

## APPENDIX C – PROBLEMS DEVELOPMENT

As the Otaki to North of Levin project started before the Business Case processes were introduced, an ILM has never been undertaken. However, the project team did clearly define the problem themes as Safety, Resilience and Access.

These have now been refined into full problem statements with representatives from the project team, NZ Transport Agency specialists and an independent ILM advisor. It is recognised that these will need to be discussed with stakeholders before being adopted.

The problem statements are shown on the attached diagram and cover the areas of:

- Safety: Almost 50 deaths and serious injuries have occurred on the state highways within the study area in the last 5 years. The highways are classified as High Risk Rural Roads and are well below the Star Rating that is expected for this class of highway. (50%)
- Resilience: There is no alternate route to SH1 between Manakau and Ohau – this section is also at high risk of closure due to the five aging structures and regular flooding. This route is a key economic and social lifeline and closures add over 2 hours to any journey (much more in peak periods). (30%)
- Growth: Horowhenua is growing faster than predicted and the District Council are proactively planning for further growth. A number of growth areas have been identified though a robust process but some are unable to be efficiently developed due to current and predicted traffic and safety issues. (10%)
- Levin Town Centre: The centre faces a number of challenges due to earthquake prone buildings, limited retail and hospitality offerings, limited transport choice and is compromised by heavy traffic. The District Council have been consulting on a plan to “Transform Levin” and transport aspects are both problems and opportunities that are central to the transformation. (10%)

The benefits flow on from the problem statements, where solving some problems create multiple benefits:

- Improved network safety - to reduce harm
- Improved network resilience – to keep lifelines open as much as possible
- Enables and facilitates development – including retail, commercial and residential
- Maintained accessibility - even with the high growth and any transport changes
- Contributes to a thriving and vibrant town centre – as envisaged by the Town Centre Strategy

The investment objectives in turn flow from the benefit statements:

- Reduce deaths and injuries from XX to YY per annum
- Reduce the number and duration of journeys affected by closures and delays by XX%
- Provide appropriate connections to serve urban areas, including planned growth areas
- Reduce the numbers of trucks in the main retail area of Levin from XX to YY

The targets for each of the investment objectives will be decided at the end of the IBC phase.

The resilience investment objective reflects the fact that resilience is affected by the frequency of events, the severity of the events and the effectiveness of the alternative routes.

In addition to the investment objectives there are a number of principles that cover other aspects of the project and its objectives and are being used throughout the project in the option selection processes. These include:

- Value for money
- Understanding and reducing the effect of the project (social, ecological, severance, cultural, landscape, etc.)
- Maximising benefits of the project (travel times, emissions, walking and cycling, etc.)

The following table presents how the problem statements reflect the GPS / IAF priorities

GPS / IAF PRIORITIES						
	Safety	Access - Opportunities	Access - Choice	Access - Resilience	Environment	Value for Money
Problem 1: Safety						
Problem 2: Resilience						
Problem 3: Growth						
Problem 4: Levin Town Centre						

This project hasn't identified any environmental "problems" to warrant transport investment. However, there are some very significant environmental factors which need to be carefully understood and managed throughout the process to ensure that the project minimises adverse effects.

Value for Money also is not an identified "problem" but will be managed through continuing the business case process and running the project through the IAF, including undertaking a cost benefit analysis.