Peka Peka to North Ōtaki Expressway

Social Impact Assessment

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Social Impact Assessment

Technical Report # 20

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1 Executive Summary

Purpose of report

This Social Impact Assessment examines the social effects of the Peka Peka to Ōtaki Expressway project (the Project or Expressway), in order to inform the Notices of Requirement and Assessment of Environmental Effects (AEE). The assessment is part of a wider suite of technical reports informing the AEE. Results from these reports are relied on, and where appropriate, assessed through a 'social lens'. The scope of this assessment includes:

- an international literature review and development of an assessment 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 a social study area and demographic profile to understand the existing social environment (social baseline);
- a review of other specialist inputs to the Project though a 'social lens' including discussions and workshops with other specialists;
- a review of feedback from the consultation process in relation to relevant social concerns of the community that have been raised;
- an assessment of the identified social effects against the SIA framework; and
- identification of appropriate monitoring, mitigation, avoidance or remedial strategies.

Methodology

For the purposes of this study, potential effects of the Project have been assessed against the following social elements:

Way of Life:

- Impacts on accessibility, connectivity, patterns of living and mobility.
- Changes to ways of walking & cycling and changes to public transport.

Wellbeing:

- Changes to wellbeing.
- Health and safety.

Environment and Amenity:

- Changes to the environment including noise, dust, amenity and landscape.

Community:

- Impacts on people's property and neighbourhoods.

- Impacts on educational facilities.
- Impacts on community areas and sites.
- Impacts on community plans and aspirations.
- Impacts on and accessibility to commercial areas.

The effects assessed in this report were informed by a literature review of international and NZ best practice, site visits and observations, a range of public consultation methods, analysis of a demographic profile and existing social environment, and a review of conclusions drawn from other specialist technical reports through a 'social lens'.

Summary of effects

The Expressway will have a number of positive and negative social and community impacts across the Project area. Overall, the impact of the negative effects will generally be low to medium, with a number of positive outcomes able to be achieved for the community.

Having evaluated using the IAIA criteria outlined above, the key positive outcomes are:

- Improvements to regional safety and connectivity through improved trip times, and reduced congestion on SH1;
- Grade separated crossings which may improve pedestrian safety;
- Removal of level crossings at Te Horo and Old Hautere Road to improve social connectivity;
- Reduction in traffic on the existing SH1, which will become a local road;
- Improvement to the social, retail and pedestrian amenity of the Ōtaki Railway Retail area due to a reduction in through traffic;
- Supporting the Greater Ōtaki Vision by encouraging growth in intended growth areas;
- Delivering key infrastructure to support future growth; and
- Improving connectivity to sources of employment and regional facilities to the north and south.

Key negative outcomes are:

- Effects on some businesses in Te Horo and potentially the Ōtaki Railway Retail Area in terms of reduced through traffic;
- Effects on landowners from land requirements;
- The land reduction of the Pare-o-Matangi Reserve by the Project (not taking into account the recommended mitigation measures, as discussed further below); and
- Construction effects on houses, businesses and other facilities within close proximity to the route.

Summary of mitigation measures

Consultation with the community throughout all phases of the Project, from designation to operation is essential for the Project. This is to ensure adverse effects on people are avoided, remedied or mitigated to meet Part 2 of the RMA. In addition to specific mitigation measures recommended by the relevant specialists to address any noise, traffic and visual effects, this assessment recommends the following mitigation measures:

- The option for residents temporarily affected by construction noise and vibration to be temporarily relocated (for the duration of the construction period) is provided, if the impacts on them are too great to maintain normal daily functioning. This should be considered in the preparation of the relevant management schedule if monitoring results indicate that this may be a suitable mitigation measure, though in the main this is not anticipated.
- Preparation and implementation of a Construction Environmental Management Plan, including a communications strategy for the community and identified stakeholders.
- The establishment of stakeholder reference groups such as local businesses (Te Horo and Ōtaki), Te Wananga-O-Raukawa, and local schools to ensure community groups are kept informed.
- Specific information updates to Grey Power, and to Kapiti Coast District Council.
- Use of regional and national media, including NZTA's website to alert commuters to potential delays during construction.
- Maintain communication with iwi through the established consultation protocol, particularly during the construction stage.
- Establish and maintain a feedback/complaints database to ensure that that appropriate responses are provided for all community, stakeholder and individual queries.
- Crime Prevention through Environmental Design Principles "CPTED" will be taken into account in design, particularly pedestrian and cycle routes.
- Review effects of additional traffic along various routes as a result of the Project construction/operation and determine if any mitigation is required.

2 Introduction

2.1 Qualifications and Experience

The author holds a BSc in Town and Regional Planning from the University of the Witwatersrand, Johannesburg, South Africa, and is employed by Opus International Consultants as Principal - Environmental Services. The author has 26 years planning experience in the areas of strategic policy, consenting and social impact assessment, with 18 years experience in New Zealand, employed in local government and consultancy.

The author has prepared or reviewed numerous social impact assessments in New Zealand mainly for large roading and wastewater infrastructure projects. She has also had involvement in the development of social impact assessments for prisons, youth justice facilities, rehabilitation centres and commercial developments.

2.2 Purpose and Scope of Report

The purpose of this Social Impact Assessment (SIA) is to examine the social effects of the Project and to inform the Notices of Requirement and Assessment of Environmental Effects. The assessment includes:

- an international literature review and development of an assessment 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 a social study area and demographic profile to understand the existing social environment (social baseline);
- a review of other specialist inputs to the Project though a 'social lens' including discussions and workshops with other specialists;
- a review of feedback from the consultation process to ensure that the relevant social concerns of the community, and their magnitude have been considered;
- an assessment of the identified social effects against the SIA framework; and
- identification of appropriate monitoring, mitigation, avoidance or remedial strategies.

Further details on the methodology used in the preparation of this assessment can be found in section 4. 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.

2.3 Exclusions & Assumptions

The following exclusions and assumptions apply to the scope of this report:

- all assessments are based on the details of the Project as available at the time of writing this report.
- corridor location and form have been considered in a separate and earlier report[1] and therefore are not re-evaluated here, with the decisions of that assessment adopted where relevant;
- the revocation of the State highway status of the existing SH1 is a separate statutory process and therefore are outside the scope of this assessment, particularly with respect to any physical works, however the local road network remains (in whatever form) and therefore is considered as part of this assessment; and
- technical assessments have separately considered economic, noise, visual, cultural effects and a range of other technical specialist areas that are affected or 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. Technical reports are reviewed in this assessment from a social perspective only.

[1] Peka Peka to Ōtaki Expressway Social and Community Review (January 2012)

3 Project Description

3.1 The Project

3.1.1 Main alignment

The Wellington Northern Corridor RoNS runs from Wellington Airport to Levin. The Project is one of eight sections of the Wellington Northern Corridor RoNS. The location of the Project in the overall scheme of this corridor is illustrated in Figure 3.1.1 below.

The NZTA proposes to designate land and obtain the resource consents to construct, operate and maintain the Expressway. The Project extends from Te Kowhai Road in the south to Taylors Road just north of Ōtaki, an approximate distance of 13km.

The Expressway will provide two lanes of traffic in each direction. Connections to local roads, new local roads and access points over the Expressway to maintain safe connectivity between the western and eastern sides of the Expressway are also proposed as part of the Project. There is an additional crossing of the Ōtaki River proposed as part of the Project, along with crossings of other watercourses throughout the Project length.

On completion, it is proposed that the Expressway becomes State Highway 1 (SH1) and that the existing SH1 between Peka Peka and North Ōtaki becomes a local road, allowing for the separation of local traffic. The power to declare roads to be State Highways or revoke status resides with the Chief Executive of the Ministry of Transport, not with the NZTA.

3.1.2 NIMT

KiwiRail proposes to designate land in the Kāpiti Coast District Plan for the construction, operation and maintenance of a re-aligned section of the North Island Main Trunk (NIMT) through Ōtaki.

Figure 3.1.1 - Location of Peka Peka to Ōtaki Expressway within the Wellington Northern Corridor.

3.1.3 Project sections

The Peka Peka to Ōtaki Expressway involves a number of changes to the existing transport infrastructure which have the potential to alter the existing social and community environment. The following section outlines the Project in more detail, by Project section. These broad areas are:

1. North Ōtaki (Taylors Road to Mill Road/Rahui Road);
2. Ōtaki (Mill Road/Rahui Road to Riverbank Road);
3. South Ōtaki / Hautere (Riverbank Road to Old Hautere Road);
4. Te Horo (Old Hautere Road to Gear Road); and
5. Mary Crest / north of Peka Peka (Gear Road to Te Kowhai Road);

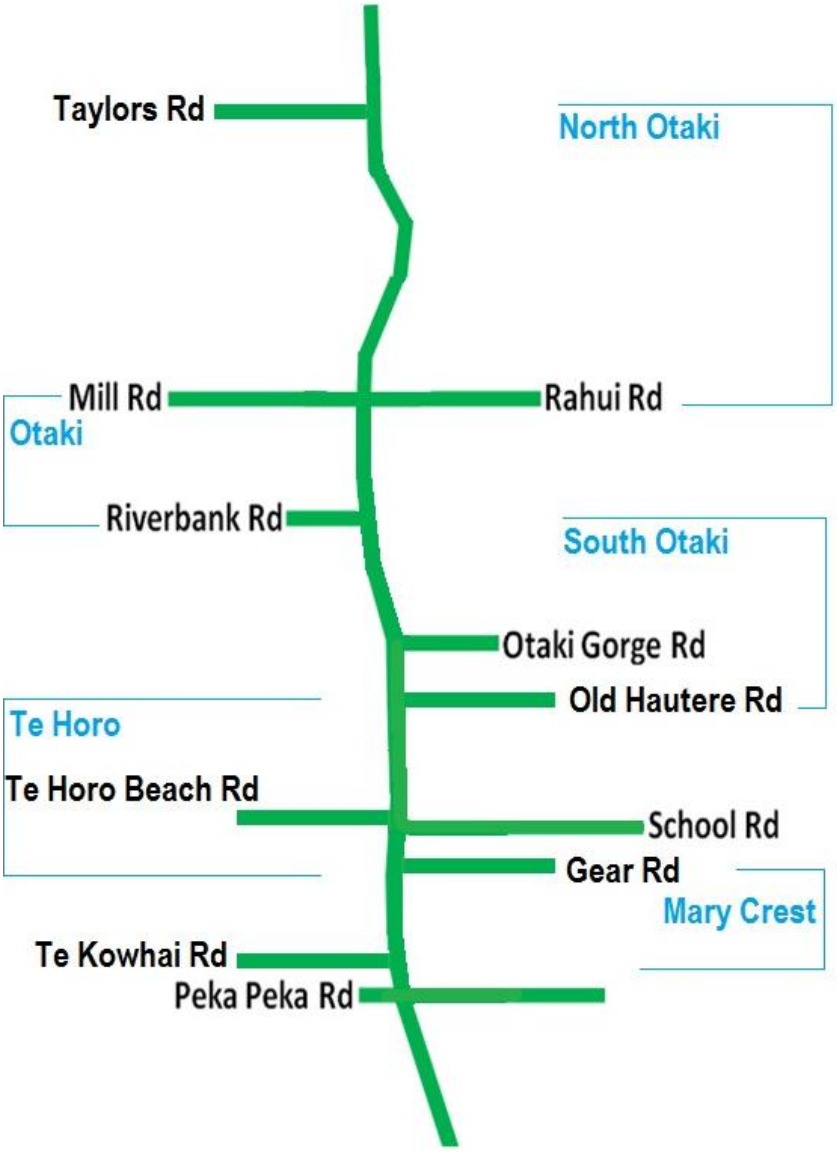

Figure 3.1.2 – Project Sections

Section 1 - North Ōtaki

After the north Ōtaki overbridge the Expressway crosses to the west of the existing SH1 and continues north until it joins the existing SH1 alignment just south of Taylors Road. A new bridge will cross the Waitohu stream. Approximately the first 3.5 km of the existing SH1 will be southbound only where it meets the Expressway and a new local access will provide continued access to properties north of Waitohu Valley Road.

Section 2 - Ōtaki

Access to Ōtaki for south-bound traffic on the Expressway will be available from the south-bound exit at north Ōtaki (just south of Taylors Road) and for north-bound Expressway traffic from the north-bound exit at the half-diamond interchange at Ōtaki Gorge Road. Access from Ōtaki onto the Expressway to the north is via a new over-bridge north of Rahui Road, and to the south via the half-diamond interchange at Ōtaki Gorge Road (south of Ōtaki).

To the east of the existing SH1, a new bridge will cross the Ōtaki River as the Expressway continues to the east of the existing SH1 and in parallel to the NIMT through Ōtaki.

The NIMT is moved slightly to the east as it approaches Ōtaki railway station from the south. The NIMT is then moved to the west of its current alignment north of the railway station, removing much of the bend in the current line, until it joins the current alignment just north of Ōtaki.

Two new bridges will cross the Expressway and the realigned NIMT; one links Rahui Road to the east and west, and alters the western approach to the new bridge, the other connects County Road (south of Te Manuao Road) to the existing SH1. An off-ramp from this bridge will provide northbound access onto the Expressway.

The Rahui Road Bridge will include proposed shared walking/cycling paths on both sides, connecting to a new path through Pare-O-Matangi Reserve to the Ōtaki Railway Station to the south, and to a proposed shared walking/cycling path along the eastern side of the north Ōtaki overbridge.

Section 3 - South Ōtaki / Hautere

A new local access road will join Old Hautere Road to Ōtaki Gorge Road, where previously it joined the existing SH1. This access road will also include a pedestrian pathway along one side, and the existing pathway to the east of the new road will remain. A new bridge and roundabout will connect Ōtaki Gorge Road with the existing SH1 to the west of the Expressway. The bridge includes a proposed shared walking/cycling path along one side which connects with existing river walkways to the west of the Expressway. There will be a half diamond interchange at the Ōtaki Gorge Road Bridge, providing southbound access onto the Expressway, and a northbound exit from the Expressway

Section 4 - Te Horo

There is to be no access on or off the Expressway at Te Horo. Access to Te Horo from the Expressway travelling north can be gained from the north-bound exit at Te Moana Road[2] (approximately 9-10km south of Te Horo) and continuing north on a new local road, or the north-bound exit at Ōtaki Gorge Road (approximately 3.5km to the north of Te Horo) and then travelling south on the existing SH1. Access for traffic on the Expressway travelling south, will be from the north Ōtaki interchange (approximately 6-7km north of Te Horo) and continuing south on the existing SH1, or from the south-bound exit at Peka Peka[3], continuing south on the existing SH1 and then travelling north on new local road.

There are also changes to cross-expressway access and existing local roads at Te Horo. Gear Road will be moved further east to accommodate the Expressway. Gear Road continues to join School Road, where a new local road will provide access to properties to the immediate east of the Expressway. This access road includes a proposed shared walking/cycling path along one side. This path continues over one side of a new bridge and will join the new access road with Te Horo Beach Road to the west of the Expressway. North of Te Horo Beach Road, a new private access road from the Gear Road extension will provide access for properties to the east of the Expressway.

Section 5 - Mary Crest / north of Peka Peka

At the Project's southern end, the Peka Peka to Ōtaki Expressway connects with the Mackays to Peka Peka Expressway at Te Kowhai Road, north of Peka Peka. A new local access road is to be created to the west of the Expressway, connecting with the local access road constructed as part of the Mackays to Peka Peka project. This access road will provide access to Te Kowhai Road, Te Hapua Road, and properties which previously directly connected to existing SH1. This access road connects underneath the Expressway to a new access road to provide access to properties to the east of the Expressway. The new access road to the east is for local access only and does not continue south.

The Expressway crosses over the NIMT, which leaves the access to properties to the west of the Expressway unchanged. Access to properties on the east of the Expressway will be via existing local roads, and Gear Road.

For further information refer to the 'Description of the Project' in Volume 2, Part D of the AEE, or Volume 5: Plan Set of the AEE.

[2] This interchange is part of the McKays to Peka Peka project.
[3] This interchange is part of the McKays to Peka Peka project.

4 Methodology

4.1 Overview

This section outlines the process followed in the preparation of this Social Impact Assessment. The key steps below are fleshed out in more detail under subsequent headings and the remaining report follows a similar structure. These steps were to:

- Review relevant literature on Social Impact Assessments to inform the development of an assessment framework.
- Review the Project and discuss it with others on the Project team to gain an understanding of the proposal, its effects and the consequent drivers of change.
- Develop a framework for assessing potential social effects and their severity; define the scope of the assessment and the potentially affected communities.
- Review the policy environment, including relevant statutory and strategic documents relevant to the Project.
- Profile the community of interest / affected community to establish the existing social baseline environment.
- Review the outcomes of general community engagement from a social perspective.
- Carry out face-to-face consultation with key stakeholders for the social assessment, particularly those groups and entities considered to either be vulnerable (elderly and children) or where the potential for adverse effects particularly from a social perspective have been identified.
- Integrate specialist assessments included in other technical assessments where the issues overlap with the scope of this social assessment.
- Provide an opportunity to the Ōtaki Business Community to “drop in” and discuss any potential economic and social effects with the Project team.
- Assess the social effects of the proposal, and their magnitude, based on the information received from the Project team and the community and stakeholders.
- Identify potential mitigation options to ensure that any adverse effects assessed can be avoided, remedied or mitigated.
- Identify future work required from a social perspective, covering construction and operational phases.

4.2 Literature Review

A literature review of international and local best practice focusing on the social impacts of road development on people and communities has been undertaken. The literature review has provided guidance on the process to be adopted for this Project. The full literature review is contained as Attachment A to this report. The basis for the literature review was to:

- gain an understanding of SIA in the light of international best practice,
- determine what methodologies are used for SIA
- determine which of these methodologies and approaches would best "fit" New Zealand infrastructure projects

It was determined that SIA is a supporting tool for decision making and is frequently used internationally with regard to infrastructural projects. SIA is defined by the International Association of Impact Assessment[4] (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".*

Vanclay and Becker (2003)[5] expanded on the implications of this definition, describing SIA as a broad umbrella or overarching framework that embodies the evaluation of all human impacts. Impacts included in this framework are: aesthetic (landscape analysis), archaeological and heritage, community, cultural, demographic, development, economic and fiscal, gender assessment, health, indigenous rights, infrastructural, institutional, political (human rights, governance, democratization), poverty assessment, psychological, resource issues (access and ownership of resource), tourism and other impacts on societies.

The literature review informed the decision to apply IAIA process and criteria and as discussed above this was further modified to incorporate Social and Environmental Management *Professional Services Guide* (PSG/13)[6] principles. National and international experience has been relied on to shape the methodology and content of this report. This is discussed in more detail in Section 4.5 below.

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

[4] www.iaia.org/

[5] Becker H & Vanclay F (eds) 2003, *The International Handbook of Social Impact Assessment: Conceptual and Methodological Advances*, Edward Elgar, Cheltenham, UK.

[6] http://www.nzta.govt.nz/resources/state-highway-professional-services-contract-proforma-manual/guidelines/psg.html

The Draft NZTA Social Impact Assessment Standard[7] has been taken into account, although this document is still under review. This SIA is substantially in accord with the draft standard, although approaches have been scaled to a degree considered appropriate for this Project.

4.3 Definition of a Community

The following definitions have been adopted for the purposes of this report:

- Directly Affected - those properties physically crossed by the designations;
- Neighbours - those not directly affected but adjacent to the designations;
- Wider Community of Interest - all those with an interest in the Project greater than the general public.

This terminology has been used in the report to differentiate the potential effects.

The Directly Affected landowners have been determined by identifying all those properties which are crossed by the new designations for the Expressway and the realigned NIMT.

Neighbours are those adjacent to the new designations, and this term has also been extended to include those who are potentially affected by proximity (i.e. by visual, noise or traffic effects).

The term Wider Community of Interest has been used broadly, recognising that given the regional and national importance of this route, the 'community of interest' in many cases will reach widely, including local and regional users of the Expressway, interest and advocacy groups (these groups are also to be referred to as 'key stakeholders'). However, given the focus on those areas of the Project where significant changes are proposed, the community of interest is in some cases much more limited to the directly affected and neighbouring properties around the change and is discussed by sector as shown in Figure 3.1.2. This is particularly so where the key effects of the change relate predominantly to noise and visual aspects which are localised.

4.4 Community of Interest

Defining the community of interest for the purposes of this SIA has been informed by a number of sources. Initially, the community of interest takes in the already defined project area, using a geographic boundary and all the residents and landowners within it. The discussion of effects is further broken down by sections as shown in Figure 3.1.2. namely:

- Mary Crest / north of Peka Peka (Te Kowhai Road to Gear Road);
- Te Horo (Gear Road to Old Hautere Road);
- South Ōtaki / Hautere (Old Hautere Road to Riverbank Road);
- Ōtaki (Riverbank Road to Rahui Road), and;
- North Ōtaki (Rahui Road to Taylors Road).

[7] Quigley, R, and Fitzgerald, G. (2012). *Standard for social impact assessment of state highway projects.* Wellington: NZ Transport Agency

The geographic selection includes the Project area and local communities likely to use social and community facilities within it, as well as the Expressway itself. It extends to the coastline to the east, to North Ōtaki, west to Ōtaki Forks, and south to Peka Peka (refer to figure 6.1.1).

During public consultation, a number of interested parties self-selected as the wider community of interest due to their participation in open days, or through providing feedback in survey or email form. These parties were then included as stakeholders in the Project and their feedback has also informed the analysis throughout the process.

The demographic analysis of the study area for this assessment further informed the community of interest by providing a baseline of social and community infrastructure and facilities within the study area, particularly those close to the Project alignment (see Project sections in Figure 3.1.2). Finally, information contained in other specialist reports identified groups within the study areas to be included as stakeholders in this assessment. Further information can be found in the demographic profile in Section 6.2 of this assessment, and in the summary of community engagement in Section 7 of this document and in the Consultation Report[8].

4.5 Assessment Framework

In developing the assessment framework for this SIA, consideration was taken of a number of matters. These included:

- NZTA PSF/13 Standard and PSG/13 guidelines;
- assessment frameworks such as those of the International Association for Impact Assessment;
- social issues identified in the review of literature;
- the wider policy environment within which the Project sits; and
- community engagement undertaken in early 2011, and in 2012.

NZTA PSF/13 Standard and PSG/13 guidelines

The NZTA PSF/13 standard and PSG/13 guidelines provide a framework for incorporating social and environmental considerations into State Highway project planning at the Investigation and Reporting phase. The PSF/13 standard identifies a number of issues which are to be considered. Many of the issues have a social effect aspect, but will be primarily addressed by individual environmental specialists. The issues that are considered to be directly relevant to consideration in this assessment are:

- Noise,

[8] Refer to 'Phase 1 Peka Peka to Ōtaki Expressway Public Engagement Report', August 2011 for more information on community engagement up to March 2011.

- Air quality,
- Social responsibility,
- Culture and heritage,
- Visual quality,
- Landuse and transport integration
- Public health,
- Cycling infrastructure,
- Cycle crossing facilities,
- Walking infrastructure, and
- Pedestrian crossing facilities.

The literature review undertaken considered a selection of both New Zealand and International Roading SIAs. The review identified that a range of approaches have been taken to preparing SIAs for roading projects and that the social effects identified vary, depending on the country, scale of project and receiving environment.

Adopted Framework

The IAIA framework best reflects international best practice. It is well recognised internationally and provides a sound, recognised framework for assessing social effects. It has been recently used successfully on a New Zealand RoNS project (Waterview Connection), and can be adapted to incorporate key aspects of the NZTA standard and guidelines.

To develop a framework for assessing effects of the Project, the IAIA framework was used as a starting point. Using the IAIA framework, combined with the requirements of the PSF/13, the following framework has been established for assessing the potential social and community effects that may result from the Project:

1. Way of Life
    - Impacts on accessibility, connectivity, patterns of living and mobility.
    - Changes to ways of walking & cycling and changes to public transport.
2. Wellbeing
    - Changes to wellbeing.
    - Safety.
3. Environment and Amenity
    - Noise, dust, visual changes.
4. Community
    - Impacts on people's property and neighbourhoods.
    - Impacts on educational facilities.
    - Impacts on community areas and sites.
    - Impacts on community plans and aspirations.
    - Impacts on and accessibility to commercial areas.

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.

- Cultural impacts - these have only been considered to a limited extent in this report as a specialist Cultural Impact Assessment has been prepared and addresses these issues.

  Health impacts - these are considered with regard to individual and community stresses; personal security; cycling and walking opportunities; healthy environment, and in consideration of other specialist reports (such as air quality, noise and vibration). A detailed health impact assessment has not been undertaken.

Stages for Impact Assessment

There are four potential stages where social and community effects can occur during a project. These are:

- planning / consenting;
- construction;
- operation; and
- closure (if relevant).

This assessment focuses on the planning / consenting (detailed design), construction and operational phases of the Project. The revocation of the State Highway designation is being treated by NZTA as a separate process and does not form part of the brief.

4.6 Information Sources and Data Collection

This review has been compiled based on information derived from the following sources:

- Maps and aerial photographs, prepared by the Project team to assist with identifying adjoining land uses.
- 2006 Census of Population and Dwellings to provide a demographic profile of the area and assist with identification of likely impacts.
- Council policies, strategies and plans to understand community aspirations and the context for the Project.
- Site visits undertaken in early 2011 and site visits in June, July and August 2012. The site visit in June was undertaken in conjunction with the Project economist.
- Review of written feedback from Community Engagement carried out over February to March 2011; and June to July 2012.
- Ōtaki Customer Survey: Report of Pedestrian Intercept Surveys conducted in March 2011.
- Review of written reports of face to face meetings held between the Project team and directly affected landowners in early 2012.
- Face to face interviews with key stakeholders representing those groups identified as being potentially the most vulnerable (elderly and children), August 2012.
- Face to face interviews with business owners in Te Horo who were identified as a group who may be adversely affected, August 2012.
- Targeted questions from a social perspective included in other face to face or group interviews carried out by other professionals. These techniques were applied in order to prevent consultation fatigue.
- An informal opportunity for the Ōtaki business community to "drop in" to a local Ōtaki cafe to discuss over coffee and refreshments any potential effects positive or negative of the Expressway bypassing the Ōtaki Railway Area.

4.7 Review of Technical Reports

Other specialist technical assessments were reviewed through the 'social lens'. Technical reports considered included the Built Heritage Assessment, Archaeological Assessment, Cultural Impact Assessment, Landscape and Visual Assessment, Assessment of Economic Effects, Air Quality Assessment, Noise and Vibration Assessment, and the Integrated Transport Assessment. For the purposes of the SIA the findings and conclusions of these assessments are relied on, however in some cases further mitigation has been recommended in order to address intangible or perceived effects from a social perspective.

4.8 Rating of Effects

In the assessment of effects, each effect has been given an overall rating. This is the rating of the effect with the 'minimum' mitigations which are already included in the Project. In some cases, no additional mitigations will be necessary, however in others additional measures may be considered necessary from a social perspective.

A nine-point scale has been applied in assessing social effects, consistent with the scale applied in the Scheme Assessment Report. The ratings applied to the effects are:

Substantial positive	Significant positive	Moderate positive	Minor positive	In-significant	Minor negative	Moderate negative	Significant negative	Severe negative

In applying the overall rating of the effects, consideration was given to: the stage of the effect (construction / operational / both), who is affected (directly affected / neighbours / wider community), the likelihood of occurrence (high / medium / low), and the severity of the impact (high / medium / low), the importance of the affected feature (local / regional / national), as well as any mitigation measures already included in the design.

In order to have a strong magnitude, an effect would generally need to be highly likely to occur, have a highly significant effect, and affect a wide group of people, or a regionally important feature, although the discretion of the author has been employed in rating the magnitude of effects.

5 Policy Environment

There are a number of plans and policies at both regional and local level that provide context for the future development of the Ōtaki region.

5.1 National

National policy documents are outlined in the full Assessment of Environmental Effects (AEE). For details on the relevant statutory matters please refer to this section of the AEE document.

5.2 Regional

5.2.1 Statutory Publications

Greater Wellington 10-Year Plan 2012-2022

Greater Wellington Regional Council has prepared a draft Long Term Plan (2012-2022) which is currently under review following the close of the submissions period. The draft LTP has a greater focus on emergency management; announcing the formation of a Civil Defence Emergency Management Group in partnership with the region's district and city councils. It also signals a change in focus of the Wellington Regional Strategy to emphasise economic growth in place of urban form. The draft LTP includes five community outcomes:

Strong economy - *'A thriving and diverse economy supported by high quality infrastructure that retains and grows businesses and employment.'*

Connected community - *'People are able to move around the region efficiently and our communications networks are effective and accessible.'*

Resilient community - *'A community that plans for the future, adapts to change and is prepared for emergencies.'*

Healthy environment - *'An environment with clean air, fresh water, healthy soils and diverse ecosystems that supports community needs.*'

Quality of Life - *'An engaged community that takes pride in our region, values our urban and rural landscapes, and enjoys our amenities and choice of lifestyles.'*

All five of the community outcomes in the draft LTP are relevant to the Project from a social perspective. The Project responds to these as the Expressway itself provides high quality infrastructure to encourage projected growth in the area, and provide for future demand. The series of over-bridges provide facilities for pedestrians and cyclists and local traffic, facilitating local connections and using a variety of transport modes. The design has been developed in order to avoid effects on ecological value wherever possible, and to maximise potential health benefits through improved air quality and reduced noise.

5.2.2 Regional Plans, Policies, and Strategies

Wellington Regional Strategy (2007)

The Wellington Regional Strategy (WRS) is a sustainable growth strategy that has been developed by the nine local authorities in conjunction with a range of local stakeholders. The aim of the WRS is to make the Wellington Region "internationally competitive" - a region which offers a competitive package of lifestyle, job opportunities, and a strong economy.

The WRS vision is:

> *In 2025 the Wellington region's competitive advantage will be based around its capital status, global links and local geography. The two main corridors running the length of the area will create a feeling of free movement and intimacy in the region. You'll never feel far from the bush, the sea, work or home.*

This vision is directly applicable to the Project as it emphasises the importance, both economically and socially, of linkages within the region.

The WRS also sets out a number of high level outcomes that will promote sustainable economic growth. These outcomes reflect the Greater Wellington 10-Year Plan community outcomes and the same ones are applicable.

Wellington Regional Land Transport Strategy 2010-2040

This strategy is prepared to comply with the requirements of the Land Transport Management Act 2003 and in support of the New Zealand Transport Strategy 2008. It sets out the long term aims of the region with regard to transport infrastructure, modes and maintenance. Key outcomes for the strategy are:

- Increased peak period public transport mode share.
- Increased mode share for pedestrians and cyclists.
- Reduced greenhouse gas emissions.
- Reduced severe road congestion.
- Improved regional road safety.
- Improved land use and transport integration.
- Improved regional freight efficiency.

The Project addresses several of the issues identified in the strategy, particularly community identified barriers to cycling and severance of communities by including a series of over-bridges linking communities to the east and west of the Expressway which include pedestrian and cycling facilities. It directly improves road capacity, both local and regional.

5.3 Local

5.3.1 Community Planning Documents

Kāpiti Coast District Council - Long Term Plan 2012-32

The Kapiti Coast District Council Long Term Plan 2012-2032 (LTP) outlines community goals and values; provides a twenty year strategic plan for the Kapiti Coast; and identifies projects and methods to achieve these goals and priorities. The LTP includes the existing community outcomes from the 2009-2019 Long Term Council Community Plan, as these are still considered relevant and important to the area. The community outcomes that are relevant to this assessment include:

- Local character is retained within a cohesive District.
- There is increased ability to work locally.

These are relevant as maintaining community connection and cohesion is an important part of the Project and one of the major benefits for the Project is growing the local and national economy.

The LTP also proposes Sustainable Development Principles, of which Principle 1 and 10 are relevant to the social assessment:

Principle 1: 'That there should be long term balance between social, economic, cultural and environmental wellbeing.'

Principle 10: 'Decisions should take account of the impacts of social wellbeing of the community and impacts on the wellbeing of individuals.'

It is worth noting that the LTP outlines concerns about the aging population in the greater Wellington region generally, and particularly on the Kāpiti Coast, and has concerns about the degree of 'churn' in the Kāpiti Coast resident population, "in 2006 just under 60% of the population had not lived on the Kāpiti Coast in 2001" (p.30). The LTP identifies the need to encourage working-age people and long-term residents into the area. The Project contributes to the latter by delivering a more reliable infrastructure, facilitating travel to the main sources of employment north and south of the Project area. The considerations and needs of a more elderly demographic have been directly considered.

5.3.2 Strategies

Cycleways, Walkways and Bridleways Strategy (2009)

The Cycleway, Walkways and Bridleways Strategy (CWBS) has the key purposes:

- To put in place a strategic direction for the future planning of cycling, walking and horse riding in Kāpiti; and
- To provide a strong foundation for the implementation of a cycleways, walkways and bridleways network that will enhance the experience of users with a variety of abilities.

The focus of the strategy over the next 10 years is to improve travel connections for walking, cycling and horse riding between Kāpiti's major towns and key recreation routes.

The CWBS is directly relevant to the Project as maintaining and enhancing community connectivity, particularly improvements to walking and cycling crossing facilities over SH1, are key elements of the Project.

The Streetscape Strategy and Guidelines (2008)

The Streetscape Strategy and Guidelines (SSG) sets out guidelines, processes, and tools for how Council can manage streetscape development. One focus of the SSG is on treatments and goals for the State Highway corridor. Specific treatments that are furthered by the SSG include:

- provide specific 'gateway' streetscape treatments at the key Kāpiti Coast State Highway One interchanges;
- slip roads (even if set well back to ensure reserve sensitivity issues are managed) allow some street frontage and reduce the visual effects of solid 'back' fences and barriers by providing opportunities for landscaping;
- developing low-impact stormwater treatments such as swales at the interface of State Highway One and residential areas will provide a good amenity buffer;
- seek to treat the use of concrete or other large-scale barriers or medians with surface or colour treatments to avoid monotonous visual blandness; and
- provide and encourage landscaping which maintains sightlines and coordinates with surrounding land uses.

The SSG has direct relevance to the Project as these treatments would contribute directly to the overall social and community atmosphere of the environment. This strategy is included in the Project's Urban and Landscape Design Framework in order to ensure that the Expressway design in particular incorporates the strategy guidelines.

Kāpiti Coast: Choosing Futures

Community Outcomes - Peka Peka Local Outcomes - Greater Ōtaki Vision (2007)

The Greater Ōtaki Vision (GOV) builds on the Community Outcomes from *Kāpiti Coast: Choosing Futures - Community Outcomes*, with a particular focus on the community's vision for the Greater Ōtaki area which includes Te Horo.

The key sections with relevance to the Project are Section 5 - Managing Growth for Local Benefit, Section 7 - Main Street and Ōtaki Railway, and Section 9 - Te Horo, Hautere and the Wider Rural Area.

> Section 5 emphasises the importance of Ōtaki as the focus for local growth and consolidated development, and that Te Horo is not intended for future development: *"5.2 That there is no new urban development at Te Horo Beach and the*

previously proposed Te Horo future urban growth area is removed, in preference to a focus on Ōtaki".

Section 7 defines the difference between the two local retail areas; "Main street - civic heart…", and "Railway Station - sub-regional retail…" It also recommends design elements to be emphasised in development, for example, native planting and improvements to pedestrian and cycling access.

The vision for Te Horo, Hautere and the wider area in Section 9 focusses on protecting remaining natural areas, and enabling the current rural and food-producing land-uses of the area to continue.

These policies are key to the Expressway and the placement of interchanges and over-bridges, as the Project provides for growth and development in Ōtaki, and a more attractive pedestrian environment in the town centre, while not stimulating inappropriate growth or development in rural areas.

Sustainable Transport Strategy (2008)

Kāpiti Coast District Council's Sustainable Transport Strategy (STS) must take account of national and regional transport strategies and plans, and is closely linked with the Regional Land Transport Strategy, and the Wellington Regional Strategy. It sets out the vision of the local community for transport planning on the Kāpiti Coast. Outcomes 2 and 7 of the STS are particularly relevant to the social assessment.

Outcome 2 - That the level and quality of access within and between communities is improved, including:

- all communities have safe and interesting pedestrian links (with good signage) that encourage use of local areas; and
- that there is easier and safer pedestrian and safer road access to the town centres - especially the Waikanae and Paraparaumu Town Centres.

Outcome 7 - There are extensive access linkages within the District in addition to State Highway 1, including:

- an extensive walkway, bridleway and cycleway system (both commuting and recreational); and
- good quality footpaths which are safe for people to use, particularly older people.

The Project will have a direct impact on improving linkages throughout the region. It will also deliver improved safety for local trips, including pedestrian safety and access, especially within Ōtaki. The above outcomes also highlight the importance of clear signage directing motorists to Ōtaki and Te Horo from the Expressway, which will need to be taken into account in the Project design.

6 Existing Environment

This section describes the social environment in which the Project is located. The purpose is to provide a baseline context and understanding of the Project environs including demographic characteristics, key land uses and geographic features. This information provides a starting point in defining the community of interest against which to assess the social effects of the Project. Further investigation of community groups and facilities has been carried out through site inspections, discussions, interviews and databases and document searches in order to refine affected groups. Refer to Section 7 for details on key stakeholder engagement.

6.1 Overview

The demographic study area is mainly rurally based, but with some scattered areas of larger settlement. The largest is Ōtaki which has a population of approximately 5,466 with around 2,361 dwellings. Te Horo has a population of 675, with approximately 294 dwellings.[9]

Ōtaki's residential areas fall on both sides of the Expressway. To the east of SH1 the residential area lies between Waitohu Valley Road to the north, Rahui Road to the south, and the cul-de-sacs of Ludlam Way, Speranza Avenue, and Brandon Street to the east.

To the west of SH1 the residential area is most densely settled around Ōtaki. There is also an area extending westward to the coast and then along Ōtaki Beach.

At Te Horo, the main residential area is along School Road, there are also numerous lifestyle and larger rural blocks in the area. The remainder of the route has lower densities of population.

Approximately 115 properties will be acquired as part of the Project, either in part, or outright. These acquisitions do not necessarily involve residential buildings.

The density of settlement of the population within the Project area is shown in Figure 6.2.1. This illustrates that the majority of the scheme runs through areas of low population numbers. However towards its northern end, it dissects a portion of Ōtaki to its eastern edge and comprising areas of more dense settlement.

The statistical detail in this section has been used to form the basis of the community and the types of activities and facilities provided. The relative effects of the Project on the community and the potential for mitigation are extrapolated from consideration of these statistics in conjunction with the information contained elsewhere in this report.

[9] Statistics New Zealand 2006

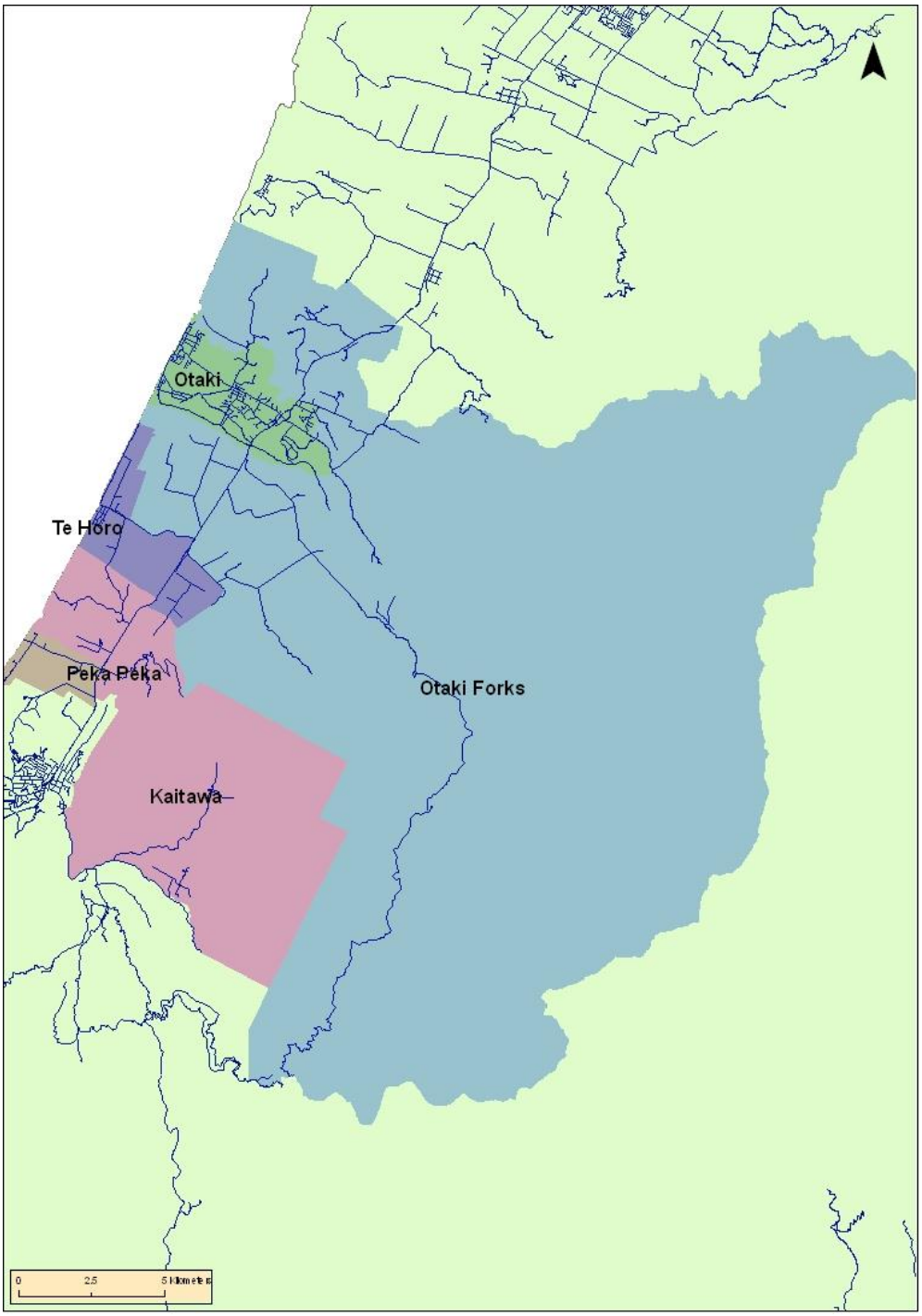

Figure 6.1.1 – Demographic Study Area

The Project lies within the territorial authority boundaries of Kāpiti Coast District (KCD) and within the Census Area Units (CAUs) of Ōtaki Forks, Ōtaki, Te Horo, Peka Peka and Kaitawa. These are illustrated in the Figure above and comprise the study area for profiling the community who reside within this area.

6.2 Population Characteristics

This section describes various demographic characteristics of the community within the area of the Project.

6.2.1 Population Size

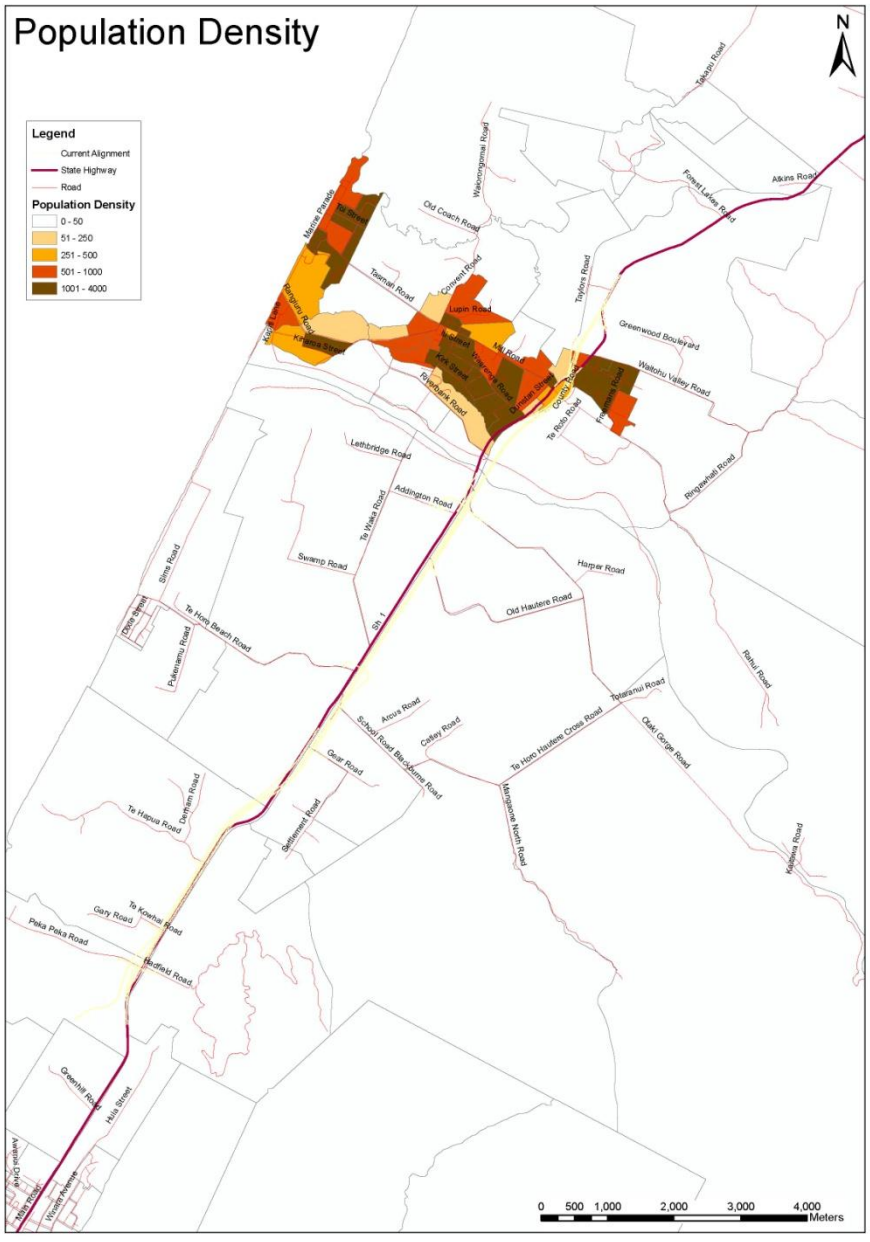

Figure 6.2.1 - Population Density

The largest population lives in the smallest CAU Ōtaki. This area unit encapsulates the township of Ōtaki. As noted above the reminder of the areas are, for the majority, comprised of rural areas.

The usually resident population varies in size between these five CAUs as illustrated in Table 6.2.1 below.

Table 6.2.1 - Usually Resident Population (1996-2006)

Area Unit	1996	2001	2006
Peka Peka	141	195	252
Kaitawa	282	390	474
Ōtaki Forks	1359	1479	1410
Te Horo	612	642	675
Ōtaki	5580	5643	5466
Total CAUs	9970	10350	10283
KCD	38688	42543	46458

The various area units have been experiencing different rates of growth over the last two census counts[10] as illustrated in Figure 6.2.2. The two densest CAUs (Ōtaki Forks and Ōtaki) experienced a decline in the usually resident population in the five year inter censual period from 2001 to 2006.

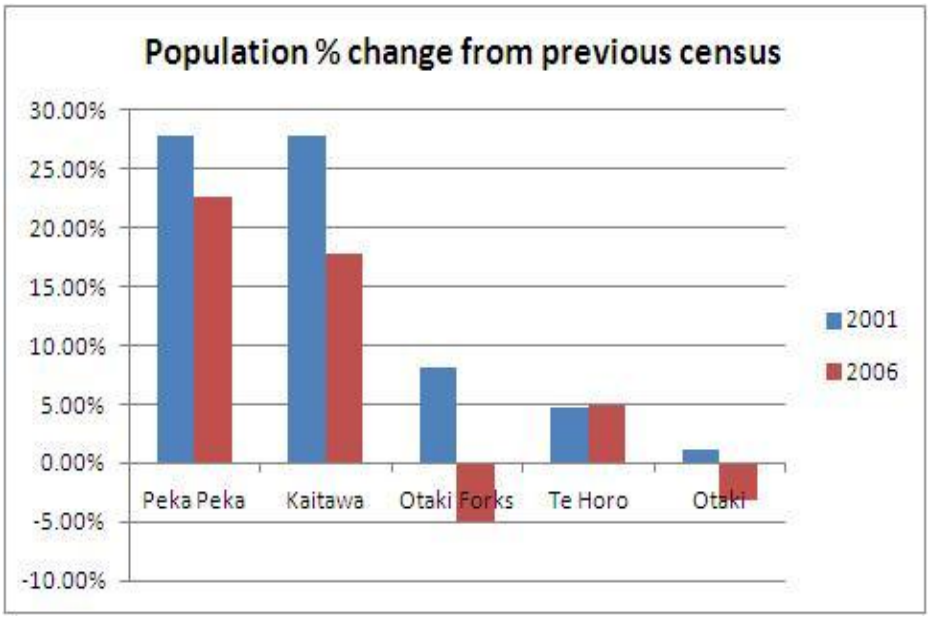

Figure 6.2.2 - Usually Resident Population (2001-2006)

[10] 2006 is the most recent census information available.

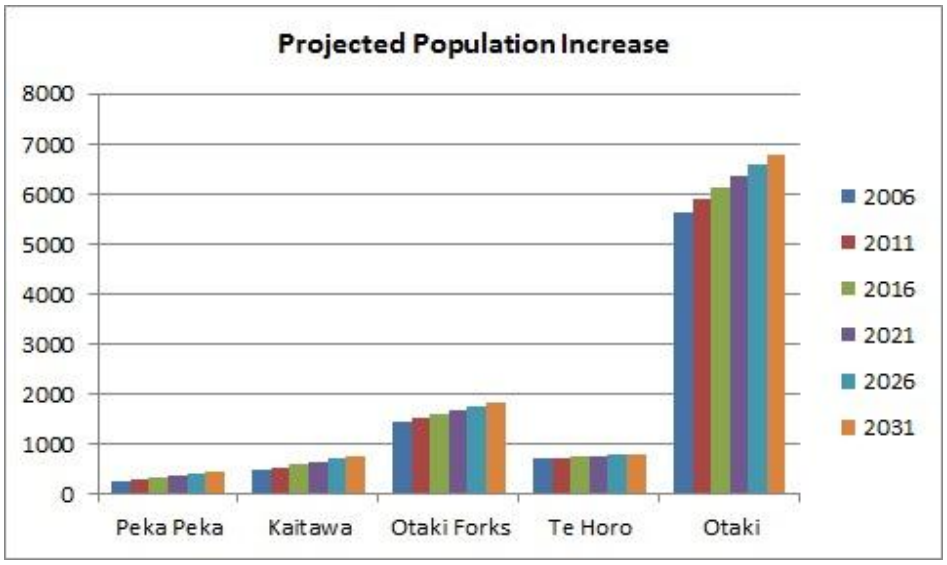

Figure 6.2.3 - Projected Population Increase

Despite the decline in population from 2001 to 2006, the population is projected to increase over the next twenty years, particularly in Ōtaki, by over 1,000 residents.[11]

6.2.2 Age Structure

The age structure of the resident population in these CAUs, and of the district, is illustrated in the table below. It is divided into those who are under 15 years of age, working ages and those over 65 years of age. The latter being when many members of the community are post-employment.

Table 6.2.2 - Age Structure, 2006

Area Unit	>15 years	15-64 years	65+ years
Peka Peka	15.1%	70.9%	14.0%
Kaitawa	20.0%	71.9%	8.1%
Ōtaki Forks	20.4%	66.6%	13.0%
Te Horo	18.5%	68.5%	13.1%
Ōtaki	20.6%	56.4%	22.9%
Total CAUs	20.2%	60.5%	19.3%
KCD	20.1%	59.4%	20.5%
New Zealand	21%	66.5%	12.4%

The population of Peka Peka to the west and Kaitawa to the south-east of the Project area comprises the greatest proportion in the employment years. This is in contrast to Ōtaki which has the lowest proportion by comparison with the other

[11] Based on Statistics New Zealand's medium population projection.

CAUs. The proportion over Ōtaki are greatest in the over 65 years of age compared with the CAUs. This indicates that the proportion of residents in Ōtaki who are post-employment is larger than that of other CAUs in the area, and far greater than the national average.

6.2.3 Ethnic Diversity

In all the areas, the majority of people were born in New Zealand, although the proportions vary. Of the CAUs within the demographic study area, Peka Peka has the highest percentage (21.4%) of residents born outside New Zealand, and this is higher than the average for the KCD region.

Table 6.2.3 - Country of Birth 2006[12]

Area Unit	New Zealand Born	Overseas Born
Peka Peka	76.2%	21.4%
Kaitawa	78.6%	18.9%
Ōtaki Forks	80.8%	16.8%
Te Horo	78.2%	16.9%
Ōtaki	81.5%	13.4%
Total CAUs	80.8%	14.8%
KCD	76.5%	19.5%

Within the region, and in each area unit, the largest ethnic group in 2006 was European, with the largest percentages residing in Peka Peka and Te Horo. The second largest group was Māori with the largest percentage of residents who identified themselves in this ethnic group resident in Ōtaki.

Table 6.2.4 - Ethnic Diversity 2006

Area Unit	European Ethnic Groups	Māori Ethnic Group	Pacific Peoples Ethnic Groups	Asian Ethnic Groups	MELAA Ethnic Groups	Other Ethnic Groups
Peka Peka	83.1%	7.2%	1.2%	0.0%	0.0%	15.7%
Kaitawa	75.5%	1.9%	0.0%	1.9%	0.0%	23.9%
Ōtaki Forks	76.2%	10.5%	1.3%	2.2%	0.2%	19.4%
Te Horo	82.0%	6.5%	0.9%	0.5%	0.9%	14.3%
Ōtaki	64.0%	34.1%	3.6%	4.2%	0.1%	9.5%
Total CAUs	68.9%	25.0%	2.7%	3.3%	0.2%	12.7%
KCD	79.6%	12.3%	2.2%	2.4%	0.2%	13.4%

[12] Percentages do not add to 100% as those who were not identified in any of the categories have been included in the calculations but not provided in the tabulations. This has been applied to all tables unless stated otherwise.

6.2.4 Transport

Table 6.2.5 shows the means of travel to work by the usually resident population over 15 years of age and employed. It excludes those who worked at home or did not go to work at the day of the census (and the data has been adjusted accordingly). Private vehicles were predominantly the method of transport in all the areas. Furthermore, these rates were generally greater than those for the district as a whole. Not surprisingly, the more rural CAUs had a greater reliance on private motor vehicles. In addition, that the use of trains to get to work was higher for Peka Peka and Kaitawa, indicating that these residents may be commuting southwards into the Wellington area to their place of employment.

Table 6.2.5 - Journey to Work 2006

Area Unit	Drove	Passenger	Public Bus	Train	Motor Cycle / Power Cycle	Bicycle	Walked or Jogged	Other
Peka Peka	75.8%	9.1%	0.0%	6.1%	0.0%	0.0%	0.0%	0.0%
Kaitawa	77.9%	4.4%	1.5%	8.8%	0.0%	0.0%	1.5%	1.5%
Ōtaki Forks	76.9%	3.8%	0.5%	4.9%	2.2%	0.5%	3.8%	0.0%
Te Horo	79.8%	4.0%	0.0%	4.0%	2.0%	1.0%	2.0%	2.0%
Ōtaki	70.7%	6.7%	0.3%	2.4%	0.5%	2.8%	7.6%	0.5%
Total CAUs	73.5%	5.8%	0.4%	3.6%	0.9%	1.9%	5.6%	0.6%
KCD	69.4%	5.7%	1.6%	9.8%	0.8%	1.7%	4.3%	0.8%

Household vehicle ownership for 2006 is provided in Table 6.2.6 below and such data can provide an indication into the socio-economic status of a population. Across the CAUs Ōtaki has 10.5% of households who do not own any vehicles. This is also highest when compared with the total district proportions. These data may reflect the larger proportion of those in the post retirement ages who have elected not to own a vehicle and chose other modes of transportation. It may also indicate a lesser ability to access private transportation. The other CAUs indicate high rates of vehicle ownership. This is likely to reflect the more rural nature of this population and in this respect, the need to have access to private transport means as there are no other practical alternative modes. In addition they may be needed to support rural based industries such as farming.

Table 6.2.6 - Vehicle Ownership 2006

Area Unit	No Motor Vehicle	One Motor Vehicle	Two Motor Vehicles	Three or More Motor Vehicles
Peka Peka	0.0%	25.0%	61.1%	11.1%
Kaitawa	0.0%	24.6%	45.6%	26.3%
Ōtaki Forks	2.2%	22.5%	46.1%	26.4%
Te Horo	2.1%	33.3%	40.6%	19.8%
Ōtaki	10.5%	48.6%	28.1%	8.4%
Total CAUs	7.6%	41.3%	33.9%	13.2%
KCD	8.5%	44.6%	33.2%	10.6%

6.2.5 Labour Force

The number of people who participate in the labour force is variable across the area units but most area units have a higher percentage of employed people than the district as a whole. Similarly, the number of unemployed in 2006 trend generally below that for KCD. Percentages of those who are unemployed and those who are not in the labour force are highest in the Ōtaki area unit, which together, comprises over 46% of the working age population. Consequently, employment rates for Ōtaki are low and much less than the other CAUs.

Table 6.2.7 - Labour Force Status 2006

Area Unit	Employed Full-time	Employed Part-time	Unemployed[13]	Not in the Labour Force
Peka Peka	52.1%	14.1%	2.8%	29.6%
Kaitawa	56.3%	20.6%	0.8%	20.6%
Ōtaki Forks	52.5%	17.9%	2.4%	25.6%
Te Horo	52.7%	16.8%	1.6%	25.5%
Ōtaki	37.4%	12.9%	3.7%	42.6%
Total CAUs	42.8%	14.6%	3.1%	36.6%
KCD	40.7%	14.2%	2.7%	39.7%

Employment status provides an indication of the proportion of residents engaged in full time or part-time work. The data provided above is from the 2006 Census and was collected before the global economic downturn. Employment status is known to have changed since that time. Table 6.2.8 and the following graph at Figure 6.2.4 show Household Labour Force[14] data for the Wellington region as a whole since 2006. These figures show that the Wellington region has experienced an increase

[13] Percentage of working age population unemployed, not the unemployment rate.

[14] Household Labour Force Survey time series data sourced from Statistics New Zealand: http://www.stats.govt.nz/infoshare

in unemployment since the 2006 census. While these figures do not necessarily correspond to the Kapiti Coast District, and to the Project area directly, it is reasonable to expect that a similar trend would apply.

Table 6.2.8 - Labour Force Status by Sex for Wellington Region (Annual-Jun)

Year	Employed in Labour Force	Unemployed in Labour Force	Not in Labour Force	Working Age Population	Unemployment Rate	Employment Rate
	(1,000s)				(%)	
2006	259.7	12.3	123.1	395.1	4.5	65.7
2007	273.7	11.7	119.8	405.1	4.1	67.6
2008	263.1	9.7	120.2	393	3.6	66.9
2009	279	13.3	116.6	408.8	4.5	68.2
2010	274.3	17	121.4	412.8	5.9	66.5
2011	272.4	16.4	116.4	405.3	5.7	67.2
2012	269.8	18.5	116	404.3	6.4	66.7

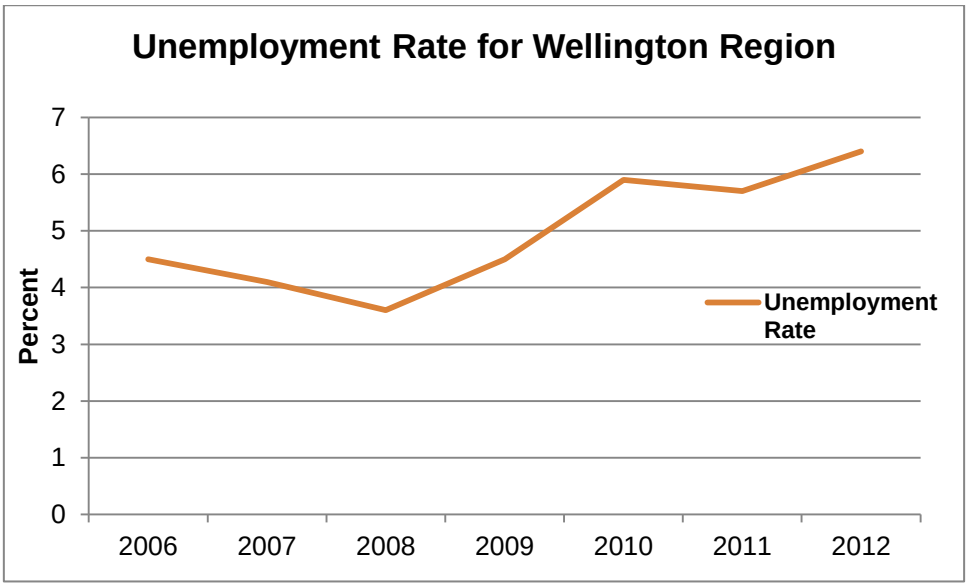

Figure 6.2.4 - Unemployment Rate for Wellington Region

6.2.6 Households

Within the study area one and two family households[15] dominate as shown in Table 6.2.9. However, again the Ōtaki CAU indicates the greatest difference as compared to the other four areas. In particular, it has the greatest number of one person households. This area also had the greatest percentage of those aged 65 years and older in 2006 and thus for elderly living on their own.

[15] Households are those where one or two people who usually reside together and share facilities.

Table 6.2.9 - Household Composition 2006

Area Unit	One-family household	Two-family household	Three or more family household	Other Multi-Person Household	One Person Household
Peka Peka	68.6%	0.0%	0.0%	0.0%	31.4%
Kaitawa	78.9%	1.8%	0.0%	3.5%	15.8%
Ōtaki Forks	80.8%	1.7%	0.0%	2.8%	14.7%
Te Horo	71.0%	1.1%	0.0%	1.1%	26.9%
Ōtaki	60.5%	1.4%	0.0%	3.2%	34.9%
Total CAUs	65.8%	1.4%	0.0%	2.9%	29.9%
KCD	66.2%	1.2%	0.0%	2.4%	28.6%

Table 6.2.10 - Household Tenure 2006

Area Unit	Dwelling Owned or Partly Owned	Dwelling Not Owned	Dwelling Held in a Family Trust	Private	Local Authority or City Council	HNZC/ State
	Tenure			Landlord for Rented Dwellings		
Peka Peka	56.8%	18.9%	21.6%	100.0%	0.0%	0.0%
Kaitawa	63.8%	13.8%	17.2%	100.0%	0.0%	0.0%
Ōtaki Forks	60.9%	16.2%	19.6%	95.0%	0.0%	5.0%
Te Horo	63.5%	17.7%	11.5%	100.0%	0.0%	0.0%
Ōtaki	54.5%	29.8%	7.9%	78.2%	7.1%	11.2%
Total CAUs	56.8%	25.5%	10.9%	81.7%	5.8%	9.5%
KCD	59.5%	22.9%	11.9%	87.8%	2.4%	5.5%

Ōtaki also had the greatest proportion of the households living in dwellings not owned by them (29.8%) of the CAUs. The predominant landlord was HNZC (or other state providers). There were also 7.1% of households in the Ōtaki area unit who had the Council providing their accommodation.

6.2.7 Deprivation Index

The Social Deprivation Index (SDI) is a measure of socio-economic status and uses a range of variables from the census which represent nine dimensions of social deprivation. The SDI is calculated at meshblock level, and built up to the relevant geographic scale using weighted average census usually resident population counts.

The nine variables (proportions in small areas) in decreasing weight in the index are:

1	*Income*	*People aged 18-59 receiving a means tests benefit*
2	*Employment*	*People aged 18-59 years who are unemployed*
3	*Income*	*People living in equivalised[1] households with income below an income threshold*
4	*Communication*	*People with no access to a telephone*
5	*Transport*	*People with no access to a car*
6	*Support*	*People aged less than 60 years living in a single parent family*
7	*Qualifications*	*People aged 18-59 years without any qualifications*
8	*Living Space*	*People living in equivalised households below a bedroom occupancy threshold*
9	*Owned Home*	*People not living in own home*

The scale ranges from 1 to 10, where 1 represents the Project areas with the least deprived scores and 10 the areas with the most deprived scores. The index applies to areas rather than individuals who live in those areas.

Figure 6.2.5 - Deprivation Index 2006 illustrates the index for the area based on the 2006 Census of Population and Dwellings using mesh blocks to provide a more graphical representation of the data. The data indicates that there is a range of levels of social deprivation within the Project area.

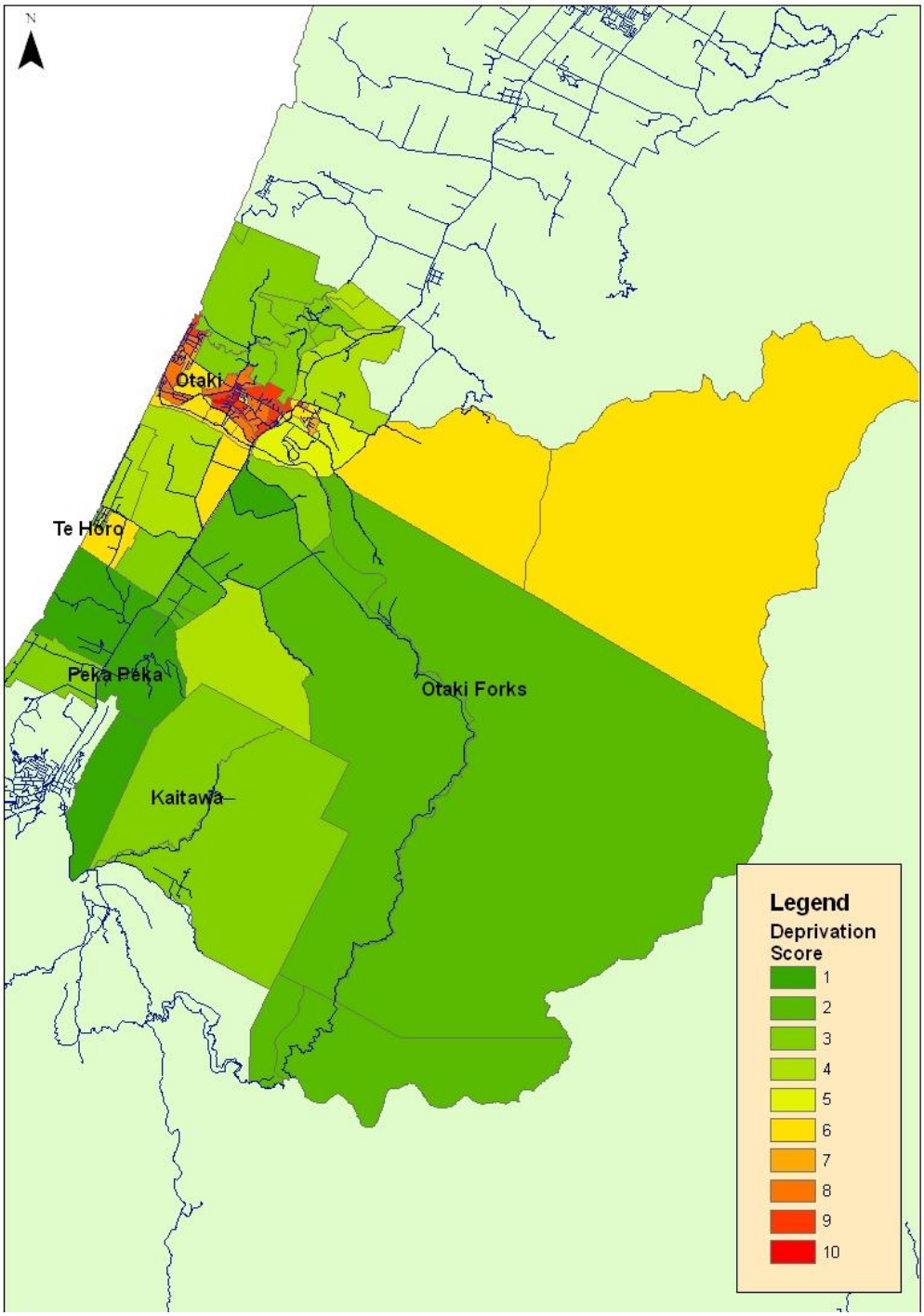

Figure 6.2.5 - Deprivation Index 2006

While in the main the majority of areas which are indicated as being least deprived are rural and less densely settled, there are some exceptions. Te Horo Beach, south Ōtaki to the west of the existing SH1 and north-east of Ōtaki are all low density areas with a SDI score of 6. These meshblocks are immediately adjacent to the least deprived areas, which are Peka Peka, south Ōtaki to the east of the existing SH1, and the Ōtaki Forks area. The most deprived meshblocks are at Ōtaki beach, and Ōtaki town to the west of the existing SH1.

6.2.8 Demographic Summary

The overall character of the study area is rural and has a very low population density, with Ōtaki township and the Ōtaki Forks area being the notable exceptions to this. These two densest CAUs show the highest rates of walking and cycling as a main means of transport to work, although it is worth noting that Ōtaki itself has a different rate of labour force participation than the rest of the Project area. This is particularly notable as Ōtaki has a higher percentage of people not in the labour force than the total for CAUs in the study area, and for the Kāpiti Coast District. This reflects both the higher rate of unemployment in Ōtaki, and the older demographic of Ōtaki (over 22% aged 65 and older). There are also higher numbers of residents in Ōtaki who have no access to a private motor vehicle than in other parts of the study area, or in the Kāpiti Coast district in general. Taken together these elements suggest that there will be higher reliance on pedestrian modes in Ōtaki than the Project area, and it is likely that accessibility for people with limited mobility will also need to be considered.

Higher numbers of people not in the labour force suggests that adverse effects during the construction period might be experienced by a larger number of people than would usually be the case, due to retired and non-working people being home during working hours. While construction effects are only expected for residents in the closest proximity to the Expressway, this underlines the need for effective communication of the timing and extent of works with the community throughout the Project's lifecycle.

Special attention is paid to the elderly demographic. Reductions in congestion and safer local roads will provide more convenient access for elderly to facilities throughout the area. Kura Kaupapa schools and Te Wananga in particular provide educational services for local residents, but are also regional centres of cultural learning. Access for local residents and students travelling from other parts of the region has the potential to be improved by the Project.

The Ōtaki Town Centre is a key employer for local residents, as well as Te Wananga O Raukawa. It is important that the Project enables their continued economic wellbeing.

With the population of the Project area projected to grow by approximately 1,000 residents by 2031, there is likely to be a growth in demand for transport infrastructure, and for accessible community facilities. The Project effectively facilitates the movement of SH1 traffic through the area, while removing this traffic from local roads. This enables good local access to the area, and has the potential to enable development of Ōtaki.

6.3 Community facilities

As noted above, with the exception of Ōtaki and Te Horo, the majority of the Project area is rural, with a mix of lifestyle and commercial farms, including areas of market gardening. There are numerous community facilities within the wider area along the Expressway which are typical of a rural community. The majority of facilities are located within the Ōtaki

Township and will not be directly affected by the Project. However, accessibility, connectivity, safety etc. are all factors that need to be considered in developing options for the Project. The community facilities are shown in Figure 6.3.1 and Figure 6.3.2 below.

Note that A3 versions of these maps can be found in Attachment 2 to this assessment.

Figure 6.3.1 - Social and Community Facilities: Ōtaki

Figure 6.3.2 - Social and Community Facilities: Te Horo

6.3.1 Cemeteries

There are three cemeteries located within the Ōtaki township. Ōtaki Cemetery is located on Anzac Road and there are two smaller cemeteries on Convent Road and Te Rauparaha Street. Ōtaki Cemetery is located approximately 1.1km from the Expressway and the two smaller cemeteries are approximately 2km from the Expressway.

6.3.2 Libraries

The Ōtaki Library and Service Centre is located in the in the centre of Ōtaki Town Centre. The proposed Expressway route is approximately 2km to the east.

6.3.3 Swimming Pool

The Ōtaki Pool is located in Haruatai Park near the middle of the Ōtaki Town Centre. This is approximately 700m from the Expressway.

6.3.4 Race Courses

The Ōtaki Racecourse is used daily for training and frequently hosts meets. The racecourse is located just to the east of SH1 and will be approximately 300m from the Expressway. A key consideration for the Ōtaki Racecourse is to provide for access across the Expressway corridor for horse floats and traffic to cater for the demands on race days. There are two smaller racecourses that are still operational and/or used for training. They are located on Te Hapūa Road and Addington Road to the south of Ōtaki. Both of these facilities are on the western side of SH1, with Te Hapūa being approximately 1km from the Expressway and Addington Road being approximately 500m from the Expressway.

6.3.5 Parks/Reserves

There are several parks within the Ōtaki Region. The Ōtaki Domain is near the centre of Ōtaki and provides playing fields and courts. Haruatai Park is located slightly to the northeast of the Domain and contains more playing fields, courts, and the Ōtaki Pool. Pare-o-Matangi Reserve is located directly to the east of SH1 near the rail over-bridge directly north of Ōtaki. The Pare-o-Matangi Reserve is not officially gazetted as a reserve. The Pare-o-Matangi Reserve combines grassed areas with planting and picnic areas. Access to the reserve is currently either from SH1 (limited access) or off Rahui Road (main access).

6.3.6 Churches

There are numerous churches in the Ōtaki area. The majority are located along Mill Road/Main Street or on Convent Road/Te Rauparaha Street. These churches are all approximately 1km from the proposed Peka Peka to Ōtaki route. The Highway Baptist Church is located on the corner of SH1 and Te Manuao Road, approximately 150m from the proposed alignment. In Te Horo there is a church on School Road near the community hall and fire station.

6.3.7 Social Services – Work and Income

The Ōtaki branch of Work and Income New Zealand is located at 84 Mill Road, Ōtaki, This is approximately 2km from the Expressway.

6.3.8 Community Halls

The Ōtaki Memorial Hall is located on Main Street in Ōtaki. The Te Horo Hall is located on School Road near the fire station. This is approximately 400m from the Expressway.

6.3.9 Medical

The Ōtaki Medical Centre is located at 2 A Ōtaki Street. This is approximately 2km from the Expressway.

6.3.10 Museums

There are two museums in the vicinity of the Project. The Ōtaki Museum is located on Main Street, Ōtaki, approximately 2km from the Expressway. The Hyde Park Museum is located on the corner of SH1 and Te Horo Beach Road, approximately 740m from the Expressway.

6.3.11 Emergency Services

Police and emergency services require good roading accessibility and connectivity in order to service the local area.

Police Station

There is only one police station within the wider Project area. This is located in Ōtaki on the corner of Iti and Matene Streets. The station is located approximately 2km from the Expressway.

Fire Station

The Ōtaki Volunteer Fire Station is located on Mill Road near the centre of the Ōtaki Township. This is approximately 2km from the proposed Expressway route. The Te Horo Fire Station is located on School Road near the community hall and it is manned by the Rural Fire Force. The Te Horo fire station is located approximately 400m from the Expressway.

Ambulance Station

The Ōtaki Ambulance Station is located near the Ōtaki Railway Retail area on Dunstan Street, approximately 150m from the Expressway.

Continued access to Te Horo and south of the district is available on the existing SH1, while access to the Expressway will be available to the south via the existing SH1 and the on-ramp at Ōtaki Gorge Road. An emergency turning bay will provide access for emergency vehicles between Gear Road and the Expressway. To the north, access will be available through the on-ramp north of Rahui Road. Local access to Ōtaki east of existing

SH1 will be improved by the bridges over the Expressway. The accessibility of movements for emergency vehicles will be improved by the project.

6.4 Educational Facilities

Education activities are well represented in the Ōtaki region. There are eight primary and secondary schools and one tertiary institute within the study area. Primary and secondary schools are a mixture of state and independent schools, with a combined roll of approximately 1300 students. Educational facilities are identified in Table 6.4.1.

Table 6.4.1 - Schools within proximity of the Project area[16]

School	Type	Gender	Decile	Roll (2012)	Address
Te Horo School	Full Primary State: Not integrated	Co-Ed	9	191	School Road, Te Horo
Ōtaki College	Secondary State: Not integrated	Co-Ed	4	470	Mill Road, Ōtaki
Ōtaki School	Contributing State: Not integrated	Co-Ed	3	211	Mill Road, Ōtaki
Waitohu School	Contributing State: Not integrated	Co-Ed	4	243	Te Manuao Road, Ōtaki
Ōtaki Health Camp School	Special School State: Not integrated	Co-Ed	1	N/A	Health Camp Road, Ōtaki
St Peter Chanel School (Ōtaki)	Full Primary State: Integrated	Co-Ed	3	21	Convent Road, Ōtaki
Te Kura-a-iwi o Whakatupuranga Rua Mano	Composite (Year 1-15) State: Not integrated	Co-Ed	3	120	143 Tasman Road, Ōtaki
Te Kura Kaupapa Maori o Te Rito	Composite (Year 1-15) State: Not integrated	Co-Ed	3	63	Te Rauparaha Street, Ōtaki

In addition to the eight schools, Te Wananga-O-Raukawa (a Māori University) is also located within the study area at 144 Tasman Road.

The approximate distances between the schools, Te Wananga-O-Raukawa and the Expressway are shown in Table 6.4.2 below.

[16] http://www.tki.org.nz/e/schools and http://www.schoolzones.co.nz/enrolmentzones/

Table 6.4.2 - Approximate distances to Expressway route

School	Approximate distance to Expressway
Te Horo Primary	1.0 km
Ōtaki College	0.4 km
Ōtaki School	1.3 km
Waitohu Primary	0.3 km
Ōtaki Health Camp School	3.9 km
St Peter Chanel School (Ōtaki)	2.0 km
Te Kura-a-iwi o Whakatupuranga Rua Mano	2.4 km
Te Kura Kaupapa Māori o Te Rito	2.3 km
Te Wananga-O-Raukawa	2.4 km

The geographic area that the schools draw their students from is likely to be relatively large due to the distances between communities and the concentration of schools in townships. As such, students may utilise various methods to get to school including walking, cycling, public transport, and private cars. Te Wananga o Raukawa draws its students regionally and nationally. Improved accessibility via the Expressway is a positive effect. The Kura Kaupapa also has a regional base (Levin through to Paraparaumu) and shares the same positive effect of the Project as the Wananga. Local schools rely heavily on bus transport and the linkages over and from the Expressway are considered positive through improved safety and reduced commuting distances. School bus routes to Te Horo Primary school and various Ōtaki schools travel on most of the main roads within the Project area which intersect with the existing SH1, including; Te Horo Beach Road, Gear Road, School Road, Old Hautere Road, Mill Road and Waitohu Valley Road[17]. The balance of students who walk or cycle either have no change in their environment or a positive improvement with reduced traffic and/or better walking and cycling.

6.5 Business/Economic

Ōtaki is the largest settlement along the Project alignment and potential business and economic effects have been examined with regard to the two main retail areas in Ōtaki. The main retail areas are: the Ōtaki Railway Retail area (the area along the existing SH1 alignment); and the Ōtaki Town Centre (the area on Main Street, approximately 1.8km north-west of the existing SH1).

There are approximately 265 workers (MECs or Modified Employment Count, from Statistics NZ's Business Frame) employed in Ōtaki's Railway Retail area (ORR) working in 43 businesses. The largest employer is the New World supermarket in the Ōtaki Town Centre (nearly 100 MECs), while other businesses in the ORR are smaller, averaging less than 5 MECs each, spread across a range of core retail, hospitality and household and health service businesses. There are a further 327 workers in the Town Centre, in 75 businesses.

[17] For further details on school bus routes refer to: http://nzschools.tki.org.nz/

Te Horo is a smaller rural community to the south of Ōtaki. While this is not a main commercial centre, a variety of businesses exist in Te Horo village; mainly concentrated on the existing SH1 and Te Horo Beach Road. Other businesses in the wider Te Horo area and between Te Horo and Ōtaki are mainly located adjacent to the existing SH1.

6.6 Use of Information

This demographic and geographic information is used to inform the SIA, by providing a baseline of information on the social fabric of the community which could be affected by the Project. Further investigation of community groups and facilities which may be affected is included in the following section, 'Summary of Community Engagement'.

7 Summary of Community Engagement

This section provides an overview of the community engagement carried out by the Project team, and the main issues that have been raised by residents and members of the community located within the Project area. General consultation with the community in relation to the Project was undertaken in February-March 2011[18] and in June-July 2012, and targeted consultation specifically regarding social effects was also carried out in mid-2012.

Engagement methods included:

- one on one meetings;
- open days;
- website, free phone number and email;
- brochure;
- feedback forms; and
- media statements.

7.1 Community Engagement February-March 2011

Community engagement carried out over February and March of 2011 sought feedback from residents and community stakeholders on their preferences between two alignment options for the Expressway. Preferences for different options were provided at different sections of the proposed alignment. Community consultation at this time also provided the opportunity for general feedback on the Project and issues raised at this stage included:

- Preference for options that had less impact on community facilities such as the Red House Café, and St Margaret's Church.
- Effects on passing trade to local businesses, especially at Te Horo.
- Local access concerns, such as the provision of slip roads to and from the Expressway at Te Horo.
- Importance of maintaining access for emergency vehicles to South Ōtaki, in particular Old Hautere Road.
- Importance of maintaining a continued linkage with Rahui Road in central Ōtaki.
- Visual impacts of the Project on the surrounding landscape, and amenity effects to Pare-o-Matangi reserve.

[18] Phase 1 Peka Peka to Ōtaki Expressway Public Engagement Report, August 2011.

7.2 Ōtaki Customer Survey

A survey of pedestrians[19] around Ōtaki was carried out in March 2011 to assess the main purpose of shoppers in Ōtaki, and how their behaviour might change once the Expressway is operational. This survey looks at the reported behaviour of shoppers in two locations; Ōtaki Main Street, and Ōtaki Railway Retail area. The location of these retail locations is shown in Figure 6.5.1 on the following page (an A3 version of this map is available in Appendix 2 of this assessment).

The survey included counts of businesses in the two retail areas by the type of business, which were classified into either retail, or service businesses. A break-down of the business classifications and the count for each type is shown in the table below.

Table 7.2.1 – Frequency of business type by location in Ōtaki [20]

Business type	Business location		Total
	Main Street	State Highway 1 (ORR)	
Retail			
Cafe, bakery and take-away	7	12	19
Clothing and shoes	2	37	39
Food, liquor or groceries	6	4	10
Petrol	0	3	3
Miscellaneous retail	12	14	26
Sub-total retail	**27**	**70**	**97**
Services			
Hotel, accommodation & bar	3	3	6
Auto repairs	1	4	5
Healthcare	3	3	6
Professional and business services	9	7	16
Other services	3	4	7
Sub-total services	**19**	**21**	**40**
Total	**46**	**91**	**137**

[19] *Ōtaki Customer Survey: Draft Report of Pedestrian Intercept Surveys conducted in March 2011,* Opus International Consultants.

[20] Table reproduced from *Ōtaki Customer Survey: Draft Report of Pedestrian Intercept Surveys conducted in March 2011,* Opus International Consultants.

Figure 7.2.1 – Ōtaki Retail Areas

Key findings of the survey were that just over half (56.6%) of surveyed pedestrians reported that they were passing through Ōtaki, and the most common types of purchases made were for takeaway food and drink, groceries, petrol and clothes. The report concludes that these business types are the most likely to be reduced passing trade as a result of the Project.

Just under half the surveyed respondents (42.2%) lived in the area, and their shopping behaviour was not expected to change as a result of the Project. A similar percentage of respondents (42.6%) reported that they would continue to shop in Ōtaki regardless of the

change in travel time to reach Ōtaki town. Of the remaining respondents, 6.6% indicated that they would still be willing to stop in Ōtaki, but this depended on how much longer this would make their trip, and 8.6% indicated that if the Expressway was in place they would no longer stop in Ōtaki.

Table 7.2.2 - Anticipated behaviour following completion of the Expressway (N=486)[21]

Anticipated Behaviour	Frequency
1. Live in Ōtaki (so the Expressway would not affect behaviour)	205 (42.2%)
2. Would continue to stop in Ōtaki regardless of time savings	207 (42.6%)
3. Willing to stop in Ōtaki, but only if this resulted in a time savings sacrifice less than a specified number	32 (6.6%)
4. Would continue on the Expressway and therefore avoid Ōtaki	42 (8.6%)

A comparison between Ōtaki Main Street[22], and the Ōtaki Railway Retail area (ORR) showed that a higher percentage of pedestrians surveyed were Ōtaki residents in the main street shopping area (57%), than at the ORR (35.7%). A higher percentage of those surveyed in the ORR indicated that the Expressway may change their travel behaviour, 13.8% (ORR), compared with 4.6% (Ōtaki main street).

Table 7.2.3 - Anticipated behaviour following completion of the Expressway for those surveyed in the Ōtaki Railway Retail area versus those surveyed in Main Street [23]

Anticipated Behaviour	ORR	Main Street
1. Ōtaki Resident	114 (35.7%)	86 (57.0%)
2. 'Willing to stop'	161 (50.5%)	58 (38.4%)
3. 'Expressway' group[24]	44 (13.8%)	7 (4.6%)

Survey participants were also asked to estimate how much they would spend in Ōtaki. Of those surveyed, 2.8% did not anticipate spending any money in Ōtaki, participants within the 'willing to stop in Ōtaki' group reported an estimated spend with a mean of $70.57, while for Ōtaki residents the mean was $56.66, and for the 'expressway' group, who reported that they would no longer stop in Ōtaki after the Expressway was built, had a mean estimated spend of $53.02.

[21] Table reproduced from Ōtaki Customer Survey.
[22] Note that totals do not match for the two tables due to some missing data on shopper location.
[23] Table reproduced from Ōtaki Customer Survey.
[24] This includes the responses: *'Willing to stop in Ōtaki, but only if this resulted in a time savings sacrifice less than a specified number'*, and '*Would continue on the Expressway and therefore avoid Ōtaki'*.

Table 7.2.4: Anticipated spending and estimated amount spent for Ōtaki residents, those willing to stop and those in the Expressway group[25]

Spending behaviour	Ōtaki residents	'Willing to stop'	'Expressway' group
Anticipated amount spent			
Nothing	7 (3.5%)	4 (1.8%)	3 (5.7%)
Less than $10	19 (9.4%)	19 (8.5%)%)	9 (17.0%)
$10-$25	45 (22.3%)	40 (17.9%)	13 (24.5%)
$25-$50	50 (24.8%)	42 (18.8%)	9 (17.0%)
$50-$75	30 (14.9%)	35 (15.6%)	2 (3.8%)
$75-100	19 (9.4%)	32 (14.3%)	10 (18.9%)
$100-$200	25 (12.4%)	39 (17.4%)	4 (7.5%)
More than $200	7 (3.5%)	13 (5.8%)	3 (5.7%)

Spending behaviour	Ōtaki residents	'Willing to stop'	'Expressway' group
Estimated spending			
Estimated mean spend (per person)	$56.66	$70.57	$53.02
Estimated total spend	$11,445.00	$15,807.50	$2,810.00
Percentage of total spend by group	38.1%	52.7%	9.2%

The findings of the study were that those willing to stop in Ōtaki were estimated to spend more on average than Ōtaki residents, or the 'Expressway' group, who reported they would be unwilling to stop in Ōtaki with the Expressway in place. The study concluded that these estimates suggested that 9% of overall sales would be lost with the Expressway in place, broken down to 12% at the Ōtaki Railway Retail area, and 3% at Ōtaki Main Street.

The report also notes that features which respondents indicated would make Ōtaki a more attractive shopping destination such as reduced traffic congestion, improved ease of parking and improved pedestrian safety were also those likely to be delivered by the Project once operational.

7.3 Community Engagement June-July 2012

In June and July of 2012, the Project team consulted with the community on the updated Project design. At this stage the preferred alignment had been decided on and the consultation focussed on specific mitigations to address issues raised in previous consultation rounds. Two public open days were held in Ōtaki and Te Horo, and feedback was provided via consultation forms, which were collected at the open days, and received over the following month.

[25] Table reproduced from Ōtaki Customer Survey.

7.3.1 Open days

One-hundred and nine visitors attended the first open day, held in Ōtaki on the 16th of June, 2012. Ninety-eight visitors attended the subsequent open day, held in Te Horo on the 20th of June. Feedback from these open days was concerned with:

- Flooding
- Geotechnical
- Stormwater
- Railway issues
- Noise
- Landscape
- Emergency services
- Heritage and culture
- Property Access

Among the issues raised, a number of attendees were concerned about potential visual and noise effects to their properties. Residents were also concerned that there was a lack of noise mitigation measures in the design, and that they had not had enough prior detail on the potential effects of the Project on their properties. There were also some concerns about partial or total land loss, and the acquisition process around this.

Residents in the area raised concerns about access to the Expressway, particularly in the Te Horo area. Residents immediately adjacent to the alignment raised concerns about access to their properties once the Expressway is operational.

Some members of the Ōtaki and Te Horo communities raised issues related preservation of the areas' heritage, namely:

- The Bridge Lodge building;
- 23 SH1; and
- the stockyards at Te Horo.

7.3.2 Community Feedback

Thirty-six consultation forms were received following the June-July 2012 consultation round, including responses submitted in person at the open days. The consultation forms sought feedback on key areas within the preferred alignment which were featured in story boards presented at the open days, namely; North Ōtaki, Rahui Road, Ōtaki River, South Ōtaki, Te Horo and Mary Crest.

Community reactions to the Project sections detailed in the story boards were largely positive for the North Ōtaki, Rahui Road and Ōtaki River sections, although some issues with regard to loss of private property and local access were raised. There were more issues raised by residents of the southern sections, particularly South Ōtaki. The most commonly expressed feedback in this area was regarding the potential effect of noise on residents, and the level of information available prior to the open days.

Positive feedback

Many forms provided general positive feedback on the Project sections illustrated in story-boards at the open days, or about the Project in general. Typical positive responses about the Project were:

- *"Best you could come up with under the circs".*
- *"Overall very impressive.*
  Look forward to it happening."
- *"Happy with this".*

Issues raised through submission feedback

Way of Life:

- Concerns about potential severance were expressed with regards to Te Horo - and pedestrian / cycling access across the Expressway.

Wellbeing:

- There were also concerns and uncertainty about what the extent of effects would be, and frustration with the consultation process.

Amenity and Community:

- Loss of individual property / impacts to property (mainly noise).
- Some individuals also mentioned the importance of continued visitors to Ōtaki, and concern that there may be fewer people / less custom passing through as a result of the Project.

7.3.3 Key stakeholders

Further consultation with key stakeholders was held by the author of this assessment and other members of the Project team following the general consultation carried out in June and July 2012. This consultation was targeted at certain groups to ensure that they had not been overlooked during general public consultation. The Project team had already carried out consultation with directly affected landowners as part of the Public Works Act process, and views of directly affected landowners and those neighbouring the Expressway had been captured from different rounds of public consultation. Direct engagement with iwi groups had

already been carried in preparation of the Cultural Impact Assessment by the relevant technical specialist. Key stakeholder meetings were held with local schools and businesses and the elderly in the area, to further understand issues and potential impact on these groups.

Business Community

This assessment explores the effects of the Project on individual businesses. As the Mackays to Peka Peka project does not propose a full interchange at Peka Peka, access to Te Horo from the south would be either via the local road network from Waikanae or from the north-bound exit to Ōtaki at Ōtaki Gorge Road, and then via the existing SH1. Access to Te Horo from the north would be from the southbound exit at Peka Peka, and then north via the existing SH1. During the first general consultation phase, a number of Te Horo businesses expressed concern about the potential impact on their economic wellbeing as a result of perceived decreased accessibility as the Expressway bypasses Te Horo. Submissions from businesses were not received during the second phase of general consultation, and the SIA team directly contacted, or attempted to contact previous submitters to ensure their viewpoint was not missed.

An attempt was made to contact 109 business owners in Ōtaki. Eleven business owners agreed to meet individually or in small groups, others elected to discuss issues on the phone, chose not to meet, or were unable to be contacted.

The effect of the Project on Te Horo businesses is dependent on the nature of the business and its catchment area. Some businesses do not rely on bypassing traffic and draw customers from the local area (refer to the Assessment of Economic Effects for more information).

For some businesses there may be some negative effects through the loss of bypassing traffic which is counter-balanced in part with safer access for local and regional customers. An example of this is South Pacific Nursery who draw their client base from keen local and regional gardeners who are often in the older demographic. In discussion with this business, the owners expressed that less traffic and safer access is perceived to be an advantage for elderly people in the area.

The effect on businesses that are 'destination' based is less severe than those that substantially rely on passing trade. Owners of the Penray self-pick fruit business expect that they will experience considerably less effect on their trade than their vegetable sale operation, as it is a destination type business. The vegetable sale business relies partly on by-passing trade.

The Winemakers Daughter is another destination based business. The business is not visible from SH1 and has largely been developed as a wedding/function centre. The owners expect that the Project will only have a minor effect as there is limited reliance on by-passing traffic.

Other businesses and particularly those in the food and beverage industry will experience the greatest impact as they are more reliant on passing traffic. Certain businesses are already looking to change their business to address this effect. Koru Ice is largely reliant on passing traffic. The business owners are examining options to change their business from retail to wholesale.

Submissions in the general consultation round from Ōtaki businesses expressed concern about the effects of the Project on their economic wellbeing. Although there is no formal organisation representing Ōtaki businesses, one has existed in the past. With the assistance of James Coutts, an Ōtaki business owner and member of the Community Board, 109 businesses were contacted by email and invited to 'drop in' for a coffee and muffin between lunchtime and early evening, to discuss the Project and to seek feedback particularly on any mitigation that may be applied. The turn-out was poor with only two parties attending. NZTA have redesigned the alignment to ensure that the Project makes access as simple as possible to Ōtaki and also to provide advance signage. Ōtaki is a retail destination particularly with respect to the factory shops located on the existing SH1.

Education Sector

The demographic analysis shows that about one-fifth of the population in the Project area are 15 years of age or less. This is reflected in the number of educational institutions in the Project area. These extend from pre-school through to Te Wananga o Raukawa, a tertiary institution. This segment of the population was not well represented during the consultation process so additional consultation was undertaken to ensure that the needs of this group were understood.

Meetings were arranged with 6 educational institutions covering all age groups from kindergarten, through to primary, secondary and tertiary facilities. Educational institutions were located on both the eastern and western sides of the Expressway and were representative of all learning forms e.g. Ministry of Education, Integrated schools and Māori Total Immersion. All of educational institutions held the view that the Project had substantial benefits in that:

- for those institutions that had a large catchment e.g. Te Wananga o Raukawa and Te Kura-a-iwi o Whakatupuranga Rua Mano, the Project would improve access for their students and reduce travel times;
- the majority of schools had a relatively low population that walked or cycled. The main form of access was by school buses or private vehicle. The effects of the Project were seen to either decrease travel times, or make the journey safer on local roads, or improve crossing points. No effect on school bus routes was envisaged so long as timely information was provided on the construction programme;
- improved walking and cycling facilities for those students who did walk or cycle were viewed as positive; and
- it is important to note Te Runanga o Raukawa is large entity and an important stakeholder. It employs 250 staff and has a student body of 2,000. At any

point there may be 200 or more students on-site engaged in Block courses. The majority of these students arrive and depart in private vehicles. Representatives of the Wananga were positive about the health benefits of the improved and/or safer walking and cycling facilities that will result from the Project. This was an important consideration as a number of their courses rely on physical activity.

Elderly Community

Kāpiti Grey Power had previously submitted as part of the February-March 2011 public engagement, raising issues such as access for the Te Horo Rural Fire Force, and the gradient of over-bridges, which have been able to be addressed in the detailed design. Kāpiti Grey Power also raised the following as key issues for their members:

- Safe travel between townships in the Kapiti district.
- Safe travel via any mode within each township.
- Accessibility to town amenities.
- Costs of project.
- Timeframes to achieve better safety and north/south congestion alleviation.
- The cost of maintaining the additional local roads.
- Priority in dealing with affected property owners and prompt payouts.

While there are no institutional aged care facilities in close proximity to the Expressway, there are a number of elderly residents in the Project area, particularly in Ōtaki, and it was considered important to have on-going engagement with the senior members of the community. In mid-2012, an update on the Project was presented to a Grey Power Meeting in Ōtaki. Although there were a few individual members whose properties were directly affected (and who had already engaged in one-on-one consultation) the vast majority felt that the Project was positive as it made local travel easier, with less traffic.

8 Review of Technical Reports

This Social Assessment of the Project takes into consideration elements which are covered in greater detail in other technical reports. Where there is an overlap of issues, the relevant technical report has been summarised below, and the issues outlined in terms of the social perspective of this report. Technical recommendations and mitigations presented in the reports below are relied on, however in some cases additional mitigation, or remedial actions may be recommended to address the effects when viewed through a 'social lens'.

8.1 Heritage Assessment[26]

The Heritage Assessment includes sites registered with the Kāpiti Coast District Council, the New Zealand Historic Places Trust, and sites with heritage values that are not statutorily recognised. The technical assessment addresses the:

- Ōtaki Railway Station;
- former Rahui Milk Treatment Station;
- former Rahui Factory Social Hall;
- former Te Horo Railway Station;
- the Beehive Kilns and other structures on the property; and
- 'Clifden'.

Overall conclusions on the heritage effects of the Project on these sites are:

- The effects on the Ōtaki Railway Station are assessed to be less than minor, as heritage values can be preserved by employing appropriate materials and methods in the reconstruction of the building, and by maintaining the same relationship with the railway itself.
- Effects on the former Milk Treatment Station are assessed to be less than minor, given the extensive modifications already carried out on the property, and that the Project will not require physical intervention on the building.
- Effects on the former Rahui Factory Social Hall are assessed to be less than minor. Changes to the environment will change as a result of the project, as will the access to the building, although this will be retained. The assessment proposes screening planting in order to mitigate changes to the setting.
- Effects to the former Te Horo Railway Station are assessed to be less than minor. The assessment proposes that screening plans are used to mitigate visual effects from the proximity of the Expressway, and recommends that a new access road is provided. Note that the Project will not require physical intervention on the building

[26] *Assessment of Built Heritage*, August 2012.

- With regard to the Smisek Beehive Kilns (which are on a site which includes the former Te Horo Railway Station), the assessment finds that these kilns will need to be relocated, given the proximity of the Expressway. The assessment concludes that relocation will not affect their heritage as long as national and international guidelines for relocation are followed. Effects to the structures on the Smisek site are assessed to be less than minor, if the recommended mitigations are implemented.

- Effects to 'Clifden' are assessed to be significant as the site of the building will be occupied by an approach to Expressway Bridge no. 6. If the recommended mitigation is implemented, the assessment finds that this effect can be reduced to minor. Recommended mitigations involve the relocation of 'Clifden' to a site which reflects its existing setting, and has historical associations with the former owner; William Small.

From a social perspective it is important that where heritage sites provide a service or facility to the community (such as the Ōtaki Railway Station), the community can continue to use and enjoy them in the same way. Heritage sites also function as a community touchstone, providing a connection for the current community with the past. As the functionality of the buildings will not be affected by the Project, it is not expected that there would be any substantial social issues regarding their amenity to the community, although access to the Rahui Social Hall will be changed as a result of the Project. In terms of the potential negative effects on heritage, the findings of the Heritage Assessment and the proposed mitigations are relied on.

8.2 Archaeological Assessment

The Assessment of Effects - Archaeology[27] outlines potential effects of the Project on the archaeological resources of the area. It finds that there are six recorded sites, and a number of unrecorded sites in the vicinity of the Expressway which could be affected by the Project. These sites are mainly located near Mary Crest, although there is one site in Ōtaki on the site of the historic railway station.

Recommended mitigations are to recover and record information related to sites of archaeological interest prior to project earthworks. The report also recommends that works are carried out in accordance with an Accidental Discovery Protocol, linked with protocols developed for the Project in conjunction with Ngati Raukawa.

The report notes that there are two standing buildings which will be affected by the Project, however only one is built before 1900, and is therefore considered to be an archaeological site under the Historic Places Act. This is Clifden Cottage at Bridge Lodge. While an Authority to Modify will be required from the NZ Historic Places Trust, the report also recommends that archaeological recording and investigation of the site be carried out in accordance with best practice prior to any modification to the structure. An authority to modify will also be required for works to realign the Ōtaki Railway Station, as there are foundations beneath it which are pre-1900.

[27] *Peka Peka to North Ōtaki Expressway Specialist Report - Archaeology*, October 2012

The assessment proposes generic mitigation to include:

- historical information and results of archaeological work along walkways and cycleways part of the Project;
- presentation of information to the public;
- preparation of information booklet / pamphlet on completion of the project, outlining results of archaeological investigation;
- if appropriate, exhibition of archaeological display at Ōtaki Museum.

The report outlines positive outcomes from the Project due to the opportunity to carry out archaeological investigations, and present findings and information back to the local and regional community. The report concludes that the overall potential effect of the Project on Archaeological resources is low to medium.

From a social perspective the findings of this assessment are accepted. Maintaining links with the history of the area and continuity of the area is important to community aspirations, and feedback from local submitters indicated that care should be taken around historical sites. The amenity and on-going access to existing buildings is important, and should not be affected by the Project. There is a potential benefit to the community that raising awareness about archaeological sites in the area as a result of investigations could strengthen historical links with the area.

8.3 Cultural Impact Assessment

The Cultural Impact Assessment[28] (CIA) documents the cultural significance of sites within the Project area to the tangata whenua; Nga Hapū-o-Ōtaki. It identifies potential effects of the Project on cultural values, and appropriate measures for the Project to mitigate these where practical.

The CIA draws four main conclusions as part of the assessment, these are that:

- damage to wahi tapu is probable between Taylors Road and Rahui Road;
- the Project is not expected to interfere with the tangata whenua kaitiakitanga;
- the establishment of a detailed protocol for earthworks and any potential discoveries with Nga Hapū-o-Ōtaki is proposed as mitigation; and
- the CIA is not a substitute for consultation with Nga Hapū-o-Ōtaki.

Within the Taylors Road to Rahui Road section, there are a number of sites which are in continued Māori ownership. The report also identifies that Pare-o-Matangi reserve has particular cultural significance to Ngāti Raukawa, and parts of this block are still under Māori ownership. The report also identifies that a former kainga for Ngāti Raukawa stretched from Te Manuao Rd across the location of the Expressway, and this area has sites of cultural and spiritual significance for the tangata whenua.

[28] *Nga Hapū-o-Ōtaki Cultural Impact Assessment on NZTA Peka Peka to Ōtaki Expressway Option,* July 2012

With regards to other sections of the Project area, the assessment concludes that there is a low probability of sites of significance occurring between Rahui Road to Ōtaki River, Ōtaki River to Te Horo and Te Horo to Peka Peka, although regarding the latter, it does note that *"care will need to be observed when dealing with sites that are unknown".*

The findings of the CIA are accepted, and from a social perspective the cultural significance of Pare-o-Matangi reserve strengthens the importance of this area to the current residents and community at Ōtaki, and reinforces the care that should be taken in addressing future use of this site.

8.4 Landscape and Visual Assessment

The Landscape and Visual Assessment (LVA)[29] describes the potential effects that may arise from the development of the Project.

The overall conclusion of the assessment is that actual and potential landscape and visual effects can be minimised and mitigated to an acceptable level, following the measures recommended in the assessment. Landscape effects are presented in sections along the extent of the Project. Effects raised by the assessment were:

- Effects to the Ōtaki North and Rahui Road section of the Project are rated 'high' by the assessment. This includes changes to Pare-o-Matangi reserve as a result of the Project, and the assessment concludes that with incorporation of additional land this effect can be reduced to a 'moderate' effect.
- Effects to the Ōtaki River to Addington Road section of the project are rated 'high' by the assessment, which can be reduced to 'moderate to high' with recommended landscape mitigation.
- Effects to the majority of the landscape sections were rated 'moderate'. These effects are expected to be able to be mitigated in the application of proposed landscape mitigation.
- Effects to the Waerenga Road to Ōtaki River section of the Project was rated 'moderate to low'
- Effects to the north of Te Hapua Road to Kowhai Road section of the project was rated 'low'.

The assessment also found that there will be 'moderate to high' visual construction effects during the construction of the Project, particularly where bridge structures are located.

Extensive landscape mitigations are recommended to address the effects above. With regard to the Pare-o-Matangi Reserve, the assessment finds a significant effect from the conversion of recreation space into transportation corridor. While this is partially offset by addition of two small land parcels within the Project area, the assessment recommends that further mitigation be considered in the form of incorporating a block of undeveloped land which is part of the current Ōtaki Motel property, to re-establish "an appropriate area of usable reserve space".

[29] *Peka Peka to North Ōtaki Expressway – Landscape and Visual Assessment,* October 2012.

The LVA recommends that sensitive landscape and urban design can appropriately mitigate the landscape and visual effects associated with the Project.

From a social perspective, the findings of the LVA are accepted, noting that the proposed mitigation for Pare-o-Matangi reserve would also address the social effect of loss of recreational amenity as a result of the Project. In addition to this, involvement of the Ōtaki community and local iwi in the future design for this space would positively address community aspirations for this area.

8.5 Assessment of Economic Effects

The Assessment of Economic Effects[30] provides an overview of the potential economic effects of the Project. Overall the assessment concludes that there will be a neutral or positive effect for most businesses in the Project area.

These benefits are due to:

- reduced vehicle operating costs, travel time, and accident costs;
- improved trip time reliability; and
- business growth and population growth in the area.

The assessment concludes that there will be general positive effects to the Wellington region, and to Kāpiti Coast. From a regional and district viewpoint, the Project is expected to improve accessibility throughout and within the Kāpiti area, which the assessment finds is likely to "increase the overall level of business activity". The Project is also expected to increase the attractiveness of the Ōtaki area for development. The assessment concludes it is likely to result in "increased levels of economic activity within Ōtaki and the District."

During the construction period of the Project, increased economic activity is expected to provide positive economic effects to the Kāpiti Coast District and the wider Wellington region. The Project will generate greater demand for services in the Project area, and increased opportunities for employment during the construction of the Expressway.

Potential economic effects are assessed with regard to three specific retail centres; Ōtaki Main Street, Ōtaki Railway Retail area, and Te Horo.

With regard to the Ōtaki Railway Retail area (ORR), the assessment expects that the Project will have "little if any" negative effect on the majority (70%) of businesses such as clothing, footwear and 'factory outlet' stores, due to reduced travel times to and from the area, and reduced traffic volumes through it.

The assessment expects that the Project will have a negative impact on retail outlets such as takeaways, cafes, petrol stations and liquor stores, as they are more reliant on passing motorised trade than the 'destination' stores described above. The assessment notes that local custom of these stores is not expected to be affected by the Project, and businesses will continue to draw trade from visitors to the area for retail purposes.

[30] Technical Report no #, Peka Peka to North Ōtaki Expressway Project: Assessment of Economic Effects.

Other business, healthcare and automotive service providers are not expected to experience negative effects as a result of the Project as they serve a local customer base. Loss of trade is expected however, for two motels within the ORR area. Negative business redistribution effects are mainly expected for businesses which are reliant on passing trade, and the assessment proposes that these effects may be mitigated by the use of appropriate signage.

For businesses on the Ōtaki Main Street, the assessment finds there is not likely to be "any significant negative impacts", as it principally serves the local community. The Economic Assessment concludes that the Project (as part of the wider RoNS package) supports economic growth in Ōtaki, which may lead to enhanced amenity for the Ōtaki Main Street Area.

The assessment finds that there could be adverse effects on some businesses in Te Horo, particularly those dependent on passing motorists for trade, due to the reduction in passing traffic. Potential negative economic effects are also extended to the area between Te Horo and Ōtaki Gorge Road. Businesses in Te Horo which are not adjacent to the existing SH1 are not expected to be significantly affected by the Project. The assessment proposes that appropriate signage on the Expressway may mitigate these effects.

There are individual businesses between Ōtaki and Te Horo which are dependent on passing trade to varying degrees. The assessment expects that these will experience some negative effects as a result of the Project.

This assessment accepts the findings of the Economic Assessment. From a social perspective, conclusions regarding the positive economic effects to Ōtaki Main Street support the on-going viability of this community hub, and the overall vision for Ōtaki as a growth area[31]. The potential adverse effects on some Te Horo businesses may result in wider negative social effects to this community. Further consideration of the social impacts as a result of economic effects are discussed in Section 9 of this report.

8.6 Air Quality Assessment

The Air Quality Assessment[32] provides an assessment of the air quality environment for the Project, including construction effects to air quality, and potential effects once the Project is operational.

Operational effects to air quality

Overall the report finds that the Project will improve air quality over the region, with reductions in pollutant emissions in some locations, and small increases in pollutant emissions for locations in close proximity to the Expressway. These increases are not expected to exceed the relevant air quality standards.

The Air Quality Assessment predicts a reduction in the concentration of vehicle air pollutants can be expected in the Township of Ōtaki along SH1 and the existing Mill

[31] GOV.Greater Ōtaki Vision (2007).
[32] *Assessment of Air Quality Effects – Peka Peka to North Ōtaki Expressway,* October 2012.

Road/SH1 intersection. It also predicts small increases in concentrations within 200m of the Expressway.

At Te Horo improvements in air quality are expected for properties to the west of SH1 and a small increase in concentrations is predicted for properties adjacent to the eastern side of the Expressway.

The air quality assessment does not propose any specific mitigation for operational air quality.

Construction effects

Minor negative impacts on air quality are expected from construction machinery in the area, but the main construction effect is expected to be dust emissions. Dust, mainly from earthworks and also stockpiled material, could have a potentially significant effect on properties within 100m of construction activities in the absence of appropriate mitigation measures. The assessment recommends a number of mitigating actions to manage this potential effect including:

- defining an area around construction areas activities where there is the potential to create dust;
- dampening surfaces that have the potential to create dust;
- restricting speed of construction vehicles near sensitive receptors[33]; and
- vegetating or covering cut barriers as soon as practicable.

Construction effects to air quality and mitigation will be managed through the development and implementation of a Construction Air Quality Management Plan (CAQMP) as part of the Construction Environmental Management Plan (CEMP). Effects are not expected to residences or activities greater than 300m from construction works. The assessment notes that some specific properties along School Road in Te Horo will be close to construction activities, but finds that these effects can be mitigated using standard dust-control measures such as those summarised above. Specific measures are to be included in the CAQMP in order to manage effects to the former Rahui Milk Treatment Station and Social Hall.

From a social perspective, maintained or improved air quality at community focal points such as schools and halls is a positive effect of the Project on the amenity of these facilities. However potential negative effects to some specific sites within 200m of the Expressway may have a localised negative effect on the wellbeing of individuals at those sites. Effective communication and management will be necessary to ensure that any potential effects during construction do not impact on the health and wellbeing of residents in close proximity to the works.

[33] For example; retirement villages, aged care facilities, hospitals, schools.

8.7 Operational Noise and Vibration Assessment[34]

This report applies to operational noise and vibration from road and rail traffic for the Project, and includes the Expressway, the new local arterial where it is being altered and other local roads delivered as part of the Project. The report adopts NZS 6806:2010 as a guideline for road-traffic noise, and KiwiRail's reverse sensitivity guidelines for rail noise and vibration criteria. The existing environment has been considered when assessing effects.

The conclusion of the Operational Noise and Vibration Assessment is that with the proposed mitigation, road traffic noise will remain at acceptable levels throughout the route alignment. As the Expressway closely follows the existing SH1 route, the character of the noise environment is not expected to change in most locations. The assessment expects significant improvements in acoustical amenity in Ōtaki township, and reduction in noise through Te Horo. With regard to road traffic noise, the assessment identifies specific locations which are expected to experience noticeable noise increases.

In North Ōtaki where the proposed Expressway diverts from the alignment of the current stage highway, there are two properties where the noise exposure will change significantly, with noise increases of 10-11 dB predicted. However, with the proposed mitigation, noise levels will be well within Category A as defined by NZS 6806 and these noise levels are considered reasonable.

In Old Hautere Road, one property is expected to be exposed to noise levels of 65 dB, and is classified as Category C. Structural mitigation within the road reserve (barriers or road surfaces) have been investigated, but not considered practicable. The assessment recommends investigation of building modification to ensure that an acceptable internal noise level is achieved. There will be some loss of outdoor amenity

Two properties on School Road are expected to experience noticeable noise increases of up to 8dB, however the overall level of noise is deemed acceptable.

Four properties on Gear Road are expected to experience 4-6dB increases, and the proposed landscape treatment may reduce the perception of noise from the Expressway.

The realignment of the NIMT will move the railway further away from several properties which are currently in close proximity. There are two properties which will be within 80 metres of the railway, and building modification will be investigated to mitigate rail noise effects. The removal of level crossings at Rahui Road will remove the need for signal bells, and trains using their horns to signal their approach.

Recommended mitigations for rail and road noise included:

- A low-noise road surface such as Open Graded Porous Asphalt (OGPA) through Ōtaki township,
- potential building modification for three specific properties
    - 14 Old Hautere Road

[34] Operational Noise and Vibration Assessment: Peka Peka to North Ōtaki Expressway Project, 3 October, 2012.

- Ōtaki Motel
- 230 Main Highway

The assessment found that no mitigation is necessary for rail vibration, as the Expressway will meet vibration criteria.

Overall the estimates and modelling in this assessment deem these increases to be within the acceptable threshold within the New Zealand standard (with only a few exceptions). The main social effect as a result of operational noise will be to the specific properties which experience a noticeable increase in traffic noise. This is particularly the case along Old Hautere Road, where residents have already expressed their concern at a lack of information about, and a lack of noise mitigating treatment, to this section of the Expressway. On-going communication with affected residents will be necessary to manage the impact of this on residents and it is recommended that this is managed via the Communication Plan.

8.8 Construction Noise and Vibration Assessment

The Construction Noise and Vibration Assessment[35] assesses noise and vibration effects as a result of the Project during the construction phase. It uses the New Zealand Standard NZS 6803 and the British Standard BS 5228-2 to provide criteria for acceptable levels of construction noise and vibration respectively, and bases its assessment on indicative noise and vibration levels predicted for each stage of the construction process. Predicted noise levels are only indicative as a detailed construction methodology has not been developed, nor has a contractor been engaged.

The assessment finds that temporary adverse noise and vibration effects during the construction period are considered reasonable, provided that appropriate management measures are in place. Construction noise will be audible and there will be disturbance at times. A Construction Noise and Vibration Management Plan (CNVMP) will be prepared to document the necessary noise management practices during construction, and communication requirements with affected residents throughout the construction period. The CNVMP includes:

- noise targets;
- summary of assessments/predictions;
- general construction practices, management and mitigation;
- noise management and mitigation measures specific to activities and/or receiving environments;
- monitoring and reporting requirements;
- procedures for handling complaints;
- procedures for review of the CNVMP throughout the Project; and
- management schedules to the CNVMP for specific activities and locations where further assessment and control is required.

[35] *Construction Noise and Vibration Assessment – Peka Peka to North Ōtaki Expressway*, October 2012.

Any significant activities such as night works will require a schedule to the CNVMP to be prepared, outlining details and conditions related to the activity.

The main area of the Expressway that the report assesses may experience construction noise and vibration effects are along Rahui Road. The assessment finds that construction noise near the Rahui Road Milk Treatment Plant could interfere with activities, and that there is the "potential for cosmetic damage to buildings (such as cracking) and annoyance from perception of vibration" at this location as well. The report proposes accurate communication to affected neighbours regarding time and duration of activities in this area, along with before and after building condition surveys to monitor any potential damage to buildings as a result of vibrations.

The report predicts that the audibility of construction works north of the Ōtaki township, south of Mary Crest and at Old Hautere Road may cause some disturbance to residents, although this is not expected to disrupt normal activities, and the report proposes that this can be managed through effective communication. The report does not find that there would be any significant noise or vibration effects in the Te Horo area.

Some night works will be required where the Project interacts with the existing SH1, the NIMT or local roads. The assessment proposes to mitigate any resulting disturbance from night works by implementing enhanced controls and liaison with affected residents.

From a social perspective, the overall findings regarding Te Horo and Ōtaki township suggest that there would be no adverse effects on the amenity of open spaces as a result of noise and vibration effects. Potential negative effects in specific locations on the amenity and environment can be managed through communication during the construction stage of the Project. In the case of night works, it is recommended that affected residents are given the option for temporary relocation.

8.9 Integrated Transport Assessment

The Integrated Transport Assessment[36] (ITA) describes the existing transport environment and assesses the likely effects of the Project on transport locally and regionally during the construction of, and as a result of the operation of the Project.

Regional forecasts, prepared by the Greater Wellington Regional Council, suggest a 26 percent increase in the vehicle-kilometres travelled over the next 30 years[37] and the number of heavy commercial vehicle (HCV) trips on SH1 is expected to grow faster than that for light vehicles.

At a local level the existing SH1 passes directly through the Ōtaki Railway Retail area, and bisects the Te Horo community. Delays caused by pedestrians crossing, motorists manoeuvring into on-street car parks or side roads slow traffic and make travel times unreliable. The current traffic flows and high numbers of HCVs in this location are inappropriate for the retail function of the street. Very few pedestrians or cyclists have been observed, with the exception of the Ōtaki urban area. The delays and perceived danger

[36] *Integrated Transport Assessment – Peka Peka to Ōtaki Expressway*, October 2012
[37] Wellington Regional Land Transport Strategy (medium scenario forecasts).

associated with crossing rural sections of the existing SH1 deters people from walking or cycling in the area.

The assessment finds that high traffic flows on the existing SH1 around Ōtaki make it difficult and unsafe for all road users including pedestrians, cyclists, equestrians and motorists to join or cross the SH1. It further highlights the high proportion (40%) of crashes in the last five years which occurred at SH1 intersections or private access points within the project area.

As the Expressway will provide an alternative route for inter-regional or inter-district traffic, it will enable the existing SH1 to function as a local arterial, and allow inter-regional and inter-district traffic to avoid populated areas. The assessment forecasts that traffic flows on the rural sections of the existing SH1 will reduce by up to 80% as a result of the Project, and by more than 50% along the existing SH1 in the Ōtaki Railway Retail area.

The ITA finds that positive effects of the Project will include improved access and connectivity within the Project area due to reduced traffic on the existing SH1 and the availability of an alternative (local) access route through the area. There will also be improved safety and connectivity between the existing SH1 and local side roads due to reduced traffic volumes.

The ITA concludes that there will be a substantial benefit to the national, regional and local economy, due to cumulative travel time savings for all users of the Expressway. The Project will reduce typical travel times for people travelling past Ōtaki by almost two minutes, improving the reliability and efficiency of inter-regional freight movements as well as improving access for other motorists to Wellington, with greater savings during holiday weekends and periods of high traffic flow.

The assessment also expects that access to properties will be safer due to the elimination of a number of at-grade railway crossings. Overall it forecasts that the Expressway will result in a 60 percent reduction in annual crash costs within the project area. Additional traffic associated with construction of the Expressway is expected to affect the safe operation of the at-grade intersections between the existing SH1 with Ōtaki Gorge Road, Old Hautere Road and School Road. It proposes measures for mitigating transport effects during construction. With the adoption of these recommendations, it is considered that construction activities will have no more than minor effect upon the safe and efficient operation of the road network.

From a social perspective cross expressway linkages improve safety and accessibility for neighbouring communities for both local motorised traffic and active transport modes. Greater perceived and actual safety may encourage uptake of active transport and have beneficial effects on the recreational amenity and use of local roads.

Improvements to the connectivity of local roads may also lead to improved amenity of local centres for retail and recreational purposes, which are currently high traffic areas.

9 Assessment of Effects

9.1 Overview

This section considers the potential social effects that may result from the Project. The assessment undertaken is based on information from a number of sources, predominantly:

- consultation feedback received to date, including general consultation and targeted interviews;
- site visits and open days held in the area;
- demographic study of the area;
- council policies, strategies and plans; and
- information and assessments obtained from other specialists.

(For more detail on the information sources used in the preparation of this report, please refer to the Methodology chapter.)

Potential and actual effects identified through these sources were then assessed against the SIA Framework adopted for this review. The framework was adapted taking into account national and international best practice and frameworks such as the IAIA, NZTA guidelines, the local policy and project context. The analysis below follows the structure of the assessment framework which is:

- Way of Life:
    - Impacts on accessibility, connectivity, patterns of living and mobility
    - Changes to ways of walking & cycling and changes to public transport
- Wellbeing:
    - Changes to wellbeing
    - Safety
- Environment and Amenity:
    - Noise, dust, visual changes
- Community:
    - Impact on people's property and neighbourhoods
    - Impacts on educational facilities
    - Impacts on community areas and sites
    - Impacts on community plans and aspirations
    - Impacts on and accessibility to commercial areas

At the end of each of the four assessment criteria, a summary is provided of:

- the effect;
- the stage of the effect ('P' - planning, 'C' - construction, 'O' - operation);

- who is affected ('D' - directly affected landowners, 'N' - neighbours, 'W' -wider community of interest);
- proposed mitigation measures;
- an overall rating of the magnitude of the effect, and
- further comments or mitigations recommended from a social perspective.

The Project already includes measures which, while not expressly for this purpose, will mitigate social effects to a small or large degree. The 'level of effect' assessment included in the summary of effects is based on the effect without any specific social mitigation. In some cases, no additional measures are considered necessary from a social perspective, however in some situations further recommendations are made in order to address the social and community impacts of the Project.

Magnitude of Effects

A nine-point scale has been applied in assessing social effects, consistent with the scale applied in the Scheme Assessment Report. The scale applied to rating each effect is below:

Substantial positive	Significant positive	Moderate positive	Minor positive	In-significant	Minor negative	Moderate negative	Significant negative	Severe negative

In applying the overall rating of the effects, consideration was given to; the stage of the effect, who is affected, likelihood of occurrence, the severity of the effect, the importance of the feature and any mitigation measures already included in the design.

In order to have a strong magnitude, an effect would generally need to be highly likely to occur, have a highly significant effect, and affect a wide group of people, or a regionally important feature, although the discretion of the author has been employed in rating the magnitude of effects.

Note that the two strongest ratings; 'substantive positive', and 'severe negative', have not been applied in this assessment.

9.2 Way of Life

9.2.1 Effect on Accessibility, Connectivity, Patterns of Living and Mobility

Potential Effects

The existing SH1 is currently the only road link between the Ōtaki area and Wellington and is the main link to Palmerston North. These two cities act as major service centres for the Ōtaki area and provide important regional facilities such as hospitals, universities and airports. There is a rail link, providing freight and passenger movement facilities. The Expressway will provide an alternative road access to these cities and will help improve journey times and journey reliability to these centres. The Expressway will result in a substantial reduction in traffic utilising the existing SH1. In particular, there will be a reduction in through traffic, including freight. Forecasts in the Integrated Transport Assessment are that traffic flows on the existing SH1 will reduce by 80% in rural areas, and 50% through Ōtaki. These factors combined will contribute to an improvement to regional access and connectivity.

Overall the result is there will be minor changes to people's localised travel patterns in the east / west directions, across the Expressway. This is due to the location and functions of the interchanges and over-bridges connecting local roads. With the removal of SH1 traffic, the high numbers of people who drive to work, as shown in the demographic profile, would have potential benefits of reduced traffic along the route.

As the Expressway closely follows the alignment of the existing SH1, most of the properties directly adjoining the Expressway (primarily on the eastern side of the alignment) will no longer have direct access to SH1. Alternative local access is provided by the detailed project design. Local changes to connectivity are discussed by section below.

North Ōtaki

Northbound access onto the Expressway will be provided at the new over-bridge north of Rahui Road. Southbound access off the Expressway will be provided north of Ōtaki where the Expressway meets the existing SH1. A small portion of the existing SH1 will become southbound only, however continued access to property will be ensured by local access roads. This means that some residents in the Waitohu Valley area will need to travel south to access the north-bound onramp to the Expressway at the over-bridge north of Rahui Road, increasing trip distance for some residents by up to approximately 1.5km.

Cross Expressway access for the existing SH1 will also be provided to the north of Rahui Road, just to the north of the current bridge over the railway. This bridge maintains local linkages to the east and west.

South Ōtaki

South-bound access onto, and north-bound access off the Expressway will be provided at the Ōtaki Gorge Road over-bridge. Cross Expressway and rail corridor access will be maintained by the grade separated connection across the Expressway provided at Ōtaki Gorge Road. The Expressway will result in the severing of the direct connection from Old

Hautere Road to the existing SH1. The initial Expressway design had the potential to result in community severance between the residents to the east and west of the Expressway due to the physical barrier it created. Following feedback from community engagement (February-March 2011) the design has been modified to include a connection road between Ōtaki Gorge Road and Old Hautere road directly adjacent to the Expressway in order to mitigate these effects. While this connection will slightly increase the distance that residents have to travel if they want to travel south, it will also provide easy access to the Expressway. All other existing connections to the existing SH1 will be maintained.

Te Horo and south

There will be no direct access on or off the Expressway at Te Horo or south of Te Horo within the Project area, and Expressway users will need to travel additional distance on the existing SH1 (approximately 6 - 9kms depending on direction travelled).

In the original proposed Expressway alignment, there was the potential for physical severance of the Te Horo community to the east and west of the Expressway as a result of the inability to cross the new State Highway 1. This has now been minimised via the over-bridge which links School Road with Te Horo Beach Road. Although this over-bridge increases the distance to cross between east and west Te Horo by approximately one kilometre, the grade-separated crossing maintains access between areas to the east and west of the Expressway, and removes the need for local traffic to cross the Expressway and the NIMT.

Avoidance of Effect/Mitigation

Direct physical severance has been avoided through the inclusion of over-bridges which will provide connections between the communities on either side of the Expressway. An opportunity exists to further avoid physical severance to either side of the Expressway by constructing over-bridges as early as possible in the construction programme.

Community opinions expressed during community engagement (February-March 2011) was taken into consideration when deciding on the over-bridge options. At Te Horo this resulted in the adoption of Option B (which is further to the north of Te Horo), and at Rahui Road a full vehicle and pedestrian and cyclist over-bridge going ahead. It is also important that the community is included in the on-going design process and is given opportunities to put forward suggestions to help reduce the perception of severance.

9.2.2 Changes to Walking and Cycling

Potential Effects

Changes to walking and cycling predominantly relate to the Ōtaki township, and to a lesser degree Te Horo. As noted in the ITA (see section 8.9), the Project passes through a predominantly rural area, and uptake of active modes of transport is low. This is reflected in the low percentage of people walking or cycling to work (refer to 6.2.4 Transport) in the area, although for Ōtaki (7.6% and 2.8% respectively) this is more than twice as much as the next highest percentage (3.8% walked at Ōtaki Forks, and 1% cycled at Te Horo). The number of private vehicles owned in Ōtaki (refer to section 6.2.4) is also lower than in other

census area units reported, suggesting that the potential for walking uptake in Ōtaki is higher than the other sections of the Project.

The bridges over the Expressway at Te Horo, south, central and north Ōtaki provide cycling and walking paths to facilitate walking and cycling. Gradient management through the design process will ensure that these bridges when built are not too steep for most users.

Instead of directly crossing the existing SH1, access across the Expressway will be via over-bridges, limiting movements from one side to the other. Although distances will be slightly longer, access will still be maintained and will be safer, given the grade-separation from the Expressway. Provision of footpaths and cycle-ways will improve facilities for pedestrians and cyclists which may also encourage more of the community to use the facilities. These changes are expected to have a positive impact on the walking and cycling environment within Ōtaki, and to a lesser degree within Te Horo.

Avoidance of Effect/Mitigation

There will be management of the gradient of the structures during the design process in order to facilitate ease of access for pedestrians and cyclists, particularly elderly or mobility impaired people. This would also support Kāpiti Coast District Council's Cycleways, Walkways and Bridleways Strategy (2009) by providing facilities for users with a variety of abilities.

It is noted that possible opportunities for walking and cycling enhancement along the existing SH1 are not part of the Project, but are part of the revocation of the existing SH1.

9.3 Wellbeing

9.3.1 Changes to wellbeing

Potential Effects

There is the potential for negative effects on local residents' wellbeing as a result of the Project. For landowners whose properties are directly affected, there is the potential for increased levels of stress and anxiety during the property negotiations process. This also needs to be put in context of the length of time that investigations have taken to confirm the alignment and route over the past 10 years. The lack of certainty over the process was a key concern expressed by many residents during the most recent phase of community engagement. While certainty has been increased by the decision on the Expressway alignment, some uncertainty will remain until the designation is in place.

Given the findings of the Operational Noise and Vibration Report, the Project is only expected to have a negative effect on levels of noise and vibration at limited specific locations, and to reduce sound levels in many instances. Noise effects are localised and have been assessed to within 100 metres of the road in urban areas, and 200 metres in rural areas. The criteria adopted in the Operational Noise and Vibration Report are based on NZS 6806, which were set reasonable criteria for road-traffic noise levels, taking into account health issues associated with noise and other matters.

For a small number of residents in specific locations there may be an increase in noise levels as a result of the Project, which may lead to reduced outdoor amenity at their properties. This is discussed below in 9.4.1.

During construction of the Project there is the potential for dust and emissions to air to affect properties within 100 metres of the Expressway. Dust emissions during construction may have a further effect on the outdoor amenity of residences.

Avoidance of Effect/Mitigation

The key mitigation measure has been to build trust with the community through consultation so that the community feel fully informed and have an input into the Project design and mitigation measures. A number of different methods have been employed throughout the planning phase of the Project, to make and maintain contact with the community within the Project area, such as; open days, information newsletters, dedicated information service, contact person for affected landowners and Project website. Where landowners are directly affected by the Project, there has been direct negotiation with regard to properties, which is on-going in some cases.

The Assessment of Air Quality Effects assesses whether or not the Project is expected to meet the NES for Air Quality. As summarised in Section 8 of this report, contractors will need to comply with the range of mitigation measures detailed in the Construction Environmental Management Plan in order to minimise any negative effects to air quality from construction activities, and reduce their potential to harm the health of residents and workers in the Project area.

Communication with potentially affected residents will help to mitigate any temporary loss of amenity, by enabling residents to avoid the area during construction.

9.3.2 Safety

Potential Effects

The Project is likely to have a positive effect on the safety of the local communities from the improvement to the traffic and roading environment. As discussed above, the provision of grade-separated over-bridges and the removal of the majority of railway level crossings in the Project area will improve safety for pedestrians and cyclists seeking to cross from east to west.

Outcome 7 of the Kāpiti Coast District Council Sustainable Transport Strategy (2008) includes mention of safe footpaths, particularly for older people. The Kapiti Coast District has a high percentage of residents aged 65 and older, in Ōtaki this percentage is nearly twice the national average (22.9% compared with 12.4%[38]).

[38] Refer to section 6.2.2 for more information.

The removal of high speed and heavy vehicle traffic (including freight traffic) on the existing SH1 to the Expressway will improve the safety of the existing SH1 as a local road and as an alternative to the Expressway. The ITA states that in the last five years, 40% of crashes in the Project area occurred at intersections or private access points to SH1. The improved and streamlined alignment of the Expressway is expected to deliver regional improvements to the safety of motorists on the Expressway.

There may be some short – medium term effects to the safety of local residents as a result of movements of heavy vehicles during the construction period. There may also be some changes to the local traffic environment, such as the removal of right-hand turns during construction.

North Ōtaki

The north Ōtaki over-bridge maintains local linkages to the east and west and is expected to improve safety by the grade separated crossing of SH1.

Ōtaki

At Rahui Road a vehicle and pedestrian/cyclist over-bridge will provide cross Expressway and rail corridor access. This will result in an improvement to safety through the provision of a grade separated connection.

South Ōtaki

The railway level crossing at the end of Old Hautere Road will be removed which may result in an improvement to safety.

Te Horo

The over-bridge which links School Road with Te Horo Beach Road provides a grade-separated crossing, which removes the need for pedestrians, cyclists and local traffic to cross the Expressway, and the existing Te Horo railway level crossing. This is considered to result in an improvement to safety to both local residents and also to rail users.

Avoidance of Effect/Mitigation

Mitigation of any construction-related effects to the safety of local and regional traffic, both motorised and active can be managed through the Construction Traffic Management Plan which includes active and ongoing communication with potentially affected community groups.

9.4 Environment and Amenity

Noise, dust and visual changes

Potential Effects

Changes to amenity and environment as a result of the Project will occur during construction, and once the Project is operational, mainly with regard to the visual and noise environment.

The Landscape and Visual Assessment finds that there will be 'high' landscape effects to certain sections of the Project area (refer to section 8.4 of this assessment). There is the potential for the Project to have an effect on the visual amenity of the environment at Te Horo and Ōtaki. Where the Expressway passes through Ōtaki, it may also affect the recreational amenity of Pare-o-Matangi reserve as the Expressway and the re-alignment NIMT railway line which passes through it.

Once operational, the Project is expected to improve the overall noise environment. Due to the removal of a number of level crossings throughout the Project, including that at Rahui Road, use of signal bells and train horns will be reduced. The Operational Noise and Vibration Assessment expects improvements in acoustical amenity through the Ōtaki township, and reduction in noise through Te Horo.

No potential negative effects on community facilities due to air emissions from the Expressway are expected. The Expressway is expected to improve the air quality for sensitive locations such as schools.

The construction of the Project is expected to have a temporary negative effect on the amenity of spaces in close proximity to the Expressway alignment (refer to sections 8.4, 8.6 and 8.8 of this report) with regard to landscape effects, construction noise and air emissions. Mitigation of construction effects with regard to noise and air quality will need to be mitigated throughout construction.

Avoidance of Effect/Mitigation

Proposed mitigation for visual effects and loss of recreational amenity includes planting and landscaping along the Expressway and around over-bridge abutments. With regard to Pare-O-Matangi reserve, it is recommended that additional land is incorporated to the reserve in order to restore the recreational value of this open space. This is discussed further in 9.5.3. Mitigation of effects during construction is proposed by staged landscaping throughout the construction period.

The air quality assessment does not propose any specific mitigation for operational air quality, however it suggests that monitoring of the air quality environment takes place in the first year of operation, to validate compliance with NES.

A low-noise road surface such as Open Graded Porous Asphalt (OGPA) is proposed through Ōtaki, which will reduce noise levels without any visual impact. Investigation of acoustic treatment at one property in the Ōtaki River to Te Horo is also proposed in the Operational Noise Assessment. Additional mitigation has been considered for the

remainder of the route, but not considered necessary or appropriate. Effects to property are discussed further at 9.5 below.

Mitigation of construction effects is expected to be able to be managed via the CEMP suite of plans, including the CNVMP and the CAQMP. For further details refer to sections 8.6 and 8.8 of this report).

9.5 Community

9.5.1 Effects on people's property and neighbourhoods

Potential Effects

Land acquisition

Effects to private property as a result of the Project include the acquisition of land for the construction of the Expressway, and or where properties are within close proximity to the Expressway alignment. As the alignment closely follows the existing SH1, these effects are mainly to properties to the east of the existing SH1 and to the west of SH1 north of Ōtaki.

Approximately 38 buildings will be acquired by the NZTA as part of the Project, which includes residential properties and businesses. The owners of these properties may be negatively affected in terms of stress and anxiety during the Project planning phase. During community engagement, feedback indicated that affected landowners reactions to land acquisition were varied, with some strongly against it.

Property access

Residents neighbouring the Expressway also expressed concern about future access to their properties (during June 2012 open days). Property access will be changed for those properties on the Expressway side of the existing SH1. This will no longer be directly from SH1, but from new or altered local access roads.

Properties on the other side of SH1 to the Expressway will retain their existing access, and there may be improvements in amenity values for those properties due to a reduction in traffic along this road.

Noise and vibration

As mentioned above at 9.3.2, there is the potential for negative effects due to construction noise and vibration at a limited number of properties in specific locations north of Ōtaki, south of Mary Crest, and at Old Hautere Road. There may also be a negative operational noise and vibration effect to a small number of properties at specific locations, where there may be increased noise levels as a result of the Project. Mitigation is proposed to ensure these effects are acceptable.

Avoidance of Effect/Mitigation

Land acquisition

Where possible within the corridor, the alignment has been designed in order to minimise direct effect on houses and land. Landowners whose properties would have been affected by the previous alignment have been informed where this is no longer the case, and communication with those landowners who are still affected is on-going.

NZTA practice is to consider land swaps and other property arrangements. It is recommended, as mitigation that this process is continued.

Property access

The design is providing for access-ways and private roads for affected properties. Communication with land-owners has been carried out by the core Project team, and is on-going to agree on access options.

Noise and vibration

Temporary negative effects due to construction noise and vibration on amenity and environment can be managed through communication during the construction stage of the Project. The Noise and Vibration Assessment recommends the inclusion of complaint response with regard to potential construction vibration in specific locations.

In the case of night works, it is the recommendation of this assessment that affected residents are given the option of temporary relocation in circumstances where there is a long-term, demonstrable effect.

Mitigation for noise includes the use of OGPA on road surfaces, but in particular locations, the proposed mitigation for operational increases in noise levels is to investigate acoustic treatment at the affected properties. On-going communication with these affected residents is recommended to manage the effect of changes on residents and it is recommended that this is managed via the Communication Plan. It is recommended that provision for complaint response is included in the management of construction activity.

9.5.2 Effects on educational facilities

Potential Effects

There will be no direct physical effect on any of the educational facilities within the Project area. The nearest education facility to the Expressway is approximately 500 metres (Ōtaki School and Waitohu Primary School). This is far enough away that both potential construction and operational effects (such as noise) can be mitigated and so that the effects will be insignificant.

The Project will not limit or restrict access to any of the educational facilities from the major population centres in the area. There are not expected to be any adverse effects on access to schools during the construction phase of the Project.

As the school bus routes to Te Horo School, and to Ōtaki schools travel of many local roads, and most of the main roads which intersect with the existing SH1, as well as SH1

itself, there may be changes or disruptions to normal school bus routes at some stage during the construction period. These can be managed through scheduling of construction activities, and through timely communication with relevant schools.

Once the Project is operational, the existing access routes to the educational facilities will be maintained along local roads. There is the added benefit from the Expressway that the existing SH1 will be less busy and with slower traffic, making it a safer environment for students, particularly in regards to accessing school buses and crossing the road.

The introduction of grade separated over-bridges across the rail corridor and Expressway at Te Horo and Rahui Road is also expected to improve safety for students, parents and staff.

While the majority of students are likely to come from the Ōtaki and Te Horo urban areas, some students may come from further away. This may particularly be the case with Te Wananga-O-Raukawa and Te Kura Kaupapa schools where students are to be drawn from a larger catchment. In these cases the Expressway may provide greater accessibility due to expected reductions in travel times on the Expressway, and reduced traffic on local roads. It also encourages walking and cycling through the provision of grade separated pedestrian and cycling routes across the Expressway at the over-bridges.

Avoidance of Effect/Mitigation

NZTA will advise the Ministry of Education and Boards of Trustees at surrounding schools regarding any changes in traffic access. Bus routes are unlikely to be affected in the long-term as a result of the Project.

Clear directional signage indicating any changes to school bus routes is recommended (particularly regarding Old Hautere Road).

Due to the number of students attending Te Wananga-O-Raukura, and the wide catchment area, it is recommended that on-going consultation is carried out with this facility. The Wananga also had strong relationships with local iwi groups, and continued communication between the school and the Project provides another mechanism to make sure that Project communications reach a broad spread of community groups.

On-going consultation with local schools is also recommended to be included as part of the Construction Environmental Management Plan, in order to manage the scheduling of construction works, and allow respective schools to communicate any changes in the local traffic environment, such as temporary changes to school bus routes, to their respective communities.

9.5.3 Effects on community areas and sites

Potential Effects

Community sites and facilities are mainly located within the Ōtaki township and Te Horo (for a map of facilities refer to Attachment 2 of this assessment). There are direct effects where the Expressway alignment crosses the site itself; this is the case for Bridge Lodge, Pare-O-

Matangi reserve and to a lesser degree the Ōtaki railway station. There will be no direct physical effects on any of the churches, emergency service facilities, libraries, cemeteries, public swimming pools, community halls, medical facilities or museums within the Project area.

As the Expressway will pass over the site of Bridge Lodge, the buildings must be removed, and Clifden Cottage will be relocated. There is the potential for the local community to lose historical connections with the area as a result of effects to buildings such as Clifden Cottage at Bridge Lodge.

The Project will also directly affect Pare-o-Matangi Reserve. The Expressway will pass directly through the Reserve, as will the realigned railway corridor and in addition, the main access off Rahui Road will be completely built over. Any areas of the Reserve that are not built over will be isolated and too small to offer much in the way of recreation value. The Reserve is an area developed by the community and has been an area specifically commented on by a number of residents through the most recent engagement phase. It is also of cultural significance to Ngāti Raukawa, as noted in the Cultural Impact Assessment. Consideration of the public use and attachment to this reserve is important; particularly in relation to consideration for mitigation options.

The Expressway requires that the rail corridor through Ōtaki to be realigned and as a result the Ōtaki railway station building will have to be realigned on its current site. As part of the Project there is the potential to improve the local environment around the Ōtaki railway station building as part of upgrading the overall Ōtaki Railway Retail area. This is a potential positive social outcome for the community.

The Project will not limit or restrict access to any of the community facilities from the major population centres in the area, and existing access routes to community facilities will be maintained along local roads and the existing SH1. The introduction of grade separated over-bridges across the rail corridor and Expressway at Te Horo and Rahui Road may improve safety for local residents seeking to cross from east to west to access community facilities.

Emergency services are located in Ōtaki and Te Horo. Vehicles will have the option of utilising the existing SH1 or the Expressway where appropriate, providing the added advantage of two routes. In Te Horo, emergency services are located on School Road which will not have direct access on or off the Expressway. The updated design has included an emergency turning bay at Gear Road, with an extension road to provide access for School Road emergency vehicles

Avoidance of Effect/Mitigation

With regard to Clifden Cottage at Bridge Lodge, the Archaeological Assessment recommends archaeological recording and investigation of the site in accordance with best practice is carried out prior to any modification to the structure. Clifden Cottage is to be relocated in a way that seeks to preserve its heritage values as far as practicably possible. There is a potential benefit to the community that raising awareness about archaeological sites in the area as a result of investigations could strengthen historical links with the area.

Proposed mitigation for Pare-o-Matangi reserve is to add two land parcels to the reserve; one from the existing SH1 rail over-bridge approach, and the other from a vacated house section on Rahui Road. Although these two land parcels contribute to the loss of land at the reserve, they are not connected to each other, and the reserve would remain bisected by the realigned NIMT and the Expressway. The additional mitigation proposed in the Landscape and Visual Assessment to incorporate land at the back of the Ōtaki Motel into the reserve is supported, as this parcel of land would tie the two halves of the reserve together, and would reduce the degree of the loss of recreational amenity at the reserve as a result of the Project. This further mitigation would require the acquisition of private land, which may impact on the current land-owner in terms of any future plans for the use of this land. The mitigation is not expected to affect the building itself, or the operation of the motel as a business, and may deliver improved amenity to the setting of the building, compared with the Project without this mitigation.

Community ownership of the reserve and its new location and appearance is important, as is the cultural importance of the reserve to local iwi. The key mitigation measure with regard to the Pare-o-Matangi Reserve will be to undertake consultation with the local community and iwi on what they would like to see happen and the potential for provision of a new reserve location, as this will enable continued links with the space.

It is recommended that the Project maintain communication with KCDC to enable improvements to the Ōtaki railway station area (separate to the Project) to occur concurrently with building location changes on the site by the Project. This would facilitate the improvement of this community area. In general, on-going community contact, managed through a Communication Strategy will be an essential part of managing the community's reaction to changes in the area.

9.5.4 Effects on future plans and aspirations

Te Horo

Potential Effects

Under the Greater Ōtaki Vision (GOV) the Te Horo urban growth area has been removed in favour of a focus on rural uses. The Expressway will support this aspiration as there is no exit or entry from the Expressway at Te Horo, restricting direct access. This is likely to limit development pressure.

The potential social effect of the GOV is that development will not be encouraged in the Te Horo community. If existing businesses are lost as a result of the Expressway then it will be a business community and KCDC decision as to whether their replacement should be supported. This could potentially result in loss of employment and also loss of a sense of community.

Ōtaki

Potential Effects

The GOV has a focus on the existing Ōtaki urban areas as places for the location of future growth. The Project supports the GOV by having easy access into the Ōtaki urban area.

The location of the Ōtaki south interchange will support growth and development in Ōtaki, but may also have the potential to open up an area currently zoned as Rural to increased urban development pressure. However, this could be controlled by KCDC through the District Plan.

The reduction in traffic through the ORR may lend itself to furthering the GOV goals of improving the amenity of the street, providing better pedestrian and cycle access, and providing for more trees instead of clear road margins.

This may also be the case with the Ōtaki main township if the Expressway results in less traffic through this area. Again this will depend if the area is frequented by local residents or visitors.

Avoidance of Effect/Mitigation

The District Plan may be used by KCDC as a mechanism to control where development can occur around the Ōtaki south interchange. This is, however, outside of NZTA's control.

The upgrading of the Ōtaki Railway Retail area and Ōtaki Main Town streetscapes by KCDC may improve the pedestrian shopping experience, thus contributing positively to both the economic viability of the businesses and the local environment.

9.5.5 Effects on accessibility to commercial areas

Te Horo

Potential Effects

There is to be no access on or off the Expressway at Te Horo, in accordance with KCDC's Greater Ōtaki Vision. The nearest exit point for traffic coming from the south is Te Moana Road, approximately 9-10km to the south of Te Horo. For traffic from the north the nearest exit point is the north Ōtaki interchange, approximately 6-7km to the north of Te Horo. Traffic from the north would also have to pass through Ōtaki before reaching Te Horo, therefore people would have to make a deliberate effort to visit Te Horo businesses. There are potentially business redistribution effects to Te Horo businesses as a result of the Project[39], which may affect the viability of local commercial facilities providing services to the local Te Horo community.

[39] *Peka Peka to North Ōtaki Expressway Project: Assessment of Economic Effects,* 31 August, 2012.

The provision of a grade separated crossing over the Expressway and existing SH1 at Te Horo provides continued local access for residents to utilise the Te Horo businesses. This crossing provides safer access across the Expressway, although its location of the over-bridge to the north of the Te Horo businesses does increase the travel distance to cross the Expressway.

A potential social implication of this is that employment opportunities in Te Horo may be directly affected by the reduction in business should this occur as a consequence of loss of passing trade.

In addition, the reduction or loss of local businesses may mean that the Te Horo community loses its commercial elements. This was a concern raised in the consultation, as the local residents place high value in the Te Horo businesses as the centre of the community, and particularly in the Red House Café.

The degree of effect on businesses varies depending on; the nature of the business, the demographic the business supports, the source of the customer base and the potential for the business to alter its delivery mode.

Avoidance of Effect/Mitigation

With the over-bridge being located north of the Te Horo businesses, the provision of a pedestrian and cyclist link from the over-bridge to local businesses would also potentially help encourage locals to visit the businesses.

Mitigations proposed to address the by-passing of Te Horo by the Expressway include signage to promote Te Horo as a destination. It is possible, however, that the potential effects to local businesses are such that they are unable to be mitigated by the Project. This would apply to a small number of businesses.

In discussions with Te Horo businesses, various means of mitigation were discussed. Signage was considered to be of prime importance and NZTA has undertaken to explore signage options in an attempt to mitigate adverse effects. Clear directional signage indicating off and on Expressway facilities, local roads and the existing SH1 along with access arrangements is recommended.

Te Horo businesses were also advised by NZTA to submit on the Mackays to Peka Peka project, as the construction of a dual interchange at Peka Peka was considered by most to address these adverse effects. The form of the interchange at Peka Peka is outside the scope of the Project.

In addition to this, the Te Horo area is not identified as an area for development in the Greater Ōtaki Vision document, and the Project supports this, by providing easy access to Ōtaki where development is intended as part of local government planning (this is further discussed below in ‘Community Development’).

Ōtaki Railway Retail Area

Potential Effects

The access on and off the Expressway for Ōtaki is relatively straightforward and direct. The use of 'half-diamond' interchanges on either side of the Ōtaki township allows for vehicles to exit the Expressway, pass through the Ōtaki Railway Retail area, and then access the Expressway immediately. In the earlier options with at an interchange at Rahui Road, the proposed route was far less direct. Otaki businesses pointed out the potential adverse effects of this with the result that a major change was made to the alignment to that now proposed. The reduction in passing traffic may be mitigated by the improvement to the amenity of the ORR which is currently frequently congested. In addition, the ORR has established itself as a shopping destination due to the outlet shops.

As outlined in Section 7.2 of this report, a survey of pedestrians in Ōtaki carried out in 2011[40] showed that there was a higher percentage of local shoppers in Ōtaki main street compared with the Ōtaki Railway Retail area. A higher percentage of shoppers in the Ōtaki Railway Retail area surveyed also indicated that the Expressway may change their travel behaviour, compared with shoppers on Ōtaki Main Street.

As with Te Horo, the potential social implications of this are that local employment opportunities in Ōtaki may be directly affected if there is a consequent reduction in business. This may mean that some Ōtaki residents will no longer be able to be employed locally and will have to travel further to find employment opportunities.

The potential for an improved amenity in the ORR could be a social benefit as it would improve the shopping experience for local residents, and potentially encourage increased visitor numbers to this area.

Avoidance of Effect/Mitigation

Consultation with local businesses will be a key mitigation measure, as will clear signage and marketing information. This will be particularly important in encouraging passing vehicles to make the detour through the Ōtaki Railway Retail area.

There is the potential that an upgraded streetscape, in line with the KCDC's Greater Ōtaki Vision, may help to improve the pedestrian shopping experience and potentially encourage both local and visiting customers. This would need to be delivered by Kapiti Coast District Council, separately to the Project.

Ōtaki Main Township

Potential Effects

The Expressway will not affect access to the Ōtaki main township. The Expressway has been designed to allow motorists to turn-off the Expressway and visit Ōtaki, and re-enter

[40] Ōtaki Customer Survey: Draft Report of Pedestrian Intercept Surveys conducted in March 2011, Opus International Consultants, 2011.

the Expressway without doubling back, whether travelling north or south. This minimises any increase in trip length as a result of turning off the Expressway.

The reduction in passing traffic along the existing SH1 might negatively affect business in the Ōtaki main township in light of impromptu decisions to visit this area. As with the other business areas, the potential impact is the loss of employment opportunities if the local businesses suffer as a result of less passing traffic.

The potential for this effect is expected to be less in the Ōtaki main street area than in other areas. The pedestrian survey of Ōtaki shoppers discussed in section 7.2 of this report found only 4.6% of those surveyed in the Ōtaki main street area anticipated that the Expressway would change their willingness to stop in Ōtaki.

Avoidance of Effect/Mitigation

Although the Ōtaki Main Township is likely to be less affected than either Te Horo or the Ōtaki Railway Retail area, it is still important that local businesses are consulted and that a signage and marketing plan is worked out.

Under the Greater Ōtaki Vision document the main street of Ōtaki will be upgraded by KCDC as a pedestrian environment in the future (separate to the Project). This would have the double social benefit of potentially increasing business custom, and also improving the environment for locals[41].

[41] Note that the draft District Plan (2012) recently notified by Kāpiti Coast District Council includes a 'Future Urban Development Zone' to the north of Ōtaki. The draft plan signals the intention to manage subdivision and development in this area through the use of a structure plan; however, this is not yet available.

9.6 Summary Rating of Effects

9.6.1 Way of Life

Accessibility, connectivity, patterns of living and mobility

Effect	Stage	Who	Section	Mitigation	Magnitude (do minimum)	Comment
Improved regional access and connectivity due to improved journey times on Expressway.	O	W N D	All	N/A	Significant positive	This enables improved access to retail service, education and employment centres, and recreational facilities, both regionally and locally. This facilitates economic growth and development.
Improved local access and connectivity due to continued use of existing SH1 as a local road, and reduced traffic volumes.	O	W	All	N/A	Significant positive	This is a positive effect of the Project.
Perceived severance to the east and west of the Expressway due to: • loss of ability to cross the Expressway, • loss of residential properties along existing highway.	C O	N D	All	Provision of over-bridges at north Ōtaki, Rahui Road, Ōtaki Gorge Road and Te Horo Beach Road	Minor negative	There may still be perceived severance due to the greater visual effect of the Expressway. Note that for residents south of Old Hautere Road there is no direct access to the Expressway, however there are very few residential properties in this area.

Effect	Stage	Who	Section	Mitigation	Magnitude (do minimum)	Comment
Potential improved connectivity of Ōtaki township to the east and west due to: • grade separated local roads over Expressway including cycling and pedestrian pathway, and • reduced traffic on existing SH1	C O	N D	All	N/A	Minor positive	The bridge across the Expressway and railway north of Rahui Road, may improve access for residents travelling by car. For pedestrians and cyclists travelling west-east and east-west across the Expressway, travelling distances will be longer, but the grade separation will also make the journey safer. Reduced traffic is expected to make crossing existing SH1 easier.
Removal of access between private properties and SH1 where properties adjoin the Expressway.	C, O	D	All	Provision of local access roads.	Minor negative	Immediate access to through routes is reduced; however there are expected to be some improvements to safety from the changed access.
KEY						
Stage	**P**: Planning			**C:** Construction	**O:** Operational	
Who	***D:** Directly affected*			***N:** Neighbours*	***W:** Wider community*	

Changes to walking and cycling

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Potential for improved pedestrian and cycling amenity - i.e. greater ease in crossing the road - as a result of overbridges : • within Ōtaki town; and • at Te Horo	O	N D	All	N/A	Moderate positive	This is a positive effect of the Project.
Potential for greater use of	O	N	All	N/A	Minor	This may also lead to improvements in the

active transport modes when travelling locally, due to safer crossing over the Expressway, and rail crossings.		D			positive	health of local residents, due to the benefits of physical activity.

KEY

Stage	**P**: Planning	**C:** Construction	**O:** Operational
Who	***D:** Directly affected*	***N:** Neighbours*	***W:** Wider community*

9.6.2 Wellbeing

Changes to wellbeing

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Uncertainty about land acquisition process and extent of effect on landowners	P	N D	All	A range of communication methods have been employed: • open days; • information newsletters; • dedicated information service; • contact person for affected landowners; • Project website; and • on-going and direct negotiation with affected landowners.	Minor negative	Uncertainty about the outcome of the Project has been mitigated as far as possible through use of different communication methods to keep in touch with the local community; however an element of uncertainty is likely to remain for some land-owners until the designations are in place.
Uncertainty about the degree of effects to private property and the mitigation measures to address them	P	N D	All		Minor negative	
Perceived poorer air quality at properties neighbouring the Expressway.	O	N D	All	N/A	Insignificant	The Air Quality Assessment expects that there will be an improvement or no significant change in operational air quality once the Project is operational.
KEY						
Stage	**P**: Planning			**C:** Construction	**O:** Operational	
Who	***D:** Directly affected*			***N:** Neighbours*	***W:** Wider community*	

Changes to wellbeing (cont.)

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Potential health and wellbeing effects of increased emissions to air during construction	C	N D	All	Effects to air quality during the construction period to be managed via the Construction Air Quality Management Plan (CAQMP), potential controls are: • defining an area around construction areas activities where there is the potential to create dust; • dampening surfaces that have the potential to create dust; • restricting speed of construction vehicles near sensitive receptors;[42] and • vegetating or covering cut barriers as soon as practicable.	Minor negative	Effects are able to be mitigated.
Potential negative effects from increased noise and vibration as a result of the Project: • wellbeing of people in the area; and • existing buildings.	O	N D	Te Horo, Mary Crest	Proposed noise mitigation options are: • Open Graded Porous Asphalt (OGPA) through Ōtaki; • Screening plants and landscaping to specific properties; and • Building modification to specific properties	Minor negative	The Noise and Vibration Assessment expects that overall noise effects are expected to remain at a reasonable level.

[42] for example; retirement villages, aged care facilities, hospitals, schools.

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Potential negative effects from increased noise and vibration during construction on: • health and wellbeing of people in the area; and • existing buildings.	C	N D	All	Preparation and implementation of a Construction Noise and Vibration Management Plan (CVNMP) to document necessary noise management practices. On-going communication with potentially affected neighbours, regarding time and duration of activities in this area. Before and after building condition surveys to monitor any potential damage to buildings as a result of vibrations.	Minor negative	The Noise and vibration report expects that effects will mainly be along Rahui Road, and at the Rahui Road Milk Treatment Plant.
Potential negative effects from construction noise and vibration related to night-works on the wellbeing of people in the area.	C	N D	All	Details and restrictions of any night-works during construction of the Project are documented in a site-specific construction noise and vibration management schedule.	Minor negative	It is recommended that the option for residents temporarily affected by construction noise and vibration the works (during the construction period) to be temporarily relocated (for the duration of the construction period) is provided, if the impacts on them are too great to maintain normal daily functioning. This should be considered in the preparation of the relevant management schedule if monitoring results indicate that this may be a suitable mitigation measure, though in the main this is not anticipated. This should be reviewed once the detailed design and final construction management plan are complete.
KEY						
Stage **P**: Planning				**C:** Construction	**O:** Operational	

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Who ***D:*** *Directly affected*				***N:*** *Neighbours*	***W:*** *Wider community*	

Changes to safety

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Potential for improved safety on existing SH1 due to: • reduction in through traffic (especially freight); and • removal of 5 out of 8 level rail crossings.	O	N D	All	N/A	Moderate positive	Further measures such as reduction of speed limits on portions of the existing SH1 in future will be addressed as part of the revocation process if appropriate, and are not covered under this Project.
Potential short-term effects to the safety of local residents as a result of: • construction vehicles, and • local traffic changes	C	N D	All	Effects mitigated and managed through the Construction Traffic Management Plan.	Insignificant	Potential effects can be mitigated.
KEY						
Stage **P**: Planning				**C:** Construction	**O:** Operational	
Who ***D:*** *Directly affected*				***N:*** *Neighbours*	***W:*** *Wider community*	

9.6.3 Environment and Amenity

Effect	Stage	Who		Mitigation	Magnitude	Comment
Loss of amenity at Pare-o-Matangi reserve as the Project passes through it.	C O	W N	North Ōtaki	Planting and landscaping along the Expressway and around over-bridge abutments. Incorporation of land parcels from existing SH1, and vacated property into Pare-o-Matangi Reserve.	Moderate negative	The recreational amenity of the park may not be fully addressed by the mitigation proposed, given the amount of land which will remain after the Project is operational. Additional mitigation proposed by the Landscape and Visual Assessment to also add a parcel of land from the Ōtaki Motel is supported to address the recreational amenity of the reserve.
Perceived potential negative effects on community facilities due to increased noise and air emissions.	C O	W N	North Ōtaki, Ōtaki, Te Horo	Proposed monitoring of the air quality environment in the first year of operation, to validate compliance with NES. General noise mitigation proposed is the use of Open Graded Porous Asphalt (OGPA)	Insignificant	The Air Quality Assessment expects that there will be an improvement or no significant change in operational air quality once the Project is operational.
Reduced visual amenity in Te Horo, as a result of the Project.	C O	N D	Te Horo	Planting and landscaping along the Expressway and around over-bridge abutments.	Minor negative	
Reduced visual amenity of the Ōtaki urban area and river area as a result of the Project.	C O	N D	Ōtaki, South Ōtaki	Planting and landscaping along the Expressway and around over-bridge abutments.	Minor negative	

KEY

Stage	**P**: Planning	**C:** Construction	**O:** Operational
Who	***D:** Directly affected*	***N:** Neighbours*	***W:** Wider community*

9.6.4 Community

Effects on people's property and neighbourhoods

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Loss of neighbouring properties and residential cohesion as a result of property acquisition to build the Expressway.	C O	N	All	The Expressway has been designed to minimise direct effect on as many properties as possible.	Minor negative	Revisions to the design following consultation have further reduced the scale of effect on residential property. Alignment follows the existing SH1 as far as possible.
Loss of private property where land is to be acquired.	P C	D	All	Land swaps or other property transactions in line with NZTA policy.	Moderate negative	Negotiation with landowners during the acquisition and disposal process to explore whether land swap may be an option.
KEY						
Stage	**P**: Planning			**C:** Construction	**O:** Operational	
Who	***D:** Directly affected*			***N:** Neighbours*	***W:** Wider community*	

Effects on educational facilities

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Perceived potential negative effects on local schools due to increased noise, air emissions, volume and speed of traffic.	O	W N D	Ōtaki	No direct effect on schools.	Insignificant	Air quality report concludes that there are no expected negative effects on air quality for sensitive receivers such as schools, Noise and vibration report concludes that overall noise levels are acceptable. Vibration effects area only expected at properties within 60m of the realigned NIMT railway line. Reduction of traffic on local roads will improve safety of the existing State highway for school traffic, and for children travelling to school on foot / bicycle.
Perceived potential negative effects on local schools due to increased noise, air emissions, volume and speed of traffic.	C	W N D	Ōtaki	Effects to air quality during the construction period are to be managed via the CAQMP (see also 9.6.2 above). Noise and vibration management practices during the construction period to be documented in the CNVMP (see also 9.6.2 above). On-going communication with neighbouring schools and educational facilities, regarding time and duration of activities in this area.	Insignificant	Potential effects can be mitigated.
Potential for positive effects on accessibility to educational facilities, such as Te Wananga o Raukawa	O	W N D	Ōtaki	N/A	Moderate positive	Improved travel time to facilities with wide catchments.

Potential for improved safety for users of school bus services as a result of reduced traffic on existing SH1.	O	W N	Ōtaki	N/A	Minor positive	The Project also encourages walking and cycling through the provision of grade separated pedestrian and cycling routes across the Expressway at over-bridges.
Potential for construction activity and vehicle movements to have a negative effect on the safety of pupils travelling to and from schools near the Expressway.	C	W N	Ōtaki, Te Horo	Effects mitigated and managed through the Construction Traffic Management Plan. Project team to advise local schools of any changes in traffic access. Provide clear directional signage indicating any changes to school bus routes is recommended (particularly regarding Old Hautere Road). On-going consultation with local schools to be included as part of the CEMP.	Minor negative	Potential effects can be mitigated.

KEY

Stage	**P**: Planning	**C:** Construction	**O:** Operational
Who	***D:** Directly affected*	***N:** Neighbours*	***W:** Wider community*

Effects on community areas and sites

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Realignment of Ōtaki Railway station is required for the new alignment of the rail corridor.	C	W N D	Ōtaki	In order to accommodate the changed rail corridor, Ōtaki railway station will need to be dismantled, and re-built in its new position.	Insignificant / Neutral.	The Heritage Assessment recommends that as long as correct procedures are in place, the heritage values of the building will not be negatively affected. Effects will be temporary; as the railway station will continue to provide a social amenity once the Project is operational. Ongoing access to the Ōtaki Railway station to be provided for in the Construction Transport Management Plan (CTMP).
Loss of land at Pare-o-Matangi Reserve has a negative effect on: • community association with the reserve, and • cultural significance of the land to tangata whenua.	C O	W N	Ōtaki	Planting and landscaping along the Expressway and around over-bridge abutments. Incorporation of land parcels from existing SH1, and vacated property into Pare-o-Matangi Reserve.	Moderate negative	The Landscape and Visual Assessment recommends incorporation of existing Motel land to restore recreational amenity of the reserve. This additional mitigation, as well as involvement of the Ōtaki community and tangata whenua in the design of the new space is recommended to further restore community ownership and regard for the area. This would reduce the effect to minor negative.
Reduced access to community facilities: • for residents west of the Expressway to reach Waitohu School, Highway Baptist Church and Ōtaki Racecourse.	C O	N	North Ōtaki, Ōtaki	Over-bridges provided north of the current railbridge in Ōtaki township, and Rahui Road provide linkages between east and west, and provide for pedestrians and cyclists as well as local traffic.	Insignificant	Given the bridge across the Expressway and railway north of Rahui Road, access may actually be improved for residents travelling by car. For pedestrians and cyclists travelling west-east and east-west across the Expressway, travelling distances will be longer, but the grade separation will also make the journey safer.

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Reduced access to community facilities: • for residents west of the Expressway travelling to Te Horo School, St Margaret's Church and the Te Horo Hall; and • for residents east of the Expressway travelling to Hyde park museum and café.	C O	N	Te Horo	Over-bridges provided between Te Horo Beach Road and School Road provide linkages between east and west, and provide for pedestrians and cyclists as well as local traffic.	Insignificant	Given the bridge across the Expressway and railway north of Te Horo Beach Road, access may actually be improved for residents travelling by car. For pedestrians and cyclists travelling west-east and east-west across the Expressway, travelling distances will be longer, but the grade separation will also make the journey safer.

KEY

Stage	**P**: Planning	**C:** Construction	**O:** Operational
Who	***D:** Directly affected*	***N:** Neighbours*	***W:** Wider community*

Effects on community plans and aspirations

Effect	Stage	Who		Mitigation	Magnitude	Comment
Restriction of direct access to Te Horo from the Expressway may limit development pressure in the area, preserving its continued rural use.	O	W	Te Horo	N/A	Moderate positive	Supports the intention of KCDC's Greater Ōtaki Vision for Te Horo.
Improved access to Ōtaki may support the future growth in this area.	O	W	North Ōtaki, Ōtaki, South Ōtaki, Te Horo	N/A	Moderate positive	Supports the intention of KCDC's Greater Ōtaki Vision for Ōtaki. The District Plan should be utilised as mechanism to control where development can occur around the Ōtaki south interchange.
KEY						
Stage	**P**: Planning			**C:** Construction	**O:** Operational	
Who	***D:** Directly affected*			***N:** Neighbours*	***W:** Wider community*	

Effects on accessibility to commercial areas

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Improved access to existing commercial areas for Te Horo residents due to new over-bridge North of Te Horo Beach road and reduced traffic on existing SH1.	O	W N	Te Horo	N/A	Minor positive.	

Effect	Stage	Who	Section	Mitigation	Magnitude	Comment
Potential for loss of access to commercial areas for Te Horo residents due to possible reduction of business services as a result of economic effects on business owners.	O	W N	Te Horo	Proposed mitigation for this effect is the addition of promotional signage to the Expressway, identifying where motorists can exit to access facilities in Te Horo.	Minor negative.	Continued local access will be provided. As regional through traffic will be reduced, there will be safety improvements for local business traffic.
Potential positive economic effects in the area during the construction phase, due to increased activity and workers in the area.	C	N D	Ōtaki, Te Horo	N/A	Minor positive	Effects are likely to be temporary, during construction only.
Potential for positive economic effects for 'destination' stores in Ōtaki Railway Retail area as a result of improved trip time and reliability, and improved amenity of the new local arterial / former SH1.	O	N D	Ōtaki	N/A	Moderate positive	Economic growth in this area may lead to an improved commercial / retail facility for local residents and visitors to the area.
Potential for adverse economic effects to business owners who are dependent on passing trade.	O	D	All	Proposed mitigation for this effect is the addition of promotional signage to the Expressway, identifying where motorists can exit to access facilities in Te Horo, and Ōtaki Railway Retail area.	Moderate negative	The extent of the adverse effect is determined by the nature of the business. Businesses with a primarily local customer base may have positive effects, while businesses reliant of through-traffic may experience negative effects. .

KEY

Stage	**P**: Planning	**C:** Construction	**O:** Operational
Who	***D:** Directly affected*	***N:** Neighbours*	***W:** Wider community*

10 Mitigation Recommendations

Many of the mitigation measures discussed in the Assessment of Effects tables above have been incorporated in the detailed design of the Project, and/or are dealt with in other specialist's assessments. These mitigations have been recommended by the environmental specialists and design team avoid or reduce the magnitude of the social effects of the project and are supported by this social assessment. Some additional mitigation has also been recommended by the social assessment.

The table below summarises both the specific mitigation measures which have already been incorporated in the Project design, and those to be undertaken during the construction and operational phases of the Project. These mitigation measures and the particular social effects they address are also discussed above in the Assessment of Effects tables above (section 9). For consistency and cross-referencing purposes, the table below is structured to reflect the IAIA effects categories.

IAIA Effects Category	Potential Effect of Project	Recommended Mitigation
Way of Life	Perceived severance to the east and west of the Expressway due to: • loss of ability to cross the Expressway, • loss of residential properties along existing highway.	The Project design includes new over-bridges at north Ōtaki, Rahui Road, Ōtaki Gorge Road and Te Horo Beach Road
Way of Life	Removal of access between private properties and SH1 where properties adjoin the Expressway.	Local access roads are included in the Project design to ensure continued access to all neighbouring properties.
Wellbeing	Uncertainty about land acquisition process and extent of effect on landowners	A range of communication methods have been employed to keep affected landowners and local communities informed about the Project, including: • open days; • information newsletters; • dedicated information service; • contact person for affected landowners; • Project website; and • on-going and direct negotiation with affected landowners.
Wellbeing	Uncertainty about the degree of effects to private property and the mitigation measures to address them	
Wellbeing	Potential health and wellbeing effects of increased emissions to air during construction	The SIA supports the recommendations of the Air Quality Assessment that appropriate air quality controls during the construction period are managed via the Construction Air Quality Management Plan (CAQMP). In addition to this, on-going communication with
Community	Perceived potential negative effects on local schools due	

IAIA Effects Category	Potential Effect of Project	Recommended Mitigation
	to increased air emissions.	neighbouring schools and educational facilities, regarding time and duration of activities in this area is recommended.
Environment and Amenity	Perceived potential negative effects on community facilities due to increased air emissions.	The SIA supports the monitoring proposed in the Air Quality Assessment of the air quality environment in the first year of operation, to validate compliance with NES.
Wellbeing	Potential negative effects from increased noise and vibration as a result of the Project: • wellbeing of people in the area; and • existing buildings.	The SIA supports that the noise mitigation options proposed in the Noise and Vibration Assessment be incorporated into the Project design, including: • Open Graded Porous Asphalt (OGPA) through Ōtaki; • screening plants and landscaping to specific properties; and • building modification to specific properties. In addition to this, on-going communication with neighbouring schools and educational facilities, regarding time and duration of activities in this area is recommended.
Environment and Amenity	Perceived potential negative effects on community facilities due to increased noise.	
Community	Perceived potential negative effects on local schools due to increased noise.	
Wellbeing	Potential negative effects from increased noise and vibration during construction on: • health and wellbeing of people in the area; and • existing buildings.	The SIA supports the recommendation of the Noise and Vibration Assessment that noise and vibration management practices during the construction period are documented in the CNVMP, including : • the preparation and implementation of a CNVMP to document necessary noise management practices. • on-going communication with potentially affected neighbours, regarding time and duration of activities in this area. • before and after building condition surveys to monitor any potential damage to buildings as a result of vibrations.
Wellbeing	Potential negative effects from construction noise and vibration related to night-works on the wellbeing of people in the area.	The SIA supports the recommendation of the Noise and Vibration Assessment that details and restrictions of any night-works during construction of the Project are documented in a site-specific construction noise and vibration management schedule. It is further recommended that the option for residents temporarily affected by construction noise and vibration to be temporarily relocated (for the duration of the construction period) is provided, if the impacts on them are too great to maintain normal daily functioning. This should be considered in the

IAIA Effects Category	Potential Effect of Project	Recommended Mitigation
		preparation of the relevant management schedule if monitoring results indicate that this may be a suitable mitigation measure, though in the main this is not anticipated. This should be reviewed once the detailed design and final construction management plan are complete.
Wellbeing	Potential short-term effects to the safety of local residents as a result of: • construction vehicles, and • local traffic changes	The SIA supports the recommendations for mitigation proposed by the Integrated Transport Assessment, including the development of a Construction Traffic Management Plan (CTMP) for all construction activities.
Community	Potential for construction activity and vehicle movements to have a negative effect on the safety of pupils travelling to and from schools near the Expressway.	The SIA supports the recommendations for mitigation proposed by the Integrated Transport Assessment, including the development of a Construction Traffic Management Plan (CTMP) for all construction activities In addition to this it is recommended that: • the Project team advise local schools of any changes in traffic access; • clear directional signage indicates any changes to school bus routes (particularly regarding Old Hautere Road); and • on-going consultation with local schools is included as part of the CEMP.
Community	Perceived potential negative effects on local schools due to increased volume and speed of traffic.	
Environment and Amenity	Reduced visual amenity in Te Horo, as a result of the Project.	The SIA supports the mitigations proposed in the Landscape and Visual Assessment; including planting and landscaping along the Expressway and around over-bridge abutments.
Environment and Amenity	Reduced visual amenity of the Ōtaki urban area and river area as a result of the Project.	
Community	Loss of neighbouring properties and residential cohesion as a result of property acquisition to build the Expressway.	During the development of the Project, the Expressway has been designed to minimise direct effect on as many properties as possible.
Community	Loss of private property where land is to be acquired.	• Residents permanently affected by the works will be compensated in line with market valuations and assisted with the process under the Public Works Act. This is not a SIA mitigation. • In addition to this, for those vulnerable residents such as the elderly or disabled, NZTA may consider appointing a community liaison person to facilitate the process.
Community	Realignment of Ōtaki Railway station is required	The SIA supports the recommendations of the Heritage Assessment for the use of appropriate

IAIA Effects Category	Potential Effect of Project	Recommended Mitigation
	for the new alignment of the rail corridor.	procedures in dismantling, and re-building the station in its new position. It is also recommended that ongoing access to the Ōtaki Railway station is provided for in the Construction Transport Management Plan (CTMP).
Community	Loss of land at Pare-o-Matangi Reserve has a negative effect on: • community association with the reserve, and • cultural significance of the land to tangata whenua.	The SIA supports mitigations proposed in the Landscape and Visual Assessment, including: • planting and landscaping along the Expressway and around over-bridge abutments; and • incorporation of land parcels from existing SH1, and vacated property into Pare-o-Matangi Reserve. In addition to the above mitigation, it is recommended that involvement of the Ōtaki community and tangata whenua in the design of the new space is recommended to further restore community ownership and regard for the area. This would reduce the effect to minor negative.
Environment and Amenity	Loss of amenity at Pare-o-Matangi reserve as the Project passes through it.	
Community	Potential for loss of access to commercial areas for Te Horo residents due to possible reduction of business services as a result of economic effects on business owners.	The SIA supports the mitigation proposed by the Assessment of Economic Effects, for the addition of promotional signage to the Expressway, identifying where motorists can exit to access facilities in Te Horo.
Community	Potential for adverse economic effects to business owners who are dependent on passing trade.	

Further Recommendations	
IAIA Effects Category	**Recommended Mitigation**
Way of life	Kapiti Coast District staff responsible for travel demand management plans should be kept informed so as to enable their plans to be prepared and/or updated.
Way of Life	If during the construction phase any substantial delays particularly over holiday periods and long weekends are anticipated publicity should be given to this on a regional or national basis e.g. use of national Press or national and regional radio.
Wellbeing	Maintain the iwi consultation protocol that has been established as a forum to communicate information particularly the construction stage.
Environment and amenity	Crime Prevention through Environmental Design Principles (CPTED) will be taken into account when designing the route, particularly the over-bridge sections and those areas including pedestrian and cycle ways.

Further Recommendations	
IAIA Effects Category	**Recommended Mitigation**
Community	A CEMP will be prepared and implemented to minimise adverse effects of construction activities. The Plan will include details on the management of: earthworks; dust; construction noise (including hours of operation and tolerable limits); construction traffic; safety management, temporary access and management of any pedestrian or cycling traffic that may be affected; timing and duration of construction and phasing of construction. A communications strategy will accompany the CEMP and will detail how and when this information will be communicated to the public, stakeholders and directly affected landowners. Tools that may be utilised include information in the local press, radio advertisements, information boards, flyers, newsletters and direct contact. Stakeholder reference groups should be established for key sectors such as education and business (Te Horo and Ōtaki). Specific provisions should be set up in association with Te Wananga-O-Raukawa to ensure the large student base the Wananga represents are kept informed as well as ensuring that the collective of Māori educational interests of which the Wananga are a part are also fully advised. All other schools could fall within a second collective.
Community	It is important that other potentially vulnerable groups are also kept informed. The elderly are potentially one of the positively affected groups by the reduction of traffic volumes on local roads. During the construction period and during the early stages of operation organisations such as Grey Power should be specifically informed.
Community	Establishment of a feedback/complaints database to established for the construction phase to ensure that community, stakeholder and individual issues are addressed and that appropriate responses are provided for all queries.

11 Monitoring

As identified throughout this SIA, its content is guided by the information that is known at this time. As the process progresses through designation, construction and operation, regular reviews of the SIA should be undertaken as changes may result as detailed design and construction methodology evolve. Recommended future work includes, but is not limited to:

- On-going community engagement including key stakeholders and directly affected individuals (see detailed recommendations in the mitigation section above).
- Finalisation of a CEMP and the details communicated to the community, key stakeholders and the community.
- Establishment of a database for recording and responding to community, stakeholder and individual requests, complaints or statements.
- Review effects of additional traffic along various routes as a result of the Project construction/operation and determine if any mitigation is required.
- Specific engagement with the community regarding Pare-O-Matangi reserve mitigation options.
- Establishment of a dedicated community liaison person who will be the conduit between the Project team and the community during construction.

Some mitigation measures proposed in this assessment - such as a feedback/complaints database - will require on-going monitoring. As these measures are to be implemented and managed through relevant plans as part of the CEMP suite (these mitigation measures are also noted in the assessment of effects in section 9 above) no specific monitoring is recommended here, however, the social assessment team will review these plans to ensure that the relevant inclusions from the social assessment have been included.

12 Conclusion and Recommendations

12.1 Conclusion

At a regional level the Project delivers clear benefits in terms of the improved movement of people, goods and services between the Kapiti Coast and the Greater Wellington region. At a local level, the Project will result in some localised negative effects but also some localised benefits through safer east-west access and reversion of SH1 to local road.

Across the entire Project area, the rating for the social and community effects arising from the Project will be from minor to moderate negative and from minor to significant positive. There are certain specific areas where the effects are more significant (Te Horo in terms of economic effects/business activity; Pare-o-Matangi Reserve; and land-take, and potential construction impacts for properties within close proximity to the route) overall the social effects of the Project can be mitigated.

The effect of the Expressway will be to distribute traffic thereby providing a safer travel route for local traffic to and from work and schools, as well as social engagements. The Project improves regional connectivity of the area, improves the reliability of travel times and delivers essential infrastructure to support future development in the area. For those living along SH1 there will be improvements in on site amenity as a result of less traffic along this route. The reduction of traffic through the Ōtaki Railway Retail area will improve its amenity as a social, employment and retail centre. For the traffic that passes straight through the Project area, including for the movement of freight, the Project will have direct benefits. There are also considerable health benefits for local communities as a result of the new walking and cycling facilities on the overbridges, particularly in Ōtaki town, coupled with reduced traffic on the local network create a better environment for walking, and cycling.

12.2 Recommendations

That the proposed mitigation measures be adopted as conditions of the designations within the context of the overall Project, so that the social effects can be appropriately avoided, remedied or mitigated.

Attachment 1 - Social Impact Assessment Literature Review

Background

The review focuses on the international and local practices on how social impacts of road development on people and communities are categorised.

Social Impact Assessment as a specific concept originated in the 1969 National Environmental Policy Act of the United States of America (NEPA) and later became widespread as a decision making tool in developed countries[43]. Recently, its use as a supporting tool for decision-making is gaining popularity with major infrastructural projects in developing countries. SIA is now a mandatory requirement for major road infrastructure projects funded by the World Bank[44], European Investment Bank, Asia Development Bank and other major international financial institutions[45].

The International Association for Impact Assessment[46] (IAIA) defines SIA 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".*

Vanclay and Becker (2003)[47] expanded on the implications of this definition, describing SIA as a broad umbrella or overarching framework that embodies the evaluation of all human impacts. Impacts included in this framework are: aesthetic (landscape analysis), archaeological and heritage, community, cultural, demographic, development, economic and fiscal, gender assessment, health, indigenous rights, infrastructural, institutional, political (human rights, governance, democratization), poverty assessment, psychological, resource issues (access and ownership of resource), tourism and other impacts on societies.

To obtain a full appreciation of these to enable them to be categorised needs the consideration of SIA as changes to one or more of the following:

- people's way of life - that is, how they live, work, play and interact with one another on a day-to-day basis;
- their culture - that is, their shared beliefs, customs, values and language or dialect;
- their community - its cohesion, stability, character, service and facilities;

[43] U.S. Department of Commerce, National Oceanic and Atmospheric Administration National Marine Fisheries Service (1994) - Guidelines and Principles for Social Impact Assessment

[44] Koji Tsunokawa and Christopher Hoban (Edit) 1997 - "Roads and the Environment - A Handbook" World Bank Technical Paper No 376

[45] www.eib.org/; www.adb.org/gms; www.tba.co.nz;

[46] www.iaia.org/

[47] Becker H & Vanclay F (eds) 2003, *The International Handbook of Social Impact Assessment: Conceptual and Methodological Advances*, Edward Elgar, Cheltenham, UK.

- their political system - the extent to which people are able to participate in decisions that affect their lives , the level of democratisation that is taking place, and the resources provided for this purpose;
- their environment - the quality of the air and water people use, the availability and the quality of food they eat, the level of hazard or risk, dust and noise they are exposed to, the adequacy of sanitation, their physical safety, and their access to and control over resources;
- their health and wellbeing - where 'health' is understood in a manner similar to the World Health Organisation definition: "a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity";
- their personal and property rights - particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties; and
- their fears and aspirations - perceptions about safety, fears about the future of their communities, and aspirations for their future and the future of their children.

International SIA Practices - Social Impact Categories

SIA has become firmly established internationally as an important aspect of environmental impact assessment. In Australia, the State Government has amended its Local Government Act to incorporate the principles of Ecologically Sustainable Development (ESD)[48]. All levels of government have agreed that ESD is based on three under-pinning principles:

- development that safeguards the welfare of future generations;
- providing for equity within and between generations; and
- protecting biological diversity and maintaining essential ecological processes and life-support systems.

Under this ESD paradigm LGA practitioners have identified the following social impact categorisation relevant to major road infrastructure projects in the federal, state and local governments.

Population characteristics

- Present population and expected change.
- Ethnic and racial diversity.
- Demographic mix.
- Fluxes in temporary residents, seasonal and leisure visitors.

Community and institutional structures

- Local government and links to the larger political system;
- Patterns of employment and industrial diversification;
- Voluntary organisations;
- Religious and other interest groups;

[48] http://www.communitysolutions.com.au/papers/quantsocimpass.html

Political and Social resources

- Distribution of power and authority - participation, discrimination.
- Income and wealth distribution.
- Legal and civil rights.

Individual and family change

- Health.
- Education.
- Personal safety.
- Family and friendship networks.

Community resources

- Natural resources and land use.
- Physical environment.
- Recreation.
- Availability of housing and community services.
- Viability of community life.
- Historical and cultural resources - indigenous and non English-speaking background.

SIA is also a requirement under the Commonwealth/ State Strategic Assessment Agreement for approval under its Environmental Protection Act 1986[49].

In the US, SIA is a statutory requirement under several acts of legislation such as the Magnuson Fisheries Conservation and Management Act 1976 and the Outer Continental Shelf Lands Act 1978. The predominant legislation though, is the National Environmental Policy Act 1969[50]. The social impact assessment variables required under this legislation include:

- Population Characteristics which mean the present population and expected change, ethnic and racial diversity, and influxes and outflows of temporary residents as well as the arrival of seasonal or leisure residents.
- Community and Institutional Structures which mean the size, structure, and level of organization of local government including linkages to the larger political systems. They also include historical and present patterns of employment and industrial diversification, the size and level of activity of voluntary associations, religious organizations and interests groups, and finally, how these institutions relate to each other.
- Political and Social Resources that refers to the distribution of power authority, the interested and affected publics, and the leadership capability and capacity within the community or region.
- Individual and Family Changes referring to factors which influence the daily life of the individuals and families, including attitudes, perceptions, family characteristics and friend-ship networks. These changes range from attitudes toward the policy to an alteration in family and friendship networks to perceptions of risk, health, and safety.

[49] Vanclay, F. 2003. International Principles for Social Impact Assessment. *Impact Assessment & Project Appraisal* 21(1): 5-11

[50] U.S. Department of Commerce, National Oceanic and Atmospheric Administration National Marine Fisheries Service (1994) - Guidelines and Principles for Social Impact Assessment.

- Community Resources including patterns of natural resource and land use; the availability of housing and community services to include health, police and fire protection and sanitation facilities. A key to the continuity and survival of human communities are their historical and cultural resources. Under this collection of variables we also consider possible changes for indigenous people and religious sub-cultures.

In Canada, SIA is a statutory requirement under the Canadian Environmental Assessment Act[51]. Stevenson[52] (1995) described the way it categorised the impacts of major road projects on people and communities as:

Displacement of Residents - residents may be displaced by the construction of a road due to additional impacts like the economic impact resulting from acquiring new housing at a new location; social and psychological impacts due to the disruption of social relationships and establishing relationships in a new social environment; or changes in type and tenure of housing.

Displacement of Businesses and Community Services -road projects may remove or cause relocation of businesses and community services such as churches, community centres or parks. Businesses and community services may have difficulty in obtaining suitable relocation sites; they may lose clients, and on relocation, may incur additional costs to re-establish.

Impacts on Residents - how residents may be disrupted and inconvenienced by detours, local road closures, dust, noise, heavy equipment traffic on existing roads, changes in the level of service, safety hazards, and interference with emergency services during the construction phase. Occasionally, there is vibration damage to near-by structures.

On the positive side, SIA also describe how residents may benefit from construction employment. Travel time, gas consumption, accidents and inconvenience to users generally decrease. The roadway increases access to jobs, schools, stores, recreation and other community services and amenities. These effects can be reflected in increased land values.

However, there may be negative impacts for some residents living near the roadway. These include increased noise, pollution and aesthetic impacts. Some of these impacts can be mitigated.

Impacts on Businesses and Community Services - socio-economic impacts on businesses and community services can be positive and negative. During the construction phase, some businesses and community services may lose clients, while other businesses may

[51] André, P. and D. Bitondo (2001)."Development of a Conceptual and Methodological Framework for the Integrated Assessment of the Impacts of Linear Infrastructure Projects on Quality of Life". Canadian Environmental Assessment Agency Research and Development Monograph Series

[52] Mark Stevenson (1995), "Social Impact Assessment of Major Roads" paper presented to the 20th World Road Congress, Montreal.

obtain additional business. When the roadway is operational, changes in traffic patterns may increase or decrease the clients for some businesses and community services.

Impacts on the Community- community impacts can be considered positive or negative. The most significant impacts are likely to result from the displacement of residents, businesses and community services. This, in turn, affects the community as customers, and members of businesses and community services, jobs and social relationships are lost. The loss of residents can have an additional effect of disrupting the social relationships in the community, creating a further loss for those who remain. Disruption of residents can lead to a loss of satisfaction with life in the community and reduced participation in community activities.

Forkenbrock and Weisbrod (2001)[53] give a very good account on transportation factors that affect people and communities, summarizing the various practices of categorising SIA effects/impacts used widely in the international arena. This is now largely adopted by major international funding organisations for project appraisals.

Road transportation factors affecting ***travel time savings*** **- while** traffic congestion and pressure areas may be shifted to another part of the township, travel time , congestion and incidents may be reduced, relieving pressure on some parts of the city, and increasing certainty of arrival time.

Road transportation factors affecting ***safety*** - crash rate may decrease, improved travel convenience thus reducing confusion and conflicting vehicles, no more pot holes and improved driving on smooth surfaces.

Road transportation factors affecting ***VOC[54] savings*** - resurfacing results in smooth roads which reduces loads and thus improve fuel efficiency. Good flow will reduce stop-and-go thus improve fuel use. Straight and short roads improve time taken for travel and reduce fuel use.

Road transportation factors affecting ***alternative transport modes*** - There are three major ways in which new or upgraded transportation facilities may affect the viability of alternate transportation modes i.e.

- upgrading roads can increase vehicular traffic;
- street widening can create barriers; and
- transportation projects can displace or disrupt facilities (e.g. bicycle trails, sidewalks, and public transport stops may have to be moved to make way for other facilities).

[53] Forkenbrock DJ (Public Policy Centre - University of Iowa) and Weisbrod GE of Economic Development Group - Guidebook for Assessing the Social and Economic Effects of Transportation Projects, NCHRP Report 456 (2001)
[54] Vehicle operating cost

Road transportation factors affecting ***accessibility*** - Transportation projects can directly affect the accessibility of households and businesses in a given location in the following ways:

- Improvements to public transport systems can expand travel options and opportunities for residents and sometimes reduce traffic congestion.
- Improvements to road system capacity and traffic control can reduce travel times to and from affected areas for those with vehicles.
- Any type of transportation infrastructure (including highways, rail lines and other fixed guideways, terminals, stations, and parking lots) can represent a physical barrier to pedestrian or vehicular movement, thereby reducing accessibility to preferred destinations.
- During construction of transportation projects, there can be considerable disruption of travel, and access to numerous destinations can be adversely affected.

Road transportation factors affecting ***community cohesion*** - Changes in transportation systems can affect community cohesion in several ways including.

- direct effects of household and business relocation;
- direct effects of structural barriers; and
- indirect effects of psychological barriers.

Road transportation factors affecting ***economic development*** **-** Economic development effects occur as the *end result* of other direct effects that a transportation project has on travellers and non-travellers. Five specific factors or mechanisms at the root of economic development effects from transportation projects include: (1) business travel costs, (2) business market reach, (3) personal travel costs, (4) job access, and (5) quality of life.

Road transportation factors affecting ***neighbourhood noise levels*** **-** Traffic noise varies with the volume and type of traffic as well as with the physical geography of the terrain surrounding the roadway. A transportation project can bring about a series of noise related effects within a community.

Road transportation factors affecting ***visual quality in a community*** **-** Transportation projects can directly affect the visual quality of an area in the following ways: construction of new structures may disrupt the visual quality of an area; blocking views of existing community features, including significant landmarks, open space, and special vistas; change the visual structure of an area and add visual clutter to the environment.

Road transportation factors affecting ***property values and land use*** **-** Transportation projects affect property values and land use as a result of their direct effects on other social and economic factors. These include:

- changes in accessibility;
- changes in safety;

- changes in noise;
- changes in visual quality;
- changes in community cohesion; and
- changes in business productivity.

Road transportation factors affecting ***distributive effects*** **-** With changes in transportation systems, the beneficiaries of a particular project may be difficult to identify because they are dispersed across a region. However, negative effects such as noise, community disruption, and other effects often occur along a relatively narrow area immediately adjacent to the road. Even when a project provides net gains across a region, the relative benefits and costs accruing to individuals and groups within the region vary so that those who must tolerate the worst effects may not be enjoying benefits commensurate with the costs they bear.

New Zealand Approach to SIA

In New Zealand SIA is a legal requirement for matters covered by the Resource Management Act 1991 framework , particularly under section 5(2), providing for the avoidance, remediation and mitigation of the impacts of use and development of resources to the environment (including people and communities). Schedule 4(2) is also relevant as it provides for the consideration of neighbourhoods and the communities when preparing an assessment of environmental effects.

Major road infrastructure projects require SIA in support of environmental approval applications to consenting authorities. The RMA does not provide a standard framework for preparation of SIA and most SIA works has been guided by the IAIA guidelines. Examples of social assessments for New Zealand roading projects using the IAIA principals include the Western Ring Route – Waterview Connection, and the Nelson Arterial Traffic Study, the approaches taken in these assessments are outlined below.

MWH[55] (2010) conducted a study on social effects of four options for the Nelson Arterial routes. This study outlines some of the social effects which may be experienced by members of local communities and individual residents in an area where a large roading project is taking place. The definition provided in this study provides a useful framework employed within NZ, and with similar characteristics to this Project. Different types of effects explored here are:

> Community severance: physical and psychological social severance[56] (or dislocation) of communities caused by its interaction with roads and traffic.

[55] MWH, December 2010 - *"Nelson Arterial Traffic Study: Social Impact Assessment of Selected Options"*

[56] Grigg, A.O. and Ford, W.G. 1983, *Review of Some Effects of major roads on urban communities, transport and Road Research Laboratory Supplementary Report 778*, Berkshire.

Amenity: the quality and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes.

Recreation: passive and active, organised and informal or social interaction that contributes to people's mental as well as physical wellbeing.

Noise effects: both through hearing, and indirectly through the way noise affects attention spans and behaviour, including sleep interference.

Air Quality: the report identifies that the World Health Organisation (WHO)[57] has found that the effect of traffic related air pollution is one of the leading concerns in traffic issues. Groups at greatest risk from diminished air quality include elderly and very young residents in close proximity to the busy roads, children who are pupils at schools near busy roads, and people spending a high proportion of their time travelling on, or in environments with heavy traffic.

The social effects assessment of the Western Ring Route - Waterview Connection[58] examined regional and local effects. The assessment *describes IAIA definitions for impact assessment and emphasises the following principle as being important across all SIA:*

> "The improvement of social wellbeing of the wider community should be explicitly recognized 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." (IAIA, 2003 'Social Impact Assessment International Principals', in 'Western Ring Route – Waterview Connection; Assessment of Social Impacts, p 27)

The following key themes are included in effect assessment:

- People's Way of Life
- Culture
- Community
- Political Systems
- The Environment
- People's Health and Wellbeing
- People's Personal and Property Rights
- People's Fears and Aspirations

[57] WHO - Health Aspects of Air Pollution with Particulate Matter, Ozone and Nitrogen Dioxide - Report on a WHO Working Group Bonn, Germany (January 2003)

[58] BECA on behalf of NZTA RoNS Project: Western Ring Route - Waterview Connection (July 2010) "Assessment of Social Effects"

Note that for the Waterview project a separate Health Impact Assessment (HIA) was carried out to address the potential health consequences of the project. The SIA considers health effects which are complimentary to the HIA, such as perceptions of health impacts, and socio-cultural factors.

Suggested further reading

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NZTA, PSF 13 (2011) - Social Environment Management Form - Pekapeka to North Ōtaki

Opus-NZTA "WAIKATO EXPRESSWAY - CAMBRIDGE SECTION: Social Impact Assessment"

Third National Community Impact Assessment Conference: "Community Impact Assessment in the 21st Century - Making Connection and Building Relationships", Madison, Wisconsin, August 2002.

Vanclay F. 2005, "Principles for Social Impact Assessment: a critical comparison between the International and US documents" - Environmental Impact Assessment Review, vol. 25.

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Viinikainen.T & Kaehoe.T (2007) - "Social impact assessment in Finland: bypass of the city of Hamina".

Ward Beverly G, 2005 - "Measuring the Effectiveness of Community Impact Assessment: Recommended Core Measures"

Ward Beverly G, 1998 - An Evaluation of the "Community Impact Assessment: A Quick Reference for Transportation" Booklet and Related Practices.

Ward B G; Smith C (2003) - Community Impact Assessment: "The Greening of the Agencies".

WHO - Health Aspects of Air Pollution with Particulate Matter, Ozone and Nitrogen Dioxide - Report on a WHO Working Group Bonn, Germany (January 2003)

www.adb.org/gms; The Asian Development Bank Website also contain guidelines and related information on social impact assessment requirement for major road infrastructure project appraisal.

www.eib.org/; - The European Investment Bank Website contain informative guidelines on social impact assessment requirement for major road infrastructure project appraisal.

www.iaia.org/ - International Association for Impact Assessment is a useful site containing information on social impact assessment frameworks that may assist project appraisal and environment/social impact assessment.

Attachment 2 - Social and Community Facilities in the Project area

Social and Community Assessment

N

OLD COACH ROAD
BENNETTS ROAD
TASMAN ROAD
LUPIN ROAD
RAUKAWA STREET
RANGIURU ROAD
ITI STREET
MILL ROAD
ANZAC ROAD
WAERENGA ROAD
TEMUERA STREET
KIRK STREET
LEMON STREET
ATMORE AVENUE
DOMAIN ROAD
AOTAKI STREET
TITOKI STREET
MIRO STREET
BELL STREET
DUNSTAN STREET
MAIRE STREET
RIVERBANK ROAD
TAYLORS ROAD
TAYLORS ROAD
SH 1
WAITOHU VALLEY ROAD
TE MANUAO ROAD
RENATA ROAD
FREEMANS ROAD
TE ROTO ROAD
RAHUI ROAD
LETHBRIDGE ROAD
TE WAKA ROAD
ADDINGTON ROAD
OTAKI GORGE ROAD
SH 1
OLD HAUTERE ROAD

Legend

- Railway Station
- State Highway
- Current Alignment
- Railway
- Road

Social and Community

Ref, Site Name

- 2, Otaki College
- 3, Otaki School
- 4, Waitohu Primary
- 5, Otaki Health Camp School
- 6, St Peter Chanel School
- 7, Te Kura-a-iwi o Whakatupuranga Rua Mano
- 8, Te Kura Kaupapa Maori O Te Rito
- 9, Te Wananga-O-Raukawa
- 10, Otaki Cemetery
- 11, Convent Road Cemetery
- 12, Te Rauparaha Street Cemetery
- 13, Otaki Library and Service Centre
- 14, Otaki Pool
- 15, Otaki Racecourse
- 16, Otaki Domain
- 17, Haruatai Park
- 18, Pareomatangi Reserve
- 19, Catholic Church
- 20, Raniatea Church
- 21, Otaki Apostolic Church
- 22, Anglican Church
- 23, Presbyterian Church
- 24, Jehova's Witness Otaki
- 25, Highway Baptish Church
- 27, Otaki Memorial Hall
- 29, Otaki Medical Centre
- 30, Otaki Police Station
- 31, Otaki Volunteer Fire Station
- 33, Otaki Ambulance Station
- 34, Otaki Railway Station
- 35, Otaki Museum

1:15,000

0 250 500 1,000 Meters

Social and Community Assessment

Attachment **Attachment 2.2 Social and Community Facilities: Te Horo**