

CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC) AGENDA
May 10th, 2018 (10:00 A.M. to end)
45 Stony Point Road, Santa Rosa, CA 95401

The Meeting is open and public/local agencies are invited to attend. For further information regarding this meeting, please contact Vijay Talada at (916) 653-1816, or email vijay.talada@dot.ca.gov. Electronic copies of this meeting Agenda and minutes of the previous meetings are available at <http://www.dot.ca.gov/hq/traffops/engineering/ctcdc/index.htm>.

Organization Items

1. Introduction

- Welcome from City of Santa Rosa- Jason Nutt, Transportation and Public Works Director

2. Membership

Caltrans

- Hamid Zolfaghari– Voting member representing Caltrans

AAA Northern CA, NV, UT

- Xavier Maltese – Voting member representing with AAA Northern CA, NV & UT

3. Approval of Minutes of the Feb 8th, 2018 Meeting

4. Public Comments

At this time, members of the public may comment on any item not appearing on the agenda. Matters presented under this item cannot be discussed or acted upon by the Committee at this time. For items appearing on the agenda, the public is invited to make comments at the time the item is considered by the Committee.

1. Public comment on items not appearing on the agenda shall be limited to a maximum of 5 minutes each. Total public comment period prior to agenda items shall not exceed 20 minutes. Chairperson will ask for a show of hands from the audience present who would like to speak on non-agendized items. The 20 minutes can be proportioned accordingly if there are more than four speakers wishing to speak. Or an additional public comment period on items not appearing on the agenda can be heard after all agenda items are heard.
2. Public comment on agenda item shall be limited to 3 minutes.
3. During public comments, a member of public may speak only once per agenda item unless specifically requested by a majority of the CTCDC to come back and comment again.
4. Longer comments should be provided in writing 10 days prior to the meeting.

Local agencies conducting experiments should incorporate public feedback (if any input was received) in the status report and/or the Final Report. The merits of an experiment's success will be based on the identified problem or issue the Local/State Agency has identified when requesting permission to experiment. Local/State policies decision are not for CTCDC debate or CTCDC public comment as the CTCDC evaluates the technical merits of the experiment and how well it addressed the identified problem or issue.

When addressing the Committee, for the record please state your name, address, and business or organization you are representing.

5. Items under Experimentation

- 16-07 Request to experiment with modified signage and pavement markings requiring vehicles to stop behind light rail vehicles stopped to board or alight passengers
 Experiment Closeout: Final Report has been submitted and can be accessed at:
http://www.dot.ca.gov/trafficops/ctcdc/docs/Final-Report_SFMTA_Taraval_Signage.pdf
 Agency/Sponsor: SFMTA/ Mike Sallaberry

Agenda Items

6. Public Hearing

Prior to adopting rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant to Section 21400 of the California Vehicle Code, the Department of Transportation is required to consult with local agencies and hold public hearings.

Consent Items (minor discussion with vote expected)

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Pages</u>
18-09	Update to Section 2B.46 Parking, Standing, and Stopping Signs	Caltrans	Zolfaghari	8-10

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

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page</u>
18- 10	Intersection control Evaluation-Draft Language	Caltrans	Zolfaghari	11-12

Action Items (Continuing discussion from prior meetings with vote expected)

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page</u>
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7. Request for Experimentation

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page</u>
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8. Discussion Items

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page</u>
18- 11	Yellow time sub-committee	Caltrans	Zolfaghari	13
18- 12	Interim Approval 21 – Rectangular Rapid-	Caltrans	Zolfaghari	14
18-13	Yellow Band	SZS Consulting	Bronkall	15

9. Tabled Items

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>
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10. Next Meeting

August 9, 2018
 Caltrans District 11, Garcia Auditorium 1-125
 4050 Taylor Street San Diego, CA 92110

11. Adjourn

5. Items under Experimentation

Some reports are available at: <http://www.dot.ca.gov/hq/traffops/engineering/ctcdc/status.htm>

11-19 Experiment with 2nd advance California Welcome Center Destination Sign (Duper Tong)

1/23/2018: EL Dorado Hills Chamber of Commerce has provided the counts and has not recommended a change to the CA MUTCD based on this experiment.

7/21/2017: Chamber of commerce has informed the CTCDC that they will begin the experiment closeout process after completing the collection of data till the end of 2017.

Status 3/29/2017: Experiment is ongoing. Data collection is under progress.

Debbie Manning

President & CEO

El Dorado Hills Chamber of Commerce

California Welcome Center

2085 Vine Street, Suite 105

El Dorado Hills, CA 95762

12-9 Request to Experiment with Yellow LED Border on Pedestrian Signal (Duper Tong)

Status-1/17/2018-Equipment has been installed in D4, and D1 has received the devices

Status-10/3/2017 –Equipment is in the process of being installed to collect before data.

Status-5/18/2017-CTCDC approved the expansion of the experiment

Status: 1/18/17 – Additional locations are being pursued to install this device and collect additional data as per FHWA guidance.

The complete report is posted on the following website:

<http://www.dot.ca.gov/hq/traffops/engineering/ctcdc/reports.htm>

Joel T. Retanan, P.E., Chief

Division of Research, Innovation and System Information, Caltrans

Ph: (916) 654-8174

12-21 Request to Experiment with In-Roadway Warning Lights (IRWL) System that would supplement existing traffic signals along the Metro Gold Line (LA Metro) (David Fleisch)

Status: 1/16/2018: Data is being analyzed

Status: 10/2/2017: Data collection is complete and is currently being analyzed

Status: 3/29/2017: Data collection is in progress

Status: 3/10/2017: LA Metro has received FHWA approval regarding request to modify experiment

Status: 1/11/2017: *8(09)-8(E)-Red In-Roadway Lights at LRT Grade Crossings-Los Angeles, CA (Reference# HOTO-1)*

Lia Yim

LA Metro

Transportation Planning Manager

Countywide Planning & Development, Active Transportation
213.922.4063
YimB@metro.net

- 15-12 Evaluation of Traffic Calming in Treatments in Princeton, CA (Mike Sallaberry)

Status: 1/17/2018 In the process of drafting the final report
Status: 10/04/2017 Data collection is complete. Next steps would be to start the experiment close out process by preparing the Final Report.

Scott M. Lanphier, PE, CFM
Director of Public Works+
1215 Market Street
Colusa, CA 95932
slanphier@countyofcolusa.org

- 16-07 Request to experiment with modified signage and pavement markings requiring vehicles to stop behind light rail vehicles stopped to board or alight passengers (Mike Sallaberry)

Status: 1/17/2018 The SFMTA is currently preparing the final report for the experiment but we are able to provide an update on the main findings. In fall 2016, before the experimental treatments were installed, 72% of vehicles stopped behind the train when doors were open. The final compliance rate improved marginally with the treatments, achieving a compliance rate of 74%. There were no reported collisions at these 5 test locations during the six-month study period, but given the results of the evaluation, the SFMTA will close out the experiment.
Status Date-10/5/17- Currently reviewing video data to check the vehicle compliance rate. Scheduled to complete analysis by the end of the month and a recommendation to be provided after November, 2017.

Status Date-4/4/17 After data is being collected

Status Date-2/8/17 Installation of the Pavement markings was under way and pictures were provided on 2/13/17

Robert Lim, SFMTA

- 16-08 Request for Permission to Experiment with the Diagonal Down Yellow Arrow Lane Use Control Signal Indications on Freeway (Duper Tong)
Status Date- 08/04/2017 Before data is being collected. The data will be collected till fall 2017.
Status Date-08/31/2016 FHWA had provided approval to the request for experimentation
David Man
Caltrans District 4-Senior Transportation Engineer – Electrical

- 16-09 Request for Permission to Experiment with the Messages and Graphics on Dynamic Message Signs on Freeway (Duper Tong)

Status Date- 08/04/2017 Before data is being collected. Experimental six line display message concepts on the six information display boards will be displayed in fall 2017

Status Date-12/9/2016 FHWA had provided approval to the request for experimentation
David Man

Caltrans District 4-Senior Transportation Engineer – Electrical

- 16-23 Request to experiment with Green backed sharrow in Goleta, CA (Bryan Jones)

Status: 11/16/2017 Green backed share lane markings were not installed and agency is waiting for the completion of the slurry seal project which is scheduled to be completed in spring-summer 2018.

Status Date-7/17/2017- The City has completed the before conditions observations. Currently waiting to place the Sharrows until after a needed slurry seal is placed in the project area and it is anticipated that the slurry will be placed late this summer.

Status Date-1/10/2017

The experiment is ongoing. Traffic counts and video data were collected for the before condition observations with standard white shared lane markings on Hollister Avenue in the fall of 2016. The installation of the experimental green-backed sharrows will occur in the next couple months following completion of a roadway surface rehabilitation project that is scheduled for spring of this year on Hollister Avenue.

Thank you,
Teresa

Teresa Lopes, PE
Senior Project Manager
City of Goleta
P (805) 961-7563
F (805) 685-2635
tlopes@cityofgoleta.org

- 16-25 Request to experiment with through lane bicycle box, City of South Pasadena (Mike Sallaberry)

Status Date- 1/18/2018 – The project is out for bid. The bid opening will be on January 30, 2018.

Status Date-10/11/2017- Before study has been completed. The engineering plans are being reviewed. The project is planned to be advertised in November and the project should be complete by January.

Status Date-7/17/2017

The "Before" study will be conducted sometime in the late summer or early autumn of this year after school starts. The "After" study will be conducted after construction, preferably at the same time of year as the "Before" study.

Status Date-1/19/2017

City of South Pasadena is in the process of collecting the “Before” Data

Margaret Lin
Principal Management Analyst
City of South Pasadena
MLin@southpasadenaca.gov

- 16-33 Request to experiment with non-standard striping detail at Express lanes (Duper Tong)

Status Date -8/10/2017- Provided an in person status report at the Aug 10th, CTCDC meeting
Status Date -3/29/2017 -Experimental striping was installed on March 20, 2017

David Thomas

Riverside County Transportation Commission

DThomas@RCTC.org

- 17-15 Request for Experimentation-Red colored pavement markings for Transit Only Lanes in left turn only lanes (Pratyush Bhatia)

Status Date -10/4/2017 In the process of obtaining bids.

Status Date -08/28/2017-FHWA approval was received

Massoud Saberian, PE,

Transportation and Public Works - Traffic Engineering

69 Stony Circle, Santa Rosa, CA 95401

Tel. 707-543-3818

- 17-16 Request to Experiment with Internally Illuminated Raised Pavement Markers
LA Metro (David Fleisch)

Status Date -10/4/2017 In the process of Designing plans.

Sam Morrissey, MBA, PE, TE

Associate Vice President

Transportation Systems

801 S Grand Ave | Suite 530

Los Angeles, CA 90017

T213.802.1724

6. Public Hearing

Consent Items (minor discussion with vote expected)

Item 18-09 Update to Section 2B.46 Parking, Standing, and Stopping Signs (R7 and R8 Series), to recommend language for the existing 8 HOUR PARKING (S23(CA)) sign to be included in Section 2B.46; and, to propose a new 10 HOUR PARKING COMMERCIAL MOTOR VEHICLES permissive sign (RXXX(CA)) sign per California Vehicle Code §22651(s)2. Also, include references in Section 2I.05 Rest Area and Other Roadside Area Signs for a newly-adopted (RXXX(CA)) sign

Recommendation: Update Section 2B.46, as proposed, and adopt a new sign specification with permissive language that allows Commercial Motor Vehicles to park for up to 10 HOUR PARKING COMMERCIAL MOTOR VEHICLES, per California Vehicle Code (CVC) 22651(s)2; and, repeat optional language of existing sign S23(CA), and include new 10 HOUR PARKING COMMERCIAL VEHICLES sign in Section 2I.05 Rest Area and Other Roadside Area Signs.

Requesting Agencies/Sponsor: Hamid Zolfaghari, CTCDC Voting Member (Caltrans)

Background

The California Department of Transportation (Caltrans) Division of Maintenance commonly posts the S23(CA) “8 HOUR PARKING” sign in Safety Roadside Rest areas, and Vista Point facilities pursuant to the following sign policy, only shown in **Section 2I.05 Rest Area and Other Roadside Area Signs Option**

²⁴ [The Rest Area/Vista Point 8 HOUR PARKING \(S23\(CA\)\) sign may be used to discourage extended stays in roadside rests or vista points.](#)

- S23(CA), with its black on white color, and rectangular shape, it is technically a regulatory sign that addresses parking requirements and is enabled by CVC 22651(s)1; however, there is no mention of it in Chapter 2B, Regulatory Signs.
- This sign is based upon CVC 22651(s)(1), which states:

ARTICLE 1. Authority to Remove Vehicles [22650 - 22711]

(Article 1 enacted by Stats. 1959, Ch. 3.)

22651.

A peace officer, as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 of the Penal Code, or a regularly employed and salaried employee, who is engaged in directing traffic or enforcing parking laws and regulations, of a city, county, or jurisdiction of a state agency in which a vehicle is located, may remove a vehicle located within the territorial limits in which the officer or employee may act, under the following circumstances:

(s) (1) When a vehicle, except highway maintenance or construction equipment, an authorized emergency vehicle, or a vehicle that is properly permitted or otherwise authorized by the Department of Transportation, is stopped, parked, or left standing for more than eight hours within a roadside rest area or viewpoint.

- In addition to the existing sign and eight-hour limit for automobiles (vehicles not excepted and listed in CVC22651(s)1), there is a 10 hour stopping, parking or left standing limit for commercial motor vehicles, in the subsequent CVC 22651(s)2), for which there is no existing sign in the CA MUTCD:

(Continuing subparagraph (s), above):

(2) Notwithstanding paragraph (1), when a commercial motor vehicle, as defined in paragraph (1) of subdivision (b) of Section 15210, is stopped, parked, or left standing for more than 10 hours within a roadside rest area or viewpoint.

- For the reason cited in the CVC, Caltrans proposes that the CTCDC recommend the following updates to the *California Manual on Uniform Traffic Control Devices* (CA MUTCD), sections 2B.46 and 2I.05.

Note: **Red** text is newly proposed text.

Section 2B.46 Parking, Standing, and Stopping Signs (R7 and R8 Series)

Option:

⁸⁹ The Rest Area/Vista Point 8 HOUR PARKING (S23(CA)) sign may be used to discourage extended stays in roadside rests or vista points for automobiles. The 10 HOUR PARKING COMMERCIAL MOTOR VEHICLES (RXXX(CA)) may be used to allow ten total hours of parking for commercial vehicles. See CVC 22651(s)1 and CVC 22651(s)2.

Section 2I.05 Rest Area and Other Roadside Area Signs

Option

²⁴ The Rest Area/Vista Point 8 HOUR PARKING (S23(CA)) sign may be used to discourage extended stays in roadside rests or vista points for automobiles. The 10 HOUR PARKING COMMERCIAL MOTOR VEHICLES (RXXX(CA)) may be used to allow ten total hours for parking for commercial vehicles. See CVC 22651(s)1 and CVC 22651(s)2.



S23(CA)

Rest Area/Vista Point 8 HOUR PARKING sign (existing)



RXXX(CA)

10 HOUR PARKING COMMERCIAL MOTOR VEHICLES sign (proposed)

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

Item 18-10 Proposed Changes to Section 4C.01

Recommendation: Request the committee to recommend to include in the CA MUTCD, amendments to Section 4C.01

Agency Making Request/Sponsor: Hamid Zolfaghari, CTCDC Voting Member (Caltrans)

Note: **Red** text is newly proposed text.

~~Struck-out blue~~ text is to be deleted from the CA MUTCD.

Background:

At the May 2017 CTCDC Meeting, Caltrans' representatives gave a presentation on the use of ICE strategies, for transportation improvement projects located on and off the State Highway System, and how they can be incorporated to enhance safety and improve mobility on California roadways. The presentation was well received, and the CTCDC suggested that Caltrans consider providing additional guidance for local agencies throughout California.

Proposal:

Section 4C.01 Studies and Factors for Justifying Traffic Control Signals

Standard:

01 An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location.

01a On State highways, the engineering study shall include consideration of a roundabout (yield control). If a roundabout is determined to provide a viable and practical solution, it shall be studied in lieu of, or in addition to a traffic control signal.

Guidance:

01b On local streets and highways, the engineering study should include consideration of a roundabout (yield control). If a roundabout is determined to provide a viable and practical solution, it should be studied in lieu of, or in addition to a traffic control signal.

Support:

~~01c Refer to Caltrans' website (<http://www.dot.ca.gov/hq/traffops/liaisons/ice.html>) for more information on the Traffic Operations Policy Directive 13-02, Intersection Control Evaluation (ICE), and other resources for the evaluation of intersection traffic control strategies.~~

Support:

01c Yield-controlled roundabouts are now recognized as a standard intersection type and control strategy to be considered when identifying the need to add, modify, expand, and/or fully control intersections.

01d Intersection Control Evaluation (ICE) refers to the decision-making process and framework that a growing number of transportation agencies are adopting to provide more comprehensive alternative analyses to the consideration and selection of access strategies during transportation planning, project identification and initiation processes that consider the addition, expansion, modification, or "full control" of intersections.

01e ICE does not establish a new process. This guidance provides direction for practitioners who plan, sponsor, and develop state highway system access proposals to encourage new analytical tools and innovative engineering strategies are systematically considered and utilized when appropriate.

^{01f} The intent of ICE is to establish an integrated, systematic and performance-based approach to engineering and investment decisions affecting state highway intersections and interchanges. ICE achieves this goal by expanding the type of alternatives available during alternative analysis.

^{01g} For additional guidance on the procedural and engineering study requirements for ICE, refer to the California Department of Transportation's, Traffic Operations Policy Directive, Number 13-02, dated August 30, 2013, or the current policy that supersedes it.

Guidance:

^{01h} ICE procedures should be considered when evaluating:

- A. Safety improvement (collision reduction)
- B. Intersections that primarily include traffic signal, multi-way stop control, and yield-controlled roundabout proposals;
- C. Proposals to construct new or modify existing intersections on new and existing highways; and
- D. Traffic impacts to intersections generated by development.

⁰² **The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions, and the applicable factors contained in the following traffic signal warrants:**

Warrant 1, Eight-Hour Vehicular Volume

Warrant 2, Four-Hour Vehicular Volume

Warrant 3, Peak Hour

Warrant 4, Pedestrian Volume

Warrant 5, School Crossing

Warrant 6, Coordinated Signal System

Warrant 7, Crash Experience

Warrant 8, Roadway Network

Warrant 9, Intersection Near a Grade Crossing

⁰³ **The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.**

7. Discussion Items**Item 18-11 Yellow timing sub committee**

Recommendation: Request CTCDC to select a chairperson for the sub-committee

Requesting Agencies/Sponsor: Hamid Zolfaghari, CTCDC Voting Member (Caltrans)

Background

At the Feb 8, 2018 CTCDC meeting, it was recommended that a CTCDC subcommittee be formed to provide recommendations on yellow timing for turning movements. Caltrans has received nominations for this subcommittee.

CTCDC is requested to select the Chair of the sub-committee.

Item 18-12 IA 21 – Interim Approval for Optional Use of Pedestrian-Actuated Rectangular Rapid-Flashing Beacons at Uncontrolled Marked Crosswalks

Requesting Agencies/Sponsor: Caltrans, Hamid Zolfaghari, CTCDC Voting member

Background

On March 20, 2018, the Federal Highway Administration (FHWA) issued Interim Approval (IA-21) for the optional use of Rectangular Rapid-Flashing Beacons (RRFB). Since IA-21 is regarding the use of an effective pedestrian safety countermeasure and is very similar to the recently terminated IA-11, Caltrans has expedited the process of requesting approval of IA-21 and has requested a statewide blanket approval regarding IA-21 from FHWA on March 22, 2018.

On April 9th, 2018, FHWA had granted approval to Caltrans' Statewide Blanket approval request.

The FHWA letter granting statewide approval can be accessed from the below website:

<http://www.dot.ca.gov/trafficops/camutcd/interim.html>

Caltrans and local agencies may now use Rectangular Rapid-Flashing Beacons per the conditions of the Interim Approval listed in IA-21.

IA 21 can be accessed at:

https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm

FHWA FAQ related to IA 21 can be accessed at:

https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/faq/index.htm

Item 18-13 Yellow Band**Recommendation:** Solicit feedback from the committee**Requesting Agencies/Sponsor:** SZS Consulting Group LLC /Robert Bronkall, CTCDC member

Background: Since 1998, the California Building Code (CBC) has contained provisions for the placement of yellow banding that encircles poles where pedestrian traffic controls are located to alert people with low vision of the location of the controls. The yellow color required is the last color in the light spectrum that people can see as their vision fades and is eventually lost. This banding informs people with low vision of the availability of the controls when approaching an intersection from any direction.

In 1998, the CBC, Part 2, Volume 1, introduced this provision in section 1117B.5.10. At present, it is contained in 11B-703.7.2.7, as follows:

Pedestrian traffic-control buttons. Pole-supported pedestrian traffic-control buttons shall be identified with color coding consisting of a textured horizontal yellow band 2 inches (51 mm) in width encircling the pole, and a 1-inch-wide (25 mm) dark border band above and below this yellow band. Color coding shall be placed immediately above the control button. Control buttons shall be located no higher than 48 inches (1219 mm) above the ground surface adjacent to the pole.

As of the 2019 triennial cycle, this requirement will no longer be contained in the CBC. Now is the time to include this provision in the CAMUTCD.

It is proposed to include these provisions into the existing Section 4E.09 Accessible Pedestrian Signals and Detectors – General at line 08 or 09 and contain the requirement in the Standard in line 13.

8. Tabled Items

Agenda Item	Description
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9. Next Meeting

August 9, 2018
Caltrans District 11, Garcia Auditorium 1-125
4050 Taylor Street San Diego, CA 92110

10. Adjourn