

Our Development Strategy

What will Auckland look like in the future?

The Development Strategy sets out how Auckland will grow and change over the next 30 years to become a place that Aucklanders love and are proud of, a place they want to stay in or return to, and a place that others want to visit, move to or invest in.

This is a revised Development Strategy

This is an update of the first Auckland Plan Development Strategy, which was released in 2012.

The initial Development Strategy set the direction for a quality compact approach to growth. There have been a few important changes since 2012 which are reflected in this updated Development Strategy.

One of the most important changes has been the release of the Auckland Unitary Plan in 2017, which sets out the planning rules for Auckland and creates adequate capacity for jobs and homes over the next 30 years.

Another important change is around Aucklanders' expectations of housing, transport and public spaces. We also live in a time of rapid technological advancement, which will have many impacts on Auckland's future growth.

Why we need a Development Strategy

Auckland is anticipated to grow significantly over the next 30 years. To make sure that we build on its strengths and hold on to the things that are dear to us during this growth, we need to plan for how and where Auckland will grow.

Around 1.66 million people currently live in Auckland.

Over the next 30 years this number could grow by another 720,000 people to reach 2.4 million. This means Auckland will need many more dwellings – possibly another 313,000, and room for extra jobs – possibly another 263,000.

Growth on this scale is significant, and requires us to work together and ensure we have a clear understanding of where and when investment in planning and infrastructure will be made – this is what the Development Strategy provides.

The National Policy Statement on Urban Development Capacity 2016 requires councils experiencing high growth to prepare a Future Development Strategy. This must

demonstrate sufficient, feasible development capacity in the medium and long term. This Development Strategy serves as Auckland's Future Development Strategy.

Auckland's context

From the arrival of the first Māori settlers to its recent evolution into a modern international city with a substantial rural sector, Auckland's story has been one of constant growth and change.

While initial settlement by both Māori and European tended to cluster around the waterfront, development soon spread further afield in response to population growth.

By the early 1900s Auckland had become New Zealand's largest city and suburban development had extended to the central isthmus and parts of the North Shore.

However, it wasn't until the arrival of the motor car, particularly after World War Two, that Auckland's urban footprint really started to expand.

The resulting pattern of lower density suburbs, enabled by the motorway system and widespread car ownership, is still the dominant feature of Auckland's urban form to this day.

The urban area now covers approximately 20 per cent of Auckland's land mass. It is home to over 90 per cent of its residents, many of whom live along a narrow axis stretching from Ōrewa in the north to Drury in the south.

The urban area is surrounded by extensive rural areas, with numerous towns and villages, and an outstanding natural environment that includes:

- beaches
- harbours
- maunga
- the surrounding ranges.

Geography continues to shape and constrain Auckland's development.

Physical pinch points, particularly where the isthmus is at its narrowest, complicates development and the transport network.

It also complicates the flow of goods and services, including to and from the port and airport, Auckland's two international gateways.

Figure 38 - Multi-nodal model



Supporting residential and business growth, while managing their impacts on the natural environment, will be one of the great challenges we face over the next 30 years.

Auckland will look very different in 30 years

Auckland's urban footprint will include:

- significant redevelopment and intensification in areas that are already developed
- newly established communities in the future urban areas.

There will also be a small amount of additional growth in rural areas outside of the urban footprint.

A multi-nodal model

Over the next 30 years, Auckland will move towards a multi-nodal model within the urban footprint.

The city centre will continue to be the focus of Auckland's business, tourism, educational, cultural and civic activities. It will continue to be an important residential centre as well.

But it won't be the only main centre in Auckland.

Albany, Westgate and Manukau, including their catchments, are nodes which are critical to growth across the region.

Over time, they will offer a broad range of:

- business and employment activity
- civic services
- residential options.

The nodes will:

- accommodate substantial growth in the north, north-west and south
- improve employment choice
- be interconnected by a range of efficient transport links.

In addition, the satellite towns of Warkworth and Pukekohe act as rural nodes.

They:

- service their surrounding rural communities
- are connected to urban Auckland through state highways and, in the case of Pukekohe, by rail
- will support significant business and residential growth.

See Figure 38 - Multi-nodal model

City centre

Auckland's city centre is critical to the success of Auckland and of New Zealand.

It is:

- Auckland's primary business area with its mix of commercial, education, employment, cultural and civic activities
- linked to the rest of Auckland by an extensive transport system.

Around a quarter of all jobs in Auckland are located in the city centre, and it contributes around seven per cent to national gross domestic product.

The residential population of the city centre and fringe areas has increased substantially over the past decade to around 80,000 residents.

Manukau

Manukau is an anchor for southern Auckland.

It has:

- a strong civic, academic, business and retail focus
- several Auckland-wide attractions
- integrated rail and bus stations.

The surrounding industrial area and proximity to Auckland Airport strengthen its role as a node.

Westgate

Westgate is an emerging node of northwest Auckland.

It is the centre for future urban development, including Red Hills, Whenuapai (which includes new business land) and Kumeū-Huapai.

Strategically located at the juncture of state highways 16 and 18 on the western ring route, it has road connections to the north, west and south.

Future transport infrastructure will transform Westgate into a major public transport interchange. This will support further mixed use intensification of the centre and the development of the surrounding business and residential areas.

Albany

Albany plays a strategic role as the node for the north. It will help support the future urban areas of Wainui East, Silverdale and Dairy Flat as they develop.

Albany will see significant residential and business growth and intensification.

Motorway access and the Northern Busway provide much needed transport connections for the area.

In time, and supported by industrial areas such as Rosedale, Albany will provide a diverse range of employment, housing, education, community and civic facilities.

Warkworth

The satellite town of Warkworth is the rural node in the north of Auckland.

It provides a range of services to the surrounding rural areas. Significant future employment growth is anticipated alongside residential growth.

Pukekohe

The satellite town of Pukekohe is the rural node at the southern extent of Auckland.

It is strategically located on the North Island Main Trunk railway line and is connected to Auckland via State Highway 22.

It serves a wide catchment, and is centred on rural production with some of New Zealand's most elite soils and prime agricultural land.

Pukekohe has the potential to function semi independently from the main urban area of Auckland. This can reduce the need for travel out of Pukekohe to access services, facilities and employment. An increase in business land will help achieve this aim.



How Auckland will grow and change - a quality compact approach

Auckland will take a quality compact approach to growth and development.

A compact Auckland means future development will be focused in existing and new urban areas within Auckland's urban footprint, limiting expansion into the rural hinterland.

By 2050, most growth will have occurred within this urban footprint, particularly focused in and around:

- the city centre
- the Albany node
- the Westgate node
- the Manukau node
- identified development areas
- future urban areas.

What quality means

The quality aspect of this approach means that:

- most development occurs in areas that are easily accessible by public transport, walking and cycling
- most development is within reasonable walking distance of services and facilities including centres, community facilities, employment opportunities and open space
- future development maximises efficient use of land
- delivery of necessary infrastructure is coordinated to support growth in the right place at the right time.

What compact means

The compact aspect of this approach means that:

- future development will be focused within Auckland's urban footprint, with most of that growth occurring in existing urban areas
- by 2050, most growth will have occurred within this urban footprint, limiting both expansion into the rural hinterland and rural land fragmentation.

This approach contributes to investment certainty by understanding where and when growth is likely to occur.

The benefits of a quality compact Auckland

The benefits of a quality compact approach to growth and development are:

- greater productivity and economic growth - a compact urban form increases economic productivity from the greater proximity between firms, workers and consumers
- better use of existing infrastructure - growing within existing urban areas makes more efficient use of existing assets. Providing physical and social infrastructure costs less per household, which results in a higher overall level of service
- improved transport outcomes - a compact urban form brings more people closer to their place of work. Greater population density supports faster, more frequent public transport services. Both reduce congestion on the road network and create a more efficient transport network overall
- rural productivity and character can be maintained - encouraging growth within urban areas helps to protect rural environments from urban encroachment, and maintain the productive capability of the land and its rural character
- enhanced environmental outcomes - adverse effects of urban activities are concentrated into fewer receiving environments. Growth creates more opportunities for environmental enhancement, particularly as part of infrastructure upgrades
- greater social and cultural vitality - concentrating activity into urban centres and neighbourhoods provides a wider variety of activities to meet the full range of people's needs. This brings diversity and vibrancy into the urban environment which in turn enhances interaction and social cohesion.

How this will be achieved

The quality compact approach to future development will be achieved by:

- ensuring sufficient capacity for growth across Auckland
- embedding good design in all development
- sequencing what gets delivered
- aligning the timing of infrastructure provision with development
- supporting rural production.

Ensuring sufficient capacity for growth across Auckland

An on-going supply of development capacity has to be maintained to meet demand.

The National Policy Statement on Urban Development Capacity requires Auckland Council to ensure that, at any one time, there is sufficient development capacity for housing and business growth.

This means:

- short term (1 – 3 years) development capacity must be feasible, zoned and serviced with development infrastructure
- medium term (4 – 10 years) development capacity must be feasible, zoned and either serviced with development infrastructure, or have funding identified in the council's Long-term Plan
- long term (11 – 30 years) development capacity must be feasible, identified in relevant plans and strategies, with the required development infrastructure identified in the council's Infrastructure Strategy.

Auckland's Unitary Plan²⁸⁶ provides enabled capacity to build around one million additional dwellings. This is significantly more than the number of dwellings Auckland will need over the next 30 years.

Under current (mid 2017) market conditions, around 326,000 dwellings across Auckland are considered feasible. The scale and location of this feasible capacity will change over the lifetime of the plan as market conditions change.

Auckland Council needs to consider the feasible development capacity against anticipated housing demand.

To meet Auckland's demand for housing over the next 30 years, a minimum target of 408,300 dwellings has been set to provide sufficient feasible development capacity.

This target takes into account assumptions on the following:

- anticipated housing demand
- additional margin required as part of the National Policy Statement
- the 2016 shortage in housing (35,000 dwellings).

Based on this there is sufficient feasible development capacity provided over the short to medium term (1-10 years). However, over the long term (11-30 years), based on these current assumptions, there is a shortfall of around 82,000 dwellings.

There will be regular monitoring of development and tracking of actual dwellings built (uptake). This will show what planning and infrastructure responses are needed to ensure well-functioning urban environments that meet future needs.

Read more about housing and business demand, including ways to address the long term capacity shortfall in Assessing demand later in this section.

Embedding good design in all development

Good design includes the attributes of:

- functionality
- attractiveness
- longevity
- innovation
- legibility.

Good design needs to be integrated at all scales of development. It includes the quality of the city structure, the design of public places and spaces as well as building and house design.

The quality of city design is integral to how it functions, which affects our overall wellbeing. Good design can contribute to making Auckland a sustainable, attractive, equitable and desirable place.

The quality and characteristics of successful places make them memorable. They result in people going there more often, staying longer, or choosing to live and work there.

The Auckland Design Manual website²⁸⁷ provides guidance on good design and best practice examples.

Sequencing what gets delivered

Development capacity must be turned into real homes and businesses.

Planning and investment will be targeted to those areas where the greatest development capacity is taken up. This means existing urban areas where actual development of scale happens and providing new bulk infrastructure for future urban land.

This will provide certainty to the market regarding where supporting infrastructure and services will be located. It will also ensure value for money as infrastructure and service providers can target their investment in response to growth.

Areas for growth and development are sequenced.

In the existing urban area this is done through identifying nodes and development areas.

In greenfield areas, it is done through future urban areas.

Aligning the timing of infrastructure provision with development

Future growth and change will require a significant increase in the capacity and expansion of Auckland's infrastructure networks.

When infrastructure is provided, it needs to be coordinated with growth. This will minimise the costs of under-used assets, or the problems with over-stressed, congested networks.

Growth and infrastructure provision can be aligned by identifying the timing and location of:

- expansion of strategic transport and water networks
- servicing of future urban areas with infrastructure
- infrastructure investment that supports significant growth in existing urban areas.

Supporting rural production

Auckland's rural areas are valued for their:

- current and future productive uses
- rural landscape and character
- ecological areas
- recreational opportunities.

As part of the quality compact approach, future urban areas have been identified to provide for urbanisation. Residential growth in rural areas will be focused in the two rural nodes of Pukekohe and Warkworth. Some growth is anticipated in the smaller towns and villages.

Residential development in rural zones will be limited. Provision for residential growth will be focused in the existing countryside living zone.

Limiting residential growth in rural areas will maintain their values and support ongoing rural production.

Change in the existing urban area

Looking ahead 30 years, Auckland's urban area will grow and change.

Growth is enabled throughout most of Auckland's urban footprint, and all neighbourhoods are capable of accommodating growth to some extent.

However, some existing urban areas are likely to undergo significant growth - these are known in the Auckland Plan as nodes and development areas.

Incremental growth will happen across existing urban areas over the next 30 years as the upzoning provided by the Auckland Unitary Plan is taken up. Most growth should be focused in the existing urban area.

This level of growth can generally be accommodated through existing infrastructure capacity or through ongoing infrastructure renewal.

Growth in nodes and development areas

Some existing urban areas are however likely to be significantly redeveloped in the next 30 years, either through the private sector or through the intervention of agencies.

Redevelopment in these areas will be of a scale that will require substantial infrastructure and service investment.

There have been initiatives across urban Auckland where significant investment and sustained redevelopment effort has taken place.

Examples from various agencies include initiatives in Manukau, Tāmaki, and New Lynn. In other areas, such as the city fringe, the private sector has taken the lead.

To date, different approaches have been taken to identify and prioritise where significant housing and business growth are anticipated. Nodes and development areas provide a consistent approach.

Nodes

The city centre, together with Albany, Westgate and Manukau form the foundation for Auckland's future growth.

Development areas

Development areas are introduced as a comprehensive approach to servicing expected growth across the existing urban area.

See *Map 15 - Existing Urban* - an interactive version of the map is available at aucklandplan.govt.nz

They are specific locations that are expected to undergo a significant amount of housing and business growth in the next 30 years. Planning and investment will be targeted and prioritised to these areas where the greatest development capacity is taken up.

Development areas are not a prediction of where large scale redevelopment will happen, but rather where it is most likely to happen. This gives infrastructure and service providers a basis from which they can do their own long-term planning.

Monitoring of actual, on-the-ground development is crucial. This will inform adjustments to development areas if needed, and subsequent adjustments to the long-term plans of providers.

Each development area will be different and will experience growth at varying rates and at different times. The investment required in these areas will focus on addressing the impacts of increased demand on infrastructure and services as development occurs. This will need a coordinated approach by agencies involved in implementation.

Characteristics of development areas

Development areas have a combination of the following characteristics:

- substantial capacity provided in the Auckland Unitary Plan for housing and business development
- access to a large number of jobs within a reasonable commuting time
- access to centres and the strategic public transport network within easy walking distance
- major public landholdings with intended or potential redevelopment
- current or planned infrastructure capacity that is likely to enable significant additional growth – for example, the expansion of the strategic transport network that improves connectivity
- market feasibility.

One or more of these characteristics can make an area attractive to market investment. This plays a critical role in determining the likely scale and pace of development.

Some areas in Auckland are currently market attractive and may require investment in infrastructure and services in the short to medium term.

Significant investment in an area can positively influence the market attractiveness, and create a spill-over effect into adjacent areas.

Also, planned future investment, such as new transport infrastructure, once built, can change an area that is currently not market attractive to one that is. These sorts of factors influence the expected timing, rather than the potential scale, of redevelopment.

Supporting investment will be prioritised for when development occurs.

Once significant growth has happened in an area, it will require further investment in amenity and community facilities to cater for the greater number of people living there.

Timeframes for development areas

Approximately 18 development areas are identified for targeted investment over the next 30 years. They are prioritised across three broad timeframes that align with the National Policy Statement on Urban Development Capacity.²⁸⁸

The criteria used to sequence development areas included:

- feasible development capacity
- regeneration opportunity and ability to optimise the use of existing or planned investments
- alignment with existing or planned infrastructure provision.

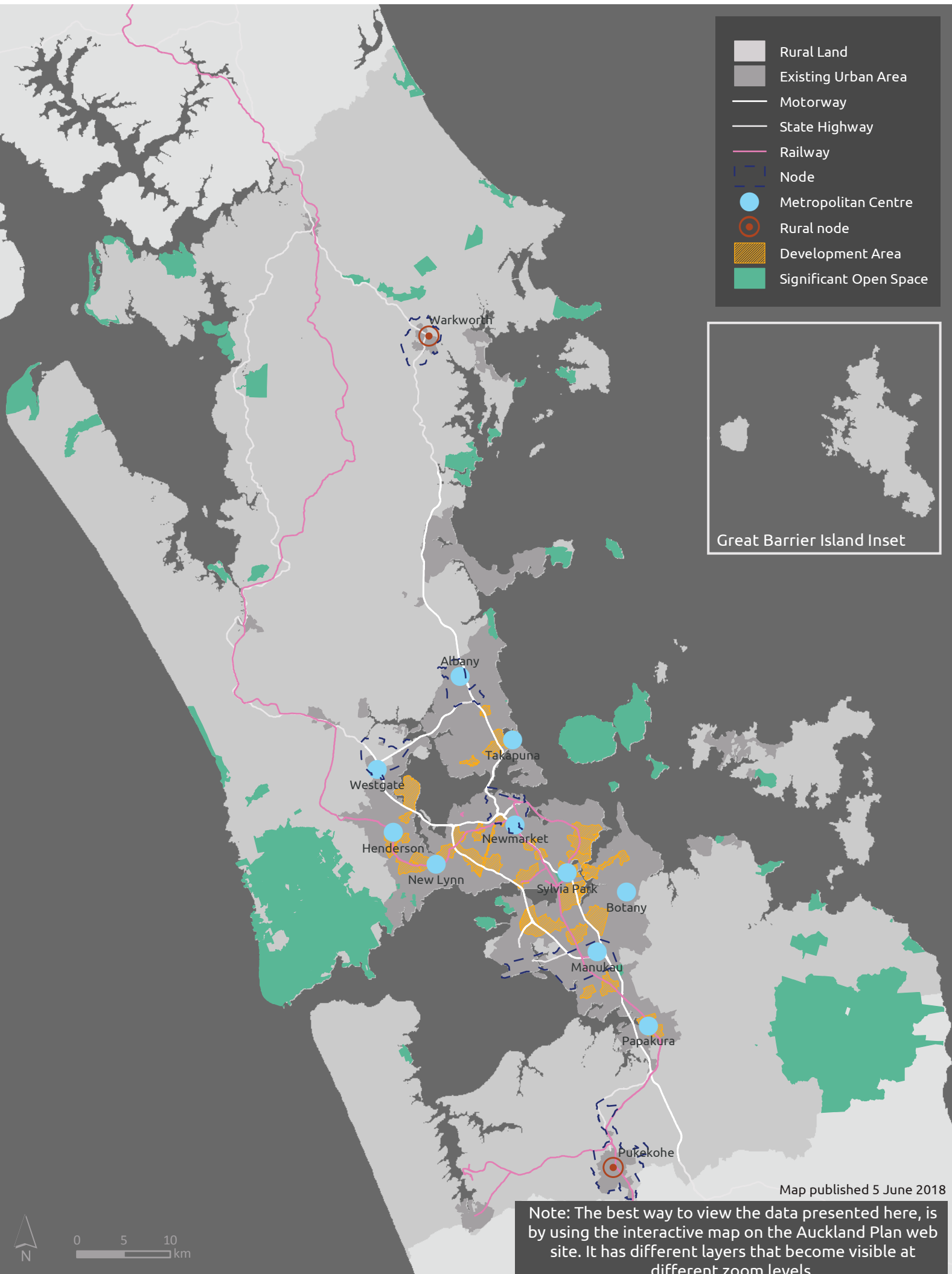
Areas that have already been identified through previous planning and with commitments to current projects are prioritised in the first three years.

Areas in the next 4 to 10 years generally rely on benefits from significant infrastructure projects such as the City Rail Link.

Beyond the next 11 years, there is less certainty about which areas will experience large scale growth.

Timeframes indicate when some of the investment in infrastructure and services may need to be made. It does not indicate that development will be completed or investment ceased at the end of the timeframe.

Years specified generally refer to 1 July of that year onwards.



Building strong urban centres and neighbourhoods

In keeping with our commitment to a quality compact urban form, it will be essential that Auckland’s centres and neighbourhoods are strong, connected and can flourish.

Centres

Over the next 30 years there will be considerable changes right across Auckland. Ensuring that Auckland creates and retains strong, thriving and resilient centres is vital. A network of centres serves communities from regional through to local level. This network is reflected in the Auckland Unitary Plan hierarchy of centres.

Centres are at the heart of neighbourhoods and are focal points for the surrounding community. They include a mix of activities and functions, such as retail, commercial and social services, as well as housing, recreation and community facilities.

Auckland’s centres are supported by a surrounding (typically residential) area that is within an easy walking distance, usually thought of as 10 minutes.

Some of our centres currently provide opportunities to maximise investment in infrastructure and support the quality compact approach to urban development. For example, Mt Albert has access to rail and is close to Unitec.

Maximising investment can be achieved by creating higher-density clusters of employment and housing, supported by public transport and other critical services such as schools and hospitals.

Many of these centres are identified in nodes and development areas. They will be supported to develop and intensify, particularly those that have greater capacity for growth.

Neighbourhoods

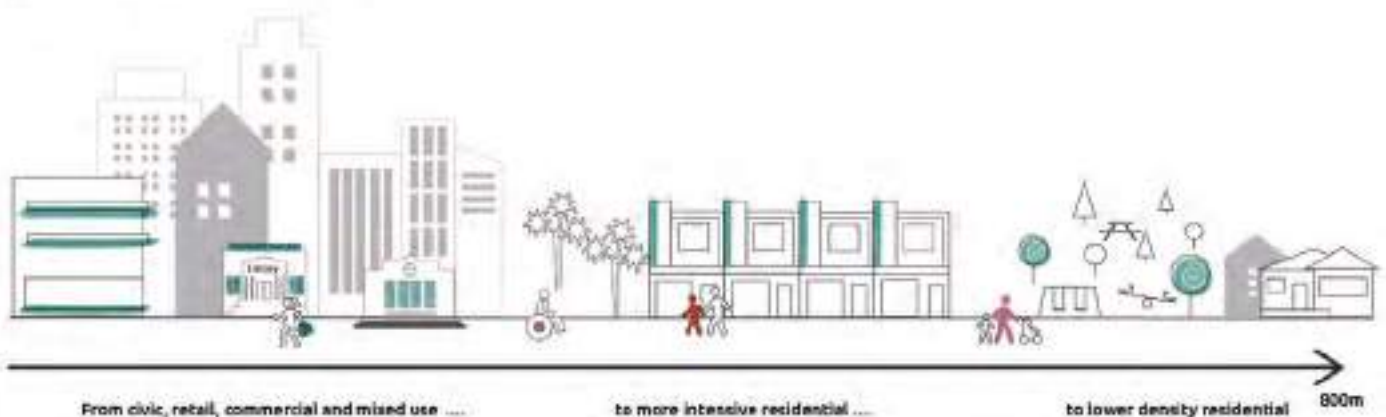
Growth will happen in neighbourhoods too. The Auckland Unitary Plan enables growth throughout most of Auckland’s existing urban footprint, and all neighbourhoods are capable of accommodating growth to some extent.

This might be in the form of subdivision, development of previously undeveloped urban land or the redevelopment of existing buildings at higher densities. All are workable options for increasing Auckland’s housing stock.

However, there are areas in Auckland that have the potential to achieve higher levels of growth than others. These are identified as development areas. Together with future urban areas they play an important role in Auckland’s future growth.

Figure 39 - Walkable catchment around a centre

10 minute walkable catchment for a centre



Managed expansion into future urban areas

In the next 30 years new communities will be established in future urban areas. These will be on the fringe of Auckland’s existing urban area, and in rural and coastal settlements.

Forming new communities

Around 15,000 hectares of rural land and coastal areas that could accommodate approximately 137,000 homes and 67,000 jobs over the next 30 years have been identified as suitable for urban development.

Expansion into greenfield areas will be managed within the Rural Urban Boundary.

Development will be sequenced, and timed for when these areas will be ‘live zoned’ and the necessary bulk infrastructure is in place. The Future Urban Land Supply Strategy²⁸⁹ outlines this approach in detail.

Areas that have already been zoned as urban in the Auckland Unitary Plan have been sequenced first. Other early sequencing priorities are areas with less infrastructure constraints - for example, Whenuapai.

See Map 16 - Future Urban - an interactive version of the map is available at aucklandplan.govt.nz

Areas that have significant infrastructure or environmental constraints are sequenced later in the 30 year timeframe - for example, Takanini.

What is needed to succeed

Because of the scale of growth envisaged in Auckland’s future urban areas, and the housing and employment choices they can provide, it is crucial that they are developed in an efficient, cost-effective and sustainable way.

They also need to be vibrant places for the new communities who will live there. This requires a network of strong centres and neighbourhoods, integrated with good transport choices, and supported by a wide range of housing types and densities.

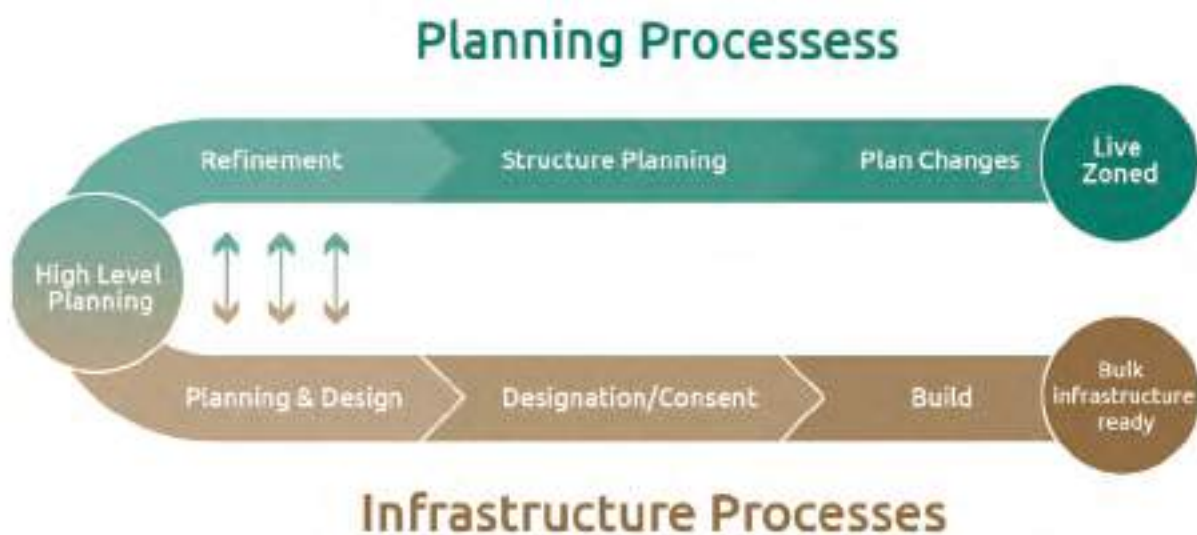
These areas will also require employment other than that provided in centres. Services and facilities such as schools and hospitals parks, sports fields and community facilities will also be required. Two additional hospital sites in the north and south will be needed in the future.

Challenges we face

There are many challenges to creating new urban areas, including environmental constraints and impacts:

- these areas are predominantly rural at present and have little or no infrastructure in place to cope with urban development
- providing the required bulk infrastructure (water, wastewater, storm water and transport) to these areas in the right place at the right time
- funding and delivery of significant infrastructure projects to these areas are key drivers of development timing.

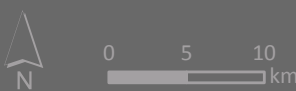
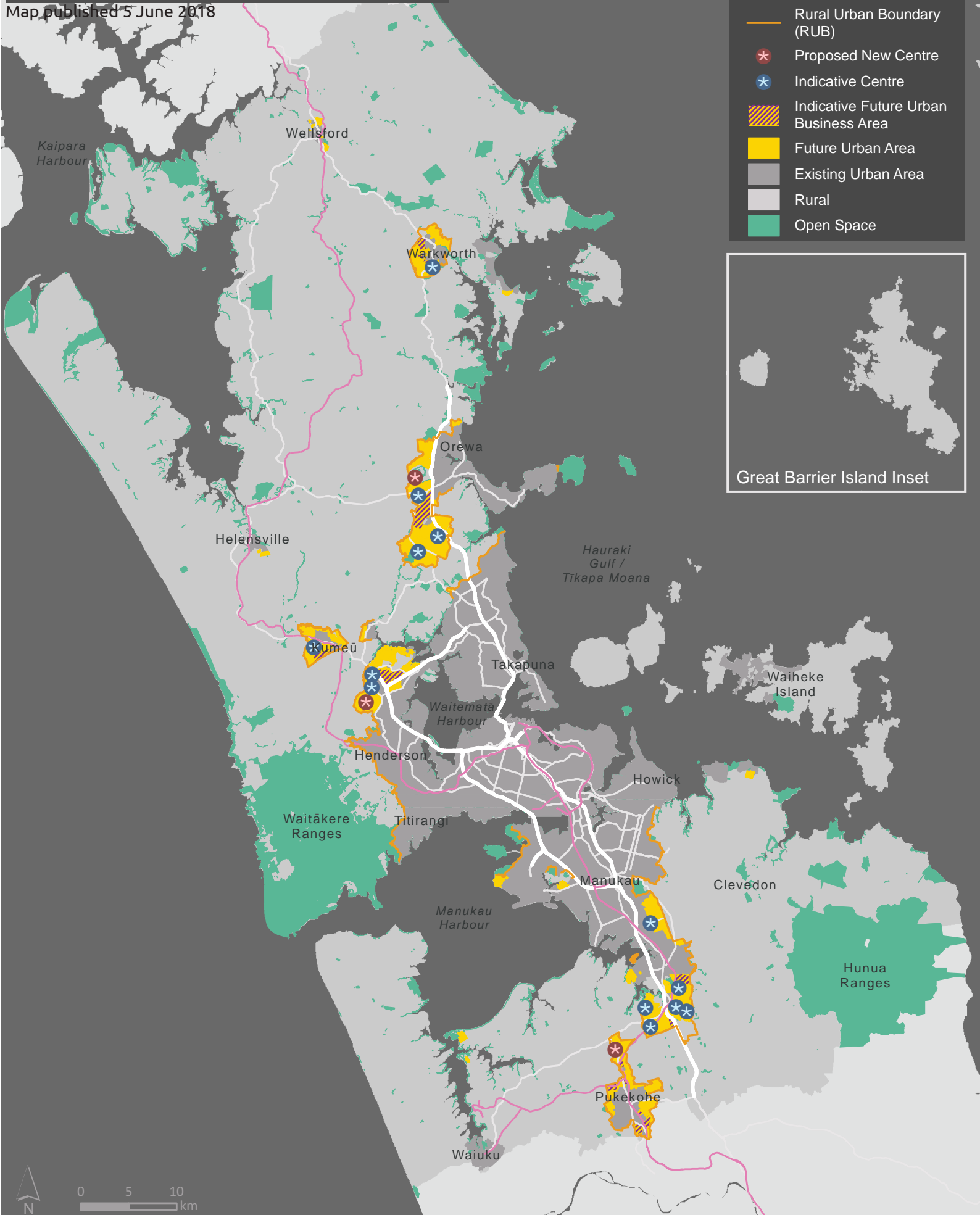
Figure 40 - Integrated planning approach brings together the planning and infrastructure processes



Note: The best way to view the data presented here, is by using the interactive map on the Auckland Plan web site. It has different layers that become visible at different zoom levels.

Map published 5 June 2018

- Motorway
- Strategic Arterial Road
- Railway
- Rural Urban Boundary (RUB)
- Proposed New Centre
- Indicative Centre
- Indicative Future Urban Business Area
- Future Urban Area
- Existing Urban Area
- Rural
- Open Space



Auckland's capacity for growth

Recent growth patterns

Auckland's population has grown by 180,700 since the first Auckland Plan was adopted in 2012.

The rate of growth has remained high in recent years, and increased by 43,000 in 2016/2017.

In the past five years consents for new dwellings have increased from 5500 (2012/2013) to over 10,000 (2016/2017) per annum. If consents continue at this level, Auckland will be on track to consent around 100,000 new homes between 2012 and 2022.

Auckland is also delivering more attached housing than in previous years. This offers people greater housing choice. The proportion of attached dwellings has increased from 16 per cent of all dwellings consented in 2012/2013 to 43 per cent in 2016/2017.

See *Figure 42 -Proportion of consented dwellings, by dwelling type from 2012 to 2017 by financial year*

Furthermore, 80 per cent of all new dwellings consented in the last five years were located within the existing urban area. For further information see the 2016/2017 Development Strategy Annual Monitoring Update.²⁹⁰

See *Figure 43 -Proportion of consented dwellings inside and outside the 2010 Metropolitan Urban Limit type from 2012 to 2017 by financial year*

Monitoring is being improved to track both dwelling consents and completions to enable better understanding of delivery against targets.

Number of consented dwellings in Auckland (2012-2018)

Reporting year	Number of consented dwellings
Year 1 (2012/2013)	5501
Year 2 (2013/2014)	7078
Year 3 (2014/2015)	8398
Year 4 (2015/2016)	9381
Year 5 (2016/2017)	10,121
Year 6 (2017/2018)	12,368
Total (2012 to 2018)	52,806

Urban development capacity

The Development Strategy provides the strategic direction for how, where and when urban growth is

delivered over the life of the Auckland Plan 2050.

Sufficient, feasible development capacity must be provided over this period. The Development Strategy therefore identifies the expected location, timing, and sequence of future development capacity in the existing urban areas and future urban areas.

This is informed by:

- the Auckland Unitary Plan
- the Housing and Business Development Capacity Assessment²⁹¹
- Auckland Council's Long term Plan (including the Infrastructure Strategy).

To meet Auckland's demand for housing over the next 30 years, a minimum target of 408,300 dwellings has been set to provide sufficient feasible development capacity. The diagram below (housing capacity in Auckland) illustrates the relationship between enabled capacity, feasible capacity and what the market actually delivers.

Enabled capacity

There are currently about 550,000 residential dwellings in Auckland. The Auckland Unitary Plan enables capacity for approximately one million additional residential dwellings. Only some of this enabled capacity will be realised each decade to meet Auckland's growth.

Enabled capacity will change over time as capacity is taken up, that is, as development happens. It will also change as the planning controls of the Auckland Unitary Plan change.

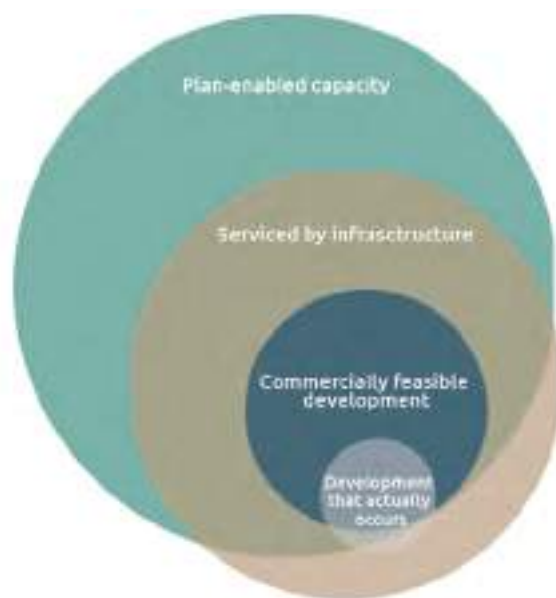


Figure 41 -Housing capacity in Auckland

Figure 42 - Proportion of consented dwellings, by dwelling type from 2012 to 2017 by financial year

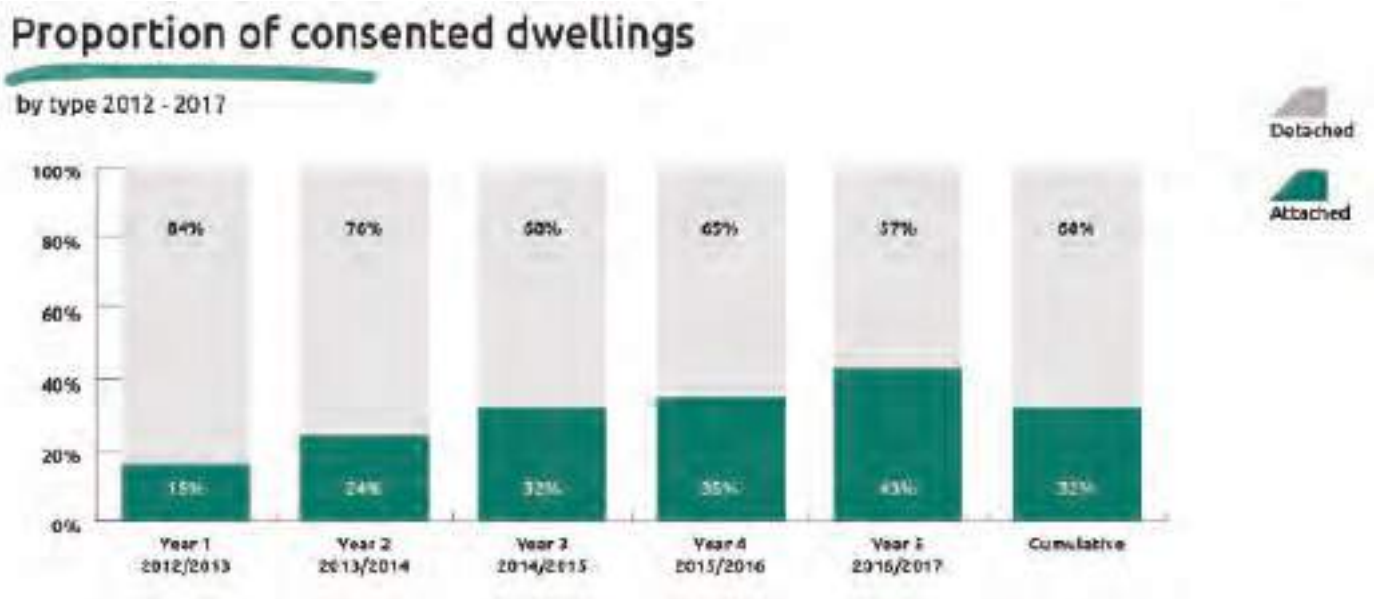
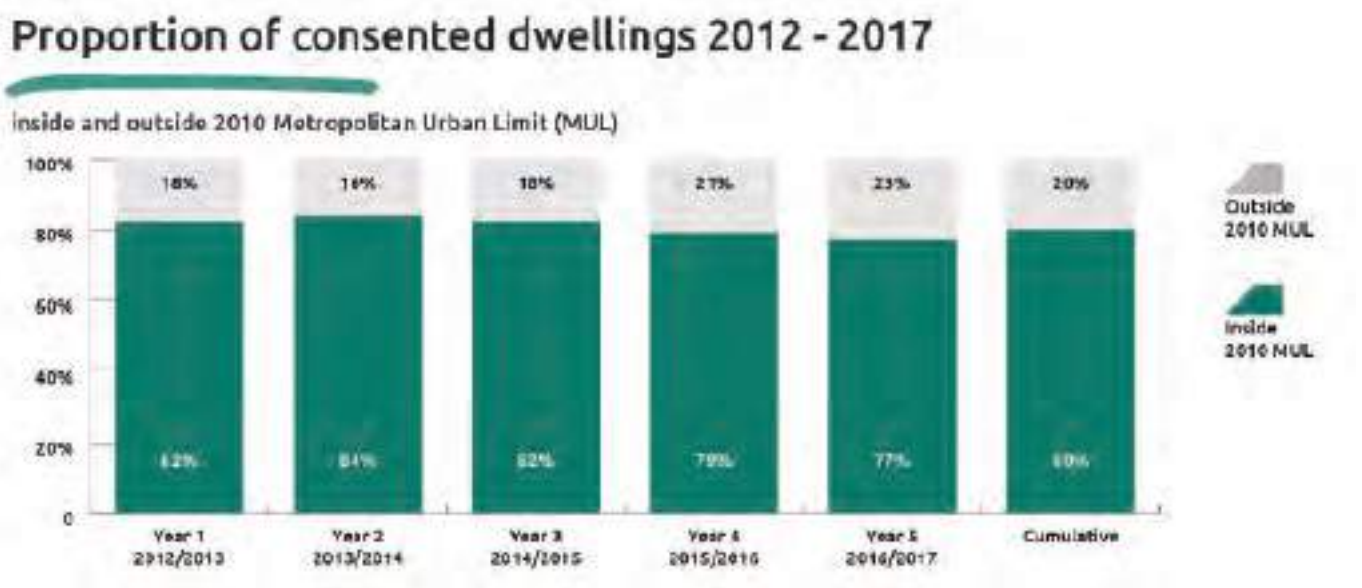


Figure 43 - Proportion of consented dwellings inside and outside the 2010 Metropolitan Urban Limit type from 2012 to 2017 by financial year



Feasible capacity

Feasible capacity is the amount of development that is commercially viable, taking into account current costs, revenue and yields.

It is a commercial 'filter' on enabled capacity, providing a 'snapshot' in time. It is not a forecast or projection of development, but does allow scenarios to be tested.

Feasible capacity is dynamic and changes subject to the housing and construction markets and economic conditions.

A range of development indicators will be monitored on a quarterly and annual basis, to ensure informed responses.

Auckland's dwelling growth to 2048

Auckland's anticipated population and dwelling growth over the next 30 years are anticipated across the region as shown in the table below.

Around 62 per cent of development over the next 30 years is anticipated to be within the existing urban area.

The remaining development is anticipated to occur in future urban areas (32 per cent) and in rural areas (6 per cent). The future urban areas will be urbanised in a managed, staged approach to ensure integration between land use planning and delivery of bulk infrastructure.

Anticipated dwelling growth by decade

Decade 1

The greatest amount of growth in residential dwelling supply is expected in the first decade of the plan. This reflects recent high population growth, which is expected to taper off and return to a more modest, long-term growth rate sometime during the first decade.

Less growth is anticipated in the future urban areas in this decade relative to other area categories. This reflects the time it will take to plan and service many of these areas with infrastructure. The build-out of these areas may take even longer, depending on:

- overall housing demand
- the ability of these areas to deliver smaller, more affordable housing options
- locational preferences.

See *Figure 44 - Anticipated dwelling growth 2018 to 2028*

Decades 2 and 3

Over the last two decades of the plan there will be less certainty about demand and supply of capacity that will be needed. Annual monitoring will enable planning to respond to changing trends.

Further growth in development areas is anticipated, with the advantages of greater accessibility of these areas through delivery of major transport projects likely to attract development.

In the future urban area more development is expected in decades two and three than in decade one, as infrastructure delivery is progressed.

See *Figure 45 - Anticipated dwelling growth 2028 to 2038* and *Figure 46 - Anticipated dwelling growth 2038 to 2048*

Development Strategy measures

Auckland Council will monitor residential and business development against the Development Strategy to track progress on development capacity and delivery across Auckland.

This is intended to ensure planning and infrastructure funding decisions are well-informed, timely and responsive to growth demands.

This will in turn ensure Auckland maintains a balanced supply of development capacity that is consistent with the strategic approach to managing Auckland's growth as set out in the Development Strategy.

Primary measures include:

- new dwellings consented
- location of new dwellings consented
- typology of new dwellings consented
- resident satisfaction with built environment at a neighbourhood level
- number of jobs accessible in the morning peak (within 30 minutes by car, 45 minutes by public transport)
- hectares of industrial zoned land.

These measures will be reported on at least annually, except for resident satisfaction which will be reported bi-annually.

Anticipated growth in population and dwellings (2018-2048)

	Population 2018 [1]	Population growth 2018 - 2048 [1]	Dwellings 2018 [1]	Dwelling growth 2018 - 2048 [1]	Feasible development capacity 2017 [2]
Existing urban area	1,486,000	443,300	491,700	195,000	117,500
Future urban area	44,200	243,400	15,300	99,000	114,800
Rural area	126,400	33,400	47,100	19,100	53,700
Total	1,656,600	720,100	554,100	313,100	286,000

[1] Source: Population and dwelling figures are based on Auckland Council’s Land Use Scenario i11 v3.

[2] Source: Feasible capacity 2017 is based on the Housing and business development capacity assessment for Auckland (December 2017).

[3] The 2018 population figure of 1,656,600 is sourced from Auckland Council’s Land Use Scenario i11 v3. Elsewhere the Auckland Plan 2050 uses the estimated population (as of 30 June 2017) of 1.66 million sourced from Statistics New Zealand.

[4] Feasible capacity figure includes only that which can be spatially distributed. This feasible capacity figure excludes assumed capacity for 25,000 dwellings on Housing New Zealand land and 15,000 dwellings in the rural zones. For more information on feasible capacity see How Auckland will grow and change.

Figure 44 - Anticipated dwelling growth 2018 to 2028

Anticipated dwelling growth

from 2018 to 2028

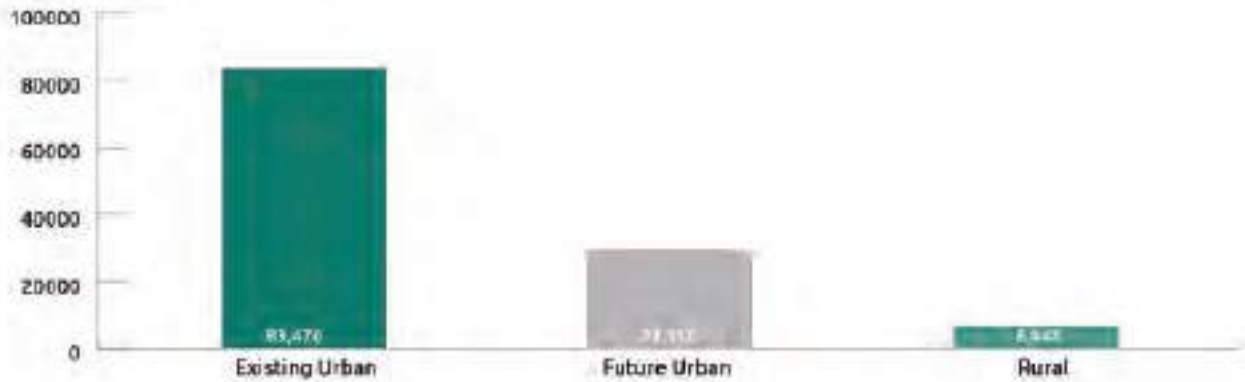


Figure 45 - Anticipated dwelling growth 2028 to 2038

Anticipated dwelling growth

from 2028 to 2038



Figure 46 - Anticipated dwelling growth 2038 to 2048

Anticipated dwelling growth

from 2038 to 2048



A series of indicators, consistent with central government guidance on urban development capacity will also be monitored, including:

- prices and rents for housing, residential land and business land
- consents granted for urban development
- population growth
- housing affordability
- price efficiency in the land and development market.

Assessing demand

The following demand for business and housing is anticipated for Auckland over the next 30 years (2016-2046).²⁹²

Business land demand

Demand for business land and floorspace is an important consideration in planning for growth. The table below shows the anticipated medium and long term floorspace demand by location.

Modelling indicates that in the short to medium term the urban north gets close to capacity in consuming business floor space.

These figures do not account for the levels of business land anticipated in the future urban areas as these areas develop. This will add business land supply in the north, north-west and south.

Housing demand

The following demand for housing is anticipated over the next 30 years (2016-2046).

The current level of feasible development capacity exceeds demand in the medium term (1-10 years). However, over the long term (11-30 years), based on current assumptions, there is a shortfall of around 82,000 dwellings.

The long term shortfall is expected to be met in the following ways:

Anticipated medium and long term business floor space demand

	City centre	Commercial zones	Light industry zones	Heavy industry zones
Medium Term (1-10 years) (floor space sqm)	871,000	3,381,000	1,830,000	710,000
Long Term (1-30 years) (floor space sqm)	1,504,000	6,098,000	3,600,000	1,397,000

Source: *Housing and Business Development Capacity Assessment, Appendix C - Business land demand and supply, Market Economics, 2017, Figures 3-7 and 3-8)*

Anticipated medium and long term housing demand

	Total (dwellings)	Demand (dwellings)	National Policy Statement margin (dwellings)	2017 shortage (dwellings)
Medium term (1-10 years)	189,800	129,000	25,800	35,000
Long term (1-30 years)	408,300	319,000	54,300	35,000

Source: *Auckland Council 2018*

Note: *Within these tables medium term includes short and medium term. Long term combines short, medium and long term. This is consistent with guidance on calculating targets for the National Policy Statement on Urban Development Capacity.*

Housing New Zealand

Expect current levels of development on Housing New Zealand owned land to continue into decades two and three. This will provide 12,500 to 25,000 extra dwellings per decade.

Kiwibuild and later central government programmes

Estimate providing up to 25,000 extra dwellings per decade. The aim is to de-risk larger development sites and speed up delivery.

Panuku Development Auckland

Expect approximately 5000 additional dwellings per decade to result from direct development actions by Panuku.

In addition, other factors are expected to deliver additional dwellings.

Long term, land values are anticipated to appreciate at a faster rate than other building costs i.e. labour and materials. Existing developments are also expected to depreciate. This is expected to result in improved feasibility of more intensive redevelopment. This is particularly in locations well serviced by public transport.

The combined actions of council and central government, together with the market will deliver improved accessibility, amenity and new development. These are all expected to lead to further interest, market confidence and development opportunities.

Anticipated growth - where and when

Growth is enabled throughout most of Auckland's urban footprint. However, much of it is expected to be concentrated in the city centre, nodes, development areas and future urban areas.

Growth in these areas is expected to require substantial investment in infrastructure and services over a sustained period of time.

Development areas

Development areas are specific locations that are expected to undergo a significant amount of housing and business growth in the next 30 years.

Planning and investment will be targeted and prioritised to these areas where the greatest development capacity is taken up.

The timeframes for the development areas indicate when development is likely to happen at scale.

This estimated timing is based on market attractiveness, major committed or planned projects (refer to table below and infrastructure section), or each area's capacity to accommodate additional growth.

Development areas may require further planning and investment in amenity and community facilities, as growth occurs, to cater for the greater number of people living there.

This support is likely to continue over the medium to long term and, in many cases, beyond the timeframes indicated in the table below.

Future urban areas

New communities will be established in future urban areas on the fringe of Auckland's existing urban area and in rural and coastal settlements.

In future urban areas, the Future Urban Land Supply Strategy 2017²⁹³ sequences when land will be live zoned, based on when necessary bulk infrastructure will be available.



Auckland Plan 2050 - Anticipated timeframe of development in existing urban area

	Decade 1 2018-2028		Decade 2 2028-2038	Decade 3 2038-2048	Expected dwelling growth 2018-2048 [1]	Feasible development capacity 2017 (dwellings) [2]
	Short term 2018-2021	Medium term 2021-2028	Long term 2028-2048			
Nodes						
City centre & city fringe					25,240	220
Albany*					5,750	990
Westgate*					33,190	41,190
Manukau					4,750	1,560
Nodes total *Includes a component of future urban					68,930	43,950
Development Areas						
Sunnynook					990	990
Takapuna					5,390	1,150
Northcote					1,450	880
Birkenhead					2,820	2,010
Te Atatū Peninsula					1,110	700
Te Atatū South					290	600
Glendene					0	390
Henderson					3,780	570
Sunnyvale					530	410
Avondale					2,440	980
New Lynn					6,850	280
Kelston					1,150	990
Glen Eden					1,550	1,270
Newton					2,980	30
Morningside					490	90
St Lukes					1,320	310
Mt Albert					1,190	230
Dominion Road corridor					1,980	300
Mt Roskill -Three Kings					6,240	2,600
Greenlane					1,570	200
Ellerslie					2,280	230
Glen Innes					3,600	3,420
Tāmaki					960	1,230
Panmure					1,780	1,080
Sylvia Park					5,210	1,520
Highland Park					1,380	2,900
Pakuranga Corridor					1,040	3,630
Pakuranga					1,700	2,890

	Decade 1 2018-2028		Decade 2 2028-2038	Decade 3 2038-2048	Expected dwelling growth 2018-2048 [1]	Feasible development capacity 2017 (dwellings) [2]
	Short term 2018-2021	Medium term 2021- 2028	Long term 2028-2048			
Development Areas						
Ōnehunga					3,890	640
Ōtāhuhu					2,250	2,870
Māngere					1,250	1,340
Māngere East					780	1,820
Ōtara					1,660	1,320
Papatoetoe-Hunters Corner					2,230	2,710
Manurewa					990	2,730
Clendon					660	1,570
Papakura					2,160	1,530
Development areas total					77,930	48,390

Note: Years specified generally refer to 1 July of that year onwards.

[1] Source: expected dwelling figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Feasible capacity 2017 is based on the Housing and business development capacity assessment for Auckland (December 2017).

Note: expected dwelling growth figures and feasible development capacity figures in each of the nodes and development areas are based on the 'best fit' of ART Zones.

Auckland Plan 2050 - Anticipated development and employment capacities and timing for future urban areas

Proposed timing – development ready	Area [^]	Anticipated dwelling capacity for each area (approx.)	Anticipated dwelling capacity subtotals (approx.)	Anticipated Employment (jobs) (approx.)#
Actuals, contracted or planned 2012 - 2017	Live zoned areas and SHAs			
	Warkworth North	Business	31,590	15,350
	Wainui East	4,500		
	Whenuapai	1,150		
	Scott Point	2,600		
	Red Hills	3,600 (SHA) + 7,050 (live zone)		
	Puhinui	Business		
	Kumeū Huapai	1,400		
	Hingaia	3,070		
	Wesley (Paerata)	4,550		
	Belmont (Pukekohe)	720		
	Drury South	1,000		
	Bremner Rd (Drury West)	1,350		
	Bellfield Rd (Opaheke)	300		
Walters Rd (Takanini)	300			
Decade One 1st half 2018 – 2022	Warkworth North*	2,300	14,300	27,250
	Paerata (remainder)	1,800		
	Whenuapai (Stage 1)	6,000		
	Silverdale West / Dairy Flat (business land)	Business		
	Drury West Stage 1*	4,200		
Decade One 2nd half 2023 – 2027	Pukekohe	7,200	7,700	
	Cosgrave Rd, Takanini	500		
Decade Two 1st half 2028 - 2032	Kumeū Huapai Riverhead	6,600	36,900	21,350
	Warkworth South	3,700		
	Whenuapai (Stage 2)	11,600		
	Drury West (Stage 2)	5,700		
	Opaheke Drury	7,900		
	Red Hills North	1,400		
	Puhinui	Business		
Decade Two 2nd half 2033 – 2037	Silverdale Dairy Flat (remainder)	20,400	29,400	
	Wainui East (remainder)	7,400		
	Warkworth North East	1,600		
Decade Three 1st half 2038 – 2042				50
Decade Three 2nd half 2043 – 2047	Takanini+ Yet to be determined new growth areas	4,500	4,500	
Total		124,390		64,000

^Refer sequencing maps for staging/areas

Anticipated employment figures do not include anticipated employment in centres

* Drury West (Stage 1) and Warkworth North development ready from 2022

+Significant flooding and geotech constraints – further technical investigations required

Further information: Refer Future Urban Land Supply Strategy (2017)²⁹⁴

Note: for information on total anticipated growth, population and dwellings and feasible development capacity see the anticipated growth in population and dwellings (2018-2048)

Auckland Plan 2050 - Anticipated development and employment capacities and timing for future urban areas - rural settlements

Proposed timing – development ready	Area	Anticipated dwelling capacity for each area (approx.)	Anticipated dwelling capacity subtotals (approx.)	Anticipated Employment (jobs) (approx.)
Actuals, contracted or planned 2012 - 2017	Live zoned areas and SHAs			
	Hatfields Beach 1	9	8,236	1,000
	Hibiscus Coast (Silverdale)	963		
	Hibiscus Coast (Red Beach)	570		
	Albany Village 1	4		
	Waimauku	231		
	Swanson	290		
	Maraetai 1	110		
	Ōruarangi 1	480		
	Clevedon Waterways	350		
	Clevedon	1041		
	Karaka North	744		
	Kingseat	1,842		
	Clarks Beach 1	650		
Glenbrook Beach 1	843			
Patumahoe	109			
Decade One 1st half 2018 – 2022	Ōruarangi 2	258	258	2,100
Decade One 2nd half 2023 – 2027	Wellsford	832	2,717	
	Algies Bay	455		
	Albany Village 2	450		
	Helensville 1	72		
	Clarks Beach 2	701		
Glenbrook Beach 2	207			
Decade Two 1st half 2028 – 2032	Hatfields Beach 2	671	1,250	0
	Helensville 2	362		
	Maraetai 2	217		
Decade Two 2nd half 2033 – 2037				
Decade Three 1st half 2038 – 2042				
Decade Three 2nd half 2043 – 2047				
Total		12,461		3,100

Further information: Refer Future Urban Land Supply Strategy (2017)²⁹⁵

For more information: Development areas provide further detail on sequencing and timing of development areas.

Note: for information on total anticipated growth, population and dwellings and feasible development capacity see the anticipated growth in population and dwellings (2018-2048)

Years 1 to 3 (2018 to 2021)

The areas where growth is expected in the first three years have been identified as those where there has been previous planning and commitments are in place.

In the case of the future urban areas, they have been given a 'live zone' in the Auckland Unitary Plan.

Years 4 to 10 (2021 to 2028)

A number of the areas identified in the one-to-three year period will continue into years 4 to 10.

New areas are likely to become more market attractive after the completion of the City Rail Link, which will improve accessibility to and from Auckland's west including Morningside, Mt Albert, and Henderson.

The completion of Auckland Manukau Eastern Transport Initiative will enable growth in Pakuranga.

Infrastructure projects in greenfield areas, including the state highway link that is currently under construction between Pūhoi and Warkworth, will enable growth in Warkworth north.

Wastewater upgrades will enable growth in Drury West and Pukekohe.

Years 11 to 30 (2028 to 2048)

In years 11 to 30 there will be continued support for projects already initiated in the first decade, but there is less certainty over when additional areas will undergo development.

Areas that are likely to commence significant development in this timeframe include those where accessibility to employment is improved through the City Rail Link and the Auckland Manukau Eastern Transport Initiative.

Investment in significant bulk infrastructure projects in future urban areas will enable development of remaining areas, including Warkworth, Whenuapai, Opaheke, Drury, Red Hills and Kumeū-Huapai-Riverhead.

Takanini has the most significant constraint and has been sequenced later in the 20 to 30 year timeframe.

For an Overview of sequencing (30 years from 2018 to 2048) see Map 28 - an interactive version of the map is available at aucklandplan.govt.nz

Timeframes for significant enabling infrastructure projects

Auckland's strategic infrastructure networks provide essential bulk services that enable the growth anticipated over the life of the Auckland Plan 2050. The following table identifies the timing of the significant projects that have been either committed or signalled.

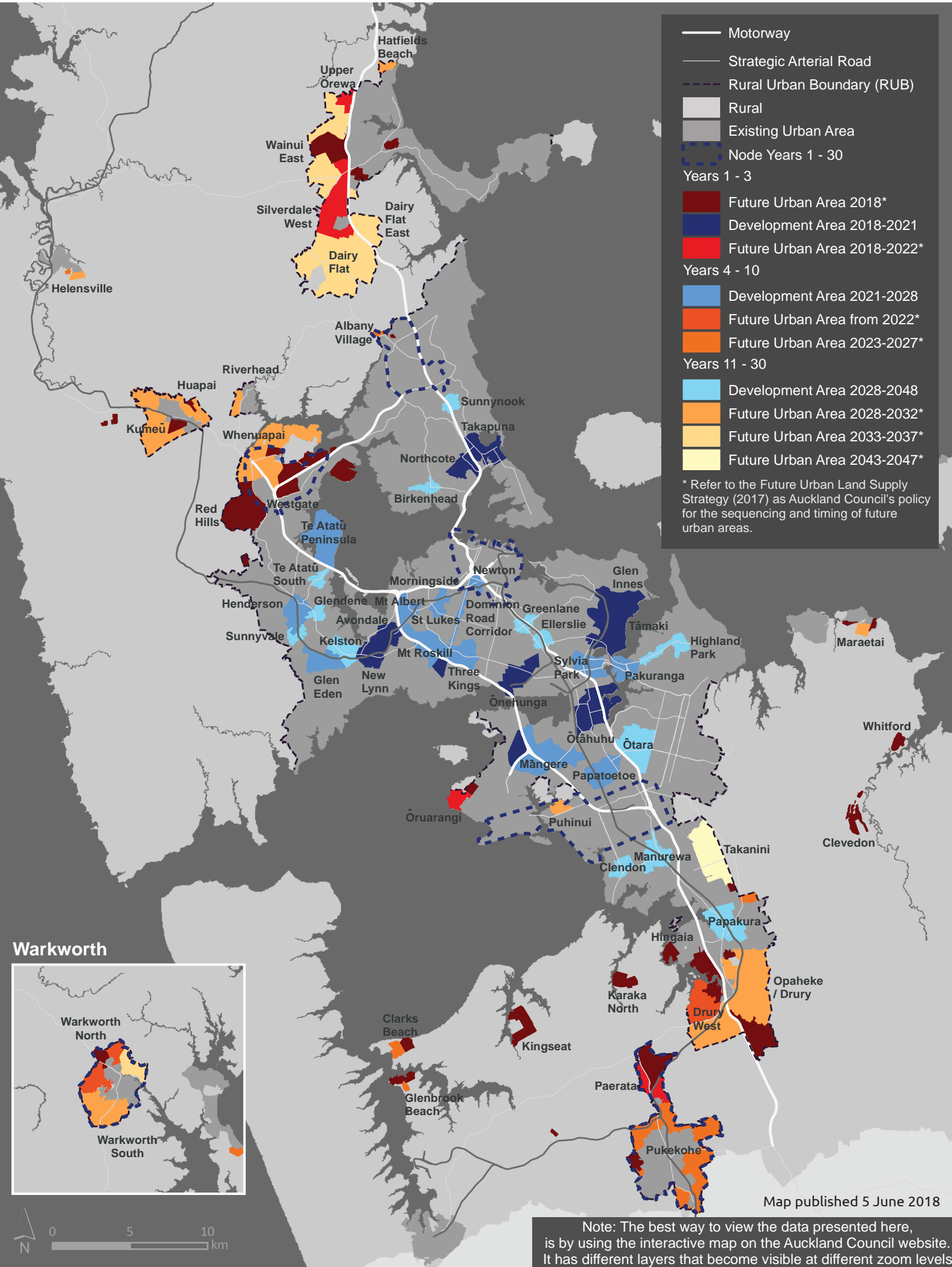
Auckland Council projects identified in decade 1 are funded in the 10 -year Budget 2018 - 2028.

Council projects in years 11-30 are identified in Auckland's 30-year Infrastructure Strategy (2018).²⁹⁶ It also shows the current 'most likely scenario' for infrastructure investment over the life of the Auckland Plan 2050.

New Zealand Transport Agency projects are subject to funding by central government.

The timing of these key projects helps to inform a broad understanding of when and where growth at scale is likely to occur.

Investment in stormwater infrastructure is not included in the table below due to the typically smaller scale and short lead-in time for investment needed to enable growth. Further information on planned investment in stormwater infrastructure is available in the 30-year Infrastructure Strategy.



Auckland Plan 2050 - Anticipated timeframe of enabling infrastructure projects in Auckland

Strategic public transport network projects

Decade 1 (2018 - 2028)	Decade 2 (2028 – 2038)	Decade 3 (2038 - 2048)
<ul style="list-style-type: none"> • Pukekohe rail electrification • City centre to Mt Roskill light rail • Onehunga to Airport • Mt Roskill to Airport light rail • Northwest Rapid Transit (City centre to Kumeū/Huapai) • City Rail Link • Eastern Busway (Panmure to Botany) • Airport to Manukau bus improvements, including Puhinui interchange • Northern Busway (Constellation to Albany) • Lincoln Road bus improvements Stage 1 • Albany to Silverdale (bus shoulder lanes) • Third main - Wiri to Westfield 	<ul style="list-style-type: none"> • New Lynn to Ōnehunga • Botany to Manukau • Lincoln Road bus improvements Stage 2 • Upper Harbour Rapid Transit (Westgate to Constellation) 	<ul style="list-style-type: none"> • Northern Rapid Transit – City centre to Takapuna and Ōrewa • Ellerslie to Panmure

Strategic road network projects

Decade 1 (2018 - 2028)	Decade 2 (2028 – 2038)	Decade 3 (2038 - 2048)
<ul style="list-style-type: none"> • Southern motorway upgrade (Manukau-Drury) • Lincoln Road widening • East – West Link • SH20B upgrade (Airport to Puhinui) • Penlink • Mill Road - partial complete with details to follow • Pūhoi to Warkworth • SH16 Lincoln Road to Westgate • Northern Corridor (SH1 to SH18) 	<ul style="list-style-type: none"> • Westgate to Kumeū corridor • Warkworth to Wellsford • Drury to Pukekohe corridor • SH16-18 interchange completion • Grafton Gully to Port 	<ul style="list-style-type: none"> • Additional Waitemātā Harbour crossing • SH20/20A improvements (Ōnehunga to Airport) • Northern motorway upgrade (Onewa to Constellation) (Albany to Silverdale) • Southern motorway upgrade (Drury to Bombay)

Wastewater projects

Decade 1 (2018 - 2028)	Decade 2 (2028 – 2038)	Decade 3 (2038 - 2048)
<ul style="list-style-type: none"> • Wellsford treatment plant upgrade • NE sub-regional wastewater treatment plant (Snells Beach) and network improvements • Army Bay treatment plant capacity and outfall • Rosedale Treatment Plant capacity • Northern Interceptor Stage 1 • Central Interceptor • Newmarket Gully • Howick diversion • Māngere Treatment Plant capacity • Southern Interceptor Augmentation Stage 1 • SW sub-regional wastewater treatment plant (Waiuku) and network improvements • Paerata – Pukekohe Wastewater Network • Pukekohe Treatment Plant capacity 	<ul style="list-style-type: none"> • NE sub-regional treatment plant (Snells Beach) capacity • Army Bay treatment plant capacity • Hibiscus Coast wastewater network improvements • Rosedale Treatment Plant capacity • Northern Interceptor Stage 2 • Māngere Treatment Plant capacity • Southern Interceptor Augmentation Stage 2 • SW sub-regional wastewater treatment plant (Waiuku) capacity • Pukekohe Treatment Plant capacity 	<ul style="list-style-type: none"> • NE sub-regional treatment plant (Snells Beach) capacity • Army Bay treatment plant capacity • Māngere Treatment Plant capacity • Southern Interceptor Augmentation Stage 3 • SW sub-regional treatment plant (Waiuku) capacity

Water supply projects

Decade 1 (2018-2028)	Decade 2 (2028 – 2038)	Decade 3 (2038 - 2048)
<ul style="list-style-type: none"> • Wellsford water supply capacity • Warkworth water supply capacity • Helensville water supply capacity • Albany to Pinehill watermain connection • North Harbour 2 watermain • Central reservoirs storage • Hunua 4 (Market Rd to Khyber Pass) • Huia water treatment plant capacity • Western reservoirs storage • Nihotupu 1 and Huia 1 watermains replacement • Ōrewa 1 replacement • Redoubt reservoirs storage • Pukekohe reservoir storage • Waiuku water supply capacity • Waikato treatment plant capacity 	<ul style="list-style-type: none"> • Ōrewa 3 watermain • Waitākere 2 watermain • Waitākere treatment plant capacity • Western reservoirs storage • Redoubt reservoirs storage • Pukekohe reservoir storage • Waikato treatment plant capacity 	<ul style="list-style-type: none"> • Warkworth water supply capacity • Snells Beach water supply capacity • Western reservoirs storage • Redoubt reservoirs storage • Waikato 2 watermain • Waikato treatment plant capacity • Waitematā Harbour Crossing (watermain)

Business areas

Flexible and adaptable business areas

As Auckland grows, it must offer capacity for new business growth. Around 263,000 new jobs may be needed over the next 30 years.

Business area trends

The concentration and location of Auckland's businesses in the urban areas has changed over time, and may continue to do so.

Heavy and light industrial uses are reducing their land areas or moving out towards the periphery and other, higher intensity uses are taking their place.

A more recent trend has been for advanced industries to concentrate in the city centre and in established industrial areas in the inner south.

Auckland's city centre plays a critical role in the success of Auckland's economy with a concentration of financial and commercial jobs.

A wide range of business activities are also clustered in major centres, industrial areas, and around the Ports of Auckland and Auckland International Airport.

The north-south State Highway 1 corridor has a concentration of businesses making use of this corridor to access other parts of Auckland and New Zealand.

Access to employment

Employment is currently concentrated in some parts of Auckland but is under-represented in the eastern and western parts of the urban area.

This imbalance, together with the 'pinch points' in the congested transport and infrastructure networks, creates greater disparities in access to education and employment between different communities.

Increasing business growth and employment opportunities around Albany, Westgate and Manukau will help address several of Auckland's current transport and employment challenges.

As these areas grow, there will be more options for people to work or study closer to home, and for greater benefits from business clustering and agglomeration.

Economic trends

Change in the make-up and distribution of Auckland's economy will continue over the medium to long term.

Most growth is expected in sectors that prefer to locate in commercial areas. However, the exact nature of economic changes and related business land needs are uncertain.

The impact of disruptive technologies and increasing automation are likely to lead to a growing share of jobs in advanced industries and further reductions in manufacturing jobs.

These changes have the potential to significantly affect the quantity, type and location of business land needed.

Given these uncertainties, the urban area needs flexibility to respond in a way that supports Auckland's future economic needs and ensures an ongoing supply of business land in appropriate locations.

Making the best use of existing business land

The quality compact approach to accommodating business growth in the future is to make the best use of existing business land, as well as create new business land in greenfield areas.

Making the best use of existing business land means repurposing and intensifying centres and business areas, especially those in accessible locations.

Existing business land, particularly important industrial areas, will be safeguarded. Once lost to other uses, such as housing, it is difficult to replace.

Business land in future urban areas

Approximately 1,400 hectares of business land is needed in greenfield areas. The Development Strategy identifies indicative locations for the provision of business land and centres.

The exact location and quantity required will be confirmed through structure planning and serviced in line with the sequence of the Future Urban Land Supply Strategy.²⁹⁷

See Map 17 - Business - an interactive version of the map is available at aucklandplan.govt.nz

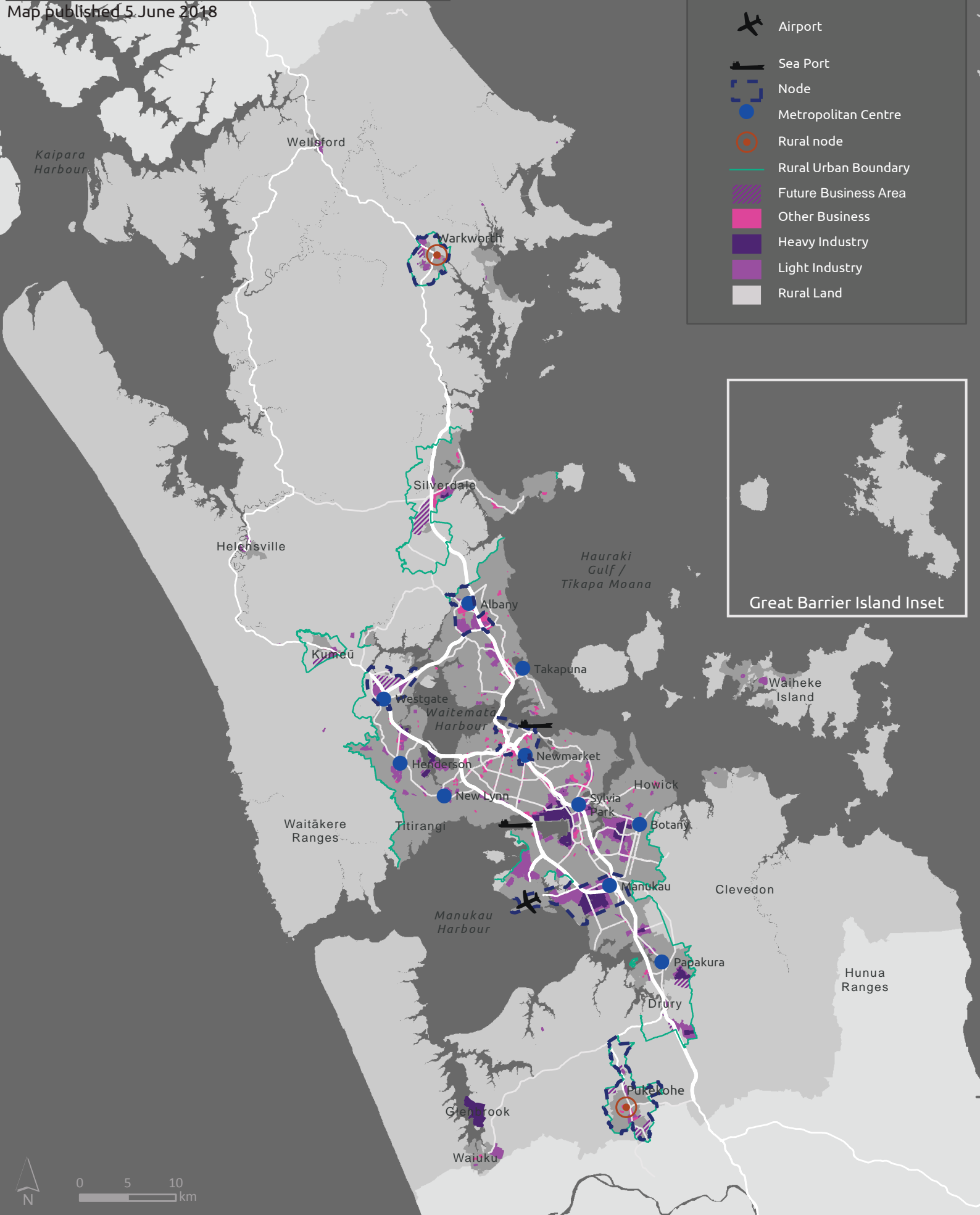
Structure planning for these areas will ensure that a range of business uses are provided for and that land extensive business activities, such as manufacturing, storage and construction, are accommodated where appropriate.

This approach to making the best use of existing business land as well as developing new business land in future urban areas provides for a range of different types of business land, economic growth and employment across Auckland.

Safeguarding existing business land and managing the supply of a range of future business land ensures opportunity, flexibility and choice over the long term.

Note: The best way to view the data presented here, is by using the interactive map on the Auckland Plan web site. It has different layers that become visible at different zoom levels.

Map published 5 June 2018



Rural Auckland

Auckland’s rural areas are a mix of cultivated, natural and built environments that contribute significantly to Auckland’s identity and character.

Rural Auckland is home to nationally and internationally significant environments and natural resources and hosts a diverse range of economic activities.

These activities include agriculture, forestry, horticulture, quarrying and the services that support them.

Auckland’s rural environments vary

Auckland’s rural areas consist of many different environments including:

- areas of rural production
- protected areas
- coastal areas
- countryside living areas
- towns and villages.

The southern rural area has a unique combination of temperate climate and frost-free fertile land, which enables a wider range of vegetables to be grown for longer periods than other areas of the country.

This makes a significant contribution to Auckland’s and New Zealand’s food supply.

The north and north-west has an increasing focus on rural tourism, vineyards and niche food production.

Rural towns and villages vary from small coastal settlements to the satellite towns of Warkworth and Pukekohe.

The types of infrastructure and community facilities needed to support rural Auckland vary in terms of place and community.

Challenges and opportunities

Changes in the broader Auckland and national context create a range of challenges as well as opportunities for rural Auckland.

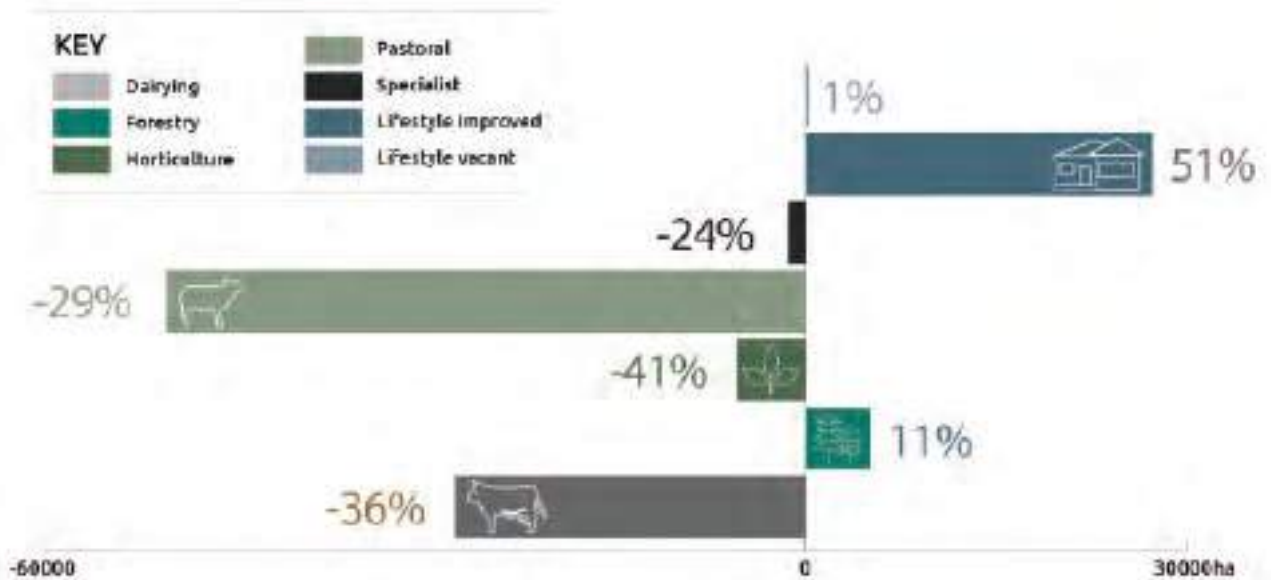
Population growth, increased demand for rural living, stressed natural systems, and changing land values create pressures and tensions between different activities.

Conversely, the commercial production of locally-grown food, as well as tourism, recreation and productive activities are made possible by the proximity of urban Auckland.

Growth has contributed to:

- high levels of subdivision across rural areas
- fragmentation of productive land
- domestication and commercialisation of rural landscapes
- introduction of sensitive land uses into working environments
- changes in rural land use.

Figure 47 -Rural production property land use and area change 1996-2016, Core Logic (2017) – based on rural valuation categories.



Growth in other regions and near Auckland's boundaries creates cross-boundary issues regarding alignment of respective development strategies, and the provision of transport, infrastructure, housing and community facilities.

In the south, settlements are growing closer together and rural production operates across boundaries.

In the north, the extension to the Road of National Significance to Wellsford will improve accessibility to urban Auckland and to Whangarei.

These growth factors have resulted in a decrease in the number of rural production properties, and an increase in the number of lifestyle properties.

For example, over the two decades from 1996 to 2016, the number of rural production properties decreased by around 40 per cent, which represents a 25 per cent loss in area, while the number of lifestyle properties increased by around 50 per cent (35 per cent in area).

Minerals are essential for Auckland's development. The demand for minerals in Auckland, particularly aggregates, is expected to increase from 10 million tonnes to 15 million tonnes per annum by 2041.

This increased demand is to support growth and development. Maintaining an accessible supply of aggregates is of regional importance.

Approach to rural growth

Residential growth in rural Auckland will be focused mainly in the towns which provide services for the wider rural area, particularly the rural nodes of Pukekohe and Warkworth.

Less growth is anticipated in the smaller towns and villages.

See Map 18 - Rural

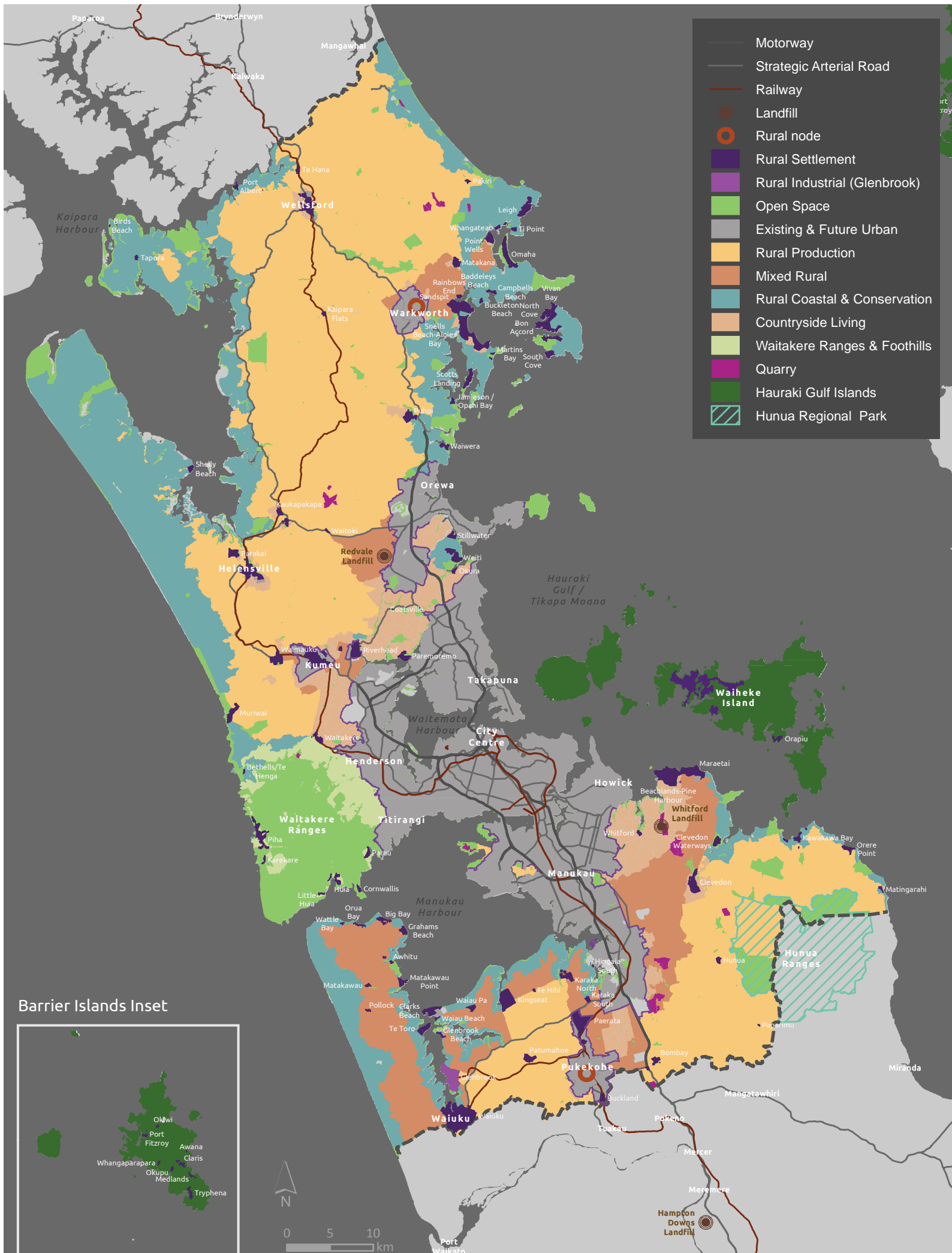
Rural lifestyle growth will be focused into those areas zoned as 'countryside living', away from the most environmentally sensitive and economically productive areas.

Only a small amount of growth is anticipated in the wider rural area. This growth is likely to relate to environmental enhancement and existing vacant lots.

This will ensure that Auckland's rural, coastal, marine and natural environments can co-exist in a balanced way with the working activities (such as farming, forestry, fishing, tourism) that rely on them and help sustain the regional community.

To ensure that rural production can continue and develop, land fragmentation and reverse sensitivity must be minimised to safeguard Auckland's land and soil resources, particularly elite soils and prime soils.

This will also support the resources and production systems, including water supply, that underpin working rural land.



Auckland's infrastructure

Auckland's infrastructure needs to keep up with the pace and scale of growth.

Investment in infrastructure has long-term consequences for Auckland's future, and will shape how well it functions for future generations.

The population and economic growth expected in Auckland over the next 30 years presents a number of infrastructure-related challenges and opportunities, including:

- coordinating investment and planning to enable growth
- improving the performance of Auckland's infrastructure
- creating resilient infrastructure networks.

Significant investment by central government, council and the private sector is needed to respond to these challenges.

At the same time, Auckland must concentrate on:

- what it takes to efficiently plan and deliver infrastructure
- keeping up with advancing technology
- ensuring that the regulatory environment supports good planning and business practices.

Auckland's strategic networks

Auckland's strategic infrastructure networks influence where and when significant urban growth can occur, especially in future urban areas.

These strategic networks provide essential bulk services and include:

- public transport
- roads
- wastewater
- water.

The following maps identify the projects currently needed to increase the capacity of the strategic networks to meet Auckland's growth for the next 30 years and beyond. Projects and timeframes may alter in response to changes in growth, community expectation, funding and technology.

See Map 19 - Strategic Public Transport, Map 20 - Strategic Road Network, Map 21 - Wastewater, Map 22 - Water Supply and Map 23 - Social Infrastructure - an interactive version of the map is available at aucklandplan.govt.nz

Projects to expand or increase capacity in strategic networks often require substantial public investment and have long lead times for planning and construction.

The 30-year Auckland Infrastructure Strategy²⁹⁸ identifies the funding status of projects to increase the capacity of the strategic networks.

Coordinating investment and planning to enable growth

The next 30 years will require significant investment in infrastructure.

Coordinated action between public and private infrastructure providers and the development sector is needed to enable the scale of development required to accommodate Auckland's growth.

It is crucial that this investment is coordinated and aligned with growth, in order to minimise the costs of under-used assets, increase Auckland's productivity and achieve better environmental outcomes.

If not managed carefully, the size of infrastructure investment required may have significant financial implications for infrastructure providers.

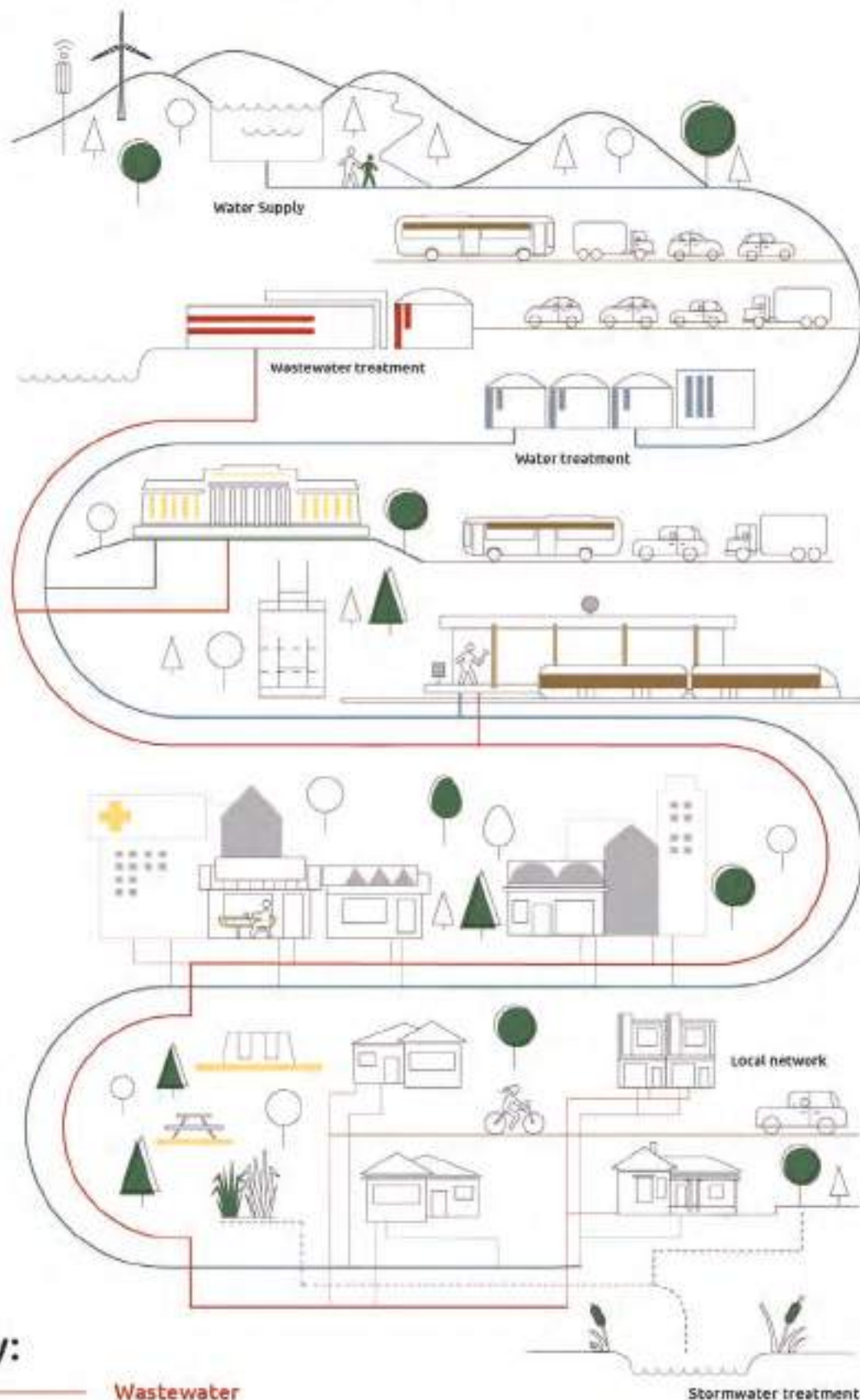
Ensuring that infrastructure networks have sufficient capacity to service growth is critical. The sequencing of future urban and development areas influences the timing of investment in the strategic networks needed to service these areas. Further investment in local infrastructure will be needed as these areas grow. This will require alignment between the expansion of strategic water and transport networks, and investment in local infrastructure, particularly to service development areas and future urban areas.

Investment in Auckland's digital networks is vital for our future.

SUPERSEDED

Delivering Auckland's infrastructure requires co-ordination across a number of public and private organisations depending on the type or scale of infrastructure. Typically:

- Government provides state highways, railway lines, and some social infrastructure such as schools and hospitals. It also subsidises other transport infrastructure.
- Auckland Council, including the council-controlled organisations, provides arterial roads, public transport systems, water supply, wastewater and stormwater networks and social infrastructure such as community facilities and parks.
- Developers initially construct local streets and pipe networks which are then vested with council to own and maintain.
- Energy and communications infrastructure is typically supplied by private utility companies.



Key:

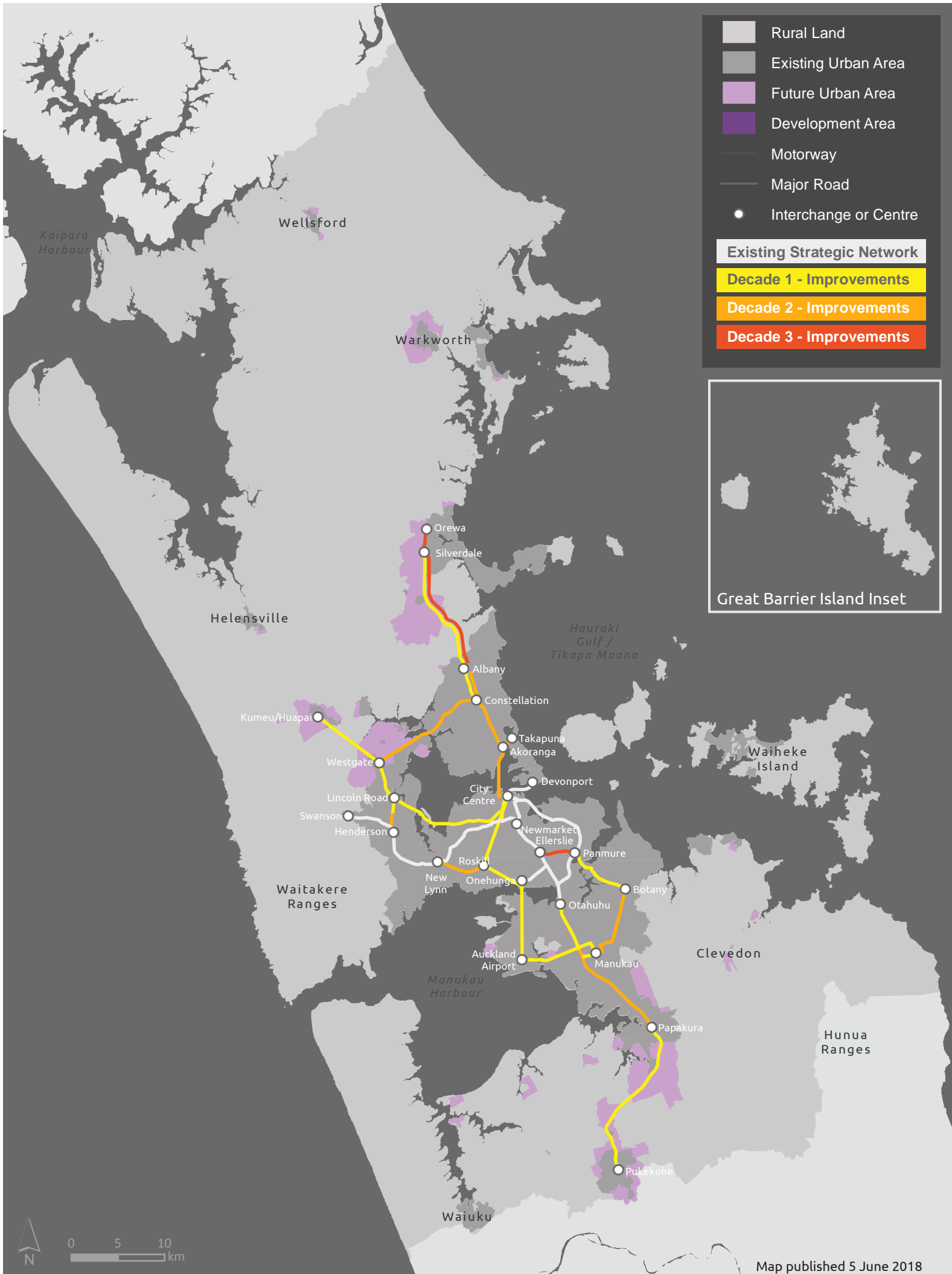
— Wastewater

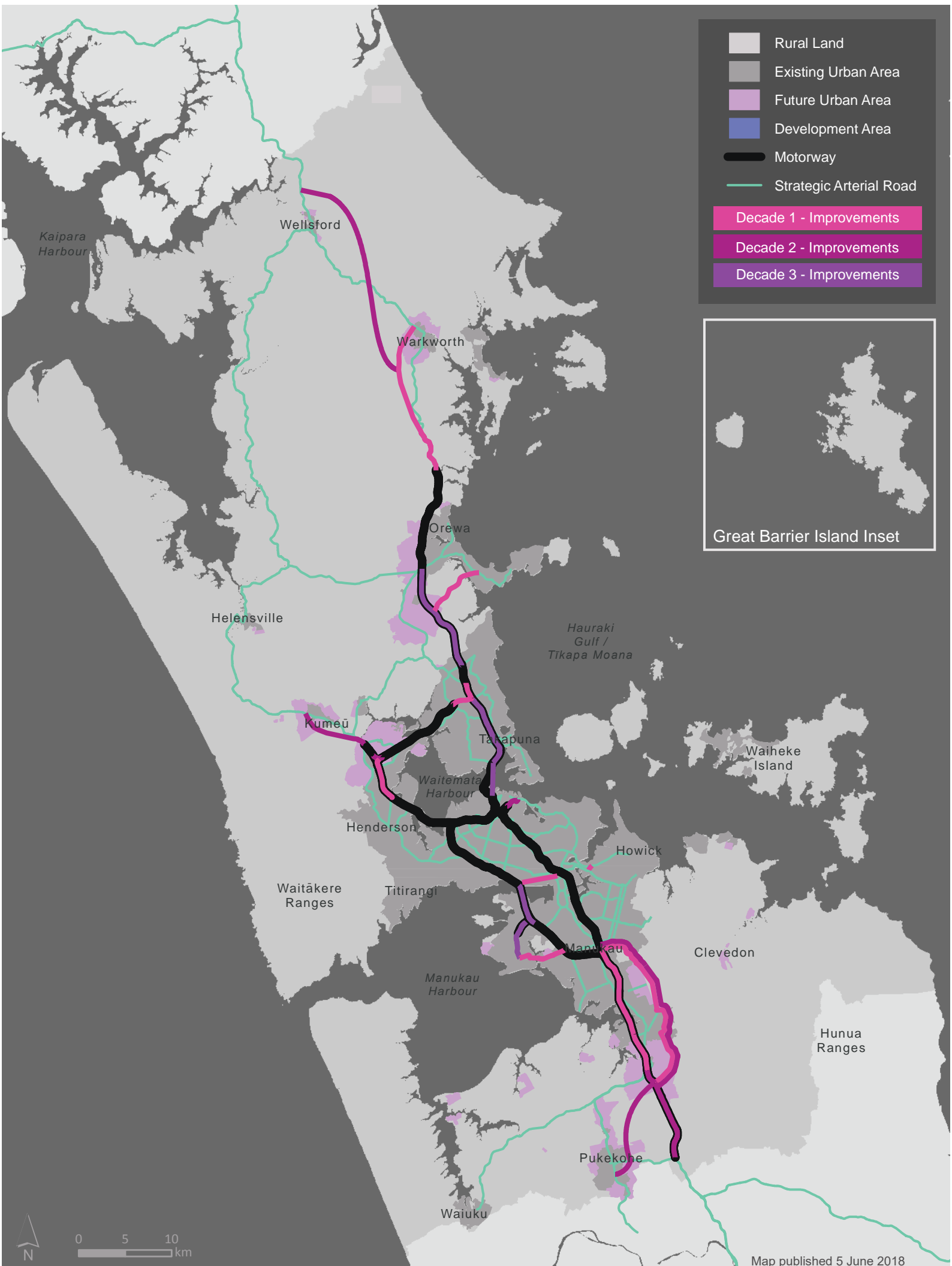
— Drinking water

— Transport

- - - Stormwater

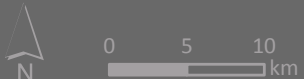
— Community Facilities

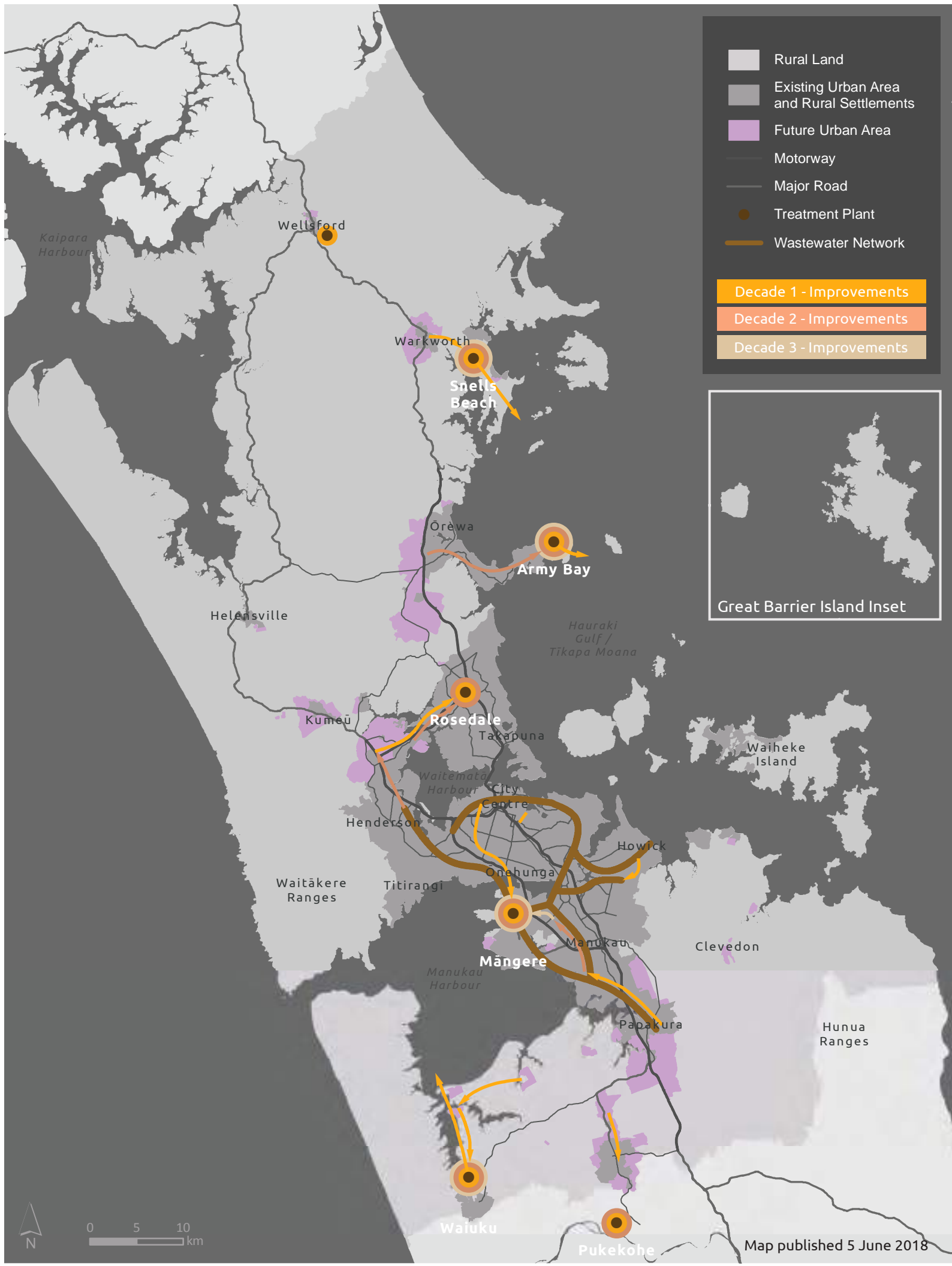




- Rural Land
- Existing Urban Area
- Future Urban Area
- Development Area
- Motorway
- Strategic Arterial Road
- Decade 1 - Improvements
- Decade 2 - Improvements
- Decade 3 - Improvements

Great Barrier Island Inset





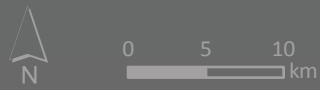
- Rural Land
- Existing Urban Area and Rural Settlements
- Future Urban Area
- Motorway
- Major Road
- Treatment Plant
- Wastewater Network

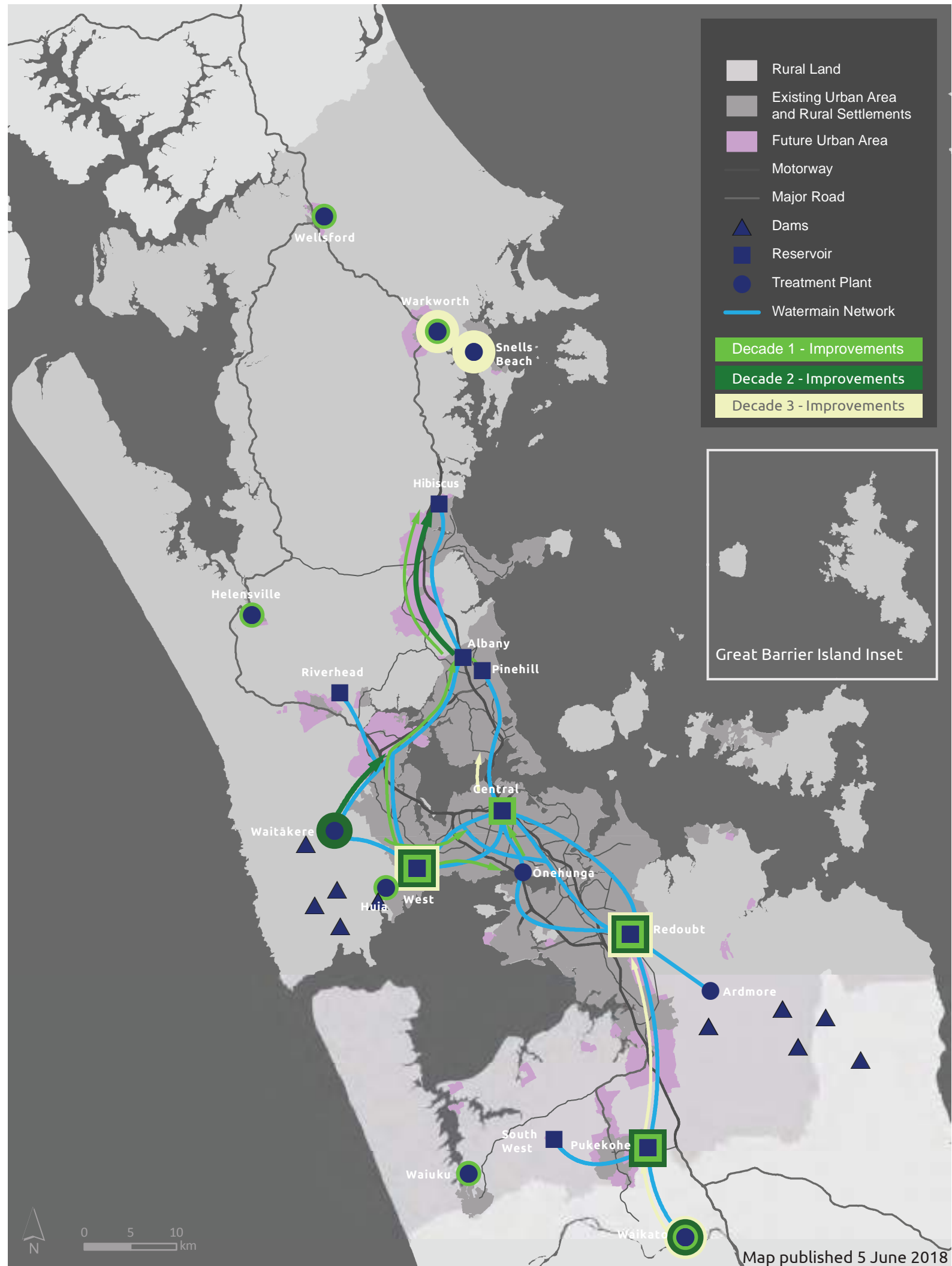
Decade 1 - Improvements

Decade 2 - Improvements

Decade 3 - Improvements

Great Barrier Island Inset





- Rural Land
- Existing Urban Area and Rural Settlements
- Future Urban Area
- Motorway
- Major Road
- Dams
- Reservoir
- Treatment Plant
- Watermain Network

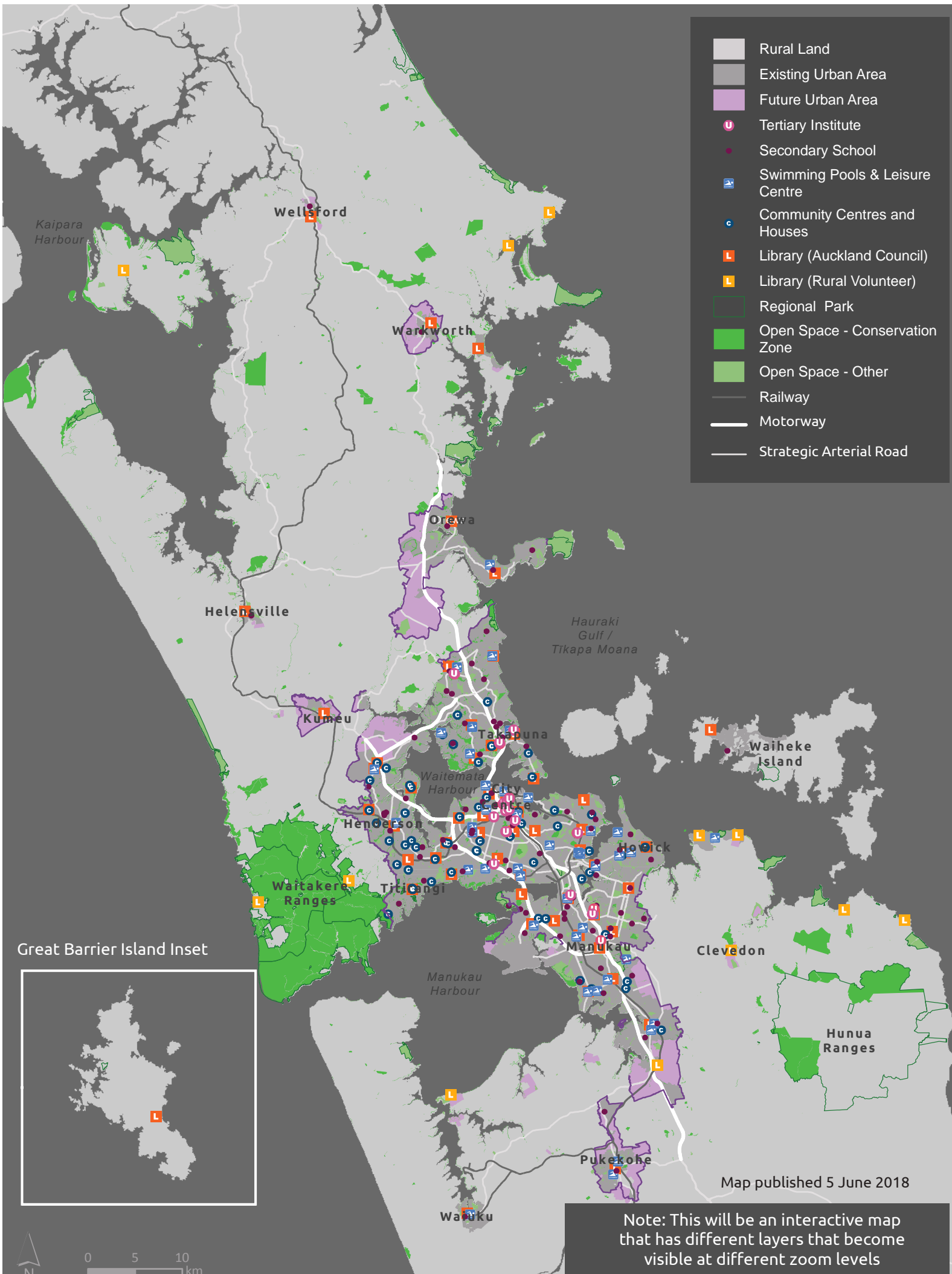
Decade 1 - Improvements

Decade 2 - Improvements

Decade 3 - Improvements

Great Barrier Island Inset

0 5 10 km



Improving the performance of Auckland's infrastructure

Even without the pressure of expected changes in Auckland's population over the next 30 years, current infrastructure assets require maintenance, renewal and replacement. Disparities in service provision across Auckland also need to be addressed.

Dealing with ageing and obsolete infrastructure

Auckland's infrastructure is not meeting current levels of demand. We also need to think ahead and plan for Auckland's future infrastructure needs.

Some of Auckland's infrastructure is getting old and will need replacing.

The investment in renewing ageing infrastructure is expected to significantly increase in the next three decades.

For example, pipe and electricity systems that were established during Auckland's post-war urban expansion from the 1940s to the 1960s are expected to require renewal from the 2020s onwards.

In addition, some of our infrastructure systems are becoming obsolete, and do not meet modern standards.

For example, the combined sewer and stormwater system in some parts of the isthmus are prone to overflows, with negative social and environmental impacts.

Differences in service provision

Disparities in the levels of service or performance of infrastructure across different parts of Auckland need to be addressed.

For example, the transport network provides comparatively poor access to employment opportunities from south and west Auckland.

Planned investment in strategic infrastructure networks, such as the construction of the City Rail Link, will help to address these issues as it will decrease travel time, particularly from the western urban area.

The design of infrastructure assets and levels of service needs to be appropriate for different locations, particularly between rural and urban areas.

Using emerging technologies

Emerging technologies will improve the performance of existing infrastructure networks and defer the need for some future investments.

The ability to collect and analyse data on a large scale will improve understanding of how individuals and households use infrastructure systems; this will in turn allow for more targeted investment.

For example, advancements in transport technology such as autonomous vehicles and real-time road user pricing, are expected to increase the capacity of existing roads.

A supportive regulatory environment will be necessary to realise the benefits of new technology.

Creating resilient infrastructure networks

Auckland's infrastructure needs to be able to:

- cope with disruptive events (such as natural disasters and human error)
- respond to on-going stresses (such as climate change)
- meet the evolving needs of Aucklanders.

Understanding the consequences and likelihood of failure, as well as the changing demands on our infrastructure systems, allows us to better manage risks to these networks.

Critical infrastructure

Failure of Auckland's critical infrastructure networks poses significant risks, as they are essential for Auckland to function.

These networks are prioritised in renewal and maintenance programmes and in emergency contingency planning.

See Map 24 - Critical Infrastructure

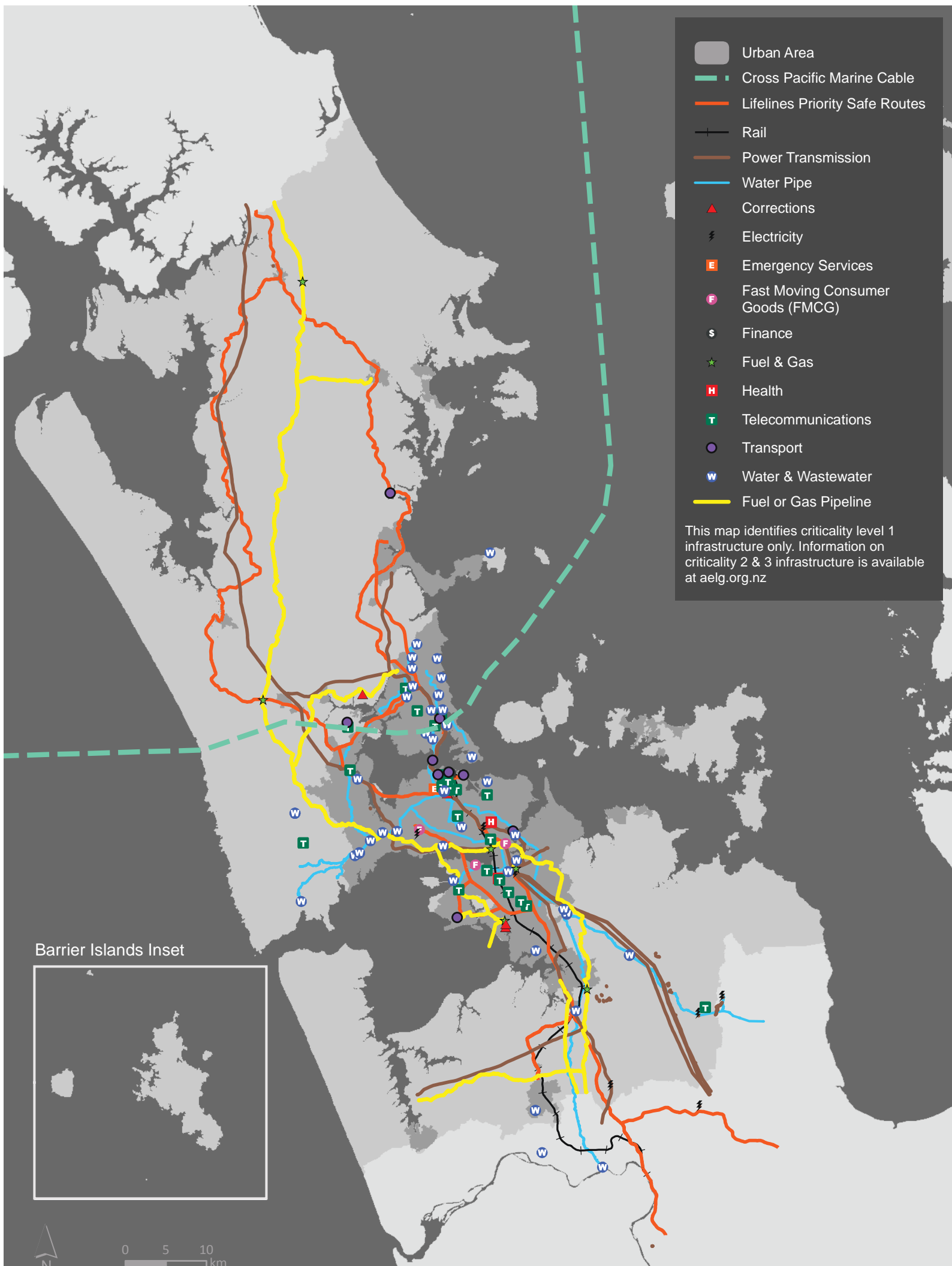
Development in close proximity to critical infrastructure networks, such as urbanisation near gas pipelines, needs to be managed carefully to ensure operation of these networks is not compromised and risks to Auckland and Aucklanders are avoided.

Evolving needs

Auckland's infrastructure systems need to be resilient to cope with ongoing stresses and trends, such as climate change and evolving technology.

Some locations are at increasing risk from natural hazards, due to the adverse impacts of climate change.

The growing demand for home energy generation and greater acceptance of water recycling and reuse has implications for Auckland's broader infrastructure networks.



- Urban Area
- Cross Pacific Marine Cable
- Lifelines Priority Safe Routes
- Rail
- Power Transmission
- Water Pipe
- Corrections
- Electricity
- Emergency Services
- Fast Moving Consumer Goods (FMCG)
- Finance
- Fuel & Gas
- Health
- Telecommunications
- Transport
- Water & Wastewater
- Fuel or Gas Pipeline

This map identifies criticality level 1 infrastructure only. Information on criticality 2 & 3 infrastructure is available at aelg.org.nz

Barrier Islands Inset

0 5 10 km

SUPERSEDED

Responding to these trends involves building greater adaptability and responsiveness in our networks.

Ensuring our infrastructure systems serve multiple functions – for example, green infrastructure that manages stormwater and delivers localised amenity, or transport corridors that also function as urban forests or stormwater systems – is one way of enhancing long-term resilience.

How we will implement the development strategy

Implementation partners

In implementing the development strategy, Auckland Council has important regulatory, policy and facilitation roles. The council is also a provider of key infrastructure; stormwater, community facilities, parks and open space.

Water, wastewater and local transport infrastructure is planned for and delivered by two council controlled organisations: Watercare and Auckland Transport.

The council works in partnership with central government agencies to implement infrastructure and plan for growth. The New Zealand Transport Agency, Ministry of Education and Ministry of Health are the principal agencies involved. Cross boundary issues also mean that it will be important to work with adjoining councils.

Auckland Council also works with telecommunications providers, energy providers and other network utility operators that are planning for growth. These include Transpower, Vector and Spark.

In some areas Auckland Council also works with social and community housing providers and development agencies.

Mechanisms used to work together

Projects require clear roles and responsibilities to achieve effective outcomes.

Sequencing of development in locations where significant growth is anticipated over the next 30 years allows stakeholders to co-ordinate efforts. It also ensure value for money and assists investment decisions, through processes such as long-term planning.

Sequencing provides a level of certainty, particularly for infrastructure providers, as to where and when capacity may be required. This recognises that providing bulk infrastructure requires long lead in times to plan, design, and build.

Monitoring is a critical component of implementing the strategy, in order to understand the location and scale of growth over time and how this aligns with what the strategy anticipates. Monitoring will inform changes to nodes, development areas and future urban areas if needed. It will also inform subsequent adjustments to

the future planning and funding decisions of providers, including Auckland Council.

The scale and complexity of these areas means that aligning land use planning and infrastructure provision is essential to delivering good outcomes.

In existing urban areas specific interventions will be required in development areas as they grow. Each development area will be different and will experience growth at varying rates and at different times. The investment required in these areas will focus on addressing the impacts of increased demand on infrastructure and services as development occurs. Interventions may range from regulatory changes and infrastructure investment to public realm improvements and redevelopment of council-owned assets.

In future urban areas structure planning will be undertaken to refine land use patterns, staging and required infrastructure specific to each place.

Auckland will progressively move toward managing demand on network infrastructure more effectively. Managing demand enables better use of existing infrastructure and reduces or defers council spend on new infrastructure to cater for growth.

Supporting strategies and plans

Auckland Unitary Plan²⁹⁹

This plan sets out the planning rules for Auckland and creates adequate capacity for jobs and homes over the next 30 years.

Infrastructure Strategy³⁰⁰

This is part of Auckland Council's Long-term Plan, the strategy sets out Auckland's infrastructure challenges and responses.

Future Urban Land Supply Strategy³⁰¹

This strategy sets out the timing and sequencing of future urban areas for urban development over the next 30 years.

How to get involved

- The Auckland Design Manual website³⁰² provides a guide to the design and development process and shows how to deliver quality projects within the built environment.
- The Roads and Streets Framework³⁰³ provides guidance on appropriately balancing the place and movement functions of road and street design.
- Auckland Council provides opportunities to find out more information, give feedback on different topics, consultations, projects, plan changes and structure plans. Find out more on how to Have your say.³⁰⁴

Supporting information

The National Policy Statement on Urban Development Capacity³⁰⁵ requires Auckland Council to develop a Future Development Strategy. This requirement is satisfied by the Auckland Plan Development Strategy.

Supporting Information

What will Auckland's city centre look like in the future

What will Albany look like in the future

What will Westgate look like in the future

What will Manukau look like in the future

What will Warkworth look like in the future

What will Pukekohe look like in the future

Development Areas

Remaining existing urban area

Wynyard Quarter - the changing nature of industrial land

Placemaking at New Lynn

Advanced industries

Auckland's electricity network

Auckland's horticultural production

What will Auckland's city centre look like in the future

The city centre is Auckland's primary centre.

It plays a critical role in the success of both Auckland and New Zealand.

One of its strengths is the concentration of population and economic activity.

It is the main location for business, tourism, educational, cultural and civic activities in Auckland, and includes the city fringe areas of Parnell, Grafton, Newmarket, Newton and Ponsonby.

It is supported by the Albany, Westgate and Manukau nodes.

The city centre

Auckland's city centre has changed substantially over the past 10 to 15 years, as a result of significant public and private investment in infrastructure and development projects.

Public investment has revitalised areas that were once run down, such as Britomart and Wynyard Quarter on Auckland's waterfront, and has been the catalyst for further private investment.

A number of developments have contributed to making the city centre a much more welcoming place for people, such as:

- shared spaces, where neither cars nor pedestrians have priority
- public space improvements
- improved public transport services.

There has been substantial growth in the city centre resident population. There are now over 80,000 people living in the city centre and fringe areas.

The city centre is the largest and fastest growing employment centre in New Zealand. Infometrics report there were 114,264 filled jobs in 2016, including those who were self-employed.³⁰⁶

An estimated 17 per cent of Auckland's gross domestic product is generated from the city centre alone.³⁰⁷

In addition to the greater number of people living in the city centre, it is well served by the transport network and draws people from as far afield as rural Auckland and northern Waikato.

Continuing investment in infrastructure, such as cycleways and the City Rail Link, means that increasing numbers of people can easily access the city centre.

Future development of the city centre

Improvements in the city centre are ongoing. The public and private sectors must continue to ensure it carries on being a highly competitive, interesting and enjoyable place to be.

Its success shows that investment in public transport, pedestrian environments and public spaces, along with the strong vision in the City Centre Masterplan and Waterfront Plan, can shape the future of central Auckland, leading to a place that is attractive, competitive, inclusive and prosperous.

In the future, the city centre will continue to be the focus of Auckland's business, tourism, educational, cultural and civic activities.

It will grow as an important residential centre, with 58,000 more people living there by 2048. Total jobs may increase by over 75,000 by 2048, which is over one quarter of all employment growth in the region.

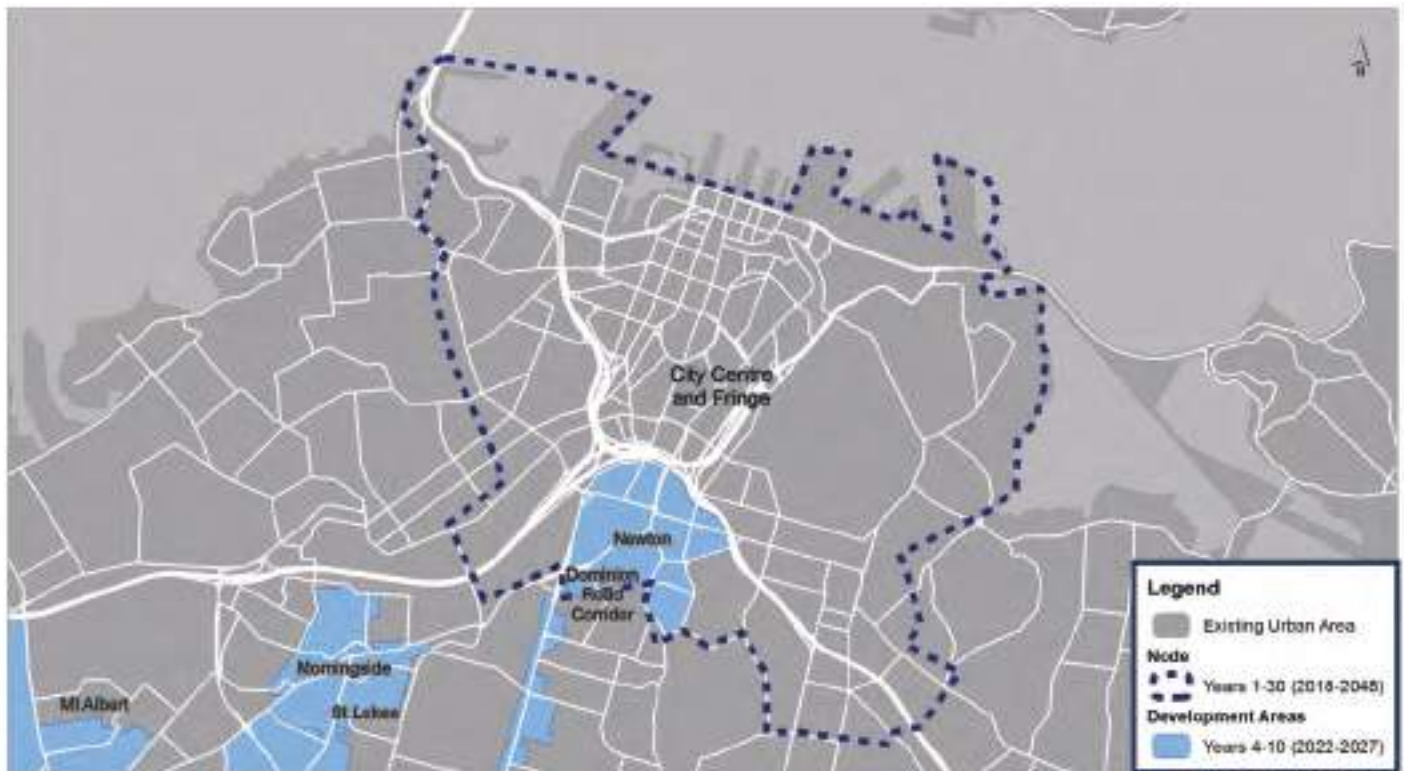
The city centre will have to continue to change and adapt over the next 30 years to serve Aucklanders, but also as it competes in the global network of cities.

Node – City centre

The city centre is an international centre for business and learning, innovation, entertainment, culture and urban living.

Population increases of over 58,400 people are expected in the centre and fringe areas by 2048, along with approximately 25,000 additional dwellings. Total jobs may increase by over 75,800 by 2048, which is over one quarter of all employment growth in the region. There is strong current development interest in the city centre. Many private sector, local and central government and other agency projects are already underway.

There is a feasible capacity of approximately 220 dwellings.



Anticipated household growth 2018-2048 [1]	25,240
Anticipated population growth 2018-2048 [1]	58,430
Anticipated employment growth 2018-2048 [1]	75,850
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000
Enabled housing capacity* [3]	12,540
Feasible development capacity 2017 [3]	220
Timing / Sequencing	1-30 Years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

What will Albany look like in the future

Albany has a significant strategic role as one of Auckland's three key nodes outside of the city centre. It will continue to evolve and develop over time as the key node for the north of Auckland.

As the northern node it will help to support the future urban areas of Wainui East, Silverdale and Dairy Flat as they develop.

Albany has significant opportunities for additional business and residential growth.

It is a focal point for future employment, business activity, social facilities and services all of which will support a growing population.

The Albany area

The Albany area has a long development history.

Planning for the urbanisation of the area began in the 1960s, when it was a predominantly rural area.

Over the next five decades, the area steadily grew and was further assisted by the North Shore City Council purchasing key land holdings and selling them to developers to facilitate further development.

Significant change occurred in the 1990s, when the extension of the Northern Motorway made new urban developments in and around Albany possible.

Albany Westfield, one of New Zealand's largest shopping centres, opened in 2007.

The opening of the Northern Busway and the associated park and ride facility in Albany in 2008 formed an important part of Auckland's Rapid Transport Network and reduced travel times from Albany to central Auckland.

Future development of Albany

In the future, Albany is likely to experience higher-density residential and mixed-use developments, with good transport connections, including high-frequency public transport.

Interest and significant investment in both commercial and residential development is evident through a number of recent large developments such as the Rose Garden Apartments and Library Lane.

Albany will continue to develop, building on its strengths, to be an attractive place to live, work and visit, with vibrant commercial, entertainment and retail areas.

Albany's existing strengths include:

- tertiary education facilities, such as Massey University
- local schools
- a large retail offer
- sporting facilities such as the QBE Stadium and Albany Stadium Pool.

These strengths provide a basis for development of the wider area.

In addition to Albany itself, the surrounding business and industrial areas of Rosedale and Apollo Drive continue to grow, offering an increasing range of services and jobs.

In the year to June 2017, over 7700 square metres of new industrial floor space was completed in and around Albany.³⁰⁸

The range of industries and services on offer in the wider area is also expanding.

Further development of Albany, including the surrounding business areas, will result in a well-connected northern node that provides a range of employment options, commercial and retail opportunities, community and civic activities, and more housing options.

Node – Albany

Albany is the node for the north and has been identified for significant growth and intensification over the next 30 years.

Motorway access and the northern busway provide good transport connections to and from the area. Albany will provide a diverse range of employment, housing, education facilities, community and civic services, as well as retail and commercial opportunities.

There is a feasible capacity of approximately 990 dwellings.



Anticipated household growth 2018-2048 [1]	5,750
Anticipated population growth 2018-2048 [1]	16,080
Anticipated employment growth 2018-2048 [1]	6,740
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	200,000-300,000
Enabled housing capacity* [3]	6,880
Feasible development capacity 2017 [3]	990
Timing / Sequencing	1-30 Years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

What will Westgate look like in the future

Westgate is the key node of north west Auckland. It features a town square, library and 28 hectares of public open space. There are more than 400,000 square metres of retail.

Westgate serves local established residential areas such as Henderson and Massey, and is a focal point for the significant growth area of north-west urban Auckland, including the areas around Red Hills, Whenuapai and Kumeū-Huapai.

Its location on the western ring route means it is now well served by motorway connections north, west and south.

Total public and private sector investment in Westgate to date is estimated at nearly \$1 billion.

The Westgate area

Westgate and surrounding areas were rural prior to the opening of the north-western motorway to Hobsonville Road in 1961. That was a catalyst for the development of new suburbs from Te Atatu to Westgate. Between 1968 and 1978 around 10,000 people moved to Massey.

However, a lack of local employment opportunities resulted in a strong pattern of commuting to other parts of Auckland for work, particularly the city centre.

This led to the identification of Westgate for urbanisation in the late 1990s.

The lack of employment in the north-west also resulted in the identification of over 300 hectares of land in and around Westgate, Whenuapai and Hobsonville Road for business activities, particularly light industry.

This employment focussed area represents a significant opportunity for existing and future residents to work closer to where they live.

Future development of Westgate

Over the next 30 years, the population of the future urban areas of Red Hills and Whenuapai are anticipated to grow from 4000 to over 40,000. This growth will be significant.

The north-western rapid transit corridor, a dedicated public transport corridor from Point Chevalier to Westgate, will transform Westgate into a key transport interchange for the surrounding area, and support residential intensification in and around the centre.

A large business area will ensure that as the north-west population grows there will be an increase in diverse local employment opportunities.



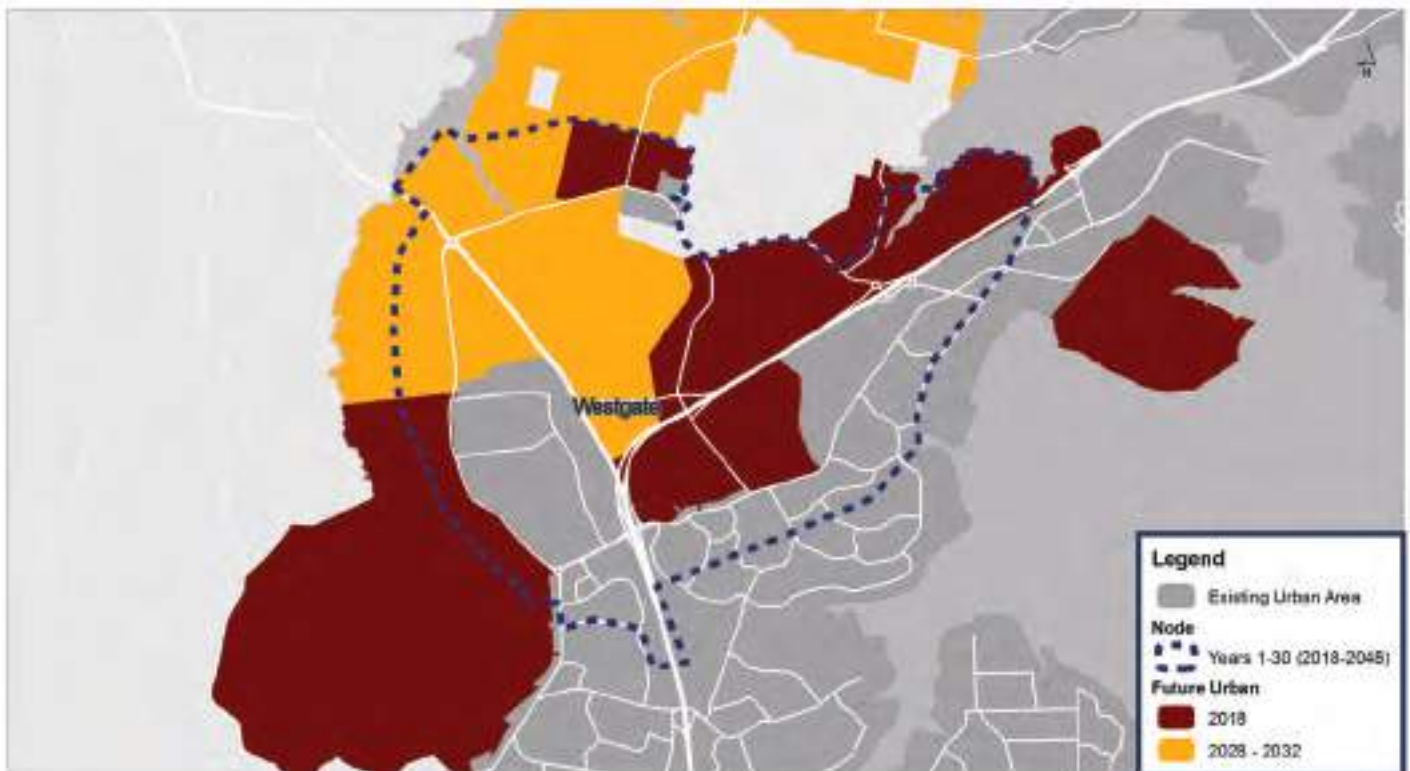
Node – Westgate

Westgate is the node for the north west and will service nearby future urban areas of Red Hills, Whenuapai and Kumeū-Huapai.

It is well connected via motorway and access to the city centre will be improved via the proposed north western rapid transit corridor.

The node has the potential to accommodate significant growth with the Whenuapai future urban area expected to provide a range of employment opportunities.

This area has feasible capacity of approximately 41,190 dwellings.



Anticipated household growth 2018-2048 [1]	33,190
Anticipated population growth 2018-2048 [1]	81,760
Anticipated employment growth 2018-2048 [1]	20,260
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	100,000-150,000
Enabled housing capacity* [3]	43,860
Feasible development capacity 2017 [3]	41,190
Timing / Sequencing	1-30 Years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

What will Manukau look like in the future

Manukau is the largest and most established of Auckland's nodes outside of the city centre. Its civic, retail, education and cultural facilities provide for the wider population of the south.

Close proximity to key distribution and transport links, including the southern and north-eastern motorways, the inland Port at Wiri and the Auckland International Airport, underpin a strong employment base and local economy.

Manukau and the surrounding business area produce about 14 per cent of Auckland's gross domestic product (Gross domestic product is for the combined local board areas of Māngere- Ōtāhuhu, Ōtara-Papatoetoe and Manurewa. It is measured in 2010 prices.)³⁰⁹

Manukau is currently undergoing major transformation that fosters and builds on the existing pride, values and culture of its people. The momentum of change and development in this area will drive demand for a more diverse range of services and activities.

The Manukau area

Similar to other nodes such as Albany, Manukau centre was planned in the 1960s. It was designed as a major administrative and commercial centre that would service southern Auckland, at a time when the area was predominantly rural.

From the outset Manukau received significant public and private investment, which allowed it to develop over time into a large centre. It played an important role of servicing a fast growing population in the southern part of Auckland.

Several government functions and service agencies were shifted into purpose-built office buildings well before the wider area developed. The Manukau mall followed in 1976 and Rainbow's End theme park opened in 1982.

The last decade has seen Manukau mature in its role as the commercial, cultural and educational node for southern Auckland.

Recent developments in the centre include:

- public space improvements
- the building of residential apartments
- expansion of the shopping centre
- completion of a multi-purpose events centre.

In April 2012 a fully integrated rail station and university

campus development was completed and Manukau was connected to the Auckland rail network.

The Manukau bus interchange, immediately adjacent to the Manukau train station, is a critical component of both Manukau's development and of the Auckland transport network. Being close to public transport makes it easier for people to live and work in the area.

Future development of Manukau

Significant growth is expected in Manukau over the next 30 years. The residential population is expected to increase from around 6000 households at present to over 10,500 and the number of jobs is expected to increase by over 22,500 to around 56,000.

Manukau is also an investment focus for Panuku Development Auckland (an Auckland council-controlled organisation). This includes urban renewal in and around Manukau centre.

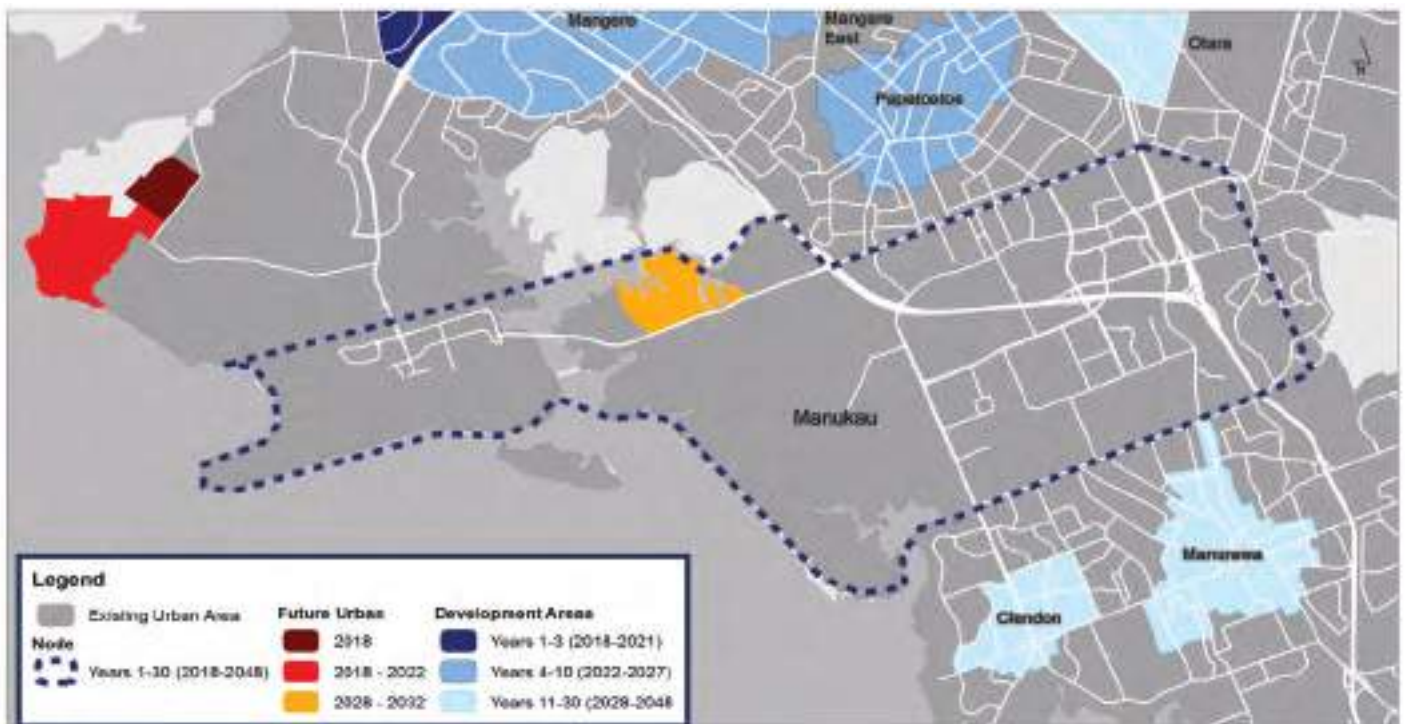
The investment currently being made in Manukau centre, and the momentum of business and employment growth in the wider area, will see Manukau strengthen its role as the node of southern Auckland.

Node – Manukau

Manukau is the node for southern Auckland. Its civic, retail, education and cultural facilities provide for the wider population of the south.

The area is well located with links to Auckland Airport, the Waikato and the city centre. It is accessible by rail, bus and the state highway network (SH1 and SH20). The recent completion of an integrated rail station and tertiary facility next to the centre, along with the bus interchange will attract further investment.

There is a feasible capacity of approximately 1,560 dwellings.



Anticipated household growth 2018-2048 [1]	4,750
Anticipated population growth 2018-2048 [1]	13,920
Anticipated employment growth 2018-2048 [1]	22,620
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	100,000-150,000
Enabled housing capacity* [3]	11,250
Feasible development capacity 2017 [3]	1,560
Timing / Sequencing	1-30 Years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

What will Warkworth look like in the future

Warkworth is a growing rural node located 57 kilometres north of Auckland's centre.

It is the largest rural town in the northern part of Auckland and serves a large rural catchment.

Warkworth is easily accessible via State Highway 1 and serves as a gateway to the many villages and beaches along the Matakana and Kowhai Coasts.

Land uses in the area have evolved from shipbuilding and orchards to dairy and sheep farms.

Horticulture, winemaking, dairying, tourism and forestry are now key contributors to the local economy.

Lifestyle blocks, retirement housing and holiday homes have also become increasingly popular.

Significant residential and employment growth is expected over the next 30 years with around 1100 hectares earmarked as future residential and business land.

This could accommodate approximately 7500 additional dwellings, or an additional 20,000 people.

The 2015 population was approximately 4500, so the anticipated growth will require investment in supporting infrastructure including transport, water and wastewater upgrades.

Future development of Warkworth

The development of quality transport links within Warkworth, as well as between Warkworth, Northland and the rest of Auckland will be critical to supporting the town's future growth.

The Pūhoi to Warkworth Road of National Significance, Ara Tūhono, will be completed in late 2021 as will the Matakana Link Road.

These projects will take through-traffic and freight away from the town centre and improve travel times to and from Warkworth.

Development will be staged over the next 20 years, reflecting demand and the provision of the necessary infrastructure upgrades.

A structure plan for Warkworth will refine the staging and timing of development and will identify the mix and location of housing, employment, retail, commercial and community facilities.



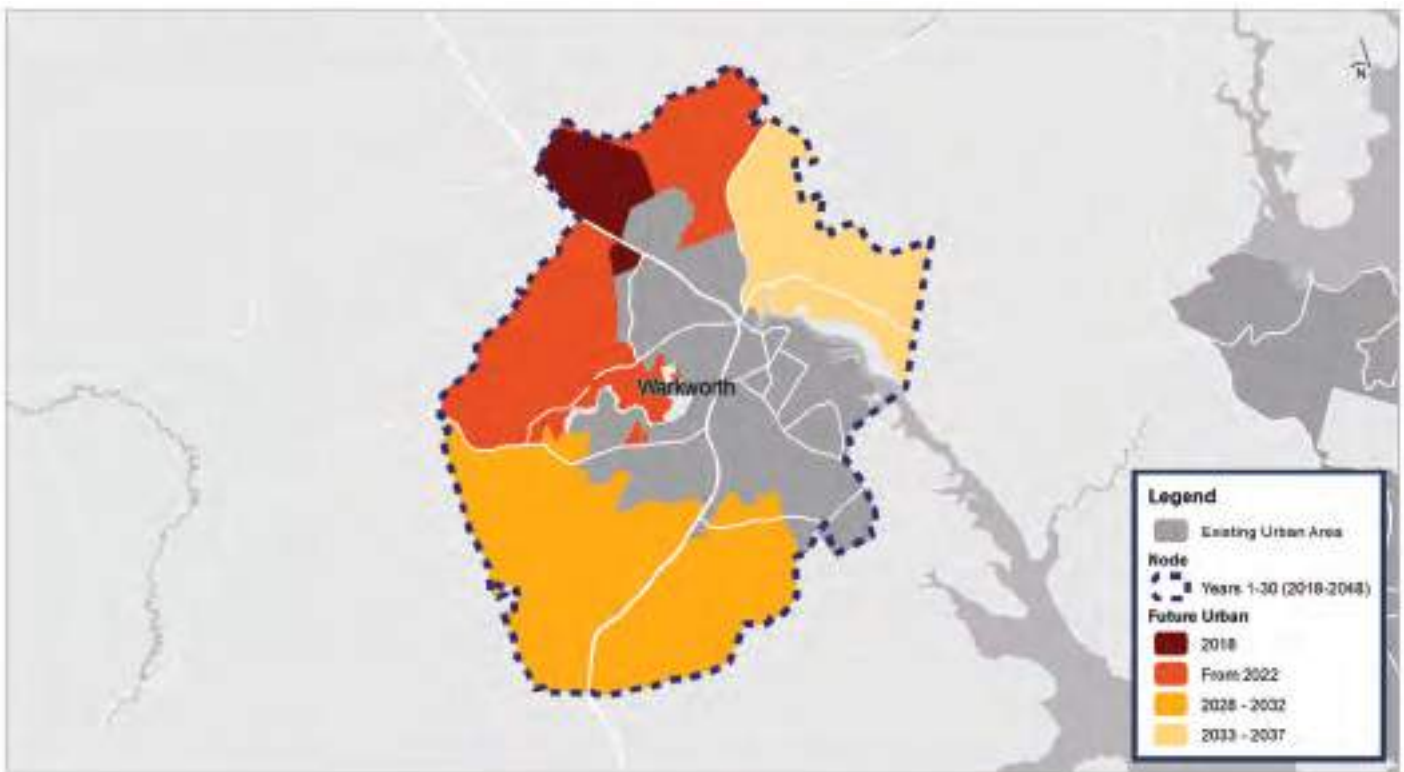
Node – Warkworth

The satellite town of Warkworth is a rural node in the northern part of Auckland serving a large rural catchment.

Significant residential and employment growth is expected over the next 30 years with around 1100 hectares earmarked as future urban land. This could accommodate approximately 7,500 additional dwellings, or an additional 20,000 people.

The anticipated growth will require investment in supporting infrastructure including transport, water and wastewater upgrades.

A structure plan for Warkworth will refine the staging and timing of development and will identify the mix and location of housing, employment, retail, commercial and community facilities.



What will Pukekohe look like in the future

The satellite town of Pukekohe is an established rural node located approximately 50 kilometres south of Auckland's city centre.

It is located on the rail line and is connected to State Highway 1 and the rest of Auckland via State Highway 22.

The wider catchment includes Paerata, located on State Highway 22, and immediately to the north of Pukekohe.

The nearby towns of Tūākau and Pokeno, located in the Waikato District, are also well connected to Pukekohe.

The node serves a wide rural catchment, centred on rural production with some of New Zealand's elite soils and prime agricultural land. Dairy farms and horticultural production activities have long been established on the surrounding fertile soils.

Pukekohe's economy is centred on farming-related activities and the protection of its highly productive soils is critical for the area. It also continues to attract those seeking a rural lifestyle.

Its town centre offers a wide variety of services and facilities.

Future development of Pukekohe

Significant growth is anticipated in this area over the next 30 years. Approximately 1700 hectares of land for future urban development has been identified around Pukekohe, including around 790 hectares in Paerata.

This has the potential to accommodate approximately 14,000 dwellings.³¹⁰ Upgrades to water, wastewater, stormwater and transport will be required.

This includes:

- an extension of electric passenger trains from Papakura to Pukekohe
- a new train station at Paerata
- improvements to the road network to increase safety, capacity and resilience.

Development has been staged over the next 10 years, reflecting demand and the provision of the necessary infrastructure upgrades.

Priority has been given to the development of Paerata, with around 330 hectares of land ready for development.

The structure plan for Pukekohe and Paerata will refine the staging and timing of development and will identify the mix and location of housing, employment, retail, commercial and community facilities.



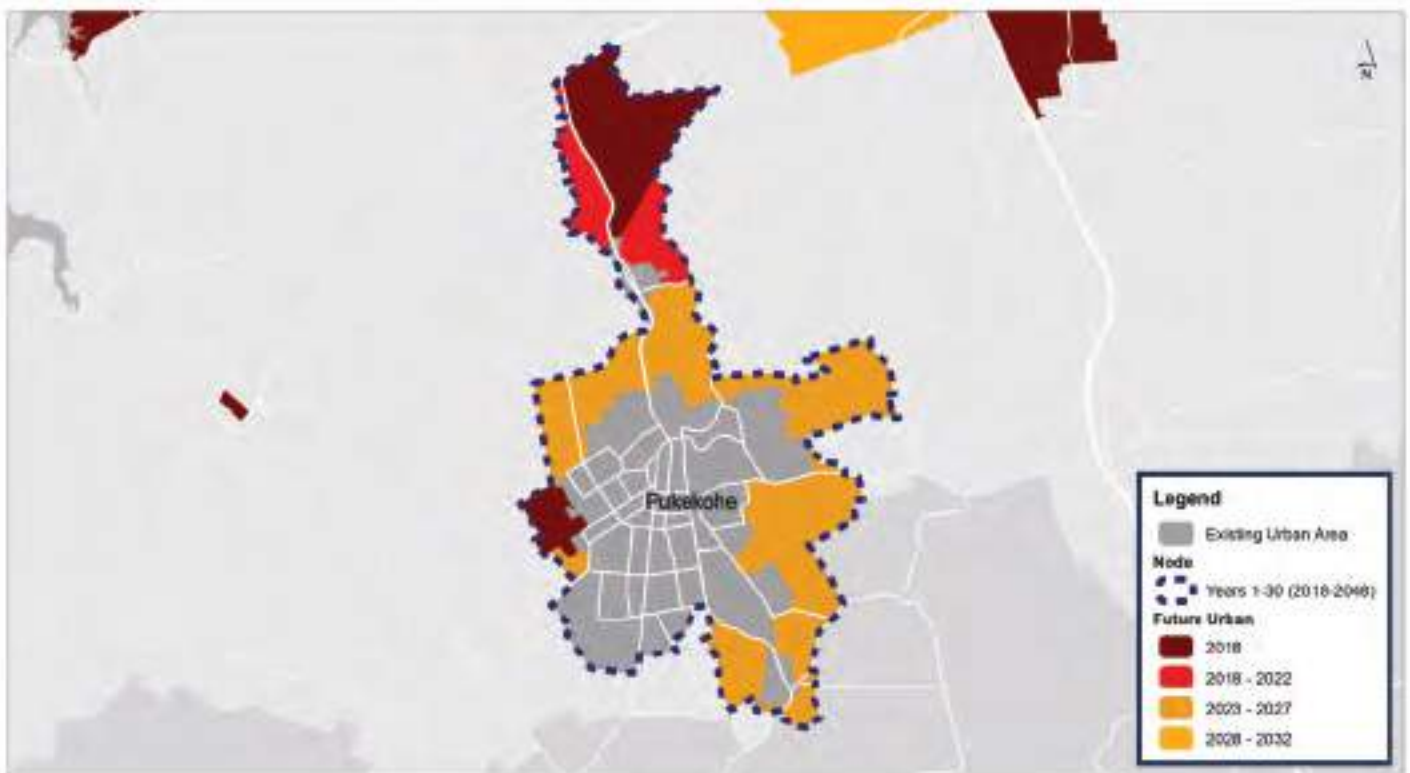
Node – Pukekohe

The satellite town of Pukekohe is an established rural node located approximately 50 kilometres south of Auckland’s city centre. It serves a wide rural catchment.

It is located on the rail line and is connected to State Highway 1 and the rest of Auckland via State Highway 22.

Significant growth is anticipated in this area over the next 30 years. Approximately 1700 hectares of land for future urban development has been identified around Pukekohe, including around 790 hectares in Paerata. This has the potential to accommodate approximately 14,000 dwellings. Upgrades to water, wastewater, stormwater and transport will be required.

The structure plan for Pukekohe and Paerata will refine the staging and timing of development and will identify the mix and location of housing, employment, retail, commercial and community facilities.



Development Area - Sunnynook

Sunnynook, including Totara Vale, on the west of State Highway 1, has good access through its station on the Northern Busway.

It has significant potential for redevelopment with the majority of the area zoned Mixed Use, Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban in the Auckland Unitary Plan.

The area has feasible capacity of approximately 990 dwellings.



Anticipated household growth 2018-2048 [1]	990
Anticipated population growth 2018-2048 [1]	1,970
Anticipated employment growth 2018-2048 [1]	410
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	200,000-300,000
Enabled housing capacity* [3]	9,810
Feasible development capacity 2017 [3]	990
Phasing / Sequencing	11-30 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area - Takapuna and Northcote

Takapuna is a centre located next to one of Auckland’s most popular beaches.

Its high amenity, good connections to the city centre via bus, and high development potential have resulted in a number of recent medium density developments. To support this growth, Auckland Council has invested in open space upgrades in the area and identified it for its urban regeneration programme, concentrating on the redevelopment of a few key sites.

Northcote is well located close to the Northern Busway, Harbour Bridge and State Highway network. When Skypath is complete, the area will also have direct cycle and pedestrian connections to the city centre.

Town centre and surrounding residential land is currently being jointly redeveloped by a number of agencies. The project aims to revitalise the area and make it more attractive to more people as a place to live. Town centre and surrounding residential land is currently being jointly redeveloped by a number of agencies. The project aims to revitalise the area and make it more attractive to more people as a place to live.

There are also a number of Special Housing Areas (SHAs) in the area including the Northcote Strategic SHA which has the potential to create over 700 new housing sites.

These areas together have a feasible capacity of approximately 2,030 dwellings.



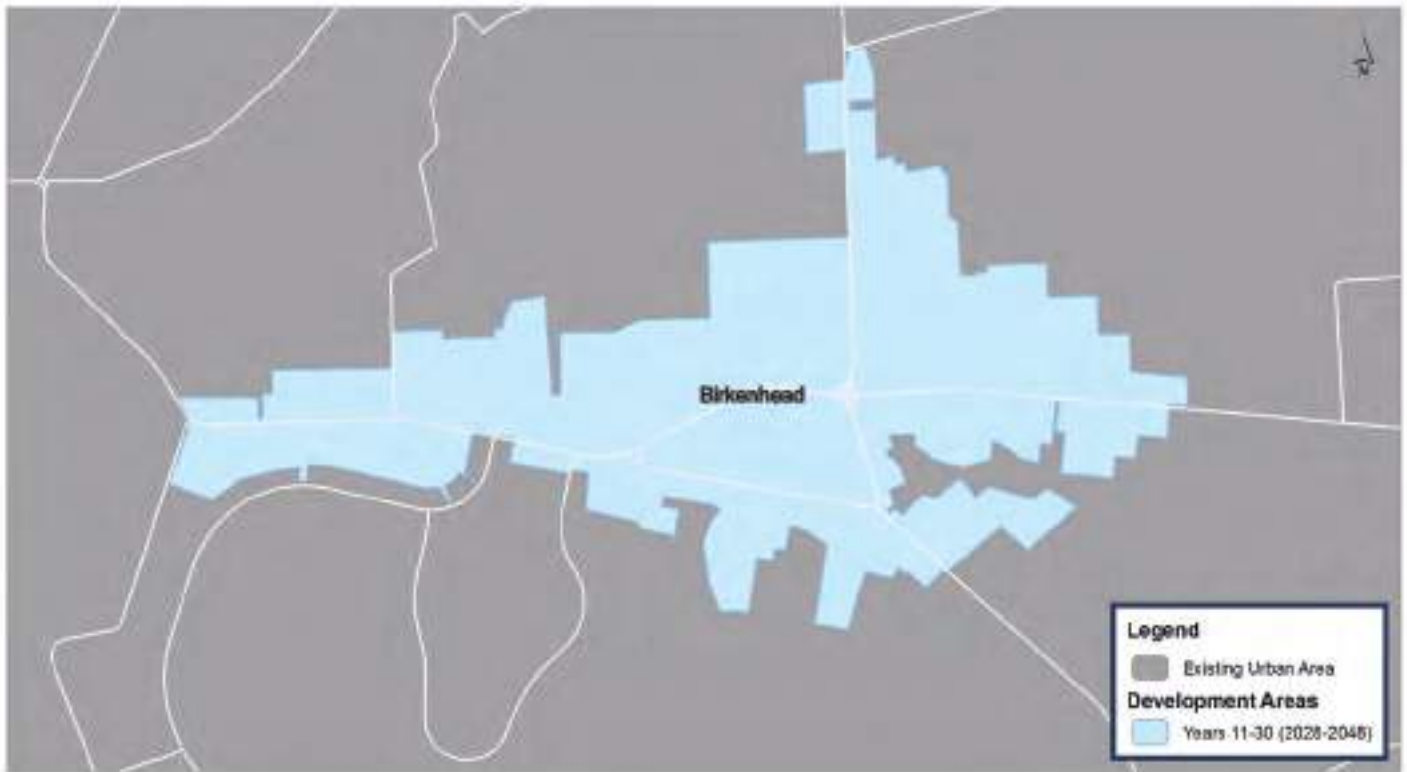
	Takapuna	Northcote
Anticipated household growth 2018-2048 [1]	5,390	1,450
Anticipated population growth 2018-2048 [1]	11,635	3,631
Anticipated employment growth 2018-2048 [1]	11,620	320
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000	200,000-300,000
Enabled housing capacity* [3]	7,260	10,430
Feasible development capacity 2017 [3]	1,150	880
Phasing / Sequencing	1-3 years	1-3 years

Development Area - Birkenhead

Birkenhead has feasible capacity of approximately 2010 dwellings.

There is some private sector development interest in this area with some small developments planned or underway. Planning is also underway for the redevelopment of the Highbury Shopping Centre, including the addition of apartments above the mall.

These developments, along with a number of improvements currently underway or complete in the area, could trigger further redevelopment opportunities.



Anticipated household growth 2018-2048 [1]	2,820
Anticipated population growth 2018-2048 [1]	7,440
Anticipated employment growth 2018-2048 [1]	580
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	200,000-300,000
Enabled housing capacity* [3]	9,380
Feasible development capacity 2017 [3]	2,010
Phasing / Sequencing	11-30 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area – Henderson, Glendene, Sunnyvale, Te Atatū Peninsula and Te Atatū South

Henderson is a centre with good public transport links. When the City Rail Link is complete, travel times to the city centre are expected to improve to approximately 30 minutes.

The centre has a range of facilities and excellent links to open space and recreation. Auckland Council is facilitating the development of nine sites in Henderson and is planning public space upgrades and further improvements to walking and cycling links. These improvements could trigger further development interest.

Te Atatū Peninsula has good redevelopment potential with large areas zoned for Terraced Housing and Apartment Building (THAB). The area has high amenity and there has been recent investment in social infrastructure, such as the library, community centre and parks.

The north western rapid transit corridor will improve access to the city centre and Westgate. This could increase development potential and see uptake of development in the THAB area.

Development in Henderson and Te Atatū Peninsula is likely to result in spill-over into Te Atatū South. Development in Glendene and Sunnyvale will be influenced by growth in Henderson, Glen Eden and Kelston, and Te Atatū.

These areas together have a feasible capacity of approximately 2,670 dwellings.



	Henderson	Glendene	Sunnyvale	Te Atatū Peninsula	Te Atatū South
Anticipated household growth 2018-2048 [1]	3,780	0	530	1,110	290
Anticipated population growth 2018-2048 [1]	11,870	-470	1,000	1,120	250
Anticipated employment growth 2018-2048 [1]	5,070	-10	-10	180	130
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	0-100,000	0-100,000	0-100,000	150,000-200,000	200,000-300,000
Enabled housing capacity* [3]	11,690	4,743	4,590	18,410	7,470
Feasible development capacity 2017 [3]	570	390	410	700	600
Phasing / Sequencing	4-10 years	11-30 years	11-30 years	4-10 years	11-30 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area – Avondale, New Lynn, Kelston and Glen Eden

Avondale is an established town centre located on the western rail line with significant development potential, particularly when combined with adjacent New Lynn.

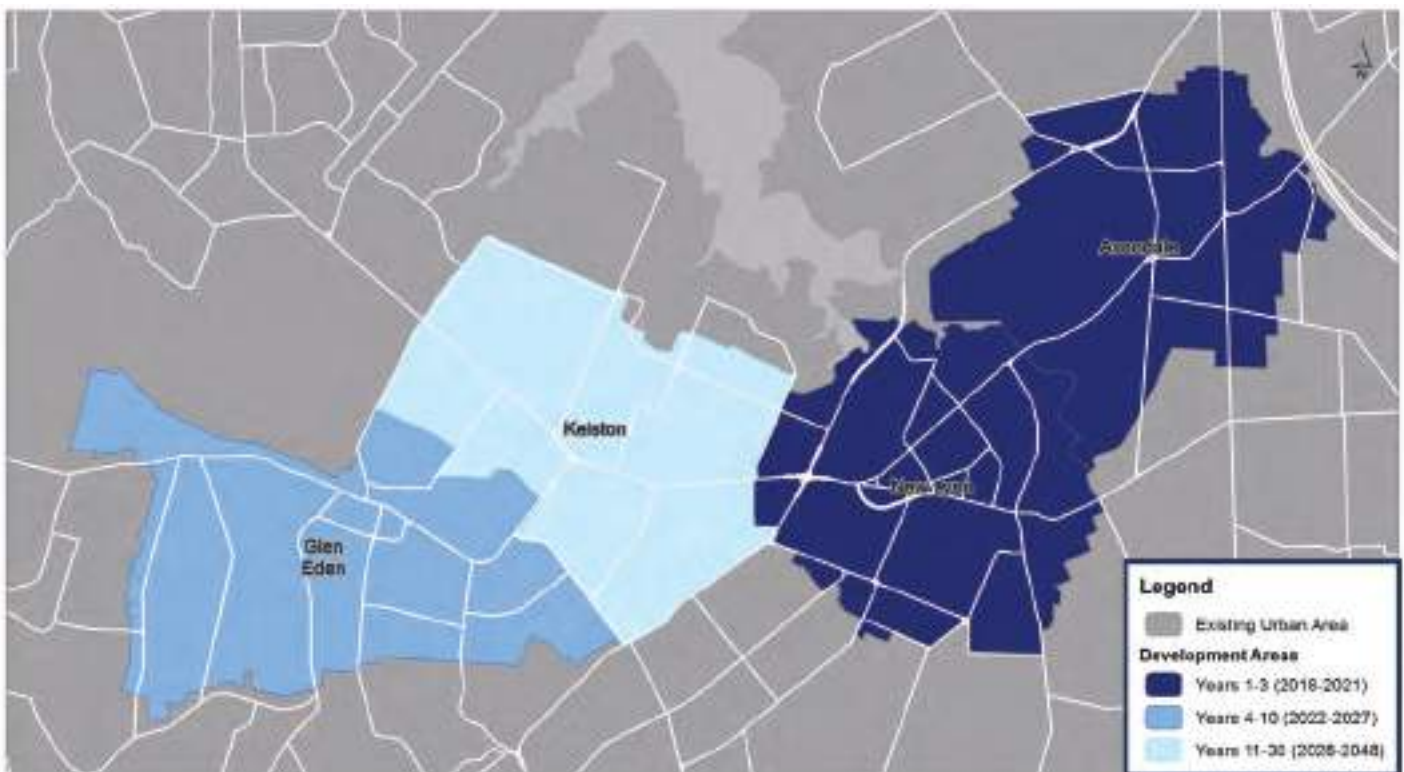
Key transport and wastewater infrastructure projects will help support its development. The City Rail Link will improve access to the city centre. The central interceptor will ensure there is capacity in the wastewater network to meet planned growth.

Avondale is an attractive development location given its central-west location and planned transport improvements. There is current development interest in the area with Auckland Council actively involved in residential development projects.

New Lynn has had major council investment and there is current development interest from the private sector and Housing New Zealand. The area is well connected via rail and bus with the New Lynn rail station and when the City Rail Link is complete, it will be a 23 minute journey to the city centre.

Kelston and Glen Eden will be a 30 minute rail journey from the city centre once the City Rail Link is complete. This will increase its attractiveness as an area for redevelopment with potential spill-over from development already occurring at New Lynn and Henderson. Present market interest in the area includes a development of 168 apartments near the Glen Eden rail station and plans for the redevelopment of the Kelston Shopping Centre.

These areas together have a feasible capacity of approximately 3,520 dwellings.



	Avondale	New Lynn	Kelston	Glen Eden
Anticipated household growth 2018-2048 [1]	2,440	6,850	1,150	1,550
Anticipated population growth 2018-2048 [1]	7,470	18,130	2,490	3,480
Anticipated employment growth 2018-2048 [1]	150	4,860	40	-20
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000	200,000-300,000	150,000-200,000	150,000-200,000
Enabled housing capacity* [3]	11,620	6,590	13,470	16,440
Feasible development capacity 2017 [3]	980	280	990	1,270
Phasing / Sequencing	1-3 years	1-3 years	11-30 years	4-10 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area – Mt Albert, Newton, Morningside, St Lukes

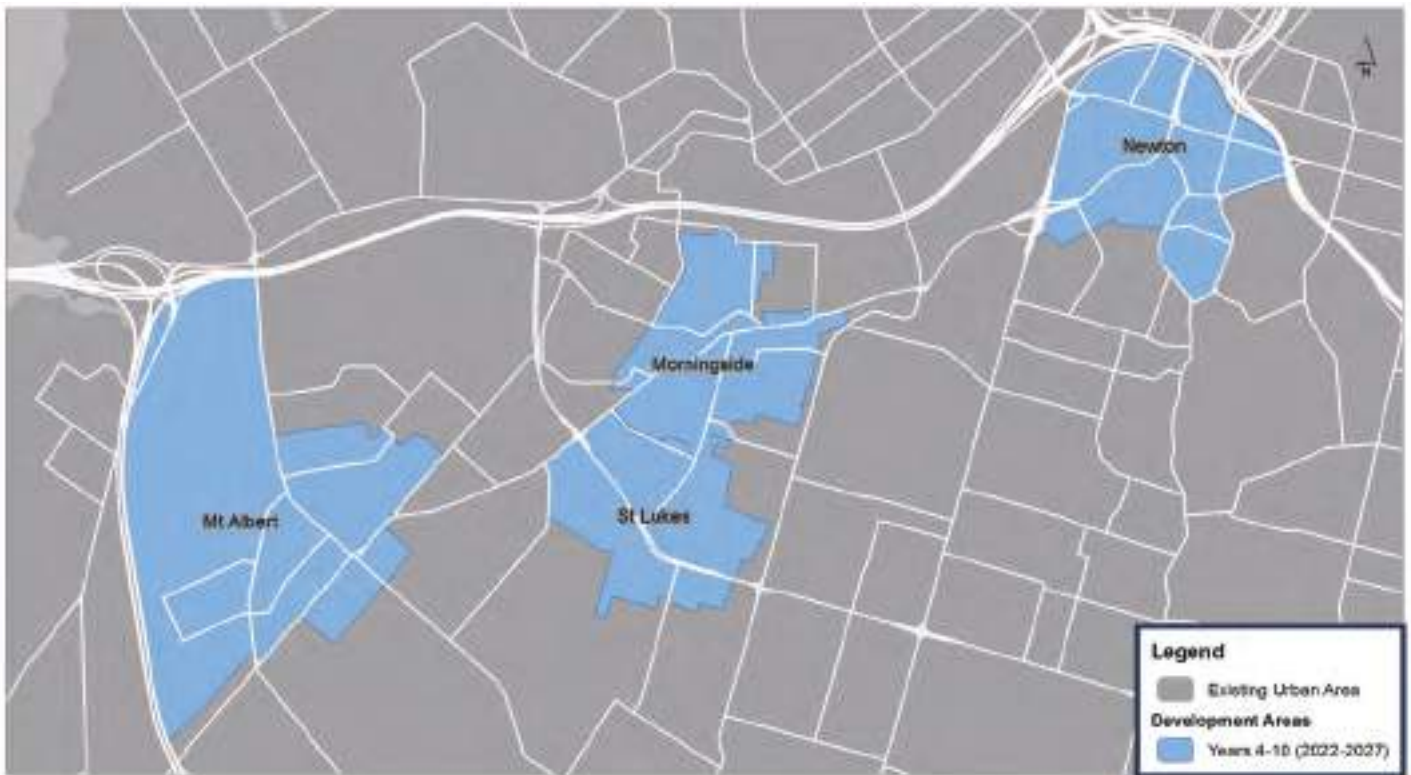
Recent council investment in Mt Albert includes a rail station upgrade, ongoing town centre improvements and cycleway developments. It is within walking distance of Unitec and has good access to open space, including Western Springs, and the motorway network.

Morningside and St Lukes are city fringe suburbs with good accessibility via the rail station and bus routes along New North Road. Cycling links onto the north western cycleway and pedestrian links increase accessibility to nearby areas. Once the City Rail Link is complete, the area will be a 14 minute rail journey to the city centre.

There are a number of large light industrial sites in both areas that have been rezoned to Mixed Use, particularly around the Morningside rail station.

Newton is a city fringe suburb in walking distance of the city centre and Auckland University. The area has good accessibility with bus routes along Symonds Street and links to the North western cycleway. On completion of the City Rail Link, the area will be in close proximity to Mt Eden and Karangahape Road rail stations. There are a number of open air car parks and large sites in the area that provide development potential.

These areas together have a feasible capacity of approximately 660 dwellings with much of the development potential near town centres.



	Mt Albert	Newton	Morningside	St Lukes
Anticipated household growth 2018-2048 [1]	1,190	2,980	490	1,320
Anticipated population growth 2018-2048 [1]	3,418	7,060	1,750	4,330
Anticipated employment growth 2018-2048 [1]	410	5,060	-10	-30
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000	Over 300,000	Over 300,000	Over 300,000
Enabled housing capacity* [3]	6,410	480	3,650	7,490
Feasible development capacity 2017 [3]	230	30	90	310
Phasing / Sequencing	4-10 years	4-10 years	4-10 years	4-10 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area – Dominion Road Corridor, Mt Roskill and Three Kings

Dominion Road corridor has a number of established centres, including Balmoral and Valley Roads, with large amounts of mixed use along the corridor. There are good bus routes with high levels of established public transport patronage as well as some cycle connections to the city.

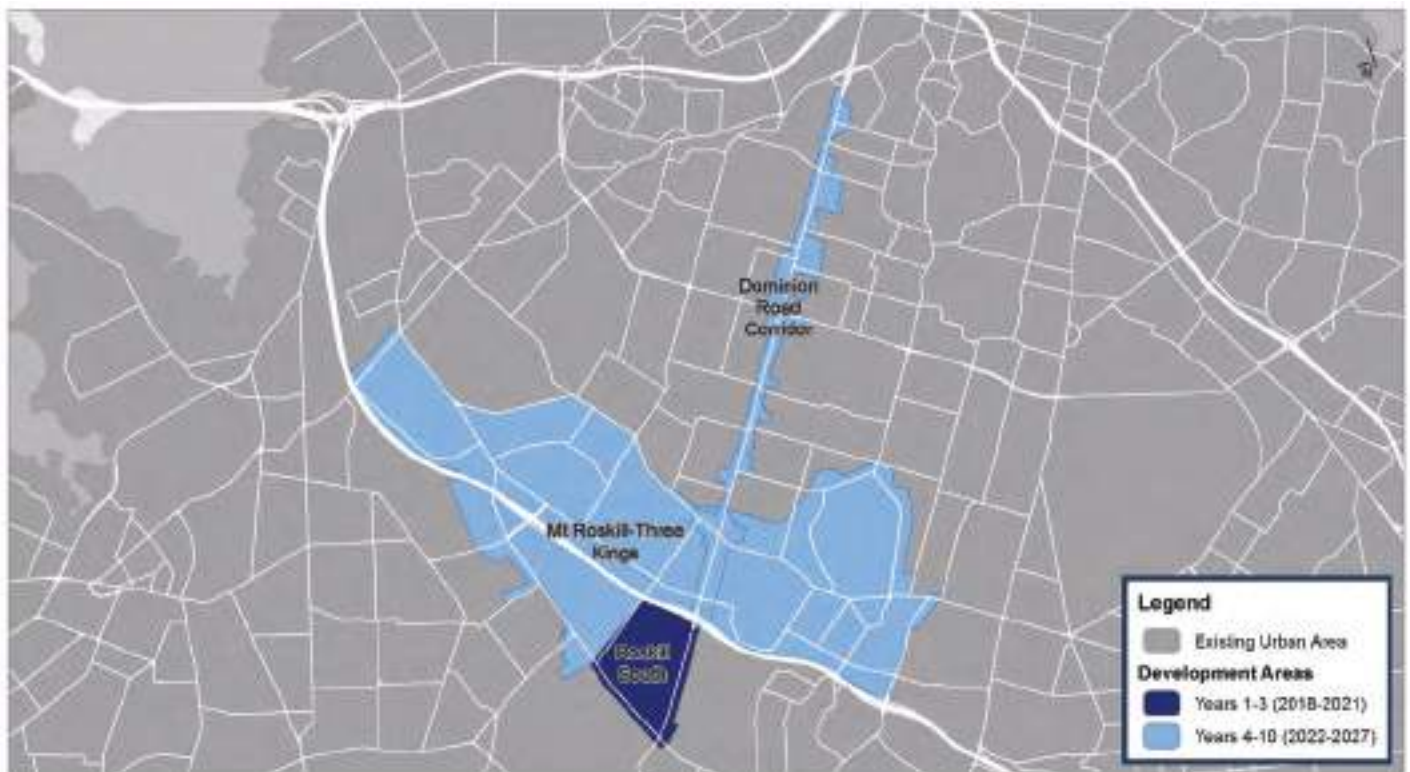
Mt Roskill and Three Kings are located less than 10km from the city centre. With frequent buses along Sandringham, Mt Eden and Dominion Roads and buses along Mt Albert Road, connecting to the Mt Albert rail station, the area has good accessibility.

The Auckland Unitary Plan provides scope for increased density in Mt Roskill and Three Kings with large areas zoned for Terraced Housing and Apartment Building (THAB) and Mixed Housing Urban (MHU).

Redevelopment has commenced at Three Kings Quarry. Homes Land Community are currently progressing developments in Roskill South (therefore sequenced in Years 1-3). This is being complemented by pedestrian, cycling and open space improvements. The remaining parts of the development areas are anticipated to experience large scale development in Years 4-10.

A potential light rail service along Dominion Road would increase accessibility and act as a catalyst for development around future stations.

These areas together have a feasible capacity of approximately 2,900 dwellings which could increase following the completion of light rail.



	Dominion Road Corridor	Mt Roskill and Three Kings
Anticipated household growth 2018-2048 [1]	1,980	6,240
Anticipated population growth 2018-2048 [1]	6,750	17,220
Anticipated employment growth 2018-2048 [1]	820	2,260
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000	Over 300,000
Enabled housing capacity* [3]	5,760	36,700
Feasible development capacity 2017 [3]	300	2,600
Phasing / Sequencing	4-10 years	4-10 years 1-3 years (Roskill South)

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

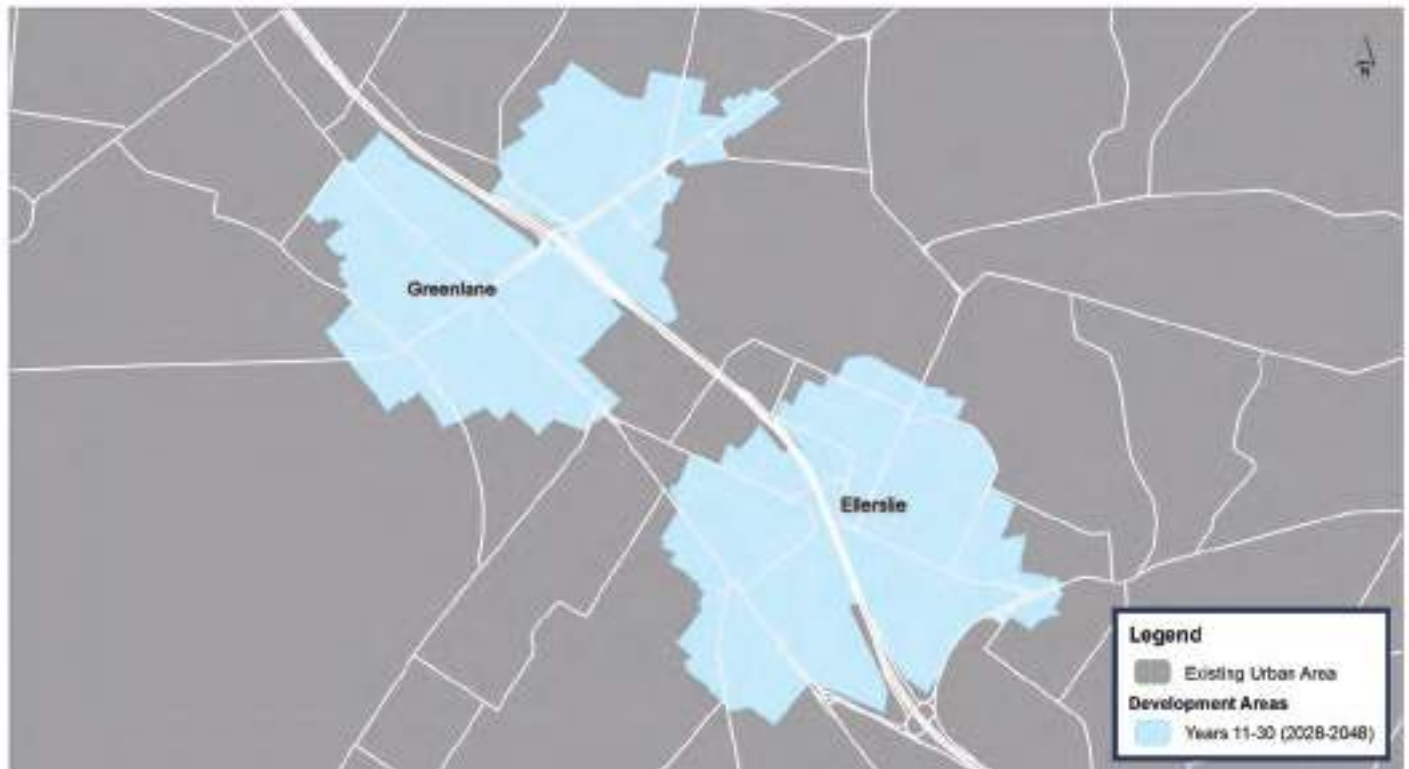
[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area - Greenlane and Ellerslie

With good connections to rail and state highway networks, Greenlane is located close to the city centre, Newmarket and Cornwall Park. Much of the area is zoned Terraced Housing and Apartment Building (THAB) under the Auckland Unitary Plan. Market interest is evident in the nearby Alexander Park Raceway developments, which will result in nearly 250 dwellings and retail space.

Ellerslie is well connected with one of the busiest railway stations in the region and good access to the State Highway network. Much of the area is zoned THAB and market interest is evident in the proposed development on the Ellerslie Racecourse site.

These areas together have a feasible capacity of 430 dwellings.



	Greenlane	Ellerslie
Anticipated household growth 2018-2048 [1]	1,570	2,280
Anticipated population growth 2018-2048 [1]	4,540	6,940
Anticipated employment growth 2018-2048 [1]	300	1,400
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000	Over 300,000
Enabled housing capacity* [3]	10,670	4,710
Feasible development capacity 2017 [3]	200	230
Phasing / Sequencing	11-30 years	11-30 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area - Glen Innes, Tāmaki and Panmure

Tāmaki and Glen Innes are currently the focus of the urban transformation led by the Tāmaki Redevelopment Company. The area has good access to beaches, parks and the city centre with a train station near the town centre.

Panmure will undergo change over the next 10-15 years. The Tāmaki Redevelopment Company is actively involved in the redevelopment of the Panmure area. There is also significant development opportunity in the town centre. The new Panmure public transport interchange, opened in 2014, has resulted in improved accessibility for the area. There is also potential for accessibility to increase further once linkages to the station are improved and AMETI is complete.

These areas together have a feasible capacity of approximately 5,730 dwellings.



	Glen Innes	Tāmaki	Panmure
Anticipated household growth 2018-2048 [1]	3,590	960	1,780
Anticipated population growth 2018-2048 [1]	10,210	2,530	5,080
Anticipated employment growth 2018-2048 [1]	450	390	740
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	200,000-300,000	200,000-300,000	200,000-300,000
Enabled housing capacity* [3]	23,560	5,090	9,900
Feasible development capacity 2017 [3]	3,420	1,230	1,080
Phasing / Sequencing	1-3 years	1-3 years	1-3 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area – Sylvia Park

Sylvia Park centre is the location of Auckland’s largest shopping centre, with plans for further expansion. It has significant potential for redevelopment with the majority of the area zoned Mixed Use, Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban in the Auckland Unitary Plan.

The area has feasible capacity of approximately 1520 dwellings and private sector interest in residential development is already underway. There are good connections to other parts of the city and the region through a rail station, State Highway 1 and Mt Wellington Highway. However, current pedestrian amenity needs to be improved.

The area is in close proximity to large employment areas of Penrose, Ellerslie and Greenlane, and there is potential for business areas surrounding the centre to redevelop into higher value business as the area evolves.



Anticipated household growth 2018-2048 [1]	5,210
Anticipated population growth 2018-2048 [1]	14,680
Anticipated employment growth 2018-2048 [1]	4,030
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000
Enabled housing capacity* [3]	10,230
Feasible development capacity 2017 [3]	1,520
Phasing / Sequencing	4-10 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

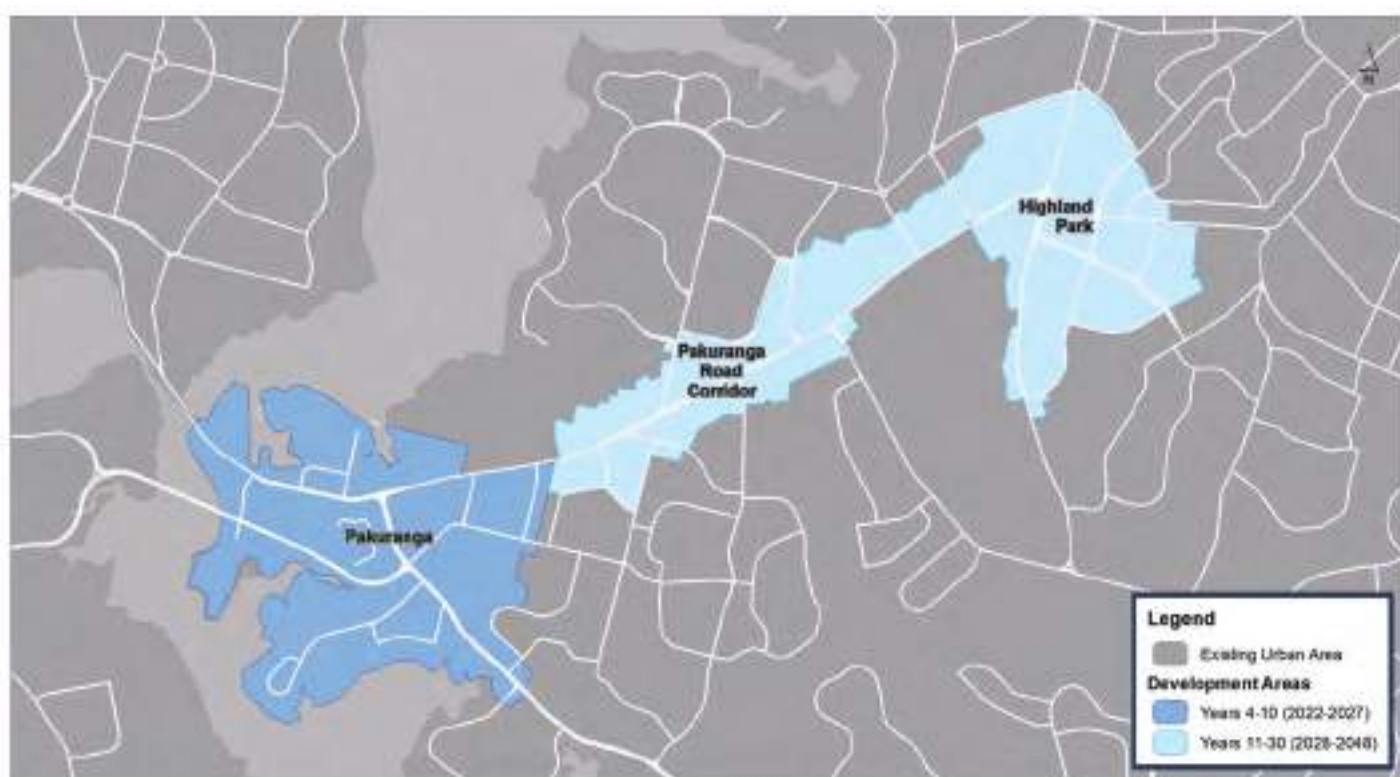
Development Area – Pakuranga, Pakuranga Corridor and Highland Park

Pakuranga will be well connected to Panmure, Botany and the city centre, via the bus/rail interchange at Panmure, when AMETI is complete. A masterplan for the area was completed in 2015 and there are opportunities to improve connections between the town centre and the surrounding residential areas.

There is developer interest in the area with developments currently planned or underway for housing, retail and a hotel. Much of the Highland Park – Pakuranga Road Corridor is zoned for Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban in the Auckland Unitary Plan.

It is likely that Highland Park and the corridor between Pakuranga and Highland Park will see some redevelopment as improved accessibility from the completion of AMETI is realised.

These areas together have a feasible capacity of approximately 9,420 dwellings.



	Pakuranga	Pakuranga Corridor	Highland Park
Anticipated household growth 2018-2048 [1]	1,700	1,040	1,380
Anticipated population growth 2018-2048 [1]	3,620	350	1,700
Anticipated employment growth 2018-2048 [1]	10	-30	120
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000	100,000-150,000	0-100,000
Enabled housing capacity* [3]	14,930	15,410	14,620
Feasible development capacity 2017 [3]	2,890	3,630	2,900
Phasing / Sequencing	4-10 years	11-30 years	11-30 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area - Ōtāhuhu

Ōtāhuhu has been the focus of recent Auckland Council investment and is well located between the city centre and Manukau.

Recent investment has included a public transport interchange, new bus stops in the town centre and the development of the Ōtāhuhu Recreation Precinct. This includes a library, aquatic and recreation centre in one facility. Leveraging off these investments, the town centre is identified for regeneration, including the Portage Route through to Middlemore Hospital. Public investment is likely to trigger private redevelopment.

There is feasible capacity of approximately 2,870 dwellings.



Anticipated household growth 2018-2048 [1]	2,250
Anticipated population growth 2018-2048 [1]	5,900
Anticipated employment growth 2018-2048 [1]	840
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	200,000-300,000
Enabled housing capacity* [3]	19,860
Feasible development capacity 2017 [3]	2,870
Phasing / Sequencing	1-3 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area - Ōnehunga

Ōnehunga, strategically located on the Manukau Harbour, is within 10km of Auckland Airport and has good accessibility to the city centre with a rail station near its centre.

Recent investment in the area included an upgrade of Ōnehunga Mall, Taumanu Reserve, and investments in transport including rail, walking and cycling facilities, SH20 roading improvements and connections to the western ring route. The area continues to be a focus for public investment and regeneration.

The Auckland Unitary Plan has enabled development in the area, with a feasible capacity of approximately 640 dwellings.



Anticipated household growth 2018-2048 [1]	3,890
Anticipated population growth 2018-2048 [1]	11,140
Anticipated employment growth 2018-2048 [1]	350
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	Over 300,000
Enabled housing capacity* [3]	10,440
Feasible development capacity 2017 [3]	640
Phasing / Sequencing	1-3 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

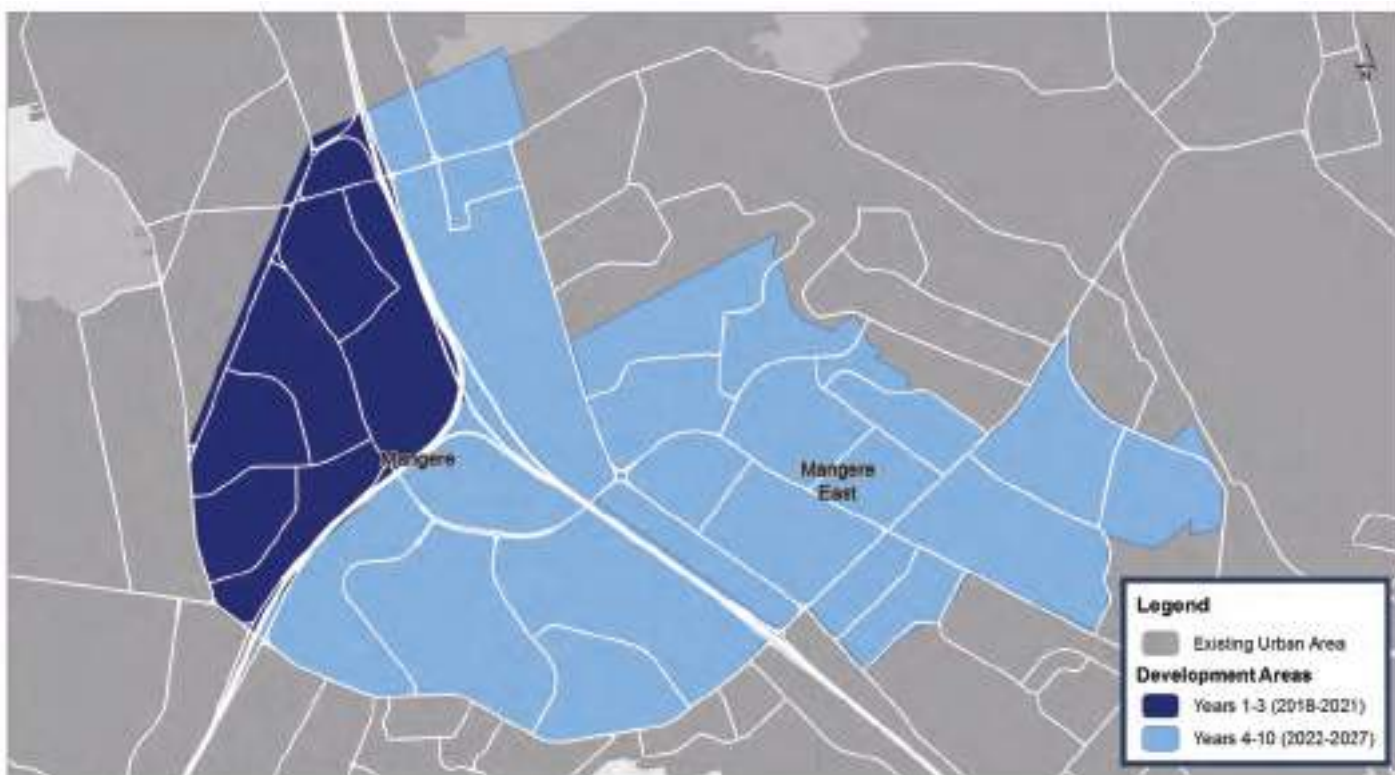
Development Area – Māngere and Māngere East

Māngere has large areas zoned for Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban. Māngere East has large areas zoned Mixed Housing Urban.

The Crown is currently undertaking a number of smaller redevelopments in Māngere. Specifically, developments in the northern part of Māngere are progressing now and are sequenced in Years 1-3. There is potential for larger scale redevelopment in the remaining parts of Māngere and in Māngere East given Housing New Zealand’s significant land ownership. These areas are anticipated to experience large scale development in Years 4-10.

Potential light rail to Auckland Airport could trigger widespread redevelopment and greatly improve accessibility for Māngere and Māngere East, in particular to the airport and city centre.

There is feasible capacity of approximately 3,160 dwellings.



	Māngere	Māngere East
Anticipated household growth 2018-2048 [1]	1,250	780
Anticipated population growth 2018-2048 [1]	490	-690
Anticipated employment growth 2018-2048 [1]	330	120
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	150,000-200,000	200,000-300,000
Enabled housing capacity* [3]	26,830	13,510
Feasible development capacity 2017 [3]	1,340	1,820
Phasing / Sequencing	1-3 years (northern area) 4-10 years (remaining area)	4-10 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

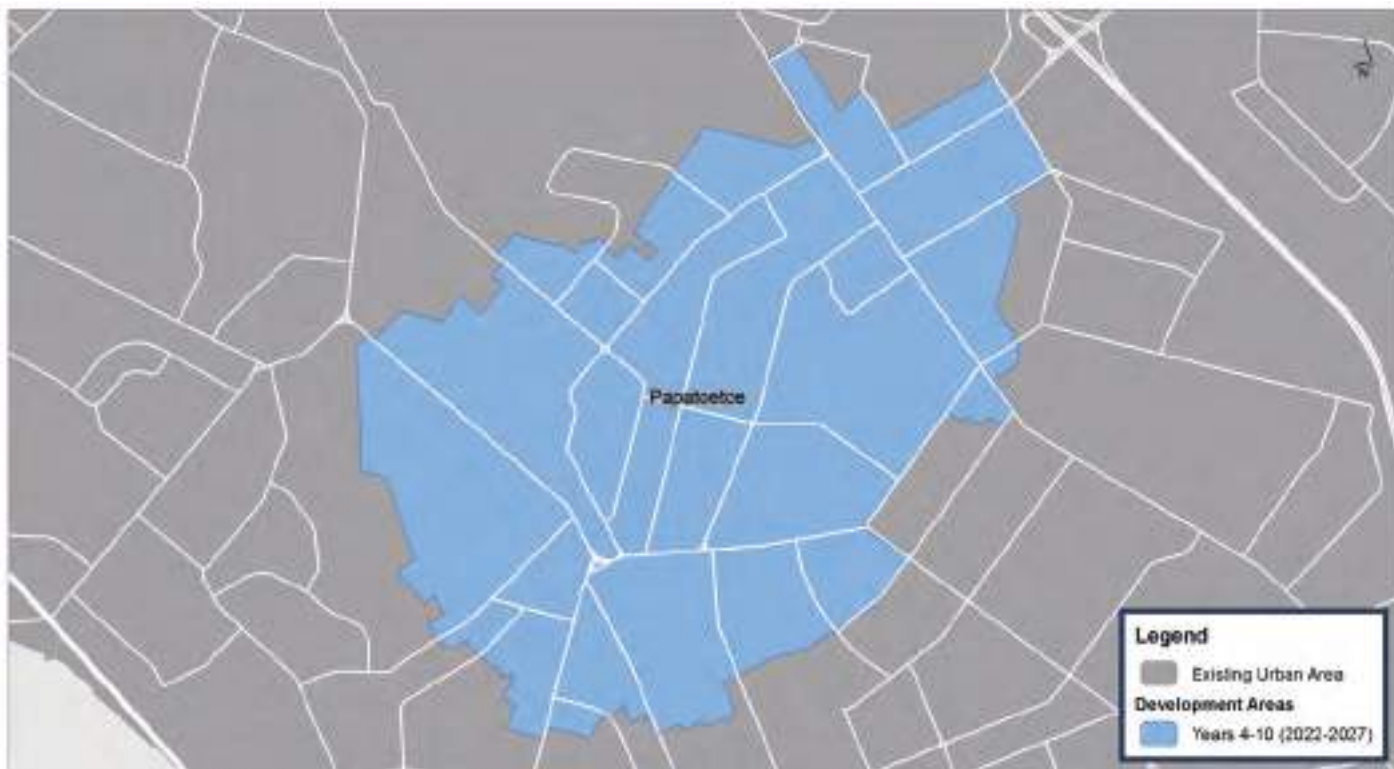
[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area – Papatoetoe and Hunters Corner

Papatoetoe and Hunters Corner are small established centres located just north of Manukau. They have good accessibility to rail and bus services as well as the State Highway network. The area has feasible capacity of approximately 2,710 dwellings.

Auckland Council is actively involved in the area and is leading the redevelopment of the Old Papatoetoe mall, including a health hub. The area has seen recent development interest with numerous residential projects (apartments and a retirement village) complete or under construction.



Anticipated household growth 2018-2048 [1]	2,230
Anticipated population growth 2018-2048 [1]	5,200
Anticipated employment growth 2018-2048 [1]	350
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	150,000-200,000
Enabled housing capacity* [3]	20,930
Feasible development capacity 2017 [3]	2,710
Phasing / Sequencing	4-10 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Development Area – Ōtara

Ōtara is strategically located directly to the east of State Highway 1 and the area has good public transport links with a bus interchange.

It is close to large employment areas of Ōtāhuhu, East Tamaki and Manukau and has good potential for redevelopment with most of the area zoned Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban in the Auckland Unitary Plan. The main campus for Manukau Institute of Technology is located in Ōtara and the centre has a library, swimming pool and leisure centre and an art gallery.

The area has feasible capacity of 1,320 dwellings. The Crown has large land holdings in the area and there is the potential for larger scale redevelopment in the area in the longer term.



Anticipated household growth 2018-2048 [1]	1,660
Anticipated population growth 2018-2048 [1]	1,770
Anticipated employment growth 2018-2048 [1]	600
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	100,000-150,000
Enabled housing capacity* [3]	21,730
Feasible development capacity 2017 [3]	1,320
Phasing / Sequencing	11-30 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

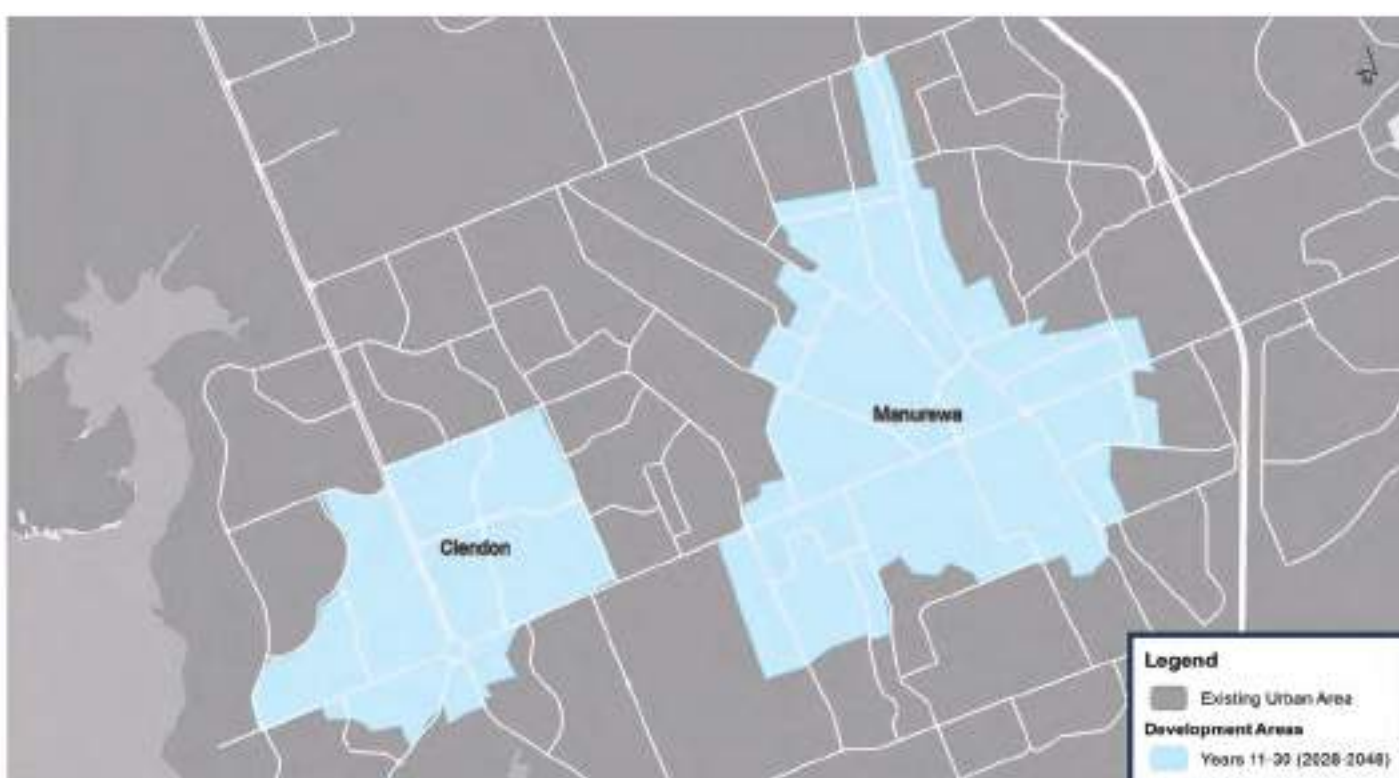
Development Area – Manurewa and Clendon

Manurewa sits on the southern rail line and it has a well-used train station and transport interchange. The Auckland Unitary Plan provides for significant Terrace Housing and Apartment Buildings (THAB) zoning around the Manurewa town centre, with a lesser amount around Clendon local centre.

An Integrated Area Plan for Manurewa, Takanini and Papakura was completed in 2017. It identifies key regeneration opportunities in Manurewa that can be activated in conjunction with public and private agencies. It builds on work already delivered that includes revitalisation of the Manurewa town centre and specific upgrades leading to the station, town centre and way finding. The Southern Initiative is working in the area to deliver a long-term programme of co-ordinated social and economic investment.

The Crown has large land holdings in both Clendon and Manurewa and there is the potential for larger scale redevelopment in the area in the longer term.

There is a feasible capacity of approximately 4300 dwellings.



	Manurewa	Clendon
Anticipated household growth 2018-2048 [1]	990	660
Anticipated population growth 2018-2048 [1]	1,330	410
Anticipated employment growth 2018-2048 [1]	290	290
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	100,000-150,000	0-100,000
Enabled housing capacity* [3]	20,820	14,310
Feasible development capacity 2017 [3]	2,730	1,570
Phasing / Sequencing	11-30 years	11-30 years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

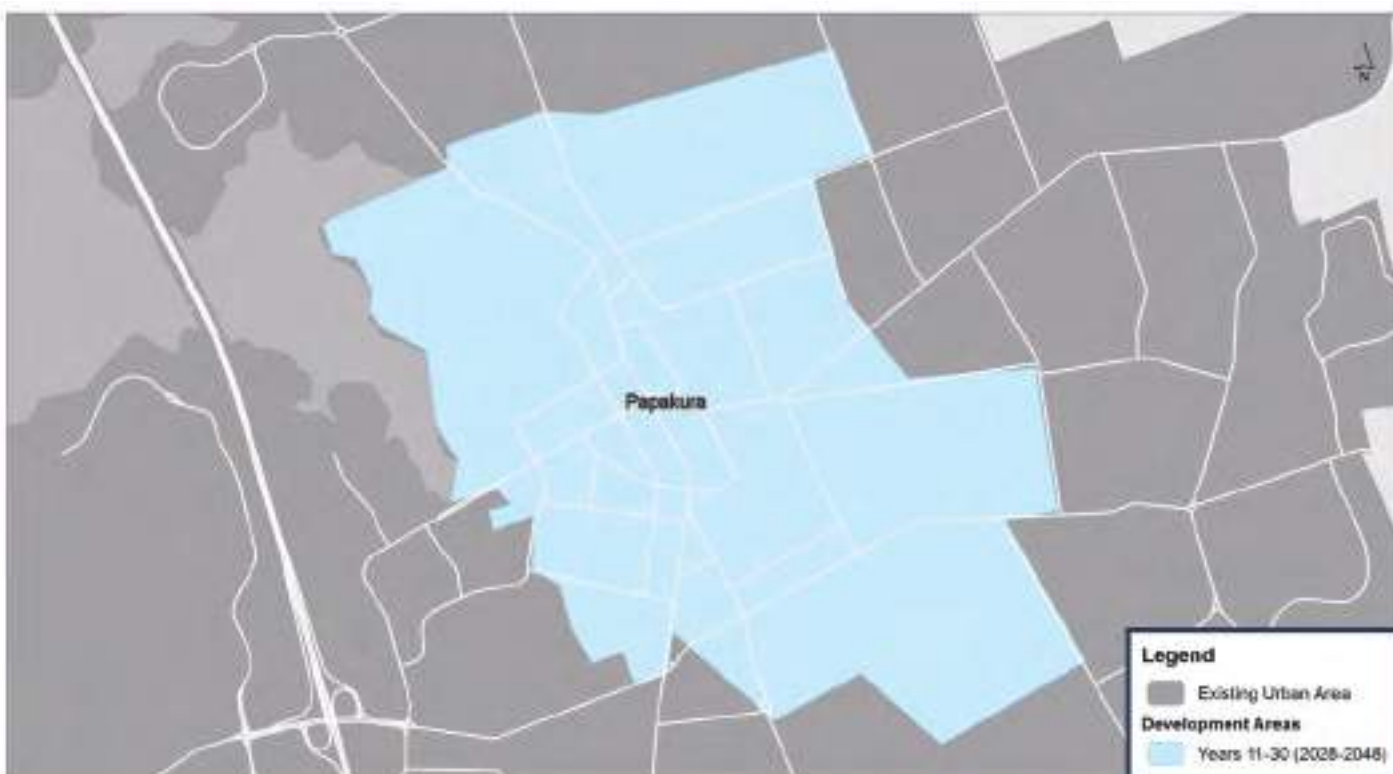
Development Area – Papakura

Papakura has good connections by rail and road both north and south. Papakura train station is the third busiest in Auckland with over 2000 people using it every day. The Auckland Unitary Plan provides scope for increased density with large areas zoned Metropolitan Centre, Terrace Housing and Apartment Building (THAB) and Mixed Use zoning.

An Integrated Area Plan for Manurewa, Takanini and Papakura was completed in 2017 and proposes to continue the revitalisation work already underway. This includes improvements to wayfinding for cycling and walking through the town centre, along greenways and to the station. The Southern Initiative is coordinating a long-term programme of investment to boost social, economic conditions and education opportunities in the area.

The Crown has large land holdings in the area and there is potential for larger scale redevelopment in the area in the longer term.

There is a feasible capacity of approximately 1530 dwellings.



Anticipated household growth 2018-2048 [1]	2,160
Anticipated population growth 2018-2048 [1]	4,730
Anticipated employment growth 2018-2048 [1]	1,240
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	0-100,000
Enabled housing capacity* [3]	16,610
Feasible development capacity 2017 [3]	1,530
Phasing / Sequencing	11-30 Years

*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Remaining existing urban area

As Auckland’s population grows, most urban areas will experience development and change. While much of this growth will occur in the nodes and development areas, some growth will take place in the remaining existing urban area. This could be in the form of subdivision, or the redevelopment of existing buildings/land parcels at higher densities.

Auckland’s many network of centres and road corridors play an essential role in accommodating both population and employment growth. As focal points of the community, higher density in and around centres and along corridors supports public transport, maximises infrastructure investment and contributes to a quality compact urban form. This area also accommodates major employment areas that are a resource for all of Auckland.

Many of Auckland’s neighbourhoods will also undergo smaller scale growth and change. Some of these areas have established character and heritage valued by the communities that live and work in them.

The remaining existing urban area has a feasible capacity of around 64,810.

Anticipated household growth 2018-2048 [1]	75,850
Anticipated population growth 2018-2048 [1]	150,300
Anticipated employment growth 2018-2048 [1]	49,590
Average no. jobs accessible within 45min morning peak public transport by 2026 [2]	N/A
Enabled housing capacity* [3]	515,740
Feasible development capacity 2017 [3]	64,810
Timing / Sequencing	1-30 Years

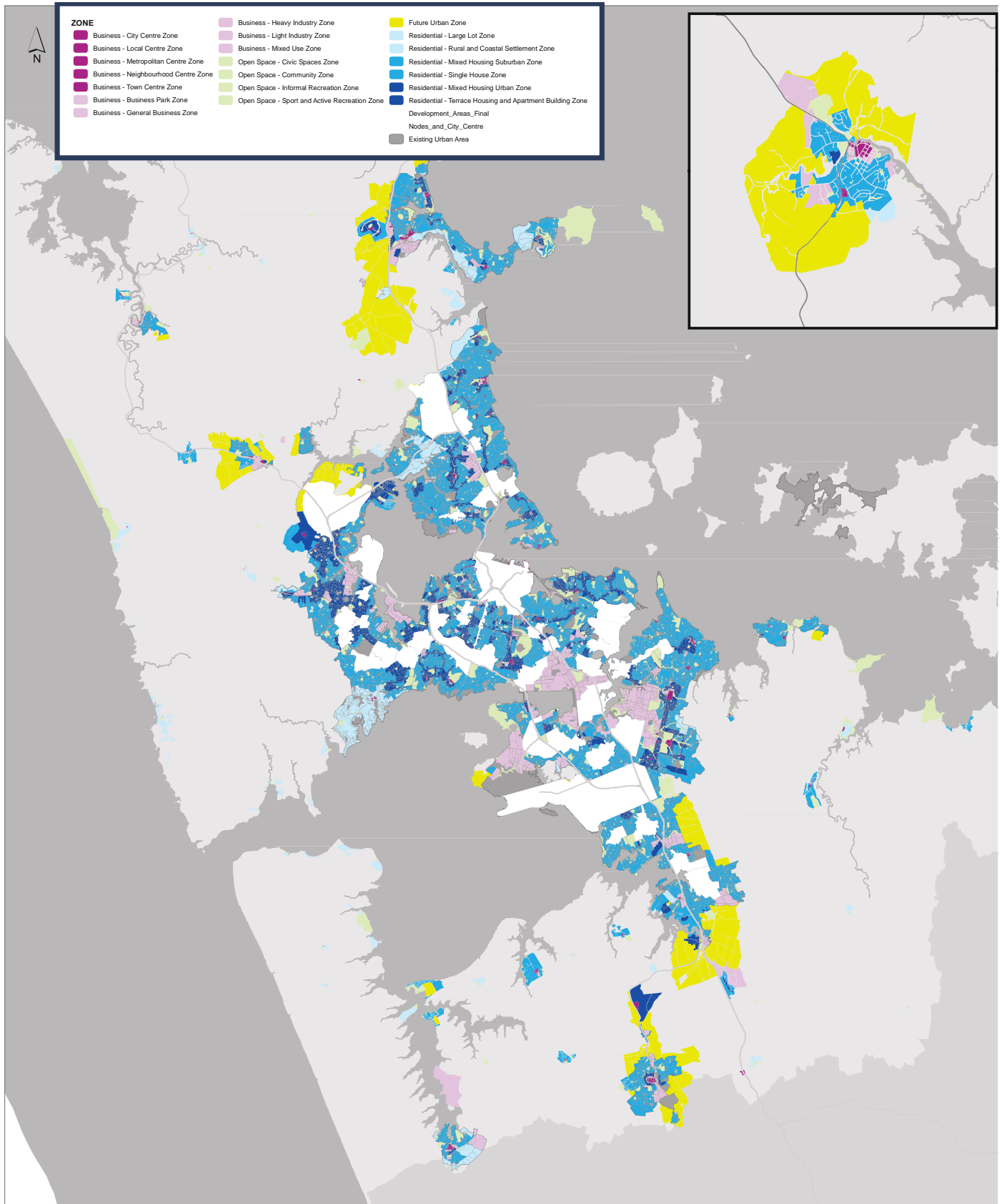
*does not include centres or mixed use zones

[1] Source: Household, population and employment growth figures are based on Auckland Council's land use scenario i11 v3

[2] Source: Auckland Transport Alignment Project Evaluation Report 2016

[3] Source Enabled housing capacity and feasible development capacity are based on the housing and business development capacity assessment for Auckland (December 2017)

Remaining existing urban area



Wynyard Quarter - the changing nature of industrial land

The Wynyard Quarter area on Auckland's waterfront has transformed over the last decade from being an industrial port closed to the public, to being a vibrant and dynamic experience for all Aucklanders and visitors.

The Wynyard Quarter covers a large area of around 37 hectares and has almost 3 kilometres of coastal frontage. The area was historically used by the timber trade, and from the 1930s began to be used for bulk petro-chemical storage. A range of other industrial, commercial and marine activities also operated in the area.

After 2005, changes to the way fuel was supplied to Auckland meant that much of the land was no longer required for bulk fuel storage. This allowed an opportunity for the area to be opened to the public and radically changed. It is now a vibrant place for living, entertainment and business.

The first stage of redevelopment was completed in 2011. That involved creating a substantial area next to the water's edge with ANZ Viaduct Events Centre, restaurants, cafés and open spaces for the public to enjoy.

The Wynyard Quarter is now home to GridAKL,³¹¹ an innovation precinct that provides the space for high-impact, growth-orientated, and technology focused businesses to establish, develop and grow.

Development continues in the Wynyard Quarter with residential accommodation, offices, a hotel and new parks and walkways expected in the short-term.



Placemaking at New Lynn

New Lynn is a great example of successful placemaking in Auckland.

In the 1990s New Lynn centre was in decline, as were local employment opportunities.

This was because of a general decline in manufacturing and because several major arterial roads and the North Auckland railway line cut through the centre.

The gradual decline of the centre could be seen in the quality of its built environment.

New Lynn was identified as a centre of strategic importance. This provided a strong signal for the substantial shared investment and development effort across multiple agencies that were needed to improve the town centre, and create additional residential and employment opportunities.

A community-led place-making process resulted in a master plan that would eventually see its revitalisation and transformation over the coming decades.

It was a transformational vision for New Lynn as a major urban growth area, based on the principles of a transit oriented development.

It opened up opportunities for a more connected and integrated urban environment and included:

- development of a new war memorial library, public plaza, Olympic Park, Rewarewa pedestrian bridge, and the New Lynn rail station and bus interchange
- the upgrade of Totara Avenue and Todd Triangle as shared spaces

- trenching and covering the North Auckland rail line through New Lynn to enable better connections in and around the town centre
- upgrades of Clark Street, Great North Road and associated link roads
- an extension to Clark Street with a new roadover-rail bridge.

This large-scale public investment and development was sustained over more than a decade, and was vital for New Lynn's transformation into a more market attractive centre.

The transport and public realm investments were largely complete by 2012 and the New Lynn rail station, a key transport interchange for west Auckland, is now the busiest rail station on the western line.

A number of plan changes between 2007 and 2012 supported further intensive residential development in and around the centre. There were two key developments - Crown Lynn and the Merchant Quarter. Both sites now include upgraded urban spaces with designs that reflect New Lynn's history.

Today the streets and public spaces are more pedestrian-friendly, with new public facilities, space for more businesses, and higher density housing within walking distance of the train station.

Through place-making, New Lynn has become a better connected, high-quality centre, with the infrastructure to support market-led growth.



Advanced industries

Auckland's advanced industries are an important part of the wider economy. These encompass research and development intensive industries that offer high levels of science, technology, engineering and mathematics employment.

Our advanced industries are growing. They are important as they are globally competitive in major markets, they are highly productive, they pay well, and they tend to cluster and agglomerate.

Being located close to transport routes, the Auckland International Airport and major centres is also important.

There is a heavy concentration of advanced industries in Auckland's city centre – 30 per cent of all advanced industry jobs are within two kilometres. There are also concentrations in Ōnehunga, Penrose, Mt Wellington, Ellerslie, and East Tāmaki/Highbrook industrial areas.

Fisher and Paykel Healthcare, Highbrook



Auckland's electricity network

A secure and reliable electricity supply is essential to Auckland's success.

There are three elements of a secure and reliable electricity supply:

- generation
- transmission
- distribution.

Auckland relies on other parts of the country for most of its electricity generation and supply. Generation sources in the central North Island and South Island are predominantly renewable hydro, wind and geothermal. They provide 95 per cent of Auckland and Northland's peak electricity demand.³¹²

Transpower's transmission network traverses Auckland and supplies electricity to Northland. As the network crosses Auckland, electricity is transferred to local distribution lines via a series of exit points, including substations at Ōtāhuhu, Penrose and Mt Roskill. Local distribution companies deliver electricity to homes and businesses. In Auckland, Vector and Counties Power have the responsibility of distributing electricity locally

Since 2010, Transpower has made substantial improvements to the transmission network. This investment means the core network is now in place, providing adequate capacity beyond 2040. Ongoing maintenance projects will ensure the reliability of the network continues over the next 30 years.

Future demand for electricity

Auckland's continued growth is reflected in projected increases in the region's electricity demand.

Auckland's population growth and the impact of new technologies create a degree of uncertainty about future electricity consumption. However, it is anticipated that Auckland's electricity demand will remain at least as high as it is now with increases of about one per cent per year over time.³¹³

New and emerging technologies will mean the electricity network will operate differently in the future. This may provide an opportunity to defer future investments.³¹⁴

For example, battery technology is continuing to develop and, in time, will impact significantly on the network. In the long term, it is anticipated that battery or other storage technologies will cover short-term imbalances in

supply and demand and smooth out daily peaks.

Energy efficiency will also continue to play its part in reducing overall electricity demand in a variety of ways.

These include:

- industry improvements
- new houses being built
- retrofitting existing housing stock
- continued evolution of energy efficient products.³¹⁵

Many new technologies are expected to reduce consumption. This may be partially offset by the uptake of electric vehicles. This uptake could be rapid due to associated benefits such as emission reductions and lower running costs.

In future, it is expected that electric vehicle batteries could have capability to be part of a battery network. This would provide services when the vehicle is plugged in to charge overnight.

Auckland's horticultural production

Over 7000 hectares of land in Auckland is used for horticultural production.

Auckland's main horticultural produce includes onions, potatoes, kiwifruit, lettuce, broccoli, wine grapes, cabbage, olives, cauliflower, pumpkin, carrots, avocados and strawberries.

Horticultural production relies on access to fresh water and quality soils.

Franklin in the south has the majority of Auckland's quality soils and a significant proportion of Auckland's horticultural produce is grown here. Vineyards are becoming a feature of Auckland horticulture – there are now over 100 vineyards in Auckland, including notable activity in Matakana, Kumeu, Clevedon and Waiheke Island.

Technological change, such as enhanced harvesting efficiency, packaging and sorting, has resulted in productivity gains in the horticultural industry.

In the medium to long-term, more technological change is expected. This will impact on how food is grown and processed, and will meet a growing demand for safe, fresh and healthy foods. It will also enable the production of larger volumes of food at a lower price.

For further reading

Martin Jenkins and Infometrics (2016). Upper North Island key sector trends to 2015 and labour demand to 2020. Prepared for the Upper North Island Strategic Alliance.³¹⁶

Curran-Cournane, F., Vaughan, M., Memon, A. and Fredrickson, C. (2013). Auckland's elite and prime land: similar messages and continued trade-offs 54 years later. Auckland Council technical report, TR2013/050.

