

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE

Minutes of Meeting

Thursday, May 7, 2026

Virtual meeting hosted on Microsoft Teams

ATTENDEES

Voting Members Present (6 Total):

- Robert Bronkall, County Engineers Association of California (CEAC)Humboldt County Public Works (Chair)
- Jason Welday, League of California Cities (LOCC), City of Rancho Cucamonga (Vice Chair)
- Mahmoud Zahriya, American Automobile Association of Northern California, Nevada & Utah (AAA-N)
- Devang Vora, Caltrans Headquarters (HQ)
- Virendra Patel, LOCC, City of Concord
- Wei Zhu, CEAC, Orange County Public Works

Voting Members Absent (4 Total):

- Mike Sallaberry, Caltrans Active Transportation (CAT) San Francisco Municipal Transportation Agency
- Lt. Kirk Bailor, California Highway Patrol (CHP)
- Marianne Kim, Automobile Club of Southern California (AAA-S)
- Bryan Jones, (CAT), City of Menifee

Alternate Members Present (4 Total):

- Tony Powers, CAT, Dokken Engineering
- Mike Malyy, Caltrans HQ
- Rock Miller, CAT, Rock E. Miller & Associates
- Julian Garcia, CEAC, Los Angeles County Public Works

Alternate Members Absent (5 Total):

- Tim Chang, AAA-S
- Michelle Donati, AAA-N

- Andrew Maximous, LOCC, City of Culver City
- Richard Moorehead, CEAC, Placer County
- Melainie Boyack, CHP
- LOCC (Northern CA member selection pending)

Committee Staff:

- Timothy Kong, Caltrans HQ, CTCDC Secretary
- Jaime Sanchez, Caltrans HQ, CTCDC Alternate Secretary
- Ejaz Shaikh, Caltrans HQ
- Mario Lozano-Cisneros, Caltrans HQ

Presenters:

- Timothy Kong, Caltrans HQ, CTCDC Secretary
- Jerry Champa, Caltrans HQ
- Jesse Solorio, Caltrans District 2
- Kathryn Kleinschmidt, Caltrans District 5

Public Speakers:

None

ORGANIZATION ITEMS

1. Introduction

Chair Bronkall opened the meeting at 9:00 a.m. The CTCDC Voting Members introduced themselves followed by Alternate Members.

2. Membership

- Virendra Patel has replaced Pratyush Bhatia as the League of California Cities (LOCC) Northern CA Voting Member. Alternate member selection pending.
- Devang Vora has replaced Shaila Chowdhury as the Caltrans Voting Member
- Wei Zhu has replaced Robert Scharf as the County Engineers Association of California (CEAC) Southern CA Voting Member
- Julian Garcia has replaced Wei Zhu as the CEAC Southern CA Alternate Member

3. Approval of Previous Meetings' Minutes

MOTION: Vice Chair Welday made a motion to approve November 6, 2025, November 17, 2025, and January 14, 2026, CTCDC Meeting Minutes. Mr. Patel seconded the motion. The motion passed unanimously, with Mr. Miller and Mr. Power abstaining for the Meeting Minutes.

4. Public Comments

Johnny Bhullar, a retired Caltrans member, is now back as a volunteer and had a comment regarding the FHWA's release of Revision 1 of the National MUTCD, reminding the committee that it should be a running agenda item until incorporated into the California MUTCD.

5. Active Experiments

Mr. Kong provided an update on ongoing active experiments. For the experiment with part time travel on left shoulder (20-13), there has been a construction contractor awarded and they are starting early construction activities. For the LA28 experiment (25-15), the Caltrans District 7 LA 28 team and Caltrans HQ has been making progress on various items and working with FHWA to finalize the LA28 Supplement to the CA MUTCD 2026.

AGENDA ITEMS

6. Public Hearing

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

None

6b. Action Items (Continuing or new items with vote expected)

26-03: Supplemental Documents

Comments:

- Mr. Kong: When reviewing the CA MUTCD 2026 we came across some wording in a California text that could pose some issues. There are a couple of standards that include the phrase "If there is a discrepancy between supplemental documents and the California MUTCD, the California MUTCD shall govern. When looking at these statements, discrepancy could mean any kind of difference . Sometimes our standard plans specs have higher standards and that is allowed. We have been working with FHWA and came up with what we think is a good solution,

where we reiterate that the CA MUTCD governs but the specifications requirements for traffic control devices in the supplemental documents, those can be more stringent and higher than the CA MUTCD.

- Mr. Bhullar: We have been using the word "discrepancy" since our very first adoption back in 2004. The issues that the word causes have come to our attention as we started exploring the supplemental documents topic and its inclusion for the first time in the Code of Federal Regulations with the National MUTCD 2023. Before that, it had been discussed with the National MUTCD team in general terms. Interpretations were made, but this time around, the Code of Federal Regulation is very clear. It states that the intent of the supplemental documents is not to negate anything from the National MUTCD. The question comes even if we have higher standard plan a consultant or a contractor working on Caltrans projects could say this is a discrepancy and as a result I'm going to default to California MUTCD which will be a lower standard, which is fine for California but not for Caltrans. They could use that argument and not use our standard plans.
- Mr. Miller: Paragraph 4 ends with "shall not contravene or negate". I recommend those words also be included in paragraph 5 to clarify what must be ignored and what must be followed in terms of helpful suggestions.
- Mr. Powers: The statement in paragraph 5 and the "may" statement in paragraph 6 contradicts it. So, it says the CA MUTCD shall govern but then it says, as an option you may be use a more stringent supplement document. A "may" statement can't overrule a "shall" statement. My suggestion would be to combine paragraphs 5 and 6 with "shall govern" unless the specifications and requirements in the supplemental documents are more stringent, higher standard than the CA MUTCD.
- Mr. Bhullar: We added the word at the end of the sentence on paragraph 4. It starts out with in accordance with the 23 CFR but if we were to repeat paragraph 4 and take out the word in accordance with the 23 CFR but keep the rest of it. If we keep that and at the end, we said "shall not contravene or not negate standard or guidance statements in the CA MUTCD". So, paragraph 4 will be repeated as paragraph 5 with the deletion of "in accordance with 23 CFR" reference and then at the end, instead of National MUTCD we call it CA MUTCD, will that work better? That will address what we are trying to say and we don't need paragraph 5 and 6 like we are proposing.

- Mr. Powers: I like Mr. Bhullar's idea but I do have a question. I'm not sure I know the definition of contravening exactly as used here. Can someone make sure that doesn't conflict with the "may" statement.
- Mr. Pyburn: Any suggestions by the CTCDC will go through our stringent scrutiny and we will work with Caltrans to develop the final language to meet the various concerns that are being raised. We have concerns that this phrase is in here at all, that a standard specification, standard plan, policy can supersede the California MUTCD. We are trying to be flexible but since we have been at this for over 2 years now it may not be possible to meet everybody's needs and wants, and be concise and clear. We will continue to work with Caltrans to work out that language that meets all these requirements.
- Mr. Welday: I think the intent here is to allow for something that doesn't contradict contravene, whatever word you want to use, the National MUTCD or CA MUTCD and I think there is probably some simple language that could be developed. We do this all the time with specifications related to precedence of documents. My recommendation is this seems like a wordsmithing thing, so I would propose a motion that the committee recommend that Caltrans and FHWA develop language and agree on language that would meet that intent of allowing for stricter, more stringent requirements so long as they don't contradict the National or the State MUTCD.
- Mr. Richard Moeur: I noticed that paragraph 4 only deals with state-level documentation. I don't know what development thereof is of regional, county or local for traffic control devices specifications, manuals and all that. I didn't know if CTCDC wanted to include those in the scope or is willing to do so.
- Mr. Bhullar: The reason why we were only addressing the state supplemental documents, because the language in the Code of Federal Regulations is clearly directed only at the state, not at the local agencies or other agencies. Even though it might be implied but at least the language in the Code of Federal Regulations is very specific to state-issued supplemental documents
- Mr. Pyburn: To be clear, federal highways puts this burden on the state. We don't know if we see eye to eye with Caltrans on this, but the state is responsible for implementing the rules for the whole state and what applies in this document for standards, specifications, whatever, applies to all local agencies. It is not the intent of federal highways to allow the state to have some special privileges that the locals don't get. The manual applies equally to all.

- Mr. Bhullar: I'm not sure if someone might not have cued in to the details or implications of what Steve Pyburn was describing but just to explain a little bit to everyone. Caltrans and FHWA have some disagreements in terms of Caltrans having the authority to issue the manual which is in the California Vehicle Code. But in terms of enforcing or implementation as far as our attorneys, we have been discussing with them, so this is something that I think we might be continuing to work on. But Caltrans, we have been informed, lacks the authority to enforce traffic control device policies and their implementation on local agencies. Caltrans lacks that authority. So that's why even though the intent of FHWA is, since they are reviewing the state MUTCDs. So that's the reason why they have that in the federal regulations, the state supplements or the state documents. However, even though we have the authority to have the manual to be issued by law, which is applicable to local agencies in California, but Caltrans does not have the authority to enforce it, just issue it. So that's where some of the work between FHWA and Caltrans continues in terms of enforcing, does Caltrans have that authority? Or do we just provide that support through the Division of Local Assistance to local agencies more as a support and encouragement rather than as an enforcement.
- Richard Moeur: Yes, I fully agree with everything that Johnny and Steve Pyburn have said regarding the way that Federal Highway Administration has approached the MUTCD and the way the FHWA administers the MUTCD. And I should have clarified when I first started speaking that this is just a comment based on what I'm seeing here myself, it's not an official position or statement on behalf of NCUTCD, the organization I work for. The reason I brought it up is this has come up in other state supplements in that the CA MUTCD applies to all levels of roadways. Some states have rather substantially developed local guidelines. FHWA has been very clear - they expect the state to be the primary agency encouraging MUTCD compliance at all levels of roadways all over within their state. Given that the CA MUTCD seems to address that, that's the reason I brought the question is, not necessarily enforcement issue, not necessarily a CFR issue, but just do you want to put that in there just to make it clear if going in that it also apply to non-state standards, just for administrative purposes, for statewide use.

MOTION: Mr. Welday made a motion that the committee recommends Caltrans and FHWA develop language and agree on language that would beat that intent of allowing for stricter, more stringent requirements as long as they don't contradict the National or the CA MUTCD. Mr. Miller seconded the motion. The Motion passed unanimously.

6c. Informational Items (Continuing or new items that may be brought back as an Action Item in a future meeting)

26-06: Roundabouts ISOAP

Comments

- Mr. Champa: I'm here today with some of my colleagues to give you a presentation on a revision concept proposal. It's not a new proposal it was presented and discussed several years ago. The team that has been supporting the implementation of Intersection Safety and Operations Assessment Process Guide (ISOAP) and providing technical assistance for roundabout applications in design. This team is proposing an SHSP or Strategic Highway Safety Plan team for intersections. A fairly modern roundabout shown on the left (Image in a power point presentation) is the focus of what we will be talking about. The single lane and even other small what are being called affordable roundabout designs. And of course ISOAP, meaning the "Intersection Safety and Operation Assessment Process Guide" which again was part of the recent update of the CA MUTCD, at least the reference to it, and I'll get to the background on this in just a moment. What I failed to mention was really and again the introduction here is to really expand the role of roundabouts because they are a safe system intersection and traffic control strategy. And also to expand the role of ISOAP as a safe system approach to the selection of identifying and selecting the optimal intersection alternative or solution. This is a general broad statement. I am going to talk about why, in terms of background. I am not going to give you all of the latest. We are working through in a strategic Highway Safety Plan update process and all the data. There is a lot of data to consider, but what we know nationally and especially statewide; when I say that I mean both the state highway system and all local streets and of course intersections. There has been a significant increase in intersection related fatal and serious injury crashes more so than any other of what are called high priority area challenge areas where there is a focus on investment and policy changes. Intersections have been increasing at a significant rate and actually went up, the numbers went up again last year. Even though from 2022 to 2023 just about everything else dropped at 8% and average but intersections continue to increase. And of course what we are focused on here is really purpose and need for this change or the recommended is to basically, we have a modern, well proven safe system and mobility solution, for all road users that's largely under considered and underutilized. Now it's a broad statement but I will mention that in the role

of implementing ISOAP and assisting with roundabout there's been a lot of effort in the last year and a half implementing the ISOAP policy update. We have been meeting with Caltrans districts, and a lot of times either local agencies have been invited, consultants and there have been webinars on the topic. And so one of the findings is that we have been hearing that there is still some doubt or skepticism or at least questions about the role of roundabouts. But what we knew and these, three results are not mixed. This has been well proven for a number of years is that they do eliminate severe crossing conflicts. They reduce speed, which is even more important concept it seems these days, not just at intersections but along corridors. And again generally understood based on a lot of studies, they prevent 90% of the fatalities that occur or are related to intersections. So why are they being referred to as under considered and what we did during this implementation phase over the last year and a half is learn, talking to our practitioners throughout the state. And again the list of challenges facing practitioners, there are many. Just some of them are the size of roundabouts, the cost has dramatically increased. Public reaction is always a concern as well as number of concerns related to the level of experience throughout the state. If you don't do roundabouts on a regular basis, it's hard to really become skilled and really experienced practitioner. The background, again leading up to this recommendation just briefly, I think most of you know intersection control evaluation. This has been a federal initiative. FHWA has been recommending encouraging all states to adopt this. Again, Caltrans did it in 2013 through the Strategic Safety Plan Process and of course included this in the CA MUTCD back then. Around 2017, this previous proposal, basically at that point it was to expand the standard or the requirement that to use Intersection Control Evaluation (ICE) or to basically recommend its use for all intersections, not just for the state highway intersections. Again, 2024 ISOAP being adopted, basically the update replacement of ICE with the emphasis on it being a safe system or process, and that has been one of the biggest changes in how decisions are made. How it considers safe system principles and performance objectives in making decisions or selecting among alternatives. As I mentioned, all this was identified and has been discussed thoroughly through the implementation of our technical assistance team and that's what Phil and John, their role as well. What we have learned are these key challenges, and now, we are in the midst of the, every four or five years, the Strategic Highway Safety Plan for the entire state is updated, and what is being done now is that we, for the 16 challenge areas, are developing a number of action proposals to address the

challenges. What is it that prevents or makes it difficult to implement roundabouts in particular, in light of all those benefits. It seems that we want to remove as many of the challenges as possible and so this process will continue on through the rest of the year. We really wanted to share this again, this effort with you before we begin to sit down and develop specific proposals of language changes for content changes in the CA MUTCD. One thing I do want to mention also in terms of background is the recent emergence, really a game changer, just like when roundabouts were first introduced. Giving a new solution and a safety centric one for intersection problems is the emergence of small and modular what are being referred to often affordable roundabout designs. And this is what now makes it very much easier to not only implement roundabouts where they are needed, but also to consider systemic programs and systemic implementation ideas such as roundabout corridors, which are able to reduce, as we said most or prevent most fatal serious injuries crashes but also reduce speed, either through the intersections and corridors, along a corridor, reducing speed and speed limits because they do bring speeds down substantially. Nothing else does this quite as well but again other geometric infrastructure is what the focus has been on, how to get speeds regulated without enforcement. The idea has been in here since 2013 within Part 4 and under the section that talks about the signal need studies. This basically features the warrant studies and of course we inserted back in 2013 the Caltrans or State Highway requirements to use ICE to always consider roundabouts as an alternative when new intersections are being proposed or really when traffic signal proposals are made and so this is a trigger to conduct an ICE assessment or study, It's nothing more than an alternative analysis with an emphasis on performance studies. Predictive performance studies so that the alternatives can be compared to determine benefits and impacts to both mobility and safety and other things. What we have now is of course updating the language, instead of ICE it's for Stage Highways practitioners shall use and agencies shall use the ISOAP. Again it's mentioned that it is a performance based analysis which supports the principles of the safe system approach and again the "may" is the language for local streets and highways. The obvious concept proposal to consider starting point is to consider the using or pursuing roundabouts and the use of ISOAP for all intersections instead of just for state highway intersections, making it a requirement. This is really expanding the role we believe can expand the role of roundabouts lead to more installations, which is essentially a safe system approach performance goal in order to improve performance.

We need to emphasize not just for safety but for mobility as well. This is a rare traffic control strategy that is able to improve both mobility and safety instead of having to always balance that. That's kind of the background on what we do have today again also from the MUTCD is the alternatives to traffic signals and the way roundabouts are presented today. They are presented as one of 17 different alternatives, I believe to traffic signals and this is what we believe is part of one of the challenges is that roundabouts have basically, there is really not a directive or a policy in the MUTCD, in the Highway Design Manual, although that has been updated substantially to include roundabouts and is still being updated. We are looking at all programs, all manuals to see where we need to increase the policy or change the policy and include guidance to address the concerns. What I think in general is that there is still a large segment of agencies or significant of agencies and practitioners who are underinformed. We think the key source of course for intersection control strategies is the MUTCD. There would be in this case, the proposal is to basically identify, recognize that there are four basic intersection traffic control strategies and not devices but the strategies that use traffic control devices. So these are of course going to be signals, always stop, minor road stop and yield and speed controlled circular intersections. Roundabouts, basically requiring yield control on all entries and then also accompanied by speed control. I think that's where this is kind of a summary or shows what I just kind of focused on. The key here is that during the rest of this year is when we don't need we are not proposing to implement a change to the CA MUTCD, but the adoption of strategies in the SHSP will be by the end of the year. We want to eliminate underinformed decisions or what some refer to as the pre selection of traffic signals the automatic go to and that's really more driven by public opinion or public understanding of what can be done at intersections. As I mentioned, basically objective of establishing four alternatives instead of having – four strategies, for controlling intersections. Instead of merely mentioning that roundabouts are an alternative to traffic signals. Expanding the role of ISOAP is the other way to make sure that roundabouts are objectively considered for agencies and sponsors that don't yet have experience and this is the best way to inform them of what the return on the investment will be for all the alternatives. I want to ask Phil Rust if there is anything that he would like to add that I missed or that he would like to expand on

- Mr. Rust: City of San Diego stands behind this 100% This will be a significant help for us.

Mr. Champa: Also John Liu, I didn't say a lot about ISOAP, how it works. Again, that is not the point of today's presentation but I also like to ask John – he led the effort to update ICE and establish ISOAP as our current. Basically, the study requirements for any project that proposes intersections, revisions, not just proposing signals, but new intersections and reconstruction.

- Mr. Liu: ISOAP is not meant to be a burdensome process. It's scalable. And when the item was brought to the CTCDC about 10 years ago we wanted the local agencies to use an ICE type process to evaluate the optimal intersection solution. There is a lot of concern about, well local agencies they may not have the resources and didn't want to create additional burdens, so it was left more like a suggestion rather than a requirement in the MUTCD. ISOAP has been out for a couple of years and we are going to be working on an update beginning this summer. It is also part of our strategy for the SHSP to have that update and we are interested in making a very user-friendly for local agencies to use this process. The update will provide additional guidance, tools and just make it very easy for the local agency to use this process. Again, it is not meant to be a burden. It is meant to have the best solution for those safety outcomes, which is our primary concern. As Jerri mentioned, roundabouts do have a whole lot of mobility benefits and all these things are evaluated as part of ISOAP.
- Mr. Champa: I think we need to emphasize that this isn't just about proposing that we adopt and require and create a standard that this has to be done for all proposals. I think what we are talking about is two things: increasing the flexibility and also talking about where it really should be applied. Not all locations are going to be considered high risk. In a low speed urban environment, engineering judgment may be initially enough to make these decisions, once the signal warrants are performed and we know that roundabouts do not require warrants. There are no warrants and it's because they really can't have a negative safety impact; only can improve intersection performance. We can't share an example of how roundabouts are being used for both safety and for speed control. In particular, what we want to stress is the fact that we believe that there can be now substantially more proposals at low cost investments.. The city of San Diego right now has a vision zero program, an intersection vision zero program which essentially identifies roundabouts as the key solution or primary solution for locations where small roundabouts, even roundabouts with modular construction components can be

implemented for a fraction of the cost and within days instead of months. So this is where the idea of quick build but quick build permanent installations for very low cost and therefore really high returns on investment. And you know as ISOAP the beauty is that it considers the benefits for both mobility and safety and whatever else is of concern or of interest in a community or city or region.

- Mr. Powers: I have been a big fan of roundabouts for quite some time. I do have a question for you on the safety benefits for pedestrians and cyclists: do those safety benefits extend equally to multi lane roundabouts and to turbo roundabouts and roundabouts with free turns and things like that?

Mr. Champa: The normal response for this is that we can talk about roundabout performance and studies do show nearly the same type of reduction of fatal and serious injury crashes. For instance, multi lane roundabouts and those numbers do include all road users. There is not a specific study, let say a multi lane for just bicyclist, but the before and after studies have always included all crashes. We know that in general that we are getting it across the board, the reduction in speed is the key reason. But I think what is most important, what ICE and now ISOAP has taught us, it's not just about how the roundabout performs well, how the alternative perform and what we know is that for large intersections, higher volume, higher speed, traffic signals will always have problems with red light running, mistakes by drivers, mistakes by pedestrians and this has been increasing even more at a higher rate; the vulnerable road users are being killed and seriously injured at a higher rate than motor vehicle occupants. So, we know that this is where, the process is to look at how each alternative will perform in terms of safety. But I will just turn it over now to Phil Rust, in particular to answer this question because I think your program Phil is designed specifically to address the majority of the fatal in the city of San Diego and those are vulnerable road users correct?

- Mr. Rust: Yes, over half of our fatal crashes involve pedestrians and when we looked into it, we essentially found traffic signals are a 10X increase in the risk of fatal crashes compared to unsignalized intersections within the City of San Diego. Also, looking nationally, we have over 11,000 roundabouts in the US now, many multi lane roundabouts and so far, only 10 reported fatal crashes involving pedestrians or cyclists. So it's very promising.
- Mr. Champa: Last caveat is that we know that the performance evaluation studies before, after and these crash reduction factors that are always cited, we have to also take into account especially at Caltrans

that a lot of the initial designs that are being evaluated were not designed in accordance with a uniform national guidance and by experienced practitioners. So, we know that we are still able to improve the design and therefore the safety and mobility performance of roundabouts. So that's another thing that we often fail to recognize is that the current designs are getting better and safer and so we are learning from the mistakes as well. The FHWA has been great about researching and documenting and improving the design practices and guidance. Depending on the context, more features, more speed control. The features and especially now that we know that the smaller roundabouts, again, you get an incrementally lower speed, the use of raised crosswalks is one of the other options especially if it's a multi lane roundabout. We have a lot of tools, and we are of course wanting to expand the role. Part of our initiative here for intersection safety is to basically provide more guidance, more training, modernize it, update it and make sure that we are providing technical assistance for those that don't have a lot of experience. We have been doing that since ISOAP was implemented.

- Mr. Miller: I just want to say a few things, when I survey the world around me, I see a lot of existing traffic signals that probably should have been roundabouts. It's hard to justify removal of the investment that's already made, and I really think about this when a fatal accident happens at an intersection near me and I know the collision history with those... Probably pretty good until the fatal accident happened. If you are doing a collision reduction only for the past three to five years, the odds are, you are never going to have a fatal in there most of the time. And yet, if you did a 10- or 20-year analysis, the odds are you would have a fatal in there. I don't know how to handle this, and I don't know how ISOAP has evolved since ICE because I don't do these evaluations anymore. But the potential of a really bad accident often isn't considered in a short term history improvement. I wanted to just throw out the idea if you can consider that even if a fatal accident didn't happen in the last five years, it could have happen in the last 20. That would probably tilt at least the cost benefit a little bit in the other direction. But the other thought, the perennial problem, is the savings from a roundabout accrue to the public and the cost accrue to the agency. I don't know how to get the savings into the agency's pocket and that's probably what's necessary.
- Mr. Champa: I will ask Phil in particular because of the city's experience. Urban areas, this is where more intersection, severe crashes happen, but

what we are learning, and Phil can talk about this, is that this idea of using smaller roundabouts and modular construction materials is bringing the cost down to where there should be for volumes, of course below 20 or 25,000 ADT, the rule of thumb, single lane roundabouts can be mini-roundabouts. The cost is so low that even if a few crashes, you get a good benefit-cost ratio it's easy. But on the other hand, we are also introducing a proposal change which the City of San Diego created, which is to establish a systemic safety approach to the identification of locations that are basically where are locations where fatalities are most likely to occur rather than just reacting to crashes. This is based on things like speed and number of lanes, presence of pedestrians. In other words, a more proactive approach and the idea of having very small low-cost roundabouts as a solution for some of the locations. Phil, I don't know if there is something you want to add that addresses Rock's really valuable comment.

- Mr. Rust: You are absolutely correct, when we looked in the past, even over a 10-year period the presence of a fatal crash was a very poor predictor of a future fatal crash. I think we had 300 fatal crashes in the data set that we looked at. Only five of them happened at the same location as a previous fatal crash in that 10-year period. So, we needed something else to be able to identify locations with high risk of a fatal crash and that turned out to be FHWA's systemic analysis that we did and absolutely right, four lane by two lane intersections, at least in our urban, suburban area, locations that are along transit routes, so presence of pedestrians or cyclist activity. Also, a history of injury crashes, we actually found three or more in a 10-year period was enough to kind of isolate out those one with a higher risk of fatal crashes.
- Mr. Champa: I want to also add and Phil's role in this effort is so important because we are working with Caltrans, Division of Local Assistance and LTAP Center of course and what the City of San Diego had done. We are planning to share with all cities and counties who can basically take advantage of the approach of the mechanism for identifying intersections that can be a high risk and or have a crash history. That would be hopefully the program, now the funding programs evolved to match that. That's what we are proposing so that you don't just have to have crashes but the presence of high-risk conditions, especially for vulnerable road users, that should also be a trigger for funding eligibility. I am referring to other activities underway as this is an initiative and the MUTCD is one of the most important things that we believe needs to be

adjusted to. Make sure we have informed practitioners and sponsors across the State.

- Mr. Welday: As a practitioner, as a city engineer, traffic engineer, who is in a city that is moving more towards the use of roundabouts. In fact, we've got two that are under construction right now as part of a development. I do have to be the contrary here, and say that I'm not supportive of the idea of changing the "may" to "shall" because I believe that while some agencies may have the resources, may have the ability, may have the political support to move forward, we are not a uniform state; we are not all the City of San Diego or not all the City of LA. I think that a better route would be more of an informational help, rather than a requirement. I think that every time we put a requirement in, I have seen situations where we have had requirements for requiring certain traffic control devices, certain things happen on a blanket measure, and we have had situations where it actually would create a more dangerous situation. So, I think that leaving that to the local engineer and their agency to come up with a policy, whether or not to implement, I think is a much more effective approach.
- Mr. Champa: That is of course, still the primary concern. That we know that there are parts of the State that are, let's say, the conditions and everything is different. Politics, etcetera. What I wanted to mention earlier is that there are shades of grey. There are ideas between making no change and requiring and I think requiring really isn't maybe the most practical approach. That's a lot of effort to prepare for in terms of training, providing technical assistance, doing everything that goes along with equipping an agency to see that this is something to be in their toolbox if they are not using it now. So, one of the things that we will consider, moving forward, is an idea like maybe initially looking at or let's say requiring consideration of roundabouts. Where it might be in locations where it would be a high-speed environment, for instance, where we know that this performance differential is substantially different and so we can attack first the highest-risk locations and not requiring roundabouts. But saying this is where the alternatives will have much different cost effectiveness and much different outcomes in terms of safety and mobility. So that would maybe be a small burden and, again, whatever is needed in terms of training, technical assistance of public outreach. All that kind of stuff would be kind of part of the package. So that's one concept that already has kind of emerged. So not across the board requiring this, regardless of conditions, but just where it would make the

most difference, in terms of, not just safety, but all strategic goals, air quality, sustainability, fuel energy consumption, how much pavement is built. I think that there is again what people are underinformed about is how small the infrastructure can be compared to a signalized intersection versus a small roundabout. So you are talking about cascading and multiple benefits. I think that you are right informing people first so that they are educated about the benefits, advantages, pros and cons as you said but so we will of course look at many options before we come up with a proposal. John, do you have anything you want to add?

- Mr. Liu: I think you said it well. I think the approach is not all or nothing. You know, are there some baby steps getting towards that vision zero that we really have for the entire state. We don't want to create too much scare. Those are the things that will be evaluated in the coming months. What is the best approach going forward.
- Mr. Champa: It may be that we start by saying where you have a traffic signal and you have a recurring traffic pattern of severe crashes. This is where the roundabout is an obvious alternative to the signal. Rather than trying to keep equipping traffic signals with features and sometimes very effective but with incremental benefits, that add work. The driver workload is increasing, the more complex we make traffic signals with additional features the drivers have to recognize and digest as they are driving in their time spent focus on the road is reducing because they are needing to pay attention to more of the change. The new signal systems and features for vulnerable road users, no left turns all these real time messages that are coming out. It's an adjustment period but I think that's one of the key areas that we can talk about. Starting with, which is when you have an existing traffic signal, both with congestion and safety concerns. This becomes maybe the time to basically require consideration of lower speed with substantially reduced conflict areas.
 - Mr. Rust: This switch from ICE to ISOAP is a significant reduction in how hard or easy this is to do, especially the phased approach phase one, phase two or we call it step one, step two. It is so much easier just to do step one and move on, and I think you are even making it easier still with the next update. John?
 - Mr. Liu: Yeah, so we got stage one and stage two, and we just want practitioners to make informed decisions right. We're not compelling people to build roundabouts. We just want to make sure, hey, are you considering these things. And as I mentioned before it's meant

to be very scalable. You could do stage one in a day, so yeah, it's not meant to be a burden.

26-07: Agenda Items Status

Comments

- Mr. Sanchez: We have started to keep track of the CA MUTCD incorporation progress and outcome of the CTCDC agenda items after they are introduced to the [CTCDC] meeting. This will help the CA MUTCD revision substantial conformance requests and provide the CTCDC updated information. We started to keep track of the agenda items from 20/21 as you can see on the table, the majority of the items that we have now or that got completed are related to the individual chapters for the CA MUTCD and the final draft. We didn't have a meeting in February, so most of the items referred to the CA MUTCD the publication of the final draft.

26-08: Legislative Info 2025/2026

Comments

- Mr. Kong: This one is our ongoing legislative information item for bills that may impact CA MUTCD. We are still looking through and working on different things but there is a list here provided that you all can look through and things we are looking at especially that were passed before and their status of being either incorporated to the CA MUTCD or if there is no change needed. For instance, Senate Bill 1216 the "sharrows" the shared bike lane marking update that was already incorporated in Revision 9 [of the CA MUTCD]. We will probably take this off for the next one and we are still going through and evaluating these, but here is a list of the ones at least we identified that may impact the CA MUTCD and their latest status from what we saw online.
 - Mr. Bronkall: I do have a question on AB 289 that is the one that will allow Caltrans to conduct automated speed ticketing in construction zones and select sites throughout the state. I believe there is a language in there that requires Caltrans to make a presentation or consult with the CTCDC. Do you have any information about when that might occur?
- Mr. Kong: I don't think Caroline is here. Caroline Chen is the speed management person in our office but I don't think she is at this meeting currently. so I would have to consult with her.
 - Mr. Bronkall: Well, perhaps that could be presented in the notes for the status section for the next meeting that we have.

26-09: CA MUTCD UPDATE

Comments

- Mr. Kong: This is a quick update from the CA MUTCD team. With the release of the manual in January we are working on several things and have updated several things as well. I'm trying to email updates to the CTCDC members and all everyone who have subscribed to the CTCDC email list. There was an initial website sent out ending in "CA MUTCD-2026" but now the latest manual is on the main CA MUTCD homepage website that is listed. There is a complete PDF now available that was a top frequently asked question. We did notice there are some graphical issues with particularly that document, especially with some the our figures, and our web team is currently working on resolving those issues. Issues seems to come up through their web remediation process. They were not on the original documents. In line with that, also, the Part PDFs which people have been requesting as well are being developed. I think they are pretty close to being posted and released. Some of the parts are very large, so remediation takes a bit of time in processing. Our web team is also working on that. I believe their plan is to fix all the graphical issues through those documents and then combine them all for the complete PDF. There is a California known errors webpage created for errors we consider are significant, not like minor graphical or editorial errors. There was one error involving a wrong way sign in Part 2 figures, so you can see that. Another note is IA-23, it passed through CTCDC while ago and now we have finally have the request letter sent to FHWA and we recently got approval. You will see on our interim approval's website, which is also available through our CTCDC website but that has been approved for statewide usage in California. Also, one of the main things as we discussed earlier is the supplemental documents having to align with the CA MUTCD. So, we are going through all those and ensuring that they align. Another frequently asked question is summary of changes, so post-release support, we have been transitioning to working a lot on that and the summary of changes for all the CA MUTCD parts we started to develop and getting more traction on that. You'll see at the last point developing the MUTCD training and there have been definitely request for that, especially from local agencies. We are still tracking and collecting potential updates for the CA MUTCD Revision 1 and that's including, as Johnny mentioned, there is the National MUTCD Revision 1 that just got released. We'll have to review that and of course, all many of you have been helping pointing out different errors, omissions or potential fixes or changes that we need to make in the upcoming revision, which is slated to be released earlier next year.

- Ms. Zhu: I have a question. I understand that historically we published the MUTCD sign chart. The last version was published in 2023, will there be an updated one that's under preparation?
- Mr. Kong: Yes, part of our office is the Signs Group and they have been working a lot on Part 2 and they are working to update with the sign's specs and sign charts.
 - Mr. Lozano: We are currently working on that. We are hoping in a few months that we can finalize it and be able to publish it.
 - Mr. Miller: I appreciate the comment about working on revisions. I have given one or two presentations over the past three months about key changes to the MUTCD, mostly to bicycle groups, who are kind of shocked when I tell them some of the changes and the only way you could find them is if you looked at the old page and the new page and look for where the differences are. I'm hopeful that your current project to assess all the changes catches all the changes. The documents that I saw online were only Caltrans initiated changes to the previous version and really didn't get into key changes to incorporate the federal version. Things like the change in bike route signs - you can no longer use and the helmeted bike rider stencil and things like that.. Those are coming as shocks to people, and then I tell them, well there is probably a thousand more. After the presentation I always get a few phone calls and emails about, oh you didn't say this and you didn't say this, so it's going to be a heroic job, but just understand that people just don't know how many changes that are there that affect their decisions.
 - Mr. Kong: Yeah, it was a very massive effort and massive change to the manual. Of course, first major revision in a long time. So, there is a lot of content we are going through.
 - Mr. Bhullar: As you know from our past experiences working on the release of the major versions of the CA MUTCD, we have always followed up with training within three to six months and this time around since I had retired so it took me a little bit of time to get back on as a volunteer. Now that I am officially back at least as a volunteer assisting the office, I started on that effort. I can ensure you that I will try to capture most of the changes not only just the Caltrans or the California or the CTCDC related changes that we made but seamlessly incorporate them into the National MUTCD changes as well. I will also try to split them into significant changes for a shorter list and then a little bit more detailed where the list is a little bit more comprehensive and it will cover all the parts. So right now, I started

working on it. Give me about 2-3 weeks at the most and I will wrap that up and I will work on the training element once I have these lists put together. We will share that with CTCDC as well, so that it can be used. We will also provide that to our Division of Local Assistance so that they can share it with the local agencies.

6d. Word Message Sign Items

26-02: Truck Lane Signs

Comments

- Mr. Solorio: I'm District 2 Traffic Operations engineer. I'm here to present some proposed modifications to the CA MUTCD. In support of a planned truck only managed lane on I-5 through Redding CA. The I-5 or the Fix 5 Cascade Gateway project seeks to add a 3rd lane in each direction North and Southbound, as well as convert adjacent general-purpose lane into this new time-managed truck only lane. The intent is to reduce interchange ramp related conflicts by moving heavy vehicles over to a left side managed lane as it runs through the city. The plan is to add three new regulatory signs for the SR70 series. As you can see on this diagram (Attachment A) and then one new warning sign plus the associated sections within the CA MUTCD. So, this was largely based off of Figure 2G-3 (from CA MUTCD) which is the HOV sign package for when a general-purpose lane converts to HOV and then reverts back to general purpose at the end of the section. Many of these signs that we have here are simple word changes from existing signs that support the HOV section and then we have these three. We will start with SR70-1 which was based off of the "HOV 2+ ONLY BEGINS 1 MILE" (R3-15a) and the plan is to say "THRU TRUCKS ONLY BEGINS 1 MILE" or whatever distance the forewarning starts. This will also require some changes to Sections 2G.03, 2G.05, 2G.06 and 2G.07 plus Tables 2G-1 (CA) and Figure 2G-1 (CA). The second sign here the "HOV RESTRICTION ENDS 1/2 MILE". what we are proposing is the SR72-1 (CA) will now read "THRU TRUCKS RESTRICTION ENDS 1/2 MILE". The third of the SR70 series will be the SR74-1, which would commonly say "HOV RESTRICTION ENDS" (R3-15c). We are proposing "THRU TRUCKS RESTRICTION ENDS" and again both of those will have relevant sections which we will discuss later. The fourth sign is the warning sign. Heavy merge from right is the standard warning sign. We are proposing a "TRUCKS MERGING FROM LEFT" to support trucks moving back over to the far-right lane once they have cleared the section.

- For Section 2C.49 the “HEAVY MERGE FROM LEFT”. We are proposing the trucks merging from right, this sign may be used to inform road users that it is desirable for through traffic to change lanes or yield to trucks merging into traffic with a support section saying the sign can be used to enhance safety and improve traffic operations in areas where heavy trucks merge into general purpose lanes from adjacent lane, ramp or access point. In these locations, merging trucks can create speed differentials and increase the potential for conflicts with through traffic.
 - Section 2G.03 adds the SR70 series.
 - Section 2G.06 also in the header adds the SR70 series as well in Section 2, plus changes to Figure 2G-1 (CA).
 - Section 2G.07 we have the descriptions of the proposed SR72-1 and SR74-1.
 - Chapter 3 we are adding that this may be post mounted median signs.
 - We have the addition to Tables 2G-1 (CA) and 2C-1 (CA) for both the SR70 series and the revised warning sign W76-1 with their associated sizes.
 - Proposed changes to the pages (Figure 2C-11 and Figure 2G-1) where these signs will be displayed and so those are the SR70 series and the warning sign.
- Mr. Miller: Are the trucks or the autos going to be confused by who can and who can't use this lane? A lot of truck lanes on the right, they are climbing lanes, I believe it's legal for cars to use them – either that, or I am breaking the law when I do. And, is the truck going to be required to use the left lane and are vehicles going to be prohibited from using the left lane?
 - Mr. Solorio: The first of your questions of a sign that will be used to specify what exactly the truck is. It's something that we are currently working on with the HQ Caltrans to come up with the best solution for this. We had a study by a consultant, Parsons, and their comment on the sign was that to increase compliance adding a sign as you described would be a potentially preferred option. In their report, they said if we are seeing low compliance to reduce sign proliferation, it may be something we can add but that discussion is ongoing. The intent is yes, if you are a through truck coming through this area, you should be entering into this lane, driving through and

then exiting. For local vehicles or vehicles that are accessing the three state routes which intersect I-5 through this corridor. They are not required to use this lane and then the intent would be that only heavy vehicles through trucks would be inside this lane during the operating hours and that it's open to all traffic in the evenings.

- Mr. Powers: Comparing to the HOV signs and knowing that all the regulatory HOV signs have the HOV symbol on it. Is there a scenario where a truck symbol would be added to these signs to provide a sort of continuity of signs? And is there a pavement marking possibility as well?
 - Mr. Solorio: The pavement marking is something that was included and also in the Parson's report, they said that to increase compliance, a stencil "Through Trucks Only" would be preferred. The drawback of this is that in those instances in the evenings when it's open to the general public it may be confusing. We have not discussed any type of sign or symbol on the signs to have an analog to the HOV diamond.
- Mr. Bronkall: I would like to echo Rock's comments that the signage is rather confusing when looking at it for the first time. If I were driving down the highway and these sorts of signs occurred and it was after 7:00 PM, I would be unsure if I'm allowed to use that lane or not. It's also unclear if you are expecting trucks to use that lane during the off hours or not. Especially considering speed differentials, that trucks are restricted to on the state highways versus automobiles. In general, I see what you are trying to do, but it just seems like the proposal hasn't been fully vetted out yet. I think you and your design team need a little bit more time in thinking this through and how all these different scenarios work for someone who's coming upon this for the very first time. From what I gather, it sounds like the application is you are adding more or less an auxiliary lane that will be added and will continue for a certain number of miles as you go through a city center area and then that auxiliary lane will end. Is that a correct understanding of what would happen on I-5?
 - Mr. Solorio: This is an existing general purpose that will convert into, but yes, essentially a "off system lane" that is intended for the trucks to be in it for the 5 to 8 miles that they go through the city without weaving in and out of it.
- Mr. Bronkall: Is there any motion from the committee? Rock, do you want to send them back to further revise it?
 - Mr. Miller: I was trying to figure out what to put into a motion. I do think there should be a motion to more fully evaluate the proposal to clarify what movements are allowed, what movements are restricted

and that both trucks and the general public understand it based upon the signs and markings.

- Mr. Lozano: I work in the Traffic Signs group here in headquarters. I think how this kind of differs from a truck climbing lane, is the use of the word only isn't used. For example, just say trucks use right lane, it's still open to the general public, however this kind of setup since Jesse was kind of describing that they are in District 2 where they are at, there is a lot of trucks that are using the right lane that cars have to go and exit but since this area has heavy truck usage, what District 2 is proposing is to have a preferential lane, which will be one of the first of its kind in the state of California. We ended up kind of heavily modeling this through trucks proposal from the HOV type of signage. For example, the through trucks only since we are utilizing the word "only" kind of like the "HOV Only". So, for that period that lane will be restricted to just through trucks. However, outside that period because they are utilizing overhead sign structures and road side signs with a period of operation. Outside of that period the general-purpose lanes and general road users will be able to use that lane.
 - Mr. Bronkall: That may need to be supplemented with all vehicles Ok outside time restriction. Obviously, that is way too wordy but that's – somewhere "all vehicles" needs to get in there to help make it more knowledgeable to the general public. I think Rock more or less formulated the motion.
- Mr. Bronkall: We got a motion; we got a second. Any discussion from the committee members or the public on the motion?
 - Mr. Powers: It wasn't really a comment on the motion. It was merely to comment on the language just suggested by the Chair that "open to all" has been used elsewhere in the State for time periods when restricted lanes are not restricted. Other than that, I support the proposed motion.
- Mr. Kong: Bob can you reiterate the motion or Rock again?
 - Mr. Miller: Request to do a full evaluation of the understanding of the restrictions by trucks and autos based upon the signage proposed and markings proposed. End of motion. And in making that motion, I know at the federal level we would go through an independent human factor testing phase of this kind of signage and document whether a very strong majority understood how it worked or if a lot of people, their understanding would be in violation of the intent.
- Mr. Pyburn: I'm going to be looking at the regulatory sign through trucks only and then the time because I think, one, that the through trucks is not necessary. If you are a trucker and you can only get in the lane at the

beginning and exit at the end, it needs to be something more than a single white line. But if you take the "THRU" off that sign and it is "TRUCKS ONLY" then it's all-traffic other times. Kind of solves the "all-traffic" or "other vehicles ok" problem.

MOTION: Mr. Miller made a motion to more fully evaluate the proposal to clarify what movements are allowed, what movements are restricted and that both trucks and the general public understand it based upon the signs and markings. Mr. Vora seconded the motion. The Motion passed unanimously.

26-04: COUNTY FIRE STATION Signs.

Comments

- Ms. Kleinschmidt: I will be presenting on the request for approval for a new word message sign, "COUNTY FIRE STATION". I am the Division Chief for Traffic for District 5. Just a little bit of background of the current signage, so that we can see what the need is for the COUNTY FIRE STATION sign, currently in the CA MUTCD we have the Cal Fire Station signage and you can see in the picture below on Highway 1 at the Arroyo Grande Station, we have that installed, but that's actually a County Fire Station where they actually contract with Cal Fire for staffing needs and it is actually owned by the County. You can see a little bit of a color difference between the signs, the Cal Fire sign in that picture is green. It used to be a green guide sign and now there are special guide signs. The only other sign in the CA MUTCD that we could use for a County Fire Station because we don't have a word message sign, would be like a warning sign. But that's more for unexpected entries by a fire truck onto our highway system. So, that is not appropriate as well. We are looking to add a new sign, and this was brought to my attention by the Battalion Chief Marcus Dunlap. We met with him at the district; he really wanted some of these County Fire Stations to have the appropriate signage because he felt that they aligned more with the operational reality as well as enhancing public safety and clarity. Here is some information on how the services are aligned with the county versus Cal Fire. Cal Fire as I mentioned, they are right now providing the staffing and operation support for the County Fire Station and that has been an agreement since the 1930s. Overall, the County has different needs and serves different functions. The County Fire stations are more for fire suppression, medical aid such as, emergency advance life support, hazardous materials and rescue operations. Where, Cal Fire can frequently be mobilized outside the area for forestry and wildlife management. The

request is to have an additional sign added to the CA MUTCD to have that sign coincide with the fire stations that are in our counties. This could probably help statewide if they have a similar issue. These are the two signs "COUNTY FIRE STATION NEXT RIGHT" and "COUNTY FIRE STATION" with arrow (Attachment B - Proposed SG38B and SG39B). The sign would have different sizes for Highway classification. They can be off conventional highways as well as Expressway, Freeways. This is very similar to the language as the Cal Fire sign. It's just a modified text for COUNTY FIRE STATION. This language here is similar to the criteria that the Cal Fire stations have to go through. They have to be within a half a mile of the exit and be open 24 hours each day of the year. The new language we added, though, is that these are no longer State. Cal Fire is a State agency, these are now county local jurisdiction signs, so these signs would be furnished and installed at no cost to the state through the encroachment permit. This would allow the counties to install the appropriate signage and then it would be less cost for Caltrans to install and maintain the signs. The one with the arrow is a very similar language, that we are proposing to add and this just shows you the signs that are currently in the CA MUTCD, the Cal Fire signs and then where the County Fire signs would be placed. We did some coordination upfront, reaching out to different local partners as well as FHWA on the 17th. I believe it was with Steve and they did discuss the proposed signs and the need. There were no objections from FHWA. In addition, I personally talked to Public Works County of San Luis Obispo, and they had no objection to these signs, and they wanted to also send their support during my presentation. I also just got 2 letters of support while we were presenting this morning from The Battalion chief Marcus Dunlap, as well as John Owens, who is the unit chief. We do have a lot of support for these signs. That concludes my presentation. I will open it up for questions.

- Mr. Pyburn: Yes, we did meet and at the time I didn't have much of an issue with the sign. I don't like it but because of our role; there isn't much of an issue. However, I say that there is not much of an issue because the state has latitude to create word message signs. However, other things are happening in the MUTCD world. The state will come under scrutiny from Federal Highway HQ on actions that are new signs added in the state of the California Manual. We learned this just last week. I don't want to go to the scrutiny now, but our office as well as Caltrans is going to be, maybe asked some difficult questions. One of the things we need to do is reduce redundancy in signs and when we went through the CA MUTCD 2026, there were a lot of CA signs with slightly different wording than federal

signs that CA liked and was used too but they said the same thing as the federal sign, so they got taken out of the manual. This sign is not for fire personnel. I would presume they know where the fire station is, so this is really for the public and the public in case of emergency won't care what kind of fire station it is. I personally, in many years have not ever needed to go to a fire station, in an emergency situation. What importance is this sign? I don't know. But what I am willing to do because I spoke about this with District 5 earlier, I will take this to my manager for review and he is on the MUTCD team in Washington and I'm going to recommend that it just say "Fire Station". The public doesn't care what kind of fire station it is, if they need them. I'm going to let my boss decide of federal highway's position. I recommend it to be changed to fire station.

- Mr. Powers: Steve, pretty much said what I was going to say, but I would add that there are many other types of fire stations. There are municipal fire stations. There are fire district stations such as Sacramento Fire District. It's not county or it's related to a county directly and it has rural fire stations as well. It seems like either they should all say "Fire Station", or we are going to have a clutter of new fire station signs.
- Mr. Bronkall: I too echo Tony's and Steve's comments. Fire Station seems to be the most appropriate sign.
- Ms. Kleinschmidt, I See the Battalion Chief Marcus is on the call and I'm not sure if, but I would like him to speak to that because I mean I see the point, the fire station and that might cover all.
- Mr. Dunlap: Yeah, we would not be opposed to "Fire Station". Really part of what is driving this from our end is that the local governments, the politicians, invest a lot of resources into their fire stations and they want a little bit of like identification to it. For the Cal Fire stations, in particular, pointing to a County Fire , that's a point of contention and putting it to just fire station would admit that. But it also kind of takes away the like local pride in your fire department as well for all the stakeholders within that area.
- Ms. Kleinschmidt: I just wanted to present the sign, and it sounds like there might be a motion coming up, but any other comments, I am happy to vet. But if it goes to just fire station, I think that at least = gives us the ability to sign the county. But I see Marcus's point why he wanted the word county in there.
- Mr. Powers: Some other signs there is a possibility of adding a placard below with explanation?. Is it possible to use a version of the fire

station sign that allows a placard below it that says El Dorado County or something like that underneath?

- Ms. Kleinschmidt: I have not seen that option myself, so that would be a new proposal.
- Mr. Bronkall: I think everything goes back to what Steve said. When someone needs a fire station, they don't care what flavor fire station they are getting. They just want it to be there and to be open.
- Mr. Welday: I will go ahead and make a motion to approve it as "Fire Station".
- Mr. Vora: I will second it.
- Mr. Powers: One comment, does this have any effect on the existing Cal Fire Station sign?
- Mr. Bronkall: Jason, as a friendly amendment, I would suggest that the Cal Fire sign be removed from service at the end of its service life and just replaced with fire station signs.
- Mr. Welday: I would support that amendment.
- Mr. Pyburn: That is exactly what I was going to suggest. The existing sign can stay until the end of their service life.
- Mr. Bronkall: We have a motion, a second, a friendly amendment that's been accepted by the motion maker. The seconder also agree?
- Mr. Vora: Yes.

MOTION: Mr. Welday made a motion to approve it as "Fire Station" and Cal Fire signs be removed from service at the end of its service like and just replace with fire station signs. Mr. Vora seconded the motion. The Motion passed unanimously.

26-05: DO NOT DRIVE BESIDE TRUCKS sign

Comments

- Ms. Kleinschmidt: This is for request for approval for a new word sign in the CA MUTCD; it will be a warning sign. "DO NOT DRIVE BESIDE TRUCKS". The need for this sign is currently our multi lane roundabouts are not typically designed to accommodate tractor trailers to stay in their lane throughout the roundabout. This is a statewide issue, but I'm going to highlight one also, in our district, we are having some issues. Per Caltrans Highway Design Manual, Section 405 which is more the intersection design standards, it actually states roundabouts with multilane entries and circulating lanes should be designed with understanding that most truck drivers will not stay

within their lane lines. We currently have an issue at one of our multilane roundabouts that is actually about 6 miles away from the only turbo roundabout in the state. The only difference with the turbo vs other multilane roundabouts is the turbo is designed to have truck standard lane; they actually have lane dividers that are somewhat raised like 3 inches and so that requires all vehicles stay in the lane. We have a little bit of an issue with the communication thing, as well as we have no California vehicle code that supports trucks taking the right of way within the circulatory roadway. We've had some issues at the roundabout that we have on 156. That turbo roundabout is at State Route 25 and 156. This is the roundabout that I wanted to highlight, but as I mentioned this could be a statewide sign that could be used if needed. This is State Route 156, it's a Expressway - the speed limit is 65 mph; it is a divided roadway and we have a roundabout at Bixby Road. There is as you could kind of see the entry. There is a lane divider that actually separates and kind of gives the impression that trucks or vehicles stay in their lane. And then as they enter the roundabout, the trucks a lot of times aren't able to negotiate and they are crossing over, so they are off tracking. This is some drone footage that we got of different trucks doing that (Attachment C). We have also been working with CHP, Captain Cody, on this issue. We have had some side swipes with vehicles, and the truck drivers will be cited because they don't have the right of way. So until there is progress on the California Vehicle Code getting changed, we are proposing a warning sign because a warning sign will not be in violation of our California Vehicle Code. But I wanted to highlight where we were getting the language for this warning sign. In Oregon, Arizona, Colorado, Montana, several states have these laws where in multilane roundabouts the trucks can essentially have the right of way to take over these lanes within the circulatory roadway and the vehicles should not be passing the trucks in this roundabout. Oregon has that law and they have a regulatory sign "DO NOT DRIVE BESIDE TRUCKS". But as I mentioned, since we don't have a lot of support we are trying to have the same message, be a warning sign, and I just want to give you a little background. We talked a lot about the messaging of this sign, we understand it is a warning sign that says "DO NOT DRIVE BESIDE TRUCKS". But there were questions about maybe saying the word "yield" instead. But this is a roundabout where vehicles and trucks must yield to all vehicles in the circulatory roadway and so we didn't want to confuse the messaging and say yield the trucks because you have to yield to all vehicles on the approaches. That is why we are proposing this language as a warning sign. The amendment would be "DO NOT DRIVE BESIDE TRUCKS" may be used in the advance of multilane

roundabout, where there is a potential for commercial vehicle off tracking and the option is the sign may be mounted alone on the approach to the multilane roundabout or on the same post as another sign where the one supplements the other as in the intersection lane control sign. The sign was displayed and how it would be added to the CA MUTCD and then this is the approach of the Bixby roundabout it would be on. This shows the Westbound approach we view applying it to both East and West and adding it to our lane use signs (Power Point). In closing, we are proposing a new warning sign to have in our toolkit to use on these multilane roundabouts. I know there is maybe some discussion about the CVC law changes and I kind of did ask Headquarters about that and I'm kind of hearing that that's up to the California Trucking Association to kind of spearhead that effort and move that forward and lobby that but that could be several years so, in the interim, we are really needing a sign at this location and others.

- Mr. Welday: I have to say I don't get it. For a number of levels, I understand the physical issue. There are several things that I have concerns with it. One is, do not is a regulatory action and so I don't know how that is a warning. I think it is more of a telling you what not to do and we are just changing the color of the sign because we don't have a vehicle code to back it up. So, that is my concern that it's not really a warning sign. It's a masquerading regulatory sign, which then leads to potential conflicts when there is a collision because the truck driver is not going to care that it's a yellow sign. He is going to be pointing to the fact that there is a sign that said you shouldn't have been there and the driver is not going to know what that sign means. It is really confusing to me. Realistically, what I thought of when I read this staff report: right turns. We have hundreds of thousands of places throughout the state, we have trucks that make right turns and there is a right turn lane and the truck drivers are trained to take control of both lanes when they have to make a wide right turn because they know they will be responsible if they cut off somebody who sneaks down the right turn. I just don't know how it would work or function and I have lots of concerns with it.
- Ms. Kleinschmidt: There really is a need for some sort of communication based on driver expectations. We have a roundabout in the same county that the trucks stay in their lane and then we have one that they are off tracking into the lanes and it's been brought to us on multiple occasions by the locals. We talked to

CHP about it and the COGs. I guess that's why we are pushing for some movement on this.

- Mr. Miller: I don't like the word "beside". I don't know what to put there, but I think the risk is the vehicle to the left of the truck, not the vehicle to the right of the truck. I could just see unnecessary enforcement of a vague regulation by people that really aren't putting themselves in the risk situation here. I kind of imagine the signs were installed in Oregon. I think the trucking industry there was very concerned with roundabouts in general and I don't know if this sign ended up in Oregon because of that or not, but I just see confusion over what the sign means. I can tell you if it's a warning sign and a bad accident happens, there will be a consideration that there were warnings issued but I still don't think we have found a way to effectively communicate the issue due to the trucks and the cars.
- Ms. Kleinschmidt: I wish we had state law. I saw Mr. Richard Moeur posted the Arizona sign and I can share that, but really what we need is some law that matches what we are designing if we are pushing for roundabouts and these multilane roundabouts don't accommodate trucks what tells the vehicle that's driving besides these trucks that they might get pinched or hit. I guess another caveat we are seeing is the truck drivers are waiting for the vehicles to go before they enter. Maybe that's something we need to communicate, I don't know the trucking agency, but we don't have any signs that we can use, so we are not sure how to address this issue. So, that's why we are presenting the sign.
- Mr. Coady: I'm the captain and commander of the CHP, Hollister Gilroy area. I was working with Kathryn on this issue as well as others related to the roundabout. So from an enforcement standpoint, when a truck is driving down the road, unless they have familiarity with this specific roundabout, they don't know that they are going off track. They rightfully assume that everything has been designed for all vehicles on the roadway and they will be able to translate that location without any issues. They enter the roundabout without consideration otherwise and as they are translating that curvature and they off track when there are vehicles next to them, their trailer typically, it's not normally the tractor, but their trailer typically then strikes adjacent vehicles. So, no matter what happens, regardless of whether there is a warning or cautionary sign of a yellow and black sign, doesn't change anything for the Highway Patrol from an enforcement standpoint. The trucks are always going to be at fault,

period because it's failing to maintain its vehicle well within a set of lanes. Only you folks as engineers know that it's designed that way. Other motorists also entering the roundabout have no knowledge that any tractor trailer combination next to them won't be able to stay in their lane and so they put themselves in a position to be struck. I know that this is, Kathryn kind of summarized it. This is an issue that must be addressed from the trucking industry standpoint because they are being put at fault for a design. And from our standpoint, from enforcement leg, there is nothing that sits in the vehicle code or any other signage that changes the approach, but you know that puts everybody on notice that, that a vehicle or specific combination of vehicles that is entering cannot negotiate, translate, traverse, whatever, the roundabout without leaving their lane. I hate to use word "fairness", but when you talk to the trucking industry locally you know that they look at this entire situation as they have been engineered into failure and they are right, from an enforcement standpoint. That is the enforcement perspective. This is an issue and what Kathryn was pointing out is just a few miles away, there is another roundabout. The turbo roundabout but I think you are all familiar with, where tractor trailer combinations do not off track. So they go from one where there are no issues to the next where there is, all on the same state route within a few miles of one another, without any warning that there is something different going to happen. Just from an enforcement, equity standpoint, from a crash causation standpoint, my brief opinion and I don't do what you folks do, but this is layman's perspective on it. Anything is better than nothing, if we can put people on notice. The trucks cannot stay in their lane when they are transversing these roundabouts, that would be beneficial.

- Mr. Champa: I have spoken to Kathryn once or twice about this and the fact is that we do know as engineers that you can't fix a problem design with signing. This isn't about fixing it, and hopefully that's happening in parallel that some adjustments can kind of relieve this as well. But I Just wanted to mention that this is one of the things that it's not a severe crash problem. I believe these are property damage only crashes at a very low speed but these are the things that ultimately make it difficult for all agencies to implement roundabouts where they are the best alternative - it is just the trucking industry is going to have comments, concerns and possible opposition. So, whatever can be done to help alleviate, especially for the trucking

lobby, I think that's kind of it's a special request. There, this is a life and death matter in some locations around the state. So, what happens here can affect other decisions.

- Mr. Bronkall: I echo CHP's comments in that providing adequate notice to the trucks ahead of the intersection will allow a truck that is not familiar with the intersection to take control of both lanes and navigate their way through the intersection. But that signage needs to be sufficiently well in advance when there is heavier traffic in both lanes in order for the truck to assume control of both lanes to make it through the roundabout.
- Ms. Dostalek: One of the issues with the trucks trying to take both lanes in advance of the roundabout is that some roundabouts are designed so that everybody stays in their lane on the approach and they are striping a double wide stripe, maybe with some hatching chevrons in between to indicate that everybody's in their lane to enter the roundabout, but then once they get into the roundabout, the trucks may need off track into the other lane. So they can't really take the approach, take both lanes at the beginning because they aren't allowed to cross over the double white line, so that movement alone would be illegal.
- Mr. Powers: Two things, I'm definitively sympathetic to the concerns of some warning needs to be provided. I was thinking, I think Jason brought up the wide right turn issue and I believe that's been mostly dealt with signs on the trucks that say "caution, this vehicle makes wide right turns". Is part of the solution perhaps a modification of that sign that says "this vehicle makes wide right turns and may not stay in the lanes in the roundabout".
- Mr. Bronkall: The signage on the trucks is supplemented with turn signal, blinker on the truck being activated to further alert motorists that they should expect the truck to make a wide right turn. There really is no notification to a motorist in a roundabout that a truck going to be off tracking. Overall, there is a problem this just does not necessarily appear to be the right solution. And maybe there is something that needs to be a new state law on the vehicle code to address this concern, so that an appropriate sign goes along with it to make it effective for everyone. It might be that the correct way to think about it is what is the signage that's really needed. Then what law is needed to go along with that and then have that presented to the legislature that here is the proposed signage and legal

authority that is needed to go ahead and make these multilane roundabouts a bit safer.

- Mr. Welday: Some of the things that have been brought up are really good points with respect to design. It sounds like if there is a roundabout a mile away, it's been designed in such a way that there is no off tracking problem and there is a roundabout here, then maybe this is something that needs to be taken into account as part of the design of the roundabout modifications of the roundabout that you have to look at the off tracking as a potential problem. I understand that potentially means more cost, more widening that sort of thing but we are having to balance all the various aspects of the design. And I don't know if you can solve all the problems and I think some of it may be a design issue and some of it may be a signage issue, but I also think that there is also some responsibility for the drivers to understand how to operate the roundabouts as well.
- Mr. Bronkall: Alright anyone wants to take a stab at a motion. Seems that no one wants to go ahead and make a motion on this. I guess in these circumstances it would just go back to Caltrans for them to further evaluate their proposal and resubmit something back to the CTCDC due to no desire to approve anything or deny anything. That is the correct course of action Timothy.
- Mr. Kong: Yes.
- Mr. Bronkall: Does the presenter or Caltrans have any further questions or comments from the Committee or the public in regards to how they might want to proceed with revising this proposal?.
- Ms. Kleinschmidt: Yes, I guess looking for feedback from the committee for next steps. As I mentioned, I have talked to HQ roundabout committee about changing the California Vehicle Code and this has been in the works for years and nothing has been done. So I'm not really sure what could move that forward. I don't know, we need more engagement, we need a letter from CTCDC. I am just looking for feedback as well as, if there was a sign, is there any language changes. It sounds like the "DO NOT" was not received well and the "BESIDE" was also. Those two items would be great if I could get feedback.
- Mr. Champa: I just wanted to say that there is interest, a strong desire and there are plans to convene a group to talk about the resurrecting the draft legislation that had been proposed and attempted some years ago. I think that is still going to happen. I'll

contact our partners in Division of Traffic Operations to see where that's at.

- Mr. Quesada: The last meeting that talked about state law, if we are able to propose that. I guess that's something moving forward, but then with the support going to the California Vehicle Code to make sure that the gets incorporated is that a process that we be able to incorporate or to move forward with?
- Ms. Kleinschmidt: We could go through legislative affairs, but I'm not sure about the process and who to engage, but probably someone in HQ. But my last interaction with that was that they wanted the California Trucking Association to kind of spearhead that. How do we get that started? Maybe someone has some advice, I don't know the process honestly.
- Mr. Bhullar: In general, Caltrans actually is an agent, a department, that recommends to the governor on a lot of topics but at the same time Caltrans cannot make the laws. We only implement the laws and however, what we can do is internally talk to our leg. affairs and at least they can get some conversation going in terms of some of the elected officials that work on transportation issues to see if they would probably be willing or if they have any interest in this, along with that, maybe the trucking industry and that's how it can be approached but Caltrans on own, we don't really make laws; that's the reason why we would approach it through leg. affairs and at least bring it to some elected officials' attention if they want to entertain it.
- Mr. Welday: One thing to consider is that if you are looking at a warning sign, is there a way to word the sign in such a way that it's warning of the danger as opposed to directing an action. For instance, hidden driveway ahead is warning the driver of the danger of it and not necessarily telling them what to do. And so is there a way to word the sign that is basically saying trucks, "TRUCKS MAY LEAVE LANE" or something like that. I don't know what the wording would be, but something that focuses more on warning of the danger rather than trying to kind of legislate the action.
- Mr. Kong: Kathryn, If I'm not mistaken, there were some different wordings that were considered, right? Like, TRUCKS OFF TRACKING and things like that.
- Ms. Kleinschmidt: Right, I think we went through different ... TRUCK MAKES WIDE TURNS, yes, but trucks may leave lanes and I know they can get on the apron. So I know that we struggled on how to

message it that really; they should not be on the side of the trucks in the multilane roundabout just because that can create a situation where they are pinched. I have received calls from motorists that almost got hit, near misses, stuff like that in the roundabout. They are very alarmed that this situation is happening, how to convey that.

- Mr. Bronkall: A graphic that displayed how the truck and a car behind it interact when the truck is off track, is the clearest way to convey that message rather than words. That may be something that should be looked into, and I do realize with the graphics that raises a higher level of review with the FHWA as well.
- Mr. Vora: We all recognize, there is a need to do something and the legislative route is going to take longer. Meanwhile, we need something to do. Like Kathryn, I would like to think we should get together with my sign group and try to come up with some other wordings. Based on some of the suggestions provided in this meeting and come back to this committee with revised wording, which does not include DO NOT, right.
- Mr. Moeur: Relating to Ron's comment regarding the sign, because the symbol or graphic sign like that was used earlier by the state of Arizona; that sign was dropped based on input from the FHWA Division Office because the sign used non-standard symbols and had not undergone human factors testing, so that's a very valid point that any proposed sign that uses a symbol, graphic pictograph, etc. would need the full experimental evaluation before I think it could move up to a standard sign.
- Mr. Powers: This doesn't seem to be a California specific problem. Is there any movement on the national level to come up with a standard sign to deal with this?
- Mr. Moeur: NCUTCD does have a Roundabout Joint Task Force. NCUTCD also has a Regulatory Warning Sign Technical Committee. I am not aware of the information I have received from either of those groups that are addressing this issue specifically yet, but I can forward it to the Chair of the Roundabout Joint Task Force and say that this was identified at a California Traffic Control Devices Committee meeting. It has also been an issue in Arizona and we will see. I don't know if there may be, but I need to confirm this. Signs of this may have been brought forward in FHWA traffic control device pool fund testing, but I'm not directly involved with that. I get secondhand reports and I typically get the reports after these devices are selected and evaluated, but I can look into that.

- Ms. Dostalek: Maybe just trying to narrow it down a little bit more, if we through the effort to resubmit the staff report here for a different sign, only to get shot down again. Jeri put in the comment section a sign that says, I'm not sure that language is quite right but like trucks make wide turns. Is that a sign that would be receptive to the CTCDC?
- Mr. Bronkall: I don't think that the sign necessarily conveys to an automobile what to expect in the roundabout. The thought that I'm currently thinking is that maybe the best approach for this proposal is to come back with an experiment where the committee might have less concern over the experiment and that would then allow Caltrans the ability to further vet something out that could then come back as a more formal permanent solution after trying something. In addition, for the long term permanent solution, if there is a need to go ahead and also have state law changed, it would be my preference to see both the propose signage and the proposed legislation that would go along with it hand in hand to ensure that everything would be in sync as that is being promoted into the legislative approval process. But I think clearly you do have the support of the committee that something needs to be done. We are not sure what it is, and we are not sure how to get there.
- Mr. Lozano: I was just going to suggest a plaque to go underneath the trucks, TRUCKS MAKE WIDE TURNS that says "SIDE SWIPE RISK". Just wondering how the committee thought about trucks make wide with a plaque that says "SIDE SWIPE RISK".
- Mr. Pyburn: I would caution against tying a particular sign to state legislation because we can't behold, we cannot be held to the actions of the state legislature. We will make a decision on the sign that we need to make and if it is tied to, the legislature and we can't support the sign, then what happens to the legislation?
- Mr. Bronkall: It was my intent that any proposal from Caltrans would coordinate with your office to internally work things out before it's presented to the CTCDC to make sure that, it looks like everyone's in general agreement of how to move this thing forward. That was kind of the thought process.
- Mr. Pyburn: We are happy to that, but again, caution against tying a sign to legislation because it limits flexibility in the future.
- Mr. Bronkall: Understood, all right I think we have spent a lot of time on this one. So, it looks like we are coming up to Section 7 upcoming meetings.

- Mr. Kong: Just to recap really quick for 26-02 just for notes and our meeting minutes. So that proposal was similar to this last one, so that Caltrans would reevaluate and come up with the updated proposal for the truck signs.
- Mr. Bronkall: The 26-02 did have a motion. Which is kicking it back to Caltrans for further revision to make things clearer.
- Mr. Kong: And then bringing back to the CTCDC at a future meeting.
- Mr. Bronkall, Correct. Well 26-05 had no motion made on it and commentary was provided to Caltrans for Caltrans to consider what they want to do next. So, in effect, 26-05 is still alive and kicking, with no action being taken.

Motion: No motion made on item 26-05 and commentary was provided for Caltrans to consider what they want to do next.

6e. Experimentation Item

None.

7. Upcoming Meetings

Mr. Kong stated the next regular CTCDC meetings are scheduled for August 6, 2026, and November 5, 2026

Discussion on future meetings:

- Mr. Kong: We have been having one in-person meeting a year rotating between Northern and Southern California. Last November, the meeting was supposed to be at the Sacramento International Airport in Northern California but was changed to a virtual meeting. Do we want to retain the in-person format for this November, and if so, what potential locations should we consider? Do we keep it in Northern California since we missed last time, or go back to Southern California?
- Mr. Bronkall: The August 6 Meeting is currently scheduled, but may be cancelled if the agenda is light on items.
- Mr. Welday: Given the tight timeline for the District 2 item, it is recommended to consult with the committee and resolve issues prior to the meeting to vote on the item.
- Mr. Bronkall: My recommendation would be that we have a July meeting or June meeting, whatever time frame works out for Caltrans, that would be not a traditional CTCDC meeting would be a focus meeting for that particular agenda item, similar to the way se dealt with the manual update.

- Mr. Kong commented one of the things we are considering is making it right now the deadline to submit agenda items is 3 weeks before the meetings. We plan to push the deadline even further before the meeting and also give more information to agenda item requesters.
- Mr. Bronkall: Locations for the November Meeting in Northern California: Sacramento Airport, first choice; Caltrans HQ or other location, second choice.
- November 5, 2026 Meeting will be in-person in Northern California.

8. Adjourn

Chair Bronkall adjourned the meeting at 11:58 a.m.