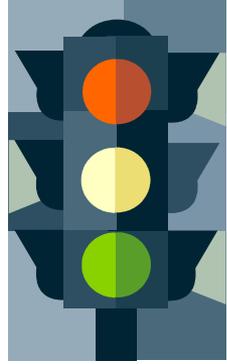




Automated Red Light Camera Enforcement



Presented to: Automated Red Light Enforcement Commission
Date: Tuesday, April 7, 2015



PURPOSE

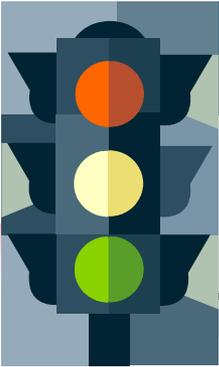
- Approval of October 8, 2014 minutes
- Open items: Questions & Answers –
February 24, 2015 scheduled briefings
- Revise Goals and Objective for FY 14/15
- Safety Update
- Legislative update



APPROVAL OF MINUTES, OPEN ITEMS: QUESTIONS & ANSWERS, AND REVISED GOALS AND OBJECTIVES

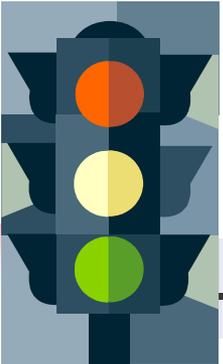


Carmen Garcia, ARC Chair



Open items: Question & Answers – February 24, 2015 Briefings

- 2014 TxDOT Report & Safety update
- Legislation, Media, Public Info. & Cameras
- Performance and Program Update
- FY13/14 Citation Issued & FY14/15 Quarterly Performance
- Public Awareness Events
- Contract Agreement update



FY 13/14 Goals & Objective

- Assessment of camera locations
- Marketing and Public Relations
- Community Engagement
- Texas Legislative Affairs

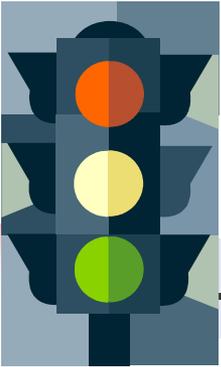
Revisions required for FY 14/15



SAFETY REPORT UPDATES



Kirk Houser, Transportation Engineer

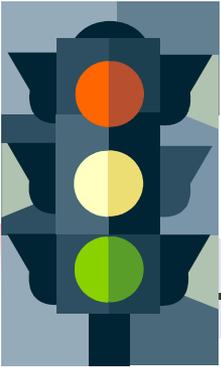


7 Year Post Safety Report

Crashes – Camera Approaches Only

- **Post 7 year results at 33 camera approaches:**
 - 54% average reduction in crashes caused by red light running
 - 73% of these approaches showed reductions or no change in red-light related crashes

3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
82	37	-44	-54.3%	22	2	9	72.7%
18	10	-8	-44.5%	9	1	1	80.0%
18	15	-3	-17.9%	5	0	3	62.5%
11	6	-6	-50.0%	6	4	1	40.0%
				42	7	14	

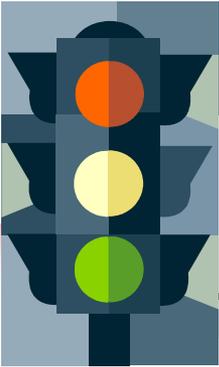


5 Year Post Safety Report

Crashes – Camera Approaches Only

- **Post 5 year results at 11 camera approaches:**
 - 45% average reduction in crashes caused by red light running
 - 91% of these approaches showed reductions or no change in red-light related crashes

3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
82	37	-44	-54.3%	32	2	9	72.7%
18	10	-8	-44.5%	9	1	1	90.9%
18	15	-3	-17.9%	5	0	3	83.5%
11	6	-5	-50.0%	6	4	1	90.9%
				42	7	14	



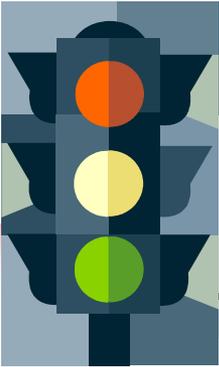
4 Year Post Safety Report

Crashes – Camera Approaches Only

- **Post 4 year results at 8 camera approaches:**

- 18% average reduction in crashes caused by red light running
- 63% of these approaches showed reductions or no change in red-light related crashes

3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
82	37	-45	-54.3%	22	2	9	72.7%
18	10	-8	-44.5%	6	1	1	90.9%
18	15	-3	-17.9%	5	0	3	62.5%
11	6	-5	-50.0%	6	4	1	90.9%
				42	7	14	

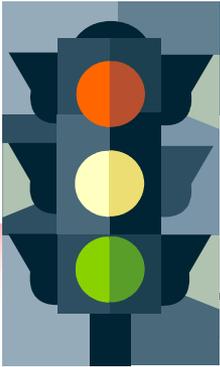


3 Year Post Safety Report

Crashes – Camera Approaches Only

- **Post 3 year results at 11 camera approaches:**
 - 50% average reduction in crashes caused by red light running
 - 91% of these approaches showed reductions or no change in red-light related crashes

3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
82	37	-44	-54.9%	22	2	6	72.7%
18	10	-8	-44.5%	9	1	1	80.0%
18	15	-3	-17.0%	5	0	3	62.5%
11	6	-6	-50.0%	6	4	1	90.9%
				42	7	14	



Safety Report

ACTIVE CAMERA APPROACHES REPORT

ALL Crash Types on Camera Approaches

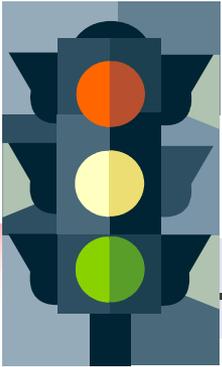
Quantity	Duration	3 Years Before ALL Types	2 Years Before ALL Types	1 Year Before ALL Types	3 Year Before AVG	1 Year After ALL Types	2 Years After ALL Types	3 Years After ALL Types	4 Years After ALL Types	5 Years After ALL Types	6 Years After ALL Types	7 Years After ALL Types	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase
33 Approaches	7 years (7/1/06 to 6/30/13)	89	217	192	166	188	129	124	133	155	159	150	145	-21	-12.4%	19	1	13
11 Approaches	5 years (7/1/08 to 6/30/13)	64	86	80	77	57	72	68	53	43			59	-18	-23.6%	9	0	2
8 Approaches	4 years (7/1/09 to 6/30/13)	87	55	71	71	81	67	42	25				54	-17	-24.3%	4	0	4
11 Approaches	3 years (7/1/10 to 6/30/13)	71	57	65	64	50	39	46					45	-19	-30.1%	10	1	0
																42	2	19

Red Light Related Crashes on Camera Approaches

Quantity	Duration	3 Years Before RLR	2 Years Before RLR	1 Year Before RLR	3 Year Before AVG	1 Year After RLR	2 Years After RLR	3 Years After RLR	4 Years After RLR	5 Years After RLR	6 Years After RLR	7 Years After RLR	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
33 Approaches	7 years (7/1/06 to 6/30/13)	39	107	99	82	58	34	29	29	32	36	43	37	-44	-54.3%	22	2	9	72.7%
11 Approaches	5 years (7/1/08 to 6/30/13)	15	21	17	18	12	12	12	10	3			10	-8	-44.5%	9	1	1	90.9%
8 Approaches	4 years (7/1/09 to 6/30/13)	22	18	13	18	26	14	10	8				15	-3	-17.9%	5	0	3	62.5%
11 Approaches	3 years (7/1/10 to 6/30/13)	13	9	12	11	5	3	9					6	-6	-50.0%	6	4	1	90.9%
																42	7	14	

Rear-End Crashes on Camera Approaches

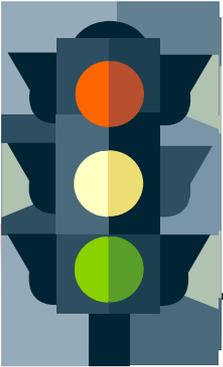
Quantity	Duration	3 Years Before RE	2 Years Before RE	1 Year Before RE	3 Year Before AVG	1 Year After RE	2 Years After RE	3 Years After RE	4 Years After RE	5 Years After RE	6 Years After RE	7 Years After RE	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase
33 Approaches	7 years (7/1/06 to 6/30/13)	21	44	29	31	38	36	37	49	47	51	40	43	11	35.9%	10	4	19
11 Approaches	5 years (7/1/08 to 6/30/13)	21	26	25	24	19	29	24	16	13			20	-4	-15.8%	4	1	6
8 Approaches	4 years (7/1/09 to 6/30/13)	20	13	9	14	17	11	9	7				11	-3	-21.4%	4	0	4
11 Approaches	3 years (7/1/10 to 6/30/13)	29	23	19	24	16	15	15					15	-8	-35.2%	5	5	1
																23	10	30



Safety Report

ALL ACTIVE APPROACHES

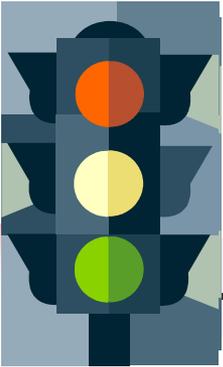
3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
187	113	-74	-39.6%	21	1	8	71.0%
46	29	-17	-37.4%	9	0	1	90.0%
40	32	-9	-21.3%	5	0	2	71.4%
31	14	-17	-54.3%	6	1	0	100.0%
				41	2	11	



7 Year Post Safety Report Crashes – All Approaches

- **Post 7 year results at 31 intersections:**
 - 40% average reduction in crashes caused by red light running
 - 71% of these approaches showed reductions or no change in red-light related crashes

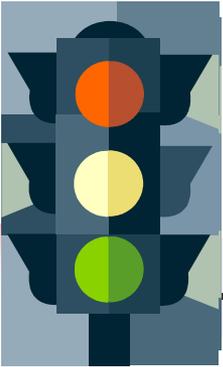
3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
187	113	-74	-39.6%	21	1	8	71.0%
46	29	-17	-37.4%	9	0	1	90.0%
40	32	-8	-21.3%	6	0	2	75.0%
31	14	-17	-54.3%	5	1	0	100.0%
				41	2	11	



5 Year Post Safety Report Crashes – All Approaches

- **Post 5 year results at 10 intersections:**
 - 37% average reduction in crashes caused by red light running
 - 90% of these approaches showed reductions or no change in red-light related crashes

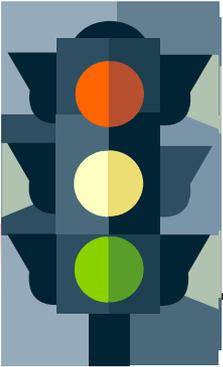
3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
187	113	-74	-39.6%	21	1	0	71.0%
46	29	-17	-37.4%	9	0	1	90.0%
40	32	-8	-21.3%	6	0	2	75.0%
31	14	-17	-54.8%	6	1	0	100.0%
				41	2	11	



4 Year Post Safety Report Crashes – All Approaches

- **Post 4 year results at 7 intersections:**
 - 21% average reduction in crashes caused by red light running
 - 71% of these approaches showed reductions or no change in red-light related crashes

3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
187	115	-74	-39.5%	21	1	0	71.0%
46	29	-17	-37.1%	0	0	1	90.0%
40	32	-9	-21.3%	5	0	2	71.4%
31	14	-17	-54.3%	6	1	0	100.0%
				41	2	11	



3 Year Post Safety Report Crashes – All Approaches

- **Post 3 year results at 7 intersections:**
 - 54% average reduction in crashes caused by red light running
 - 100% of these approaches showed reductions or no change in red-light related crashes

3 Year Before AVG	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase	
187	113	-74	-39.6%	21	1	0	71.0%
46	29	-17	-37.1%	9	0	1	90.0%
40	32	-8	-21.3%	6	0	2	71.4%
31	14	-17	-54.3%	6	1	0	100.0%
				41	2	11	

Safety Report

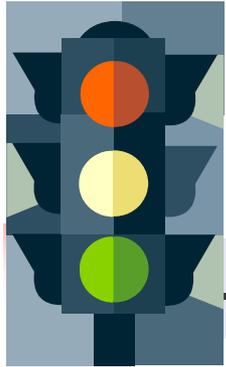
FATALITY REPORT

Fatalities at ALL Approaches

Quantity	Duration	3 Years Before Fatalities	2 Years Before Fatalities	1 Year Before Fatalities	3 Year Before AVG	1 Year After Fatalities	2 Years After Fatalities	3 Years After Fatalities	4 Years After Fatalities	5 Years After Fatalities	6 Years After Fatalities	7 Years After Fatalities	After AVG	AVG Change	Percent Change
31 Intersections	7 years (7/1/06 to 6/30/13)	1	3	1	1.7	1	2	0	1	1	0	0	0.7	-1.0	-57.1%
10 Intersections	5 years (7/1/08 to 6/30/13)	0	0	0	0.0	0	0	0	0	0			0.0	0.00	#DIV/0!
7 Intersections	4 years (7/1/09 to 6/30/13)	0	0	0	0.0	0	1	0	0				0.3	0.25	#DIV/0!
7 Intersections	3 years (7/1/10 to 6/30/13)	2	0	0	0.7	1	0	1					0.7	0.00	0.0%

Red Light Related Fatalities at ALL Approaches

Quantity	Duration	3 Years Before Fatalities	2 Years Before Fatalities	1 Year Before Fatalities	3 Year Before AVG	1 Year After Fatalities	2 Years After Fatalities	3 Years After Fatalities	4 Years After Fatalities	5 Years After Fatalities	6 Years After Fatalities	7 Years After Fatalities	After AVG	AVG Change	Percent Change
31 Intersections	7 years (7/1/06 to 6/30/13)	0	3	0	1.0	0	1	0	0	0	0	0	0.1	-0.9	-85.7%
10 Intersections	5 years (7/1/08 to 6/30/13)	0	0	0	0.0	0	0	0	0	0			0.0	0.00	#DIV/0!
7 Intersections	4 years (7/1/09 to 6/30/13)	0	0	0	0.0	0	0	0	0				0.0	0.00	#DIV/0!
7 Intersections	3 years (7/1/10 to 6/30/13)	1	0	0	0.3	0	0	1					0.3	0.00	0.0%



7 Year Post Safety Report

Crash Injuries

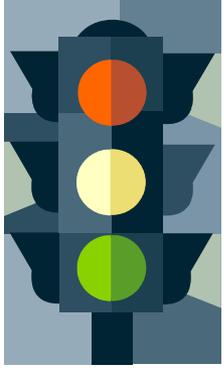
- **Fewer Fatalities**
 - 86% reduction in fatalities

3 Year Before AVG	After AVG	AVG Change	Percent Change
1.0	0.1	-0.9	-85.7%
0.0	0.0	0.00	=0PV0%
0.0	0.0	0.00	=0PV0%
0.0	0.0	0.00	0.0%

Safety Report

INJURY REPORT

		Injuries at ALL Approaches																
Quantity	Duration	3 Years Before Injuries	2 Years Before Injuries	1 Year Before Injuries	3 Year Before AVG	1 Year After Injuries	2 Years After Injuries	3 Years After Injuries	4 Years After Injuries	5 Years After Injuries	6 Years After Injuries	7 Years After Injuries	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase
31 Intersections	7 years (7/1/06 to 6/30/13)	267	679	601	516	492	378	345	422	327	332	318	373	-142	-27.6%	19	4	7
10 Intersections	5 years (7/1/08 to 6/30/13)	159	116	136	137	150	128	134	72	68			110	-27	-19.4%	8	0	2
7 Intersections	4 years (7/1/09 to 6/30/13)	174	116	135	142	186	137	78	55				114	-28	-19.5%	4	1	2
7 Intersections	3 years (7/1/10 to 6/30/13)	140	107	98	115	74	65	89					76	-39	-33.9%	7	0	0
																38	5	11
		Red Light Related Injuries at ALL Approaches																
Quantity	Duration	3 Years Before RLR	2 Years Before RLR	1 Year Before RLR	3 Year Before AVG	1 Year After RLR	2 Years After RLR	3 Years After RLR	4 Years After RLR	5 Years After RLR	6 Years After RLR	7 Years After RLR	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase
31 Intersections	7 years (7/1/06 to 6/30/13)	80	235	200	172	153	97	92	94	74	86	83	97	-75	-43.5%	18	3	9
10 Intersections	5 years (7/1/08 to 6/30/13)	41	19	36	32	40	20	41	11	15			25	-7	-20.6%	7	0	3
7 Intersections	4 years (7/1/09 to 6/30/13)	46	23	34	34	48	30	21	12				28	-7	-19.2%	4	1	2
7 Intersections	3 years (7/1/10 to 6/30/13)	23	18	14	18	4	4	12					7	-12	-63.6%	5	2	0
																34	6	14
		Red Light Related Injuries at Camera Approaches																
Quantity	Duration	3 Years Before RLR	2 Years Before RLR	1 Year Before RLR	3 Year Before AVG	1 Year After RLR	2 Years After RLR	3 Years After RLR	4 Years After RLR	5 Years After RLR	6 Years After RLR	7 Years After RLR	After AVG	AVG Change	Percent Change	Reduction	No Change	Increase
33 Approaches	7 years (7/1/06 to 6/30/13)	27	95	101	74	53	29	25	37	25	28	41	34	-40	-54.3%	22	0	11
11 Approaches	5 years (7/1/08 to 6/30/13)	19	16	14	16	10	7	13	4	2			7	-9	-55.9%	8	0	3
8 Approaches	4 years (7/1/09 to 6/30/13)	24	11	9	15	26	14	11	7				15	0	-1.1%	4	2	2
11 Approaches	3 years (7/1/10 to 6/30/13)	8	6	9	8	0	3	7					3	-4	-56.5%	6	2	3
																40	4	19



Appendices

- 2014 Approved Meeting Dates
- List of ARC Members
- Red Light Camera Map
- Red Light Camera Locations

Legislative Bills regarding Red Light Cameras

Bill No.	Author	District	Description	Status
HB142	Jonathan Stickland	92	Relating to the authority of the governing body of a local authority to impose a civil penalty for certain violations recorded by an automated traffic control system or a photographic traffic signal enforcement system; Total photo enforcement ban with a Grandfather Clause for contracts existing prior to June 1, 2015 and which can be carried out until contract expiration date.	Introduced and HB referred to House Transportation Committee – HEARING APRIL 9TH
HB 1034	Charlie Green	99	Relating to registration of a motor vehicle alleged to have been involved in a violation detected by a photographic traffic signal enforcement system; Bill would ban our Automated Scofflaw Programs (ASP) in TX.	Introduced and referred to House Transportation Committee – HEARING APRIL 9TH
HB 1131	Gary Elkins	135	Companion to SB 340; Relating to prohibiting the use of photographic traffic signal enforcement systems; total enforcement ban without grandfather clause	Introduced and referred to House Transportation Committee – HEARING APRIL 9TH
HB 2442	Bill Zedler	96	Relating to allowing a person to register a motor vehicle when delinquent in the payment of certain civil penalties. Impedes the county assessor/collector of the TX DMV from refusing to register the car of a person who is delinquent in paying a civil penalty.	Introduced and referred to committee on House Transportation - HEARING APRIL 9TH

Legislative Bills regarding Red Light Cameras cont...

Bill No.	Author	District	Description	Status
HB 1710	Dwyane Bohac	138	Relating to an election to repeal a photographic traffic signal enforcement system ordinance; Bill would allow for a local election by petition to repeal a city ordinance for red light camera systems. The threshold for the election is set at 10% of registered voters. (Very low threshold for voters at just 10%). When photo enforcement programs are put out to a voter referendum, more time than not, programs are voted out. would: (1) require a city to submit to its voters the question of repealing an ordinance establishing red light cameras if the city council receives a petition requesting the election signed by 10 percent of the registered voters; (2) prohibit a city from adopting another red light camera ordinance if a majority of the votes cast at an election described in (1), above, favor repealing the ordinance; and (3) prohibit an election described in (1), above, from being held more often than every two years.	Introduced and referred to committee on House Transportation - HEARING APRIL 9TH
HB 2744	Giovanni Capriglione	98	Relating to the use of automatic license plate readers by a law enforcement agency; defines license plate reader, fits RLC camera definition, conflicts	Introduced and referred to House on Homeland Security and Public Safety
HB 2779	Gary Elkins	135	Relating to the authority of a local government to impose a civil penalty for certain failures to obey a traffic signal; bans right on red PE, no grandfather; would prohibit a city that is using a red light camera from imposing a civil penalty on the owner of a motor vehicle who runs a red light to turn right at an intersection.	Introduced and referred to House Transportation Committee - HEARING APRIL 9TH

Legislative Bills regarding Red Light Cameras cont...

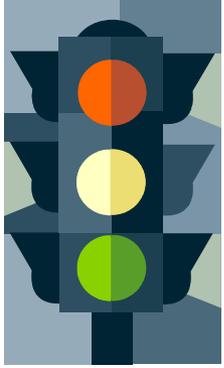
Bill No.	Author	District	Description	Status
HB 2781	Gary Elkins	135	Relating to the enforcement of traffic laws by local authorities; Total PE banning bill, grandfather clause; would: (1) prohibit the issuance of criminal or civil charges or fines based on an image captured using a red light camera; (2) require the city to pay all the costs incurred by a motor vehicle owner, including attorneys fees, if a person is incorrectly charged with running a red light based on red light camera evidence; (3) repeal the trauma account associated with red light camera fees; (4) repeal the statutes allowing red light camera traffic enforcement; and (5) allow a city to continue to use red light cameras if the city has a contract with a vendor until the expiration of the contract.	Introduced and referred to House Transportation Committee - HEARING APRIL 9TH
HB 2867	Matt Rinaldi	115	Relating to the use of automatic license plate readers by a law enforcement agency. Would allow a law enforcement agency to use images produced from an automatic license plate reader for investigating a criminal offense or a report of a missing person.	Introduced and referred to House on Homeland Security and Public Safety
HB 3817	Gary Elkins	135	Relating to the photographic enforcement of traffic laws. (Companion: SB 1340)	Introduced and referred to House Transportation Committee - HEARING APRIL 9TH
HB 740	Dwyane Bohac	138	Relating to the content of photographic traffic monitoring system signs. Adds additional sign postings	Introduced and referred to House Transportation Committee - HEARING APRIL 9TH

Legislative Bills regarding Red Light Cameras cont...

Bill No.	Author	District	Description	Status
HB 864	Bill Zedler	96	Relating to the rules of the road regarding red signals at certain traffic control signals. Stop and go on red when non detection.would provide that an operator of a vehicle facing a steady red signal at a traffic-actuated electric traffic-control signal may proceed if the traffic-actuated electric traffic-control signal fails to register the vehicle within a reasonable period of time, and that the right to proceed is subject to the rules applicable after stopping at a stop sign. (Companion bill is S.B. 334 by Watson.)	Introduced and referred to House Transportation Committee - HEARING APRIL 9TH
SB 334	Kirk Watson	14	Companion/ identical to HB 864; Relating to the rules of the road regarding red signals at certain traffic control signals. Stop and go at signal	Introduced and referred to Senate Transportation Committee
SB 340	Don Huffines	16	Companion to HB1131; Relating to prohibiting the use of photographic traffic signal enforcement systems; total photo enforcement ban with no grandfather clause; would: (1) prohibit a city from issuing a traffic complaint, notice of violation, or other civil or criminal charge or citation if the evidence for the charge comes from a red light camera or other automated radar or video device; (2) make a city liable for attorneys fees or other costs if the city issues a complaint or charge described above; and (3) remove all city authority to have any programs or contracts related to red light cameras.	Introduced and referred to committee on Senate Transportation - HEARING APRIL 1ST 8:00 A.M.

Legislative Bills regarding Red Light Cameras cont...

Bill No.	Author	District	Description	Status
SB 714	Bob Hall	2	Relating to the authority of the governing body of a local authority to impose a civil penalty for certain violations recorded by an automated traffic control system or a photographic traffic signal enforcement system. Total photo enforcement ban with a Grandfather Clause for contracts existing prior to June 1, 2015 and which can be carried out until contract expiration date.	Introduced and referred to Senate Transportation Committee
SB 1286	Bob Hall	2	Relating to the use of automatic license plate readers by a law enforcement agency.would: (1) authorize a law enforcement agency to use an automatic license plate reader; (2) allow images captured from an automatic license plate reader to be used only for investigating a criminal offense and investigating a report of a missing person; and (3) require images and data produced from an automatic license plate reader to be destroyed no later than the 7th day after collection, unless used as evidence in a criminal investigation or prosecution. (Companion bills are H.B. 2744 by Capriglione and H.B. 2867 by Rinaldi.)	Introduced and referred to committee on Senate Criminal Justice
SB 1340	Don Huffines	16	Would prohibit a local authority from enforcing a traffic law only by photographic means or pursuing civil enforcement based only on evidence obtained through photographic means. (Companion bill is H.B. 3817 by Elkins.)	Introduced and referred to committee on Senate Transportation -



2014 Approved Meeting Dates

Meeting time: 9:30 am – 11:30 am

<u>Date</u>	<u>Location</u>
Tuesday, January 20, 2014	5ES
Tuesday, April 7, 2014	6ES
Tuesday, August 25, 2014	5ES
Tuesday, October 6, 2014	6ES

Memorandum



DATE 17 October 2014

TO Honorable Members of the Public Safety Committee: Sheffie Kadane (Chair),
Adam Medrano (Vice Chair), Dwaine Caraway, Jennifer S. Gates, Sandy Greyson, and Scott Griggs

SUBJECT Safelight Program (A Red-Light Photo Enforcement Safety Initiative) Follow-up to Questions asked during
the October 13th Briefing

During the Public Safety Committee meeting on Monday, October 13, 2014 there were questions regarding the Safelight Program administration, contract extension, safety statistics and site selection. In response, additional information regarding the Safelight Program is provided below:

Question: Can additional safety statistics be provided related to the Safelight Program?

Response: The Safelight Program is required to provide the State of Texas an annual report on specific traffic and red-light camera enforcement related items. A detailed report of Safelight Program related safety statistics is attached.

Question: Does the red-light photo enforcement process include citations to vehicles with temporary, paper tags?

Response: The Safelight Program does not issue red-light photo enforcement citations to vehicles with temporary, paper tags.

Question: What methodology is used or what review occurs for the Safelight Program safety statistics?

Response: Safelight Program records and prepares statistics as required by Section 707.004 of the Transportation Code. The City is required to submit to the Texas Department of Transportation (TxDOT) 18 months of before crash data and annual after crash data reports via a web-based reporting system where local jurisdictions enter the crash data for each intersection approach. The required data includes the number of crashes, injury crashes and fatality crashes as well as information regarding crash types: right angle intersection crashes, rear-end injury crashes, and other intersection crashes.

The statistics are compiled by the traffic engineering section of the Streets Department based on information found in CRIS-TxDOT, Crash Records Information System Reporting for Department of Public Safety and Texas Department of Transportation. TxDOT has pre-activation and all post activation reports by intersection with a Red-Light Camera available on the TxDOT website at <http://www.txdot.gov/driver/laws/red-light/reports.html>.

Question: Are other countermeasures used besides red-light photo enforcement to reduce red light related accidents in intersections?

Response: The traffic engineering sections uses a number of remediation methods to reduce red-light running and related crashes in intersections. Photo enforcement is one of the last remediation methods used for an intersection with a history of red-light related crashes. The traffic engineering sections reviews intersections with red-light related crashes and uses the following process:

Step 1 - Types of Sites

- Accident trend sites – Police Accident Database Query
 1. History of red light related crashes
 2. Right-angle crash trends
- Behavior modification sites
 1. High frequency of red light violations
 2. Provide geographic balance citywide

Step 2 - Engineering Study

- Countermeasures to solve red light violations before enforcement is considered
 1. Traffic signal control equipment is functioning properly
 2. Signal head must be visible & meet standards for size & placement
 3. Stop bars and crosswalks must be visible
 4. Traffic signs are visible and do not distract from signal operation
 5. Signal timing should be optimized for green time distribution
 6. Sequence of movements should be reviewed for possible changes
 7. Yellow timing conforms to standard formula recommended by Institute of Transportation Engineers
 8. Adjusted for 85 percentile (majority) speeds
 9. Accounts for steep grades approaching signal
 10. **Camera enforcement determined as appropriate countermeasure.**

Step 3 – Recommending an Intersection

- Review of list intersections deemed appropriate for camera enforcement
- Remove intersections scheduled for future or existing reconstruction
- Remove Intersections submitted for signal replacement

Step 4 – Validate Use

- Conduct 16 hour video study to determine violation issues:
 1. Review time of day violations occurring
 2. Review signal timing plan during hours with high violations for potential adjustments

Step 5 – Review for Constructability

- Cameras and flashers must be placed at optimal distances from stop bar to operate
 1. Constraints
 - underground utilities
 - driveways
 - vegetation
 - sidewalk width
 2. In some cases camera was constructed on different approach due to construction constraints

Question: Has the City Staff reviewed and utilized any studies or research regarding red-light photo enforcement to guide the direction of the Safelight Program?

Response: The City staff has utilized information from studies and data regarding red-light photo enforcement in Texas. See the below link for the Texas Transportation Institute (TTI) study entitled "An Empirical Bayes Analysis of Photographic Traffic Enforcement Systems in Texas." In addition, the Traffic Engineering section utilizes best practices and engineering guidelines and standards in the countermeasures regarding intersections and red-light related crashes.

http://ftp.dot.state.tx.us/pub/txdot-info/trf/red_light/empirical_analysis_photo_enforce.pdf

Please feel free to contact me if you need additional information.



Eric D. Campbell
Assistant City Manager

[Attachment]

c: Honorable Mayor and Members of the City Council
A.C. Gonzalez, City Manager
Warren M.S. Ernst, City Attorney
Craig D. Kinton, City Auditor
Rosa A. Rios, City Secretary
Daniel F. Solis, Administrative Judge
Ryan S. Evans, First Assistant City Manager

Jill A. Jordan, P.E., Assistant City Manager
Mark McDaniel, Assistant City Manager
Joey Zapata, Assistant City Manager
Jeanne Chipperfield, Chief Financial Officer
Sana Syed, Public Information Officer
Forest E. Turner, Assistant City Manager, Chief Wellness Officer
Eisa Cambi, Assistant to the City Manager – Mayor & Council

CRASH DATA for ACTIVE Approaches

7 YEARS Locations	All Accidents			All Red Light Related			All Right Angle			All Rear End			Red Light Related @ Camera Approach			Rear End @ Camera Approach			ALL Accidents @ Camera Approach		
	2 Years Before ALL	1 Year Before ALL	7 Years After AVG	2 Years Before RLR	1 Year Before RLR	7 Years After AVG	2 Years Before RA	1 Year Before RA	7 Years After AVG	2 Years Before RE	1 Year Before RE	7 Years After AVG	2 Years Before RLR	1 Year Before RLR	7 Years After AVG	2 Years Before RE	1 Year Before RE	7 Years After AVG	2 Years Before ALL	1 Year Before ALL	7 Years After AVG
All Active Intersections	606	528	421	259	209	113	235	187	100	140	130	117	107	99	37	44	29	43	217	192	145
Forest Lane EB @ Abrams Rd	23	16	18	6	6	4	3	5	3	7	4	5	1	1	1	4	3	2	8	7	7
Commerce St. EB @ S. Central Expressway	20	13	6	18	12	2	17	12	3	0	1	0	14	10	2	0	1	0	16	11	4
W. Camp Wisdom Rd WB @ S. Westmoreland Ave	17	4	10	4	0	1	2	0	1	4	1	3	2	0	0	0	0	1	5	0	4
W. Jefferson Blvd EB @ S Tyler St.	18	13	7	13	10	4	13	10	4	3	0	1	7	6	1	0	0	0	3	2	1
N.Beckley Ave SB @ W. Colorado Blvd	6	10	7	1	6	2	1	4	2	2	1	2	0	2	0	0	0	1	0	2	3
Ferguson Rd SB @ Gus Thomasson	14	8	12	3	2	2	3	2	3	5	0	3	1	0	0	2	0	2	5	0	5
Greenville NB @ Mockingbird	12	22	13	2	2	1	2	2	1	5	10	7	1	1	0	1	4	5	4	7	6
Coit Rd NB @ Banner Dr	10	6	3	8	4	1	6	3	1	2	1	1	5	3	0	1	1	0	6	5	1
Lemmon Ave NB @ Oak Lawn Ave	19	22	15	6	9	3	6	6	3	5	3	5	4	3	1	0	1	1	2	5	3
Graham Blvd EB @ Lindsley Ave	10	6	3	6	4	1	6	4	1	0	0	0	0	0	0	0	0	0	3	2	1
S. Westmoreland Dr SB @ Illinois Rd	26	30	22	7	4	3	7	4	2	4	8	8	3	1	0	0	0	2	8	6	6
S. Buckner Blvd NB @ Bruton Rd	34	32	25	10	7	4	12	6	3	8	17	11	3	1	1	3	3	4	10	4	7
N. Central Expressway NB @ Lemmon Ave	27	24	29	9	14	10	9	14	10	13	5	5	4	5	1	3	0	1	8	7	4
Griffin St. W. WB @ St. Paul St.	10	14	7	5	9	2	5	9	2	0	1	1	5	5	1	0	1	1	9	8	5
Ledbetter EB @ S. Lancaster Rd	10	9	15	3	7	3	2	5	2	2	1	7	0	2	0	2	1	2	2	3	4
Woodall Rodgers Frwy WB @ Olive St	24	18	8	22	17	6	22	17	6	0	0	1	2	5	1	0	0	0	2	5	2
Harry Hines SB @ Northwest Hwy	35	39	23	5	7	4	1	3	2	9	11	6	3	5	2	3	0	1	11	20	6
N. Buckner Blvd NB @ John West Rd	16	20	17	6	5	3	6	4	3	2	4	4	1	2	1	0	1	1	8	10	7
Lovers Ln WB @ N. Central Expy	32	21	29	29	14	11	29	14	11	0	3	7	3	10	9	0	0	0	3	10	11
N. Central Expy NB @ E. Lovers Ln	32	21	29	29	14	11	29	14	11	0	3	7	10	3	0	0	1	4	12	7	10
W. Northwest Hwy WB @ Lemmon Ave (Marsh)	26	17	23	14	4	7	12	4	7	8	4	5	3	1	2	4	2	2	9	5	8
RL Thornton Fwy WB (S) WB @ Harwood St.	23	12	6	17	7	3	17	7	3	2	1	1	2	3	1	2	0	0	5	3	2
RL Thornton Fwy EB @ Harwood St.	23	12	6	17	7	3	17	7	3	2	1	1	3	1	1	0	1	0	4	3	2
Northwest Hwy WB @ Dallas N. Tollway	14	13	13	4	4	2	1	2	1	4	4	4	2	3	0	2	3	2	7	8	4
Northwest Hwy EB @ Dallas N Tollway	14	13	13	4	4	2	1	2	1	4	4	4	1	1	1	2	1	2	6	4	7
S. Hampton SB @ Wheatland Rd	6	6	11	2	2	4	2	2	3	2	1	2	1	0	1	1	0	1	2	1	4
Walton Walker SB @ Northwest Hwy	72	54	39	19	10	11	12	9	9	20	22	7	5	3	1	4	0	1	21	10	3
Northwest Hwy WB @ Abrams	18	12	14	3	2	2	4	1	1	10	6	7	0	0	1	4	2	2	5	4	5
Alpha Rd WB @ Dallas North Parkway	13	31	11	10	23	6	10	23	6	3	3	1	8	15	2	1	0	0	9	15	3
Forest Ln WB @ Inwood Ln	4	9	4	0	1	1	0	1	1	1	2	2	0	0	0	1	0	1	1	2	1
S. Munger NB @ Lindsley	27	12	8	18	9	4	18	8	4	7	0	1	12	5	3	3	0	0	16	7	4
Frankford Rd. @ Preston Rd. EB	16	18	9	3	6	1	3	4	1	3	8	4	0	2	1	1	1	1	3	4	3
W. Mockingbird Ln. WB @ Stemmons Frwy.	24	17	14	6	2	3	4	2	3	9	8	4	1	0	1	0	2	1	4	5	4

All Accidents	5			2			5			2			5			2			5		
	1 Year			1 Year			1 Year			1 Year			1 Year			1 Year			1 Year		
	Years			Years			Years			Years			Years			Years			Years		
	Before	After	AVG																		
5 Years Locations	ALL		ALL	AVG																	
All Active Locations	175	173	134	39	44	29	32	41	22	49	41	37	21	17	10	26	25	20	86	80	59
Ferguson Rd. EB @ Peavy Rd.	12	9	7	6	6	4	4	3	3	3	3	0	1	2	1	1	3	0	3	5	2
Keller Springs WB @ Knoll Trail	5	10	2	2	5	0	2	7	0	2	0	0	2	2	0	0	0	0	2	2	1
Webb Chapel Rd. SB @ Lombardy Ln.	14	8	10	2	1	2	2	1	1	2	1	2	1	0	0	1	0	1	3	2	2
Forest Ln. WB @ Schroeder	6	8	6	2	0	1	3	0	0	2	0	2	2	0	1	2	0	1	4	4	2
Dallas Parkway NB @ Keller Springs	11	12	18	3	6	5	3	6	5	1	1	2	1	1	1	1	0	1	5	4	8
Forest Ln. EB + LT @ Plano Rd.	23	20	14	3	6	4	2	6	3	6	7	5	3	1	2	4	6	3	18	10	7
Ledbetter WB @ S. Lancaster Rd	9	15	13	2	4	2	1	1	1	5	5	7	2	0	0	2	2	3	5	3	5
Central Expy. NB @ Mockingbird Ln.	38	27	23	3	6	2	3	6	2	19	11	7	1	2	1	6	7	4	14	11	10
Mockingbird Ln. WB @ Central Expy.	38	27	23	3	6	2	3	6	2	19	11	7	1	3	1	8	4	2	13	12	7
Skillman St. SB @ LBJ Frwy.	43	45	30	9	5	8	5	6	5	8	6	5	5	2	2	1	0	3	14	17	11
MD Love Frwy. NB @ Camp Wisdom Rd.	14	19	10	7	5	1	7	5	1	1	7	5	2	4	0	0	3	2	5	10	4

2 Years Before	4			2			4			2			4			2			4		
	1 Year			1 Year			1 Year			1 Year			1 Year			1 Year			1 Year		
	Years			Years			Years			Years			Years			Years			Years		
	Before	After	AVG																		
4 Year Locations	ALL		ALL	AVG																	
Active Locations	159	167	140	41	38	32	35	33	28	42	27	30	18	13	15	13	9	11	55	71	54
W. Northwest Hwy EB @ Lemmon Ave	22	23	20	6	6	4	10	6	5	5	3	3	5	3	4	3	3	2	9	12	12
Northwest Hwy EB @ Walton Walker	46	57	30	13	17	9	7	14	8	14	7	6	8	5	3	3	2	17	23	9	
Frankford Rd. @ Preston Rd. NB	4	7	11	0	1	2	0	0	1	2	3	4	0	0	0	1	1	1	2	3	2
Frankford Rd. @ Preston Rd. SB	4	7	11	0	1	2	0	0	1	2	3	4	0	0	0	0	0	1	0	2	3
Skillman St. NB @ LBJ Frwy.	43	45	38	9	5	10	5	6	7	8	6	7	2	2	5	4	0	3	19	22	17
Mockingbird Ln. @ Carpenter (IH183) EB	9	13	12	1	4	2	1	4	2	7	2	2	0	2	1	2	2	1	2	7	6
Frankford Rd. WB @ Dallas N. Pkwy.	20	14	22	7	4	4	7	2	4	4	4	7	3	1	1	0	0	2	5	2	4
Illinois Ave. EB @ RLT (IH35)	15	8	8	5	1	2	5	1	1	2	2	2	0	0	1	0	0	1	1	0	3

2 Years Before	2			2			2			2			2			2			2		
	1 Year			1 Year			1 Year			1 Year			1 Year			1 Year			1 Year		
	3 Year			3 Year			3 Year			3 Year			3 Year			3 Year			3 Year		
	Before	After	AVG																		
3 Year Locations	ALL		ALL	AVG																	
Active Locations	142	128	97	36	20	14	24	16	10	51	56	40	9	12	6	26	23	20	57	65	45
S. Buckner Blvd SB @ Bruton Rd	25	24	25	6	6	4	1	3	3	12	9	12	0	3	0	8	0	5	10	12	9
Camp Wisdom Rd. EB @ MD Love Frwy.	6	5	13	1	1	1	1	1	1	2	2	7	0	1	1	1	1	1	1	3	3
Buckner Blvd. NB @ Garland Rd	22	23	15	3	3	2	2	3	1	11	14	8	0	0	0	0	4	2	1	5	4
Garland Rd EB @ Buckner Blvd	22	23	15	3	3	2	2	3	1	11	14	8	0	3	1	4	4	2	7	8	4
Garland Rd WB @ Buckner Blvd	22	23	15	3	3	2	2	3	1	11	14	8	2	0	0	2	1	2	5	3	3
IH30 Tom Laundry EB @ Cockrell Hill Rd.	26	10	5	13	4	1	13	5	1	7	1	2	1	1	0	0	0	0	1	1	1
IH30 Tom Laundry WB @ Cockrell Hill Rd.	26	10	5	13	4	1	13	5	1	7	1	2	0	0	0	0	0	0	1	2	1
Inwood Rd NB @ Stemmons Fwy	20	28	11	4	4	1	4	4	1	7	11	3	1	0	0	0	4	1	2	6	4
Inwood Rd SB @ Stemmons Fwy	20	28	11	4	4	1	4	4	1	7	11	3	2	2	0	3	0	0	7	6	3
NW Hwy EB @ Trammel	7	8	4	1	0	1	1	0	0	6	8	2	1	0	0	5	5	1	6	5	2
Buckner Blvd. NB @ Military Pkwy	36	30	25	8	2	4	2	0	2	6	11	7	2	2	3	3	4	4	16	14	12

FATALITIES & INJURIES

Fatalities in Crashes At Intersections with a Red light Camera

Locations	2 Years Before Fatalities	1 Year Before Fatalities	1 Year After Fatalities	2 Years After Fatalities	3 Years After Fatalities	4 Years After Fatalities	5 Years After Fatalities	6 Years After Fatalities	7 Years After Fatalities
7 Years Locations	3	1	1	2	0	1	1	0	0
5 Years Locations	0	0	0	0	0	0	0		
4 Years Locations	0	0	0	1	0	0			
3 Years Locations	0	0	1	0	1				

Fatalities in Red Light Related Crashes at Intersections with a Red Light Camera

Locations	2 Years Before Fatalities	1 Year Before Fatalities	1 Year After Fatalities	2 Years After Fatalities	3 Years After Fatalities	4 Years After Fatalities	5 Years After Fatalities	6 Years After Fatalities	7 Years After Fatalities
7 Years Locations	3	0	0	1	0	0	0	0	0
5 Years Locations	0	0	0	0	0	0	0		
4 Years Locations	0	0	0	0	0	0			
3 Years Locations	0	0	0	0	1				

Crashes with Injuries At Intersections with a Red light Camera

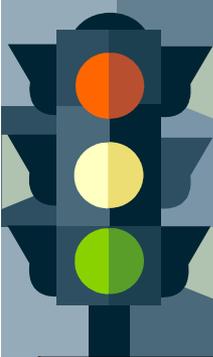
Locations	2 Years Before Injuries	1 Year Before Injuries	1 Year After Injuries	2 Years After Injuries	3 Years After Injuries	4 Years After Injuries	5 Years After Injuries	6 Years After Injuries	7 Years After Injuries
7 Years Locations	679	601	492	378	345	422	327	332	318
5 Years Locations	116	136	150	128	134	72	68		
4 Years Locations	116	135	186	137	78	55			
3 Years Locations	107	98	74	65	89				

Red Light Related Crashes with Injuries at Intersections with a Red Light Camera

Locations	2 Years Before RLR	1 Year Before RLR	1 Year After RLR	2 Years After RLR	3 Years After RLR	4 Years After RLR	5 Years After RLR	6 Years After RLR	7 Years After RLR
7 Years Locations	235	200	153	97	92	94	74	86	83
5 Years Locations	19	36	40	20	41	11	15		
4 Years Locations	23	34	48	30	21	12			
3 Years Locations	18	14	4	4	12				

Red Light Related Crashes with Injuries only for the Intersection approach with a Red Light Camera

Locations	2 Years Before RLR	1 Year Before RLR	1 Year After RLR	2 Years After RLR	3 Years After RLR	4 Years After RLR	5 Years After RLR	6 Years After RLR	7 Years After RLR
7 Years Locations	95	101	53	29	25	37	25	28	41
5 Years Locations	16	14	10	7	13	4	2		
4 Years Locations	11	9	26	14	11	7			
3 Years Locations	6	9	0	3	7				



Councilmember & Commission Appointee

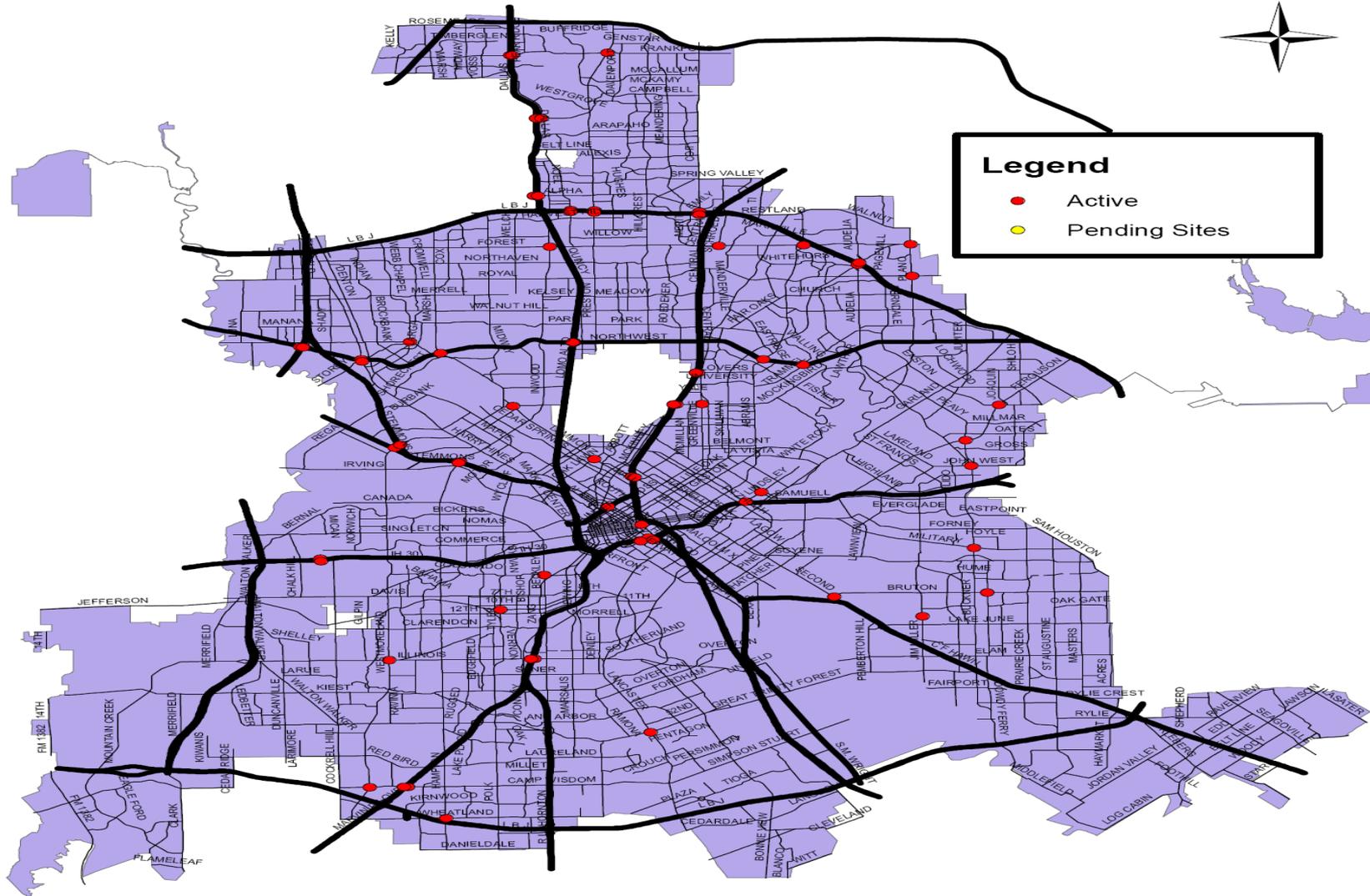
Chair	Carmen R. Garcia	Mayor Mike Rawlings
Vice Chair	Tarek Radjef *	City Council
District 1	Ernest P. Banda	Scotts Griggs
District 2	Woodrow W. Austin	Adam Medrano
District 3	Taylor Toynes	Vonciel Jones Hill
District 4	VACANT	Dwaine R. Caraway
District 5	Jesus A. Rodriguez	Rick Callahan
District 6	Jessica Sepulveda	Deputy Mayor Pro Tem Monica Alonzo
District 7	VACANT	Carolyn R. Davis
District 8	Tiffany M. Kamuche	Mayor Pro Tem Tennell Atkins
District 9	Ben Davis Sr.	Sheffie Kadane
District 10	VACANT	Jerry Allen
District 11	Glynn Newman	Lee. M. Kleinman
District 12	Tarek Radjef *	Sandy Greyson
District 13	Wade R. Vache	Jennifer S. Gates
District 14	Matthew N. Gobush	Phillip Kingston
Ex Officio	Kirk Houser	City Designated Representative

Red Light Camera Sites



Legend

- Active
- Pending Sites



SafeLight Cameras by District					
Code	DISTRICT	Direction	Approach	Status	Activity
502	1	SB	N Beckley Ave SB @ W Colorado Blvd		
702	1	SB	S Westmoreland Rd SB @ W Illinois Ave		
303	1	EB	W Jefferson Blvd EB @ S Tyler St		
804	2	WB	E RL Thornton Serv S WB @ S Harwood St		
603	2	EB	Graham Ave EB @ Lindsley Ave		
604	2	WB	Griffin St W WB @ S St Paul St		
813	2	EB	S Harwood St EB @ E RL Thornton Serv N		
801	2	NB	S Munger Blvd NB @ Lindsley Ave		
514	2	WB	W NW Hwy WB @ Marsh Ln	August 2015 Deactivation	
243	3	EB	Camp Wisdom EB at MD Love (67) SBSR		
423	3	EB	E Ledbetter Dr EB @ S Lancaster Rd		
154	3	WB	E Ledbetter Dr WB @ Lancaster Rd		
923	3	EB	I-30 Frontage Rd EB @ S Cockrell Hill Rd	Immediate	Removed 1/19
924	3	WB	I-30 Frontage Rd WB @ S Cockrell Hill Rd	Immediate	Removed 1/19
104	3	WB	W Camp Wisdom Rd WB @ S Westmoreland Rd		
273	4	EB	W Illinois Ave EB @ RL Thornton Fwy		
411	5	NB	S Buckner Blvd NB @ Bruton Rd		
412	5	NB	S. Buckner Blvd NB @ Bruton Rd		
N/A	6	NB	Harry Hines Blvd NB @ Walnut Hill	2015 New Camera Install	To be installed by 4/15
422	6	SB	Harry Hines Blvd SB @ N NW Hwy	August 2015 Deactivation	

	Immediate Deactivation
	August 2015 Deactivation
	2015 New Camera Install
	No Change

SafeLight Cameras by District					
Code	DISTRICT	Direction	Approach	Status	Activity
931	6	NB	Inwood Rd NB @ Stemmons FWY		
932	6	SB	Inwood Rd SB @ Stemmons FWY		
612	6	SB	N Walton Walker Serv W SB @ W NW Hwy		
414	6	WB	W Mockingbird Ln WB @ N Stemmons Serv E		
253	6	EB	W NW Hwy EB @ N Walton Walker Blvd		
122	6	SB	Webb Chapel Rd SB @ Lombardy Ln		
431	7	NB	Buckner NB @ Military Pkwy		
511	7	NB	N Buckner Blvd NB @ John West Rd		
181	8	NB	Marvin D Love Fwy NB @ W Camp Wisdom Rd		
322	8	SB	S Hampton Rd SB @ W Wheatland Rd		
623	9	EB	E Northwest Hwy EB @ Trammel		
133	9	EB	Ferguson Rd EB @ Peavy Rd		
602	9	SB	Ferguson Rd SB @ Gus Thomasson Rd		
913	9	EB	Garland Rd EB @ N Buckner Blvd		
914	9	WB	Garland Rd WB @ N Buckner Blvd		
911	9	NB	N Buckner Blvd NB @ Garland Rd		
223	9	EB	W Mockingbird Ln EB @ John Carpenter Fwy		
263	9	EB	W NW Hwy EB @ Marsh Ln	August 2015 Deactivation	
N/A	10	EB	Audelia EB @ Forest	2015 New Camera Install	To be installed by 4/15
103	10	EB	Forest Ln EB @ Abrams Rd		

	Immediate Deactivation
	August 2015 Deactivation
	2015 New Camera Install
	No Change

SafeLight Cameras by District					
Cod e	DISTRIC T	Direction	Approach	Status	Activity
123	10	EB	Forest Ln EB @ Plano Rd		
124	10	WB	Forest Ln WB @ Schroeder Rd		
231	10	NB	Skillman NB at IH635 EBSR		
132	10	SB	Skillman St SB @ LBJ Fwy		
504	11	NB	Alpha Rd NB @ Dallas Pkwy		
401	11	NB	Coit Rd NB @ Banner Dr		
121	11	NB	Dallas Pkwy NB @ Keller Springs Rd		
134	11	WB	Keller Springs Rd WB @ Knoll Trail Dr		
903	12	EB	Frankford Rd EB @ Preston Rd		
234	12	WB	Frankford Rd WB @ Pkwy		
261	12	NB	Preston NB + NBLT at Frankford		
242	12	SB	Preston SB + SBLT at Frankford		
224	13	WB	Forest Ln WB @ Inwood Rd		
904	13	WB	N NW Hwy WB @ Dallas North Toll Way	Immediate	To be removed 2/16
213	13	EB	W NW Hwy EB @ Dallas North Tollway	Immediate	To be removed 2/16
N/A	14	EB	Carlisle/Cole EB @ Lemmon	2015 New Camera Install	To be installed by 4/15
N/A	14	WB	Carlisle/Cole WB @ Cole/Lemmon	2015 New Camera Install	To be installed by 4/15
203	14	EB	Commerce St EB @ Cesar Chavez Blvd		
214	14	WB	E Lovers Ln WB @ N Central Expy		
144	14	WB	E Mockingbird Ln WB @ N Central Serv E		
614	14	WB	E NW Hwy WB @ Avenue E		
701	14	NB	Greenville Ave NB @ E Mockingbird Ln		
501	14	NB	Lemmon Ave NB @ Oak Lawn Ave		
N/A	14	SB	Lemmon Ave SB @ Carlisle/Cole	2015 New Camera Install	To be installed by 4/15
211	14	NB	N Central Expy NB @ E Lovers Ln		
311	14	NB	N Central Expy NB @ Lemon Ave		
131	14	NB	N Central Serv W NB @ E Mockingbird Ln		

Immediate Deactivation
August 2015 Deactivation
2015 New Camera Install
No Change