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1.0 Introduction

District plans have the potential to contain planning instruments that may provide for activities that have direct effects on road safety. Conversely, district plans also have the ability to provide mechanisms to address these effects. Given that the preparation of district plans are at different stages of development throughout New Zealand, it is possible for input to be made into district plans and the planning process through best practice guidelines.

Councils have the ability to use best practice guidelines for a number of purposes e.g. as part of the assessment criteria for assessing resource consents, or to flag that a particular development project needs to be scrutinised by traffic engineers to determine the actual and potential effects on the roading network.

Transfund New Zealand commissioned Tonkin & Taylor Ltd to undertake a project to explore the need for best practice guidelines for road safety provisions in district plans and then develop the guidelines, if they were deemed necessary.

2.0 Objective of the project

“To undertake a scoping exercise of District Plans and documents available in relation to road safety and traffic management with the view to the provision of advice on the development best practice guidelines.”

These guidelines would then be made available to local authorities to be used when considering the effects of developments on the roading infrastructure.

This would enable Transfund New Zealand, through the Resource Management Act 1991, to help to ensure district plans or other planning mechanisms (such as internal procedure guidelines) contain provisions that enable development projects to be assessed in terms of a set of best practice guidelines to provide for greater road safety.

3.0 Who's involved

The driver within Transfund is Ian Appleton, Safety Team Leader.

Transfund set up an industry working party to oversee the project. The working party comprises of representatives of Local Government (both engineers and planners), Transit New Zealand, the Land Transport Safety Authority, and consultants.

The work undertaken by Tonkin & Taylor Ltd has been principally done by Chris Hansen, Senior Resource Management Planner, Honor Clark, Senior Resource Management Planner and Michelle Grinlinton-Hancock, Resource Management Planner.

4.0 Scope of the project

The development of the guidelines is occurring as a three-stage process.

Stage 1 involved gathering information and undertaking research as follows:

- Identify and examine existing guidelines and/or texts available in New Zealand
- Review a number of district plans (as determined by the working group) to identify those that are deficient in dealing with issues in regard to road safety

- Collate the relevant parts of those district plans that are considered to be “good”
- Assess alternative methods to the use of best practice guidelines
- Report back to the working group on the outcome of Stage 1 – report entitled “Road Safety & Efficiency Information and District Plan Provisions” Report No: OG/0207/16S Transfund New Zealand

Stage 2 involves the development of the draft guidelines as follows:

- Undertake a more detailed assessment of the issues already addressed in District Plans we reviewed as part of Stage 1, looking at whether the issues can be broken down into 50km / 70km / 100km speed area, urban / rural issues etc
- Consult with the working group to gather input of the key issues identified from the District Plans we reviewed
- Undertake a more detailed assessment of examples from past and current considerations
- Using the outcomes of Stage 1 and the further work in Stage 2 develop a draft best practice guideline to be used by Councils to assist with assessing resource consent applications and for use when preparing and reviewing district plans i.e. permitted activity standards, assessment criteria and activity status that can be inserted into or referenced by District Plans.

Stage 3 will involve consultation and the preparation of the final document and include the following tasks:

- Consult with the working group and key stakeholders to gather input on the draft best practice guidelines
- Finalise best practice guidelines
- Circulate to local authorities a copy of the best practice guidelines for use when assessing consent applications and preparing/reviewing district plans
- Prepare a monitoring strategy to review the implementation of the guidelines

5.0 Existing documentation examined

The following road safety documents were reviewed:

Transit New Zealand documents:

- “National State Highway Strategy”
- “Planning Policy Manual” (December 1999) superseded “Highway Planning Under the Resource Management Act 1991”
- “Guidelines for Planting for Road Safety” (1991)

Land Transport Safety Authority documents:

- “Road Safety In Effects Based Planning” – A draft discussion document intended to compliment “Highway Planning Under the Resource Management Act 1991”
- “Advertising Signs & Road Safety: Design & Location Guidelines” (1993)

Transfund New Zealand documents:

- Scoping Study: Roading, Land Use Developments and Road Safety Audits” (2000)

A report commissioned by Transit New Zealand “Investigation of Factors Affecting Crash Rates on State Highways at Rural Accesses” was also reviewed.

6.0 Review of District Plans

The choice of plans to review was selected to ensure that the plans used were:

- Geographically distributed around New Zealand
- Included Councils with a range of focus. i.e. from small Councils with a predominantly rural focus to those Councils in large cities.

To achieve this, it was decided that the Councils chosen would represent the following locations and characteristics:

- 4 Councils with a rural/urban focus (2 North Island, 2 South Island)
- 4 Councils with a rural focus (2 North Island, 2 South Island)
- 3 Councils with a large city focus (2 North Island, 1 South Island)
- 2 Unitary Authorities (1 North Island, 1 South Island)

The following plans were used in assessing how road safety / traffic management is addressed, and whether they include any provisions in relation to the effects that adjoining land uses can have on roads and road safety:

- Kapiti Coast District Plan
- Tauranga District Plan
- Timaru District Plan
- Tasman District Plan (Unitary Authority)
- Stratford District Plan
- Far North District Plan
- Buller District Plan
- Central Otago District Plan
- Wellington City Plan
- Hamilton City Plan
- Christchurch City Plan
- Nelson Resource Management Plan
- Gisborne District Plan

Each of the plans was scoped to determine if road safety/traffic management had been identified as an issue and whether any objectives, policies and methods resulted from the identification of issues. In addition to these provisions, the Anticipated Environmental Results (AER) and monitoring sections of plans were also scoped. Where section 32 reports were available, these were also reviewed. A full summary of the plans was included in matrix format in Appendix 3 to the Stage 1 report.

The key issues identified in plans were:

- traffic access effects on-flow and the subsequent effects on traffic safety
- effects of land uses on the efficiency and safety of the transport network
- the need to protect infrastructure from the effects of other activities
- the roading network is used by a variety of users

There was general recognition through plans that land uses adjacent to roading networks impact on the safety and efficiency of those networks, and the effects generated when there is a variety of users and the way in which they each use the roading network may cause conflicts.

The main focus of plan objectives were:

- roading networks that provide for different users safely and efficiently
- the minimisation of conflicts between land uses and the roading network
- ensuring that the effects of parking are minimised
- the maintenance of safe and efficient access
- the location of access points not to affect the safe and efficient functioning of the road

Generally, the policies tended to paraphrase the Resource Management Act.

The methods used to implement plan provisions and how frequently they were used were:

The most frequent methods used were:

- Zone rules
- Roading hierarchy

The next most frequent methods were:

- Financial contributions
- Designations for existing/new roads
- Performance/engineering standards

The next most common methods were:

- Council works programmes
- Transport strategies
- District wide rules
- Liaison
- Use of resource consent applications

The less common methods were:

- Structure plans
- Development manuals
- Specific investigations
- RAMM assessments
- Traffic Impact Studies
- Specified documents outside of the plan process
- Land Transport Safety Authority Guidelines

The contents of the rules were examined. The rules generally covered 5 main areas:

- Performance standards for vehicle crossings
- Loading
- The distance of vehicle crossings from an intersection
- Where a site had access to two roads and one had a higher ranking in the roading hierarchy than the other then access would be provided to the lesser ranked road, and
- Car parking standards.

No rules were found that directly addressed the control of activities that generated major traffic movements. Some plans addressed this issue through other mechanisms, such as the Kapiti Coast District Plan that defines a “Major Traffic Activity” (generates more than 90 vehicle movements per day) and requires any effects on the State Highway to be assessed through the resource consent process. Several of the plans contained a generic rule that referred to

part 'x' of the plan in regard to traffic management issues. Where this approach was adopted the connection between the issues, objectives, policies and the rules became lost. It is not considered that a single section of the plan that contains standards for traffic management is appropriate or necessary. Such standards need to be supported by specific rules, rather than being left to stand-alone.

Eight of the 13 plans had Anticipated Environmental Results (AER) that directly mentioned road/traffic safety. The AER should offer a specific tangible outcome that is to be worked towards and thus provide a solid basis on which to base subsequent monitoring. Of the AER that did directly refer to traffic/road safety, the common failing was that they did not carry on to specific monitoring provisions.

Only five of the 13 plans contained monitoring provisions in relation to roading issues. Of the five only three specifically mentioned the monitoring of statistics like the number of motor vehicle accidents within the city/district to determine whether the objectives, policies and methods were having any significant effect.

The conclusions gained from the assessment of the plans were:

- The most effective plans are those that have issues that are followed through to measurable monitoring provisions.
- In most cases the issue of road/traffic safety is defined as an issue within a district/city with the associated objectives, policies and methods.
- The variety of methods used to implement the issues, objectives and policies varies greatly between Councils with the four most commonly used methods being the use of zone rules, road hierarchy, performance standards and financial contributions.
- In general there was a lack of follow through to specific monitoring provisions.

- The depth of provisions of a plan appeared to be directly related to the size of a council, the size and location of the district and current pressure on the roading network.
- Half of the Plans assessed mentioned the use of transport strategies with some Councils being in the process of revamping existing documents.
- A few Councils made reference to the use of documents outside of Council origin. Of the external documents that were specifically referenced these included the Transit Guide on State Highway Pavement design and some of the Land Transport Safety Authority Guidelines, such as the Advertising Signs and Road Safety Design and Location Guidelines.
- A number of territorial authorities have made use of Limited Access Road (LAR) provisions. This is often linked to sites where a site has access to a LAR and a secondary road, and access to the secondary road is preferred.

7.0 Key conclusions from the Stage 1 work

The main conclusions we have drawn from the Stage 1 work are as follows:

- There are a range of existing documents and guidelines addressing a range of road safety and efficiency issues.
- Of the district and city plans that were reviewed as part of the scoping exercise, all of the plans identify road safety and efficiency in the issues, objectives, and policies and methods sections.
- Of most concern is that although all the plans acknowledge the issue of road safety and efficiency as an issue within their district, there is little or no monitoring mentioned in the Plans, which would prove or disprove whether the provisions in the plans are addressing the issue.
- The use of good practice guidelines is one of many alternatives available to Transfund to encourage Councils to use good practice in

the consideration of resource consent applications for projects and developments.

- The success of good practice guidelines in regard to use and implementation of the document is dependent largely on the ability and willingness of Councils to use document.

The overall conclusion of the scoping exercise is that although councils have recognised that there are issues in regard to road safety and efficiency and have adopted appropriate objectives and policies, there is a need for plans to adopt better methods to implement the objectives and policies, and to monitor the plan provisions to ensure they are addressing the issues defined.

8.0 The next step

As a result of the findings of the Stage 1 work, Transfund New Zealand believed it appropriate to proceed with the development of the best practice guidelines.

With input from the working party we are currently working through the issues that are appropriate to be addressed by the guidelines. We are putting together the guidelines to address the issues.

9.0 Acknowledgement

Tonkin & Taylor Ltd thank Transfund New Zealand and the NZPI for the opportunity to present this paper at the 2003 Conference.

A copy of the Stage 1 report associated with this work OG/0207/16S is available from Ian Appleton, Transfund New Zealand.