



Privacy and Video Surveillance in Mass Transit Systems: A Special Investigation Report

Privacy Investigation Report MC07-68

Executive Summary

In this report, I respond to a privacy complaint received by my office from Privacy International, a privacy advocacy organization based in the United Kingdom, regarding the deployment of video surveillance throughout Toronto’s mass public transit system. In its letter of complaint, Privacy International alleged that the Toronto Transit Commission’s (TTC) video surveillance system contravened the privacy provisions of the *Municipal Freedom of Information and Protection of Privacy Act* (the *Act*). In response to the complaint, and based on the important issues raised, my office initiated an investigation into the TTC’s use of video surveillance.

During the course of the investigation, my office met with representatives from the TTC, and received the TTC’s written position on the complaint and copies of relevant documentation, including policies and procedures. At all times, the TTC co-operated fully with the investigation. Privacy International was also provided with an opportunity to submit additional information.

In addition to outlining the results of our investigation into the TTC’s plans for the expansion of its video surveillance system, the report provides a review of the literature into the effectiveness of video surveillance, as well as an assessment of the role that Privacy-Enhancing Technologies (PETs) play in protecting privacy.

The report advances PETs as an alternative to the zero-sum, “privacy versus security” paradigm that often persists in discussions on video surveillance. Briefly stated, this paradigm posits that enhancements to security must always involve sacrifices to privacy, and vice versa. In this Report, I strongly reject this “privacy versus security” mentality in favour of a positive-sum model, in which privacy and security may co-exist together through the use of PETs.

To demonstrate how PETs may be utilized in video surveillance to enhance **both** privacy and security, the Report makes reference to the innovative work of Karl Martin and Kostas Plataniotis at the University of Toronto, who demonstrate how object-based encryption can be used to obscure the images of individuals that are the subjects of video surveillance. Where an incident takes place requiring further investigation, the images may only be decrypted by an authorized person. If deployed successfully, this technology would reduce the risk of the random invasive and unlawful surveillance of individuals, while permitting the use of images for safety and security purposes. The Report includes a recommendation that the TTC select a location to evaluate this research.

Based on the investigation, I have concluded that the TTC’s collection of personal information through the use of video surveillance is permissible under the *Act* because it is necessary to the proper administration of Toronto’s mass transit system, and because it is used for public safety and law enforcement purposes. This conclusion was made on the basis of the material provided

by the TTC, as well my consideration of the literature on video surveillance and the experiences of other jurisdictions.

In the Report, I make reference to the following circumstances in reaching my decision:

- Mass transit systems have unique challenges in moving large numbers of passengers safely and securely in confined spaces;
- Cameras play a legitimate role in contributing to operator safety, particularly on surface vehicles and in the detection of crime;
- As part of the critical infrastructure of modern societies, mass transit systems are viewed as desirable targets for terrorists;
- It is not feasible to successfully address these issues through a combination of other measures (e.g. increased security personnel, enhanced lighting).

The Report also draws conclusions and makes a number of recommendations that are based, in part, on my office's *Guidelines for the Use of Video Surveillance Cameras in Public Places* (the *Guidelines*). These *Guidelines*, originally issued in 2001 and updated in 2007, have been used by many government organizations to develop and implement video surveillance programs in a privacy-protective manner, in compliance with the *Act*.

A key recommendation is that the TTC should implement a maximum retention period of 72 hours instead of seven to 30 days. This three-day retention period, which is set out in the *Guidelines*, has been successfully employed in numerous jurisdictions across Ontario, including by the Toronto Police for its video surveillance program in Toronto's entertainment district.

Additionally, the Report recommends that the TTC should engage an independent third party to conduct an audit of the TTC's entire video surveillance system, on an annual basis. The first audit should be sent to my office for review and comment. In the report, I note that the Canadian Institute of Chartered Accountants and the American Institute of Certified Public Accountants have jointly published the *Generally Accepted Privacy Principles (GAPP) – A Global Privacy Framework* (the *GAPP Privacy Framework*), which serves as an excellent basis for conducting such independent audits.

The Report also recommends the strengthening of the Memorandum of Understanding (MOU) between the Toronto Police and the TTC governing remote access to images by the Police. Specifically, the Report recommends that the MOU be amended to make explicit an audit requirement of the Police's access to the TTC's video surveillance system. Such a requirement will further reduce the risk of abuse to the system.

The complete recommendations contained in the Report are as follows:

1. That, prior to providing the Police with direct remote access to the video surveillance images, the TTC should amend the draft MOU to require that the logs of disclosures be subjected to regular audits, conducted on behalf of the TTC. A copy of the revised draft MOU should be provided to my office prior to signing.
2. That the TTC amend its Policy to reflect the conditions set out in the revised MOU.
3. That the TTC amend its Policy to require that all employees dealing with the video surveillance system sign a written agreement regarding their duties, including an undertaking of confidentiality.
4. That the TTC advise my office of its progress in installing the signs providing Notice of Collection to passengers.
5. That the TTC amend its retention periods for video surveillance images from a maximum of seven days to a maximum of 72 hours.
6. That the TTC amend its Policy to include applicable retention periods, both for when images are used (minimum of one year) and when the images are not used (either 15 hours or 72 hours, depending on where the camera is situated).
7. As the TTC expands its use of video surveillance cameras in the public transit system, it must take additional steps to inform the public, by publishing general information on its website and by holding more extensive consultations, possibly in the form of town hall meetings.
8. That the TTC include an additional heading in its Policy specifically addressing the annual audit requirement. The Policy should state that the annual audit must be thorough, comprehensive, and must test all program areas of the TTC employing video surveillance to ensure compliance with the Policy and the written procedures. The initial audit should be conducted by an independent third party, using the *GAPP Privacy Framework*, and should include an assessment of the extent to which the TTC has complied with the recommendations made in this Report.
9. That the TTC provide my office with a copy of its first annual audit for review, and comment on the details and methodology of the audit.
10. That the TTC provide my office with a copy of its revised Policy no later than one month after the date of this Report.
11. That the TTC should keep abreast of research on emerging privacy-enhancing technologies and adopt these technologies, whenever possible.

12. That the TTC should select a location to evaluate the privacy-enhancing video surveillance technology developed by the University of Toronto researchers, K. Martin and K. Plataniotis.
13. Within three months of the date of this Report, the TTC should provide my office with proof of compliance or an update on the status of its compliance with each of these recommendations.

In making these recommendations, I have attempted to balance the legitimate need for the TTC to use video surveillance to promote public safety and security on the mass transit system, with the need to protect the privacy of TTC passengers. In my view, this balance will be achieved by ensuring that controls for the TTC's video surveillance system are in place with respect to governance (policy/procedures), oversight (independent audit, reportable to my office), and through the most promising long-term measure, the introduction of innovative privacy-enhancing technologies. For more detailed information on the special investigation, please refer directly to the Report.