Technical Note 109

Video Record Keeping of Traffic Management at Roadworks

July 2014
1 Purpose

This technical note is a supplement to the Transport and Main Roads Specification MRTS02 Provision for traffic and to the Manual of Uniform Traffic Control Devices, Part 3 – Works on Roads (MUTCD). It provides guidelines to practitioners for keeping a video record of traffic guidance schemes.

2 General

It is a requirement that supervisory personnel at roadworks sites collect and retain appropriate records. Appendix A of the MUTCD outlines these requirements as follows:

**MUTCD Clause A2 RECORD KEEPING**

Supervisory personnel engaged on works which require the use of a traffic guidance scheme shall keep … daily records of the sign arrangement or traffic guidance scheme.

AND

In the case of incidents (e.g. crashes, collisions), either witnessed or reported, involving the public or from which legal proceedings might arise, the actual type, size and location of signs and devices in use at the time of the accident should be recorded and the sign arrangement photographed for subsequent reporting. Details of the actual width and condition of the travelled path and weather conditions should also be recorded.

**MUTCD Clause A3.2 Before work starts**

(d) After adjustments have been made to the traffic management provisions for the day they should be checked for safety and effectiveness by an inspection drive through the job, and a record made of the signs erected and their locations.

**MUTCD Clause A3.3 During hours of work**

The following routine should be followed while work is in progress:

(a) Periodically drive through the work site to check that all signs, markings and delineating devices as seen by other road users are satisfactory and in their correct position.

**MUTCD Clause A3.4 Closing down at the end of the day**

In general the following action is required at the end of a day's work:

(c) Drive through the work site to confirm that signs and devices are in position and operating before leaving the site.

**MUTCD Clause A3.5 After hours**

During the hours when work is suspended:

(a) Carry out periodic after-dark inspections on low headlight beam to ensure that all devices are visible and performing their correct function.

(c) Ensure that a record is kept of signs found damaged, missing or out of place (and their location) at night, weekend or holiday inspections.

Collecting information is particularly important in the event of an incident, in case legal proceedings result.
A key objective of the Traffic Management Improvement at Roadworks project commenced by Transport and Main Roads in 2013/14 is to improve speed limit compliance at roadworks. This will be achieved by working cooperatively with the Queensland Police (QPS). There is a risk legal challenges of the roadworks speed limits may occur. Consequently the collection of records of traffic guidance schemes at roadworks, and particularly speed limit signage, is very important.

In recognition of these requirements and improvements in video technology, the MRTS02 has included the following clause with regards to inspection and records.

**MRTS02 Clause 6.2.4 Inspections and records**

As an alternative to the record keeping arrangements outlined in the MUTCD Part 3, photographic and/or video evidence of the TGS is permitted …

Given these requirements and guidance, this note has been developed to provide guidance for the collection of video records as part of the recordkeeping process of traffic guidance schemes at roadworks sites.

### 3 Purposes for which video records may be required

There are three purposes for which video records are to potentially be used:

1. Maintain a record of the presence, location and quality of the Traffic Guidance Scheme signs and devices as installed which can be used in the event that a claim is made due to a road traffic incident.
2. Maintain a record of the presence, location and quality of the installed speed limit signs in the event that a speeding infringement is challenged.
3. To allow post application review and auditing of the implementation of the TGS.

It must be noted that this video record could also validate an incident claim against the contractor, the principal contractor or the department, or invalidate a speeding infringement, in the event that they demonstrate the TGS installation is not in accordance with either the MUTCD or the TGS plan.

### 4 Application of this guidance

Reviews of suitable camera equipment by the department has revealed that appropriate cameras can be considered a relatively low cost item. It is recognised that the primary implications, for those personnel undertaking a review and recording of the TGS installation in accordance with the MUTCD, is the filing and storage of video records.

The decision to enforce the use of video recording will be at the discretion of the Principal’s Project Administrator.

### 5 Video camera specification

Any video footage taken is required to be taken from the driver’s perspective and to capture each of the following:

- Temporary Guidance Scheme signs and devices
  - Be able to correctly visually identify each sign and device
  - View the sign / device location
- View the orientation of the sign / device, including whether it has been displaced or knocked
- View the condition – damage, dirt, colour etc.

- Identify the visual presence or otherwise of permanent traffic control devices.

These outcomes represent the minimum requirements for any in-car video recording. To achieve this outcome the following represent the typical specifications required for a video camera.

- Resolution - 1080 Full HD Recording
  - \(1920 \times 1080\) Pixels
  - Minimum 25 frames per second
- Viewing Angle – Wide: minimum of 145 degrees, preferably 170 degrees.
- GPS - coordinates shall be in World Geodetic System 1984 (WGS84) format or Geocentric Datum of Australia 1994 (GDA94) format, with latitude and longitude in decimal degrees. GPS data to be stored either directly onto the video image or recorded in the file metadata.
- Time and date stamping in Australian Eastern Standard Time (Coordinated Universal Time + 10 hours). Time and date stamping data to be stored either directly onto the video image or recorded in the file metadata.
- Microphone with sufficient clarity to allow the office making the record to verbally record observations at the time of the video capture.
- Data file format to be suitable for reading by standard media players. Camera specific formats which require specific non-standard software to playback are not suitable.

Alternative specifications may be accepted where it can be demonstrated that the outcomes listed above can be achieved.

6 Video recording practice

The following describes the preferred practice for video recording. This practice would provide the strongest level of legal support in defence of any action arising from alleged deficiencies in the TGS.

i. Prior to starting the run the officer undertaking the recording should visually identify themselves and confirm and the required details listed in Appendix A of the MUTCD.

ii. The inclusion of a recognisable landmark or feature that visually confirms the location is also required. This may include a particular unique guidance sign, route maintenance marker, landmark or infrastructure (e.g. a unique bridge design).

iii. With the camera correctly mounted, the driver should then proceed through the site in the same manner as a typical driver behaving legally.

iv. The recording officer should make a verbal note of all of the observations and features that are observed. This may include reading off each of the signs on the TGS for confirmation of their presence on site.
7 Record keeping

All video records shall be retained by the Contractor in accordance with the Limitations of Actions Act 1974, for actions associated with personal injury (including the duration required for any claims to be resolved).

Records shall be provided to the TMR Administrator at the end of each month or upon request. All records should be provided at the completion of the contract. Body text (Arial 10 pt), left aligned (not justified).