yield".

MR. SALLABERRY: My reasoning for that sign is just because, if nothing else, you notice the symbols and the three.

COMMITTEE CHAIRMAN BAHADORI: Sure.

MR. SALLABERRY: So there might be some value.

COMMITTEE CHAIRMAN BAHADORI: I like that sign too but that's not California law. Thank you.

Next. Mr. Kenney.

MR. KENNEY: Good afternoon, Mike Kenney, County of San Diego.

I do want to echo the regulatory nature of the signs. Hopefully we can change that.

Has there been any discussion about why we need a sign? This is a blanket application across the state. I know there is some verbiage in there about if you can't provide it that you don't have to. But I don't know that that really goes to the roadway you're on. If you're in a large truck maybe you can't, if you're a small vehicle. So I am not sure that we need to post it if the roadway is not a real element as to whether or not it applies. If it just

applies everywhere are we going to put out -- am I going to have to put out signs on 2,000 miles of roadway that I may not see any benefits from?

COMMITTEE MEMBER CICCARELLI: An optional sign.

MR. KENNEY: Okay. If it's an optional sign, when would we be using it? Just when we got a complaint or?

COMMITTEE MEMBER CICCARELLI: I think the same consideration applies to the R4-11. Although there are agencies such as San Francisco that have pretty specific guidance on when to use it. This is a little more nebulous.

MR. KENNEY: Okay. I would shy away from the text. We're fresh from the law itself. And separate, give three feet, that all means the same thing to us right now, but I guarantee you, my parents will never know what that means. I think if we could just get to a symbol sign, maybe like the Florida sign, we would be better off for the folks who don't quite have the background that we do.

Three feet is the operable thing here, it's not the bike, so we should be emphasizing that. The separation should be the emphasis. I think you need a cross-section of the road for the sign to be useful.

I also would like to see the pavement underneath, like in the sign in the lower right in the view that we are looking at right now. Because a bicyclist needs to be a participant in this too and it should show the bicyclist as

far to the right as reasonably possible. I think that would be helpful as well. Thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you. The bumper sticker and the placard that I just talked about, we actually prepared it in collaboration with Mr. Snyder who was here, he left. And ours -- as I said, we already distributed 250,000 of these in Southern California and we are probably going to go to a million-plus by the time we are done with our campaign. We used "give three feet" because that's pretty much what the law says but that doesn't mean that the sign should say that.

Representative from FHWA. By the way, I would be interested to see how you guys approached the other states that have developed some of those signs.

MR. KORTH: Kevin Korth, Federal Highway. I'll make a comment to some of them.

The sign in Florida, it's an experimental sign that Florida State University did the human factor study on. It was Federal Highway's opinion that the study showed that it was largely unsuccessful in deciphering the message to the road user. If you look at the percentages of the comprehension --

COMMITTEE CHAIRMAN BAHADORI: Did I hear correctly, you said "unsuccessful"?

MR. KORTH: Yes, we believe that the --

COMMITTEE CHAIRMAN BAHADORI: Okay.

MR. KORTH: -- study showed --

COMMITTEE CHAIRMAN BAHADORI: The Florida sign.

MR. KORTH: The Florida signs were --

COMMITTEE CHAIRMAN BAHADORI: Which Florida sign? I see two there.

MR. KORTH: The ones with the header panel, the Florida law.

COMMITTEE CHAIRMAN BAHADORI: Okay. Okay, thank you.

MR. KORTH: As far as signs meeting state law. A header panel in order for them to be enforced statewide. Federal Highway, we don't believe in the need for that. There's plenty of other signs that are providing information about the whole entire state, like "Move Over for Emergency Vehicles". You encounter an emergency vehicle at any point and then move over for them. And it is a statewide law, you don't need a state law panel across that to convey the message. I mean, that's what the CVC is for and the DMV is to have that awareness of what your state laws are as a motorist.

The SHARE THE ROAD plaque. I wanted to make the clarification that the SHARE THE ROAD plaque is not only for bicycles, it is to be placed along the highway for bicycles, golf carts, horse-drawn vehicles or other farm machinery.

So "Share the Road" is a phrase used for any slow-moving vehicle. It could be for -- in the Amish community you can use the SHARE THE ROAD plaque. So it's not a plaque specifically for the bicycles. And so I just wanted to make that clarification, that that "Share the Road" phrase is not just a bicycle-only phrase, but it could be used underneath the bicycle diamond sign to convey that message.

We prefer that that there be -- it came up with a word-only message, like some of the -- what was mentioned in the agenda packet and some of the people in the public that there's a lot of different proposals that have been put out there and none of them have provided the human factor study that shows that they were successful in conveying the message.

Like the example of the Florida law one. Does it mean that the bicyclist must always travel on the right side of a vehicle and that they have to always -- that they have to ride on the sidewalk if they can't get three feet. So there's a lot of confusing elements with a lot of the signs that have been proposed to date. So that's why nationally Federal Highway hasn't been able to provide a sign for that condition.

What I'd recommend is only providing a sign in situations where there's, by state law, allowable to pass a vehicle, like especially when you have a skip-dash on a two-

lane roadway. To be able to pass a vehicle and you already have a passing zone. Or there's a bicycle facility where it's actually needed to provide that three foot buffer.

A sample of a word message that could possibly be also used to convey the message is "change lanes to pass bicycles" so anytime you come up on a bicycle and you have -- the passing zone is available to you. If you just have a plaque on the side there that says "change lane to pass bicycles", that's something that can provide that general awareness for the state law that is the three foot. That will solve the issue of providing only three feet or more than three feet. Changing lanes. A vehicle to change lanes when it's allowable with the skip-dash and approaching traffic is okay. That would be a good point to have.

One concern we have with the bicycle is it's a very small object on the roadway compared to most. The Universal Vehicle Code allows you to pass farm machinery or a garbage truck across a solid yellow line because it's a big vehicle. And so approaching vehicles from the opposite direction, they can usually see these big combines or farm tractor equipment approaching on the road so they're going to be decelerating as they approach this vehicle anyway, so then they are usually aware that there's cars trying to pass those large vehicles. So for cars to pass the double yellow to pass a bicycle to give them three feet, the approaching

motorist doesn't necessarily see that bicycle on the shoulder or in the lane as they would a garbage truck or farm equipment.

COMMITTEE MEMBER CICCARELLI: A question for Kevin.

COMMITTEE CHAIRMAN BAHADORI: Sure.

COMMITTEE MEMBER CICCARELLI: You mentioned that, for example, the "change lanes to pass" would be appropriate where there is one lane of travel in the direction of the bicycle and the pass would be occurring over a passing-permitted center line. Would you also see such a message sign or regulatory sign useful in a multi-lane situation where you have a narrow outside lane the bicycle is occupying?

MR. KORTH: In a condition, a one-way street or a two-street that has multiple lanes and where there's no bicycle lane present and the bicycle is using that lane.

COMMITTEE MEMBER CICCARELLI: And the lane is narrow, it's substandard.

MR. KORTH: Yes, that word message could be applied for both a two-lane, two-way roadway or a multiple lane roadway or a one-way road with multiple lanes. I think a three-lane roadway or something. That a motorist should be changing lanes when they're passing that bicycle if there's no bike lane.

COMMITTEE MEMBER CICCARELLI: I am certainly glad to hear that, that's a word message that has been bandied about in other discussions but it has never made its way onto a sign that's been standardized yet.

MR. KORTH: We just feel that that message, depending on how individual states, their state law is, that message will make the motorist decide, can I make that safe pass to begin with, not just worrying about giving three feet. They should be changing lanes if the lane markings allow for that maneuver to be --

COMMITTEE MEMBER CICCARELLI: Not too get too far digressed on that because the genesis of this proposal was to respond to the new state law. But one objection that's been raised in regard to the specific wording "change lanes to pass bicyclists" is that if it's on a regulatory sign wouldn't motorists think that they have to execute a pass rather than at their discretion? I am not sure that that holds any water but would the law -- would the sign then be requiring motorists to pass?

MR. KORTH: I believe that if the bicycle is in the lane that they should be executing a pass in their motorized vehicle.

COMMITTEE MEMBER CICCARELLI: Okay. So you're --

MR. KORTH: But I'd have to ask. And maybe Lieutenant Ricks would have an opinion on how interaction

between a vehicle overtaking another vehicle versus a vehicle overtaking a bike. I'd ask the CHP if they have any comment on that.

COMMITTEE MEMBER CICCARELLI: So to finish the thought on "change lanes to pass". You'd be comfortable with a largely word message sign that said "change lanes to pass bicycle symbol"?

MR. KORTH: No, it would be the word only, a word-only message.

COMMITTEE MEMBER CICCARELLI: So would the word "bicycle" appear or would it just be "change lanes to pass"?

MR. KORTH: "Change lanes to pass bicycles."

COMMITTEE MEMBER CICCARELLI: To pass bicycles. So bikes or bikes, some last word would be "bicycles".

MR. KORTH: Right.

COMMITTEE MEMBER CICCARELLI: Okay. And then in subsequent years if it was submitted through experimentation that word could be replaced with a bicycle symbol as it is on the R4-11.

MR. KORTH: Sure.

COMMITTEE MEMBER CICCARELLI: Okay.

COMMITTEE CHAIRMAN BAHADORI: Any other questions at this point? Okay, thank you.

Anyone else in the audience wishes to address the Committee?

Seeing none we close it and bring it back to the Committee.

This is a state law so I hope that whatever we do, since this is a new law, that somehow we incorporate, maybe add a plaque or something that says it's state law also. Because I hate for these signs to go to waste. I don't know how many people are going to install them to begin with. But even if there are 10 of them in California, at least if there is some educational component to it, so that people, when the drivers pass by it they also remember that this is -- because this is a new law, we have not had it. So I hope that it helps. So anyway, I for one, think that we should stay with only the regulatory sign because this is an enforceable section of the Vehicle Code. We don't want to go with a warning sign, it confuses the message.

Let's start listening from the left side. Mr. Walter?

COMMITTEE MEMBER WALTER: Thank you, Mr. Chairman.

I appreciate the public comments because I think it raises some uncertainties on this and I also am a little bit concerned about the lack of clarity in the word "give" and the messaging that we need to have for motorists and cyclists to be really clear about what it is that we are accomplishing.

I realize that it is a state law now. I think

perhaps the approach should be that we would not immediately approve these signs to be added to the MUTCD but have them be maybe created in some sort of an experimental application that could be evaluated with a human factor study such as has been happening, or not yet happened around the country. But give it a little bit of time. And with your educational program perhaps that is going to sink in and resonate and then maybe we can do some signs that will match up to what the public expects.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Mr. Winter.

COMMITTEE MEMBER WINTER: Just echoing that too. I agree that this should not be a warning sign or to somehow confuse the motorist with the scheme of it being a warning sign.

As far as regulatory signs go. I mean, I'm just doing a little doodling myself here. And one I was wondering if it's somehow being considered or has been maybe considered is the PASS WITH CARE sign that we already have in the manual. Obviously that deals with the specific circumstances of, you know, a passing zone. But it is telling the motorist that an engineering review has been done and it's determined now you can pass slower-moving vehicles. But the PASS WITH CARE but add either the word "bicycle" or the bike symbol.

The word "care" seems in my mind, also, to resolve the question of is it three feet minimum or what if it's, you know. The other provision that's in the Vehicle Code, the 21760(d) that says if you just slow down, if you, the motorist, have considered the roadway conditions and determined that you could still pass in a reasonable and prudent manner, then you can do so. So that's why just thinking about the word "care", it just seems to imply that you wan that motorist to give pause before they make that maneuver around the bicycle.

And again, if you add the words "state law" up at the top of that I could see some rationale. Appreciate the comments from FHWA about the use of that. But there is a rationale to at least add the words "state law" to the sign because it is truly a law in California and not necessarily applied in the same manner throughout the rest of the country.

Again, not sure if we want to -- how you are going to approach this, Mr. Chairman, but just my more of a comment that I'm making about another option as far as the regulatory sign would go.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Now Lieutenant Ricks. His agency is primarily responsible to enforce the new law so what are your thoughts?

COMMITTEE MEMBER RICKS: It should definitely be a

black and white sign for a regulatory sign. When we saw the examples of the signage in this proposal, I passed it around my office. There were some avid bicyclists there and they were a bit confused on the message it was giving. Just the wording. We didn't really have anything to come back with. But the "give three feet", you know, a few of them said, "What does that mean to me?"

As far as what Kevin said about the change lanes. I'd be real careful on something like that, just due to the fact that it sounds like you are requiring someone to change lanes when, you know, it may not be safe for them to do it; they might say "The sign told me to do it." And then again, if they see that sign where it is legal to pass and then further up the road it may not be, it may be a double yellow, if there was another sign saying, "Don't change lanes to pass." You know, they could be assuming that sign is still in effect just further up the road and say, "Hey, the sign said change lanes to pass, I'm passing a bike" when it's not legal on a double yellow. So yes, if we are going to have a sign the message needs to be, I believe more clear than what this proposal has in it.

COMMITTEE MEMBER TONG: It should be the regulatory sign. I think the warning sign will cause more confusion of that.

Regarding the message. I would like to learn from

the Committee Members what kind of message to be there. If we use, continue to use the "give three feet" I think it's consistent to the law, that's a good thing, but I would like to hear more from the members about the message.

COMMITTEE CHAIRMAN BAHADORI: Thank you. Mr. Jones.

COMMITTEE MEMBER JONES: I just started Googling some pedestrian signs that are already in the MUTCD and some paddles. And, you know, we have the stop sign here for pedestrians and then we have the yield here for pedestrians without symbols and words. We also have the paddles that you glue down in the crosswalks near schools or whatever that say, "the state law, yield symbol, to pedestrian symbol, within crosswalk." So there's a lot of precedent already set using symbols and words and putting state law as a reminder that it is a state law. So I definitely agree that it needed to be a regulatory sign.

I do like the bike symbol, the side view of the bike symbol. I can see where "give" might have some ambiguity. I agree that we need to put it on the motorist to give the three feet, so I think that's important.

I guess those are my comments at the moment.

COMMITTEE CHAIRMAN BAHADORI: Mr. Marshall.

COMMITTEE MEMBER MARSHALL: I was very intrigued with Bill Winter's idea about pass with care; I'd like to

explore that further.

COMMITTEE CHAIRMAN BAHADORI: Sure. Just one of the things, again, you know, this is new. And typically when there's an amendment to any section of the Vehicle Code, Caltrans is the agency that comes with the proposal. So this time we have one of our members, Mr. Ciccarelli, who has come with the proposal.

As far as experimentation. We've got to be very careful and we've got to -- because I don't want to create more confusion and potentially even legal challenges that the same section of the Vehicle Code is being enforced using different signage at different locations. And there's always a smart attorney who is going to find a loophole and is going to challenge the whole thing and make a mess of it.

So I don't know. I hear concerns, primarily like from agencies and most importantly from CHP, that they don't feel really comfortable with the message on the sign. And they are ultimately the officers who are going to be enforcing the law out there so we want their concurrence.

So how do we go about it? Do we start developing some additional signs or ideas? Because this is a work product of one individual. Mr. Ciccarelli has been gracious with his time and has taken leadership and come up with the idea, traditionally Caltrans would have done this. But now we have this on our agenda so where do we go from here?

Caltrans, do you guys want to do what you always do? That there is a new section of the Vehicle Code and you develop signage in collaboration with the CHP and agencies?

COMMITTEE SECRETARY SINGH: We will develop a sign. But if you do not agree on the proposed sign, if you feel it is very confusing, give us language. Basically we need a recommendation from the Committee today.

COMMITTEE CHAIRMAN BAHADORI: We had some, we had some. Mr. Winter.

COMMITTEE SECRETARY SINGH: Suggestions by the Department, by CHP, so we need recommendations from the Committee.

COMMITTEE CHAIRMAN BAHADORI: And we have had some and we are definitely open to more suggestions and ideas.

As I said, our campaign is an educational campaign. We worked with the California Bicycle Coalition and came up with the bicycle stickers but these are different than regulatory signs. And we thought that "I give three feet to bicycles" is a good message for education but enforcement is a different matter.

COMMITTEE MEMBER CICCARELLI: As the bringer of the proposal I want to respond to everything, hopefully succinctly.

I am more than willing to remove the warning plaque formulation. It was the only example I saw of an

adopted state sign plaque in Utah. I agree with the regulatory issues -- the regulatory message on a warning color, so ignore that.

I am very comfortable with putting "state law" above it. I think from the standpoint of addressing FHWA's concerns, this is not the case where adding that confuses the message, if anything it strengthens the message. It may be deemed to be unnecessary but I just say that it's optional and innocuous. So I'm more than comfortable with the "state law" header on top of it. For consistency with the way that's been done before, for example in the R16 sign, it should be yellow to call attention to it. So, so far, so good.

As for the wording. I am certainly open to other wording but I want to -- as background, this really was brought forward by CBC. The California Bicycle Coalition worked very hard to get the Give Three Feet law applied. The wording of "give three feet" I believe appears in -- at least a reference to the bill's name appears in the Vehicle Code. So I think, not that I'm speaking for CBC, but I suspect they are going to be disappointed if three feet, 3 FT or some variation thereof doesn't appear somewhere on the sign. I don't know how to reconcile that.

I like "pass with care". I think it's kind of soft, though. I like "change lanes to pass" much more

because it's very specific. It's like "bikes may use full lane", much more specific than "share the road". I don't know how to reconcile the desire to have "three feet" in there somewhere with the rest of it.

COMMITTEE CHAIRMAN BAHADORI: Mr. Howe, is that possible on your computer to bring up the actual section of the Vehicle Code, what it says, or at least the new law.

COMMITTEE MEMBER MARSHALL: It's in the agenda.

COMMITTEE CHAIRMAN BAHADORI: The AB --

COMMITTEE MEMBER CICCARELLI: It's at page 47.

COMMITTEE CHAIRMAN BAHADORI: Go to page 47, please. See what it says.

MR. HOWE: I'm trying to find something for Kevin.

COMMITTEE CHAIRMAN BAHADORI: We have to be mindful that we are not creating law; the sign must reflect exactly what the law says. Okay, the section of the Vehicle Code is going to read where?

COMMITTEE MEMBER CICCARELLI: It's down near the bottom, 21760.

COMMITTEE CHAIRMAN BAHADORI: Okay, 21760. So the law is known as Three Feet for Safety Act.

COMMITTEE MEMBER CICCARELLI: 21760(a) says the section shall be known as, and may be cited as, the Three Feet for Safety Act.

And Section 21760(b) says, when overtaking or

passing in the same direction, shall do so at a safe distance that does not interfere with the safe operation of the overtaken bicycle. That section does not mention three feet.

Section (c) says, shall not overtake or pass in the same direction at a distance of less than three feet between any part of the motor vehicle, any part of the bicycle or its operator. So the three feet provision is in 21760(c).

COMMITTEE CHAIRMAN BAHADORI: Yes.

COMMITTEE MEMBER CICCARELLI: And then 21760(d) says if unable to comply with (c), that is the three foot provision due to traffic or roadway conditions, shall slow to a speed that is reasonable and prudent and pass only when doing so would not endanger the safety of the operator of the bicycle.

So basically this, in my reading, and I'm not a lawyer and I am not a CHP officer, allows you to pass with less than three feet clearance when you slow and do so prudently.

And then finally, the violation provisions are under (e).

COMMITTEE CHAIRMAN BAHADORI: Yes. And it's a $35, which is, of course, the state standard rate. But then add court costs, it's a pretty expensive ticket.

Okay. So the law is very clear on what the law says and what the expectations and the obligations of the drivers are. So the message must clearly reflect what the state law says. Mr. Marshall.

COMMITTEE MEMBER MARSHALL: So inspired by the "pass with care" idea but the need for it to be stronger and more specific and true to the legislation I sketched something just now that says "pass" -- the first line is the word "pass", the next line is "bikes", the next line is "3 FT" and the next line is "min". Pass bikes 3 feet minimum.

COMMITTEE CHAIRMAN BAHADORI: So pass bikes 3 feet minimum.

COMMITTEE MEMBER JONES: We got an endorsement from FHWA, I saw a nod.

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: So you want to say "motorists pass bikes"?

COMMITTEE MEMBER MARSHALL: I don't.

COMMITTEE CHAIRMAN BAHADORI: No? Okay, just say pass --

COMMITTEE MEMBER CICCARELLI: I think if bicycles want to pass bikes with three feet they're allowed to do so.

COMMITTEE CHAIRMAN BAHADORI: Okay. So it's going to be a rectangular sign that's going to say "pass" bikes or

bicyclists?

COMMITTEE MEMBER MARSHALL: Bikes.

COMMITTEE CHAIRMAN BAHADORI: Bikes.

COMMITTEE MEMBER MARSHALL: I'm trying to keep it simple.

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE MEMBER MARSHALL: Minimal content for maximum comprehension.

COMMITTEE CHAIRMAN BAHADORI: "Pass bikes 3 FT minimum."

COMMITTEE MEMBER CICCARELLI: I'd like to twist Kevin's arm one more time.

COMMITTEE CHAIRMAN BAHADORI: Sure.

COMMITTEE MEMBER CICCARELLI: What is the heartburn with allowing that same formulation but with the sideways bicycle symbol substituting for the word "bikes" Without going through the whole rigmarole of an experimentation or a request to FHWA? Is it just that it's in the manual like that, it's a historical precedent or what's the big deal?

MR. KORTH: Actually the manual is silent on doing like a direct replacement of a word with the symbol. And so if that sign -- a sign using the word "bike" or "bicycle" or replacing it with a bicycle symbol.

COMMITTEE MEMBER CICCARELLI: It's our 4-11

sideways bicycle symbol, yes.

MR. KORTH: I think it would be, it would be an acceptable -- our preference is an all-word message. But if that -- the bicycle sideways, bicycle symbol is put into a sign, we would prefer that there is -- that the Section 2A.06 not be added and just remain silent on that issue, because otherwise you're making preference to just bicycles. And then what about the ped symbol? And it's just going to be a big snowball effect of all these new signs coming out. And so we would prefer that Section 2A,06 remain silent and not having that specific decision about bicycles.

COMMITTEE MEMBER CICCARELLI: That's very good news to hear. Is Mr. Howe cool with that?

MR. HOWE: I'm cool with that.

MR. KORTH: And I just wanted to, since a couple of people asked me about the state law header panel. I just wanted to reinforce Section 2A.15, the Enhanced Conspicuity of Standard Signs. If you look at sections C and D, through engineering judgment. For a period of time you're allowed to put a header panel with the words "Notice: State Law" or "New" above it and then remove it after some point. SO having some --

I am not necessarily in favor of having a sign that is always having the words "state law" above it. The reason I think -- I am not completely sure but that one that

had "state law" for the -- the one that's mounted in the middle of the road, was because there is such a variation in the states between the state law being "stop for peds" and "yield to peds".

So providing the either/or option with that state law allows each state that only adopts the national MUTCD to select between one of those two and then enforce that state law in their state. So that was kind of, I believe, the thought process before that "state law", a panel for that one sign. But since then everybody is trying to put the word "state law" on any new sign that comes available. So I think it is allowed and you can do that but I would just use Section 2A.15, the engineer should use Section 2A.15 to provide that state law header panel and not include that in the design of the sign.

COMMITTEE CHAIRMAN BAHADORI: Okay, I see Caltrans' brainpower behind you. Mr. Howe and Mr. Bhullar, let us know your wisdom.

MR. HOWE: Don Howe from Caltrans. I agree with FHWA, there is not a need to put in 2A.06 the specific. Because I think it might create a precedent and we'll start seeing language for other symbols similarly. So at this point I think that's understood, in view of other signs that have a bicycle symbol.

In my own -- I'm a bicyclist. I probably logged

1,000 miles this good time of years to ride bicycles. But I think one of the things that I would like to see on a symbol, which would probably require some work, would be to show a bicycle being ridden by a person rather than a riderless bicycle. But right now we don't have that symbol in our -- there is only one sign and it's the -- it shows the pavement marking that has a bicycle with a rider with a helmet and that's always a good message. But that would be my own personal opinion.

COMMITTEE CHAIRMAN BAHADORI: You're in a position of power, you can introduce new symbols, Mr. Bhullar.

MR. BHULLAR: Johnny Bhullar with Caltrans. First of all, I was trying to stay on the sidelines but now that I see it's after 2:30 and some of the members are trying to really bring out some creative skills here in terms of coming up with word messages, I just want to remind everyone that the signs, five words is the limit, or pieces of message. So when you are trying to be creative we are already up to five, I think, in a couple of proposals I'm looking at. So just be cautious of that.

COMMITTEE CHAIRMAN BAHADORI: Good point. Very, very good point on both. Five lines, not five words.

COMMITTEE SECRETARY SINGH: We have one by Bill. Do you want to share it?

COMMITTEE MEMBER WINTER: Well I kind of walked

down there a little bit and you're right, Johnny, I think we're getting a little too creative here.

But again, I keep coming back to the "pass with care" but adding, you know, the "pass" and bike symbol or perhaps "bikes". so "pass bikes with care".

And then as far as the state law as the header. I do understand from some comments here that if we want to reinforce that there is a state law but as a header instead say "3 FT for Safety Law". So "three feet for safety law" as a header instead of just saying "state law". So that it again, conveys the three feet message which is out there.

But it's really about care. We want the motorist to pass with care, as was mentioned in the Vehicle Code, in my first set of comments and again when we went through it. You still have that 21760(d) that does allow them to pass at a distance perhaps less than three feet. So it all comes down to care and that was the word that, again, in my suggestion there.

COMMITTEE SECRETARY SINGH: I just wanted to share with the Committee Members. The top line is "3 FT for Safety Law", "pass" symbol "with care".

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE SECRETARY SINGH: The second one is from Mr. Marshall, "Pass 3 FT minimum".

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE SECRETARY SINGH: That's what we like.

COMMITTEE MEMBER CICCARELLI: I have a riff on Mr. Winters.

COMMITTEE CHAIRMAN BAHADORI: Lieutenant Ricks, CHP, in my mind, at least as one member of the Committee, is what I am looking for in things like this. Because at the end your officers should feel comfortable that the message that any regulatory sign says out there reflects exactly what the letter and the intent of the Vehicle Code is. Do you feel comfortable with this or do you want to take it back or how is your position?

COMMITTEE MEMBER RICKS: As simple as these new ones are, "pass bike 3 foot minimum" --

COMMITTEE SECRETARY SINGH: State law, on the top.

COMMITTEE MEMBER RICKS: "state law". That's all --

COMMITTEE CHAIRMAN BAHADORI: The "state law" is a plate, it can be added later.

COMMITTEE MEMBER RICKS: Something like that would be -- that's simple, that's understood.

COMMITTEE CHAIRMAN BAHADORI: So you feel comfortable with "pass bikes 3 FT min"?

COMMITTEE MEMBER RICKS: Yes.

COMMITTEE CHAIRMAN BAHADORI: Okay. Okay, it seems like we have a -- whose creative idea was this?

Mr. Marshall, thank you, it was your proposal.

So we have a proposal that it is going to be a regulatory sign, that it is going to say "pass bikes 3 FT min". Four lines on the same sign and with the potential of adding the "state law" in black/yellow on top wherever the agency wants. So we have a proposal. Do you want to discuss that, do you want to vote, how do you want it?

COMMITTEE SECRETARY SINGH: Let's ask for a motion.

COMMITTEE MEMBER CICCARELLI: I'd like to comment on it, as the original proposer of the --

COMMITTEE CHAIRMAN BAHADORI: Absolutely. It's your item, go ahead.

COMMITTEE MEMBER CICCARELLI: I love it. I love it. I think it's clear, I like the state law thing with the expiration of the state law plaque to be optional, you know, engineering judgment. I think it says what it needs to say and I think it says it clearer than "give" did. I'll be glad to support it.

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE SECRETARY SINGH: Can we have a motion?

COMMITTEE CHAIRMAN BAHADORI: Since it was your idea you make the motion.

COMMITTEE MEMBER MARSHALL: I am planning to and I appreciate all the positive feedback. I'm paging through

the staff report real fast to see what's needed.

COMMITTEE MEMBER CICCARELLI: I'm hoping that you have an iconic bike -- pass bike symbol, since FHWA seems open to it and Don is open to it.

COMMITTEE MEMBER MARSHALL: It was kind of an interesting discussion on that.

So I am looking through the proposal in the agenda. And as I understand it, we are not pursuing the first item, which was the business about 2A.06. Essentially we're replacing the second one by saying, add the following sign that is now the Marshall design.

COMMITTEE CHAIRMAN BAHADORI: Yes.

COMMITTEE MEMBER MARSHALL: Okay. Add the -- The third item is just putting it in the right place in the charts and tables; is that still -- I guess that still applies.

COMMITTEE MEMBER CICCARELLI: I think if you go through the proposal starting at 53 we can knock this out pretty quick.

COMMITTEE MEMBER MARSHALL: That's what I am trying to do.

COMMITTEE MEMBER CICCARELLI: The first red paragraph on 53 is the 2A.06, which we're striking.

COMMITTEE MEMBER MARSHALL: Right.

COMMITTEE MEMBER CICCARELLI: Okay. The second

paragraph is the 9B.xx, it's the definition of the sign, so we give it a different name. Otherwise it, I think, reads pretty much the same.

COMMITTEE MEMBER MARSHALL: Yes.

COMMITTEE MEMBER CICCARELLI: The third block is the warning plaque. That goes away, we are not doing one.

COMMITTEE MEMBER MARSHALL: Okay.

COMMITTEE MEMBER CICCARELLI: And the actions requested, it's just really the second action.

COMMITTEE CHAIRMAN BAHADORI: That's it.

COMMITTEE MEMBER MARSHALL: Okay.

COMMITTEE CHAIRMAN BAHADORI: Pretty straightforward.

COMMITTEE MEMBER MARSHALL: Devinder, if I just say, so moved, you've got it.

COMMITTEE SECRETARY SINGH: We can second it.

COMMITTEE MEMBER TONG: We second.

COMMITTEE MEMBER MARSHALL: But I mean, you understand the listing that John just made so I don't have to say it again?

COMMITTEE SECRETARY SINGH: Yes.

COMMITTEE CHAIRMAN BAHADORI: There is a motion and a second. Let's listen to FHWA, Kevin. Now you have a specific motion and a specific sign so we'd appreciate hearing your thoughts.

MR. KORTH: I have two points. It's a state law issue so it's up to however you guys interpret it.

I was just curious with the CVC, part (d). If you believe that whatever sign you're proposing is inclusive of that part (d) where it says: "If the driver of a motor vehicle is unable to comply with subdivision (c) due to traffic or roadway conditions the driver shall slow to a speed that is reasonable and prudent and may pass only when doing so would not endanger the safety of the operator or the bicycle."

And then the second point is, if the Committee believes that this item has changed so much that it should be provided back to public comment and reviewed at the next meeting or it could be voted on today? That would be the second question.

COMMITTEE CHAIRMAN BAHADORI: One of the things, if you vote on something today I assume Caltrans is going to be going and preparing the standard sign spec and the dimensioning and the letter size and clearances between lines and so on and so forth.

So I hear your thoughts in case -- this is a new sign and we pretty much in this room are making that decision. Do you want to give other folks a chance also to take a look and bring it back next meeting or do you guys feel comfortable to just vote today and have Caltrans

prepare a sign with this language? And I refer mostly to CHP and to our non-motorized reps.

COMMITTEE MEMBER MARSHALL: Well, Mr. Chair, even though I wasn't either of those categories.

x COMMITTEE CHAIRMAN BAHADORI: And I name you as the creator of the sign.

COMMITTEE MEMBER MARSHALL: The indicator to me is that we don't have Mr. Wachtel leaping to his feet to protest.

COMMITTEE CHAIRMAN BAHADORI: That's good.

COMMITTEE MEMBER MARSHALL: As the kind of official rep of a bicycling organization in the room, Mr. Snyder having already departed.

COMMITTEE CHAIRMAN BAHADORI: That's good, that's good for me.

COMMITTEE MEMBER MARSHALL: That to me speaks well.

COMMITTEE CHAIRMAN BAHADORI: i don't want to, I don't want to delay items unduly at all.

COMMITTEE MEMBER TONG: I would like to suggest to move forward with it.

COMMITTEE CHAIRMAN BAHADORI: Okay, we'll move forward. And I don't see Lieutenant Ricks pulling out his gun so he's happy, I'm happy. Okay.

COMMITTEE MEMBER JONES: This is a demonstration

of innovation and creativity right here.

COMMITTEE CHAIRMAN BAHADORI: Exactly.

COMMITTEE MEMBER JONES: We got a mission statement from Kate this morning and --

COMMITTEE CHAIRMAN BAHADORI: And this sign -- and this sign is going to be referred to as Rick Marshall's sign.

Okay, there is a motion and a second and no more discussion. All those in favor please --

COMMITTEE MEMBER WINTER: Just one quick comment.

COMMITTEE CHAIRMAN BAHADORI: There is a discussion.

COMMITTEE MEMBER WINTER: The word "minimum", is it all spelled out?

COMMITTEE MEMBER MARSHALL: No, just M-I-N.

COMMITTEE MEMBER WINTER: M-I-N. Okay. Just so -- I'm not sure how consistent we have been in the use of that abbreviation. I know us in the room understand it but do you think we have used it elsewhere?

COMMITTEE MEMBER CICCARELLI: I think it might be allowed in the MUTCD explicitly.

MR. HOWE: I can look it up.

COMMITTEE MEMBER WINTER: As far as a sign, as far as putting it on a sign. I can understand the space concerns if you try to spell it out.

COMMITTEE MEMBER JONES: And we are also allowing the "state law" yellow on the top if you want.

COMMITTEE CHAIRMAN BAHADORI: That's an option.

COMMITTEE MEMBER MARSHALL: An option that already exists.

COMMITTEE CHAIRMAN BAHADORI: I don't know how many people are going to install these, but since it's a new law it may, at least in the introductory phase, have the benefit of educating motorists that this is a new law.

COMMITTEE MEMBER JONES: Yes.

COMMITTEE CHAIRMAN BAHADORI: Okay, Mr. Walter.

COMMITTEE MEMBER WALTER: Mr. Chairman, just maybe a comment. I'm the new guy and I -- I actually would like the idea that we would continue this for another meeting and come back with comments that would go out with this new sign proposal that we've got, which I think is good creativity and on the spot thought and action. But I'd like to be able to take it back out and -- I know Mr. Greenwood is not here anymore and he had mentioned to me that he thought there was going to be quite a bit of discussion on this. So I would really like to be able to get it back out to the cities and other agencies that would have an interest in this. And I don't see that there is a great need to hurry and get it down right now. I expect that we could wait another meeting and have the action then.

COMMITTEE CHAIRMAN BAHADORI: Okay, I hear your comment. I have a motion and I have a second so I have to take a vote on that. If that motion fails then we will go with the alternate motion.

COMMITTEE MEMBER JONES: I would say --

COMMITTEE CHAIRMAN BAHADORI: Pardon me?

COMMITTEE MEMBER JONES: I would say that taking action and getting a sign out there soon after the law passes is one of the best educational tools to leverage the momentum that is occurring through all the advocacy in AAA and whatnot so that municipalities can have something out there. If we delay it by four or five months, you know, it's getting pretty stale.

COMMITTEE CHAIRMAN BAHADORI: Okay, we heard both points of view about the merits of approving it today and carrying it, moving it forward.

There's a motion and a second. We have had discussion so let's go with a show of hand vote. Mr. Singh, if you'd count. All those in favor of approving the sign and the motion as it was proposed please raise your hand.

COMMITTEE SECRETARY SINGH: Yes, we've got it.

COMMITTEE CHAIRMAN BAHADORI: All those opposed?

Okay, 8 to 1. Actually it's 7, it's 7 to 1 because Mr. Greenwood left. At 7 to 1 the motion passes. Now Caltrans is charged with preparing the specs for the

sign and putting it in the MUTCD so any local agency who wants to use it can. Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: I did a little bit of research for you. Table 1A.1, Acceptable Abbreviations, specifically allows "min" to substitute for "minimum". But humorously, 2A.13, Specific Topic Abbreviations says: "Abbreviations should be kept to a minimum."

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: I thought that's the whole purpose of abbreviations.

COMMITTEE MEMBER WINTER: And again, not to belittle the sign. I don't want the public out there wondering, what do they mean when they put up a sign that says, "min."

COMMITTEE SECRETARY SINGH: Three minutes.

COMMITTEE CHAIRMAN BAHADORI: And by the way, again doing a little self-promotion, the ones that we had printed, it has been sent to all your cities but we sent it to city managers. So any of you cities that want as many copies of those bumper stickers and cards, let us know, we'll provide it to you at no cost.

Okay, this item, we are moving on to the next item. We are now on to 14-19, which is a proposal to amend California blue text from Section 6F.85, Temporary Traffic Barriers; it is a Caltrans proposal. Who will present it?

COMMITTEE SECRETARY SINGH: Mr. Chairman, this is -- we proposed it just to clarify. We do not use on temporary barriers cube-corner lenses. So it is in the manual. We just want to clarify -- we just want to delete the cube-corner lenses.

COMMITTEE CHAIRMAN BAHADORI: Very straightforward. Anybody wants to have discussion on this?

No. It's an item on the agenda, I have to open it to the public. Any member of the public wishes to address the Committee on this issue?

Seeing none, we close it back, bring it. Any motion for approval?

COMMITTEE MEMBER WALTER: So moved.

COMMITTEE CHAIRMAN BAHADORI: Second? Is there a second?

COMMITTEE MEMBER TONG: I second.

COMMITTEE CHAIRMAN BAHADORI: We have a motion and a second. All those in favor say aye.

(Ayes.)

COMMITTEE CHAIRMAN BAHADORI: Opposed?

The motion passes.

Going to our last item, it's 14-20. It's a proposal to adopt Buffered Bicycle Lane Contra Flow Bicycle Lane and Intersection Bicycle Lane Markings by amending Section 9C.04 of CA MUTCD. It says submitted by Caltrans

but we are going to have Mr. Ciccarelli do the introduction.

COMMITTEE SECRETARY SINGH: Can I make one statement before that?

COMMITTEE CHAIRMAN BAHADORI: Sure.

COMMITTEE SECRETARY SINGH: I just wanted to let Committee Members know, this is my last meeting, so I will not be attending any more CTCDC meetings. At the same time, we proposed this item so we will be very appreciative if the Committee makes a recommendation to adopt the last item. So this is the time to give it to me.

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: So moved. So moved, seconded and I use the prerogative of the Chair; it's approved in dictatorial fashion. No, I'm kidding.

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: By the way, I didn't want to mention it, we are going to mention it when we are done with the agenda about your departure.

COMMITTEE SECRETARY SINGH: Okay.

COMMITTEE CHAIRMAN BAHADORI: So Mr. Ciccarelli, you want to do the intro?

COMMITTEE MEMBER CICCARELLI: Sure. This is a proposal to adopt in California's MUTCD, language that is, again, in the same way as the earlier proposal on bike signals, already made it through the national process, the

technical committees and the national council. So without being ensconced in a memorandum formatted by the national council, this is, in fact, lifted directly from the proposals that were passed at the national council earlier this year.

With consultation with Johnny and other Caltrans MUTCD staff there have been some changes made to both the text and figures. Those text and figure changes I think are part of the proposal. What this is, is three separate new traffic control devices or treatments as regards to bicycles.

What a buffered bicycle lane is, is a bicycle lane supplemented either on its left side, the traffic side, the typical traffic side, or its right side, typically the parking side but not always, but a marking consisting of two, white longitudinal lines, which depending on context may be solid lines or dotted lines. Dotted is the high-frequency skip line. And if wide enough, supplemented between those two lines by transverse markings, which may be chevrons or diagonal markings. So that's a buffer.

The reason for a buffered bicycle lane is to provide additional visual or lateral separation between typically motor traffic and bicycle traffic who are alternatively between a parking lane, including the hazardous door-opening zone along the bicycle travel side of

the parking lane and the bicycle lane.

Just as any other marking, including a bicycle lane marking, the solid or double solid or dotted or broken nature of the line conveys how strongly crossing of the line is discouraged. In the law, including the Vehicle Code, a double, adjacent, white solid line is completely prohibitory, you may not cross it. In the same way you may not cross, except to make left turns, a double yellow center line. But two lines that are solid white that are separated by transverse markings are not prohibitory. They are strongly discouraging but not prohibitory.

So a buffer along a bike lane is still something that can be crossed. In fact, it needs to be crossed to park a car or to unpark a car or when a bicyclist needs to pass another bicyclist and the bicycle lane space that is not covered with transverse markings is not wide enough to be used for passing of bicyclists by bicyclists. Or for bicyclists to legitimately leave the bicycle travel area in order to cross the buffer, enter the travel lanes and prepare for something like a left turn or driveway access at mid-block.

So to be clear, this is not a prohibitory marking, it's a new flexible use of buffers to, in general, more strongly discourage crossing but still allow some exceptions.

The two key layouts that are used in the NACTO guide, the NACTO Urban Bikeway Design Guide, from which a lot of this was extracted, although really the precedent was already there in the manual for ordinary buffers, is the case where there are two, solid white lines and you do want to strongly discourage crossing. And a second case where one of the lines is solid but the other line is dotted. that is, high-frequency dashed.

I have had a lot of experience riding these facilities in San Francisco because San Francisco has made extensive use of these to divide up what would be otherwise undifferentiated space on some major roadways, including some really high-speed roadways. They have a frontage road along I-280 near where I live in Bernal Heights. It used to be three lanes. It doesn't need to be three lanes for capacity.

Mike Sallaberry and crew took the third lane, the outside lane, put a big wide buffer next to half of it and the rest is the bicycle area. What you see is individuals and families getting from one cross street to the next cross street on what otherwise is a 50 mile an hour facility. It works. More commonly its used on low to moderate speed facilities just to reserve an area that shouldn't be driven in and to channelize motorists more effectively.

They paid a lot of attention to doing the right

thing at driveways. We already have some pretty specific figures in Part 9, the bicycle part of the MUTCD, about how to break lines at driveways and on approaches to intersections. This just builds on that with new guidance and new figures that adds the buffer as an element of vocabulary, both in the parking case, the non-parking case, the strongly discouraging case and the less-strongly discouraging case. So that's what the buffered bike lane is all about.

A contra flow bike lane is really not contrary at all. If you consider a two-way roadway that for purposes of discussion has one travel lane -- motor vehicle lane in each direction and one bicycle lane in each direction. So it's bike, travel, center line, travel, bike. And then you remove one travel lane, the bike lane that was on the one side of the road that no longer has a car lane in the same direction next to it, that's what is commonly called a contra flow bicycle lane.

It is a residual bicycle lane on what used to be or was never two-way for cars; but it's one way for cars, two way for bikes. It's in the correct position on the roadway relative to the direction of travel, it's separated by a center line, a yellow center line or a yellow painted median or a raised median. It's like a two-lane road that lost all its general purpose lane in one direction and

retains only the bike lane. Occasionally you will see a formulation of it where there is a motor vehicle lane but it is a preferential lane for transit but there are no general purpose lanes in that direction.

The national technical committee for bicycling put together a pretty comprehensive proposal that is what we borrowed from here and they also recognized another case of contra flow where the bike lane in the direction that still has the car lanes, I'm going to call them the car lanes, the travel lanes, the bicycle lane on that side is on the left side of the car travel lanes.

If you do that what you get is a roadway that has a center line separating the two bicycle areas, one traveling in each direction, but still a car lane, a travel lane on the right side of the side of the roadway that still has motor vehicle travel. So that goes a little bit beyond what we have often encountered as a contra flow bike lane. It still makes sense in terms of traffic flow. In many California cities there are legitimate reasons to put bicycle lanes on the left side of, for example, one way streets. If you've got heavy bus, taxi and right turn activity near the right curb,, that's a high conflict area for bicyclists in a way that the left side is not.

Here in Oakland there are plenty of big, wide, multi-lane one way streets and it may make sense at some

time in the future, if Oakland decides to do it, to put the bike lane on the left side of those one way streets. But a one way street environment is one that forces bicyclists to go out of direction around the block to get the other direction. So it's possible to consider dropping in a contra flow bike lane, so-called, on such a multi-lane one way street. This brings technically developed content from the federal technical committee into the CA MUTCD earlier.

The third element is intersection bicycle lane markings. This builds on existing content in the MUTCD which allows what are called extension lines through intersections. There are good reasons to use extension lines to keep vehicles from side-swiping each other. For example, if you have a dual left turn lane it's common to put a skip stripe between the two lanes of the left turn sweep to guide drivers. This is doing basically the same thing for bicyclists.

But where it goes beyond the existing formulation is that the existing lane line extensions are nothing but longitudinal lines, curved or otherwise. In the bicycle case the markings can be stronger. They may be elements like chevrons, they may be two skips instead of a single skip in the case of a turn lane. So you may actually see sort of a dotted shadow of a bike lane going across the intersection to more firmly guide the bicyclists.

In the case of the contra flow bike lane it is useful to indicate to motorists that there may be crossing movements by the contra flow bicyclists where they would not otherwise expect any sort of traffic to be progressing through the intersection. So the intersection bicycle lane markings are also useful in the contra flow context.

So those are three proposals in one as Item 14-20. And again, we are completely borrowing, in advance, what was already vetted technically at the national level. It has already been through one pass of review by Caltrans and with some modifications.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

Any members of the public who wishes to address the Committee on this specific issue? And there are three specific proposals, please be specific and address your comments to which item you are talking about. Mr. Wachtel.

MR. WACHTEL: Alan Wachtel representing CBAC. CBAC has not had a chance to consider these proposals at a meeting but they were circulated by e-mail and comments were made. And I am happy to report that most of those comments have been incorporated into the proposals so further comments will be on behalf of CABO, not CBAC. I'd like to reiterate some of the comments that were made but not incorporated.

Starting with buffered bike lanes. There's a

great deal of interest in buffered bike lanes. It can be very useful to adopt guidance, but any guidance should be considered as preliminary and subject to revision because of a real lacking of a lot of information that we need to make definite statements about how these markings should be implemented.

The FHWA guidance, if I interpret it correctly, says that buffered bike lanes can be implemented at the present time if pavement markings that are compliant with the MUTCD are used. My understanding is that the compliant marking would be the chevron channelization marking. Let's see. FHWA, is that correct?

MR. KORTH: (Inaudible - sitting in the audience.)

MR. WACHTEL: The FHWA guidance is that buffered bike lanes can be implemented at the present time if compliant markings are used. And my understanding is that the compliant marking would be the chevron channelization marking.

MR. KORTH: Kevin Korth, Federal Highway. That is correct for the buffered bike lane.

MR. WACHTEL: So it can be implemented at the present time with the chevron marking, which I believe is the correct one. But there is no other guidance, so although it is additional guidance it is still very welcome.

I am glad to hear Mr. Ciccarelli say that the

purpose of the marking is not prohibitory, it's to discourage crossing but crossing is still necessary to enter parking and to make turns. It may be necessary for bicyclists to leave he bike lane at times.

I don't think that this operational meaning is well understood. In studies of buffered bike lanes a great deal of confusion has been expressed about the rules affecting the use of the buffer marking, about when motor vehicles can be in the buffered bike lane, about whether other road users are obeying the rules which are themselves unstated. in other words, a great deal of confusion.

This confusion also sometimes leads to adverse effects on safety when vehicles don't enter the buffer before making turns at intersections.

The status of the buffer in the Vehicle Code is ambiguous. I can make arguments either that crossing it is prohibited or that it is permitted with caution.

This Committee can't solve those problems entirely but I think that a statement in the CA MUTCD emphasizing that the buffer discourages but does not prohibit crossing would be welcomed.

The AASHTO guide for the development of bicycle facilities also has the statement that the benefits of additional lateral separation should be weighed against the disadvantages and it enumerates some. And I think some

guidance to that effect would also be helpful.

I am glad to see the taper approaching intersections and major commercial driveways.

The text says "end buffer on approach to intersection of side streets or major commercial driveways." The figure shows a taper. I assume that the taper is meant to apply in those cases but I think there should be a cross-reference to the figure so that the buffer isn't simply stopped abruptly. And I would like to see more details of the taper and I'm sure there are experts who can provide those.

The paragraph 53 says that the chevron or diagonal markings may be omitted from narrow bicycle lane buffer areas less than three feet wide. I am concerned that that creates a double parallel line that can't be crossed.

There is also a statement that a buffer shall be delineated by standard, normal width, longitudinal pavement markings. That's a standard. And the guidance says that consideration should be given to installing chevron or diagonal markings as appropriate.

My interpretation would be that chevron markings would be used between a bike lane and a general purpose travel lane to its left and diagonal markings would be used between the bike lane and parking to its right. I think that would be an appropriate use of the markings. And if

the Committee agrees that that's the correct use then I think it should be more explicit because there's too much latitude for interpretation here.

I think that's all that I need to say about buffered bike lanes.

Contra flow bike lanes. Again, serve a very useful purpose. Glad to see their inclusion. My only comment is this: If the final option is that at locations where a contra flow bicycle lane is provided across an intersection or driveway entrance, pavement markings may be placed. There is also a signage showing turn prohibitions but exceptions for bicycles. I don't believe that this is enough notification to cross traffic at a street that is one way for vehicles, is actually two way for bicycles. There is, I believe, guidance here that the one way sign should not be used and ordinarily the absence of a one way sign indicates two way traffic. That may not be the case here.

That is my experience with contra flow bike lanes, They are just hard for cross traffic to understand that there's two way bicycle traffic at that point. And i am not aware of any existing signs or markings that are really adequate to that situation but I believe it's important to develop them.

And finally just to comment on he extension of bike lanes through intersections. I believe that existing

Section 9C.04, paragraph 16, already permits this using the standard dashed line and that should be either consolidated with or cross-referenced to the new material.

I have some concern about extending the bike lane too prominently across intersections. I believe it may encourage bicyclists to stay too far right and motorists not to enter the bike lane before turning right at intersections. But since it is a permitted use already I don't think I could use that as an objection to providing more guidance.

So again, those comments represent my own views and those of CABO but not those of CBAC.

COMMITTEE CHAIRMAN BAHADORI: Okay, thank you.

COMMITTEE MEMBER CICCARELLI: A brief response. There was considerable discussion at the national technical committee for bicycling and the marketing -- well, primarily the bike tech committee, about chevron versus diagonal. Several practitioners who are involved in budgeting for markings and application and maintenance pointed out that the chevron is typically a hand-applied marking whereas a chevron -- the diagonal can be applied automatically.

My own take on it is that the chevron pointing away from the motorist is effective in telling the motorist that there is motor traffic on both sides but it is less of a big deal when one side is bicycle traffic. I was

personally fine with San Francisco's use, for example, of the diagonal marking to separate a bike lane from a motor vehicle lane. I wonder about your take on that?

And then to your point about cross traffic not expecting contra flow bicycle traffic through an intersection. Headquarters Design Reviewer Maggie O'Mara made the same point very strongly and I tend to agree with her. We have some sort of precedents in the manual. There's the warning plaques, I guess they're plaques, yellow, rectangular plaques that say "CROSS TRAFFIC DOES NOT STOP". We've got examples in my neighborhood in Bernal Heights in San Francisco where it's a T intersection and the oncoming left turn doesn't stop. So it says "ONCOMING TRAFFIC DOES NOT STOP" I think something of that format might be considerable for this application as a warning that looks like other, similar warnings that are already in the manual.

MR. WACHTEL: Possibly so, although the "does not stop" is not the issue here, it's the direction.

COMMITTEE MEMBER CICCARELLI: I understand. But I'm talking about the sign format and aspect.

MR. WACHTEL: All right. As for the cross-hatch markings. The convention is that same direction lanes of travel are separated by chevrons. And unless there is some reason to deviate from it I think the convention ought to be

maintained. Presumably it's there for a purpose. In a practical sense I am not sure that road users notice any distinction and it probably doesn't matter.

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE MEMBER CICCARELLI: To the extent that it does have value for the motorist in somehow visually steering them away from the bicycle then perhaps the diagonal marking, as is San Francisco's practice, pointing towards the motor travel area.

COMMITTEE CHAIRMAN BAHADORI: Let's move on then. We'll bring it back and then we'll make a decision.

Thank you, Mr. Wachtel.

MR. WACHTEL: All right, thank you.

COMMITTEE CHAIRMAN BAHADORI: Next speaker, please.

MR. BITTNER: Jim Bittner, City of San Jose.

Just to follow up on the cross-hatch versus diagonal. Page 63, the second figure at the bottom of that page. On the right side it shows cross-hatching and has a label. White chevron markings should be used if buffer space is three feet or wider. On the left side of the intersection it says, "See Note 1" and it says "18 inch minimum for buffer lane" and it shows chevrons. So one says three foot minimum with chevrons, the other one is showing chevrons and labeled 18-inch minimum.

To follow up the diagonal versus cross-hatch. Maybe a middle ground is we use the chevrons for three feet or more because it's easier to see a chevron, once you get to under three feet use a diagonal. Something like that. Just so there is something in a smaller buffer to delineate it instead of just, you know, white lines out there to separate them.

The diagram on the top shows the No-P bike lane symbol or no parking anytime. I would suggest also adding the option of no stopping anytime. That's a standard sign that we are using in the City of San Jose on all our bike lanes. And if we are using a solid, buffered bike zone, we wouldn't want vehicles to travel over that anyway and they wouldn't be able to even stop on the side of the road.

A suggestion to change all of the labels for these two diagrams to the symbols for the bike lanes, to be consistent with the final three diagrams that show the bike symbol. It's a much more effective use, I think, for drivers, especially those drivers that are not English-speaking. Symbols are very useful. And I appreciate the previous motion to keep a bike symbol for that sign for that same type of reason.

On the third page where it shows the contra flow. It has the center line dashed through the intersection but the opposing direction doesn't have the dash going through

the intersection. It may be a useful thing, especially on a one way street, to show the tunnel vision going through the intersection of bikes coming out of either side of the traffic. To extend them and not just have it on one direction of the intersection.

COMMITTEE MEMBER CICCARELLI: I'm not following, Jim.

MR. BITTNER: The contra flow has the dashed yellows through the intersection. The opposing bike lane doesn't have the dashes through the intersection.

COMMITTEE MEMBER CICCARELLI: Right.

MR. BITTNER: And that was one of the things that I will throw out just as an idea.

On the next diagram it shows the two dashes going up the page and only a single one going down the page. It looks more like a dashed edge line than it does for the actual bike getting extended through the intersection. So my suggestion would be if you are going to have the dash extended through the intersection, maintain two lines to show all the drivers going through the intersection that it is a bike lane going through the intersection and not just a taper line.

Like Mr. Ciccarelli said of the extension of a double left turn, a taper line through the intersection of a single line just to divide two lanes of traffic. This is

for a bike lane extension through the intersection.

On the next diagram it gives detail of the length of the dashed lines on the taper approaching the intersection at the bottom of two-foot lines/six-foot space, but there is no real dissemination of what kind of lines are used on all of the other tapers coming up to an intersection. Like the first drawing, the second drawing, that show the taper approaching an intersection from a buffered bike lane. Are they the same two-foot lines/six-foot space, are they different? Just to get some guidance on what kind of tapers to use at the end of the buffered bike lane approaching an intersection.

And those are my comments, thank you.

COMMITTEE CHAIRMAN BAHADORI: Thank you very much.

Anyone else? Yes.

MR. SALLABERRY: Committee Members, my name is Mike Sallaberry, City of San Francisco and D-4 BAC for Caltrans.

Fifteen years ago I came to my first CTCDC meeting to propose an idea for a shared roadway; it became the shared roadway marking. And when I saw the agenda today I was amazed by all the different types of bike measures. Because when I proposed a simple shared lane marking I was almost crucified on the spot.

(Laugher.)

MR. SALLABERRY: And so I really appreciate all the work that everyone is doing here and the progress we are making as a state. This is great to see between this and the bike signal so thank you very much for your hard work on this.

All three measures have been used in San Francisco. We support all of these measures; I think it's great to see this. Chevron versus diagonal. We just thought -- we have been using diagonals just because to have a chevron in a very narrow space not only is applying it for our paint crews more laborious, we didn't think it was a big deal. Having a diagonal is giving motorists the message to move to the left, which I think is the key message here. In a narrow space the chevron isn't well-defined so that's why we use a diagonal in that situation. So I support the use of a diagonal or a chevron.

Regarding confusion with the buffers. I think we haven't seen the confusion with buffers that Alan mentioned at these types of bikeways. We do see confusion at intersections and I think that's just a problem in general with how motorists and cyclists understand the law at intersections. But I think the fact that you show the buffered bike lane going down to a taper and continuing on in a dash is consistent with the Vehicle Code and it's a good design so I think you should keep that.

One idea for a sign for a contra flow lane, something we used is a version of a W6-3, which is basically a warning sign, a two-way warning sign. And in the opposing -- int he downward arrow what we do is we put a bicycle symbol above that showing that there is two way traffic but it is only bicycles coming in the opposite direction. So that's something to consider for inclusion perhaps in the MUTCD.

And lastly, the markings in the bike lane on page 67. That's something that we haven't -- I have been working on the NACTO committee, the national committee on this type of designs, and we haven't settled on what should be between the two dashed lines. Some people say it should be chevrons, some people say it should be a sharrow because it is actually a shared space for right-turning motorists, some people say it should be blank. So I think it's kind of up in the air and maybe up for debate a bit.

So I will leave it at that and just say thank you for all your work and, you know. As I was talking to Devinder during our break, you know, the last time I was here 15 years ago as a junior engineer with much more hair, and I'm really glad I was able to make it to your last meeting here, Devinder. So thank you for all your work and all these agendas and minutes. So thank you for all that.

COMMITTEE SECRETARY SINGH: Thank you.

COMMITTEE MEMBER CICCARELLI: Thank you.

Any other members? Mr. Korth.

MR. KORTH: Just a quick -- I'd be curious to hear from Caltrans if t he Committee was interested in the proposal from the City of San Jose about extending a lane line in a -- in figure 9C.106, adding an additional lane extension line to a place where there is no line existing currently. I am not sure if that goes against Caltrans' spec. Because where is that -- usually the lane extensions are extending a current pavement marking. So creating a pavement marking through the intersection like that, will it get confused as a limit line? I don't have any specialty on that but that was just a question I had if that kind of proposal went through, for Caltrans to speak on.

As far as the contra flow lanes. Federal Highway, we're looking to go in a slightly different direction, most likely, than the one the national committee provided to us as a recommendation.

What is proposed in today's main agenda for contra flow lanes is okay. It is in substantial with the manual currently. And most likely that figure will change in the next rulemaking so it is up to the Committee if they would like to way to see hat comes out of the federal rulemaking. Or they can continue with that contra flow design, as currently stated, and then we will just have to readdress it

in the next manual.

But as far as Figure 9C.106, 2 of 2. Providing the example of the green bike lanes, will not be in substantial conformance with the manual. That's under -- It is allowable under Interim Approval 14 but it cannot be placed into a state manual. So anyone -- they are allowed to use green pavement markings through their lane extensions of that bike lane but they have to use the interim approvals in Section 1A.10 to use that practice but it cannot be placed into the manual at this time.

COMMITTEE MEMBER CICCARELLI: Kevin, is that for both the approach and departure as well as the intersection or all green in that figure?

MR. KORTH: It would be all green in that figure.

COMMITTEE MEMBER CICCARELLI: Got it.

MR. KORTH: Green bike lanes is still under interim approval. So you can show the -- I would just use the left side of that figure and just duplicate it on both sides. When using the green pavement markings are allowable but they have to use them through the interim approval.

COMMITTEE MEMBER CICCARELLI: Is it allowable for a state manual to cite an interim approval in the call-out?

MR. KORTH: In the next edition of the 2014 CA MUTCD there is a table, it's going to be in the beginning, that discusses all the interim approvals that California has

statewide approval on and then it is going to reference a website that would be the latest and greatest of what the Committee has provided statewide approval for. But to put those statewide approval language into the manual in each of those sections, Part 2, Part 3, Part 4, et cetera, would not be in substantial conformance.

COMMITTEE MEMBER CICCARELLI: Thank you.

MR. KORTH: But I am agreeable to providing a table just informing the public about all the interim approvals that were available at the time of the publication.

COMMITTEE CHAIRMAN BAHADORI: Okay. Anything else, Kevin?

MR. KORTH: That's it.

COMMITTEE CHAIRMAN BAHADORI: Thank you.

COMMITTEE SECRETARY SINGH: Mr. Chairman, if the Committee makes a recommendation, as we proposed, the green pavement marking, then we will go back and work with FHWA. If they agree then we will add it, if not, then we will remove it.

COMMITTEE CHAIRMAN BAHADORI: Mr. Ciccarelli.

COMMITTEE MEMBER CICCARELLI: To the specific suggestion by San Jose that a second dotted line be extended from the curb return -- curb on the approach to the face of the curb on the departure. I don't know how it will go down

with regards to Caltrans' markings because there is an issue with painting a limit line.

But I can tell you that this particular flexibility would be especially useful on contacts I'm working on in the Santa Clara County expressways where you have -- the shoulders are used as bicycle facilities. And you have a developed right turn pocket. And it's not a bike lane per se on most of the expressways, but we want to clearly delineate a transition area across the developed right turn pocket. And so we would very much like to extend from face of shoulder to edge of pavement, if you will, across the right turn pocket.

I'm not sure it's quite the same thing and it's really a separate discussion.

COMMITTEE CHAIRMAN BAHADORI: Let me see if anyone else wants to address the Committee. Anybody else? Okay.

MS. THOMAS: Did you ask about District 4? (Inaudible - away from the microphone.)

COMMITTEE CHAIRMAN BAHADORI: If you haven't spoken, and you haven't on this item, come forward, please.

MS. THOMAS: I just want to say, in our district we have a lot of urban conventional routes. So they are state highways that are surface streets and roads going through different cities. And especially recently, we are getting a lot of proposals through our encroachment permit

process especially, to use a lot of these different treatments. And we are really at a loss because we don't have the tools in our toolbox basically, to do things that even if we agree this seems to make sense in this location, that we don't have t he backing in the manual.

So I just want to mention that, given that this is the last meeting before the 2014 manual comes out. That is the importance of the work that you do here because it really affects our ability when we review these proposals regarding, you know, what we are allowed to do.

So of course you have to give this a lot of consideration in terms of what makes sense but just in terms of the timeliness with the 2014 manual. That this is a really important meeting in terms of that timing.

COMMITTEE CHAIRMAN BAHADORI: Perfect, thank you for letting us know.

Mr. Howe.

MR. HOWE: I have one small detail on the example diagram. We show a sign there that is not specified. It's this except bicycle sign. And that would be a sign that we would have to give a California sign code to. And they would be sign widths 42 inches, 30 inches, 24 inches and 18 inches that would go below the "do not enter" or the "prohibited" left turn/right turn symbol sign. So that's one detail that I would submit to be included in this

proposal if it goes forward.

COMMITTEE CHAIRMAN BAHADORI: So you are saying that sign is not in the standard sign chart.

COMMITTEE SECRETARY SINGH: It will be part of the of the --

COMMITTEE CHAIRMAN BAHADORI: It will be part of this recommendation to add this to the standard sign.

COMMITTEE SECRETARY SINGH: Yes.

MR. HOWE: That is correct.

COMMITTEE MEMBER CICCARELLI: This sign has already been approved by the national council and is on its way to federal rulemaking.

COMMITTEE CHAIRMAN BAHADORI: Okay. So as part of whatever we discuss and approve, this sign that says "except" with a bicycle symbol, will be included for addition to the Uniform Sign Chart.

Okay, anybody else in the public? We close the public hearing part of it, bring it back to the Committee.

We had three specific proposals, we have had comments from several people. Mr. Ciccarelli, how do you want to go about it?

COMMITTEE MEMBER CICCARELLI: I'd like to move approval with several addenda, if you will. I'd like first to ensure that this gets into the CA MUTCD 2014. I think it's important to get this thing passed. But I think there

is a way to formulate this so that things that can't be solved today can be solved afterwards.

So first of all I'd like to modify the proposal as needed, without going into the details of the text, to require transverse marking in all buffers. I think it's -- we have seen it in the request to experiment from Santa Monica a couple of meetings back where we had two parallel lines that were 18 inches apart and it was a real ambiguous situation. So require transverse markings.

Number two: To allow the use of the leftward-pointing diagonal marking in all cases as an alternative to the chevron.

Number three: To direct Caltrans to work on a sign with a specific warning that there may be bicycles coming in to a cross-movement from an unexpected direction in an intersection for use with the contra flow bicycle lane treatment at an intersection or any other treatment where -- any other situation where such a sign might make sense. And 'd suggest that it be used as inspiration that cross traffic does not stop, a series of warning plates.

I support San Jose's addition of the "no stopping anytime" sign as another alternative to one of the figures in addition to the "no parking" sign.

I support the change to bicycle lane symbols instead of words.

And Jim from San Jose also pointed out that one figure has three feet on one side of the call-out and "see note 1" on the other side call-out, so that's a reconciliation.

I'd like to hold off on t he dot line extension through the intersection on the curb face. Right now I think that opens up some other issues. I am personally interested in it but i don't think we need that in the figure.

With regard to whether to defer the contra flow section until we get the new guidance from FHWA. I think it's better to get this into the manual and then to modify it when we see the federal 2016.

No green in the figure for substantial conformance.

And who was it? Was it Don who mentioned the W63 two way warning sign with the bicycle above? Mike Sallaberry. I don't think that needs to be in the proposal but it sounds, it sounds good to me. So that would be, that would be under the direction to Caltrans to investigate signs to be used for the contra flow bicycle warning sign.

And I think that about covers it. So what I have tried to do is to note everything that has been brought up. And what I propose is that we move approval with those changes and those directives to Caltrans.

COMMITTEE CHAIRMAN BAHADORI: So that's the motion; is there a second for that?

COMMITTEE MEMBER JONES: Second.

COMMITTEE CHAIRMAN BAHADORI: There is a motion and a second and I hope that you guys were following it. I hope more importantly Caltrans was following it, and you took good notes and you have verbatim minutes so that you know what actually the Committee is recommending. If you need clarification please ask Mr. Singh.

COMMITTEE SECRETARY SINGH: What we'll do, we'll revise the proposal and run it through to you and whoever else is interested. So we will make sure that we --

COMMITTEE CHAIRMAN BAHADORI: Make sure all. You have verbatim minutes and all the comments and the motion itself is pretty clearly stated.

Okay, there is a motion and a second, is there a discussion?

Seeing no -- okay, Mr. Jones.

COMMITTEE MEMBER JONES: I, like many of the speakers, have done a number of buffered bike lanes. And my maintenance crews really appreciate the diagonal option over the chevron, especially on something that's maybe five feet or less. Because it is real easy for them to go out there and do it with their vehicles or with their push things rather than putting down -- especially when you're doing

seven miles at a time, they can crank it out pretty fast. For maintenance, labor-intensive -- and it sends the same message to the motorists and we've had great experience with that in both Fremont and in Carlsbad when we did the Coast Highway, so I am very supportive of that.

COMMITTEE CHAIRMAN BAHADORI: And the motorist is clear on that, you don't need to lay down the template for a chevron on such a small island.

Any other discussion?

Hearing none, there is a motion and a second. All those in favor please say aye.

(Ayes.)

COMMITTEE CHAIRMAN BAHADORI: Opposition?

COMMITTEE MEMBER JONES: Way to go, Devinder.

COMMITTEE SECRETARY SINGH: Thank you very much.

COMMITTEE CHAIRMAN BAHADORI: Hearing none. Thank you, Devinder, thank you.

(Applause.)

COMMITTEE CHAIRMAN BAHADORI: The motion passes.

We don't have a request for experimentation, we have no discussion items.

The two information items, Devinder, do we need to discuss them or not?

COMMITTEE SECRETARY SINGH: No, they are just for information.

COMMITTEE CHAIRMAN BAHADORI: They are just for information.

One thing just to remind you again because of some delay in the yellow timing, we changed the deadlines. Now the deadline for compliance for the yellow timing, the yellow timing guidelines for intersections with RLC is April 1st.

COMMITTEE SECRETARY SINGH: No, it's moved to June.

COMMITTEE CHAIRMAN BAHADORI: June? We moved it again.

COMMITTEE SECRETARY SINGH: We have the MUTCD. In another two weeks it may be moved another month.

COMMITTEE CHAIRMAN BAHADORI: Okay. So I'd say sometime in mid-2015. And for all the intersections it's going to be two years from then, which is going to be mid-2017. Mr. Winter.

COMMITTEE MEMBER WINTER: Thank you. And thank you, Devinder, you just answered one of my questions about an information item.

The other though, I do want to ask on 14-02. I think Rick's letter was very well crafted.

COMMITTEE SECRETARY SINGH: Yes.

COMMITTEE MEMBER WINTER: I do appreciate that the subcommittee that you convened, it seems like you had well-

reasoned statements there in your letter that you've made. But as I read the letter I am not just quite clear. Did you intend for this to be an information item today? Because you do contain a couple of different recommendation statements or statements to the lines of, if CTCDC wants to take action?

COMMITTEE MEMBER MARSHALL: Right. Thank you for asking. I did not intend for this to be an information item. I considered to be a continuation of an action item that was before the Committee previously. I'm hoping we can wrap it up.

COMMITTEE SECRETARY SINGH: What happened basically -- what Mr. Marshall proposed it was a support statement so we already included it in the 2014 CA MUTCD. On a support statement you don't need action, it's not a "may" guidance or "shall". It's already in the 2014 MUTCD.

MR. BHULLAR: It will be.

COMMITTEE SECRETARY SINGH: It will be. So --

COMMITTEE MEMBER MARSHALL: I couldn't quite hear you. It's what kind of statement?

COMMITTEE SECRETARY SINGH: Your recommendation.

COMMITTEE MEMBER MARSHALL: Yes.

COMMITTEE SECRETARY SINGH: We are including in the CA MUTCD without committee action.

COMMITTEE MEMBER MARSHALL: So my recommendation,

the subcommittee recommends that no action is needed and no change to the MUTCD so I am not sure what you're putting in the book.

COMMITTEE SECRETARY SINGH: (Overlapping).

COMMITTEE MEMBER MARSHALL: And we provided an alternative in case the Committee wanted it, but the primary recommendation is to make no change.

COMMITTEE SECRETARY SINGH: There is no change. But look at page 70 of the agenda.

COMMITTEE MEMBER MARSHALL: Yes. Right, that's the Plan B, if the Committee in its discussion wants to go this way. But our starting recommendation is on the previous page.

COMMITTEE SECRETARY SINGH: This is under a support statement. And we thought if you wanted to include it we don't need to make the action, we can include it in the CA MUTCD. This is under the support statement. I don't know what section it's at.

COMMITTEE MEMBER WINTER: But Devinder, you're talking about on page 70, the statement in red, paragraph F as in Frank.

COMMITTEE SECRETARY SINGH: Yes.

COMMITTEE MEMBER WINTER: Okay. I would support putting it into the manual. I think where my concern comes from and probably why Rick graciously took this item up is,

we have a county out there that simply wanted to place a sign on a road and they were told, come to the CTCDC to see if, you know, if we would agree that it should be placed in the manual.

I think the outcome, I think that I was looking for was some mechanism for that county to go back to their district, if it's District 10. And, you know, if this helps them, in other words, to get hat permit issue reconciled then all the better. But if that's what it's going to take then so be it.

COMMITTEE SECRETARY SINGH: Johnnie, you have access to he CA MUTCD for 2014? Under which section are we adding this statement?

MR. ENGELMANN: Hello, Chris Engelmann with Caltrans. And this item F in red is going to be in the 2014 MUTCD at this point.

COMMITTEE CHAIRMAN BAHADORI: Okay.

COMMITTEE SECRETARY SINGH: Under which section?

MR. BHULLAR: It's going to be Section 1A.08.

MR. ENGELMANN: Section 1A.08.

COMMITTEE SECRETARY SINGH: And it's under support statement.

MR. BHULLAR: Don, if you can bring that up.

MR. HOWE: It's right here, 1A.08.

MR. BHULLAR: It will be on page 67?

MR. HOWE: You want the MUTCD?

MR. BHULLAR: Yes.

MR. HOWE: I'll pull up -- the one I've got is 2012.

MR. BHULLAR: Yes, that's fine. Page 67.

MR. HOWE: Page 67?

MR. BHULLAR: Yes. Up there, up there. Right after E.

MR. HOWE: Right after E.

COMMITTEE MEMBER WINTER: Again, as it's shown on page 70 then of the agenda packet.

MR. BHULLAR: Yes.

COMMITTEE MEMBER WINTER: Okay. So I don't know if we need a motion on that. It sounds like it is already going to occur. Again, if you need a motion just to say that the Committee appreciates the work that the subcommittee did and we accept this and that we, you know, are then passing it on to Caltrans.

COMMITTEE CHAIRMAN BAHADORI: I take that as our motion. Was that your motion?

COMMITTEE MEMBER WINTER: I'll so move.

COMMITTEE CHAIRMAN BAHADORI: Any second?

MR. BHULLAR: That's Plan B, right, Chris?

COMMITTEE MEMBER MARSHALL: It's fine. I'll second the motion.

COMMITTEE CHAIRMAN BAHADORI: There's a motion and a second. With the specific recognition of Mr. Marshall's great work I am bringing this to closure and the paragraph is going to be added. Now in addition to a sign to your name you have a paragraph named after you in the MUTCD. Thank you for all your contributions.

COMMITTEE MEMBER MARSHALL: It's going on my résumé.

(Laughter.)

COMMITTEE CHAIRMAN BAHADORI: There is a motion and a second. Any discussion?

Seeing none, all those in favor?

(Ayes.)

COMMITTEE CHAIRMAN BAHADORI: Opposed?

Motion passes. That paragraph F is added to 1A.08.

Okay, moving on, Tabled Items, we don't usually go through those.

Next meeting. Before we discuss next meeting. I was informed a few days before our meeting today that this meeting is going to be Mr. Singh's meeting with us as the Secretary of the Committee. I have been on the Committee for 11 years and he has been here longer than me so I have no idea how long he has been here, but for the last 11 years.

And we are going to have a formal recognition for him next meeting. Next meeting we will celebrate you, your departure duly and properly. But I just wanted to say, as a member I have had the privilege and honor of working with you for 11 years. And I know you are going to be doing better and more important things in Caltrans but I, for one, will seriously miss you, your wisdom, your counsel, and keeping me during the times that I have been chairing the committee in order and reminding me. So thank you very much for your great, fantastic, first-class contribution to improving traffic safety in California.

(Applause.)

COMMITTEE SECRETARY SINGH: Thank you very much.

COMMITTEE MEMBER TONG: And I want to take a moment to recognize Devinder Singh. Thank you for many, many years of working as the Secretary.

I just wanted to announce a couple of things. Because of the consolidation and change after the reorganization of the Traffic Operations in Caltrans, Devinder Singh is not leaving the Traffic Control Device Branch, he'll just do different things. He mainly will focus on the new products. And also with all the functions that we want him to take care of and all the standard plans and specs is under him. So we will work closely with him if the Committee believes that we need to make any change of he

standard plan and spec.

And also I want to welcome back Johnny Bhullar. Johnny Bhullar left us for a couple of months. He graciously accepted the challenge to come back, now he is the Editor of the MUTCD, also the Secretary of the CTCDC. So welcome Johnny back.

MR. BHULLAR: Thank you.

COMMITTEE CHAIRMAN BAHADORI: Great, thank you. Great job, Johnny, and it's a great to have the continuity. I hope to see you next meeting so you can be properly recognized and appreciated for your great, fantastic work.

COMMITTEE MEMBER JONES: So just for clarification, all new e-mails that we receive from Caltrans that used to be from Devinder are now going to be from Johnny?

COMMITTEE SECRETARY SINGH: Yes.

COMMITTEE MEMBER JONES: Okay.

COMMITTEE CHAIRMAN BAHADORI: Yes.

COMMITTEE MEMBER JONES: Just so we don't -- make sure that they don't go into spam or something.

COMMITTEE CHAIRMAN BAHADORI: You have to move him from your spam list.

COMMITTEE SECRETARY SINGH: I also want to take a moment to thank the Committee. The last 14 years I worked with a number of members who represented local agencies.

And Hamid is the oldest one but John Fisher and some of the others I worked with, was it 13 years? So it was fun doing the different things.

I tried my best to accommodate everybody. Especially I don't want -- I tried to not make people wait like six months, you know. Because we meet every three or four months. So if I not put someone on the agenda that person had to wait another six months. So I used to be amending the agenda 10 days before the meeting. So I did my best and I am going to miss this committee. This committee had a lot of wisdom, expertise on the CA MUTCD. We revised the CA MUTCD five times. And without this committee we would not be able to do it. Thank you very much.

COMMITTEE CHAIRMAN BAHADORI: There is a perception, wrongly mostly in my opinion, in some parts of the population about the dedication and commitment of government employees. And I, for one, can attest for the last 11 years, both Devinder and Johnny. And I have been working for government and now working for private. I have not seen people in the private sector that are more hard-working, more dedicated, more professional than these two individuals. So thank you both very, very much.

So let's go for the next meeting. When do we need to meet? Fitting your schedule for MUTCD. You're coming out with the new one so probably we don't need to meet this

year again.

COMMITTEE SECRETARY SINGH: The middle of January.

COMMITTEE CHAIRMAN BAHADORI: January. So probably the next meeting is going to be in 2015 in January. Is there anybody who has a date in January that you cannot make it?

COMMITTEE SECRETARY SINGH: Between the 15th and 22nd.

COMMITTEE CHAIRMAN BAHADORI: Okay, let's see. When is Martin Luther King?

COMMITTEE MEMBER CICCARELLI: The 19th.

COMMITTEE CHAIRMAN BAHADORI: The 19th, okay. So how is January 15th, which is a Thursday?

COMMITTEE MEMBER CICCARELLI: Do you have a location?

COMMITTEE CHAIRMAN BAHADORI: Do we have a location? Do you want to come south?

COMMITTEE SECRETARY SINGH: It will be Southern California.

COMMITTEE CHAIRMAN BAHADORI: It's going to be somewhere in Southern California. We'll pick the location somewhere in Southern California, we have been up here a couple of times.

But is January 15th okay on your calendars?

(Affirmative responses.)

COMMITTEE CHAIRMAN BAHADORI: Okay. So if you would please block that day, January 15th, for the next meeting date and Johnny is going to get back to us with the location. Most probably somewhere in Southern California.

COMMITTEE SECRETARY SINGH: I think District 7 should be host this time because we already had a couple in San Diego, so maybe District 7.

COMMITTEE CHAIRMAN BAHADORI: Thank you, all. If there are no other items I need a motion for adjournment.

COMMITTEE MEMBER MARSHALL: So moved.

COMMITTEE MEMBER JONES: Second.

COMMITTEE CHAIRMAN BAHADORI: There is a motion and a second to adjourn the meeting of the California Traffic Control Devices Committee, to our next meeting on January 15th,, somewhere in Southern California. All those in favor?

(Ayes.)

COMMITTEE CHAIRMAN BAHADORI: Thank you very much and have a pleasant trip back home.

(Thereupon, the meeting of the California Traffic Control Devices Committee adjourned at 3:50 p.m.)

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CERTIFICATE OF REPORTER

I, Ramona Cota, an Electronic Reporter and Transcriber, 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 I thereafter transcribed it.

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 3rd day of November, 2014.

/s/ Ramona Cota

RAMONA COTA, CERT**478