



Transfund General Circular No. 04/05

Road Safety Audit Policy and Procedures

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Circulation	All Road Controlling Authorities	<i>For Action</i>
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	Local Government NZ	<i>For Information</i>
	IPENZ Transportation Group	<i>For Information</i>
	Land Transport Safety Authority	<i>For Information</i>

Purpose

To advise land transport organisations of Transfund's new road safety audit policy and how it will be implemented. This follows Transfund's review of road safety audit policy and procedures, assisted by an industry working party, and the feedback from an industry consultation exercise.

What is Road Safety Audit?

In this General Circular, the words "Road Safety Audit" apply to the procedure for the auditing of project development. It does not apply to auditing of the existing network or specialist applications, such as traffic control at roadwork sites.

'Road Safety Audit' (RSA) is an internationally used term to describe an independent review of a project to identify road safety concerns. The objectives of RCAs are:

- to identify potential road safety concerns for all road users and others affected by a project

- to ensure that measures to eliminate or reduce the concerns are considered fully.

A RSA is a formal examination of a road or traffic project, or any other type of project which affects road users, carried out by an independent, competent team who identify and document road safety concerns. RSAs can be applied to all projects, not just those addressing road safety problems.

Stages of Audit

RSAs are typically undertaken at the following key stages of a project's development:

- Feasibility / Concept Stage
- Preliminary Design / Scheme Assessment Stage
- Detailed Design Stage
- Pre-Opening / Post Construction Stage

However, these stages should not be seen as rigid. There will be occasions where the project manager will consider the need to conduct *additional* RSAs for critical milestones, temporary traffic management during site investigations/construction and design and build projects where there may be a need to conduct them progressively throughout the design process.

In addition, it is recognised that smaller projects may not go through all these stages. In this case the audit regime needs to match the project's actual development.

Transfund Board Resolutions

The Transfund New Zealand Board has resolved that:

- road safety audit is to be a condition of funding for new projects started after 1 July 2004, subject to the assessment against the criteria set out below;
- safety auditors shall be appointed separately from the professional services contract for project development for new projects started after 1 July 2004; and
- Transfund will encourage road safety sector of the land transport industry to develop its own register of safety auditors and to monitor the outcomes of safety audits to see if appropriate auditors are being employed.

The Policy

The new Transfund policy is as follows:

- RSA shall be conducted, at the four key stages listed above (feasibility, preliminary design, detailed design and pre-opening) for all new projects on state highways and local roads unless the project manager considers there is reason not to do so. The project manager must give full consideration to the assessment criteria outlined below.

- The project manager may choose to do more safety audits than is prescribed in the four stages.
- Smaller projects will not always follow all the development stages envisaged in the four stages of audit. In these circumstances the stages of audit shall match the project's actual development stages.
- If the project manager considers there is justification for not conducting an RSA then he/she must complete the "Exception Declaration" and keep it on file for audit purposes.
- Safety Auditors must be totally independent of the project team and must be appointed separately from the professional services contract for the project development.
- The policy covers all new projects started after 1 July 2004. Projects already started are not covered, though RSA is strongly recommended for all projects. In this context "started" means "started the planning process" not "started construction".

Assessment Criteria

The purpose of any assessment criteria is to ensure that RSA is applied to the projects that have the potential to create road safety problems.

The assessment criteria are appended to this General Circular. They comprise 3 parts:

- Part A: [Transfund's Policy](#)
- Part B: [The RSA Exception Declaration](#)
- Part C: [The checklists master](#)

The assessment criteria form appendix 1 of Transfund's revised RSA guideline.

The checklists are just a guide

Any checklist cannot capture all the nuances of a project. The checklists provide guidance to help the project manager come to a decision; they do not replace sound engineering judgement. Experienced project managers will use the master checklists but inexperienced project managers will need to refer to the detailed checklists that are based on the Austroads checklists. The master checklists reflect the detailed checklists.

Road Safety Audit Guideline

The current RSA guideline is the Transit 1993 "Safety Audit Policy and Procedures". An industry working party has helped Transfund to revise Transit's 1993 guideline. The revised guideline will be published in due course, but in the meantime the Transit 1993 guideline should be used. The revision has not changed the safety audit process, it has merely added more advice.

The revised manual will be published in hard copy and will also be available on Transfund's Website.

Your Action

Please note the new policy and be prepared to implement it for new projects starting after 1 July 2004.

Attachments

A copy of the criteria that are designed to help the project manager determine whether a RSA is required.

Enquiries

For further information contact Ian Appleton at Transfund's National Office in Wellington phone (04) 916 4271 or email ian.appleton@transfund.govt.nz

Next Steps

Transfund will continue to promote RSA and its new RSA policy.
Transfund will publish the revised RSA guideline and put it on its Website www.transfund.govt.nz

In conjunction with this, Transfund will develop and deliver refresher training courses in road safety audits. The main training for RSA remains the Road Safety Engineering Workshop held annually.

Transfund will be approaching the road safety sector of the land transport industry to develop its own register of road safety auditors.

Bob Alkema
Operations Manager

APPENDIX 1: (TO TRANSFUND'S REVISED RSA MANUAL)

TRANSFUND RSA POLICY REQUIREMENTS

PART A TRANSFUND ASSESSMENT CRITERIA

**PART B ROAD SAFETY AUDIT EXCEPTION
DECLARATION FORM**

PART C CHECKLIST MASTER

Copies of Parts A, B and C are also located in the guideline rear pocket.

TRANSFUND RSA POLICY REQUIREMENTS

PART A TRANSFUND ASSESSMENT CRITERIA

Transfund Policy (from 1 July 2004) requires that all phases of projects (totally or partly funded by Transfund) be subject to a road safety audit, **unless** the client project manager declares that a road safety audit is not warranted.

In coming to a decision that a road safety audit is not warranted, the project manager will have had regard to the relevant sections of this Road Safety Audit Procedures for Projects Guideline and the checklist master – found in Section 9 of the guidelines and attached to the Road Safety Audit Exception Declaration Form. Where more detailed consideration is appropriate the project manager can refer to the detailed checklists contained separately in the rear pocket of the document.

If a road safety audit is deemed not to be warranted then the project manager must complete the “Road Safety Audit Exception Declaration Form (Part B). This form will be placed on the project file so that it can be the subject of Transfund procedural audit.

A copy of the Road Safety Audit Exception Declaration Form (together with this criteria and the checklist master) is inserted, loose leaf, in the document rear pocket for ease of reproduction. It can also be accessed electronically from the Transfund website: www.transfund.govt.nz



TRANSFUND RSA POLICY REQUIREMENTS

**PART B ROAD SAFETY AUDIT EXCEPTION
DECLARATION**

Project Name:

Project Stage:

RCA:

Brief Description of Project (including location):

Having checked the above project with reference to the relevant road safety audit sections of Road Safety Audit Procedures for Projects guideline and checklist master attached*, I consider that the proposals will not have a marked effect upon the safety of road users over a significant period. Therefore, I consider that an independent road safety audit is not required.

Signed: (Project Manager)

Name (print):

Tel No.: **Date:**/...../.....

* Project Manager can also refer to the detailed checklists (rear pocket of document)

TRANSFUND RSA POLICY REQUIREMENTS

PART C - CHECKLIST MASTERS

Checklist Master 1: Feasibility/Concept Stage Audit

1.1 General Topics

1. Scope of the project; function; traffic mix
2. Type and degree of access to property and developments
3. Major generators of traffic
4. Staging requirements
5. Future works
6. Wider network effects

1.2 Design Issues (General)

1. Route choice
2. Impact and continuity with the existing network
3. Broad design standards (including Design Vehicle)
4. Design speed
5. Design volume and traffic characteristics

1.3 Intersections

Checklists are only an aid.

Caution is recommended that they do not replace thorough and complete road safety consideration.

Checklist Master 2: Scheme/Preliminary Design Stage Audit

2.1 General Topics

1. Changes since previous audit
2. Drainage
3. Climatic conditions
4. Landscaping
5. Services
6. Access to property and developments
7. Adjacent developments
8. Emergency vehicles and access
9. Future widening and/or realignments
10. Staging of the scheme
11. Staging of the works
12. Maintenance
13. Hazard Management

2.2 Design Issues (General)

1. Design standards
2. Typical cross sections
3. The effect of cross sectional variation
4. Roadway layout
5. Shoulders and edge treatment
6. Effect of departures from standards or guidelines

2.3 Alignment Details

1. Geometry of horizontal and vertical alignment
2. Visibility; sight distance
3. New/existing road interface
4. 'Readability' of the alignment by drivers

2.4 Intersections

1. Visibility to and visibility at intersections
2. Layout, including the appropriateness of type
3. Readability by drivers

2.5 Special Road Users

1. Adjacent land equipment (e.g. tractors)
2. Pedestrians
3. Cyclists
4. Motorcyclists
5. Equestrians and stock
6. Freight transport
7. Public transport
8. Road maintenance vehicles

2.6 Signs and Lighting

1. Lighting
2. Signs
3. Marking and delineation

2.7 Traffic Management

1. Traffic flow and access restrictions
2. Overtaking and merges
3. Rest areas and stopping zones
4. Construction and operation

2.8 Additional Questions to be Considered for Development Proposals

1. Horizontal alignment
2. Vertical alignment
3. Parking provision
4. Servicing facilities
5. Signs and markings
6. Landscaping
7. Traffic management

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Caution is recommended that they do not replace thorough and complete road safety consideration.

Checklist Master 3: Detailed Design Stage Audit

3.1 General Topics

1. Changes since previous audit
2. Drainage
3. Climatic conditions
4. Landscaping
5. Services
6. Access to property and developments
7. Emergencies, breakdowns, emergency and service vehicle access
8. Future widening and/or realignments
9. Staging of the scheme
10. Staging of the work
11. Adjacent developments
12. Stability of cut and fill
13. Skid resistance

3.2 Design Issues (General)

1. Geometry of horizontal and vertical alignment
2. Typical cross sections
3. Effect of cross sectional variation
4. Roadway layout
5. Shoulders and edge treatment
6. Effect of departures from standards or guidelines
7. Visibility and sight distance
8. Environmental treatments

3.3 Alignment Details

1. Visibility, sight distance
2. New/existing road interface
3. 'Readability' of the alignment by drivers
4. Detail of geometric design
5. Treatment at bridges and culverts

3.4 Intersections

1. Visibility to and visibility at intersections
2. Layout
3. Readability by drivers
4. Detailed geometric design
5. Traffic signals
6. Roundabouts
7. Other intersections?

3.5 Special Road Users

1. Adjacent land equipment (e.g. tractors)
2. Pedestrians
3. Cyclists
4. Motorcyclists
5. Equestrians and stock
6. Freight transport
7. Public transport
8. Road maintenance vehicles

3.6 Lighting, Signs, Pavement Marking and Delineation

1. Lighting
2. Signs
3. Pavement marking and delineation

3.7 Physical Objects

1. Median barriers
2. Poles and other obstructions
3. Safety barriers
4. Bridges, culverts and causeways/floodways

3.8 Additional Questions to be Considered for Development Proposals

1. Horizontal alignment
2. Vertical alignment
3. Parking provision
4. Servicing facilities
5. Signs and markings
6. Landscaping
7. Traffic management

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Checklist Master 4: Post Construction Stage Audit

4.1 General Topics

1. Changes since previous audit; translation of design into practice
2. Drainage
3. Climatic conditions
4. Landscaping
5. Services
6. Access to property and developments
7. Emergency vehicles and access
8. Batter treatment
9. Shoulders and edge delineation
10. Signs and markings
11. Surface treatment; skid resistance
12. Contrast with markings
13. Roadside hazards
14. Natural features
15. All road users
16. Speed management

4.2 Alignment Details

1. Visibility; sight distances
2. New/existing road interface
3. Readability by drivers
4. Bridges and culverts

4.3 Intersections

1. Visibility of intersection
2. Visibility at intersection
3. Readability by drivers
4. Traffic signals
5. Roundabouts and approach islands

4.4 Special Road Users

1. Adjacent land equipment (e.g. tractors)
2. Pedestrians
3. Cyclists
4. Motorcyclists
5. Equestrians

4.5 Lighting, Signs, Pavement Marking and Delineation

1. Lighting
2. Signs
3. Pavement marking and delineation

4.6 Physical Objects

1. Median barriers
2. Poles and other obstructions
3. Safety barriers

4.7 Operation

1. Operation
2. Traffic management
3. Temporary traffic control/management

Checklists are only an aid.

Caution is recommended that they do not replace thorough and complete road safety consideration.