

***Traffic Standards and Guidelines***  
1998 Survey

***RSS 9***

**Safety Management Systems**



**October 1998**

ISSN 1174-7161  
ISBN 0-478-20642-9

## Survey of Traffic Standards and Guidelines

The Land Transport Safety Authority (LTSA) is a stand-alone authority responsible for promoting safety in Land Transport at reasonable cost. Part of its function is to “monitor adherence to safety standards within the land transport system”.

To support this objective the regional engineering sections of the Land Transport Safety Authority undertake a survey programme that assesses the implementation effectiveness of various safety standards by road-controlling authorities.

The purpose of these surveys is to:

- assist and advise road controlling authorities on the implementation of selected traffic standards and guidelines that affect traffic safety;
- measure the uptake of standards and guidelines by road controlling authorities;
- provide a national summary of the uptake and compliance with standards and guidelines and report findings to road controlling authorities and other interested parties; and
- identify changes to improve standards, guidelines or traffic rules.

The surveys are usually carried out in two parts:

- Part 1 uses a questionnaire to look at the systems and procedures a road controlling authority has in place to deliver on the standard.
- Part 2 uses a field survey to measure where possible the actual delivery from the users viewpoint. It essentially provides a snapshot of road safety delivery at the date of the survey.

This report presents the national results of the latest of these surveys

I believe you will find the information of value and will be able to use it to improve road safety in New Zealand.

Please contact the Regional Engineer at the LTSA's Auckland, Wellington or Christchurch Office if you would like further information or assistance with implementing traffic standards or guidelines.



Rob Martyn,  
General Manager, Operations



## Executive Summary

### Introduction

- Interview surveys were conducted in May 1998 at a sample of 32 road controlling authorities. This included four separate offices of Transit New Zealand. The surveys covered three topics:
  1. Traffic Control at Roadworks.
  2. Temporary Speed Limits at Roadworks.
  3. Safety Management Systems.
- This report details the results of the survey of Safety Management Systems (SMS). Companion reports detail the results of the other two safety areas.
- The purpose of the survey was to gain some understanding of the current practices amongst road controlling authorities in relation to Asset Management Plans, safety documentation and quality assurance all of which have potential utilisation in Safety Management Systems. No universally accepted published guidelines or standards currently exist for Safety Management Systems.

### Results

- The majority (30 or 94%) of road controlling authorities ('RCA') surveyed have prepared or are preparing an Asset Management Plan. There is considerable variation in the content of the Plans between various authorities.
- Only 11 (34%) of RCAs surveyed have a single document that defines their road safety activities. Many of the other 21 are including these in their Asset Management Plans and/or District Plans.
- With the exception of the Transit New Zealand offices with their *Standards and Guidelines Manual*, only 5 (18%) of the remaining 28 RCAs surveyed had a single document specifying the standards, guidelines and codes of practice they had adopted.
- Fourteen (44%) RCAs surveyed have been, or are working towards being, registered for Quality Assurance.

## **Discussion**

- It is apparent that most authorities are preparing Asset Management Plans. The Plans are generally being used to meet the financial requirements of Part VIIA of the *Local Government Act 1974* (as inserted by the *Local Government Amendment Act (No3) 1996*)
- An Asset Management Plan sometimes includes statements regarding the authority's policies on road design and management. However, even when this is done, it does not appear that all of the policies are included in the Asset Management Plan.
- Almost half of the respondents either had or were working towards becoming Quality Assured. Most authorities have some requirement for those outside organisations working for them to be Quality Assured.

## **Recommendations**

- RCAs should specify the documents to be utilised for the provision of safe roads within their area.
- RCAs should consider the suitability of the control they currently have over the standards and guidelines that are applied to their roads.

## Contents

	Page
Executive Summary	v
1. Introduction	1
2. Purpose of the Surveys	1
3. Methodology	2
3.1 Sample Selection	2
3.2 Interview Surveys	2
3.3 Field Surveys	2
4. Results	2
4.1 Interview Surveys	2
4.1.1 Asset Management Plans	2
4.1.2 Single Road Safety Activities Document	3
4.1.3 Specification of Standards, Guidelines and Codes of Practice in a Single Document	4
4.1.4 Quality Assurance	4
4.1.5 Participation in Further Safety Management Practices Surveys	4
5. Discussion	5
6. Recommendations	6
Appendix 1	7





## 1. Introduction

In May 1998 the Regional Offices of the Land Transport Safety Authority (LTSA) in conjunction with the Regional Offices of Transfund New Zealand conducted surveys of two standards and guidelines in 32 road controlling authorities ('RCA'). The 32 RCAs included four regional offices of Transit New Zealand and 28 territorial local authorities.

The standards and guidelines surveyed were:

- Traffic Control at Road Works: *Working on the Road: A Handbook for Temporary Traffic Control and Safety at Roadwork Sites* ['Working on the Road'] TNZ 1993, and *Specification for Temporary Traffic Control* TNZ G1: May 1996, ['TNZ G1']
- Temporary Speed Limits: *Setting temporary Speed limits at Road Works*, LTSA Draft Guidelines March 1996
- Safety Management Systems: No universally accepted guidelines or standards currently exist for this topic.

This report describes the procedures for the survey of Safety Management Systems and presents the results.

## 2. Purpose of the Surveys

The purpose of the survey on Safety Management Systems was to:

- determine what the current practices are in RCAs in anticipation of the Safety Management System approach to road management becoming more widely used.
- determine the status of Asset Management Plans (AMP) around the country.
- find out how many Asset Management Units are Quality Assured.
- make recommendations on how RCAs may be assisted to prepare their own Safety Management System and Asset Management Plan.

A copy of the survey form used is attached in Appendix 1.

### 3. Methodology

#### 3.1 Sample Selection

A sample of 28 territorial local authorities and four Transit New Zealand Regional Offices were chosen for inclusion in the survey. The sample was chosen with emphasis on authorities not included in the previous years' surveys.

#### 3.2 Interview Surveys

Interview surveys were conducted with representatives in each authority. Survey forms were sent in advance to allow time to research answers if necessary. Questions centred on the stage that authorities were at in preparing their Asset Management Plan, whether or not they had begun preparing for Safety Management Systems and whether or not authorities were working toward or had achieved Quality Assurance. Respondents were also asked if they would participate in more in depth surveys for Safety Management System in the future.

#### 3.3 Field Surveys

No formal field surveys were carried out on this topic.

### 4. Results

#### 4.1 Interview Surveys

##### 4.1.1 Asset Management Plans

It should be noted that there is no legal requirement for road controlling authorities to prepare an Asset Management Plan, but one can be prepared as a means of creating a financial plan which is a requirement of Part VIIA of the *Local Government Act 1974* (as inserted by the *Local Government Amendment Act (No3) 1996*).

Respondents were asked at what stage was the preparation of their Asset Management Plan.

- 15 (47%) stated that their Plans were complete.
- 15 (47%) stated that their Plans had been started but were not yet complete.
- 2 (6%) stated that they had not begun to prepare a Plan.

Respondents were asked if there was a separate section in their for the roading asset.

- 26 (81%) stated that the Plan was either only for the roading asset or had a separate section.
- 3 (9%) stated that there was no separate section.
- 3 (9%) stated that they did not know yet whether or not there would be a separate section for the roading asset.

From the comments received, it was apparent that there was a substantial variation in the Plans that had been prepared. Some authorities had preferred to use a high level document with little detail while other authorities had created a very detailed document.

Several authorities mentioned that they will use a process of annual update of the information in the Plan and inclusion of new items.

#### 4.1.2 Single Road Safety Activities Document

In response to the question whether or not the RCA had a single document defining the authorities road safety activities:-

- 5 (16%) indicated they did have a single document defining their road safety activities.
- 6 (19%) indicated they had a draft document or that it was being prepared.
- 21 (66%) indicated they did not have a single document.

Many of the territorial local authorities not having a single defining document advised that a series of reports have been presented to their Council specifying policies on such issues as delineation, seal widths, road marking, etc. Some conceded that this system was not ideal in that there were significant gaps in their policies; for example, they had no policy on safety audit.

Transit New Zealand respondents mentioned that their Head Office was preparing a draft Safety Management Systems document to be released soon.

Some of the authorities who had not prepared a single document believed that their Asset Management Plan covered many of the aspects of the Safety Management System and that annual updates to the Asset Management Plan would see new policies and guidelines included.

#### 4.1.3 Specification of Standards, Guidelines and Codes of Practice in a Single Document

In response to the question whether or not the authority had the standards, guidelines and codes of practice it has adopted for its roading network specified in one document:-

- 10 (31%) indicated they did specify their standards, guidelines and codes of practice in a single document.
- 22 (69%) indicated they did not have a single document to specify their standards, guidelines and codes of practice.

The most detailed and complete example of a single document is Transit New Zealand's *Standards and Guidelines Manual*, Transit NZ, July 1998.

Many territorial local authorities without a single document use a combination of Austroads design guides, guidelines published by LTSA, New Zealand Standards and other documents, but have not prepared a single list of those adopted. Comments received suggested this is because not all of the standards used by an authority have been formally adopted by their Council or were locally amended versions of the published documents.

#### 4.1.4 Quality Assurance

Quality Assurance for the road controlling authority is the documentation of the policies and procedures that are followed when making decisions. In itself, an Safety Management System is essentially a chapter of a Quality System.

Respondents were asked whether the authority, its Business Unit or its Local Authority Trading Enterprise responsible for asset management was Quality Assured. The replies indicated:-

- 6 (19%) of respondents were Quality Assured.
- 8 (25%) of respondents were working towards becoming Quality Assured.
- 18 (56%) of respondents were not Quality Assured and are not working towards becoming Quality Assured.

Most of the authorities had requirements for the contractors or consultants who work for them to have some form of Quality Assurance in place.

#### 4.1.5 Participation in Further Safety Management Practices Surveys

The respondents were asked whether or not they would be prepared to participate in more in-depth surveys of safety management practices. The responses indicated:-

- 23 (72%) would be prepared to take part in future surveys.
- 7 (22%) would not be prepared to take part in future surveys.
- 2 (6%) gave no answer to this question.

Of those respondents who agreed to take part in future surveys, comments included that they would only be interested in taking part if the survey would add value to their own practices or if their authority became legally responsible for preparing and maintaining a Safety Management System.

## 5. Discussion

- It is apparent that most authorities are making attempts to prepare Asset Management Plans. The Plans are generally being used to meet the financial requirements of *Part VIIA of the Local Government Act 1974*.
- The Asset Management Plan sometimes includes statements regarding the authority's policies on road design and management. However, even when this is done, it does not appear that all of the policies are included in the Plan. Some policies remain informal with the authority's official attitude to them being unclear to those expected to implement them.
- Almost half of the respondents either had or were working towards becoming Quality Assured. It is understood that many authorities have looked at Quality Assurance in the past and dismissed it as being inappropriate for their organisation. However, most authorities have some requirement for those outside organisations working for them to be Quality Assured.
- Nine respondents either did not reply or declined to take part in further surveys of safety management practices. Many of these were reluctant to participate because they had no Safety Management System and felt they may not be able to contribute effectively. Others would need to know what the basis of future surveys was before making a commitment. It would appear that documenting their safety management practices is not considered to be a core part of the work of some authorities at this time. It may be because Safety Management Systems have not yet been given any official status.

## **6. Recommendations**

- RCAs should specify the documents to be utilised for the provision of safe roads within their area.
- RCAs should consider the suitability of the control they currently have over the standards and guidelines that are applied to their roads.

## Appendix 1

### Safety Management Systems Questionnaire, 1998

Road Controlling Authority \_\_\_\_\_

Person(s) Interviewed \_\_\_\_\_

Contact Phone No. \_\_\_\_\_

Date \_\_\_\_\_

Interviewer \_\_\_\_\_

QUESTIONS
<p>1. <i>The Local Government Act now requires Local Authorities to have an Asset Management Plan. Has your Asset Management Plan been completed? (Yes/No) and, if yes, does it have a section for managing the roading asset. (yes/no)</i>  <i>Comments:</i></p>
<p>2. <i>Does your council have a single document that defines your road safety activities? (This may be called a safety management system or a road safety plan and is likely to contain the council's policies and procedures in respect of road safety). (yes/no)</i>  <i>Comments:</i></p>
<p>3. <i>What documentation does your Council have that specifies the standards, guidelines and codes of practice that it uses on its roading network?</i>  <i>Comments:</i></p>
<p>4. <i>Is the council itself, its Business Unit or its LATE (whichever applies) Quality Assured? (Yes/no)</i>  <i>Comments:</i></p>
<p>5. <i>Would you be prepared to participate in a survey of safety management practices undertaken jointly by LTSA &amp; Transfund? The survey would enable best practice to be established. (Yes/No) If so, whom should we contact for copies of documentation and further information?</i>  <i>Comments:</i></p>





**Road Safety Survey Series**

RSS 1	Traffic Signal Light Output	1995/96
RSS 2	Street Lighting	1995/96
RSS 3	Treatment of Slip Lanes at Traffic Signals	1995/96
RSS 4	Stop and Give Way controls at Intersections	1996/97
RSS 5	Advisory Speed Signs	1996/97
RSS 6	Pedestrian Crossings	1996/97
RSS 7	Temporary Speed Limits	1998
RSS 8	Traffic Control at Road Works	1998
RSS 9	Safety Management Systems	1998

These reports may be purchased from the Regional Engineer, Land Transport Safety Authority in Auckland (Private Bag 92-515), Wellington (PO Box 27-249) or Christchurch (PO Box 13-364) at a cost of \$10 each including GST.