

## **Request for Proposals for Red Light Camera Systems**

<b>Date:</b>	December 6, 2013
<b>To:</b>	Public Works and Infrastructure Committee
<b>From:</b>	General Manager, Transportation Services Director, Purchasing and Materials Management
<b>Wards:</b>	All
<b>Reference Number:</b>	P:\2013\Cluster B\TRA\TMC\PW13009tmc.doc

### **SUMMARY**

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Red light cameras were introduced at the City of Toronto in 2000 as a two-year pilot project, and have since been implemented in two phases at 115 locations. Both phases of camera installations have successfully met the objective of reducing collisions and injuries attributed to red light running.

This purpose of this report is to request City Council's approval to issue a Request for Proposals, in conjunction with the partnering municipalities (Ottawa, Hamilton, Peel, Halton, Waterloo and York), for the supply, installation, operation and maintenance of red-light camera sites effective January 1, 2017. City Council is also requested to authorize a publishing schedule for red light running violation data.

### **RECOMMENDATIONS**

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The General Manager of Transportation Services and the Director, Purchasing & Material Management, recommend that:

1. City Council direct the General Manager, Transportation Services and the Director, Purchasing and Materials Management to issue a Request for Proposals, in conjunction with other partnering municipalities which operate red light camera systems, for the supply, installation, operation, maintenance and removal of red light camera systems for the period of 2017 to 2022, with the option to extend the resulting contract for an additional five years.
2. City Council authorize the release of red light running violation statistics for each active red light camera site on a bi-annual basis commencing in 2014.

## **Financial Impact**

There is no incremental financial impact resulting from the adoption of this report. Funding in the amount of \$3,361,425 is included in the 2014 Transportation Services Base Operating Budget in account TP0393 to fund red light camera system operations.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

## **DECISION HISTORY**

On April 11, 12 and 13, 2000, City Council approved a motion to execute an agreement with Lockheed Martin IMS Canada Inc. (now Xerox) for the supply, installation, operation and maintenance of red-light camera systems in the City of Toronto.

At its meeting of July 20, 21 and 22, 2004, City Council adopted the recommendations within Clause No. 5 of Works Committee Report No. 6 "Red Light Camera Operations", and approved an extension of red light camera operations in the City of Toronto beyond November 20, 2004 and the site selection process detailed in the report for future red light camera sites. The decision document can be viewed at:

<http://www.toronto.ca/legdocs/2004/agendas/council/cc040720/wks6rpt/cl005.pdf>

At its meeting of May 23, 24 and 25, 2006, City Council adopted the recommendations within Clause No. 18 of Policy and Finance Committee Report No. 4 "Red Light Camera Operations: Contract Extensions and Request for Proposal 9148-05-5048 for the Supply, Installation, Operation and Maintenance of Red Light Camera Systems Within the City of Toronto and Other Municipalities Within Ontario", and approved a contract to retain Traffipax Inc. for the supply, installation, operation and maintenance of additional red light cameras within the City of Toronto, over a five-year period, from 2007 to 2011 with the option to extend for up to five additional years on an annual basis. The decision document can be viewed at:

<http://www.toronto.ca/legdocs/2006/agendas/council/cc060523/pof4rpt/cl018.pdf>

At its meeting of April 28 and 29, 2008, City Council, in its consideration of item PW14.10 "Contract Resource Approval Required for Red-Light Camera Operations", approved an amendment to the contract with Affiliated Computer Systems (formerly Lockheed Martin IMS Canada Inc. and now Xerox) for four additional years to November 2012. The decision document can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2008/pw/bgrd/backgroundfile-11860.pdf>

At its meeting of June 14 and 15, 2011, City Council, in its consideration of item PW4.5 "Amendment to Contract No. 47012243 for the Supply, Installation, Operation,

Maintenance, and Decommissioning of Red Light Camera Systems in the City of Toronto", approved an amendment to the contract with Traffipax Inc. for five additional one-year periods on an annual basis up to December 31, 2016. The decision document can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2011/pw/bgrd/backgroundfile-37998.pdf>

At its meeting of November 29, 30 and December 1, 2011, City Council, in its consideration of item AU 4.1 "Red Light Camera Program - Although Red Light Cameras Have Contributed to a Reduction in Accidents, Opportunities Exist to Improve Financial Results and Program Effectiveness", requested the General Manager, Transportation Services, to re-evaluate the current location of all red light cameras based on predetermined criteria. The results of this evaluation are to be compared to an even distribution of cameras on a ward-by-ward basis as requested by Council. The decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.AU4.1>

At its meeting of October 15, 2013, Government Management Committee, in its consideration of item GM25.1 "Response to Council Request for Information on red Light Camera Infractions", requested the General Manager, Transportation Services to include activity volumes by monitored locations and provided recommendations for publishing data at regular intervals to educate the public on red light running at monitored locations in the City of Toronto. The decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.GM25.1>

## **ISSUE BACKGROUND**

Red light cameras have thus far been implemented and managed in two phases. The first phase included 10 red light cameras operated at 38 different locations through rotation in the City of Toronto from November 2000 to November 2012. The second phase of 77 red light cameras at fixed locations went into operation in November 2007 following both an extensive testing process and enactment of amendments to the Regulations of the Provincial Highway Traffic Act, which designates the red light camera systems that can be operated in the province of Ontario. City Council has provided authority to operate the second phase of red light cameras until December 31, 2016. The request for proposals to be issued following approval of this report will represent a third phase of red light camera management.

## **COMMENTS**

The City of Toronto is currently one of seven municipalities designated by regulation to operate red light cameras in the Province of Ontario. Along with the seven municipalities, the Ontario Ministry of Transportation and Ontario Ministry of the Attorney General, the City of Toronto is a member of the Red Light Camera Steering Committee, which was formed to ensure consistent operation of red light camera activities and to provide direction, assistance and resource sharing to partnering municipalities. In addition to managing its own red light camera operation, the City of Toronto operates the joint municipal processing centre on behalf of the Cities of Hamilton and Ottawa, as well as the Regional Municipalities of Peel, Halton, Waterloo and York (collectively known as the Partnering Municipalities). The joint municipal processing centre reviews all photos, processes evidence, issues Offences Notices and prepares court documents for all Partnering Municipalities. The City of Toronto has existing agreements with the Partnering Municipalities for sharing the cost to operate the joint municipal processing centre.

### **Red Light Camera Operations Phase One (2000 to 2012)**

The first phase of red light cameras was initiated in November 2000 as a two-year pilot project, in co-operation with the Cities of Hamilton and Ottawa, as well as the Regional Municipalities of Peel, Halton and Waterloo. As part of the pilot project, the City of Toronto operated 10 red light cameras which were rotated among 38 equipped intersections. In November 2002, at the request of City Council and the Partnering Municipalities, the Government of Ontario extended the red light camera pilot project to November 2004. On August 1, 2004, the Government of Ontario amended the Red-Light Cameras Pilot Projects Extension Act, 2002 to allow permanent use of red light cameras by designated municipalities. In doing so, municipalities designated to operate red light cameras were given the authority to operate red-light cameras indefinitely. The first phase of red light cameras remained in operation until November 2012.

The City of Toronto, in conjunction with the Participating Municipalities, issued a Request for Proposal (RFP) 9119-00-7004 for the supply, installation, operation and maintenance of red light cameras in February 2000, for the City of Toronto and the Partnering Municipalities. At its April 11 – 13, 2000 meeting, City Council granted approval to retain Lockheed Martin IMS Canada to supply, install, operate and maintain 10 red light camera systems which were to be rotated among 38 equipped intersections during the pilot project period. City Council approved extensions to the contract with Lockheed Martin IMS Canada (later Affiliated Computer Systems and now Xerox) on 6 occasions in August 2002, June 2003, July 2004, July 2005, May 2006 and April 2008, with a final expiration of the agreement in November 2012. These cameras were decommissioned following the expiry of the agreement.

## Red Light Camera Operations Phase Two (2007 to present)

In November 2005, the City of Toronto issued a Request for Proposal (RFP) 9148-05-5048 for the supply, installation, operation and maintenance of red light camera systems, in the City of Toronto and the Partnering Municipalities, thereby beginning the second phase of red light cameras in the City of Toronto. At its May 23 – 25, 2006 meeting, City Council granted approval to retain Traffipax LLC, for the supply, installation, operation and maintenance of an additional 77 red light camera systems in the City of Toronto, for a five-year period with the option to extend the agreement for five additional one-year periods. Unlike phase one red light cameras, these red light cameras are permanently installed and not rotated.

At its June 14, 2011 meeting, City Council granted approval to exercise the option to extend the agreement with Traffipax LLC., for five additional one-year periods, renewed on an annual basis up to December 31, 2016. As detailed in RFP 9148-05-5048, the red light camera systems operated throughout the second phase are to be removed at the end of the agreement, on December 31, 2016.

### Phases One and Two Combined Safety Performance

Table 1 below summarizes the average daily reduction in red light violation charges issued at the phase one and two red light camera sites combined.

Table 1 – Average Daily Reduction in Red Light Violation Charges Issued at Red Light Camera Sites

Average Daily Reduction in Red Light Violation Charges Issued (Initial – Recent Operation)	Number of Red Light Camera Sites
< 10 %	3
11 – 20 %	4
21 – 30 %	6
31 – 40 %	9
41 – 50 %	12
51 – 60 %	18
61 – 70 %	25
71 – 80 %	18
81 – 90 %	13
91 – 100 %	7
Total (Phase One and Two combined)	115

## Red Light Camera Operations Phase Three (2017 and Beyond)

As shown in the preceding table, red light camera system operations have and continue to result in a decline of red light running. However, while there have been improvements to road safety associated with this program, red light running continues to occur in the City of Toronto. During the five-year period from 2007 – 2011, collisions attributed to red light running at signalized intersections in the City of Toronto totalled 11,160, including in 11 fatalities, 2,812 injuries, and 8,337 property damage collisions.

A third phase of red light camera operations would permit continued red light running enforcement beyond December 2016 at the signalized intersections which experience the highest frequency of collisions attributed to red light running. In order for City Council to consider all aspects and costs associated with a third phase of red light camera systems, it is recommended that the General Manager, Transportation Services, in co-operation with the Partnering Municipalities, prepare and issue a Request for Proposals (RFP) for a third phase of red light cameras operations. Providing that City Council approves the issuing of a RFP for a third phase of red light camera operation, the City of Toronto will issue a RFP on behalf of the Partnering Municipalities in early 2014.

The RFP will require the successful proponent to enter into an agreement with the City of Toronto and each of the Partnering Municipalities for the rental, operation and maintenance of red light cameras, including the associated computer hardware and software. The length of the agreement is proposed to be for a five-year period with the option to extend for up to five additional years. The number of camera systems to be included in the request for proposals is between 200 and 300 systems, roughly half of which would be assigned to the City of Toronto. The option to extend will be at the sole discretion of the City of Toronto and the Partnering Municipalities.

A follow up report will be submitted to City Council in 2015 recommending the award of the RFP to the successful proponent, project costs, required agreements and schedule for a third phase of red light camera operations commencing in January 2017, as well as identifying the number of locations where red light cameras will be operated during a third phase.

In regards to red light camera site selection, a staff report was submitted to the June 21, 2004 Works Committee. The report included details on the process of analyzing collisions attributed to red light running to determine the red light camera locations for the second phase. At its meeting, the Works Committee amended recommendation #5, "the process, as described in this report for selecting additional locations for an expanded red-light camera program, for future consideration by City Council, be approved in principle" by adding the following the following recommendation, "request that the Acting Commissioner of Works and Emergency Services consider the allocation of at least one red-light camera per ward or a similar equitable distribution system."

The selection of red light camera sites will be based on previous Council direction and the approved recommendation of the Auditor General from the 2011 report "Red Light Camera Program - Although Red Light Cameras Have Contributed to a Reduction in Accidents, Opportunities Exist to Improve Financial Results and Program Effectiveness", and will include a detailed analysis of collisions attributed to red light running at signalized locations from 2008 through 2012 representing the most recent five-year period for which all motor vehicle collisions are available. By studying collisions which occurred throughout this period, staff will be able to select red light camera locations based upon locations with the highest frequency of red light running related collisions.

## Red Light Running Violation Data

At the Government Management Committee meeting held on October 15, 2013, the committee requested that the General Manager, Transportation Services, when preparing his evaluation report the Public Works Committee and Infrastructure Committee on the operation of the Red Light Camera Program, include activity volumes by monitoring intersection locations and provide recommendations for publishing data at regular intervals to educate the public on red light running at monitored locations in the City of Toronto. Transportation Services recommends that this information be published bi-annually on the City's Web site under Transportation Services – Red Light Cameras starting in 2014.

Appendices A and B detail the number of charges issued at each of the phase one and two red light camera sites, on an annual basis. Since the 10 red light camera systems operated throughout the first phase were rotated among 38 equipped intersections, the data contained in Appendix A does not represent an equal duration of red light running enforcement at each site, but reflects the rotation of the 10 red light cameras at the 38 equipped intersections. As red light cameras are not rotated throughout the second phase, the data contained in Appendix B reflects an equal duration of red light running enforcement at these 77 locations.

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### SIGNATURE

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Stephen Buckley, General Manager  
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Michael Pacholok, Director  
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### ATTACHMENTS

Appendix A: Charges Issued, by Location and Year – Phase One  
Appendix B: Charges Issued, by Location and Year – Phase Two

## Appendix A: Charges Issued, by Location and Year – Phase One

Phase One Red Light Camera Site	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Yonge St. and Richmond St.	438		925	71	778	863	243	259	61	79	3		
Yonge St. and Wellesley St.	324	74					228	61	9				
Yonge St. and Eglinton Ave.		49	24	Removed due to intersection reconfiguration									
Dufferin St. and Eglinton Ave.	47	586	204	530	928	420	78	107	84	6			
Yonge St. and York Mills Rd.	869	359	399	2523	1083			645	38	685	138		
Yonge St. and Finch Ave.	1911	112						162	103	55			
Yonge St. and Steeles Ave.	65	743	150				159	106	344	512	645	319	
Kingston Rd. and Morningside Ave.	177		142				120	13	27	7			
Dundas St. and Keele St.		174	338	524	De-activated due to utility work and construction activities								
Danforth Ave. and Broadview Ave.	38	169	317	1085		522	352		46		7		
Bloor St. and Bathurst St.		403	125	52	329		226	38	13	68	79	58	
Bloor St. and Dufferin St.	19	14				342	116	178	1	142	57	103	
Lawrence Ave. and Victoria Park Ave.	84	407	3321	493	2281	3238	1387	206	155	71			
Lawrence Ave. and Warden Ave.	67		64	495	105	313	249	18	17	13	1		
Lawrence Ave. and Markham Rd.	38	2	317	363	94	191	80	17	18	7			
Lawrence Ave. and Weston Rd.	119			1	De-activated due to utility work								
Dixon Rd. and Islington Ave.	173	31	51	8			62	31	40	1	5		
Dixon Rd. and Martingrove Rd.	242		212	1340	899	767	111	770	44				
Eglinton Ave. and Pharmacy Ave.	291	192	278	416			166	8	2	12			
Eglinton Ave. and Don Mills Rd.	179		207			22	61	26	9				
Eglinton Ave. and Markham Rd.		350	532				81		57	30	52	91	
St. Clair Ave. and Victoria Park Ave.	36		882	136	1055	249	275	160	550	480	164	181	
St. Clair Ave. and Dufferin St.		209	108		21								
Finch Ave. and Jane St.	144		581		260	519	16	84	12	3	2		
The Queensway and Royal York Rd.	247	146	153	497	Removed due to intersection reconfiguration								
Finch Ave. and Weston Rd.	1083	175	572	2703	819		145	32			274		
Dufferin St. and Steeles Ave.	175		624		37			34	12	1			
Finch Ave. and Bathurst St.		75	288	1024	52	209	124	32	12	9	22	20	
Ellesmere Rd. and Brimley Rd.	425	4	56			46			99	14	19		
Ellesmere Rd. and Markham Rd.	147	11	56				1	35	24		4	21	
Eglinton Ave. and Martingrove Rd.	1752	243	965	2663	1965	1938	946	168	13				
Finch Ave and Don Mills Rd.	17	268					1442	1006	1293	1866	1314	757	
Brimley Rd. and Huntingwood Dr.		448		224	1193	43	41	219	269	174	173	181	
Finch Ave. and Warden Ave.	207	106	55		276	272	108	16	9	1		12	
Allen Rd. and Sheppard Ave.	64	61	53							1	1		
Lake Shore Blvd. and Yonge St.	57	34	840	53	81	Removed due to intersection reconfiguration							
Finch Ave. and Kipling Ave.	116						46	1	27				
University Ave. and Gerrard St.		De-activated due to utility work						204	170	175	140		

Note: The 10 red light camera systems operated throughout the first phase were rotated among 38 equipped intersections.



## Appendix B: Charges Issued, by Location and Year – Phase Two

Phase Two – Red Light Camera Site	2007	2008	2009	2010	2011	2012
Richmond St. and Parliament St	46	1208	909	998	827	1100
Lake Shore Blvd. and York St.	42	635	165	238	394	592
Steeles Ave. and Carpenter Rd.	70	1061	1123	835	782	999
Steeles Ave. and Hilda Ave.	25	625	527	760	846	1000
Albion Rd. and Silverstone Dr.	222	1467	1137	1092	975	1213
Albion Rd. and Finch Ave.	0	0	93	171	145	251
Dixon Rd. and Kipling Ave.	0	160	86	75	96	136
Steeles Ave. and Islington Ave.	0	34	193	181	420	463
Sheppard Ave. and Wilson Heights Blvd.	0	0	140	189	169	165
Bathurst St. and Sheppard Ave.	5	223	165	117	188	198
Lawrence Ave. and Marlee Ave.	0	436	494	454	288	228
Lawrence Ave. and Bathurst St.	0	54	161	74	90	207
Bayview Ave. and Cummer Ave.	0	0	590	943	811	1227
Finch Ave. and Willowdale Ave.	0	0	184	217	0	233
Leslie St. and Lawrence Ave.	0	139	132	225	165	227
Leslie St. and York Mills Rd.	0	9	50	141	145	207
Bayview Ave. and Truman Rd. / Fiferhire Rd.	0	1416	1962	2291	1966	2210
Midland Ave. and McNicoll Ave.	0	121	395	383	356	307
Steeles Ave. and Birchmount Rd.	0	0	276	209	411	482
Warden Ave. and Arkona Dr. / Cloverleaf Gt.	0	369	1218	1235	1113	1351
Steeles Ave. and Brimley Rd.	0	365	462	402	283	552
College St. and Bathurst St.	0	22	109	117	43	127
Lawrence Ave. and Morningside Ave.	0	11	44	86	88	119
Dixon Rd. and Carlingview Dr.	0	0	79	482	332	551
Dufferin St. and Glencairn Ave.	0	0	457	933	527	998
Overlea Blvd. and Thorncliffe Park Dr. / Beth Neelson Dr.	0	59	234	253	228	232
Ellesmere Rd. and Kennedy Rd.	0	225	217	256	189	235
Finch Ave. and Leslie St.	0	38	123	260	203	229
Birchmount Rd. and Huntingwood Dr.	0	0	610	795	618	491
Kingston Rd. and Port Union Rd. / Sheppard Ave.	0	60	27	48	67	82
Bloor St. and The West Mall	0	0	117	240	232	333
The Queensway and The West Mall	0	27	216	79	224	369
Lake Shore Blvd. and Thirty Seventh St.	0	0	625	869	480	885
Kipling Ave. and Horner Ave.	0	29	20	11	5	34
The Queensway and North Queen St.	0	1	71	119	126	201
Wilson Ave. and Transit Rd. / Billy Bishop Way	0	11	108	542	274	479
Lake Shore Blvd. and Windermere Ave.	0	579	389	1040	955	1220
Warden Ave. and McNicoll Ave.	0	0	643	1482	1283	1296
Keele St. and Wilson Ave.	0	49	66	80	57	89
Dupont St. and Lansdowne Ave.	0	380	177	116	216	380
Queen St. and Lansdowne Ave. / Jameson Ave.	0	0	162	344	350	802
Burnhamthorpe Rd. and The East Mall	0	241	328	168	161	0
Sheppard Ave. and Keele St.	0	0	50	63	82	111
Eglinton Ave. and Bermondsey Rd. / Sloane Ave.	0	835	677	889	522	535
Jane St. and Bala Ave. / Emmett Ave.	0	1056	1060	1037	936	869
Jane St. and Clair Rd. / Spenvally Dr.	0	472	1883	1353	1308	927
O Connor Dr. and Bermondsey Rd. / Yardley Ave.	0	150	320	348	190	387
Danforth Ave. and Birchmount Rd.	0	309	220	328	269	286
Islington Ave. and The Westway	0	8	308	910	385	596
Bathurst St. and Davenport Rd.	0	0	22	0	47	0
Warden Ave. and Comstock Rd.	0	104	542	494	248	274
Eglinton Ave. and Victoria Park Ave.	0	4	221	474	327	447
Eastern Ave. and Coxwell Ave.	0	0	47	181	129	164
Jarvis St. and Dundas St.	0	0	346	494	365	427
Midland Ave. and Progress Ave.	0	0	43	129	98	119
Lawrence Ave. and Bellamy Rd.	0	1	123	291	228	302
Eglinton Ave. and Birchmount Rd.	0	2	56	197	181	234
Danforth Rd. and Birchmount Rd.	0	0	7	71	58	70
St. Clair Ave. and Brimley Rd.	0	0	113	293	183	288
Keele St. and Lawrence Ave.	0	0	180	188	138	167
Bloor St. and Ossington Ave.	0	0	0	0	21	141
Danforth Ave. and Greenwood Ave.	0	0	0	557	205	299
Queen St. and Woodbine Ave.	0	0	25	28	8	16
Jarvis St. and King St.	0	0	83	187	104	94
Lake Shore Blvd. and Leslie St.	0	1	252	722	512	612
Lower Jarvis St. and The Esplanade	0	0	414	891	108	0
Lake Shore Blvd. and Carlaw Ave.	0	0	214	1173	546	1097
Keele St. and Rogers Rd.	0	0	102	262	153	203
Bloor St. and Dundas St.	0	0	129	348	146	297
Yonge St. and Lawrence Ave.	0	0	188	131	740	963
Spadina Ave. and Adelaide St.	0	0	0	38	63	5
Eglinton Ave. and Spadina Rd.	0	0	0	752	813	954
Eglinton Ave. and Mount Pleasant Rd.	0	0	93	221	156	109
Lawrence Ave. and Don Mills Rd.	0	0	30	86	68	63
Neilson Rd. and Sheppard Ave.	0	0	108	248	150	162
Sheppard Ave. and Malvern St. / Progress Ave	0	0	73	622	695	584
Ellesmere Rd. and Military Trl.	0	0	81	684	531	667

