Notice of Motion:

Moved by: A. Heisey
Seconded by: J. Colle

Whereas the proper functioning of the Bay Street Clearway and the King Street East Transit Priority Lanes is critical to the efficient and timely operation of TTC vehicles in these surface transit corridors;

And whereas enforcement levels are not sufficient to maintain these transit corridors open for efficient movement of TTC surface transit vehicles;

And whereas traditional existing enforcement of transit lanes requires police to enter the transit lane and stop offending motorists to physically give them a ticket further reducing the usefulness of these transit corridors for their intended purpose;

Be it resolved that

1. That TTC staff meet with representatives of the Toronto Police Service and the Transportation Department of the City of Toronto to determine the legislative changes that would be required to permit the utilisation of camera technology for enforcement of the Bay Street Clearway and the King Street East Streetcar Transit Priority Lane and the desirability of utilising cameras as an enforcement tool.

2. That TTC staff meet with representatives of the Toronto Police Service to determine the cost to install and maintain such cameras if the legislation was changed to permit their usage.

3. That TTC staff report back to the Commission as to the outcome of these discussions and the practicality of the application of cameras to enforce the Bay Street Clearway and the King Street East Streetcar Transit Priority Lane with recommended next steps if any.

Chair Stintz and Members of the Board:

As Chairman of the Toronto Police Service Board I pushed for Photo Enforcement of the Bay Street Clearway transit priority lane and a report came to the Police Services Board on May 27, 2004.

Please see Item #P196 at p.75-80 is a report on photo-monitoring traffic clearways including Bay Street from Wellington to Yorkville. On page 80 the report stated “The T.T.C. has just begun to examine this issue. HOV lanes are not included in this process. It is anticipated that this process may take up to two years to complete.” The Police Services Board received the report.

I believe it would be worthwhile to revisit the use of cameras as a potential enforcement tool to improve surface Transit operations in these specific surface transit routes to see if they could be of wider application in other areas of the City. The concept is that instead of using police officers to stop people and obstruct traffic, in transit priority lanes often at rush hour, while enforcing these regulations, a camera would take license plate pictures and tickets would be issued to the owner of the vehicle as tickets are for red light cameras.

On the Bay Street Clearway if the cameras showed a vehicle other than a taxi in the clearway lane for more than one block, to enable legal right turns the motorist would get a ticket issued automatically and served by mail on the owner of the vehicle.

Cameras could also be used to enforce the prohibition on left hand turn lanes in the Bay Street corridor where they are in place in the Clearway.

On King Street East the cameras would be used to enforce the rush hour no left turn restrictions and the prohibition on private vehicles in the centre street car lanes.

The cameras could also have the potential to be a tool for crime prevention for our police service.

The greater use of cameras to improve traffic flow and TTC surface transit operations is an issue that could have a significant impact on our customers with the potential for faster travel times and reduced wait times through greater and more certain enforcement of existing traffic regulations by cameras.

The use of cameras might also reduce enforcement costs.
The following draft Minutes of the meeting of the Toronto Police Services Board held on JUNE 21, 2004 are subject to adoption at its next regularly scheduled meeting.

The Minutes of the meeting held on MAY 27, 2004 previously circulated in draft form were approved by the Toronto Police Service Board at its meeting held on JUNE 21, 2004.

MINUTES OF THE PUBLIC MEETING of the Toronto Police Services Board held on JUNE 21, 2004 at 1:30 PM in the Auditorium, 40 College Street, Toronto, Ontario.

PRESENT:       Mr. A. Milliken Heisey, Q.C., Chair
               Ms. Pam McConnell, Councillor & Vice Chair
               Mr. John Filion, Councillor & Member
               Dr. Benson Lau, Member
               The Honourable Hugh Locke, Q.C., Member
               Mr. Case Ootes, Councillor & Member

ALSO PRESENT:  Mr. Julian Fantino, Chief of Police
               Mr. Albert Cohen, City of Toronto - Legal Services Division
               Ms. Deirdre Williams, Board Administrator
PHOTO-MONITORING – TRAFFIC CLEARWAYS

The Board was in receipt of the following report JUNE 01, 2004 from Julian Fantino, Chief of Police:

Subject: PHOTO-MONITORING – TRAFFIC CLEARWAYS

Recommendation:

It is recommended that the Board receive the following report for information.

Background:

At its April 29, 2004 meeting, the Board requested that I provide a report on the feasibility of implementing photo-monitoring for enforcement purposes, in traffic clearways and priority lanes (Board Minute P137/04 refers).

The City of Toronto has a road network of 5,345 kilometres, including 45 kilometres of expressways. There are 1.2 million vehicles registered to individuals and companies in the City and 1.3 million vehicles travel in and out of the City on a daily basis. Peak traffic volumes of approximately 100,000 vehicles occur between the hours of 8:00 am to 9:00 am and from 5:00 pm to 6:00 pm. The volume of vehicles travelling on our roadways, the lack of road expansion, ongoing roadway construction and the exhausted load bearing capacity of our roadways has contributed to the congestion which is seen on our streets daily.

In an effort to improve traffic flow, the City, identified a number of traffic clearways and priority lanes throughout the City. Depending on the location, use of these lanes, during the identified time periods, is restricted to Toronto Transit Commission (T.T.C.) buses and streetcars, taxi cabs and passenger vehicles with more than three occupants.

The efficient flow of authorized vehicles travelling within these lanes is the key to their success. In essence, the timely passage of these vehicles ensures commuters arrive at their destinations quicker while improving public perception of the reliability of the lanes which may lead to increased usage of public transportation and car pooling. All important steps in reducing congestion on our roadways.
The following chart outlines the 16 locations within the City that currently have priority lanes:

<table>
<thead>
<tr>
<th>Street</th>
<th>Location</th>
<th>Restrictions</th>
<th>Authorized Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay Street</td>
<td>Wellington Street West to Yorkville Avenue</td>
<td>Monday to Friday 7:00 am to 7:00 pm</td>
<td>T.T.C. buses, taxi cabs, bicycles</td>
</tr>
<tr>
<td>Eglinton Avenue West</td>
<td>Oakwood Avenue to Richardson Avenue</td>
<td>Monday to Friday 7:00 am to 9:00 am; 4:00 pm to 6:00 pm</td>
<td>T.T.C. buses, taxi cabs, bicycles</td>
</tr>
<tr>
<td>Eglinton Avenue West (eastbound only)</td>
<td>Old Forest Hill Road to Duplex Avenue</td>
<td>Monday to Friday 7:00 am to 9:00 am; 4:00 pm to 6:00 pm</td>
<td>T.T.C. buses, taxi cabs, bicycles</td>
</tr>
<tr>
<td>Eglinton Avenue East (eastbound only)</td>
<td>Dunfield Avenue to Brentcliffe Road</td>
<td>Monday to Friday 7:00 am to 9:00 am; 4:00 pm to 6:00 pm</td>
<td>T.T.C. buses, taxi cabs, bicycles</td>
</tr>
<tr>
<td>King Street West (streetcar lane)</td>
<td>Dufferin Street to John Street</td>
<td>Monday to Friday 7:00 am to 9:00 am; 4:00 pm to 6:00 pm</td>
<td>T.T.C. streetcars, taxi cabs</td>
</tr>
<tr>
<td>King Street East (streetcar lane)</td>
<td>Jarvis Street to Parliament Street</td>
<td>Monday to Friday 7:00 am to 9:00 am; 4:00 pm to 6:00 pm</td>
<td>T.T.C. streetcars, taxi cabs</td>
</tr>
<tr>
<td>Don Mills Road</td>
<td>Overlea Boulevard to Finch Avenue East</td>
<td>Monday to Friday 7:00 am to 10:00 am; 1:00 pm to 7:00 pm</td>
<td>T.T.C. buses, taxi cabs, HOV*</td>
</tr>
<tr>
<td>Overlea Boulevard</td>
<td>Millwood Road to Don Mills Road</td>
<td>Monday to Friday 7:00 am to 10:00 am; 1:00 pm to 7:00 pm</td>
<td>T.T.C. buses, taxi cabs, HOV*</td>
</tr>
<tr>
<td>Pape Avenue</td>
<td>Danforth Avenue to Donlands Avenue</td>
<td>Monday to Friday 7:00 am to 9:00 am; 4:00 pm to 6:00 pm</td>
<td>T.T.C. buses, taxi cabs, HOV*</td>
</tr>
<tr>
<td>Eglinton Avenue East</td>
<td>Leslie Street to Cedar Drive</td>
<td>Monday to Friday 7:00 am to 10:00 am; 1:00 pm to 7:00 pm</td>
<td>T.T.C. buses, taxi cabs, HOV*</td>
</tr>
<tr>
<td>Yonge Street</td>
<td>Bishop Avenue to Steeles Avenue</td>
<td>Monday to Friday 7:00 am to 10:00 am; 1:00 pm to 7:00 pm</td>
<td>T.T.C. buses, taxi cabs, HOV*</td>
</tr>
<tr>
<td>Dufferin Street/Allen Road</td>
<td>Transit Road to Finch Avenue West</td>
<td>Monday to Friday 7:00 am to 10:00 am; 1:00 pm to 7:00 pm</td>
<td>T.T.C. buses, taxi cabs, HOV*</td>
</tr>
<tr>
<td>Dundas Street West</td>
<td>Etobicoke Creek to Aukland Road</td>
<td>Monday to Friday 7:00 am to 10:00 am; 1:00 pm to 7:00 pm</td>
<td>T.T.C. buses, taxi cabs, HOV*</td>
</tr>
<tr>
<td>Spadina Avenue</td>
<td>Sussex Avenue to Queens Quay West</td>
<td>All days All times</td>
<td>Median dedicated streetcar line</td>
</tr>
<tr>
<td>Queens Quay West</td>
<td>Waterpark Place to Bathurst Street</td>
<td>All days All times</td>
<td>Median dedicated streetcar line</td>
</tr>
<tr>
<td>Bathurst Street</td>
<td>Queens Quay West to Lakeshore Boulevard West</td>
<td>All days All times</td>
<td>Median dedicated streetcar line</td>
</tr>
</tbody>
</table>

* High Occupancy Vehicle (HOV) ~ three or more occupants

Current Enforcement Activity:

The current legislation to support enforcement activity of these designated lanes is found in two acts. Lanes located on the 'old' Metropolitan Toronto roadways are governed by the Municipality of Metropolitan Toronto By-law 132/93 Section 3(a);

'Drive non-designated vehicle in reserved lane during prohibited hours'
and the lanes located on Toronto roadways are governed by the City of Toronto Municipal Code Chapter 400-21 section C(1);

'Drive Vehicle Designated Lane'

The out of court fine is $65.00 plus a $15.00 Victim Fine Surcharge. An offence has been made out when an unauthorized vehicle travels in excess of 45 metres within the designated lane before or after an intersecting roadway where the vehicle had an opportunity to exit or enter from.

A continued high visibility presence of police officers pro-actively enforcing violations in a particular area will result in a change in driving behaviour. This has been reflected anecdotally after a recent enforcement initiative on Don Mills Road.

Photo-Monitoring:

Legislation:

In recent history, two photo-monitoring programs, for enforcement purposes, have been enacted in the Province of Ontario. The first, which amended the Highway Traffic Act (H.T.A.) to permit the use of photo radar on Provincial highways, was proclaimed into law on August 15, 1994 and subsequently repealed on July 5, 1995.

The second program, the red-light camera pilot project, amended the H.T.A. to enable municipalities to use evidence obtained from red-light cameras. This amendment was proclaimed into law on November 20, 2000. The initial pilot project was for a two year period, however, it was extended and will now finish on November 19, 2004.

While both programs use photo-monitoring technology, each program required independent legislation to amend different sections of the H.T.A. and to create independent Provincial Regulations. As a result, the only remaining program and supporting legislation, is specific to red-light offences and photo-monitoring enforcement can only used for that purpose.

In order to proceed with a program that would use photo-monitoring for enforcement of traffic clearways and priority lanes, the Provincial government would have to provide a new updated statutory framework, amendments to the H.T.A. to allow municipalities to create owner liability offences, a procedural code outlining appropriate devices for use and outlining the grounds that any appeals maybe launched.

Technology:

The short time frame required for this report did not allow for an in-depth analysis of various technologies that maybe available for this purpose. The supplier, to the City, of the red-light cameras presently being used in the pilot project was consulted on the feasibility of this initiative and provided the following information.
The current red-light camera system operates using a combination of ‘loops’ embedded in the roadway and a single mode camera. The ‘loops’ determine the speed for the vehicle using the distance between the axles and simple time/distance calculations. If the vehicle speed exceeds the calculated threshold for the vehicle to stop in time when facing a red-light at the intersection, the second ‘loop’ activates the camera and takes the picture of the vehicle disobeying the light.

The supplier has suggested that an installation similar to the present red-light camera system, with slight modifications, should provide the necessary technology to support this initiative. Having said that the supplier has indicated that this would be a new use for their technology and that they have not used it in this manner yet.

A dual mode camera, capable of providing both a still photograph and video image would be required for this application. In this installation the ‘loops’ embedded in the roadway capture an image of the underside of a vehicle. Each image is unique to a specific vehicle and using the distance between the axles any unauthorized vehicle would be identified and the video mode of the camera would be activated. Once the vehicle has passed over the subsequent ‘loops’ providing sufficient evidence to support a charge, a ‘still’ photograph of the vehicle is generated to identify the vehicle.

The installation includes any necessary road markings, landmarks and signs that would be required to reference distances and locations. The locations would be heavily signed to encourage a modification of driver behaviour and reduce violations.

**Prosecution of Offences:**

Jean Gillespie, Supervisor of Prosecutions, City of Toronto, was consulted and indicates that with the appropriate legislation in place, prosecution of photo-monitoring offences for traffic clearways and priority lanes would be possible.

**Program Administration:**

An infrastructure is required to administer and process the images. Traffic enforcement is a police function and in order to ensure the program’s success and creditability it is necessary that the Service manages and controls the program. It is difficult to predict the number of offences that may be captured by this program, which in turn makes it difficult to assess staffing requirements.

Michael Brady, Manager, Red-Light Camera Operations Unit, City of Toronto, Works and Emergency Services, indicates that there are presently five part-time provincial offences officers, and two administrative clerks assigned to administer the red-light camera pilot project. This section is however used by all jurisdictions that are participating in this pilot project provincially. Presently this section processes approximately 85,000 images a year from red-light offences generated by camera locations within the City of Toronto.
With this infrastructure already established, Mr. Brady has indicated that this section would be in a position to initially assist with administering the photo-monitoring program with the necessary authorizations remaining with the Service.

Program Expenditures:

The cost for each camera location, which includes the installation of the camera, 'loops' and signage is approximately $140,000. There are a number of options available to finance this program including:

- Outright purchase of the necessary equipment including the processing software. The City chose this option for the red-light camera pilot project and administers the project themselves.
- Paying a flat monthly fee to the supplier who is then responsible to administer the program including processing offences, repairing and upgrading equipment when required.

Operational costs in order to administer and control the program relate to police officer(s) salaries. For each Sergeant position identified, salary and benefits total $91,776 per year and for each Constable position identified, salary and benefits total $80,502 per year.

Program Limitations, Issues and Concerns:

- There presently is no legislation to support this type of enforcement.
- Photo-monitoring for enforcement purposes must be used to augment traditional police enforcement in problematic areas and tied to improving road safety.
- Criteria for the placement of the cameras must be established to ensure they are placed in appropriate locations that will have the greatest impact on traffic flow, that will provide sufficient evidence to support a prosecution while limiting defence arguments.
- The use of this technology is not feasible in designated lanes that allows vehicles to carry three or more occupants (HOV) as the image produced is not capable of clearly identifying the number of occupants of a vehicle. As a result, this technology can not be deployed on 10 of the 16 priority lanes previously noted in this report.
- Large capital outlay to enforce approximately 14 kilometres of designated lanes for a limited number of days and hours.
- This technology cannot ascertain the difference between a taxi cab, which is authorized to use a designated lane, and a passenger vehicle which is not. As a result images will be generated for taxi cabs which must be vetted before processing.
- This technology may not identify some of the larger sports utility vehicles as unauthorized vehicles.
- A dual mode camera is required to provide a video image that will clearly show an offence. A single photo image simply shows a specific vehicle in a designated lane, as a snap shot in time. This image will not provide any possible lawful reasons that
the vehicle may be in the designated lane such as it is going to turn right, a roadway obstruction, it has broken down or the driver is fulfilling their responsibilities under the H.T.A. when an emergency vehicle is approaching.

- Congestion within a designated lane may not allow for a clear image to be taken of an offending vehicle(s) as a result of the site lines that must be established to ensure that the camera functions properly.
- It would be speculation as to the cost to process an offence captured by photo-monitoring in priority lanes, however, at the present time it costs approximately $40.00 to process a red-light camera offence which includes the cost of the equipment, detection of the offence and the prosecution of the charge.
- The T.T.C. has just begun to examine this issue. HOV lanes are not included in this process. It is anticipated that this process may take up to two years to complete.

Conclusion:

In an all out effort to make our roads safer, traffic enforcement has been designated as a core responsibility for all police officers during the course of their daily duties. The Service’s goal is to reduce collisions and incidents of poor driving behaviour, thereby reducing needless deaths and injuries occurring daily on Toronto’s roadways.

Technology does exist to support photo-monitoring for enforcement purposes of traffic clearways and priority lanes. The ability to put in place the essential infrastructure including capital costs, supporting legislation, administration and prosecution of offences is necessary to ensure the success of the program.

Through innovative initiatives the City’s roadways will become safer and the quality of life for all Toronto’s citizens will be significantly improved.

Acting Deputy Chief, David Dicks, Policing Support Command, will be present to answer any questions.

Supt. Steve Grant, Traffic Services, was in attendance and responded to questions by the Board about this report.

The Board received the foregoing report and requested that a copy be forwarded to the City of Toronto - Chief Administrative Officer for information.