Eastern Busway

EB2 and EB3 Residential

Social Impact Assessment

Document Number: EB234-1-PL-RP-Z2-000029

Eastern Busway

Quality Information

Document Number: EB234-1-PL-RP-Z2-000029

Document History and Status			
Rev	**Date**	**Author**	**Status**
A	14 July 2022	Kate Symington and John Daly	Draft for review

Document Approval					
Rev	**Action**	**Name**	**Position**	**Date**	**Signature**
A	Reviewed by	John Daly	Social Impact Lead	14 July 2022	On file
1	Approved by	Roger McDonald	Principal Alliance Planner	20 July 2022	On File

Table of Contents

Figures

Tables

List of Abbreviations and Definitions

Abbreviation and Definitions	Description
AEE	Assessment of Environmental Effects
AUP(OP)	Auckland Unitary Plan (Operative in part) 2016
CEMP	Construction Environmental Management Plan
CPTED	Crime Prevention Through Environmental Design
EB1	Eastern Busway 1 (Panmure to Pakuranga)
EB2	Eastern Busway 2 (Pakuranga Town Centre)
EB3 Commercial/ EB3C	Eastern Busway 3 (Gossamer Drive to Botany)
EB3 Residential/ EB3R	Eastern Busway 3 (SEART to Gossamer Drive)
EB4	Eastern Busway 4 (link between Ti Rakau Drive and Te Irirangi Drive, Botany Town Centre Station)
EBA	Eastern Busway Alliance
ETBP	East Tāmaki Business Precinct
GIS	Geographic Information Systems
HWCN	Howick Walking and Cycling Network
ITA	Integrated Transport Assessment
km	Kilometre(s)
LBA	Local Board Area
LBP	Local Board Plan
m	Metre(s)
m^2	Square Metre(s)
m^3	Cubic Metre(s)
MCA	Multi Criteria Analysis
NPS - UD	National Policy Statement for Urban Development 2020
NoR	Notice of Requirement
PTCMP	Pakuranga Town Centre Masterplan
PWA	Public Works Act 1981
RTN	Rapid Transit Network
RRF	Reeves Road Flyover
RMA	Resource Management Act 1991
SEART	South-Eastern Highway

Executive Summary

This Social Impact Assessment (SIA) has been prepared to support the assessment of environment effects (AEEs) for the Eastern Busway 2 (EB2) and Eastern Busway 3 Residential (EB3R) sections of the Eastern Busway Project (the Project). It assesses the potential social impacts from the construction and operation of the Project and recommends mitigation and management measures.

This SIA has been prepared following the methodology set out in the International Principles for Social Impact Assessment prepared by the International Association for Impact Assessment (IAIA). The SIA has been informed by stakeholder and community consultation undertaken for the Project as well as the community profile of the study area. Other technical assessments have been reviewed to inform the SIA.

EB2

During construction, delays and congestion due to changed road conditions and altered access arrangements may result in a moderate adverse social impact rating as a result of stress and frustration likely to be experienced by the community. However, with mitigation this reduces to **low** adverse social impact rating.

The displacement of healthcare facilities for the construction of EB2 has the potential to be an up to moderate adverse social impact rating. Impacts to open space, mainly Ti Rakau Park, are limited but could result in moderate adverse social impact rating. Advance notice has been provided to all properties affected by the project however there will still be impacts to patients and may create uncertainty for the community. With mitigation this reduces to **low up to moderate** adverse social impact rating.

Changes to property access are likely and will be moderate adverse reducing to **low** adverse with mitigation. The displacement of residents and businesses will have a potential high adverse social impact rating. These impacts can be mitigated through early and ongoing engagement with affected owners and tenants and effective communication during construction works. With mitigation this reduces to **low up to moderate** adverse social impact rating.

During operation there is likely to be a **positive** social impact rating with transport network improvements resulting in greater connectivity for local communities. There will also be improved safety for pedestrians and cyclists which will improve accessibility and reduce severance effects for nearby residents to and within the town centre.

EB3R

During construction, delays and congestion due to changed road conditions and altered access arrangements may result in a moderate adverse social impact rating. These effects can be mitigated through early notification to minimise journey disruption. With mitigation this reduces to **low** adverse social impact rating.

Access changes and relocation to social infrastructure at 205 – 229 Ti Rakau Drive could disrupt people accessing these services and facilities. There is the potential for a moderate adverse social impact rating as a result of changes in access to these services and facilities. With mitigation this reduces to **low** adverse social impact rating.

Several education and early education facilities are located along construction vehicle routes. Safe crossings will be retained for users of these facilities and notice of construction vehicle routes is recommended. The social impact rating is considered **low** adverse.

There is a moderate adverse social impact rating for the potential loss of open space at Riverhills Park. This loss will be as a result of temporary occupation during construction and permanent loss along Ti Rakau Drive during operation. However, with mitigation this reduces to **low** adverse social impact rating.

The displacement of residents and businesses will have a potential high adverse social impact rating. These impacts can be mitigated through early and ongoing engagement with affected owners and tenants and effective communication during construction works. With mitigation this reduces to **low up to moderate** adverse social impact rating.

During operation some minor streets will have left only access to Ti Rakau Drive, this is not expected to increase journey time and is considered to have a **low** adverse social impact rating.

New bus stations and a dedicated busway will improve public transport options, including frequency of services and potentially new routes. These connections will enable communities to better connect with the wider area. The operation of the Project is likely to result in a **positive** social impact rating in terms of connectivity.

Management and mitigation

Mitigation and management measures have been set out in Section 8.1 to minimise any adverse social impacts during construction and operation of EB2 and EB3R.

The SIA recommends early engagement be implemented throughout design, construction, and operational phases to keep the community informed and respond to any concerns or complaints. Specific measures are recommended for displacement and business disruption such as providing information to landowners and tenants and ensuring access and frontages are maintained as far as possible. Monitoring is also recommended to analyse the effectiveness of the identified mitigation and management measures.

1.0 Introduction

1.1 Overview of the Eastern Busway Project

The Project is a package of works focusing on promoting an integrated, multi-modal transport system to support population and economic growth in southeast Auckland. This involves the provision of a greater number of improved public transport choices and aims to enhance the safety, quality and attractiveness of public transport and walking and cycling environments. The Project includes:

- 5km of two-lane busway
- New bridge for buses across Pakuranga Creek
- Improved active mode infrastructure (walking and cycling) along the length of the busway
- Three intermediate bus stations
- Two major interchange bus stations.

The Project forms part of the previous Auckland Manukau Eastern Transport Initiative (AMETI) programme (the programme) which includes a dedicated busway and bus stations between Panmure, Pakuranga and Botany town centres. The dedicated busway will provide an efficient rapid transit network (RTN) service between the town centres, while local bus networks will continue to provide more direct local connections within the town centre areas. The project also includes new walking and cycling facilities, as well as modifications and improvements to the road network.

The programme includes the following works which do not form part of the Eastern Busway Project:

- Panmure Bus and Rail Station and construction of Te Horeta Road (completed)
- Eastern Busway 1 (EB1) – Panmure to Pakuranga (completed).

The Eastern Busway project consists of the following packages:

- Early Works Consents – e.g. William Roberts Road extension from Reeves Road to Ti Rakau Drive
- Eastern Busway 2 (EB2) – Pakuranga Town Centre, including the Reeves Road Flyover (RRF) and Pakuranga Bus Station
- Eastern Busway 3 – Residential (EB3 Residential) – SEART to Gossamer Drive, including Edgewater Bus Station
- Eastern Busway 3 - Commercial (EB3 Commercial) – Gossamer Drive to Guys Reserve, including Riverhills bus station and two new bridges, and an offline bus route through Burswood
- Eastern Busway 4 – Guys Reserve to a new bus station in the Botany Town Centre, including a link road through Guys Reserve.

The overall Project is shown in Figure 1 below.

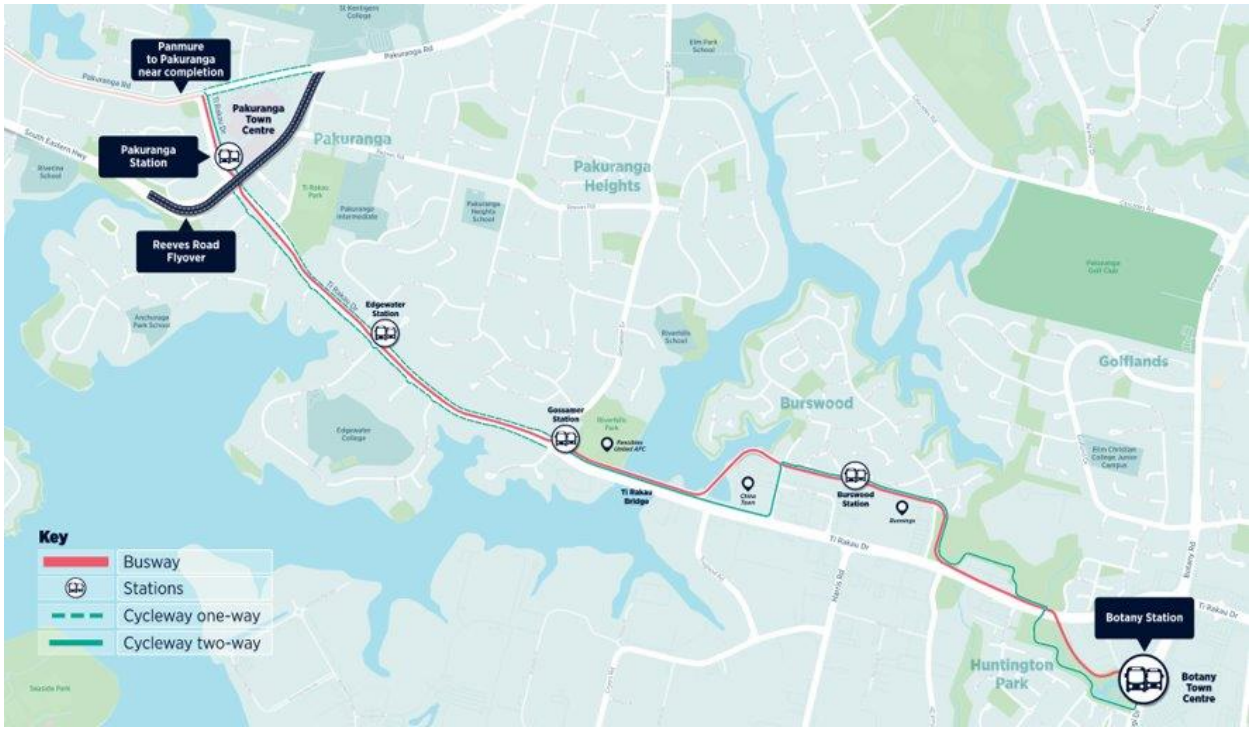


Figure 1 Project alignment

1.2 Project Objectives

The Project Objectives are:

1. Provide a multi modal transport corridor that connects Pakuranga and Botany to the wider network and increases access to a choice of transport options
2. Provide transport infrastructure that integrates with existing land use and supports a quality, compact urban form
3. Provide transport infrastructure that improves linkages, journey time and reliability of the public transport network
4. Contribute to accessibility and place shaping by providing better transport connections between, within and to the town centre
5. Provide transport infrastructure that is safe for everyone
6. Safeguard future transport infrastructure required at (or in vicinity of) Botany Town Centre to support the development of a strategic public transport connection to Auckland Airport.

The Project Objectives have been considered in relation to this assessment, with those particularly relevant to the assessment being Objectives 1 to 5.

2.0 Proposal Description

The below is a summary of the works proposed within the EB2 and EB3R packages. Refer to the AEE for additional detail on the works proposed.

2.1 Eastern Busway 2

The EB2 section of the Project commences from the intersection of Ti Rakau Drive and Pakuranga Road, connecting with EB1, and traverses east along Ti Rakau Drive to the intersection of SEART. The north-south extent of EB2 is between SEART and Pakuranga Road along Reeves Road and William Roberts Road. The main components of EB2 are described below.

2.1.1 Busway and Pakuranga Town Centre Bus Station

A segregated dedicated two-way busway is proposed along Ti Rakau Drive to provide prioritised access for bus services between Pakuranga Town Centre and Botany. From Pakuranga Road to SEART, the busway will run on the northern side of Ti Rakau Drive.

The proposed Pakuranga bus station is a key facility for services running to and from the Panmure Station Interchange, Howick, Highland Park, Eastern Beach, Bucklands Beach and Sunnyhills. The bus station will be located along the northern side of Ti Rakau Drive, on land currently occupied for Pakuranga Plaza and 26 Ti Rakau Drive. The bus station will feature two platforms and will contain a mixture of street furniture and structures, including bus shelters, electronic messaging signage and seating. New proposed pedestrian crossings will provide connections to the bus station and Pakuranga Plaza. Modifications to the Ti Rakau Drive median strip, landscaping, and general traffic lane reconfiguration will enable safe and efficient bus movement for the busway once it becomes operative.

2.1.2 Reeves Road Flyover (RRF)

The RRF will provide two general traffic lanes in each direction connecting SEART to Pakuranga Road, to reduce local traffic congestion along Pakuranga Road and Ti Rakau Drive. The RRF will start opposite Paul Place Reserve, pass over Ti Rakau Drive and Reeves Road, before finishing at a new intersection with Pakuranga Road. Traffic lanes for the RRF will be elevated and run through the centre of SEART, requiring the relocation of the SEART off-ramp to the north of the existing off-ramp.

2.1.3 Walking and Cycling Facilities

EB2 includes improvements to active transport infrastructure and connections. This includes a new cycleway, improved footpaths, and new pedestrian crossings. These works will improve the safety and connectivity of walking and cycling links across Pakuranga Town Centre.

2.1.4 Supporting Works

A range of works will be undertaken in support of the EB2 package. This includes the relocation of network utility services, new street lighting, earthworks, removal of vegetation, landscaping, stormwater upgrades, environmental restoration and mitigation and temporary construction sites.

2.2 Eastern Busway 3 Residential

The EB3R section of the busway is a continuation of EB2 from the intersection of SEART and Ti Rakau Drive, with the proposed dedicated busway proceeding centrally along Ti Rakau Drive towards Gossamer Drive and Riverhills Park in the east. EB3R will largely occur within land vested as road or land currently owned by Auckland Transport. The construction of EB3R will take a staged approach to minimize disruption to the existing road network and its users. The main components of EB3R have been described below.

2.2.1 Edgewater and Gossamer Intermediate Bus Stations

EB3R includes two intermediate bus stations on Ti Rakau Drive, located within the vicinity of Edgewater Drive and Gossamer Drive. Both stations will have separate platforms for eastbound and westbound bus movements. A range of street furniture and structures will also be constructed, such as modular bus shelters pedestrian linkages, electronic messaging signage, seating and cycling storage facilities.

2.2.2 Western Bridge Abutment

EB3R includes construction of the western bridge abutment for a new future bridge across Pakuranga Creek. The abutment will be located within the area that is currently the southeastern section of Riverhills Park. Only the bridge abutment is included in the EB3R package of works. The remaining parts of the bridge will form part of the EB3C approval package.

2.2.3 Walking and Cycling Facilities

Provision has been made for walking and cycling along the route of EB3R. This includes footpaths and uni-directional cycleways located on either side of Ti Rakau Drive from SEART to Gossamer Drive. Signalised pedestrian crossings will be provided at key intersections along Ti Rakau Drive, including adjacent to the proposed Edgewater bus station.

2.2.4 Associated changes the road network

The proposed changes to the road network include lane arrangement and intersection reconfigurations and changes to the parking arrangement and access to Edgewater Drive Shops. Changes are also proposed to the access arrangements for residential properties along the EB3R alignment. New westbound lanes for general traffic will be established within the land which has been acquired by Auckland Transport and will be vested as road once it becomes operative, as the busway alignment replaces the existing westbound lanes.

2.2.5 Supporting Works

A range of works will be undertaken in support of the EB3R package. This includes the relocation of network utility services, new street lighting, removal of vegetation, earthworks, landscaping, stormwater upgrades, environmental restoration and mitigation and temporary construction sites.

3.0 Specialist Assessment

Chapter Summary
The SIA will: • *Provide an understanding of the community and existing social environment* • *Identify any positive or adverse social impacts of the Project during construction and operation* • *Identify appropriate measures to avoid, remedy or mitigate the social impacts identified.*

3.1 Assessment Content

This report describes the assessment of social impacts associated with the operation and construction of EB2 and EB3R sections of the Project.

Its purpose is to inform the AEE relating to the Notice of Requirement, as well as the required regional consents and land use consents required under National Environmental Standards for EB2. It also addresses the district and regional consent applications for EB3R, as well as identifying the ways in which any adverse impacts will be mitigated for both application packages.

This SIA will:

- Provide an understanding of the community and existing social environment in sufficient context to assess the social impacts of the Project, specifically related to EB2 and EB3R
- Ensure that social impacts are addressed in the planning and development of this project
- Identify any positive or adverse social impacts of the Project and whether they are:
    - Temporary (e.g. short term during construction) or long term / permanent (when the alignment is operational)
    - Cumulative over time or in combination with other impacts
    - A high, moderate or low risk rating of social impact
- Identify appropriate measures to avoid, remedy or mitigate the social impacts identified.

3.2 Specific Project Elements

This assessment considers the social impacts resulting from the construction and operation of the Project including the busway corridor and the proposed new stations. However, there are certain aspects described below which are more prominent during the assessment of effects. These are:

3.2.1 Eastern Busway 2

The social impacts of EB2 are the result of development in or around Pakuranga Town Centre and the impacts of people's ability to access the town centre during construction and operation of the Project. Key aspects of the Project which are relevant include:

- The construction and design of the RRF which includes potential for noise and air quality effects for nearby residential and commercial properties and social infrastructure. The proposed RRF is an elevated structured which will reduce congestion in the town centre but has the potential to create severance within the community, impact on visual amenity and the enjoyment of the urban realm

- Improved pedestrian and cycle networks in the Town Centre which will improve safety, increase connectivity and ease of travel. There is also the potential for health and well-being benefits from using active travel modes
- Changes to road layout, impeded access to businesses and services in the Town Centre for servicing and deliveries and loss of carparking at the new Aylesbury Street / Ti Rakau Drive / Palm Ave intersection and William Roberts Road which will impact businesses in the town centre and people accessing those businesses
- The proposed Pakuranga Bus Station which provides new infrastructure to support increased reliability and improved access to public transport
- New residential and commercial property acquisition and notice being served on properties currently leased from Auckland Transport (AT). This will result in impacts on those being newly displaced by the project to anxiety associated with being served notice on a lease
- General construction activity in the town centre which can cause amenity impacts, disruption and inconvenience for those accessing the town centre for work, shopping or other services, including community facilities and other social infrastructure. Construction impacts also have the potential to impact those travelling through the area from further afield.

3.2.2 Eastern Busway 3 Residential

The social impacts of EB3R are related to the development along Ti Rakau Drive, in particular the residential receivers either side of the road corridor. As the Project is based on widening an existing corridor, as opposed to building a new alignment, the impacts are mostly related to changes in the road network and the proposed land take. Specifically, this includes:

- Access to Ti Rakau Drive from side streets including left turn only restrictions from Wheatley Avenue and Roseburn Place which has the potential to impact accessibility to Ti Rakau Drive for residents during construction and operation, subject to future access arrangements
- Two new intermediate bus stations (Edgewater Station and Gossamer Station) which provide new infrastructure to support increased reliability and improved access to public transport
- Short-term changes to site access to Edgewater College, Te Tahawai Marae, the Edgewater shops and community facilities in Freemantle Place during construction activities which affects people accessing this social infrastructure
- New pedestrian crossings including Edgewater Drive and Gossamer Drive which improve safety, increase connectivity and make it easier for people to get around
- Property acquisition along Ti Rakau Drive which will result in residents being displaced
- Acquisition and temporary occupation of land within Riverhills Park which will impact the community's use and enjoyment of the open space
- General construction activity along Ti Rakau Drive which can cause amenity impacts, disruption and inconvenience for residents and members of the wider community accessing residential properties, businesses and community facilities located along the corridor. Construction impacts also have the potential to impact those travelling through the area from further afield.

4.0 Methodology and Analysis

Chapter Summary

The SIA has been prepared using International Association for Impact Assessment (IAIA) principles.

The assessment of social impacts for EB2 and EB3R has involved the following steps:

- *Desktop assessment to ascertain the social baseline, namely identification of:*
  - *social infrastructure including education, health, recreation and other essential services in proximity to the project*
  - *Communities with the potential to be directly and indirectly affected by the project*
- *Identification and assessment of social impacts based on environmental issues with the potential to effect infrastructure and communities identified in the desktop assessment*
- *Assessment of the significance of social impacts during construction and operation including positive and adverse impacts*
- *Identification of mitigation strategies for managing and monitoring the impacts during construction and operation of the Project.*

The SIA is informed by stakeholder and community consultation undertaken for the Project. The community consultation has been undertaken in accordance with IAP2 principles.

4.1 Overview

This SIA has been prepared following the methodology set out in the International Principles for Social Impact Assessment prepared by the International Association for Impact Assessment (IAIA) (Vanclay F. , 2003), which is recognized as a best practice framework for SIA. The SIA has been further informed by the IAIA SIA guidance document for Projects (Vanclay, Esteves, Aucamp, & Franks, 2015), which specifically addresses the application of SIA at the Project level (e.g. the planned construction of new infrastructure).

The IAIA defines Social Impact Assessment (SIA), as:

> *"…the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and adverse, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions."* (Vanclay, Esteves, Aucamp, & Franks, 2015)

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

> *'The improvement of social wellbeing of the wider community should be explicitly recognised as an objective of planned interventions and as such should be an indicator considered by any form of assessment. However, awareness of the differential distribution of impacts among different groups in society, and particularly the impact burden experienced by vulnerable groups in the community should always be of prime concern'.* (Vanclay, Esteves, Aucamp, & Franks, 2015)

The IAIA considers that social impacts include:

> *'all the issues associated with a planned intervention (i.e. a project) that affect or concern people, whether directly or indirectly. Specifically…something that is experienced or felt in either a perceptual (cognitive) or a corporeal (bodily, physical) sense, at any level, for example at the level of*

an individual person, an economic unit (family/household), a social group (circle of friends), a workplace (a company or government agency), or by community/society general' (Vanclay, Esteves, Aucamp, & Franks, 2015).

The methodology adopted for this SIA is based on the principles of the IAIA. It has been developed to establish the key social impacts which have the potential to arise from the construction and operation of the Project, from the perspective of the community and stakeholders potentially affected by it, in support of the Assessment of Environmental Effects (AEE) prepared for the Project's resource consent applications and Notice of Requirement.

This SIA is also informed by the outcomes of the various specialist reports that have been prepared for the Project. Of particular relevance to this SIA are the air quality, traffic and transport, noise and vibration and landscape and visual impact specialist reports. This assessment has been informed by the results of specialist reports and the outcomes of consultation undertaken for the Project.

4.2 Methodology Overview

The IAIA notes that SIA is a process that can greatly assist in ensuring the achievement of benefits and the avoidance of harm, through the identification, assessment and as required mitigation of social impacts across the life of a project. This assessment considers the impacts that will result from the construction and operation stages of the development this will include the anticipation of construction.

To determine the social impacts assessed in this report, the following steps have been undertaken:

- Review of the Project description, as detailed in Sections 2.1 and 2.2, the construction methodology, project briefing and site visit
- Undertake a literature review to inform an understanding of likely social impacts and the project's area of social influence
- Identify the study area for the SIA
- Develop a community profile which identifies stakeholders that may be impacted by the Project
- Identify the needs, interests and values of the community and affected stakeholders
- Review of those environmental issues with potential for social impacts including review of relevant specialist reporting required to inform the AEE for the Project
- Identification of impacts that may occur as a result of the Project on stakeholders, general community, businesses, social infrastructure and other receivers
- Assessment of the significance of social impacts during construction and operation including positive and adverse impacts
- Identification of mitigation strategies for managing and monitoring the impacts during construction and operation of the Project.

4.3 Relevant literature and data sources

To inform the assessment of social impacts and also to identify the project's area of social influence a literature review has been undertaken. The literature review consisted of:

- A review of social impact assessment guidance
- A review of SIAs and related documents for transport infrastructure in Auckland
- A review of selected social impact literature relating to transport to inform the impact assessment

- A review of technical assessments (Construction Noise, Operational Noise, Landscape, Air Quality, Transport) which support the EB2 / EB3R AEE
- Consultation reports prepared for Eastern Busway
- Local policy relevant to the social environment and potential impacts
- Consultation outcomes report to understand community sentiment towards the Project and issues of importance
- Additional data sources including:
    - New Zealand 2018 Census data
    - Site visits to the Project area and surrounding area
    - Briefing sessions from the Project's Planning and Community Engagement
    - Attendance at community events on 26 March 2022 and 13 July 2022.

4.4 Social baseline study

The demographics, business and retail areas, social infrastructure and social characteristics of the communities in the local study area have been collated and analysed to understand community functions and interactions with the Project. This includes information from:

- Statistics New Zealand websites focusing on 2018 Census data, specifically population, age profile, cultural diversity, levels of income and employment, levels of social disadvantage, household composition, vehicle ownership and how people travel to work
- Community values related to local amenity, character, lifestyle, recreation, community cohesion, access and connectivity based on review of local policy identified in community consultation outcomes reported
- Social infrastructure facilities within the vicinity of the Project area identified through a search of online sources including council websites and online mapping tools
- Key business and retail areas that will attract visitors to the area identified through a search of online sources including online mapping tools
- Briefings and discussions with the Planning, Comms and Engagement and Technical Assessors to understand the potential range, type and level of social impacts.

Site visits to assist the Social Impact Assessors in understanding the community profile and the potential range and level of social impacts were held in March 2021 and July 2022.

4.5 Social Impact assessment framework

The IAIA identifies a range of social impact categories, as a guideline the social impact of a Project is a change to one or more of these. The following categories have been identified as being of the most relevance to the Project:

- **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, services and facilities
- **Their environment –** the quality of the air and water people use; the availability and quality of the 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 –** health is a state of complete physical, mental, social and spiritual 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

- **Their fears and aspirations –** their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

Reference has also been had to the Waka Kotahi Social Impact Guide (NZ Transport Agency (Waka Kotahi), 2016) and the New South Wales Social Impact Assessment Guideline (NSW Department of Planning and Environment, 2021).

There is some overlap between these categories and other technical assessments, particularly for noise and visual impacts, in terms of lifestyle and amenity and these have been reviewed to inform the SIA. Please refer to the relevant report for further information and discussion. Cultural values are captured through a separate engagement process with mana whenua (see Section 6.7.6).

4.6 Risk Assessment and Impact Rating

The assessment of social impact is considered as either positive, neutral or adverse (from the perspective of the stakeholder or stakeholder group) on the basis of whether the anticipated social consequences will either enhance or detract from the community values, social processes or social infrastructure identified in the social baseline study.

Social impacts can be real or perceived depending on their nature. The likelihood and consequence of social impacts can vary between people and groups. To ensure a robust assessment the impact rating approach from the IAIA has been adopted.

Risk rating is a way of determining significance and establishing priorities for action, this involves assigning a consequence score and a likelihood score for each risk. The likelihood level (A – E) and consequence level (1 – 5) combine to determine the overall 'risk rating' being either low, moderate, high or extreme. The risk assessment framework is shown in Figure 2.

In determining the overall impact rating (scale) of the impacts the IAIA refers to the use of empirical (quantitative) measures to determine the actual assignment of likelihood and consequence. This involves a qualitative assessment of the likelihood, and scale (consequence) of the impact relative to the existing environment and likely future environment.

		Consequence Level				
		1	2	3	4	5
Likelihood Level	Descriptor	Insignificant	Minor	Moderate	Major	Catastrophic
A	Almost certain	A1	A2	A3	A4	A5
B	Likely	B1	B2	B3	B4	B5
C	Possible	C1	C2	C3	C4	C5
D	Unlikely	D1	D2	D3	D4	D5
E	Rare	E1	E2	E3	E4	E5

Risk Rating Low Moderate High Extreme

Figure 2 IAIA Risk Assessment Framework (Vanclay, Esteves, Aucamp, & Franks, 2015)

Likelihood of the impact occurring was considered using the criteria described in Table 1. The overall consequence level is determined from the duration of the effect, the spatial extent and number of people impacted and the severity of change. The consequence criteria are described in Table 2.

Table 1 Risk Assessment – Likelihood Description

Likelihood	Likelihood	Description
A	Almost certain	Expected to occur in most circumstances.
B	Likely	Will probably occur in most circumstances.
C	Possible	Might occur at some time.
D	Unlikely	Could occur at some time.
E	Rare	May occur in exceptional circumstances.

Table 2 Risk Assessment – Level of Consequence Description

Consequence levels	Consequence descriptors
Insignificant	No discernible positive or adverse changes to baseline condition.
Minor	Small change to baseline condition, generally short-medium term, confined to a locality or suburb and are able to be mitigated or enhanced.
Moderate	Medium change to baseline condition that may be short, medium, or long term. The spatial extent may vary. However, impacts will usually respond to mitigation or enhancement.
Major	Large change to baseline condition usually resulting in medium to long-term impacts. Spatial extent is generally at an LGA or regional level with the potential for substantial impacts on the social or economic environment. Adverse impacts will require extensive mitigation.
Catastrophic	Irreversible, wide-spread and long-term, with limited response to mitigation.

The duration of effects reflects on the community has also been considered by the Social Impact Assessors.

Table 3 Risk Assessment - Duration description

Duration	Description
Short term	Less than six months
Short-medium term	Between six months and two years
Medium term	Between two and five years
Medium-long term	Between five and ten years
Long term	More than ten years (effect likely to be irreversible)

4.7 Key stakeholders and communities

Direct social impact engagement with the community is a limitation of this assessment; however, the SIA has been informed by the stakeholder and community consultation undertaken for the Project. This consultation was undertaken by the Project's Planning and Community Engagement Team.

A detailed briefing by the Project's Planning and Community Engagement Team was provided and the Social Impact assessors have analysed the findings of the consultation feedback reports from February

2022[1], April 2022[2] and May 2022[3]. The Social Impact Assessors also attended a community event to inform their understanding of the issues raised by the community.

It is recognised that the Social Impact assessors have not undertaken engagement with the community at this stage and this is a recognised limitation of the assessment. Opportunities however exist to review the assessment following scheduled Social Impact engagement with the community in July 2022, and following submissions made through the notification of the Project (should the applications be notified).

Consultation to date has been undertaken with the following key stakeholders:

- Government Ministries including Waka Kotahi NZ Transport Agency, Ministry of Education, Kāinga Ora and Department of Conservation
- Elected Representatives, including the Howick Local Board
- Mana whenua
- Auckland Council including libraries, parks and reserves, community facilities and community broker teams
- Regional advocacy groups including transport and tourism advocacy groups and disability action groups
- Local stakeholder groups including:
    - Howick Youth Council
    - Pakuranga, Botany and Highland Park Libraries
    - Pakuranga and Botany Citizen's Advice Bureau
    - Pakuranga and Howick Budgeting Service
    - Pakuranga Counselling Centre
    - Pakuranga Rugby League Club
    - Howick and Pakuranga Cricket Club
    - Fencibles United Football Club
    - Te Tuhi Contemporary Art Trust
    - Pakuranga Medical Centre owners and Centre Manager
    - Howick Residents and Ratepayers Association
    - Businesses and organisations in the area, including Souly Funerals, Edgewater Shops owners, Masjid Abu Bakr Al-Siddiq Mosque, Dementia Auckland, Ambridge Rose, Edgewater Village
    - Pakuranga Chinese Association
    - Asian Safety Education and Promotion Charitable Trust
    - Korean Positive Ageing Charitable Trust
    - Chinese Women Association of New Zealand
    - Chinese New Settlers Services Trust.
- Affected property owners and occupiers of retained properties including Dale Crescent, William Roberts Road, Gossamer Drive and Ti Rakau Drive
- Affected occupiers / leaseholders of buildings owned by AT and those due to be acquired and demolished as part of the project including Dale Crescent, Cortina Place, Bolina Crescent Pakuranga Road, William Roberts Road, Gossamer Drive and Ti Rakau Drive
- Education providers including Howick and Pakuranga Principals Association, Kindergarten Association, local schools and early childhood centres

[1] https://at.govt.nz/media/1988284/consultation-feedback-report-feb-2022.pdf
[2] https://at.govt.nz/media/1989113/eastern-busway-community-meetings-summary-apr-22.pdf
[3] https://at.govt.nz/media/1989114/eastern-busway-community-meetings-may-2022-final.pdf

- Other local stakeholders including businesses and places of worship.

A variety of communication and engagement activities have been undertaken, including:

- Holding pre-consultation briefings with partners and key stakeholders and workshops with interest groups
- Creating and publicising an online brochure and feedback form with translated versions available
- Distributing printed and electronic copies of brochures and feedback forms to community members, property owners and occupiers and other stakeholders in the database
- Establishing a 'virtual consultation room' hosted on the Eastern Busway webpage for people to interact with the information including an interactive online map and digital feedback form (social pinpoint)
- Generating media releases, proactive local news stories and Our Auckland content about key features of the project and consultation timeframe
- Providing flyers, brochure, feedback forms and prepaid envelopes to four libraries in the project area
- Working with business and residents' associations, places of worship, elected representatives and Howick Local Board to promote the consultation through their networks.

The community consultation for the Project has been undertaken in accordance with IAP2 principles. Table 7 below identifies examples of how the consultation approach aligns with the IAP2 spectrum.

Table 4 Alignment with IAP2 Public Participation

Inform	Consult	Involve	Collaborate

• Website updates
• Virtual consultation room
• Social media posts on AT platforms
• Project newsletters and factsheets
• Letters and formal notifications
• Project enquiry email and phone contact
• Print media, media releases and radio announcements
• Project video
• Signage and VMS in project area
	• Social Pinpoint feedback form and discussion board
	• Community meetings, information and feedback sessions
	• Meetings and discussions with affected property owners, residents, community stakeholders, local businesses and groups
		• Ongoing meetings with Advisory Boards / Steering Groups, including:
		  ○ Elected Representatives
		  ○ Howick Local Board
		  ○ Capital Projects Accessibility Group (CPAG)
		  ○ Workshops to identify best community outcomes with local stakeholder groups including:
		  – Te Tuhi
		  – Ti Rakau Park and Riverhills Park sports clubs
		  – Involving Edgewater School design students through workshops
			• Monthly hui with mana whenua (Project Partner)
			• Auckland Council and CCO staff workshops on a wide range of topics (project partner)
			• Working with utilities providers e.g.
			  ○ Transpower
			  ○ Watercare
			• Working with key landowners e.g. GYP and AMP on integration opportunities
			• Collaborating with Pakuranga Counselling Centre to provide community mental health support
			• Collaboration with key stakeholder groups (e.g. Bike Auckland) on active modes review and design

5.0 Review of Social Impacts from Transport Projects

Chapter Summary
A summary of the Social Impact Assessment for transport projects reviewed to inform the assessment of EB2 and EB3R.

A review has been undertaken of selected social impact assessments for transport projects in Auckland. This was undertaken to understand the range of social impacts and mitigation identified with those projects at both the construction and operational stages. These have been reviewed to inform the understanding of the range of potential effects associated with EB2 / EB3R. The documents reviewed include:

- The Social Impact Assessment for City Rail Link (Beca Carter Hollings & Ferner Ltd (Beca), 2011))
- The Social Impact and Business Disruption Delivery Works Plans and Social Impact and Business Disruption Annual Reports for City Rail Link (Link Alliance, 2020)
- The Social Impact Assessment for Northern Corridor (Aurecon NZ Ltd, 2016)
- The Social Impact Assessment for Ameti Stage 2a (Opus International Consultants Ltd, 2016)
- The Social Impact Assessment for Ameti Stage 4 (an earlier unimplemented project for a busway with a similar scope of works to EB2 / EB3R) (GHD Limited (GHD), 2014)

Positive Impacts

Across each of the SIAs positive impacts from the proposed transport infrastructure projects were identified. Key positive impacts are summarised below:

- Increased accessibility and connectivity within and between communities and to important destinations such as town centres and the city centre. Key benefits of this included improved access to employment opportunities and social and cultural infrastructure
- Proposed new transport stations supporting urban development around stations and improvements in the public realm, directly as part of proposed transport infrastructure upgrades and indirectly as a result of development surrounding transport stations/corridors
- Improved journey efficiency for car users, freight and public transport users
- Dedicated and quality facilities that support the patronage of public transport and use of walking and cycling facilities
- Safety improvements generated by transport infrastructure improvements, particularly for pedestrians and cyclists through dedicated facilities, and through the adoption of 'Crime Prevention Through Environmental Design' (CPTED) measures in urban design (Ministry of Justice, 2005).

Planning Stage and Construction Stage Impacts

There are similarities in the actual and potential social impacts at the construction stage for each of the projects. Key construction impacts are summarised below:

- Concerns and anxiety over upcoming construction works and ongoing uncertainty over the nature and timing of works, and the level of impacts that will be experienced
- Anxiety and uncertainty for property owners and occupiers (businesses and residents) over property acquisition and the need to relocate
- Impacts on people's health and wellbeing (including stress and anxiety) from the presence of prolonged construction works

- Impacts on residential and visual amenity (from noise, vibration and dust)
- A change in local character during the period of construction works. Note that whilst construction activity was seen to contribute to an adverse change in character and amenity, it was also seen as an opportunity, i.e. new customers for local business
- Impacts on business viability from the presence of construction works, including loss of loading bays, access and parking for customers, staff and deliveries
- Access impacts on those navigating around construction sites, including vulnerable groups such as those with physical disabilities
- Disruption and delays for the local community and those passing through an area including both those using private vehicles and public transport
- Cumulative impacts in terms of works being carried out by third parties, such as utility providers.

Operational Stage Impacts

Operational impacts varied depending on the scale of the project, its geographical location and relationship with the surrounding environment. Key operation impacts are summarised below:

- Permanent impacts on social and community infrastructure, including sports facilities and places of worship, resulting in a loss of these facilities for the community
- Severance from increased transport infrastructure and changes to how the community move around their local area and access services
- Changes in outlook and amenity impacts on occupiers of residential properties in close proximity to the new transport infrastructure.

Mitigation and Design Features

Mitigation was identified across each of the SIAs for the construction stage. Typical measures included:

- The preparation and implementation of a Construction Environment Management Plan, which adopts the recommendations from the social impact assessment and other specialist assessments, including noise, air quality and transport
- Ongoing and regular engagement and communication with affected communities and stakeholders, including the establishment of a CLG and / or the appointment of dedicated contact points for the community
- The establishment of grievance mechanism for complaints and feedback
- Collaboration with third party developers, utility providers and key stakeholders to manage cumulative effects
- A Social Impact and Business Disruption Management Plan was recommended for City Rail Link:
    - Development response measures including wayfinding signage and activation of hoardings, street cleaning and maintenance
    - Specific measures to support businesses, including signage and maintaining access. City Rail Link also included a business support package. Note a hardship fund for small businesses was established during the extended construction stage due to the major and sustained nature of the works and on an ex gratia basis
    - Annual reporting and monitoring of the social impacts
- Property strategy / initiatives to support the early acquisition and management of property (Ameti 2a), and to support the relocation of sports facilities (Northern Corridor). The relocation of social infrastructure was also identified in the designation conditions for City Rail Link

Design features to avoid or reduce social impacts include:

- The use of low volume road surface to reduce noise effects and noise walls
- Urban design measures and landscape to enhance the existing streetscape / transport corridor.

6.0 Existing Environment

Chapter Summary
An area of social influence has been defined for both EB2 and EB3R. This includes: *Directly Impacted ('Project') Area – based on Statistical Area 1 boundaries* *Indirectly Impacted ('Local' and 'Regional') Area – based on Statistical Area 2 boundaries.*

6.1 Area of Social Influence

The Project area and its surrounds were analysed to identify the area of social influence to inform the SIA. The IAIA guidance defines the 'area of influence' as:

> *the physical area (and components such as air, water, soil) over which a project creates impacts (including abiotic, biotic and socioeconomic) caused by a project (and its associated activities). Thus it includes not only the land surface area but also the functioning of any marine and terrestrial ecosystems; airsheds and watersheds (surface or underground); and all social groupings including individuals, communities, companies (especially SMEs), organizations and governmental agencies.*

However, the IAIA guidance notes the social area of influence is likely to be much larger in physical area than the physical area of influence due to the mobility of people.

The most significant social impacts, particularly those relating to community wellbeing and amenity values, are anticipated to occur in proximity to the project's footprint. Other transport projects have found that while significant accessibility benefits may exist appropriate consideration should be given to local-level negative social impacts (Mottee, Arts, Vanclay, Miller, & Howitt, 2020).

Indirect impacts will occur from individuals living in the wider area who visit the area to access community facilities and employment opportunities etc. Ti Rakau Drive is however a major arterial road with strategic importance as a regional transport corridor. Any construction disruption along Ti Rakau Drive, between Ti Rakau Park in the west to the Ti Rakau Bridge in the East, will impact a large geographic area. Operational benefits also positively impact the local and wider community area and a larger regional area.

The area of social influence has been separated into the following categories:

- **Local Community Study Area –** is the area located adjacent to the project where the community will experience the direct results of the Project, for example construction noise and vibration, construction dust, land acquisition etc. This also captures properties immediately adjacent to the corridor and those areas which are accessed from the project corridor.
- **Wider Community Study Area –** areas outside the local community area which may be indirectly affected by the Project, particularly in terms of access and connectivity between their homes and places of work, study, recreation and essential services and facilities.
- **Regional Community Study Area –** the regional area which encompasses a number of community areas and is more likely to be affected indirectly by the Project, particularly users of the strategic and arterial transport network.

6.1.1 Local Community Study Area

The local community area consists of those residents, community facilities and businesses that are most likely to be directly impacted by the Project due to proximity. Consideration has been given to the range

of impacts from construction, including those residents, community facilities and businesses where the main access is from Ti Rakau Drive, and the operational impact to identify the local area.

The local study area is shown in Figure 3 and Figure 4 with the surrounding SA1 boundaries shown for context.

For EB2 this area includes Reeves Road, Cortina Place, sections of Dale Crescent, Pakuranga Road, William Roberts Road and Ti Rakau Drive. The neighbourhood includes the majority of Pakuranga Town Centre commercial area and part of Ti Rakau Park.

Figure 3 Local community area of relevance to the EB2 section of the Project

For EB3R the neighbourhood area includes Ti Rakau Drive corridor including intersections at Tiraumea Drive, Mattson Road, Roseburn Place, Edgewater Drive and Gossamer Drive. The neighbourhood area also includes part of Riverhills Park.

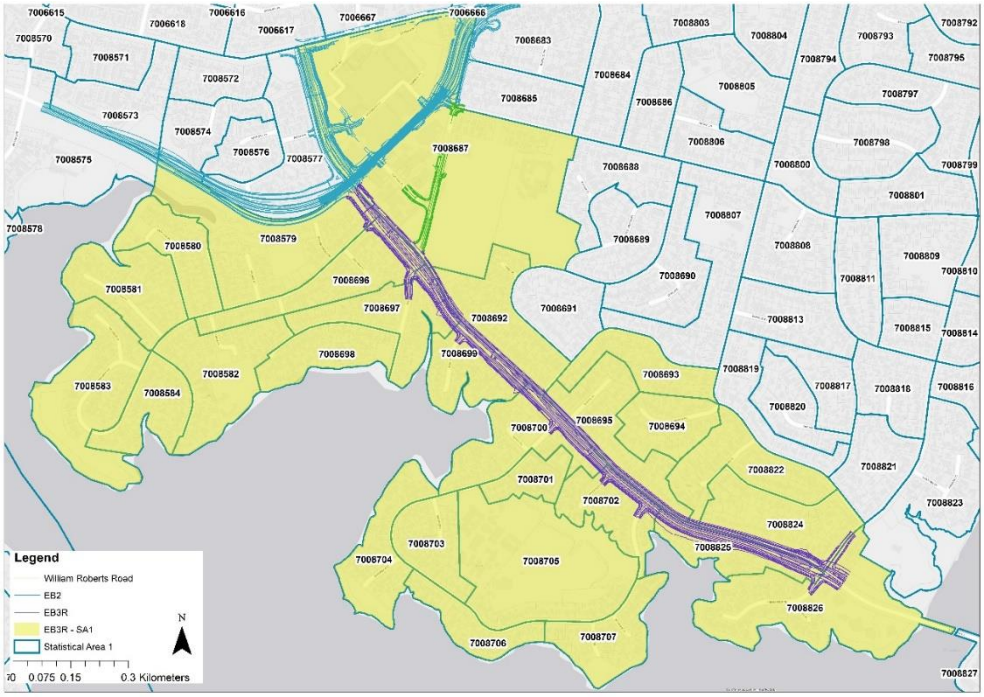


Figure 4 Local community area of relevance to the EB3R section of the Project

6.1.2 Wider Community Study Area

The wider community study areas has been identified in accordance with Statistical Area 2 (SA2) boundaries. SA2 boundaries have been shown as they represent a larger geographical boundary compared to SA1 boundaries, and represent the larger catchment that has the potential to be impacted (positively or adversely) by the construction or operation of the Project. The SA2 boundaries of relevance to the Project are shown on Figure 5.

The wider community study areas includes SA2 Areas that extend from Pakuranga Road in the west to Ti Rakau Bridge in the east broadly 1 km from EB2 and EB3R areas consisting of East Tamaki, Pakuranga West, Pakuranga Central, Tamaki, Panmure East, Mount Wellington Central, Mount Wellington Industrial, Sunnyhills West-Pakuranga North, Sunnyhills East, Pakuranga Heights North West, Pakuranga Heights East, Pakuranga Heights South West, Burswood

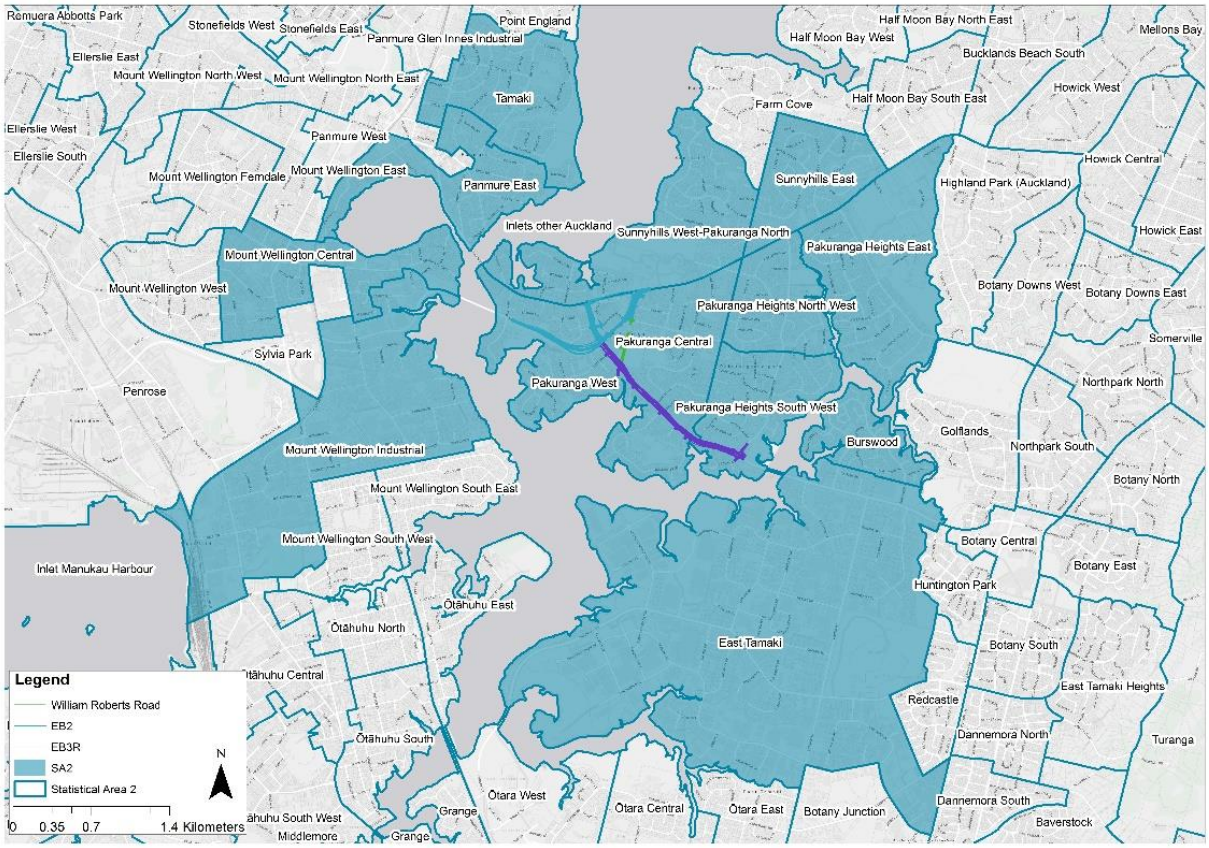


Figure 5 Wider community area of relevance to the EB2 and EB3R sections of the Project

6.1.3 Regional Community Study Area

There is the potential for some effects to extend beyond the local and wider community area, and be experienced at the Local Board or Regional level, notably in relation to strategic trips along the impacted transport corridors and includes the Howick Local Board Area and wider Auckland Region.

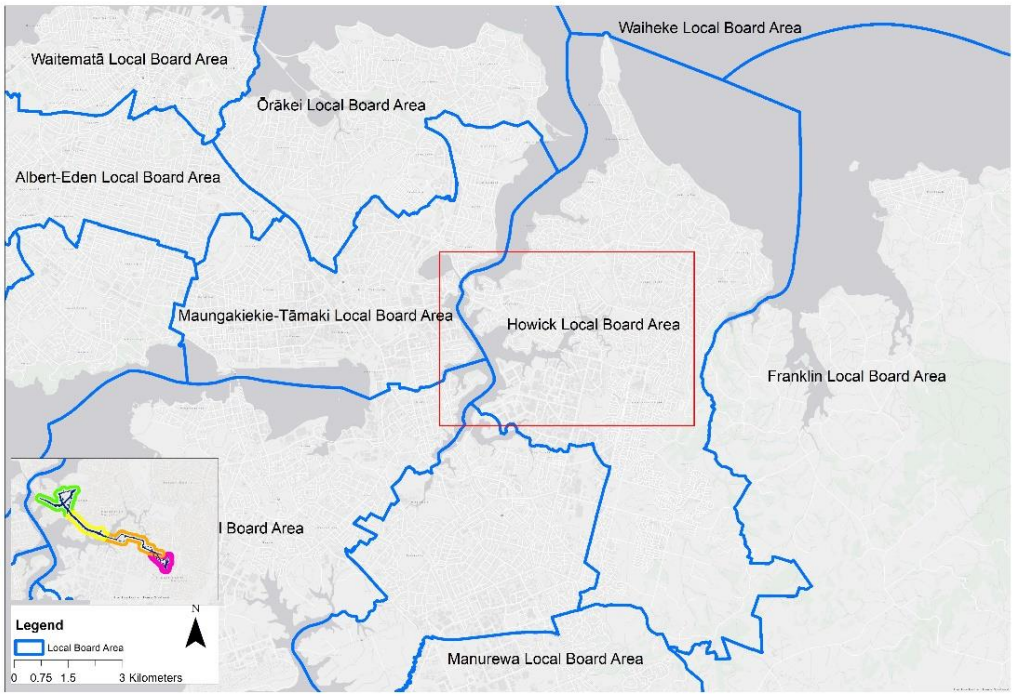


Figure 6 Howick Local Board Area (LBA) in relation to Project area

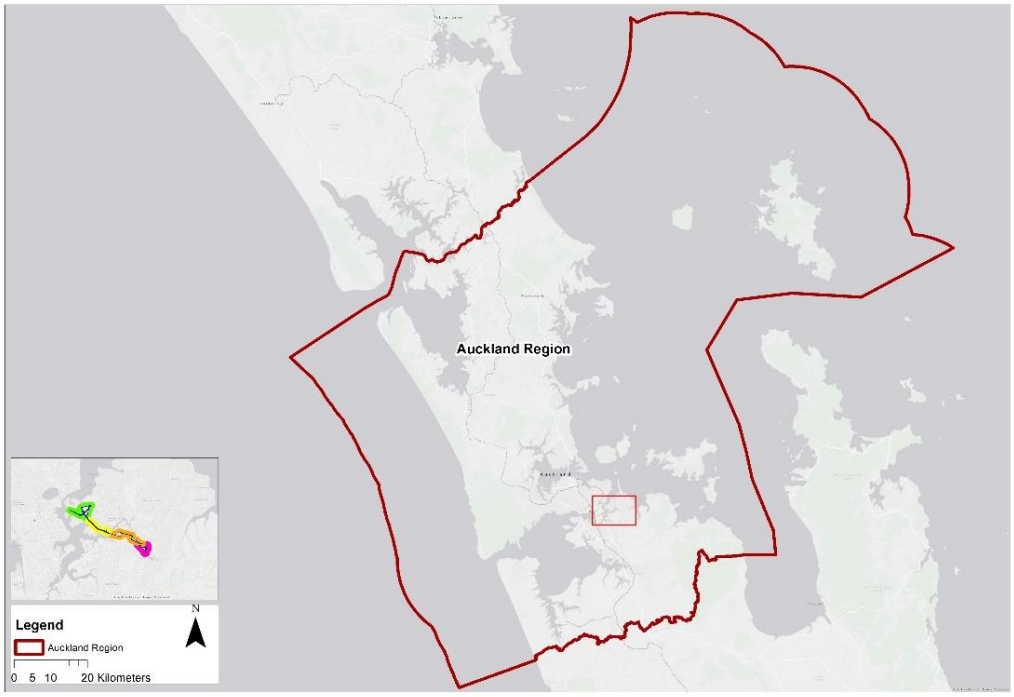


Figure 7 Auckland Region boundary in relation to Howick LBA

6.2 Demographic profile

The demographic profile, relating to the socio-economic characteristics of the study area, is informed by statistics sourced from the Statistics New Zealand Census data (2018). This demographic profile forms the socio-economic baseline against which potential impacts are assessed. The demographic profile of

the local and wider community study areas, with comparisons to the Howick LBA and the Auckland Region is described in sections 6.2.1 and 6.2.2 and detailed information is provided in Appendix 1.

It is noted that the statistics provided are from the 2018 Census and the economic and employment environment will have changed due to impacts from COVID-19. The impact of the COVID-19 pandemic on employment is uneven across sectors; some industries e.g. accommodation and food services and transport were negatively impacted and suffered high levels of job losses due to restrictions on people's movements and a lack of tourism while others such as healthcare increased due to demand for medical services. The high demand for housing has also increased the number of jobs in construction.

6.2.1 Eastern Busway 2

6.2.1.1 Population, Age Profile and Ethnicity

The total population in the EB2-SA1 is 2,181 based on the Census information for those normally resident. This is approximately 1.4% of the population of Howick LBA and 0.1% of the Auckland Region. EB2-SA1 has a younger population with 42.1% aged under 29 years. The average median age for the EB2-SA1 is 34.2 lower than the SA2 (35.9), Howick LBA (37.3) and the wider Auckland Region (34.7).

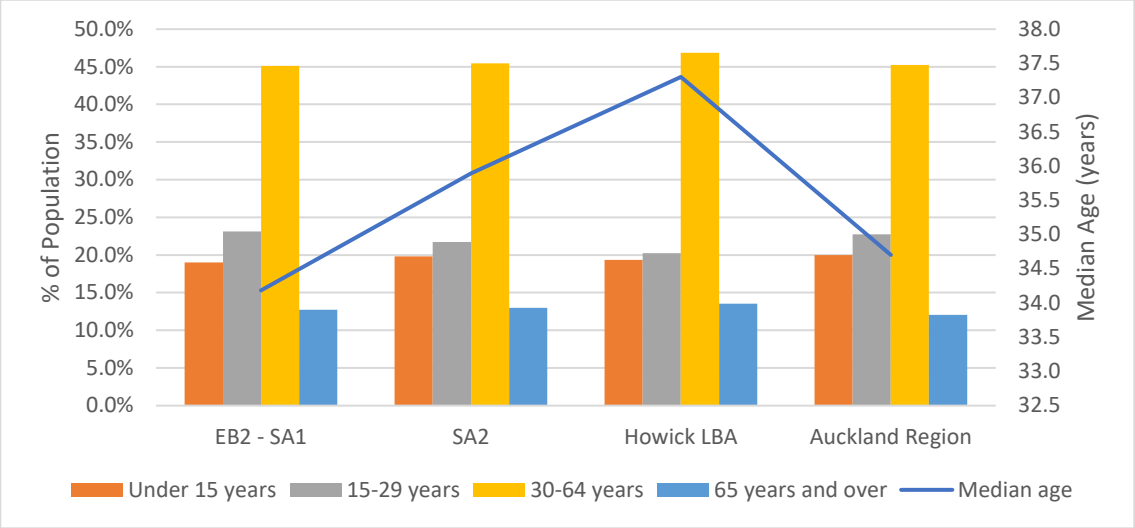


Figure 8 Demographics for EB2-SA1 based on census information for residential address

The area has a wide range of age groups, and it is recognised that within the EB2 area there are young families with children as well as elderly people who have lived in the area a long time. These receivers will be affected differently by the project.

EB2-SA1 had a similar proportion of residents who were born overseas (56.1%) compared to Howick LBA (53.6%). This is higher than SA2 (47.3%) and the Auckland Region (41.6%).

The population in EB2-SA1 mainly identified as Asian (44.7%), European (33.3%) and Pacific Peoples (11.8%), Māori (6.7%) (Figure 9). Compared to SA2 the EB2-SA1 had more people that identify as Asian (33.5%), and fewer people that identified as European (38.5%), Pacific People (13.1%) and Māori (10.6%). The Auckland Region has a lower proportion of people identifying as Asian (18.9%) and a higher proportion of people identifying as European (56.5%), Pacific People (14.4%) and Māori (11.1%).

The ethnic diversity in the area is reflected in the wide range of community groups that have been consulted with (see Section 4.7) and the availability of materials in languages other than English.

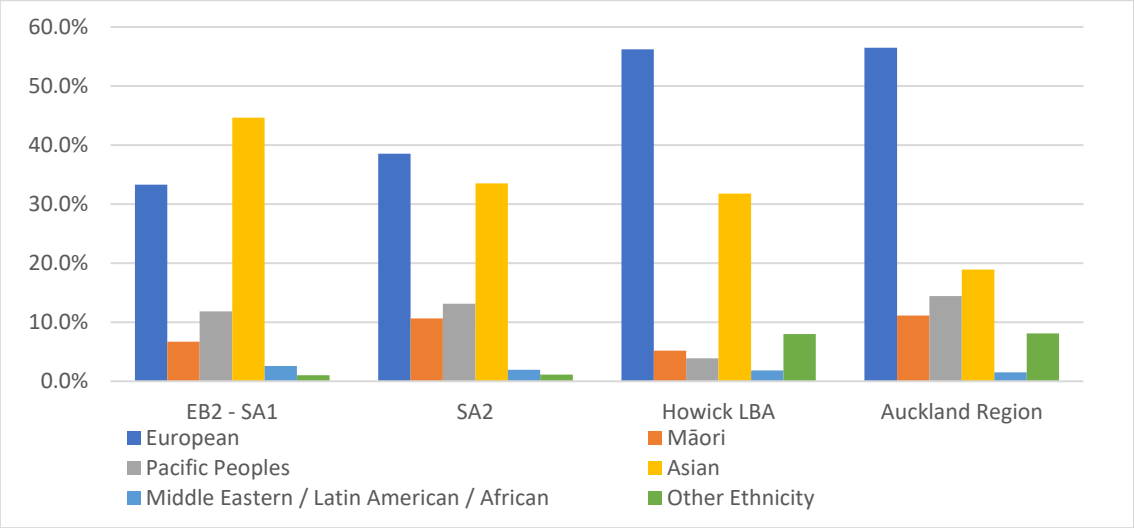


Figure 9 Ethnicity for EB2-SA1 based on census information for residential address

6.2.1.2 Dwellings

EB2-SA1 had a lower proportion of home ownership (38.2%) compared to all other areas including SA2 (42.9%) and Howick LBA (50.3%), this indicates there are more people renting in the local area (Figure 10). The average median rent is $470 which is higher than the Auckland Region ($450) and the SA2 ($441) and less than Howick LBA ($530), suggesting the area is generally more expensive than some other parts of Auckland however, the local community area is more affordable for renters to live compared to the wider LBA area. Statistics for home ownership will be skewed by AT ownership of many affected properties along the corridor.

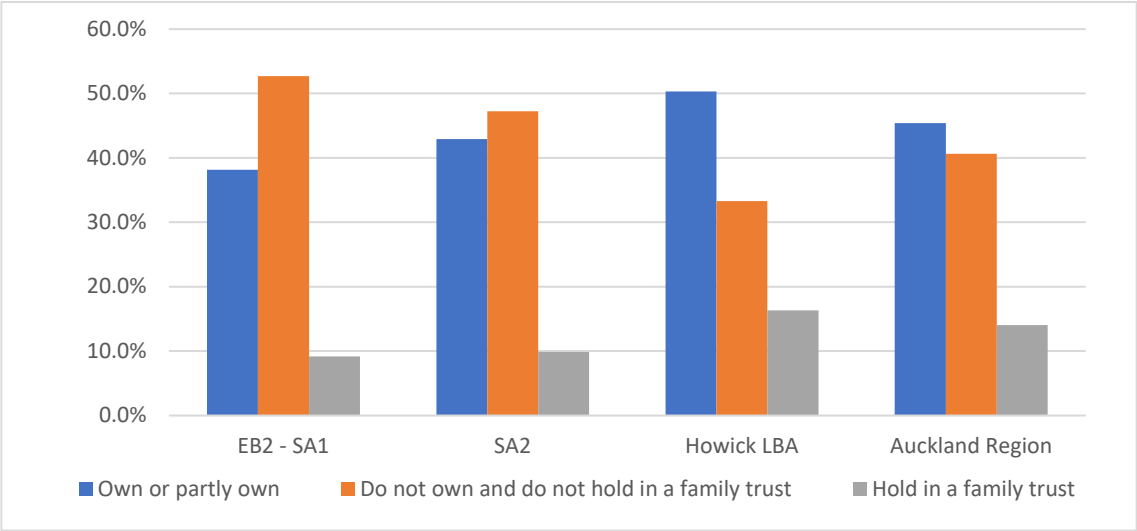


Figure 10 Home ownership for EB2-SA1 based on census information for residential address

While private people and businesses were the most common type of landlord (76.0%) there were a higher proportion of properties managed by Auckland Council in the EB2-SA1 area (16.0%) compared to all other areas, 3.4% in the SA2, 1.3% in the wider Howick LBA and only 0.7% in the Auckland Region were managed by Auckland Council. It is noted that within the Project area the figure is likely higher due to the acquisition of land for the Project which is currently tenanted (see Section 7.3.1.3.2). There is a much lower proportion of properties that are managed by Kāinga Ora (Housing New Zealand Corporation) in the SA1 (3.0%) and Howick LBA (4.3%) compared to SA2 (16.4%) area and the wider Auckland Region (15.5%).

Within the EB2-SA1 area, there were fewer unoccupied dwellings (5.0%) compared to the Auckland Region (7.2%), but a slightly lower occupancy rate compared to SA2 (4.9%) and Howick LBA (4.7%). The proportion of houses under construction in the Auckland Region is low (1.3%), however is even lower in the Howick LBA (0.8%) and the SA2 area (0.4%). Within the EB2-SA1 area 1.4% of private dwellings were identified as under construction in the occupancy status census information.

6.2.1.3 Employment – Residential Address

The average median wage for EB2-SA1 was $29,280 which was lower than the SA2, Howick LBA and the Auckland Region which were all over $33,000 (as shown in Figure 11). EB2-SA1 had a similar proportion of people in full-time and part-time employment (64.0%) compared to the SA2 (63.9%) and the Auckland Region (65.5%) and a similar percentage of residents unemployed (4.3%) compared to SA2 (4.1%) and Auckland Region (4.1%). Howick LBA area had a slightly higher percentage of people in full and part time employment (64.4%) and a slightly lower unemployment (3.4%).

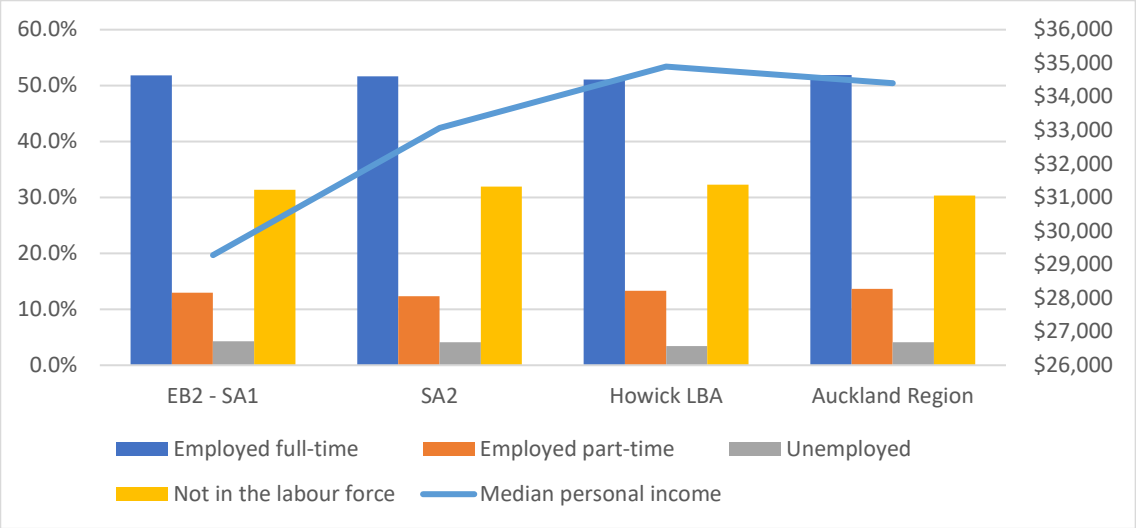


Figure 11 Employment rates for EB2-SA1 based on census information for residential address

The key profession types for people usually resident in the EB2-SA1 are mainly professionals (20.8%) but there are slightly higher numbers of Technicians and Trade Workers (15.4%), Community and Personal Service Workers (12.3%) Machinery Operators and Drivers (6.6%), Labourers (8.7%) compared to other areas. There were fewer numbers of Managers in the EB2-SA1 area compared to other areas.

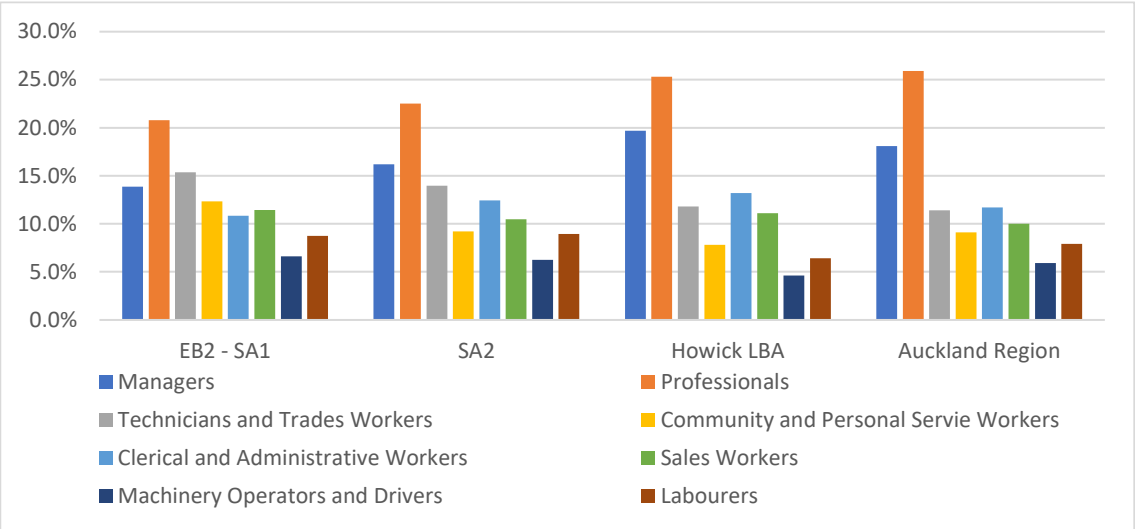


Figure 12 Profession type(s) for EB2-SA1 based on census information for residential address

6.2.1.4 Employment – Workplace Address (people coming to the area for work)

The key profession types for people who work in the EB2-SA1 include high proportions of Professionals (18.6%) and also Sales Workers (20.7%), Clerical and Administrative Workers (12.9%), Labourers (13.4%). There were fewer Managers (14.7%) employed in the EB2-SA1 than the wider area.

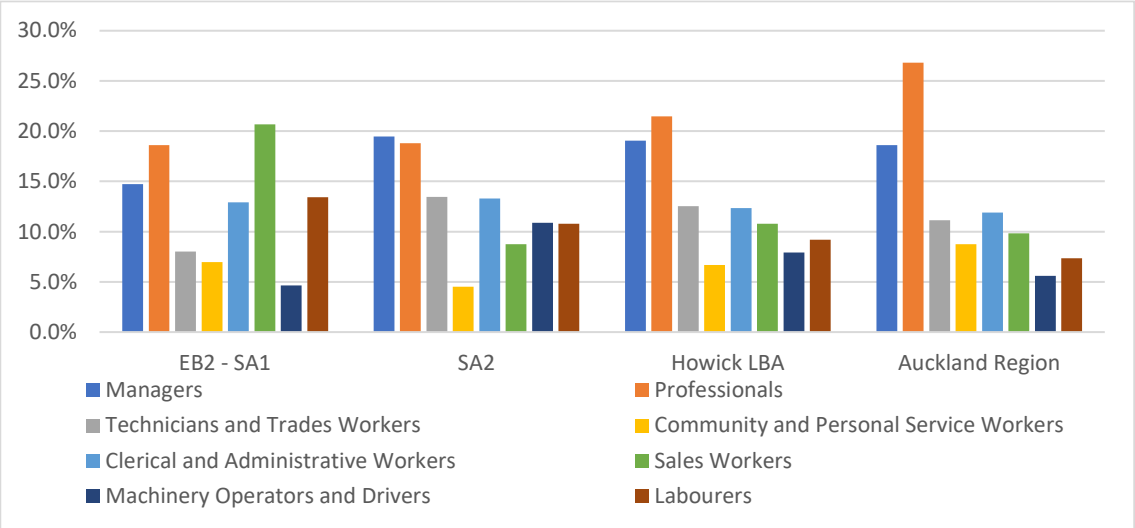


Figure 13 Profession type(s) for EB2-SA1 based on census information for workplace address

6.2.1.5 Transport

For EB2-SA1 the most common way for people to travel to work was via private vehicle (61.4%) and for SA2 (64.8%) (Figure 14). This proportion was less than the Howick LBA (67.0%) and greater than the Auckland Region (59.5%). It is noted that the statistics do not take account of changes in working from home patterns people may have adapted following COVID 19. It is likely that some of those that identified in the Census as working within the local and wider community area will now work from home, and those that live in the area but work elsewhere will now work from home.

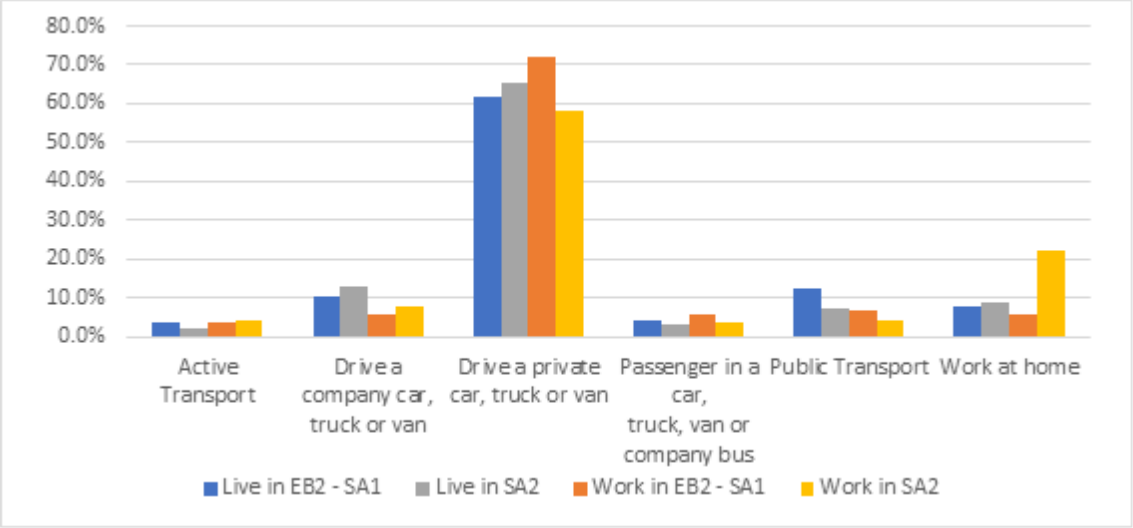


Figure 14 Transport modes for those living and working in EB2-SA1 and SA2

EB2-SA1 had a slightly lower percentage of residents who travelled to work by public transport (8.1%) compared to the Auckland Region (10.7%), SA2 (9.7%) but more than Howick LBA (6.2%). The

percentage of people using active transport to travel to work was similar in EB2-SA1 (3.3%) compared to the SA2 (3.4%), higher than Howick LBA (1.9%) and lower than the Auckland Region (5.3%).

Those that work in EB2-SA1 were more likely to drive a private vehicle (68.1%) compared to Howick LBA (64.2%) and the Auckland Region (59.2%) but less than SA2 (70.6%). EB2-SA1 also had the highest percentage of households who had one vehicle or did not have a vehicle (44.1%). Only 36.3% had two vehicles. The SA2 and Howick LBA had higher proportions of households who had two vehicles (40.1% and 44.2% respectively).

Based on the professions for those living and working in EB2-SA1, there are still a high number of sales workers, clerical and administrative workers and labourers who may not be able to work at home.

6.2.2 Eastern Busway 3 Residential

6.2.2.1 Population, Age Profile and Ethnicity

The total population in the EB3R-SA1 is 4,017 based on the Census information for those normally resident. This is approximately 2.7% of the population of Howick LBA and 0.2% of the Auckland Region.

EB3R-SA1 has a similar median age to Howick LBA (37.8 and 37.3 respectively), this is higher than the SA2 (25.9) and wider Auckland Region (34.7) (Figure 15). Again, there are a number of different demographic groups represented who will be differently affected by the project.

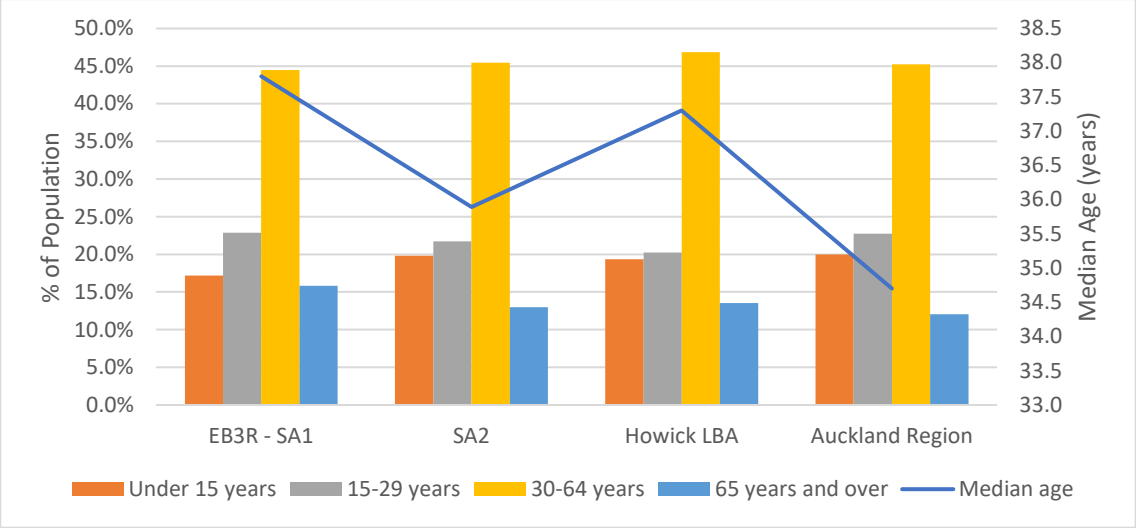


Figure 15 Demographics for EB3R-SA1 based on census information for residential address

EB3R-SA1 has a higher percentage of residents born overseas (49.4%) compared to SA2 (50.2%) and the wider Auckland Region (41.6%) and slightly less than Howick LBA (53.6%). A greater proportion of people identified as Asian in EB3R-SA1 (37.2%) compared with the SA2 area (33.5%), Howick LBA (31.8%) and the Auckland Region (18.9%). As shown in Figure 16, 38.6% of people in EB3R-SA1 identified as European and 13.1% identified as Pacific Peoples and another 10.6% as Māori.

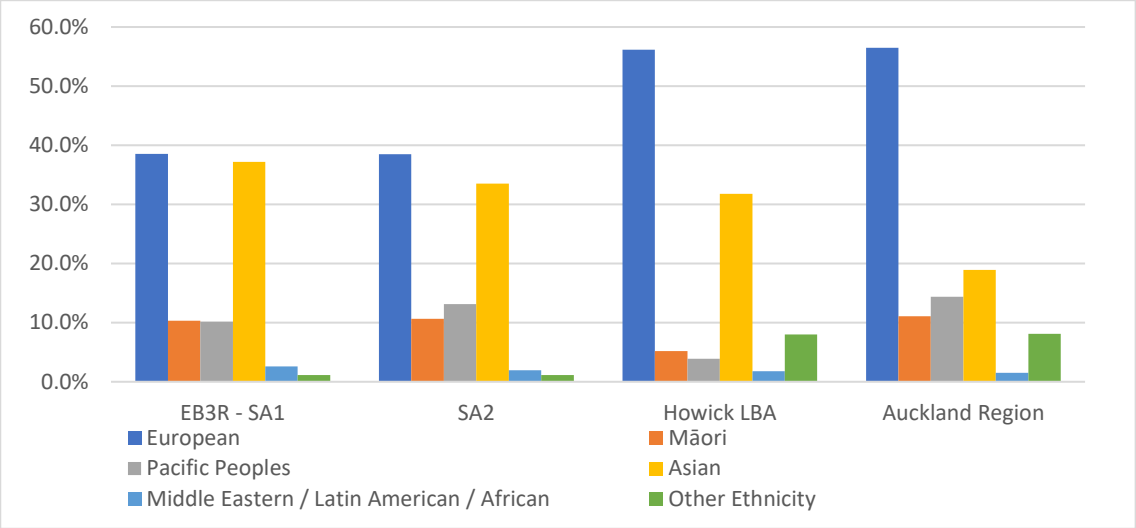


Figure 16 Ethnicity for EB3R-SA1 based on census information for residential address

6.2.2.2 Dwellings

EB3R-SA1 had a slightly higher proportion of home ownership (46.4%) compared to SA2 (42.9%) and lower than Howick LBA (50.3%). However, EB3R-SA1 has a similar proportion of home ownership to the Auckland Region (45.4%).

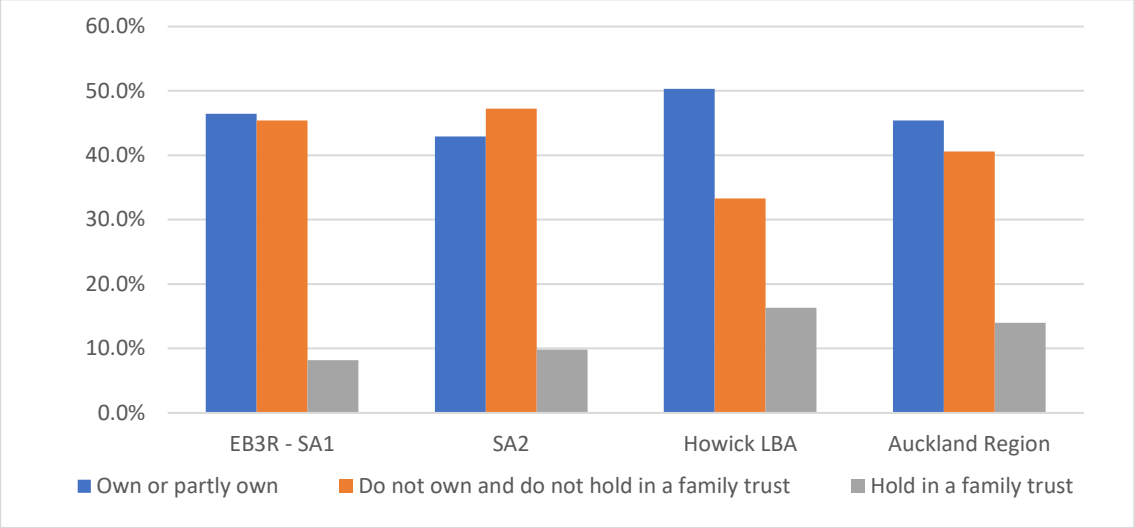


Figure 17 Home ownership for EB3R-SA1 based on census information for residential address

The average median rent ($449) is similar to the Auckland Region ($450), and slightly higher than the SA2 ($441). The Howick LBA is more expensive ($530) suggesting it is more affordable for renters to live compared to the adjacent areas and similar to other parts of Auckland.

While private people and businesses were the most common type of landlord (81.4%) there were a higher proportion of local authority landlords in the EB3R-SA1 area (11.8%) compared to SA2 (3.4%), Howick LBA (1.3%) and the wider Auckland Region (0.7%). As discussed elsewhere this is a result of the acquisition of land within the Project area which is currently tenanted. There is again a much lower proportion of properties that are managed by Kāinga Ora (Housing New Zealand Corporation) in the SA1 (5.0%) compared to SA2 (16.4%) area and the wider Auckland Region (15.5%). The proportion of Kāinga Ora landlords is higher than Howick LBA (4.3%).

Within the EB3R-SA1 area there were fewer unoccupied dwellings (3.6%) compared to 4.9% in SA2 and Howick LBA and 7.2% in Auckland. In general, the SA2 and Howick LBA also had a low proportion of unoccupied dwellings compared to the wider Auckland Region. 0.2% of dwellings were identified as under-construction in the EB3R-SA1.

6.2.2.3 Employment – Residential Address

EB3R-SA1 also had a lower average median wage ($31,704) and a slightly lower proportion of people in full-time and part-time employment (61.9%) compared to SA2 (63.9%), Howick LBA (64.4%) and the Auckland Region (65.5%). The unemployment rate in the EB3R-SA1 (4.0%) is similar to the Auckland Region (4.1%) and SA2 (4.1%) and slightly higher than Howick LBA (3.4%). It is noted that the statistics provided in the tables are from the 2018 Census and the economic and employment environment will have changed due to impacts from COVID-19.

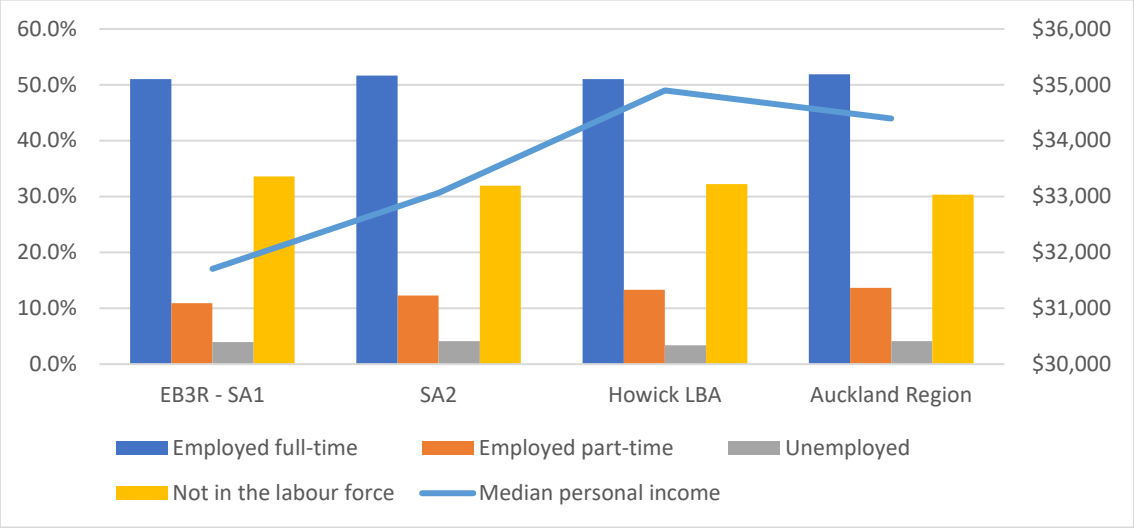


Figure 18 Employment status for EB3R-SA1 based on census information for residential address

The key professions for residents of EB3R-SA1 included Professionals (22.0%), Technicians and Trades Workers (14.8%), Clerical and Administrative workers (12.2%), Sales Workers (11.1%) and Community and Personal Service works (10.5%). There were also a number of Managers (14.2%) although this was a smaller proportion than in SA2, Howick LBA and the Auckland Region.

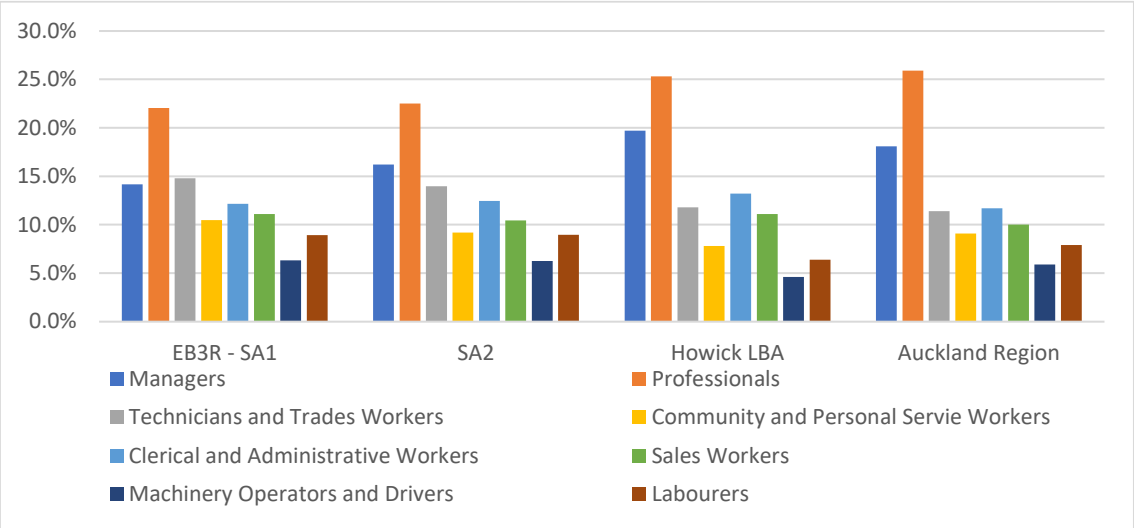


Figure 19 Profession for EB3R-SA1 based on census information for residential address

6.2.2.4 Employment – Workplace Address

The key professions for those that work in EB3R-SA1 included Professionals (26.4%), Sales Workers (18.4%), Community and Personal Service workers (11.8%) and Clerical and Administrative workers (10.9%). There were also a number of Managers (13.8%) although this was a smaller proportion than in SA2, Howick LBA and the Auckland Region.

Figure 20 Profession for EB3R-SA1 based on census information for workplace address

6.2.2.5 Transport

EB3R-SA1 had a higher percentage of households who had one vehicle or did not have a vehicle (36.6%), similar to the Auckland Region (36.9%). The SA2 and Howick LBA had higher proportions of households who had two vehicles (44.5% and 44.2%).

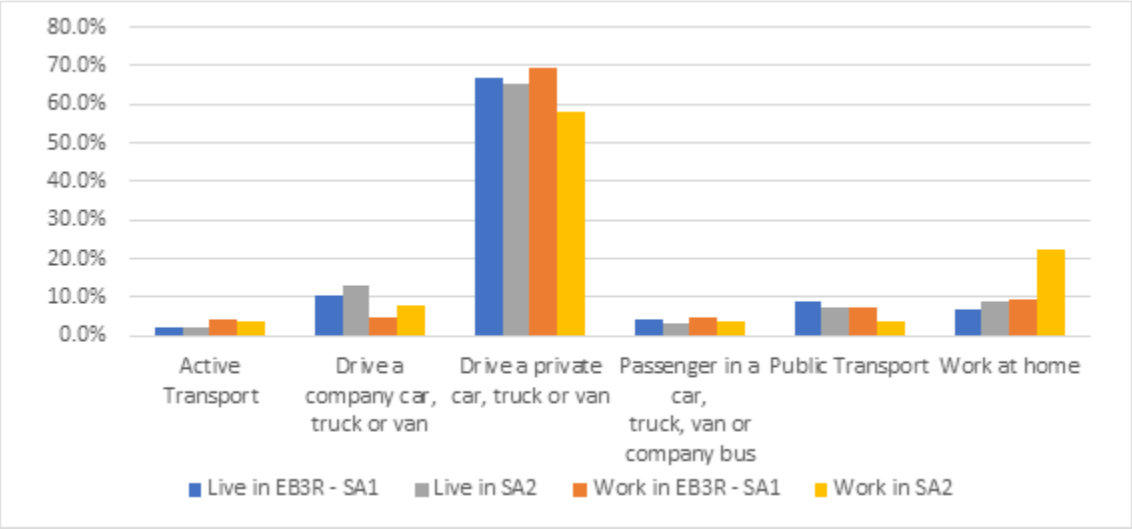


Figure 21 Transport modes for those living and working in EB3R-SA1 and SA2

For EB3R-SA1 the most common way for people to travel to work was via private vehicle (68.0%). This proportion was higher than the Howick LBA (including SA2) and greater than the Auckland Region. EB3R-SA1 had a lower percentage of residents who travelled to work by public transport (7.9%) compared to the Auckland Region (10.7%), but more than SA2 (7.3%) and Howick LBA (6.2%). The

percentage of people using active transport to travel to work (2.4%) was similar to SA2 (2.3%), lower than Auckland (5.3%) and higher than Howick LBA (1.9%).

6.2.3 Deprivation Index

New Zealand Deprivation Index analysis from 2018 (NZDep2018) provides a deprivation score for each SA1 based on seven key social indicators including employment, income, crime, housing and geographical access. A deprivation score of 1 represents areas with the lowest levels of deprivation and 10 the areas with the highest level of deprivation. For both EB2-SA1 and EB3R-SA1 the median deprivation score is 7, but several SA1 areas have a score of 9 (7008574, 7008577, 7008687, 7008692, 7008696). While there is variability along the corridor, the area can be considered to have a relatively high level of deprivation.

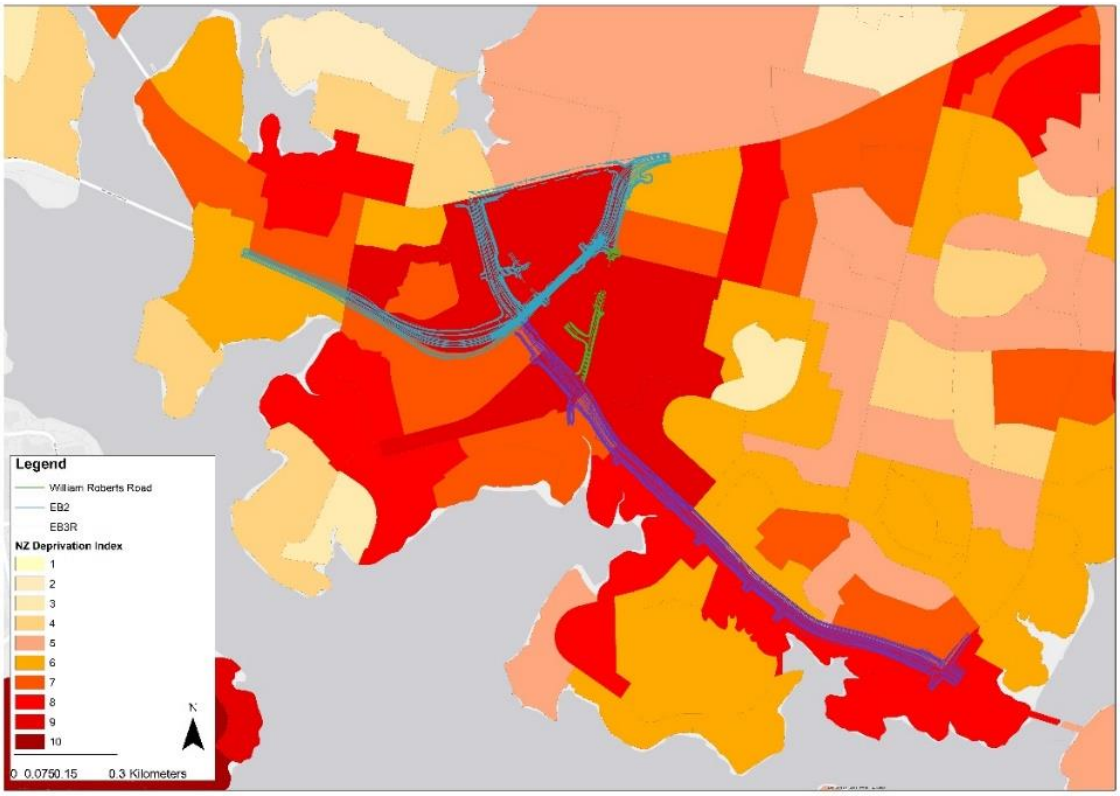


Figure 22 Social Deprivation Index (NZDep) for study area (EB2 and EB3R)

6.2.4 Disability

The 2013 New Zealand Disability Survey estimated that a total of 1.1 million New Zealanders were disabled, approximately 24%. Disability and age are related, more older people reported as having at least one disability. There are a number of statistics which provide information on disabled people including wellbeing[4] and labour market statistics[5]. These show that there are inequalities in employment, tenure of housing and social isolation.

The wellbeing statistics for December 2020 found just 39% of disabled people of working age (18-64) reported having enough or more than enough money to meet every day needs compared with 70% of

[4] https://www.stats.govt.nz/information-releases/wellbeing-statistics-december-2020-quarter
[5] https://www.stats.govt.nz/information-releases/labour-market-statistics-disability-december-2020-quarter/

the non-disabled population. Moreover, disabled people reported levels of loneliness and increased levels of anxiety compared to non-disabled populations.

6.3 Land use

6.3.1 AUP(OP) zoning

The Project generally follows the existing road network along Ti Rakau Drive from Pakuranga Road to Riverhills Park. EB2 is located in proximity to the Pakuranga Town Centre with Business – Town Centre zoning and Business – Mixed Use zonings. Ti Rakau Park is zoned Open Space – Sport and Active Recreation Zone. Around Pakuranga Town Centre the zoning is Residential – Terrace Housing and Apartment Building. There are some areas of Residential – Mixed Housing Urban Zone and Residential – Mixed Housing north of Pakuranga Road and Pakuranga Highway.

The EB3R component is located between SEART and Riverhills Park (Ti Rakau Drive Bridge). The underlying zonings are Business – Town Centre zoning, Residential - Terrace Housing and Apartment Building Zone (from Pakuranga through to Marriott Road) and Residential - Mixed Housing Urban Zone (Marriott Road to Ti Rakau Drive Bridge). There are areas zoned as Open Space – Conservation Zone, Open Space – Informal Recreation Zone and Coastal - Coastal Transition Zone to the south of Ti Rakau Drive. Riverhills Park is zoned as Open Space – Sport and Active Recreation Zone and Open Space – Conservation Zone. Riverhills Park also has a small area zoned as Coastal – Coastal Transition.

Figure 23 Land Use and AUP(OP) zoning in EB2 and EB3R Project areas

6.3.2 Land use

The EB2 component is located along Ti Rakau Drive from Pakuranga Town Centre to SEART. It includes Ti Rakau Drive, the northern section of William Roberts Road and associated changes to the surrounding

road network. In addition to the business land use the Williams Roberts Road section also contains community and recreational uses including the Pakuranga Leisure Centre and Ti Raku Park.

The Pakuranga Town Centre is located to the south-east of the Pakuranga Road/Ti Rakau Drive intersection and contains a large format shopping mall (Pakuranga Plaza). There is also a small group of retail and office spaces on the north side of Pakuranga Road, immediately to the east of the Pakuranga Road/Ti Rakau Drive intersection.

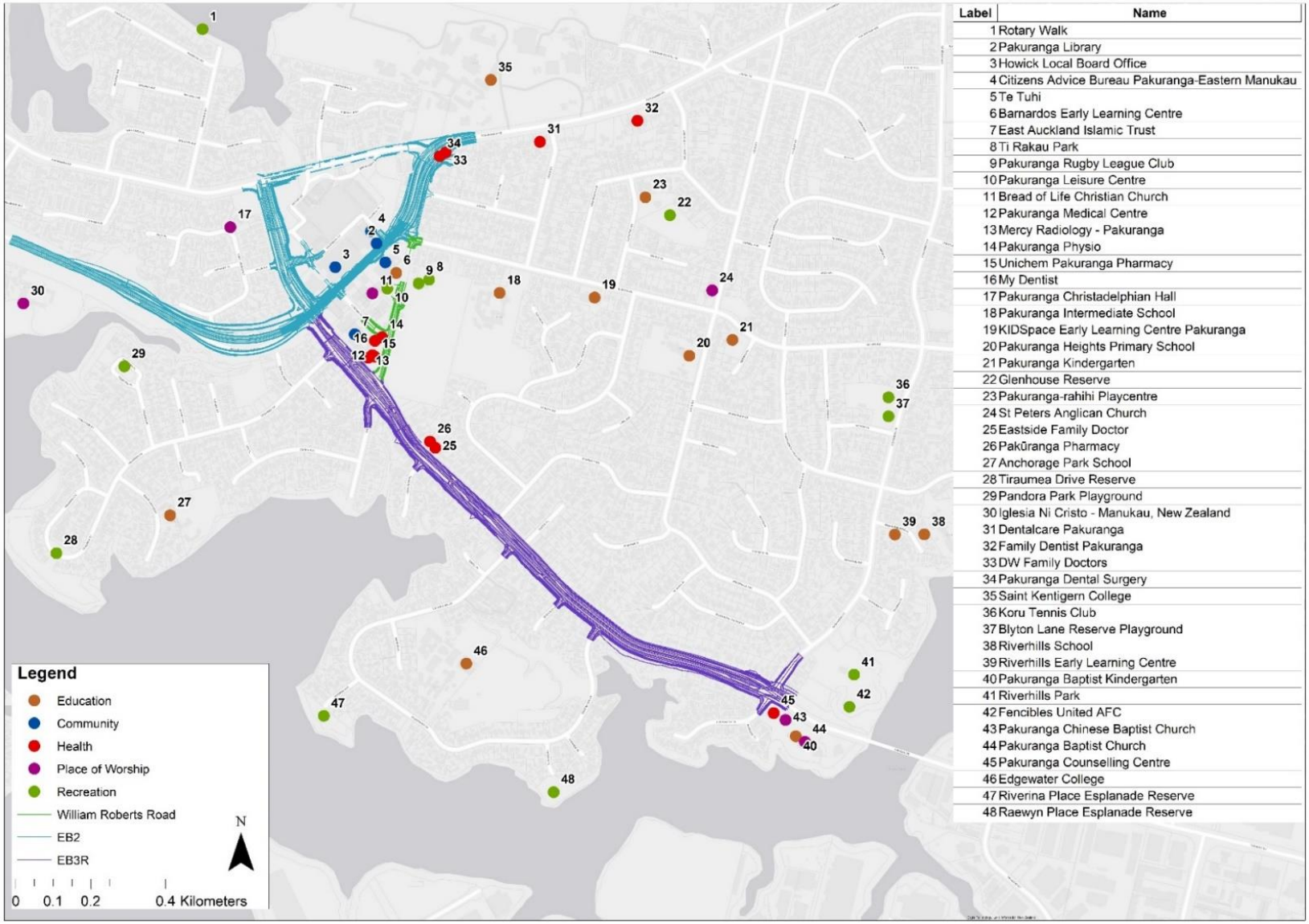
EB3R is predominantly residential, single houses or unit development land uses. Neighbourhood shops are also located adjacent to the intersection of Ti Rakau Drive and Edgewater Drive. There is also open space adjacent to Pakuranga Creek.

6.3.3 Social infrastructure

The IAIA refers to social (community) infrastructure/assets as the:

> *Public and private services and facilities that contribute to the general quality of life'* and '*the resources in the community that can be used to improve development outcomes for the community. They include the people and organisations who can help achieve community goals, but it also refers to the places, attractions, and physical resources whether natural or artificial that are valued by the community'* (Vanclay, Esteves, Aucamp, & Franks, 2015).

Social infrastructure in the vicinity of the Project includes education facilities, community and recreation facilities, cultural and religious spaces. The social infrastructure identified within the study area is shown in Figure 24 and a detailed list is provided in Appendix 2.



Label	Name
1	Rotary Walk
2	Pakuranga Library
3	Howick Local Board Office
4	Citizens Advice Bureau Pakuranga-Eastern Manukau
5	Te Tuhi
6	Barnardos Early Learning Centre
7	East Auckland Islamic Trust
8	Ti Rakau Park
9	Pakuranga Rugby League Club
10	Pakuranga Leisure Centre
11	Bread of Life Christian Church
12	Pakuranga Medical Centre
13	Mercy Radiology - Pakuranga
14	Pakuranga Physio
15	Unichem Pakuranga Pharmacy
16	My Dentist
17	Pakuranga Christadelphian Hall
18	Pakuranga Intermediate School
19	KIDSpace Early Learning Centre Pakuranga
20	Pakuranga Heights Primary School
21	Pakuranga Kindergarten
22	Glenhouse Reserve
23	Pakuranga-rahihi Playcentre
24	St Peters Anglican Church
25	Eastside Family Doctor
26	Pakūranga Pharmacy
27	Anchorage Park School
28	Tiraumea Drive Reserve
29	Pandora Park Playground
30	Iglesia Ni Cristo - Manukau, New Zealand
31	Dentalcare Pakuranga
32	Family Dentist Pakuranga
33	DW Family Doctors
34	Pakuranga Dental Surgery
35	Saint Kentigern College
36	Koru Tennis Club
37	Blyton Lane Reserve Playground
38	Riverhills School
39	Riverhills Early Learning Centre
40	Pakuranga Baptist Kindergarten
41	Riverhills Park
42	Fencibles United AFC
43	Pakuranga Chinese Baptist Church
44	Pakuranga Baptist Church
45	Pakuranga Counselling Centre
46	Edgewater College
47	Riverina Place Esplanade Reserve
48	Raewyn Place Esplanade Reserve

Figure 24 Location of identified social infrastructure surrounding the EB2 and EB3R Projects

6.3.3.1 Education

There are several schools in the area including:

- Saint Kentigern College a private school with 2259 students enrolled and likely to have a wide catchment
- Pakuranga Intermediate School a state school with 231 students enrolled with a locally zoned catchment
- Edgewater College a state school with 635 students enrolled with a locally zoned catchment

In addition to these schools there are a number of early learning facilities directly impacted including Barnardos Early Learning Centre, KIDSpace Early Learning Centre Pakuranga, Pakuranga Kindergarten Pakuranga Baptist Kindergarten. Barnardos Early Learning Centre is located on Reeves Road. The other centres are outside the proposed EB2 and EB3R areas.

6.3.3.2 Community

There are a number of community facilities within the study area including the Howick Local Board Office and Citizens Advice Bureau on Aylesbury Street. These facilities are likely to be directly affected by the project.

6.3.3.3 Health

The Project area is within the East Health Trust Public Health Office (PHO) area which covers Howick, Botany, Pakuranga, Beachlands, Clevedon, Flat Bush, Maraetai, Kawakawa Bay and Pukekohe. East Health PHO includes 19 general practices in the East Auckland and Franklin area. Based on information from 30 June 2020 the East Health Trust PHO had a total of 95,036 patients enrolled with 1:1,485 General Practitioner (GP) to patient ratio and 1:1,808 nurse to patient ratio.

Health facilities within the study area are shown in Figure 24 above.

6.3.3.4 Places of Worship

These include Bread of Life Christian Church, Pakuranga Mosque, Pakuranga Christadelphian Hall, St Peters Anglican Church, Pakuranga Chinese Baptist Church and Pakuranga Baptist Church.

The Bread of Life Church and Pakuranga Mosque and Pakuranga Chinese Baptist Church and Pakuranga Baptist Church are likely to be affected by adjacent construction works. The other places of worship identified are likely to be affected by general construction works in the area.

6.3.3.5 Recreation

The main recreational areas include Pakuranga Leisure Centre, Ti Rakau Park and Riverhills Park. Pakuranga Leisure Centre is located on Reeves Road. Ti Rakau Park will be minimally affected by works within the park but there are works adjacent. Some land within Riverhills Park will be acquired permanently and some land is required on a short-term basis for construction.

6.4 Existing Transport Network

A full review of the transport network is provided in the ITA. The transport network is relevant to the SIA as it shapes how people are able to move about and determines how readily they can access places like work, school, shops and recreational or social activities and is a key contributor to “people’s way of

life". The transport network is also relevant when determining the study area and those communities who may be indirectly affected by the Project.

The majority of traffic is based on people commuting from the eastern suburbs of Howick, Pakuranga and Botany to the Auckland Isthmus, with the majority of movements westbound in the morning and eastbound in the evening. Manukau City Centre was also identified as a significant destination.

The area has been identified as suffering from a severely congested road transport network which is heavily reliant on private vehicles. The vast majority of people who live and work in this area commute by car (see Sections 6.2.1.5 and 6.2.2.5). Due to this congestion public transport is not seen as a viable alternative as the buses are stuck in the same congestion leading to a less reliable service. In addition, there is an identified lack of travel choices including public transport and active transport due to the existing transport infrastructure.

Private vehicles

Traffic movements are predominantly westbound in the morning (towards the city) and eastbound in the evening (towards the eastern suburbs). There are two crossings, Waipuna Bridge and Panmure Bridge, which both funnel traffic to and from the Auckland Isthmus and southeast suburbs.

Pakuranga Road is an east-west regional arterial road which connects Howick with Panmure via Highland Park and Pakuranga. It also intersects with Ti Rakau Drive at Pakuranga Town Centre. Ti Rakau Drive is a strategic corridor connecting Pakuranga with Botany. Pakuranga Town Centre is located at the junction of Pakuranga Road and Ti Rakau Drive but can also be accessed locally using Reeves Road.

Parking in the area includes Pakuranga Plaza (1,355 spaces), Cortina Place (25 spaces), William Roberts Road (127), Ti Rakau Drive (180)[6]. There is also some parking available on Ayr Road, Roseburn Place and Mattson Road.

Public Transport

Pakuranga Road and Ti Rakau Drive are serviced by a number of different bus routes including 70, 72C, 72M, 72X, 352, 711, 712. Generally, routes are focused on travel between Pakuranga and the city with limited services which link the area to Sylvia Park, East Tāmaki, Manukau City Centre and Ōtāhuhu. Bus stops are on-street with the exception of an off-street stop at Pakuranga Plaza. Existing bus stops are not evenly spaced along Ti Rakau Drive with a range of 200 m to 1500 m and an average of 500 m.

Walking

The pedestrian network consists of footpaths along the side of the street network. There is some separation between pedestrians and vehicles, by way of a berm, between the carriageway and footpath on most routes. For EB2 (Pakuranga Town Centre) there are limited crossing facilities, with signalised crossings located at the major intersections of Pakuranga Road / Ti Rakau Drive and Pakuranga Highway / Ti Rakau Drive. The nearby Rotary Path follows the Tāmaki Estuary between Pakuranga, Sunnyhills, Farm Cove and Half Moon Bay. A footpath through Bus Stop Reserve connects the Rotary Path with the Town Centre.

For EB3R, Ti Rakau Drive itself has a good footpath. However, there is poor pedestrian connectivity between the road and the residential areas adjacent due to the number of cul-de-sacs and limited

[6] Based on section 3.6 of the ITA

pedestrian links. Ti Rakau Drive is a heavily trafficked arterial road, safe crossings are located at major road crossings and do not provide good connectivity due to the limited number and the design of crossings which have multiple legs.

Cycling

Cycling facilities along Ti Rakau Drive are minimal and do not support mode shift from private vehicles to cycling. Cyclists share the road with general traffic and crossings and links are similar to those for pedestrians. In the wider Pakuranga area, there are sections of short cycle routes and quieter roads. There has also been some investment into recreational cycling facilities such as the Cascades shared path and Pakuranga Rotary shared path.

6.5 Plan and policy review

6.5.1 National Policy Statement on Urban Development 2020 (NPS-UD)

The National Policy Statement on Urban Development 2020 (NPS-UD) seeks to deliver well-functioning urban environments by encouraging denser residential development within a walkable distance around city centres and rapid transit stops. The NPS-UD requires local authorities to enable greater building heights and density in areas of high demand and with good accessibility.

Auckland Council has recognised the important role multi-storey developments have in providing new housing particularly within walking distances to rapid transit. Its approach to meet the requirements of the NPS-UD includes a 10-minute walking catchment around metropolitan centres, as well as existing and planned rapid transit stops (approximately 800 m). There is further work planned by Auckland Council to refine the walkable catchments noting this will be based on actual pedestrian networks.

The Project is consistent with the directives in the NPS-UD as it provides a rapid transit system that supports and enables growth and development. In particular, intensification will be supported around the proposed bus stations.

6.5.2 Auckland Council Plans and Strategies

6.5.2.1 Auckland Plan 2050: Development Strategy, July 2018

Auckland is anticipated to need an additional 319,000 dwellings, 6,098,000 m^2 of commercial floor space, 3,600,000 m^2 of light industrial floor space and 1,397,000 m^2 of heavy industrial floor space by 2046 (Auckland Council, 2018).

The Auckland Plan 2050: Development Strategy (the Development Strategy) sets out how this will be achieved including by ensuring sufficient land is available to enable growth and aligning the timing of infrastructure provision with development. Highland Park, Pakuranga Corridor and Pakuranga are identified as growth areas and the Project is identified as key to delivering growth in the Pakuranga area.

6.5.2.2 Auckland Economic Development Action Plan (EDAP) 2021-24, July 2021

Auckland is identified as the most economically significant region in New Zealand accounting for 40% of GDP and employing over 900,000 people. The Auckland EDAP notes the impact of COVID-19 restrictions including lockdowns resulted in a decrease in GDP generation and an increase in unemployment during 2020. Following this period some of the key challenges include public transport uptake and growing

wealth inequality and income disparity. The EDAP includes an objective to support infrastructure that enables economic development, in particular infrastructure to encourage a modal shift away from private vehicles.

6.5.3 Local and Community Plans

The local planning framework identifies community values, aspirations and goals. The key local plans that relate to the study area and the Project objectives are set out in Figure 25.

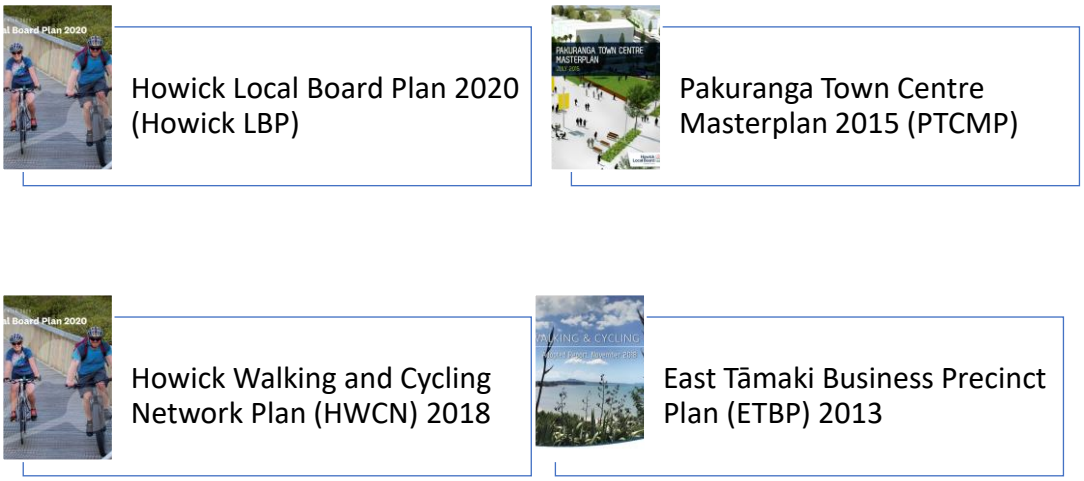


Figure 25 Local policy documents

6.5.3.1 Howick Local Board Plan 2020 (Howick LBP)

The Project is located in the Howick Local Board Area, the plan includes a number of outcomes which are important for SIA these are detailed in Table 5.

Table 5 Outcomes and objectives of the Howick Local Board Plan

Outcome	Objective
Outcome 1: People in our communities feel safe, engaged and connected.	• People actively contribute to their community.
Outcome 2: Well-planned public spaces that support active, healthy and sustainable lifestyles.	• Parks, open spaces and coastal areas support a wide variety of recreational activities. • Sports and recreational opportunities respond to the needs of our communities.
Outcome 3: Heritage, local arts and cultural diversity are valued.	• Enable people to engage with local history, and share their diverse cultures.
Outcome 4: Our natural environment is protected, restored and enhanced.	• Our large natural areas are enhanced and protected.
Outcome 5: A prosperous local economy supporting business growth and opportunity.	• Grow the number of businesses locating in the Howick Local Board area's key industrial and commercial areas. • Generate business activity and employment by increasing visitor numbers to the Howick Local Board area.
Outcome 6: Effective and accessible transport choices.	• Public transport services that people can easily access.

	• Active transport infrastructure enables connection with schools, key community facilities and transport hubs. • Our road network enables local economic prosperity.

6.5.3.2 Howick Walking and Cycling Network Plan, November 2018 (HWCN Plan)

The Howick Walking and Cycling Network Plan defines the long-term walking and cycling network plan for the Howick LBA. The HWCN Plan aligns with the outcomes and objectives of the Howick LBP, including around connectivity, active and sustainable lifestyles and accessibility to transport. The Project aligns with the HWCN Plan's main aim which is to improve the network of safe walkways and cycleways in Howick, and encouraging these modes of transport as practical, healthy options for local and regional connections.

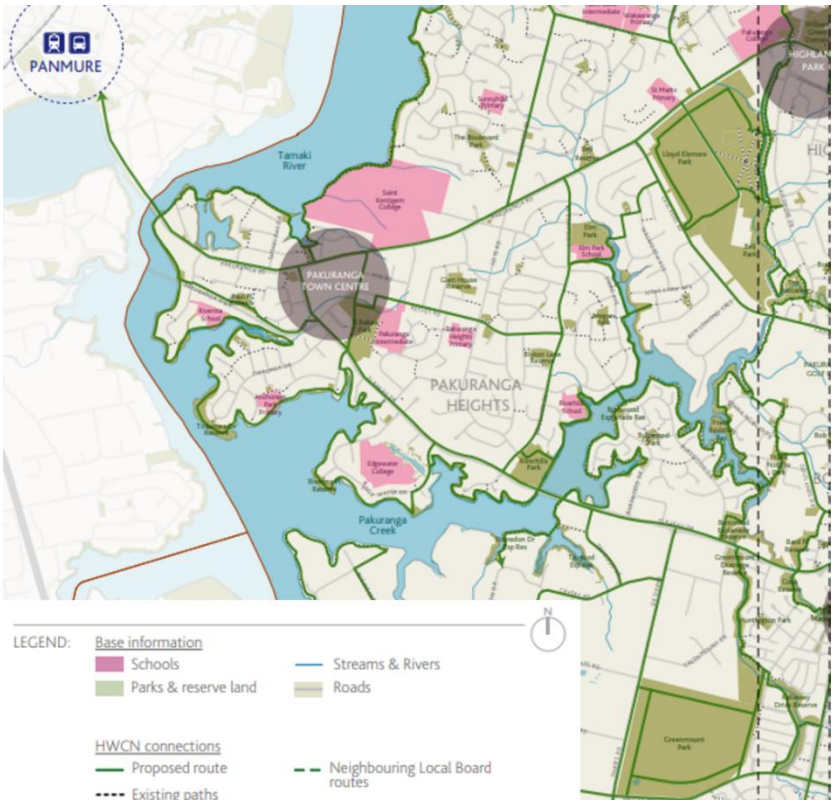


Figure 26 HWCN Plan for existing and proposed connections in the Project Area source: HWCN

6.5.3.3 Pakuranga Town Centre Masterplan, July 2015 (PTCMP)

The PTCMP sets out the direction for the redevelopment and enhancement of the Pakuranga town centre over the next 30 years. The PTCMP identifies the role the Project will have on the Town Centre and is informed by stakeholder feedback which identifies some of the community values (e.g. cultural diversity, access to public space, improved pedestrian and cycle links). These outcomes are:

Building

- Redevelopment of the centre will be a catalyst for change in the surrounding area.

Connecting

- The centre will be a well-connected destination for all modes of transport
- Within the centre there will be a coherent network of attractive, connecting spaces
- The centre will have strong links to the coast with a dedicated pedestrian crossing over Pakuranga Road
- Car parking will be located within new developments, freeing up land for other uses
- Widened footpaths, shared spaces and cycle lanes will make it easier to cycle and walk in and around the centre.

Revitalising

- The new bus interchange will increase the number of people coming to the centre.

The actions set out in the PTCMP is to use the masterplan's vision and design principles to influence the Project and to deliver new signage in the centre to link to landmarks such as Bus Stop Reserve, Te Tuhi Regional Arts Facility, Pakuranga Library and shopping areas. These actions are directly linked to the delivery of the Project.

6.5.3.4 East Tāmaki Business Precinct (ETBP) Plan, July 2013

East Tāmaki is a key employment area in the Auckland Region accounting for 4.5% of total employment (ETBP, 2013). The plan recognises that an improved connection between Auckland and Manukau will help support employment growth and improve access to the precinct. The ETBP notes that 35% of employees live within 5km and 70% live within 10 km of the precinct with the majority of these employees residing in the Eastern Suburbs.

The outcomes for the East Tāmaki business precinct include:

- Infrastructure needs are delivered for anticipated business growth and quality. Reliable and continuous services are delivered
- The majority of the workforce continue to live locally
- Sustainable business practices are adopted by all businesses in East Tāmaki leading to cost efficiencies in energy, transport and other uses. Impacts on the natural environment are reduced
- Connections are provided that promote business to business activities and land uses both within the precinct and beyond
- The efficient movement of both goods and people is facilitated
- An environment that is attractive for businesses to locate and employees to work.

6.6 Strategic growth and development

The Auckland Region is projected to account for about half of New Zealand's population growth between 2018 and 2048, with an increase of 648,000 – from just over 1.6 million to just over 2.3 million (medium projection). The Howick LBA had a population of 140,970 people in 2018 or 9% of Auckland's total population and is expected to grow to 180,000 by 2051 (Howick Local Board , 2020). The PTCMP notes that the Pakuranga area is likely to be subject to significant change over the next 30 years and will need 70,000 new dwellings to accommodate its residents (Howick Local Board, 2015).

The Howick LBP recognises the strategic east-west corridor between Howick, Botany and Highland Park through to Pakuranga and the rest of Auckland (Figure 27). This corridor will continue to form an important function for transport and access into the future. The area is likely to be subject to further

intensification and changing land use, driven by the planning framework including the NPS-UD, Howick LBP and PTCMP.

Figure 27 Strategic network source: Howick LBP

6.7 Community consultation outcomes

6.7.1 Community Values

The identification of community values, aspirations and goals assists in the assessment of potential social impacts by providing an insight into how the community may perceive impacts and how impacts may be felt differently between various demographics and stakeholders.

Values are defined by the IAIA as *'abstract and often subconscious assumptions held by individuals about what is right and/or important in their lives'.* From a community perspective this could include things or beliefs that the community as a whole, or certain groups in the community, value about a particular area, that positively contribute to quality of life or sense of place, and could include aspects such as:

- The amenity and character of a place based on the physical and natural environment (including heritage and cultural features, air quality, noise levels)
- Health and safety
- Access to employment and community services
- Social and cultural
- Environmental values and natural features enjoyed by local communities.

During consultation undertaken for the Project, as discussed in the consultation outcomes report[7] and identified on social pinpoint, the community raised the following key issues:

6.7.2 Members of the public, Residents and Resident Associations

- Concern and empathy for residents affected by acquisition including the impacts on community cohesion, residents' mental health and uncertainty about the decision-making process and timing[8]
- For those who will be displaced concerns about a lack of affordable alternatives, their ability to access and/or afford a mortgage and the valuation process for owners of property that has not yet been acquired[9]
- The need to maintain access to residential areas and properties, commercial and community facilities
- Fears of impacts from construction including traffic and congestion, noise and vibration, impacts on native flora and fauna and the coastal marine area and the length of time for construction
- Including a park and ride facility to encourage people to use the busway and for people with mobility issues who raised concerns about how they would get to the stations without a park and ride[10]
- Support for active modes including the provision of safe and convenient cycling options specifically dedicated, separated cycle paths which were seen as safer and more attractive
- Apprehension regarding potential for future development and increased urbanisation as a result of up-zoning as a result of the NPS:UD and MDRS
- Noise and dust impacts during operation including the RRF and properties along Ti Rakau Drive
- Impacts on green spaces, including Ti Rakau Park, where works were perceived to impact on access to existing green spaces
- Consideration of the design of the flyover which had the potential to improve traffic flow and safety for pedestrians on Reeves Road, but had the potential to create an unattractive and unsafe environment underneath
- Confusion and uncertainty with accessing schools, shops and community facilities following the new road alignment
- Connecting the Town Centre, including ensuring access from key intersections is maintained with efficient east-west routes and providing safe and efficient crossings for cyclists and pedestrians
- Mode shift there was an evident dichotomy of those supportive of more sustainable transport who wanted to see the Project focus on cycling and walking criticising the perceived 'car-centric' approach of the Project. Some residents wanted to see fewer road lanes and objected to the Project being used to provide a new flyover which will benefit private vehicles. Conversely there were also respondents who were concerned the Project will exacerbate existing congestion and was not providing enough lanes for private vehicles.

6.7.3 Businesses and Business Associations

- General support for a busway, however concern the busway will be under-utilised and questions about frequency and reliability of buses during operation

[7] Appended to the relevant AEE
[8] A number of these comments related directly to impacts for the Burswood community which will assessed separately for the EB3C component of the Project
[9] Many of these comments are related directly to impacts for the Burswood community which will assessed separately for the EB3C component of the Project
[10] This was in reference to Botany Station which is assessed separately under EB4

- During the construction of Reeves Road dust, noise and vibration, road closures, wayfinding and the combined impact of these factors on stakeholders in this area
- Support for the offline alignment which would reduce impacts on businesses along Ti Rakau Drive.

6.7.4 Community Facilities and Social Infrastructure

- Engagement with educational facilities raised concerns about safety, road layout, and accessibility for educational facilities including Edgewater College, Riverhills School and the ability for parents and students to access the school(s)
- Sports clubs (Pakuranga Rugby league Club and Fencibles AFC) noted the potential for increased accessibility of the clubs following the project however were concerned with impacts to their facilities. Suggestions included adding fencing, improving the layout and design of the park and improved lighting. Along William Roberts Road a 40km/hr speed limit was also recommended.

6.7.5 Advocacy Groups

- General support for planning for a high-quality rapid transit network that improves transport efficiency, reduces emissions and tackles congestion and this should cater for increased urban development in the area
- Need to include cycling facilities and integrate cycling and pedestrian links into the design of the project including considering existing pathways
- Use of grade separated crossings to ensure safe crossings for cyclists and pedestrians by ensuring vehicles slow down
- Design of bus stations and facilities to be inclusive and safe spaces which provide adequate shelter and amenities.

6.7.6 Mana whenua

Regular engagement with mana whenua partners has taken place through the Auckland Transport and mana whenua Southern Forum. The forum includes representatives from Ngāti Whanaunga, Ngāi Tai ki Tāmaki, Te Akitai Waiohua, Ngāti Maru, Ngāti Tamaoho, Te Patukikkiri, Ngāti Paoa, Ngāti Paoa Trust, Ngāti Te Ata Waiohua, Te Ahiwaru, and Ngāti Tamaterā.

Mana whenua have played a key and valued role in the development of the design, including urban design and landscape, stormwater management, construction methodologies and sustainability and procurement strategies and policies. A separate engagement process has been undertaken with mana whenua and will continue throughout the course of the project.

7.0 Assessment of Social Effects

Chapter Summary

- *During the construction stage there will be transport impacts, including traffic diversion and re-aligned access points which have the potential to create adverse social impacts by reducing connectivity and accessibility*
- *Once operational the busway will result in better trip times and improved access for the local and regional area associated with better connectivity for residents, businesses, and social infrastructure*
- *The Project will result in the acquisition and termination of leases of residential and commercial properties. The acquisition of this land will displace both people and businesses, creating adverse social impacts*
- *During construction there may be adverse social impacts associated with detours, closures and alternative access arrangements which can result in delays and cause stress, anxiety and frustration for the community*
- *The improved walking and cycling infrastructure will reduce severance effects for nearby residents to and within the Town Centre*
- *For both construction and operation stages there are a range of potential environmental effects including the level of dust and noise they are exposed to. These effects can result in adverse impacts on people's health and wellbeing and the enjoyment of their local area.*

7.1 Overview

The EB2 construction works are anticipated to occur over a period of approximately four years with multiple work zones occurring simultaneously. The general extent of the EB2 project area encompasses the following zones:

- Ti Rakau Drive from Pakuranga Road to Roseburn Place
- SEART from the eastern Waipuna Bridge abutment to Ti Rakau Drive
- Reeves from Ti Rakau Drive to William Roberts Road
- Pakuranga Road from Ti Rakau Drive to William Roberts Road
- William Roberts Road and Cortina Place
- Specific sections of Palm Avenue, Aylesbury Street, Seven Oaks Drive.

The general extent of the EB3R construction area encompasses Ti Rakau Drive from SEART to the western Ti Rakau Bridge abutment and short sections of Tiraumea Drive, Mattson Road, Roseburn Place, Edgewater Drive west, Wheatley Avenue, Edgewater Drive east, Gossamer Drive and Freemantle Place. The EB3R construction works are anticipated to occur over a period of approximately three years.

Construction impacts are by their nature short term. The duration of the construction works will affect the level of consequence and the potential social impact (as set out in Section 4.6) It is important to note construction for the Project will be undertaken over several stages and impacts will typically be contained to live work areas. This means that effects experienced by individual receivers are likely to be for a shorter period (e.g., weeks or months) compared to the overall construction duration (years). This does not include laydown areas which will typically remain in place for the duration of construction.

The level of social impact identified is based IAIA Risk Assessment Framework (Vanclay, Esteves, Aucamp, & Franks, 2015) as shown in Figure 2 and uses a consequence and likelihood to determine an overall social impact rating.

7.2 Positive Effects

Eastern Busway will deliver significant new public transport infrastructure which will result in a number of positive social impacts for the neighbourhood, community and sub-regional area.

7.2.1 People's community, health and wellbeing and way of life

7.2.1.1 Access and Connectivity

The new busway will result in better trip times and improved access for the local and regional areas. As a result, there will be a positive social impact rating associated with better connectivity of residents, businesses, and social infrastructure in proximity to the Project. This will indirectly increase access to additional employment, educational and social opportunities (Wild, et al., 2021).

Improvements in traffic flow and shorter journey times will benefit public transport and private vehicle users. In addition, new cycleways and footpaths will support greater uptake of active transport improving health and wellbeing. Greater transport equity and mode shift which seeks to move away from reliance on private vehicles can promote greater social inclusion (Waka Kotahi NZ Transport Agency, 2020). Improved connectivity will also reduce commuting stress (Wild, et al., 2021).

Better trip times and improved access will also result in better connectivity of open and green space to the local and regional network. The social impact rating of improved facilities and better access to the facilities would be positive.

The project also provides an improved pedestrian and cycling environment with safer crossings, legible routes, improved wayfinding and a more integrated urban form. Design aspects such as carriageway width, kerbs, planting, station amenities and pedestrian lighting will support placemaking particularly around the town centre. A positive social impact rating is associated with the improved urban environment.

7.2.1.2 Access to Community and Cultural Facilities

An improved pedestrian crossing at William Roberts Road will strengthen pedestrian connections between Te Tuhi and the Town Centre providing increased opportunities for visitors. The result will be a positive social impact rating particularly at a community level for those who regularly use this pedestrian network.

7.2.1.3 Open Space and Parks

Whilst there will be adverse impacts on open spaces during construction it is considered the mitigation proposed would not simply offset those impacts but result in ongoing improvements to those spaces. At Ti Rakau Park, replacement parking facilities will be well-located for access to the park, the replacement of existing play equipment with new and upgraded play equipment and improved siting of the playground away from the road would improve open space facilities and result in a positive social impact rating.

Similarly for Riverhills Park, mitigation is still being finalised however there is the potential for improved facilities including an extended pathway and improved facilities for sporting fields which would result in a positive social impact rating.

Other open space areas will benefit from new planting to enhance existing vegetation, including:

- Areas along Pakuranga Road at the front of St Kentigern College,
- The edge of Ti Rakau Park near Ti Rakau Drive and
- The linear park adjacent to the new SEART

This will result in a positive social impact rating.

It is expected that pedestrian amenity and safety will be improved through upgraded footpaths and crossings in the vicinity of Ti Rakau Park and Riverhills Park and the reduced trip times will increase the catchment for users of these open spaces which will result in a positive social impact rating.

7.2.2 People's Environment

7.2.2.1 Amenity

The Project has identified opportunities to strengthen the character of the existing environment, including the Town Centre, improve connectivity for pedestrians and cyclists and enhance the amenity, accessibility, and quality of public space along the corridor. These features will improve the environment and result in a positive effect. This includes the opportunity for re-integration of residual land to create a positive relationship between the new transport infrastructure and built form and which enables future development of land uses in support of the Development Strategy and PTCMP.

7.3 Construction

7.3.1 Eastern Busway 2

7.3.1.1 People's Way of Life, Community and Culture

7.3.1.1.1 Community character

There is a larger proportion of Asian ethnicities in the local and wider community area. This reflects the services and facilities that are present in the community area. Many businesses and community facilities in the area have Chinese language skills for example. It will be important for information related to the timing of construction works to be available in other languages such as te reo Māori, Hindi and Chinese (simplified). If key information is not available in these language social impacts may be greater than those set out below, due to increased uncertainty and knowledge of the construction works.

7.3.1.1.2 Access and Connectivity

Several commercial and residential properties in the EB2 neighbourhood area will have access impacted during construction works. As a guiding principle for the Project suitable access will be provided for any property that has not been acquired by AT. Access and connectivity impacts include frustration and stress caused by traffic and congestion in the town centre as a result of reduction in road capacity and additional construction traffic. Impacts on the community also extend to uncertainty and perceived inconvenience from changes to the local transport network.

Traffic congestion and disruption in travel due to construction works was raised during consultation with respondents expressing concern for the potential for disruption along the length of the road for an extended period of time.

The Project's ITA has assessed transport effects generated during construction (short-term) and operation (long-term). The ITA identified potential temporary adverse effects associated with construction works within the road corridor including the need for alternative access arrangements for a number of properties.

The ITA notes minimal impacts are predicted for key intersections along the project during construction. Moreover, construction traffic volumes are anticipated to be low, with most construction vehicles travelling outside of peak hours.

Despite the ITA, there remains the potential for a moderate adverse social impact rating (likelihood = possible, consequence = minor) as a result of construction effects adjacent to and within the road corridor.

The ITA notes a Construction Traffic Management Plan (CTMP) will be developed to mitigate the effects of construction traffic on the road network and the effects on safety performance. In addition to the CTMP, the mitigation measures as set out in Section 8.1 for early notification and ongoing communication should be implemented to identify the potential for congestion and delay and to allow people to plan ahead. With mitigation measures in place the social impact rating is considered low adverse (likelihood = possible, consequence = insignificant).

7.3.1.1.3 Community Severance

During construction excavation works within the road corridor may result in severance effects due to physical barriers like road or footpath closures. These effects will be felt by receivers in the neighbourhood, community and sub-regional areas. During consultation, respondents were concerned they would not be able to access essential services including shops, the library, the art gallery and the early learning centre in the Town Centre. During consultation one respondent queried *"How will you maintain access for my son, his cohort and teachers to this Early Learning Centre during construction?".*

It is accepted that construction activities will disrupt people's patterns of movement. Fencing, hoardings and barriers will be required during construction and will provide safe detours around work areas. The severance impacts are likely to be more significant for those with a disability. However, requirements for accessibility have been considered through engagement with AT Capital Projects Accessibility Group.

The social impact rating is considered moderate up to high adverse (likelihood = possible, consequence = minor up to moderate) for community severance effects. These effects will be short-term depending on the length of construction.

The incorporation of accessibility and design measures, such as tactile paving, wheelchair access and visually contrasting ground surfaces, to respond to the needs of the disabled community will assist in addressing social severance for those more vulnerable users. Further mitigation measures include good communication during construction activities providing adequate notice of changes, a clear description of alternative routes and timetable for works, providing legible signage, removing barriers as soon as practicable and maintaining access (see Section 8.1 for more details).

With mitigation measures in place, this reduces the social impact rating to low up to moderate adverse (likelihood = possible, consequence = insignificant up to minor). The rating will depend on the extent that design features are incorporated into the final design.

7.3.1.1.4 Access to Community and Cultural Facilities

Several properties will be affected by temporary changes to access during construction of EB2, specifically works at the intersection of Reeves Road / William Roberts Road and the changes to on-street carparking on William Roberts Road. Receivers impacted include the community around William Roberts Road and Reeves Road. This includes a number of community facilities, including; Dementia

Society, Te Tuhi, Pakuranga Library and Citizens Advice Bureau, two places of worship and an early learning centre. These facilities are not being displaced.

Changes in access and parking can generate confusion, frustration for those seeking to access these facilities. These effects will be felt at a community level but also potentially a regional level depending on the type of facility and its catchment. Effects will be mostly short-term during construction but could be medium to long term due to changes to access from Ayr Road.

Access changes disrupting people using services and facilities will result in higher effects for those who are less resilient to change, including children, the elderly and those with a disability. There is the potential for a moderate adverse social impact rating (likelihood = possible, consequence = minor) as a result of changes in access and construction traffic to these services and facilities. These impacts would be short-term reflecting the construction schedule.

Alongside the mitigation measures set out in Section 8.1, suitable alternative access arrangements are being developed in consultation with directly impacted stakeholders, with appropriate measures for the service, facility and locality. These measures are detailed in the ITA. With mitigation in place the social impact rating is low adverse (likelihood = possible, consequence = insignificant).

Within the EB2 area the Bread of Life Christian Church and the Pakuranga Mosque are located on Cortina Place. These properties are not being displaced however there will be changes to access during construction. Access changes could disrupt people's ability to attend these places of worship due to lack of parking or inconvenient access. There is therefore also the potential for the construction works to result in a loss of connection between members of the community and their place of worship. As above, effects will be higher for those who are less resilient to change or are particularly vulnerable including children, the elderly and those with a disability.

There is the potential for a moderate adverse social impact rating (likelihood = possible, consequence = minor) as a result of changed or impeded access to these facilities. Alongside the mitigation measures set out in Section 8.1, suitable alternative access arrangements are being developed in consultation with directly impacted stakeholders, with appropriate measures for the occupier and locality. These measures are detailed in the ITA. With mitigation in place the social impact rating is low adverse (likelihood = possible, consequence = insignificant).

7.3.1.2 People's Health and Wellbeing

7.3.1.2.1 Access to Health and Wellbeing Facilities

Some healthcare facilities will be displaced during construction of the Project. This includes DW Family Doctors (177 Pakuranga Road) and Pakuranga Dental Surgery (175 Pakuranga Road). The loss of these facilities will be felt at a local community level by the businesses themselves but also will impact the wider community area as a GP is a primary healthcare service and dental surgeries are also a routine service that the community would use.

While these are established practices, it is noted the properties have already been acquired by AT and they are now tenants on a lease with a 3 month notice period. The impacts in this regard would be the same as if Auckland Council no longer wished to lease the property. However, the loss of these facilities still has the potential to affect existing patients and for the community who may need to use these facilities. Patients may not be able or willing to relocate to a different practice which may result in delays seeking help and poor health and wellbeing.

Advanced notice to the practices will allow the practices to plan to relocate and communicate this to their patients. At this point in time there remains uncertainty in terms of the future location of the impacted practices, the availability of practices with similar specialities, fee structures and staff language skills, and the capacity of other practices in this area to cater for patients should the catchment areas change.

There is the potential for a moderate up to high adverse social impact rating (likelihood = possible, consequence = minor up to moderate) as a result of changes in access and loss of healthcare services and facilities. With mitigation, set out in Section 8.1, and proactive community engagement, the social impact rating would be low up to moderate adverse impact (likelihood = possible, consequence = insignificant up to minor) due to the loss of these healthcare facilities. These impacts would be short-term while facilities or patients relocate but could be longer term if they are unable to do so.

7.3.1.2.2 Open Space and Parks

For EB2, there will be construction work within or adjacent to open space areas including Ti Rakau Park and the Bus Stop Reserve on Pakuranga Road. These impacts will be mostly confined to the local and wider community; however, the Rugby League Club at Ti Rakau Park may have a wider catchment for players. During consultation several respondents highlighted the need for high quality green space and the perceived lack of green space in the area, with the loss of green space resulting in adverse social and environmental impacts. Consultation responses included: *"If roads are extended here what becomes of the community park? There already [aren't] enough nice green spaces in this area"*.

At Ti Rakau Park, construction works during EB2 are limited with a large amount of construction works having been carried out as part of the William Roberts Road early works. However, works would still impact access from William Roberts Road north of the park.

The Bus Stop Reserve will be affected by temporary occupation during construction for the installation of stormwater infrastructure. The area of works within the Bus Stop Reserve is limited and the park and its footpaths will be accessible during the construction period.

There is the potential for a short-term moderate adverse social impact rating (likelihood = possible, consequence = minor) as a result of construction effects adjacent to and within areas of open space.

Proactive community engagement and wayfinding signage will be important to mitigate impacts for access to open space (see Section 8.1 for details). With mitigation in place the social impact rating is considered to be low adverse (likelihood = possible, consequence = insignificant).

7.3.1.2.3 Stress and Anxiety

The Project has the potential to induce fear and anxiety for the community which can adversely impact people's health and wellbeing. These effects will be most significant at a community level where people are directly impacted by the Project e.g. through land acquisition or close proximity to construction works. Aspects of the Project which are likely to generate anxiety include:

- Uncertainty around the nature and timing of the project
- The length of time for construction spanning multiple years
- For those being displaced the acquisition process or relocation process
- Effects of the project on property prices, rental incomes or business operation.

These aspects will most likely affect residents and business operators in close proximity to EB2, including those on Pakuranga Road, Ti Rakau Drive and in the vicinity of Reeves Road and William

Roberts Road. The effects are likely to be short to medium term during the planning and construction phases of EB2.

The social impact rating of these fears is considered moderate adverse (likelihood = possible, consequence = minor). Ongoing and active communication will be essential to reduce uncertainty and anxiety for people who live, work or use the transport networks during construction of the project. With the mitigation set out in Section 8.1, the social impact rating is considered low adverse (likelihood = unlikely, consequence = minor).

7.3.1.3 People's Personal and Property Rights

7.3.1.3.1 Property Access

Access to property is related to community severance and includes potential loss of viability for local businesses if frontages are impacted by construction or operation of the Project. There will be impacts from a loss of parking on Aylesbury Street and Ti Rakau Drive and impeded access to businesses and services in the Town Centre for servicing and deliveries. This includes properties on William Roberts Road, Cortina Place and Reeves Road.

It is noted that suitable access will be maintained to properties that are not being acquired as set out in the ITA. The ITA has also considered traffic effects for those accessing affected homes and businesses during construction. The ITA confirmed that there would not be significant traffic effects associated with construction. Amenity impacts, including for receivers close to construction activities, have been considered in Section 7.3.1.4.1. The loss of parking and disruption to businesses including servicing and loading areas has the potential to result in a moderate adverse social impact rating (likelihood = possible, consequence = minor). The impact would be short term dependent on the length of construction.

It is noted that mitigation including suitable alternative access and replacement parking being provided where practicable is included in the ITA. This includes consideration of a loading zone to be provided for deliveries and careful design of fencing and hoardings to improve visibility of retail frontages and signage to assist traffic and access for customers that would use the local shops. With mitigation measures, including ongoing engagement, in place the social impact rating is considered low adverse likelihood = possible, consequence = insignificant).

7.3.1.3.2 Property Acquisition

The Project will result in the acquisition of residential and commercial properties. The acquisition of this land is likely to displace both people and businesses, creating adverse social impacts. There will be a number of people directly affected whose land is required for EB2 and who will need to relocate. The details of those properties affected are shown in Figure 28 and Table 6.

Figure 28 Map of property acquisition for EB2

The number and types of properties that need to be acquired are set out in Table 6. One commercial property will need to be fully acquired. There are also two partial property acquisitions which is where some land is needed from the property for the project.

Table 6 Properties to be acquired

Type of property	Full	Partial	Subtotal
Commercial	1	1	2
Residential	0	1	1
Total	1	2	3

In addition to those properties being fully acquired, there are currently 59 residential properties and seven commercial properties which have already been acquired but that have tenants who will be displaced.

Table 7 Displacement of tenanted properties

Type of property	Full	Partial	Subtotal
Commercial	7	0	7
Residential	59	19	78
Total	66	19	85

Based on the average household size of 3.1 people[11] the full acquisition or displacement of 59 residential properties will displace approximately 183 people.

The Public Works Act provides a framework for the acquisition of land required for the Project and the compensation to be paid to those property owners affected due to the value of the land, any business loss or reduction in value of remaining land. The process of acquisition is largely complete for EB2. Those landowners affected by EB2 have had an extended period to plan for and respond to the impacts, as set out below.

Early engagement with affected properties has already been carried out. Residents were consulted in 2018 and again in October and December 2021 with further engagement being undertaken in July 2022. Some impacts which would be associated with the acquisition process have been managed and the community has had time to recover. However, there are residual effects as a result of the acquisition process, mainly for tenants of these properties who now need to relocate.

Currently tenants have an extended notice period, and many have already moved out. Approximately 36% of these properties are currently vacant and being maintained by EB for amenity value i.e. mowing lawns and building maintenance.

However, the SA1 area has been identified as having a lower median rent than the wider Howick LBA and a low vacancy rate. Therefore, it is considered possible that not all displaced persons will be able to find accommodation within the same area due to constrained supply. This could be particularly challenging for those who do not have the financial power to relocate and/or pay a higher rent. Those social demographics likely to be particularly affected include older people who have lived in the area a long time and families with children enrolled in local schools, as well as other cultural groups with significant attachment and networks in the area. Some may be able to relocate to more affordable areas in SA2 or other parts of Auckland.

Existing tenants have had the opportunity to plan ahead for the move, and will be assisted by the proposed mitigation. The end of the tenancy agreement would be the same as for any private landlord, however, there will be approximately 50 properties (across EB2 and EB3R) that will receive notice within a short timeframe and there is the potential for anxiety, uncertainty and inconvenience to be experienced by these residents. The level of anxiety, uncertainty and inconvenience will depend on the ease of which a new / replacement accommodation can be found, and be influenced by the socio-economic and demographics of the residents. Therefore, the overall social impact rating of displacing residents and businesses prior to mitigation is considered to be moderate to high adverse (likelihood = likely, consequence = minor up to moderate).

The SIA recommends a strategy to support displaced property owners and tenants to ensure impacts are mitigated as far as practicable (see Section 8.1). This mitigation could include contact points for housing advice and waived notice periods if tenants wish to move sooner. Mental health support has already been offered to those impacted by acquisition and displacement through Pakuranga Counselling Service. It is anticipated this will continue to be provided. With mitigation measures in place, the social impact rating for impacted occupiers is considered to be low up to moderate (likelihood = possible, consequence = insignificant up to minor).

[11] Based on the usual resident population and the total number of households reported in the Census 2018

7.3.1.4 People's Environment

7.3.1.4.1 Amenity

Respondents raised concerns about the impacts of construction activities and the potential for dust, noise, and vibration effects. The effects of construction on amenity can negatively impact people's environment and so these have been reviewed as part of the SIA. These environmental effects have been addressed through separate specialist assessments which form part of the AEE for the project and should be referred to for a detailed assessment. Key conclusions, as they relate to social impact, are set out below.

In addition to the management plans being prepared for dust, noise and visual effects, proactive and ongoing communication tailored to those sensitive receivers likely to be impacted during construction is recommended. A contact point to raise construction issues in a timely manner is also recommended. This recommendation is included in the management and mitigation measures set out in Section 8.1.

7.3.1.4.2 Air quality

An air quality impact assessment including an assessment of human health criteria has been prepared for the Project. During construction the main adverse effects are dust and particulate emissions from excavations and bulk earthworks associated with the development, the largest source of this is the construction of the RRF.

The air quality impact assessment confirmed during construction there was a medium risk of offensive or objectionable dust at 13 Reeves Road which includes Te Tuhi Gallery, Barnardos Early Learning Centre and Pakuranga Leisure Centre. Based on the information in the assessment and the location of the Reeves Road flyover it is anticipated that the risk is primarily for the frontage on Reeves Road which includes the gallery and café. The effect of dust is a reduced enjoyment of people's environment and potentially a loss of visitors to the gallery. There was not considered to be a risk for human health. As a result, the social impact rating is considered to be moderate adverse (likelihood = possible, consequence = minor). The effects would be short-term and coincide with active construction works including the construction of the RRF.

Proposed mitigation includes adaptive and proactive management to modify activities and mitigation measures based on forecasted wind conditions and in response to feedback from monitoring. Early and ongoing engagement with these receivers is recommended to ensure that the adaptive management measures proposed can be implemented effectively.

Based on the draft Construction Environmental Management Plan (CEMP) air quality will be managed through conditions of consent including measures set out in section 8 of the Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions (Ministry for the Environment, 2016). Mitigation and monitoring methods for dust emission control during construction of EB2 will be included in the Erosion and Sediment Control Plan (ESCP). It is recommended the receivers at 13 Reeves Road are provided with contact details for EBA and proactive engagement is undertaken to identify and mitigate potential air quality impacts.

With this mitigation in place the social impact rating is considered to be low adverse (likelihood = possible, consequence = insignificant).

7.3.1.4.3 Noise and vibration

Respondents raised concerns regarding the construction noise impacts particularly for those homes close to construction areas. A Construction Noise and Vibration Impact Assessment has been prepared

for the Project. The assessment considers construction and operational sources of noise and vibration, including road noise, and includes management and mitigation measures to control the effects.

The assessment has considered the impacts of construction noise on residential receivers in the vicinity of construction works and social infrastructure including Te Tuhi Gallery and Pakuranga Medical Centre. The assessment identified that generally impacts for receivers would be acceptable and could be managed using effective communication with receivers including prior notification of noisy construction activities and appropriate programming of those activities and temporary barriers or screening.

Construction noise can impact the quality of people's lives and cause stress, disturb sleep and affect concentration. Effects will be more severe for those closer to noise sources and those who have specific requirements e.g. shift workers who need to sleep during the day or businesses which are sensitive to noise and vibration such as the Triton hearing clinic. While effects are likely to be short-term and within acceptable limits, the social impact rating is still considered to be moderate adverse (likelihood = possible, consequence = minor).

The construction noise assessment recommends a construction noise and vibration management plan be prepared. A draft plan has been prepared and is included within the application documents. The draft plan includes specific thresholds for sensitive receivers and measures such as adjusting construction times to avoid sensitive times for receivers where practicable.

With this mitigation in place the social impact rating is considered to be low adverse (likelihood = possible, consequence = insignificant).

7.3.1.4.4 Visual

A landscape and visual impact assessment has been prepared for the Project and included an assessment of visual effects which may impact people's amenity. The landscape and visual impact assessment confirmed during construction there would be landscape and visual impacts associated with construction works including earthworks, presence of construction materials and vehicles, demolition of buildings, removal of trees. In addition, safety fencing will be used during construction of the project to prevent access to work areas.

Generally, these effects were considered to be low or moderate-low except for Paul Place Reserve (moderate), Pakuranga Community Centre (moderate-high) and residential receivers located adjacent to the construction of the Project (moderate-high) due to the sensitivity of these receivers and the proximity of construction works. Visual effects impact people's perceptions of a place and limit their enjoyment, this is particularly significant in areas like parks and reserves where people have come to enjoy the natural environment which is reflected in the landscape and visual impact assessment. The social impact rating is still considered to be moderate adverse (likelihood = possible, consequence = minor). These effects are likely to be short-term but may be longer if views are impacted by proposed new structures or the new road design.

Landscape and visual impacts will be mitigated through limiting works areas to the smallest extent practicable and installing construction hoardings with interpretive panels in certain areas to provide information about the Project and its progress. Additional mitigation measures for fencing and hoardings are also outlined in the CCCP and CEMP. With this mitigation in place the social impact rating is considered to be low adverse (likelihood = possible, consequence = insignificant).

7.3.2 Eastern Busway 3 – Residential

7.3.2.1 People's Way of Life, Community and Culture

7.3.2.1.1 Community character

There is a larger proportion of Asian ethnicities in the local and wider community area. This reflects the services and facilities that are present in the community area. Many businesses and community facilities in the area have Chinese language skills for example. It will be important for information related to the timing of construction works to be available in other languages such as te reo Māori, Hindi and Chinese (simplified). If key information is not available in these language social impacts may be greater than those set out below, due to increased uncertainty and knowledge of the construction works.

7.3.2.1.2 Access and Connectivity

The ITA identified potential adverse temporary effects on the existing road transport network during the construction of the Project particularly along Ti Rakau Drive. Several properties will require alternative access from their property during construction, this will be provided mostly via access roads through acquired properties. The closure of either Edgewater Drive intersections has the potential to impact on the accessibility for residents from Snell Place, Mangos Place, Riverina Ave, Raewyn Place, Susanne Place and Edgewater Drive itself. The closure of these intersections will be staged and access will be available at all times however, there could be delays for residents due to congestion or long detours.

The key adverse social impacts are considered to be disruptions or inconvenience to the community and those travelling through the area caused by reduced road network capacity as well as increased numbers of heavy vehicles from construction on Pakuranga Road, Ti Rakau Drive, Gossamer Drive and Reeves Road. These impacts will be short-term and directly related to the length of the construction period.

There is the potential for a moderate adverse social impact rating (likelihood = possible, consequence = minor) as a result of construction effects adjacent to and within the road corridor.

The ITA notes a Construction Traffic Management Plan (CTMP) will be developed to mitigate the effects of construction traffic on the road network and the effects on safety performance. In addition to the CTMP, further mitigation measures are set out in Section 8.1 for early notification and ongoing communication that will be implemented. With mitigation in place, the social impact rating is considered low adverse (likelihood = possible, consequence = insignificant).

7.3.2.1.3 Community Severance

Ti Rakau Drive is a major arterial road with a berm in the centre of the road and limited pedestrian crossings. Construction is unlikely to increase severance effects as alternative crossings will be provided and pedestrian connectivity is already poor.

Edgewater College is currently accessed by school buses which drive from the eastern intersection of Ti Rakau Drive / Edgewater Drive to drop students at the off-street drop-off area then continue along Edgewater Drive to the western intersection. The closure of either Edgewater Drive intersections has the potential to impact on the accessibility and convenient access to the school for students, parents and staff. Te Tahawai Marae is located in the grounds of Edgewater College and would also be affected by access changes.

There is the potential for a moderate adverse social impact rating (likelihood = possible, consequence = minor) as a result of the disruption to school travel routes. Again, this impact will be short-term and is associated with construction.

Mitigation proposed includes temporary rearrangement of the school's current off-street parking area to facilitate a U-turn for buses or using the existing bus stops on Ti Rakau Drive. Mitigation will be finalised in consultation with Edgewater College and Te Tahawai Marae. With mitigation in place, the social impact rating is considered low adverse (likelihood = possible, consequence = insignificant).

7.3.2.1.4 Access to Community and Cultural Facilities

During construction there is the need to replace utilities within the driveway and carparking areas at 205 – 229 Ti Rakau Drive which will take approximately three months and involve temporary loss of some of the available parking and alternative access requirements. Receivers impacted include three churches (Pakuranga Baptist Church, Pakuranga Chinese Baptist Church and Congregational Church of Samoa) and the Pakuranga Baptist Kindergarten.

Pakuranga Intermediate School (43-49 Reeves Road), KIDSpace Early Learning Centre (67 - 73 Reeves Road) and Pakuranga Kindergarten (107A Reeves Road) are located on the construction vehicle routes (Route 1 and Route 2). In the existing environment the buildings at these receiver locations are set back from the road and off-street access is provided. For the early learning centre and the kindergarten, the outdoor play areas are adjacent to Reeves Road with minimal screening.

Reeves Road will carry roughly one construction vehicle every two minutes at the height of construction.[12] The ITA has confirmed the existing environment can safely accommodate larger sized vehicles and the additional vehicles are not expected to significantly increase traffic on Reeves Road. The signalised pedestrian crossing point across Reeves Road connecting to the school at Lewis Road will be retained. Unsignalised pedestrian crossings at Cardiff Road near the early learning centre and at Gerwyn Place near the kindergarten will also be retained.

Access changes and construction activities could disrupt people accessing these services and facilities. There is the potential for a moderate adverse social impact rating (likelihood = possible, consequence = minor) as a result of changes in access to these services and facilities. The impact will be short-term and vehicles would travel outside of peak times where possible.

Alongside the mitigation measures set out in Section 8.1, suitable alternative access and parking arrangements will be developed in consultation with directly impacted stakeholders. This could include avoiding or reducing works during specific times important to the community. Mitigation for those receivers along the construction vehicle route includes making stakeholders aware of the potential for construction vehicles to be passing along Reeves Road and identifying any mitigation required. With mitigation in place the social impact rating is low adverse (likelihood = unlikely, consequence = minor).

7.3.2.2 People's Health and Wellbeing

7.3.2.2.1 Access to Health and Wellbeing Facilities

The Pakuranga Counselling Centre (207 Ti Rakau Drive) is part of the land take for the Project that has already been acquired. Only part of the site is required, and the facility will not be displaced. However, during construction, the facility will be impacted by driveway works described in Section 7.3.2.1.4.

[12] ITA

Prior to mitigation the social impact rating is considered moderate adverse (likelihood = possible, consequence = minor). Suitable alternative access and parking arrangements should be developed in consultation with this facility and other mitigation measures identified in Section 8.1 will apply. With mitigation in place the social impact rating is low adverse. With mitigation in place the social impact rating is low adverse (likelihood = possible, consequence = minor).

7.3.2.2.2 Open Space and Parks

Respondents indicated there was a perceived lack of green space in the area and that loss of green space will result in adverse social and wider environmental impacts. For EB3R, there is a partial land take within Riverhills Park. Stakeholder engagement with Auckland Council and the users of Riverhills Park, including Fencibles (Football Club), recognised the potential impacts of the partial acquisition of the land. Issues were raised with the potential land take and loss of sporting pitches and the loss of parking. However, consultation identified potential opportunities to increase use of the playing fields and park.

The potential loss of green space and outdoor recreation will result in a social impact rating of moderate adverse (likelihood = possible, consequence = insignificant). This impact is potentially long-term.

Mitigation is planned and is currently being prepared in consultation with stakeholders. The mitigation is expected to deliver significant benefits to the users of the park in the long term. In the short-term proactive community engagement and wayfinding signage will be important to mitigate impacts for access to open space (see Section 8.1 for details). With mitigation in place, the social impact rating is considered low adverse (likelihood = possible, consequence = insignificant).

7.3.2.2.3 Stress and Anxiety

The Project has the potential to induce fear and anxiety for the community which can adversely impact people's health and wellbeing. These effects will be most significant at a community level where people are directly impacted by the Project e.g. through land acquisition or close proximity to construction works. Similar to EB2, aspects of the Project which are likely to generate anxiety include:

- Uncertainty around the nature and timing of the project
- The length of time for construction spanning multiple years
- For those being displaced the acquisition process or relocation process and
- Effects of the project on property prices, rental incomes or business operation.

The effects are likely to be short to medium term during the planning and construction phases of EB3R and will likely be more significant for properties being acquired on Ti Rakau Drive or those homes which are retained but will be close to construction activities.

The social impact rating of these fears is considered moderate adverse (likelihood = possible, consequence = minor). Ongoing and active communication will be essential to reduce uncertainty and anxiety for people who live, work or use the transport networks during construction of the project. With mitigation set out in Section 8.1, the social impact rating is considered low adverse (likelihood = possible, consequence = insignificant).

7.3.2.3 People's Personal and Property Rights

7.3.2.3.1 Property Access

There will be some impacts on the local shops at the intersection of Ti Rakau Drive and the western end of Edgewater Drive as result of construction access arrangements. Tenants were concerned about the

loss of the through traffic and the need for carparking that allows visitors to quickly park to access the shops. Tenants also raised concerns about providing adequate space for trucks making deliveries.

There are nine properties currently accessed by driveways extending off Ti Rakau Drive that are not being acquired. Alternative access to these properties will be maintained via a residential access track along the back of properties within the project area.

Overall, the social impact rating for property access effects for EB3R is considered moderate adverse (likelihood = possible, consequence = minor).

The ITA includes alternative access and car parking arrangements which will be finalised in consultation with shop owners. The management and mitigation measures outlined in Section 8.1 will include mitigation measures to avoid, remedy or mitigate the access disruption. This includes consideration of a loading zone to be provided for deliveries and careful design of fencing and hoardings to improve visibility of retail frontages and signage to assist through traffic that would use the local shops.

With mitigation measures in place, the social impact rating is considered low adverse (likelihood = possible, consequence = insignificant).

7.3.2.3.2 Property Acquisition

There will be a number of people directly affected whose land is required for EB3 and who will need to relocate. The properties to be acquired are shown in Figure 29. Two partial acquisitions in EB3R will require the occupants to move out as buildings fronting Ti Rakau Drive will be removed to construct the busway.

Figure 29 Map of full property acquisition for EB3R

The number and types of properties that will be acquired include one residential property as set out in Table 8.

Table 8 Properties to be acquired

Type of property	Full	Partial	Subtotal
Commercial	0	0	0
Residential	0	12	12
Total	0	12	12

In addition to those properties being acquired, there are currently 83 residential properties which have already been acquired but have tenants that will be displaced. The acquisition or demolition of 85 homes (two partial properties still to be acquired, and 83 already acquired and currently tenanted properties) will result in approximately 270 people (average household size of 3.18) being displaced. There are likely to be adverse social impacts for tenants as a result of the financial and emotional stresses of moving.

Table 9 Already acquired and currently tenanted

Type of property	Full	Partial	Subtotal
Commercial	0	0	0
Residential	83	12	95
Total	83	12	95

The Public Works Act provides a framework for the acquisition of land required for the Project and the compensation to be paid to those property owners affected due to the value of the land, any business loss or reduction in value of remaining land. The process of acquisition is largely complete for EB3R. Those landowners affected by EB3R have had an extended period to plan for and respond to the impacts, as set out below.

Early engagement with affected properties has already been carried out. Residents were consulted in 2018 and again in October and December 2021 with further engagement being undertaken in July 2022. Some impacts which would be associated with the acquisition process have been managed and the community has had time to recover. However, there are residual effects as a result of the acquisition process, mainly for tenants of these properties who now need to relocate.

Currently tenants have an extended notice period, and many have already moved out. Approximately 36% of these properties are currently vacant and being maintained by EB for amenity value i.e. mowing lawns and building maintenance.

However, it is considered possible that not all displaced persons will be able to find accommodation within the same area largely due to constrained supply. Those likely to be particularly affected include older people who have lived in the area a long time and families with children enrolled in local schools, as well as other cultural groups with significant attachment and networks in the area.

Existing residents have had the opportunity to plan ahead for the move, and will be assisted by the proposed mitigation. The end of the tenancy agreement would be the same as for any private landlord, however, there will be approximately 50 properties (across EB2 and EB3R) that will receive notice within a short timeframe and there is the potential for anxiety, uncertainty and inconvenience to be

experienced by these residents. The level of anxiety, uncertainty and inconvenience will depend on the ease of which a new / replacement accommodation can be found, and be influenced by the socio-economic and demographics of the residents. Therefore, the overall social impact rating of displacing residents and businesses prior to mitigation is considered to be moderate up to high adverse (likelihood = possible, consequence = minor up to moderate).

The SIA recommends a strategy to support displaced property owners and tenants to ensure impacts are mitigated as far as practicable (see Section 8.1). This mitigation could include contact points for housing advice and waived notice periods for tenants wishing to move sooner. With mitigation measures in place, the social impact rating for impacted occupiers is considered to be low up to moderate (likelihood = possible, consequence = insignificant up to minor).

7.3.2.4 People's Environment

7.3.2.4.1 Amenity

Respondents raised concerns about the impacts of construction activities and the potential for dust, noise, and vibration effects. The effects of construction on amenity can negatively impact people's environment and so these have been reviewed as part of the SIA. These environmental effects have been addressed through separate specialist assessments which form part of the AEE for the project and should be referred to for a detailed assessment. Key elements as they relate to social impact are set out below.

In addition to the management plans being prepared for dust, noise and visual effects, proactive and ongoing communication tailored to those sensitive receivers likely to be impacted during construction is essential. A contact point to raise noise and wider construction issues in a timely manner is also recommended. This recommendation is included in the management and mitigation measures set out in Section 8.1.

7.3.2.4.2 Air quality

Large scale bulk earthworks are not required within EB3R the majority of works are for road widening. No bridges or viaducts are planned within EB3R. The air quality impact assessment confirmed during construction there was a medium risk of offensive or objectionable dust along the EB3R corridor. However, the assessment does note that as the construction is linear the frequency and duration of effects for individual receivers will be lower. The effect of dust is a reduced enjoyment of people's environment, there was not considered to be a risk for human health. As a result, the social impact rating is considered to be moderate adverse (likelihood = possible, consequence = minor). These effects are likely to be short-term.

Proposed mitigation includes adaptive and proactive management to modify activities and mitigation measures based on forecasted wind conditions and in response to feedback from monitoring. Early and ongoing engagement with these receivers is recommended to ensure that the adaptive management measures proposed can be implemented effectively.

Air quality will be managed through conditions of consent including measures set out in section 8 of the Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions (Ministry for the Environment, 2016). Mitigation and monitoring methods for dust emission control during construction of EB2 will be included in the Erosion and Sediment Control Plan (ESCP). It is recommended the receivers at 13 Reeves Road are provided with contact details for EBA and proactive engagement is undertaken to identify and mitigate potential air quality impacts.

With this mitigation in place the social impact rating is considered to be low adverse (likelihood = possible, consequence = insignificant).

7.3.2.4.3 Noise and vibration

Respondents raised concerns regarding the construction noise impacts particularly for the southern side of Ti Rakau Drive where properties are being acquired and buildings removed for the project. A Construction Noise and Vibration Impact Assessment has been prepared for the Project and has considered the impacts on residential receivers. The assessment identified that generally impacts would be acceptable and could be managed using effective communication with receivers including prior notification of noisy construction activities and appropriate programming of those activities and temporary barriers or screening.

Construction noise can impact the quality of people's lives and cause stress, disturb sleep and affect concentration. Effects will be more severe for those closer to noise sources and those who have specific requirements e.g. shift workers who need to sleep during the day or those working from home. While effects are likely to be short-term and within acceptable limits, the social impact rating is still considered to be moderate adverse (likelihood = possible, consequence = minor).

The construction noise assessment recommends a construction noise and vibration management plan be prepared. A draft plan has been prepared and is included within the application documents. The draft plan includes specific thresholds for sensitive receivers and measures such as adjusting construction times to avoid sensitive times for receivers where practicable.

With this mitigation in place the social impact rating is considered to be low adverse (likelihood = possible, consequence = insignificant).

7.3.2.4.4 Visual

The landscape and visual impact assessment confirmed during construction there would be landscape and visual impacts associated with construction works including earthworks, presence of construction materials and vehicles, demolition of buildings and removal of trees. Community receivers, including users of Riverhills Park, Pakuranga Baptist Kindergarten and Church were considered to have a moderate adverse visual impact due to their sensitivity. A reduction in amenity can result in social impacts from reduced or limited enjoyment of these uses as a result of visual effects. The social impact rating of the reduced amenity is considered to be moderate adverse (likelihood = possible, consequence = minor). These effects are likely to be short-term but may be longer if views are impacted by proposed new structures or the new road design.

Landscape and visual impacts will be mitigated through limiting works areas to the smallest extent practicable and installing construction hoardings with interpretive panels in certain areas to provide information about the Project and its progress. Additional mitigation measures for fencing and hoardings are also outlined in the CCCP and CEMP. With this mitigation in place the social impact rating is considered to be low adverse (likelihood = possible, consequence = insignificant).

7.4 Operation

7.4.1 Eastern Busway 2

7.4.1.1 People's Way of Life, Community and Culture

7.4.1.1.1 Access and Connectivity

Connectivity effects anticipated from the operation of the Project includes removing buses from road congestion to allow quicker and more reliable travel times. There are also positive impacts associated with transport network improvements resulting in better connectivity to the city and other regionally important locations, such as Botany and Manukau City Centre. Improved connectivity can create opportunities for improved access to education, employment, health and recreational services and facilities.

Respondents queried whether park and ride facilities would be available:

"Great to get east Auckland Moving but where are the Park & Rides at Botany & Pakuranga"

"Will there be any park and ride facilities?"

Park and ride facilities are not proposed however, it is anticipated that new station facilities will make public transport more accessible to a wider range of abilities. Respondents noted the need for enclosed facilities with wide platforms and good signage. The design of facilities should also include CPTED principles to ensure facilities are safe as well as inclusive.

Respondents also raised concerns with the pedestrian experience between the bus station and the town centre. One respondent wrote:

"It looks like there are a lot of roads and through ways here, but [it] will also be the main point of access for bus commuters. What will the pedestrian experience be in this area between the bus station and the town centre?"

The location and design of the bus station in the Town Centre will enable better connectivity of businesses and services in the town centre to public transport. The new pedestrian environment will make it safer and easier for people to navigate the town centre. Due to the improved connectivity and safer access the social impact rating of the Project during its operation will be positive.

7.4.1.1.2 Community Severance

Reeves Road is a busy thoroughfare with limited crossings for pedestrians and there is an existing community severance issue at this location. Project design has sought to avoid the potential for additional severance effects by providing a safe pedestrian environment underneath the RRF. It is anticipated that local traffic, pedestrians and cyclists will continue to use Reeves Road with multiple crossings provided.

During community consultation respondents noted the potential for the RRF to "cut" the town centre in half. However, others noted the potential for the RRF to reduce congestion in the town centre and supported urban realm improvements to create a well-designed pedestrian connection. These comments included:

"It does appear that this flyover being able to divert the majority of motorway approaching traffic will definitely improve pedestrianisation of this area."

"There should be a pleasant and inviting pedestrian link under the flyover."

The landscape and visual impact assessment has identified a number of mitigation measures specific to the RRF including considering the user experience, treatments for abutments, and retaining the simple continuous design of the structure, using light to enhance the quality and safety of the space under the RRF. Visual effects of the RRF are discussed further in Section 7.4.1.4.1.

In addition to the RRF, during consultation several respondents noted the need for safer road crossings and dedicated cycle infrastructure to improve safety and accessibility to the Town Centre. Responses included:

"Please create a safe route for cyclists to be able to travel from around the Botany area to Pakuranga, and onward to Panmure. Build a great cycling route and people will use it."

Improved safety for pedestrians and cyclists through new signalised crossings and new cycleway and footpaths along the Project will reduce severance effects for nearby residents to and within the town centre.

More broadly severance effects are minimised through the Project design which incorporates the minimum road width and the minimum number of lanes practicable, to reduce the visual and physical severance impacts of the corridor. Consideration has been given to integrating new structures, namely the RRF and bus station, with the existing environment to support connectivity particularly around the Town Centre.

Wayfinding signage should be integrated with new structures and at decision points for cyclists, pedestrians, and drivers to support connectivity and encourage recreational and economic activity. Wayfinding signage can also reduce severance effects through providing clear information for preferred routes.

Overall, the social impact rating of EB2 during operation is considered neutral and up to positive at some locations e.g. Pakuranga Bus Station where measures for pedestrian and cyclists and public transport users are provided.

7.4.1.1.3 Access to Community and Cultural Facilities

Once operational footpaths will be provided along both sides of Cortina Place, providing access to the leisure centre, learning centre and Ti Rakau Park to the north and to Ti Rakau Drive to the south. This new and improved access will include a new raised pedestrian crossing near the northern accessway of these two properties.

The William Roberts Road / Cortina Place intersection will be designed to reduce speeds, as well as improve pedestrian amenity and safety performance. As a result of better trip times and improved access during operation, there will be a positive social impact rating associated with better connectivity of these facilities to the local and regional network.

7.4.1.2 People's Health and Wellbeing

7.4.1.2.1 Open Space and Parks

New parking facilities, new play equipment and improved siting of the playground away from the road is being progressed as mitigation for the Project's impacts at Ti Rakau Park. It is expected that pedestrian amenity and safety will be improved through upgraded footpaths. A more efficient and reliable service will also result in better connectivity of these facilities to the local and regional network.

A safe and connected cycleway and footpath will make active transport more accessible to a wider range of people which should increase uptake in active transport. This is likely to result in a positive effect on people's health and wellbeing (Rees, Masari, & Appleton-Dyer , 2020). A reliable and efficient transport network will enable people to spend less time travelling and improve people's overall wellbeing. The social impact rating of improved facilities and better access to the facilities would be positive.

7.4.1.3 People's Personal and Property Rights

7.4.1.3.1 Property Access

The Project will result in the loss of a small number of carparking spaces. The ITA has assessed the utilisation rates of parking around the town centre to ensure that adequate parking is maintained.

The loss of carparking can be somewhat mitigated by improved connectivity for pedestrians, cyclists and public transport as there is less need for parking of vehicles. The Project would make public transport and active transport options more attractive and will benefit people accessing these businesses and services by these transport options.

The social impact rating during operation is considered low adverse (likelihood = unlikely, consequence = minor) potentially reducing to neutral once travel arrangements become established. Mitigation may include promoting public transport and active transport modes to leverage the benefits of the Project, directional signage and having wayfinding maps for pedestrians and cyclists to encourage walking or cycling in the town centre.

7.4.1.4 People's Environment

7.4.1.4.1 Amenity

Amenity effects can reduce people's enjoyment of their environment, prolonged exposure to environmental effects such as noise and dust can affect people's health and wellbeing. Environmental effects have been addressed through separate specialist assessments which form part of the AEE for the project and should be referred to for a detailed assessment. Key elements as they relate to social impact are set out below.

7.4.1.4.2 Air quality

Concerns were raised by respondents during consultation regarding the potential for the RRF to generate air quality impacts, for example one respondent wrote:

"The proposed flyover would be an eyesore and source of serious air pollution for neighbours. It would move the congestion to Pakuranga Rd instead of Ti Rakau Dr."

During operation the air quality impact assessment identified both traffic volumes and congestion would reduce due to the implementation of EB2 and as a result, lower rates of emissions of vehicle exhaust pollutants are expected. The social impact rating of reduced emissions and improved air quality to support people's enjoyment of their environment would be positive.

7.4.1.4.3 Noise and vibration

There were concerns raised by respondents regarding road noise generated by the operation of the Project including:

"Noise barriers should be considered for some or all sections of the flyover."

"What is being done to reduce increased noise and pollution from the flyover affecting the residence in this area?"

An operational noise assessment has been prepared for the Project. The results of the operational noise assessment found that a number of receivers along Ti Rakau Drive, William Roberts Road and Pakuranga Road would experience positive effects due to reduced speeds, better traffic flow and the change in road alignment.

However, there was an increase in road noise levels at a number of properties due to the demolition of buildings in front of these locations which currently provide separation between the road and the property. Negatively affected properties are located along the south side of Ti Rakau Drive, Dale Crescent and a small number of locations along Ayr Road and Pakuranga Road[13]. Despite these increases, the operational noise assessment noted "the predicted noise levels are not unexpected for an urban environment, especially in proximity to a major urban arterial route"[14] and the social impact rating is therefore considered neutral (although clear communication and explanation of the changes in noise environment and the operation of the busway will help avoid uncertainty and anxiety from perceived (as opposed to actual) noise impacts.

7.4.1.4.4 Visual

During community consultation respondents raised concerns of a lack of integration of the RRF with the Town Centre, describing the RRF as an "eyesore" when viewed from the surrounding residential areas. There were concerns that it will result in an unpleasant pedestrian environment underneath and this environment will be unsafe due to anti-social behaviour.

Responses included:

"Flyover creates a dark area under the flyover that will attract garbage and vandals, as such flyovers do the world over. It will no longer be a safe place to walk as the current Reeves Rd is."

"Flyover seems like a concrete jungle that will disincentivise re-development and investment around the town centre area."

The landscape and visual impact assessment include mitigation for the RRF such as lighting to promote a safe environment underneath and ensuring surfaces discourage graffiti and don't trap litter. The RRF forms part of the PTCMP and is recognised as providing benefits in redirecting traffic from the town centre. The benefits of the RRF in reducing congestion in the town centre and providing an opportunity for improvements in the pedestrian environment are balanced against the resulting change in the landscape character which would be highly urbanised with an imposing concrete structure.

With the proposed design features which are anticipated to create an attractive and safe environment underneath the flyover the social impact rating is considered neutral.

7.4.1.5 People's Fears and Aspirations

7.4.1.5.1 Fear of Crime

During community consultation some respondents mentioned concerns around safety and crime. It should be noted that a fear of crime it is often associated with poor environmental conditions for example litter and graffiti rather than actual crime (Lorenc, et al., 2012). However, the fear of increased crime can still adversely impact individual and community wellbeing.

[13] Operational noise assessment
[14] Road traffic noise assessment

People identified a need to feel safe when travelling to and waiting at stations and this can be achieved through thoughtful design of lighting, landscaping, and amenities. In addition to the mitigation in the landscape and visual impact assessment design principles to support safe and legible connections using CPTED principles and including lighting for night-time walking and cycling should be considered.

The design has already considered safety by design principles and has sought to contribute to a safe walking and cycling environment through careful design including natural surveillance, lighting and amenities. The fear of the potential for crime will result in a low adverse potential social impact rating. Communication on the design and operational features to avoid crime, as far as practicable, alongside collaboration with New Zealand Police and other stakeholders, will reduce the social impact rating to neutral.

7.4.1.5.1 Climate change

During consultation several respondents noted the need to do more to address climate change. The transport system is recognised as a key factor in New Zealand reaching its emission reduction targets. Domestically transport is responsible for 47% of CO_2 emissions and 19.7% of total greenhouse gas (GHG) emissions (Te Manatū Waka Ministry of Transport, 2021). In addition, reliance on private vehicle for transport has been identified as having a negative effect on physical and mental health and wellbeing (Rees, Masari, & Appleton-Dyer , 2020).

The Project includes an overarching sustainability objective to encourage sustainable public transport and support a modal shift away from private vehicles to more sustainable transport options including public transport, walking and cycling through providing well-designed and inclusive transport infrastructure.

A sustainability strategy has been prepared which seeks to address GHG emissions during construction and operation of the Project. The objectives of this strategy include:

- Ensuring this infrastructure is resilient to climate change effects through design
- Reducing the consumption of resources by applying circular economy principles and innovative construction techniques
- Minimising GHG emissions during construction and contribute to industry knowledge of GHG emissions reduction
- Protecting and enhancing the environment around the busway through design which positively influences climate change

The project will create opportunities to address climate change and has the potential to provide an overall positive social impact rating.

7.4.2 Eastern Busway 3 – Residential

7.4.2.1 People's Way of Life, Community and Culture

7.4.2.1.1 Access and Connectivity

Improved crossings at Edgewater Drive / Ti Rakau Drive and Gossamer Drive / Ti Rakau Drive will enable pedestrians and cyclists to move more easily along the road corridor and to connect to adjacent areas as well as into the town centre. This was supported by community sentiment in the consultation responses:

"I'm thrilled to see continuous, connected, cycleways along the length of the route."

The improved footpath and cycleway will support a legible route from Botany to Pakuranga along Ti Rakau Drive, creating a better connection for pedestrians and cyclists. The footpath will also be designed to meet modern standards and be accessible to a wider range of abilities.

New bus stations and a dedicated busway will improve public transport options, including reliability and efficiency of services and potentially new routes. These connections will enable communities to better connect with the wider area. The operation of the Project is likely to result in a positive social impact rating in terms of connectivity.

7.4.2.1.2 Community Severance

Ti Rakau Drive is already a busy arterial road with limited crossings which creates a physical barrier between areas north and south of the existing road corridor. There are therefore existing severance effects experienced by communities.

During operation there are several side streets servicing residents which are planned to have a left only turn onto Ti Rakau Drive e.g. Wheatley Ave and Roseburn Place. The corridor includes new signalised U-turns across Ti Rakau Drive to facilitate travel to Botany. Consultation feedback raised concerns about the inability to turn right, the need for U-turn bays and the number of traffic signals included within the design. It was perceived that the Project will impede access to Botany Town Centre and Manukau City Centre.

"Absolutely not acceptable that we cannot turn right here anymore. How are we supposed to get to Botany from here?"

"Why are all of the right-turn abilities being removed from the side roads along Ti Rakau Drive? This is not necessary and will not ease traffic congestion along this road. If right turns were possible fewer U-turn bays would be required."

The ITA notes that the impact of the proposed U-turn movements on the major corridor of Ti Rakau Drive, as well as the various side roads, is expected to be minimal. While the U-turn may cause an inconvenience to residents living on side streets, the ITA has confirmed that there would be no significant increase in journey time.

Therefore, the social impact rating in terms of severance, access and connectivity is considered low adverse (likelihood = unlikely, consequence = minor) due to the perception of access difficulties. The impact rating reduces to neutral as new access arrangements become established and the wider transport and connectivity benefits of the project are clearly articulated to the community.

7.4.2.2 People's Health and Wellbeing

7.4.2.2.1 Open Space and Parks

There would be some loss of open space at Riverhills Park along the interface with Ti Rakau Drive. As set out in section 7.3.2.2.2 new or upgraded facilities being considered as part of mitigation for the acquisition of land along Ti Rakau Drive will result in a potential positive social impact rating during operation.

A safe and connected cycleway and footpath will make active transport more accessible to a wider range of people which should increase uptake in active transport. This is likely to result in a positive effect on people's health and wellbeing (Rees, Masari, & Appleton-Dyer , 2020). A reliable and efficient transport network will also enable people to spend less time travelling and improve people's overall

wellbeing. The social impact rating of improved facilities and better access to the facilities would be positive.

7.4.2.3 People's Environment

7.4.2.3.1 Amenity

Amenity effects can reduce people's enjoyment of their environment, prolonged exposure to environmental effects such as noise and dust can affect people's health and wellbeing. Environmental effects have been addressed through separate specialist assessments which form part of the AEE for the project and should be referred to for a detailed assessment. Key elements as they relate to social impact are set out below.

7.4.2.3.2 Air quality

The air quality impact assessment noted that the reduction in congestion and the improvement in vehicle emission factors contributed to an overall reduction in emissions of vehicle exhaust pollutants for EB3R. The social impact rating of reduced emissions and improved air quality to support people's enjoyment of their environment would be positive.

7.4.2.3.3 Noise and vibration

Respondents raised concerns over noise due to the size and scale of EB3R. Comments include:

"There should be measures to mitigate the road noise for remaining houses e.g. earth berms or sound walls"

"How will you improve or mitigate traffic noise for properties on either side of [Ti Rakau Drive]? Particularly the sound side given this is the side you will be extending on?"

An operational noise assessment has been prepared which noted that a large number of receivers will experience noise level increases as a result of EB3R. However, it also identified that despite the increase in noise level at these receivers that the type and scale of noise predicted is not outside what is expected for properties within a close distance to a major arterial road. The social impact rating is therefore considered neutral as the effects are expected to be unnoticeable for these receivers. Although clear communication and explanation of the changes in noise environment and the operation of the busway will help avoid uncertainty and anxiety from perceived (as opposed to actual) noise impacts.

7.4.2.3.4 Visual

The landscape and visual impact assessment notes that new planting in the road corridor will reduce the dominance and scale of the increased width of Ti Rakau Drive. The assessment notes that positive effects of new planting will be realised in the long-term. For those residential properties which will retain views of the road the visual effects were low and are anticipated in a road environment.

The social impact rating of the Project on people's enjoyment of the environment, particularly in the long-term, can be considered neutral potentially increasing to positive at some locations.

7.4.2.4 People's Fears and Aspirations

7.4.2.4.1 Fear of Crime

There was concern from respondents in the surrounding area of increased crime as a result of the new intermediate bus stations at Edgewater and Gossamer. The fear of increased crime has the potential to adversely impact individual and community wellbeing (Lorenc, et al., 2012).

People identified a need to feel safe when travelling to and waiting at stations and this can be achieved through thoughtful design of lighting, landscaping, and amenities. In addition to the mitigation in the landscape and visual impact assessment design principles to support safe and legible connections using CPTED principles and including lighting for night-time walking and cycling should be considered.

The design has already considered safety by design principles and has sought to contribute to a safe walking and cycling environment through careful design including natural surveillance, lighting and amenities. The fear of the potential for crime will result in a low adverse potential social impact rating. Communication on the design and operational features to avoid crime, as far as practicable, alongside collaboration with New Zealand Police and other stakeholders, will reduce the social impact rating to neutral.

7.4.2.4.2 Climate change

During consultation several respondents noted the need to do more to address climate change. The transport system is recognised as a key factor in New Zealand reaching its emission reduction targets. Domestically transport is responsible for 47% of CO_2 emissions and 19.7% of total GHG emissions (Te Manatū Waka Ministry of Transport, 2021). In addition, reliance on private vehicle for transport has been identified as having a negative effect on physical and mental health and wellbeing (Rees, Masari, & Appleton-Dyer , 2020).

The Project includes an overarching sustainability objective to encourage sustainable public transport and support a modal shift away from private vehicles to more sustainable transport options including public transport, walking and cycling through providing well-designed and inclusive transport infrastructure.

A sustainability strategy has been prepared which seeks to address GHG emissions during construction and operation of the Project. The objectives of this strategy include:

- Ensuring this infrastructure is resilient to climate change effects through design
- Reducing the consumption of resources by applying circular economy principles and innovative construction techniques
- Minimising GHG emissions during construction and contribute to industry knowledge of GHG emissions reduction
- Protecting and enhancing the environment around the busway through design which positively influences climate change

The project will create opportunities to address climate change and has the potential to provide an overall positive social impact rating.

7.4.3 Cumulative Effects

7.4.3.1 Other Development

The SIA has assessed both EB2 and EB3R components of the project which are mostly linear construction projects. However, there is the potential for concurrent or sequential stages of EB2 and EB3R to result in cumulative impacts for receivers for example extended construction noise and dust effects from EB3R once EB2 is complete. As these sections form part of a single project effective and ongoing communication with the community will be able to provide clear updates of progress and upcoming works which will reduce the potential for cumulative effects between EB2 / EB3R.

There were concerns raised during previous consultation about the length of time required for the project and a desire to complete the project as quickly as possible. Consultation of the staging and timing of works with receivers should be used to assist in minimising disruption or planning for periods of respite.

There are likely to be other works including utility works, other road works or large construction projects that can exacerbate effects particularly during construction. This is more likely to affect the regional community who will travel longer distances and are more likely to be impacted by more than one construction project. At a community level construction at a neighbouring property or unrelated road works on an adjacent street can exacerbate the effects of construction noise or dust from EB2 or EB3R. Ongoing consultation with developers, utility and infrastructure providers is recommended, particularly for any large-scale projects in the local or sub-regional area to coordinate works.

There is the potential for further development within the same area that is triggered by the transport benefits of EB2 / EB3R. External projects could come before, during or after the construction of EB2 and EB3R. Any third-party construction projects could result in cumulative impacts. Monitoring of these projects and engagement with developers as set out above could assist in better planning of works.

7.4.3.2 Increased Urbanisation

Respondents questioned the impact of the project on the densification of the wider Pakuranga – Burswood area and some did not support increased densities. Others expressed a desire for residual land to be well used and that included for apartments close to good public transport links.

There is an opportunity for land-use transport integration with new development to be built to respond to the corridor and stations, which will potentially reduce the level of social impacts experience by the future community. To facilitate this, ongoing consultation with developers is recommended.

As a result of the NPS-UD, it is likely that sections of the Ti Rakau Drive corridor will see higher densities enabled. The existing community may not be present in its current form during the construction and operation of the corridor and the impacts described in this assessment are based on an identified social baseline.

7.5 Summary of Effects

Table 10 below provides an overview and summary of the effects for EB2 and EB3R with and without mitigation. Mitigation measures set out in Section 8.1 including early notification and ongoing communication apply throughout, as described in sections 7.3 and 7.4 however the summary table has highlighted some key areas of consideration for mitigation.

Table 10 Summary of Social impact ratings for EB2 during construction

People's Way of Life, Community and Culture	Description of impact	Likelihood and Consequence	Impact	Proposed mitigation	Likelihood and Consequence	Impact
Access and connectivity effects	Disruptions or inconvenience to vehicles, cyclists and pedestrians as a result of road / footpath closures and congestion	Possible / Minor	Moderate adverse	Measures to address construction traffic and effects on safety performance set out in ITA Early notification and ongoing communication	Possible / Insignificant	Low adverse
Community severance	Severance effects of physical barriers like road or footpath closures	Possible / Minor up to Moderate	Moderate to High adverse	Early notification and ongoing communication	Possible / Insignificant up to Minor	Low up to Moderate adverse
Access to community and cultural facilities	Changed access for local facilities including Te Tuhi Gallery, Barnados Early Learning Centre and Pakuranga Leisure Centre, Pakuranga Library and Citizens Advice Bureau, Bread of Life Church and Pakuranga Mosque	Possible / Minor	Moderate adverse	Suitable alternative access to be provided during construction set out in ITA Early notification and ongoing communication	Possible / Insignificant	Low adverse
People's Health and Wellbeing	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Access to health and wellbeing facilities	Displacement of DW Family Doctors and	Likely / minor up to Moderate	Moderate up to High adverse	Further investigation be undertaken regarding	Possible / insignificant up to minor	Low up to Moderate adverse

	Pakuranga Dental Surgery Changed access to Pakuranga Medical Centre	Likely / Insignificant up to minor	Minor up to Moderate adverse	capacity of the local area for GP services Early notification and ongoing communication	Possible / Insignificant	Low adverse
Open space and parks	Changed access to Ti Rakau Park and loss of 15 carparking spaces Changed access to Bus Stop Reserve	Possible / Minor Possible / Minor	Moderate adverse Moderate adverse	Short term – early notification and ongoing communication Long term – new or upgraded facilities (see operation)	Possible / Insignificant Possible / Insignificant	Low adverse Low adverse
Stress and anxiety	Uncertainty of timing, length of project, relocation, property prices etc.	Possible / minor	Moderate adverse	Early notification and ongoing communication	Unlikely/ minor	Low adverse
People's Personal and Property Rights	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Property access	Loss of parking on Aylesbury Street and Ti Rakau Drive Changes to access for businesses and services in the Town Centre for servicing and deliveries	Possible / Minor	Moderate adverse	Suitable alternative access to be provided during construction Identification of alternative or relocated loading zones if needed Provide businesses signage for those ground floor properties which may be affected by fencing or hoardings Early notification and ongoing communication	Possible / Insignificant	Low adverse
Property acquisition	2 properties to be acquired and 65 tenants affected by displacement	Likely / minor up to Moderate	Moderate up to High adverse	Strategy to be prepared for both property owners and tenants to ensure	Possible / insignificant up to minor	Low up to Moderate adverse

				impacts of displacement are avoided, remedied or mitigated as far as possible		
People's Environment	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Amenity	air quality, visual, noise and vibration impacts causing nuisance	Possible / Minor	Moderate adverse	Mitigation as proposed in the relevant specialist report	Possible / Insignificant	Low adverse

Table 11 Summary of Social impact ratings for EB3R during construction

People's Way of Life, Community and Culture	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Access and connectivity effects	Disruptions or inconvenience to vehicles, cyclists and pedestrians as a result of road / footpath closures and congestion	Possible / Minor	Moderate adverse	CTMP to address construction traffic and effects on safety performance Early notification and ongoing communication	Possible / Insignificant	Low adverse
Community severance	Severance effects of physical barriers like road or footpath closures Impacts on school bus routes	Possible / Minor	Moderate adverse	Early notification and ongoing communication Mitigation for school bus routes to be prepared in consultation with school	Possible – unlikely / Insignificant	Low adverse
Access to community and cultural facilities	Changed access for local facilities including Pakuranga Baptist Church, Pakuranga Chinese Baptist Church and Congregational Church of Samoa and the Pakuranga Baptist Kindergarten	Possible / Minor	Moderate adverse	Suitable alternative access to be provided during construction Early notification and ongoing communication	Possible / Insignificant	Low adverse
People's Health and Wellbeing	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**

Access to health and wellbeing facilities	Changed access for Pakuranga Counselling Centre	Possible / minor	Moderate adverse	Suitable alternative access to be provided during construction Early notification and ongoing communication	Possible / Insignificant	Low adverse
Open space and parks	Partial acquisition of Riverhills Park	Possible / Minor	Moderate adverse	Short term – early notification and ongoing communication Long term – new or upgraded facilities (see operation)	Unlikely / minor - insignificant	Low adverse
Stress and anxiety	Uncertainty of timing, length of project, relocation, property prices etc.	Possible / minor	Moderate adverse	Early notification and ongoing communication	Unlikely/ minor	Low adverse
People's Personal and Property Rights	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Property access	Edgewater Shopping Centre due to changed access	Unlikely / Minor	Low adverse	Alternative access to be provided from Edgewater Drive Provide businesses signage for those ground floor properties which may be affected by fencing or hoardings	Unlikely / Insignificant	Low adverse
Property acquisition	5 properties to be acquired and 78 tenants affected by displacement	Likely / minor up to Moderate	Moderate up to High adverse	Strategy to be prepared for both property owners and tenants to ensure impacts of displacement are avoided, remedied or mitigated as far as possible	Possible / insignificant up to minor	Low up to Moderate adverse
People's Environment	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**

Amenity	air quality, visual, noise and vibration impacts causing nuisance	Possible / Insignificant	Low adverse	Mitigation as proposed in the relevant specialist report	air quality, visual, noise and vibration impacts causing nuisance	Possible / Insignificant

Table 12 Summary of Social impact ratings for EB2 during operation

People's Way of Life, Community and Culture	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Access and connectivity effects	Increased connectivity of public transport networks Safer and more legible connections to town centre	-	Positive	-	-	-
Community severance	Safer access and improved connectivity for pedestrians and cyclists	-	Positive	-	-	-
Access to community and cultural facilities	Safer access and improved connectivity	-	Positive	-	-	-
People's Health and Wellbeing	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Open space and parks	Safer access and improved connectivity Upgraded facilities	-	Positive	-	-	-
People's Personal and Property Rights	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Property access	Loss of carparking spaces at Pakuranga Plaza	Unlikely /minor	Low adverse	Promoting public transport and active transport modes	Unlikely /minor	Low adverse
People's Environment	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Amenity	Air quality, visual, noise and vibration impacts causing nuisance	-	Neutral	Mitigation as proposed in the relevant specialist report	-	Neutral

People's Fears and Aspirations	Description of impact	Likelihood and Consequence	Impact	Proposed mitigation	Likelihood and Consequence	Impact
Fear of Crime	Concern about safety and increased antisocial behaviour	Unlikely / minor	Low adverse	Design to include CPTED principles e.g. lighting for night-time Consult with Police during detailed design	-	Neutral

Table 13 Summary of Social impact ratings for EB3R during operation

People's Way of Life, Community and Culture	Description of impact	Likelihood and Consequence	Impact	Proposed mitigation	Likelihood and Consequence	Impact
Access and connectivity effects	Increased connectivity of public transport networks	-	Positive	-	-	-
Social severance	Proposed U-turn movements for side streets	Unlikely / negligible	Low adverse	-	Unlikely / negligible	Low adverse
People's Health and Wellbeing	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Open space and parks	Safer access and improved connectivity	-	Positive	-	-	-
People's Environment	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Amenity	Air quality, visual, noise and vibration impacts causing nuisance	-	Positive	-	-	-
People's Fears and Aspirations	**Description of impact**	**Likelihood and Consequence**	**Impact**	**Proposed mitigation**	**Likelihood and Consequence**	**Impact**
Fear of Crime	Concern about safety and increased antisocial behaviour	Unlikely / minor	Low adverse	Design to include CPTED principles e.g. lighting for night-time	-	Neutral

				Consult with Police during detailed design		

8.0 Mitigation

Chapter Summary
Mitigation includes: • *Early and effective communication with impacted stakeholders including tailored messaging for neighbouring properties* • *Providing advance notice to property owners and tenants affected by displacement* • *Providing comprehensive information and contact information for housing and business advice for property owners and tenants affected by displacement* • *Developing hoardings, fencing and other screening that will integrate construction areas with the local environment* • *Removing barriers as soon as possible once no longer required to minimise severance effects* • *Having a process for ongoing review and reporting of social impacts*

8.1 Recommended Management and Response Measures

Social impacts will be managed through a number of management plans including the Communication and Consultation Plan (CCP), Construction Noise and Vibration Management Plan (CNVMP), Construction Transport Management Plan (CTMP) and overarching Construction Environmental Management Plan (CEMP).

8.1.1 People's community, health and wellbeing and way of life

Impacts to people's way of life include access and connectivity effects and community severance effects. Impacts to community and health and wellbeing are also focused on access to community facilities and social infrastructure including parks and open spaces. In terms of access the best form of mitigation is early and effective communication which enables people to plan and prepare for any disruption or to make alternative arrangements.

Early engagement has already been undertaken, specific notification and ongoing community engagement for construction and operation of EB2 and EB3R will be set out in the CCP. To address the social impact the CCP is also expected to:

- Identify the relevant stakeholders including residents, businesses, emergency services, accessibility organisations and community groups
- Provide an easy to understand description of works, results of technical studies, mitigation and details of any residual effects likely to be experienced. The material should be available in te reo Māori, English and community languages including Hindi and Chinese (simplified)
- Outline the timing and programme of works including construction traffic routes and hours, as well as the timing of offensive works supported by a clear explanation as to why the works programme has been set
- Outline opportunities for stakeholders and the local community to input into the construction works programme, i.e. to take account of community events or business requirements, above, if practicable, or explanation of the reasons for program if not possible
- Include a review of construction practices and communication should NZ enter into a future lockdown
- Provide key contact points for stakeholders and the local community during design, construction, and operational phases and provide an onsite information point within the local area for the project
- Provide a grievance procedure during construction phase which includes:

    - mechanisms for the community to provide feedback or raise concerns or complaints
    - a clear and transparent process to manage and respond to complaints, including an explanation when alternative mitigation is not practicable

- Provide the community with details of the complaints and feedback procedure during the operation stage.

Engagement methods should be tailored to the community profile this includes vulnerable groups within the community such as those with disabilities, different cultural and linguistic backgrounds and with different socio-economic circumstances.

8.1.2 People's environment

Impacts to people's environment are mainly due to air quality effects, visual effects, noise and vibration effects causing nuisance. The recommendations within the relevant specialist assessment should be implemented.

Amenity effects will be more severe for those properties in close proximity to active works. Specific social impact mitigation will include:

- Consider the impacts on the liveability of residential properties, including the ability of people to work from home, and usability of businesses and community facilities, near construction works by:
    - Preparing tailored community consultation messages and multi-channel methods of communication for neighbouring properties who will remain during construction
    - Providing advance notice of high impact works (e.g. noisy works) and additional resources where extended periods of works are required that may result in significant amenity impacts for neighbouring properties who will remain during construction
    - Provide a comprehensive information package and contact information which includes details of venues and locations where the community can work should construction work be disruptive
    - Providing a dedicated contact point to raise issues including those that may require a timely response
- Provide training to ensure the construction team operate as a 'good neighbour', are aware of potential impacts on neighbouring residential, businesses and community receivers whilst working and the need for mitigation measure to be in place.

8.1.3 People's personal and property rights

Impacts to people's personal and property rights include impacts to property access and the acquisition of property for the project. One of the key issues raised is the displacement of residents. For EB2 and EB3R there has been a long period of engagement and a number of properties have already been acquired.

It is acknowledged that there is opportunity for property owners and businesses being displaced to prepare for relocation. However, there are also practicable measures that the EBA can implement to aid those being displaced.

It is recommended that a clear strategy to manage the impacts of displacement for both property owners and tenants is prepared, this strategy should:

- Consider the timing of notice for impacted property owners and occupiers to ensure that notices are staggered as far as practicable to help minimise a spike in demand for alternative accommodation in the local area.
- Provide a minimum 90 days advance notice to property owners and tenants affected by displacement to ensure that sufficient time is provided for tenants or owner occupiers to relocate
- Provide a comprehensive information package and contact information for housing advice for property owners and tenants affected by displacement
- Provide support for tenants who are required to relocate through waiving notice periods, providing discounted moving costs and providing real estate agent contacts. Consideration should be given to other practical measures that can assist with the stress and anxiety of relocating
- Provide mental health and wellbeing support for property owners and tenants affected by displacement this has already been offered to some residents through Pakuranga Counselling Service and could be continued or expanded as needed to provide support for those affected by displacement.

It is also recommended that a clear strategy should be prepared for businesses potentially disrupted by the works and should:

- Identify businesses and community infrastructure close to or likely to be impacted by construction works and develop a strategy to support proactive and early engagement with the impacted businesses and community infrastructure
- Provide a comprehensive information package and contact information for business advice for commercial property owners and tenants affected by displacement or construction works
- Where social infrastructure, including cultural infrastructure, health infrastructure is affected provide a detailed resource to support users of these services with details of nearby commensurate alternatives and contacts for these alternative services
- Maintain suitable access to businesses and social infrastructure during construction including a suitable quality of access for pedestrians including wayfinding signage
- Develop hoardings, fencing and other screening that will integrate construction areas with the local environment (by providing opportunities such as locational signage, artist murals or advertising for businesses) where practicable, and remove barriers as soon as possible once no longer required
- Wayfinding signage should be integrated with new structures and at decision points for cyclists, pedestrians, and drivers to support connectivity and encourage recreational and economic activity. Wayfinding signage can also reduce severance effects through providing clear information for preferred routes
- Provide alternative access for servicing, delivering, and loading areas for businesses impacted by construction works.

8.1.4 People's fears and aspirations

To ensure the effective management and mitigation of social impacts it is important that there is a clear process for the community to report on impacts and discuss mitigation. Monitoring will help develop mitigation which responds to people's fears for their community and aspirations for their future.

Monitoring is included in the CCP and should:

- Detail a process for ongoing review of social impacts, including key measures to be reported on and a programme to carry out the review
- Report on the review of social impact annually including a review of concerns and complaints raised by the community and how these have been responded to
- Provide an opportunity for the community and stakeholders to provide feedback on impacts and how effective mitigation has been
- Explain impacts that cannot be practicably mitigated due to the nature and scale of the construction works
- Review other practicable measures which could be adopted to mitigate identified social impacts.

9.0 Recommendations and Conclusions

This SIA has been prepared to support the AEE for EB2 and EB3R. It assesses the potential social impacts from the construction and operation of the Project and recommends mitigation and management measures.

This SIA has been prepared following the methodology set out in the International Principles for Social Impact Assessment prepared by the IAIA. The SIA has been informed by stakeholder and community consultation undertaken for the Project as well as the community profile of the study area. Other specialist assessments have been reviewed to inform the SIA.

EB2

During construction, delays and congestion due to changed road conditions and altered access arrangements may result in a moderate adverse social impact rating as a result of stress and frustration likely to be experienced by the community. However, with mitigation this reduces to **low** adverse social impact rating.

The displacement of healthcare facilities for the construction of EB2 has the potential to be an up to moderate adverse social impact rating. Advance notice has been provided to all properties affected by the project however there will still be impacts to patients and may create uncertainty for the community. With mitigation this reduces to **low up to moderate** adverse social impact rating.

Changes to property access are likely and will be moderate adverse reducing to **low** adverse with mitigation.

The displacement of residents and businesses will have a potential high adverse social impact rating. These impacts can be mitigated through early and ongoing engagement with affected owners and tenants and effective communication during construction works. With mitigation this reduces to **low up to moderate** adverse social impact rating.

During operation there is likely to be a **positive** social impact rating with transport network improvements resulting in greater connectivity for local communities. There will also be improved safety for pedestrians and cyclists which will improve accessibility and reduce severance effects for nearby residents to and within the town centre.

EB3R

During construction, delays and congestion due to changed road conditions and altered access arrangements may result in a moderate adverse social impact rating. These effects can be mitigated through early notification to minimise journey disruption. With mitigation this reduces to **low** adverse social impact rating.

Access changes and relocation to social infrastructure at 205 – 229 Ti Rakau Drive could disrupt people accessing these services and facilities. There is the potential for a moderate adverse social impact rating as a result of changes in access to these services and facilities. With mitigation this reduces to **low** adverse social impact rating.

Several education and early education facilities are located along construction vehicle routes. Safe crossings will be retained for users of these facilities and notice of construction vehicle routes is recommended. The social impact rating is considered **low** adverse.

There is a moderate adverse social impact rating for the potential loss of open space at Riverhills Park. This loss will be as a result of temporary occupation during construction and permanent loss along Ti Rakau Drive during operation. However, with mitigation this reduces to **low** adverse social impact rating.

The displacement of residents and businesses will have a potential high adverse social impact rating. These impacts can be mitigated through early and ongoing engagement with affected owners and tenants and effective communication during construction works. With mitigation this reduces to **low up to moderate** adverse social impact rating.

During operation some minor streets will have left only access to Ti Rakau Drive, this is not expected to increase journey time and is considered to have a **low** adverse social impact rating.

New bus stations and a dedicated busway will improve public transport options, including frequency of services and potentially new routes. These connections will enable communities to better connect with the wider area. The operation of the Project is likely to result in a **positive** social impact rating in terms of connectivity.

Management and mitigation

Mitigation and management measures have been set out in Section 8.1 to minimise any adverse social impacts during construction and operation of EB2 and EB3R.

The SIA recommends early engagement be implemented throughout design, construction, and operational phases to keep the community informed and respond to any concerns or complaints. Specific measures are recommended for displacement and business disruption such as providing information to landowners and tenants and ensuring access and frontages are maintained as far as possible. Monitoring is also recommended to analyse the effectiveness of the identified mitigation and management measures.

10.0 References

Auckland Council. (2018). *Auckland Plan 2050: Development Strategy.*

Aurecon NZ Ltd. (2016). *Northern Corridor Improvements Assessment of Social Effects.*

Beca Carter Hollings & Ferner Ltd (Beca). (2011). *City Rail Link Notice of Requirement: Social Impact Assessment.*

GHD Limited (GHD). (2014). *AMETI 4 Social Impact Assessment.*

Howick Local Board . (2020). *Howick Local Board Plan 2020.* Auckland Council.

Howick Local Board. (2015). *Pakuranga Town Centre Masterplan.* Auckland Council.

Link Alliance. (2020). *Karangahape Station Main Works: Social Impact and Business Disruption Delivery Work Plan.*

Link Alliance. (2020). *Maungawhau (Mt Eden) Station Main Works: Social Impact and Business Disruption Delivery Work Plan.*

Link Alliance. (2020). *Te Wai Horotiu (Aotea) Station Main Works: Social Impact and Business Disruption Delivery Work Plan.*

Link Alliance. (2021). *Social Impact and Business Disruption Delivery Work Plan Annual Report.*

Lorenc, T., Clayton, S., Neary, D., Whitehead, M., Petticrew, M., Thomson, H., . . . Renton, A. (2012). Crime, fear of crime, environment, and mental health and wellbeing: Mapping review of theories and causal pathways. *Health Place*(18), 757-765.

Ministry of Justice. (2005). *National guidelines for crime prevention through environmental design in New Zealand.*

Mottee, L. K., Arts, J., Vanclay, F., Miller, F., & Howitt, R. (2020). Reflecting on How Social Impacts are Considered in Transport Infrastructure Project. *Urban Policy and Research, 38*(3), 185-198.

NSW Department of Planning and Environment. (2021). *Social Impact Assessment Guideline for State Significant Projects.*

NZ Transport Agency (Waka Kotahi). (2016). *PEOPLE, PLACE AND ENVIRONMENT SERIES: Social impact guide.*

Opus International Consultants Ltd. (2016). *AMETI Stage 2a Social Impact Assessment.*

Rees, D., Masari, E., & Appleton-Dyer , S. (2020). *Transport impacts on wellbeing and liveability: literature summary.* Waka Kotahi NZ Transport Agency.

Stats NZ. (2022, 01 10). *Geographic Boundary Viewer*. Retrieved from https://statsnz.maps.arcgis.com/apps/webappviewer/index.html?id=6f49867abe464f86ac7526552fe19787

Te Manatū Waka Ministry of Transport. (2021). *Transport Emissions: Pathways to Net Zero by 2050.* Retrieved from https://www.transport.govt.nz/assets/Uploads/Discussion/Transport-EmissionsHikinateKohuparaDiscussionDoc.pdf

Vanclay, F. (2003). International Principles For Social Impact Assessment. *Impact Assessment and Project Appraisal*, 5 -12.

Vanclay, F., Esteves, A. M., Aucamp, I., & Franks, D. (2015). *Social Impact Assessment: Guidance for.* International Association for Impact Assessment.

Waka Kotahi. (2022, 01 10). *One Network Road Classification*. Retrieved from https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

Waka Kotahi NZ Transport Agency. (2020). *Social impact assessment of mode shift.* Waka Kotahi NZ Transport Agency.

Wild, K., Woodward, A., Herbert, S., Tiatia-Seath, J., Collings , S., Shaw, C., & Ameratunga, S. (2021). *The relationship between transport and mental health in Aotearoa New Zealand.* Waka Kotahi NZ Transport Agency.

Appendix 1: Baseline Data

Table 14 Population count and median age for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1*	EB3R - SA1*	SA2	Howick LBA	Auckland Region
Population count and median age	Population usually resident	1908	3738	38541	140970	1571718
	Median age	34.2	37.8	35.9	37.3	34.7

** This is the average median age for the combined area*

Table 15 Age distribution for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick LBA	Auckland Region
Age distribution	Under 15 years	19.0%	17.2%	19.8%	19.4%	20.0%
	15-29 years	23.1%	22.9%	21.7%	20.2%	22.7%
	30-64 years	45.1%	44.5%	45.5%	46.9%	45.2%
	65 years and over	12.7%	15.8%	13.0%	13.5%	12.0%
	Total	100.0%	100.0%	100.0%	100.0%	100%

Table 16 Cultural diversity distribution for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick Local Board Area	Auckland Region
Population origin	Born in New Zealand	43.9%	49.8%	52.8%	46.4%	58.4%
	Born overseas	56.1%	50.2%	47.3%	53.6%	41.6%
	Total	100.0%	100.0%	98.8%	100.0%	100.0%

Table 17 Cultural diversity distribution for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick Local Board Area	Auckland Region
Cultural diversity	European	33.3%	38.6%	38.5%	56.2%	56.5%
	Māori	6.7%	10.3%	10.6%	5.2%	11.1%
	Pacific Peoples	11.8%	10.2%	13.1%	3.9%	14.4%
	Asian	44.7%	37.2%	33.5%	31.8%	18.9%
	Middle Eastern / Latin American / African	2.6%	2.6%	1.9%	1.8%	1.5%
	Other Ethnicity	1.0%	1.1%	1.1%	8.0%	8.1%

	Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 18 Unemployment and income distribution for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick Local Board Area	Auckland Region
Employment (population aged 15 years and over)	Employed full-time	51.8%	51.0%	51.6%	51.1%	51.9%
	Employed part-time	13.0%	10.9%	12.3%	13.3%	13.7%
	Unemployed	4.3%	4.0%	4.1%	3.4%	4.1%
	Not in the labour force	31.3%	33.6%	31.9%	32.2%	30.4%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 19 Median Weekly rent for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1*	EB3R - SA1*	SA2*	Howick Local Board Area	Auckland Region
Weekly Rent	Median Personal Income ($)	$29,280	$31,704	$33,067	$34,900	$34,400

** This is the average median income for the combined area*

Table 20 Dwelling and household ownership for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick Local Board Area	Auckland Region
Ownership Status	Own or partly own	38.2%	46.4%	42.9%	50.3%	45.4%
	Do not own and do not hold in a family trust	52.7%	45.4%	47.2%	33.3%	40.6%
	Hold in a family trust	9.2%	8.2%	9.8%	16.3%	14.0%

Table 21 Weekly median rent for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1*	EB3R - SA1*	SA2*	Howick Local Board Area	Auckland Region
Weekly Rent	Median Weekly Rent ($)	$470	$449	$441	$530	$450

** This is the average median weekly rent for the combined area*

Table 22 Dwelling and household ownership for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick Local Board Area	Auckland Region
Landlord Type	Private person, trust, or business	76.0%	81.4%	77.0%	93.4%	82.0%
	Local authority or city council	16.0%	11.8%	3.4%	1.3%	0.7%
	Housing New Zealand Corporation	3.0%	5.0%	16.4%	4.3%	15.5%
	Other housing provider	3.0%	1.9%	2.1%	0.7%	1.1%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 23 Dwelling and household ownership for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick Local Board Area	Auckland Region
Occupation status	Occupied dwelling	93.6%	96.1%	94.6%	94.5%	91.5%
	Unoccupied dwelling	5.0%	3.6%	4.9%	4.7%	7.2%
	Dwelling under construction	1.4%	0.2%	0.4%	0.8%	1.3%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 24 Travel to work distribution for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick Local Board Area	Auckland Region
Travel to work (population aged 15 and over)	Active Transport	3.3%	2.3%	3.4%	1.9%	5.3%
	Drive a company car, truck or van	61.4%	68.1%	64.8%	12.1%	10.3%
	Drive a private car, truck or van	10.5%	10.6%	10.9%	67.0%	59.5%
	Passenger in a car, truck, van or company bus	3.9%	3.9%	4.3%	3.6%	4.1%
	Public Transport	8.1%	7.2%	9.7%	6.2%	10.7%
	Work at home	6.7%	7.0%	6.5%	8.4%	8.7%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 25 Number vehicles per household distribution for SA1 and SA2 study areas, with comparisons made to the Howick Local Board and Auckland Region.

Characteristics	Description	EB2 - SA1	EB3R - SA1	SA2	Howick Local Board Area	Auckland Region
Number Vehicles per household	No vehicles	7.3%	5.9%	6.5%	3.0%	6.6%
	One	36.9%	30.0%	30.3%	24.0%	30.3%
	Two	36.3%	37.6%	40.1%	44.2%	40.0%
	Three or more	19.6%	26.5%	17.1%	17.7%	23.1%
	Total	100.0%	100.0%	100.0%	88.9%	100.0%

Appendix 2: List of Social Infrastructure

Social infrastructure in the vicinity of the Project

Table 26 Social Infrastructure in directly affected areas

Name	Address	Project
Pakuranga Library	7 Aylesbury Street, Pakuranga	EB2
Howick Local Board Office	1 Aylesbury Street, Pakuranga	EB2
East Auckland Islamic Trust	5B Cortina Place, Pakuranga	EB2
Citizens Advice Bureau	7 Aylesbury Street, Pakuranga	EB2
Bread of Life Christian Church	8 Cortina Place, Pakuranga	EB2
Barnardos Early Learning Centre	13 Reeves Road, Pakuranga	EB2
Pakuranga Christadelphian Hall	51 Dale Crescent, Pakuranga	EB2
St Peters Anglican Church	71 Udys Road, Pakuranga	EB2
Ti Rakau Park	William Roberts Road, Pakuranga	EB2/EB3R
Pakuranga Leisure Centre	13 Reeves Road, Pakuranga	EB2
Pakuranga Rugby League Club	27R William Roberts Road, Pakuranga	EB2
Pakuranga Medical Centre	11 - 13 Cortina Place, Pakuranga	EB2/EB3R
Eastside Family Doctor	96 - 98 Ti Rakau Drive, Pakuranga	EB2
Mercy Radiology	11 - 13 Cortina Place, Pakuranga	EB2
Pakuranga Pharmacy	96 Ti Rakau Drive, Pakuranga	EB2
My Dentist	11 - 13 Cortina Place, Pakuranga	EB2
Pakuranga Physio	11 - 13 Cortina Place, Pakuranga	EB2
DW Family Doctors	177 Pakuranga Road, Pakuranga	EB2
Unichem Pakuranga Pharmacy	11 - 13 Cortina Place, Pakuranga	EB2
Pakuranga Dental Surgery	175 Pakuranga Road, Pakuranga	EB2
Dentalcare Pakuranga	207 Pakuranga Road, Pakuranga	EB2
Family Dentist Pakuranga	237A Pakuranga Road, Pakuranga	EB2
Saint Kentigern College	130 Pakuranga Road, Pakuranga	EB2/EB3R
Pakuranga Intermediate School	43 - 49 Reeves Road, Pakuranga	EB3R
KIDSpace Early Learning Centre Pakuranga	67 - 73 Reeves Road, Pakuranga	EB3R
Pakuranga Kindergarten	107A Reeves Road, Pakuranga Heights	EB3R
Pakuranga Chinese Baptist Church	219 Ti Rakau Drive, Pakuranga	EB3R
Pakuranga Baptist Church	219 Ti Rakau Drive, Pakuranga	EB3R
Pakuranga Baptist Kindergarten	219 Ti Rakau Drive, Pakuranga	EB3R
Edgewater College	32 Edgewater Drive, Pakuranga	EB3R
Te Tahawai Marae	32 Edgewater Drive, Pakuranga	EB3R
Riverhills Park	Gossamer Drive, Pakuranga Heights	EB3R
Pakuranga Counselling Centre	207 Ti Rakau Drive, Pakuranga	EB3R

Table 27 Social Infrastructure in wider area

Name	Address
Anchorage Park School	16 Swan Crescent, Pakuranga
Pakuranga Heights Primary School	77 Udys Road, Pakuranga
Riverhills Early Learning Centre	4 Waikaremoana Place, Pakuranga Heights
Riverhills School	13 Waikaremoana Place, Pakuranga Heights
Pakuranga-rahihi Playcentre	6 Glenside Avenue, Pakuranga
Tiraumea Drive Reserve	118 Tiraumea Drive, Pakuranga
Rotary Walk	Pakuranga Rotary Path, Pigeon Mountain to Pakuranga Road
Pandora Park Playground	Pandora Place, Pakuranga
Riverina Place Esplanade Reserve	Riverina Avenue, Pakuranga
Raewyn Place Esplanade Reserve	Raewyn Place, Pakuranga
Koru Tennis Club	114 Gossamer Drive, Pakuranga Heights
Blyton Lane Reserve Playground	Blyton Lane, Pakuranga Heights
Glenhouse Reserve	6R Glenside Avenue, Pakuranga
Iglesia Ni Cristo	30 Millen Avenue, Pakuranga