CHAPTER 1B. LEGAL REQUIREMENTS FOR TRAFFIC CONTROL DEVICES

Section 1B.01 <u>National Standard</u> Standard:

- ⁰¹ The Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) is incorporated by reference in 23 Code of Federal Regulations (CFR), Part 655, Subpart F and shall be recognized as the national standard for all traffic control devices installed on any street, highway, bikeway, or site roadway open to public travel (see definition in Section 1C.02) in accordance with 23 U.S.C. 109(d) and 402(a).
- **In accordance with 23 CFR 655.603(a), the MUTCD shall apply to all of the following types of facilities:**
 - A. Any street, roadway, or bikeway open to public travel, either publicly or privately owned;
 - B. Streets and roadways on sites that are off the public right-of-way that are open to public travel without full-time access restrictions. Examples include roadways within shopping centers, office parks, airports, sports arenas, other similar business and/or recreation facilities, governmental office complexes, schools, universities, recreational parks, and other similar publicly-owned complexes and/or recreation facilities. The above-described examples of streets and roadways are referred to in this Manual as site roadways open to public travel;
 - C. Publicly-owned toll roads, including those under the jurisdiction of a public agency, public authority, or public-private partnership;
 - D. Privately-owned toll roads where the public is allowed to travel without access restriction. This includes gated toll roads or roadways where the general public is able to pay to access the facility; and
 - E. Grade crossings of publicly-owned roadways with railroads or light rail transit.
- **The MUTCD shall not apply to the following types of facilities:**
 - A. Roadways within private gated properties where access to the general public is restricted at all times;
 - B. Grade crossings of privately-owned roadways with railroads; and
 - C. Parking areas, including the driving aisles within those parking areas, that are either publicly or privately owned.
- ^{03a} In California, California MUTCD, which has been reviewed by FHWA CA Division and determined to be in substantial conformance with the National MUTCD, replaces the National MUTCD, and shall be the state standard for all official traffic control devices.
- California MUTCD shall be the standard for all traffic control devices installed on all of the following types of facilities:
 - A. Any highway or street that is publicly owned and maintained and open to the use of the public for purposes of vehicular travel. Refer to CVC Sections 360, 590, 21350, 21351, 21400 and 21401 and California Government Code Section 11340.9(h).
 - B. Any privately owned and maintained road, upon which a city or county has enacted an ordinance or resolution, regulating vehicular traffic. Refer to CVC Sections 21100, 21100.1, 21107, 21107.5, 21107.6 and 21107.7. This includes privately owned and maintained roads:
 - That are generally held open for use by the public for vehicular travel and which so connect with highways that the public cannot determine that the roads are not highways. Refer to CVC Section 21107.5(a).
 - 2. Which are generally held open to the public for purposes of vehicular travel to serve commercial establishments. Refer to CVC Section 21107.6(a).
 - 3. That are not generally held open for use of the public for purposes of vehicular travel but, by reason of their proximity to or connection with highways, the interests of any residents residing along the roads and the motoring public will best be served by application of the provisions of this code to those roads. Refer to CVC Section 21107.7(a).
 - C. Any privately owned and maintained road, upon which the private property owner has erected a notice to the effect that the road is privately owned and maintained and that it is subject to public traffic regulations or control. Refer to CVC Sections 21100, 21100.1, 21107, 21107.5, 21107.6 and 21107.7.
- 03c California MUTCD shall not be applicable to any privately owned and maintained road under the following conditions:
 - A. Any privately owned and maintained road upon which the owner has erected a notice of a size, shape, and color as to be readily legible during daylight hours from a distance of 100 feet to the effect that the road is privately owned and maintained and that it is not subject to public traffic regulations or control. Refer to CVC Sections 21107.5, 21107.6 and 21107.7.

Support:

- The use of this Manual is encouraged on all privately owned and maintained roads, in general, as a good practice. See Section 1D.02 for more information.
- ⁰⁴ The policies and procedures of the Federal Highway Administration (FHWA) to obtain basic uniformity of traffic control devices are as described in 23 CFR 655, Subpart F.
- ⁰⁵ Section 15-116 of the UVC (see Section 1A.06) states, "No person shall install or maintain in any area of private property used by the public any sign, signal, marking, or other device intended to regulate, warn, or guide traffic unless it conforms with the State manual and specifications adopted under Section 15-104." Adoption by agencies of such a provision through statute or ordinance can help maintain the integrity of official traffic control devices and provide continuity of uniformity at locations that are not subject to the provisions of this Manual.

Section 1B.02 State Adoption and Conformance

Support:

All States have officially adopted the National MUTCD either in its entirety, with supplemental provisions, or as a separate published document. The National MUTCD has also been adopted by the National Park Service, the U.S. Forest Service, the U.S. Military Command, the Bureau of Indian Affairs, the Bureau of Land Management, and the U.S. Fish and Wildlife Service.

Standard:

- ⁰² States or other Federal agencies that have their own MUTCDs or Supplements shall revise these MUTCDs or Supplements to be in substantial conformance with changes to the National MUTCD within 2 years of the effective date of the Final Rule for the changes [23 CFR 655.603(b)(3)]. Substantial conformance of such State or other Federal agency MUTCDs or Supplements shall be as defined in 23 CFR 655.603(b)(1). Support:
- On December 19, 2023, a Final Rule adopting the National MUTCD 2023 was published by Federal Highway Administration (FHWA) in the Federal Register with an effective date of January 18, 2024. California does not automatically adopt the National MUTCD immediately upon the effective date of the latest edition or revision of the National MUTCD. Caltrans revises the current CA MUTCD to adopt changes issued by FHWA to the National MUTCD, and to bring it into substantial conformance with the National MUTCD, within two years from the effective date of the final rule. Refer to Section 1A.01 for information on Caltrans' CA MUTCD annual revision cycle.
- This California MUTCD supersedes and replaces the previously adopted (on January 11, 2024) California MUTCD 2014 Revision 8.

Standard:

- ⁰³ For the purposes of Paragraph 2 of this Section, policies, directives, specifications, standard drawings, or similar documents that are issued by an agency and that change or modify Standard, Guidance, or Option provisions in this Manual shall be considered as supplements to the MUTCD and shall also be revised to be in substantial conformance with the National MUTCD.
- In accordance with 23 CFR 655.603(b)(1), in addition to a State MUTCD or Supplement, supplemental documents that a State issues, including but not limited to policies, directives, standard drawings or details, and specifications, shall not contravene or negate Standard or Guidance statements in the National MUTCD. Support:
- ⁰⁵ Caltrans publishes Standard Plans, Standard Specifications, Standard Special Provisions and other manuals and guidelines, which in addition to other topics, also contain specifications and requirements for traffic control devices, including their use and placement, when performing work on State highways. For the traffic control device topic portion of the contents in these publications, these publications are considered to be supplemental documents to the California MUTCD. In some cases, the specifications and requirements for traffic control devices contained in these publications, although in compliance with the minimum standards of the California MUTCD and the National MUTCD, can be more stringent (higher standard) than those shown in the California MUTCD. **Standard:**
- On State highways, the California MUTCD shall mean to include, but not limited to, supplemental documents (for the traffic control device topic portion of the contents), such as Caltrans' publications of manuals, guidelines, handbooks, pamphlets and other publications, including the following:

- A. Standard Plans,
- B. Standard Specifications,
- C. Standard Special Provisions,
- D. Proven Safety Countermeasure Guidance, Manuals and related publications,
- E. California Manual for Setting Speed Limits,
- F. Traffic Calming Guide,
- G. Flagging Instructions Handbook
- H. Traffic Safety Bulletins,
- I. Traffic Operation Policy Directives (TOPD)
- J. Official Memos.
- Any revisions to these supplemental documents shall conform to, or not contravene or negate, any Standard and Guidance statements, figures, or tables of the California MUTCD.
- ⁰⁸ If there is a discrepancy between the supplemental documents and the California MUTCD, the California MUTCD shall

govern.

- Support:
- ⁰⁹ Following information can be used to access some of these publications referenced:
 - A. Caltrans Manuals https://dot.ca.gov/manuals
 - B. Caltrans Safety Program https://dot.ca.gov/programs/safety-programs
 - C. Caltrans Traffic Operations https://dot.ca.gov/programs/traffic-operations

Standard:

The latest edition of Caltrans' California Sign Specifications shall be a part of this manual. If there are any discrepancies between the Sign Specifications and the California MUTCD, the California MUTCD shall govern. California Sign Specifications shall conform to, or not contravene or negate, any Standard and Guidance statements, figures or tables of the California MUTCD.

Support:

11 Refer to the following web link for Caltrans' California Sign Specifications: <u>https://dot.ca.gov/programs/safety-programs/sign-specs</u>

Section 1B.03 Compliance of Devices

Standard:

The U.S. Secretary of Transportation, under authority granted by the Highway Safety Act of 1966, decreed that traffic control devices on all streets and highways open to public travel in accordance with 23 U.S.C. 109(d) and 402(a) in each State shall be in substantial conformance with the Standards issued or endorsed by the FHWA. Support:

⁰² 23 CFR 655.603 also requires traffic control devices on all streets, highways, bikeways, and site roadways open to public travel in each State be in substantial conformance with standards issued or endorsed by the Federal Highway Administrator.

Standard:

⁰³ After the effective date of a new edition of the MUTCD or a revision thereto, or after the adoption thereof by the State, whichever occurs later, new or reconstructed devices installed shall comply with the new edition or revision, as required by 23 CFR 655.603.

Standard:

- ^{03a} For the purpose of the Standard in Paragraphs 4 and 5 of this Section, the reference to National MUTCD shall mean the California MUTCD. Refer to Sections 1A.01 and 1B.01 and CVC Sections 21400 and 21401 for more details.
- In cases involving Federal-aid projects for new construction, reconstruction, resurfacing, restoration, or rehabilitation of a facility to which this Manual applies, the traffic control devices installed (temporary or permanent) shall comply with the most recent edition of the National MUTCD before that highway is opened or re-opened to the public for unrestricted travel [23 CFR 655.603(d)(2) and (d)(3)].
- Unless a particular device is no longer serviceable (see definition in Section 1C.02), non- compliant devices on existing highways and bikeways shall be brought into compliance with the current edition of the National MUTCD as part of the systematic upgrading of substandard traffic control devices (and installation of new required traffic control devices) required pursuant to the Highway Safety Program, 23 U.S.C. §402(a).

Support:

⁰⁶ The FHWA has the authority to establish other target compliance dates for implementation of particular changes to the MUTCD [23 CFR 655.603(d)(1)].

Standard:

- The target compliance dates established by the FHWA shall be as shown in Table 1B-1 (Sheet 1 of 2). The target compliance dates previously established by the FHWA in the National MUTCD 2009 Edition shall be as shown in Table 1B-1(Sheet 2 of 2). The target compliance dates previously established by Caltrans pursuant to CTCDC recommendation shall be as shown in Table 1B-1(CA).
- Design, application, and placement of traffic control devices other than those adopted in this Manual shall be prohibited unless the provisions of Sections 1B.04 through 1B.08 are followed regarding official interpretations, experiments, changes to the MUTCD, and interim approvals granted by the FHWA. Support:
- ⁰⁹ Many of the provisions in this Manual that are explicitly prohibitive have been included to address practices that have been shown to be ineffective, unsafe, or inconsistent with uniformity. A provision of mandatory or recommended practice represents the accepted and established practice that promotes uniformity and consistency. The absence of a provision in this Manual that explicitly prohibits a particular practice, use, design, application, operation, or other aspect of a traffic control device does not, in itself, constitute acceptability or permission to use the device in a manner <u>not</u> provided for in this Manual.

Guidance:

- 10 Agencies should contact the FHWA when considering employing a practice or application that is not explicitly addressed in this Manual to ensure continued compliance with the provisions in this Manual. Support:
- The FHWA reviews and interprets the provisions in this Manual for agencies on an as-needed basis, which can lead to the issuance of official interpretations (see Section 1B.04), or interim approvals (see Section 1B.07). **Standard:**
- ¹² A non-compliant traffic control device that is being replaced or refurbished because it is damaged, missing, or no longer serviceable (see definition in Section 1C.02) for any reason shall be replaced with a compliant device, except as provided for in Paragraph 13 of this Section. Option:
- A non-compliant traffic control device may be replaced in kind when engineering judgment indicates it is more appropriate because:
 - A. One compliant device in the midst of a series of adjacent non-compliant devices would be confusing to road users, and/or
 - B. The schedule for replacement of the whole series of non-compliant devices will result in achieving timely compliance with the MUTCD.
- Agencies may install traffic control devices included in previously approved construction plans that complied with the previous version of CA MUTCD at the time of plan approval.
- Except for the traffic control devices with target compliance dates established by FHWA as shown in Table 1B-1 and those established by Caltrans using the CTCDC process and shown in Table 1B-1(CA), and traffic control devices that are not located within a construction work zone, all traffic control devices on existing highways and bikeways that have become non-compliant per California MUTCD adopted standards may remain in service through the end of their useful service life.

Section 1B.04 Interpretations

Support:

- ⁰¹ The FHWA issues authoritative interpretations of this Manual when necessary to provide clarity in response to unique situations for device application or general requests for clarification of a provision.
- ⁰² An interpretation includes a consideration of the application and operation of standard traffic control devices, the official meanings of standard traffic control devices, or the variations from standard device designs and design requirements.

Guidance:

- 03 *Requests for an interpretation of this Manual should contain the following information:*
 - A. A concise statement of the interpretation being sought;
 - B. A description of the condition that provoked the need for an interpretation;
 - C. Any illustration that would be helpful to understand the request; and

D. Any supporting research data that is pertinent to the item to be interpreted.

Support:

04 Section 1B.08 contains information on submitting a request for interpretation.

Section 1B.05 Experimentation

Support:

⁰¹ Requests for experimentation (see Section 1B.08) include consideration of field deployment for the purpose of testing or evaluating a new traffic control device, its application or manner of use, or a provision not specifically described in this Manual.

Standard:

- A traffic control device or application that does not comply with the provisions of this Manual shall not be used on any street, highway, bikeway, or site roadway open to public travel (see definition in Section 1C.02) without first receiving official approval to experiment from the FHWA's Office of Transportation Operations. Support:
- A request for permission to experiment (see Section 1B.08) will be considered only when submitted by the public agency or toll facility authority responsible for the operation of the road or street on which the experiment is to take place. For a site roadway open to public travel, the request will be considered only if it is submitted by the private owner or official having jurisdiction.
- A request for experimentation with a novel device or application across multiple jurisdictions as a single experiment with a common hypothesis, evaluation plan, and evaluation team will be considered when submitted jointly by all the authorities responsible for operation of the roads or streets on which the experiment is to take place. Similarly, a request to add experimental sites to an experimentation approved for another jurisdiction will be considered when submitted jointly by the all the authorities for operation of the roads or streets on which the experiment is then to take place.
- Manufacturers or inventors of novel devices are encouraged to engage the services of a qualified traffic engineer or other professional who is versed in traffic control devices. Early engagement during the concept and development processes will help ensure the efficacy of the device with regard to human factors, operational, safety, and other considerations prior to an agency requesting experimentation.
- In some cases, an off-roadway closed-course or laboratory study might be required before a request for experimentation can be considered. The purpose of such a study is to determine whether testing the experimental device or application in an open-road setting could result in an undue safety risk. *Guidance:*
- Before requesting permission to experiment with a new device or application, an owner of a site roadway open to public travel should first check for any laws, regulations, and/or directives covering the application of the MUTCD that might apply.

Option:

- ⁰⁸ An agency may request a preliminary assessment of the viability of a potential request for experimentation by submitting an abstract that briefly describes the experimental concept. Support:
- ⁰⁹ A diagram indicating the process for requesting and conducting experimentations with traffic control devices is shown in Figure 1B-1.

Standard:

- 10 The request for permission to experiment shall contain the following:
 - A. A statement indicating the nature of the problem and a hypothesis establishing the premise of the experiment.
 - **B.** A description of the proposed change to the traffic control device or application of the traffic control device, including the manner in which it deviates from the provisions of this Manual, and how it is expected to be an improvement over existing provisions.
 - C. Illustrations that would help to explain the traffic control device or use of the traffic control device.

- D. Any supporting data explaining how the traffic control device was developed, including if it has been tested, in what ways it was found to be adequate or inadequate, and how this choice of device or application was derived.
- E. Comparison of the proposed device to other compliant devices or treatments, either individually or in combination, that address the same condition, if applicable.
- F. A legally binding statement that the experimental device or application is in the public domain, in accordance with Paragraph 16 of this Section.
- G. The time period and location(s) of the experiment.
- H. Control sites for comparison purposes or justification for not using control sites.
- I. A detailed research and evaluation plan that provides for close monitoring of the experimentation, throughout all stages of its field implementation. The evaluation plan shall include an appropriate evaluation methodology, such as before and after analysis, or other appropriate methodology as well as quantitative data describing the performance of the experimental device.
- J. An agreement to provide semi-annual progress reports for the duration of the experimentation, in accordance with the schedule provided in Paragraph 12 of this Section, and an agreement to provide a report of the final results of the experimentation to the FHWA's Office of Transportation Operations within 3 months following completion of the experimentation (see Paragraph 14 of this Section). The FHWA's Office of Transportation Operations shall have the right to terminate approval of an agency's experiment if reports are not received in accordance with this schedule.
- K. An agreement to restore the site of the experiment to a condition that complies with the provisions of this Manual within 3 months following the end of the time period of the experiment. This agreement shall also provide that the agency sponsoring the experimentation will terminate the experimentation at any time that it determines that safety concerns are directly or indirectly attributable to the experimentation and the agency shall provide timely notification to the FHWA's Office of Transportation Operations. The FHWA's Office of Transportation Operations shall have the right to terminate approval of the experimentation at any time if there is an indication of safety or operational concerns, or if the terms of the approval are not being adhered to. If, as a result of the experimentation, a request is made that this Manual be changed to include the device or application being experimented with, the FHWA's Office of Transportation Operations will determine whether the device or application can be permitted to remain in place until an official rulemaking action has occurred.
- Where an item in Paragraph 10 of this Section is determined to not be applicable to the type of experiment, device, or application, the request shall provide sufficient explanation.
- 12 The required semi-annual progress reports shall be submitted throughout the course of an approved experiment in accordance with the following schedule:
 - A. No later than August 1st for the preceding period of January through June; and
 - **B.** No later than February 1st for the preceding period of July through December.
- 13 The experimenting agency shall submit a semi-annual progress report for any approved experiment even if no work was performed during the previous reporting period. Failure to submit two consecutive progress reports shall result in termination of the experiment and shall constitute rescission of the FHWA's approval to the experimenting agency, requiring restoration of the site(s) to a condition that complies with the provisions of this Manual within 3 months.
- ¹⁴ The experimenting agency shall submit a final report within 3 months of the conclusion of an approved experiment. If a final report is not received by the FHWA's Office of Transportation Operations, and the experimenting agency fails to notify the FHWA of any mitigating circumstances within 6 months of the end of the approved experimentation period, then the experiment shall be considered terminated and shall constitute rescission of the FHWA's approval to the experimenting agency, requiring restoration of the site(s) to a condition that complies with the provisions of this Manual within 3 months. Support:
- ¹⁵ Under certain circumstances the FHWA Office of Transportation Operations might allow an experimental device or device application that has been shown to be effective and without safety concerns to remain in use after the experiment has ended. This typically would occur if the device or application is actively being considered for interim approval under the provisions of Section 1B.07.

Standard

- A request for experimentation that involves a new traffic control device or a new application of an existing traffic control device shall include from the agency conducting the experiment, the manufacturer and/or developer of the device, and the supplier of the device, a legally-binding statement certifying that the traffic control device is not protected by a patent, trademark, or copyright in accordance with Section 1D.06, and that the traffic control device is in the public domain and can be used freely in traffic control device design and application without infringement or claim of trade secret misappropriation. The legally-binding statement shall also state that the agency conducting the experiment, the manufacturer and/or developer of the device, and the supplier of the device are aware that if patent, trademark, or copyright protection is established in the future for the device or application, such action will result in its removal from the MUTCD, cancellation of its interim approval, or cancellation of the authorization for experimentation.
- ¹⁷ For the purpose of the Standard in Paragraph 16 of this Section, traffic control device refers to those aspects of a sign, signal, marking or other device which regulates, warns, or guides traffic. The limitation on patent, trademark, or copyright protection does not include the legal protection of individual elements of such devices. For example, manufacturing methods, assembly methods, or individual components of such devices can be protected, whereas the traffic control device cannot be subject to protection so long as it remains in this Manual. As a further example, an internal circuit board for an electronic traffic control device can be legally protected, but the electronic traffic control device itself or its operational function cannot be legally protected by any of the above forms of intellectual property rights.

Support:

¹⁸ In addition to the requirements of the FHWA, experimental traffic control devices are subject to the laws, regulations and policies of the State of California.

Standard:

19 The agency shall request and receive approval from FHWA and Caltrans, prior to installation of experimentation devices on public roadways in California.

Guidance:

- 20 Caltrans should present the request to the California Traffic Control Devices Committee (CTCDC), prior to any agency's installation of experimentation devices on public roadways in California. Support:
- 21 For information contact: Executive Secretary, California Traffic Control Devices Committee https://www.dot.ca.gov/programs/safety-programs/ctcdc
- The California MUTCD contains the official standards and policies of the State of California for the design, application, and placement of traffic control devices.
- 23 Experimentation is defined as research involving the acts of testing, evaluating, analyzing or discovering the effect of a specific device, principle, supposition, etc., usually carried out in an operational context. Experimentation could also be performed in a laboratory. The request for experimentation is a submission specifically requesting approval to use a non-standard device on public roadways for purposes of gathering verification data.
- As used herein, the term "device" includes not only signs, signals, and markings, but also their application and manner of use. *Guidance:*
- 25 Requests for experimentation, interpretation, or changes relating to the California edited portion of the California MUTCD should be sent to:

(DRAFT - For review purposes only)

Executive Secretary,

California Traffic Control Devices Committee – MS36

P.O. Box 942874, Sacramento, CA-94274-0001

Support:

Part 1 - General

²⁶ The following procedures apply to requests for experimentation:

Submission of Projects

- A request for permission to experiment will be considered only when submitted by the public agency or private toll facility responsible for the operation of the road or street on which the experiment is to take place. *Guidance:*
- 28 Experimentation requests should contain the following information:
 - A. A statement indicating the nature of the problem.
 - B. A description of the proposed change, how it was developed, the manner in which it deviates from the standard, and how it is expected to be an improvement over existing standards.
 - C. Any illustration, photograph, or videos, which would help, explain the experimental device or use of this device.
 - D. Any supporting data as to how the experimental device was developed, if it has been tried, in what ways it was found to be adequate or inadequate, and how was this choice of device or application arrived at.

Support:

29 Requests for experimentation that are submitted without an explanation of the objective, scope, and duration will be returned to the originator for amplification.

Procedure for Processing Requests

- A. All requests for experimentation will be reviewed by Caltrans (Secretary of the CTCDC) to determine whether other related experimentation has been scheduled, in process, or already completed.
- B. The Secretary of the CTCDC will list the experimentation proposal on the next CTCDC meeting agenda for review and recommendation. The Committee's recommendation would also include the specific guidelines to be followed for the experimentation.
- C. Action by Caltrans based on CTCDC recommendation on any request for experimental use of a non-conforming device could take several forms:
 - 1. Recommendation of the device for limited use on an experimental project, subject to FHWA approval.
 - 2. Recommendation of the device for limited use in a formal research project, subject to FHWA approval.
 - 3. Not recommended until such time as satisfactory research or other justification is submitted.
 - 4. Not recommended.
- D. If action by Caltrans based on CTCDC recommendation on any request for experimental use of a non-conforming device results in a recommendation of the device for limited use, the agency will need to submit the experimentation request to FHWA and receive official approval to experiment from the FHWA's Office of Transportation Operations, to conduct the experiment.
- E. After action by Caltrans based on CTCDC recommendation, the Secretary of the California Traffic Control Devices Committee will notify the originating party of its decision. If approved by FHWA, the originating parties will be requested to submit a status report on the experimental testing at appropriate intervals. When the results of experimentation are completed, a final report will be prepared and forwarded to the Secretary for Committee review.
- F. The agency receiving FHWA approval for experimentation must agree to faithfully follow the specific guidelines for the experimentation, must forward reports as indicated, and must agree to terminate the experimentation upon notification.

Specific Guidelines for Experimental Proposal

Guidance:

- 30 A specific proposal should be submitted for each request. Support:
- This proposal can be submitted with the initial request or could be a follow-up to specific comments by the CTCDC in their recommendation to Caltrans. The proposal, after FHWA approval, will become an integral part of the approved experimentation. *Guidance:*
- 32 Each proposal should include:
 - A. <u>Scope</u>: A detailed description of the experimentation, locations of installation, and number of experimental projects.
 - B. <u>Work Plan</u>: A description of the proposed plan of study; the variables that are to be measured; the criteria against which the devices is to be evaluated; observations, measures and data which will be collected; whether the experimentation will be carried out in the field or under laboratory conditions; how installations of the experimental device or application will be made; the indication if any adverse effects on safety or traffic operations can be anticipated, together with the means that may be taken to minimize them; and the factors which will be held constant or measured and controlled in order to ensure that the true effects of the device are measured.

- C. <u>Time Periods:</u> Time periods for experimentation will normally not be less than six months nor more than two years.
- D. <u>Evaluation Procedures:</u> Caltrans via CTCDC process will recommend needed changes to criteria, if any, which will be used to evaluate experimental devices or applications. To permit meaningful comparisons with standard installations, advice from specialists such as human factor experts, statisticians, etc., could be included.
- E. <u>Reporting</u>: A written status report must be forwarded to the sponsor 45 days prior to each public meeting. A final report must be completed within 90 days of the terminal date of the experimentation and forwarded to Caltrans (Secretary of the CTCDC). Status reports will describe the progress of the work, any particular deviation from the work plan and anticipated time of conclusion. The final report will contain, as a minimum, the basic information on the problem, the preliminary investigations, the proposed solutions, the study procedures, the detailed analysis of the data, the results of the work, a discussion of the results, and whatever conclusions are drawn. If a change in the California MUTCD is proposed, the recommended text (wording) for the California MUTCD should be included.
- F. <u>Administration</u>: All experimentation proposals will include the agency sponsoring the study, the agency conducting the study, and the name and titles of principal researchers. There must be proof of professional traffic engineering capabilities and other related professional expertise to perform the experimentation and related evaluation processes.

Termination of Experimentation

Standard:

- The project shall terminate at the end of the approved period unless an extension is granted in writing by FHWA, and all experimental devices and applications shall be removed unless specific permission is given for continued operation. Support:
- FHWA could, at any time, terminate approval of experimentation if significant safety hazards are indicated to be directly or indirectly attributable to the experimentation. Approval of any experimentation could also be terminated if no status report is received 45 days prior to each public meeting or no final report is received within 90 days of the terminal date of the experimentation.

Removal of Experimentation Installations

Standard:

- All experimentation installations shall be removed upon termination of the experiment-when a decision is made by FHWA and Caltrans that the device is not-warranted. Support:
- ³⁶ Authority and reference cited for removal of experimentation installation is CVC Section 21400.

Section 1B.06 Changes to the MUTCD

Support:

- O1 Continuing advances in technology and approaches to traffic safety will produce changes in the highway, vehicle, and road-user proficiency; therefore, portions of the system of traffic control devices in this Manual will require updating. It is important to have a procedure for recognizing these developments and for introducing new ideas and modifications into the system.
- A change includes consideration of a new device to replace a present standard device, an additional device to be added to the list of standard devices, or a revision to a traffic control device application or placement criteria. *Guidance*:
- Requests for a change to this Manual (see Section 1B.08) should contain the following information:
 - *A.* A statement indicating what change is proposed;
 - B. Any illustration that would be helpful to understand the request; and
 - C. Any supporting research data that is pertinent to the item to be reviewed.

Support:

Requests for a change to this Manual will be evaluated to consider the potential safety and operational benefits of the requested change and be considered for inclusion in the future for consideration in the next rulemaking to issue a new edition or revision of the Manual. A diagram indicating the process for incorporating new traffic control devices into this Manual is shown in Figure 1B-2.

Section 1B.07 Interim Approvals

Support:

Interim approval allows for provisional use, pending official rulemaking, of a new traffic control device, a revision to the application or manner of use of an existing traffic control device, or a provision not specifically described in this

Manual.

- ⁰² The FHWA issues an interim approval by official memorandum signed by the Associate Administrator for Operations and posts this memorandum on the MUTCD Web site.
- ⁰³ Interim approval allows for the optional use of a traffic control device or application and does not create a new mandate or recommendation for its use. Interim approval includes conditions that jurisdictions, toll facility operators, or owners of site roadways open to public travel agree to comply with in order to use the traffic control device or application until an official rulemaking action has occurred.
- The issuance by FHWA of an interim approval might result in the traffic control device or application being proposed for adoption in the next scheduled rulemaking process to issue a new edition or revision of this Manual. If the device or application under interim approval is not proposed in the next rulemaking for a new edition or revision, then a statement of the status of the interim approval, whether it is to be rescinded or remain in effect, will be included in the Federal Register notice for the rulemaking.
- ⁰⁵ Interim approval is considered based on the results of experimentation, and/or results of analytical or laboratory studies with a traffic control device or application that analytically demonstrates a device effectively communicates its intended meaning. Interim approval considerations include an assessment of relative risks, benefits, costs, impacts, and other factors.
- ⁰⁶ Section 1B.08 contains information on submitting a request for interim approval.
- Interim approval is ordinarily considered only after published authoritative research and experimentation sufficiently demonstrate that the device or application provides a significant safety or operational improvement. Individual experiments by various jurisdictions, without a research report on the overall findings of the experimental device or application, will not ordinarily qualify for issuance of an interim approval.
- ⁰⁸ Interim approval ordinarily is not considered based solely on non-U.S. experience with a new traffic control device or application. Differences in regulations, enforcement and penalties, and driver licensing requirements, among other factors, can result in dissimilar road-user behavior. Additionally, due to variations in conventions for traffic control device design, a non-U.S. traffic control device concept might need to be adapted to U.S. criteria to ensure consistency with the provisions and principles of this Manual. However, documented non-U.S. experience can be considered in the development of requests for experimentation (see Section 1B.05) and within the evaluation plan for traffic control device research.
- ^{08a} Refer to Table 1B-101(CA) for the Interim Approvals issued by FHWA and their status in California. **Standard:**
- O9 A jurisdiction, toll facility operator, or owner of a site roadway open to public travel that desires to use a traffic control device or application for which FHWA has issued an interim approval shall request and receive permission from FHWA in writing prior to applying the device or application.
- 10 The request to place a traffic control device or application under an existing interim approval shall contain the following:
 - A. A description of where the device or application will be used, such as a list of specific locations or highway segments or types of situations, or a statement of the intent to use the device or application jurisdiction-wide;
 - B. An agreement to abide by the specific conditions for use of the device or application as contained in the FHWA's interim approval memorandum;
 - C. An agreement to maintain and continually update a list of locations where the device or application has been installed; and
 - D. An agreement to:
 - 1. Restore the site(s) of the interim approval to a condition that complies with the provisions in this Manual within 3 months following the issuance of a Final Rule on this traffic control device or application; and
 - 2. Terminate use of the device or application installed under the interim approval at any time that it determines that safety concerns are directly or indirectly attributable to the device or application. The FHWA's Office of Transportation Operations shall have the right to terminate the interim approval at any time if there is an indication of safety, operational, or other concerns.

Option:

11 A State may submit a request for permission to use a device or application under an existing interim approval for all

jurisdictions in that State, as long as the request contains the information required in Paragraph 9 of this Section. Support:

- Figure 1A-101(CA) shows the process for the use of traffic control devices in California approved as interim approval by FHWA. **Standard:**
- A jurisdiction, toll facility operator, or owner of a site roadway open to public travel that elects to use a device or application under a statewide interim approval shall inform the State of its use of the device or application.
- ¹³ Under a statewide interim approval, the respective jurisdictions, toll facility operators, and owners of site roadways open to public travel shall maintain and continually update a record of all locations on their roads where the device or application is implemented (see Item C of Paragraph 9 of this Section) and shall furnish this information to the State.

Section 1B.08 <u>Requesting Official Interpretations, Experiments, Changes to the MUTCD, or Interim</u> Approvals

Approvals

Guidance:

A local jurisdiction, toll facility operator, or owner of a site roadway open to public travel that is requesting permission to experiment or permission to use a device or application under an existing interim approval should first check for any State laws, regulations, and/or directives covering the application of the MUTCD provisions that might apply.

Standard:

- ⁰² Except as provided in Paragraph 3 of this Section, requests for an interpretation, permission to experiment, a change to the MUTCD, granting of an interim approval, or permission to use an existing interim approval shall be submitted electronically to the Federal Highway Administration (FHWA), Office of Transportation Operations, MUTCD team, at the following e-mail address: MUTCDofficialrequest@dot.gov. Option:
- If electronic submittal is not possible, requests for an interpretation, permission to experiment, a change to the MUTCD, granting of an interim approval, or permission to use an existing interim approval may instead be mailed to the Office of Transportation Operations, HOTO-1, Federal Highway Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590.

Support:

- ⁰⁴ Communications regarding other MUTCD matters that are not related to official requests will receive quicker attention if they are submitted electronically to the MUTCD Team Leader or to the appropriate individual MUTCD technical lead team member. Their e-mail addresses are available through the links contained on the "MUTCD Team" page on the MUTCD Web site at http://mutcd.fhwa.dot.gov/team.htm.
- ⁰⁵ For additional information concerning interpretations, experimentation, changes, or interim approvals, visit the MUTCD Web site at http://mutcd.fhwa.dot.gov.

