1 want to discuss with the Committee, understanding that the

- 2 Committee cannot take any decision on that issue but this is
- 3 the opportunity. If you are here for any item that is on
- 4 the agenda please wait until that item come up. Any members
- 5 of the public that has any issues to share?
- No? Seeing none we move on. Well, this is going
- 7 to be a short meeting.
- 8 We go to Public Hearing. Okay, I'm going to --
- 9 When we get to discussion items I will play around with the
- 10 order a little bit, colleagues, because of the number of the
- 11 people that are here for the item 09-10. But for Public
- 12 Hearing we just follow the agenda. Let's go with the Item
- 13 07-17, Proposal for Road Work Plaque. Mr. Henley.
- 14 COMMITTEE MEMBER HENLEY: Okay. We are asking to
- 15 defer that until the next meeting because we need to get
- 16 some feedback from our construction division and we haven't
- 17 gotten that yet.
- 18 COMMITTEE CHAIRMAN BAHADORI: Okay, the item is
- 19 delayed for the next meeting.
- 20 We go to the next item, it's coming back to us,
- 21 it's Item 08-8, bicycle and motorcycle detection. This is
- 22 follow-up to Assembly Bill 1581 that was passed requiring
- 23 bicycle detection at traffic signals, new and modifications.
- 24 Subject to Caltrans approval, adoption and approval of the
- 25 standards. So who will be representing -- who will be

- 1 presenting this, Mr. Henley?
- 2 MR. GAMBOA: Today I will be representing the
- 3 Subcommittee Chair, which was Ahmad Rastegarpour. He had a
- 4 family emergency so I have been asked to pinch hit for him
- 5 today. I have a technical assistant, Bob Shanteau, who will
- 6 chime in when there's some questions from the Committee.
- 7 COMMITTEE CHAIRMAN BAHADORI: Thank you. And by
- 8 the way, colleagues. I know that you introduced yourselves.
- 9 But when you get up to the podium please reintroduce
- 10 yourself because they are keeping the minutes and we need to
- 11 know who is speaking.
- 12 MR. GAMBOA: Sorry. My name is Dave Gamboa from
- 13 Caltrans headquarters, signal operations. And I am here
- 14 today to talk about AB 1581.
- 15 And going over the minutes from the last meeting.
- 16 The Committee asked if the subcommittee could address some
- 17 of these issues before we come to this meeting. And they
- 18 asked to tighten up the language on the document, which was
- 19 done. I think everybody has hopefully had a chance to read
- 20 the agenda item. So that was done. The subcommittee
- 21 members worked on that.
- 22 Also they were asked to come up with bicycle
- 23 timing. There was some question about the minimum eight
- 24 second green time for the bicycle time, the start-up time.
- 25 But there was a form that was developed by the subcommittee

- 1 and that was also in the agenda item.
- 2 What it describes is a basic six second start-up
- 3 time plus the width of the intersection divided by the
- 4 start-up time of the bicycle, which is considered 10 miles
- 5 an hour at 15 feet per second. And that would be the
- 6 minimum green time to get a bicycle through the
- 7 intersection. So that language is listed in the --
- 8 DR. SHANTEAU: Green plus yellow plus red.
- 9 MR. GAMBOA: Excuse me?
- 10 DR. SHANTEAU: Green plus yellow plus red.
- MR. GAMBOA: Must be greater than the minimum
- 12 green --
- DR. SHANTEAU: Plus yellow plus red.
- 14 MR. GAMBOA: -- plus red. So that language is now
- 15 part of the new bicycle timing.
- Also, this is where we are going to use this
- 17 bicycle timing. And we also plan to have a path study. We
- 18 will start July 1, 2009 to make sure we are covering all
- 19 the, all the items regarding the bicycle timing.
- 20 Also there was also a bicycle/ped push button,
- 21 well actually it was a bicycle push button, in instances
- 22 where we had the need for supplemental detection.
- Those items were all touched on the agenda.
- 24 Anyway, are there any questions?
- 25 COMMITTEE CHAIRMAN BAHADORI: Okay, members, we

- 1 have been through this a few times and we asked it to go
- 2 back to the Bicycle Advisory Committee, which it did. And I
- 3 was present in one of the Bicycle Advisory Committees that
- 4 this was discussed. I participated in another one I think,
- 5 conference call.
- 6 So let me ask you this. The Bicycle Advisory
- 7 Committee, Caltrans Bicycle Advisory Committee, they are all
- 8 okay with what you are presenting?
- 9 MR. GAMBOA: Yes they are.
- 10 COMMITTEE CHAIRMAN BAHADORI: Okay.
- 11 MR. GAMBOA: They are okay with that. So the next
- 12 thing is will the Committee, are they good with this.
- 13 COMMITTEE CHAIRMAN BAHADORI: Okay, now we get
- 14 into that. Okay colleagues, any questions for the speaker?
- 15 I am going to start here. Let's go to Mr. Fisher.
- 16 COMMITTEE VICE CHAIRMAN FISHER: There were a
- 17 number of technical issues that were brought to my
- 18 attention, probably five of them, so I'd like to go over
- 19 there.
- MR. GAMBOA: Sure.
- 21 COMMITTEE VICE CHAIRMAN FISHER: But I don't want
- 22 to dominate the discussion on it. So if there are other
- 23 ones along the way then I'll go back to some of the other
- 24 ones.
- 25 My first one would be on page 11. Under the

1 definition at the bottom of page 11 of limit line detection

- 2 zone it says it's a six-by-six foot area. However, if you
- 3 have a wide curb lane you would want the detection zone to
- 4 extend across that wider lane. So six-by-six works well for
- 5 a 12 foot lane, a 10 foot lane.
- 6 So I would like to change the definition of the
- 7 limit line detection zone to add a sentence that would say:
- 8 For a lane width of 20 feet or greater, two six-foot-by-six-
- 9 foot areas shall constitute the limit line detection zone.
- 10 And so that would ensure if you have a wide lane you have
- 11 got the detection to identify motorcycles or bicycles. So I
- 12 would like to take that as a first action.
- 13 MR. GAMBOA: To include some language that would
- 14 include those instances where you have a wider lane, okay.
- 15 COMMITTEE CHAIRMAN BAHADORI: Okay. Mr. Fisher,
- 16 do you want to go over all your five items.
- 17 COMMITTEE VICE CHAIRMAN FISHER: Okay.
- 18 COMMITTEE CHAIRMAN BAHADORI: And then we'll do
- 19 one motion?
- 20 COMMITTEE VICE CHAIRMAN FISHER: That would be the
- 21 first one.
- 22 One page 12 about three-fourths of the way to the
- 23 bottom it indicates a bicyclist push button may be used to
- 24 supplement and then it lists the cases.
- MR. GAMBOA: Yes.

1 COMMITTEE VICE CHAIRMAN FISHER: And the only one

- 2 I have a concern about is Item C where it says it may be
- 3 used where all of the conditions exist. And it says,
- 4 vehicular right turns are either prohibited or not
- 5 authorized. My reading of the Vehicle Code is that a
- 6 bicyclist is allowed to move to the left of a right turning
- 7 vehicle but is also allowed to stay near the curb. That's
- 8 my reading of the Vehicle Code. So I wouldn't think you
- 9 would have to require that right turns be prohibited to have
- 10 a push button.
- 11 MR. GAMBOA: Well I can't answer that right now.
- 12 I know that the thinking when they developed that part, they
- 13 just wanted to make sure that the bicyclists were not in
- 14 harms way by placing something like that so they were, they
- 15 were trying to allow a little degree of safety. So that
- 16 when there are places that supplement -- If you look at the
- 17 diagram on page 16 it kind of shows the instances where we
- 18 would prefer to have something like this.
- 19 COMMITTEE VICE CHAIRMAN FISHER: Well again, I
- 20 think bicyclists are allowed to be near the curb; they are
- 21 also allowed to move away. So that's maybe an item we would
- 22 want to consider.
- MR. GAMBOA: Okay.
- 24 COMMITTEE VICE CHAIRMAN FISHER: On page 13, page
- 25 13 near the top is a support statement. Yet the, I think

1 the eighth line says a bicyclist push button is only allowed

- 2 as a supplement because, and then it lists the situations.
- 3 I think the situations that are listed, A, B, C, are indeed
- 4 support statements because they are educational, they
- 5 inform. However, when we have wording like, "is only
- 6 allowed' that takes on the meaning of a standard, a shall
- 7 condition. So on the prior page we said push button may be
- 8 used, which is an option. So what I would suggest is that
- 9 we delete -- let me see. That we change the sentence to
- 10 read like a support statement.
- 11 COMMITTEE CHAIRMAN BAHADORI: So instead of saying
- "only allowed" say "may be used?"
- 13 COMMITTEE VICE CHAIRMAN FISHER: Well that would
- 14 make it an option. So yes, I would say --
- MR. GAMBOA: So you want it to move from your
- 16 suggestion --
- 17 COMMITTEE VICE CHAIRMAN FISHER: Again, I would
- 18 say let's delete this sentence altogether because on a prior
- 19 page we say a push button may be used. So we don't need
- 20 another statement that conflicts with what that says, may
- 21 only be used where. So I would suggest we delete that
- 22 sentence.
- MR. GAMBOA: Wait. The sentence that says, "A
- 24 bicycle push button is only allowed." Is that the one you
- 25 are referring to?

```
1 COMMITTEE VICE CHAIRMAN FISHER: Right.
```

- MR. GAMBOA: What about the subsequent?
- 3 COMMITTEE VICE CHAIRMAN FISHER: Well you can
- 4 eliminate A, B -- I mean, you can eliminate the letters A,
- 5 B, C and just list those as educational content.
- 6 MR. GAMBOA: Okay.
- 7 COMMITTEE VICE CHAIRMAN FISHER: Which is the form
- 8 of a support statement.
- 9 Right above that, and I missed this. Right above
- 10 that the sentence: "Accordingly, the limit line detection
- 11 zone need not extend all the way to the curb or edge of
- 12 pavement." Let me see.
- 13 MR. GAMBOA: That was the idea that in instances
- 14 where vehicles are, when they go over the limit line.
- 15 COMMITTEE VICE CHAIRMAN FISHER: Yes. I think the
- 16 issue is -- Again, my reading of the Vehicle Code is that
- 17 bicyclists are allowed to be riding right next to the curb.
- 18 And therefore I would think you would want to have detection
- 19 there for those who elect to ride next to the curb. This
- 20 sentence says, "need not extend all the way to the curb."
- 21 Well, that's an opinion embedded in a support statement so I
- 22 was going to recommend that that be deleted as well.
- 23 And then as we get to the diagrams on the next few
- 24 pages. The diagram on page 14. I think we should show the
- 25 push button as option rather than it being deleted. Because

- 1 again, a bicyclist is allowed to ride next to the curb.
- 2 MR. GAMBOA: Again, I think the thinking was, the
- 3 reason why they wanted to do that, because they just felt
- 4 that it would put bicyclists -- I know they are allowed to
- 5 do it but, you know, should we be putting things where
- 6 people may be in conflict with a vehicle?
- 7 COMMITTEE VICE CHAIRMAN FISHER: Well if you do
- 8 that, okay.
- 9 MR. GAMBOA: That was the whole idea for that.
- 10 COMMITTEE VICE CHAIRMAN FISHER: Okay, all right.
- 11 MR. GAMBOA: I mean, it is a supplement. So, I
- 12 mean, you know, there might instances where you would do
- 13 that but I think the thinking is let's not try to put it
- 14 somewhere where they can, you know. That detection is
- 15 supposed to work.
- 16 COMMITTEE VICE CHAIRMAN FISHER: The what
- 17 detection is supposed to work?
- 18 MR. GAMBOA: The one that is supposed to be put in
- 19 there.
- 20 COMMITTEE VICE CHAIRMAN FISHER: You mean the
- 21 limit line?
- 22 MR. GAMBOA: Whatever detection, when the bicycle
- 23 detection gets put in it's supposed to --
- 24 COMMITTEE VICE CHAIRMAN FISHER: Okay. Well if
- 25 it's the sense that we don't want to allow the option of

1 putting in a push button then we need to show a detector

- 2 that extends to the curb, for those who drive next to the
- 3 curb. Otherwise we don't detect them.
- 4 MR. GAMBOA: So you're saying maybe show detection
- 5 all the way, all the way across.
- 6 COMMITTEE VICE CHAIRMAN FISHER: Right, if the
- 7 lane is 20 feet or more.
- 8 MR. GAMBOA: I could see where there is a merit to
- 9 that.
- 10 COMMITTEE VICE CHAIRMAN FISHER: Okay. And then
- 11 finally for the diagram on page 16. For those push buttons
- 12 we would say those are optional. Just to limit, to label it
- 13 as optional.
- MR. GAMBOA: As optional, okay. Okay.
- 15 COMMITTEE VICE CHAIRMAN FISHER: So I guess if we
- 16 first decide kind of the issue which repeats itself on
- 17 several pages regarding riding next to the curb. If we can
- 18 resolve that issue then I think we can resolve several of
- 19 the points that I've raised.
- 20 MR. GAMBOA: Basically if you are allowing a wider
- 21 detection area. Is that what you are referring to?
- MR. GAMBOA: Right.
- 23 COMMITTEE VICE CHAIRMAN FISHER: Okay.
- 24 MR. GAMBOA: And that a bicyclist is allowed to
- 25 ride next to the curb. Now maybe it's not always a good

1 thing to do if there are right turns but they are not

- 2 prohibited from doing so.
- 3 MR. GAMBOA: Okay, all right.
- 4 COMMITTEE CHAIRMAN BAHADORI: Okay. That's it?
- 5 COMMITTEE VICE CHAIRMAN FISHER: Oh, and I missed
- 6 one other one. Page 13, near the bottom on the formula.
- 7 That the green plus yellow plus --
- 8 MR. GAMBOA: Yes.
- 9 COMMITTEE VICE CHAIRMAN FISHER: -- red clearance
- 10 is greater than. Shouldn't that be greater than or equal
- 11 to?
- MR. GAMBOA: Yes.
- 13 COMMITTEE VICE CHAIRMAN FISHER: Okay.
- 14 MR. GAMBOA: But I think it was equal to but maybe
- 15 it was the underlining.
- 16 COMMITTEE VICE CHAIRMAN FISHER: Oh, okay.
- MR. GAMBOA: You didn't see that?
- 18 (Laughter.)
- 19 COMMITTEE VICE CHAIRMAN FISHER: I missed that.
- MR. GAMBOA: It's a joke.
- 21 COMMITTEE VICE CHAIRMAN FISHER: All right.
- 22 COMMITTEE CHAIRMAN BAHADORI: Okay.
- MR. GAMBOA: Any other questions? Yes sir.
- 24 COMMITTEE CHAIRMAN BAHADORI: Chief.
- 25 COMMITTEE MEMBER MAYNARD: Kind of along the lines

1 with some of the things that John brought up. The bicycle

- 2 is required to be as close as practical to the right hand
- 3 edge and there are exceptions when they can move over. But
- 4 then that doesn't mean that all bets are off and the bicycle
- 5 gets to go wherever they want on the entire road. So what
- 6 John was saying about extending those detection zones
- 7 farther on the right side for those wide lanes on the right,
- 8 shouldn't the detection zone cover more of the lane in the
- 9 next lane over so that the bike was riding on the right hand
- 10 edge of that lane. It could detect the bike as well.
- 11 Because if the bicyclist moves over to a lane to the left
- 12 like they are allowed to do in certain circumstances, they
- 13 have got to be able to trip that detector as well riding as
- 14 close as they can to the right side of that lane.
- MR. GAMBOA: Well the hope is for bicyclists --
- 16 and Bob could help me. But when they ride they are going to
- 17 take command of the lane if they are in lanes one and two,
- 18 one or two. Let's say there's three lanes abreast, you
- 19 know, for arguments sake. So they are going to be -- They
- 20 are going to take over that lane and then try to be in the
- 21 middle of that lane, which will set off the detector.
- 22 COMMITTEE MEMBER MAYNARD: But not all of them
- 23 will, is what I'm saying.
- 24 MR. GAMBOA: No, not all of them will. But the
- 25 law, by going to the letter of the law that is what the

1 thinking is. But in instances where they are not riding

- 2 fast enough they will have to go more to the right hand side
- 3 or the third lane.
- 4 COMMITTEE MEMBER MAYNARD: So if we are defining
- 5 though what these detection zones should look like the
- 6 ultimate goal is that the bicycles are able to trip it and
- 7 not stuck at lights. Why not make that a wider detection
- 8 zone.
- 9 MR. GAMBOA: For what lanes, one and two, left
- 10 turns? Or all three all the way across?
- 11 COMMITTEE MEMBER MAYNARD: For the lane, yes, that
- 12 the bikes would be in.
- 13 MR. GAMBOA: I'll let Bob answer that question
- 14 real quick.
- DR. SHANTEAU: I'm Bob Shanteau. I'm
- 16 transportation engineering liaison for the California
- 17 Association of Bicycling Organizations and the bicycle
- 18 representative on the AB 1581 subcommittee.
- 19 The answer to your questions, Mr. Fisher's and
- 20 Chief Maynard's, is towards the bottom of page eight where
- 21 there's a figure.
- 22 In fact, Devinder, can you bring it up? It should
- 23 be, I should have one called Agenda. And then go to page
- 24 eight. You'll see that we have a diagram there showing a
- 25 right hook conflict. Yes, it is legal. It is strictly

- 1 legal.
- 2 You'll have to hit Alt-Tab to go, to go between
- 3 applications there, to go between windows. Alt-Tab.
- 4 It is strictly legal for a through bicyclist to go
- 5 through from the curb, yes. It is strictly legal for a car
- 6 to go through from the right curb, yes. It is strictly
- 7 legal for a motorcycle to go straight through from the right
- 8 curb, yes. But do you want them to?
- 9 If the lane is 20 feet wide or wider -- If the
- 10 lane is 20 feet wide or wider that's one lane. It's still
- one lane, sirs. It's still one lane. One lane means one
- 12 line of traffic. It doesn't mean that bicyclists keep to
- 13 the right and next to the curb.
- We don't want them there, that's where you get
- 15 right-hooked. We have lost bicyclists. We lost two in
- 16 Portland a couple of years ago. We lose bicyclists -- we
- 17 lost one in Santa Barbara. We lost one in Santa Cruz.
- 18 Killed, literally killed in right hook collisions. We don't
- 19 want bicyclists there. That's why we don't want to put the
- 20 push button there. We don't want to encourage bicyclists to
- 21 ride against the curb, where there's a wide right lane in
- 22 particular.
- 23 And to answer your question, if there are -- to
- 24 turn to the wide right lane example, Sheet 1-A on page 14.
- 25 That shows, that's the wide right lane that you were asking

- 1 about. And there it shows the limit line detection zone
- 2 starting three feet from the lane line, which is where that
- 3 loop would normally be.
- I have been a signal engineer much of my life.
- 5 And that's where you would put the loop is about three feet
- 6 from the lane line because the loop is six feet wide. Right
- 7 turners would turn from the curb. After all, right turns
- 8 are required, the Vehicle Code requires that right turns be
- 9 made from as close to the curb as practical. So you
- 10 certainly don't want the bicyclist and the right turner both
- 11 against the right curb because then the right-turning car is
- 12 going to right hook that bicyclist. We have lost bicyclists
- 13 that way.
- 14 So part of what we bicyclists have committed to do
- 15 once this is passed, it's premature right now. But once
- 16 this is passed we will initiate an education program among
- 17 bicycle -- we will be distributing leaflets to bicycle shops
- 18 and to bicyclists in as many places as we can find them
- 19 about where this detection zone is, where they can be
- 20 detected.
- 21 An important thing we found out when we were in
- 22 our subcommittee deliberations was that the local traffic
- 23 engineers, and remember, we have traffic engineers
- 24 representing three cities on our subcommittee, the city of
- 25 San Francisco, the City of Long Beach and the City of LA.

1 And all three of them did not want to have to put down paint

- 2 markings on any of these new intersections. And to put them
- 3 down on existing intersections that would be a pain also,
- 4 but especially not on the new intersections.
- 5 So if you are not going to put paint down on the
- 6 new intersections to indicate to bicycles where to stop,
- 7 bicycles have to know where to stop. And that's the simple
- 8 rule. The simple rule is, if the lane is say 12 feet wide,
- 9 stop in the middle. If it's wider, stop about six feet from
- 10 the lane line. Simple, straightforward, nothing to think
- 11 about.
- 12 But if the rule is well gee, if it's wide then
- 13 push the button, or you may be detected if you are in the
- 14 lane somewhere. But a right-turning car. What are we going
- 15 to do about right-turning cars and bicyclists? We don't
- 16 want to detect right-turning cars but we do want to detect
- 17 bicyclists. The standard way of doing that, standard
- 18 operating procedure among signal engineers is to put one
- 19 loop out three feet from the lane line. And that's exactly
- 20 what we are proposing, that's how we came up with that
- 21 recommendation and that's why we are making the
- 22 recommendation.
- 23 COMMITTEE CHAIRMAN BAHADORI: Chief, do you have
- 24 any more questions on this?
- 25 COMMITTEE MEMBER MAYNARD: I'm just, I'm not clear

- 1 on why if we are proposing a change or a standard that we
- 2 would be spelling out where to put loops where we know that
- 3 they wouldn't detect some bicyclists. Why not, why not
- 4 extend them where bicycles will be riding. That's my
- 5 comment.
- 6 DR. SHANTEAU: Because, perhaps because we expect
- 7 bicyclists to ride in a different place. We don't expect
- 8 bicyclists to ride against a curb, they can be killed there.
- 9 We don't want people to be killed.
- 10 COMMITTEE CHAIRMAN BAHADORI: And I think both
- 11 sides have made their point, let's move on to the next
- 12 issue, Mr. Knowles.
- 13 COMMITTEE MEMBER KNOWLES: Just a quick follow-up
- 14 though on that point. Are you saying the standard as you
- 15 are proposing it would object to a very wide detection zone?
- 16 I mean, if I am using video I have no constraints on how
- 17 wide I make that detection zone. So this is a minimum
- 18 standard. There is nothing that keeps me from setting up
- 19 more detection.
- DR. SHANTEAU: Yes, it's a minimum.
- 21 COMMITTEE MEMBER KNOWLES: Okay. Because there's
- 22 nothing in here that clearly states that. So I just wanted
- 23 to be --
- 24 DR. SHANTEAU: It says, a minimum six-by-six foot
- 25 detection zone.

1 COMMITTEE MEMBER KNOWLES: Approximate six-by-six.

- 2 And that's my concern. Especially for a controller with a
- 3 limited number of channel.
- 4 DR. SHANTEAU: Sorry, we should have added the
- 5 word minimum.
- 6 COMMITTEE MEMBER KNOWLES: Okay.
- 7 DR. SHANTEAU: We'll do that.
- 8 COMMITTEE MEMBER KNOWLES: Because I want that to
- 9 be clear. That if I am going to provide bicycle detection I
- 10 am going to use a fairly wide zone to blanket the street.
- DR. SHANTEAU: Okay.
- 12 COMMITTEE MEMBER KNOWLES: I had some other
- 13 questions about your thinking when you were setting this up.
- 14 It appears to me that the legislation talks about using
- 15 normal, professional practices when setting this up. But
- 16 there's elements of this that look more like pedestrian
- 17 detection than vehicle detection, even though we have been
- 18 arguing that a bicycle is a vehicle and not a pedestrian.
- 19 Like your clearance interval. It's nothing like
- 20 what we would apply to any motorized vehicle.
- MR. GAMBOA: Well.
- 22 COMMITTEE MEMBER KNOWLES: With a vehicle the only
- 23 clearance interval is our all-red clearance. A yellow is
- 24 just a warning that the red is coming, that the green is
- 25 terminating, yellow is not a clearance interval. And even

- 1 when we set our minimum greens we are trying to get the
- 2 vehicle past the limit line. And then you can't start even
- 3 though your light has turned green until all the vehicles
- 4 legally in the intersection have cleared the intersection.
- 5 So this seems like a very different practice than what we
- 6 use for any other vehicle in --
- 7 MR. GAMBOA: Well that's the tricky part. We
- 8 typically -- as you know, I guess your background, I could
- 9 tell, the way we do yellow intervals, on speed. But
- 10 bicycles they can't really do that. The type of yellow
- 11 interval we would do would be diametrically opposed to the
- 12 way we do it for vehicles. I mean, you were talking about
- 13 way longer yellow intervals to get a bicycle through the
- 14 intersection.
- 15 COMMITTEE MEMBER KNOWLES: And we couldn't do that
- 16 because of the motorized vehicles.
- 17 MR. GAMBOA: You can't do that. So we are making
- 18 an assumption that bicycles will stop, for the most part, if
- 19 they see a yellow. Before they hit the limit line they are
- 20 going to have enough, they will have enough reaction time to
- 21 stop before they get there. But if they are in the middle
- 22 of the intersection I don't -- I can't say where their
- 23 standing would be, if they could get through the
- 24 intersection or not.
- 25 COMMITTEE MEMBER KNOWLES: So if I understand this

```
1 correctly, we need to program a minimum green --
```

- 2 MR. GAMBOA: Yes.
- 3 COMMITTEE MEMBER KNOWLES: -- plus a yellow, plus
- 4 all-red clearance. Plus an additional six seconds because
- 5 of the start-up loss time for the bicycles?
- 6 MR. GAMBOA: Well, you would do the -- you would
- 7 have to come up with whatever the width of the intersection.
- 8 So let's make it easy on ourselves, let's say the width of
- 9 the intersection with the bike is 150 feet. That's a big
- 10 one. And then it's 15 feet per second so you're talking
- 11 about 10 seconds.
- 12 COMMITTEE MEMBER KNOWLES: Right.
- 13 MR. GAMBOA: Plus the start-up time is 16 seconds.
- 14 This is a real wide intersection, of course. On the other
- 15 side you need to have, if it's 45 miles an hour well let's
- 16 say it's 4.5 seconds yellow. Subtract that from the 16,
- 17 plus your all-red, maybe a second and a half, so it's 6
- 18 seconds. So you basically have to come up with 10 seconds
- 19 of minimum green.
- 20 COMMITTEE MEMBER KNOWLES: Which means every left
- 21 turn pocket has a ten second minimum green. Every minor
- 22 street has a ten second.
- MR. GAMBOA: Well.
- 24 COMMITTEE MEMBER KNOWLES: Because quite often the
- 25 left or the minor streets, which have the biggest impact on

- 1 my capacity. My minor streets crossing the main street,
- 2 that's the longest crossing. I'm looking at generally ten
- 3 second minimum greens. So my five second minimum greens are
- 4 just doubling, you know. I typically use a five second
- 5 minimum green. Because clearly the formula is saying,
- 6 minimum green, plus yellow, plus red, and then it refers to
- 7 an additional six seconds.
- MR. GAMBOA: Um-hmm.
- 9 COMMITTEE MEMBER KNOWLES: So I need to add that
- 10 on to the formula.
- 11 DR. SHANTEAU: Bob Shanteau again. The answer to
- 12 your question is on page 11. It's that little graph where
- 13 we are showing there's a horizontal distance of 6 seconds
- 14 and then a slanted line at 14.7, approximately 15 per
- 15 second.
- 16 COMMITTEE MEMBER KNOWLES: I understand the
- 17 theory.
- DR. SHANTEAU: I addressed --
- 19 COMMITTEE MEMBER KNOWLES: I am trying to
- 20 understand the impact and make sure I understand your
- 21 proposal.
- DR. SHANTEAU: We have to know what, we have to
- 23 know what your crossing distance is. The crossing distance
- 24 is on the vertical. If your crossing distance -- I just
- 25 answered this question from Sean Skehan who is the City of

1 LA representative on the AB 1581 subcommittee. He asked me

- 2 this. He said, supposing my left turn distance, left turn
- 3 crossing distance is 60 feet. What is the minimum green
- 4 time. I said, well you take 60, divide it 15, you get 4.
- 5 Add 6, you get 10. Subtract -- how long is your yellow,
- 6 Sean? He said, 3. How long is your all-red? One. So you
- 7 subtract 4 from 10 and you get 6. So his answer was 6
- 8 seconds. He said, we'll we're currently using 5 so we're
- 9 fine with that.
- 10 What is your crossing, left turn crossing time?
- 11 Or left turn crossing distance?
- 12 COMMITTEE MEMBER KNOWLES: As I mentioned the
- 13 biggest, the biggest impacting is at a minor street, a
- 14 residential collector crossing a side arterial, you know.
- 15 In a city like Pleasanton it was easy to have Hopyard Road,
- 16 you know, a 12 lane road. So it's an exceptionally wide
- 17 street, you know, maybe 130 feet. And I would literally
- 18 have to be increasing my minimum green time from the
- 19 existing five seconds to 12 seconds.
- 20 DR. SHANTEAU: Well if it's -- you say 130 feet?
- 21 You go to 130 feet on this drawing, we end up with about
- 22 approximately 15 seconds to cross for bicyclist crossing
- 23 time. Subtract, what's your yellow?
- 24 COMMITTEE MEMBER KNOWLES: Minor street, three
- 25 seconds. All-red clearance is two.

```
1 DR. SHANTEAU: Okay, that's five.
```

- 2 COMMITTEE MEMBER KNOWLES: That's five seconds.
- 3 So I've got a ten second minimum green every single time.
- DR. SHANTEAU: Yes, unless you can discriminate.
- 5 COMMITTEE MEMBER KNOWLES: And 24/7.
- 6 DR. SHANTEAU: Unless you can discriminate between
- 7 bicyclists and motor vehicles the answer to your question is
- 8 yes. Every time that signal on the side street turns green
- 9 that will be your minimum green time.
- 10 COMMITTEE MEMBER KNOWLES: So every time I have a
- 11 single car a ten second minimum green.
- DR. SHANTEAU: Yes.
- 13 COMMITTEE CHAIRMAN BAHADORI: And if you have a
- 14 bicycle --
- 15 COMMITTEE MEMBER KNOWLES: And so that's my
- 16 concern. No, because the detector doesn't know a bicycle
- 17 from a car.
- MR. GAMBOA: No, they need to be smarter.
- 19 COMMITTEE MEMBER KNOWLES: So to me, that's the
- 20 difficulty with conformance with professional engineering
- 21 practices. This doesn't reflect our current practices.
- 22 Because we don't treat cars this way. The minimum green is
- 23 basically to deal with that start-up lost time. They see
- 24 the green, they go. Kind of like the walk signal. Time to
- 25 react to the signal and start walking. But our clearance

1 interval, the all-red is the only thing we use with regards

- 2 to a clearance interval for a vehicle, and a bicycle is a
- 3 vehicle. I just wanted to get that clarification.
- 4 COMMITTEE CHAIRMAN BAHADORI: Okay, let's --
- 5 COMMITTEE MEMBER KNOWLES: Let me get one other
- 6 point of clarification.
- 7 COMMITTEE CHAIRMAN BAHADORI: Yes, let's not spend
- 8 too much time on a single issue. I want to get all the
- 9 issues out and give some time for people to speak in the
- 10 audience and then we'll come back. Mr. Knowles, next issue.
- 11 COMMITTEE MEMBER KNOWLES: Yes. The only other
- 12 point I wanted to make with regards to what has been about
- 13 the detection area is that as a city traffic engineer and
- 14 having been one for several cities I am concerned not so
- 15 much with the adult riders as my kids going to school. And
- 16 that's where I have a problem with a six-year-old or even an
- 17 eight-year-old taking the lane versus being on the right
- 18 side of the road.
- 19 So I do take exception that there are some
- 20 individuals on bicycles that I would rather have on the
- 21 right side of the road than out in the middle or the far
- 22 left side of a 20 foot lane.
- 23 MR. GAMBOA: What do you encourage your six-year-
- 24 old when they come to a signalized intersection?
- 25 COMMITTEE MEMBER KNOWLES: Walk across in the

```
1 cross walk. But we are establishing a rule here. I'm just
```

- 2 saying I take exception to the idea that every cyclist needs
- 3 to be taking the lane. Some do need to be on the far right
- 4 side. And a lot of cyclists like to stand with one foot on
- 5 the curb. And that's why in Thousand Oaks we are putting
- 6 the push buttons on the outside of the poles because it was
- 7 right where they like to stop. But okay, that's the end of
- 8 my questions.
- 9 COMMITTEE CHAIRMAN BAHADORI: Okay, Mr. Babico.
- 10 COMMITTEE MEMBER BABICO: No, no comments.
- 11 COMMITTEE CHAIRMAN BAHADORI: Okay, just before I
- 12 go to opening for public hearing just one minor comment I
- 13 have. Whenever you use a formula I suggest you use a legend
- 14 right under the formula explaining each of the terms that
- 15 you have used. You have explained the terms in the
- 16 paragraph preceding the formula. I'm talking about page 13,
- 17 about signal timing guidance. You have a formula and you
- 18 have some parameters in there. It says, G minimum, Y, R
- 19 Clear, W. Be very specific what they are. Although they
- 20 are explained in the paragraph it always helps when you have
- 21 a formula in the manual to have a legend. Especially in
- 22 this case. And the W is always questionable. Okay, where
- 23 do I measure from, what to what. So that's one suggestion.
- 24 Colleagues, if you don't have any more questions I
- 25 am going to open it to the public, this is a public hearing

- 1 item.
- Seeing none, thank you very much. We may ask you
- 3 later to come back when we hear from the rest of the folks
- 4 in the audience.
- 5 Anybody who wishes to address the committee on
- 6 this item please step up to the podium. Chad. Please
- 7 mention your name, your affiliation, and please try to be
- 8 very brief on your comments. I will give you three minutes
- 9 each and at the end of three minute I will rudely interrupt.
- 10 Go ahead.
- 11 MR. DORNSIFE: Chad Dornsife, Best Highway Safety
- 12 Practices Institute. I was recently at a security
- 13 conference for perimeter security and facility security.
- 14 With video analytics and some of the new controllers that
- 15 are really becoming quite inexpensive you could do every one
- of these call cancels, pedestrians, ADA, everything for a
- 17 few cents on the dollar without traffic loops, without
- 18 stanchions, without call buttons. And do it all
- 19 electronically at very low expense with very high
- 20 efficiency.
- 21 So if you have a bicycle who clears early you call
- 22 cancel. If you have a pedestrian that doesn't go in that
- 23 direction you call cancel. If you have a person in a
- 24 wheelchair it sees them, tracks their speed when they clear,
- 25 they hold it until they clear. The point is that the

1 technology is advancing way beyond the language of this bill

- 2 and this bill should facilitate new solutions that solve all
- 3 these call problems. And ten seconds every time a light
- 4 changes is crazy.
- 5 So on that particular one if a bicycle approaches
- 6 it would hold the signal until the bicyclist cleared by
- 7 demand. If he's slower it would hold it longer and if he
- 8 wasn't it would clear it sooner. But it would only activate
- 9 on a bicyclist or a pedestrian, the rest of the time it
- 10 would be cycling for the automotive.
- Or if you had a tractor-trailer with double
- 12 trailers it would see that and it could hold it longer. The
- 13 point is it can discern a truck from a pedestrian, a child,
- 14 a bicyclist or a motorcycle and there is no infrastructure
- 15 to put in the ground other than a camera on the pole.
- 16 COMMITTEE CHAIRMAN BAHADORI: Thank you. The next
- 17 speaker, please.
- 18 MR. AMUNDSON: Hi, my name is Marty Amundson with
- 19 LA County Department of Public Works. We just had a couple
- 20 of concerns similar to John Fisher's about the bicycle push
- 21 button usage. We kind of feel like there are people that
- 22 would go out and go into the detection area but there are
- 23 some people that aren't, probably would be afraid to go out
- 24 towards there and still will hug the curb. Even though
- 25 through education you might be able to tell them you need to

1 move away from the curb, away to avoid the right hook, there

- 2 will still be people that will sit at the curb. And that
- 3 you might want to have a pedestrian push button or you might
- 4 need to have some more technology to have something.
- 5 So we have a concern that we would like to have
- 6 the push button be able to be used based off of engineering
- 7 judgment about watching people, what they do at an
- 8 intersection and not having this restricted, saying you
- 9 cannot use this at all unless you restrict right turns.
- 10 Which is almost impossible to do at every intersection.
- 11 But you should consider all bicyclists, not just
- 12 recreational bicyclists or this person that is just riding
- 13 to work that doesn't even know all the rules but they just
- 14 like to hang out by the thing.
- 15 The other thing we have concerns with is the
- 16 minimum green. We do have some very, very large
- 17 intersections in the county that we have. And if we are
- 18 doing stuff with the left turns. And we did -- if we are
- 19 measuring distances of up to 200 feet across you are going
- 20 to have minimum greens for left turns that will average
- 21 about 15 seconds and even up to 18 or 19 seconds just for a
- 22 left turn. And so that is a concern with us with the
- 23 distance.
- 24 I mean, I think there should be a minimum time but
- 25 there should also be a limit. Hey, you should not exceed

1 this amount for certain time limits on this. Because it's

- 2 like, we're going to get complaints at these large
- 3 intersections when you just have one car at the intersection
- 4 and they pull away and then we still have to time out
- 5 another 15 seconds just to make sure, just in case there is
- 6 a bicyclist out in the intersection. That we are going to
- 7 get complaints from citizens saying, hey, why isn't this
- 8 left turn, why is it stuck on. Nobody is there. One car
- 9 goes and we are sitting there for 15 -- If you have got an
- 10 eight phase intersection you start wasting gas and time for
- 11 everybody at these intersections.
- 12 And that's pretty much our two concerns.
- 13 COMMITTEE CHAIRMAN BAHADORI: Thank you.
- MR. AMUNDSON: Thank you.
- 15 COMMITTEE CHAIRMAN BAHADORI: Next speaker.
- MR. SHAO: Hi, my name is Bill Shao with City of
- 17 Los Angeles Department of Transportation. My only comment
- 18 to this was I wished to see instead of a formula, I would
- 19 like to see a table like Caltrans table 4D-101. Or at a
- 20 minimum yellow, the table which -- it's a table which it
- 21 makes it like non-ambiguous. It's totally straightforward.
- 22 The reason for that is the legality, legal inquiries.
- I would hate to see some -- one subject matter
- 24 expert, you know, in a court of law, presenting this as this
- 25 is my computation, here is the city staff presenting this

- 1 computation, and leave up to juries to decide whose
- 2 computation is, quote, correct versus non-correct. So I
- 3 would rather have it as a table, thank you.
- 4 COMMITTEE CHAIRMAN BAHADORI: Anybody else who
- 5 wishes to speak?
- 6 MR. BAROSS: Good morning. My name is Jim Baross.
- 7 I am the vice chair of the California Bicycle Advisory
- 8 Committee. I also represent two statewide bicycling
- 9 organizations and the League of American Bicyclists, which
- 10 has been training cyclists since 1976 to operate properly on
- 11 the roadway. And I have a couple of comments.
- 12 First, I don't care, especially where you put the
- 13 ped button. If it's a deal breaker to get a ped button
- 14 where it's going to be dangerous for people but you think
- 15 it's appropriate, it's better to get the detection in place.
- 16 Right now we have bicyclists who are at risk at
- 17 intersections that will not change for them. Will not
- 18 change for them. And many enforcement personnel are giving
- 19 them tickets for treating that signal as inoperative when
- 20 they go through when it's red. So we are in a tough
- 21 situation here. The Legislature agreed with us a year and a
- 22 half ago. We are pushing two years since the legislation.
- 23 It's time to get off the ball boys and get our cyclists safe
- 24 on the roadway.
- On the issue of timing and phasing. If you cannot

1 provide actuation which is distinguishing slower and faster

- 2 crossers you need to provide for the slower crosser.
- 3 Bicyclists are going to get killed, hurt. What is the
- 4 alternative if you are not going to provide 15 seconds for
- 5 the bicyclists? Somebody gets delayed, that's unfortunate,
- 6 but it also means bicyclists are less at risk and more
- 7 likely they will make it through.
- 8 As for riding next to the right hand side of the
- 9 road. Motorists are not supposed to be next to the right
- 10 hand side of the road when they are going straight through,
- 11 neither are bicyclists. Your children don't belong in
- 12 traffic if they don't know how to handle traffic. They
- 13 belong on the sidewalk crossing as a pedestrian.
- 14 Same with bicyclists who don't know how to handle
- 15 traffic. If they don't know how to handle traffic they need
- 16 to take the pedestrian choice you are providing. If there
- 17 is a pedestrian crossing there is probably a push button for
- 18 the pedestrian or some kind of way to be actuated and that
- 19 is the appropriate accommodation.
- 20 Not to encourage or allow or certainly putting the
- 21 bike detection logo next to the curb invites right hook
- 22 conflicts and opportunities for bicyclists to get hurt.
- 23 As far as the gentleman, I think you're from the
- 24 California Highway Patrol. If we can make detection areas
- 25 wider. In other words, this should be referring to a

- 1 minimum six-by-six. If we can provide more opportunities
- 2 for the bicyclist who for some reason needs to be or chooses
- 3 to be where it's legal to be in the other lanes, left turn,
- 4 second or third lane, fine. I don't think this precludes
- 5 that, it just hits at a minimum.
- And lastly, at least for my points. It's time,
- 7 it's past time. Bicyclists are legitimate road users. They
- 8 haven't been accommodated. The Legislature has decided they
- 9 should be accommodated. It's up to us to come with some
- 10 minimum standards to get this in place. If it needs to be
- 11 or can be modified in the future when technology becomes
- 12 available let's do it then but let's get this on the road
- 13 now. Thanks.
- 14 COMMITTEE VICE CHAIRMAN FISHER: Can I ask him a
- 15 question?
- 16 COMMITTEE CHAIRMAN BAHADORI: Sure.
- 17 COMMITTEE VICE CHAIRMAN FISHER: Sir.
- 18 COMMITTEE CHAIRMAN BAHADORI: Jim, could you come
- 19 back.
- 20 COMMITTEE VICE CHAIRMAN FISHER: Yes, I just
- 21 wanted to make sure I understood what you were saying. For
- 22 a wide curb lane.
- MR. BAROSS: Yes.
- 24 COMMITTEE VICE CHAIRMAN FISHER: Would you prefer
- 25 that the detection extend across the width of the wide curb

1 lane? Or are you satisfied just to have a six-foot-by-six-

- 2 foot area for the wide curb lane?
- 3 MR. BAROSS: I think it's fine to have more area
- 4 for detection than less. I wouldn't want, for instance, if
- 5 you did have a wide area, to have any indication to the
- 6 bicyclists that they are most appropriate next to the curb
- 7 when they are going straight through. But if the detection
- 8 area could cover the whole space, fine. My problem, of
- 9 course, was with the push button, which encourages them to
- 10 be to the right.
- 11 Or because there is the option of applying the
- 12 bicycle logo detection, the paint marking on the pavement
- 13 for the sweet spot when the detection area is only quite
- 14 small. I certainly wouldn't want it where it is going to
- 15 encourage cyclists to do what we have been teaching for 30-
- 16 plus years not to do.
- 17 COMMITTEE VICE CHAIRMAN FISHER: So you would want
- 18 the in-roadway detection but not the push button detection
- 19 because it encourages bicyclists to stay to the right.
- 20 MR. BAROSS: Well I think for your level of
- 21 service, your concern for level of service of an
- 22 intersection, I don't think you want detection off to the
- 23 right. You are going to cause a green light to be triggered
- 24 when the bicyclist or the motorist is turning right, which
- 25 is legal in a right turn. If you are concerned with level

```
1 of service and throughput I don't think you want detection
```

- 2 where people are turning right, not where they are going
- 3 straight. But if that is what it takes to get bicyclists
- 4 detected, please. I am trying to get bicycles detected.
- 5 COMMITTEE VICE CHAIRMAN FISHER: Thank you.
- 6 COMMITTEE CHAIRMAN BAHADORI: Any other members of
- 7 the public?
- 8 Okay, seeing none I close the public hearing on
- 9 the item. There are a couple of individuals in the audience
- 10 that have helped also. I see Maggie hiding there from
- 11 Caltrans. She has been contributing. And Dave Roseman back
- 12 there from City of Long Beach, on this issue. But Jim and
- 13 Bob Shanteau have been very critical in developing this,
- 14 working with the Bicycle Advisory Committee, and we
- 15 appreciate all your effort.
- Okay, well let's bring it back to the Committee.
- 17 Colleagues, I think this is like the second or third issue
- 18 that we sent to the subcommittee. And then we have
- 19 subcommittees and they meet and they come with language and
- 20 then they come back here and then again we have more issues
- 21 with it but maybe that's the nature of the beast.
- 22 So where do we go from here? I think if I
- 23 captured everything clearly there are three primary issues.
- 24 There's some minor ones here and there. But one is the
- 25 definition of the detection area. How do you define that.

1 Second is how we treat the push button. I think

- 2 the counties and the cities would like to have the option of
- 3 placing the push button and not being restricted. But then
- 4 I understand the bicycle group concerns.
- 5 And probably bigger than those two is the issue of
- 6 timing. On the issue of timing. My two cents on the issue
- 7 of timing is that it's like any other new state law. It is
- 8 going to inconvenience the cities and the counties. You
- 9 have to go and redo your minimum greens if this passes, if
- 10 the language passes.
- 11 But apparently the state legislators felt that the
- 12 way that we are treating bicycle traffic on our highways is
- 13 not adequately safe so that's why they passed 1581. So I'll
- 14 be the last one to say this but next time, if we adopt this
- 15 the next time somebody calls and says, hey, why am I waiting
- 16 here? Why is the green on the side street so long? Call
- 17 your state legislators.
- 18 Anyway, so Mr. Fisher had the most comments and I
- 19 think Chief Maynard and Mr. Knowles also captured some of
- 20 them. So where do we go from here? Do we want to make, is
- 21 there anyone ready to make a motion? I think if you want to
- 22 have a motion there are probably seven issues that need to
- 23 be modified according to what I heard.
- 24 COMMITTEE MEMBER MANSOURIAN: Mr. Chairman.
- 25 COMMITTEE CHAIRMAN BAHADORI: Yes, Mr. Mansourian.

```
1 COMMITTEE MEMBER MANSOURIAN: I have one question
```

- 2 from John on timing. And the reason I am picking John is
- 3 because of the impact to large cities, I want to learn.
- 4 And then I want to ask Robert about the law
- 5 enforcement and the bike, whether they belong on the right
- 6 or not.
- 7 So on the issue of timing, John, just look at it
- 8 from a big city point of view. So we have got to get the
- 9 bicyclists across in a safe manner, right. They can't rush
- 10 it. So the math comes out to whatever it is, 15 seconds.
- 11 It's no different than when we had to accommodate for
- 12 wheelchairs crossing on the pedestrian crosswalk and that
- 13 created congestion. But we couldn't come up with any way to
- 14 get them to go faster.
- 15 So if I am correct on what I just said then that's
- 16 a given and it will create congestion. I don't know what
- 17 else we can do. Other than then maybe we can come up with a
- 18 way of detecting bicycles. So then when there is -- in the
- 19 examples like Marty of LA County gave, you have a long
- 20 timing for only one car because the current detectors cannot
- 21 pick the difference between a bicyclist and a car. So if we
- 22 would install --
- 23 So what I am saying is, does it make sense for
- 24 large jurisdictions, or rural counties like us, have a
- 25 choice of either you live with the long timing or detect the

1 bicycles. Am I understanding that issue correctly or is it

- 2 much bigger than that?
- 3 COMMITTEE VICE CHAIRMAN FISHER: Well I think as
- 4 has been pointed out, for many of our conventional
- 5 intersections the minimum time would be close to the range
- 6 of what we are using now. But I think when you get to the
- 7 skewed intersection or the very wide intersection you are
- 8 going to have some minimum times which sometimes far exceeds
- 9 the demand that is there. And I think ultimately the answer
- 10 is to have some sort of discriminating detectors which can
- 11 distinguish between a bicycle and a vehicle and somehow
- 12 provide the time associated with what it is detecting.
- Now I've got people on my staff, Sean and Bill,
- 14 who may know the feasibility of that. But I think
- 15 ultimately technology is going to have to find a way to
- 16 ensure that we don't have a lot of wasted signal timing out
- 17 there. I am not sure that technology is there quite yet.
- 18 However, we will be experimenting with a detector that
- 19 supposedly can distinguish the mode of vehicle that is over
- 20 it. But I think the jury will be out on that for awhile.
- 21 But the bottom line is is this the law. And, you
- 22 know, it is going to create some inefficiencies at some
- 23 locations. So I think we need to pursue technology to make
- 24 sure that we don't have a lot of wasted time at some of
- 25 these unique type of intersections.

- 1 COMMITTEE CHAIRMAN BAHADORI: Deborah.
- 2 COMMITTEE MEMBER WONG: I had a comment related to
- 3 that. Does it make sense then to add some language that
- 4 allows for that technology when it is available to be used.
- 5 In lieu or in there. Where does it state that?
- 6 COMMITTEE VICE CHAIRMAN FISHER: Yes. "The limit
- 7 line detection system that can discriminate between
- 8 bicyclists and vehicles may be used to extend the length of
- 9 the minimum green." I'm not sure we have all seen it yet.
- 10 I'm not sure to what degree it's developed yet. But you
- 11 know where there is a need there's a clever inventor out
- 12 there.
- 13 COMMITTEE CHAIRMAN BAHADORI: If there's bucks to
- 14 be made somebody will make it.
- 15 COMMITTEE MEMBER MANSOURIAN: Can I then go on my
- 16 second question?
- 17 COMMITTEE CHAIRMAN BAHADORI: Sure.
- 18 COMMITTEE MEMBER MANSOURIAN: Robert, last time we
- 19 also talked about whether the bicyclist, this issue of
- 20 whether they can be on the right side or they can't.
- 21 Remember, we had all of that discussion. And that appears
- 22 to be the issue. I would appreciate hearing your point of
- 23 view on the law, the law enforcement side. Not the
- 24 philosophy part that people say you belong there or you
- 25 don't. But are we creating a conflict with the existing

1 vehicle code by doing what is being proposed? Or this is

- 2 not a conflict, it's just a philosophical difference.
- 3 COMMITTEE MEMBER MAYNARD: As far as which
- 4 proposal?
- 5 COMMITTEE MEMBER MANSOURIAN: The part about
- 6 bicyclists being on the right lane and the push button and
- 7 whether, you know. That's where I need your, your advice.
- 8 COMMITTEE MEMBER MAYNARD: Well the Vehicle Code
- 9 says that the bicyclists shall travel as close as practical
- 10 to the right hand edge and then there are exceptions for
- 11 when the bicycle is allowed to move away from location. And
- 12 at the case of an intersection where right turns are
- 13 permitted the bicyclist is permitted to move over to the
- 14 left to allow sufficient room for a car to turn right
- 15 without creating that right hook conflict. It doesn't say
- 16 they have to move over to the left.
- 17 And I think when you get to the discussion or
- 18 comments like, well we don't want bicycles there, that's
- 19 when you get into the philosophical discussion. The Vehicle
- 20 Code says they shall be to the right except in these
- 21 circumstances. Then they can move over to a safer location.
- 22 But if we are talking about minimum greens and
- 23 those kinds of things that have to be in effect 24/7 to
- 24 account for bicyclists to allow safe passage, what about the
- 25 times when you are on a road where there is no traffic?

1 Since the bicyclist is allowed and is supposed to be as far

- 2 to the right as possible, if they are the only ones out
- 3 there and there is nobody else there is no reason for a
- 4 bicycle to move over to the left and take the center of an
- 5 adjacent lane.
- 6 So if in that circumstance they can't be detected
- 7 by a loop detector that goes far enough across the lane to
- 8 detect them then I don't know why there is a problem with
- 9 having the option of having the push button so that they can
- 10 get across in a safe manner at some point in time without
- 11 having to run the red or, you know, whatever else they are
- 12 having to do. Did I answer your question?
- 13 COMMITTEE MEMBER MANSOURIAN: Yes, thank you.
- 14 COMMITTEE CHAIRMAN BAHADORI: Okay, anybody else?
- 15 Mr. Knowles.
- 16 COMMITTEE MEMBER KNOWLES: I would recommend that
- 17 in the interest of getting something out there that
- 18 standardizes the installation of bicycle detection, that I
- 19 would recommend voting on this section by section so that we
- 20 can take the issue of the detection separately from the
- 21 timing. There are so many issues as we go through this word
- 22 by word that --
- 23 COMMITTEE CHAIRMAN BAHADORI: Okay.
- 24 COMMITTEE MEMBER KNOWLES: It's more important to
- 25 me to get the detection out there than to specify right now

- 1 exactly what the timing should be.
- 2 COMMITTEE CHAIRMAN BAHADORI: Again just to remind
- 3 everybody. Whatever we do today here, ultimately this thing
- 4 is not in effect until Caltrans issues the policy directive.
- 5 So the idea -- so let's move and I don't know how long that
- 6 is going to take.
- 7 But there is a suggestion that you look at the
- 8 issue of detection and timing separately. Colleagues, what
- 9 is your pleasure on that? Do you think it's productive?
- 10 COMMITTEE MEMBER BABICO: Mr. Chairman?
- 11 COMMITTEE MEMBER KNOWLES: Mr. Knowles, if I --
- 12 sorry, Mr. Babico. Mr. Knowles, if I understand you
- 13 correctly, you may feel comfortable with the detection issue
- 14 but you may have some reservations on the timing part.
- 15 COMMITTEE MEMBER KNOWLES: Strongly, yes.
- 16 COMMITTEE CHAIRMAN BAHADORI: But if you do that
- 17 then Caltrans has to issue two policy directives. One
- 18 policy directive is going to amend MUTCD only on the
- 19 detection. And then whenever the issue of timing is
- 20 resolved then that is another policy directive.
- 21 Mr. Babico.
- 22 COMMITTEE MEMBER BABICO: Yes. Well, we do have a
- 23 committee that they prepared these findings, whether they
- 24 are private or within Caltrans. And they hear all the
- 25 comments and recommendations. Why don't we have them to

1 take this and bring them back next CTCDC meeting with the

- 2 resolution.
- 3 COMMITTEE CHAIRMAN BAHADORI: That was the idea,
- 4 that there was a subcommittee that was formed that was
- 5 chaired by Mr. Shanteau and we had representation.
- DR. SHANTEAU: By Ahmad.
- 7 COMMITTEE CHAIRMAN BAHADORI: Pardon.
- B DR. SHANTEAU: Ahmad, Ahmad.
- 9 COMMITTEE VICE CHAIRMAN FISHER: It was chaired by
- 10 Caltrans.
- 11 COMMITTEE CHAIRMAN BAHADORI: By Mr. Rastegarpour
- 12 from Caltrans. And it was -- we had participation from Long
- 13 Beach, LA and other cities and Caltrans of course. And they
- 14 worked on this. And then they took this to the Bicycle
- 15 Advisory Committee, which is a Caltrans committee. So this
- 16 is the result of their work.
- 17 Now if you are suggesting that they take these
- 18 comments that they heard today back to the subcommittee and
- 19 to the committee that's, that's an approach and you are
- 20 welcome to make a motion if that's what you want.
- 21 COMMITTEE MEMBER BABICO: I am making that motion.
- 22 COMMITTEE CHAIRMAN BAHADORI: So what is your
- 23 motion?
- 24 COMMITTEE MEMBER BABICO: To bring this subject to
- 25 the next meeting after considering and resolving these

```
1 comments and issues raised by the CTCDC panel.
```

- 2 COMMITTEE CHAIRMAN BAHADORI: All the issues that
- 3 were raised by all the parties?
- 4 COMMITTEE MEMBER BABICO: Right.
- 5 COMMITTEE CHAIRMAN BAHADORI: I have a motion on
- 6 the floor. Is there a second?
- 7 COMMITTEE MEMBER HENLEY: Can I --
- 8 COMMITTEE CHAIRMAN BAHADORI: Hold on. If motions
- 9 don't get seconded they don't go. I have a motion. Is
- 10 there a second on the motion?
- 11 Seeing none the motion dies.
- 12 COMMITTEE MEMBER BABICO: I tried.
- 13 COMMITTEE MEMBER MANSOURIAN: May I?
- 14 COMMITTEE CHAIRMAN BAHADORI: Yes sir.
- 15 COMMITTEE MEMBER MANSOURIAN: I think, I think we
- 16 owe it to the committee members who put a lot of hours, and
- 17 ourselves, to get rolling on this. The subcommittee is
- 18 making a recommendation to us. It's in front of us. We in
- 19 turn are going to make a recommendation to Caltrans. Let's
- 20 do that. Let's do whatever part of the subcommittee
- 21 recommendation that we don't like. We don't need to agree
- 22 with them, just like Caltrans doesn't need to agree with us.
- 23 But let's go on.
- 24 My suggestion is, let's start with a motion of
- 25 adopting what they have recommended. And then any part we

1 don't like go ahead and change it. And then at the end see

- 2 if we have it or not. I think we need to resolve this
- 3 issue. Construction season is upon us and I think we need
- 4 to be out there, not wait another whole year.
- 5 COMMITTEE CHAIRMAN BAHADORI: Thank you.
- 6 COMMITTEE MEMBER MANSOURIAN: That's my
- 7 recommendation.
- 8 COMMITTEE CHAIRMAN BAHADORI: Mr. Henley.
- 9 COMMITTEE MEMBER HENLEY: Yes, there are a couple
- 10 of things I think we can all agree on in that these are the
- 11 minimum standards. And I think we talked about changing a
- 12 word so that it would make it clear that there is a minimum
- 13 detection area and if you have got a wide lane you could
- 14 have more detectors or a wider detector. And I think we can
- 15 all pretty well agree on that.
- And then there was the issue about whether we
- 17 should show a formula or a table. There was a preference to
- 18 the table. But if we don't have the table we at least have
- 19 to have clarification on the formula.
- 20 COMMITTEE CHAIRMAN BAHADORI: On the legend, on
- 21 the legend. I think it's a good idea. Because it was my
- 22 idea it's a good idea --
- 23 (Laughter.)
- 24 COMMITTEE CHAIRMAN BAHADORI: -- to add, to add
- 25 the legend on the table. I would like to caution you,

- 1 except if you can calculate on maybe five feet increments
- 2 and go all the way to 300 feet it's going to be a pretty
- 3 long table. Because you really, it's going to be pretty
- 4 difficult to foresee what is the widest possible W. But
- 5 anyway, that is an option to look at.
- 6 But I agree with the gentleman who made the
- 7 mention. I mean, the defense attorneys, they love this
- 8 stuff. When they see a formula and there is room, you know.
- 9 I have been to a few of those. Jim Hudson and I used to
- 10 work in City of Orange together. We have had a few traffic
- 11 accident investigations.
- 12 Okay. So Mr. Mansourian, if I hear you correctly
- 13 -- by the way, the standards for the construction part, when
- 14 the policy directive is issues, will apply only to the new
- 15 signals or when you modify the signal. The timing part is
- 16 going to go into effect for all the signals. So there is a
- 17 distinction there also. So is that your suggestion,
- 18 Mr. Mansourian, that we just go through these comments maybe
- 19 one more time in a summary form and have Caltrans work the
- 20 language?
- 21 COMMITTEE MEMBER MANSOURIAN: I would suggest, I
- 22 would Jeff and John point out the clarifications, and Robert
- 23 if he has any, to specific, you know. And then if we all
- 24 agree then that's our motion. But, you know, beginning page
- 25 11, I believe, is where the subcommittee's proposal begins.

1 COMMITTEE CHAIRMAN BAHADORI: Okay, so let's have

- 2 it in the form of a motion so we can move this thing.
- 3 Mr. Fisher, do you want to take the lead on making a motion
- 4 outlining the recommendations and changes that you
- 5 suggested.
- 6 COMMITTEE VICE CHAIRMAN FISHER: I would like to
- 7 move that the committee first give direction on whether we
- 8 want the detection for a wide curb lane, across the width of
- 9 the wide curb lane. And I think then if we can resolve
- 10 that, then we can move on the other items. Would that be
- 11 okay to do it that way?
- 12 COMMITTEE CHAIRMAN BAHADORI: Absolutely.
- 13 COMMITTEE VICE CHAIRMAN FISHER: So I move that we
- 14 resolve that we want detection across the full width of a
- 15 wide lane. And I will then suggest wording to that effect.
- 16 COMMITTEE CHAIRMAN BAHADORI: So there is a motion
- 17 to define the detection area as wide as the lane may be.
- 18 COMMITTEE MEMBER MANSOURIAN: Second.
- 19 COMMITTEE CHAIRMAN BAHADORI: There is a motion
- 20 and a second. Discussion?
- 21 COMMITTEE VICE CHAIRMAN FISHER: I mean, just to
- 22 get philosophical concurrence.
- 23 COMMITTEE CHAIRMAN BAHADORI: Yes.
- 24 COMMITTEE VICE CHAIRMAN FISHER: We can work on
- 25 the words. But I think we need to resolve this

1 philosophical discussion, this philosophical issue first. I

- 2 think as the --
- 3 COMMITTEE CHAIRMAN BAHADORI: God help us, a bunch
- 4 of engineers discussing philosophy.
- 5 COMMITTEE VICE CHAIRMAN FISHER: Right. But I
- 6 respect what Mr. Shanteau has come up with indicating that
- 7 we don't necessarily want them to ride next to the curb
- 8 because they are going to get hooked by a right turn that
- 9 turns not next to the curb but a little bit far from the
- 10 curb. And I think I respect that. And I think education
- 11 should help teach the more seasoned bicyclist to ride in
- 12 that fashion.
- 13 But I think also because the vehicle code allows
- 14 you to be next to the curb there are going to be some
- 15 bicyclists who will exercise that right. And therefore I
- 16 think the prudent thing to do is to make sure we detect all
- 17 bicyclists if we have a curb lane of a certain width.
- 18 COMMITTEE CHAIRMAN BAHADORI: Okay, there is a
- 19 motion and second on the floor. Discussion? Mr. Knowles.
- 20 COMMITTEE MEMBER KNOWLES: I was wondering if
- 21 there is an alternative. The sticking point seems to be the
- 22 six-by-six. What if we were just talking about the six foot
- 23 area immediately behind the limit line? Because that is
- 24 really where we are putting the detection and that way we
- 25 are not mandating the detection go all the way across the

- 1 wide lane.
- Because I may separate that into two separate
- 3 detections. Using my video I may have the left section and
- 4 the right section. Because the right section I want to
- 5 apply some detection delay to, to allow for that right turn
- 6 on red. It will detect the cyclist but there may be a 10 or
- 7 20 second delay before it goes in. But the left section of
- 8 the lane there would be no delay whatsoever.
- 9 So I wouldn't want to do a blanket statement I
- 10 have to provide detection all the way across the lane. You
- 11 know, what we are dealing with really is that six foot area
- 12 immediately behind the limit line is where we need to
- 13 provide this bicycle and motorcycle detection.
- 14 COMMITTEE VICE CHAIRMAN FISHER: But as a
- 15 practical matter, loops come in six foot increments.
- 16 COMMITTEE MEMBER KNOWLES: Not videos. It's
- 17 whatever you draw.
- 18 COMMITTEE VICE CHAIRMAN FISHER: Okay. For video
- 19 you're correct, you can do it. If you are using conductive
- 20 loop detectors they come in six foot increments.
- 21 COMMITTEE MEMBER KNOWLES: Not if you do it
- 22 lengthwise across the lane instead of depth.
- 23 COMMITTEE VICE CHAIRMAN FISHER: Well, with the
- 24 quadrapole design that we have there?
- 25 COMMITTEE MEMBER KNOWLES: I just didn't want to

1 limit my ability in saying that I had to provide detection

- 2 across the entire lane. Because I would treat a 20 or 22
- 3 foot lane separately. I would probably do two separate --
- 4 COMMITTEE CHAIRMAN BAHADORI: Okay. Mr. Henley.
- 5 COMMITTEE MEMBER HENLEY: My question on it. If
- 6 we go all the way across that wide lane do we, you know,
- 7 start sacrificing capacity for the right turners?
- 8 COMMITTEE MEMBER KNOWLES: Yes.
- 9 COMMITTEE MEMBER HENLEY: I think every time you
- 10 have somebody making a right turn you are going to wind up
- 11 going through a green cycle and it's probably not necessary.
- 12 COMMITTEE VICE CHAIRMAN FISHER: Well, but it can
- 13 cancel out. It can cancel out.
- 14 COMMITTEE MEMBER HENLEY: Oh, it can.
- 15 COMMITTEE VICE CHAIRMAN FISHER: If the right turn
- 16 leaves then the call is dropped.
- 17 COMMITTEE MEMBER HENLEY: Okay.
- 18 COMMITTEE CHAIRMAN BAHADORI: Okay, there is a
- 19 motion and a second on the floor.
- 20 COMMITTEE MEMBER MANSOURIAN: Sorry, I have a
- 21 quick question.
- 22 COMMITTEE CHAIRMAN BAHADORI: Sure.
- 23 COMMITTEE MEMBER MANSOURIAN: What Jeff says and
- 24 what John is suggesting, why can't we have both? I mean, I
- 25 think if I read John's idea, the idea of being wide is so

1 everybody is detected. And Jeff is correct that I might not

- 2 want to detect but he still wants to pick them up. So why
- 3 can't be the language that either you pick them up or you
- 4 have to be putting loop. You see what I'm -- I mean, we
- 5 don't want -- the concept is to pick them up. How you do it
- 6 -- so let's give them that choice.
- 7 COMMITTEE CHAIRMAN BAHADORI: It's up to the
- 8 maker. We are just moving the process forward. It is up to
- 9 the maker of the motion if he wants to amend his motion.
- 10 COMMITTEE VICE CHAIRMAN FISHER: Well, I think we
- 11 wanted to get general agreement on the concept.
- 12 COMMITTEE CHAIRMAN BAHADORI: So that's what I'm
- 13 trying to get.
- 14 COMMITTEE VICE CHAIRMAN FISHER: Before we got
- 15 into the details.
- 16 COMMITTEE CHAIRMAN BAHADORI: That's what I am
- 17 trying to get.
- 18 COMMITTEE VICE CHAIRMAN FISHER: So do we agree on
- 19 the concept?
- 20 COMMITTEE MEMBER MAYNARD: The concept that we are
- 21 trying to detect bicycles across the entire width of the
- 22 lane.
- 23 COMMITTEE VICE CHAIRMAN FISHER: Of a wide lane,
- 24 yes.
- 25 COMMITTEE CHAIRMAN BAHADORI: So there is a motion

- 1 that the Committee supports the concept of detecting
- 2 bicycles for the full width of the lane, on the curbside
- 3 lane, regardless of the width of the lane. And there is a
- 4 second on that. Do you want to work on that concept before
- 5 we can move forward? All those in favor?
- 6 (Ayes.)
- 7 Opposition? Okay.
- 8 COMMITTEE MEMBER KNOWLES: What is the specific
- 9 language?
- 10 COMMITTEE CHAIRMAN BAHADORI: No, no, it's a
- 11 concept.
- 12 COMMITTEE VICE CHAIRMAN FISHER: It's a vote on
- 13 the concept.
- 14 COMMITTEE CHAIRMAN BAHADORI: It's a concept, it's
- 15 a concept, before we can move to the specifics. So the
- 16 concept is approved, Mr. Fisher.
- 17 COMMITTEE VICE CHAIRMAN FISHER: Okay, all right.
- 18 So let me --
- 19 COMMITTEE MEMBER HENLEY: Did everybody say yes?
- 20 COMMITTEE CHAIRMAN BAHADORI: Yes, it was
- 21 unanimous.
- 22 COMMITTEE MEMBER MANSOURIAN: Now John has ten
- 23 seconds to come up with --
- 24 COMMITTEE VICE CHAIRMAN FISHER: Now using the
- 25 language --

```
1 COMMITTEE CHAIRMAN BAHADORI: We solved the
```

- 2 philosophy part.
- 3 COMMITTEE VICE CHAIRMAN FISHER: Okay.
- 4 COMMITTEE CHAIRMAN BAHADORI: Now let's get to the
- 5 engineering.
- 6 COMMITTEE VICE CHAIRMAN FISHER: All right. Now
- 7 at the bottom of page 11 under definition 29A. The language
- 8 that is there is that an approximate six-foot-by-six-foot
- 9 area for a normal lane, okay. So you've got the word
- 10 "approximate" and you've got the word "normal lane" okay.
- 11 We are talking about a normal lane is generally in the range
- 12 of 12 feet, 11 feet, whatever. And so what we are talking
- 13 about is for a wide curb lane. That's not a normal lane,
- 14 it's a wide curb lane.
- 15 So I would proposal that we keep the language that
- 16 is already there but add a sentence that would say: For a
- 17 lane width of 20 feet or greater, two six-foot-by-six-foot
- 18 areas shall constitute the limit line detection zone. The
- 19 reason for that is that these special loops come in six foot
- 20 increments. Twenty feet is about the minimum width where
- 21 you could fit another six foot loop in.
- 22 COMMITTEE CHAIRMAN BAHADORI: Okay, let's -- There
- 23 is no way we can get all this done in one motion. Let's
- 24 move one paragraph maybe at a time. So your, let's make it
- 25 in the form of a motion moving on. So you make a motion to

- 1 add that sentence to where, 29A, right?
- 2 COMMITTEE VICE CHAIRMAN FISHER: To the end of
- 3 29A.
- 4 COMMITTEE CHAIRMAN BAHADORI: To the end of 29A on
- 5 page 11.
- 6 COMMITTEE VICE CHAIRMAN FISHER: Right.
- 7 COMMITTEE CHAIRMAN BAHADORI: There is a motion,
- 8 is there a second.
- 9 COMMITTEE MEMBER MANSOURIAN: Second.
- 10 COMMITTEE CHAIRMAN BAHADORI: There is a motion
- 11 and second. Discussion on adding that sentence to the end.
- 12 Mr. Knowles.
- 13 COMMITTEE MEMBER KNOWLES: I guess because we are
- 14 dealing with different technology and we wanted to be
- 15 technology neutral. I still question the six-by-six simply
- 16 because when we are drawing in video everything is
- 17 approximate. We are not saying minimum, you know. I guess
- 18 I am not clear because my typical detection zones, what we
- 19 are drawing don't resemble anything six-by-six. We are
- 20 drawing them, you know, standing in the field on a screen.
- 21 They are not six-by-six.
- 22 COMMITTEE CHAIRMAN BAHADORI: But it says,
- 23 approximately six-by-six.
- 24 COMMITTEE MEMBER KNOWLES: But I mean, if it's a
- 25 minimum of it's something. But six-by-six. I have a hard

1 time with six -- what do I explain in court, you know. How

- 2 exact do we need to be when we are drawing, you know,
- 3 detection zones, the technician is drawing them in the
- 4 field? We are getting detection. We are going to verify
- 5 that we are getting detection. And we are going to
- 6 customize that field to get the detection, you know. You
- 7 know how with the variety that are out there. And for me,
- 8 two six-by-sixes doesn't cut it.
- 9 COMMITTEE MEMBER BABICO: What if you use about
- 10 six-by-six.
- 11 COMMITTEE CHAIRMAN BAHADORI: It already says,
- 12 approximately.
- 13 COMMITTEE MEMBER KNOWLES: A minimum of six-by-
- 14 six?
- 15 COMMITTEE MEMBER BABICO: I didn't say minimum, I
- 16 said about. It could be minimum, it could be approximate.
- 17 COMMITTEE MEMBER KNOWLES: Well ten-by-six is not
- 18 about six-by-six.
- 19 COMMITTEE VICE CHAIRMAN FISHER: Well Jeff, is
- 20 your issue resolved if we strike out the words "an
- 21 approximate" and use "a minimum?"
- 22 COMMITTEE MEMBER KNOWLES: Yes. Okay. I will
- 23 amend my motion for the first sentence to say, a minimum
- 24 six-foot-by-six-foot area, blah-blah-blah.
- 25 COMMITTEE MEMBER KNOWLES: Okay.

1 COMMITTEE VICE CHAIRMAN FISHER: And then for the

- 2 second sentence that I propose that we add --
- 3 COMMITTEE CHAIRMAN BAHADORI: You want to read it
- 4 one more time, please.
- 5 COMMITTEE VICE CHAIRMAN FISHER: Okay, so here is
- 6 my amended motion for 29A. A minimum six-foot-by-six-foot
- 7 area immediately behind the limit line, either centered in a
- 8 normal lane width or approximately three feet from the left
- 9 lane line if a right turn lane is more than 12 feet wide.
- 10 For a lane width of 20 feet or greater --
- 11 COMMITTEE CHAIRMAN BAHADORI: That's a new
- 12 sentence.
- 13 COMMITTEE VICE CHAIRMAN FISHER: Yes, the new
- 14 sentence. For a lane width of 20 feet or greater, two
- 15 minimum six-foot-by-six-foot areas shall constitute the
- 16 limit line detection zone.
- 17 COMMITTEE CHAIRMAN BAHADORI: Okay. Do you want
- 18 to second that?
- 19 COMMITTEE MEMBER MANSOURIAN: Yes, second.
- 20 COMMITTEE CHAIRMAN BAHADORI: Okay, there is a new
- 21 motion, second. Discussion on that one?
- 22 Seeing none do you want to vote? All those in
- 23 favor of the motion say aye.
- 24 (Ayes.)
- 25 COMMITTEE CHAIRMAN BAHADORI: Opposition?

- 1 Passes unanimously.
- 2 Second one. On page 12 we have Item C under where
- 3 it says vehicular right turns are either prohibited or not
- 4 authorized. And you were wondering about the California
- 5 Vehicle Code compliance. So does this resolve that issue
- 6 now?
- 7 COMMITTEE VICE CHAIRMAN FISHER: Okay, we have
- 8 already determined that we will put detection in a wide lane
- 9 to detect the bicycles. So I guess the issue is then do we
- 10 want to allow a bicycle push button where we already have
- 11 detection as an option? I heard from the guests in the room
- 12 that some thought it was a good idea because --
- 13 COMMITTEE CHAIRMAN BAHADORI: The reason I said,
- 14 Mr. Fisher, this may be a non-issue now is because that was
- 15 an issue when you were restricting the detection area to the
- 16 left side of the lane.
- 17 COMMITTEE VICE CHAIRMAN FISHER: Right.
- 18 COMMITTEE CHAIRMAN BAHADORI: Now that we are
- 19 defining and expanding the detection area, so it's the
- 20 matter of form of detection. It's either the loop or camera
- 21 for video detection. And why not with the push button as an
- 22 option. There is no harm in that one.
- 23 COMMITTEE VICE CHAIRMAN FISHER: It seems like
- 24 there is no harm but then I heard someone say that well, you
- 25 are encouraging them to always stay to the right if you put

1 the push button there. Because that will be highly visible

- 2 and then they will be inclined to stay to the right. So I
- 3 am a little conflicted on this one.
- 4 COMMITTEE CHAIRMAN BAHADORI: Yes. Because the
- 5 language the way it is now you have the option of putting
- 6 the push button if the right turn is prohibited.
- 7 COMMITTEE VICE CHAIRMAN FISHER: Right.
- 8 COMMITTEE CHAIRMAN BAHADORI: Otherwise you cannot
- 9 put the push button there. Which is like 99.9 percent of
- 10 intersections.
- 11 COMMITTEE VICE CHAIRMAN FISHER: Well I move then,
- 12 since we resolved the issue of extending the detection
- 13 across a wide lane, that we remove Item C.
- 14 COMMITTEE CHAIRMAN BAHADORI: You want to make a
- 15 motion.
- 16 COMMITTEE MEMBER MANSOURIAN: John, I'm sorry,
- 17 would you say which Item C.
- 18 COMMITTEE VICE CHAIRMAN FISHER: I'm sorry, near
- 19 the bottom of page 12.
- 20 COMMITTEE MEMBER MANSOURIAN: Are you under Option
- 21 or under Guidance?
- 22 COMMITTEE VICE CHAIRMAN FISHER: Under Option.
- 23 COMMITTEE MEMBER MANSOURIAN: Okay.
- 24 COMMITTEE VICE CHAIRMAN FISHER: Bicyclist push
- 25 button may be used. And it says, where vehicular right

1 turns are either prohibited or not authorized. I'd move

- 2 that we strike that language C.
- 3 COMMITTEE CHAIRMAN BAHADORI: There is a motion to
- 4 strike language C on page 12. Is there a second?
- 5 COMMITTEE MEMBER MANSOURIAN: I'll second that and
- 6 I want to ask Robert one more time to advise us. So I
- 7 second it for discussion.
- 8 COMMITTEE CHAIRMAN BAHADORI: Okay, for discussion
- 9 purposes the motion and second. Chief.
- 10 COMMITTEE MEMBER MAYNARD: Well, so what you are
- 11 saying is -- the language as written says that you can only
- 12 have a push button where right turns are prohibited or not
- 13 authorized.
- 14 COMMITTEE CHAIRMAN BAHADORI: That's the proposed
- 15 language, yes.
- 16 COMMITTEE MEMBER MAYNARD: So if we strike that
- 17 then we are saying that the push buttons can only be used
- 18 for the first two.
- 19 COMMITTEE CHAIRMAN BAHADORI: This is an option,
- 20 it's not only. It just gives an option to the locals.
- 21 COMMITTEE MEMBER MAYNARD: The option is only
- 22 where all the following apply.
- 23 COMMITTEE VICE CHAIRMAN FISHER: So in other words
- 24 you would be able to use it where right turns are allowed.
- 25 COMMITTEE MEMBER MAYNARD: Oh, I see what you are

- 1 saying, right.
- 2 COMMITTEE CHAIRMAN BAHADORI: In other words, when
- 3 there is an option language it's the local discretion based
- 4 on engineering judgment.
- 5 COMMITTEE MEMBER MAYNARD: Well then I quess I'm
- 6 confused, John, about -- I thought you were conflicted about
- 7 having those highly visible where a right turn is
- 8 authorized. I mean, technically, you know, technically they
- 9 are allowed to be there. So if we have detection outside
- 10 the push button then you probably wouldn't need the push
- 11 button. But should the local engineer have the option of
- 12 determining based on their best judgment that on a
- 13 particular intersection they need it there. There is no
- 14 conflict of the Vehicle Code having it there.
- 15 COMMITTEE VICE CHAIRMAN FISHER: Right. I would
- 16 argue that, now that I think about it, if you have a 16 foot
- 17 lane, not quite wide enough to put in the two six-foot-by-
- 18 six-foot detectors, you are going to have the right half of
- 19 your lane undetected. Now you could argue then you want
- 20 bicyclists then to take the lane. But some are not going to
- 21 take the lane.
- 22 COMMITTEE MEMBER MAYNARD: Right.
- 23 COMMITTEE VICE CHAIRMAN FISHER: So I think the
- 24 only option for them is to press the button. So that's why
- 25 I would suggest removing Item C.

1 COMMITTEE CHAIRMAN BAHADORI: Mr. Knowles, you had

- 2 your hand up. Do you have something to add?
- 3 COMMITTEE MEMBER KNOWLES: I quess first I would
- 4 question. Is this language at all reflecting anything in
- 5 the federal MUTCD. Because for me it works best if you put
- 6 a period after "detection." "A bicyclist push button may be
- 7 used to supplement the required limit line detection." And
- 8 strike everything else.
- 9 Because it puts certain jurisdictions in jeopardy
- 10 where based on engineering judgment they put that in. We
- 11 are saying it's supplementing what we just defined as limit
- 12 line detection. But we are saying you can only -- we are
- 13 already telling this engineer, you can only use it in these
- 14 cases. And exactly -- unless we are reflecting the federal
- 15 MUTCD, why exactly based on the legislation, are we telling
- 16 engineers they can only use it under these conditions. So I
- 17 would recommend that we put a period after "detection" and
- 18 strike the rest of it.
- 19 COMMITTEE CHAIRMAN BAHADORI: What was that you
- 20 were suggesting?
- 21 COMMITTEE MEMBER KNOWLES: That this section for
- 22 support. You know, when you get down to, a bicycle push
- 23 button may be used to supplement the required limit line
- 24 detection, period. And that you don't need the rest of the
- 25 language.

```
1 COMMITTEE CHAIRMAN BAHADORI: So you are, so you
```

- 2 are suggesting to get rid of that option altogether, right?
- 3 COMMITTEE MEMBER KNOWLES: You get rid of
- 4 everything starting with, only where all. Get rid of A, B
- 5 and C.
- 6 COMMITTEE MEMBER MANSOURIAN: I think that makes a
- 7 lot of sense.
- 8 COMMITTEE MEMBER WONG: Yes.
- 9 COMMITTEE MEMBER MANSOURIAN: Because it leaves us
- 10 room. And we don't need to start getting into specifics.
- 11 COMMITTEE VICE CHAIRMAN FISHER: I would agree
- 12 with that.
- 13 COMMITTEE CHAIRMAN BAHADORI: So you are
- 14 withdrawing your motion?
- 15 COMMITTEE VICE CHAIRMAN FISHER: I am withdrawing
- 16 my motion.
- 17 COMMITTEE CHAIRMAN BAHADORI: Or you are amending?
- 18 Okay, let's --
- 19 COMMITTEE VICE CHAIRMAN FISHER: I will amend it.
- 20 COMMITTEE MEMBER BABICO: We have spent over an
- 21 hour and a half on one item.
- 22 COMMITTEE MEMBER KNOWLES: But remember, we have
- 23 been discussing this for a long time. We are trying to get
- 24 it resolved.
- 25 COMMITTEE VICE CHAIRMAN FISHER: On what Jeff has

- 1 said --
- 2 COMMITTEE MEMBER HENLEY: We don't want to do it
- 3 again.
- 4 COMMITTEE MEMBER BABICO: That's what I'm saying.
- 5 It's better to give it to the committee and let them come
- 6 back.
- 7 COMMITTEE CHAIRMAN BAHADORI: Mr. Babico, I really
- 8 don't want to bring this issue back for a couple of reasons.
- 9 we have spent a lot of time. And the second reason is that
- 10 1581 is not going to kick in, it is not going to become
- 11 effective until Caltrans issues a policy directive. And as
- 12 Mr. Mansourian said, the construction season is starting and
- 13 we want to have something out there.
- 14 Go ahead.
- 15 COMMITTEE VICE CHAIRMAN FISHER: I would amend my
- 16 motion just for the option to say a bicyclist push button
- 17 may be used to supplement the required limit line detection,
- 18 period. And eliminate the rest of that option.
- 19 COMMITTEE CHAIRMAN BAHADORI: Eliminate the rest
- 20 of the sentence and A, B, C.
- 21 COMMITTEE VICE CHAIRMAN FISHER: Right.
- 22 COMMITTEE CHAIRMAN BAHADORI: All of it, that's
- 23 the motion.
- 24 COMMITTEE MEMBER HENLEY: Second.
- 25 COMMITTEE CHAIRMAN BAHADORI: And a second.

- 1 Discussion? Hopefully not.
- Okay, seeing none. All those voting yes, aye.
- 3 (Ayes.)
- 4 COMMITTEE CHAIRMAN BAHADORI: Opposition?
- 5 The second one passes also.
- 6 The third one. Mr. Fisher, you had a comment
- 7 also, on top of page 13.
- 8 COMMITTEE VICE CHAIRMAN FISHER: Right.
- 9 COMMITTEE CHAIRMAN BAHADORI: Where it says, "the
- 10 limit line detection not extend all the way to the edge." I
- 11 think that issue is now resolved because we defined the
- 12 detection zone.
- 13 COMMITTEE MEMBER KNOWLES: What about the bottom
- 14 part of the guidance on 12? For example, we had that letter
- 15 from the City of San Jose where they had this issue of using
- 16 the phrase in the top line, have been. Exactly what do we
- 17 mean when we say, if more than 50 percent of the limit line
- 18 detectors have been, past tense. They are very concerned,
- 19 and I think legitimately, that if it has -- It's almost like
- you are required to update the detection even though you
- 21 updated it in the past. And I think that is a legitimate
- 22 concern.
- 23 COMMITTEE CHAIRMAN BAHADORI: Okay, didn't bring
- 24 it up in the first round of discussion. So Mr. Knowles,
- 25 would you please explain what you mean.

```
1 COMMITTEE MEMBER KNOWLES: Well basically if you
```

- 2 strike "have been or" so that the sentence reads: If more
- 3 than 50 percent of limit line detectors need to be replaced
- 4 at a signalized intersection then the entire blah-blah-blah.
- 5 It's just strike the words "have been or." That way it's
- 6 all present tense.
- 7 COMMITTEE CHAIRMAN BAHADORI: Okay, make it a
- 8 motion, get a second and let's move on.
- 9 COMMITTEE MEMBER KNOWLES: I'm too new to make a
- 10 motion.
- 11 (Laughter.)
- 12 COMMITTEE CHAIRMAN BAHADORI: This is going to be
- 13 your first motion, we've got to celebrate. Go ahead.
- 14 (Laughter.)
- 15 COMMITTEE MEMBER HENLEY: Drinks for everybody.
- 16 COMMITTEE CHAIRMAN BAHADORI: So is that in the
- form of a motion, Mr. Knowles?
- 18 COMMITTEE MEMBER KNOWLES: Well, I make the motion
- 19 to approve the guidance as stated on page 12, absent the
- 20 words "have been or", as stated in the first sentence.
- 21 COMMITTEE CHAIRMAN BAHADORI: Okay, there's a
- 22 motion. A second?
- 23 COMMITTEE MEMBER MAYNARD: Second.
- 24 COMMITTEE CHAIRMAN BAHADORI: Okay, I have a
- 25 second from the Chief. All those in favor?

```
1 (Ayes.)
```

- 2 COMMITTEE CHAIRMAN BAHADORI: Opposition?
- 3 It passes with the language as recommended for
- 4 deletion. Okay, now we go to 13.
- 5 COMMITTEE VICE CHAIRMAN FISHER: Okay 13. The top
- of page 13 is support statements.
- 7 We already resolved that we want to extend the
- 8 detection across a wide lane. So that would suggest that we
- 9 delete the sentence that says -- Figure 40, 111-CA
- 10 COMMITTEE CHAIRMAN BAHADORI: Accordingly.
- 11 COMMITTEE VICE CHAIRMAN FISHER: "Accordingly, the
- 12 limit line detection zone need not extend all the way to the
- 13 curb or edge of pavement."
- 14 COMMITTEE CHAIRMAN BAHADORI: Okay, you know the
- 15 drill, make a motion.
- 16 COMMITTEE VICE CHAIRMAN FISHER: I move that we
- 17 delete that sentence.
- 18 COMMITTEE CHAIRMAN BAHADORI: There is a motion to
- 19 delete on top of page 13 the sentence that starts with
- 20 "Accordingly the limit line" all the way through. Second?
- 21 COMMITTEE MEMBER MAYNARD: Second.
- 22 COMMITTEE CHAIRMAN BAHADORI: I have a motion and
- 23 second. Anybody opposing?
- 24 Seeing none the motion passes unanimously.
- Okay, what was your next one?

1 COMMITTEE VICE CHAIRMAN FISHER: The very next

- 2 sentence, sentence of the next paragraph. Again keep in
- 3 mind this is a support statement. It says: "A bicyclist
- 4 push button is only allowed as a supplement" because we have
- 5 already determined that it will be an option.
- 6 COMMITTEE CHAIRMAN BAHADORI: Yes.
- 7 COMMITTEE VICE CHAIRMAN FISHER: So I move that we
- 8 eliminate, that we delete this sentence and we editorially
- 9 restructure A, B and C below so that it is just a continuous
- 10 paragraph. In other words, delete the letters A, B and C
- 11 and just keep that as a paragraph in that it is a support
- 12 statement.
- 13 COMMITTEE CHAIRMAN BAHADORI: So your motion is to
- 14 delete the heading sentence and then do not numerate A, B,
- 15 C.
- 16 COMMITTEE VICE CHAIRMAN FISHER: Right.
- 17 COMMITTEE CHAIRMAN BAHADORI: Just put it in a
- 18 paragraph format.
- 19 COMMITTEE VICE CHAIRMAN FISHER: Yes.
- 20 COMMITTEE CHAIRMAN BAHADORI: There is a motion.
- 21 A second? We have no second. There is a motion, is there a
- 22 second?
- 23 COMMITTEE MEMBER HENLEY: I'll second it.
- 24 COMMITTEE CHAIRMAN BAHADORI: There is a motion
- 25 and a second. Discussion?

```
1 You want to vote? All those in favor say --
```

- 2 COMMITTEE MEMBER KNOWLES: Discussion.
- 3 COMMITTEE CHAIRMAN BAHADORI: Oh, delayed.
- 4 Mr. Knowles, discussion.
- 5 COMMITTEE MEMBER KNOWLES: I guess in light of the
- 6 fact that we allowed the traffic engineer to supplement
- 7 detection with a button. When I read this push button, when
- 8 I read this new paragraph then it seems -- you know, the
- 9 substitution for A, B and C. It only includes all the
- 10 reasons not to put in a button and seems like it creates a
- 11 tremendous liability for the individual that just installed
- 12 the button.
- 13 COMMITTEE MEMBER MANSOURIAN: I think you need to
- 14 -- because of our previous motion I think we need to
- 15 eliminate this whole thing.
- 16 COMMITTEE MEMBER KNOWLES: I would agree.
- 17 COMMITTEE MEMBER MANSOURIAN: The sentence and A,
- 18 B, C.
- 19 COMMITTEE MEMBER KNOWLES: Yes.
- 20 COMMITTEE MEMBER MANSOURIAN: We already dealt
- 21 with that. It's up to the local to decide if they want to
- 22 do it, period.
- 23 COMMITTEE CHAIRMAN BAHADORI: Okay, this time I am
- 24 not going to give you the benefit.
- 25 COMMITTEE MEMBER MANSOURIAN: So I'll make the

- 1 motion that --
- 2 COMMITTEE CHAIRMAN BAHADORI: Your motion failed,
- 3 let's make another motion.
- 4 COMMITTEE MEMBER KNOWLES: Wait, no.
- 5 (Laughter.)
- 6 COMMITTEE MEMBER KNOWLES: I second the motion.
- 7 We're making the argument against the previous action in
- 8 this.
- 9 COMMITTEE VICE CHAIRMAN FISHER: I'm sorry, did I,
- 10 was it my motion.
- 11 COMMITTEE CHAIRMAN BAHADORI: You win some, lose
- 12 some, okay. Go ahead.
- 13 COMMITTEE VICE CHAIRMAN FISHER: I will, I move to
- 14 amend my motion.
- 15 COMMITTEE CHAIRMAN BAHADORI: Okay.
- 16 COMMITTEE VICE CHAIRMAN FISHER: That would
- 17 eliminate the lead section.
- 18 COMMITTEE CHAIRMAN BAHADORI: The whole section.
- 19 COMMITTEE VICE CHAIRMAN FISHER: I quess the whole
- 20 section, right. One of the problems is it's hard to edit
- 21 all this on the fly like we're doing but I recognize that we
- 22 need to do so to get something out.
- 23 COMMITTEE CHAIRMAN BAHADORI: We have to keep this
- 24 thing moving.
- 25 COMMITTEE VICE CHAIRMAN FISHER: Right.

1 COMMITTEE CHAIRMAN BAHADORI: We don't want to

- 2 send it back to subcommittee.
- 3 COMMITTEE MEMBER MANSOURIAN: So is your motion
- 4 from the "bicyclist push button" all the way to where it
- 5 says "guidance?" Is that what you are recommending? We are
- 6 deleting that whole thing, right?
- 7 COMMITTEE VICE CHAIRMAN FISHER: Yes.
- 8 COMMITTEE MEMBER MANSOURIAN: The sentence, A, B,
- 9 C.
- 10 COMMITTEE VICE CHAIRMAN FISHER: Yes, the whole
- 11 paragraph.
- 12 COMMITTEE MEMBER KNOWLES: The last sentence is
- 13 still applicable.
- 14 COMMITTEE MEMBER MANSOURIAN: No, no, he means A,
- 15 B, C.
- 16 COMMITTEE CHAIRMAN BAHADORI: Only A, B, C.
- 17 COMMITTEE MEMBER KNOWLES: Okay.
- 18 COMMITTEE CHAIRMAN BAHADORI: Not the last line.
- 19 COMMITTEE VICE CHAIRMAN FISHER: Did anybody
- 20 second the motion?
- 21 COMMITTEE MEMBER MANSOURIAN: Second.
- 22 COMMITTEE CHAIRMAN BAHADORI: There is a motion
- 23 and second. Discussion?
- 24 COMMITTEE MEMBER MANSOURIAN: I'm charging you for
- 25 all these seconds.

```
1 COMMITTEE CHAIRMAN BAHADORI: Seeing none, all
```

- 2 those in favor say aye.
- 3 (Ayes.)
- 4 COMMITTEE CHAIRMAN BAHADORI: Opposition?
- 5 Okay, the motion passes unanimously.
- I am not going to make my suggestion for the
- 7 legend, you guys do that editorially. Just add the legend
- 8 under the formula so we know the parameters. Okay.
- 9 COMMITTEE VICE CHAIRMAN FISHER: And editorially
- 10 change "greater" to be "greater than or equal to."
- 11 COMMITTEE CHAIRMAN BAHADORI: At the end we will
- 12 have a uniform, comprehensive motion.
- Okay, moving on, on page 14.
- 14 COMMITTEE MEMBER KNOWLES: So I guess I don't
- 15 understand the way you are dividing up the discussions
- 16 because guidance seemed like there are major issues on page
- 17 13 with regards to signal timing. What we just approved
- 18 was --
- 19 COMMITTEE CHAIRMAN BAHADORI: Okay so let's stop,
- 20 let's go back to page 13. Okay, page 13 we go under
- 21 Guidance. Is the issue of timing. And I think Mr. Knowles
- $^{22}$  led the discussion on that one. Jeff, you want to --
- 23 COMMITTEE MEMBER KNOWLES: My big concern here is
- 24 -- remember, this isn't just convenience. This is air
- 25 quality management, this is automotive emissions, fuel

1 usage, all those kinds of things when we increase congestion

- 2 at these intersections because of lengthening basically the
- 3 green time for minor movements at the expense of green time
- 4 for the main street. That's typically what the impact will
- 5 be. Because the main street crossing a minor street, the
- 6 existing signal timing handles these clearance intervals.
- 7 But a minor side street crossing a main street, the effect
- 8 would be reducing the green time and less congestion on the
- 9 main street. Because the minor street has a long distance
- 10 to traverse.
- 11 So number one. In most cases, although the
- 12 existing MUTCD has text, we almost always have tables in
- 13 these types of instances. And number two, when I read the
- 14 legislation it's very vague. It emphasizes detection,
- 15 detection, detection. It makes reference to "and
- 16 related signal timing." But isn't that with regards to
- 17 detection, detection. So I oppose the language
- 18 in Guidance.
- 19 COMMITTEE CHAIRMAN BAHADORI: Are you opposing the
- 20 whole concept of introducing a section for timing associated
- 21 with bicycles at signals or are you opposing this specific
- 22 language?
- 23 COMMITTEE MEMBER KNOWLES: I strongly recommend
- 24 that we approve language for putting in detection and that
- 25 the issue of timing needs to come back at a later time with

1 a table and with some discussion about the impact on traffic

- 2 operations in general. Because with the large suburban
- 3 communities I work for with huge arterial roadways, the
- 4 impact this would have on maintaining levels of service, of
- 5 traffic progression down the street, we're talking signal
- 6 coordination, is just huge. If all of a sudden --
- 7 I mean, I already have trouble with pedestrians
- 8 crossing these wide streets and the way I dealt with signal
- 9 timing. But if now for every signal I have got to increase
- 10 my minimum green times to acceptable levels, that makes
- 11 progression on two way arterials very difficult.
- 12 COMMITTEE CHAIRMAN BAHADORI: You made your point
- 13 and now you have experience, you are ready for your second
- 14 motion. So is that your motion, to delete that language
- 15 related to guidance altogether?
- 16 COMMITTEE MEMBER KNOWLES: Yes. Yes. At this
- 17 time.
- 18 COMMITTEE CHAIRMAN BAHADORI: I have a motion to
- 19 delete the language related to timing at this time and come
- 20 back with additional information later under Guidance. Is
- 21 there a second to the motion?
- Seeing no second the motion dies. Okay, let's
- 23 move on.
- 24 So how do you want to approach this? The issue is
- 25 just not to make it overly complicated. It has

1 consequences, I mean, let's not fool ourselves. Regardless

- 2 of whatever happens to the formula, and you do a table, you
- 3 don't do a table. You do 14.7, you do 14.5. Whatever you
- 4 do in terms of speed and all that. The consequences is that
- 5 the signalized intersections, now you have to adjust your
- 6 minimum greens. Otherwise the next bicyclist that has an
- 7 accident, you have a lawsuit on your hands. And that is the
- 8 intent of the state Legislature. So now we can play around
- 9 with the language.
- 10 COMMITTEE MEMBER BABICO: Mr. Chairman?
- 11 COMMITTEE CHAIRMAN BAHADORI: Yes, Mr. Babico.
- 12 COMMITTEE MEMBER BABICO: I recall that Jeff
- 13 expressed his concerns about this and there were some
- 14 comments in response to his comments from the floor by the
- 15 committee members as well as the guest members. So I wonder
- if we can just open it to the public, to those whom they
- 17 concern, those members of the committee and the visitors,
- 18 especially from the City of LA, how do they feel about the
- 19 motion that Jeff made or how they are going to approach
- 20 this, his comments regarding the signal timing. Rather than
- 21 just closing because it didn't have a second motion.
- 22 COMMITTEE CHAIRMAN BAHADORI: Okay. I have closed
- 23 to public comments, I am not going to open to the public.
- 24 But Caltrans staff and consultants to the Bicycle Committee,
- 25 they are welcome to address the issue. As for the City of

1 LA, we have Mr. Fisher here and he can speak for the City of

- 2 Los Angeles. But the point is what are we asking them.
- 3 What is the question?
- 4 COMMITTEE MEMBER BABICO: Well whatever the motion
- 5 was.
- 6 COMMITTEE CHAIRMAN BAHADORI: The motion, the
- 7 concern is that this language would force municipalities to
- 8 increase the minimum green on all their signals. And that
- 9 fact is unavoidable. I mean, you can go and prepare new
- 10 language and you can put in a new table and do calculations
- 11 an do all kinds of things. But if you adopt a guidance in
- 12 the California MUTCD that says that your signals must
- 13 accommodate safe movement of a bicycle, when you don't have
- 14 a bicycle detection, whether there is bicycle traffic on
- 15 that road or not, then it is going to affect all your
- 16 signals.
- 17 And there was a suggestion by Mr. Mansourian that
- 18 there may be an exception made there, you know, for rural
- 19 counties and things like --
- 20 COMMITTEE MEMBER MANSOURIAN: No, no, I wasn't
- 21 saying that. I was saying because that creates a
- 22 congestion.
- 23 COMMITTEE CHAIRMAN BAHADORI: Because it creates
- 24 congestion.
- 25 COMMITTEE MEMBER MANSOURIAN: Then that encourages

- 1 us to detect the bicyclists.
- 2 COMMITTEE CHAIRMAN BAHADORI: Yes.
- 3 COMMITTEE MEMBER MANSOURIAN: Which is the intent
- 4 of the legislators.
- 5 COMMITTEE CHAIRMAN BAHADORI: Okay, go ahead,
- 6 Mr. Fisher.
- 7 COMMITTEE VICE CHAIRMAN FISHER: I was just going
- 8 to say I think we all feel a little bit of discomfort in
- 9 providing green times that are not efficient in the absence
- 10 of a bicyclist. But I think this is going to occur over a
- 11 long period of time. It only applies when we are modifying
- 12 our intersection anyway.
- 13 COMMITTEE CHAIRMAN BAHADORI: Not the timing.
- 14 COMMITTEE MEMBER KNOWLES: This is instant.
- 15 COMMITTEE VICE CHAIRMAN FISHER: Well, you've got
- 16 to have the detector there to detect the bicyclist.
- 17 COMMITTEE CHAIRMAN BAHADORI: If you don't have a
- 18 detector you have to have a minimum green to provide safe
- 19 movement for the bicycle because the bicycle was not
- 20 detected.
- 21 COMMITTEE MEMBER KNOWLES: There is nothing in
- 22 this saying at new intersections or upgraded intersections.
- 23 COMMITTEE CHAIRMAN BAHADORI: It just says, signal
- 24 timing.
- 25 COMMITTEE MEMBER KNOWLES: This is just saying

1 signal timing, period. This is, all my coordination goes

- 2 out the window.
- 3 COMMITTEE CHAIRMAN BAHADORI: That's why the
- 4 implications of timing are more far-reaching the implication
- 5 of detection.
- 6 COMMITTEE MEMBER MANSOURIAN: Excuse me, I'm
- 7 having a hard time hearing us. Would you guys, if you need
- 8 to talk please go outside.
- 9 COMMITTEE CHAIRMAN BAHADORI: LA City folks, they
- 10 always looking to make noise.
- 11 Okay, if we are not going anywhere on this thing
- 12 let's move on, I'll come back to this issue. I want to get
- 13 all the detection issues resolved so we come back to the
- 14 timing later.
- 15 Let's go back to page 14 again. Is there any
- 16 comment on the diagrams, page 14 and 15 and 16?
- 17 COMMITTEE VICE CHAIRMAN FISHER: Okay, I propose
- 18 some changes on the diagram on page 14. It would be on the
- 19 left display. That's labeled: "A intersection with a wide
- 20 ride-through lane." I propose that it be modified to show
- 21 the bicycle push button as labeled "optional" rather than
- 22 crossed out. I propose that the curb lane width be labeled
- 23 as "greater than or equal to 20 feet." And therefore
- 24 propose that we show another six foot detector there.
- 25 COMMITTEE CHAIRMAN BAHADORI: Okay, so three. So

```
1 the cross out on the bicycle option sign is going to be
```

- 2 deleted, we put "optional" on the top.
- 3 We are going to show the lane width of 20 feet.
- 4 The number, one, two, three -- the number three lane 20 feet
- 5 or wider and show a second detector there.
- And what was the other one?
- 7 COMMITTEE VICE CHAIRMAN FISHER: Label it
- 8 "optional" for the push button.
- 9 COMMITTEE CHAIRMAN BAHADORI: Label it "optional."
- 10 COMMITTEE VICE CHAIRMAN FISHER: Right.
- 11 COMMITTEE CHAIRMAN BAHADORI: So that's your
- 12 motion.
- 13 COMMITTEE VICE CHAIRMAN FISHER: Yes.
- 14 COMMITTEE CHAIRMAN BAHADORI: Is there a second?
- 15 COMMITTEE MEMBER HENLEY: I'll second it.
- 16 COMMITTEE CHAIRMAN BAHADORI: A motion and second.
- 17 Discussion?
- 18 COMMITTEE MEMBER KNOWLES: I had one comment.
- 19 COMMITTEE CHAIRMAN BAHADORI: Mr. Knowles.
- 20 COMMITTEE MEMBER KNOWLES: I was wondering if we
- 21 could change the language a bit. In basically the old
- 22 number one strikeout -- I mean, does it work if we refer to
- 23 it as instead of to activate the traffic signal, referring
- 24 to it as supplementing the required detection. That way we
- 25 really don't show it as an option. We are consistent with

1 the rest of the language where this is not an option for

- 2 detection but it is an option to supplement the other
- 3 required detection.
- 4 COMMITTEE CHAIRMAN BAHADORI: I see Jim is
- 5 nodding, it's good enough for me. Okay, you want to add it
- 6 to your motion?
- 7 COMMITTEE VICE CHAIRMAN FISHER: I didn't
- 8 understand what you said, I'm sorry.
- 9 COMMITTEE CHAIRMAN BAHADORI: Jeff, you want to
- 10 explain.
- 11 COMMITTEE VICE CHAIRMAN FISHER: You're talking
- 12 about the footnotes?
- 13 COMMITTEE MEMBER KNOWLES: The old comment number
- one, the old footnote to that push button.
- 15 COMMITTEE VICE CHAIRMAN FISHER: Right.
- 16 COMMITTEE MEMBER KNOWLES: Used to refer to it as
- 17 you could use this as an option to activate the signal. And
- 18 we are not really saying that. We are saying all the
- 19 language that used to be in the old struck out sentence.
- 20 But instead of to activate it is to supplement the required
- 21 vehicle detection. A push button should be located, you
- 22 know, where it is convenient to the bicyclist, blah-blah-
- 23 blah. So all I am doing is striking out activate a traffic
- 24 signal to supplement the required detection.
- 25 COMMITTEE VICE CHAIRMAN FISHER: But that language

- 1 is struck out.
- 2 COMMITTEE MEMBER KNOWLES: I would restore that to
- 3 explain why that is an option.
- 4 COMMITTEE CHAIRMAN BAHADORI: He wants to
- 5 reinstate it.
- 6 COMMITTEE MEMBER KNOWLES: Because it is really an
- 7 option to supplement, it is not an optional form of
- 8 detection.
- 9 COMMITTEE VICE CHAIRMAN FISHER: But if we are
- 10 showing the additional detector and we are labeling the push
- 11 button as optional doesn't that accomplish the same thing?
- 12 COMMITTEE MEMBER KNOWLES: Well to me I quess an
- 13 option is not a supplement in my mind, it's an option. And
- 14 I'd rather -- it's supplementing. It's not taking the place
- of any detection we're showing, it's supplementing the
- 16 detection. And to me that gets the distinction. Because
- 17 previously in the text we referred to it as supplementing
- 18 and we allowed the engineers discretion on its use. We have
- 19 never before really called that an option.
- 20 COMMITTEE VICE CHAIRMAN FISHER: I thought in the
- 21 text we said that -- where was it? Going back to page, in
- 22 page 12 we said a bicyclist push button may be used as an
- 23 option. Under the title, Option: "A bicyclist push button
- 24 may be used to supplement the required limit line
- 25 detection." That was under the Option section.

```
1 COMMITTEE MEMBER KNOWLES: Okay. I would have
```

- 2 just preferred it referred to as supplementing the required
- 3 detection.
- 4 Are you proposing any text to go with undeleting
- 5 it as an option? You're restoring -- You're proposing to
- 6 not delete it. Is there any text that goes with the
- 7 restored symbol?
- 8 COMMITTEE VICE CHAIRMAN FISHER: Yes, it would say
- 9 below it, optional.
- 10 COMMITTEE MEMBER KNOWLES: I would just recommend
- 11 using the word "supplement" within the sentence so that it's
- 12 very clear to, you know, engineers in small agencies that
- 13 it's only supplementing.
- 14 COMMITTEE CHAIRMAN BAHADORI: So your suggestion
- 15 is to delete the strike-through and reinstate that number
- 16 one sentence, right?
- 17 COMMITTEE MEMBER KNOWLES: Yes.
- 18 COMMITTEE CHAIRMAN BAHADORI: And then add
- 19 "supplement" okay. Do you want to include it in your motion
- 20 or do you disagree?
- 21 COMMITTEE VICE CHAIRMAN FISHER: I don't, I
- 22 personally don't see the need for it, therefore I won't
- 23 amend my motion. I respect the consensus of the group.
- 24 COMMITTEE CHAIRMAN BAHADORI: All right, so let
- 25 the motion fly and see how it goes.

1 There's a motion and a second and we have had some

- 2 discussion. All those in favor say aye.
- 3 (Ayes.)
- 4 COMMITTEE CHAIRMAN BAHADORI: Opposition?
- 5 Seeing none the motion passes unanimously.
- 6 COMMITTEE SECRETARY SINGH: Just adding "optional"
- 7 to the push button and adding second --
- 8 COMMITTEE CHAIRMAN BAHADORI: And adding second.
- 9 And putting greater than or equal to 20 feet to number
- 10 three, curbside length. Those three. This is for the
- 11 figure on page 14.
- Do you have any comments on page 15 or 16,
- 13 anybody?
- 14 COMMITTEE MEMBER KNOWLES: I have a comment on
- 15 page 16.
- 16 COMMITTEE CHAIRMAN BAHADORI: Okay, let's --
- before we go to 16. Anybody, comments on page 15?
- 18 Seeing none let's go to page 16. You wanted to
- 19 add "optional" there.
- 20 COMMITTEE VICE CHAIRMAN FISHER: Yes, optional to
- 21 the push buttons on the left diagram and the right diagram.
- 22 And then that we delete footnote four.
- 23 COMMITTEE CHAIRMAN BAHADORI: So there is a motion
- 24 to add "optional" to the two push buttons shown on the
- 25 right, the exclusive right turn lane, the protected right

1 turn lane. Add "optional" on those two islands. And then

- 2 delete footnote number four on page 16.
- 3
  Is there a second for the motion?
- 4 COMMITTEE MEMBER WONG: Second.
- 5 COMMITTEE CHAIRMAN BAHADORI: There is a motion
- 6 and a second. Discussion? Mr. Knowles.
- 7 COMMITTEE MEMBER KNOWLES: Yes. I would suggest
- 8 instead of deleting number four that again we put a period
- 9 after "the required limit line detection" and then just
- 10 delete the rest of the text. That way we are making the
- 11 statement, "typical bicyclist push button locations, a
- 12 bicycle push button may be used to supplement" blah-blah-
- 13 blah. Limit line detection, period.
- 14 COMMITTEE CHAIRMAN BAHADORI: So you are saying
- 15 keep number four but put a period at the end of where it
- 16 says "the required limit line detection."
- 17 COMMITTEE MEMBER KNOWLES: Yes.
- 18 COMMITTEE CHAIRMAN BAHADORI: Second line.
- 19 COMMITTEE MEMBER KNOWLES: And then strike the
- 20 rest of it.
- 21 COMMITTEE CHAIRMAN BAHADORI: And delete the rest
- 22 of it. Is that okay with you, Mr. Fisher?
- 23 COMMITTEE MEMBER KNOWLES: If you want it that
- 24 would be okay with me as long as we then put that same
- 25 language on page 14.

```
1 COMMITTEE CHAIRMAN BAHADORI: Makes sense. Okay,
```

- 2 so make it -- you want to make a motion to do the optional
- 3 on page 14 for the two push buttons in the island. And
- 4 number four, put a period at the end of "limit line
- 5 deletion." Delete the rest of the paragraph. And take the
- 6 same language as footnote number four, add it to page 14.
- 7 COMMITTEE VICE CHAIRMAN FISHER: Yes.
- 8 COMMITTEE CHAIRMAN BAHADORI: Is that your motion?
- 9 COMMITTEE VICE CHAIRMAN FISHER: I amend my
- 10 motion.
- 11 COMMITTEE CHAIRMAN BAHADORI: Is there a second?
- 12 Deborah, Ms. Wong?
- 13 COMMITTEE MEMBER WONG: Yes.
- 14 COMMITTEE CHAIRMAN BAHADORI: There is a motion
- 15 and a second. Discussion?
- 16 Seeing none the motion passes unanimously.
- 17 Okay, so we are done with the detection side of it
- 18 altogether.
- 19 Let's go back to page 13, the issue of the
- 20 guidance, the issue of timing. That's back to philosophy
- 21 again, you know. So that's the issue. No matter what you
- 22 do with it, it's going to start affecting minimum green for
- 23 traffic signals in California. Now we may have our thousand
- 24 suggestions for doing things differently in terms of table
- $\,$  25  $\,$  or whatever. But maybe taking the lead from Mr. Fisher's

1 suggestion for the detection side let's look at the

- 2 philosophy side of it.
- 3 Do you want to even go there? And maybe I should
- 4 ask Caltrans. your interpretation of 1581. Does 1581
- 5 definitely require standards for timing also or is it only
- 6 talking about detection?
- 7 COMMITTEE MEMBER HENLEY: My interpretation, it
- 8 requires timing also.
- 9 COMMITTEE CHAIRMAN BAHADORI: Timing also.
- 10 COMMITTEE MEMBER HENLEY: And the thing is that we
- 11 are talking about safety here essentially. We don't want to
- 12 catch some bicycle out there in the middle of the road and
- 13 getting whacked. I think we need to leave it there. And
- 14 then, let's face it, it's going to create a market for some
- 15 technology to, you know, get rid of the ambiguity of who is
- 16 trying to cross the road but I think that's downstream.
- 17 It's not something we are going to solve today or even next
- 18 week.
- 19 COMMITTEE VICE CHAIRMAN FISHER: Mr. Chairman?
- 20 COMMITTEE CHAIRMAN BAHADORI: Sure.
- 21 COMMITTEE VICE CHAIRMAN FISHER: My interpretation
- 22 of this, although I don't see all the words that say that.
- 23 But my interpretation of this is that the timing has to be
- 24 in place at such time that the detection is in place. How
- 25 can you provide a minimum -- I think you would have to

1 provide this timing when you have got the detection there to

- 2 know you have a bicyclist there. So I would think that
- 3 would be the activation for the timing is putting the
- 4 detection in place.
- 5 And actually the words don't say that, it just
- 6 says, the signal timing shall be this. But I think we need
- 7 to preface it by saying, when limit line detection zone has
- 8 been provided the signal timing blah-blah-blah for all
- 9 phases shall be as per the formula.
- 10 COMMITTEE CHAIRMAN BAHADORI: See, the problem on
- 11 reading the actual text. It says -- on D it says, upon the
- 12 first placement of a traffic actuated signal or replacement
- 13 of the loop detector of a traffic signal. The traffic
- 14 actuated shall to extend feasible blah-blah-blah detect for
- 15 motorcycle and bicycle. So on that one I'm clear.
- But then you go to Item C. It says cities -- I'm
- 17 reading page six and seven on the agenda. It's the actual
- 18 text of 1581. It says cities and counties shall not be
- 19 required to comply with the provisions until the Department
- 20 has adopted this, okay. But then it says "related signal
- 21 timing." I'm not an attorney, you may be right. It might
- 22 be related signal timing to the signals that you modify.
- 23 You can go argue that in a court. But my read is that it
- 24 says "related signal timing." It means that the
- 25 intersections that you modify. But who knows. Some judge

- 1 will decide some day.
- 2 So you can put it in Guidance. You can add the
- 3 language that says that the guidance applies to the
- 4 intersections where the requirements of 1581 have been
- 5 applied. Is that going to address your concerns,
- 6 Mr. Knowles.
- 7 COMMITTEE MEMBER KNOWLES: I'm just thinking about
- 8 all my split phase intersections or the minor street. It
- 9 has a double-whammy. You know, this is only getting worse.
- 10 No. I mean, I think when you're dealing with
- 11 detection, detection has got to deal with gap timing, call
- 12 hold, call hold. But, you know, min green is really not a
- 13 detection function, you know. All-red, yellow is not a
- 14 detection function. I think the legislation really doesn't
- 15 refer to the kinds of things that we are monkeying with here
- 16 and it's a real problem.
- 17 COMMITTEE CHAIRMAN BAHADORI: Okay, let me ask.
- 18 Let me stop this and let me ask Mr. Shanteau back and the
- 19 gentleman from Caltrans.
- MR. GAMBOA: Dave Gamboa.
- 21 COMMITTEE CHAIRMAN BAHADORI: Dave, sorry. Let's
- 22 move this thing around.
- MR. GAMBOA: Yes.
- 24 COMMITTEE CHAIRMAN BAHADORI: And Mr. Shanteau
- 25 also has been very involved.

1 It seems that the committee has consensus to move

- 2 the detection part of it forward. It seems that the timing
- 3 issue may need a little bit more work.
- 4 Do you prefer to hold this one up or do you prefer
- 5 that we do a motion, recommend to Caltrans to adopt the
- 6 detection language, take the guidance section on page 13,
- 7 work with your group, work with whoever else in this
- 8 committee might be interested, and come back at a later
- 9 time. So that at least the detection part is not delayed
- 10 and makes it to the California MUTCD in time?
- 11 MR. GAMBOA: I would say the prevailing thought is
- 12 we would go forward. The language that we have for the
- 13 detection, it reflects what the law is asking for. I know
- 14 that Mr. Knowles has some concerns regarding the practices
- 15 portion of that. There is a, there is a technology lag. We
- 16 don't have smart detectors that can distinguish. And maybe
- 17 it would be incumbent on us to start work in that area.
- 18 COMMITTEE CHAIRMAN BAHADORI: Yes, understood. I
- 19 don't think we are going to have the votes to pass the
- 20 signal timing language part of it. But I don't want to hold
- 21 this, to say to -- let me finish my thought. We may make a
- 22 motion and move it. But before I want us to get their -
- 23 COMMITTEE MEMBER MANSOURIAN: But they are our
- 24 subcommittee.
- 25 COMMITTEE CHAIRMAN BAHADORI: Yes but they are the

1 people who are very much interested in implementing 1581,

- 2 the bicycle advocacy.
- 3 COMMITTEE MEMBER MANSOURIAN: The problem is, how
- 4 can -- I mean, we have already made that decision,
- 5 Mr. Chairman. That's why we put the timing in it.
- 6 COMMITTEE CHAIRMAN BAHADORI: Okay.
- 7 COMMITTEE MEMBER MANSOURIAN: We already had that
- 8 discussion. We said, without timing this is actually
- 9 endangering bicyclists. That we are now picking them up.
- 10 COMMITTEE CHAIRMAN BAHADORI: Okay.
- 11 COMMITTEE MEMBER MANSOURIAN: And then we are not
- 12 going to have any timing for them to safely get across.
- 13 COMMITTEE CHAIRMAN BAHADORI: Okay. Let me hear
- 14 from Mr. Shanteau a couple of words also.
- 15 DR. SHANTEAU: That's correct. That's why -- You
- 16 remember, I didn't show up in Lincoln, your last meeting.
- 17 Because I realized we made a huge mistake in that we did not
- 18 include signal timing in our recommendation for the Lincoln
- 19 meeting, your last meeting. And I realized without signal
- 20 timing we have nothing.
- 21 COMMITTEE CHAIRMAN BAHADORI: Okay, I have heard
- 22 enough, thank you. Okay.
- 23 COMMITTEE MEMBER MANSOURIAN: Mr. Chairman, here
- 24 is my --
- 25 COMMITTEE CHAIRMAN BAHADORI: Okay, so is that a

- 1 motion on the remaining part?
- 2 COMMITTEE MEMBER MANSOURIAN: I don't think we
- 3 have an issue with the timing and here is why. Every
- 4 comment that has been made, which is good comments, talks
- 5 about the difficulties and the congestion that this proposed
- 6 timing will propose -- will create. They're right, there is
- 7 absolutely no debate. The problem is the state legislators
- 8 have passed an Assembly Bill and are telling us to do this.
- 9 So this is one of the issues we have. So not doing it is
- 10 not an option.
- 11 COMMITTEE CHAIRMAN BAHADORI: So you are ready to
- 12 make a motion to adopt the rest of the language?
- 13 COMMITTEE MEMBER MANSOURIAN: Yes, I'm fine. I
- 14 think we have covered with everything. And we might not be
- 15 happy with this particular timing. The subcommittee can
- 16 come back with further recommendations in the future but I
- 17 think we need to move on.
- 18 COMMITTEE CHAIRMAN BAHADORI: Okay. I need a
- 19 final motion that somebody says adopt the language as
- 20 proposed with the amendments as moved through the different
- 21 motions that we had. Is there a motion to that effect?
- 22 COMMITTEE MEMBER MANSOURIAN: John, have we
- 23 covered all your issues yet?
- 24 COMMITTEE VICE CHAIRMAN FISHER: Since we are now
- 25 concentrating on timing, and I believe we do need to move

1 forward with that. I was just going to add a sentence to

- 2 that.
- 3 COMMITTEE MEMBER MANSOURIAN: What page, please.
- 4 COMMITTEE VICE CHAIRMAN FISHER: On page 13. That
- 5 would tie in the requirement for timing with the detection.
- 6 COMMITTEE CHAIRMAN BAHADORI: Okay, what's the
- 7 sentence.
- 8 COMMITTEE VICE CHAIRMAN FISHER: So it would be
- 9 under Guidance and it would precede the words that say
- 10 "signal timing:" And the words would be, "Where limit line
- 11 detection has been provided, signal timing should be
- 12 provided as follows." And then strike the words "signal
- 13 timing" and then proceed with the rest that says --
- 14 COMMITTEE CHAIRMAN BAHADORI: Okay.
- 15 COMMITTEE VICE CHAIRMAN FISHER: "For all phases
- 16 the sum of the minimum" blah-blah-blah.
- 17 COMMITTEE CHAIRMAN BAHADORI: Okay, so it will
- 18 restrict the timing requirement only to the signals that
- 19 have been modified for detection.
- 20 COMMITTEE MEMBER MANSOURIAN: Second.
- 21 COMMITTEE CHAIRMAN BAHADORI: That's your
- 22 suggestion.
- 23 COMMITTEE VICE CHAIRMAN FISHER: Yes.
- 24 COMMITTEE CHAIRMAN BAHADORI: So there is a
- 25 motion. With the adding of that sentence the timing will be

1 restricted only to the intersections that have been modified

- 2 for detection.
- 3 And there is a second. Is there discussion?
- 4 COMMITTEE MEMBER KNOWLES: Yes.
- 5 COMMITTEE CHAIRMAN BAHADORI: Mr. Knowles.
- 6 COMMITTEE MEMBER KNOWLES: I would say you would
- 7 need to be more specific that you are talking about signals
- 8 that have been modified to include the bicycle detection as
- 9 described in the section. Because many signals have limit
- 10 line detection right now that isn't compatible with
- 11 bicycles. And the language as proposed would affect those
- 12 too based on what I heard.
- 13 COMMITTEE CHAIRMAN BAHADORI: You can --
- 14 COMMITTEE MEMBER KNOWLES: Secondly, I would want
- 15 some -- is that the only part of the language proposed right
- 16 now? We are not getting into the specifics of the formula
- 17 or the values that we are talking about? Just that?
- 18 COMMITTEE CHAIRMAN BAHADORI: It's just that
- 19 sentence. Just a clarification.
- 20 COMMITTEE VICE CHAIRMAN FISHER: Right. It says:
- 21 "Where a limit line detection zone has been provided then
- 22 the signal timing shall be provided as follows."
- 23 COMMITTEE MEMBER KNOWLES: See, most of my signals
- 24 have limit line detection zones but we haven't
- 25 implemented --

1 COMMITTEE VICE CHAIRMAN FISHER: No, no, you don't

- 2 a have limit line detection zone as defined here.
- 3 COMMITTEE CHAIRMAN BAHADORI: You can add -- Just
- 4 say, you can say, for intersections that have limit line
- 5 detection as explained in Section 29A of this code.
- 6 COMMITTEE MEMBER KNOWLES: Yes, please. Because
- 7 all of my signals have limit line detection. Not this kind.
- 8 COMMITTEE CHAIRMAN BAHADORI: So that it says it
- 9 is only applying for this section. If you do that it is
- 10 going to take care of his concern. Are you willing to amend
- 11 your motion?
- 12 COMMITTEE VICE CHAIRMAN FISHER: Hold on a second.
- 13 COMMITTEE CHAIRMAN BAHADORI: If you say for the
- 14 intersections that have limit line detection as defined by
- 15 Section 29A of California MUTCD. Which means that only the
- 16 intersections that are modified per this section of the
- 17 Code. Then that restricts it only to those intersections.
- DR. SHANTEAU: Can I suggest?
- 19 COMMITTEE VICE CHAIRMAN FISHER: Yes, I think we
- 20 may need --
- 21 DR. SHANTEAU: Just capitalize limit line
- 22 detection zone in your motion.
- 23 COMMITTEE VICE CHAIRMAN FISHER: Yes.
- 24 COMMITTEE CHAIRMAN BAHADORI: Yes, that solves it
- 25 also. For further clarity you can refer to the section of

- 1 the Code if you want, it's your motion.
- 2 COMMITTEE VICE CHAIRMAN FISHER: Well.
- 3 COMMITTEE CHAIRMAN BAHADORI: I want to finish
- 4 this item in the next few minutes.
- 5 COMMITTEE VICE CHAIRMAN FISHER: Right. And I
- 6 guess the only thing I'm struggling with, Jeff said his
- 7 limit line, limit line detection zone doesn't make reference
- 8 to the referenced bicycle rider.
- 9 COMMITTEE MEMBER KNOWLES: Right. See, I already
- 10 have 29A at all of my signals, you know. This is our basic
- 11 loop layout. But I won't be able to provide bicycle
- 12 detection.
- 13 COMMITTEE VICE CHAIRMAN FISHER: So if we consider
- 14 this, amending my motion to say, where limit line detection
- 15 zone that can detect the referenced bicycle rider has been
- 16 provided, signal timing should be provided as follows. Will
- 17 that do it?
- 18 COMMITTEE MEMBER KNOWLES: Yes.
- 19 COMMITTEE CHAIRMAN BAHADORI: There is a motion.
- 20 Is there a second?
- 21 COMMITTEE MEMBER MANSOURIAN: Second.
- 22 COMMITTEE CHAIRMAN BAHADORI: There is a motion
- 23 and a second. Is there discussion?
- 24 COMMITTEE MEMBER KNOWLES: On that phrase? We are
- 25 just talking about that. Not the whole sentence but that

```
1 phrase, right?
```

- 2 COMMITTEE VICE CHAIRMAN FISHER: Right, just
- 3 adding that.
- 4 COMMITTEE CHAIRMAN BAHADORI: That phrase.
- 5 Okay, all those in favor?
- 6 (Ayes.)
- 7 COMMITTEE CHAIRMAN BAHADORI: Opposition? That
- 8 phrase is added as crafted by Mr. Fisher, as suggested in
- 9 his motion.
- 10 Okay, is there any other discussion on the rest of
- 11 the Code? Or this is ready for -- Because I need a final
- 12 motion to approve the whole thing, including these motions
- 13 that we have been making.
- 14 COMMITTEE MEMBER KNOWLES: I --
- 15 COMMITTEE VICE CHAIRMAN FISHER: I move that we --
- 16 well go ahead, Jeff.
- 17 COMMITTEE MEMBER KNOWLES: If I could ask a
- 18 question of the Committee, though. In what cases have we
- 19 ever used green time as a clearance interval? Even yellow
- 20 is not a clearance interval. It is just advising people
- 21 that the green -- you know, yellow equals green. We use
- 22 this all the time in talking about pedestrian clearance when
- 23 they say the Walk isn't long enough. That even up to and
- 24 through the yellow cyclists can enter the intersection.
- 25 There is a basic flaw that says you can use yellow

- 1 and minimum green to try to clear any vehicle all the way
- 2 through the intersection. It just doesn't work. Legally
- 3 the bicycle can enter on yellow and all he's got is whatever
- 4 is left of the yellow and the all-red clearance. And they
- 5 are not going to clear a wide intersection. But the intent
- 6 is to use green as a clearance interval and it is not.
- 7 You know, for people who operate signals I just
- 8 don't understand the concept of designing minimum green so
- 9 they can clear the full intersection. We just don't do that
- 10 and California law doesn't require it. Any car on a green
- 11 has to yield to any vehicle already in the intersection
- 12 legally.
- 13 COMMITTEE VICE CHAIRMAN FISHER: Well it didn't
- 14 say it's a clearance interval. It just says to clear the
- 15 last conflicting light.
- 16 COMMITTEE MEMBER KNOWLES: But the formula uses
- 17 green as part of the clearance formula. I mean, it is being
- 18 calculated as a start-up and clearance.
- 19 COMMITTEE CHAIRMAN BAHADORI: Yes, it is adding
- 20 green plus yellow plus red clearance. They are treating
- 21 bicycles different than vehicles when it comes to --
- 22 COMMITTEE MEMBER KNOWLES: Right. The legislation
- 23 refers to conformance with professional engineering
- 24 practices. What we would be doing here is not consistent
- 25 with what we do with any other professional practice as it

- 1 reflects vehicles on the roadway.
- 2 COMMITTEE VICE CHAIRMAN FISHER: So what do you
- 3 recommend?
- 4 COMMITTEE MEMBER KNOWLES: It goes back to the
- 5 committee. I want a table that Caltrans really approves
- 6 that they are going to use on Hawthorne Boulevard, the
- 7 really wide state routes.
- 8 COMMITTEE CHAIRMAN BAHADORI: Okay, you know what.
- 9 COMMITTEE MEMBER KNOWLES: I want to see this.
- 10 COMMITTEE CHAIRMAN BAHADORI: I thought we don't,
- 11 I thought we don't have a vote on this but some members felt
- 12 we do. I have a motion and I have a second to approve the
- 13 language as presented with the amendments so far and I have
- 14 a second. Is there a discussion? And you made your point
- 15 and let's -- if anybody else has points. Mr. Babico?
- 16 COMMITTEE MEMBER BABICO: No.
- 17 COMMITTEE CHAIRMAN BAHADORI: Chief? Mr. Henley?
- 18 Anybody? Okay, let's vote on the motion. All those in
- 19 favor say aye.
- 20 (Ayes.)
- 21 COMMITTEE CHAIRMAN BAHADORI: Opposition?
- 22 COMMITTEE MEMBER KNOWLES: No.
- 23 COMMITTEE CHAIRMAN BAHADORI: The motion passes
- 24 one-seven. Seven-to-one, not one-seven. One-seven we fail.
- 25 Motion passes seven-to-one.

1 It's the end of 1581, thank you very much for your

- 2 patience. Thank you. I mentioned it before, Mr. Shanteau,
- 3 Jim, all the members of the subcommittee, the folks from LA,
- 4 from Long Beach back there. There was another city, who was
- 5 there?
- DR. SHANTEAU: San Francisco.
- 7 COMMITTEE CHAIRMAN BAHADORI: San Francisco.
- 8 Since they are not here I am not going to thank them.
- 9 DR. SHANTEAU: The City and County.
- 10 COMMITTEE CHAIRMAN BAHADORI: I am not going to
- 11 thank them, they are not here. No, no, thanking everybody.
- 12 You guys did -- it took about a year to come up with this,
- 13 thank you very much.
- 14 And it is now in Caltrans' ball -- court to issue
- 15 the policy directive. As soon as the policy directive is
- 16 issued 1581 kicks in for the cities and the counties.
- 17 Congratulations.
- Do you want to break for ten minutes or do you
- 19 want to keep going?
- 20 (Affirmative responses.)
- 21 COMMITTEE CHAIRMAN BAHADORI: Okay. But please,
- 22 we have a long agenda. Please be back in ten minutes. Ten
- 23 minutes maximum.
- 24 (Thereupon, a recess was taken off the
- 25 record.)