

TRAFFIC MONITORING GUIDELINE

1. GUIDELINE OVERVIEW

This guideline has been developed to supplement the contract document that covers the routine traffic surveys and data collection carried out by a NZ Transport Agency Region. These Regional contracts compliment a separate National contract that manages the telemetry sites.

To allow a consistent approach for managing traffic data, the Transport Agency has developed a centralised software system known as the Traffic Monitoring System (TMS). This has been designed for the storage, analysis and reporting of traffic data. The Consultant shall be provided with access to this system in order to upload data. More information is available in the Transport Agency's *Traffic Monitoring of State Highways Manual (SM052)*.

Access to the TMS is via the Internet and this requires that the Consultant possess appropriate computer hardware and software for this purpose.

The Consultant will be provided with a "logon" name and password, a manual, and up to four hours training with a regional administrator on the use of the system.

2. DATA COLLECTION

Appendices A to C contain three examples of graphical representations acceptable to the Client.

Appendix A	Shows a typical count survey loadset graphed in Excel.
Appendix B	Shows a typical classification survey graphed in Excel.
Appendix C	Shows a typical count survey load set graphed in Excel, but contains unusual data patterns requiring explanation. In this instance, it was caused by an earlier fatal road crash about 50km up the highway.

The graphs in Appendices A and B show the traffic patterns at two typical rural sites. The first is a count survey; the second is a classification survey. Both show directional quarter hour volumes for seven days. The classification survey includes extra graphs showing the proportion of all heavy vehicles in the traffic stream (the horizontal line) and the proportions of individual heavy vehicle types (classes) within the heavy vehicle traffic stream. Heavy vehicles are classes 3 – 13.

Except for the amplitude, variations in peak times, weekend versus weekday traffic and proportions of heavy vehicles, a majority of surveys will look similar to these.

The following specific requirements are to be covered in the Contract Scope.

2.1 Classification Count Using Tubes

Where	In accordance with the schedule of site locations.
When	In accordance with the consultants programme.
How	In accordance with the Contract Specification, the current approved Site Safety Plan and the manufactures specification.

2.2 Volume Only Counts Using Single Loops

Where	In accordance with the schedule of site locations.
When	In accordance with the consultants programme.
How	In accordance with the Transport Agency's <i>Installation and Maintenance of Inductive Loops for Traffic Monitoring Specification TNZ P/28</i> , Contract Specification and the current approved Site Safety Plan.

2.3 Classification Count Using Dual Loops

Where	in accordance with the schedule of site locations.
When	In accordance with the consultants programme.
How	In accordance with <i>TNZ P/28</i> , Contract Specification and the current approved Site Safety Plan.

2.4 Telemetry Site Classification Using Tube

Where	In accordance with the schedule of site locations.
When	In accordance with the consultants programme.
How	In accordance with the Contract Specification and the current approved Site Safety Plan. This data will be loaded to TMS as a duplicate loadset, as there will also be continuous data loaded from the National Telemetry Consultant.

2.5 Special Surveys

Where	As requested and as identified.
When	As requested.

2.6 Tube Classified Count on Sites with High Traffic Volumes

When	A site scheduled for a classified count has an ADT >4500 then a separate classifier is required for each direction.
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2.7 Speed Data

Speed data shall be included in the data delivery. This may be uploaded to TMS or requested in a raw data format.

Provision of Raw Data Files

All raw data collected prior to summarising for TMS upload shall be stored by the Consultant and delivered to the Client annually on CD or DVD at the end of each calendar year.

2.8 Spatial Coordinates

Spatial coordinates for the traffic counting control box, temporary or permanent, shall be included in the data delivery. This shall be delivered in excel format. The equipment being used shall be capable of achieving an accuracy of +/- 5m. The coordinate provided shall be in a NZMG format, as follows: Northing, Easting (7 digit in metres) and Elevation (height above mean sea level in metres). The coordinate shall be delivered within the first 12 months of the contract. Amended coordinates are required through the contract for any new or amended site locations, using the site amendment form within TMS.

3. RELEVANT EXPERIENCE

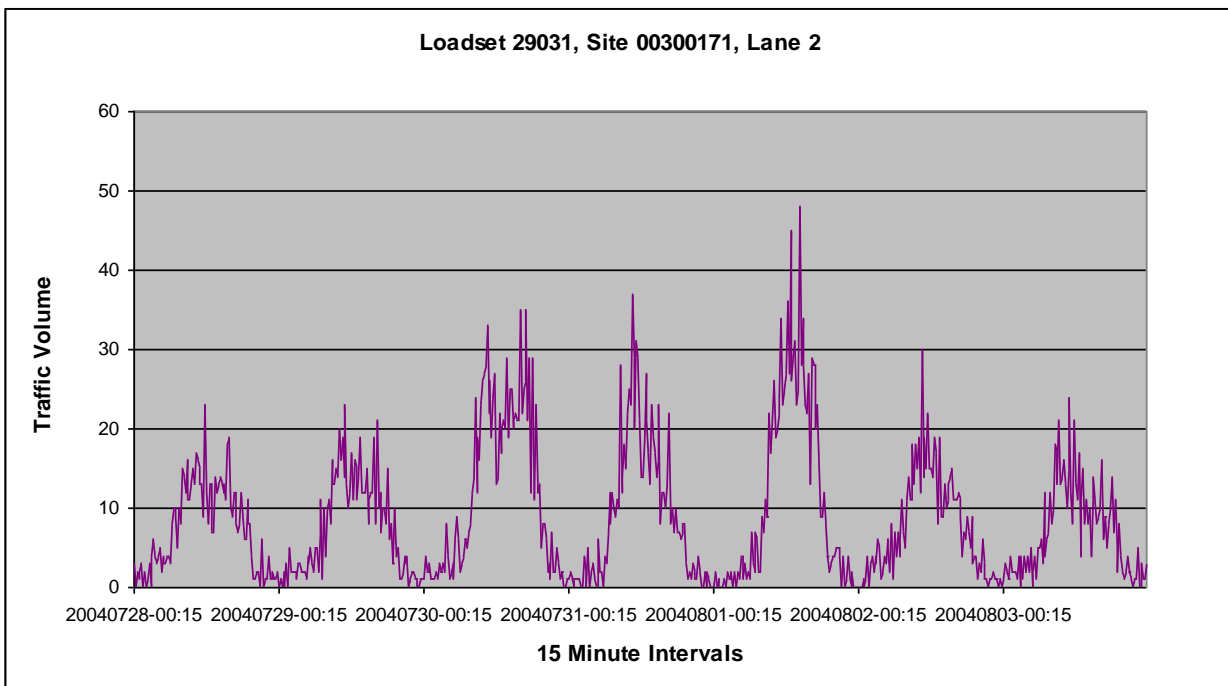
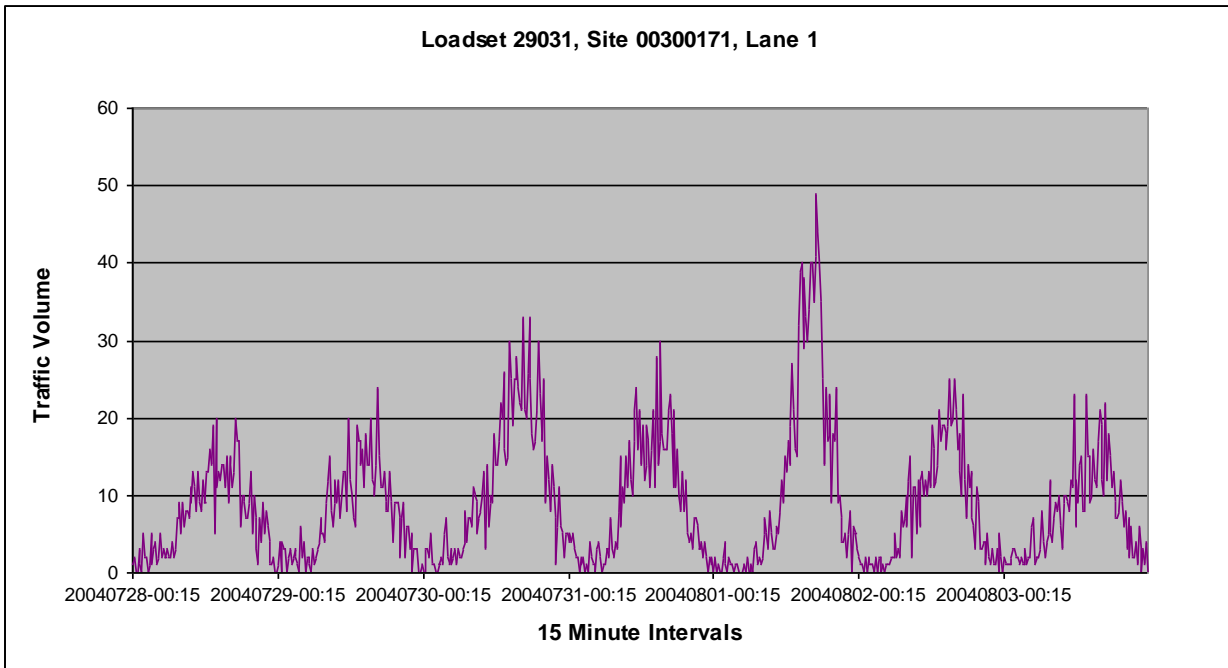
The sub-attribute Relevant Experience in the Tendering Information should be reviewed as part of the tender document preparation. Three recent projects may be more suitable than the 5 as in the standard document. This is justified due to the specialist nature of these contracts.

3.1 Count Frequency at Non-Continuous Sites

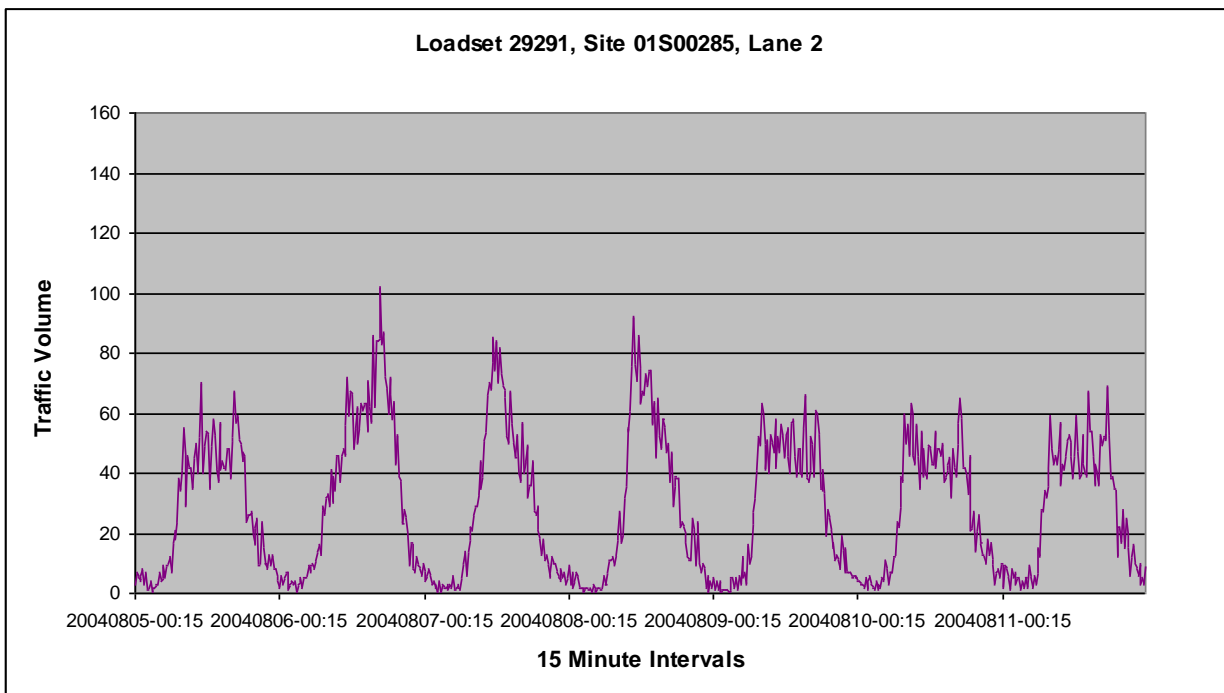
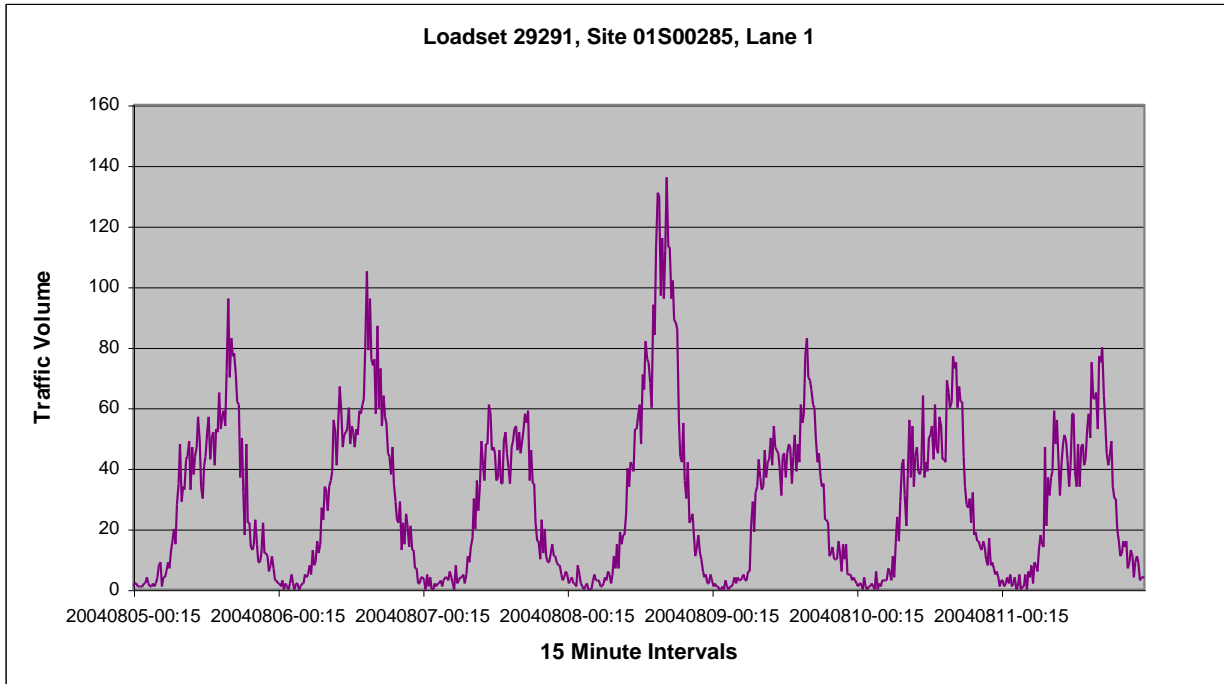
The tender preparation team should ensure that the requirements of the Transport Agency *Traffic Monitoring for State Highways Manual (SM052)* are achieved, relating to count frequency. This should include:

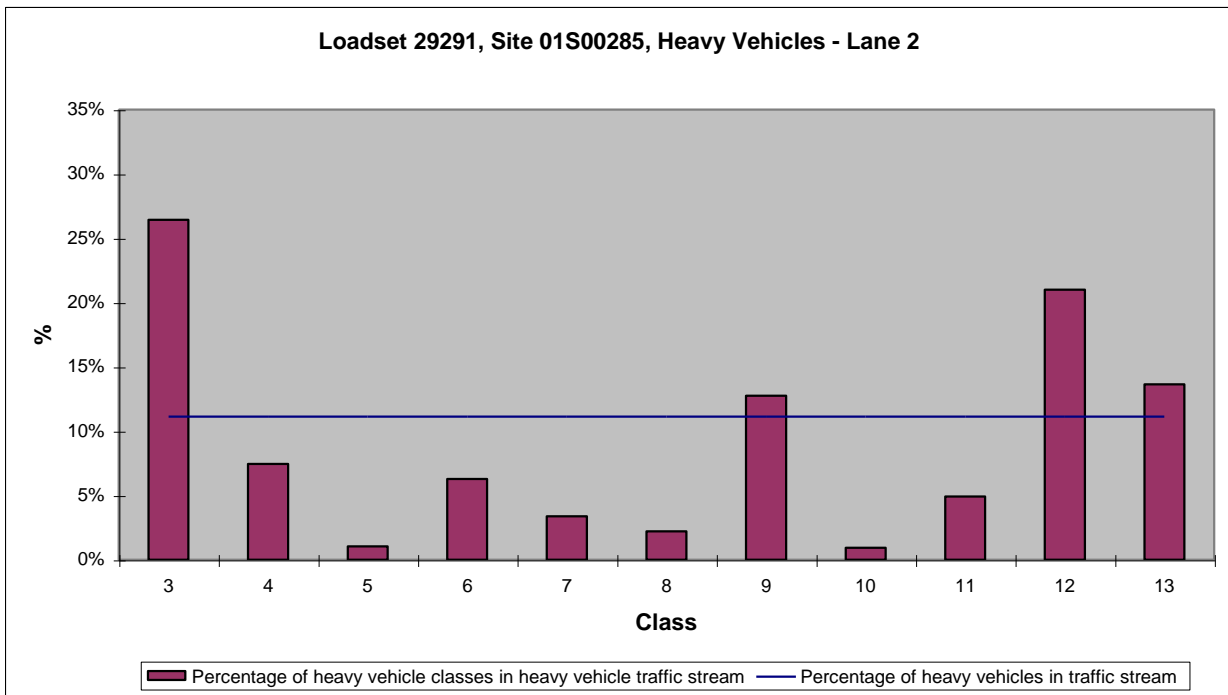
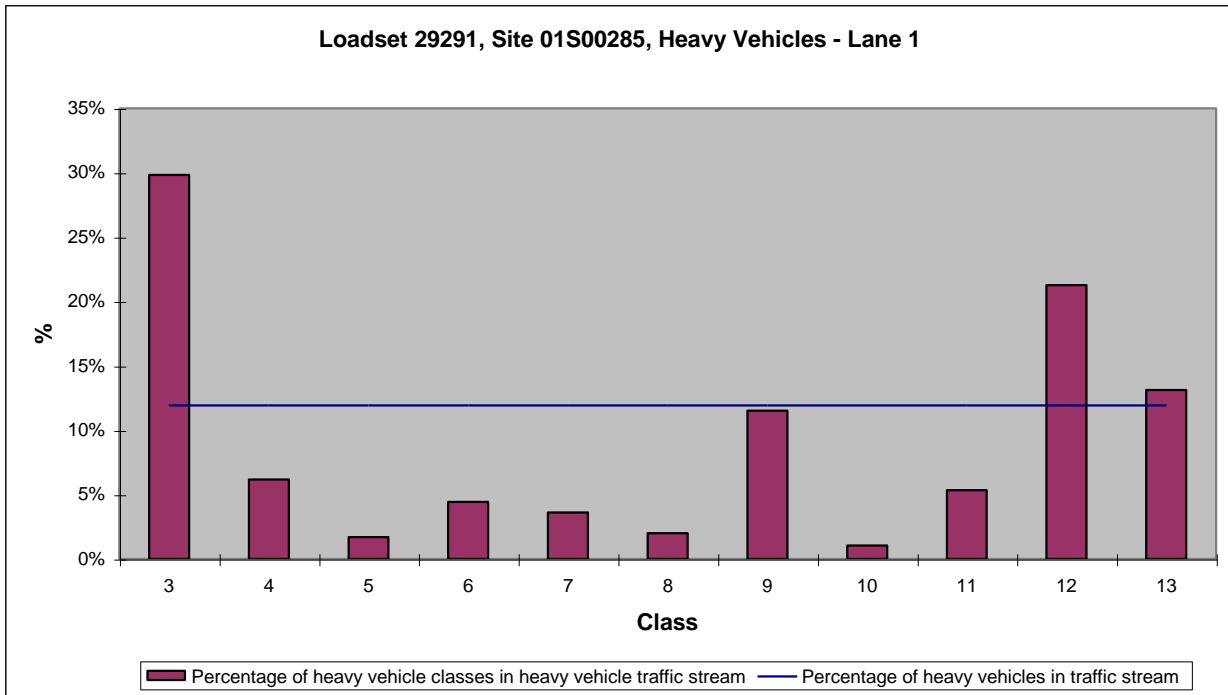
AADT	COUNTS PER YEAR (MINIMUM)	CLASSIFICATION PER YEAR (MINIMUM)
<1000	4 separate weeks	1 week
>1000	2 separate weeks	1 week

APPENDIX A



APPENDIX B





APPENDIX C

