PHOTO RADAR AND RED-LIGHT CAMERA PILOT PROJECT

Application by Quebec Police Organizations:
SERVICE DE POLICE DE LA VILLE DE MONTRÉAL, SÛRETÉ DU QUÉBEC and the ASSOCIATION DES DIRECTEURS DE POLICE DU QUÉBEC

PRIX DE PARTENARIAT CCATM-POLICE

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1. BACKGROUND

In December 2007, a year focused on road safety, the Quebec National Assembly adopted *An Act to Amend the Highway Safety Code and the Regulation Respecting Demerit Points* to enable the launch of a pilot project using new traffic control technology. The legislative amendment authorized the installation of nine photo radar units and six red-light cameras in three administrative regions of Quebec: Montreal, Montérégie and Chaudière-Appalaches.

Despite exceptional improvements in the road safety record for that year, consolidating information continues to pose a constant challenge. Speed is the cause of fatalities in 37% of cases, which makes it a main cause of traffic accidents in Quebec. In addition, failing to stop for a red light causes more than 25% of casualty accidents at intersections equipped with traffic lights.

In Montreal, implementing these control devices is one issue set out in the Transportation Plan in order to improve the safety of vulnerable users while encouraging active travel.

Thus, the pilot project implementation was aligned with one of the government’s directions which is to pool skills while abiding by each public organization’s operating rules. The project comes under the responsibility of the Quebec Ministère des Transports (MTQ) and is carried out in partnership with the Quebec Ministère de la Sécurité publique (MSP) and Ministère de la Justice (MJQ), the police forces represented by the Association des directeurs de police du Québec (ADPQ), the Sûreté du Québec (SQ) and the Service de police de la Ville de Montréal (SPVM), and numerous partners, including the Société de l’assurance automobile du Québec (SAAQ).

The main points in support of implementing the project were set out in the report of the *Table québécoise de la sécurité routière* published in July 2007:

- The 15 sites will be distributed over three pilot regions.
- The implementation sites are places in which accidents are attributable to speed and failure to stop at a red light.
- The sites were chosen in partnership with the stakeholders involved.
- Net revenues will be reinvested in road safety measures through a fund established specifically for this purpose.
- Sites will be disclosed in advance to prevent the public from perceiving them as traps.
- A communications strategy will be developed to explain the issues.

The pilot project activities began with a trial period from May 19 to August 18. Over the course of these three months, warnings rather than tickets were issued. The pilot project itself began on August 19 and will be carried out over 18 months. After 12 months of operation, in August 2010, the Minister of Transportation and its partners will table an evaluation report in the National Assembly. The results will determine whether the measures become permanent, adjustments are needed to make them permanent, or the experiment ends.
2. INVOLVEMENT OF POLICE ORGANIZATIONS

Police forces and organizations in Quebec, namely the Service de police de la Ville de Montréal (SPVM), Sûreté du Québec and the Association des directeurs de police du Québec representing the local police forces were the targeted partners for the pilot project. The police community, very active in a number of aspects of the project, helped develop a bill for the implementation of automated control devices by taking part in the various working committees. Police organizations have publicly supported the implementation of new technologies on several occasions, particularly during the work of the Table québécoise de la sécurité routière and the hearings of the Committee on Transportation and the Environment in 2001, 2006 and 2007.

- SITE SELECTION

The City of Montreal was assigned six automated control units after having been selected for the pilot project for its urban features and high accident rates. Following the coming into force of the sections of the Act that allow for the identification of locations and conditions of use for the units, the SPVM became actively involved in an analysis of sites with a high incidence of accidents. This work, which began in 2008, continued until 2009 in order to comply with the time limitations for completing infrastructure work. This exercise was carried out jointly with the City of Montreal’s Infrastructures, Transportation and Environment Services (SITE) to propose sites to the Ministère des Transports that meet the site selection criteria. Out of 15 units installed in the province, six were located in the City of Montreal.

In the Montérégie and Chaudière-Appalaches regions where the other nine units are installed, the site determination process was carried out jointly by the Ministère des Transports, the municipalities in which the equipment was installed along with their police forces, and the Sûreté du Québec. Numerous working meetings were held to carefully select areas in which accidents caused by excessive speed and running red lights could be reduced. The difficulty of carrying out conventional police control was also taken into consideration in the site selection process.

- TERMS AND CONDITIONS OF OPERATIONS

In order to share responsibilities between various levels of police jurisdiction and the departments involved, the project needed to set out the terms and conditions of operations and assign roles and responsibilities to the range of partners involved. Thus, the MTQ, to which the government entrusted the organization and implementation of the pilot project, proposed a structure in which it would act as project manager, working in partnership with the MSP, MJQ, and police departments, and oversee a private firm responsible for integrating the technology.

The project management structure that was developed is not an authoritative structure; rather, it is a model that takes into account the role and contribution of each partner from a strategic, tactical and operational perspective. This structure also respects the partners’ areas of jurisdiction and legal mandates.
**IMPLEMENTATION AND MONITORING STRUCTURE**

Implementation and Monitoring Structure Flow Chart (above)

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• **Main Partners**

The *Ministère des Transports* (MTQ) oversees the project; it is the project manager, responsible for ensuring coordination, consistency and equipment compatibility. It is also responsible for developing communications plans.

The *Ministère de la Sécurité publique* (MSP) coordinates the management of police operations.

The *Sûreté du Québec* (SQ) manages the use of photo radar units and plays a coordination role for all police organizations. In addition, it serves as administrator of the evidence-processing centre.

The *Service de police de la Ville de Montréal* (SPVM) and other municipal police departments manage operations relating to the use of photo radar units and red-light cameras, analyze the evidence, and issue general violation reports.

The *Ministère de la Justice du Québec* (MJQ), through the *Bureau des infractions et amendes* (BIA), processes general violation reports and enforces judgments (fine collection). The BIA delivers second-tier services.
• **PROJECT STRUCTURE**

In addition to a project implementation manager, the project has a Steering Committee comprising the three Deputy Ministers who make all of the decisions to ensure the success of the project by following the advice of the Advisory Committee and Coordination Committee. The Advisory Committee comprises representatives from all the organizations and partners affected by the implementation of the pilot project. This Committee, on which the police organizations sit, is a forum for exchange and cooperation.

The Coordination Committee comprises managers appointed by delegation from the three departments and the managers of the SQ, SPVM and ADPQ. This committee advises the project manager on various strategies to be adopted.

The consultants’ group is responsible for monitoring the growth of the project and conducting an evaluation to ensure that the report is tabled in the National Assembly 12 months after the beginning of the project. The police organizations participate in all of the working sub-groups that help produce the report.

To ensure the success of the project in terms of business process, the MTQ project manager has built a team comprising the SQ police operations coordinator, the MJQ coordinator and the supplier’s coordinator; a team of professionals assists his work.

• **POLICE OPERATIONS**

As illustrated above, police organizations participate at all levels of project management. They are involved in the strategic and tactical activities of the pilot project, as well as operations. All traffic control activities come under police jurisdiction.

In terms of police operations, an evidence-processing centre has been established within the Sûreté du Québec’s facilities, housing a team of 17 police officers and one civilian employee. All police officers report to this location, except for three SQ officers who operate the mobile unit in Chaudière-Appalaches. This team, coordinated by the Sûreté du Québec, is responsible for carrying out all operational and administrative police duties related to this project.

The Sûreté du Québec has 10 representatives assigned to various management, evidence-processing and police operations tasks. It is supported by local police officers, including one from the Granby police department. The SPVM has assigned six police officers to the project, including one sergeant who supervises the evidence analysis staff. In addition, he conducts quality control for all the activities at the evidence-processing centre, along with the firm that developed the technology-based solution. Two officers are assigned to evidence processing in order to produce the general violation reports needed to issue tickets. The mobile photo radar unit on Notre-Dame Street is operated by three SPVM officers. This team of Montreal police officers is supported by a lieutenant under the authority of the Chief of the Road Safety Division.
The staff members assigned to this new unit began their activities in the fall of 2008 and will continue their assignment until February 2011. Various phases of the pilot project were implemented before all the equipment appeared on the highway network.

This is the first time in Quebec that three police entities (ADPQ, SQ and SPVM) have banded together as part of an operating structure to carry out a medium-term police project. In order to ensure the proper operation of the project and to respect the specific nature of each organization, memoranda of understanding were signed in support of this alliance.

3. OBJECTIVES

The key objectives of the pilot project are to develop further knowledge in order to improve road safety. Sites were selected to bring a lasting solution to road safety issues. Signage was also installed to prevent entrapment and to strengthen the road safety message. Any fines and fees collected are placed in a special road safety fund.

- **System effectiveness in reducing accidents and changing poor habits**
  Practically all similar measures taken in other administrations have resulted in better road safety. According to trials carried out in France, the photo radar units are responsible for reducing the death toll by 75%. In the United Kingdom, a pilot project showed a 42% reduction in fatal accidents at camera-equipped sites. The team of consultants will analyze the observable effects of behavioural changes targeted by the measure.

- **Social acceptability**
  The purpose of reviewing the pilot project after 12 months is to determine its social acceptability and adjust its administrative and technical management. Public perception of the devices and the impact on attitudes toward speeding and red-light violations need to be analyzed.

- **Operational aspects**
  In addition to monitoring the implementation of the project and the technology-based solution, we would like to track fines after they have been sent to the owner, and particularly, the frequency of challenges related to these fines. The evaluation of operational aspects will be carried out by the police, BIA and courts.
4. RESULTS ACHIEVED

The implementation of a pilot project of this scope could not have been successful without a close partnership with the Ministère des Transports, Ministère de la Sécurité publique, Ministère de la Justice and police organizations. The pilot project will certainly provide a clear indication of the number of cameras required for possible permanent implementation in Quebec. In addition, this experience has helped allay the concerns of the public and of stakeholders involved in automated traffic control.

Nonetheless, we can show that the units had a positive influence on road safety. In areas equipped with permanent photo radar devices, driving speed has been reduced by more than 12 km/h and speeding has decreased by nearly two thirds, or 63%.

In terms of red-light cameras, we have noted a considerable reduction — 83% — in the number of violations. From the beginning of the pilot project to December 31, 2009, nearly 24,000 tickets were issued.

With regard to social acceptability — one of the main objectives of the pilot project — the survey conducted by the Ministère des Transports in September found that public approval of photo radar units topped 81%, and 86% of the public supported red-light cameras.

5. CONCLUSION

The involvement of the Service de police de la Ville de Montréal, Sûreté du Québec and the Association des directeurs de police du Québec in this photo radar and red-light camera pilot project is certainly a fine example of collaboration and cooperation in forging partnerships aimed at reducing injury and saving lives.

We are confident that this project will help raise public awareness, ensuring that Canadian roads are among the safest in the world by the end of 2010.