

**AGENDA**  
**CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC)**  
**September 2, 2010 Meeting (Start Time 9 a.m.)**  
**220 South Daisy Avenue, Building A**  
**City of Santa Ana, CA 92703**

**Organization Items**

**1 Introduction**

**2 Approval of Minutes (April 15, 2010 Meetings)**

**3 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. Any person addressing the Committee will be limited to a maximum of five (5) minutes so that all interested parties have an opportunity to speak. When addressing Committee, please state your name, address, and business or organization you are representing for the record.

**Agenda Items**

**4 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 (CVC), the Department of Transportation is required to consult with local agencies and hold public hearings.

		Page #s
10-08	Proposal to Amend CA MUTCD Section 2D.19 <u>Business Auxiliary Sign (M-3)</u> (Requested by San Bernardino County)	(Introduction) (Babico) 6-9
10-09	Proposal to adopt a double wide solid or double wide broken white lane marking for HOV lanes in California and to revise CA MUTCD Section 3B.23 and add new Figure 3B-26(CA) (Requested by Caltrans)	(Introduction) (Henley) 10-21
07-7	Experimentation by Implementation of Two New School Site Loading Signs (Experiment was Requested by San Francisco)	(Continued) (Banks) 22-22

**5 Request for Experimentation**

10-10	Request for Permission to Experiment with modified SPEED HUMP (W17-1) Signs (Requested by the City of Stockton)	(Introduction) (Knowles) 23-30
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**6 Information Items**

10-11	Status of speed limit procedures changes in July 2009	(Introduction) (Henley) 31-31
10-7	<u>National MUTCD 2009</u> The following dates are scheduled to hold CTCDC Technical Workshops to review National MUTCD for the adoption in CA	(Continued) (Henley) 32-32

WORKSHOP #3: [August 31 & September 1, 2010 \(Santa Ana\)](#) - Parts 3 (Markings) & 6 (TTC Work Zones)

WORKSHOP #4: [October 19-20, 2010 \(Sacramento\)](#) - Parts 4 (Traffic Signals) & 8 (Railroad Xing)

### **Information on CA MUTCD**

A List of Signs is shown [on page 32](#) that were included in to the revised CA MUTCD 2010.

The CA MUTCD 2010 has been posted on the following website:

<http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/index.htm>

08-18 Proposal to adopt “NO IDLING COMMERCIAL VEHICLES & SCHOOL BUSES” Sign  
Status: The policy has been approved and posted on the following website:  
<http://www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm>  
This item will be removed from the future agenda’s.

06-5 Clear The Way Signage (Drive Damaged Vehicle to Shoulder)  
Status: The Committee suggested either use the National MUTCD 2009 sign or ask approval from the FHWA for the symbol sign which was used during the experimentation. A letter was sent to the FHWA on April 29, 2010, requesting change to MUTCD for an additional device to be added to the list of standard devices (Section 2B.65 FENDER BENDER Sign R16-4). On June 9, 2010, FHWA denied Caltrans request for the use of symbol sign, however, they encouraged collecting more data on human factor research for their further considerations. Caltrans has decided not to pursue further study.

Note: The CTCDC closed this Item during the April 15, 2010 meeting. This item will be removed from the future agenda’s.

10-2 Proposal to amend existing typical applications and adopt new TA’s for accommodating bicyclists in TTC zones and to Revise CA MUTCD Sections 6D.101(CA) and 6G.05 and added a new Table 6H-1(CA).  
Status: The policy will be issued in two to four weeks. This item will be removed from the future agenda’s.

**7 Next Meeting**

**8 Adjourn**

ITEM UNDER EXPERIMENTATION

- 06-2 Experiment with Colored Bike Lane (Wong)  
 (Proposed by the City of San Francisco)  
**Status:** Experiment with Colored Bike Lane: The first test location and material was installed in May 2010. Data collection is continuing. The next two locations have been identified, before data collection is occurring, and the variable is scheduled to be installed by the end of September. All data collection and a subsequent analysis will now be performed by the City.  
  
 The revised schedule is as follows:  
 Winter 2009/2010 - Investigate Materials Spring 2010 thru Spring 2011 - Collect Before Data  
 Spring 2010 thru Spring 2011 - Install Variable at Test Locations Spring/Summer 2011 -  
 Collect After Data Fall/Winter 2011 - Analyze Data and Prepare Final Report
- 07-7 Experimentation by Implementation of Two New School Site Loading Signs (Wong)  
**Status** – We have completed evaluating all post-installation study zones. Our findings show that the signs were not very effective in changing the behavior of drivers in the loading zones. At 6 of the 9 schools (15 zones in all), little change in driver behavior was observed and in most cases, actually got worse. Two of the 3 other schools showed improvement in numbers, but the sample size was so small (2-3 vehicles) that it was not considered significant. The big improvement at the last school was more likely due to the installation of a new passenger zone rather than the new sign. Overall, we did not see any improvement with these new school site loading signs.  
  
 This experimentation is completed. Is there anything more that the City must do to conclude the experiment with CTCDC?
- 07-19 Wildlife Corridor Signage (Babico)  
 (Proposed by the County of San Bernardino)  
**Status:** In the process to Request approval from the FHWA
- 08-7 Request for Experimentation with new Warning Sign for Bicyclists (Wong)  
 (Proposed by the City/Co of San Francisco)  
**Status:** No change since their last report. The City and County of San Francisco would like to bring this experiment to a close and therefore will analyze collision data collected before and after the installation of this experimental warning sign and submit the results to the Committee within the next 12 months for its evaluation.
- 08-20 Request to Experimentation with Flashing Yellow Arrow for Permissive (Mansourian)  
 Right Turn Movement  
**Status:** See under “Status Report – Ongoing Experiments” on the following website:  
<http://www.dot.ca.gov/hq/traffops/signtech/newtech/index.htm>
- 08-21 Proposal to Experiment with Regulatory Sign “BIKES IN LANE” with (Henley)  
 Bicycle Symbol (Originally submitted as “Bike May Use Full Lane”)  
**Status:** Caltrans District 5 still looking for funding for the human factors study. The signs have been well received and there are no negative issues to report at this time. State collision data is not yet available, however, collision data obtained from the City of Santa Cruz up to 09/01/09, shows that there have been 3 bike related collisions since the signs went up, 5 in the year previous, and 7 in the year prior to that.
- 09-9 Request to Experiment with Steady Red Stop Line Light (Fisher)  
 (Requested by the City of Los Angeles)

**Status:**

**CTCDC  
STATUS OF EXPERIMENT**

**Date:** March 11, 2010

**Item:** 09-09      **Experiment:** Steady Red Stop Lights

**Sponsor:**      City of Los Angeles Department of Transportation (LADOT)

**Supporting Agency and Contact:**      LA County Metropolitan Transportation Authority (Metro), Abdul Zhobi (213) 922-2114

**Next Appearance Before the CTCDC:** \_\_\_\_\_

**Milestones:**      Started "before project" data collection in November 2009

Started construction in **February 2010**

Finish construction in **March 2010**

Start "after project" data collection in **May 2010**

Finish all data collection in **September 2011**

Finish final report **December 2011**

**Status:** Metro has secured limited funding to proceed with the experiment at two, instead of five intersections proposed in the original application. One is at Metro Orange Line crossing at Woodman Avenue and the other is at Metro Blue Line crossing at Los Angeles Street. The construction is currently 90% complete. We expect to turn on the lights by the end of March. We are also collecting "before project" data and will start collecting "after project" data beginning May 2010.

Applicant's Signature: \_\_\_\_\_

Applicant's Name: Kang Hu, PE, PTOE

Address: 100 S. Main Street, Los Angeles, CA 90012

Phone: 213-972-8627

FAX: 213-972-8610

09-13      Experiment Request for the USAGE OF "HOV" IN LIEU OF  
"CARPOOL" Signage Related to the Los Angeles EXPRESS LANES  
**Status:** **The project is in planning stage**

(Henley)

09-14 Experiment request for the Usage of “TRANSIT LANE” in lieu of “CARPOOL” Signage (Henley)

**Status:** The project is in planning stage

09-21 Request for Permission to Experiment with Separated/Protected Bikeway on the Left Side of Two One-Way Streets in the City of Long Beach (Rte 9-112E) (Fisher)

**Status:** See under “Status Report – Ongoing Experiments” on the following website:  
<http://www.dot.ca.gov/hq/traffops/signtech/newtech/index.htm>

**Pending Items for Caltrans Action**

07-1 Proposal to revise the sizes for the Supplemental School Plaques (S4-3, W16-7p and W16-9p)

**Status:** No update was received.

**10-08 Proposal to Amend CA MUTCD Section 2D.19 Business Auxiliary Sign (M-3)**

**Recommendation:** San Bernardino County recommends adoption for of the Section 2D.19 as shown in the proposal.

**Requesting Agency:** San Bernardino County

**Sponsor:** Jacob Babico, CTCDC member representing Southern counties.

**Background:** This is a request to add to the CTCDC agenda meeting of September 2010. The Wrightwood community and the Chamber of Commerce of the Wrightwood Community are requesting to designate segment of State Route 2 (SR-2) as a Business District Route. In order to allow that, Section 2D.19 needs to be changed to the following”

**Proposal:****Section 2D.19 Business Auxiliary Sign (M-3)****Option:**

The Business (M4-3) auxiliary sign (see Figure 2D-4) may be used to designate an alternate route that branches from a numbered route, passes through the business portion of a City **or unincorporated area**, and rejoins the numbered route beyond that are.

**Standard:**

If used the BUSINESS AUXILIARY SIGN SHALL BE MOUNTED ABOVE A ROUTE SIGN.

**Option:**

The ROUTE \_\_\_\_\_ BUSINESS (G76(CA)) sign may be used to direct motorists to an established U.S. or State numbered business route or an interstate business loop from a State Highway.

**Guidance:**

The G76(CA) sign should be installed below an advance ground-mounted directional sign.

**Option:**

The G76(CA) sign may be placed separately in advance of the business route if it is necessary. A NEXT RIGHT/LEFT message may be used. Refer to Section 2D.09 for establishing business routes.

**Attachments:**

The Wrightwood Chamber of Commerce would like to have “**Route 2 BUSINESS**” G76(CA) sign as shown in Figure 2D-4 (CA) on page 2D-54 be placed on SR-2 .

***Figure 2D-4 (CA). California Route Sign Auxiliaries***

G76 (CA)

**Section 2D.18 BY-PASS Auxiliary Sign (M4-2)****Option:**

The BY-PASS (M4-2) auxiliary sign (see Figure 2D-4) may be used to designate a route that branches from the numbered route through a City, bypasses a part of the City or congested area, and rejoins the numbered route beyond the City.

**Standard:**

**If used, the BY-PASS auxiliary sign shall be mounted directly above a route sign.**

Note: This subject was discussed with Johnny Bhullar in Year 2007.

**DEPARTMENT OF PUBLIC WORKS**

FLOOD CONTROL • LAND DEVELOPMENT & CONSTRUCTION  
SOLID WASTE MANAGEMENT • SURVEYOR • TRANSPORTATION



COUNTY OF SAN BERNARDINO

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GRANVILLE M. "BOW" BOWMAN, P.E., P.L.S.  
Director of Public Works

July 15, 2010

Devinder Singh  
Senior Transportation Engineer  
Executive Secretary, CTCDC  
1120 N Street, MS36  
Sacramento, CA 95814

**RE: AMEND SECTION 2D.19 OF CA MUTCD**

Devinder,

The Community and the Chamber of Commerce in the Wrightwood area are requesting to designate a segment of State Route 2 as a business district route and place "ROUTE 2 BUSINESS" G76(CA) sign shown in figure 2D-4 on page 2D-54 of the CA MUTCD. However, Section 2D.19 should be amended to qualify the unincorporated area for such designation. As such we request to amend Section 2D.19 to read as follows:

Section 2D.19 BUSINESS Auxiliary Sign (M4-3)

Option:

The Business (M4-3) auxiliary sign (see Figure 2D-4) may be used to designate an alternate route that branches from a numbered route, passes through the business portion of a City or congested area, and rejoins the numbered route beyond that area.

Standard:

If used the BUSINESS AUXILIARY SIGN SHALL BE MOUNTED ABOVE A ROUTE SIGN.

Option:

The ROUTE \_\_\_\_\_ BUSINESS (G76(CA) sign may be used to direct motorists to an established U.S. or State numbered business route or an interstate business loop from a State Highway.

GREGORY C. DEVEREAUX  
County Administrative Officer

Board of Supervisors			
BRAD MITZELFELT .....	First District	NEIL DERRY .....	Third District
PAUL BIANE .....	Second District	GARY C. OVITT .....	Fourth District
JOSIE GONZALES .....	Fifth District		

Letter to Devinder Singh  
July 15, 2010  
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Guidance:

The G76(CA) sign should be installed below an advance ground-mounted directional sign.

Option:

The G76(CA) sign may be placed separately in advance of the business route if it is necessary. A NEXT RIGHT/LEFT message may be used. Refer to Section 2D.09 for establishing business routes.

It should be noted that the proposed language is similar to the language shown in Section 2D.18.

San Bernardino County sponsors the request from the Community and Chamber of Commerce of Wrightwood. Wrightwood Community has a population of 3,308 located just east of Los Angeles County and 4 miles from Mountain High Ski Resort. Wrightwood California has much to offer as a Southern California Mountain Resort Town. SR-2 passes through the community with a variety of businesses along both sides of the highway such as lodging, restaurants, shopping & gifts, real estate and ski equipment rental.

San Bernardino County appreciates this item to be placed on the September CTCDC meeting agenda, and approve the proposed change in the policy of Section 2D.19 of the CAMUTCD.

Sincerely,



JACOB Y. BABICO, P.E.  
Chief Traffic Division

JYB/sr

Cc: Brad Mitzelfelt, First District Supervisor  
Reading File

**10-09 Proposal to adopt a double wide solid or double wide broken white lane marking for HOV lanes in California and to revise CA MUTCD Section 3B.23 and add new Figure 3B-26(CA).**

**Recommendation:** Adopt the double lane line (consisting of two wide white lines) to designate HOV or Express lanes. Two solid wide white lines would be used in areas where access is restricted, and two broken wide white lines would be used in areas where crossing is allowed.

**Agency Making Request/Sponsor:** Caltrans

**SUMMARY (Executive Summary):****A. This proposal is motivated by four distinct actions:**

1. Anticipation of the adoption of the 2009 Federal MUTCD which established new standards for Preferential Lanes.
2. Addition of Express Lanes (i.e. special use lanes reserved for HOV and toll-paying single occupant vehicles),
3. The evolution of the Department's operational policy & practices that supports and even encourages the employment of unlimited/continuous access operation for HOV lanes
4. Implementation of the Action Plan for Challenge Area 5 of the California Strategic Safety Plan

**B. The most significant changes and benefits that will be produced by this proposal include:**

1. The elimination of yellow stripes from the current standard practice for limited access HOV operation. The current practice (featuring 2 or 4 parallel solid yellow lines) functions as "barrier striping" which prohibits lane changing between the HOV and adjacent General Purpose lane.

The 2009 Federal MUTCD establishes a detail with 2 (or 4) parallel solid **wide white** stripes to serve the same function.

2. Adoption of the Federal MUTCD's **double-broken wide white** striping configuration as the new standard to delineate the lane line between unlimited / continuous access Preferential Lanes and the adjacent General Purpose lanes.

The new standard will replace the current striping detail (either an 8" or 4" broken white lane line) that is employed to indicate that lane changing is permitted.

**C. The primary reasons and justification for the proposed striping standards include:**

1. Uniformity of the striping detail for Preferential Lanes employed throughout the state will be greatly improved today, at least a dozen variations of the striping pattern (i.e. the number, width, and spacing between stripes) exist on southern California freeways alone.
2. A unique and substantially more conspicuous lane line detail will improve driver recognition of lanes with special use conditions or requirements. This will simplify driver decision-making, and thereby improve driver performance in freeway corridors which undeniably have the most complex infrastructure and operating conditions in the state (if not the nation). Note: This is reflected in the SHSP Challenge Area 5 collision trends that will be further discussed in the Background section below.

On many metropolitan area freeways (especially in southern California) the sheer width, condition, pavement color (PCC), and location of longitudinal paving joints collectively diminish the visibility of striping – especially under challenging environmental conditions (wet weather, darkness and

headlight glare). Wider striping, and the value added by contrast treatment along the length of the broken stripes will increase the driver's ability to see, recognize and comprehend the edge lines and lane lines.

The evolution of a unique striping detail for freeway auxiliary lanes (all or most of which terminate within a mile) has proven to be valuable in reducing the number of unnecessary lane changes in high-speed and density locations that are subject to unstable flow.

3. A reduction in collision frequency, conservatively estimated to range between 5% and 10%, is expected. In fact, one recent safety research study performed to evaluate enhanced striping (i.e. wider stripes) along urban freeway corridors produced a Collision Reduction Factor of 56%.

**NOTE:** Secondary reasons which support the proposal include the incremental but potentially positive impact on violation rates due to the unique and significantly more conspicuous appearance of the double-broken wide white striping configuration. This potential benefit will be presented in the DISCUSSION section (see below).

**D.** Concerns expressed by partners and stakeholders focus primarily on the impact that the wider striping detail for unlimited / continuous access operation will have on:

- Motorcyclists, especially those who choose to "lane split" – the name used to describe passing by motorcyclists between stopped or slow moving vehicles in adjacent lanes – when the pavement and marking material is wet.
- Drivers of passenger vehicles (especially larger PC's)
  - they may be confused by a striping detail (double-broken wide white) that has not been used or even tested on California's freeways
  - the wider striping detail may produce a perception of a narrow lane, which can cause severe braking or an unexpected response
- the cost to place and maintain pavement markings

Responses to these concerns are presented in the DISCUSSION section (see below).

## **BACKGROUND:**

A. Over the past 10 years, collision data trend analysis, before-after evaluation of site-specific safety improvements, and formal safety research studies – all performed in support of SHSP CA5 and its predecessors – have produced findings that establish a strong relationship between:

- Severe collision concentrations and the complexity of freeway infrastructure and operating conditions
- Enhancements to traffic control devices (e.g. signing, striping, flashing beacons, etc.) and a significant reduction in collision frequency

Challenge Area 5 is primarily concerned with the severe collision trend related to lane changing on high-speed, multi-lane highways - especially freeway corridors or segments in metropolitan areas with:

- recurrent mainline congestion
- unstable flow, which is usually accompanied by:
  - substantial speed differential among adjacent mainline lanes
  - abrupt lane changing as drivers attempt to leave or enter lanes with stopped or slow-moving traffic

- relatively high speeds and density in which merging, diverging, and weaving can be the initial source of unstable flow

The source of the above undesirable operating conditions includes:

- exit ramps with queuing that extends to or onto the outside mainline lane
  - right lane overloads due to relatively high-volume entrance and exit ramps during peak period merge and diverge operations when mainline is at or near capacity
  - deficient weaving sections
    - between successive entrance and exit ramps
    - along the ingress-egress opening of a limited access Preferential lane
    - two-sided weaving between the ingress-egress opening of a limited access Preferential lane and the conventional right-side access point
- B. Repeated requests for greater flexibility in HOV lane operating practices by Orange County transportation officials in late 2005 shifted the focus of a formal safety research study on HOV lane performance deficiencies. The research findings formed the basis of the current, more flexible HOV lane operational policy, and pending revisions to the technical content of the Department's HOV Guidelines. These changes will support and even encourage the employment of unlimited / continuous access operation for Preferential Lanes.

Various research and site-specific engineering safety studies have confirmed that driver performance and decision-making is enhanced when drivers are provided with more and/or clearer information, especially positive guidance in high-speed, complex highway environments. And, since driver's make fewer errors when they are better informed, safety performance is generally improved when enhanced signing, striping, lighting, etc. is provided, especially in complex driving environments.

- C. The Orange County Transportation Authority, in cooperation with Caltrans District 12, recently prepared and has begun to implement a county-wide plan to convert all HOV lanes from limited access operation to unlimited / continuous access operation via a combination of freeway improvement projects (ranging from pavement rehabilitation to stand-alone conversion projects).
- D. The attached proposal was generated by the SHSP Challenge Area 5 team, and has been discussed with various internal and external partners and stakeholders, including:
- the Caltrans District HOV Coordinators
  - the Caltrans *HOV GUIDELINES* Update Committee (which includes representatives from the FHWA California Division Office and the CHP), and
  - the Caltrans District 12-led technical committee formed to develop project-level technical guidance to support the Orange County implementation plan (which includes representative from the local CHP Office and FHWA Division Field Office).
  - Informal presentation and dialogue at June CTCDC Workshop in Costa Mesa

**DISCUSSION:**

## A. Pros: Value &amp; User Benefits

The 2009 Federal MUTCD presents an opportunity to substantially improve the uniformity of Preferential Lanes, and to mitigate for the increasing complexity that southern California have and continue to experience as Preferential Lane requirements evolve and change in real-time, especially on southern California freeways that already experience severe collision concentrations unlike most others in the state.

This proposal will provide a higher degree of uniformity than that which would be produced if California adopted the 2009 Federal MUTCD without the proposed modifications. Greater uniformity would be produced by selecting specific striping options as the new standards, instead of adopting all standard details, such as the single wide white stripe.

Further, the proposal would establish one design or arrangement of stripes (colors and widths) that could be applied to retrofit situations as well as newly proposed Preferential Lanes throughout the entire state. Of course, the one design would have two basic variations:

- i. SOLID striping where lane changing is prohibited
- ii. BROKEN striping where lane changing is permitted

Compliance with the new standards will require a substantial planning and retrofit effort to convert the existing striping configuration employed along limited access operation (which OCTA and Caltrans are undertaking for all of Orange County, with the exception of the 91 Express Lanes). This entails the removal of lengthy segments of the existing “barrier striping” configuration (multiple solid yellow and white stripes), and placement of the new standard detail for Preferential Lane barrier striping, which is shown in Exhibit A.2.a (two parallel solid wide white stripes with a black stripe between the two white stripes).

For limited access Preferential Lane ingress-egress openings, and for Preferential Lane facilities on which unlimited / continuous access operation is employed, it is proposed to adopt the striping detail shown in Exhibit A.2.b (double-broken wide white with black stripe between the two white stripes). See Exhibit A.2.c for a depiction of the transition from the barrier-striping configuration where lane changing is prohibited to the proposed striping standard detail for segments where lane changing is permitted. If the proposal is adopted, driver’s will now see two basic striping configurations instead of the three basic configurations now employed (barrier-striping with solid yellow and white stripes; single-broken wide white striping; and, the conventional broken white detail employed where part-time Preferential Lanes are operated.

If this proposal is not adopted, it is likely that at least three basic configurations will continue to be employed, and all three could be used in the same region (and possibly the same corridor). This outcome is likely where Preferential Lane corridors in southern California (at least Orange and San Bernardino counties) are being converted from limited access to unlimited / continuous access operation. If this proposal is not adopted, then drivers will not see a distinct, conspicuous and uniform striping configuration for all Preferential Lanes.

Since the construction and use of Preferential Lanes is expected to continue, expand and evolve, it is both logical and valuable to establish a unique, distinct and conspicuous striping detail that drivers will automatically recognize without waiting or needing to see the signing that designates Preferential Lane status. The current striping for Preferential Lane ingress-egress openings (see Exhibit A.2.d) is clearly not as conspicuous as the Federal MUTCD’s double-broken wide white

striping detail. Also, based on the above-referenced safety research findings related to the use of wider lane lines along urban freeway corridors, the SHSP Challenge Area 5 team will recommend the use of wider stripes in poorly performing corridors, and this will marginalize the conspicuity of the single-broken 8" wide striping detail.

Experimentation on the State Route 22 freeway and shorter freeway segments in Orange County has demonstrated that the single-broken wide white detail can be enhanced with reflective markers, but this does not enhance the appearance of the striping configuration during daylight hours, and it adds significantly to construction and maintenance costs and increases the number of raised markers that can affect the operation of motorcycles.

Finally, Exhibit E.2.e provides a standard striping & markings detail for situations which warrant the inclusion of special traffic elements to facilitate enforcement activities. Note: This schematic specifies a 4' buffer space between the Preferential Lane and adjacent General Purpose lane in which channelizers, rumble strips, etc. may be installed to discourage violators.

**B. CONS: Response to Partner and Stakeholder Concerns** (Refer to SUMMARY Section "D" above)

• **RE: Potential impacts on motorcycle operations and safety**

Based on consultations with representatives from the CHP (at meetings in Sacramento and Orange County), and representatives from SHSP Challenge Area 12, "Improve Motorcycle Safety":

- The proposal was modified to:
  - Eliminate or minimize the "buffer space" specified in the Federal MUTCD
  - Reduce the width and therefore surface area of pavement that needs to be covered with thermoplastic or paint

NOTES:

- (1) Safety research has not produced findings to suggest that "lane splitting" is a significant source of motorcycle-involved collisions on high-speed, multi-lane highways. In fact, an older research study concluded that lane splitting can reduce collision frequency.
- (2) Other Federal MUTCD striping standards (e.g. the single solid wide white detail) require as more thermoplastic or paint, and motorcyclists cannot avoid crossing this stripe.

• **RE: Confusion and Impact Related to Use of New & Wider Striping Detail**

- The Federal MUTCD adopted the double-broken wide white striping detail based upon its deployment in Georgia, Florida, Virginia and Maryland. Consultations with representatives from at least two of these states (Georgia and Florida) revealed that drivers adapted to the new / wider striping detail.
- Wide striping placed over the center of adjacent lanes does not reduce the physical width available for motor vehicle operation. In fact, it may positively impact driver performance.
  - However, guidance will be provided for situations in which one or both lanes is less than 11 feet.

- **RE: Higher Construction and Maintenance Costs**

- Compared to the current “barrier-striping” detail employed on limited access Preferential Lane facilities, the new standard will require less material and fewer placement operations
- The proposed striping detail for ingress-egress openings and unlimited / continuous access Preferential Lane operation will not require more materials and labor to place and maintain. This assumes that the alternative (single-broken wide white) will continue to be supplemented with contract treatment (black paint on both sides of the white stripe) and twice the number of reflective markers that have been deemed necessary on the experimental sections of the 22 freeway and other freeway segments.

C. Enforcement

Although lane changing is permitted along the entire length of the double-broken wide white striping detail, Georgia DOT officials indicated that they selected this striping detail (at least in part) because it incrementally discourages potential Preferential Lane violators. Also, see paragraph at the end of SUMMARY Section “C.”

**Proposal:**

The existing California MUTCD policy is shown below with **amendments/additions shown in red text.**

Section 3B.23 Preferential Lane Longitudinal Markings for Motor Vehicles

**Standard:**

**Preferential lane longitudinal markings for motor vehicles shall be marked with the appropriate word or symbol pavement markings in accordance with Section 3B.22.**

Support:

Preferential lanes can take many forms depending on the level of usage and the design of the facility. They might be physically separated from the other travel lanes by a barrier, median, or painted neutral area, or they might be concurrent with other travel lanes and be separated only by longitudinal pavement markings. Further, physically separated preferential lanes might operate in the same direction or be reversible.

Option:

Preferential lanes may be operated either full-time (24 hours per day on all days), for extended periods of the day, or part-time (restricted usage during specific hours on specified days).

**Standard:**

**The following four items are presented in tabular form in Table ~~3B-2~~ 3B-2(CA):**

- A. Physically separated, nonreversible preferential lane—the longitudinal pavement markings for preferential lanes that are physically separated from the other travel lanes by a barrier, median, or painted neutral area shall consist of a single normal solid yellow line at the left edge of the travel lane(s), a single normal solid white line at the right edge of the travel lane(s), and if there are two or more preferential lanes, the preferential travel lanes shall be separated with a normal broken white line (see Figure 3B-26a).**
- B. Physically separated, reversible preferential lane—the longitudinal pavement markings for reversible preferential lanes that are physically separated from the other travel lanes by a barrier, median, or painted neutral area shall consist of a single normal solid white line at both edges of the travel lane(s), and if there are two or more preferential lanes, the preferential travel lanes shall be separated with a normal broken white line (see Figure 3B-26a).**

C. Concurrent flow (left side) preferential lane—the longitudinal pavement markings for a full-time or part-time preferential lane on the left side of the other traveled lanes shall consist of a single normal solid yellow line at the left edge of the preferential travel lane(s) and one of the following at the right edge of the preferential travel lane(s):

1. A double solid wide white line where crossing is prohibited (see Figure 3B-26(CA)b).
- ~~2. A single solid wide white line where crossing is discouraged (see Figure 3B-26e).~~
3. A single double broken wide white line where crossing is permitted (see Figure 3B-26(CA)d) at ingress/egress segments for physically separated full-time preferential lanes.
4. A single broken 100 mm (4 in) white line where crossing is permitted on preferential lanes that operate for only certain periods of the day. In these cases, markings shall conform to the purpose the lane serves a majority of the time.

If there are two or more preferential lanes, the preferential travel lanes shall be separated with a normal broken white line.

D. Concurrent flow (right side) preferential lane—the longitudinal pavement markings for a full-time or part-time preferential lane on the right of the other travel lanes shall consist of a single normal solid white line at the right edge of the preferential travel lane(s) if warranted and one of the following at the left edge of the preferential travel lane(s):

1. A double solid wide white line where crossing is prohibited (see Figure 3B-26(CA)b).
- ~~2. A single solid wide white line where crossing is discouraged (see Figure 3B-26e).~~
3. A single double broken wide white line where crossing is permitted (see Figure 3B-26(CA)d) at ingress/egress segments for physically separated full-time preferential lanes.
4. A single double dotted normal wide white line where crossing is permitted for any vehicle to perform a right turn maneuver (see Figure 3B-26(CA)e).
- ~~5. A single broken 100 mm (4 in) white line where crossing is permitted on preferential lanes that operate for only certain periods of the day. In these cases, markings shall conform to the purpose the lane serves a majority of the time.~~

If there are two or more preferential lanes, the preferential travel lanes shall be separated with a normal broken white line.

Guidance:

Option:

When concurrent flow preferential lanes and other travel lanes are separated by more than 1.2 m (4 ft) 3.6 m (12 ft) or more, chevron markings should may be placed in the neutral area.

Guidance:

~~If used, the~~ The chevron spacing should be 30 m (100 ft) 60 m (200 ft) or greater.

Option:

~~For full time or part time concurrent flow preferential lanes, the spacing or skip pattern of the single broken wide white line may be reduced. The width of the single broken wide white line may be increased.~~

Support:

The striping pattern for the lane lines between the HOV lane and the adjacent normal flow lanes will vary depending on the condition. See Department of Transportation's High Occupancy Vehicle (HOV) Guidelines and Ramp Meter Design Manual for the appropriate HOV lane line striping patterns and markings. See Section 1A.11 for information regarding these publications.

**Table 3B-2(CA). Standard Edge Line Lane Markings for Preferential Lanes**

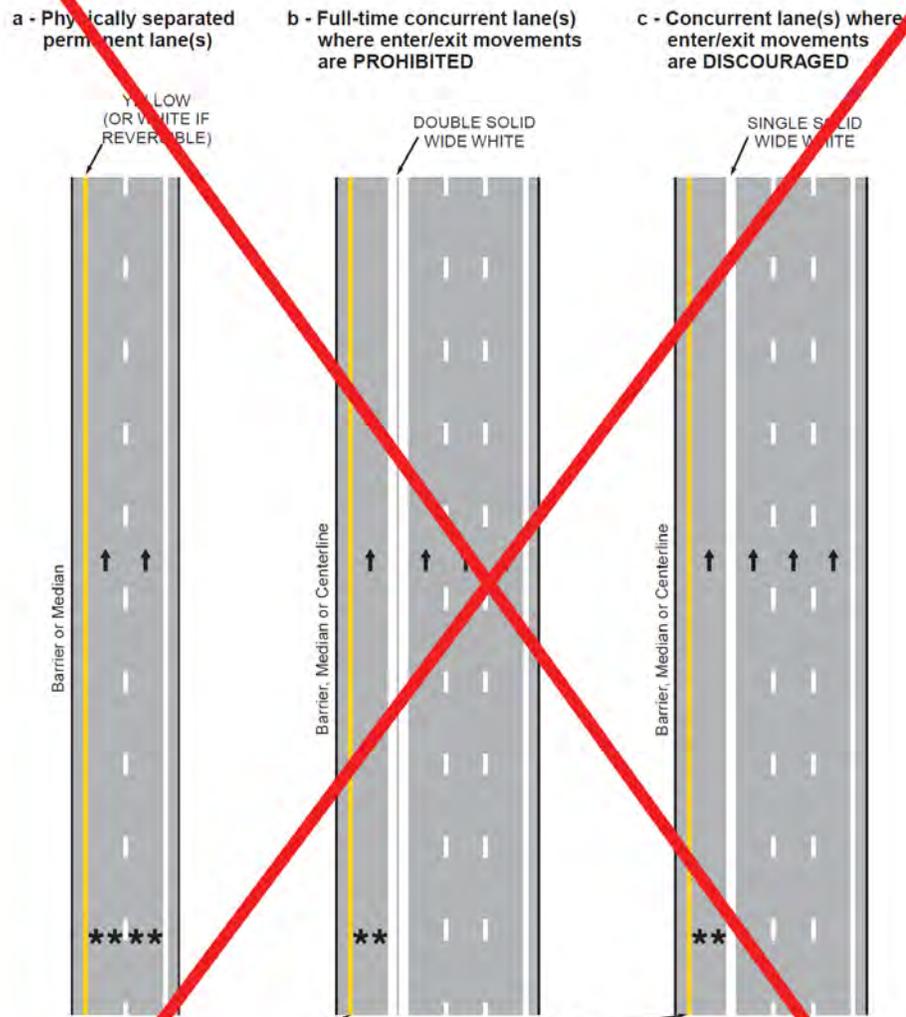
Type of Preferential Lane	Left Edge Line	Right Edge Line
<b>Physically-Separated, Non-Reversible</b>	A Single normal solid yellow line	A Single normal solid white line
<b>Physically-Separated, Reversible</b>	A Single normal solid white line	A Single normal solid white line
<b>Concurrent Flow – Left Side</b>	A Single normal solid yellow line	<p>A <del>single double</del> solid wide white line where crossing is <del>discouraged prohibited</del> (see Figure 3B-26c(CA))</p> <p>A <del>single double</del> broken wide white line where crossing is permitted (see Figure 3B-26d (CA)) for full-time and part-time preferential lane ingress/egress segments</p> <p><del>A single broken 100-mm (4 in) white line for part-time preferential lanes where crossing is permitted</del></p>
<b>Concurrent Flow – Right Side</b>	<p>A <del>single double</del> solid wide white line where crossing is <del>discouraged prohibited</del> (see Figure 3B-26c (CA))</p> <p>A <del>single double</del> broken 100-mm (4 in) wide white line for part-time preferential lanes where crossing is permitted</p> <p>A <del>single double</del> dotted normal wide white line where crossing is permitted for any vehicle to perform a right-turn maneuver (see Figure 3B-26e (CA))</p>	A Single normal solid white line

Notes: If there are two or more preferential lanes, they shall be separated with a normal broken white line.

The standard lane markings listed in this table are provided in a tabular format for reference.

This information is also described in the second Standard in Section 3B.23.

Figure 3B-26. Examples of Markings for Preferential Lanes  
(Sheet 1 of 2)

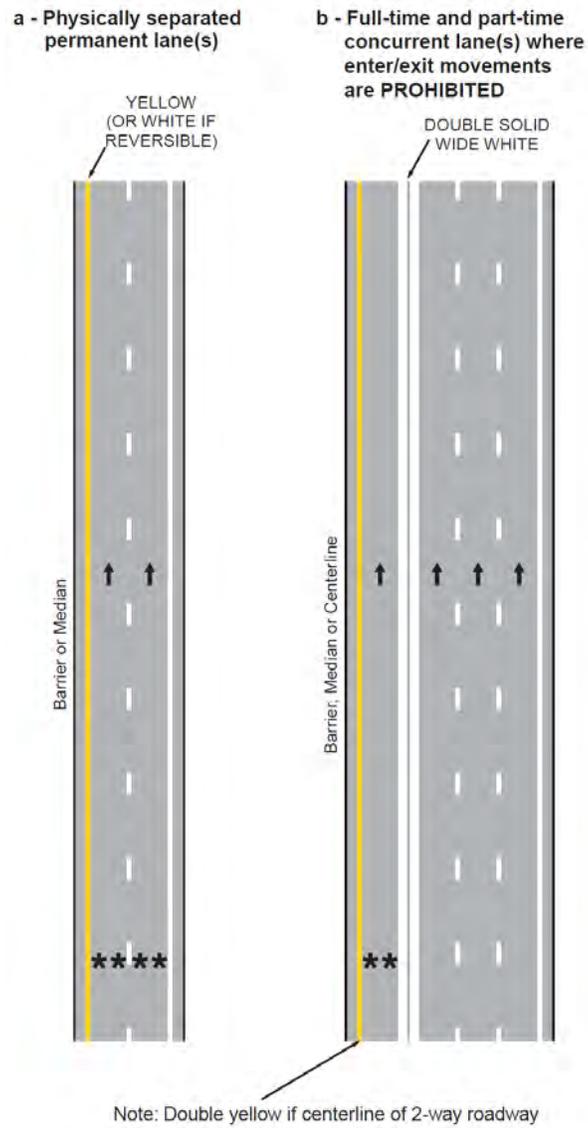


Note: Double yellow if centerline of 2-way roadway

Legend

- Direction of travel
- \*\* Applicable symbol or word

Figure 3B-26 (CA). Examples of Markings for Preferential Lanes  
(Sheet 1 of 2)



Legend  
→ Direction of travel  
\*\* Applicable symbol or word

Figure 3B-26. Examples of Markings for Preferential Lanes  
(Sheet 2 of 2)

d - Full-time concurrent lane(s)  
where enter/exit movements  
are PERMITTED

e - Right Side Concurrent Lane(s)

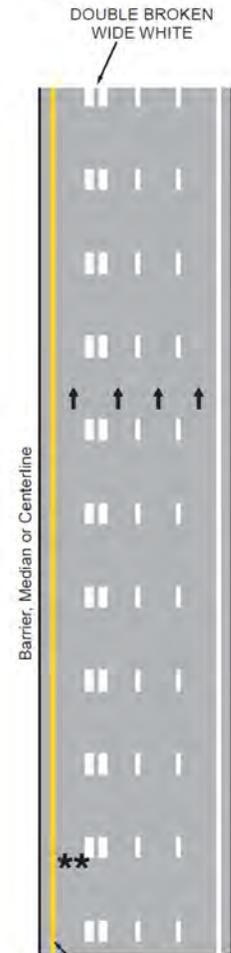


Note: Double yellow if centerline of 2-way roadway

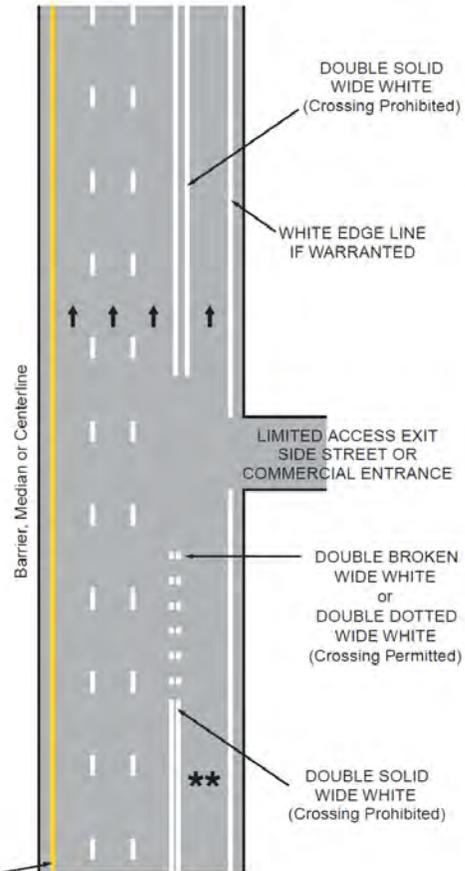
- Legend
- Direction of travel
  - \*\* Applicable symbol or word

Figure 3B-26 (CA). Examples of Markings for Preferential Lanes  
(Sheet 2 of 2)

d - Full-time and part-time concurrent lane(s) where exit/enter movements are PERMITTED



e - Right Side Concurrent Lane(s)



Note: Double yellow if centerline of 2-way roadway

Legend

- Direction of travel
- \*\* Applicable symbol or word

## 07-7 Experimentation by Implementation of Two New School Site Loading Signs

**Status** – The City have completed evaluating all post-installation study zones. Their findings show that the signs were not very effective in changing the behavior of drivers in the loading zones. At 6 of the 9 schools (15 zones in all), little change in driver behavior was observed and in most cases, actually got worse. Two of the 3 other schools showed improvement in numbers, but the sample size was so small (2-3 vehicles) that it was not considered significant. The big improvement at the last school was more likely due to the installation of a new passenger zone rather than the new sign. Overall, we did not see any improvement with these new school site loading signs .

This experimentation is completed. Is there anything more that the City must do to conclude the experiment with CTCDC?

**Recommendations:** Item should be closed and locations should comply with the CA MUTCD provisions within 3 months following the issuance of final recommendation by the Committee.

**5. Request for Experimentation:**

**10-10 Request for Permission to Experiment with modified SPEED HUMP (W17-1) Signs**

**Recommendation:** City of Stockton request authorization to conduct an experiment with amended SPEED HUMPS sign.

**Agency Making Request:** City of Stockton

**Sponsor:** Jeff Knowles, CTCDC member representing Northern CA Cities



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**CITY OF STOCKTON**

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PUBLIC WORKS DEPARTMENT

22 East Weber Avenue, Room 301 • Stockton, CA 95202-2317 • 209/937-8411 • Fax 209/937-8277  
www.stocktongov.com

April 1, 2010

Secretary  
California Traffic Control Devices Committee – MS36  
P. O. Box 942874  
Sacramento, CA 94274-0001**SUBJECT: REQUEST FOR PERMISSION TO EXPERIMENT**

The City of Stockton California is requesting permission to experiment with signs used for the Neighborhood Traffic Management Program.

**A. PROBLEM**

The City of Stockton has installed approximately 270 speed humps/cushions on local streets since 2006. The W17-1 (Speed Hump) sign and more often the W17-1 in combination with the W13-1 (Advisory Speed) sign are placed on the approach of every hump/cushion location. In some neighborhoods this has led to sign pollution. Many residents have complained about the excessive number of signs in their neighborhoods, whereas drivers complain about not noticing signs or seeing chevrons (installed on humps/cushions) with sufficient reaction time.

The City of Stockton would like to experiment with two signs "Speed Humps Ahead" and "Speed Hump Area" to help curb the number of signs on city streets and at the same time advise drivers to the possibility of multiple humps/cushions in an area. Each sign would be used under specific circumstances as defined under the Work Plan section of this request. "BUMP" pavement markings will be included in the experiment to help address the visibility of individual humps and cushions.

We note that similar warning signs have been used in other communities although we could not confirm that this was through an experiment or approved by the California Traffic Control Devices Committee or FHWA.

**B. PROPOSED CHANGES**

The first proposed change to the 24" x 24" Speed Hump sign (W17-1) is to pluralize **Speed Hump** and add "**Ahead**". Speed Humps Ahead with the Advisory Speed sign



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(W13-1) would be placed in advance of the first hump/cushion in a series of humps on a residential street segment or between traffic controlled intersections.

The second proposed change is to add “Area” to the 24” x 24” Speed Hump (W17-1) sign. This sign, Speed Hump Area will be used with the Advisory Speed sign at each entrance to a neighborhood with limited entrances.

**C. ILLUSTRATION**



**D. SUPPORTING DATA**

These signs and/or very similar signs have been used in other communities. The City of Sacramento lists the “Speed Humps Ahead” sign in their Speed Hump Program Guidelines although their sign also includes a single hump symbol. City of Belmont California and City of Hayward California have included “Bumps Ahead” signs in their Guidelines for Installation of Speed Humps.

Since the W17-1 has been used consistently throughout Stockton and is easily recognized, the proposed signs do not substantially deviate from the MUTCD approved sign.

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**MUTCD Section 2C.24 SPEED HUMP sign (W17-1) Option:** *"If a series of speed humps exists in close proximity, an Advisory Speed plaque may be eliminated on all but the first SPEED HUMP sign in the series."*

**MUTCD Section 3B.27 Advance Speed Hump Markings Option:** *"...Advance pavement wording such as BUMP or HUMP (see Section 3B.19) may be used on the approach to a speed hump either alone or in conjunction with advance speed hump markings. Appropriate advance warning signs may be used in conformance with Section 2C.24."*

**ITE Guidelines for the Design and Application of Speed Humps 2007 4.3.1 Spacing Page 41:** *"A two-hump configuration may be satisfactory on single-block segments of moderate length (500 to 1,000 ft. [152 to 305 m]) On very long blocks (1,000 to 1,500 ft [305 to 457 m]) three or more humps may be necessary."*

**4.4 Traffic Control Devices Page 43:** *"Many agencies have developed and implemented speed hump signs and markings that are not included in the current edition of MUTCD. Consistency of traffic control devices used at speed hump installations within a jurisdiction is recommended to increase road user comprehension."*

**[www.ite.org/traffic/hump.asp](http://www.ite.org/traffic/hump.asp) Traffic Calming Measures - Speed Hump, Design/Installation Issues:** *"often have signage (advance warning sign before first hump in series and warning sign or object marker at hump)"*

**MUTCD Section 2A.04 Excessive Use of Signs Guidance:** *Regulatory and warning signs should be used conservatively because these signs, if used to excess, tend to lose their effectiveness. ...Support: Sign information overload occurs when the frequency of signing, complexity of messages or diversity of messages is so great that they cannot be readily assimilated..."*

## E. LEGAL STATEMENT

A basic search of the on-line U. S. Patent and Trademark Office database did not reveal any signs similar to those proposed in this request. To the best of our knowledge, the City of Stockton certifies that the concept of the proposed traffic signs is not protected by a patent or copyright.

## F. TIME PERIOD AND LOCATIONS

Currently the City of Stockton Neighborhood Traffic Management Program has waiting lists of seven to twelve years. A time period for experimentation of two years is requested. If experimentation is approved to begin in the City's Fiscal Year 2010/11 (July 2010) and continue through FY 2011/12 (June 2012), the City of Stockton will implement the experimental signage in the 16 neighborhoods beginning the Traffic

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Calming process where the specific conditions exist as stated in the Work Plan. Enclosed is a copy of the current neighborhood waiting lists for the Traffic Calming Program showing the 16 eligible neighborhoods.

#### **G. WORK PLAN**

Field reviews will be conducted in the 16 neighborhoods to be included in the study. Wherever the determining conditions are present, i.e., multiple humps or cushions on a street segment or limited access to a neighborhood, one of the following signs would be utilized. The neighborhood would then be subject to the testing criteria established in the Evaluation Plan Section.

##### **Speed Humps Ahead**

This sign will be used whenever two or more speed humps/cushions are to be placed on a street segment or between intersections. The approach to the first hump/cushion (each end) in the series shall be posted with the "Speed Humps Ahead" sign and the advisory speed sign. "BUMP" pavement markings will be placed 50' (if possible) in advance of these humps/cushions in the opposite lane. All other speed humps/cushions in the series shall be marked on both sides with "BUMP" pavement markings 50' (if possible) in advance of the humps. All speed humps/cushions shall continue to be marked with reflective thermoplastic chevrons.

##### **Speed Hump Area:**

When access to a neighborhood is limited, each entrance to the neighborhood shall be posted with the "Speed Hump Area" warning sign and the advisory speed sign. "BUMP" pavement markings will be placed in each lane, 50' (if possible) in advance of each hump. All speed humps/cushions shall continue to be marked with reflective thermoplastic chevrons.

One variable which can be measured quantitatively and is a main objective of the study is the number of signs eliminated under this experiment as opposed to our current program. Accident statistics will be compared pre and post experiment as well as compared with neighborhoods traffic calmed using the previous warning signs.

Many of the variables to be considered through this experiment are subjective. Does one advance warning sign effectively replace repetitive signs? Do BUMP Pavement Markings give adequate notification of the speed hump's presence? Are speed humps more visible with the BUMP pavement marking than the warning signs and chevrons? Does the warning of multiple humps eliminate speeding between measures? Residents will need to be polled to determine whether the experimental procedures have improved their perceived traffic issues in the neighborhood.

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#### **H. DETAILED RESEARCH (EVALUATION PROCEDURES)**

As each of the 16 neighborhoods begins the traffic calming process, residents actively participating will be asked to complete a survey to rate their perception of the City traffic calming program prior to traffic calming in their neighborhood, advantages, problems, signage, visibility, effectiveness, etc. After-implementation studies will request those same residents assess the warning notifications in their neighborhood, improvements, problems, etc. Evaluation reports will be based on this input, any input from other residents, and observations of Traffic Engineering staff members. Evaluations will also include any available police reports and accident statistics related to traffic calmed streets.

#### **H. AGREEMENT**

The City of Stockton agrees that a written status report will be forwarded to the California Traffic Control Devices Committee 45 days prior to each public meeting. A final report will be provided within 90 days of the terminal date of the experimentation. Within three months of the end of this experiment, if deemed appropriate by FHWA, the experimental signs will be removed and replaced with the original W17-1 Speed Hump sign. In addition, the City will terminate the experimentation at any time that it determines significant safety concerns are directly or indirectly attributable to the experimentation.

The City of Stockton agrees to provide a copy of the final results of the experimentation to the FHWA Office of Transportation Operations within three months following completion of the experimentation.

ROBERT MURDOCH, DIRECTOR  
PUBLIC WORKS DEPARTMENT



TODD GREENWOOD  
ASSISTANT CITY TRAFFIC ENGINEER

RKM:TG:sa

emc: Federal Highway Administration (FHWA),  
Office of Transportation Operations, MUTCD  
[MUTCDofficialrequest@dot.gov](mailto:MUTCDofficialrequest@dot.gov)

**Signage Guidelines for Speed Hump/Cushion Series****Speed Humps Ahead:**

When 2 or more speed humps/cushions are to be placed on a street segment or between intersections:

The approach to the first hump/cushion (each end) in the series shall be posted with the "Speed Humps Ahead" sign and the advisory speed sign. "BUMP" pavement markings will be placed 50' in advance of these humps/cushions in the opposite lane.

All other speed humps in the series shall be marked on both sides with "BUMP" pavement legends 50' in advance of the humps.

All speed humps/cushions shall be additionally marked with reflective thermoplastic chevrons.

**Speed Hump Area:**

When access to a neighborhood is limited:

Each entrance to the neighborhood shall be posted with the "Speed Hump Area" sign and the advisory speed sign.

"BUMP" pavement markings will be placed in each lane, 50' in advance of each hump.

All speed humps/cushions shall be additionally marked with reflective thermoplastic chevrons.

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM  
WAITING LISTS BY QUADRANTS

WEST NEIGHBORHOODS	STATUS	SOUTHWEST NEIGHBORHOODS	STATUS	SOUTHEAST NEIGHBORHOODS	STATUS	NORTHEAST NEIGHBORHOODS	STATUS
Iron Circle (200408+)	Completed	1 Golf Course Terrace (200405+)	Completed	1 Sheppard Lane Villas (200402+)	Completed	1 Normandy Villas (200402+)	Completed
Estates N. (200505+)	Completed	2 West of Center (200405+)	Completed	2 Highland Park (200505+)	Completed	2 Pacific Oaks (200505+)	Completed
1th Lake (200607+)	Completed	3 Watson Ran Crown Pk (200506+)	Completed	3 S. Thornton Channel (200607+)	Not Eligible	3 Blenheim Res. Villas (200407+)	Completed
Village (200708+)	Completed	4 Lake Park Lakeside (200607+)	Completed	4 Palmyra Park (200607+)	Completed	4 Country Greens (200708+)	Completed
ve (200809+)	Completed	5 Victory Park Terrace (200708+)	In Process	6 Alpine Manor (200708+)	Completed	5 Pacific Oaks South (20080+)	Completed
Barcelone (200809+)	Completed	6 Stockton Acres (200809+)	In Process	6 City Homesland (200809+)	Completed	6 Mayfair West (200809+)	Completed
1 Bridge Angelico (200810+)	Completed	7 Columbus Park (200809+)	Completed	7 Little Johns Creek (200809+)	Completed	7 Snowdon Manor East (200912+)	Completed
Madrew Blvd (200810+)	Completed	8 Calumet Village Manor (200910+)	Completed	8 Calaveras Estates (200910+)	Completed	8 Villa Beranda (200910+)	Under Const
1od Sunnyside (201011)	In Process	9 City Park Gardens (200910+)	In Process	9 Villa Addition (200910+)	Under Const.	9 Calavilla Estates (201011)	Waiting
Estates Salera (201112)	Waiting	10 Watson Ranch Crestmont (201011)	In Process	10 Pacific Manor (201011)	In Process	10 Vista North (201011)	Waiting
Est. Paradise (201112)	Waiting	11 Pacific Gardens (201011)	Waiting	11 Calmore (201011)	Waiting	11 Snowdren Manor (201112)	Waiting
1ks (201112)	Waiting	12 River Estates (201112)	Waiting	12 College View (201112)	Waiting	12 Westwood Terrace (201112)	Waiting
14 (201213)	Waiting	13 Watson Ranch Largo (201112)	Waiting	13 The Oaks (201112)	Waiting	13 Pacific Oaks Canyon (201213)	Waiting
15 (201213)	Waiting	14 Oxford Circle (201213)	Waiting	14 Nightingale Manor (201213)	Waiting	14 Westar Ranch (201213)	Waiting
16 (201314)	Waiting	15 Tuxedo Park South (201213)	Waiting	15 McCloud's Addition (201314)	Waiting	15 Mayfair Northwest (201314)	Waiting
17 (201314)	Waiting	16 City Park Terrace (201314)	Waiting	16 Stockton Rennewal (201314)	Waiting	16 La Morada Adams (20132014)	Waiting
18 (201415)	Waiting	17 Oxford Manor (201314)	Waiting	17 Sunnyside Addition (201314)	Waiting	17 Morada Adams (20132014)	Waiting
19 (201415)	Waiting	18 Coronado Acres (201415)	Waiting	18 The Villa (201415)	Waiting	18 Loch Lomond Terrace (201415)	Waiting
20 (201415)	Waiting	19 Watson Ranch-Ishi Gato (201415)	Waiting	19 Sunnyside Addition (201415)	Waiting	19 Mission Park (201516)	Waiting
21 (201516)	Waiting	20 South of Mormon Channel (201516)	Waiting	20 El Ricardo Terrace (201516)	Waiting	20 La Morada-Palmo (201516)	Waiting
22 (201516)	Waiting	21 Coronado Park (201516)	Waiting	21 Northwest (201516)	Waiting	21 San Ramon Terrace (201617)	Waiting
23 (201617)	Waiting	22 Westwood Park (201516)	Waiting	22 Fremont Villas (201617)	Waiting	22 Holiday Park (201617)	Waiting
24 (201617)	Waiting	23 Parkview Estates (201617)	Waiting	23 Rancho Del Sol (201617)	Waiting	23 Hernandez - Province (201718)	Waiting
25 (201617)	Waiting	24 Western Ranch Moorcroft (201718)	Waiting	24 Homestead Sunset (201718)	Waiting	24 Sierra Meadows (201718)	Waiting
26 (201819)	Waiting	25 East (201819)	Waiting	25 City Homestead-American (201718)	Waiting	25 Mayfair Northwest (201819)	Waiting
27 (201819)	Waiting	26 West (201819)	Waiting	26 Searchlight Addition (201819)	Waiting	26 Fox Creek (201819)	Waiting
28 (202021)	Waiting	27 (202021)	Waiting	27 Fairview Terrace/Snow Oaks (201819)	Waiting	27 Kentfield (20192020)	Waiting
29 (202122)	Waiting	28 (202122)	Waiting			28 Frenchman Mesa (20192020)	Waiting
30 (202223)	Waiting	29 (202223)	Waiting			29 Glenbrook Park	Waiting

not neighborhoods are those scheduled to be processed in FYs 2011 and 2012

**6. Information Item****10-11 Status of speed limit procedures changes in July 2009**

Traffic Operations Policy Directive (TOPD) 09-04 notified agencies of changes in Section 2B-13 in the CA MUTCD. In TOPD 09-04, agencies were asked to send in a summary of speed data, and before and after posted speed limits to Roberta McLaughlin, Caltrans, Office of Signs and Markings. This request was an attempt to collect data to see what changes, if any, have occurred on the posted speed limits determined after applying the new policy to Engineering and Traffic Surveys.

To date, less than a dozen responses have been received. Therefore, a last call should be sent out by members of the CTCDC to see if any additional data will be sent in. The time period to be covered was July 1, 2009 to July 1, 2010.

A final report of data received and reviewed will be presented at the next regular meeting of the CTCDC.

**10-7 National MUTCD 2009**

Even though, FHWA has released the new 2009 MUTCD but it is not effective in California until Caltrans and CTCDC review it and incorporate the changes into California MUTCD through formal efforts. California has until January 15, 2012 to accomplish this task although it is anticipated that it would be done sooner.

The following dates are scheduled to hold CTCDC Technical Workshops to review National MUTCD for the adoption in CA:

During the previous two Workshops, Parts 1, 2, 5, 7 and 9 were covered and they will be posted on the CA MUTCD website for comments.

<http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/index.htm>

**WORKSHOP #3: August 31, & September 1, 2010 (Santa Ana) - Parts 3 (Markings) & 6 (TTC Work Zones) and CTCDC Meeting on September 2<sup>nd</sup>, 2010 (Santa Ana)**

**WORKSHOP #4: October 19-20, 2010 (Sacramento) - Parts 4 (Traffic Signals) & 8 (Railroad Xing)**

**List of Signs included into the CA MUTCD 2010**

CA Standard Sign Specifications Update - 1/21/2010

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CA Code	MUTCD Code	Title of Sign	Notes	Date
R25B	None	Passenger Loading ONLY 5 MINUTE LIMIT w/ Double Arrow	New sign.	2/17/09
R25C	None	PASSENGER LOADING ONLY 5 MINUTE LIMIT w/ Double Arrow	New sign.	2/17/09
R25D	None	School Passenger Loading ONLY 7AM TO 4PM SCHOOL DAYS 5 MINUTE LIMIT w/ Double Arrow	New sign.	2/17/09
R25E	None	PASSENGER LOADING ONLY 7AM TO 4PM SCHOOL DAYS 5 MINUTE LIMIT w/ Double Arrow	New sign.	2/17/09
R25F	None	School Bus Passenger Loading ONLY w/ Double Arrow	New sign.	2/17/09
R25H	None	Tour Bus Passenger Loading ONLY w/ Double Arrow	New sign.	2/17/09
R25J	None	CAR SHARE PARKING ONLY PERMIT REQUIRED w/ Double Arrow	New sign.	2/17/09
R26K	None	Tow-Away No Parking	New sign.	2/17/09
R26L	None	Tow-Away NO STOPPING ANY TIME	New sign.	2/17/09
R28C	None	NO STOPPING BUS ONLY w/ Arrow	New sign.	2/17/09
R28D	None	NO PARKING VEHICLES OVER 6' HIGH w/ Double Arrow	New sign.	2/17/09
R28D(S)	None	NO STOPPING VEHICLES OVER 6' HIGH w/ Double Arrow	New sign.	2/17/09
R28E	None	NO PUBLIC PARKING SUBJECT TO CITATION AND REMOVAL AT OWNER'S EXPENSE	New sign.	2/17/09
R28F	None	No Parking VEHICLES OVER 5 TONS	New sign.	2/17/09
R30B	None	No Parking 10AM TO 12PM WEDNESDAY STREET SWEEPING	New sign.	2/17/09
R30C	None	No Parking 2AM TO 6AM EXCEPT BY PERMIT	New sign.	2/17/09
R30D	None	No Parking 2AM TO 6AM CITYWIDE EXCEPT BY PERMIT	New sign.	2/17/09
R30E	None	No Parking w/ Double Arrow	New sign.	1/21/10
R30F	None	NO STOPPING 7 TO 8 AM 2 TO 3 PM SCHOOL DAYS	New sign.	1/21/10
R32C	None	2 HOUR PARKING 8AM TO 6PM DISTRICT 7 PERMITS EXEMPT	New sign.	2/17/09
R32D	None	30 MINUTE PARKING 2AM TO 6AM DISTRICT 3 PERMITS EXEMPT	New sign.	2/17/09
R32E	None	2 HOUR PARKING 8AM TO 4PM - PASSENGER LOADING ONLY 4PM TO MIDNIGHT 5 MINUTE LIMIT w/ Double Arrow	New sign.	2/17/09
R32F	None	2 HOUR PARKING 8AM TO 6PM MOTORCYCLE PARKING ONLY w/ Double Arrow	New sign.	2/17/09
R38A	None	TOW-AWAY NO STOPPING 7AM TO 9AM - PASSENGER LOADING ONLY ALL OTHER TIMES 5 MINUTE LIMIT w/ Double Arrow	New sign.	2/17/09
R39	None	NO PARKING OF COMMERCIAL VEHICLES EXCEPT BY PERMIT	New sign.	9/12/08
R39-1	None	NO DOUBLE PARKING ANYTIME COMMERCIAL VEHICLES INCLUDED	New sign.	11/21/10
R39-2	None	NO DOUBLE PARKING ANYTIME COMMERCIAL VEHICLES INCLUDED	New sign.	11/21/10
R99	None	Accessible Parking Only	Spec format updated, design/dimensions unchanged.	7/1/08
R99B	None	MINIMUM FINE \$250 (plaque)	New supplemental plate.	7/1/08
R99C	None	Accessible Parking Only Minimum Fine \$250	New combination sign, combines R99 and R99B signs.	7/1/08
R100B	None	Disabled Tow-Away	Revised sign, per AB 1531 (DeSaulnier).	7/1/08
S22-1	None	VEHICLE INSPECTION ONLY, NO LOITERING OR CAMPING	New sign.	9/12/08
S32	None	Adopt-A-Highway	Bolt holes info revised.	3/23/09
S32A	None	Adopt-A-Highway Symbol	Bolt holes info revised.	3/23/09
S32B	None	Adopt-A-Highway Recognition Panel	Bolt holes info revised.	3/23/09

**7 Next Meeting**

**8 Adjourn**