

Automated Red Light Camera Enforcement



Presented to:Automated Red Light Enforcement CommissionDate:July 27, 2010



THIRD QUARTER SUMMARY EVENTS			
TOTAL EVENTS CAPTURED	281,082		
NON VIOLATIONS 1	230,054		
POSSIBLE VIOLATIONS	51,028		
CONTROLLABLE EVENTS REJECTED	6,567		
NON CONTROLLABLE EVENTS REJECTED	12,389		
VIOLATION IN PROCESSING STATUS	1,281		
VIOLATIONS MAILED AS CITATIONS	30,783		

¹ Events are each photo taken by the camera equipment. Each event must be reviewed and is not necessarily a violation.



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 – June 30, 2010

UNCONTROLLABLE EVENTS BY CONTRACTOR				
Car Obstructed	410	3.31%		
Dealer Tag	213	1.72%		
DMV – Dealer Tag	0	0.00%		
Direct Sun Glare	330	2.66%		
DMV – Plate Obstructed	0	0.00%		
DMV – Temporary Tag	0	0.00%		
DMV – No Hit	2,025	16.35%		
Glare on Plate	1,168	9.43%		
Old Issue Date	205	1.65%		
Hazardous Road Conditions by Officer	6	.05%		
High Profile Vehicle by Officer	9	.07%		
Missing TRF Light by Officer	1	.01%		
No Plate	434	3.50%		
Not Issued – DMV Reject	2,551	20.59%		
Obscured Tags by Officer	13	.10%		
Officer Present by Officer	3	.02%		
Plate Damaged	56	.45%		
Plate Obstructed	3,221	.26%		
Rejected by Officers (other)	27	.22%		
Temporary Tag	1,654	13.35%		
Temporary Tag by Officer	1	.01%		
Vehicle Match Failure by Officer				
	62	.50%		
TOTAL	12,389	100.00%		

4





FY 09-10 ACCOMPLISHMENTS OCTOBER 2009 – JUNE 2010

•Total of 62 cameras city-wide

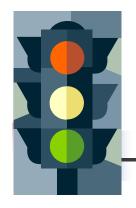
- 3 camera sites added in July 2010
- Preston SB at Frankford
- Preston NB at Frankford
- Camp Wisdom at Marvin D. Love

•Red-light officers reviewed approximately 114,004 events and issued 81,606 citations

•Notices in Spanish began June 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 7th Annual Walk Like MADD Safety Fair





FY 09-10 ACCOMPLISHMENTS OCTOBER 2009 – JUNE 2010 (continuation)

•Additional safety presentations made to:

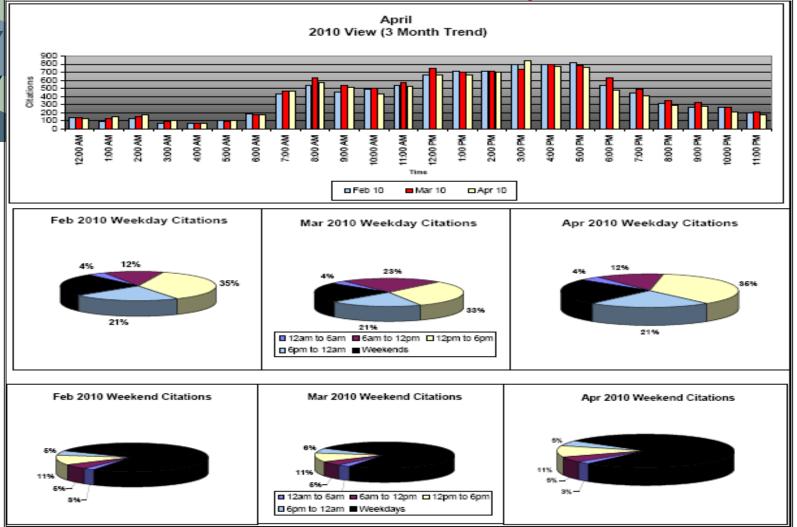
- Oncor driving staff
- Councilman Atkins Community Event

•Implemented safety message on Dallas residents' July 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 4th 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 Implemented 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

 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 STOPPING 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



High-end advertisement is appealing but can be very expensive:

Television and Radio Advertisement

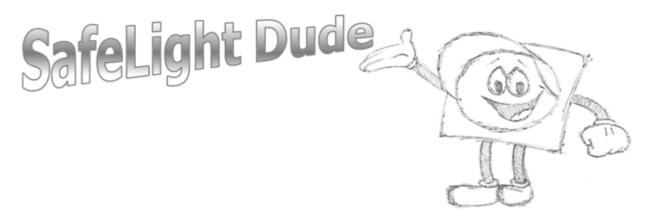
Billboard Advertisement

Dart Bus Advertisement



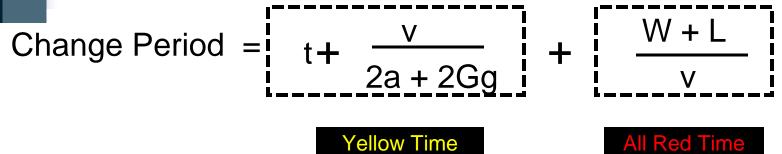
Marketing of SafeLight SafeLight Dude

- 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





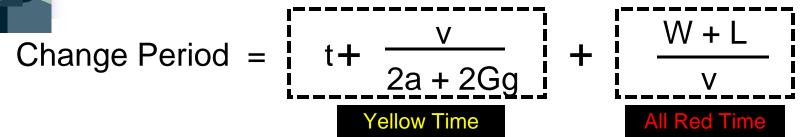
Yellow and ALL Red Intervals



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



Yellow and ALL Red Intervals



The Change Period has two time intervals:

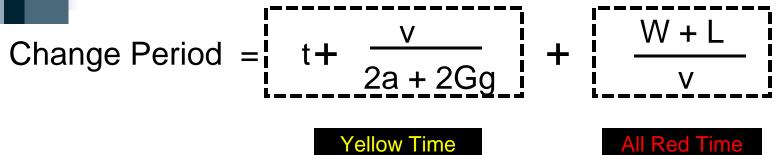
1) <u>Yellow time</u> provides time for the driver to decide to keep going through the intersection, or react and stop at a comfortable deceleration rate

2) <u>All Red time</u> 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 <u>NOT</u> longer yellow time



Yellow and ALL Red Intervals



YELLOW time variables

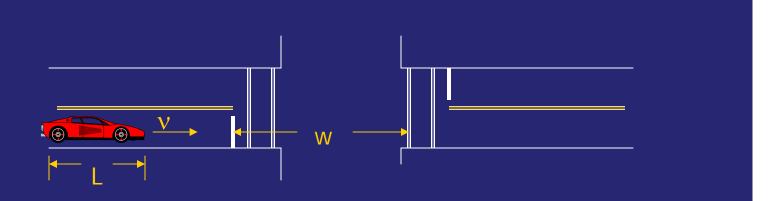
- t = 1 second = perception/reaction time
- v = approach speed (highest of either the posted speed or 85th percentile speed)
 - a = deceleration rate = 10 feet/sec
 - G = Acceleration due to gravity, 32.2 ft/sec^2
 - g = percent grade in decimal form (positive for uphill and negative for downhill)

ALL RED time variables

- W = width of intersection (stop bar to far side of intersection curb)
 - L = length of vehicle = 20 feet
 - v = approach speed



Examples



Intersection	Posted Speed Limit	85th Percentile Speed	Approach Slope	Yellow Time Used (seconds)	Intersection Width (feet)	All Red Time Used (Seconds)
WB Northwest Highway at Abrams	45 mph	49 mph	+ 0.016	4.7 sec	121 feet	2.0 sec
EB Commerce at 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 Journal, May 2010



List of Councilmember's Commission Appointees

Delia Jasso	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	Ben Davis
Jerry R. Allen	Chick Cowan
Linda Koop	Brett Ferguson
Ron Natinsky	Thomas Goyne (Newly appointed)
Ann Margolin	Edwin Bright
Angela Hunt	Steve Rosato
Mayor Tom Leppert	Raul Magdaleno (Chair)
City Staff	Beth Ramirez

Camera Locations (3 additional camera sites)

#	LOCATION	#	LOCATION
1	S 2nd Ave SB @ Bruton Rd	32	Lemmon Ave NB @ Oak Lawn Ave
2	Alpha Rd WB @ Dallas Pkwy	33	Lemmon Ave SB @ W Mockingbird Ln
3	N Beckley Ave SB @ W Colorado Blvd	34	E Ledbetter Dr EB @ S Lancaster Rd
4	N Buckner Blvd NB @ John West Rd	35	E Ledbetter Dr WB @ Lancaster Rd
5	S Buckner Blvd NB @ Bruton Rd	36	E Lovers Ln WB @ N Central Expy
6	W Camp Wisdom Rd WB @ S Westmoreland Rd	37	Marvin D Love Fwy NB @ W Camp Wisdom Rd
7	N Central Expy NB @ E Lovers Ln	38	Miller Rd WB @ Plano Rd
8	N Central Expy NB @ Lemmon Ave	39	Montfort Dr SB @ LBJ Serv N
9	N Central Serv W NB @ E Mockingbird Ln	40	E Mockingbird Ln WB @ N Central Serv E
10	Coit Rd NB @ Banner Dr	41	W Mockingbird Ln EB @ John Carpenter Fwy
11	Commerce St EB @ S Central Expy	42	W Mockingbird Ln WB @ N Stemmons Serv E
12	Dallas Pkwy NB @ Keller Springs Rd	43	S Munger Blvd NB @ Lindsley Ave
13	Ferguson Rd EB @ Peavy Rd	44	E NW Hwy WB @ Avenue E / Abrams Rd
14	Ferguson Rd SB @ Gus Thomasson Rd	45	N NW Hwy WB @ Dallas North Toll Way
15	Forest Ln EB @ Abrams Rd	46	W NW Hwy EB @ Dallas North Tollway
16	Forest Ln EB @ Plano Rd	47	W NW Hwy EB @ Marsh Ln / Lemmon Ave
17	Forest Ln WB @ Inwood Rd	48	W NW Hwy EB @ N Walton Walker Blvd
18	Forest Ln WB @ Schroeder Rd	49	W NW Hwy WB @ Marsh Ln / Lemmon Ave
19	Frankford Rd EB @ Preston Rd	50	Preston Rd SB @ LBJ Fwy
20	Frankford Rd WB @ Dallas Pkwy	51	E R L Thornton Serv N WB @ S Harwood St
21	Graham Ave EB @ Lindsley Ave	52	E R L Thornton Serv S EB @ S Harwood St
22	Greenville Ave NB @ E Mockingbird Ln	53	Skillman St NB @ LBJ Fwy
23	Griffin St W WB @ S St Paul St	54	Skillman St SB @ LBJ Fwy
24	S Hampton Rd SB @ W Wheatland Rd	55	S Tyler St NB @ W Jefferson Blvd
25	Harry Hines Blvd SB @ N NW Hwy	56	N Walton Walker Blvd SB @ W NW Hwy
26	W Illinois Ave EB @ RL Thornton Fwy	57	Webb Chapel Rd SB @ Lombardy Ln
27	W Jefferson Blvd EB @ S Tyler St	58	S. Westmoreland Rd SB @ Illinois Rd
28	Keller Springs Rd WB @ Knoll Trail Dr	59	Woodall Rodgers Serv S WB @ Olive St
29	LBJ Fwy EB @ Montfort Dr	60	Preston SB at Frankford (new camera site)
30	LBJ Fwy WB @ Coit Rd	61	Preston NB at Frankford (new camera site)
31	LBJ Fwy WB @ Preston Rd	62	Camp Wisdom at Marvin D. Love (new camera site)

