Social Impact Assessment

December 2017

Mt Messenger Alliance

Technical Report 5

NZ TRANSPORT AGENCY WAKA KOTAHI

Mt Messenger Bypass

New Zealand Government

Quality Assurance Statement			
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Contents

Glossary

Abbreviation	Definition
CEMP	Construction Environmental Management Plan
CNMP	Construction Noise Management Plan
CTMP	
AEE	Assessment of Environmental Effects
DSI	Deaths and Serious Injuries
NOR	Notice of Requirement
RMA	Resource Management Act 1991
SH3	State Highway 3
SIA	Social Impact Assessment
Transport Agency	NZ Transport Agency

Executive summary

Purpose of Report

This social impact assessment identifies and assesses the social effects that may arise as a result of the Mt Messenger Bypass project (the Project) during the planning/consenting, construction and operational phases. Limited consideration has also been given to potential localised effects in the event of the existing road being closed or transferred from NZTA to the local authority.

The assessment has been prepared by:

- Establishing a social baseline by identifying the study areas
- Reviewing conclusions drawn from other specialist technical assessments through a social lens
- Reviewing other relevant qualitative and quantitative data and various statutory and non-statutory policy documents
- Reviewing the consultation logs from consultation undertaken prior to June 2017, participating in public drop-in sessions as well as information obtained from interviews and a targeted survey to identify social effects, both positive and negative
- Identifying and assessing social effects of the project against a framework at a local and regional level
- Identifying appropriate mitigation, avoidance or remedial strategies.

Methodology

Potential effects of the Project have been assessed against a social framework. The framework was informed by a review of what the authors consider to be best practice; the NZ Transport Agency's Z19 *State highway environmental and social responsibility standard* and its Social Impact Guide and the International Association of Impact Assessment framework, which has been adapted to fit the Project. The following criteria have been used:

Regional criteria

- **Way of life** – Impacts on accessibility, connectivity, patterns of living and mobility – the changes/benefits through an improved route and connectivity including the difference the project would make to daily life
- **Growth and development** – the benefits that may be realised as part of the Project and the ability to lever off changes in access

Local criteria

- **Way of life** – Impacts on accessibility, connectivity, patterns of living and mobility – the benefits through an improved route and connectivity including the difference the project would make to daily life
- **Wellbeing** – changes to wellbeing and safety
- **Quality of the environment** – the effects on people from construction and operation of the project (i.e. noise)

- **Wellbeing** – changes to wellbeing and safety
- **Community –** Impacts on people's property and 'neighbourhoods'; educational facilities; community areas and sites; community plans and aspirations; and on accessibility to services.

Of the four potential stages[1] where social and community effects can occur, this assessment focusses mainly on the construction and operational phases of the Project. The effects of closure or change in road ownership have only been considered briefly on a localised level.

Summary of effects

The Project will have positive and negative social effects. At a local level the effects of the Project are negative but relatively minor and restricted to a small number of properties. At a regional level, the effects are all positive and significant. The regional effects have been assessed using the following criteria:

- Way of life
- Growth and development
- Wellbeing

Regionally the project results in significant social benefits with regard to:

- **Way of Life** – greater resilience in the road network to accidents and natural hazards, and improved capacity and ease of movement for both freight and people
- **Growth and Development** –
    - increased competitiveness with Auckland and the Waikato by increasing the capacity of SH3 to safely handle oversized loads and more consistent journeys
    - improved accessibility and improved trip experience for visitors
    - enhanced accessibility for businesses, particularly those which are reliant on freight movements for production materials and access to markets
    - residential growth becomes more attractive with regional connectedness and a reduction of the perception of isolation
    - maintaining and enhancing regional liveability helps to retain skills and services in the region
    - improving access and journey experience to essential facilities in the Waikato, such as Waikato hospital
    - greater resilience in terms of trip reliability and trip-time reliability that improves competitiveness for businesses
    - a potential to increase business activity and consequent positive, beneficial impact on employment

[1] The stages are: planning/consenting, construction, operation and closure (if relevant)

    - employment opportunities and economic activity created for local businesses and services during the construction phase
- **Wellbeing**
    - improvement in the journey experience through reduction in driver frustration, by virtue of greater passing or overtaking opportunities, and a reduction in delays through being caught for long periods behind heavy vehicles
    - improved response times for emergency services leading to improved outcomes and reduced perception of isolation

The adverse social effects of the Project are primarily at the local level. The potential adverse local effects are:

- **Way of Life** – as construction vehicle cause disruption to local road users and construction activity and route disturbance causes a change to property access, and there is the potential for disruption to school buses.
- **Quality of the Environment** – through increased noise, dust, and vibration, a change in amenity and visual aspects affects a three dwellings close to construction, and road users passing through the construction area.
- **Wellbeing** – through anxiety with regards to the nature of construction and its duration.

Mitigation

There are a number of mitigation measures that should be instituted for this project:

- A key mitigation measure is to ensure that good information is available to affected individuals, local community groups in particular schools, recreational users and the general public. Stakeholder engagement methods in accordance with the CEMP should identify the various communities of interest and how construction information will be provided. Information provision may take the form of radio advertisements, newspaper publications on a more regional level to establishment of a small local groups of schools, businesses and individuals who are affected by construction and need regular information to minimise disruption to daily lives.
- Development and implementation of relevant construction management plans as referred to in the various specialist reports (Volume 3 of the AEE)
- A Community Liaison person should be appointed by the Transport Agency for the duration of the construction phase. That person should be the main and readily accessible point of contact at all times for persons affected by the construction and operation of the Project
- At all times during construction work, the Transport Agency should maintain a permanent register of any complaints received alleging adverse effects from, or related to, the construction of the Project
- Involving local schools and the community in the construction process through regular talks, and engaging schools in the process by providing access to ecologists and other specialists.

Conclusion

Overall the Project has significant social benefits to the region in terms of way of life, growth and development, and wellbeing. Furthermore, the relatively minor negative social effects on the local population can be either appropriately avoided, remedied or mitigated.

1 Introduction

1.1 Purpose and Scope of this Report

This report forms part of a suite of technical reports prepared for the NZ Transport Agency's Mt Messenger Bypass project (the Project). Its purpose is to inform the Assessment of Effects on the Environment Report (AEE) and to support the resource consent applications and a Notice of Requirement to alter the existing State Highway designation, and which are required to enable the Project to proceed.

This social impact assessment (SIA) assesses the social effects of the Project, which is shown on the Project Drawings in Volume 2: Drawing Set.

The full range of social effects from State Highway 3 (SH3) are experienced across a geographical range of communities. The range of communities that this assessment considers includes those:

- directly affected and those that live in the immediate vicinity of the Project;
- that live in the Taranaki region and use/rely on SH3; and
- outside of the Taranaki region who travel to, from and through the region.

The scope of this assessment includes:

- development of an SIA framework based on national and international best practice
- an assessment of the relevant statutory and non-statutory framework to ensure that the Project aligns with legal and other local authority requirements;
- identification of the different levels of community(s) of interest and impact that the Project would have on social amenities and facilities (such as community areas and places where groups of people gather together), to understand the existing social environment (social baseline);
- a review of other specialist inputs to the Project though a 'social lens';
- a review of feedback from the consultation process in relation to relevant social concerns of the community that have been raised from meetings, open days and feedback forms;
- a targeted survey of Taranaki residents, business and recreational interests;
- an assessment of the identified social effects against the SIA framework;
- identification of appropriate mitigation, avoidance or remedial strategies; and
- an assessment of monitoring requirements.

This SIA considers the relevant sections of Part II of the Resource Management Act 1991 (RMA), being the following:

- Section 5(2): Enabling "people and communities to provide for their social, economic and cultural wellbeing"; and

- Section 7(b) and (c): In achieving the purpose of the RMA, all persons “shall have particular regard to":
    - "the efficient use and development of natural and physical resources”; and
    - “the maintenance and enhancement of amenity values”

Further details on the methodology used in the preparation of this assessment can be found in section 3. The SIA is part of a wider suite of technical reports informing the AEE and, while it overlaps with topics included in other technical reports, it examines these from a social perspective.

The authors have been involved with the Project since May 2017.

1.2 Project Description

The Project involves the construction and ongoing operation of a new section of State Highway 3 (SH3), generally between Uruti and Ahititi to the north of New Plymouth. This new section of SH3 will bypass the existing steep, narrow, and winding section of highway at Mt Messenger. The Project comprises a new section of two lane highway approximately 6km in length, located to the east of the existing SH3 alignment.

The primary objectives of the Project are to enhance safety, resilience, and journey time reliability of travel on SH3, and contribute to enhanced local and regional economic growth and productivity for people and freight.

A full description of the Project including its design, construction, and operation is provided in the Assessment of Effects on the Environment Report, contained in Volume 1: AEE, and is shown on the Drawings in Volume 2: Drawing Set.

1.3 Assumptions and Exclusions in this Assessment

The following exclusions and assumptions apply to this report:

- Social impacts on individual properties are identified, but the effects on property value have not been addressed as these will be considered through a separate process under the Public Works Act 1981.
- Economic impacts are examined solely from a social perspective in terms of whether the project has effects on local and regional businesses and communities.
- Cultural impacts affecting culture, land, water and air have been addressed separately by other experts through involvement of and in consultation with iwi, and particularly in the Cultural Values Assessment included with the AEE.
- Technical assessments have separately considered noise, vibration, transportation effects and a range of other technical specialist areas that require consideration in a project of this size and scale. These assessments of effects have been carried out by the relevant technical specialist, and their findings are relied on in this report. Relevant technical reports are reviewed in this assessment from a social perspective only

- Health impacts – a detailed health impact assessment has not been undertaken. Health impacts are considered with regard to individual and community stressors; healthy environment; and in consideration of other specialist reports (such as noise and air quality).

1.4 Experience

1.4.1 Wendy Turvey

Wendy Turvey has the following qualifications and core experience in social impact assessment:

- 30 years' planning experience in the areas of strategic policy, consenting and social impact assessment
- Bachelor of Science degree in Town and Regional Planning from the University of the Witwatersrand, Johannesburg, South Africa
- Involved in preparing and reviewing social impact assessments for large infrastructure projects, predominantly roading-related, including:
    - Peka to Peka North Otaki Expressway
    - Cambridge Bypass in Hamilton
    - Caversham Bypass in Dunedin
    - Hamilton section of the Waikato Expressway
    - St Lukes Mall in Auckland
    - Basin Bridge
    - Puhoi to Wellsford section of State Highway 1 (SH1), north of Auckland.

1.4.2 Stephanie Brown

Stephanie Brown has the following qualifications and core experience in social impact assessment:

- 16 years professional experience in environmental impact assessment and consultation
- Master of Science in Geography from the University of Otago and Bachelor of Science.
- Undertaken the IAP2 Certificate Programme in Public Participation (2007)
- Full member of the Environment Institute of Australia and New Zealand and a Certified Environmental Practitioner (since 2007)
- Involved in social impact assessments for the following roading projects:
    - Waikato Expressway, Hamilton Section – Resolution Drive (2016)
    - State Highway 2, Section C (2016)
    - SH2 Katikati Bypass (current)
    - SH1 Cambridge to Piarere (current)
    - SH29 Tauriko (current).

2 Assessment Methodology

2.1 SIA Process and Framework

SIA is a supporting tool for decision making and is frequently used internationally with regard to infrastructure projects. SIA is defined by the International Association of Impact Assessment[2] (IAIA) as:

"*the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment*".

The IAIA notes that SIA can be undertaken in different contexts and for different purposes, but that the following principle is important across all SIA:

"*The improvement of social wellbeing of the wider community should be explicitly recognised as an objective of planned interventions and as such should be an indicator considered by any form of assessment. However, awareness of the differential distribution of impacts among different groups in society, and particularly the impact burden experienced by vulnerable groups in the community should always be of prime concern*."

The methodology adopted for this SIA has been developed to identify and predict the key social impacts of the Project from the perspective of those potentially affected by it for technical assessment to support the AEE.

The Transport Agency has adopted the position that SIA is a process, and that project teams and SIA specialists should follow a process to ensure that impacts are identified and assessed from the perspective of those potentially affected.

2.2 Methodology Overview

This section outlines:

- The social science methods used to gather, analyse and present social data
- Community and stakeholder engagement activities used to understand social impacts
- The methods used to identify and evaluate social impacts.

[2] www.iaia.org/

The methodology has seven key steps:

Step 1		Scope, context and baseline		What is proposed Study areas (geographical)
Step 2		Information review and data gathering		Technical reports Research Other
Step 3		Engagement		Stakeholder and public engagement
Step 4		Impact identification		Nature of likely socio-economic effects
Step 5		Assessment of effects		Scale, extent, distribution, duration of effects
Step 6		Design mitigation		Development of mitigation
Step 7		Management plan/communication strategy/monitoring		Implementation requirements

2.3 Scope, context and information review

The following information sources and methods were used to prepare this SIA:

- A briefing from the project team and a review of aerial photos/design plans carried out in order to understand the nature and extent of the study area and to gain an understanding of how the community may be affected by the proposal
- Data – Census data to determine information about communities as recorded by Statistics New Zealand (2013 census); school data (e.g. school rolls, decile ratings, ERO reviews)
- Site Visits along the existing SH3 corridor.
- Information Review:
    - a review of project documentation, as appropriate, including design drawings, technical assessments3, project consultation records, statutory and non-statutory documents
    - property requirements
    - Venture Taranaki (April 2017 and Sept 2012) and economic development reports (Infometrics, 2016, Jenkins, date unknown)
    - Sport participation
    - Media coverage.

[3] Technical assessments that are relevant to this SIA are noise, transport (including strategic transport), air quality, landscape and economics

2.4 Engagement

2.4.1 Survey

An online survey was designed using a 'Public Participatory Geographic Information Systems' (PPGIS) tool to gather local information and perspectives about the routes, places and activities associated with the Project. The tools use maps as an accessible and recognisable format that allows people to easily participate in data capture about places, infrastructure and activities that are significant to them, or could have impact on them. In this Project, it was designed to:

- Obtain detailed information about significant locations and activities that are linked to the Mt Messenger route (current and proposed);
- Identify what the significant locations and activities mean for people's way of life, networks, ability to connect across the region, engagement with places of cultural significance, and so on;
- Describe the values associated with those activities; and
- Identify the potential changes to locations and activities that could be expected.

The PPGIS approach uses a place based approach and provides a robust way of obtaining quantitative and qualitative information. It is a bottom-up approach instead of top down, which is often the approach taken. A bottom up approach was taken as it is easier to engage the target group.

An invitation to complete the survey was sent to 41 targeted parties/stakeholders that included:

- Residents and property owners located along the Mt Messenger route;
- Businesses and recreational groups located along or nearby the Mt Messenger route, notably tourism operators and recreation groups;
- Businesses and recreational groups (including the major sporting codes) in Taranaki who are a) currently frequent users of this part of SH3; or b) could be frequent users with improvements; and
- Emergency services and network operators.

The selection of those targeted was done by the report authors based on experience and previous consultation. Residents and property owners were provided with the option of completing the survey by hardcopy or online with all other parties contacted by email inviting them to do the survey online. A copy of the survey is in Appendix C:.

2.4.2 Interviews

The survey was supplemented with interviews undertaken in June – August 2017. A total of 21 interviews were held with:

- Schools
- Venture Taranaki
- Businesses (transport, agriculture, manufacturing)
- Sport
- Infrastructure owners
- Residents who attended the Drop-In sessions

With the exception of two, all interviews were undertaken face-to-face. All but one party that was approached agreed to be interviewed. The interviews were semi structured but also provided the opportunity for those being interviewed to raise any matter. A record of the interviews undertaken is in Appendix B:.

An official information request was lodged with Taranaki District Health Board regarding the number of Taranaki residents that access health services at Waikato Hospital. A response was received, and is discussed later in this report.

2.4.3 Community

One of the authors attended the Drop-In Sessions held in New Plymouth, Urenui and Mokau in June 2017.

A more detailed breakdown and assessment of the engagement is in Section 6.

2.5 Identification and Evaluation of Social Impacts

In developing the assessment framework for this SIA, a number of matters were considered. These included:

- the Transport Agency Social and Environmental Management Professional Services Guideline (PSG/13) and Social and Environmental Management Form (PSF/13);
- assessment frameworks such as those of the International Association for Impact Assessment. The IAIA framework is well recognised internationally and provides a sound, recognised framework for assessing social effects. It is regularly used on New Zealand transport projects, and can be adapted to incorporate key aspects of the Transport Agency standard and guidelines;
- the wider policy environment within which the Project sits; and
- community engagement undertaken between December 2016 and June 2017.

Other elements which informed inclusions in the framework for assessment included international experience, social and environmental impact assessments prepared for other transportation projects in New Zealand and the wider policy environment within which the project sits.

The Transport Agency's Social Impact Guide[4] has been taken into account. This SIA is substantially in accordance with the guide, although approaches have been scaled to a degree considered appropriate for the social effects of this project.

The following framework has been established for assessing the potential social and community effects that may result from the Project:

Regional Impacts as a result of the operation of the Project within and external to the region:

- **Way of life** – Impacts on accessibility, connectivity, patterns of living and mobility – the benefits through an improved route and connectivity including the difference the project would make to daily life;
- **Growth and development** – the benefits that may be realised as part of the Project and the ability to lever off changes in access; and
- **Wellbeing** – changes to wellbeing and safety.

Local social impacts experienced across the project area and at a localised level (where relevant) at the construction and operational phases:

- **Way of life** – Impacts on accessibility, connectivity, patterns of living and mobility – the benefits through an improved route and connectivity including the difference the project would make to daily life;
- **Wellbeing** – changes to wellbeing and safety;
- **Quality of the environment** – the effects on people from construction and operation of the project i.e. noise; and
- **Community –** Impacts on people's property and 'neighbourhoods'; educational facilities; community areas and sites; community plans and aspirations; and on accessibility to services.

The following aspects of the IAIA framework have not been adopted for the reasons stated:

- Political systems – the wider political system and ability to participate democratically in society is not considered to be an issue for the Project; and
- Cultural impacts – these have only been considered to a limited extent in this report as such matters are addressed in the Cultural Values Assessment prepared by Ngāti Tama.

2.5.1 Rating of effects

Each potential social impact has been assessed having considered scale, duration and probability. The impacts are described from the perspective of the stakeholder group using:

[4] NZ Transport Agency (2016). *People Place and Environment Series: Social impact guide.* Wellington: NZ Transport Agency

- Cause of impact
- Who is the stakeholder/stakeholder group to be impacted, in particular any potentially vulnerable groups, directly affected people, or indirectly affected people; and their ability to adapt to change;
- Whether the impact will be positive and negative;
- The consequence likelihood rating of for negative impacts impact;
- The magnitude of the impact;
- Permanence of impact; and
- Impact rating.

There are four potential stages where social and community effects can occur during a project. These are: (i) planning / consenting; (ii) construction; (iii) operation and (iv) closure (if relevant). This assessment generally focuses on the effects of construction and operational phases of the Project with some consideration of the consenting stage. There will be a separate revocation process and there is currently uncertainty about the future of the route and whether it remains a through route. Property access will however be retained.

The overall scale of each potential social impact has been determined used the scale shown in Appendix D, Table D1.

3 Statutory Framework for Considering Impacts

3.1 Overview

There are a number of statutory and non-statutory plans and policies that provide high-level context for the proposal. Understanding plan outcomes and relevant resource management themes from statutory and strategic documents is important to considering the Project's likely social impacts on a regional scale.

The following documents have been reviewed to identify matters likely to be of importance to the community:

- Regional Council Long Term Plan 2015-2025;
- Regional Policy Statement;
- Regional Land Transport Plan 2015-2045;
- Regional Walkways and Cycleways Strategy for Taranaki 2007;
- District Council Long Term Plan 2015-2025;
- Economic Development Strategy 2014-2024; and
- Operative New Plymouth District Plan.

3.2 Statutory Matters

3.2.1 Land Transport Management Act 2003 (LTMA)

The LTMA provides the legal framework for managing and funding land transport activities. The purpose of the LTMA is to contribute to an effective, efficient and safe land transport system in the public interest.

The LTMA requires that in meeting its objective and undertaking its functions, the Transport Agency must exhibit a sense of social and environmental responsibility.

3.2.2 Resource Management Act 1991 (RMA)

The RMA requires the decision making process to include consideration of the actual and potential effects of activities on the environment. The RMA definition of the environment in Section 2 include (emphasis added):

a Ecosystems and their constituent parts, **including people and communities**;

b All natural and physical resources; and

c Amenity values; and

d ***The social, economic, aesthetic, and cultural conditions*** *which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters.*

The definition highlights that people and communities, and the social and economic conditions which affect them, are a critical part of the environment that need to be considered, hence this SIA assessment.

Section 4 is also important to an assessment of social effects. Section 4 defines the purpose of the RMA as being 'to promote the sustainable management of natural and physical resources'. Sustainable management means:

> '*Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety…*'

In addition, section 6 states that 'all persons exercising functions and powers under the Act… shall have particular regard to… 'the maintenance and enhancement of amenity values (s7(c)).'

Amenity values impact on how people live their lives and is an important part of a social impact assessment.

Schedule 4(2) states that any person preparing an assessment of the effects on the environment should consider the following matters:

'Any effect on those in the neighbourhood and, where relevant, the wider community ***including any socio-economic*** *and cultural effects*.'

These matters above provide a statutory context for this SIA.

3.3 Regional and Local Plans

3.3.1 Taranaki Regional Council Long Term Plan 2015-2025

The Taranaki Regional Council Long Term Plan 2015/2025 (LTP) includes a focus on ensuring the region's natural environment and physical resources are sustainably managed but also ensuring there is efficient infrastructure and movement of people and goods 'so vital to economic development'.

The LTP states that the Council's mission is to work for a thriving and prosperous Taranaki by:

- Promoting the sustainable use, development and protection of Taranaki's natural and physical resources;
- Safeguarding Taranaki's people and resources from natural and other hazards;
- Promoting and providing for Taranaki's regional significant services, amenities and infrastructure; and
- Promoting and providing for Taranaki's regional significant services, amenities and infrastructure.

Transport is one of six 'Groups of Activities' that contribute to achieving the Mission. The Transport group of activities promotes an affordable, integrated, safe, responsive and sustainable transport system that assists economic development and safety and personal security, improves access and mobility, protects and promotes public health and ensure environmental sustainability. Safety, access, mobility and assisting economic development are all matters that are addressed in this SIA.

3.3.2 Regional Policy Statement

The Regional Policy Statement (RPS) outlines the resource management issues for the region, and the policies and methods to be used in managing its physical and natural resources. It became operative in January 2010. The RPS addresses a number of issues that are relevant to the consideration of social impacts associated with the Project. These include air quality, built environment, mauri and health of freshwater bodies, historic and cultural heritage, amenity and natural hazards.

The RPS states that 'notable feature of the Taranaki region is its reliance on the region's natural and physical resources for its economic and social wellbeing' (section 2.7) and that 'A vital part of the Taranaki economy is its physical infrastructure'.

The RPS states (section 2.7.7) that:

> *'Taranaki is generally well connected and serviced from a roading infrastructural perspective relative to its size and population. However, there are roading and transport infrastructure issues that require ongoing attention if Taranaki is to meet its current and anticipated growth and development needs. Some of these issues concern route security and reliability (particularly in relation to State Highway 3 north and south and State Highway 43), network efficiency and capacity (for example in relation to our rural roads and urban New Plymouth) and safety issues such as passing opportunities, road and bridge widths etc.'*

The significant issues in relation to Taranaki's regionally significant infrastructure include:

Recognising and providing for the establishment and continued operation of regionally significant infrastructure (including where this is of national importance), particularly where they provide benefits and/or physically cross district and or regional boundaries.

The associated objective is:

INF OBJECTIVE 1: *To provide for the continued safe and efficient operation of the region's network utilities and other infrastructure of regional significance (including where this is of national importance), while avoiding, remedying or mitigating adverse effects on the environment*.

3.3.3 Taranaki Regional Land Transport Plan 2015-2045

The Taranaki RLTP establishes the strategic vision and outcomes for transport in the region. The RLTP identifies that SH3, as strategic corridor, is important to the viability of industries

in Taranaki being able to compete in the North Island market and in overseas export markets, for regional tourism, and for access to other services and facilities in major centres outside Taranaki.

The priority inter-regional issue for the Taranaki region is the future route efficiency, safety and reliability of SH3 travelling north over Mt Messenger, through the Awakino Gorge to Te Kuiti, Hamilton and beyond.

Key matters are:

Issues and Challenges	Objectives	Policies
Facilitating growth and economic development	An effective, efficient and resilient land transport system that enhances economic wellbeing, growth and productivity in the Taranaki region and beyond.	Removal of constraints to growth in freight, tourism and people movement, particularly on interregional corridors. Focus on effective and efficient strategic road and rail corridors, particularly between inter-regional ports. Ensure those roads in the region serving tourism and the productive sector are fit for purpose.
Reducing the safety risk on Taranaki's transport network	A safe transport network increasingly free of death and serious injury.	Promote infrastructure improvements on strategic corridors.
Ensuring network resilience and responsiveness in the context of internal and external pressures	A land transport system that is robust, responsive to changing needs and resilient to external influences	Improve the resilience of transport infrastructure. Protect routes with lifeline functions.

These are all matters that have been raised through consultation. Section 6 of this report considers the findings of the Assessment of Traffic and Transport Effects (e.g. safety and resilience) and the Strategic Transport Assessment (e.g. economic development and resilience). This report assesses the likely impacts of these matters from a social perspective.

The RLTP acknowledges that SH3 was identified by the government to be one of fourteen 'accelerated' regional roading projects and as such the Mt Messenger to Awakino Gorge Corridor project is included in the regionally significant activities.

3.3.4 Regional Walkways and Cycleways Strategy for Taranaki 2007

This strategy sets out the vision, policies, implementation actions and outcomes for walking and cycling in the region. It recognises the increasing role of tourist and long-distance cycling.

Relevant objectives include:

- *Objective Two: To recognise and promote the leisure, recreational, commuter and tourism opportunities provided by walking and cycling.*

The strategy is relevant, as a new route requires consideration of community connections, and walking and cycling facilities.

3.3.5 New Plymouth District Long Term Plan 2015-2025

The LTP is a requirement of the Local Government Act 2002 and outlines community 'key directions' being:

a Environment – enhance the natural environment with biodiversity links and clean waterways;

b Communities – strengthen and connect local communities;

c Citizens – enable engaged and resilient citizens;

d Growth – direct a cohesive growth strategy that strengthens the city and townships;

e Industry – strengthen and manage rural economy, industry, the port and the airport;

f Talent – grow and diversify new economies that attached and retain entrepreneurs, talented workers and visitors;

g Central city – champion a thriving central city for all; and

h Destination – become a world-class destination.

Five of the key directions (a, b, e, f and h) in the LPT are relevant to the Project. From a social perspective, the Project responds to communities, industry and destination through the provision of quality infrastructure.

3.3.6 New Plymouth District Plan (Operative August 2005)

The New Plymouth District Plan sets out the objectives, policies and rules to address resource management issues within the district. The following objectives have been identified as relevant to social aspirations:

Amenity, Health and Safety

- Objective 1 – to ensure activities do not adversely affect the environment and amenity values of areas within the district or adversely affect existing activities; and

- Objective 3 – To ensure public works and network utilities do not adversely affect the health and safety of the community.

Traffic and Transportation

- Objective 20 – to ensure that the road transportation network will be able to operate safely and efficiently.

The safety of the wider community is considered as part of the SIA.

3.4 Other Matters

3.4.1 Economic Development Strategy 2014-2024

The Economic Development Strategy was informed by the LTP 2012-2022 and the Region's Economic Development Strategy 2010-2035. While the Strategy focusses on 'active economic development', a strategic priority is to 'Improve our connections within New Zealand and with the world'.

The issue with achieving this is that the district is 'distant from markets for our goods and services and other urban centres. Distance increases transport and trade costs and means that firms are unable to achieve the same economies of scale as those in the same industries in larger markets, and hence constrains productivity' and an outside perception that the district and region are isolated.

Improving connections includes physical connections within the district and between the district, region, other districts and regions and offshore markets.

Connectivity is a key matter that was raised during consultation along with the perception that the region is isolated. This SIA considers the connectivity changes (way of life) that will occur at a local and regional scale and therefore the benefits (growth and development) that may arise.

3.5 Summary

The key themes relevant to social issues identified in the documents are:

- Way of life: The importance of infrastructure for providing connections and also for contributing to economic growth.
- Wellbeing: Ensuring activities do not adversely affect the health and safety of the community.
- Quality of the Environment: The importance of the quality of the environment and therefore peoples' experience and appreciation of it, and their sense and pride of place. Particularly the importance of air, soil and water quality to peoples' health, well-being, livelihoods and recreational aspirations.

4 Existing Social Environment

4.1 Overview

This section describes the project setting. It includes land uses, a description of the communities of interest and a description of key current community facilities. It also describes community infrastructure and resources within the study area which have the potential to be affected by the Project, including matters which were identified by submitters and stakeholders in consultation.

The survey and feedback from the community and stakeholder consultation provides further context about the existing environment and collectively, these sources provide insight into the local study area and people's: attitudes, expectations and aspirations; wellbeing; and culture and their local communities:

- Insight into people's attitudes, expectations, and aspirations is provided through both community consultation and review Council strategies. Community consultation was carried out through a series of interviews (summarised in Appendix B:) and also references the Assessment of Traffic and Transport Effects.
- Insight into people's wellbeing and way of life is particularly provided through the inclusion of consultation feedback, common locations for accessing social services and attending school, travel patterns, reserves and recreation areas.
- Insight into people's culture and their local communities is particularly provided through the inclusion of community values articulated in consultation, and places of religious assembly/affiliation; and through the inclusion of information about local town centres, community infrastructure and resources, community meeting spaces, and the demographic composition of communities (for example, population growth, ethnic composition, and socio-economic status).

It is important to recognise that social impacts are not just localised, they extend over a greater area.

As the wider community of interest extends beyond the immediate area, information on potential effects has been sourced through general community engagement and further, targeted consultation via a survey and interviews, as well as information gathered from other specialist reports (see Review of Relevant Technical Reports section 5).

4.1.1 Mt Messenger

The Mt Messenger area is remote with the nearest major towns being Te Kuiti to the north and Waitara to the south, 150km apart.

It sits within the boundaries of New Plymouth District Council. There are small settlements along the SH3 corridor in the area with Ahititi at the northern boundary of the Project, and Uruti approximately 11km to the south of Mt Messenger.

This SIA has established a Project Study Area for the purposes of profiling the existing environment and assessing social impacts associated with the Project. The Study Area has been defined at two levels:

1 Localised – covering the extent of the area of affected SH and the surrounding area

2 Regional – recognising the strategic importance of the SH to the wider community.

Figure 4.1 – Showing local study area.

Figure 4.2 – Taranaki Region study area.

4.1.2 Demographics

Typically the starting point for the analysis is the demographic profile of the Study Area. The demographic profile describes the existing environment and assists in the identification of potential community groups which may be affected by the Project, particularly those that are not in direct proximity to the Project.

Data from Stats NZ (formally called Statistics New Zealand) census area units and meshblocks are normally used to develop the demographic profile. The data includes:

population trends, age groups, employment figures, vehicle ownership and use, income and means of travel to work.

The population information is presented in Appendix A along with plans showing the census areas. However, census data has not been extensively used to prepare a demographic profile because:

- the immediate Project area has a very small population and number of dwellings – the relevant area unit is geographically large and the Project area is contained within a single meshblock; and
- an analysis of the regional study area would provide very generic information.

4.2 Regional Study Area

4.2.1 Population[5]

For the Taranaki region as a whole, the population has increased from 104,127 in 2006 to 116,700 in 2013 – i.e. an increase of 5.3%, and accounting for 2.7% of New Zealand's population. Statistics New Zealand, furthermore, gives a medium growth projection to 122,500 residents in 2023 and 130,800 in 2043, implying an average annual growth rate of 0.5% over the period 2013 to 2043.

Statistics New Zealand data indicate that the resident population in the New Plymouth District increased from 68,901 people in 2006 to 74,187 in 2013 – i.e. an increase of 7.1%. Over the same time period New Zealand's population has increased by 12.1%. Statistics New Zealand's medium projection is for the District's population to grow to 94,100 by 2043, implying an average annual rate of growth of 0.6% per annum. This compares with a medium projection average growth rate for New Zealand's total population of 0.7% per annum.

4.2.2 Infrastructure

SH3 plays and important role in ensuring national freight security (e.g. being the default north-south route when the central plateau is snowed out), and is critical for supporting industry and trade between Taranaki and the north of New Zealand – when SH3 is closed the alternative route is via SH1 and Whanganui (an additional 242km or approximately 5 hours between Auckland and New Plymouth).

Where Taranaki freight in general relies heavily on the road network (95% of all freight movement from Taranaki in 2012), short inter-regional freight trips are predominantly by road. Both rail and coastal shipping also play a role, with rail used predominantly for medium length inter-regional trips, and coastal shipping for long distance inter-regional trips.

[5] Stats NZ www.stats.govt.nz; NZ. Stat; Population (data extracted 17 July, 2017)

Dangerous goods, particularly from the Taranaki based petro-chemical industries, are routinely transported on SH3, and an overall average of 460 heavy truck movements per day have been recorded – with the majority being long-distance commercial freight. These heavy truck movements include longer quad axle semi-trailers (B-trains)[6][7]. Within the dangerous goods category, detailed interviews (see appendix B) also revealed that there are a large number of tankers hauling dangerous goods along SH3 to Auckland (for example, one firm sends 25 loads of LPG per day (up 40% from the previous year).

The 370km Maui high-pressure gas transmission pipeline (running from Oaonui Production Station, south of New Plymouth, to Huntly Power Station - south of Auckland) also relies on SH3 for maintenance access. The Maui pipeline went into operation in 1979 and was originally built to supply gas from the Maui field to points nominated by the Crown. However since 2005 it has been operated as an Open Access pipeline and now carries gas from a number of different Taranaki gas fields. It is the largest capacity high-pressure gas transmission pipeline in New Zealand. The pipeline transports natural gas produced in the Taranaki region directly to large gas users such as electricity generators and petrochemical plants, as well as being the primary source of supply for other gas transmission and distribution pipelines.

The majority of goods (80%) that go through Port Taranaki were given as bulk liquids, most of which is for export (per interviews; appendix B). The remaining is animal feed, logs and some cement. SH3 is now even more important for container based freight connectivity with markets, as only two modes (road and rail) are available with the demise of container shipping from Port Taranaki in 2013.

4.2.3 Business

Taranaki's overall economic performance is founded in agriculture, forestry and fishing; manufacturing and mining.

The following information is from the Infometrics 2016 Annual Economic Profile – Taranaki Region:

- Primary industries accounted for the largest proportion of GDP (34.4%) in Taranaki Region, which is higher than in the national economy (7.3%);
- A total of 15,147 business units[8] were recorded in Taranaki Region in 2016; and
- Road Freight Transport created an additional 122 positions in Taranaki Region between 2015 and 2016.

[6] Opus (August 2017) SH3 Mt Messenger Highway Upgrade Project: Strategic Transport Assessment.
[7] Opus (August 2017) SH3 Mt Messenger Bypass Detailed Business Case

[8] Businesses are measured by geographic units, which represent a business location engaged in one, or predominantly one, kind of economic activity at a single physical site or base (e.g. a factory, a farm, a shop, an office, etc.).

Table 4.1 – Summary of key business industries (based on Infometrics 2016 Annual Economic Profile – Taranaki Region, and Statistics New Zealand, 2016).

Sector	Key information
Manufacturing	Largest employer (by industry type) in the Taranaki Region at 8900 people, or 17.6% of the region's workforce. Manufacturing made the largest contribution to employment growth in Taranaki Region between 2015 and 2016 with the industry adding 178 jobs.
Agriculture, Forestry and Fishing	The second largest employer (by industry type) at 6185 people or 12.2% of the region's workforce. Forestry product is now freighted to Port Taranaki from the west, and SH3 north does not carry many logs. Port Taranaki Ltd advise that the longer-term strategy with respect to forestry is to develop scale economies at the port so as to reduce the per unit cost charged to the industry. At present product generated in south Waikato is generally freighted to the Port of Tauranga, although Port Taranaki has already begun to acquire some market share.
Oil and Gas	Gas and LPG products are moved to markets north of Taranaki by the Maui pipeline and SH3, while road transport is used to move product south and east. Road transport distribution of LPG to market is time-sensitive.
Food processing	Food manufacturing contributes 4307 jobs (8.5%) or $340m of the region's GDP. Taranaki employs 18% of New Zealand's total workforce involved in dairy product and cheese manufacturing – the second highest contributor. It comprises over half of Taranaki's manufacturing base. The region is home to a number of the nation's major food production facilities as well as a base for locally grown successful businesses – Taranaki has over 6% of New Zealand's GDP and jobs in food production, 18% of the nation's dairy and cheese production workforce, and supply links to major outlets here and around the world.
Tourism	The tourism industry employed an average of 2,640 people in Taranaki Region in 2016. This amounted to 5.2% of the Taranaki Region's total employment in 2016. The tourism industry contributed $110m towards GDP in Taranaki Region in 2016 and accounted for 1.5% of the region's economic output.

Sector	Key information
	Visitor expenditure for the 12 months to January 2017 was an estimated $338 million for the region, an increase of 5% over the previous year.

SH3 plays an important role in ensuring national freight security. The key ambitions to grow the region relate to improving the scale of Taranaki's core industries and removing the 'isolation issue' regarding its connectivity to the upper North Island (from the Economic Development Strategy). Venture Taranaki surveyed stakeholders as part of their Economic Development Study on State Highway 3 North (2012). The Venture Taranaki report notes:

> *The view is – aspects of the route [SH3] add to costs, place operations at risk and will likely become a significant constraint to growth in the near future. (pg. 36)*
>
> *We have engaged the trucking and heavy engineering industries and have identified that the size and dimension constraints on SH3 are particularly binding for them, and disadvantage Taranaki's competitiveness in a disproportionate manner. (pg. 50)*
>
> And regarding Heavy engineering:
>
> *One of the issues identified was the restrictions on over-dimension vehicles using SH3. This significantly increases the cost for doing business, reduces Taranaki firms' competitive edge, and also likely affects net exports. The bulk of this sector's exports are via Auckland or Tauranga ports.*
>
> *Tunnel not large enough to allow typical oversized loads through. What would normally be about a 368 km trip between New Plymouth and Auckland on SH3 at a cost of about $4,000 becomes a 780 km trip on SH1 via Bulls or Marton that costs about $9,000. These costs include 2-3 light pilot vehicles in support, accommodation costs for staff that would otherwise be avoided (because a return trip could be made in one day), and the road user charges. (pg. 36)*

4.2.4 Sport and Recreation

The region is supported by a number of natural features which provide for a range of activities including surfing (SH45 surf touring route), surf lifesaving, running, walking, triathlon, mountain biking and horse riding. Many of these activities are in growth and opportunities to maximise access to suitable facilities can significantly increase participation for community and events.

There are a number of major facilities which are significant at a National level. Both the Yarrow Stadium (rugby, football) and the TET Hockey Stadium (Hockey) regularly host national and international events and act as a significant drawcard to the region. Other major facilities include TSB Stadium (indoor sports) in New Plymouth, TET Stadium (Athletics) in Inglewood and Egmont A&P Showground (Equestrian) in Hāwera (Global Leisure Group, 2017).

Other than the top rugby and basketball team, sporting codes travel by road and if this is north it is via SH3 -destinations include Hamilton, Auckland and Rotorua. There are no particular patterns to travel as it depends on the code but at the later period of a sporting season there are larger tournaments that normally mean travel is required. For 'smaller sports' (in terms of numbers participating) the geographic location/drive time is a "massive put off for people" (personal communication, Sport Taranaki, 3 August 2017).

4.2.5 Tourism

Domestic tourism is key for the region with 84% of Taranaki's commercial guest nights from domestic visitors, with the balance, (16%) being international[9].

The national tourism strategy includes a focus on regional dispersal for the next four years to take the pressure off key destinations. Connections to other regions will be important for Taranaki and as part of this, Taranaki is looking to work with Waikato (personal communication, interview with Venture Taranaki, June 2017).

Tourism is playing an increasingly important role in the Taranaki economy with a number of annual events attracting visitors from outside of the region. Venture Taranaki (personal communication, interview with Venture Taranaki, June 2017) note that for major events most people travel from the Auckland and Wellington regions. Annual events include the Around the Mountain Cycle Challenge, WOMAD music festival, Rhododendron and Garden Festival, Festival of Light and Taranaki Fringe Garden Festival.

The Taranaki Regional Land Transport Plan recognises that potential exists to better develop non-motorised transport tourism within the region, particularly walking and cycling trails.

4.2.6 Health

Taranaki has two hospitals - Taranaki Base Hospital in New Plymouth and Hāwera Hospital. There are health centres at Stratford, Opunake, Waitara, Mokau and Patea.

Waikato Hospital in Hamilton is the closest tertiary facility, and a key role of SH3 is for patients travelling from Taranaki to Hamilton for assistance beyond the capabilities of Taranaki Base Hospital. Waikato Hospital provides specialist services for Taranaki and referrals from Taranaki Base Hospital to Waikato hospital are common.

Taranaki District Health Board (DHB) have advised that over the last three years[10] the total number of treatments and attendances by Taranaki residents at Waikato Hospital have increased by approximately 200 each year:

[9] Venture Taranaki, Taranaki Visitor Statistics March 2017

[10] Taranaki District Health Board, response to Official Information Act request, letter dated 18 August 2017.

Table 4.2: Treatments and attendances by Taranaki residents at Waikato Hospital.

Category	2014	2015	2016
In-patient discharges	954	955	973
Outpatient attendances	1287	1455	1654

While there is no criteria for deciding when residents need to be sent to Waikato as an emergency referral, all emergency patients are transferred by air due to Taranaki's geographic location.

4.3 Local Study Area

The immediate Project area is primarily conservation land (public), Ngāti Tama land (private freehold – 'Parininihi') and pastoral farming (dairy, pasture). There is a small number of dwellings scattered through the Project area. These are mainly close to SH3 which tends to be the main individual property access. There is a small cluster of houses in the Ahititi and Uruti areas.

4.3.1 Population

The Project area is within the Okoki-Okau Area unit (see Appendix A). Stats NZ data indicate that the resident population of the Area Unit increased from 1920 in 2006 to 2169 in 2016 – i.e. an increase of 11.5% compared to an increase of 5.3% in the Taranaki region.

The median age of people living in the Area Unit is 42.3 years; those over 65 years represent 13.8% of the Area Unit and those under 15 years 21.3%. These are similar figures to the region.

At the time of the 2013 census there were 819 occupied dwellings (78%) and 225 unoccupied indicating that the majority of people live permanently in the area, although lower than the 92% occupancy rate across the region.

Those that live within the Area Unit are likely to have good access to private vehicles as 21.3% of the population have access to 3 or more vehicles and 49% to 2 or more.

4.3.2 Community Facilities

Community facilities within the key area have been identified in Figure 3.

Ahititi School is a state primary school (Year 1 to 8) with an average roll of 20 students. The school decile rating is 4 indicating that its students sit around the middle range with respect to the proportion of students from low socio-economic communities. There is no zone/enrolment scheme in place at the school. The school has important connections to the community, with the school swimming pool and tennis courts well used.

Uruti School is a state primary school (Year 1 to 8) with a roll of 13 students in Years 1-8. The school decile rating is 4. There is no zone/enrolment scheme in place at the school, but it predominantly draws its students from the area south of the Mt Messenger tunnel.

Uruti Hall & Community Centre is strongly supported by the local community and used by the school. In interviews with the school there was a desire to expand the use of the community hall to become a possible stopping point on the route particularly for the local population. There are also suggestions that the community hall, which is a well-proportioned and usable building, could be used or used in part as a café.

There are also primary schools at Mimi and Urenui, which are outside of the key area. The closest high school, for those that attend the local primary schools, is at Waitara. The nearest early childhood education is at Urenui.

The nearest towns are Urenui to the south and Mokau to the north. Within Urenui there are a small number of shops including a cafe, Four Square, petrol station and Pub. The community also provides accommodation with the motor camp and motel. St Paul's Anglican Church provides a place for religious assembly. The Urenui Volunteer Fire Brigade is located just off the main road. The brigade has one fire appliance (however it has vehicle rescue equipment). On Tuesday and Friday mornings the Urenui and Districts Health Clinic is open, otherwise the nearest medical practice is at Waitara and nearest after hours facility is in New Plymouth.

Urenui Sportsfield and Community Centre is located to the south east of Takiroa Street in Urenui. The reserve is a District Council facility but administered and maintained by the Urenui Community Centre Committee. The land contains the community centre, sports fields, skate park and some bush. The park has two fields available for sports. The sports played are currently social rugby and school soccer and the Playcentre is based at the centre. The Urenui and Districts Lions Club is the local service club. Other facilities/clubs include a library, dive club and bowling club. The Urenui Domain is located on a spit of land at the mouth of the Urenui River and has been a summer recreation ground for more than 100 years. The motor camp is located within the domain along with the 9-hole golf club.

Urenui Pa is located north of the town. Urenui Pa holds a special significance for Ngāti Mutunga[11] within Taranaki. It is their only remaining marae and has been the focal point for Ngāti Mutunga Iwi activities since the early 1870s.

To the north of the Project area, Mokau's coastal location makes it popular for fishing by Taranaki residents and for visitors over the summer. It is part of the Waitomo District (i.e. part of the Waikato region). It has a number of accommodation facilities, cafes, butcher, a museum and gallery, library, community hall and health centre. Mokau Primary School

[11] The main concentrations of Ngāti Mutunga populations are located within Taranaki, Christchurch and Wellington. The majority of Ngāti Mutunga descendants (approximately 73%) live outside Taranaki. (source http://ngatimutunga.iwi.nz/ngati-mutunga/)

(decile 7) provides for Year 1 to 8 students with a roll of 26 (as at 2016). There is a St Johns Ambulance Station and rural fire team.

The area is served by the Clifton Community Board that covers the area from just north of Waitara to New Plymouth's northern district boundary.

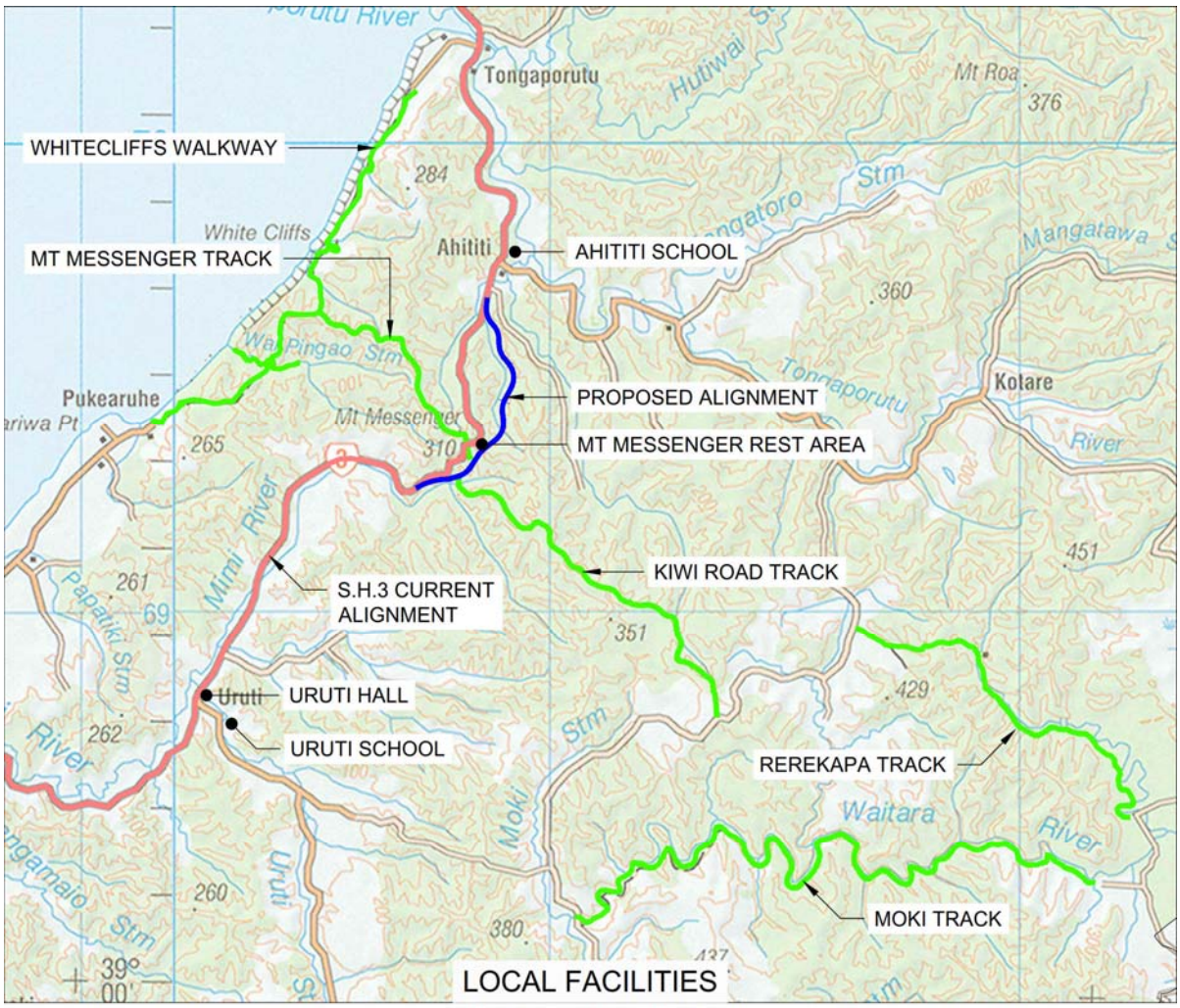

Figure 4.3 – Map of local facilities relative to SH3 and the proposed alignment.

4.3.3 Reserves and Recreation Areas

The Mt Messenger and Kiwi Road Tracks are currently accessed from SH3. Department of Conservation advice indicates use is low in both cases (low 100s per year), with the Kiwi Road track providing access for pig hunting in the Mt Messenger Conservation Area to the east. Roadside access off SH3 is especially poor for the Mt Messenger Track, with it intersecting SH3 directly onto the road and with no adjacent parking area. There is a pull-over area at the start of the Kiwi Road Track with parking for two to three vehicles. Both routes are promoted via the Department of Conservation's online recreation information for Taranaki.

The Mt Messenger Track links with the Whitecliffs Walkway which runs from Gilbert Road in the south to Waikoroa Road in the north, and to the coast via Waipingao Stream

The Moki Track (walking and mountain biking) goes through Makino Conservation Area. Combined with the Rerekapa Track, these two tracks offer a full day 45km loop trip for experienced riders.

4.3.4 Travel patterns and community linkages/connections

SH3 is the key transport link within the area. The majority of locals are used to driving over Mt Messenger. During consultation one Ahititi resident recounted that members of the public (from New Plymouth) 'can't believe they would commute over Mt Messenger' however, it is not unusual for locals to go into New Plymouth.

Ahititi School has a single bus (small van) that goes up Okau Road for approximately 20km and then to Tongaporutu. The school regularly takes trips north and south, for examples, every fortnight the Year 7 and 8s go to Waitara.

The Uruti School has a single bus that undertakes a 1 hour round trip in the morning. The afternoon school bus run is broken into two runs; the first to the area north of the school and the second to the south. There are regular trips north and south with regular trips to Ahititi School and other schools in the cluster of five schools. A major issue for the school bus is the lack of pull-off areas that causes major safety concerns. The winding nature of the route also increases the bus drivers' levels of concern and discomfort.

There is no public transport in the area however, the Intercity bus stops at Uruti and Ahititi.

The survey (see Appendix C) and traffic data shows that people travel the route throughout the year, all days of the week and at varying times. SH3 is used as there is no other way for people to travel. However the route is not considered as safe, enjoyable or convenient as illustrated in Figure 4.4.

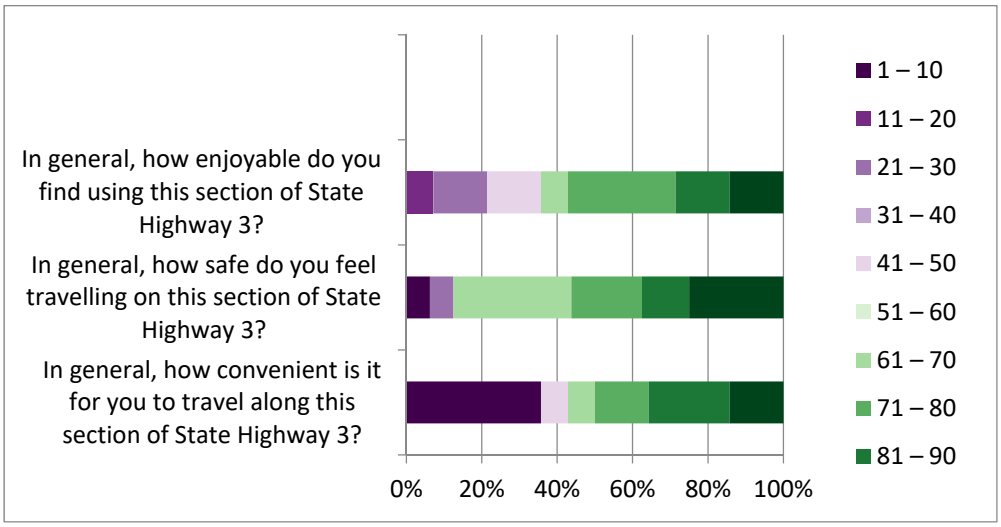

Figure 4.4 – Respondents rate safety and convenience of SH3 (1: Very enjoyable/ safe/ convenient to 100: Very unenjoyable/ unsafe/ inconvenient)

The reasons given (with a selection of survey responses) are:

- Do not feel safe as: tight, steep and slow curves, winding, lack of safe passing opportunities, rest area is not safe, too many near misses, hard to see what is coming, difficult for commercial traffic, large vehicles make people feel unsafe.

How safe do you feel travelling on this section of SH3?

"large vehicles and unskilled rivers on this road make me feel unsafe"

"The steepness and corners of Mt Messenger make it un-safe"

"Very windy and narrow in some places along with the rock fall can be scary"

- Not enjoyable as: unsafe driving practices, high concentration driving, large trucks, rough surfaces.
- Not convenient as: slow, stops people coming into the region, prone to closure and could cut Taranaki off for days at a time.

Closures also have an impact on people's use of SH3 and/or their travel plans.

If there is a road closure or risk of closure, how does this affect your use of SH3/travel plans?

"Big time. Getting freight out of New Plymouth becomes a problem as it takes up drivers' hours and slows the whole logistics process down"

"Massively – we have been held up for hours due to accidents several times. Teams have had to travel for several hours longer having to go the long way around on return or going to tournaments"

4.3.5 Community views

The social environment also includes the community's view of their environment. As part of the targeted survey people were asked about places they like, don't like and ones that are important to them. The locations are plotted on the two figures below.

The most common reason for identifying 'places or features I don't like on this route' within the Project area are "tight, steep, slow corners, condition of the road, and is unsafe".

'Places and features I like on the route' within the Project area include "access to the walkway, pretty, nice scenery, good views and green".

I don't like this (place) because: "Windy, narrow sections going up Mt Messenger, Scary trucks"

The (place) is important to me because: "The beautiful scenery"

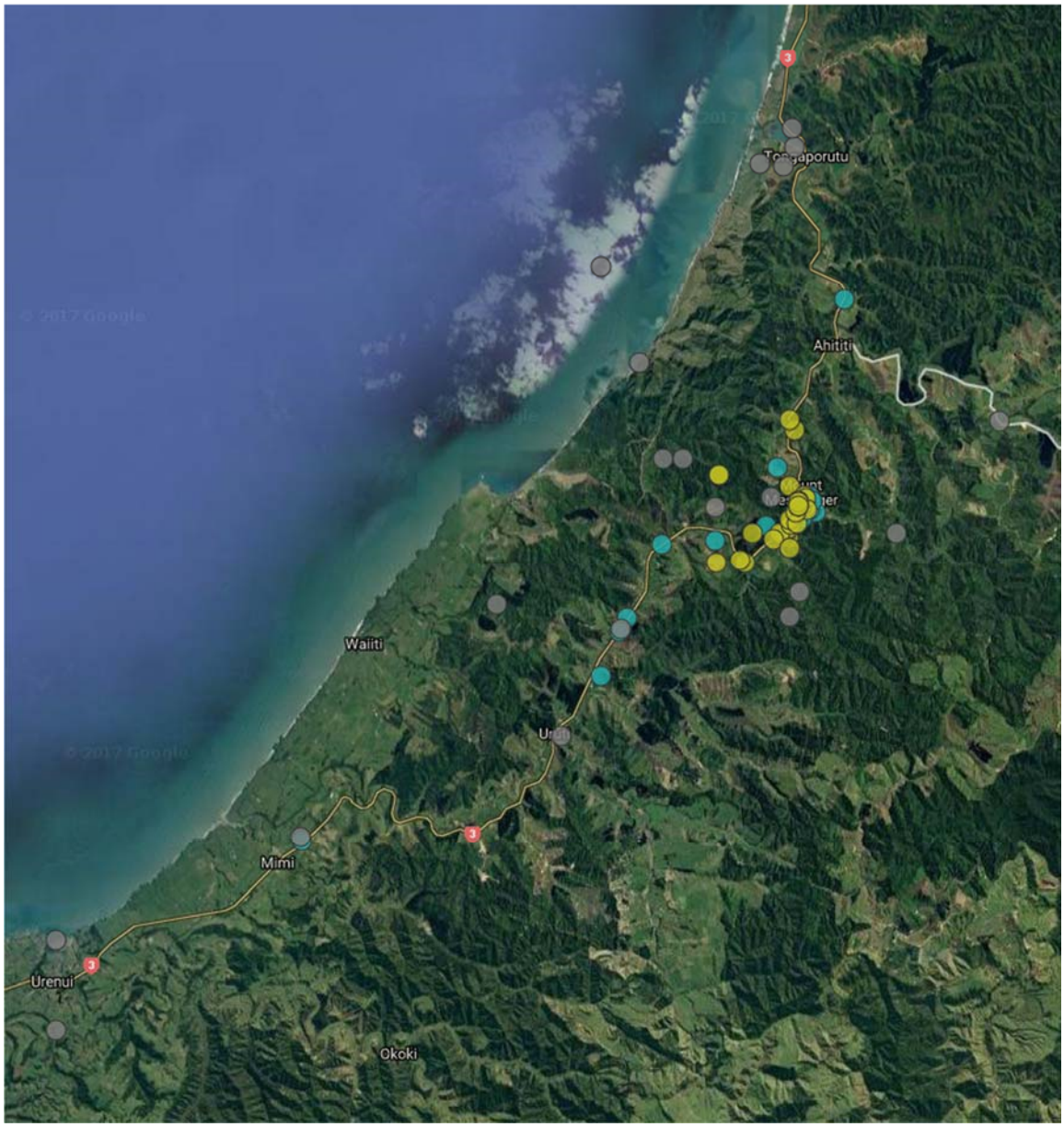

Figure 4.5 – Places and features identified by those who completed the survey – wider area.

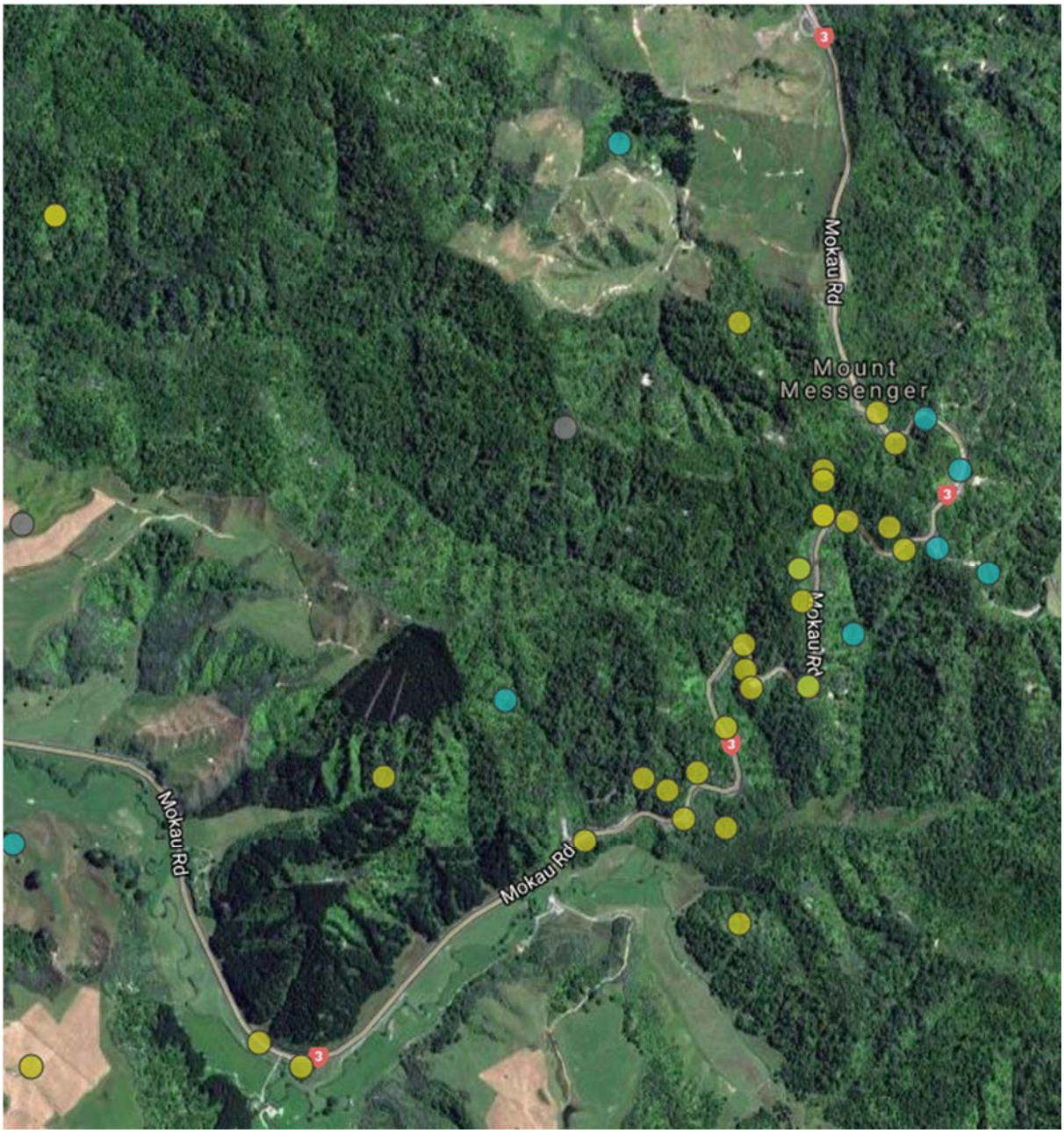

Figure 4.6 – Places and features identified by those who completed the survey – Project area.

5 Review of Relevant Technical Reports

This section takes into consideration elements which are covered in greater detail in the technical assessments and provides an assessment through a 'social lens'.

5.1 Environmental Noise and Vibration Effects Assessment

The Environmental Noise and Vibration Assessment[12] addresses the operational road-traffic and construction noise and vibration effects of the Project.

From a social perspective, noise effects can have significant implications for people's health and wellbeing (e.g. ability to sleep/relax), as well as their ability to enjoy their environment, and to engage in learning activities.

From a social perspective, vibration can have significant impacts on human comfort, including potential disruption to sleep, cause of annoyance, and general impacts on health and wellbeing.

From a human effects perspective, the report has identified three properties (as protected premises and facilities; PPF) that require consideration:

1 3072 Mokau Road – highest noise level will increase by approximately 3 decibels once operational (the noise level effects in this property vary by façade, as explained in the noise and vibration report)

2 2750 Mokau Road – reduction in noise of 4 decibels

3 2528 Mokau Road – reduction in noise of 1 decibel

Overall, the report predicts the traffic noise levels at the nearest receivers post construction are low to medium, are considered acceptable and would not result in adverse effects on residential activities.

With respect to vibration, the report concludes that operational vibration effects will be negligible.

Construction noise is predicted to comply with the day-time limits at all dwellings. For vibration from construction, all buildings as assessed as having a low or medium risk of damage – these effects have been considered acceptable by the author.

From a social perspective, the recommendations in the noise and vibration report are accepted. No further mitigation is required.

[12] Environmental Noise & Vibration Assessment (Technical Report 10, Volume 3 of the AEE)

5.2 Air Quality Assessment

The effects on air quality from construction dust (from earthworks) and vehicle exhaust emissions are considered in the Air Quality Assessment[13]. Two sensitive receptors within 200m of the Project are identified:

- 3072 Mokau Road at the northern end of the alignment, 97m from the nearest point of earthworks and 112m from the proposed road edge (118m to the existing SH3 alignment)
- 2528 Mokau Road at the southern end of the alignment, 120 m from the nearest point of earthworks and 117m from the proposed road edge (no change in distance to the existing alignment).

The report concludes that:

- The separation distance to residential houses is such that they would not be impacted by exhaust emissions from construction vehicles and plant.
- Good practice measures for dust control via a dust management plan is recommended to proactively manage dust emissions and avoid adverse effects during the construction phase and will ensure the risk of adverse effects of dust from construction activities at the two houses is low.
- Effects from operation of the road are considered negligible.

5.3 Assessment of Transportation Effects

Two transport assessments have been prepared. The Strategic Transportation Assessment (STA)[14] describes the effects of the Project with respect to resilience, robustness and economics. The Traffic and Transport Assessment[15] considered the impacts that would result from the proposed SH3 realignment, including relevant construction effects.

The key problems with the SH3 route are identified as:

a Lack of road-side shoulders, narrow lanes, poor geometry, and unforgiving conditions causing crashes, death, serious injury, and road closures.

b Lack of suitable alternate routes where road closures are forced by natural events, leading to delays and adverse economic impact.

c Too few passing opportunities leading to driver frustration and poor journey experiences.

[13] Air Quality Assessment (Technical Report 11, Volume 3 of the AEE)

[14] Strategic Transport Assessment (Technical Report 1, Volume 3 of the AEE)

[15] Assessment of Traffic and Transport Effects (Technical Report 2, Volume 3 of the AEE)

From a social perspective, transportation is important with regard to:

- Access, connectivity and patterns of living – ability to access community facilities, essential services, medical facilities, educational institutions etc., as well as implications of travel time on regular/daily routines.
- Health, safety, wellbeing and amenity – effects of traffic noise, safety of the local environment, air quality, vibration.

As a transportation project, the Project will result in some changes to access, connectivity and patterns of living both during construction and once the Project is operational.

The reports summarise the primary adverse effects of the Project as:

- Construction traffic movements associated with transport of earthworks material and transporting construction materials which can be mitigated through implementation of a Traffic Management Plan.

The positive effects of the Project include:

- Improved safety:
    - improving safety will reduce deaths and serious injuries and future crash risk on a section of high risk rural road
- Greater resilience:
    - improving resilience on a section of highway prone to closures and subject to long detours when closed will enable better disaster response and recovery and will minimise disruption through better event preparedness, and fuller achievement of infrastructure standards (design)
    - will ensure better support for economic growth through improved public and business confidence in route availability, and improved availability of key routes
    - will reduce risk of harm to road users as seen by the decreased number of incidents.
- Combined improvements to trip time and resilience:
    - In cases where both route resilience and trip time reliability are significantly improved, benefits accrue to residents through a reduced sense of isolation, especially with more reliable road access to Waikato Hospital and Auckland Airport.

In summary, the Project will strengthen a key strategic link and enable a better and more dependable standard of access to the benefit and advantage of the Taranaki region as a whole.

5.4 Economic Assessment

Two assessments were relied on with regards to the economic effects of the Project. These were the STA and the Economic Assessment[16].

The STA cited regional growth (especially in the New Plymouth District) as significant. Furthermore, 10 major industries (including forestry, livestock farming, and meat and dairy product manufacturing) are expected to grow by up to 29.9%, as are their associated transport demands – involving increasing numbers of heavy vehicles on SH2. Implicit is that residents' improving economic livelihoods, therefore, rely in large part on these industries and their connections to the wider economy,

Several key challenges for the region included:

1 Ensuring an integrated transport network.

2 Facilitating growth and economic development.

3 Ensuring network resilience, and

4 Reducing safety risk on the network

The Economic Assessment cited transport infrastructure as heavily implicated in the operation of key industries/ economic drivers (largely agriculture, manufacturing, and oil and gas), therefore employment in the region. LPG shipments by road, for example, are particularly important since as Auckland Manukau Harbour is no longer being dredged their transport by sea is no longer possible.

Thus, both the STA and the Economic Assessment give regional reliance on a limited number of vulnerable road links as a limiting factor in terms of capacity, resilience, and safety – all of which have flow on economic effects which impact on individuals and businesses (including community wellbeing).

The economic benefits of the Project include:

- Reduced commercial operating expenses:
    - Reduced travel times achieved by reducing route length, developing shallower grades and a higher speed limit, for heavy vehicles the average travel time over this section of SH3 will halve.
    - Reduced delays due to rock-falls and landslips cause delays – reducing travel time reliability and increasing travel times – affecting both personal and commercial traffic.
- Commercial inventory cost-savings and improved competitiveness:

[16] Economic Assessment (Technical Report 4, Volume 3 of the AEE)

- Greater resilience is achieved through Improving network resistance and resilience, and increasing transport capacity of the SH3 lifeline better minimises economic disruption in the event of disasters.
- And for businesses more reliable roads facilitate "just in time" deliveries, with benefits in terms of inventory cost-savings, and improved competitiveness.

- Improved commercial transport efficiencies:
  - Greater capacity where currently tunnel size is an impediment to regional development as it restricts the size of freight – two-way traffic is difficult and truck load sizes are limited by two narrow tunnels (at Mt Messenger and Awakino).

The Economic Assessment concludes that the Project will lead to greater economic efficiency and predicts benefits in terms of economic growth. A potential economic loss is given where a small number of properties located close to development may suffer through severance (due to changed road layout), noise, visual impact, and other intangible effects' impact on property prices.

However, as the only direct arterial highway connection to and from the North, reductions in vehicle operating/ travel time and road accident costs, and improved travel time reliability and route resilience would benefit local businesses and residents (e.g. through reduced cost of inputs and greater reliability, and greater employment).

5.5 Recreation Assessment

The Recreation Effects Assessment[17] focuses on recreation activities and recreation values (those factors which make recreation activities valuable or desirable). It also covers tourism and considers the ability of the Project to deliver beneficial outcomes for tourism, particularly in the Taranaki region, but only in a broad manner. Use of private land for recreation is not considered.

The Recreation Effects Assessment notes:

- There are no effects on access to the summit rest area or the track entry points for the Mt Messenger and Kiwi Road Tracks as SH3 will remain open during construction
- The proposed route crosses the Kiwi Road Track immediately east of the track start, and without the installation of a temporary access, the Mt Messenger Conservation Area will not be accessible from the west.
- Construction noise effects are temporary but may displace some pig hunting in the nearby Mt Messenger Conservation Area. This is a very minor effect considering the scale of the setting.
- The location of the new road will remove a substantial source of noise for users of the Mt Messenger Track from Parininihi / Mt Messenger to Waipingao.

[17] Recreation Assessment (Technical Report 13, Volume 3 of the AEE)

- Provisions for cycling on the new route are positive, but limited by the quality of the roads to the north and south. However, the proposal improves the potential for future additional cycleway provision.

The conclusion is that operational effects on existing recreation amenity, including tourism, are positive.

5.6 Summary

The technical reports discussed above demonstrate that adverse effects can largely be addressed through good construction practice and that there will be significant operational benefits that will be realised. This approach is acceptable from a social perspective, and the recommendations from the technical specialists are relied upon.

6 Summary of Community Engagement

6.1 Overview

The process and outcomes of community and stakeholder engagement are important inputs to the SIA, providing primary information about community values, aspirations and concerns relating to the community and potential impacts from the Project.

All the consultation material for this Project has been reviewed in order to prepare this section of the report. This included meeting minutes, feedback, consultation material and speaking to other members of the Project team that were involved with the meetings.

In accordance with the Transport Agency's guideline, community engagement has been undertaken by the authors of this SIA. The authors have been involved with:

- Attendance at the June 2017 Drop-In sessions
- Interviews with a range of parties (see Appendix B)
- Designing and undertaking a targeted survey.

The 'Consultation of Options Report' (April 2017) has also been reviewed along with media releases. The consultation that has been undertaken is summarised in Table 6.1 below.

Table 6.1: Treatments and attendances by Taranaki residents at Waikato Hospital.

Engagement	Date
Stakeholder engagement (meetings and correspondence) including: Affected landowners, Māori, SH3 Working Party, Department of Conservation, New Plymouth District Council & Taranaki Regional Council, Forest & Bird, Fish & Game	Various 2016-2017
Awakino Gorge to Mt Messenger Programme Consultation on 3 options Drop-In sessions, social media	Nov 2016 – Jan 2017
Project updates	May 2017, November 2016
Media releases Consultation announcement Revised options and notice of drop-in sessions	 21 Nov 2016 14 June 2017
Drop-in Sessions TSB Showplace, New Plymouth Mud Bay Café, Urenui	 15 June 16 June

Engagement	Date
Mokau Community Hall	16 June
Interviews	June – August 2017
Targeted survey	July 2017

In terms of social and community impacts, the following are the key themes that were raised through the general consultation:

- Important that the SH3 improvements are an opportunity to improve driver efficiency including freight movements, which will have flow-on effects for Taranaki and the national economy
- A long term view is required that will benefit future generations and the environment
- A safer, more reliable road is necessary
- People saw a new route as having economic benefits to communities as well as to heavy vehicle operators
- "There is a significant volume of freight that traverses Mt Messenger every day, therefore, shortening and improving the alignment of the road would undoubtedly be beneficial for the economic growth of Taranaki, by providing improved access to markets for local produce. Our economic growth will contribute towards a stronger national economy and further development of New Zealand Inc." (Stratford District Council in NZ Transport Agency, 2017).

The impacts raised by the community during consultation to date have been used as a basis for identifying and considering social impacts, along with the matters which are identified in the framework discussed in section 3 of this report.

6.2 Survey and Interview Information

A copy of the survey results and interview notes are in Appendix B and C. Twenty-one people were interviewed and 46% of the 41 people responded to the targeted survey.

A diverse range of values and opinions have been expressed from local residents to people with business interests. A very small number of people (%?) do not want to see the road changed as they consider minor improvements could be made or alternative transport methods should be used. The overwhelming majority (%?) are in general agreement that the Project is needed and is long awaited.

The common concerns raised are: (i) safety issues that result due to the current alignment and design; (ii) people have a perception that the road is not good and this perception affects use of the road; and (iii) that SH3 is hugely important to locals and the region, so a reliable and safe road is critical.

Respondents were also asked what benefits would come from an improved SH3. This is discussed in section 7.

7 Assessment of Regional Social Impacts

7.1 Introduction

This section considers the wider potential social effects that may result from the proposal that are likely to be experienced at a regional level (outside of the local area), primarily from the operation of SH3. The wider social impacts relate to:

- **Way of life** – Impacts on accessibility, connectivity, patterns of living and mobility – the changes/benefits through an improved route and connectivity including the difference the Project would make to daily life
- **Growth and development** – the benefits that may be realised as part of the Project and the ability to lever off changes in access
- **Wellbeing** – changes to wellbeing and safety

The rating of the regional social impacts identified in this section is in Appendix D: Table D2

7.2 Way of Life

The Project is expected to deliver major social and community benefits related to transportation, connectivity and accessibility. The main benefits include:

- Greater resilience
- Improved movement of freight and people

Some residents feel isolated due to the current route's vulnerability and outsiders can have a perception that it is difficult to get to Taranaki. It was evident from both the consultation, interviews and a targeted survey that there are negative perceptions of the road and that makes people feel vulnerable and uncomfortable to use the route.

From the Venture Taranaki survey of 2011 (Venture Taranaki, 2012) respondents believed that SH3 affects Taranaki's overall attractiveness and that an improvement would link Taranaki to the rest of New Zealand. The interviews and survey undertaken for this Project confirmed this perception of this section of SH3.

Improved resilience will come from reducing road closures on this section of SH3, which is the main link from Taranaki and southwest Waikato to the Upper North Island and the ports of Auckland and Tauranga. These closures are caused by slips, flooding, obstructions such as trees and crashes.

When the road is closed (either due to crashes, natural hazards or planned maintenance) the local road detours are exceptionally long and difficult. This means traffic may be faced with either significant delays or detours adding up to 3 hours to their journey. Partial closures for the same reasons can also cause significant delays, and are often in place longer than full closures.

The survey respondents were spilt between perceiving the route as 'very convenient' and 'inconvenient' and 'very inconvenient'.

The inconvenient and very inconvenient views were evidenced by comments on people planning trips to leave earlier than required to ensure arrival at their destination be it Waikato or New Plymouth. In discussions with members of the public it became evident that hospital referrals from Taranaki Hospital to Waikato Hospital, especially for the elderly, can result in patients going a day earlier than their appointment and being forced to overnight so as to avoid the risk of missing appointments. Similar resilience issues were pointed out by sporting groups and those travelling for recreation purposes.

Reducing the frequency and duration of road closures will lead to improved reliability of the route, which will lead to increased business confidence, and may lead to investment and economic growth in the region. For truck drivers this will be a significant benefit as, if a driver is unable to complete a New Plymouth–Auckland return journey within daily maximum allowable driving hours per day, a replacement driver needs to be sent to complete journeys. The other option is that drivers are required to rest creating additional delays.

Everything is time critical these days and any hold ups have financial impact… An improved state highway would provide dependable schedules ***– transport company***

"Will provide better accessibility to region" – ***survey respondent***

"Our sporting organisation has people who live in Ahititi and a better route would make participation easier. They travel for sport each week" ***– survey respondent***

The current tunnel size limits the size of freight loads that can be transported with larger loads having to go via an alternative route. The Project will enable larger loads to be transported by truck thereby improving accessibility which will have flow on economic benefits.

There are currently no specific cycling facilities along this section of SH3. The proposal will provide for cycle access though the proposed tunnel, and the new road will have sufficiently broad shoulders to allow for road cycling (minor positive). There are no proposed upgrades to the Highway north and south of the new section to allow for safe cycling beyond the upgraded road.

From a health perspective, the number of residents going to Waikato Hospital for treatments and attendance has been increasing by 200 every year since 2014. The number of people accessing health services in Waikato, and therefore the reliance on SH3, is likely to continue to increase given the projected annual growth rate of 0.4% per annum for the region.

7.3 Growth and Development

The Project is expected to enhance the economic performance of Taranaki through improved resilience on this key route to the upper North Island, by mitigating risk and duration of route closure. The Assessment of Economic Effects[18] identifies the following potential opportunities that may arise from this as:

- Increased competitiveness for the region due to an improved SH3 being able to be used for oversized loads and higher degrees of certainty that the road will be open.
- Increased attractiveness of the New Plymouth District and the Taranaki region for business and residential development as well as improve accessibility for visitors. This has implications for expansion in growth and employment.
- Likely to generate additional leisure trips by residents and visitors.
- In particular, greater route resilience and trip time reliability will improve the competitiveness of Taranaki based businesses and the attractiveness of the region to locate new businesses or expand existing businesses.
- Benefits to residents and businesses from knowing a trip can be made even when no trip is undertaken.

While the above are all economic benefits, social benefits can be expected from them by encouraging retention of businesses in Taranaki, and encouraging the establishment of new businesses. This level of stability enhances employment opportunities, aids in retaining and growth in the regional populations which leads to the maintenance and upgrading of social infrastructure (houses, recreation areas and community facilities). Increased liveability is a factor in retaining skilled technical and professional people in the region.

The Project will result in additional expenditure, employment and incomes for Taranaki businesses and residents during the Project's construction through local employment, use of local supplies and materials, attracting a highly skilled workforce at least for parts of the construction timeframe who are likely to live and recreate in New Plymouth and the broader area.

"More tourism, more people and better options to get people to the region" – ***survey respondent***

"Would increase travel flow, trucks for transport, in turn increase economy as more money would be spent here" – ***survey respondent***

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[18] Assessment of Economic Effects (Technical Report 4, Volume 3 of the AEE)

7.4 Wellbeing

Consultation identified a real concern by road users about the safety of the current route and their resultant wellbeing. The survey highlighted the views expressed through the wider consultation of people feeling unsafe travelling the route and that it is not enjoyable.

By improving road safety the Project will directly contribute to the social and economic wellbeing of local residents and businesses and to the health and safety of residents and visitors to the District and Region. This has benefits not only to the region but to the local population. The schools have concerns about the safety of the route, the lack of pullover space for school buses and the daily discomfort of the school bus driver and children.

Improving safety will reduce deaths and serious injuries (DSIs) and future crash risk on a section of high risk rural road. Deaths and DSIs have high costs to society so significant benefits are expected.

There are some residents that will not drive over Mt Messenger as they do not feel safe. While there can be no certainty that the Project will change the way some people feel, a safer road or a road that is perceived as safer may change their perception and participation in activities.

As part of the consultation for the SH3 route between Awakino Gorge to Mt Messenger, a public survey carried out in 2015 revealed that 75% of 251 respondents had negative journey experiences along the corridor, with key words in their responses such as “scary”, “slow” and “annoying”. This information was supported by views expressed in interviews and the survey.

The Project will improve the journey experience by improving users’ experience of the corridor including reducing driver frustration, improving driver information and incident response, providing more opportunities to overtake and/or pass, and enabling less frustration from being behind slow moving vehicles. It is also likely that better mobile phone communications will occur from the start of construction as the contractors will require reliable communications.

Improved communications will allow for faster response times by emergency services, which may also reduce the severity of injuries from serious crashes. Improved driver information will also reduce delays by notifying drivers earlier if there is an incident on the road so they can make travel decisions.

By investing in improving the safety and resilience of the route, it will result in better infrastructure quality on the improved section. This will also have second order benefits in minor efficiency benefits, improved comfort and journey experience for the travelling public.

“The future road use is about risk management. When we have key loads freighted that are needed in a hurry there will be comfort in knowing that

the road is as safe as possible and drivers are unharmed" – ***Oil & gas industry***

"An improved road would provide assurance that trucks can come and go safely – for drivers and others on the road" – ***Freight business***

This adds to the liveability of the region and supports retention of businesses, growth of new businesses with positive potential impacts on employment and regional wealth. Positive economic outcomes or expectations enables a strong social and community infrastructure (schools, hospitals, recreation and cultural opportunities).

Feedback from stakeholders and the community clearly demonstrates a strong level of overall support for the Project. By improving road safety, route resilience and travel reliability and reducing vehicle operating costs and travel times, the Project will directly contribute to the social and economic wellbeing of local residents and businesses and to the health and safety of residents and visitors to the District and Region.

8 Assessment of Local Social Impacts

8.1 Introduction

Local social impacts experienced across the Project area and at a localised level (where relevant) at the construction and operational phases include:

- **Way of life** – Impacts on accessibility, connectivity, patterns of living and mobility – the benefits through an improved route and connectivity including the difference the Project would make to daily life
- **Wellbeing** – changes to wellbeing and safety
- **Quality of the environment** – the effects on people from construction and operation of the Project i.e. noise and dust
- **Community** – Impacts on people's property and 'neighbourhoods'; educational facilities; community areas and sites; community plans and aspirations; and on accessibility to services

The rating of the local social impacts identified in this section is in Appendix D: Table D3.

8.2 Way of life

The assessment below focusses on the construction phase. Operational effects are expected to be similar to the regional impacts.

Based on experience from other projects of a similar nature and scale, typical construction related effects on accessibility, connectivity, patterns of living and mobility can include:

- Construction vehicle movements causing disruption to road users
- Construction activity causing changes to access in and out of properties and route disruption

The commencement of construction will be when most individual way of life impacts will begin to be felt. The Project involves significant construction activity albeit the majority of it will be offline. Construction is anticipated to take 3 years. Construction works are programmed to commence Quarter 3, 2018 (dependent on all required land and approvals being secured) and will be completed by the end of 2022. Construction support areas (e.g. contractors' yards) will be set up, a significant volume of material will be excavated and a large workforce will be present during daylight hours. However, because the contractor's yards, temporary stockpile areas or spoil storage areas, and the sediment retention pond are all located away from residences, no occupied site will be exposed to construction for the entire duration. Long term social impacts will relate to the post construction phase once the Project is operational.

The existing SH will remain open during construction, however at either end of where the proposed route will tie in with the existing alignment there is likely to be some disruption as this work occurs. This may result in minor delays (a minor negative) for road users.

During construction as part of normal traffic management, access will need to be maintained. Details of the measures to be adopted, whenever construction activities vary the normal operating conditions of any road affected by works, will require a Construction Traffic Management Plan (CTMP). The Plans are prepared in accordance with the requirements of the NZ Transport Agency Code of Practice for Temporary Traffic Management.

Any changes to access at the construction stage are considered to be minor negative and can be addressed through the requirement for a Construction Environmental Management Plan (CEMP). The plan would include provision of access for emergency vehicles, maintenance of road and property access during construction and the requirement for a Traffic Management Plan.

It would also be normal practice to notify affected landowners and the local community of the likely commencement date for the works and expected timeframe of the construction programme. This will help to mitigate the social effects of any temporary changes, as people will be able to plan for appropriate alternative arrangements and incorporate these into their usual daily routines.

The existing SH will remain open during construction, however there are limited existing opportunities for safe walking and cycling along SH3. There is no public transport provided in the area other that the inter-regional bus services. For these reasons walking and cycling effects during construction are not considered any further.

School buses operate in the area depending on where school pupils live. The two primary schools each have a minivan and those high school aged students that go to Waitara High School go via school bus. During construction, any effects on school bus routes/turning area will depend on where pupils are living at the time of construction. As the existing road is to remain open during construction, any disruptions will be minimal.

Uruti School has identified that there could be positive educational benefits in the Project from construction as they would be interested in understanding the ecological effects and their mitigation and participating in activities where is safe to do so.

8.3 Wellbeing

Construction activity has the potential for effects on the wellbeing and safety of surrounding residents. Wellbeing may be affected through anxiety about the nature and duration of construction effects. Safety may be affected through changes to the quality of the environment (for example air quality). These effects can be minimised as far as possible through implementation of the CEMP which would require e.g. containment of dust within the boundaries of the designation.

Concern and anxiety cannot be fully avoided or mitigated as individuals have different reactions. However, the accelerated nature of the Project has the potential to provide certainty to people that the Project will go ahead as opposed to a long drawn out process.

Notification of the likely commencement date for the works and expected timeframe of the construction programme will enable people to make any arrangements to their daily lives and routines to minimise any potential effects on health and wellbeing during the construction period.

There are potentially short-term effects to safety related to construction traffic primarily where the proposed alignment ties into the existing state highway. It is expected that safety will be maintained throughout the construction period through the preparation and implementation of the CEMP.

The effects on road safety during operation are discussed in the Regional impacts section above.

In summary, construction effects are considered to be a minor negative, and most effects can be addressed through the CEMP. This includes the anxiety effect, addressed through a communications plan and effective stakeholder engagement as part of the CEMP.

8.4 Quality of the environment

Construction works can be socially disruptive and also be annoying to surrounding residents depending on how they are managed. Activities can impact on people's outdoor use or may disrupt sleeping habits. The effects on air quality, noise and vibration have been considered in the technical assessments and mitigation measures are proposed. The effects will be managed through the CEMP which provides for a Dust Management Plan and the Environmental Noise and Vibration Assessment recommends that a Construction Noise Management Plan (CNMP) is implemented in the construction phase of the Project.

All dwellings are further than 100m from the works and construction noise and vibration are expected to comply with the relevant limits thereby providing adequate protection to the quality of the existing environment.

The CNMP will need to demonstrate compliance with NZS6803: 1999 Acoustics Construction Noise. NZS6803 requires lower noise levels on Sundays and after 6pm. As construction work on Sundays has been proposed, specific approval may be required before work on Sunday would be allowed. However, work in close proximity to the nearest dwellings is only intended to be carried out during Monday to Saturday operations. Subsequently, the effect during construction is considered to be minor negative as the construction noise standards can be met. Once operational, the traffic noise changes are considered to be minor and for two of the properties will be positive therefore no specific mitigation is considered necessary.

It is not expected that the wellbeing of residents at adjacent properties will be adversely affected by dust as this can be managed.

The Project will require earthworks, and hence an associated increase in construction traffic. Construction traffic has the potential to impact on the amenity of the local community and impact on peoples' ability to enjoy their local environment. The routes and types of vehicles used that this traffic will take will be determined by the contractor, following the award of the contract. It is anticipated that the contractor will construct internal haul road(s) to shift cut material internally within the site, and/or to enable internal site connectivity to structures during construction. The CEMP would require the contractor to prepare a traffic management plan, including mitigation measures to address impacts on roads use. In any case, the effects of construction traffic will be temporary.

The general nature of construction activity and the resultant Project impacts on the visual amenity of an area as changes to the local environment occur. In this case the Project will result in a new road in a location where there is currently none as opposed to an existing road being widened.

With respect to visual effects, these can affect the ability of residents to enjoy their surrounding environment, and this in turn can affect people's health and wellbeing. For home environments, the visual outlook can be important for relaxation, and this is particularly so where people have a rural outlook.

The major two elements of the landscape in this area are the open and rolling, green pastoral land and the steep bush clad hills. The landscape is considered to have moderate to high value.

A small number of properties may gain views of the new road. The effects on the environment and amenity can be addressed by conditions requiring: adoption of mitigation plans developed as part of design; sympathetic treatment to earth worked slopes; and new planting appropriate to the locality.

In summary, the changes to the environment and amenity are considered as minor to moderate negative.

8.5 Community

Privately owned land is required for the Project – three properties have dwellings that are not currently owned by the Transport Agency. However, while a small number of properties are required (for partial or full purchase), owners that are directly or indirectly affected by change in the local area may experience anxiety. Severance of properties can result in social impacts through changes to people's livelihoods and employment (for example, to the viability of a farm operation).

Should severance of a property occur, the severance of a farming operation can affect the ability for a landowner to carry on their employment. Compensation will be provided through the Public Works Act process, and a lapse date on the planning approvals will be important in providing a degree of certainty regarding construction timeframes and acquisition.

There are no specific facilities in the immediate Project area. The closest is Ahititi School approximately 1.8km from the northern tie-in. Uruti School is over 5km from the southern end of the Project area. The Mt Messenger walking tracks are considered in the recreational assessment so are not considered any further in this report.

There will be no construction activities that will directly affect access to commercial areas.

The author is not aware of any specific community aspirations.

In summary, the main community effect is the impact on a few privately owned properties that are required in order to construct and operate the Project.

9 Assessment of effects following Mitigation

Overall it is considered that there are significant positive effects and that potential adverse effects can be appropriately mitigated as identified in Table 9.1. Table 9.1 considers only the adverse effects, the recommended mitigation and then provides an impact rating as a result of the proposed mitigation. As appropriate, mitigation measures identified by other technical experts have been adopted. Impact ratings refer to the Appendix D effects scale.

Table 9.1 – Summary of negative social impacts, mitigation and residual impacts.

Impacts	Impact Rating without mitigation	Key mitigation proposed	Impact Rating with mitigation
Construction			
Potential changes in accessibility for property owners due to disruption caused by construction activity	Minor –	Implementation of stakeholder engagement methods in accordance with the CEMP	Minor –
Road delays during construction	Minor –	CTMP / CEMP	Minor –
If local roads are used for construction related traffic there will be an increase in heavy vehicle numbers	Minor –	CTMP / CEMP	Minor –
Noise and vibration during construction may impact on people's enjoyment. People who work from home/farm could be affected by long periods of noisy works	Minor –	Implementation of a Construction Noise Management Plan (CNMP) during the construction phase	Minor –
Large scale earthworks and other activities such as contractor support areas could generate dust	Minor –	CEMP	Minor –
The main visual effects during construction will arise from earthworks, construction support areas. These elements will represent a change in the amenity and 'look and feel' of the area	Medium –	Alignment of highway geometry with underlying natural landform, avoiding major landform cuts, ensuring cut and fill areas are integrated with surroundings	Minor –

Impacts	Impact Rating without mitigation	Key mitigation proposed	Impact Rating with mitigation
Increased anxiety among local residents about safety and wellbeing during construction	Medium –	Implementation of stakeholder engagement methods in accordance with the CEMP	Minor –
Operation and Maintenance			
A revocation process for the existing SH route will be initiated at some point in the future. – while it is not possible to determine what future use will be available for this section of existing road, the process will ensure that property access is retained for all landowners with current access of SH3	Minor–	Formal revocation process, involving consultation with existing landowners	Minor –
The completed Project will represent a change in amenity for locals that previously did not have a SH in their viewshed	Medium –	Very few landowners identified to have views of the new highway.	Minor –
Land take – loss of social cohesion from land acquisition. One owner who has lived in the area for a long time will be required to move off the property during construction	Medium –	Compensation will be provided through the Public Works Act process	Minor –
Loss of properties (farming)	Medium –	Compensation will be provided through the Public Works Act process	Minor –

Key mitigation will be around communications on the Project both regionally and locally. The following is recommended:

- Development and implementation of relevant construction management plans as referred to in the various specialist reports, including the CEMP and CTMP.
- Prior to the commencement of construction and/or enabling Work, the NZ Transport Agency shall implement stakeholder engagement methods in accordance with the CEMP, setting out procedures detailing how the public and stakeholders will be communicated with throughout the construction period and for the first six months of operation. This will need to include local communication and may include local meetings with schools, landowners and the community, dissemination of information

through the schools to the parent communities. A broader strategy will also be required for key regional stakeholders such as New Plymouth District Council, Taranaki Regional Council, road haulage and freight management organisations, Port of Taranaki, road users, emergency services.

- A Community Liaison person should be appointed by the Transport Agency for the duration of the construction phase. They should to be the main and readily accessible point of contact at all times for persons affected by the construction and operation of the Project.
- At all times during construction work, the Transport Agency should maintain a permanent register of any complaints received alleging adverse effects from, or related to, the exercise of the designation.
- Involving local schools and the community in the construction process through regular talks and engaging schools in the process by providing access to ecologists and other specialists to explain the process and involve local schools where it fits within the curriculum.

10 Conclusion and Recommendations

From a social perspective it is considered that once operational the Project will offer significant regional and local benefits.

Key regional benefits include:

- **Way of Life** – greater resilience in the road network to accidents and natural hazards, and improved capacity and ease of movement for both freight and people
- **Growth and Development** –
    - increased competitiveness with Auckland and the Waikato by increasing the capacity of SH3 to safely handle oversized loads and more consistent journeys
    - improved accessibility and improved trip experience for visitors
    - enhanced accessibility for businesses, particularly those which are reliant on freight movements for production materials and access to markets
    - residential growth becomes more attractive with regional connectedness and a reduction of the perception of isolation
    - maintaining and enhancing regional liveability helps to retain skills and services in the region
    - improving access and journey experience to essential facilities in the Waikato, such as Waikato hospital
    - greater resilience in terms of trip reliability and trip-time reliability that improves competitiveness for businesses
    - a potential to increase business activity and consequent positive, beneficial impact on employment
    - employment opportunities and economic activity created for local businesses and services during the construction phase
- **Wellbeing**
    - improvement in the journey experience through reduction in driver frustration, by virtue of greater passing or overtaking opportunities, and a reduction in delays through being caught for long periods behind heavy vehicles
    - improved response times for emergency services leading to improved outcomes and reduced perception of isolation

The adverse social effects of the Project are primarily at the local level. The potential adverse local effects are:

- **Way of Life** – as construction vehicle cause disruption to local road users and construction activity and route disturbance causes a change to property access, and there is the potential for disruption to school buses.

- **Quality of the Environment** – through increased noise, dust, and vibration, a change in amenity and visual aspects affects a few residents close to construction, and road users passing through the construction area.
- **Wellbeing** – through anxiety with regards to the nature of construction and its duration.

The majority of the adverse effects are on the local social environment and those experienced during the construction phase. These are generally minor effects that can be mitigated by the CEMP and specific management plans. A key mitigation measure will be communication as this is vital to address concerns likely from landowners in the Project area. People will expect and tolerate some form of disruption if they are aware when it will be over so they can get on with their lives.

There are a number of mitigation measures that should be instituted for this Project:

- A key mitigation measure is to ensure that good information is available to affected individuals, local community groups in particular schools, recreational users and the *general public. A public information strategy should be prepared as part of the consent application. The strategy should identify the various communities of interest and how construction information will be provided. This may take the form of radio advertisements, newspaper publications on a more regional level to establishment of a small local groups of schools, businesses and individuals who are affected by construction and need regular information to minimise disruption to daily lives
- Development and implementation of relevant construction management plans as referred to in the various specialist reports
- A Community Liaison person should be appointed by the Transport Agency for the duration of the construction phase. That person should be the main and readily accessible point of contact at all times for persons affected by the construction and operation of the Project
- At all times during construction work, the Transport Agency should maintain a permanent register of any complaints received alleging adverse effects from, or related to, the construction of the Project
- Involving local schools and the community in the construction process through regular talks, and engaging schools in the process by providing access to ecologists and other specialists.

Overall the project has significant social benefits to the region in terms of way of life, growth and development, and wellbeing. Furthermore, the relatively minor negative social effects on the local population can be either appropriately avoided, remedied or mitigated.

11 References

Global Leisure Group (April 2017), Taranaki Regional Sport Facility Strategy, prepared for the Taranaki Regional Sport Facility Strategy Steering Group

Infometrics, Taranaki Regional Annual Economic Profile 2016

Jenkins, Martin (date not stated) Economic Development Strategy 2014-2024, prepared for New Plymouth District Council

New Plymouth District Long Term Plan 2015-2025

New Plymouth District Plan (Aug 2005)

NZ Transport Agency (2016), People Place and Environment Series: Social impact guide. Wellington: NZ Transport Agency

NZ Transport Agency (April 2017), Awakino to Mt Messenger Programme: Consultation on Options Report

Statistics New Zealand (2017), 2013 Census data

Statistics New Zealand (2017), Subnational population projections: 2013 (base) – 2043 update

Taranaki Regional Council (2007) Regional Walkways and Cycleways Strategy for Taranaki

Taranaki Regional Council (2010), Regional Policy Statement

Taranaki Regional Council (March 2015), Regional Land Transport Plan for Taranaki 2015-2045

Taranaki Regional Council (2015), Long Term Plan

Venture Taranaki (April 2017), Taranaki Trends 2017 Q2Q3

Venture Taranaki (Sept 2012), The Road Ahead – Economic Development Study on State Highway 3 North

Appendices

Appendix A: Census Information

Introduction

The following information has been obtained from Census data prepared by Statistics New Zealand.

Statistics are presented at three levels: (i) Taranaki region; (ii) New Plymouth district and (iii) Okoki-Okau as the area unit that the project sits within.

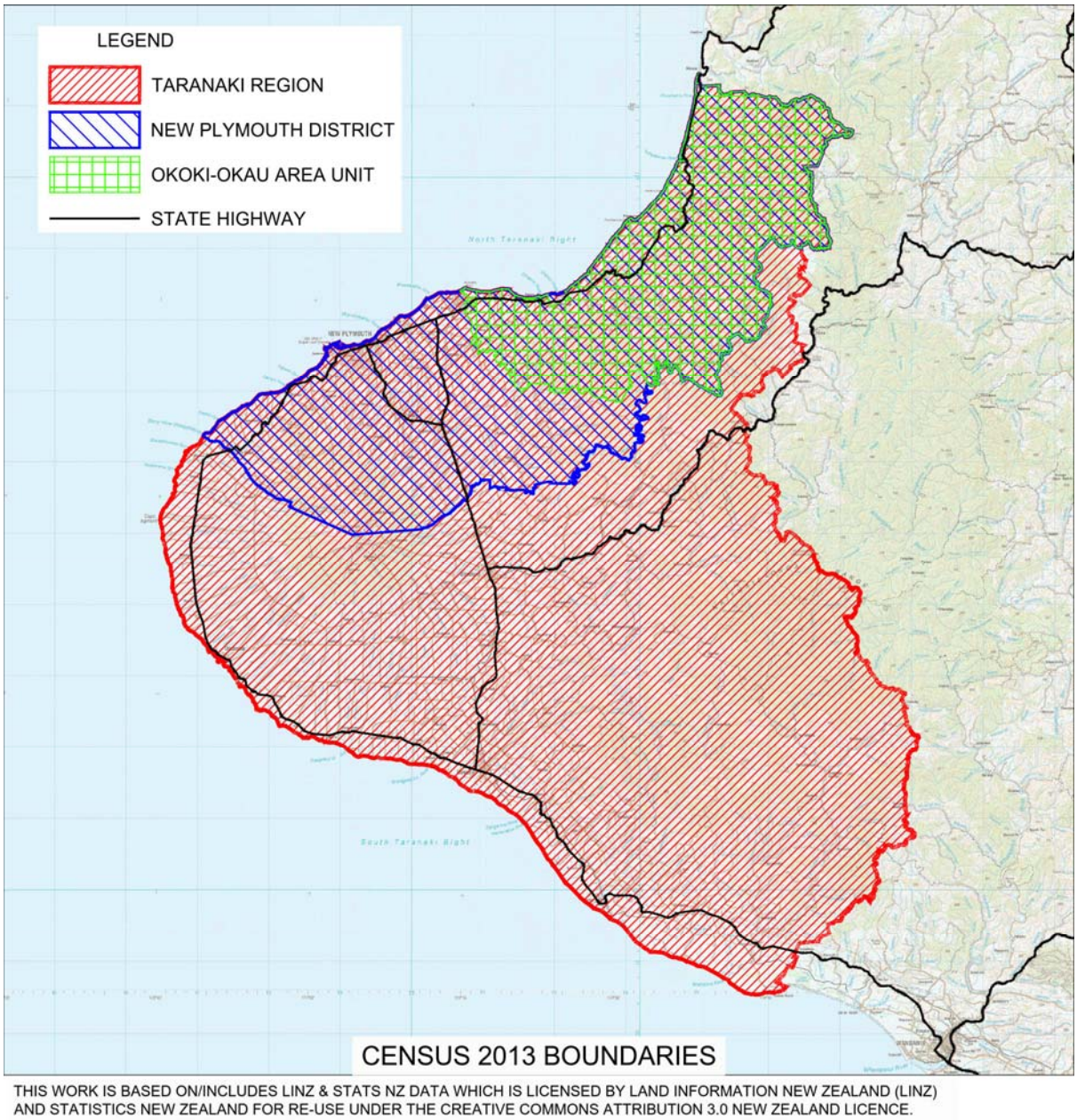


Figure A 1 – Boundaries of Okoki-Okau Area Unit, New Plymouth District and Taranaki region.

Population data

Table A 1 – The usually resident population and rates of change over the last three census.

Usually Resident Population (2001 – 2013)					
	2001	2006	2013	Change 2001–2006 (%)	Change 2006–2013 (%)
Okoki–Okau Area Unit	1902	1920	2169	0.9	11.5
New Plymouth District	66,603	68,901	74,187	3.3	7.1
Stratford	8886	8892	8891	0.06	1.1
South Taranaki	27,537	26,484	26,577	-3.9	0.3
Taranaki	102,858	104,127	109,608	1.2	5.3

Table A 2 – Key parameters for age, dwellings, qualifications, income, households and transport.

	Parameter	Okoki–Okau Area Unit	New Plymouth District	Taranaki Region
Age	Median age	42.3 yrs	38.2 yrs	39.9 yrs
	Over 65 yrs	13.8%	16.8%	16.2
	Under 15 yrs	21.3%	20.4%	21.1%
Dwellings	Occupied	819	29,466	43,431
	Unoccupied	225	2,238	3,855
Ethnic Groups	European	90.3%	86.7%	81.9%
	Maori	18.4%	15.7%	16.5%
	Pacific	0.9%	1.8%	1.5%
	Asian	0.6%	4.0%	3.2%

	Parameter	Okoki-Okau Area Unit	New Plymouth District	Taranaki Region
	Middle Eastern, Latin American, African	0.3%	0.5%	0.4%
	Other	3.3%	2.1%	1.9%
Qualifications	Those over 15yrs with formal qualifications	69.8%	74.7%	71.8%
Employment	Unemployment rate – over 15yrs	3.9%	5.6%	5.6%
Income	Median – aged 15yrs+	$29,900	$29,100	$29,100
	Annual income of $20,000 or less	35.4%	36.3%	36.3%
	Annual income over $50,000	26.7%	26.8%	26.4%
Family Type	Couples with children	41.0%	38.4%	39.0%
	Couples without children	48.8%	44.5%	43.8%
	One parent families with children	9.8%	17.1%	17.2%
Household composition	One-family household	76.7%	68.2%	67.9%
	One-person households	21.0%	26.3%	26.7%
Transport	Access to 3 or more vehicles	21.3%	14.4%	14.8%
	Access to 2 motor vehicles	49.0%	39%	38.9%
	Access to 1 vehicle	27.6%	39%	38.9%
	No vehicle	2.4%	7.5%	7.3%
Main means of travel to work	Private car, truck or van	66.1%	153.4%	65.1%
	Company car, truck or van	17.2%	11.2%	14.5%
	motorcycle	5.9%	14.6%	2.3%
Home ownership	Private dwelling owned by occupier	73.3%	69.8%	68%
	Those that rent – median weekly rental	$200	$250	$220

Table A 3 - Business: Top 5 industries in Okoki-Okau for year-end February 2013.

Industry	Okoki-Okau		New Plymouth District	
	Employee count	% of total employee count	Employee count	% of total employee count
Manufacturing	190	32.2	4410	12.8
Agriculture, forestry & fishing	180	30.5	1120	3.2
Mining	55	9.3	1210	3.5
Construction	40	6.8	2780	8.1
Education & Training	35	5.9	2550	7.4

Business demographic data for the year ended February 2013 shows there were 508 business locations (geographic units) in Okoki-Okau compared with 8,906 for all of New Plymouth District. This is an increase of 2.8 percent from the year ended February 2006 for Okoki-Okau.

Appendix B: Interview Information

Subject:	**Mt Messenger Bypass Project**		
Location:	**New Plymouth – Public Drop In session**	Date:	**15 June 2017**
Party	**Transport**	Recorded By:	**SB**

- Do not forget that landowners are important – through construction phase need to be aware of what means for their life
- Tourism opportunity – want to see it happen. There is a conservation gap – opportunity to get people in and enjoy
- It is not just a road, need to enjoy
- Will open up day trip opportunities
- See Option A best – closer to the coast. Eastern option not an option
- Opportunity for all
- All need to make compromises
- Not just about the road, is about lifestyles and enhancing lifestyles
- Importance of getting people to Waikato Hospital who often have to travel night before so guarantee will get there
- Are some older people who won't drive over Mt Messenger to visit family
- Is a bigger story to be told, is more than just transport
- Want to change the perception that can only drive one way in any one day so that can travel both ways in a day
- Need to consider stock truck effluent – don't want a green trail along the road as not a good environmental look

Subject:	**Mt Messenger Bypass Project**		
Location:	**New Plymouth – Public Drop In session**	**Date:**	**15 June 2017**
Party	**Taranaki Resident**	**Recorded By:**	**SB**

- Travel SH3 – private vehicle at various times of the day and days of the week
- SH3 is the only route can use as use it to visit family
- Like the scenic values (scenic beauty of native flora) of the current route particularly at the Mount
- Heavy traffic makes it slow and dangerous, also high maintenance costs
- Is neither a convenient or inconvenient route
- Traffic travelling slower makes it feel safer
- Would like to see the following improved: stopping/scenic spots, cell reception
- Benefits an improved SH would have for Taranaki: improved reliability, heavy transport important as lost big containers at the Port
- Benefits an improved SH would have outside the region: current SH may stop use of campervans
- Benefits an improved SH would have on business/recreation/lifestyle/cultural opportunities: walking tracks, open up hunting areas, increase tourism
- Other: Enjoy Mt Messenger as winding (slower so enjoy scenery more, can smell the ferns)

Subject:	**Mt Messenger Bypass Project**		
Location:	**New Plymouth – Public Drop In session**	Date:	**15 June 2017**
Party	**Freight**	Recorded By:	**SB**

- Lives elsewhere and travels frequently through the route by private and commercial vehicle. Mainly at night time. All days of the week, all year round. Use as is the shortest route
- Don't like lack of passing opportunities, not conducive for others feeling comfortable
- If single lane new road is not future proofing it
- Trucks are still the most economic
- Currently people come to Taranaki on purpose, you don't come here by accident – need to take away the isolation
- Type of roads we drive on are a significant hold up to traffic flow
- Would like to see the following improved: cell coverage, things that run alongside tourism potential and everything that goes with it
- Benefits an improved SH would have for Taranaki: drive is scenic and don't want it spoiled. So many spin offs but need to balance – NZ driving conditions are different to overseas
- Benefits an improved SH would have outside the region: interest of the road you drive on helps concentration. Actually driving not just cruising along is important – need variety in road so people have to concentrate driving
- Other: need to future proof but combine resources i.e. transport modes. Of doing road projects need to do in conjunction with rail, gas route, train etc.
- Retired generation here in Taranaki have campervans – will the road suit them?
- Need to provide stopping points – give drivers a reason to stop
- Timeframe to drive a route is important
- On the route to Auckland, Mt Messenger/Awakino is the worst part
- Take a long term view – do it once, do it right even if have to spend more. Do not disadvantage future generations

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	Date:	**16 June 2017**
Party	**Emergency Services**	Recorded By:	**SB**

- Are no real spending issues with current SH, trucks do 90 km/h. Speed more of an issue at Mokau and on straights
- Over long weekends drivers observe the speed tolerance limit and do 95 km/h
- Are not many accidents on this stretch of SH3
- Patrol the route regularly but not necessarily every day, often just to top of Mt Messenger. On Friday and Sundays do patrol

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	Date:	**16 June 2017**
Party	**Commercial – heavy equipment**	Recorded By:	**SB**

- Current SH limits size of plant (~50 tonnes) that can transport on the road. Equipment over 120 tonnes has to go via an alternative route
- Would like to see the following improved: passing areas, stopping areas, cell/radio coverage
- Benefits an improved SH would have: easier to transport equipment at short notice – would change part of their business model
- Other: some people enjoy the current route due to e.g. scenery so it depends on why you are driving the road

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	Date:	**16 June 2017**
Party	**Resident**	Recorded By:	**SB**

- The current SH should become a walkway and cycleway.
- Spend whatever needs to be spent to get the right solution

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	Date:	**16 June 2017**
Party	**Resident**	Recorded By:	**SB**

- Other: need to put more effort into trapping to protect the birds

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	Date:	**16 June 2017**
Party	**Resident**	Recorded By:	**SB**

- In the past 15 years only had 1 detour
- Preference is Option A but could build a tunnel all the way

- Other: need to put more effort into trapping to protect the birds

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	**Date:**	**16 June 2017**
Party	**Resident**	**Recorded By:**	**SB**

- Lives 15min from Mt Messenger
- Likes the scenic drive but knows that truck drivers prefer straighter routes

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	Date:	**16 June 2017**
Party	**Resident**	Recorded By:	**SB**

- Option A – an open cut would allow the road to dry out so surface would last longer. If needed to be tunnel would accept that
- Go back to basics – why did we get the $$ for the project – to get rid of tunnels, provide passing (people get frustrated when stuck in row of vehicles)

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	Date:	**16 June 2017**
Party	**Emergency Services**	Recorded By:	**SB**

- Get about 65 calls/year of which 45 calls up to Mokau/year
- 14 members in the brigade, have cutting gear, is more cars then trucks that have accidents, approximately 2 years since had truck accident
- Takes approx. 20 minutes travel to top Mt Messenger
- Locations on Urenui side that are the worst are the first and second corner, the other is where deer fencing starts. Some passing lanes dangerous, not designed for cars to travel around outside
- Homeowners 'switch off' into Urenui. – is where accidents happen
- If motor vehicle accident Waitara brigade also called out
- Ambulance from New Plymouth – closest

Subject:	**Mt Messenger Bypass Project**		
Location:	**Mokau – Public Drop In session**	Date:	**16 June 2017**
Party	**Resident**	Recorded By:	**SB**

- Drives Mt Messenger route for golf on a Tues at 8.30pm. Takes about 40 minutes. Issue is trucks and queues that form behind them and no safe areas to pass because always oncoming traffic

Subject:	**Mt Messenger Bypass Project**		
Location:	**Mokau – Public Drop In session**	Date:	**16 June 2017**
Party	**Residents Q&As**	Recorded By:	**SB**

- Motel has 8 units – get lots of trucks, workers, holidays been there 11 years steady all year round
- What needed is food 24 hours or at least after 7pm as everything is shut until 7am
- No preference re option, you are paying experts to look at it so surely they will come up with the right option
- Opportunity to create a conservation area that is fenced
- What happens with the current road?
- Someone presented a 1979 consultation document – need to get on with it. Has been put off due to funding.
- Likely to be lots of Model A & T Fords over the edge that would be interesting
- Stick with current route, less landowners disrupted. If don't have to pay out landowners have more money for the road.

Subject:	**Mt Messenger Bypass Project**		
Location:	**Urenui – Public Drop In session**	Date:	**16 June 2017**
Party	**Resident**	Recorded By:	**SB**

- Lives in Te Awamutu, has block land at Mokau
- Go coastal direction as provides opportunities to provide access to conservation areas and the coast
- Coast is unique – rates better than the Great Ocean Road in Victoria. Australia.
- Need to take a long term view of what needs to be achieved – Māori have the right approach with being caretakers for others to come.

Subject:	**Mt Messenger Bypass Project**		
Location:	**Ahititi**	Date:	**28 June 2017**
Party	**Ahititi School**	Recorded By:	**SB**

- 120 years old – was school at Okau, Tongaporutu and Ahititi by river – school ended up in middle location
- School has 1.5 FTE (staff) all live locally
- Is 1 bus route with 2 legs – up Okau Rd for 20km and then Tongaporutu for remaining pupils
- School gets used outside of school hours by the community e.g. school pool in summer, tennis courts
- Students either go to high school at Waitara or further afield to boarding school. A small number go to the intermediate school
- 10 years ago – new carpark built by Transfield given the road frontage – meant moving the school exit. Concern was for safety of students
- School is a Cluster host for Mimi, Uruti, Mokau. Every November there are 150 students that attend
- School is reasonably mobile – trips to e.g. library, coastal walkway, beach, movies. Years 7&8 every second week go to tech classes at Waitara. Kids are used to the road and going to town
- Road accidents – recall an accident 300m up the road, was a truck fire, cars backed up – opened up the school – toilets, phone.
- Regularly get travellers asking to use the phone as no cell coverage in area
- Are issues for the school: random travellers – leave cars parked that have broken down for e.g. 6 weeks; rubbish along roadside; using the school grounds as a toilet or dumping rubbish
- Improvements have a positive effect – get closer to town, even 5 mins makes a difference particularly at night when coming home. 40 years ago took 1.5 hours to go to town, now 50 min. New Plymouth public can't believe would commute over Mt Messenger
- Kids – have bush access on farm so don't tend to do go on local walks
- XX has been a resident for 35 yrs – traffic Friday to Sunday is now non-stop to the point it is noticeable, moving stock has become almost impossible
- Dial 111 – get Wellington call centre, have no idea where they are
- "Need to crack an egg to make an omelette" – are pragmatic but need least inconvenience possible during construction – in grand scheme is a "forgotten highway"
- Used to be Ministry of Works depot around corner, dairy factory – with population decrease school has declined
- Existing road – should become scenic route – what will happen to it?

- Would like to see the following improved: arrows on the road as concerned about tourists, need pullover areas if e.g. get flat tyre – need to pull over on road side; need toilet facilities and rubbish bins
- Benefits an improved SH would have on business/recreation/lifestyle/cultural opportunities: School needs more kids – would road make access to employment easier so would they live in area? Older people leaving – retire to town. Contractor – should employ some local people, create opportunity.
- Other: sort out cell/radio coverage before start so don't need to use locals' phones

Subject:	**Mt Messenger Bypass Project**		
Location:	**Uruti**	Date:	**29 June 2017**
Party	**Uruti School**	Recorded By:	**WT**

- School has 2 FTE (staff – the Principal/teacher and a teacher aid funded by the board who is also the bus driver). All live locally
- A role of 13 students from Years 1-8
- Is 1 bus route with 2 legs – north then south with a 1 hour return trip morning and afternoon
- School has major safety concerns with the lack of pull-off areas to pick up and drop students as well as for safe turning areas
- The driving experience for the bus driver on the windy road is negative
- Schools takes regular trips both north and south as the school is part of a cluster of 5.
- Students either go to high school at Waitara or further afield to boarding school in New Plymouth
- Although the school has excellent internet coverage cell phone use is still a problem
- The school is very environmentally active in a kiwi protection programme so are very interested in involvement in the ecological and construction aspects of the project
- School would like to see more use of the community hall to play a bigger role in tourism (café and arts sales)

Subject:	**Mt Messenger Bypass Project**		
Location:	**New Plymouth**	Date:	**29 June 2017**
Party	**Venture Taranaki**	Recorded By:	**SB**

- Venture Taranaki are the regional development agency
- Background to 2012 report
- Improving the SH had been talked about forever, had been a number of reports prepared. Was a need to look at regional development and how connected to wider things. Were trying to attract specialist skills, hard to get people to relocate, did some perception studies – people from Auckland, Waikato and Manawatu perceived the area as isolated, tricky to get to and for some this meant the SH – was a need to overcome this perception
- Heavy industry: businesses build in the region and need to transport to Auckland to export – the tunnels were the pinch point
- The SH is important for food products as need timely transport
- Tourism
    - 14% of visitor flows are international – normally come in through Auckland
    - When major events are held, most people come from Auckland and Wellington
    - Connection to other regions is important and the journey – looking to work with Waikato (has Waitomo and Hobbiton) and then Rotorua.
    - Looking at the conservation aspect of promotion but need a tourism product e.g. kokako
    - Government is seeking regional dispersal. Tourism NZ focus for next 4 yrs is regional dispersal as e.g. Rotorua and Queenstown at capacity
    - International markets need a commissioned product before tourists will come
    - Once people are here – feedback is positive, just need to overcome the perception/barriers – this includes the road
- Business
- Good infrastructure is part of the picture regarding increased business e.g. for Tegel who have food products, road closures have a consequence
- Hoped at the time the report was done (2012) that the result would be minor improvements to the road so great going the full extent
- Construction of the road is in itself something to promote – it promotes confidence

Subject:	**Mt Messenger Bypass Project**		
Location:	**New Plymouth**	Date:	**29 June 2017**
Party	**Freight**	Recorded By:	**SB**

- Type of freight:
    - LPG loads to Auckland (25 loads per day – up 40% compared to last year with Manukau Harbour no longer being dredged by Holcim), general freight (15 loads per days), servicing oil & gas, fast moving consumer goods from Auckland (e.g. appliances), frozen goods
    - "hots shots" – when oil & gas is humming and fly parts in from other parts of the world and trucks meet them at Auckland airport – is time critical for delivery to Taranaki as could mean rig goes down if don't get parts in a timely manner
    - Over dimension loads normally 1 per week
- Operational matters
    - Contact Energy – product is crucial supply, supply e.g. hospitals, bakeries. Pinch points – Auckland when gets cold, used to have large storage got gas but now sometimes can't keep up with supply.
    - Everything time crucial these days, any hold ups have financial impact. If need to use the detour (6hrs) decision is made early
    - Auckland is on the bounds of driving limits – plan is return trip for drivers – 4 hr 45 mins to Manukau-Wiri. Have a lot of 1am night shift starts to time arrival in Auckland avoiding traffic
    - Closures are a mix of accidents and natural events. NZTA should consider single lane closures as opposed to full closure – was a 2 day closure that had a big impact
    - For drivers – safety issue is for DG vehicles, hold ups = crunch point and congestion at Auckland and e.g Mokau/Awakino
    - If drivers reach limit of their driving hours need to do "rescue missions" due to accidents/closures to change drivers due to hours
    - Drivers get to Mercer/Bombay hills and take their first break so can get into Auckland and out with minimal delays – aim is not to have to a break (other than unload) in Auckland
- Route
    - Issue is that there is no other viable route
    - Safety reports – near misses, often on a weekly basis, trucks go 15 km/hr under post speed limits on e.g. corners
    - Weather – rain weather pattern gets monitored as has big impact on operations

- Over dimension route is the same as the detour
- Perception of the route does not affect way do business but when planning/costing jobs gets factored in

- Would like to see the following improved:
- Pull over areas to let vehicles through, rest areas for drivers
- Benefits an improved SH would have on business/recreation/lifestyle/cultural opportunities:
  - Will provide assurance trucks can come and go safely – for drivers and others on road.
  - Would enable dependable schedules.
  - Trucks – suspension, brakes, tyres savings would reduce repairs and maintenance, better fuel consumption – "environmental footprint" reduced

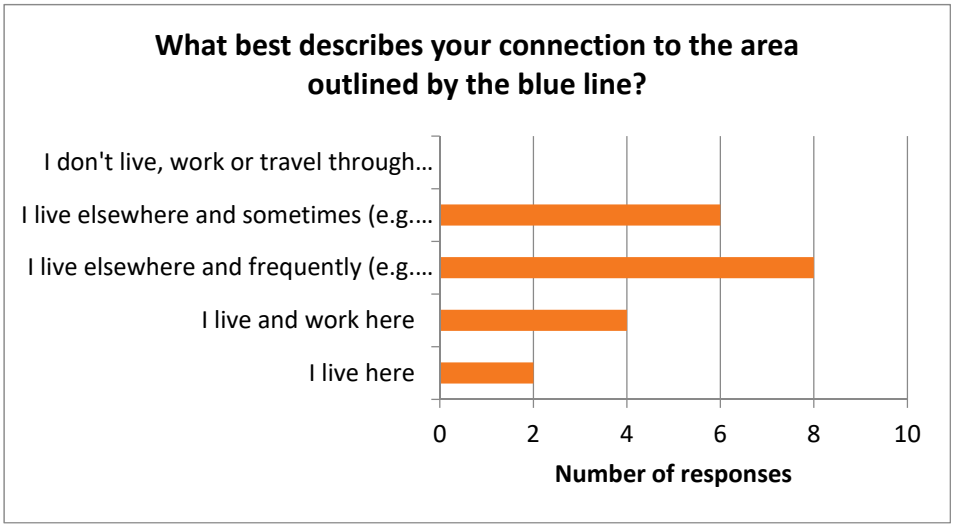
Subject:	**Mt Messenger Bypass Project**		
Location:	**New Plymouth**	Date:	**29 June 2017**
Party	**Port**	Recorded By:	**SB and WT**

- Type of freight:
  - 80% is bulk liquids – most exported, export mainly LPG
  - Containers stopped in Oct 2013
  - 20% animal feed, logs, little cement. Competing with Tauranga on animal feed (PKE)
  - Is 4th largest port
  - Most logs come from South Taranaki as logs from Waitomo/Te Kuiti area mostly go to Tauranga
- All parts in NZ trying to expand network catchment
- Cost comes down to km rates, road users do not pay for full cost of using roads
- Most logs get exported to China – don't have a large storage area at the Port so boats load at another port in NZ before leaving
- If the SH becomes more efficient to get logs into Port Taranaki as opposed to Tauranga – could make a difference to the business
- Improved SH could be positive or negative for the port

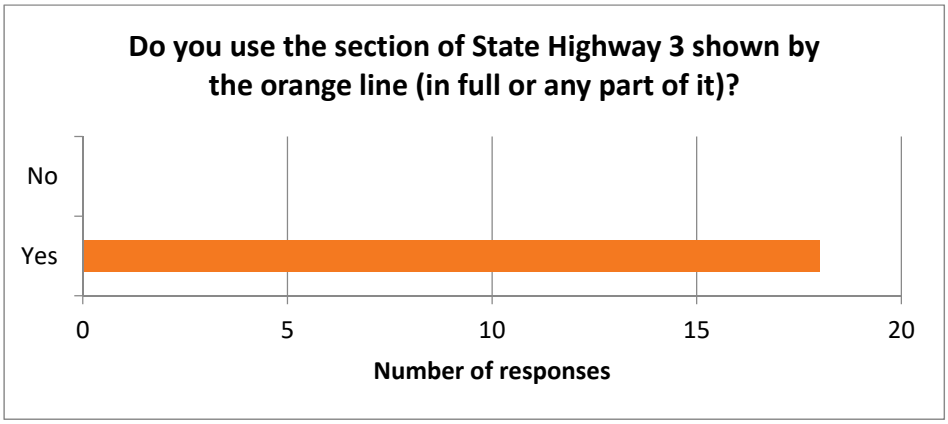
Appendix C: Survey

- **Survey Response data**

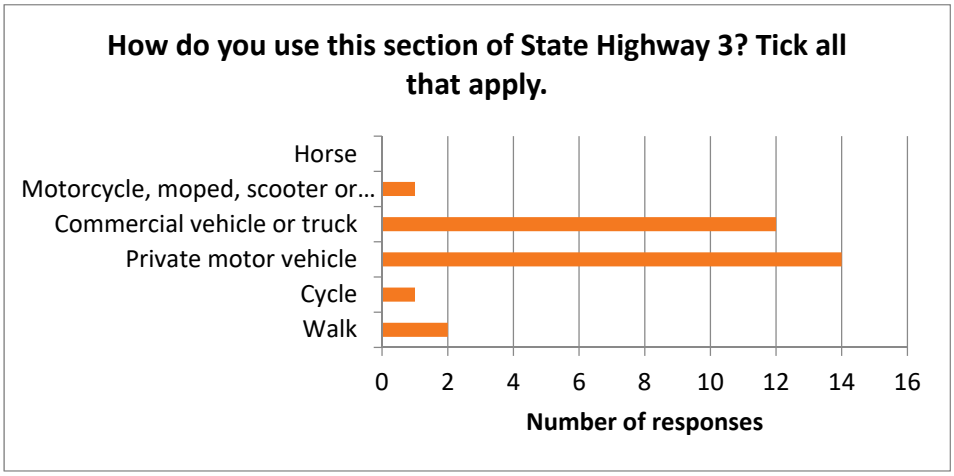
a) What best describes your connection to the area outlined by the blue line (Wider Mt Messenger area)?



b) Do you use the section of State Highway 3 shown by the orange line (in full or any part of it)?



c) How do you use this section of State Highway 3? Tick all that apply.



d) I like this (place) because:

Comment
View from the top
Scenery
Passing lane
Long straights and sweeping corners. Traffic flows nicely
It is a straight piece of road
I love all the rest sometimes the surface on certain corners only gets patched and never last otherwise it's a good road

e) I don't like this (place) because:

Comment
Windy, narrow sections going up Mt Messenger. Scary trucks
Windy
When cornering, no passing opportunities and resilience of road is unreliable
Tunnel is too small and a hard to get around with large vehicles
Trucks
Too slow and dangerous through this area of Mt Messenger

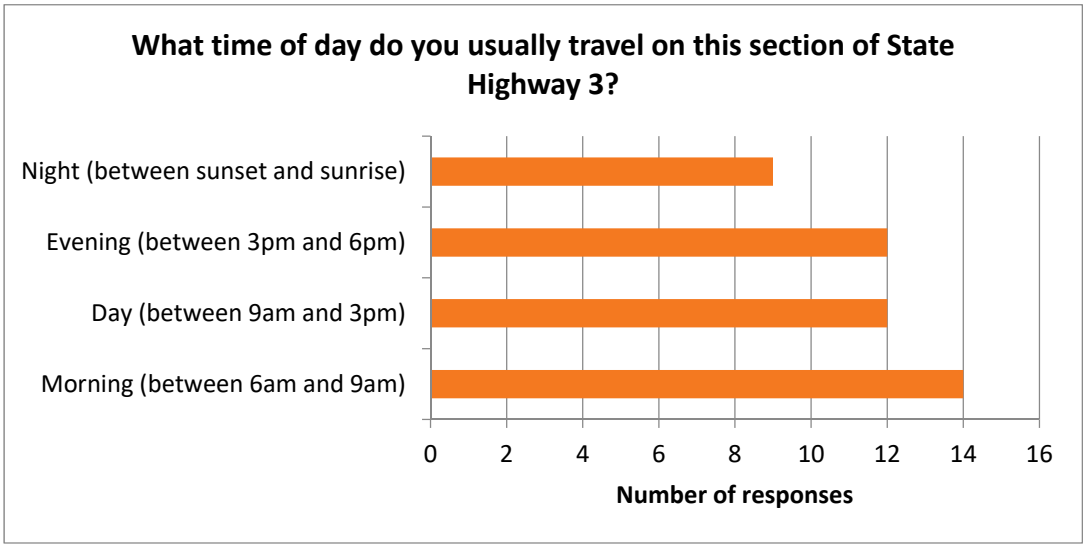
Comment
Tight, steep, slow corners
Tight, steep, slow corners
Tight corners that large trucks cross centre line frequently – continual hazard
This series of bends can be slippery and too tight
The tunnel + bends!
The slowness of the road as a whole
The roughness of the surface on south side
The new Armco railing makes the corner too narrow for southbound trucks to get around without trailers cutting the centre line
The Mounts is the most difficult area from start to finish
The ice on south side when frosty.
Steep and winding, road surface full of pot holes and keeps getting repaired
Slow, tight and risky in large vehicles
Slow route for commercial traffic and prone to disruption
Rockfall
Poor corner, no passing lanes.
People drive the entire road like idiots; myself and my family were nearly killed in a crash a few months ago because of some ridiculous manoeuvre by the other driver. Every day we drive these roads and every day there is at least one near miss, with people passing on corners or rises or falling asleep. There is no actual rest area and it is this that caused our crash – the other driver needed to pull over so swerved when he saw a gravel pit, unfortunately we were just a couple of car lengths away and we connected. Signposted rest areas would have prevented this near fatality and saved the government many 10s of thousands of dollars in rehabilitation costs and it would have saved out family a massive amount of pain and suffering and money too. You actually need to survey people who live here specifically and they will tell you the same, it is bloody dangerous, to the point we try to go on the road as little as possible and out kids aren't even allowed to walk on it anymore.
Narrow 1 lane tunnel on a corner, safety issue for long vehicles, cars to fast in this area.
Mt Messenger Rest Area. We don't like the rest area open, we hope it will be closed.

Comment
I am on call 24 hours a day and night for call out work, break downs for the AA. We live at the top of Mt Messenger and turning right into area from New Plymouth is quite dangerous especially if I have a trailer in tow for my AA work and my partner has horses and a horse float, it can be difficult to get across in front of the traffic especially trucks – or if a truck is already parked in the rest area. Also we don't like people dumping rubbish, live or dead animals at the top of Mt Messenger, and graffiti also strangers come into the farm along the private track.
Downhill run into 30 km corners is slow and poor
Don't like the tunnel.
Corners to tight for long vehicles. Road surface rough. Hard to retain good surface condition.

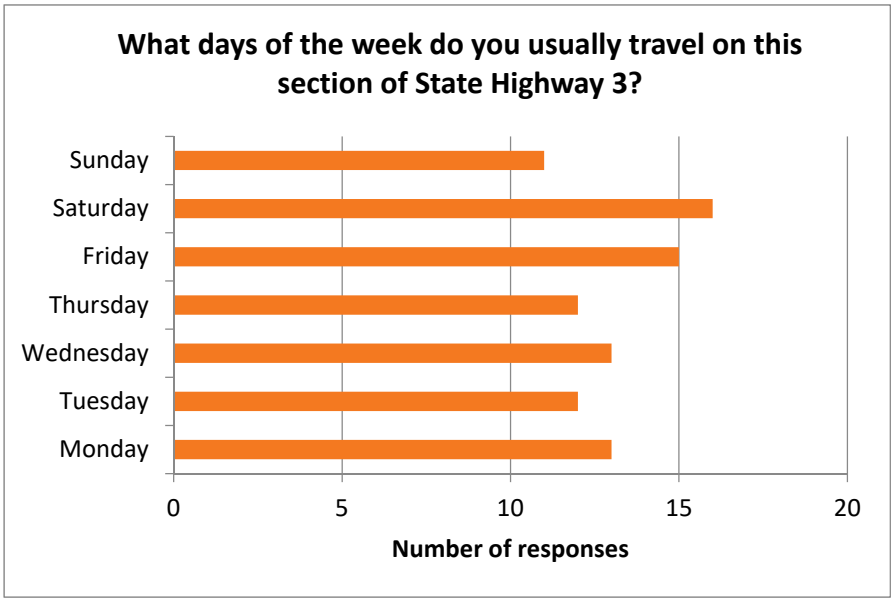
f) This (place) is important to me because:

Comment
Beach access
Beach access for recreation
Conservation values
Conservation values
Family holidays
Great coast line and view of Mt Taranaki
Have friends that live there and also the white cliffs at Waiiti are cool
It's a great beach side spot
It's where I live and I want it to be looked after and a safe place to be. It is not at the moment.
My farm, my hunting in Tongaporutu Area, my friends in Arati and Tonga/Ahiti. My kids went to Ahititi school etc. etc.
My home
Recreation – going up Mokau river
The beautiful scenery
The area has been set aside for endangered bird re-settlement and its critical

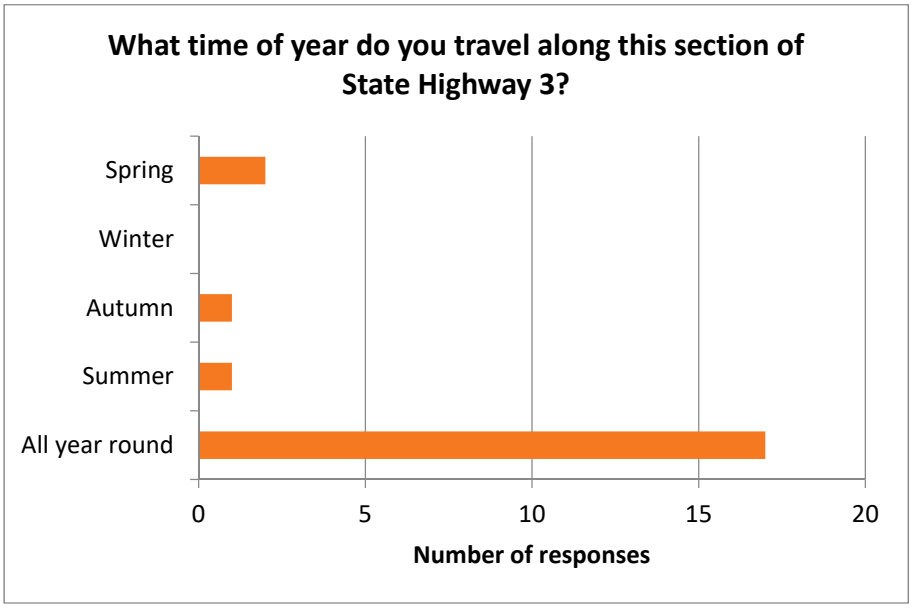
g) What time of day do you usually travel on this section of State Highway 3?



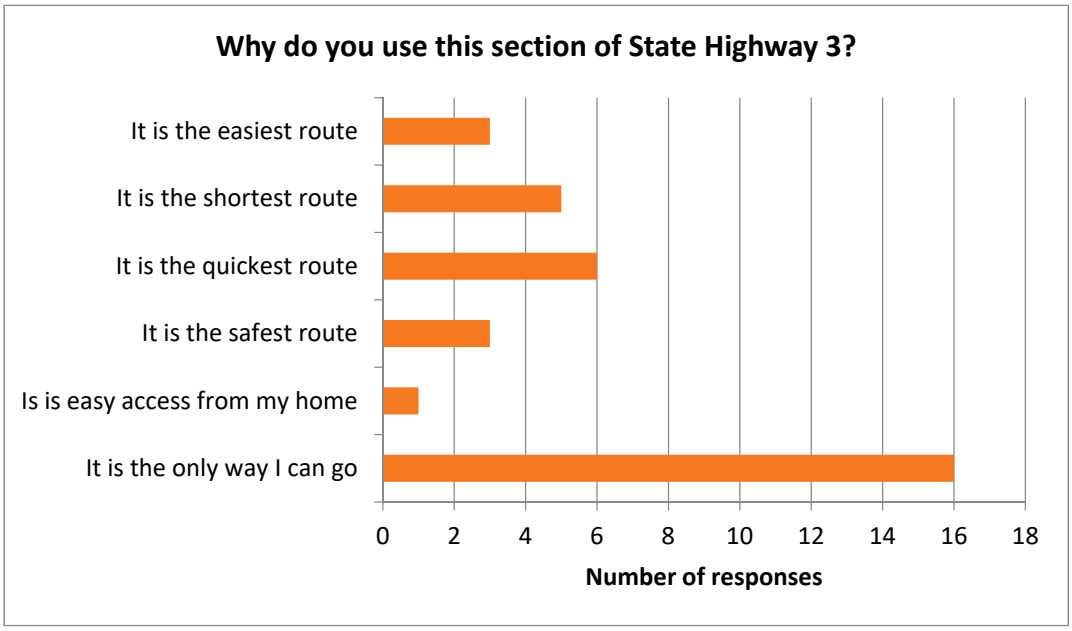
h) What days of the week do you usually travel on this section of State Highway 3?



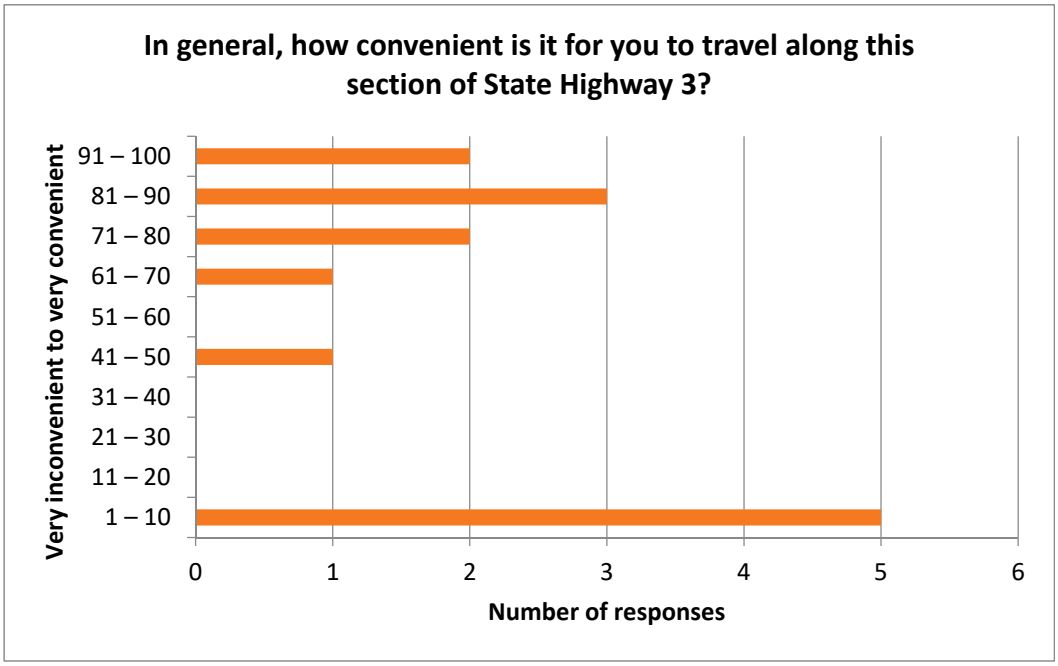
i) What time of year do you travel along this section of State Highway 3?



j) Why do you use this section of State Highway 3?



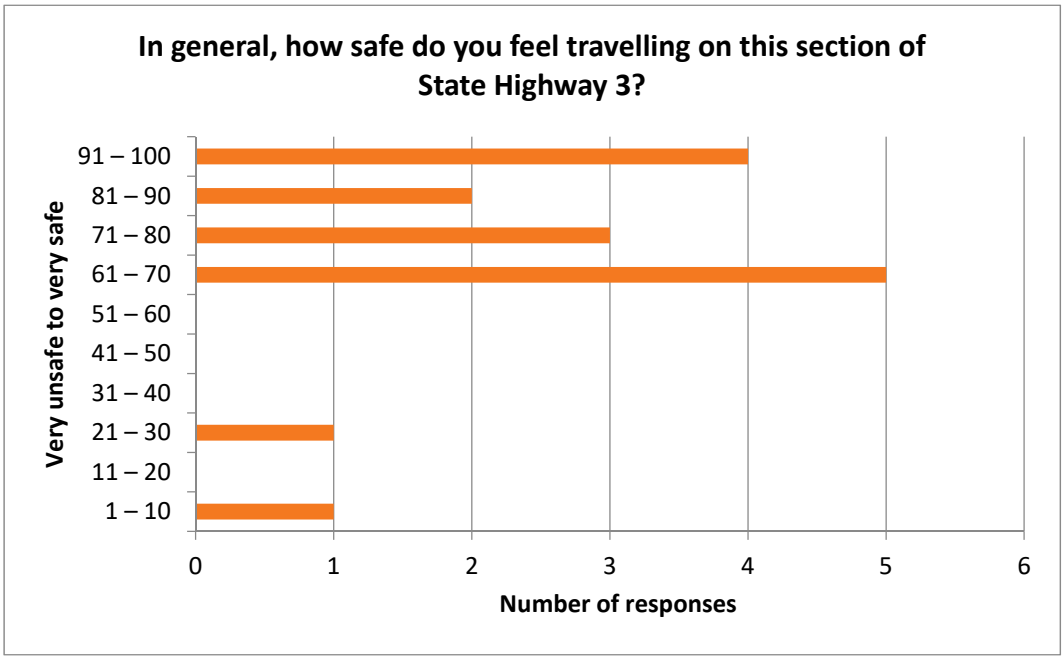
k) In general, how convenient is it for you to travel along this section of State Highway 3? 1–10 = very convenient, 91–100 = very inconvenient.



a. Briefly tell us what makes it convenient or inconvenient.

Comment	Score (1=very convenient, 50=mid-point, 100=very inconvenient)
Convenient cause it's close to everything for me.	1
It is the best route north	75
We have to travel it but if I had a choice I would not	
Only way to get north	5
Prone to closure could cut Taranaki off for days at a time.	85
When our teams are travelling north it is really the only option	10
It is convenient because the alternatives are to fly or take a 6 hour road detour	1
Most direct route	1
Main route north	
Slow	81
Unsafe terrain	100
Too slow. Stops people coming to the region. No passing lanes	98
It is really the only way north unless I wanted to travel from NPL down to WANG and then up which is very inconvenient	69
It's the only way I can go so it is neither	
It's the only logical choice so therefore convenient	49

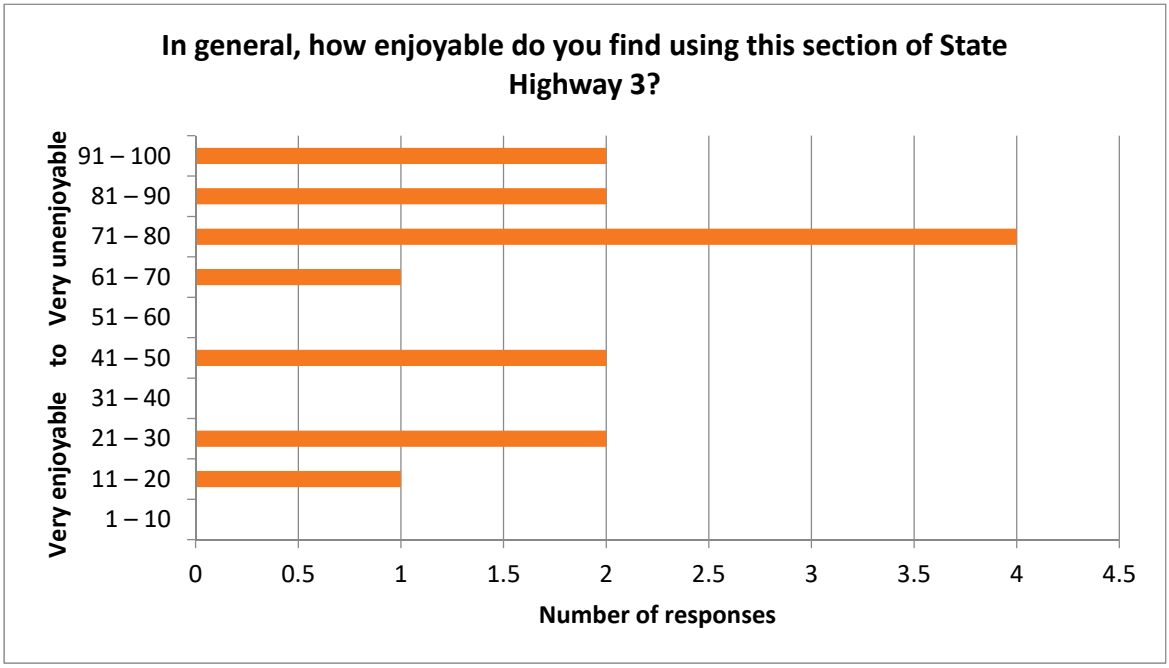
l) In general, how safe do you feel travelling on this section of State Highway 3? 1-10 = very safe, 91-100 = very unsafe.



a. Briefly tell us what makes you feel safe or unsafe.

Comment	Score (1=very safe, 50=mid-point, 100=very unsafe)
Tight bends, no outside barriers, visual.	100
Cause I know the road really well been a regular on it for 25 years.	1
Feeling unsafe is usually only when other vehicles do not drive to the conditions or when weather is not good.	21
People overtaking in stupid places	78
Uphill and downhill with bends hard on vehicles and prone to mishaps	
Too many truck and campervans, etc. and too many twists and turns - plus rockfall debris	84
The steepness and corners of Mt Messenger make it unsafe	70
Steep drop offs sides of road. Steep cliff faces that could fall at any time. Poor road surface. Steep twisting gradient for large vehicles to climb and brake on descent.	83
Lack of passing lanes, traffic from trucks	65
Windy and difficult for commercial traffic	76
Very	100
Bad corners. Impatient people making poor passing, hard to see what is coming	100
Very windy and narrow in some places along with the rock fall can be scary	78
The road surface over the mountain is often broken, the bends are dangerous and too tight, narrow for large trucks. The road to the south of the mountain is very low lying and prone to partial flooding	67
Large vehicles and unskilled drivers on this road make me feel unsafe	64

m) In general, how enjoyable do you find using this section of State Highway 3? 1-10 = very enjoyable, 91-100 = very unenjoyable.



a. Briefly tell us what makes it enjoyable or unenjoyable.

Comment	Score (1=very enjoyable, 50=mid-point, 100=very unenjoyable)
Rough surfaces, large trucks, tourists.	21
Scenery, people I know love the bush.	15
Unsafe driving as explained before. But also, when you ring to say there is a tree leaning over the road on a bind rise, which is going to come down in the next storm, you are told that no-one can do anything about it, then, surely enough, in the next storm the tree comes down and you are out in the middle of a stormy, wet night trying to stop people crashing till the fire service can get there – very unenjoyable. There is a serious lack of pro-active maintenance. There are so many instances where trees in particular, could have been removed or trimmed back prior to them smashing on the road and causing serious hazards. It is not good enough to rely on people that live out here to do the road companies job for them – which is generally what happens because no-one wants to have an accident happen outside their front door.	100
Rough road surfaces no passing places	73

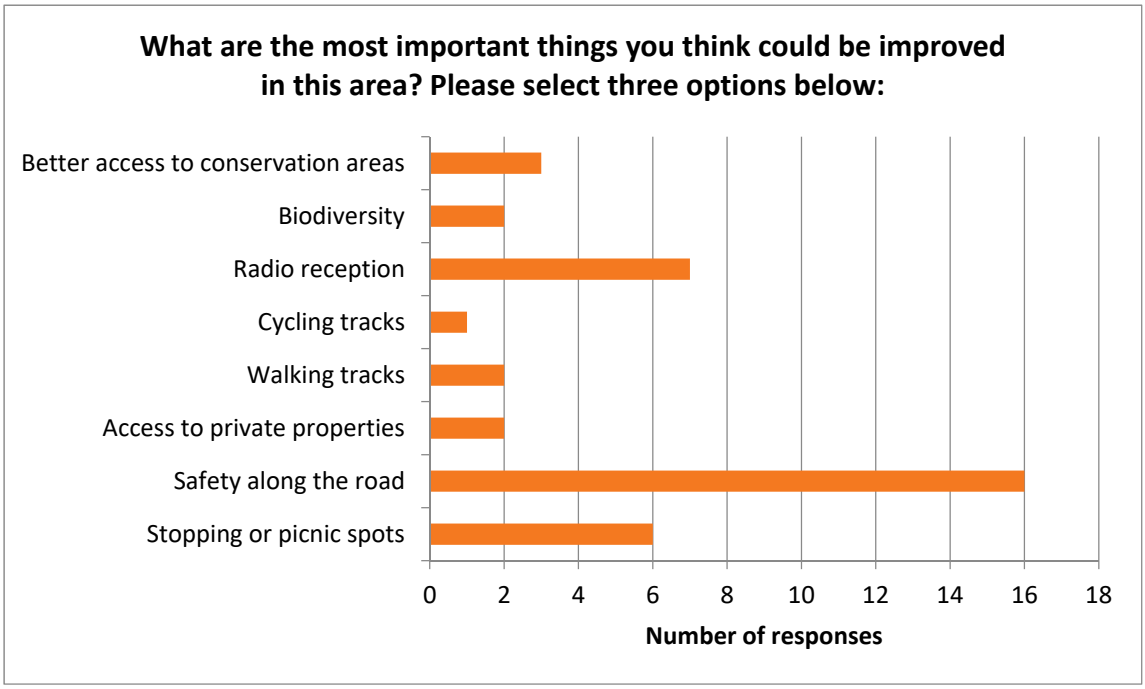
Comment	Score (1=very enjoyable, 50=mid-point, 100=very unenjoyable)
High concentration driving and no room for error in terms of your driving or person coming other way.	83
Have to concentrate and change speed too often	90
I enjoy the challenge of driving this road, but doing it regularly it is hard road	
Don't enjoy the many slow corners and poor road surface.	77
Driving through scenic area	30
When I travel this section of road I am glad when I get past Awakino and Mt Messenger.	80
It can be a scary drive over the mountain	70
Yes it is great to see and the country side is fantastic but still a very difficult area to travel.	47
It's a means to an end	

If there is a road closure or risk of closure, how does this affect your use of State Highway 3 or your travel plans?

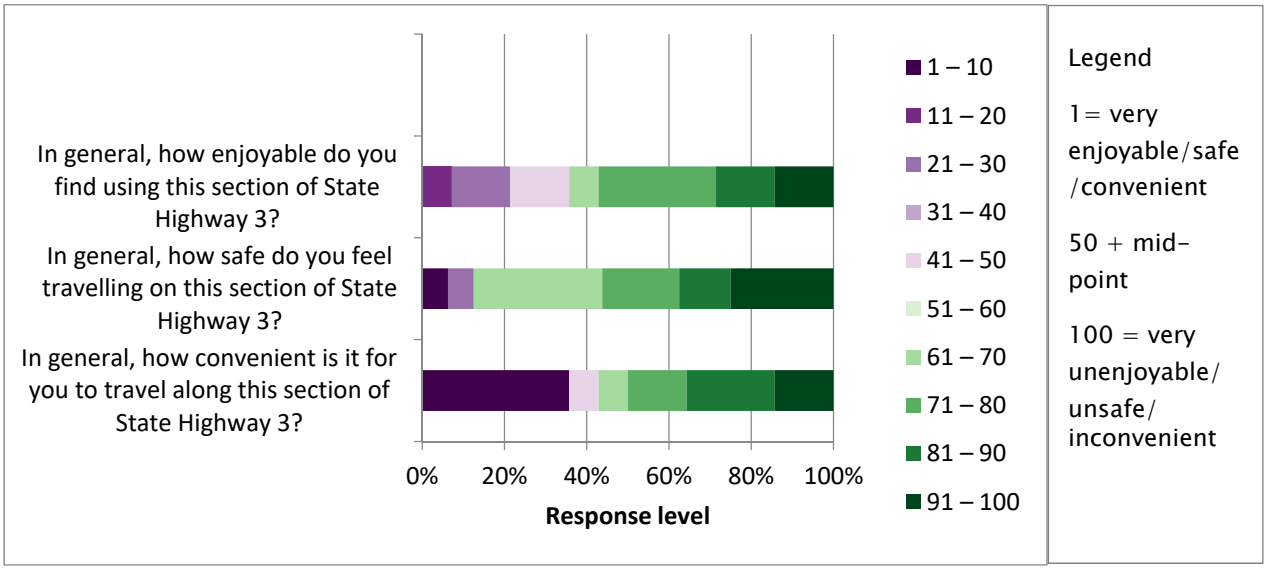
Comment
Primarily cuts our business off
A lot. A long way to go around.
It means I either cannot travel to or from the North of Taranaki, or I need to defer the trip.
We just drive home, we have a boat we have used too
Delays late for work loss of earning
Hugely. We run a Bull Business and supply 20% of the tradeable Bulls in Taranaki to the dairy industry. We winter them in the King Country and bring them down to Taranaki on certain dates. This year's McKay closure nearly cancelled our 31st annual bull sale. The first 3 unit loads through were bulls for us. A risk we can't take.

Comment
Massively – we have been held up for hours due to accidents several times. Teams have been had to travel for several hours longer having to go the long way around on return or going to tournaments
Hugely, there are basically no alternatives. There is no reliable rail or road links
Huge impact. Trucks have to travel south up SH4. a lot of extra cost
Stops or delays journey
Dramatic. Have several trucks per day travelling north from Taranaki, with the alternate route through Wanganui or Bulls
We have to cancel or maybe go south to Wanganui
Hugely, as mentioned above, we would have to travel from NPL to WANG and then up the middle of the island creating a massive disruption to the trip
Severely as the only alternative is very long
Big time. Getting freight out from New Plymouth becomes a problem as it takes up drivers hours and slows the whole logistics process down.
Trips get cancelled as alternate is not an option

What are the most important things you think could be improved in this area?



Summary of responses to questions 9–11.



What benefits would an improved State Highway have for Taranaki?

Comment
Faster and safer access to the province and business trade.
Heaps more money for Taranaki. More traffic on roads (not good).
Better access
To be honest I hate the State Highway running past our house, there are so many more trucks now it drives me nuts. What would actually State Highway 3 is improved alternative transport methods – rail, sea, etc., instead of using all the trucks, they are increased in number significantly in the last few years. Less trucks would speed traffic flow and reduce driver frustration significantly, this in turn would help reduce some risky driving that people do to get past slow traffic
Not as much inconvenience through hold ups Less wear and tear on vehicles
Cartage on every tonne of produce in or out could be up to $1 tonne cheaper. Essential northern safe outlet. Huge for the province with the 2nd best city in the world. Would have though the powers to be would have worked that out before they committed $90 million to the job.
Faster journey Safer journey
More economic freight, and therefore commercial benefits
Reliable freight access to the north.

Comment
Freight cost savings for Taranaki businesses.
Easier travel
Reduced time from Taranaki to north bound markets
More tourism, more people and better options to get people to the region. Faster transport routes.
Better economy as more tourist would travel to us instead of down the middle of the island to Wellington etc.
Better access for wide loads for construction Tourism, the existing road puts people off Travel time and lessened risk of road closure
We are having to put more freight in and out of Taranaki as it is the best means. Yes this will put more trucks on the road and 50tonne maxes looks like where things will be going.
Less intimidating to visitors

What benefits would an improved State Highway have outside of the region?

Comment
Quicker travel times to motorists. Easier road to navigate! Safer for unfamiliar travellers.
More tourists maybe. Could cart houses through etc. if there were no tunnels.
People wouldn't worry about travel
Same as above and is a long way away from emergency services so needs to be safe as can be. No tunnels so buildings can be shifted.
Cheaper for goods being transported out and in Less hold ups for visitors
Safer travel option if the desert rd is closed for snow/ice.
Better accessibility to region
More cost competitive
As above, be able to see our beautiful coastline and city

Comment
Better heavy transport access
Still the same I believe
Easier access

What benefits would an improved State Highway network have on business, recreation, lifestyle and cultural opportunities?

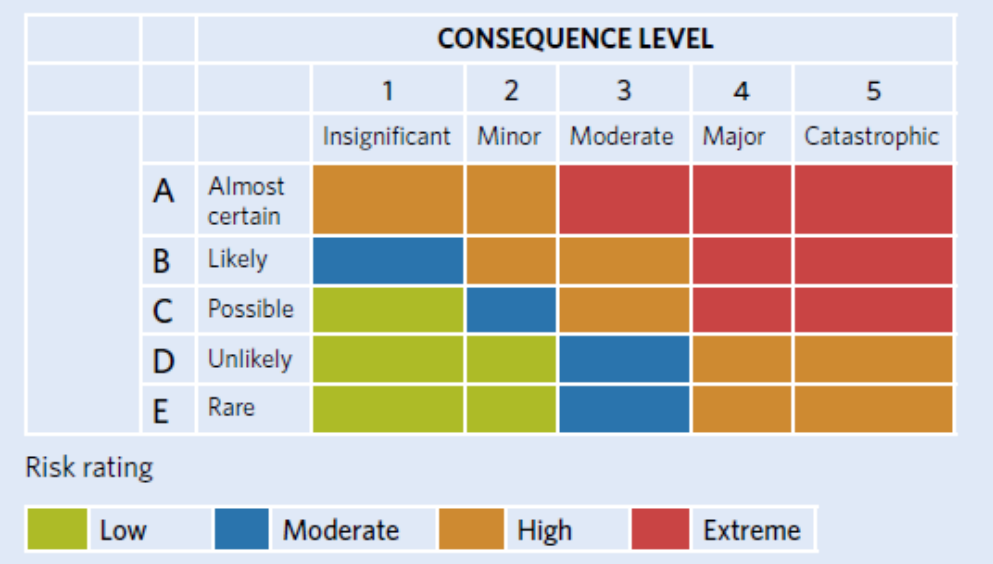
Comment
Creation of a viewing platform and rest area to view newly released Kokako. To appease the tourists.
Less accidents.
Our sporting organisation has people who live in Ahititi and a better route would make participation easier. They travel for sport each week.
In business access and communication is everything. This will do the job is the road goes straight through no tunnel
Fast travel time between Taranaki and Waikato. Reduced running costs. Less fatigue on drivers.
Less disruptions due to road closures etc.
Improve all opportunities
As above, would increase travel flow, trucks for transport, in turn increase economy as more money would be spent here
The assumption is that it has to improve all of these by offering improved road access
No closing and safer route.
My business would have increased clientele

If you have any other comments please let us know.

Comment
Stop wasting tax payer resource and get on with the new road.
We have two farms. One at Urenui and one at Uruti. We are originally from Ahititi and lived and farmed there for 20 years. We love Mt Messenger. Don't change the road, route is fine no slips. No huge cost in re-routing, shave off a corner here and there and blow the tunnel up, no inconvenience to local farmers, iwi etc. them. Leave the bush alone.
Need more passing lanes between Waitara and Piopio
I would imagine if the road goes straight through they may leave the original part there as a side road as a backup detour and access to locals so views aren't important as they could stay. If the so called Eastern route is picked you'd need to leave the existing route open as fog lays in the valley until midday and parts of it don't see the sun so black ice could be a problem. The views are beautiful but won't be lost if road goes straight through. There is no backup or detour in the area. During World War II the Home Guard dug a tunnel under the road just north of the tunnel and were set to blow the road if the Japs invaded. That tells you how significant and important the Taranaki Northern Outlet is. We have a farm on Mt Messenger and in the past 5 years 18 cars have crashed into the fence. 6 have owned up, 6 have been uninsured and 6 have been hit and run. This would have to be a NZ record for 1km of road. In the past 6 months Opus has been on property looking at rare trees, bats, frogs, lizards, birds, trout and now a survey. For god's sake get on and stop listening to minority groups and put the road straight through before the 90 million is lost on consultants. If the Green party gets in at the election there is a risk of no road happening and progress will halt for Taranaki. Access is paramount.
Improved road would be good for business and tourism but shouldn't be done at the expense of conservation areas and biodiversity values
Do the right thing and do this properly.
This is a very important stretch of road for all Taranaki people. We do need a better communication network also through this area.

Appendix D: Rating Effects Table

Table D 1 – Matrix to determine the likelihood/consequence ratings for negative impacts (from NZTA, 2016).



Direct or indirect impact

Direct social impact – an impact which occurs as a direct result of the project. May also be called a primary impact or first order impact. In SIA, it refers to the social changes or social impacts caused directly by the project itself.

Indirect social impact – an impact which occurs as a result of another change which is caused by another project. In SIA, an indirect effect might be caused by a physical change to the environment. May also be called a secondary impact, second or higher order effects.

Impact Rating

Major Positive	Medium Positive	Minor Positive	Neutral	Minor negative	Medium negative	Major negative	Fatal flaw

Magnitude of Impact: Many affected – the wider community, Moderate number – the local community, Few affected – directly affected owners, occupiers and users of properties

Permanency of impact

Temporary – the impact is expected to last 3 years or less. Temporary impacts are described by when will the impacts be experienced, e.g. day/night, frequency and/or how long (ego days, weeks, months), intensity

Permanent – the impact is expected to last 3 years or more, or for the life of the project.

Table D 2 – Rating of Regional Social Impacts for Mt Messenger Bypass.

Construction							
Effect	**Stakeholders**	**Positive/ Negative**	**Consequence/ Likelihood**	**Magnitude**	**Permanence***	**Direct/Indirect**	**Impact Rating**
Inflow of construction workers into area and increase in trade	Businesses in the region	Positive	A2	Many affected	T	Direct	Medium +
Opportunity for local employment during construction	Taranaki residents	Positive	A2	Moderate number	T	Direct	Minor +
Road delays during construction	People using the road	Negative	B3	Many affected	T	Direct	Minor –
Maintenance and Operation							
Improved travel times	All road users	Positive	A2	Many affected	P	Direct	Minor +
Improvements to road safety	All road users, emergency services	Positive	A4	Many affected	P	Direct	Major +
Greater resilience – less risk of closure due to natural events	All road users	Positive	A4	Many affected	P	Direct	Major +
The completed Project will represent a change in amenity for road users who were familiar with the current route. In time users will 'adjust' to the new environment	All road users	Negative	A2	Many affected	P	Direct	Minor –

* Permanency of Impact – is either Temporary (T) or Permanent (P)

Table D 3 – Rating of Local Social Impacts for Mt Messenger Bypass.

Impact	Stakeholders	Positive/ Negative	Consequence/ Likelihood	Magnitude	Permanence	Direct/Indirect	Impact Rating
Construction							
Potential changes in accessibility for property owners due to disruption caused by construction activity	Landowners	Negative	B2	Few affected	T	Direct	Minor –
Road delays during construction	All road users	Negative	B3	Few affected	T	Direct	Minor –
If local roads are used for construction related traffic there will be an increase in heavy vehicle numbers	Local road users	Negative	C2	Few affected	T	Direct	Minor –
Noise and vibration during construction may impact on people's enjoyment. People who work from home/farm could be affected by long periods of noisy works	Nearby property owners	Negative	B2	Few affected	T	Direct	Minor –
Large scale earthworks and other activities such as contractor support areas could generate dust	Nearby property owners	Negative	C2	Few affected	T	Direct	Minor –
The main visual effects during construction will arise from earthworks, construction support areas. These elements will represent a change in the amenity and 'look and feel' of the area	Nearby property owners	Negative	A3	Few affected	T	Direct	Medium –
Increased anxiety among local residents about safety and wellbeing during construction	Local residents along construction route	Negative	A3	Few affected	T	Direct	Minor –

Impact	Stakeholders	Positive/ Negative	Consequence/ Likelihood	Magnitude	Permanence	Direct/Indirect	Impact Rating
Maintenance and Operation							
Improved safety reduces crash rate so local residents less likely to have to deal with impacts of crashes at their 'front gate'	Local residents along construction route	Positive	B2	Few affected	P	Direct	Minor –
A revocation process for the existing SH route will be initiated at some point in the future. – while it is not possible to determine what future use will be available for this section of existing road, the process will ensure that property access is retained for all landowners with current access of SH3	Local residents along construction route	Negative	D2	Few affected	P	Direct	Minor –
The completed Project will represent a change in amenity for locals that previously did not have a SH in their viewshed	Local landowners	Negative	A2	Few affected	P	Direct	Minor –
Land take – loss of social cohesion from land acquisition. One owner who has lived in the area for a long time will be required to move off the property during construction	Local community	Negative	A2	Few affected	P	Direct	Minor –
Loss of properties (farming)	Local landowners	Negative	A2	Few affected	P	Direct	Minor –


35