



**Road Safety  
Camera  
Commissioner**

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# **REPORT OF THE ROAD SAFETY CAMERA COMMISSIONER TO THE MINISTER FOR POLICE AND EMERGENCY SERVICES**

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**Mobile road safety camera site selection investigation**

Release date: 24 June 2013



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## PURPOSE

- 1 The purpose of this investigation is to determine whether mobile road safety camera deployment complies with the physical field criteria contained in the Victoria Police *Mobile Road Safety Camera Policy and Operations Manual*.

## BACKGROUND

- 2 In July 2012, the Road Safety Camera Commissioner received a complaint that a mobile road safety camera was deployed on Warrigal Road in Canterbury at the bottom of a hill. Upon making enquiries with the Department of Justice, it was found that the mobile road safety camera had been set up contrary to the policy set out in the *Mobile Road Safety Camera Policy and Operations Manual* (the Manual) and any potential infringements captured during that camera session were rejected.
- 3 In early October 2012, the Commissioner, through a news article in the Herald Sun newspaper, asked members of the public to write to him about any mobile road safety camera sites they believed did not comply with the physical field criteria set out in the Manual. In response to that newspaper article, the Road Safety Camera Commissioner received 116 complaints.
- 4 Thirty of the complaints were made in relation to hand held speed measuring devices. These devices are managed and operated exclusively by Victoria Police and they are outside the scope of this investigation.
- 5 Of the remaining 86 complaints, 40 complaints contained enough information to identify a specific mobile road safety camera session and to investigate whether the mobile road safety camera was operated in accordance with the physical field criteria contained in the Manual. This investigation was carried out pursuant to section 10 of the *Road Safety Camera Commissioner Act 2011*, which provides that the Road Safety Camera Commissioner has the power to investigate complaints that appear to indicate a problem with the road safety camera system and to make recommendations to the Minister for Police and Emergency Services to address any systemic issues identified.

## MOBILE ROAD SAFETY CAMERAS

- 6 The State of Victoria uses a type of mobile road safety camera known as the Gatsometer Radar24-GS11, which is prescribed for use in Victoria by regulation 30(o) of the Road Safety (General) Regulations 2009 (Attachment A).
- 7 Mobile road safety cameras must be deployed within a site approved by Victoria Police. A site is defined as a length of road between two locatable points (e.g. side streets or signage). Within a site, a mobile camera can generally be deployed at any position along the stretch of road defined as the site.
- 8 For a traffic infringement notice to be validly issued as a result of a mobile road safety camera detection, the mobile road safety camera must comply with strict legal requirements in relation to testing, sealing and use of the prescribed mobile digital road safety camera. These requirements are set out in regulations 38, 39 and 40 of the Road Safety (General) Regulations 2009 (Attachment A).

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## **THE VICTORIA POLICE *MOBILE ROAD SAFETY CAMERA POLICY AND OPERATIONS MANUAL***

- 9** There are approximately 2000 mobile road safety camera sites in Victoria. Each site must satisfy both site selection criteria and physical field criteria, which are contained in the Manual.
- 10** The site selection criteria are based on crash risk and require that each site falls within one or more of the following categories:
- a. Documented history of serious and major injury collision in the previous three years,
  - b. Subject of a validated complaint of excessive speeds, for example, from the general public or local councils,
  - c. Identified by police to be a speed related problem site, or
  - d. Proposed speed enforcement by non-camera devices within a specified site is deemed not practicable or unsuitable.
- 11** The physical field criteria were developed by Victoria Police to ensure that a mobile road safety camera is only set up at locations where it is possible to measure speed accurately and take a photograph of sufficient quality. Some of the criteria were designed to meet certain technical requirements required by the manufacturer to produce accurate speed readings, such as, a mobile road safety camera should not be set up on a bend or at a location where there are reflective objects in or near the beam. Other criteria were introduced to provide fairness in relation to the use and operation of the mobile road safety camera, for example, a camera should not be placed on certain gradients and a camera should not be concealed. The fairness criteria do not affect the validity of the speed measurement.

### **DISCUSSION**

- 12** The complaints investigated by the Road Safety Camera Commissioner suggested that the mobile road safety camera deployment did not comply with the physical field criteria set out in the Manual, on the basis that the camera was:
- a. set up on an "unsuitable" gradient
  - b. set up on a bend in the road
  - c. concealed
  - d. set up within 200 metres to a change of speed zone
  - e. set up in proximity to sources of reflection, and/or
  - f. located near an overpass or elevated adjacent road.

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- 13** All but one of the sites investigated was visited by a staff member of the Road Safety Camera Commissioner or an independent contractor to determine whether the complaint had any substance. One site was not visited due to its remote location, however, it was scrutinised using topographical data.
- 14** This investigation was carried out with the assistance of Victoria Police and the Department of Justice.

## **COMPLAINTS ABOUT GRADIENT**

- 15** Criterion 2(b) of the Manual states that a site shall not be:

Descending down unsuitable gradients or within 300 metres of the bottom of a gradient or hill UNLESS the site has a significant speed related collision record;

Unsuitable gradient is defined as a slope that causes a vehicle in top gear (or drive) to increase indicated speed against maximum deceleration (NO BRAKE OR ACCELERATION) from a commencement speed at the top of the slope at the posted limit. This must be determined by the relevant TMU [Traffic Management Unit].

This restriction does not apply to camera enforcement of the ascending traffic flow or where a Regional Traffic Inspector provides written approval for a particular location.

- 16** In short, the Manual provides that a mobile camera should not be used to monitor the speed of vehicles travelling down an "unsuitable" gradient unless:
- a. the mobile camera site has a significant speed related collision record, or
  - b. A Regional Traffic Inspector has provided written approval for enforcement at that location.
- 17** Of the 40 complaints that were investigated, the majority alleged that the mobile road safety camera was set up on an "unsuitable" gradient or at the bottom of a hill. Upon investigating these complaints, it was found that there were three sites where the gradient could be considered "unsuitable" in accordance with the definition in the Manual. However, two of these sites had been granted an exemption from a Regional Traffic Inspector and the other site was selected on the basis that it had a significant speed related collision record. That site was also the subject of validated complaints of excessive speed and had been identified by Victoria Police to be a speed related problem site.
- 18** Of the remaining sites, Victoria Police advised that these sites had been assessed and the gradient was found to be suitable for the placement of a mobile road safety camera. All but one of the sites was visited by a staff member of the Road Safety Camera Commissioner or an independent contractor, to observe the gradient. The site that was not physically visited was scrutinised using topographical data. At each of these sites, the gradient was found to be suitable for the placement of a mobile road safety camera.
- 19** As a result of the investigation into each of the complaints regarding gradient, it was found that each of the mobile road safety cameras was set up fairly and in accordance with the field criteria contained in the Manual.

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## **COMPLAINTS ABOUT ENFORCING ON A BEND IN THE ROAD**

- 20** The Road Safety Camera Commissioner received complaints that the mobile road safety camera in question was set up contrary to criterion 2(a) of the Manual which states that a "site shall not be on a bend in the road".
- 21** The Manual prohibits mobile road safety cameras from being set up on a bend because the mobile camera system can only accurately measure the speed of a vehicle when it is travelling through the radar beam in a straight line. A mobile road safety camera site may contain bends and a mobile road safety camera may be set up near a bend. However, as long as the mobile road safety camera is set up and operated on a straight stretch of road, it is compliant with the physical field criteria set out in the Manual.
- 22** Upon investigating these complaints, it was found that no mobile road safety camera vehicles were set up on a bend in the road and that all speed measurements taken were from straight sections of road.

## **COMPLAINTS THAT THE MOBILE ROAD SAFETY CAMERA WAS CONCEALED**

- 23** The Manual states that "under no circumstances are camera vehicles, tripods or portable flash units (when used) to be disguised by signs, logos, breakdown of vehicle (e.g. boot open or spare wheel/jack visible etc.), tree branches, lamp posts, rubbish bins or any other covert means."
- 24** Two of the complaints that were received contained images showing that one camera vehicle was parked beside a freeway behind a large shrub and another was set up along a dual carriageway behind a road sign. These two vehicles appeared to be concealed, or partially concealed, contrary to the physical field criteria in the Manual regarding concealment of a mobile road safety camera vehicle.
- 25** Victoria Police advised that the mobile road safety camera vehicles in question were positioned behind a tree or a sign as a matter of safety for the mobile camera operator.
- 26** I have viewed CCTV footage taken from within camera vehicles showing cars and trucks driven in a manner that is deliberately intimidating to the mobile road safety camera operator, constituting a real risk of injury or worse. Parking behind a protective object can reduce the threat of injury to the camera operator.
- 27** It is clear that there is some conflict between the guideline contained in the Manual regarding the concealment of mobile road safety camera vehicles and the practice that is currently adopted by Victoria Police in siting mobile road safety cameras. However, the safety of the mobile road safety camera operators cannot be overlooked and this factor should be communicated to the public.

## **COMPLAINTS ABOUT PROXIMITY TO A CHANGE OF SPEED ZONE**

- 28** Criterion 2(c) of the Manual states that a "site shall not be within 200 metres of a change to a speed zone, applicable to the same length of road."
- 29** One complaint was investigated in relation to proximity to a change of speed zone. It was found that the mobile camera was set up more than 200 metres from a change to a speed zone.

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## COMPLAINTS ABOUT PROXIMITY TO REFLECTIVE SURFACES

- 30** Criteria 5 and 6 of the Manual require that the mobile road safety camera operator performs thorough background and foreground evaluations of each site for any sources of reflection.
- 31** Of the complaints that were investigated relating to the presence of a source of reflection, none raised a legitimate issue.

## COMPLAINTS ABOUT PROXIMITY TO AN OVERPASS

- 32** Criterion 4 of the Manual states that a "site shall not be on or near an overpass, or facing any elevated adjacent road that may carry traffic past the radar beam." The purpose of this guideline is to prevent a mobile road safety camera from being set up on a stretch of road that is perpendicular to an overpass so that other vehicles do not pass through the radar beam and interfere with the accuracy of the speed measurement.
- 33** One complaint was investigated in relation to a camera vehicle's proximity to an overpass. It was found that the overpass was located on the same stretch of road as the mobile road safety camera and the radar beam was facing away from the overpass. The mobile road safety camera that was the subject of this complaint was set up in compliance with this guideline.

## CONCLUSIONS

- 34** This investigation has proven to be a worthwhile exercise in three ways.

Firstly, it led to Victoria Police scrutinising 40 specific complaints in relation to the siting of mobile road safety cameras. In scrutinising each of these sites, it was confirmed that:

- a. the mobile road safety camera site was selected in accordance with the site selection criteria as required by the Manual
- b. each mobile road safety camera was found to be tested, sealed and used in accordance with the requirements of the Road Safety (General) Regulations 2009, and
- c. the mobile camera was deployed in compliance with the physical field criteria contained in the Manual.

Secondly, while that scrutiny did not result in those complaints being found to have substance, it contributed to those responsible for siting mobile road safety cameras re-evaluating the appropriateness of the mobile road safety camera sites that were the subject of this investigation.

Thirdly, it has identified a conflict between the prohibition contained in the Manual regarding the concealment of the mobile road safety camera vehicles and equipment and the Victoria Police policy regarding the safety of mobile road safety camera operators in carrying out their duties.

- 35** In addition, Victoria Police has advised that the physical field criteria contained in the *Mobile Road Safety Camera Policy and Operations Manual* are being reviewed.

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## RECOMMENDATIONS

- 36** I endorse the decision of Victoria Police to review the physical field criteria contained in the *Mobile Road Safety Camera Policy and Operations Manual*.
- 37** As a part of that review, I recommend that Victoria Police revisit the prohibition on concealment of a mobile road safety camera vehicle or equipment contained in the Manual and state in clear terms the circumstances in which it will be permitted.

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## **ATTACHMENT A – ROAD SAFETY (GENERAL) REGULATIONS 2009**

### **REGULATION 30 - PRESCRIBED ROAD SAFETY CAMERAS**

For the purposes of the definition of prescribed road safety camera in section 3(1) of the Act, the following camera systems are prescribed—

- (o) the camera system known as the Gatsometer Radar24-GS11

### **REGULATION 38 - TESTING OF MOBILE DIGITAL ROAD SAFETY CAMERAS**

For the purposes of sections 81 and 84(7) of the Act, a mobile digital RSC is tested in the prescribed manner if the testing officer who tests the system—

- (a) is satisfied that the system is in a satisfactory electrical condition and, in particular, that any maintenance carried out on the system has been carried out in a satisfactory manner; and
- (b) is satisfied that the speed calculation unit is properly calibrated so that the frequencies or speeds at which calibration is effected indicate speed readings within a limit of error not greater than or less than 3 kilometres per hour or 3 per cent (whichever is greater) of the true speeds determinable from those frequencies or speeds.

### **REGULATION 39 - SEALING OF MOBILE DIGITAL ROAD SAFETY CAMERAS**

A mobile digital RSC is sealed in the prescribed manner for the purposes of sections 81 and 84(7) of the Act if the speed calculation unit is sealed—

- (a) by the testing officer who carried out the test under regulation 38; and
- (b) with a seal that effectively prevents interference with the time measuring or speed computing components of the speed calculation unit without breaking the seal.

### **REGULATION 40 - USE OF MOBILE DIGITAL ROAD SAFETY CAMERAS**

For the purposes of sections 80, 80A, 81, 83A(1), 84(7) and 84H(2)(a) of the Act, a mobile digital RSC is used in the prescribed manner if—

- (a) the speed calculation unit is used in accordance with operating instructions approved by a testing officer; and
- (b) the speed calculation unit has been tested in accordance with regulation 38 within 12 months before the occasion of its use; and
- (c) the speed calculation unit has been sealed in accordance with regulation 39 at the time that it was last tested.