



# California Traffic Control Devices Committee



## State of California

### DEPARTMENT OF TRANSPORTATION CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE

Minutes of Meeting  
May 5, 2022

#### **ATTENDEES**

##### **Voting Members (Present):**

- David Fleisch, CEAC (Chair)
- Robert Bronkall, CEAC (Vice-Chair)
- Jason Welday, LOCC
- Xavier Maltese, AAA of Northern CA
- Marianne Kim, Automobile Club Southern CA
- Lt. Noah Hawkins, CHP
- Lee Haber, Caltrans
- Mike Sallaberry, Caltrans – Active Transportation
- Bryan Jones, Caltrans - Active Transportation

##### **Voting Members (Absent):**

- Pratyush Bhatia, LOCC

##### **Alternate Members (Present):**

- Zoubir Ouadah, CEAC
- Richard Moorehead, CEAC
- Virendra Patel, LOCC
- Lena Whittaker, AAA of Northern CA
- Denise Dobson, CHP
- Gurinderpal (Johnny) Bhullar, Caltrans
- Tony Powers, Caltrans – Active Transportation

##### **Alternate Members (Absent):**

- Steve Finnegan, Automobile Club Southern CA
- Rock Miller, Caltrans – Active Transportation

##### **Committee Staff:**

- Gurinderpal (Johnny) Bhullar, CTCDC Secretary, Caltrans
- Russell Wenham, Caltrans
- Tariq Baha, Caltrans

**Presenters:**

- Gurinderpal (Johnny) Bhullar, Caltrans
- Sarah Horn, Caltrans
- Russell Wenham, Caltrans
- Jeremy Johnson, San Bernardino County
- Tim Fremaux, City of Los Angeles
- Dain Pankratz, Consultant to L.A. Metro
- Noe Negrete, City of Santa Fe Springs
- Aaron Calderon, Consultant to City of Santa Fe Springs

**Public Speakers:**

- Jay Beeber, Safer Streets L.A. and National Motorists Association
- Sonia Elkes, resident of San Carlos
- Steve Pyburn, U.S. Department of Transportation, Federal Highway Administration (FHWA)
- Zoubir Ouadah, County of San Diego
- Richard Moeur, Executive Secretary, National Committee on Uniform Traffic Control Devices (NCUTCD)
- Tony Powers, Caltrans – Active Transportation
- Josh Clark, San Diego Association of Governments
- David Sforza, Consultant, Assembly Transportation Committee
- Jim Esparza, California Public Utilities Commission (CPUC)
- Craig Rhodes, Traffic Management, Inc.

**ORGANIZATION ITEMS**

**1. Introduction**

Chair Fleisch opened the meeting, held via Webex, at 9:04 a.m. He requested the Committee Members to introduce themselves.

**2. Membership**

Chair Fleisch informed that the position of LOCC Southern California Alternate Member. Appointment by the League of California Cities (LOCC) to represent the league as their southern California cities representative and alternate voting member on the CTCDC is still vacant and pending with LOCC's Administrative Associate in Member Services.

**3. Approval of Minutes of the November 4, 2021, Meeting**

**MOTION:** Mr. Welday moved to approve the November 4, 2021, California Traffic Control Devices Committee Meeting Minutes as reported. Vice-Chair Bronkall seconded. The Motion passed unanimously.

#### 4. Public Comments

Jay Beeber, Safer Streets L.A. and National Motorists Association, gave a general background on the work of the Yellow Timing Subcommittee upon which he had served pre-pandemic. While the original subcommittee had made some general recommendations on traffic signal timing, they had not come up with a recommendation for turning lanes. The subcommittee had been created to look at that issue. They are now getting close to a recommendation for the MUTCD. At the same time, the Institute of Traffic Engineers (ITE) was in the process of finalizing their recommended practice which would include turning lanes as well. The subcommittee had agreed to wait for the ITE's recommendation, which came out in March 2020, but then the pandemic started. The subcommittee now asked to start the discussion again at the next CTCDC meeting. Those interested in the restarted subcommittee can participate.

Sonia Elkes, bike and active transportation activist from San Carlos, shared concerns about sharrows markings. They are not useful or kid-friendly for bike networks. However, they do attempt to create connective bike networks which is important. Ms. Elkes shared two concerns: with the current lines every 250 feet, it is difficult to know where to ride – you may be too close to the cars or the oncoming traffic; and the thermoplastic paint used on sharrows is overly bumpy. Ms. Elkes suggested for sharrows to be more closely connected, and for bike positioning symbols to be used at intersections and in between sharrows with non-thermoplastic paint. She was also a proponent of stop signs having Yield for Bicyclists verbiage included.

Secretary Bhullar relayed that he had received Mr. Beeber's request and the Committee would follow up at the next meeting. Secretary Bhullar had also received Ms. Elkes' email and will be processing it.

#### 5. Updates on Items under Experimentation

Chair Fleisch expressed appreciation for Secretary Bhullar and staff having gone through each individual experiment item, contacting the responsible agencies for status in order to trim down the list.

Secretary Bhullar displayed a spreadsheet that tracks current CTCDC experiments. He gave a summary of the 15 current experiments that date back to 2015:

- 10 are also FHWA experiments.
- Five are not active.
- Four exceed the 2-year timeframe.
- Six are active and less than 2 years old.
- Seven are non-CTCDC FHWA experiments.

Staff is looking at making changes that will address gaps, timelines, reporting requirements and agency and sponsor responsibilities and CTCDC expectations on the CTCDC experimentation process and policy (included in CA MUTCD Section 1A.10 and related Figures showing Flow Chart Process). Staff is drafting a proposal (agenda item) to clarify the current experimentation process, which will be discussed in a future meeting. They also intend to remind the CTCDC item sponsors of their responsibilities, among other actions.

Chair Fleisch noted a challenge they had encountered: In many cases a consultant rather than the agency had brought the experiment forward. It needs to be a sponsoring agency that is involved in the process.

Secretary Bhullar reported that at the next meeting the Committee will be discussing the experiments in detail – both Requests for Closure with conclusions, and CTCDC member input on how to proceed.

## AGENDA ITEMS

### 6. Public Hearing

#### 6a. Consent Items (minor discussion with vote expected)

None

#### 6b. Action Items (Continuing discussion from prior meetings with vote expected)

#### **21-22: Planned editorial changes to Part 3 and Part 9 to incorporate green-colored pavement, bikeway separator post and editorial cleanup**

Russ Wenham, Caltrans, stated that this item has come before the Committee before. In November 2021, the Committee passed a Motion to send the item out for additional review and comment. A Response to Comments table has been prepared and an update is ready for a Motion today.

Mr. Wenham stated that this update fits into three main areas:

- Ensuring that we take what has already been approved via Interim Approvals with FHWA and incorporating them into the CA MUTCD.
- Staff has gone over Part 9, finding editorial cleanup opportunities that bring clarity to the document.
- A new definition is added for “Bikeway Separator Post.”

There is now a differentiation of “Bikeway Separator Posts” for Class IV Bikeways. The flexible posts for Class IV bikeways can be different than the traditional definitions for “Channelizers” and “Delineators.”

For more than a decade, green-colored pavement markings have been allowed and they continue to evolve in terms of definitions. The goal of this item is to bring the MUTCD in alignment with what has already been approved. Cleanup has been done on text and work has been done on figures. Mr. Wenham displayed an example figure of the use of green today.

The term “separated bikeways” is now used consistently all the way through the document.

Mr. Wenham displayed examples of editorial cleanup and font change for consistency.

He requested a Motion from the CTCDC recommending inclusion of the recommended changes in the documents.

#### Committee Questions and Discussion

Mr. Sallaberry asked about Section 3G.101 and compared the first paragraph, line 1, with item G further down; he asked about the “shall not” clause which is a strong statement and an inconsistency with what is seen around the country. He would like to see this rectified. Some may say that perhaps we need experimentation of green behind shared lane markings, but this would be challenging for cities and jurisdictions. We should use our engineering judgment and state that this does not warrant a “shall not” clause.

Mr. Wenham understood the point and stated that this portion was word-for-word out of the federal draft.

Steve Pyburn, FHWA, commented that the Interim Approval and even the draft bike lane markings in the proposed amendment to the MUTCD may not be the final product. His guess was that the green markings denote that bikes are present and that putting them in a shared crosswalk, for example, might give the message to bicyclists that pedestrians are not present.

Mr. Sallaberry clarified that he was referring to the shared lane markings rather than crosswalk markings.

Richard Moeur, NCUTCD, commented that the proposed wording in the CTCDC proposal is identical to that in the Notice of Proposed Amendments. In FHWA docket comment FHWA-2020-0001-5565, the National Committee had recommended that the particular paragraph be modified to delete some wording – the official position of the National Committee is in agreement with Mr. Sallaberry’s comments; they are waiting to see what is in the final rule.

Mr. Sallaberry noted that markings are not mentioned in the Interim Approval (IA), so perhaps they should not be mentioned at all.

Mr. Wenham stated that he would be comfortable with that in the Motion.

#### Public Comment

Tony Powers, Alternate Member, asked if the word “crosswalks” in that section is intended also to prohibit green paint in a bike path crossing as defined in the Vehicle Code Section 231.6. Mr. Pyburn responded that they had an item from the County of Santa Clara that had bike lane markings at a lane drop that were not in the IA. They had asked the MUTCD team to include those in the IA as a figure; Mr. Pyburn felt that they should be included here as well. At the transition to the land drop there was a dashed white line on the left side of where the bikes can go, and the green markings went all the way to the lipped curve. Further, Mr. Pyburn felt that California creates its own confusion regarding channelizers and delineators. The channelizer definition in Part 3 is unique to California, but to the traffic engineering community there is no difference. Last, Mr. Pyburn noted that once the revised MUTCD is published, any changes now made to the CA MUTCD may have to change.

Ms. Elkes reiterated that making the sharrow (an almost useless symbol) bigger does not help in any real way, when the larger issue with shared use lanes is their lack of continuity.

Mr. Ouadah agreed with Mr. Sallaberry: unless we have safety concerns, we should not make it as a standard statement. We need to give the authority to the standard statement in our manuals. If there is research and we know we do not want it, it should be an option. Let the local agency make that decision. Mr. Ouadah also made the point that we need to make the manual smaller so people can use it more. Why are we duplicating bike lane information in two sections (3 and 9)? Third, regarding channelizers and delineators: channelizers are for channeling traffic while delineators are for emphasizing something in the roadway such as an island in the middle of traffic.

#### Committee Questions and Discussion

Mr. Sallaberry noted that cleaning up the channelizers and delineators language should probably be a separate effort.

**MOTION:** Vice-Chair Bronkall moved to approve the recommendation regarding Editorial Clean-Up & Green-Colored Pavement.



**MOTION:** Mr. Sallaberry moved to approve the recommendation with line 3G.101 struck out. Vice-Chair Bronkall seconded. The Motion passed unanimously.

**MOTION:** Vice-Chair Bronkall moved to approve the recommendation regarding Bikeway Separator Posts. Mr. Welday seconded. The Motion passed unanimously.

Chair Fleisch commented that as noted by Mr. Pyburn, when the final FHWA documents come out, we may have to make some adjustments to the language.

### **22-03: Clean California Funding Sign**

Sarah Horn, Caltrans, began by describing the start of the New Clean California Projects to Beautify and Revitalize Public Spaces Across the State in February 2022. It must be completed by June 2024. Ms. Horn displayed the project signs.

#### Public Comment

Mr. Ouadah recommended that the contact phone number and website not be included on the sign, only the funding agency logo.

Mr. Pyburn stated that the FHWA reserves the right to approve the logo for the reasons given by Mr. Ouadah: it may not include information prohibited by other parts of the MUTCD. The FHWA does not oppose the sign.

Ms. Elkes felt that using a poppy and clean air on the logo would inspire people more.

Secretary Bhullar commented that the design of the logo was in the hands of the Governor's Office. He agreed with the comments being made but noted that many other funding signs go against the prohibition on phone numbers and websites in the MUTCD. Perhaps we should address this issue more forcefully.

#### Committee Questions and Discussion

Vice-Chair Bronkall commented that the C47 and C48 series generally depict the funding source, and this is just a different kind of funding that is already there. Possibly new text does not need to be incorporated. Secretary Bhullar responded that the reason we wanted to incorporate this here is that the other signs and their specifications are very specific. SB-1 legislation called for the sign to have the SB-1 logo – we cannot modify it and incorporate other logos – that is why we had to create a separate sign.

**MOTION:** Mr. Haber moved that the Committee recommend inclusion of the California Clean Funding sign as outlined within the Document 22-3. Vice-Chair Bronkall seconded with a Friendly Amendment that the inclusion be subject to the logo's approval by FHWA. The Motion passed unanimously.

**6c. Information Items (New items that may be voted on or brought back as an Action Item in a future meeting)**

**21-16: Assembly Bill (AB-43) on Traffic Safety Signed by Governor 10-08-2021 relating to speed limits**

Secretary Bhullar reported that the CTCDC had asked Caltrans to form a subcommittee to look at AB-43 legislation and its implementation in terms of the initial draft proposal that Caltrans had submitted at the November 4 meeting. The resulting subcommittee, consisting of 16 members, met three times in December and came up with this proposal and amendments. It is now pending due to internal discussions with Caltrans management and the California State Transportation Agency (CalSTA).

The subcommittee has come up with a spreadsheet showing different speeds. Caltrans Legal has been involved and has come up with some interpretations of their own. Caltrans management has not yet made a decision.

The second phase concerns the proposal of the definition of a “safety corridor” and criteria to determine what constitutes land or facilities that generate high concentration use for peds and bikes. That draft has been prepared and will be given to the subcommittee for their review before we formalize it into a CTCDC agenda item.

Mr. Haber recognized Secretary Bhullar’s efforts in leading the subcommittee and thanked everyone for their very helpful input.

Public Comment

Mr. Beeber stated that he had been a member of the Zero Fatalities Taskforce and had been closely involved in discussions with the author on AB-43. During discussions, the author had said that they did not intend for there to be a reduction in speed limit under 10 MPH anywhere below the 85th percentile. The purpose of the language was to remove the restriction on 5 MPH reductions when rounding down, but not to get two or three more reductions on top of the first.

Josh Clark, San Diego Association of Governments, stated that the mobility working group comprised of the 19 member agencies had convened a task force to discuss AB-43 at their regional level. One takeaway from the task force was the desire for greater involvement in the definition of “safety corridors.” Mr. Clark felt that the State Highway Safety Plan’s Bicycle and Pedestrian Challenge Area would also be reviewing the definition of “safety corridor” as well.

Mr. Ouadah suggested that this enormous task could have been split into two phases. He also felt that we need to control the traffic flow within communities to make them a place for people to walk and enjoy.

David Sforza, consultant for the Assembly Transportation Committee and member of the AB-43 subcommittee, stated that the Legislature had respectfully rejected Mr. Beeber’s amendments, which were debated on the Senate floor. He had not been told that there would be a 9 MPH reduction maximum; that would only happen when rounding down from a 4 MPH point.

Mr. Beeber countered that his amendments were not debated on the floor but had been rejected out of hand by the author. He maintained that setting a speed limit much below the way the road was built is dangerous and that this bill lowers speed limits arbitrarily.

## 6d. Request for Word Message Signs Approval

### 22-04: WILDLIFE CROSSING Word Message Warning Sign

Jeremy Johnson, San Bernardino County, stated that the item had been brought before the Committee to address some community concerns. Certain species are not listed among the approved W11 signs in the MUTCD. It is a mountain community frequented by tourists, and they are not aware of the multiple species in the environment. The agency was asking to use a “WILDLIFE CROSSING” sign to consolidate the existing signs into one, and thus minimize the visual effects on the area.

Mr. Johnson showed the three locations for sign placement. He displayed the experiment schedule; the evaluation will take a year with results assembled in September 2023. He showed the experiment work plan which included measures of effectiveness and acceptance among the community.

Secretary Bhullar emphasized that this is a one-message sign for which the federal agencies do not have issue. Also, because the sign is one-message and is in English, it does not have to be an experiment; the Committee can choose to approve the sign for use.

#### Committee Questions and Comments

Mr. Haber asked if the agency had considered that the deer crossing sign could be used as a standardized wildlife warning sign. This is done throughout the country in rural areas. Mr. Haber also asked if they had considered using the single word “WILDLIFE.” Mr. Johnson responded that the deer crossing sign had been sufficient for many years, but recently they have seen a challenge in that a couple of bears had been hit. The agency has received a number of requests for coyotes and horses as well. Another recent concern has been bighorn sheep. The community has been asking for more and more, and the agency seeks to find out if this tool will be welcome.

Mr. Johnson explained that the agency had sought to use the word “CROSSING” to indicate the concept that this was not just a particular location but an entire area. Mr. Haber responded that for him, the single word “WILDLIFE” with “NEXT xx MILES” would give this indication.

Vice-Chair Bronkall felt that the word “CROSSING” indicates that wildlife may be on the road and provides greater notice to motorists to expect that something may be in their path.

#### Public Comment

Mr. Ouadah referred to paragraph 13 of Section 28.06 which indicates that if Caltrans wants an experiment, it is their responsibility and not the local agency’s. This is an example in which the Committee could say they do not want an experiment – they have the authority to do a sign. Mr. Johnson and his local agency should not be responsible for doing this experiment. Mr. Ouadah also felt that in the spirit of the MUTCD wording, the word “CROSSING” is redundant and should not be used.

Chair Fleisch pointed out that this section of the agenda, Word Message Signs Approval, had been started recently because the CTCDC had been getting many requests for word message signs that did not need an experiment but did need approval for wording.

Richard Moer, NCUTCD Executive Secretary, commented that the animal warning issue has been ongoing for decades. NCUTCD has no position on this specific issue other than that which is currently in the MUTCD and proposed in the NPA 11th Edition. In discussions with the Regulatory Warning Signs Technical Committee, the focus is more on animals that pose a significant crash risk. The issue that came up in Arizona is that warning signs of this type



often cover livestock as well. Mr. Moeur agreed with Mr. Ouadah that there can be risk from animals that are alongside the road as well as crossing it, so the “CROSSING” language could send a mixed message. In Arizona, the effect on crashes after installation of these signs was very modest. However, there was significant effect on agency exposure – the warning made it more defensible for the agency. Mr. Moeur suggested the Code W11-101 sign in use in Arizona: “WATCH FOR ANIMALS.”

Ms. Elkes commented that seeing an animal’s face on a sign could be very effective, especially if the animal looked terrified.

#### Committee Questions and Discussion

Mr. Welday asked a procedural question: if the Committee approves the word message on the sign, can the agency move forward, or must they wait for the manual to be updated? Secretary Bhullar answered that once the Motion is passed, it gives the Secretary the direction to update the manual with the new policy, and the agency can move forward with implementation.

Mr. Haber proposed to give the county the opportunity to make a choice between “WILDLIFE,” “WILDLIFE CROSSING,” or “WATCH FOR ANIMALS” – they can present the options to their local public. They could then report back to the Committee with their findings but not have to present a formal Experimentation request. Chair Fleisch noted that with this type of word message sign, the agency is not required to come back.

Mr. Johnson stated that if the Committee will allow the option of choosing among the three signs, the agency can take advantage of that. They are very interested in the community’s reception of the options – the community has been the catalyst for solving this sign blight issue. The agency will be happy to report back with their findings as a professional courtesy.

**MOTION:** Vice-Chair Bronkall motioned to approve the “WILDLIFE” sign, the “WILDLIFE CROSSING” sign, or the “WATCH FOR ANIMALS” sign to allow administrative approval by Caltrans and incorporation into the manual. Mr. Welday seconded. The Motion passed unanimously.

## 6e. Request for Experimentation

### 19-11: Red Colored Transit Only Lanes (Expansion of experiment)

Tim Fremaux, Senior Transportation Engineer at City of Los Angeles Department of Transportation, provided some background. Their initial experiment involved a minimalist approach of seeing whether significant motorist compliance could be achieved with limited red paint marking. Data collection focused on motorist compliance. The data showed very positive results with well over 50% decrease in violations in some cases. They also collaborated with Metro in interviewing operators, who observed better behavior overall with the red marking.

The L.A. Department of Transportation would like to continue this experiment and also expand it to additional corridors, continuing to collect data that they hope will prove their hypothesis that this will continue to help with motorist compliance.

Committee Questions and Discussion

Mr. Haber asked if the agency has procured sufficient materials for all the new areas, or if they risk being caught up in supply chain issues. Mr. Fremaux replied that they have not yet secured the material, but they have the money lined up and the supplier is ready; the given schedule should work. Mr. Haber asked if they were comfortable with the August 23 date for submittal of the final report, or if they would like some flexibility in those dates. Mr. Fremaux replied that the agency would appreciate some flexibility in case some unforeseen delay occurs.

Mr. Sallaberry said that he supported this effort because making the entire transit lane red is extremely costly – possibly \$1 million per lane mile.

**MOTION:** Mr. Haber motioned to approve the city’s Request to Experiment, allowing flexibility to increase the dates by up to six months in each milestone, dependent upon material acquisition shortages. Mr. Sallaberry seconded. The Motion passed unanimously.

**22-01: Using Internally Illuminated Raised Pavement Markers (IIRPMs) to supplement traffic signals**

Dain Pankratz, consultant to L.A. Metro, stated that the requester was looking to continue the existing application on the L.A. Metro Gold Line and use it on an East San Fernando Valley project, which is 6.7 miles long. It runs in the middle of Van Nuys Boulevard and will be protected by raised medians. Concern has arisen about vehicles illegally crossing over the LRT tracks. The project has 11 stations and a maintenance facility and is scheduled for service in 2028. The project was heavily evaluated during the CPUC’s diagnostic approval process.

Regarding the illegal left turn potential, the diagnostic engineers determined that the standard MUTCD signage and red left turn arrow traffic signal applications were not sufficient. They discussed having IIRPMs as they are specified in the MUTCD. These markings have standard red illuminations showing when the train comes as an additional warning for the motorist.

Mr. Pankratz showed a photograph of the installation. The IIRPMs will face the left turn motorist and the cross-traffic motorist. Another unique application is bidirectional IIRPMs that will light up for pedestrians as they walk against a DON’T WALK sign when a train approaches.

The request is for a two-year demonstration period. The project is for IIRPMs at the 34 crossings. The city and the Public Utilities Commission (PUC) are supportive.

Commissioner Questions and Discussion

Chair Fleisch asked about the given demonstration period of 2028-2030. Mr. Pankratz explained that while they go through the PUC approval process, they like to state in the application that this has been approved; the PUC process can take two years. L.A. Metro is trying to get all of its permits in place so that they can tell their contractor to go forward with procuring and designing the IIPRMs into the system.

Chair Fleisch noted that CTCDC experiments are generally two years in length. Secretary Bhullar stated that this is a request for a conceptual approval now. When 2028 comes, a formal Request for Experiment will be submitted.

Mr. Haber asked if there is any brief information that the city or the consultant could provide on the effectiveness of the two existing installations. Also, since this is part of the 2028 Olympic preparation work – a design/build project moving forward – sometimes there are incentive clauses for early completion. If the agency is looking at moving with that, Mr. Haber would like to propose looking at a 24-month experimentation requirement, tied to when these go into operation.

Mr. Pankratz responded that for the East Side Gold Line, L.A. Metro had done a study from 2009-12. They broke down data on the hazards of people making the left turn. Secretary Bhullar stated that a different experiment, CTCDC 17-16, had been conducted by the same agency and was completed with a final report submitted. Success was demonstrated by the use of IIRPMs; however, the agency chose not to use them because there was limited compliance from the public. The agency used the gate rather than the reflectors.

Public Comment

Mr. Ouadah commented that this should be easily requested from Caltrans by the public agency rather than requiring an experiment, delaying the project, and spending a lot of money. It complies with Section 2A-15, Enhancing Traffic Control Devices. The agency is merely taking the RPMs and enhancing them with lighting; they are not deviating from anything in the spirit of the MUTCD.

Mr. Pyburn reminded the applicant that approval by FHWA to change the experiment is also required.

Secretary Bhullar commented regarding the need for the experiment. Section 4L pertains to crosswalk markings, but this is a different application: it is for the rail track and trying to warn the motorist against getting on the tracks, which belongs in Part 8. CPUC is the owner of Part 8 and Secretary Bhullar requested that agency to weigh in.

Jim Esparza, CPUC, stated that they had discussed this project proposal. Since it is being used for an intersection, and it is an application that is for rail safety purposes, the CPUC is in agreement with the proposal.

Committee Questions and Discussion

**MOTION:** Vice-Chair Bronkall moved that the Committee conceptually approve the experiment and request that the applicant revisit the Committee when they are ready to proceed. Mr. Haber seconded.

Mr. Welday asked if not having the full experiment approval would impede the applicant's ability to get their permitting. Mr. Pankratz replied that being able to note in their application process that CTCDC has provided conceptual approval should enable them to move forward with the contract and installation.

**VOTE:** The Motion passed unanimously.

**22-02: Using left turn gates to supplement traffic signals**

Mr. Pankratz stated that this was a left turn gate lane application for the same corridor. As with the IIRPMs, the gates are positioned at every crossing location on the alignment. Because of restraints of the roadway, the agency cannot apply left turn gates at all the crossings; further, there are not enough turns at every crossing. About half the crossings will

have this type of gate. It is different from the standard crossing gate, as it does not have flashing lights and bells – it is more like a parking garage gate. Service is scheduled for 2028, the same as the IIRPMs.

Left turn accidents are the most frequent accidents on the light rail trains on Metro's alignment. Left turn gates are effective barriers in preventing illegal left turns in front of trains.

Mr. Pankratz showed photographs of left turn gate installations. He then showed engineering diagrams.

The request was for a two-year demonstration to begin in 2028. If any issues arise, the agency would deactivate the gate and let CTCDC know.

#### Committee Questions and Discussion

Vice-Chair Bronkall asked if this gate installation is already covered by Section 2B.68. Mr. Pankratz answered that while documentation from the city had interpretations showing that it may be, this diagnostic group felt that it was better to get CTCDC approval just to make sure.

Mr. Haber noted that an interpretation question is on the table – how soon does the agency need a definitive answer on this? Mr. Pankratz answered that a conditional approval would be appreciated. He could follow up at the next meeting to answer any questions.

Mr. Haber asked if the gates will also be at locations that have the internally illuminated pavement markers. Mr. Pankratz confirmed: those markers will be at every crossing on this alignment. The left turn gates will be installed at about half of the locations because of room.

#### Public Comment

Mr. Beeber stated that his agency was in favor of anything that is going to help with vehicle/train conflicts in terms of engineering. He pointed out that in many places there is a problem with left turn yellow timing; these installations may help with that issue. Mr. Beeber hoped that the agency and consultants would look at the yellow light timing for these left turn lanes. He also mentioned that they were looking at using this application for restrictions on right turn lanes along the Canoga Avenue bus line.

Mr. Pyburn stated that FHWA had received this Request for Experiment and wanted to make known their initial thoughts. There is an interpretation issue regarding the requirements of the gate – whether it is a signal control or a crossing control; additional discussion would be necessary. They also thought that warning lights would be necessary, and the stripes would have to conform to the crossing design (red vertical). Interpretation of the requirements and application of this control device is ongoing at FHWA Headquarters.

Mr. Esparza stated that for the project on the 18th and the onramp on State Highway 10 mentioned by Mr. Pankratz, the CPUC had approved the application. They had not considered the parking gate-type mechanism for the left turn lane as part of the railroad crossing warning devices because it is not activated upon the train warning – it is activated with the signal operation. Since the project on the 18<sup>th</sup> and State Highway 10 had received a favorable response and no left turn collisions have occurred in the several years since implementation, CPUC was supportive of this project.

**MOTION:** Vice-Chair Bronkall motioned for Caltrans to review the request to verify that an experiment is necessary and that it does not already qualify for installation underneath the manual; and if not, then to approve the experiment as

proposed. [The approval will be conceptual.] Mr. Haber seconded. The Motion passed unanimously.

## 22-05: Improved Temporary Traffic Control Delineation

Noe Negrete, Santa Fe Springs Director of Public Works, introduced the item. They were proposing a simple approach.

Aaron Calderon, consultant to the City of Santa Fe Springs, stated their goal as specified in MUTCD Section 6B-01: the basic safety principles governing the design of permanent roadways and roadsides should also govern the design of temporary traffic control zones. The agency has taken a typical application from the MUTCD in which any left shoulder or two-way left turn is yellow, and any right shoulder or lane line is white. Currently the available existing devices for temporary traffic work zones are orange cones with a white reflective band. The agency is proposing these changes:

- Any delineator for a temporary traffic control work zone coming off a left yellow shoulder, double yellow, or yellow skip line, would be an orange cone with yellow reflective banding.
- Any cone coming off a white lane line or a white right shoulder would be the current traffic cone: orange with white reflective banding.
- Any closed-off lane, closed shoulder, or potential closed ramp would be an orange cone with red reflective banding.

Mr. Calderon showed the current options from the MUTCD and the new devices that would be used within a closed facility.

The agency was asking for an opportunity to run a daytime and a nighttime operation to check for reflectivity of white versus yellow and red.

### Committee Questions and Discussion

Mr. Haber had seen applications where the contractor would insert small arrows on top of cones or barrels to indicate which side to stay on. He was concerned about adding requirements to contractors to stock the material and being able to have flexibility to move devices around in the field short-term. Also, there may be motorist confusion regarding all the colors at temporary locations.

Mr. Calderon responded that the agency also uses cone-mounted signs during set-ups because it is an available tool. However, the sign shields are fairly limited regarding different sizes. As a motorist, the actual recognition of that sign is fairly limited. Banding on the cone would be more recognizable and understandable.

Secretary Bhullar noted that the small signs are allowed on the cones for low-speed configurations, and they are supplemental to the actual signs.

### Public Comments

Craig Rhodes, traffic engineer at Traffic Management Inc., commented that simplifying the MUTCD has been discussed. He also asked how autonomous vehicles would deal with the different colors. Having the three different colors sounds great, but in the real-world accidents happen because traffic control is improperly set up. Mr. Rhodes expressed concern with the lack of uniformity and the lack of ability to use it. 3M Corp. can supply the reflectivity data of what these items are going to be at night.

Mr. Ouadah commented that this proposal is beyond an experiment; there is research behind use of white and orange on chevrons and cones.

Mr. Moeur commented that in 2014, there was a group led by the National Committee that came up with a strategic plan for the MUTCD. They did recommend reducing the size of the manual. Currently, while waiting for the final rule on the 11th Edition, all the technical committees and joint task forces are looking at the size and complexity of the 12th Edition. The National Committee has no action on this item yet. One of the questions that may be raised early in the discussion is contrast ratio of colors. Mr. Moeur will forward this proposal to the Temporary Traffic Control Chair and Incoming Chair for their information.

Mr. Pyburn reminded the applicant that a Request for Experiment approved by FHWA is required prior to implementing this action. Based on other recent experiments, a well-defined set of performance measures and a well-structured data collection plan will probably be needed for FHWA approval.

Committee Questions and Discussion

Secretary Bhullar expressed concern about getting data on the retro-reflectivity of replacing white with yellow and red. In addition, what is the problem that is being solved with this? That information should be supplied for the submittal to the FHWA. Secretary Bhullar asked about the potential for wrong use by the worker who may quickly grab the other color. Also, the manual denotes the use of fluorescent pink for emergencies.

Vice-Chair Bronkall also expressed concern about the additional requirement to have multiple types of cones and devices when setting up temporary traffic control for small work projects. Rural project sites are often hours from away from supply locations. If it appears that a site may be confusing to the public, adding a flagger at each end would give motorists the guidance they need to navigate successfully through the work zone.

Mr. Calderon stated that their approach had been to improve a safety issue. Today's feedback had been valuable. If they decide to continue to move forward, they have some questions to address. They are going to reevaluate the proposal.

Chair Fleisch agreed with the concerns expressed. When drivers try to navigate a work zone, complexities are already present; adding color and variety may go against the problem you are trying to fix.

**7. Next Meeting**

Chair Fleisch stated that the next meeting will be held on August 4, 2022.

**8. Adjourn**

**MOTION:** Mr. Wedlay moved to adjourn. Mr. Jones seconded. There were none opposed.

The meeting adjourned at 12:27 p.m.