10 Considerations for Option Evaluation

The results of the evaluation of proposed infrastructure improvements can be used for a number of purposes. As regards this study, evaluation can be used to:

(a) Determine which of the options best meet the strategy objectives;

(b) Determine the degree to which an option meets the requirements of the LTMA 2002.

The scope of the study requires that options are evaluated in order to identify a preferred alignment and that this will be subject to an LTMA assessment. The scope also identifies town planning, urban design and build-ability as considerations for determining a preferred option.

This study is not required to rank the preferred strategy against other schemes proposed for the region. However efficiency savings will be made if the options evaluation framework is broadly aligned with regional prioritisation methods. The process adopted by GWRC follows the approach required when making LTNZ funding applications. Schemes requiring regional funding are assessed in relation to the following themes:

- **Effectiveness**: The extent to which the package or project contributes to the regional policy objectives defined in the RLTS;
- **(Economic) Efficiency**: A rating of the economic returns on the funds invested as measured by a benefit to cost ratio (BCR); and
- **Urgency**: The need to accelerate or bring forward project implementation because of external factors that influence the timing of project / package implementation;
- **Seriousness**: The magnitude and significance of the transport problem to which the project or package responds;

Effectiveness, Seriousness and Urgency are subjectively assessed by a panel of professional experts from within the region. Detailed frameworks are used to guide the assessment of Effectiveness and Efficiency. This section highlights further considerations for developing an option evaluation framework and recommends a process for this project.

10.1 Proposed Evaluation Framework

Figure 10.1 graphically shows the evaluation process that should be used to identify the preferred option and to determine the degree to which the recommended option meets the requirements of the LTMA. It is important to recognise that alternative transport interventions were evaluated as part of the Western Corridor Transportation Study which recommended upgrading SH1 through the Kapiti Coast. The primary purpose for evaluation at this stage in the project cycle is to assess the effectiveness (how well does it achieve the strategy aims) and efficiency (what value for money is offered) for alternative roading options.
The detailed criteria to be used for this assessment will need to be agreed by Transit NZ and KCDC and are likely to be based upon policies identified within the Kapiti Coast Community Plan and Regional Policy statements relating to the built environment.

10.2 Options Evaluation: Assessment Methods and Presentation

It is proposed that assessment criteria are not weighted. Decisions relating to expenditure on strategic infrastructure and the information / processes on which they are based are need to be transparent. Often weighting involves complicated numerical scoring systems that can be difficult for lay-people to follow and imply an unwarranted degree of scientific credibility to essentially subjective decisions.

Each assessment will be documented using a one page summary sheet developed for each option. The note will clearly and simply present the findings of the assessment on a single side. Where appropriate the note will refer to other, more detailed technical reports. Each assessment summary sheet will present:

(a) A brief description of the option including;

- Extent of physical works: alignment, new pavements, new structures, variations within options etc;
- Cost;
• Land requirements;
• Planning issues;
• Urban design issues.

(b) Details of performance against the strategy objectives, including a bar chart summary (see Figure 10.2, below);

(c) The calculated Benefit to Cost Ratio; and

(d) Description of the technical difficulty and likely disruption during construction.

Only element (b) will be summarised as a recommended score for each option: high, medium or low which will be presented in the decision matrix.

**Figure 10.2 – Assessment against Strategy Objectives**

The initial “options” evaluation will assess the full length of each option (i.e. between Peka Peka and MacKays Crossing).

**10.3 LTMA Evaluation**

The scope of works requires that the Otaki Bypass and Otaki to Te Horo Expressway schemes are subject to a full evaluation against the requirements of the Land Transport Management Act. The proposed evaluation methodology will ensure the recommended option is consistent with governmental policy, but is also firmly guided by local circumstances and aspirations. An LTMA evaluation for other sections of the corridor is not expected to be necessary because to a degree it would duplicate work previously undertaken. Preferably, the LTMA evaluation will be undertaken following public consultation. This will allow the results of the public consultation to be used to inform the assessment.