


## Safellghōi <br> Dallas Stops on Red!

Presented to: Automated Red Light Enforcement Commission Date: July 27, 2010

## Event Update

 April 1, 2010 - J une 30, 2010| THIRD QUARTER SUMMARY EVENTS |  |
| :---: | :---: |
| TOTAL EVENTS CAPTURED | 281,082 |
| NON VIOLATIONS ${ }^{1}$ | 230,054 |
| POSSI BLE VIOLATI ONS | 51,028 |
| CONTROLLABLE EVENTS Rej Ected | 6,567 |
| Non Controllable events rejected | 12,389 |
| VIOLATION IN PROCESSING STATUS | 1,281 |
| VI OLATI ONS MAI LED AS CITATI ONS | 30,783 |

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## Controllable Events

April 1, 2010 - June 30, 2010

| CONTROLLABLE EVENTS BY CONTRACTOR |  |  |
| :---: | :---: | :---: |
| Clarity of Plate | 4,639 | 70.64\% |
| Dark Environment | 85 | 1.29\% |
| DMV - Clarity of Plate | 0 | 0.00\% |
| Equipment Malfunction | 772 | 11.76\% |
| Lane 1 Remediation | 12 | 18\% |
| Lane ID Error | 3 | .05\% |
| Temporary Hold -Do not Delete ACS | 3 | .05\% |
| Over Exposed | 486 | 7.40\% |
| Picture Bad | 234 | 3.56\% |
| Signal Head Not Visible | 12 | .18\% |
| Unclear Tag | 234 | 3.56\% |
| Video Not Usable | 37 | .56\% |
| Video Not Usable by Officers | 41 | .62\% |
| Wrong Plate Keyed | 9 | .14\% |
| TOTAL | 6,567 | 100.00\% |

## Uncontrollable Events

## April 1, 2010 - J une 30, 2010

| UNCONTROLLABLE EVENTS BY CONTRACTOR |  |  |  |
| :--- | ---: | ---: | ---: |

## FY 09-10 ACCOMPLISHMENTS OCTOBER 2009 - JUNE 2010

-Total of 62 cameras city-wide

- 3 camera sites added in J uly 2010
- Preston SB at Frankford
- Preston NB at Frankford
- Camp Wisdom at Marvin D. Love
-Red-light officers reviewed approximately 114,004 events and issued 81,606 citations
-Notices in Spanish began J une 2009 - Collections related to Spanish notices continue to have a positive impact and a positive increase in collections
-Presentations were made at 12 local high schools during the 09-10
school term. In the Fall staff will resume school outreach
-Participated in $7^{\text {th }}$ Annual Walk Like MADD Safety Fair



## FY 09-10 ACCOMPLISHMENTS OCTOBER 2009 - J UNE 2010

 (continuation)-Additional safety presentations made to:

- Oncor driving staff
- Councilman Atkins Community Event
-Implemented safety message on Dallas residents' J uly 2010 water bill invoice
-Staff developed an informative Public Service Announcement which is currently being aired on the City's cable network
-Staff is preparing for the Mayor's Back to School Fair in August staff provides information brochures and pencils with marketing logo -Staff is preparing for National Stop on Red Week in August 2010. Dallas will celebrate on Wednesday, August $4^{\text {th }}$ with a proclamation from Mayor Leppert. Other activities are pending.


## Citation Issuance Trend- Time of Day and Week



- According to Traffic Engineering, the range for the highest traffic congestion occurs during the midday hours
- This could be attributed to drivers commuting from work and school. This can also be due to people who drive for a living such as couriers, deliverers, and other various mobile services.


## Texting as a Possible Contributor to Red-Light Running

- Although texting while driving could possibly contribute to red light running, there are no official studies supporting this statement.
- While official studies have not been performed, anecdotally we can presume a link between texting, unsafe driving and red light running.
- Measures to address this likely link has encouraged our government at all levels to take action.
- Federal government employees are prohibited from texting while driving
- U.S. Transportation Secretary and National Highway Traffic Safety Administration (NHTSA) provided a sample state law to be used as a starting point for states to prohibit texting and driving


## Safety Measures I mplemented at the Local Level

Local measures to reduce texting and driving
-In 2009, Texas Legislation banned the use of hand-held cell phones in school zones across Texas.

- 2,623 signs were installed throughout Dallas' 651 school zones
-I Intermediate license holders are banned from all hand-held cell phone usage (including texting) while driving for the first twelve months
-Bus drivers are banned from all hand-held cell phone usage (including texting) when a passenger 17 and younger is present -Also, City policy is being developed to prohibit City employees from texting or emailing while driving City vehicles. To be finalized tentatively in September 2010.



## Marketing of SafeLight Active Initiatives

- Advertised message on Dallas residents' water bill invoice in July 2010
- Message stated: Congratulations for helping save lives! Since 2008, good driving habits have reduced accidents at intersections with red light cameras by $63 \%$. Thanks for STOPPI NG ON RED!
- See appendix for sample water bill
- SafeLight, Dallas Stops on Red website posted on police department's Facebook page:
http://www.facebook.com/pages/Dallas-TX/Dallas-Police-Department/126927037411
- Developing a partnership with Veda "Locca" Emory - radio personality for FM 97.9. Ms. Emory is a spokesperson for anti-texting while driving and has a passion for reaching our youth
- Staff is working with the City's Public Information Office to provide a story to the local media during the week of "National Stop on Red Week" - first week of August
- Sidewalk Kiosks - staff is working on and developing an image that can be posted at multiple Kiosks city-wide that will advertise the red light program and raise safety awareness


## Marketing of SafeLight

- High-end advertisement is
appealing but can be very expensive:
-Television and Radio Advertisement
- Billboard Advertisement
- Dart Bus Advertisement


## Marketing of SafeLight

## SafeLight Dude

- Introduce SafeLight Dude as a coloring page on the City's webpage
- Provide SafeLight Dude coloring page to children at Mayor's Back to School Program
- As part of the contractor with ACS, the contractor provides 4 hours per month toward marketing initiatives
- This time will be used to continue to maintain an ongoing and fresh marketing perspective



## Calculation of Change Period



- The City uses kinetic formula recommended by the Institute of Transportation Engineers
- Based on laws of physics
- Yellow time varies based on approach speed and slope
- ALL Red time varies based on approach speed and width of intersection
- Yellow time should be between 3 and 6 seconds with the value increasing in correspondence to higher speeds and downward slopes


## Calculation of Change Period

Yellow and ALL Red Intervals


- The Change Period has two time intervals:

1) Yellow time provides time for the driver to decide to keep going through the intersection, or react and stop at a comfortable deceleration rate
2) All Red time is a period of time that all approaches are red

- Provides enough time for vehicle passing the stop bar (just as the light turns from yellow to red) to travel through the intersection before the cross street receives a green signal
- Wide intersections need longer All Red time NOT longer yellow time


## Calculation of Change Period

Yellow and ALL Red Intervals

Change Period $\left.=t+\frac{v}{2 a+2 G g}\right]+\frac{W+L}{v}$

## Yellow Time

## All Red Time

- YELLOW time variables
- $\quad \mathrm{t}=1$ second = perception/reaction time
- $\quad$ v = approach speed (highest of either the posted speed or $85^{\text {th }}$ percentile speed)
- a = deceleration rate $=10$ feet $/ \mathrm{sec}$
- $\quad \mathrm{G}=$ Acceleration due to gravity, $32.2 \mathrm{ft} / \mathrm{sec}^{2}$
- $\quad g=$ percent grade in decimal form (positive for uphill and negative for downhill)
- ALL RED time variables
- $\quad$ W $=$ width of intersection (stop bar to far side of intersection curb)
- $\quad L=$ length of vehicle $=20$ feet
- $\quad$ = approach speed


## Calculation of Change Period

## Examples



| Intersection | Posted <br> Speed <br> Limit | 85th <br> Percentile <br> Speed | Approach <br> Slope | Yellow <br> Time Used <br> (seconds) | Intersection <br> Width (feet) | Time Used <br> (Seconds) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WB Northmest Highway at <br> Abrams | 45 mph | 49 mph | +0.016 | 4.7 sec | 121 feet | 2.0 sec |
| EB Commerce at <br> Cesar Chavez | 30 mph | 31 mph | +0.008 | 3.3 sec | 75 feet | 2.1 sec |
| EB Ledbetter at Lancaster | 45 mph | 41 mph | +0.014 | 4.3 sec | 162 feet | 2.8 sec |
| SB Montfort at LBJ (IH635) | 30 mph | 38 mph | 0.000 | 3.8 sec | 57 feet | 1.4 sec |

## Appendixes

## - Updates

- New Appointee along with current Commission Appointees
- Map of camera locations city-wide depicting three additional sites
- List of camera locations city-wide with three additional sites
- Water Bill with Thank You Message
- "Effectiveness of Red-Light Cameras," Brian S. Bochner, PE., PTOE, PTP and Troy D. Walden, Ph. D., ITE J ournal, May 2010


## List of Councilmember's Commission Appointees

| Delia J asso | VACANT |
| :--- | :--- |
| Deputy Mayor Pro Tem, Pauline Medrano | Charlie Chen |
| David A. Neumann | VACANT |
| Mayor Pro Tem, Dwaine R. Caraway | VACANT |
| Vonciel Jones Hill | Yolanda Williams |
| Steve Salazar | Jessica Sepulveda |
| Carolyn R. Davis | VACANT |
| Tennell Atkins | Lionel Churchill |
| Sheffie Kadane | Chick Cowan |
| Jerry R. Allen | Brett Ferguson |
| Linda Koop | Thomas Goyne (Newly appointed) |
| Ron Natinsky | Edwin Bright |
| Ann Margolin | Steve Rosato |
| Angela Hunt | Raul Magdaleno (Chair) |
| Mayor Tom Leppert | Beth Ramirez |
| City Staff |  |




-*- Demonstration Powered by Exstream Dialogue 06/23/2010, Version 6.1.015-*-

|  | Utilities <br> And | $\begin{aligned} & 07-012010 \\ & 0 \\ & \text { TE } \end{aligned}$ | Amount Due by 7/3/10 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \$364,765.99 |
|  |  | 00_AMT_DUE (364 765.99) 00_DUE_AFTER |  |  |

City of Dal as Services
Customer Name: CITY OF GRAND PRAIRIE

Account Number: 10029531
Service Address: 1834 STRAUSS RD

| INVOICE SUMMARY |  |
| :--- | :---: |
| Previous Balance | $\$ 929,124.54$ |
| Payment(s) | $(\$ 867,558.87)$ |
| Balance Forward | $\$ 61,565.67$ |
| Current Charges (See back page(s) for details) |  |
| Treated Water | $\$ 527,382.12$ |
| Miscellaneous Utility Charges | $(\$ 224,181.80)$ |
| Total Current Charges | $\$ 303,200.32$ |
| Total Amount Due | $\$ 364,765.99$ |

Total Amount Due

Invoice 050300086740 Issued 7/1/10 Page: 1 of 2 SPECIAL MESSAGES Conserve our most precious resource-water! Don't water your yard between 10 am and 6 pm, April 1 through October 31. For more information, visit Da las Water Uulities' website at www.SaveDal lasWater.com.

Call 311 to request or report an emergency water turn-off, a water main break, a water meter leak, a fire hydrant leak, or clogged or overfiowing wastewater main.
Congratulations for helping save lives! Since 2008, good driving habits have reduced accidents at intersections with red light cameras by $63 \%$. Thanks for STOPPING ON RED

| Job ID $=$ HOLDI174 |
| :--- |
| Sequence ID $=000001$ |
| Department Code $=101$ |
| Mail Zip -5 Digit $=75053$ |
| Current Sheet $=1$ |

Current Sh Digit $=75053$
Current Sheet \# = 1
Total Sheet Count $=1$
Condensed Bit $1=\mathrm{F}$
Condensed Bit $2=6$
Break Mark =

## Coniliceres?

By Phone: (214) e51-144
Internet: www.dallascityhall.com
In writing: 1500 Marilla, 3ANorth, Dallas, TX 75201

> | Be a good Neighbor! |
| :--- |
| Operation WaterShare: Helps pay water bills for customers |
| facing temporary financial setbacks. This program is |
| administered by The Salvation Army. |
| Teen Program Dallas Public Library Teen Centers offer special |
| programs to help teens achieve success in life and school. |
| Programs are as diverse, ranging from digital photography to |
| information on college entry, but all work to develop Ife skills. |

Keep tinls portion for your records
Flesse relum this partion with your payment 00001 20-199 E

## Dallas Water Utilities PO Box 680025 Dallas TX 75206-0025

City of Dalas
000801006461820000017505340455 E, July.

ACCOUNT NUMBER: 100295311

Make payable to:
City of Dallas
Cty Hall, 1AN
Dallas TX 75277


Seq\# HOLD-000001
CITY OF GRAND PRAIRIE Co REVENUE MANAGER PO Box 5
GRAND PRAIRIE TX 75053-4045Check here for change of address on back


[^0]:    ${ }^{1}$ Events are each photo taken by the camera equipment. Each event must be reviewed and is not necessarily a violation.

