

## NAPA POLICE DEPARTMENT TRAFFIC BUREAU

Tom Pieper
1539 First St. Napa, Ca 94559
Traffic Coordinator
(707) 257-9569

Dorothy Roadman
City Clerk
City of Napa
Ms. Roadman,
Below are the answers to the requests to the attached Public Records Act Request:

1. See material attached for the yellow signal light timing.

2 \& 3 Jefferson Street Southbound at First Street: 2 straight through lanes with 1 of the straight through lanes also being able to make a right turn. Speed limit is 30 mph .

Trancas Street Eastbound at Big Ranch Road/Soscol Avenue: 2 straight through lanes and 1 left turn lane. Speed limit is 35 mph .

State Route 221 (Soscol Ave) Northbound at State Route 121 (Imola Ave): 2 straight through lanes and 2 left turn lanes. The speed limit is 40 mph .

State Route 29 Southbound at State Route 121/12: 2 straight through lanes and 1 right turn lane. The speed limit is 60 mph .
4. See attached Redflex Management reports for each monitored approach for April, May and June of 2010

5
See attached Redflex Redlight Offender Statistics report for April, May and June of 2010

Thanks,


Tom Pieper \#40
Napa Police Department
Traffic Coordinator

January 7, 2010
To: Sgt. Tom Pieper
From: Transportation Division, Public Works
The City of Napa has installed Red Light Photo Enforcement Cameras. This letter is to certify that the traffic signals identified below have yellow light intervals set above the California State minimum yellow light intervals. The City of Napa standard is to add 0.1s (one-tenth of a second) to all yellow intervals under City of Napa control.

## First Street \& Jefferson Street:

Phase 1 and 6 (northbound); 3.3 sec 's
Phase 2 (southbound); 3.3 sec 's
Phase 4 (westbound); 3.1 sec 's
Trancas Street \& Big Ranch Road:
Phase 1 and 6 (westbound); 3.7 sec's
Phase 2 and 5 (eastbound); 3.7 sec 's
Phase 3 and 8 (northbound); 4.0 sec 's
Phase 4 and 7 (southbound); 4.4 sec's


## DEPARTMENT OF TRANSPORTATION

11! GKAND AVENUE
P. O. BOX 23360

OAKLAND. CAA 94612
1 HONE (510) 286-5900)
:AX (510) 286-5903

June 30, 2010
Sgt. Tom Peeper
Napa Police Department
1539 First Street
Nара, CA 94558
Dear Sgt. Peeper:
This is a letter letting you know of updates to the yellow timing at the intersections of Rte.121/12 and Rte.29/12. The change was done on the length of yellow for the overlap phase and phase 7; in both cases the yellow has been increased from 3.2" to 3.8". This change was done on May 13, 2010, between 10 AM and 11 AM . The direction, name of approach and phase assignment at this intersection is as follows:

1. The northbound leg is referred to as Rte.29/12 (phases 5 and 2).
2. The southbound leg is referred to as Rte.29/121 (phases 6 and overlap right turn).
3. The eastbound leg is referred to as Rte.121/12 (phases 7).

The yellow timing per phase is as follows:

Phase $2=5.4^{\prime \prime}$ (through lane)
Overlap right turn $=3.8^{\prime \prime}$

Phase $6=5.4^{\prime \prime}$ (through lane)
Phase $5=3.2^{\prime \prime}$ (left turn lane)

Phase 7-3.8"

The above described yellow light timings are set in accordance with the California Manual on Uniform Traffic Control Devices (CA-MUTCD 2006).

Sincerely,
Sine A. Aura

EINAR ACUNA, Senior TEE
Branch Chief, Signal Operations

## DEPARTMENT OF TRANSPORTATION

11' CRAND AVENUE
P. U. BOX 23360

OAKLAND, CA 94612
PHONE (510) 286-5900
FAX (510) 286-5903

February 8, 2008
Sgt. Tom Peeper
Napa Police Department
1539 First Street
Napa, CA 94558
Dear Sgt. Pieper:
This is in response to your request in obtaining the yellow timing at the intersection of Imola Avenue (Route 121) and Soscol Avenue (Route 221). The yellow timing is effective February 8,2010 , and as shown on the attachment.

The above described yellow light timings are set in accordance with the California Manual on Uniform Traffic Control Devices (CA-MUTCD 2006).

Sincerely,


DINAR ACUNA
Senior Transportation Electrical Engineer

ATTACHMENT

## Imola Ave. (Route 121) \& Soscol Ave. (Route 221)

| Phase | Yellow |
| :---: | :---: |
| $\phi 1$ | 3 |
| $\phi 2$ | 4 |
| $\phi 3$ | 3 |
| $\phi 4$ | 3.6 |
| $\phi 5$ | 3 |
| $\phi 6$ | 4 |
| $\phi 7$ | 3 |
| $\phi 8$ | 3.6 |




Speed
$=\frac{\mathrm{D}}{\mathrm{V}}=$ The minimum yellow light change interval (sec)
$V=$ Posted speed or prima facie Speed ( $\mathrm{m} / \mathrm{sec}$ or $\mathrm{ft} / \mathrm{sec}$ )
$\mathrm{d}=$ Deceleration Rate ( $3.05 \mathrm{~m} / \mathrm{sec}^{2}$ or $10 \mathrm{ft} / \mathrm{sec}^{2}$ )
$\mathbf{t}_{\mathbf{R}}=$ Reaction Time (1 sec)
Reaction Distance $=\mathrm{Vt}_{\mathbf{R}}$
Deceleration Distance $=1 / 2 \mathrm{dt}^{2}$ or $\frac{1}{2} \mathrm{Vt}$ or $\frac{\mathrm{V}^{2}}{2 \mathrm{~d}}$
$D=$ Detector Setback $=$ Deceleration Distance + Reaction Distance $=\frac{V^{2}}{2 d}+V t_{R}$
$T=\frac{\frac{V^{2}}{2 d}+V t_{R}}{V}$
$T=\frac{V}{2 d}+t_{R}$

## Section 4D. 10 Yellow Change and Red Clearance Intervals

 (The following is added to this section)Support:
The purpose of the yellow signal indication is to warn traffic approaching a traffic signal that the related green movement is ending or that a red indication will be exhibited immediately thereafter and traffic will be required to stop when the red signal is exhibited.

The following methodology in this section provides guidance for establishing the "minimum yellow light change interval" for traffic signals. This methodology is essentially the same as was included in Section 9-04.5 of the Caltrans 1996 Traffic Manual. The 1996 Manual used the term "approach speed" for the minimum yellow interval, which caused some confusion for the courts. The methodology in this section uses the posted speed limit or prima facie speed limit instead of approach speed. At the December 8 , 2004 meeting of the Califormia Traffic Control Devices Committee (CTCDC) there was discussion regarding the desirability of changing the methodology because some public agencies are using automated enforcement systems. The CTCDC recommended that the methodology in this section be reevaluated after a period of one year. During this one-year period, the Committee will examine whether changes need to be made in the methodology.

## Standard:

The minimum yellow light change interval shall be in accordance with Table 4D-102. The posted speed limit, or the prima facie speed limit established by the California Vehicle Code (CVC) shall be used for determination of the minimam yellow light change interval for the through traffic movement.

The minimum yellow light change interval for a protected left-turn or protected right-turn phase shall be $\mathbf{3 . 0}$ seconds.

Option:
The minimum yellow light change interval for the through movement and the protected left-turn or protected right-turn may be increased based on a field review or by using appropriate judgement. That judgment may be based on numerous factors, including, but not limited to, $85^{\text {mit }}$ percentile speed, intersection geometry and field observation of traffic behavior.

Table 4D-102 Minimum Yellow Light Change Interval

| POSTED SPEED OR <br> PRIMA FACIE SPEED |  | MINIMUM YELLOW <br> INTERVAL |
| :---: | :---: | :---: |
| mph | $\mathrm{km} / \mathrm{hr}$ | Seconds |
| 25 or less | 40 or less | 3.0 |
| 30 | 48 | 3.2 |
| 35 | 56 | 3.6 |
| 40 | 64 | 3.9 |
| 45 | 72 | 4.3 |
| 50 | 80 | 4.7 |
| 55 | 89 | 5.0 |
| 60 | 97 | 5.4 |
| 65 | 105 | 5.8 |

## The Table is based on the following Formula:

$\mathrm{T}=\mathrm{t}+\mathrm{V} / 2 \mathrm{~d}$
$\mathrm{T}=$ The Minimum yellow light change interval (sec.)
$\mathrm{V}=$ Approach Speed (ft/sec.)
$\mathrm{d}=$ Deceleration rate ( $10 \mathrm{ft} / \mathrm{sec}$.)
$\mathrm{t}=$ Reaction time ( 1 sec .)

