Gisborne-Wairoa Rail Feasibility Study

Terms of reference and project plan

As agreed between Business and Economic Research Ltd and the Provincial Development Unit

Paenga-whāwhā 2019

1 Terms of reference

The Provincial Development Unit (PDU), which manages the Provincial Growth Fund (PGF), recently received two applications for funding feasibility studies for various combinations of usage and reinstatement of the Gisborne to Wairoa rail line. Individually, both applications met PDU thresholds for funding but, in approving them, officials recognised it was appropriate that the different questions they raise be addressed in one overarching feasibility study, given they concern the same rail corridor.

The PDU is seeking a credible study on the viability of the various options for the Gisborne to Wairoa line that can form the basis for decision making around next steps.

1.1 Scope

The feasibility study should identify the combination(s) of operationally feasible uses that maximise the commercial viability of reinstating any portion of the Gisborne to Wairoa line, having regard to the costs of reinstatement and ongoing maintenance.

It is noted that any rail tourism activities should align with any Gisborne-wide tourism strategy, particularly the elements of such a strategy related to cycling and walking activities that could use sections of the rail corridor where it is appropriate and safe.

This feasibility study is not intended as a comprehensive assessment or business case for achieving the end goals relating to the use of the Gisborne to Wairoa rail line.

Identifying a potential provider of a rail service on a reinstated railway is out of scope which would be considered in a business case if a decision resulting from the outcome of the feasibility study is made to progress to a business case.

While this feasibility study concerns the reinstatement of the track from Gisborne to Wairoa the reality is that the freight is going to Napier and beyond. The study will assume that KiwiRail will reopen the line from Wairoa to Napier Port as agreed with the Hawke's Bay Regional Council. The study will not suggest that freight is railed from Gisborne to Wairoa and then put on trucks to go to Napier. The study will assume that there will not be any barriers or interchange rate issues from Wairoa to Napier.

While the scope of this study will not allow a full-scale comprehensive community consultation exercise, engagement with a range of stakeholders will be undertaken to explore local views about the region's transport infrastructure. This will consider and assess the appetite for reinstatement of the rail line and whether support differs by the extent of the reinstatement.

Engagement with iwi and Māori will be of paramount importance to this study. Business and Economics Research Limited (BERL) recognise Māori as tangata whenua of Aotearoa/New Zealand and acknowledge the partnership between Māori and the Crown as reflected in Te Tiriti o Waitangi. BERL established a close relationship with the Federation of Māori Authorities (FOMA) when FOMA was founded more than 30 years ago. BERL is now formally, a preferred provider of economic advice to FOMA. In addition, BERL has a long history and considerable experience working with Māori entities engaged in development activities across the many rohe of Aotearoa.

2 Project delivery

Business and Economics Research Limited (BERL) will work with Tairāwhiti Rail Limited (TRL) to deliver this project. In particular, BERL will act as the lead consultant responsible for overall delivery.

The delivery partners alongside BERL for this project will be:

- Renouf Corporation (Stephen Underwood)
- Neil Buchanan
- Global Reach Associates (Graeme Carroll)
- Activate Tairāwhiti

BERL will enter into sub-contract agreements with the delivery partners, Renouf Corporation, Neil Buchanan, Global Reach Associates and other sub-consultants to provide the technical and engineering expertise necessary to deliver the feasibility study. BERL will also engage with Activate Tairāwhiti (and, if necessary, specialist tourism expertise) to deliver the tourism analysis.

It is expected that Renouf Corporation, Neil Buchanan, Global Reach Associates will manage the sub-contract relationships with the technical and engineering sub-consultant suppliers to meet the delivery requirements as set out in this document, the contract between TRL and PDU, the contract between BERL and TRL, and in the contracts between BERL and the delivery partners.

BERL will be responsible for managing the relationships with Renouf Corporation, Global Reach Associates, Neil Buchanan, and Activate Tairāwhiti (and, if necessary, specialist tourism expertise). This will include paying invoices to these delivery partners as agreed in the contracts for the provision of services.

BERL will also enter into contractual agreements with the engineering sub-consultants on the recommendation of Neil Buchanan. The engineering sub-consultants will be managed by Neil Buchanan. The engineering sub-consultants will submit all invoices to Neil Buchanan for certification. Neil Buchanan will then forward these invoices to BERL for payment.

BERL will engage with Activate Tairāwhiti and other specialist tourism expertise, as required, to complete the tourism-related elements of the feasibility study.

It is expected that Activate Tairāwhiti and specialist tourism expertise will work closely with the delivery partners together with BERL. This will enable clear information on the type of tourism opportunities that are possible to be integrated into scenarios for

development. In particular, the interaction with capital costs and/or operational criteria for freight or other activities utilising the corridor will be specifically noted.

2.1 Headline deliverables

The primary deliverable will be a feasibility study that considers a number of options for commercial activity on the Gisborne to Wairoa rail corridor, which should consider the elements in the table below. BERL will take responsibility for synthesising the various components and tasks of the final feasibility study.

The feasibility study will identify the combination(s) of operationally feasible uses that maximise the commercial viability of reinstating any portion of the Gisborne to Wairoa line, having regard to the costs of reinstatement and ongoing maintenance.

Our work to complete the feasibility fall into three key components:

- Economic, financial, and social assessment
- Engineering assessment
- Project management and report preparation.

The feasibility study will consider the following:

Economic, financial, and social assessment This component will look at the benefits to the Gisborne region of reinstatement of the rail line to a standard that is resilient to natural events that have, in the past, closed the line. This part of the feasibility study will consider the volume of freight that will/could use the reopened rail line; the appetite for, and viability of, tourism activities associated with the rail corridor, including rail tourism, cycling and walking activities; the revenue that will/could be generated from the range of opportunities; the substitution impacts; economic impacts; wellbeing impacts; and will canvass and consider the views of the local community.	
Rail freight	Assessment of volumes, origins and destinations, modal split, commodities moved, freight growth, and the potential to do more with rail (e.g. 40 foot containers vs 20 foot limit by road).
Substitution	Investigation of the freight customers that would use rail in preference to their existing arrangements if a reinstated rail freight service were available. Investigation of the strength of interest and what the determining factors are in any decision to switch to rail.

	Questions that will be addressed include: Are there freight customers that would use rail in preference to their existing arrangements if a reinstated rail freight service were available? What is the strength of their interest and what will be the determining factors in any decision to switch to rail?
Tourism	Identify opportunities to use either the reinstated rail line or the rail corridor for tourism opportunities, including types of activities that could be offered using both the rail line (on track such as steam excursions or cycle-rail tourism) and using the rail corridor (off track, such as to enable a cycleway).
Revenue	Identify the potential revenue that could be generated by providing services based on any operationally viable combination of uses. The basis for revenue assumptions will be provided and revenues will be distinct for given combinations of uses (e.g. exclusively freight, exclusively on or off track tourism, combinations of both etc.). Assumptions around compatibility will be stated clearly, and impacts on revenues reflected. (e.g. if freight was only allowed to operate at night and tourism during the day). This deliverable will assess the revenue projections for current freight being transported out of the Gisborne area by road that could be converted to rail and new revenue that may arise if growers and producers had confidence to produce products that could be transported by rail e.g. change of land use to horticulture, etc.
Gisborne community perspective	Investigation of the views of the Gisborne business community, iwi, local government about Gisborne's transport infrastructure. This task will consider and assess the appetite for reinstatement of the rail line (and, if applicable, where support differs by the extent of reinstatement, this will be made clear).
Economic benefits from reinstatement of railway	Identify and quantify new opportunities that will be brought about by a reliable and responsive rail service. We anticipate that this will include job creation, GDP impacts and change of land use from pastoral farming to intensive horticulture.
Secondary economic benefits from	Identification of the indirect and induced economic costs and/or benefits from a reinstated rail service. We anticipate that these

reinstatement of railway	benefits will include reduced roading repair costs, lower accident rates, job impacts, and GDP impacts.
Living Standards Framework assessment of impact on the Gisborne region	An assessment using the Living Standard's Framework to describe the wider impacts and consequences of the reinstated rail line. This assessment will take a broader view of the likely impacts, taking account of how the reinstatement of the rail line is likely to affect different aspects of the wellbeing of the community. The non-financial value of the railway line will extend to numerous social, cultural and even environmental consequences that should also be taken into account when evaluating the contribution of the reinstated rail line to Gisborne and the region. We will assess the reinstatement of the rail line against the four capitals as set out in the Treasury Living Standards Framework. These are Physical/Financial capital, Natural capital, Social capital, and Human capital.

Engineering assessment

This component will look at the work required to bring the rail line back up to the standard required to operate regular rail services. Further, reinstatement of the line should be to a standard that is resilient to natural events that have, in the past, closed the line. This will involve an assessment of the estimated costs for reinstatement and continued operation.

Analysis of three cost categories will be required.

1. Reinstatement cost: The study must provide a high reliability estimate of the cost of reinstatement of the sections of track affected by washouts along with all other work required to restore the line to a fit for purpose state having regard for applicable combinations of usage types and the extent of reinstatement.
2. Recurring maintenance and long term capital cost: The projected annual cost of maintenance of the track and rail corridor together with an estimate of the long run capital cost for the next 10 years to maintain a fit for purpose state for usage scenarios considered in the study.
3. Service costs: The cost of providing a sustainable and financially viable service on the reinstated line, for each usage identified or combinations thereof.

Engineering lead consultant and management of engineering subcontractors	Management of the investigation by consulting engineers with experience in railway related matters concerning track, bridges, culverts, and related requirements.
Track, vegetation, LX	Inspection of the route required so that a detailed estimate can be arrived at for the work necessary on the rail, sleepers, ballast and fastenings. Estimate will also be prepared of the time required to carry out the necessary repairs. It is expected that weeds and vegetation will have grown across the track and an estimate will be compiled to treat them so that the track can be opened. Additionally an ongoing program of what should be spent on vegetation control will be provided. All of the level crossings will be surveyed during the track inspection to determine any work necessary to allow for the safe running of trains.
Bridges and culverts	Intention is to carry out a basic inspection of the culverts at the time the track inspection is carried out. However for deep culverts it may be necessary to have some excavating equipment brought to site to inspect more thoroughly.
Bridge engineering	Review of bridge engineering and assessment of work required to bring existing bridge structures up to standard to allow for regular rail services. This will include reviewing KiwiRail's data and estimating costs for bridge repairs.
Dropout repair schemes and estimates	Four dropouts were the event that caused the line to close in 2012. The project will fully survey the sites, in the field and in the office, to arrive at a robust scheme to repair the dropouts. Costs have been variously estimated at between $3m - $6m but no in-depth engineering investigation has been carried out to estimate the cost accurately with a definite scheme tailored to each dropout.
Freight yard scheme Matewhero	As all freight will be loaded and received at Matewhero the available yard space will be assessed and an estimate arrived at to install the necessary track and freight yard. This work will be carried out in conjunction with Steve Weatherell.

Peer review	The repair costs will be peer reviewed and then discussed with KiwiRail.
Access	Additional dropouts have occurred since original inspections, assessments were made in 2014 – 2016, and access is now more difficult. Accordingly, allowance has been made for access by helicopter or for new access tracks / roads to be cut.

Project management and report preparation This component will deliver oversight of the project and delivery of all reports and documents.	
Project management and administration	Project oversight and management of sub-contractors. Co-ordination of steering group meetings.
Report drafting and delivery	Co-ordination, drafting and review of all reports.