30 Social effects

Overview

From a social perspective, Kāpiti Coast communities have transformed significantly since their establishment, with population and business growth driving an on-going transition from a series of beach oriented communities and small service centres to an increasingly distinct sub-regional urban hub. The Project will add to, and possibly accelerate, this change dynamic in response to a combination of beneficial and adverse social effects. The social effects would range in significance, between adverse and beneficial, across the community and along the Project length. These effects would also vary over time through the Project's construction and operation phases.

From a regional perspective, it is anticipated that there would be significant social benefits, derived from the economic and transport/accessibility benefits of the proposed Expressway.

The construction and use of the proposed Expressway will alter the existing local social environment as it would affect those factors that influences people's social well-being, including its effects on connectivity and movement, amenity values and local character, open space and recreational values.

Arising from its economic and transportation benefits, the Project would have social benefits for the District. However, there would be negative social effects which will be largely borne by those in neighbourhoods immediately adjoining the proposed Expressway.

The Project design sought to mitigate a number of potentially negative social effects; for example, by maintaining or improving local road accessibility throughout the communities. The Project design also sought to reconcile its impact on adjoining neighbourhoods with the requirements for safety and functionality.

Many of the negative social effects would occur during construction, and it is therefore important that these effects are mitigated through effective construction management, communication and community liaison. The Construction Environmental Management Plan (CEMP) and its subsidiary plans for traffic, noise, vibration and air quality have been informed by the social effects assessment and are designed to ensure adverse effects arising from construction will be at acceptable levels. Monitoring is proposed through a proposed community liaison group to identify any adverse social effects that may occur during construction.

Once in operation, the scale of the social impacts from the proposed Expressway will diminish as people and communities adjust to the presence of the road. Any long-term issues will be addressed through the ongoing relationship between NZTA and KCDC.

30.1 Introduction

This Chapter sets out an assessment of Project-induced social effects. The information in this Chapter is drawn from the Social Impact Assessment (SIA) (Technical Report 20, Volume 3), as well as the findings of other technical assessments which are relevant in considering social effects.

Social effects can be experienced at individual, family / household, and community levels. Effects can be actual or perceived; direct or indirect; and positive or adverse in character. The focus of the SIA is on communities and groups rather than on individuals.

By their nature, social impacts are the 'human' experiences of other effects individually or in combination. Avoiding "double counting" of effects is therefore important where there are overlaps with other AEE specialist assessments. For example, the operational effects of the Project on air quality and the proposed mitigation are discussed in the Air Quality Assessment (Technical Report 13, Volume 3) and in Chapter 20 of this AEE. Nonetheless, as part of discussions on the Project's social effects, people have raised concerns about the effects of the Project on air quality in respect of their living experiences and day-to-day lives.

Given the inevitable overlaps, effects dealt with in other specialist reports are acknowledged within this Chapter where relevant. However, while perceptions of changed amenity values are acknowledged in this social assessment, overlapping or repetition of discussion in other assessment sections on these effects has been kept to a minimum.

The Project has been assessed both within the broader context of the wider Wellington Region and within the District in terms of its effects on the local communities between MacKays Crossing and Peka Peka (the local communities). To carry out the assessment within these contexts, the following were prepared:

- A SIA framework, incorporating a study area profile and assessment framework to identify the social consequences and impacts (benefits and disbenefits) of the Project on a regional and local scale;
- An assessment using the SIA framework of the social impacts of the Project on a regional and local scale. Impacts were assessed for the planning, construction and operation phases of the Project; and
- An assessment of appropriate measures to avoid, remedy or mitigate the social effects identified in the planning, construction and operation phases of the Project.

The Project is of national and regional significance; however, the potential for social change as a result of the Project is distinctly different between the local and regional communities; in particular, the nature of the potential adverse social effects are considered to be experienced relative to proximity to the physical works for the Project and its ongoing operational effects. Thus, the assessment includes a brief overview of Wellington Region's social environment in which the Project is located, and then focuses on the social environment in the MacKays to Peka Peka section which includes the local communities of Raumati, Paraparaumu, Waikanae and Peka Peka.

The description of the existing social environment provides the basis on which the social effects are assessed. The following are described:

- characteristics of the local communities and their people;
- the communities' wellbeing and way of life through the locations/accessibility of education facilities, social services, reserves and recreational areas, and transport routes and connections;
- people's culture through the recognition of the local communities' values, archaeological / heritage / cultural sites and places of religious assembly; and
- people's attitudes, expectations and aspirations identified in existing documents and from feedback received during consultation.

30.2 Existing social environment

At a district scale, Kāpiti's social environment is transforming through population growth, changing employment dynamics, continuing increase in the average age of residents, and on-going demand for housing and new business development[233]. Some key indicators in this regard are estimates for the period 2010 to 2031 of:

- Population growth of circa 10,000 persons or 20% (medium growth assumptions)[234]
- Total employment growing between 3,400 (23%) to more than 6,000 (53%)[235]
- An ageing population profile with the proportion of those over 65 years forecast to increase from 24% to 32% of the population[236], and
- A decline in the proportion of the population who are of working age (20 to 65 years) from 52% to 46%[237].

For the purposes of profiling the existing environment and for assessing local social impacts, the SIA study area profile identifies four community areas within the Project area. These use Census Area Units (or combinations of area units) to describe the community within these them and are grouped as:

- Raumati

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[233] Kāpiti Employment Areas Study, October 2011 produced by Property Economics Limited for Kāpiti Coast District Council, & Monitoring and Evaluation Research Associates Ltd (MERA) Population Projections 2011.

[234] Kāpiti Employment Areas Study, October 2011 produced by Property Economics Limited for Kāpiti Coast District Council.

[235] Ibid.

[236] MERA Population Projections 2011

[237] Ibid

- Paraparaumu
- Waikanae
- Peka Peka

Raumati: This community area includes QE Park (a significant regional recreational and environmental asset), and the Raumati South, Raumati Beach and Raumati residential areas which have a local focal point at Raumati Village. The 2006 resident population was 8,013.

Paraparaumu: This community area includes Paraparaumu, Paraparaumu Beach and Otaihanga. The community's focal points are primarily at the Paraparaumu town centre and Paraparaumu Beach Village, which are also major concentrations of business activity within Kāpiti. Residential communities give way to peri-urban and rural environments moving north into Otaihanga. The 2006 resident population was 17,247.

Waikanae: This community area includes Waikanae, Waikanae Beach and the locality of Ngarara. The community focal points are at the Waikanae town centre and Waikanae Beach Village. Residential development stretches from the coast to the Kāpiti foothills. North of Te Moana Road, land use shifts to peri-urban and includes future residential growth zones through to a growth management boundary under the District Plan in the vicinity of Smithfield Road. The 2006 resident population was 10,230.

Peka Peka: This community area includes Peka Peka village, adjacent to SH1, and the Peka Peka coastal residential development; these communities are located in an otherwise predominantly rural setting. The rural area is generally rolling open farm land, bounded on the east by current SH1. It is traversed north to south through its centre by transmission lines. The 2006 resident population was 252.

Community areas described and used in the Social Assessment are shown in Figure 30.1.

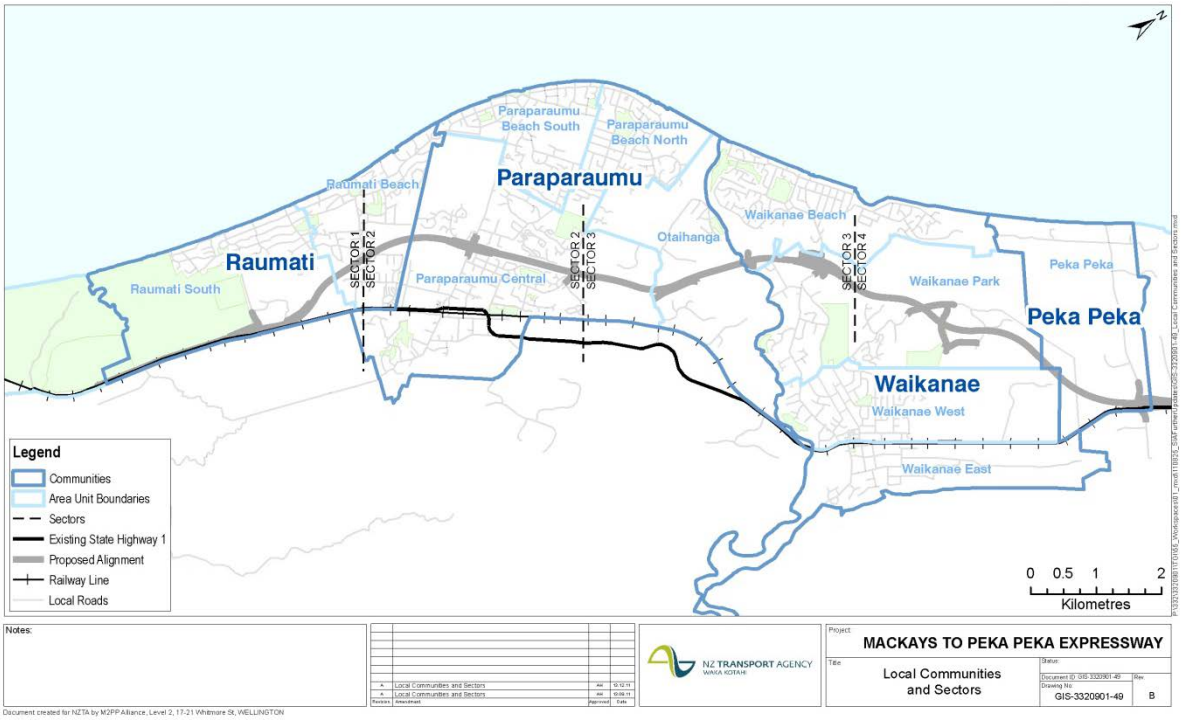

Figure 30.1: Local Communities and Sectors

30.2.1 Investigation and assessment process

As one part of the overall environmental assessment which contributes to the wider decision-making process, the SIA addresses the effects of the Project on people and communities' social well-being.

The assessment of the social effects of the Project includes consideration of the potential effects of a project on social / cultural factors, economic factors, population-based services, individual / behavioural factors as part of the assessment of impacts on people's 'attitudes, expectations and aspirations', 'wellbeing and way of life', 'culture' and 'community'. Overall, relevant health impact issues for the Project have been considered either through Project specific assessments (for example, the assessment of contaminated sites: Technical Report 23, Volume 3), or as part of the Wellington Regional Land Transport Strategy Health Impact Assessment (2006)[238].

The SIA was informed by a number of relevant technical assessments, the findings of which are reported in the SIA where relevant to potential social impacts: examples include air quality and noise impacts on local residents. The SIA therefore considers the effects identified by other technical assessment from the perspective of social wellbeing.

The SIA was informed by:

- site visits and observational surveys in residential, rural and business locations;
- attendance at public expos;
- meetings and interviews with community and stakeholder groups;
- regional and district level demographic and business statistics;
- review of regional and district strategies and policies (particularly the social and community outcomes identified in those strategies and policies); and
- specialist assessment reports commissioned by KCDC.

The SIA was structured to categorise potential effects for people and communities in terms of effects prior to construction, during construction and during operation when the proposed Expressway is in use.

This Chapter does not address the social effects of the route relative to the other route options that were assessed, as these form part of the Multi-Criteria Assessment of Alternative Route Options, outlined in Chapter 9. In addition, this Chapter does not address tangata whenua values, which are addressed in separate cultural impacts assessments (Technical Reports 11 and 12, Volume 3), and summarised in Chapter 14 of this AEE.

[238] The Wellington Regional Land Transport Strategy Health Impact Assessment (2006) provided a strategic level assessment of road crashes / safety, the availability of travel modes / choices and the accessibility of public transport in vulnerable socio-economic areas.

30.2.2 Themes informing the social assessment

The following themes, identified by the International Association for Impact Assessment (IAIA), informed the social assessment for the Project:

- **People's Way of Life**: How people live, work, play and interact;
- **Community**: Its cohesion, character, services and facilities, and stability;
- **Culture**: People's shared beliefs, customs, values and language;
- **The Environment**: The quality of the environment in which people live, work and socialise (e.g. dust and noise they are exposed to, their physical safety, the level of hazardous risk);
- **People's Health and Wellbeing**: The state of physical, mental, social and spiritual wellbeing;
- **People's Personal and Property Rights**: In particular, whether people are economically affected or experience disadvantage; and
- **People's Fears and Aspirations**: Perceptions about people's safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

30.2.3 NZTA policies on social effects

In addition to the IAIA recommendations, the NZTA has its own policies for the social and environmental management in the planning, construction and operation of State Highway projects[239]. Matters that must be addressed include:

- Access and mobility, the ability of State highway projects to connect users to community educational, health and recreational facilities;
- Community cohesion, particularly effects from accessibility and severance;
- Environmental externalities, including air quality, noise and vibration;
- Effects on culture and heritage, e.g. archaeological sites and people's customs;
- Visual quality and urban design, the aesthetics of the built environment; and
- Public health.

These matters were also factored into the assessment of the social effects of the Project. The overview conclusions of this work are set out below, followed by sections providing more specific assessment.

[239] NZTA Minimum Standard Z/19: Social and Environmental Management

30.3 Summary of regional social effects

30.3.1 Transport, accessibility and connectivity

The operation of the proposed Expressway is anticipated to result in significant positive social benefits for transport, accessibility and connectivity to the Wellington Region in terms of more reliable travel, improved accessibility (through reduced travel time and accessibility resilience in the event of an accident or natural disaster) and enhanced connectivity and travel safety through the Region and in and out of the local area. Construction of the Project is anticipated to cause moderate to minor adverse effects on connectivity in terms of temporary delays and inconvenience, mainly at the two locations where the proposed Expressway will join the current SH1.

30.3.2 Economic growth and development

The operation of the Project is expected to have significant positive social benefits derived from the growth and economic development that would occur through reduced travel time, travel time reliability, and improved accessibility. Construction of the proposed Expressway is expected to provide employment and opportunities to improve people's economic and social wellbeing throughout the Wellington Region (such as for those providing services for the Project and people employed in the Project).

30.3.3 Healthy communities

A reduction in traffic congestion, improved access to recreation/leisure opportunities and health services, improved traffic safety, and increased access to active modes of transport are anticipated from the Project: these improvements are anticipated to have health benefits. Vehicle emissions are anticipated to be within health standards, although some people are likely to be continue to be concerned that vehicle emissions will adversely affect their health.

30.4 Summary of social effects on the community during construction

30.4.1 Overview

Construction activity, although temporary, will affect the local communities and particularly those near construction activities.

Commencement of construction will end uncertainty about the Project proceeding or not, and as a consequence will enable people to move on with planning their lives, and to solidify their expectations and aspirations for the future. Effects on peoples' attitudes, expectations and aspirations will depend on their individual perspectives and on the level of nuisance they experience during construction.

The main social effects arising from construction activities are considered to relate to:

- physical disruption of communities and severance effects;
- construction noise and vibration effects;

- air quality effects;
- traffic and access effects;
- effects on recreational activity;
- landscape and visual impacts; and
- cultural effects

Additionally, the following are described as potential adverse social effects arising from the Project's construction:

- anxiety about construction effects; and

disruption to the community from the relocation of residents or businesses.

30.4.2 Disruption of neighbourhoods

The Project is largely within the designation footprint which has been in place in one form or another since the 1950s for prior roading project proposals, and therefore occupies an area long set aside within the community for transport purposes. However, some sections of the Project deviate from the existing WLR designation footprint, primarily near Leinster Avenue in Raumati, and in the vicinity of Puriri Avenue in Waikanae.

A total of 84 property owners (excluding the Crown and KCDC) have land that needs to be acquired in whole or in part to construct the Project. Of these, land has been acquired from 21 property owners as at February 2012. The land required from the remaining 63 property owners includes 24 houses to be removed for Project works. This in turn will require the residents to relocate, some of whom already have. Most of the households that are required to be relocated are in the vicinity of interchanges at Poplar (Raumati) and Te Moana Road (Waikanae). Five commercial businesses are also affected. The neighbourhoods in which such disruptions are:

- Disruption of the existing residential area north of Poplar Avenue in the vicinity of Leinster Avenue and SH1, with 21 properties[240] required in full, and nine in part, involving the relocation of households and two businesses.
- In Paraparaumu, in the vicinity of the Kāpiti Road interchange, five properties are required in full (two houses and three commercial buildings), and nine further properties in part.
- Disruption of the residential area north of the Waikanae River in the vicinity of Puriri Avenue and Te Moana Road with 16 properties required in full, and eight in part. This involves relocation of households and businesses where the proposed Expressway deviates from the existing designation alignment.
- In Peka Peka, five properties are required in full and two in part.

[240] The term "properties' refers to an individual landowner, noting that a landowner may own more than one parcel of land.

The social effects of the requirement for relocation of households and businesses are, to a degree, hard to quantify, as it is not certain that these households or business can or want to shift within the community. However, it is recognised that the requirement for these properties will result in disruption to and potential loss for the local communities, particularly if the people or businesses move out of the community.

To provide certainty to property owners, the Crown has initiated the process of offering to purchase directly affected land along the alignment, based on 'willing buyer / willing seller' negotiation. As noted above, at the time of lodgement, purchase agreements are in place for 21 property owners.

Current neighbourhood social dynamics have been, and will continue to be, disrupted while these property acquisition processes continue. The incidence of effects on households displaced and those who remain has been strongly felt and this has been unsettling for those involved. This has elicited a range of responses from reluctant acceptance to ongoing opposition to the Project.

30.4.3 Disruption of businesses

Project requirements necessitate displacement of two businesses at Raumati, three businesses at Kāpiti Road and three businesses at Te Moana Road, as well as operational changes for affected rural-based businesses.

The Crown is progressing acquisition agreements with all of the businesses that would be displaced. Social effects of these businesses moving to new locations are assessed to be low and the community is expected to readily adjust to their relocation.

In addition to those directly affected, businesses at other locations within Kāpiti will likely relocate in response to the proposed Expressway, either to take advantage of new traffic flows or to respond to the potential for decreased patronage at their current location. Businesses heavily dependent on passing vehicular traffic will be most affected. These effects are discussed in Chapter 29 of this AEE on economic effects. This assessment includes recognition that some businesses will benefit from construction and / or operation of the proposed Expressway, and that on balance there are net benefits to the Kāpiti District, in addition to national and regional level benefits.

In terms of RMA considerations, the nature and scale of the effects on businesses is such that it is unlikely to have a significant effect on the ability of the District's residents to provide for their social well-being.

30.4.4 Social effects of construction work

All people in the local communities will be affected in some way by construction in that it will disrupt people's patterns of movement, creating a level of disturbance, nuisance and stress. Such effects are common to all road construction, maintenance and upgrading.

The Project also would have the potential to affect daily patterns of living especially for those near construction works. Noise, dust and vibration from construction activities have the potential to effect people in and near social sites where people gather, and at residences that are near construction

activities. Several people's wellbeing and way of life will be affected, especially those who live or work near construction sites or where their property access is affected. There is likely to be disruption and periods of inconvenience for those travelling by road or bus, and for cyclists, pedestrians and horse riders.

Over the expected course of the construction phase, the social effects on the local community are expected to range widely. However, the potential adverse social effects of Project construction are generally experienced more by those living in proximity to the construction works. It is therefore important that these people are included in the communication and liaison processes over the construction period.

Management and mitigation of construction effects will be particularly important for maintaining the local communities' wellbeing and quality of life during construction. The proposed mitigation includes proactive community engagement and liaison, communication management, construction management and systems to seek to ensure that the NZTA is responsive to community concerns over the construction period, particularly vulnerable groups in the community such as elderly and the disabled.

Day time construction noise will be elevated from the current noise environment in most locations, and residents will experience some nuisance / disturbance particularly at times of noisy works. People who stay at home during the day (including people who work from home, are sick, or who work night shifts) are likely to be disproportionally affected by long periods of noisy works. As Kāpiti has an older population than the New Zealand average age profile and higher than average proportion of persons working at home, this issue is given specific attention under the CEMP in Volume 4.

The largest proportion of the construction works will be in the vicinity of the interchanges, bridges and other structures. Residents in close proximity to these areas are likely to be subjected to long periods of noisy works, and where piling works are occurring intermittent vibration effects. Effective noise and vibration management is therefore essential to reducing these noise effects as far as practicable.

Dust and sand can affect human health and be a nuisance to the surrounding public by causing deposits on and in houses, cars and washing. Dust and sand may also impact on people's enjoyment of outdoor areas and cause perceived or actual health impacts. The air quality assessment, described in Chapter 20 of this AEE and in Technical Reports 13 and 14, assesses the potential effects associated with construction (dust and vehicle emissions) along key routes – and focuses on sensitive receptors in the community, such as residential areas, schools, preschools and healthcare facilities. Management measures via the CEMP in Volume 4 are designed to seek to ensure that the adverse effects of dust will be acceptable at these locations.

During the construction phase, some suburban and rural roads will be used for construction-related traffic. Most construction related traffic movements will be directed via the current SH1 into Otaihanga Road and onto the alignment which will be used as a haul route, or via SH1 from the Peka Peka Road and Poplar Avenue intersections. Use of Kāpiti Road and Te Moana Roads will also be required.

Temporary disruption to access to and from community facilities, schools, health centres and parks (regional and district), and on cycleways and pedestrian linkages will therefore occur on an intermittent basis. There are a number of community facilities in close proximity to the Project, and there may be

some inconvenience to users of these facilities during construction, particularly in relation to access for these facilities. In particular:

- At Kāpiti Road, access to the Paraparaumu Library and community centre, Paraparaumu Airport, Paraparaumu Town Centre
- At Waikanae, access to the El Rancho Christian Holiday Camp, access to the Takamore urupā, and Waikanae River Trails
- Other key recreational facilities, including Otaihanga Bike Park and QE Park.

Requirements to comply with a Construction Traffic Management Plan in Appendix O of the CEMP (Volume 4) and the availability of alternative public access points elsewhere will seek to ensure that impacts on peoples' way of life will be acceptable and appropriately managed. Traffic effects are discussed in Chapter 12 of this AEE and in Technical Reports 32 and 33 in Volume 3.

30.4.5 Temporary Effects on Community Well- being

Construction works, especially those with long timeframes, can be socially disruptive and have the potential to represent an annoyance to surrounding residents and road users. Good management of these construction works will influence the community's acceptance of these works and the degree to which their quality of life is affected.

Until the works begin, some residents are likely to remain unsure and may be anxious as to what they will be facing. Provision of quality information to enable people to understand the nature and duration of effects facing them is important to help lessen this source of anxiety.

For some residents, there will be a sense of relief once construction of the Project finally starts, given the long duration of previous designations and the speculation and uncertainty about various project proposals that have spanned many years. This relief, however, may be tempered by the extent to which they are directly affected by the length of construction period.

As described above, it will be important to have an effective communications process over the construction period of the Project to minimise the degree of uncertainty.

30.4.6 Temporary benefits of construction to the community

Around 500 construction workers are likely to be engaged over the peak construction periods. There will be an influx of construction workers at the major construction sites, predominantly around bridges and structures. This may bring significant benefits, particularly in terms of increased spending at local businesses (especially food outlets).

30.5 Social effects from the operation of the proposed Expressway

There are a number of operational consequences of the Project, outlined in the SIA, which may impact on people's wellbeing and way of life. The following sections outline the long-term social impacts, and cross reference to the relevant Chapter and technical report for more information on specific effects.

30.5.1 Overview

By the time the Project is constructed, most residents can be expected to have factored the Project into their own expectations and aspirations about the future of their lives and communities. This is particularly the case given the relatively long construction period associated with the Project (four years). Based on the feedback received during consultation, the proposed Expressway coming into operation is an experience that some people have not been looking forward to, particularly those living in close proximity to the Project. Conversely, a significant proportion of the feedback received indicates that many in the community will welcome the proposed Expressway coming into operation.

The proposed Expressway will be a new transport option for local communities. It will offer greater access and shorter travel times to educational and social services, and reserves and recreation. It is expected that there will be improved travel experiences for vehicle users, public transport users, and cyclists and pedestrians. Economic benefits are anticipated from these including increased attractiveness of the local area to businesses, employment opportunities, and reductions in unemployment and underemployment.

However, the proposed Expressway is likely to have a severance effect to some extent, especially in Paraparaumu and Waikanae. While the proposed Expressway will reduce traffic volumes on many local roads and maintain all east-west local road connections, it will create some physical severance: in particular, Leinster Avenue will become a cul-de-sac, and some existing informal walkways across the designation corridor will be severed. In addition, the changing nature of traffic in some neighbourhoods may affect the ease of connectivity across some routes (for example, because of anticipated future traffic volumes on Park Avenue). These changes, as well as the presence of a long hard linear section of infrastructure will also present a psychological severance for some residents.

Noise effects of the operational proposed Expressway have perhaps the greatest potential effect on the wellbeing and quality of life of residents in the local communities. Given the existing moderate to low-noise environment where the Expressway is proposed, the Project will increase ambient noise levels, especially for residents close to the proposed Expressway in areas where there is little existing traffic noise. The noise mitigation measures proposed have been identified as the 'best practicable option' by those specialists involved in that design process. These options have taken into account the need to mitigate effects beyond the physical effects of noise; for example, the visual and amenity effects of noise barriers. Overall, the proposed noise mitigation will ensure residents will retain an appropriate quality for their living environment, although it is acknowledged that this change will not necessarily be acceptable to all affected residents as it still reflects a change from their current situation. For some others, the quality of life is anticipated to be improved by greater access to and improved travel times on the proposed Expressway.

Overall, the range of social effects of operation of the Project for the local communities is anticipated to range from significantly adverse (particularly in regard to some people's attitudes and expectations) through to significantly positive (particularly in regard to the Project's economic and travel benefits).

The following section assesses some of the long-term effects on the communities' social well-being in greater detail:

- Severance Effects

- Effects on Community Health
- Effects on Living Environments
- Effects on Recreational Values
- Effects on Community Well-being

30.5.2 Severance effects

There are two aspects to considering what is known as the 'severance effect' of constructing a new road such as an expressway:

- the physical disruption to connectivity and movement (both vehicular and non-vehicular), and
- the perception of severance from establishing a long linear hard section of infrastructure.

30.5.2.1 Connectivity and movement

Generally, the Project will reduce vehicular travel distances and maintain or enhance accessibility and connectivity within and between the communities within the Project Area. This is achieved through:

- Provision of a new walking / cycling path alongside the proposed Expressway and connections to the local KCDC Cycling / Walking / Bridleway network,
- Maintenance of all major east to west local road connections,
- Retention of urban local road crossings at grade below the proposed Expressway to support walking, cycling, and recognising the needs of the mobility impaired;
- The reduction of traffic volumes on many local roads, as well as the existing State Highway;
- Provision of new pedestrian footbridges to offset loss of current informal tracks across the existing designation alignment;
- Enabling easier access to rail and bus stations as traffic on the existing SH1 will be reduced once the Project is operational; and
- Enabling consideration of options for new bus 'loop' services via the proposed Expressway.

These outcomes are considered to result in positive social impacts on people's patterns of daily living, and there will be an overall net benefit to people's access to and use of the State highway network and local roads.

Improved accessibility along the proposed Expressway will result from the provision of an additional bridge crossing at Waikanae. Full interchanges at Kāpiti and Te Moana Roads will benefit people's patterns of daily living by improving connectivity and reducing travel times. This includes improving connectivity to local places of work, leisure, and community facilities, as well as to other areas in the Wellington region and facilities of regional importance, such as the Wellington Regional Hospital and Wellington International Airport.

The Project is identified as having the potential to enhance the overall level of business investment and development[241]. While any adverse business displacement effects at Waikanae, Paraparaumu and other Kāpiti locations are likely to be business-specific and localised, the broader impacts of the proposed Expressway on business activity is considered to be positive.

While there has been comment from some residents and businesses at Peka Peka who feel disadvantaged by the proposed partial interchange in that location, which would not provide either for local traffic to travel south on the proposed Expressway, or for northbound traffic coming off the proposed Expressway to Peka Peka. However, given the small population in the vicinity and the alternative routes for local traffic to travel south and north (via either the existing State highway and via the coastal road), this effect would be a relatively confined impact.

A significant beneficial impact for the residential communities along current SH1 is the overall reduction in traffic, as well as the reduced severance from facilities such as train and bus stations at Paraparaumu and Waikanae. In this instance, 'severance' is used to describe the effects of roads and traffic that physically separate a community from other communities or community services and facilities. Roads and traffic can affect social interaction and accessibility, particularly when the roads are wide and/or there is a high volume of traffic as is presently the case with current SH1. The current SH1 also presents difficulties for local traffic entering the State highway network. The safety record of the current SH1 within the Project area is poor. Community perceptions are that there is danger associated with living near the current SH1 due to access concerns and safety concerns regarding walking alongside it in higher speed limit sections.

The improved ease of access across the existing SH1 to public transport facilities, and community and residential areas in eastern Waikanae, will reduce severance perceptions for private residences that are accessed off SH1. The redevelopment of the existing SH1 will, enhancing opportunities for amenity improvements at town centre frontages to current SH1 at Paraparaumu and Waikanae.

Potential enhancement of the urban environment along the existing SH1 once the proposed Expressway is in operation is being jointly investigated by KCDC and NZTA, and received overwhelmingly favourable responses from the community during consultation.

Public transport commuters and residents have stated that crossing current SH1 presents a number of safety and mobility issues for residents and is an existing community severance issue, posing both a real and perceived barrier.

30.5.2.2 Severance perception

The proposed Expressway would introduce a significant new infrastructure element into what is a perceived as an open and relatively undeveloped and natural environment, compared with adjacent developed areas. The introduction of the Project is therefore likely to alter the sense of connection

[241] *Kāpiti Employment Areas Study*, October 2011, produced by Property Economics Limited for Kāpiti Coast District Council.

across the designation, notwithstanding that all main east-west road and pedestrian linkages will remain intact and at grade after the proposed Express way is constructed.

The proposed Expressway design utilises a range of design solutions seeking to lessen 'barrier' perceptions such as:

- Choice of alignment to set the proposed Expressway into the landscape and make it less prominent through shielding by land contours, use of landscape planting, provision of bunding, and structural design choices;
- Where, practicably, the proposed Expressway has to be elevated, design attention has been given to the experience of passing under the proposed Expressway bridges, and for those living or moving alongside the proposed Expressway, including through proposed planting and screening; and
- Provision of cycleway / walkway / bridleway facilities along the proposed Expressway and linking to the Kāpiti Coast District Council paths network; this would assist the sense of connection through clear means of accessing neighbourhoods along and across the proposed Expressway.

The Project, particularly in those sections of the alignment that deviate from the WLR road and previous motorway designations, will cause some physical disruption of the existing urban fabric and may give rise to perceptions of severance in some locations. In particular, the Project would create the perception of a 'barrier' between neighbourhoods on either side of the proposed Expressway due to the scale and operational characteristics of the proposed Expressway.

The significant reduction in traffic on the existing SH 1, particularly heavy vehicles, will reduce the severance effects that such traffic have on the existing communities in Waikanae and Paraparaumu. It would also provide an opportunity to further reduce this perception by enhancements that could be made to the road environment.

Users of informal walking tracks across the existing designated land face physical disruption of these links during the construction and into the operation of the proposed Expressway. The proposed Expressway would cut off some informal walking tracks across the existing designation, particularly in Raumati South and between Kāpiti and Mazengarb Roads. Project analysis of walking movement 'desire lines' has identified what are considered to be optimal locations for reinstating connections via two pedestrian over bridges. Once the proposed Expressway has been constructed, this connectivity will be largely reinstated through two new pedestrian bridges across the proposed Expressway at Raumati South and Paraparaumu, in conjunction with the proposed Expressway long walkway/cycleway. Nonetheless, perceptions of severance are likely to arise for some users of informal tracks.

30.5.3 Effects on community health

The proposed Expressway design and associated improvements to the overall transportation network will bring about significant improvements to road safety.

This will have a positive impact in relation to the health / wellbeing of local residents (as well as road users from elsewhere in the Region). The existing SH1 along the length of the Project has a poor crash rate history, including three fatalities in 2011.

The Project is expected to significantly improve road safety performance by providing a road built to improved modern design standards. The Project will feature safety measures, such as a continuous median barrier separation for northbound and southbound traffic and grade separated intersections. The overall effect will be improved road safety for road users. There will also be benefits for the communities along the existing SH1 where traffic will reduce.

At Kāpiti Road and Te Moana Road in particular, as well as at Poplar Avenue and Peka Peka Road, the interchanges will introduce increased traffic volumes. This has the potential to decrease road safety for people within these areas. However, the proposed design of the Project, including some proposed works on the sections of local roads which tie in to the Interchanges will mitigate the potential adverse effects of increased traffic for road users and for pedestrians and other users such as cyclists in these areas.

The incidence of crime is often reduced when areas are lit at night time and have increased traffic volumes. As such, this is a positive effect resulting from the operational phase of the Project, especially in areas that previously had low traffic numbers, such as in Peka Peka. Offsetting this will be some people's desire for quietness and not having lighting in rural areas.

In terms of route security and resilience, the existing SH1 between MacKays Crossing and Peka Peka is vulnerable to several threats which collectively reduce the security of the route. Primary risk events are large earthquakes, high rainfall events which cause flooding, and road traffic crashes. The Project will improve the security of the State highway network and the security of the Regional and District road network by providing an alternative route to the current SH1. The modern design standards will also provide increased resilience to natural hazards.

The result of this is the likelihood of a reduced network closure period in the event that the Main Alignment is affected by any of these threats, providing a positive effect for people's wellbeing. Reduced road closure periods allow for more rapid response by emergency services and improved access to regional hospital facilities and recovery logistics hubs following a major natural disaster.

The Project will also provide additional access options to key electricity transmission, gas and water infrastructure following an event. The availability of alternative routes will also allow traffic to be diverted, rather than stopped, in the event of a road closure on one of the routes. These measures positively impact on people's confidence in the transport network and on their health and safety.

30.5.4 Effects on living environments

In terms of the effects of the proposed Expressway on the sense of place and neighbourhood character, the potential impacts in relation to people's expectations of local character vary between community areas, and according to people's individual expectations.

For example, the 400-plus residences alongside the current SH1 will experience the operational 'reality' of the proposed Expressway as a decrease in traffic locally which is highly likely to be perceived to be an

improvement to the existing environment. In other areas, impacts on people's local living environment will be significant and permanent, such as adjacent to the proposed Expressway in the vicinity of Te Moana Road. The physical presence of the proposed Expressway will be a psychological barrier for some people affecting their sense of local character.

For the rural section of the Project (i.e., between Ngarara Road and Peka Peka) there will be a significant change to the local character and landscape caused by the new road structure and associated traffic. Given the general absence of community infrastructure in the area, services and facilities are not affected.

Varying in extent between community areas, the Project will result in a permanent alteration to the local character of areas along the alignment, including:

- For the MacKays to Poplar Avenue segment of the Project, the change in character will generally be caused by the effects experienced by QE Park users who are already in an environment affected by the existing SH1.
- From Poplar Avenue to south of Raumati Road, the proposed Expressway and structures are located within new designation boundaries, creating exposure to new noise and activity levels.
- From Raumati Road to Kāpiti Road, the proposed Expressway and structures will generally be located consistent with existing designation boundaries as they affect the communities and will form an edge effect.
- The interchange at Kāpiti will introduce a change of character to the business and community areas particularly in terms of new structures, including noise barriers, and increased volumes of traffic and the consequential increased sense of activity.
- Residential areas north to Mazengarb Road and the Waikanae River will experience a change in local character because of modification of the current rolling dune landscape, and some properties will have views of the new road.
- At Waikanae River to north of Te Moana Road, residents and recreational users will experience exposure to new noise and activity levels as well as an edge effect to adjacent properties.
- North of Te Moana Road to Peka Peka, the semi-rural and rural experience will significantly alter with exposure to new noise and activity levels, as well as an edge effect to adjacent properties.

As previously discussed in relation to connectivity and movement, there will be a corresponding reduction in severance caused by the volume and nature of traffic on the existing SH1, which increases accessibility and safety. Reduced severance can also improve the amenity and local character of these locations and communities.

Given the level of attention that has been given to the design of the proposed Expressway alignment, intersections, pedestrian facilities, walkways and cycle-way connections, and landscape and ecological planting, while it will alter the character of communities along the route, it is anticipated that the actual effect of the Project on the living environment and people's sense of place will not be significant.

The main visual effects during the construction phase will arise from earthworks modifying existing landforms including the dunescape through ground improvement activity, cut and fill works, and the building of structures.

In addition, other visual effects will arise from construction yards, partially completed road elements, and concentrations of vehicles and machinery at the construction sites.

These elements will represent a significant change in the amenity and the 'look and feel' of neighbourhoods adjacent the Project, in rural areas, and in recreation areas such as at the Waikanae River Trails, and QE Park.

For those who will have a view over construction sites as it is likely that construction will span a four to five year period means these effects are of a moderately long duration. This may affect people's pride in their neighbourhood. However, as the visual effects of construction are temporary, it is not considered to have a significant impact on wellbeing or way of life. Some people will have a genuine interest in the construction work and activity in their neighbourhood and may consider that the visual impact of construction is not an adverse effect.

Landscape and visual effects are discussed further in Chapter 17 and in Technical Report 7.

30.5.4.1 Noise and vibration

All properties near the main alignment of the proposed Expressway and those which are considered to be sensitive receptors – including schools and residential properties, care centres and churches – have been assessed against the New Zealand Standard 6806:2010 Acoustics: Road Traffic Noise.

Without any mitigation and management measures it is likely that there will be adverse effects to surrounding communities at numerous residential sites, and facilities arising from noise. Project design has therefore included:

- noise reducing road surfacing,
- a wide designation footprint (generally around 100m) to enable greater separation from properties and to enable mitigation measures such as bunds to be 'designed in', and
- noise barriers where typography or other considerations mean the above responses are not practical.

These measures will ensure received noise is within New Zealand standards. Noise effects are discussed in Chapter 19 of this AEE and the Technical Reports 15 to 19.

Heavy vehicles on roads can generate vibration that travels through the ground to nearby houses. Typically, this vibration will be well below limits set to avoid structural damage to houses or cosmetic damage such as cracking plaster and paintwork. Vibration levels reduce as vibration travels further away from a road. A detailed assessment of road-traffic vibration has been conducted (refer to Chapter 19 of this AEE and Technical Report 18 in Volume 3), which includes measurements of vibration from test sites in Kāpiti.

The noise effects of the proposed Expressway once it is in operation have perhaps the greatest potential effect on the wellbeing and quality of life of residents in the local communities. Overall, the proposed noise mitigation is considered to enable residents to retain an appropriate quality of living environment. However, it is acknowledged that this change will not necessarily be acceptable to all affected residents as it still reflects a change from their current situation.

30.5.4.2 Air quality

Vehicle emissions and the potential adverse health impacts associated with these emissions are a potential impact relating to the operational phase of the Project. Air Quality effects are outlined in Chapter 20 of this AEE and in Technical Reports 13 and 14 (Volume 3), and should be read in conjunction with the Traffic and Transport Chapter 12 and associated Technical Reports.

Traffic volumes are predicted to increase at locations near proposed Expressway interchanges, particularly Kāpiti Road and Te Moana Road, once the Project is operational. Traffic volumes are predicted to decrease along the length of current SH1 through the established residential communities and business areas north of Poplar Avenue, through the Paraparaumu and Waikanae town centres, and north to Peka Peka Road. Traffic volumes on many other local roads are also expected to reduce once the proposed Expressway is in operation.

30.5.4.3 Amenity values

The completed Project will represent a significant change in the amenity values[242] of the area for local residents, with potential adverse noise and visual effects, particularly for those with a view of the Main Alignment, bridges and structures. Effects on amenity values are further discussed in the Urban Form Chapter 16 and in Technical Report 6.

There will be an adverse effect on amenity values arising from the removal of the contribution that the undeveloped designation corridor currently provides to the neighbourhoods along its alignment. At present, the designated land has a natural and, in many locations, quiet character. This will be fundamentally changed by the proposed Expressway in some locations, for example in the vicinity of Puriri Road, Waikanae.

There will be an effect on the amenity values of QE Park as the proposed Expressway alignment cuts through at its northeastern corner, a part of the Park that is generally unused by the public.

[242] 'Amenity values' under the RMA mean those natural or physical qualities or characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

30.5.5 Effects on recreational values

The proposed Expressway will have some effects on the community's ability to access and enjoy the recreational opportunities in the District. Some of these effects will be beneficial, particularly in terms of providing increased connectivity and access and the enhancement of the area's cycling and walkway network.

At the southern end of the Project, while the route will permanently remove approximately 4 hectares of QE Park, pedestrian and cycle linkages will be maintained and enhanced across the Project, and the NZTA is working with GWRC and DOC on measures to improve cycling facilities within QE Park that can link with the proposed walkway/cycleway along the proposed Expressway corridor. NZTA is also working towards offsetting the QE Park land required for the proposed Expressway with an equivalent area of land in a location adjacent to the Park. This process is occurring outside the NoR process, as it involves other statutory processes and agreements.

During construction there will be disruption and changes to the northeastern corner of the Park (currently used for farming purposes) to build the north bound off-ramp at Poplar Avenue, and to establish set down areas and temporary yards for construction activities. Approximately 10.85 hectares are required on a temporary basis. The effects of these works include the need to limit public access in the vicinity of Poplar Avenue for the construction set down and yard area, and traffic management arrangements to ensure safety of those walking and cycling in the Poplar Avenue vicinity.

The Waikanae River Trails and Wharemauku Stream walkway are moderately to heavily used by the community. Bridge construction at these locations will temporarily affect the use and enjoyment of these specific locations. Pedestrian and cycle activity on local roads crossed by the proposed Expressway will also experience localised effects. Requirements to comply with a CEMP and the availability of alternative public access points will seek to ensure that the impacts on peoples' way of life will be acceptable and that safety will be appropriately managed.

At the Waikanae River Trails, physical access will be maintained during construction by using diversions and keeping at least one trail open at all times. On completion, the proposed Expressway design incorporates measures to seek to ensure that the pedestrian environment under the proposed Expressway bridge continues to invite use of these routes.

There will be longer-term effects on the amenity values of the Waikanae River Trails once the Project is operational. However, the design of the proposed Expressway includes a number of mitigation measures beyond those achieved through choice of Project alignment and designation width:

- Quality of design for bridges and structures,
- Provision of bunds and planting for many affected visual outlooks,
- Noise bunds and barriers for increased noise effects.

It is considered that implementation of these will reduce the potential amenity related adverse effects to acceptable levels.

Horse-riding in the vicinity of Raumati Road and through the northern portions of the Project area is identified in the SIA as an important recreational activity, both on private land and on local roads. There may be some disruption to this activity during construction of the Project resulting from additional construction traffic on roads causing safety concerns, and from occupation of publicly owned land (i.e., in the vicinity of the Waikanae River). Similarly, construction of the Project has the potential to affect the regional cycle route via SH1 at MacKays Crossing through the Raumati Straight and to the north.

There will be other effects on recreation as a result of the construction of the Project. Water based recreation may be affected, as people are less likely to swim, fish or participate in water sports if the water quality of Waikanae River and other streams and / or the Waikanae Estuary is perceived to be affected; for example, by any temporary sedimentation resulting from the Project.

Management measures are to be put in place to seek to ensure that the adverse effects on water quality will not be significant during the construction of the Project, to reduce the risk of recreational opportunities being affected.

Construction of a north / south cycle and walking path as part of the Project, linking to KCDC networks and regional routes (via QE Park) to the south offers significant recreational value to the community.

30.6 Conclusions of the social effects assessment

From a regional perspective, it is anticipated that there will be significant social benefits resulting from the Project, particularly economic and transport/accessibility benefits. The Project is also expected to yield economic and accessibility benefits to the District and local communities, with consequential social benefits. However, there are negative social effects of the Project, which are borne predominantly by those in close proximity to the Project, particularly those neighbourhoods immediately adjoining the proposed Expressway. It is also recognised that the presence of the proposed Expressway in the local communities will result in a change to the character of those communities.

Given the alignment and design of the proposed Expressway has sought to either maintain the existing level of connectivity, particularly in regard to east-west links, or to enhance such connectivity (such as by providing a second crossing of the Waikanae River and by developing a cycleway/walkway the length of the Project), the actual physical extent of severance would be minor. However, it is acknowledged that, for some residents, the physical presence of the road will be perceived as a psychological severance.

Many of the negative social effects would occur during construction. It is important that these effects are monitored and mitigated through effective construction management, communication and community liaison.

The Project design has mitigated a number of potentially negative social effects (including the reduction of reducing the acoustic and visual effects of the proposed Expressway, and maintaining local accessibility in the local communities).

30.7 Measures to avoid, remedy or mitigate actual or potential adverse effects on the social environment

The SIA identifies a range of significant benefits arising from the construction and operation of the Project. There will also be adverse social effects associated with the Project, primarily of a temporary nature arising from transitional effects on residential, business and rural environments adjusting to the presence of the proposed Expressway.

30.7.1 Mitigation of social effects on the region

To address the potential effects of construction in particular, it is proposed to continue to engage and communicate with people in the Region over this phase of the Project. In particular, the importance of keeping the community informed on construction activities and potential accessibility / travel time impacts of construction will provide opportunity for reducing the social disruption due to construction effects; for example, by allowing people to plan for travel time delays.

With mitigation measures in place, the overall effects of the Project on the Region are anticipated to range from moderately negative on occasions during construction to significantly positive when the proposed Expressway is in operation.

30.7.2 Mitigation of social effects on the community

From the SIA, the following primary potential adverse social effects from construction and operation were identified:

- community anxiety (construction phase)
- noise and vibration (construction and operational phases);
- air quality (construction phase);
- traffic and access (construction and operation phase);
- amenity (operational phase);
- recreation (construction and operational phase);).
- local character changes (construction and operational phase).)

For the construction phase of the Project, the CEMP in Volume 4 and its subsidiary plans for noise / vibration, air quality and traffic are used and will form part of the suite of consent and designation conditions. The NZTA will require its contractors to perform to a high level in relation to managing stakeholder and community expectations.

Communication will be the key tool to manage effects, allowing the NZTA and the contractors to understand how the community feels and ascertain the most appropriate way to manage community concerns. The NZTA would commit to:

- Being proactive and providing clear information on the Project in a timely manner,
- Engaging in dialogue on Project timing and options as they affect specific properties, and

- Providing an avenue for certainty and closure by purchasing affected properties, offering to purchase property ahead of the proposed designation being confirmed.

As described above, the NZTA is proposing to undertake a number of other measures that would occur under other statutory processes outside the framework of the RMA. These measures also require the agreement of key stakeholders, and are therefore not appropriate to regard as potential conditions of the designation/resource consents.

A table summarising the principal mitigation measures that are proposed to be undertaken by the NZTA to address the actual or potential social effects is presented below. Many these measures have been proposed in regard to other specific effects of the Project, and therefore duplicate other measures proposed by the NZTA. These measures are in addition to the mitigation proposed as part of the overall design of the proposed Expressway.

Table 30.1: Mitigation measures for Social Effects

Identified actual or potential effect	Method to avoid, remedy or mitigate potential effect
Adverse construction effects	▪ Implementation of a Stakeholder Communication Management Plan ▪ Implementation of a CEMP (in Volume 4), including communications strategy and processes to respond to queries and complaints ▪ Establishment of a local liaison group(s) with representatives of affected communities ▪ Provision of updates on construction to local and wider communities, with contact details and processes for engaging with the NZTA ▪ Post-construction return of land not required for Project operation as soon as is practicable
Community Anxiety	▪ Regular communications and project information on timelines, sources of information, and advice ▪ Continuation of active property purchase programme by the Crown ▪ Liaison person to answer queries and concerns
Adverse effects on living environment	▪ Mitigation of construction noise and vibration as recommended in Chapter 19 (Noise and Vibration) of this AEE, and to be set out in the CEMP (Volume 4) ▪ Noise bunds and planting incorporated as set out in Chapter 17 (Landscape and Visual) of this AEE ▪ Quality design of structures to mitigate adverse visual effects as set out in Chapter 16 (Urban Form & function) of this AEE ▪ Opportunities to include the community in the implementation of the landscaping design (for example, community planting days) ▪ The design of urban area bridges and structures applies CPTED principles to encourage safe and useable facilities
Adverse potential adverse effects on recreation:	▪ The Construction Traffic Management Plan (Appendix O of the CEMP, Volume 4) recognises and provides for recreational activities which use many local roads ▪ Maintain provision for walking and cycling along the Waikanae River and Wharemauku Stream corridors during construction ▪ Effects on water quality are managed through methods for erosion and sediment control
Severance	▪ Liaison with KCDC to determine appropriate locations for proposed pedestrian crossings of the proposed Expressway at Raumati and Paraparaumu