

Tāmaki – Whenua Taurikura Auckland Future Development Strategy 2023-2053

As required by the National Policy Statement on Urban Development 2020





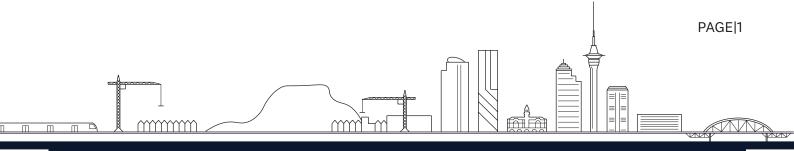
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He Mihi

Tērā tō waka te hoea ake e koe i te moana o te Waitematā kia ū mai rā ki te ākau i Ōkahu.

Ki reira, ka mihi ake ai ki ngā maunga here kōrero, ki ngā pari whakarongo tai,

ki ngā awa tuku kiri o ōna manawhenua, ōna mana ā-iwi taketake mai, tauiwi atu

E koro mā, e kui mā i te wāhi ngaro, ko Tāmaki Makaurau tā koutou i whakarere iho ai,

ki ngā reanga whakaheke, ki ngā uri whakatupu - ki tō iti, ki tō rahi.

Tāmaki – makau a te rau, murau a te tini, wenerau a te mano. Kāhore tō rite i te ao.

Tō ahureinga titi rawa ki ngā pūmanawa o mātou kua Whakakāinga ki roto I a koe.

Kua noho mai koe hei toka herenga i ō mātou manako katoa. Kua ūhia nei mātou e koe ki te korowai o tō atawhai, ki te āhuru o tō awhi.

ki te kuku rawa o tō manawa.

He mea tūturu tonu whakairihia,

hei tāhuhu mō te rangi e tū iho nei,

hei whāriki mō te papa e takoto ake nei.

Kia kōpakina mātou e koe ki raro i te whakamarumaru o āu Manaakitanga.

E te marae whakatutū puehu o te mano whāioio, e rokohanga nei i ngā muna, te huna tonu i ō whāruarua i ngā hua e taea te hauhake i ō māra kai, i ngā rawa e āhei te kekerihia i ō pūkoro. Te mihia nei koe e mātou.

Tāmaki Makaurau, ko koe me tō kotahi i te ao nei, nōku te māringanui kia mōhio ki a koe,

kia miria e te kakara o te hau pūangi e kawe nei i ō rongo. Ka whītiki nei au i taku hope ki ngā pepehā o onamata, ki ōku tūmanako mō āpōpō

me ōku whakaritenga kua tutuki mō te rā nei.

Tāmaki Makaurau, tukuna tō wairua kia rere.

Let your canoe carry you across the waters of the Waitematā until you make landfall at Ōkahu.

There, to greet the mountains, repository of all that has been said of this place,

there to greet the cliffs that have heard the ebb and flow of the tides of time,

and the rivers that cleansed the forebears of all who came those born of this land and the newcomers among us all.

To all who have passed into realms unseen, Auckland is the legacy you leave to those who follow,

your descendants – the least, yet, greatest part of you all. Auckland – beloved of hundreds, famed among the multitude, envy of thousands.

You are unique in the world.

Your beauty is infused in the hearts and minds of those of us who call you home.

You remain the rock upon which our dreams are built.

You have cloaked us in your care,

taken us into the safety of your embrace,

to the very soul of your existence.

It is only right that you are held in high esteem,

the solid ground on which all can stand.

You bestow your benevolence on us all.

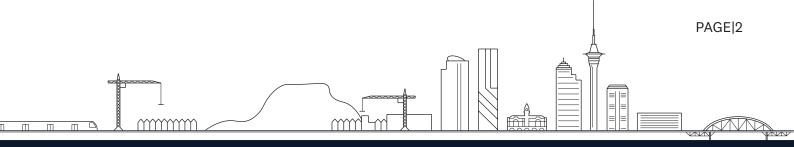
The hive of industry you have become motivates many to delve the undiscovered secrets of your realm, the fruits that can still be harvested from your food stores and the resources that lie fallow in your fields. We thank you.

Auckland you stand alone in the world, it is my privilege to know you.

to be brushed by the gentle breeze that carries the fragrance of all that is you.

And so I gird myself with the promises of yesteryear, my hopes for tomorrow and my plans for today.

Auckland let your spirit soar



He Whakarāpopototanga | Executive summary

Tāmaki Makaurau Auckland is anticipated to grow and change significantly over the next 30 years. Our population is expected to grow by around 520,800 people to a total of 2,230,800. The make-up of that population will change too – our population will be older, households will be smaller, and we will be even more multi-cultural.

It is important for Tāmaki Makaurau, and of national importance, that the region builds on its strengths, takes up its opportunities, and addresses its challenges. We need to accommodate our growing population, support quality-built environments and ensure a strategic and integrated approach to growth.

This is a time of uncertainty; climate change, severe weather events, environmental degradation, inequity, the COVID 19 pandemic, a changing legislative context and potentially major city-shaping transport infrastructure. These issues, and others, are forcing society to examine and challenge long-established ways about how we live and the impacts that this has on society and environmental well-being. How could we make better choices, not only now but also for the future?

Achieving a resilient, equitable and liveable Tāmaki Makaurau is a huge challenge that will take time. This Future Development Strategy focuses on the long-term future of Tāmaki Makaurau. It is our plan to manage growth for the next 30 years and provide sufficient residential and business land capacity – in terms of the quantum and location – to support urban growth and create a competitive market for land. It seeks to integrate long-term land use and infrastructure planning while meeting future climate, environmental, population, housing and employment needs. This requires the public and private sectors to work together to deliver quality urban growth and the best outcomes for Auckland.

This Strategy identifies a number of significant challenges that will not only impact the way we grow and develop, but also how we live and change behaviours over time. In its spatial response the Strategy continues the quality compact, multi-nodal model established in previous strategies, with further refinement of concepts and approaches.

It does however have two significant changes from previous strategies:

- 1. A much stronger focus on adaptation, particularly in relation to flooding hazards and the protection of life and property.
- 2. A greater recognition of the financial challenges facing Auckland Council and ratepayers, and giving the development sector clear signals about these constraints and when council is likely to be able to invest in infrastructure and services in respective areas, especially in greenfields. The aim is to give the sector as much certainty as possible for their own planning and outline the meaningful role it can play in the development of Tāmaki Makaurau.

Figure 1 gives an overview of the essence of this Future Development Strategy; the significant challenges that need to be addressed, the core direction of the Strategy in response, and the key actions that flow from this.

In setting this direction the Future Development Strategy not only meets the intent behind the National Policy Statement on Urban Development 2020, such as ensuring sufficient residential and business development capacity, it also recognises the uniqueness of Tāmaki Makaurau, its people and its communities. Growth, the respective needs and hopes of all people, and a healthy environment and economy must be considered together when planning for the future. That is what the Future Development Strategy aims to achieve.

OVER-ARCHING CHALLENGES Need to adapt to the current and Ensuring Spatial Ongoing future effects of growth and planning in an Funding environmental climate change change is constraints uncertain degradation and reduce environment equitable greenhouse gas emissions **CORE DIRECTION** Focus funding and Avoid enabling growth in Continue implementing a investment where it will places that will put current quality compact achieve the greatest and future Aucklanders in approach to deliver on benefit and social return harm's way strategic outcomes **KEY ACTIONS Prioritise** Remove future adaptation **Enable more** urban areas Identify a small investment Support local growth in where new number of where it is investment in development areas with needed most, investment would put life key locations fewer accounting for priority areas and property constraints risk and adaptive at risk capacity

Figure 1 - Overview of Future Development Strategy



Wāhanga | Part 1: Horopaki - Context

1.1 What is the Future Development Strategy and why are we revising it?

Under the National Policy Statement on Urban Development (NPS-UD) 2020, the purpose of the Future Development Strategy is to promote integrated, long-term strategic planning to help the council set the high-level vision for accommodating urban growth over the long term and identify strategic priorities to inform other development-related decisions. It aims to:

- achieve well-functioning urban environments
- ensure there is sufficient development capacity
- integrate planning and infrastructure planning and funding.

Tāmaki Makaurau is anticipated to grow and change significantly over the next 30 years. The population is expected to continue to grow by around 520,800 people to a total of 2,230,800.

To make sure that we build on its strengths and hold on to the things dear to us during this change, we need to plan for how and where Tāmaki Makaurau will grow – this is the role of the Future Development Strategy.

Climate change, weather events, environmental degradation, inequity, the COVID pandemic, a changing legislative context and potentially major city-shaping transport infrastructure; this is a time of uncertainty. These issues, and others, are forcing society to examine and challenge long-established ways about how we live and the impacts that this has on society and environmental well-being. How could we make better choices?

It is important to respond to events as they happen. The council and central government have, and are, responding to financial challenges, COVID 19 and flooding events through immediate, on the ground action.

It is also important to look further ahead and understand where we want, and need, to go. Are individual responses to events leading us in the direction Tāmaki Makaurau should be going over the longer term? Is the strategic direction council has set – through for example Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan, the Transport Emissions Reduction Pathway, the Auckland Water Strategy – being achieved and delivered?

Then there is also central government driven change through its legislative programme, particularly through the National Policy Statement on Urban Development 2020 and environmental and climate legislation. This change has significant implications on Tāmaki Makaurau.

This document aims to deal with this significant uncertainty and level of change in a land use sense. It replaces the existing Auckland Plan 2050 Development Strategy 2018 and the Future Urban Land Supply Strategy 2017. The rest of the Auckland Plan 2050 remains in place, including the six Auckland Plan outcomes. The Auckland Plan 2050 and the Future Development Strategy work together to set the high-level direction for Auckland over the long-term.

Still, despite this uncertainty the revision of the Future Development Strategy is an opportunity to build an integrated strategic approach for resilient urban, future urban, rural and business environments, that protect and restore the natural environment and make best use of infrastructure and scarce funding.

It considers spatial priorities and how we might achieve the greatest benefit for the region as a whole, rather than considering outcomes in isolation or in separate geographic areas. It considers the trade-offs needed in these times of significant economic constraints.

This Future Development Strategy satisfies the statutory requirements under both the Local Government (Auckland Council) Act 2009 and the National Policy Statement on Urban Development 2020. However, it is also much more than a statutory requirement – it provides significant opportunity for Tāmaki Makaurau to forge its own future direction, based on its unique characteristics and aspirations.

1.2 How Tāmaki Makaurau has grown?

1.2.1 Land has sustained communities in Tāmaki Makaurau for centuries

Tāmaki Makaurau has a rich and dynamic history of hapū and iwi occupation and settlement of nearly 1000 years.

The rich natural resources, fertile volcanic soils, pristine waters, strategic vantage points, transport routes and portages providing access to the east and west coasts of the North Island, is reflected in its name; Tāmaki desired by many. Discovery of place, intermarriage, battles for strategic sites and seasonal migration contribute to cultural landscapes that tell the history and presence of the relationships and associations each hapū and iwi has with the land and waterways of Tāmaki Makaurau.

In September 1840, Ngāti Whātua chief Apihai Te Kawau gifted 3000 acres to establish Tāmaki Makaurau as the capital of New Zealand. Tāmaki Makaurau has grown much wider, from Te Hana to Pukekohe and the islands within the Waitematā and the coasts of the Manukau and Kaipara Harbours.

1.2.2 The 19th and 20th centuries

New people came to live in Tāmaki Makaurau, bringing new ideas, values, and practices.

Neo-colonial land development and management, with a desire to extract, contain and control the environment replaced Māori resource management approaches based on kinship, reciprocity and kaitiakitanga. These practices had, and continue to have, drastic effects on te taiao (the environment), the breakdown of ecosystems and the degradation of whenua (land) and wai (water), in direct contradiction to Māori knowledge and practices, and to the detriment of mauri (life force).

Initial settlement by both Māori and European tended to cluster around waterways and the waterfront for access to natural resources, water transport and trade. However, as the population grew, development spread further afield enabled by infrastructure projects such as water supply, rail and roads. While this development helped some Aucklanders prosper, it often came with ongoing costs to the region's natural environment.

By the early 1900s Tāmaki Makaurau had become New Zealand's largest city and suburban development had extended to the central isthmus and parts of the North Shore. Electric tramways serviced major routes such as New North, Dominion, Mt Eden and Manukau roads, leading to significant growth in the suburbs they served. Up until 1945, movement around the city was predominantly by trams, walking and cycling. This created a series of 'villages' each with their own distinct character.

After World War Two, the urban area in Tāmaki Makaurau started to expand, largely enabled by growing private car ownership and the opening of the Auckland Harbour Bridge in 1959. The resulting pattern of lower density suburbs, further enabled by the motorway system and widespread car ownership, is still the dominant feature of urban form in Tāmaki Makaurau to this day.

1.2.3 Today

The urban area of Tāmaki Makaurau is now home to over 90% of its residents. The urban area covers approximately 20% of the region's land mass with development focused along a narrow axis stretching from Ōrewa in the north to Drury in the south. The physical form influences the flow of goods and services, including to and from the port and airport, the two international gateways to Tāmaki Makaurau.

The urban area is surrounded by extensive rural areas which contribute significantly to the region's natural environment (beaches, harbours, maunga (mountains) and the surrounding ranges), character, economy, and provides much of the region's food supply. Rural Tāmaki Makaurau also has a network of rural towns and villages.

The Hauraki Gulf Islands are a distinctive feature of Tāmaki Makaurau, significantly contributing to local economies through tourism while providing unique and often ecologically significant landscapes. The island communities face different challenges to rural communities on the mainland, especially employment, housing and infrastructure.

As New Zealand's largest city, Tāmaki Makaurau continues to grow, but with a focus on intensification within the existing urban area and a shift towards more intensive forms of housing such as townhouses, units and apartments.

More dwellings are locating close to public transport and services, providing more opportunity for people to access their daily needs locally and be less dependent on private vehicles.

1.2.4 Spatial and growth planning in Tāmaki Makaurau

Spatial planning in Tāmaki Makaurau has evolved significantly over the last 20-30 years. This has been a process of on-going refinement, starting with the Auckland Regional Growth Strategy in 1999 through to the adoption of the Auckland Plan 2050 in 2018. This Future Development Strategy builds on the previous iterations and replaces the 2018 Development Strategy.

The key aspects to accommodating future growth in Tāmaki Makaurau are:

Quality compact growth applies a consistent approach and provides for most growth in the existing urban area through strengthening existing centres and neighbourhoods, particularly those with good access; some growth in future urban areas (greenfield) and limited growth in rural areas.

The **quality** of design is integral to how Tāmaki Makaurau functions, which affects our overall wellbeing. Good design contributes to making a sustainable, attractive, equitable and desirable place for all Aucklanders.

The **existing urban area** in Tāmaki Makaurau consists of a variety of interconnected neighbourhoods, centres and business areas, which support where most Aucklanders live, work and spend their leisure time (as defined by the urban extent in 2016).

Future urban areas are new greenfield areas to be established on the fringe of the existing urban area, and in rural and coastal settlements.

The multi-nodal approach reinforces the urban form of Tāmaki Makaurau, defining the north, northwest and southern focal points for sub-regions. They provide a spatial structure where the city centre, Albany, Westgate and Manukau are critical to growth across the region.

Aligning growth with infrastructure provision to support development and change in existing and new communities, in the right place at the right time.

Identifying spatial priorities to focus investment in a limited number locations that will achieve the greatest benefits, across multiple outcomes. This means investing primarily in existing urban areas, with a strong focus on aligning land use and infrastructure.





Wāhanga | Part 2: Tā mātou anga mokowā e whai rautaki ana Our strategic spatial framework

In this time of uncertainty we cannot predict all possible futures. What we can do is set a vision for the built environment that clarifies what we collectively aim to achieve in Tāmaki Makaurau.

To achieve the vision, and help guide its development, this Future Development Strategy is anchored around a guiding strategic spatial framework.

This framework seeks to ensure that the council clearly identifies and considers the overarching

long-term challenges for Tāmaki Makaurau over the next 30 years and honours Te Tiriti o Waitangi during its development and implementation.

To respond to these long-term challenges, this Future Development Strategy sets out the council's desired future spatial outcomes, the principles it will apply in responding to future growth and change, and outlines a set of actions, both spatial and non-spatial, to guide future growth towards achieving our vision.

Future Development Strategy Strategic Spatial Framework		
Our vision	Auckland's built environment underpins the development of prosperous, inclusive, and vibrant communities. Quality development helps to regenerate the environment and deliver our commitments to greenhouse gas emission reduction as we grow and change.	
Te Tiriti	Honouring Te Tiriti o Waitangi and enabling Te Tiriti outcomes	
Hapū and iwi values and aspirations for urban development	Mauri, Rangatiratanga, Mana Motuhake, Mātauranga Māori, Kaitiakitanga, Manaakitanga	
Over-arching challenges	 Climate change and its impacts Spatial planning in an uncertain and changing environment Halting the ongoing degradation of the natural environment Achieving equitable growth and change Investing in infrastructure in a financially constrained environment 	
Spatial outcomes	 Tāmaki Makaurau is viewed as an interconnected living system Development achieves high quality living environments Disparities in our communities and investments are addressed Development results in resilient built systems, natural environment and communities 	
Principles for a quality compact approach to growth and change	 Reduce greenhouse gas emissions Adapt to the impacts of climate change Make efficient and equitable infrastructure investments Protect and restore the natural environment Enable sufficient capacity for growth in the right place at the right time 	
Inputs to our spatial response	Conceptual growth scenarios Constraints on development Development capacity	
Our spatial response	Spatial scales Spatial environments Prioritising areas for development Approach to natural hazard constrained areas Approach to iwi development	
Implementation	Actions to implement this Future Development Strategy	

2.1 Te Tiriti o Waitangi

Māori have enduring rights and interests affirmed under Te Tiriti o Waitangi/the Treaty of Waitangi and as indigenous peoples under international law. Te Tiriti o Waitangi provides the foundation for a partnership approach between Te Kaunihera o Tāmaki Makaurau Auckland Council and mana whenua. Te Tiriti creates the foundation for a dynamic and enduring relationship that enriches the future of Tāmaki Makaurau with the unique knowledge, wisdoms, practices, and aspirations of te ao Māori. The council recognises mana whenua as kaitiaki, contributors to the economy, and leaders within Tāmaki Makaurau.

The council is committed to meeting its statutory responsibilities to Māori in Tāmaki Makaurau and recognises these fall within a local government Tāmaki Makaurau context. Responsibilities also include giving effect to the overall intent and relevant provisions of individual iwi Treaty Settlements.

Through our ongoing relationships and engagement with mana whenua their voice, values, aspirations, and challenges have informed the strategic direction of the Future Development Strategy, shaped the spatial outcomes and influenced the principles for change and growth.

Auckland Council recognises 19 mana whenua entities representing hapū and iwi in Tāmaki Makaurau.

Ngāti wai	Ngāti Rehua Ngāti Wai ki Aotea
Te Rūnanga o Ngāti Whātua	Ngāti Manuhiri
Te Uri o Hau	Ngāti Whātua o Kaipara
Te Kawerau ā Maki	Ngāti Whātua Ōrākei
Te Ākitai Waiohua	Ngāi Tai ki Tāmaki
Te Ahiwaru	Ngāti Tamaoho
Ngāti Paoa	Ngāti Te Ata Waiohua
Ngaati Whanaunga	Ngāti Maru
Te Patukirikiri	Ngāti Tamaterā
Waikato-Tainui	

Each mana whenua entity asserts and maintains its rangatiratanga and mana motuhake. Mana whenua have a wide range of interests in the council's activities and participate individually and collectively across issues, spatially, and through

time. Environment and iwi management plans detail their interests and values as they apply in resource management matters to guide resource management practitioners (including the council in its role as regulator). The mana whenua-council relationship is not the only relationship mana whenua must navigate and the council is mindful of the demands on time and resources engagement and partnership can require.

Te Tiriti o Waitangi, growth and development

Te Tiriti guaranteed Māori authority over their lands and villages. Land confiscation and alienation of Māori land by the government occurred in Tāmaki Makaurau within a few decades of the signing of the Treaty leaving iwi and hapū virtually landless. In addition, statute, regulations, and policy were tools used to advance settler outcomes and which continue to undermine Māori socio-economic outcomes.

If land was retained, it was often in places of little economic use or importance. These are now places of ecological importance or significance with associated restrictions and community expectations of use.

The council recognises that land returned through Treaty settlements and Māori land is often located outside of the existing urban and future urban areas and there are therefore development limitations that disadvantage Māori socio-economic opportunity and undermine redress intent.

The use and development of Māori land including Treaty Settlement land¹ by Māori needs to be enabled as provided for in Te Tiriti (and intended by Treaty Settlements). As an overarching principle and commitment to Te Tiriti, the use and development of Māori land by Māori wherever these lands are situated needs to be enabled, provided off-site impacts are avoided, remedied, or mitigated. The council will work collaboratively with iwi to help facilitate their economic, cultural and social objectives.

Many of the region's iwi have largely rural or coastal rohe or heartlands and there is a reverse sensitivity of wider community values, undermining iwi socioeconomic wellbeing and a perverse outcome of forcing iwi to invest in the rohe or heartlands of other iwi, away from their ancestral lands and identity.

Iwi² economic wellbeing through the use and development of iwi-controlled or iwi-owned lands³ or 'significant iwi developments' within the rohe or heartland of iwi that may not otherwise be within the urban or future urban area of Auckland needs to be enabled.

¹See Auckland Unitary Plan definitions of Māori land and Treaty Settlement Land (Chapter J)

²See Auckland Unitary Plan Glossary of Māori terms (N1)

³ An implementation action of this strategy (see Part 5) is to investigate strengthening AUP provisions to further enable Māori economic, social and cultural development. As part of this implementation action, the FDS envisages inclusion of a definition for iwi-controlled and iwi-owned lands. This could include:

at least 50% iwi ownership

[•] iwi commercial development being 25% or more, provided the development is identified in an iwi planning or strategic document (i.e. Iwi Management Plan, Strategic Plan, Annual Plan) setting out how the development contributes to the economic, social and cultural wellbeing of the iwi.

2.2 Hapū and iwi values and aspirations for urban development

The 19 mana whenua organisations representing hapū and iwi interests in Tāmaki Makaurau have consistently articulated their concerns, challenges, issues, needs and aspirations to the council. The following values and aspirations have been drawn through engagement on the Future Development Strategy and earlier feedback on other strategies and plans, in particular strategic input and advice on Te Tāruke-a-Tāwhiri: Auckland's Climate Action Plan and the Auckland Water Strategy.

2.2.1 Values

Values and relationships underpin te ao Māori. How they are defined, applied and practiced is shaped by the environments, aspirations, and histories of each hapū and iwi. The most common values are:

Mauri – often translated as life force or life principle, every animate and some inanimate objects have mauri. Mauri is strong in a well-functioning ecosystem and once gone cannot return. Mauri as a value ensures all decisions are made to ensure living systems are recognised, protected and supported to flourish.

Rangatiratanga – From Article 2 of the Māori language version of the Treaty, it conveys the idea of unqualified exercise of Māori chieftainship over their lands, villages and all their taonga. Rangatiratanga is associated with sovereignty, leadership, autonomy to make decisions, and self-determination. This includes leadership within the whānau and community, as well as leadership within business and politics¹.

Mana Motuhake – To exercise authority over one's own affairs through self-reliance, self-determination, independence. Mana through self-determination and control over one's own destiny.

Mātauranga Māori – a holistic body of knowledge founded on the interactions within and between systems, shaped through almost 1000 years of observation and interaction with te taiao in Tāmaki Makaurau. The mātauranga of each hapū and iwi was shaped by their local environments.

Kaitiakitanga – the inherent obligation that each hapū and iwi as tangata whenua have for maintaining the wellbeing of the environment, including people, within their rohe. From a Māori world view, people are the younger kin to the environment and have a responsibility to maintain balance and equilibrium.

Manaakitanga – at the heart of manaakitanga is relationships. Manaakitanga is the active reciprocity and generosity between those in a relationship, regardless of whether a relationship is fleeting or enduring.

⁴ https://www.imsb.maori.nz/maori-wellbeing-in-tamaki-makaurau/rangatiratanga/



2.2.2 Aspirations for urban development

The specialised knowledge and wisdoms that each hapū and iwi have brings opportunities for innovative solutions to many of today's challenges at all levels of decision-making. Mana whenua seek a greater reciprocal and mutually beneficial partnership with Auckland Council as guaranteed by Te Tiriti o Waitangi (the Treaty).

Adopting the wisdom of Māori knowledge developed from living in Tāmaki Makaurau for hundreds of years, enables an integrative approach to robust decision-making. Being supported and valued as specialists to undertake kaitiaki responsibilities applying Māori knowledge and practices can ensure development and growth is regenerative and supports outcomes for all.

Development has detrimentally impacted mauri but low impact design, quality compact urban environments and creating ecological corridors can support ecosystems and native biota to flourish. Development that restores and enhances the environment through riparian planting with appropriate native species will enable the environment to regenerate and sustain mauri.

The natural infrastructure – forests, bush, waterways and water bodies, must be valued at least the same as physical infrastructure so financial decisions are not made in isolation of wider implications and future costs.

Wetlands once a prominent feature of Tāmaki Makaurau have been drained, contaminated or destroyed. Their importance to the ecosystem, inherent to mātauranga Māori, is only now being recognised as critical to sustaining the environment. Where these cannot be restored, protecting existing and creating new wetlands must be part of the way forward.

Tāmaki Makaurau has been bereft of mana whenua histories and presence but development is an opportunity to honour Te Tiriti and to share tribal histories and stories with all Aucklanders and visitors through sensitive and appropriate design, art, and names.

The remnants of mana whenua occupation are under constant pressure of loss through development. Māori sites across the region require immediate assessment and protection to ensure they are not destroyed or obscured, like view shafts of maunga – features that are spiritual, cultural and navigational markers.

Development is an enabler for mana whenua to be significant contributors to the economy of Tāmaki Makaurau and Aotearoa New Zealand. Mana whenua led development puts people and the environment first, creating practices and shaping the landscape in a way that benefits Tāmaki Makaurau and future generations.

Breaches of Te Tiriti o Waitangi have created ongoing and profound inequities that continue to impact hapū and iwi today. Actively protecting and providing for the rights guaranteed by Te Tiriti, including development rights, is critical.

The return of land through Treaty settlements often in areas constrained by the planning system creates new inequities. This requires recognition to mitigate these inequities and create different solutions that enable equitable outcomes.

Land loss has had a compounding impact on and continues to affect intergenerational socio-economic outcomes. The unaffordability of the housing market in Tāmaki Makaurau and a planning system that limits development of Māori land are barriers to mana whenua living and thriving here.

Partnering with council and developers, simplifying housing processes, and supporting papakāinga on Māori land and around marae are suggested solutions to bring whānau home.

Land loss and environmental degradation has affected customary practices and access to cultural food sources, consequently dislocating many Māori from their cultural heritage and knowledge.

Restoring and enhancing waterways, waterbodies, mahinga kai sites, and the ngahere is fundamental to an equitable future for biota, mana whenua and all Aucklanders.

Development must provide broader outcomes for all Aucklanders. Food sovereignty is critical and development must enable spaces for whānau to grow their own food and provide safe places for tamariki to play and socialise particularly in higher density areas.

Incentivising developers, landowners and communities to create urban ngahere and grow the canopy across the city will potentially mitigate the impacts of climate change. This encourages all residents and communities, with the council, to protect green areas for flood retention and mitigation such as swampland, as part of mitigation for climate change.

2.3 Over-arching challenges

The Auckland Plan 2050 sets out three key challenges that must be addressed to achieve the Tāmaki Makaurau we want by 2050:

- Population growth and its implications
- Sharing prosperity with all Aucklanders
- Reducing environmental degradation

These three challenges providecontext for the Future Development Strategy. The wider challenges for strategic planning and how Tāmaki Makaurau grows spatially over the next 30 years are described below.

2.3.1 Climate change and its impacts

The likely impacts of climate change on Tāmaki Makaurau are well established. The impacts will not only be environmental, but will also affect the cultural, social and economic wellbeing of Aucklanders. The impacts of climate change are far reaching and inform all of the other over-arching challenges that need to be addressed.

These impacts are a challenge for spatial planning in several ways. They can be broadly categorised into climate change mitigation challenges, and climate change adaptation challenges.

In terms of climate change mitigation, spatial planning plays a key role in shaping and re-shaping the urban form. Urban form can have a significant impact on ensuring as much residential and business development as possible is located close to key public transport nodes and routes, and that active modes of travel are real options for certain types of trips. This is necessary to help support emission reductions from the transport sector. If development occurs in far flung locations (both greenfield and brownfield) remote from good public transport services, the ability to reduce emissions from transport is impacted.

This means that spatial planning should seek to avoid, as far as possible, new greenfield development in locations that are not, or will not, be serviced by good quality public transport services. At the same time, planning for higher density development close to centres, key employment hubs, and good quality public transport is critical.

In terms of climate adaptation, many brownfield and greenfield locations are at significant risk from natural hazards and disasters exacerbated or generated by climate change. Spatial planning can provide high level direction as to how such risks are to be managed into the future. Specifically, spatial planning can provide direction to ensure more development does not occur in high-risk areas, thereby protecting people and property from harm.

2.3.2 Spatial planning in an uncertain and changing environment

The unexpected events of the past few years have impacted the rate of growth and development in Tāmaki Makaurau and have arguably resulted in greater appreciation of the need to, and value of, planning for the future.

The COVID-19 pandemic slowed short-term growth in Tāmaki Makaurau, particularly through border closures. New Zealand's borders are now open, and the population is once again increasing with significant long-term growth expected in Tāmaki Makaurau over the next 30 years. There are ongoing changes to the workforce, economy, interest rates, inflation, and project viability. There is also ongoing behaviour change such as increases in working from home and online retail and a greater awareness of the environmental impacts our lifestyles have.

New information focuses us on how we respond to climate related events. The increasing frequency and severity of these events challenge our ability to plan and respond over the short to long-term.

The government is driving wide-spread reforms. Implementation of central government's legislative programme impacts on how the council plans for accommodating growth in the future. There is tension between providing certainty for infrastructure providers with flexibility for development aspirations.

Regardless of uncertainty, planning for this growth is important as we address existing Auckland's present and future housing and business requirements shortfalls and build resilience.

2.3.3 Halting the ongoing degradation of the natural environment

In the past Tāmaki Makaurau expanded in a way that put pressure on our land, air and water, negatively impacting the mauri (life force) of the natural environment.

Where and how development occurs can significantly reduce the effect that we have on the natural environment, and in many cases can create habitat or connect and restore ecosystems. However, the current policy framework, development patterns and competing priorities means growth, development and providing infrastructure do not always happen in an environmentally sustainable or mauri enhancing manner.

Development contributes to the ongoing decline of freshwater, estuarine and marine water quality. Holistic water sensitive design principles are often poorly implemented. Watercourses and natural wetlands continue to be reclaimed or their riparian yards developed. Unprotected urban ngahere are declining on private land, particularly mature trees that would otherwise provide irreplaceable ecosystem services. Tāmaki Makaurau has great examples of development using holistic water sensitive design and reafforestation. However, this remains the exception and does not occur consistently at any large scale.

A degraded environment is less resilient and less able to cope with the impacts of climate change. As the climate changes, ecosystems will need to adapt. How and where we develop will influence the ability of ecosystems to do this.

2.3.4 Achieving equitable growth and change

The on-the-ground outcomes that communities experience differ significantly, reflected in distinct demographic and geographic patterns. The impact of high and rising house prices in Auckland is felt by way of reduced living standards, higher costs, lower wellbeing, and labour market mobility. This means there are differences in the ability of our communities to withstand, adapt, recover and thrive in the face of change. Those communities already struggling are more vulnerable to the impacts of change, disruption and hazards.

Breaches to Te Tiriti o Waitangi led to the loss of a vital and strategic economic foundation for Māori. Critically the leadership role in shaping communities and the environment was also affected. Legislative, regulatory, economic and environmental change continue to compound inequity for Māori, including where and how Māori live, earn, and collectivise. While Treaty settlements are a form of redress, achieving equitable growth and change requires addressing the drivers of inequity.

Historic growth patterns and hard and soft infrastructure investment, or lack thereof, have resulted in inequitable levels of accessibility and the distribution of goods, services, employment and resources. How and where we grow, change and invest must address these disparities.

2.3.5 Investing in infrastructure in a financially constrained environment

As the population of Tamaki Makaurau continues to grow, there is demand for new infrastructure alongside the on-going need to maintain existing infrastructure networks and services. The Auckland Unitary Plan and more recent land use planning changes have enabled a greater level of intensification across the existing urban area which will increase the requirement for upgraded and new infrastructure. There is significant uncertainty in forecasting the location and timing of required infrastructure to support growth that will occur over the next thirty years. Because of this forecasting uncertainty, by necessity the Future Development Strategy adopts a cautious approach to ensure sufficient residential and business land capacity is available in the right locations and at the right time.

Infrastructure is costly, and the council's capacity to provide infrastructure is not unlimited. Funding and financing of bulk infrastructure is complex, and it is essential to ensure developers pay an appropriate share of the infrastructure investment that they contribute to the need for and will benefit from. The challenge is therefore one of understanding what is required and when, what is affordable, who will pay and how to get the best value from the investments council decides to make. . It is not just the council that can or does deliver infrastructure. Central government, and the private sector do as well and either can take a primary role in enabling infrastructure. Some projects also benefit existing communities, and therefore not all the costs are attributable to growth.

Reducing emissions, adapting to natural hazards and increasing accessibility, all drive the need to reconsider where and how to invest in infrastructure. This means that over the 30-year period of the Strategy, previously planned and prioritised infrastructure may no longer be appropriate or provide the best value for money. As priorities change, trade-offs need to be made (and re-made) to ensure Aucklanders are getting the best value for money from infrastructure investment.

2.4 Spatial outcomes

Reconciling the many tensions between growth and the challenges highlighted above requires a strategic approach to planning and the future. Bold actions are needed to address these challenges.

Four spatial outcomes set the scene for what we want to achieve from the Future Development Strategy. These focus on the long-term future of Tāmaki Makaurau and what it needs to look like.

2.4.1 Tāmaki Makaurau is viewed as an interconnected living system

Tāmaki Makaurau is large, complex and made up of many interconnected living systems. Te mauri o te taiao is the life sustaining capacity of these systems that must be protected and enhanced. Our communities and the natural environment have a reciprocal relationship that influence and impact each other. All decisions and actions consider mauri, interrelationships and interactions holistically.

The linkages and interdependencies between our investment, our infrastructure, where people live, work and access the environment is provided for and recognised. What happens in one place impacts other places and uses in the network. These impacts are recognised, understood and support a regenerative and equitable future.

2.4.2 Development achieves quality living environments

The quality of design supports how Tāmaki Makaurau functions and positively affects our overall well-being. Tāmaki Makaurau has achieved net zero emissions. People feel part of strong, connected, sustainable communities where they can easily meet the full range of their needs for housing, employment, recreation, health and well-being.

Growth and change integrates the natural and built environment with the stories of mana whenua, draws from mātauranga Māori and Māori design, and recognises mana whenua as kaitiaki; respecting and enhancing the local context and creating a home for diverse communities.

Good design is integrated at all scales of development. It includes the quality of the city structure, the design of public places and spaces for people and nature, as well as building and house design. It also respects our cultural and built heritage places and finds ways to work with and compliment this heritage.

Infrastructure supports growth and provides a sustainable foundation for communities to thrive.

2.4.3 Disparities in our communities and investments are addressed

Growth and change is equitable.

Communities and mana whenua can live locally, supported by equitable access and infrastructure provision. Growth and change respects existing communities and the local context, providing solutions that are the right fit for the unique communities and iwi/hapū of Tāmaki Makaurau.

The identity, wellbeing, and future of iwi and hapū as mana whenua of Tāmaki Makaurau is inherently linked to the identity, wellbeing and future of Tāmaki Makaurau. Development supports iwi and hapū aspirations and creates opportunities for Māori to thrive in Tāmaki Makaurau.

Investments are prioritised in the parts of the region that need it most, addressing disparities, providing services, and serving communities of greatest need.

2.4.4 Development results in resilient built systems, natural environment and communities

Communities, infrastructure and ecosystems have the necessary space and are in the right place to adapt, recover and thrive in the face of climate change impacts and an uncertain future.

Growth and change results in greater resilience across Tāmaki Makaurau through taking a long-term view, responding to local context and is backed up by strong policy and implementation tools.

Areas at higher risk from natural hazards are avoided and infrastructure investment is focused on resilient solutions, which are often smaller, distributed and nature-based.

2.5 Principles for growth and change

The spatial outcomes in the previous section are addressed by principles for growth and change set out in this section.

A well-functioning urban environment for Tāmaki Makaurau as a city and region is one which continues to develop in a quality compact form and follows these five principles to guide its growth and development.

- Principle 1: Reduce greenhouse gas emissions
- Principle 2: Adapt to the impacts of climate change
- Principle 3: Make efficient and equitable infrastructure investments
- Principle 4: Protect and restore the natural environment
- Principle 5: Enable sufficient capacity for residential and business growth in the right place and at the right time

The following pages provide more information on these principles and how they apply in Tāmaki Makaurau.

Principle 1: Reduce greenhouse gas emissions

A compact urban form is a critical requirement for low carbon and climate resilient urban development as it largely determines the viability and practicality of different modes of transport. Both commuter and household vehicle trips generate significant greenhouse gas emissions. Compact urban growth (greater density, mixed-use) reduces car dependency and vehicle kilometers travelled (VKT) when the car is in use, and enables people to live more locally and choose sustainable methods of mobility like walking and cycling. Key to supporting this is by having employment and where people live in close proximity, and having services and facilities within easy reach. A reliable and frequent public transport network supports the other needs to travel across the region. Such a network cannot be achieved within a low-density urban form with limited mixed use.

Principle 1(a): Intensify the existing urban areas and limit further urban expansion

In general, urban expansion and greenfield development is likely to produce more emissions than existing urban development. This is largely due to more vehicle kilometers travelled, less availability of high-quality public transport, and poorer accessibility to a wide range of jobs, education and other services. There is also a link to the housing typologies being developed, with more dense cities having lower emissions impacts, consuming less operational and embodied emissions than standalone buildings.

At a regional scale, most, but not all, growth will be focused in the existing urban area and this growth will be more intensive.

Around 9,500 hectares⁵ of future urban land remains identified for urban development across the region and the intention is for these areas to not further expand during the timeframe of this strategy.

Growth in rural areas will be minimal to retain the rural environment and rural productivity.

⁵This figure reflects the direction set out in this strategy to re-zone future urban areas that are not considered suitable for urban development due to the risk to life and property.



Principle 1(b): Strengthen accessible, walkable and mixed-use neighbourhoods

Over the next 30 years there will be more intensification across Auckland's existing urban area. This is not enough to achieve strong, thriving and resilient neighbourhoods. Tāmaki Makaurau also needs neighbourhoods with centres at their hearts to enable people to live locally and access most of their daily needs by active modes and public transport.

All communities should have a mix of uses to support more equitable, sustainable living. Strong centres need to integrate non-residential activities that are compatible with residential uses – places of work, community services and facilities, shops which serve people's daily needs and open and green spaces for recreation and socialisation. They must be easy to access, by walking or cycling.

For both centres and neighbourhoods, connectivity and safe accessibility (by active modes and public transport) will be improved to provide more people with real options to reduce their transport emissions, reduce the cost of being mobile and provide a greater level of resilience. Appropriate land use changes and investment in infrastructure, services, public spaces and streets will be made to create well-functioning environments.

Principle 1(c): Bring jobs and homes closer together

Locating jobs and homes in close proximity supports more resilient communities, reduces emissions and brings many other benefits. Yet there are inequities in employment opportunities in some parts of Tāmaki Makaurau.

Creating employment closer to where people live, and enabling living close to employment, is a long-term endeavour, not a short-term fix.

Significant sub-regional employment opportunities will be supported to address existing inequities.

Although a mix of uses is already enabled in most centres, success will require strengthening centres further, to better enable and promote residential and employment opportunities. By creating better access through active modes and public transport, neighbourhoods can be connected to these centres and the job opportunities they provide, particularly at the subregional scale.

There are similarly areas in Tāmaki Makaurau, other than centres, that are already hubs of employment (Wairau Park and Rosebank Road, for example). These areas will likely grow and adapt over time and the employment they offer may change accordingly. Nearby residential areas are often of relatively low density, and the employment hubs are not always easily accessible. In this case there is the opportunity to 'bring people closer to jobs'. The development potential will be increased in these residential areas, where appropriate, and accessibility (physically and/or through public transport services) to the employment hub improved.



Principle 2: Adapt to the impacts of climate change

As our climate changes, the frequency and severity of hazards will worsen. Hazards such as flooding, coastal inundation and sea-level rise, coastal erosion and instability, or other geohazards will impact communities, public health, private property, infrastructure, and ecosystems. In some locations, heat hazard risk will also increase over summer. Where and how we plan for growth and change and adapt to these hazards is increasingly important.

There are different approaches to adaptation to make communities more resilient to the effects of hazards. The FDS provides direction to support these adaptation approaches through how we grow and change.

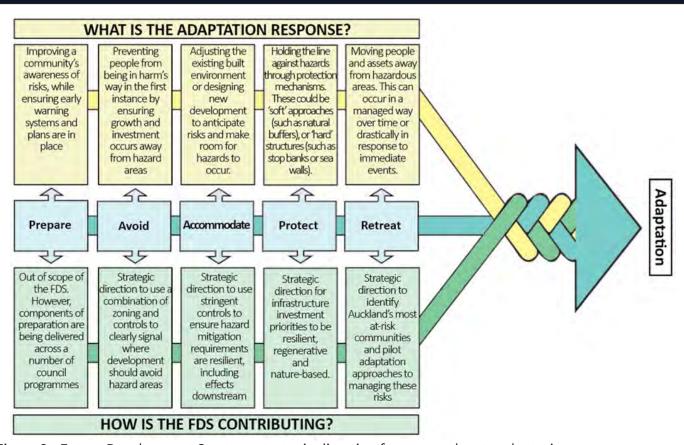


Figure 2 - Future Development Strategy strategic direction for approaches to adaptation

Principle 2(a): Avoid further growth in areas exposed to hazards and promote resilient design solutions

The current approach to managing development in locations potentially exposed to natural hazards does not always result in resilient outcomes. The urban environment will need to respond with durable and resilient solutions.

The council has a greater ability in future urban areas to require zoning patterns that avoid hazardous locations, but this has not always been achieved. While some hazards can be avoided through engineering and environmental solutions, this comes with a level of risk when interventions become overwhelmed during extreme events. These interventions are often also very expensive to deliver. The number, scale and ad hoc nature of development means that it can be difficult to achieve the required integrated catchment response.

Growth will not be enabled in known hazard areas where people, property or infrastructure would be exposed to significant risk. Where historic decisions mean development is already enabled in potentially vulnerable locations, clear direction will be developed on where avoidance or mitigation is appropriate.

In existing urban areas, those locations and communities with greatest risk and exposure will be identified and appropriate adaptation planning initiated.

In future urban areas, direction will be given for growth in hazardous locations to be avoided. Where future development proposals would increase stormwater runoff and impact downstream floodplains and urban areas, direction will be to take an integrated catchment approach to assessing and designing stormwater management and infrastructure provision.

Principle 2(b): Prioritise integrated, naturebased, regenerative and resilient infrastructure

Infrastructure networks across Tāmaki Makaurau need to cope with ongoing change, such as climate change and evolving technology. Older infrastructure is not always integrated, nature-based, regenerative or resilient.

Infrastructure will be viewed as a system, recognising connections and interdependencies. This allows us to understand how infrastructure can evolve, where its vulnerabilities lie, what can increase its resilience and how it impacts the resilience of our communities.

When investing in infrastructure, the council will prioritise investments (as is relevant) that:

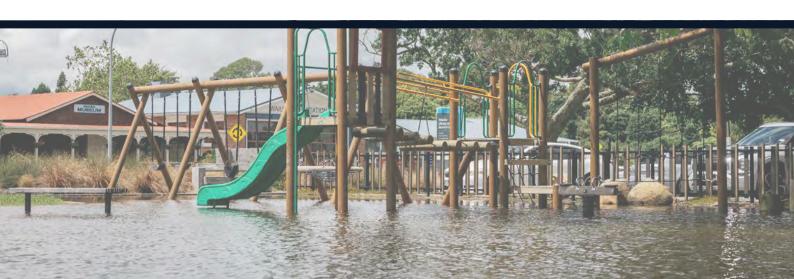
- are nature-based, regenerative and mauri enhancing
- enable local decentralised solutions, where appropriate
- are low or zero emissions and circular in resource use
- consider the total economic value in decision making, including appropriately valuing social, cultural and environmental outcomes and taking a whole-of-life-cycle approach
- allows Aucklanders to connect with te taiao (the environment) and understand the impact that infrastructure can have on the environment
- serves multiple functions, for example, green infrastructure that manages stormwater, but can also enhance Te Mauri o Te Wai - the lifesustaining capacity of water, create habitat and deliver local amenity.

Principle 2(c): Support communities to develop appropriate adaptation responses in high-risk areas

Many communities in Tāmaki Makaurau are constrained by hazards to some degree, some of which may be high-risk. The council has started a process to identify these communities, consider the appropriate adaptation approach, and develop tools to help address adaptation.

Council programmes such as Resilient Auckland and central government initiatives such as the National Adaptation Plan 2022, should provide additional tools to help communities adapt. It is important to consider the ability for ecosystems in coastal areas to adapt and retreat, as well as the opportunities for reinstating ecosystems through naturalisation of areas communities may retreat from.

In preparation for these new tools, areas where initial adaptation efforts could be prioritised will be identified, and programmes piloted. These would consider the full range of adaptation approaches (see Figure 2 on previous page).



Principle 3: Make efficient and equitable infrastructure investments

Infrastructure is expensive and takes significant time to plan and implement. Over the next 30 years, the council plans to invest around \$284 billion on infrastructure, with over \$118 billion of that planned to be spent on new assets or renewals of existing assets⁶. Infrastructure investment is a complex challenge and requires balancing many competing demands to ensure money is spent in a way that produces the most value, especially as there are limits in terms of council's ability to borrow.

The council, along with many other entities including central government and the private sector, provides infrastructure to support growth. The council is responsible for the planning and provision of regional transport, three water services, parks and community facilities, waste, arts, culture and urban regeneration. Ports (both sea and air) state highways, telecommunications, electricity, gas and petroleum suppliers, health and education providers all provide infrastructure for Aucklanders.

Infrastructure ownership is spread among different agencies with different priorities, which means coordinated management and delivery can be difficult. The council will continue to partner with central government, iwi and the private sector to realise outcomes for Auckland.

Principle 3(a): Take a regional view to infrastructure investment and costs

Infrastructure to support growth will always require significant investment. At a regional scale infrastructure servicing urban intensification varies in cost depending on its location. Development in existing urban areas typically costs less in terms of infrastructure provision, when compared with development in future urban areas. Adding additional growth at the fringes of our existing networks is the least cost-effective investment in infrastructure to support growth. The best return on investment is closer to the centre⁷.

We will take a regional and whole of society view of the costs and benefits when making long-term decisions, and we will take those costs and benefits into consideration when land use planning decisions are made.

Growth and infrastructure investment closer to the city centre and sub-regional nodes within the existing urban area will be prioritised. This is to assist the council's financial management and value for money for Aucklanders, while also addressing disparities in infrastructure and service provision.

Funding infrastructure to support growth in already identified future urban areas will be phased over a longer timeframe and balanced with the investments required in the existing urban areas.

Rezoning and development in future urban areas earlier than when council can fund bulk and network infrastructure and services (out-of-sequence development) creates significant challenges to this regional approach. It often requires the reallocation of council infrastructure funding which impacts on the delivery of other planned infrastructure. This is why out of-sequence development is generally discouraged further addressed in Principle 5.

Principle 3(b): Make the best use of existing infrastructure

Much of the infrastructure that will support Tāmaki Makaurau over the longer term already exists.

Limited financial resources mean the council must decide how best to invest to maintain infrastructure services while increasing the resilience of our current and future communities.

Development in the existing urban area generally supports the most efficient use of infrastructure for the least monetary cost over time. This allows for use of existing services, infrastructure and infrastructure corridors. When infrastructure in existing urban areas needs to be renewed, growth can be accommodated for a marginal cost.

In contrast, future urban areas cost more even though some initial land/construction costs are lower. This is because a larger amount of new infrastructure is required, including expansion of existing networks, with subsequent greater ongoing maintenance and service provision costs. Transport infrastructure in particular is more expensive.

Given this, most development will be focused in the existing urban area to make the best and most efficient use of infrastructure for the least monetary cost over time.

⁶ Table 11 Planned infrastructure investment covered in this Infrastructure Strategy, Page 59 https://www.aucklandcouncil.govt. nz/plans-projects-policies-reports-bylaws/our-plans-strategies/budget-plans/The-10-year-budget-2021-2031/10yearbudgetfull/10-year-budget-2021-2031-volume-2.pdf

⁷Trubka R, Newman P, Bilsborough, D, 2009. Assessing the costs of alternative development paths in Australian cities, Curtin University of Technology.

Principle 3(c): Make investment decisions that deliver on multiple outcomes

The council, together with central government and other partners, has enormous capacity to effect positive change through its substantial investment in infrastructure.

Infrastructure is a significant lever for delivering outcomes for Tāmaki Makaurau. For instance, focusing infrastructure investment decisions in existing urban areas could influence health outcomes, accessibility, greenhouse gas emissions reductions, business and employment outcomes and development costs.

Coordinating infrastructure investment across agencies will maximise our collective investment, provide certainty and get the best outcomes.

To make the most of our investment we will prioritise infrastructure investment that delivers on multiple outcomes and will coordinate this across agencies and partners. This includes infrastructure that is multi-functional, resilient green infrastructure and nature-based solutions.

Decision-making will be based on the infrastructure investment hierarchy shown in Figure 3.

When the council considers whether or how to invest, we will identify all options rather than solely focusing on a built infrastructure-based solution. We will firstly consider and prioritise non-built solutions such as effective planning, demand management and improving our existing infrastructure. Where non-built options are possible, they enable infrastructure challenges to be addressed in a cost-effective and low-carbon way. Infrastructure investments using this hierarchy ultimately provides the most efficient use of our resources.

Principle 3(d): Work with the private sector to find new innovative ways to fund infrastructure

The private sector can be a significant contributor to the provision of infrastructure to support growth. Where the private sector can fund the infrastructure necessary to service all or part of development of both residential and, if appropriate, business land, the council will work collaboratively with the private sector on mechanisms to establish this infrastructure that would otherwise be constrained by limited council resources. In this way, growth can be facilitated without materially impacting the council's debt levels or requiring the reallocation of council funding.



Figure 3 Infrastructure investment hierarchy (adapted from Rautaki Hanganga o Aotearoa 2022)



Principle 4: Protect and restore the natural environment

The ecological health of the natural environment and community's access to it, are critical to the success of urban spaces. Partnering with mana whenua and drawing from mātauranga Māori with collaborative community action will enable better outcomes.

Development can put pressure on the natural environment, particularly impacting the space and connectivity for water, soils, plants and animals to thrive. However, development also presents an opportunity to draw from mātauranga Māori and to protect and restore our ecological taonga as Tāmaki Makaurau grows and changes. This will require both the council and developers to prioritise outcomes that integrate the built and natural environment.

Principle 4(a): Protect ecosystems and integrate the natural and built environment

Existing ecosystems are susceptible to the impacts of growth, change and development. Development historically has not always responded to the existing context or considered the wider catchment or natural environment and ecosystem.

In future urban areas in particular, this can result in degradation of forest, stream, wetland and coastal ecosystems, particularly through habitat loss, damage or fragmentation. In the existing urban area, unprotected indigenous habitat and urban ngahere (forests) in back gardens, parks and roadside berms is especially vulnerable to the impact of growth and development.

As Tāmaki Makaurau continues to grow and intensify and private outdoor space diminishes, the quality, function, distribution and accessibility of public open space becomes increasingly important. Although the primary function of public open space is often recreation or social utility, it can also be used as detention basins and stormwater systems to protect communities from flood hazards and to protect areas of biodiversity or natural and cultural heritage.

Development of the built environment must integrate with the natural environment to improve biodiversity, water quality, ecological health, natural hazard resilience, water supply security, as well as recreation and amenity values. Such approaches can also offer opportunity for climate change mitigation and adaptation.

This can be achieved by protecting existing ecosystems, retaining vegetation and planting new green spaces within existing urban developments and tree planting along road corridors. Applying water sensitive design principles in development can also help.

A strong policy approach will be set to protect existing ecosystems and better manage the environmental impacts of growth and development.

Principle 4(b): Restore and connect ecosystems

Many ecosystems in the existing urban area are fragmented and disconnected. This impacts on the healthy functioning of ecosystems, biodiversity, resilience and ability to adapt to a changing climate.

Future urban areas, which are often in pasture, provide opportunities to restore and connect ecosystems.

These areas can improve ecological linkages between habitats, create new habitats, provide access to natural open space and help to achieve water sensitive outcomes.

Retaining and creating ecological corridors within all future urban development is essential. Structure planning must integrate land use with ecosystems and identify opportunities to leverage growth to restore and connect ecosystems at the regional and subregional scales.

Development in the existing urban area should be leveraged to retain or create green space and biodiversity on-site to help restore and connect ecosystems.

Public open spaces and road corridors provide significant capacity for reafforestation and the long-term restoration and connection of existing habitats. Strategic and coordinated investment is needed to achieve this.

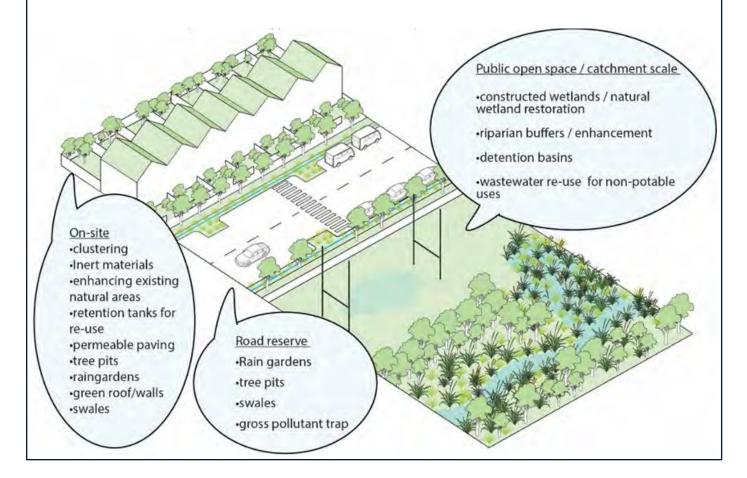
Enabling community uses of public land, such as gardens and urban farming, provides another way to increase biodiversity and connect ecosystems. This contributes to climate mitigation (through localised food production), fostering a sense of community, minimising urban waste and contributing to circular economies.

A strong policy approach will be set to restore and connect ecosystems and better manage the impacts of growth and development, while harnessing the opportunities provided.

Water sensitive design

Water sensitive design principles seek to limit stormwater flow rates and contaminant generation at source, by minimising imperviousness or earthworks and using inert materials, and maintaining or restoring natural hydrological features. The approach uses structural interventions, such as green infrastructure, to provide / mimic ecosystem services that retain, detain, transpire, or infiltrate stormwater flows and filters contaminants. Holistic water sensitive design also integrates with water supply and wastewater outcomes to contribute to whole-of-urban water cycle management (such as water capture or grey water re-use).

The council has directed that a suite of regulatory and non-regulatory interventions from the Auckland Water Strategy be implemented to increase the use of water sensitive design principles in growth and development. Ongoing implementation of these actions will contribute to integrating a well-functioning urban environment with the natural environment.





Principle 5: Enable sufficient capacity for growth in the right place and at the right time

The National Policy Statement on Urban Development 2020, and particularly the Medium Density Residential Standards (MDRS)⁸, have changed the strategic planning landscape. This principle considers where and how growth, and the funding of supporting infrastructure, is prioritised to get the best outcomes and support the functioning of land and development markets. It also confirms that Tāmaki Makaurau has sufficient residential and business development capacity to meet needs over the long-term.

Principle 5(a): Provide direction for where and when growth is appropriate

Legislation requires the council to enable greater density over wide areas of urban Tāmaki Makaurau as well as being 'responsive' to unanticipated or out-of-sequence development. This makes it hard to have an informed estimation of where and when growth is likely to happen. It is harder for the council, infrastructure providers and communities to plan for growth proactively, particularly planning for the longer term. Unanticipated or out-of-sequence development creates major funding challenges for the council. It can also mean that planned projects in existing communities are deferred or cancelled.

The council has limited tools to help direct growth. This makes it even more important to have a strong basis for decision making.

The council's prioritisation rationale to support growth and change will therefore be based on a location's accessibility to existing and future jobs and services via public transport and active modes, and availability of facilities, amenities and services to meet day-to-day needs. This will be evaluated against the level of benefits realisation possible from infrastructure and service investment.

The approach emphasises the importance of most growth occurring within existing urban areas. In support of this, future urban areas will be timed for development readiness, with this readiness linked to infrastructure prerequisites dependent on when council can provide the required bulk infrastructure. Consideration of the trade-offs and costs that might occur when development occurs out-of-sequence, ahead of existing priorities, will be applied.

Given the need for council to be responsive in its planning, there may be scenarios where unanticipated and / or out-of-sequence development is appropriate. This may be the case with alternate or new infrastructure funding approaches which limit impacts on council's

financial position and commitments. Council will therefore consider agreements with the private sector to provide the bulk infrastructure for development where this does not unduly impact the council's debt profile or other funding commitments. Consideration of the trade-offs and costs that might occur when development occurs out-of-sequence, ahead of existing priorities, will be applied.

Where growth is appropriate is also related to the ability to manage constraints, including natural hazards. Structure planning, by either council or the private sector, or the relevant planning process at a smaller scale, therefore has an important role in ensuring development takes a holistic and integrated approach to assessing and managing constraints.

Principle 5(b): Prioritise areas for growth and investment

The council cannot fund all infrastructure and services needed to serve growth which is now enabled across much of Tāmaki Makaurau, at least not in numerous locations at the same time. The council must therefore make choices about how it allocates limited funding across the region, whilst considering alternative funding solutions with government and the private sector. The council will proactively invest in a limited number of places at a time to achieve the greatest benefits, across multiple outcomes, and support development capacity in those areas to be realised. This means investing primarily, but not exclusively, in existing urban areas, with a strong focus on aligning land use and infrastructure. This is also a way to support projects which have city-shaping potential, such as the City Rail Link, Light Rail or North-west rapid transit.

Alternatively, if the council spreads funding too widely and only invests in reactive planning, then it risks not making a measurable difference for communities.

⁸ Schedule 3A of the Resource Management Act 1991

Principle 5(c): Enable more housing and business capacity to meet future needs

The Future Development Strategy provides the strategic direction for how, where and when growth is expected over the next 30 years. Sufficient development capacity must be provided over this period.

The Housing and Business Assessment identifies that, at a regional level, there is broadly sufficient residential and business development capacity.

However, creating more capacity for growth, particularly in good locations of high demand, good accessibility and with low hazard risk, is likely to improve overall wellbeing for Tāmaki Makaurau in that, amongst others, it introduces more competition in the market. The Future Development Strategy also identifies areas where there are good reasons to defer or limit development, for example in areas with bulk infrastructure constraints (deferral until infrastructure issues are suitably resolved) or high natural hazard risk (limiting development to minimize future risk).

Over time this forgone capacity will be offset by increasing capacity in good locations elsewhere, so that overall capacity is increased.

Areas for land-extensive business are particularly sensitive to location, which need large, flat sites that are well served by transport networks. In the past, land extensive business land has, and in the future will increasingly come under pressure from housing and other uses that can reduce the suitability for existing business uses. Capacity will be enabled in suitable locations to address shortfalls, and the necessary supporting infrastructure provided in appropriate timeframes. Development that would preclude suitability for business use in these locations will be avoided.

There are also sub-regional inequities in the distribution of business land. The council will ensure that strategically important or difficult to relocate business areas are sufficiently protected, identify others as potentially suitable for transition to higher density, as well as provide more business land (in addition to centers) in greenfields areas to provide for long-term business land needs of a growing, innovative and productive city.





Wāhanga | Part 3: He whāurunga ki tā mātou urupare mokowā Inputs to our spatial response

This section looks at potential ways to accommodate future growth in Tāmaki Makaurau, referred to as growth scenarios. It also considers constraints on growth and development capacity available. Information in this section guides our spatial response in Part 4.

3.1 Conceptual growth scenarios

The physical growth pattern in Tāmaki Makaurau has been influenced by many factors; the availability of land and how it can be serviced by infrastructure, housing market factors and housing preferences, transport choices, proximity and accessibility to employment, education and community facilities and retail/leisure opportunities.

The future is uncertain. There will be many changes in the global and local political, environmental, social, economic and cultural landscapes that will influence how we grow and will impact on the success of Tāmaki Makaurau.

The Future Development Strategy looks at alternative ways the region may grow and change physically. Understanding these alternatives for the future shape of Tāmaki Makaurau helps us enable the best pathway.

This section sets out the alternative growth scenarios investigated and the learnings that inform the spatial response. This is a sound planning approach but also a requirement of the NPS-UD, which requires the FDS to be informed by a consideration of the advantages and disadvantages of different spatial scenarios.

3.1.1 Alternative growth scenarios

Four scenarios were developed, each representing a different possible urban form. Some common assumptions applied to all the scenarios. These included:

- reflecting current legislative framework (including MDRS)
- growth occurs in a compact urban form (more intensive in corridors and along key transport routes)
- growth does not occur in protected and sensitive areas (no-go areas and at-risk areas)
- best practice land development (e.g., good urban design, erosion and sediment control, water sensitive design)

- higher intensity areas support higher uptake of active modes (improving accessibility)
- transport networks that reflect the timing of growth and when transport projects would need to be in place.

Differences in the levels of intensification and greenfield growth were investigated, together with variations in the location of growth and the transport network.

The four scenarios are illustrated in Figure 4.



Scenario A



- More concentrated growth within dense sub-regional and metro centres and within walkable catchments to rapid transit network (RTN), limited suburban infill
- Limited growth in future urban areas other than for employment land
- Warkworth and Pukekohe important rural growth centres avoiding areas with constraints (including soils), and no growth in rural towns and villages
- Employment growth matches residential growth through mixed uses

Scenario B



- More concentrated growth within existing urban area aligned with RTN, and focused in sub-regional centres with limited suburban infill.
- Some growth in future urban area at slower rate than currently anticipated, areas with major constraints are not prioritised.
- Pukekohe and Warkworth are important rural nodes but reduced focus (particularly Pukekohe due to soils) and limited growth in rural towns and villages.
- Employment growth reinforces past employment growth trends and supports agglomeration benefits of city centre and nodes.

Scenario C



- Concentrated growth around centres and corridors with planned RTN and frequent transit network (FTN) and moderate suburban infill and redevelopment.
- Future urban areas with major constraints are not prioritised.
- Warkworth and Pukekohe are important rural growth centres and growth in rural towns and villages limited to existing extent (existing capacity).
- Employment growth reinforces past employment growth trends and supports agglomeration benefits of city centre and nodes.

Scenario D



- Future urban areas (existing and new) are key areas for growth.
- Less concentration in centres and corridors served by RTN, and extensive suburban infill including high amenity areas.
- Warkworth and Pukekohe are important rural growth centres with significant growth at Warkworth, and rural areas considered market attractive for infill/redevelopment and expansion.
- Employment growth reinforces past employment growth trends and supports agglomeration benefits of city centre and nodes.

Figure 4 - Alternative growth scenarios

3.1.2 Evaluation

Evaluation of the four scenarios involved a multi-criteria analysis relying on modelling outputs as well as quantitative and qualitative information.

The evaluation process enabled alternative land use scenarios to be tested. Key growth principles were then identified to inform the development of the spatial response for the Future Development Strategy.

3.1.3 Key themes

Evaluating these scenarios resulted in a number of themes. These are:

Most of the future spatial form already exists and growth has limited influence

Tāmaki Makaurau has an established built form. The scale and pattern of this existing development means that additional growth will have limited influence over travel patterns and behaviour over the next 10 years.

 Reducing vehicle emissions needs to focus on current travel patterns and behaviours, rather than rely on changing growth and development, although the latter can play a significant part in setting Tāmaki Makaurau up for reduced emissions over the longer term.

Determining the location of land uses will only take us so far

- Setting the most appropriate land use pattern is a necessary part of the transformation to achieving better long-term outcomes. This needs to be supported by strong policy (e.g. performance standards in the AUP) and implementation frameworks to achieve on the ground results.
- Urban development can impact on the natural, built and cultural environments. Combined with strong complementary policy and implementation frameworks it can also provide opportunities to resolve issues and enable positive outcomes.

Land use and infrastructure integration, particularly transport, is fundamental to spatial outcomes

- Scenarios that focused growth within the existing urban area and specifically within the walkable catchments of the planned RTN/FTN performed better against transport criteria specifically but also environmental, social, cultural and economic criteria.
- Compact urban forms perform better in terms of least monetary cost of infrastructure over time, as they result in more efficient use of existing services and new infrastructure. More expansive urban forms require the greatest amount of new infrastructure with the most significant costs.

Locating homes and jobs in close proximity is important

- Generally, the more intensive scenarios, with a mix of uses around transport nodes, performed better in relation to reducing the need to travel (to employment, education services etc) and therefore reducing carbon emissions and the cost of travelling.
- Future urban areas provide opportunities to balance employment and housing.

These scenario findings, combined with other qualitative and quantitative research and analysis were considered in developing the way forward for physical growth and change in Tāmaki Makaurau over the next 30 years. They also informed the five principles for growth and change.



3.2 Constraints on development

The NPS-UD requires the Future Development Strategy to spatially identify 'any constraints on development'.

Tāmaki Makaurau has a number of natural hazard, environmental and cultural areas that present constraints to future development. Policy safeguards that seek to limit development within or near these constrained areas and/or to avoid or mitigate adverse effects on them already exist, e.g. through National Policy Statements, National Environment Standards and/or Auckland Unitary Plan policies and overlays. These constraints have also been a key consideration in the evaluation of the alternative growth scenarios (outlined in section 3.1) and have influenced the spatial response in the sections below.

Figures 5-9 below map the extent of different constraints, grouped as natural hazards, natural

environment, cultural heritage, land use capability and natural hazards. The darker shaded areas on each map represent more constrained areas while the lighter shaded areas represent less constrained areas in the region. See Appendices 1-2 for further information about the types of constraints, how they are categorised and for full versions of each map.

It is noted that a constraint, such as a natural hazard constraint for example, does not automatically indicate a high level of exposure to risk. In many cases the level of risk to life or property associated with the hazard constraint is relatively low and could be adequately managed through design and engineering solutions. The approach to managing natural hazard constrained areas is set out in section 4.2.7

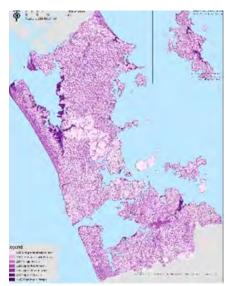


Figure 5: Natural hazard constraints

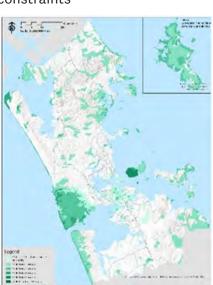


Figure 8: Natural heritage constraints



Figure 6: Land Use Capability (LUC) Class 1, 2 and 3



Figure 9: Cultural heritage constraints



Figure 7: Natural environment constraints

3.3 Development Capacity

The Future Development Strategy meets the statutory requirement under the NPS-UD to ensure there is at least sufficient housing and business development capacity to meet demand over the next 30 years⁹. The following gives a snapshot of how this is likely to happen over the next 30 years.

The population in Tāmaki Makaurau has grown by 40,000 since the 2018 Development Strategy was adopted¹⁰. Over the next 30 years, from 2023 to 2053, the population is expected to continue to grow, by around 30%, or 520,800 people to a total of 2,230,800¹¹. Meeting this demand will require at least sufficient development capacity for housing is enabled in line with the requirements of the NPS-UD, being in locations where development is planenabled, infrastructure-ready, commercially feasible, and reasonably expected to be realised.

The Auckland Plan 2050 estimated Auckland would be on track to consent around 100,000 new homes between 2012 and 2022. As of the year ending on June 30th 2023, the total dwellings consented since July 1st 2012 is 141,434. Over 100,000 of these dwellings were consented between 2017 and 2023. This record-breaking increase is largely attributed to the Auckland Unitary Plan, which significantly increased development opportunities within Auckland's urban environment, as well as Auckland's strong performing economy. This experience also shows Aucklanders are happy to buy, and developers can profitably provide, a wide range of new, more intensive forms of development, especially in locations with good access to amenities.

With the introduction of Medium Density Residential Standards (MDRS) which mandates residential intensification and further increases housing development capacity above the current growth strategy, the city faces new challenges in managing this widely dispersed plan enabled growth. This means that growth needs to be guided by a development strategy in areas where people want to live, where the supporting infrastructure and services already are or can be provided, and where better and value for money outcomes can be achieved through those choices. Appendix 3 sets out the likely bulk/significant development infrastructure required to support or service the development capacity.

Plan Change 78 - Intensification to the Auckland Unitary Plan incorporates the MDRS requirements, as well as gives effect to the requirements of the NPS-UD, which mandates zoning for high density housing development in particular locations. This proposed plan change results in a large increase in plan-enabled development capacity within Auckland's existing urban area.

Dwelling demand and supply

Based on the usual resident population projection, households¹² are forecast to grow by 34% or just under 200,000 additional resident households¹³. Tāmaki Makaurau will need at least the equivalent number of net additional dwellings, to bring the total to around 773,000 dwellings from the current levels. This must allow for not only the increase in the total number of Aucklanders, but also demographic and preference changes within the population that could increase the need for more dwellings. More dwellings in excess of the 200,000 (additional residential households) will need to be built to allow for the replacement of existing dwellings, redevelopment of existing developed sites

and general churn, This also must ensure sufficient accommodation for students, visitors, temporary workers and mixed family situations.

Plan enabled capacity¹⁴ is not a constant, and is certain not to be maximised / fully capitalised upon. The currently estimated medium to long term total net plan-enabled dwelling capacity is 2,615,580¹⁵ which is several times greater than the expected demand for dwellings (see Appendix 4: Development Capacity for further information). However, while much of this enabled capacity is or will be commercially feasible^{16,} not all of it needs to be immediately, (or

⁹As required by clauses 3.2 and 3.3 of the NPS-UD

 $^{^{10}}$ Over the period 30 June 2018 to 30 June 2022.

[&]quot;Using a medium growth projection. All projection figures are from customised projections prepared by Stats NZ according to assumptions agreed by Auckland Council.

¹²Household is defined by Statistics NZ as "A household can be one person who lives alone, or two or more people who live together and share facilities (such as for cooking) in a private dwelling". Accordingly, each projected household would generate demand for at least one 'private dwelling' ("A private dwelling accommodates a person or a group of people and is not generally available for public use. The main purpose of a private dwelling is as a place of habitation; it is usually built (or converted) to function as a self-contained housing unit)

¹³ Market Economics, based on Medium AC March 2023 based population projection, difference of 197,120 households between 2022 (569,950) and 2052 (767,070).

¹⁴Plan Enabled Capacity is defined by the National Policy Statement on Urban Development (Cl 3.4) but can be summarised as being what is a permitted, controlled, or restricted discretionary activity on business or residential land by the operative district plan (from short term), proposed District Plan (from medium term) and FDS (from long term).

¹⁵ Based on the current Auckland Unitary Plan enabled dwelling capacity, that includes proposed PC78 enabled residential capacity (MDRS and NPS UD with all Qualifying Matters applied).

¹⁶ As existing take up under the less enabling/more spatially focused Operative AUP provisions demonstrates, see also s32 reports from Council for PC78, evidence from a number of parties to the same, CBA for MDRS, and HBA.

ever) infrastructure-ready¹⁷ as only a small proportion is ever expected to be demanded in total. It is important however, for as much sufficient¹⁸ feasible development capacity to be infrastructure-ready where it is likely to be taken up. By ensuring the market has significantly more opportunities than is likely to be required, it promotes competition in the land and development markets, ultimately resulting in more choice for consumers.

The feasibility of plan enabled development also changes over time, as preferences change, new amenities are created, and accessibility though transport investment improves. Changes in interest rates, building costs, land availability, infrastructure costs, perceived risk, and expected sale prices impact individual development projects, and demand, differently from time to time. Broader economic changes will play a part too.

Holding current conditions constant, a sufficient proportion of this enabled potential is considered commercially feasible. The latest feasibility test suggests that 540,000 plan-enabled dwellings are commercially feasible in the short term and will gradually increase to 1.99 million dwellings over the medium to long term. Take-up has been high in almost all areas where intensification has been enabled by the AUP, including in relatively low land value locations. Ongoing take-up of these opportunities is reasonably expected wherever they are provided, but over time an ongoing shift is expected towards both newly upzoned and amenity improved areas that have higher land values (reflecting higher demand) and lower levels of existing built improvements (which are more easily redeveloped).

Plan enabled and commercially feasible capacity also far exceeds existing, planned or likely infrastructure capacity in many locations. However, because take-up will vary, infrastructure provision can be focused and prioritised to locations consistent with the outcomes of this strategy.

Therefore, this Future Development Strategy does not focus on identifying significant additional plan enabled development capacity, as the capacity requirements of the NPS-UD have been exceeded. The focus is rather on the quality aspects of accommodating growth; where and how development take-up occurs. This means as much of the development capacity as possible should be available in locations close to employment, services and rapid transit networks. The FDS therefore directs the AUP to increase capacity in good locations, over time, to create and maintain competition in the market and thereby affect affordability. The council will follow

the principle that, where plan-enabled capacity is reduced or constrained, over time forgone capacity will be offset and increased by creating additional capacity in good locations elsewhere, so that overall capacity is increased. The implications of an under-supply of enabled residential capacity are much more severe than those of an oversupply of enabled capacity.

Business demand and supply

The Auckland economy continues to grow as businesses provide for the increased demand for goods and services in response to the growing population in the region. There are over 300,000 more jobs in the region now compared to 20 years ago, and two thirds of that growth occurred over the last decade. Construction, professional services, healthcare, retail, and hospitality created most of the additional jobs over the last 10 years.

Underpinning this growth, the estimated total employment is expected to increase by 27% under a medium growth scenario; from 937,000 in 2022, to 1,034,000 in 2032, and 1,194,000 in 2052 (see Table 1). This will provide an estimated additional 257,000 employees to the regional economy¹⁹.

Table 1 Auckland regional employment projections based on Auckland Council's March 2023 projections.

Year	Low	Medium	High
2022 base year	937,000	937,000	937,000
2032	1,000,000	1,034,000	1,074,000
2052	1,040,000	1,194,000	1,374,000
2022-25	31,000	43,000	55,000
2022-25 %	3%	5%	6%
2022-32	63,000	97,000	137,000
2022-32 %	7%	10%	15%
2022-52	103,000	257,000	437,000
2022-52 %	11%	27%	47%

Source: Auckland Economy Growth Model 2023

Broadly, the demand for employment is linked to population growth and change (i.e. potential workers), and economic trends that determine domestic and export demand. The supply of employment opportunities, nature and location of employment, and associated demand for particular types of business land, is driven by demand for the goods and services produced by businesses, from local, regional and national populations and other businesses, as well as international export markets.

That is infrastructure capacity will not ever be equal to this significant excess of plan enabled capacity – there is insufficient total demand to require it, and the cost to do so would be ruinous. Infrastructure capacity will however need to be provided in particular places to meet reasonable take up expectations (including management of take up where infrastructure constraints are temporarily or permanently binding), and manage levels of service, including environmental performance limits.

¹⁸Sufficiency is defined by the NPSUD to be capacity that is plan enabled, infrastructure ready, feasible and expected to be realised, that meets the expected demand, plus a competitive margin.

¹⁹ Market Economics, August 2023, taking a largely 'business as usual' approach informed by sectoral trends over the last 20 years.

Economic modelling²⁰ suggests the amount of employment growth in different sectors of the Tāmaki Makaurau economy is likely to be broadly similar to that of today²¹, albeit with some important differences.

Figure 10 below provides an overall view of how the major business sectors in Tāmaki Makaurau could change over the medium (i.e., 10 years) and longerterm (i.e., 30 years). All sectors, except for the primary sector (agriculture, fishing, extraction), have similar growth rates over these two periods. Auckland's primary sector is relatively small, and in the long term its growth has lagged behind the other sectors, not least because of the advance of urban activity across rural land and due to fact that Tāmaki Makaurau is primarily an urban based economy. However, some segments of the primary sector in Tāmaki Makaurau, such as vegetable growing, are significant.

The changes in other sectors reflect the underlying population growth as well as technology and demographic change. For example, the Finance and Professional services sector is expected to see ongoing improvements in information technology that will improve its labour productivity. In contrast, Education and Health services employment demand is expected to grow as the demand for health services and welfare grow due to an ageing population.

Broadly, this means that the size of Auckland's economy is expected to grow as GDP per capita continues to rise in real terms, driven by the evolving needs of a growing population, improvements in labour productivity, innovation and opportunity, and taking advantage of our strengths as New Zealand's largest and most diverse city, over the longer term.

These changes can provide a high-level indication of different sectors' land demands over time. Accommodating this growth in demand will be through a combination of intensification and mixed uses in centres and corridors for activities like retail, hospitality and office-based activities, co-development with residential activities for smaller scale population servicing activities (like retail, childcare, health services) and the provision for new centres and business areas in greenfield areas.

The Manufacturing, Transport and Construction sector covers the main industrial uses that have specific locational requirements, including protection from more sensitive activities. Their requirement for large land areas also makes them sensitive to changing land prices. Large format retail may also struggle to find suitable locations in intensified areas, although this might change somewhat if these formats move more towards a multi-storey development model.

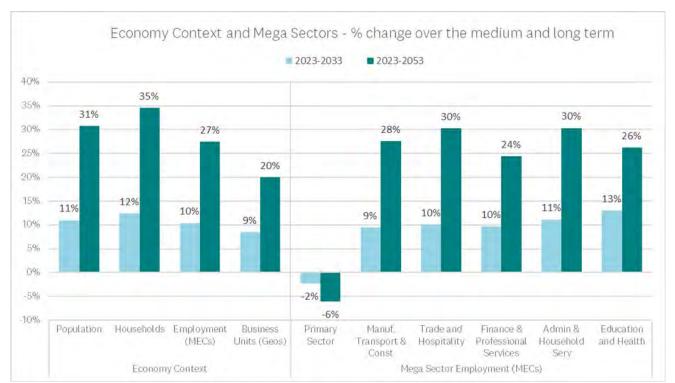


Figure 10 - Expected proportional growth in the economic context and proportional growth in different sectors

²⁰ Market Economics, August 2023, taking a largely 'business as usual' approach informed by sectoral trends over the last 20 years.

²¹ Compare potential for different futures as outlined in the scenarios explored in Koi Tu, Reimagining Tāmaki Makaurau Auckland: Harnessing the region's potential, March 2022 report, all of which would require sufficient land and space for business activity as a necessary prerequisite, ahead of any 'governance, management and planning' required to enable the change to any of these potential alternatives. https://aucklandunlimited.com/tamaki-makaurau-auckland-future-report

Business land analysis outlined in council's 2023 Housing and Business Assessment, shows a need to ensure adequate vacant business land is available over the long term. It is possible to accommodate employment growth in the region through a combination of better utilisation of existing floorspace, building on vacant and underutilised land within existing centres and business areas, redeveloping existing floorspace, and establishing new centres and business areas in greenfields. The capacity and demand analysis identified approximately 3,668 ha of vacant and underutilised land in existing centres and business areas, which if utilised, would accommodate projected business growth. However, not all of this land should be expected to be available for development, or be available at a price, or size suitable for all business needs. For land intensive uses, new greenfield land may sometimes be the most practicable option.

The business assessment suggests that around 1,500 (medium growth scenario) to 1,700 (high growth scenario) ha of this land will be developed over the long term. Most of this land is not currently available to the market (as evidenced by historically low vacancy rates prevailing in many of the region's business property markets) and there is a possibility that it may not come to market in the future. If some or all of this vacant and underutilised land is not available for development because it is actively in use, being held for future use by the current owner, or otherwise constrained or unsuitable, some or all of this demand for vacant land would have to be met in greenfield areas over the period to 2052. The business assessment model includes significant employment growth in three new centres at the edge of the existing urban area, in Drury, Red Hills, and Whenuapai. These three centres combined are projected to see 6,000 additional jobs over the medium term and nearly 12,000 additional jobs over the long term²².

To address this requirement for land, live zoning staged with infrastructure provision of future urban business areas will be required. Over the medium to

long-term, additional business-zoned land will need to be live-zoned, including through the provision of centres in new development areas.

The protection of existing and planned business zoned land for business purposes is also an ongoing challenge. This particularly relates to industries with specific locational requirements, that may be displaced or precluded by activities that are deemed sensitive and/or have a much wider choice of locational options. A potential relocation (in part or all) of the Ports of Auckland adds to this uncertainty (see Appendix 9: Information on major projects).

Commercial property intelligence²³ indicates a current shortage of industrial land, with high demand for industrial premises, resulting in historically low existing building vacancy rates. There are few undeveloped sites in the region's older traditional industrial areas and constraints on (re)development have intensified. This, along with increasing demand from other activities places upward pressure on rental costs and incentivises the conversion of sites to higher value, non-industrial, activities that can afford to locate in high rental value areas.

The transition away from traditional industrial uses in some of the region's older areas is well underway as they begin to serve a different role in the regional economy with other uses replacing industrial uses in some areas. As a result, for some industries, particularly those that need to be in light industrial zones with available prime grade premises, locational choice has become very limited.

Striking a balance between managed transition of some areas to other higher density employment uses, the protecting or consolidating other areas that are home to sectors whose locational choices are constrained, and enabling greenfield capacity for new and displaced industrial users, is key.

²² These three centres are arbitrary placeholders, and this modelling does not reflect the FULSS 2017, nor the land supply suggested by this FDS. The model would need to be updated and recalibrated to reflect the direction of this FDS around the timing of business land servicing, particularly, in relation to consequential changes in projected demand in the other parts of the city The model requires new business areas to be input as exogenous assumptions and will rebalance the rest of the regions employment growth to compensate for takeup in these locations. That is, addition of more greenfield land (and the employment and floorspace it is expected to provide for) will reduce employment and floorspace demand in other locations.

²³ Colliers Essentials - Auckland Industrial 1H 2023

3.3.1 More residential capacity supports a responsive, competitive market

Capacity estimates consider the amount enabled under the Auckland Unitary Plan, the commercial feasibility of development opportunities, and infrastructure readiness. When compared with projected population growth, this test concludes that Tāmaki Makaurau has broadly sufficient capacity to accommodate demand from future residential growth.

While an important test, there is uncertainty over the readiness of enabling infrastructure and the extent to which development opportunities can be realised, for example unwilling sellers. These frictions hinder housing supply from responding to demand.

Rather than viewing capacity as a target to meet, it is helpful to recognise that relatively more capacity means more development opportunities, and competition among developers is created and maintained.

As discussed above, the capacity requirements of the NPS-UD have been exceeded (including that enabled by Plan Change 78 - Intensification to the Auckland Unitary Plan), however, Auckland would benefit from more capacity for growth:

- Housing affordability remains a concern.
 Housing supply has not responded
 sufficiently to strong demand, as signaled
 in higher prices that remain high relative to
 incomes.
- People leaving for other regions. The net outflow to other regions is a sign that Auckland is potentially less competitive in attracting and retaining people.
- The mix of capacity could be better aligned with preferences. Some good locations with accessibility to jobs and transport have low capacity, relative to the demand to live there
- Assumed capacity in some locations may need to be revisited. This is relevant in light of new data on natural hazard risk exposure, or the national direction to improve freshwater quality.
- Land use policy is a powerful lever for more housing. The Auckland Unitary Plan has added to the urban land supply and enabled more flexible use of some land. Auckland has had a surge in new dwellings since, with more built than otherwise. More choice of dwelling types that consume less land - the costly component - has also proved popular.

Creating more capacity for growth, particularly in good locations of high demand with low hazard risk, is likely to improve overall wellbeing for Aucklanders in the following ways:

- provide more choice for households in good locations, where they would prefer to live.
 Those preferences point to a more compact urban form, which comes with the benefits of reduced need for costly infrastructure extensions and fewer transport emissions.
- improve proximity and density supports a more productive economy, with reduced travel times for households and for moving goods and services. This supports the retention and attraction of skilled workers.
- greater inclusiveness, by enabling more households to live in locations where they can more readily access places with economic opportunity and existing amenities.
- support housing affordability to be better.
 An abundant and flexible land supply is vital
 to improving housing affordability, as part
 of a set of policy remedies. Without this, the
 risk of worsening affordability will be higher.

While creating more capacity has clear benefits, there are trade-offs, as with all policy options. Some neighbourhoods in good locations will change and intensification may impact on existing residents. Weighing this up involves consideration of the overall wellbeing gain for Auckland, including for future generations, and the options about where and how more capacity is created.



Wāhanga | Part 4: Tā mātou urupare mokowā Our spatial response

The Future Development Strategy's spatial response is underpinned by a continuation of the quality compact approach to accommodate growth, as set out in the five principles for growth and change. This updates the quality compact approach in the Auckland Plan 2050 to provide a greater degree of intensification in existing urban areas, along with some development in future urbans areas and limited reliance on expansion into rural areas and satellite townships. There is also a renewed focus on aspects of quality.

This response is based on findings from the potential scenarios, including any limitations caused by constraints (see Part 3). It also considers housing and business capacity information and the annual monitoring of delivery of dwellings and business floor space across Tāmaki Makaurau.

This section examines what needs to happen at different spatial scales; regional, sub-regional and local. It then looks at the different ways the updated quality compact approach translates within the different spatial environments; existing urban, future urban, rural and business areas.

4.1 Spatial scales

Understanding the community interconnections across the whole region is an essential part of achieving quality compact growth in Tāmaki Makaurau. Communities at different scales, regional, sub-regional and local, have different but complementary roles and need to work together to support change. The FDS balances certainty, flexibility and ambition to deliver better outcomes for Tāmaki Makaurau over time.

4.1.1 Regional scale

At a regional scale, most growth will be focused in the existing urban area.

Growth in future urban areas will be phased over a longer timeframe.

There will be no reliance on urban expansion into rural areas, and growth in rural areas will be minimal to retain the rural environment and rural productivity.

4.1.2 Sub-regional scale

At a sub-regional scale, Tāmaki Makaurau will continue to move towards a multi-nodal model (Figure 11). This model was introduced in the 2018 Development Strategy.

Nodes are major growth areas critical to accommodating development across Auckland. These areas are based around a significant centre and service large sub-regional catchments. Nodes include surrounding employment and high-density residential areas.

For many years the city centre was the Tāmaki Makaurau-wide focus. The city centre will continue to be the focus of business, tourism, educational, cultural and civic activities. It will also continue to be an important residential centre. However, in time it will not be the only main centre in Tāmaki Makaurau.

The Future Development Strategy grows the roles of Albany, Westgate and Manukau in importance to support sub-regional activity. The aim is that these nodes will generate an increasing number of employment opportunities, bringing housing and jobs together. This not only creates more sustainable sub-regions and vibrancy but also reduces the need to travel. As these nodes develop, each with their own character, they will, over time, lead to greater sub-regional sustainability.

Lastly, the model anchors Warkworth and Pukekohe as rural nodes in the north and south respectively. See Appendix 5 for further information on the nodes.

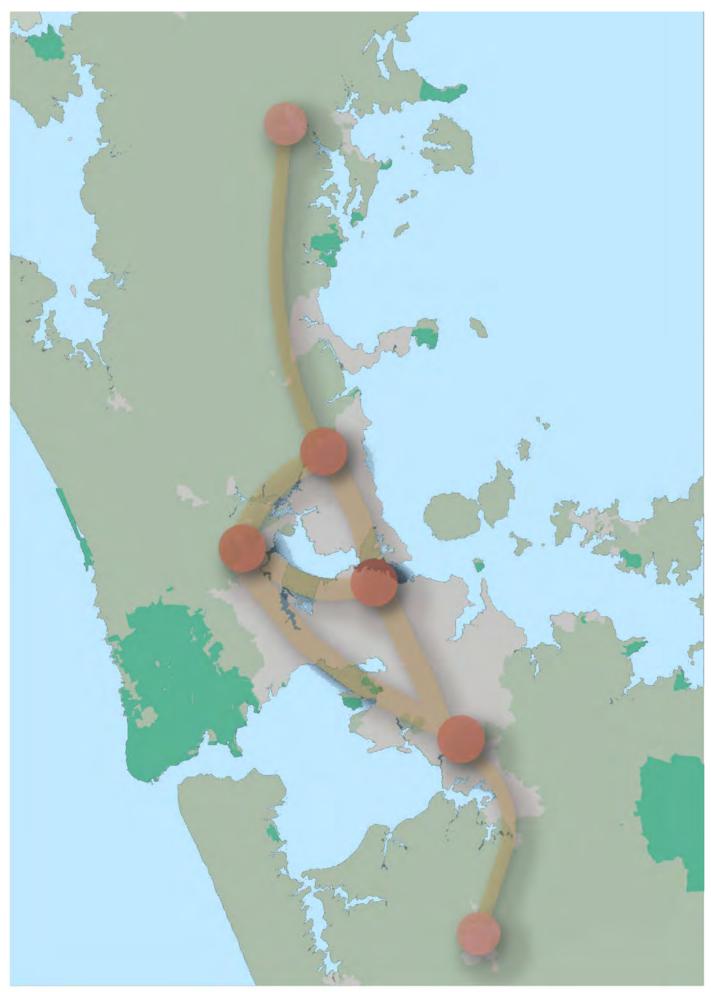


Figure 11 - Multi-nodal model

4.1.3 Local scale

At a local scale, neighbourhoods will offer a wider range of services and non-residential land uses. Most of these will still be concentrated in centres within these neighbourhoods, however there may be opportunity for some non-residential land use to be integrated into higher density residential development near centres. The aim is to create greater sustainability at a local level.

Strong centres therefore need to integrate non-residential activities that are compatible with residential uses or necessary to create economic activity and local employment – places of work, community services and facilities, and shops that serve people's daily needs. They need to be easy to access, by walking or cycling. This requires land use change and investment in infrastructure, public spaces and streets to create better environments for both people and nature.

Some centres provide both business and residential development opportunities, and those centres with easy access to public transport also provide access to other critical services such as schools and hospitals.

Centres are generally supported by a surrounding, typically residential, area that is within an easy walking distance - usually thought of as 10 minutes - though walking is not always easy.

Investment in centres and their surrounding neighbourhoods therefore maximises benefits for both business and the local community. In greenfield areas, investment may be needed in new centres to enable vibrant places for the new communities who will live there. These areas will also require employment other than that provided in centres.

Understanding the issues to be addressed and therefore the investment required at a local scale often requires some level of detailed planning. In greenfields this is at a level more detailed than structure planning. In brownfield areas the type of planning required will depend on the location and need. This planning needs to be supported to get value for money from the investments and to support positive outcomes for growing communities.

There will be growth outside centres too. This might be in the form of subdivision, the development of previously undeveloped urban land or the redevelopment of existing buildings at higher densities.

Figure 12 shows guidelines for local growth to enable strong communities and local outcomes.

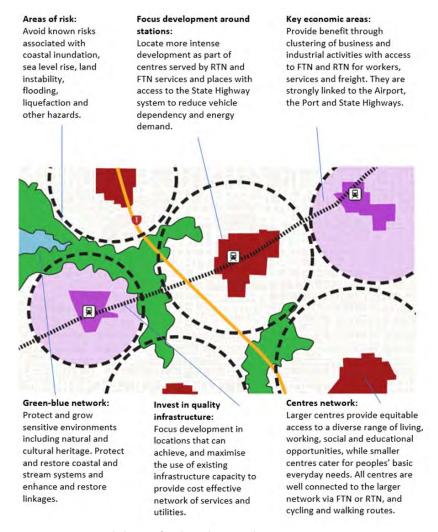


Figure 12 - Guidelines for local growth

4.2 Spatial environments

Tāmaki Makaurau is made up of four main spatial environments: the existing urban, future urban, rural and business areas. While these spatial environments each have distinct characteristics and contribute differently to the region, they are interconnected and exist as part of the larger regional system.

This section considers each of these spatial environments and discusses key considerations and the way forward.

4.2.1 Existing urban areas

Background

Since the late 1990's Tāmaki Makaurau has promoted a quality compact approach to growth. For each of the last five years, over 80% of growth happened within existing urban areas, mostly though intensification.

The pattern of the city's growth has also been changing.

Development intensity is increasing. Single house developments on large sites are making way for more intense developments. Apartments, townhouses and other multi-units made up 69% of dwellings consented in the 2021/2022 financial year²⁴

This pattern of growth is also aligning with the emerging rapid transit network. Data shows that a significant and growing proportion of development is close to stations²⁵.

Growth is visible across most of the city; both small developments, frequently multi-units on single sites, and large scale revitalisation projects as part of the Kainga Ora's Auckland Housing

Programme (e.g., Tāmaki, Mt Roskill and Māngere). These major projects are often based on partnerships with the council, central government, mana whenua, Eke Panuku and infrastructure providers.

Enabling growth was mainly focused in areas which have significant capacity for housing, access to a high number of jobs, within a centre and on the public transport network. This approach allowed the council to focus efforts and investment in areas where it would get the maximum benefit.

The 2018 Development Strategy also introduced the role of nodes (the city centre, Albany, Westgate and Manukau) as places expected to undergo a significant amount of housing and business growth over the next 30 years. Investment in these nodes was seen as a way to increase sub-regional sustainability.

Looking ahead over the next 30 years, most – but not all - growth will be accommodated within existing urban areas (see Figure 13 Existing urban area). This is a continuation of the approach taken for some decades now.

²⁵ https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/about-the-auckland-plan/Documents/ap-ds-monitoring-report.pdf



²⁴ https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/about-the-auckland-plan/Documents/ap-ds-monitoring-report.pdf

Key considerations

As New Zealand's largest city the scale and complexity of issues to manage its growth requires integrated solutions that bridge multiple partners, stakeholders and disciplines.

1. Insufficient integration of well-being and environmental outcomes with housing development

Increasing numbers of dwellings have been consented in recent years. This has helped to address, but not solve, the housing shortfall in Tāmaki Makaurau. However, the number of dwellings consented is only part of the equation. Wider sustainability and community well-being outcomes are as important for long-term success, but these have not had the same level of attention as increasing the number of dwellings.

The unique setting of Tāmaki Makaurau provides the opportunity to design with the local context using the natural environment, mātauranga Māori, and existing built form and infrastructure framework to improve urban outcomes. The greatest opportunities come from partnerships and collaboration with other agencies, mana whenua, and the private sector on large scale, comprehensive development. For example, large scale projects by Kāinga Ora (the Auckland Housing Programme), Eke Panuku (town centre redevelopment) or private sector developments on large land holdings.2.Neighbourhoods need to be more sustainable

Many older neighbourhoods, based largely on walking, public transport and a greater degree of density and mix of uses, provide a useful model for future sustainable development patterns. Newer neighbourhoods often need better linkages for people to move around - especially for walking or cycling - and a broader range of services to meet day-to-day needs locally. This not only reduces the need to travel but also makes such communities more resilient. Creating these more sustainable neighbourhoods requires investment in both regional networks and at a local level.

3. Investment must be focused to get maximum benefit

A changing legislative environment, particularly applying the Medium Density Residential Standards, has enabled greater density over much of Tāmaki Makaurau. This means that

growth is enabled throughout most of the urban area and all neighbourhoods will accommodate this growth to some extent.

Some existing urban areas are likely to be significantly redeveloped in the next 30 years through private and public sector initiatives. Both will likely require substantial infrastructure and service investment.

Major projects being planned, such as Auckland Light Rail, the Waitematā Harbour Connections and North-west rapid transit, potentially offer significant long-term benefits, especially in terms of greater accessibility. These projects however also add further uncertainty in terms of region-wide development patterns.

This means the council has much less certainty in forecasting where growth will be taken up, and where and when additional infrastructure will be needed.

Because of affordability constraints the council's approach to date has been to prioritise resources in areas where significant growth was anticipated. For example, funding is strategically aligned with central government's Auckland Housing Programme.

4. Areas of risk must be accounted for

As well as understanding where it is advantageous to intensify, the council also needs to understand areas where there are risks and where development may not be appropriate. Some areas within the existing urban area are more exposed than others to hazard risks – such as geohazards, flooding, coastal erosion and inundation – to the extent that future risk must be avoided and further development in these areas potentially curtailed. Such areas should be subject to adaptive planning processes.

Way forward

Addressing the key considerations above points to the need to determinedly focus where and when the council makes investment in infrastructure, both at a regional and local level, and to avoid future exposure to risk to the extent necessary. The private sector can play an important role in the delivery of that infrastructure. See section 4.2.5 Prioritising areas for development for further information about investment prioritisation.

In addition to where investment is focused, how it is funded also needs addressing. As the existing urban area intensifies, substantial infrastructure, service and amenities will be required to support this growth. While the cost of this investment will be spread over time (as growth occurs, rather than all required immediately), it is still significant.

Development contributions and infrastructure growth charges (water and wastewater) are currently the primary means of ensuring development contributes to the cost of providing infrastructure. However development contributions particularly have their limitations in existing urban areas. Additional funding tools to complement the use of development contributions and/or a better development contributions 'construct' have to be introduced to ensure urban intensification is appropriately supported by infrastructure and services. Unless addressed, this funding challenge will magnify in time

As areas are developed and intensify, investment in those areas need to be targeted to address real community needs and to get the most out of the combined investments made. This will at times require planning at a local level to inform what investments are needed and how investments can best be coordinated. The development of these plans needs to be prioritised amongst respective local areas.

Supporting actions

The following actions support the spatial response of the Future Development Strategy and form part of its implementation

- Identify and further enable and incentivise residential capacity (with some opportunity for small scale nonresidential use) in locations of high demand close to optimal centres, employment, rapid transit and with low hazard risk.
- Investigate opportunities to intensify and diversify business areas to strengthen nodes, and to increase housing capacity in surrounding areas.
- Invest in public transport and active mode infrastructure and services to better serve and connect residential areas, centres and business areas.
- Investigate funding tools, including private sector funding, and options to ensure development in existing urban areas is appropriately supported by investment in infrastructure, services and local amenity. This can include collaborative infrastructure solutions by partnering with others.
- Further investigate hazard types and exposure to risk, starting with the initial locations identified in the Future Development Strategy (4.2.7), and pilot programmes to develop appropriate adaptation responses.
- Support local level planning to inform investment requirements and coordination, and potentially initiatives that require community action rather than investment.



See Part 5 for more information.

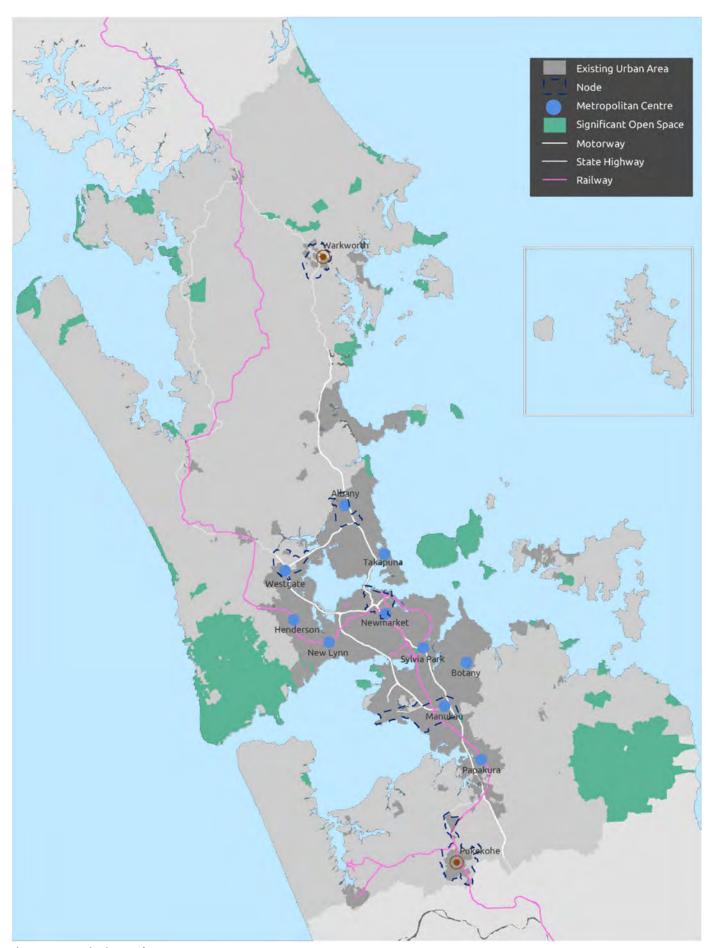


Figure 13: Existing urban area

4.2.2 Future urban areas

Background

While most growth is anticipated to be through intensification in existing urban areas, future urban areas will provide for urban expansion. This enables new communities to be established on the fringes of the existing urban area and in rural and coastal settlements.

In 2016, around 15,000ha of land that was rural was identified as future urban areas to accommodate growth. It was estimated that this land could accommodate approximately 137,000 homes and 67,000 jobs. These future urban areas were seen as a valuable resource that needed to be planned and used efficiently to get the best long-term, sustainable outcomes.

The Future Urban Land Supply Strategy 2017 (FULSS) outlined a coordinated approach to timing and sequencing development in these future urban areas over 30 years. This approach was taken to maintain a development pipeline of land to be re-zoned as urban when bulk infrastructure was in place and the area was ready to be developed. The FULSS acknowledged that the magnitude of bulk infrastructure required meant that any ad-hoc or out of sequence development would have major funding implications, affect the ability to coordinate delivery and was likely to have major implications on the ability to service other areas.

An important learning is the need for the release of new land to be integrated with the provision of funded infrastructure. With limited council budgets this infrastructure funding can come from a variety of sources, including public sector agencies and the private sector. The key is the level of enduring commitment and the successful outcome in servicing the area. The capital funding of new infrastructure is however only part of the consideration. The operational costs of providing services (e.g. public transport) and maintaining such new infrastructure is another consideration as these costs have to be funded and fall to the council and ratepayers.

Key considerations

Approximately 33% of identified future urban land has now been live zoned and is being developed (as at end of March 2023).

1. Private plan changes severely undermine coordination

Future urban areas have come under increasing development pressure. Rather than the sequenced and planned approach provided for through the FULSS, live zoning has come through private plan changes ahead of time. Up until the end of

March 2023, 10 private plan changes were fully operative in the future urban area. A number of other private plan changes are being processed with more expected. In effect, private plan changes are driving the strategy and have effectively resulted in council not progressing any plan changes in line with the FULSS timing. Together, this has removed any degree of certainty in sequencing and timing of growth and has forced the council group to become more reactive to ever changing priorities - both in the timing of development and the number and spread of areas being live zoned. This also results in council having to amend planned infrastructure provision, which undermines both strategic planning and the confidence of those who participate in it.

The private sector develops the bulk of the housing and businesses needed for Tāmaki Makaurau's population growth, and some of this housing and business growth will be in future urban areas. Private plan changes certainly have a role and can contribute positively to achieving Tāmaki Makaurau's development goals. Still, a much more collaborative approach between the development sector, council and central government is needed to ensure this growth is well managed and can be delivered.

2. Funding and financing pressures have increased

Development in an increasing number of future urban areas has put more pressure on the council group's ability to provide funding and financing to service development, especially when there are already severe affordability constraints. There is consequently a potential opportunity cost for planned and sequenced infrastructure and service provision. This is particularly the case when priorities need to shift to unplanned and out-of-sequence development. Shifting priorities also impacts negatively on infrastructure providers' ability to deliver large scale, complex bulk infrastructure projects that require long lead times.

3. Vehicle kilometres travelled need to reduce

Transport emissions account for 40% of carbon emissions in Tāmaki Makaurau. Most transport emissions – 86% – come from road transport. Both the council and central government have set transport emissions reduction targets for 2030 and 2035 respectively. Key to achieving these targets is to reduce the amount of vehicle kilometres travelled (VKT). Though public transport infrastructure is being planned for most future urban areas, the timing of when this infrastructure and associated services will be operational is unlikely to contribute to the 2030 and 2035 emission targets.

In addition to public transport, future urban areas must be planned in a manner that maximises opportunity for much greater levels of active transport modes (walking, cycling) to be taken up than have been typical in historic, conventional greenfield developments. This requires 'connected communities', both within and beyond developments, that not only help reduce VKT but also result in better levels of personal safety, health and fitness, and cost of living benefits.

4. Future urban areas must be used efficiently

Future urban areas will provide part of the needed development capacity over at least 30 years. The intention, however, is not to expand further into rural land without significant investigation and fully understanding the trade-off to be made.

Region-wide there is sufficient capacity for housing and business in the short, medium and long-term. However, future urban capacity must be used well. Rather than ad-hoc planning based on ownership boundaries, comprehensive and integrated planning is needed. Efficient use of future urban areas means higher density living and employment areas coordinated with appropriate infrastructure and environmental protection and improvements.

5. Constraints need far greater recognition

Knowledge of and importantly, general awareness about constraints, principally natural hazards, the impacts of climate change and the number and severity of weather events are increasing.

These constraints have recently been brought into sharp focus with the storms of January and February 2023. This has highlighted the dangers of flooding and land stability as well as challenges with the resilience of infrastructure. It also showed the risk exposure associated with such events.

This information reveals an increased vulnerability of some future urban areas and the need for comprehensive structure plans based on a catchment wide approach and with broad community engagement, rather than planning based on ownership boundaries.

While the degree of constraints vary, all future urban areas have some level of constraint on development which needs to be managed. Resilience and adaptation must be key considerations in all aspects of the planning and design of these areas. The value of this is shown by how well some modern, quality, and well-planned developments responded to the January and February 2023 weather events.

Way forward

Addressing the key considerations emphasises the need to reassess where, how and when future urban areas are developed.

Structure planning, plan changes and live zone

This strategy sets out the timing of when future urban areas will be ready for development to commence.

The AUP requires that before any future urban zone is zoned as being ready for urban development, a structure plan will be completed. Structure plans are an important method for establishing the pattern of land use and the transport and services network within a defined area. They should explain how future development will give effect to the regional policy statement and how any adverse effects of land use and development are to be avoided, remedied or mitigated by proposed plan provisions.

Following a structure plan, a plan change is required to rezone land to an appropriate live zoning. It is envisaged that areas will be live zoned before the timing set out in Appendix 6 and Appendix 7, meaning that when all bulk infrastructure is in place, the area already has the appropriate live zoning in place. This also means that some development works, such as land preparation, local infrastructure etc. could proceed (in line with the live zoning and appropriate consents) prior to the required bulk infrastructure being in place. Residential or business occupation can however not occur prior to the bulk infrastructure / networks that it connects to are in place.

Timing and prerequisites for development

Development of future urban areas contributes to development capacity and housing choice, but must account for the ability to service this land across the region. The sequencing and timing of live zoning, and subsequent development, is adjusted to reflect the realities of infrastructure funding and provision and the significant capacity in the existing urban area.

This information in the Future Development Strategy replaces the 2017 Future Urban Land Supply Strategy.

Infrastructure prerequisites, linked to the development readiness of areas, are introduced. Prerequisites relate to when the council - and in cases Waka Kotahi and Kiwirail - can provide all the required bulk infrastructure to ensure that any development is well-coordinated and is able to provide a safe, sustainable environment on which communities can be based. The NPS-UD allows the use of infrastructure prerequisites.

Applying prerequisites will vary from area to area. In some cases, the prerequisite infrastructure will need to be in place when development commences. In some cases, it will be appropriate for rezoning to occur and development to commence prior to or while the infrastructure prerequisite is in the process of being built and established. In other

cases, staged development will be appropriate. Alternate approaches to infrastructure technology that achieve the same or similar outcome will also be considered.

There may therefore be cases where the timing and development of areas could be brought forward. This will however need to be considered on a case-by-case basis. While this creates a 'pathway' for development that wishes to proceed earlier, the council will only consider this where there is not a significant impact on the council's financial position and broader well-functioning urban environment outcomes can be met.

As infrastructure programmes may change over time, prerequisites will be reviewed regularly to ensure they reflect latest information.

Figure 14 below shows the location of future urban areas. Information on sequencing, timing and prerequisites for future urban areas is set out in Appendix 6 and Appendix 7.

While infrastructure prerequisites address future development, it does not address areas of varying size that have already been live-zoned or that are potentially in the process of being live-zoned. In some cases this live zoning has been ad-hoc and unconnected, and cumulatively have significant effects on especially environment outcomes. When combined with future urban areas that will in time be live-zoned and developed, these cumulative effects become even greater.

Planning at a more detailed level than structure planning is needed to coordinate existing live-zoned areas and new live-zoned areas as they come onstream. The focus is less on bulk infrastructure, which is addressed through other documents and processes, but more broader outcomes and well-functioning environments. The nature and form of this type of planning will vary between future urban areas, depending on their unique characteristics. Focusing council's investment

Focusing council's investment

Specific areas within the wider future urban area are identified as the focus for the council's investment in infrastructure, particularly in the next 10 years (see section 4.2.5 Prioritising areas for development). The council will seek to stringently adhere to this focused approach and ensure that growth areas are adequately serviced by appropriate infrastructure.

This is a signal to infrastructure providers and the development sector that the council's financial resources are limited, and that servicing growth consequently is determined by the ability of council to fund new infrastructure across the region. This approach is taken to ensure that infrastructure projects in areas prioritised for development

are funded and able to be planned, designed, consented and constructed.

Still, the council will consider private sector initiatives which find practical ways to provide infrastructure either through direct provision, or funding council to accelerate its own infrastructure provision where that contributes significantly to housing and business capacity, and meets the requirements of a well-functioning urban environment, set out in section 2.5 above, and as required by the NPS-UD.

Private sector infrastructure provision

Local infrastructure is funded by developers to the extent that they mitigate the impact of their development. However, this infrastructure generally has to connect to bulk infrastructure and/or have an impact on wider infrastructure networks and services, creating cumulative infrastructure impacts. Whilst this strategy sets infrastructure prerequisites that align with council's planned investment in future urban areas, it also signals a pathway for the private sector to fund infrastructure ahead of when the council can fund the required infrastructure.

Private sector infrastructure provision could consider:

- private sector funding to the council and it's CCOs to provide the infrastructure ahead of programme where it does not impact council's debt profile and fits with the financial position of the council and CCOs
- private sector provision of infrastructure with deferred vesting in the council
- independent standalone infrastructure, where it can be provided, funded and operated by the private sector pending delivery and connection of public infrastructure to a place.

For developments where the private sector provides the infrastructure, there may be public benefits in future-proofing the level of infrastructure to cover an expanded growth area, rather than confined to the development area only.

How subsequent development pays an appropriate proportion of the initial infrastructure costs, and how that is compensated back to the original infrastructure funder must occur appropriately.

The council's debt profile and financial position is such that it cannot effectively, and it may not be appropriate to, buy out the residual infrastructure costs, and recoup that progressively from future developments over time. Alternative mechanisms are required in situations where it is appropriate to do so.

The council will work with the development sector to identify appropriate mechanisms by which

the private sector can fully fund all infrastructure up front, including the cumulative infrastructure required, and by which subsequent developments in the surrounding area reimburse the private sector infrastructure funder at a future date, where appropriate. This will relate to the eventual timeframes of the take-up of the infrastructure capacity.

The need for infrastructure is triggered by the occupation of homes and businesses (see appendix 6 for further information). Concurrent land development, subdivision and construction, timed with appropriate infrastructure provision, can provide timing and budget efficiencies, but requires detailed planning and assessments. This includes financing and funding decisions cognisant of financing and maintenance costs over the period when infrastructure is unused and under-utilised.

Discussions around constructs with developers will focus on principles such as:

- risk as to timing and final outcome rests with the initial funder, not the council
- the appropriateness of the original infrastructure funder receiving funding for some portion of the infrastructure that others may benefit from
- any agreements between the council (and its CCOs) and developer being in place prior to development proceeding.

Options that could be considered include:

- private sector financing and funding of cumulative (local and bulk) infrastructure
- partnership arrangements between the private and public sector to fund infrastructure over time
- utilisation of tools such as provided in the Infrastructure Funding and Financing Act 2020
- use of targeted rates and development contributions
- infrastructure funding agreements with developers to fund infrastructure with recovery of appropriate costs by way of funding tools such as development contributions.

For the removal of doubt, any and all options and approaches described here, or any other mechanism or solution that may be identified to provide infrastructure that enables development in future urban areas prior to when the council (and its CCOs) can or intend to provide that infrastructure, will be subject to an agreement between the council and developer prior to any development proceeding. This will be on the condition that the developer funds the council's work to fully scope, research and reach an agreement, it does not impact on the council's debt profile, nor constrain its ability to fund infrastructure it has committed to or prioritised, other than as may be agreed by the council. Consequential operational expenditure costs falling to the developer, in full or in part, and for a period to be specified, may also form part of the agreement reached between the council and developer.

Removing hazardous areas from development

Many future urban areas are constrained by different types of hazards. The suitability of each area for urban development has been assessed against a range of criteria, including hazard constraints. The most hazard constrained parts of certain future urban areas are not considered suitable for urban development due to the risk to life and property. The direction is to remove these as future urban areas and apply an appropriate non-urban zoning through a AUP plan change process. The remaining parts of these future urban areas are 'red flagged' due to the impact urban development in these areas would have on increasing existing flood risk within the future urban area and downstream. In these 'red flag' areas, any future development proposals need to include structure plans that meet requirements as outlined in Section 4.2.7 Approach to natural hazard constrained areas.

The presence and extent of natural hazards that should be addressed in development proposals in other future urban areas is set out in Appendix 7.

Supporting actions

The following actions support the spatial response of the Future Development Strategy and form part of its implementation.

- Strengthen matters for assessing plan changes (including infrastructure and occupation prerequisites and potential trade-offs) in the AUP.
- Strengthen the requirement to take an integrated catchment management approach to hazards within structure planning (Appendix 1 of AUP).
- Support future urban area planning that, for example, coordinates existing and future live zoned areas and gives more detailed direction on achieving well-functioning urban environment outcomes, prioritising Whenuapai as the first.

See Part 5 for more information.

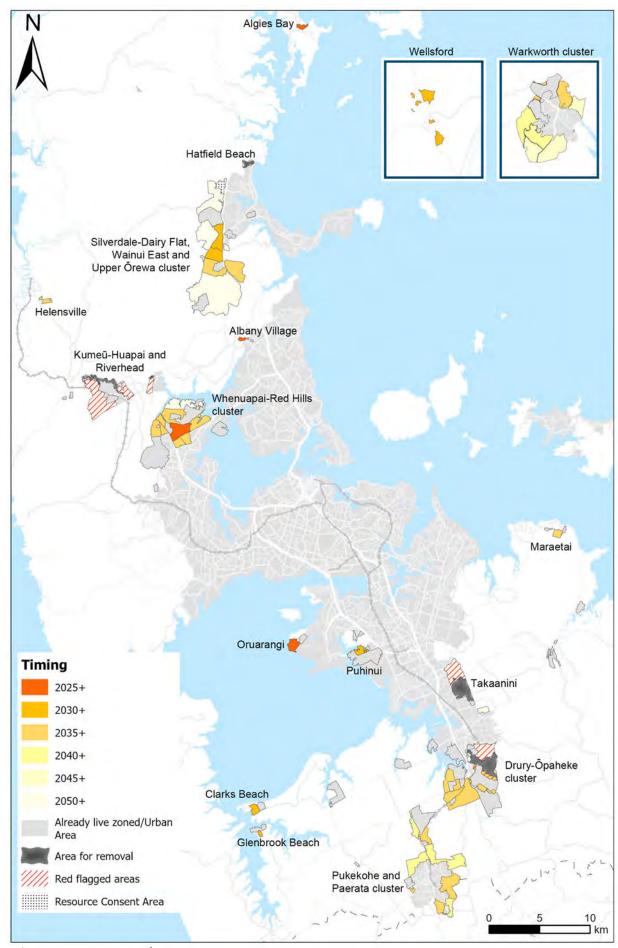


Figure 14 – Future urban areas

4.2.3 Rural areas

Background

Rural areas in Tāmaki Makaurau vary considerably and are a mix of cultivated, natural and built environments that contribute significantly to the identity and character Tāmaki Makaurau.

Rural Tāmaki Makaurau 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, tourism, quarrying and the services that support them.

Rural areas in Tāmaki Makaurau consist of many different environments. These include areas of rural production, industrial areas of different scale, various protected areas, countryside living areas and numerous towns and villages. See Figure 15 below.

The southern rural area has a unique combination of temperate climate, frost-free fertile land, access to water and proximity to market. This enables a wider range of vegetables to be grown for longer periods than other parts of the country, and this makes a significant contribution to the food supply for Tāmaki Makaurau and New Zealand. Vegetable growing is also a significant segment of the region's primary sector.

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

Rural towns and villages vary from small settlements to the larger rural nodes of Warkworth and Pukekohe. Catchments for rural communities are large and there are strong associations to Northland, Kaipara and the Waikato.

The types of infrastructure and community facilities needed to support rural Tāmaki Makaurau vary in terms of place and community and their projected growth. Understanding the nature of the network between these rural communities is key to identifying what investments may be needed in the future.

Key considerations

Changes in the broader Tāmaki Makaurau and national context create a number of challenges as well as opportunities for rural Tāmaki Makaurau.

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

1. Reducing environmental degradation and restoring ecosystems

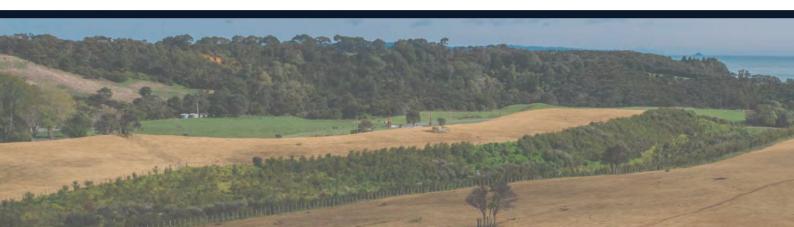
The good health of the natural environment is a fundamental condition to the well-being and resilience of rural areas. The rural natural environment also plays a key role in water quality and biodiversity for much of Tāmaki Makaurau.

The good health of the rural natural environment is also key to a thriving rural economy and people's quality of life.

2. Rural growth has many and varied impacts

The commercial production of locally grown food, as well as tourism, recreation and productive activities are made possible by the proximity of urban Tāmaki Makaurau. The value of food production, highlighted by growers for many years, is now much more widely recognised after the supply and price impacts of recent weather events. These impacts were felt across Aotearoa New Zealand.

Yet growth has contributed to high levels of subdivision across rural areas and fragmentation of rural land. This often comes with domestication and commercialisation of rural landscapes and changes in rural use. These changes can and do lead to reverse sensitivity where sensitive land uses are introduced into productive environments. The newly introduced National Policy Statement on Highly Productive Land aims to safeguard against this – at least for land classified as highly productive.



3. Resilience of rural communities

While climate change affects all communities, it can disproportionately affect rural communities in terms of both scale and intensity. Many rural communities rely on vulnerable infrastructure for their day-to-day needs. If this infrastructure fails it can cause significant disruption and impacts the long-term resilience and viability of these communities. Most rural communities are predominantly car dependent. Building greater resilience in rural communities and environments requires rural solutions to rural issues, and needs to be supported to help overcome challenges such as adapting and diversifying in the transition to net zero emissions.

4. A broadening economic base

The southern rural towns and industry zones in particular have large industrial land holdings. Combined with technology advancements, these land holdings potentially open up opportunities for new industries that could generate significant employment in the area. The potential scale of these opportunities could substantially alter the way this rural area functions, with more people and freight movements, the need for more housing, negative impacts on rural production (noting the requirements of the NPS for Highly Productive Land), the relationship between urban and rural etc. This will necessitate integrated planning of the southern rural area as one functional network to balance these opportunities with other rural needs, interests and opportunities.

5. Resilience and wellbeing of rural Māori communities

The vast majority of Māori land is within the rural periphery of urban Tāmaki Makaurau. This is primarily due to the historic marginalisation of iwi/hapū, customary or Māori title being actively extinguished by the Crown in areas of economic growth for the settler community, or the return of residual Crown lands that remained outside of developed areas through Treaty settlements. The historic development pattern in Tāmaki Makaurau has left Māori behind.

To avoid history repeating, the development of Māori Land and Treaty settlement commercial redress land needs to be enabled. The limited extent of this land highlights its significant importance in lifting mana whenua social, cultural and economic well-being.

See Figure 26 for a map of Māori Land and Commercial redress land.

Way forward

Addressing the key considerations above points to the need to recognise and better protect the

value of rural Tāmaki Makaurau and contribution both economically and in terms of Aotearoa New Zealand's food security. It also points to the need to address the health of the natural environment and the resilience of rural communities.

Managing rural residential growth will support rural, coastal, marine and natural environments to co- exist in a balanced way with economic and rural production 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 land and soil resources, particularly highly productive land.

This also needs to support the resources and production systems, including water supply, that underpin the rural economy.

At the same time the potential industrial growth in the southern rural area, and the employment that would generate, needs to be accounted for and planned for. This is to ensure that all rural activities, the relationship with urban development, and the natural environment they all depend on, can co-exist and benefit this rural area and its communities as a whole.

Limiting rural residential growth

Residential growth in rural areas will predominantly be focused in towns that provide services for the wider rural area, particularly the rural nodes of Warkworth and Pukekohe. Less growth is anticipated in the smaller towns and villages.

Māori land and iwi strategic developments will be enabled / not constrained by the Future Development Strategy. These developments and uses will be determined by subsequent planning processes. In some cases, local rural areas of Māori land will be actively supported, for example, where land is adjacent to rural towns or settlements, or rural enterprise compatible with surrounding activity.

Rural lifestyle growth will remain focused into those areas zoned as 'countryside living', away from the most environmentally sensitive and economically productive areas. Only a small amount of growth will be provided for in the wider rural area, outside of Warkworth and Pukekohe. This growth is likely to relate to environmental enhancement and existing vacant lots.

A proposed Rural Strategy will be prepared that will consider the appropriateness of growth in existing rural towns and settlements and in the interim, merit-based development in areas adjacent to existing towns and settlements will be considered through relevant subsequent planning processes.

Increasing rural resilience

Planning for resilience has largely been driven by environmental issues. The health of the natural environment is vital to resilience. Rural areas face increasing challenges related to natural hazards. Coastal areas are becoming increasingly vulnerable to sea level rise while inland areas are facing more frequent flooding events.

Rural resilience must also consider economic and social dimensions. Rural resilience is the capacity of communities, businesses, and systems within the rural areas to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience. Adapting to climate change will be critical to the future resilience of rural areas and communities.

A key aspect to rural economy resilience is understanding the factors that influence rural productivity – the driver of the rural economy. Changes to current rural productivity methods are required to achieve resiliency. These changes include adapting to new technologies, improving efficiency and becoming more flexible responding to changing regulations and market needs.

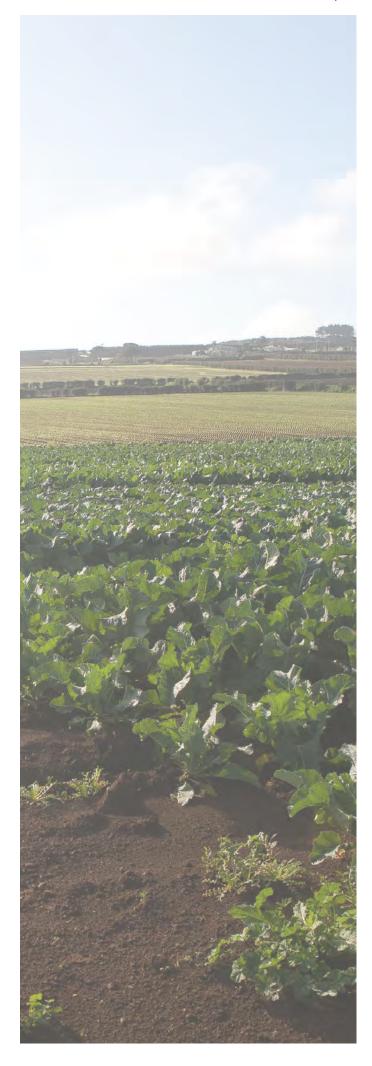
Rural areas function as a complex network of rural communities of different sizes all relying on each other. Understanding the nature of this network is one of the key factors to address social resilience.

Supporting actions

The following actions support the spatial response of the Future Development Strategy and form part of its implementation.

 Update information on rural settlements, environments, productivity and employment and develop a Rural Strategy (prioritising the southern rural area) to inform the future approach to rural areas.

See Part 5 for more information.



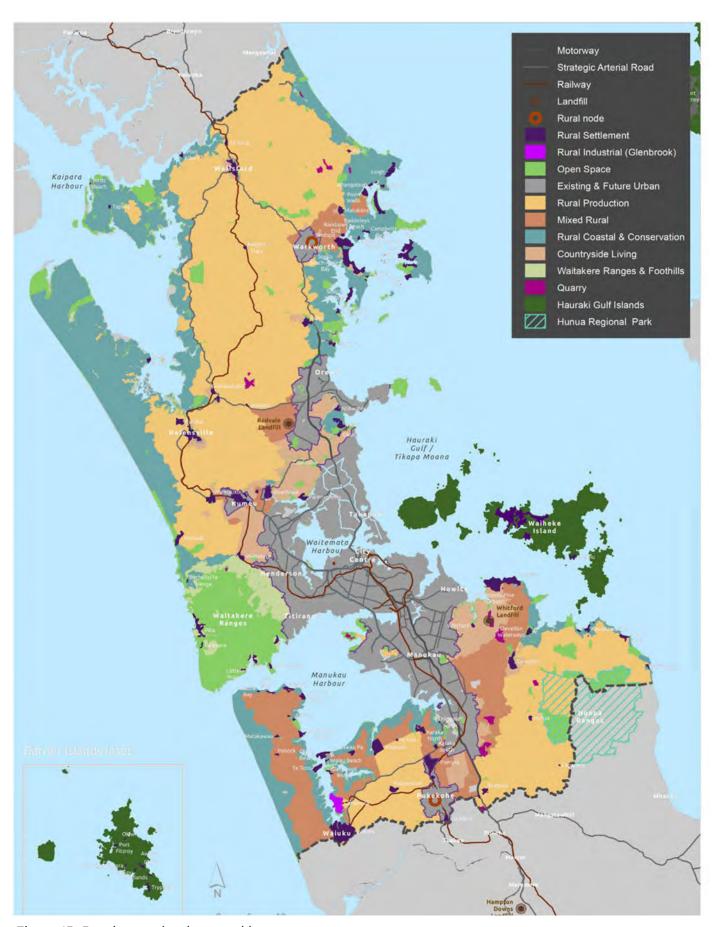


Figure 15: Rural map - land use and key routes

4.2.4 Business areas

As Tāmaki Makaurau grows, it must provide capacity for new business growth. Over the next 30 years, employment is projected to increase by around 257,000 new jobs (for further information on business demand and supply see section 3.3).

The last few years have resulted in significant change as COVID 19 increased the rate of technology uptake. Remote working and flexible working hours have become the norm in many sectors, with the resultant change in where and when people work. Online working and trading have similarly become normal parts of business practice. In future, robotics will have an impact on employment, both in terms of opportunities it brings but also the displacement of jobs.

Still, the city centre continues to play a critical role in the success of the economy with a concentration of financial and commercial jobs. Advanced industries are also concentrating in the city centre.

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

As is the case in the city centre, advanced industries are increasingly concentrating in established industrial areas in the inner south. At the same time heavy and light industrial uses are moving out towards the periphery because existing industrial land is highly constrained for expansion. There is also pressure on industrial uses to move and make way for cleaner land uses. The general trend is for higher intensity uses to replace these industrial uses.

The north-south State Highway 1 corridor continues to have a concentration of businesses using this

corridor to access other parts of Tāmaki Makaurau and New Zealand.

As the urban area extends, new business areas are being established at Westgate/Whenuapai in the North-west and Drury in the south. Business land is being developed for both new town centres to serve establishing communities and for industrial activities.

Continuing this outward trend, some businesses have relocated from Tāmaki Makaurau to Waikato, taking advantage of the availability of industrial land still relatively close to Tāmaki Makaurau, Hamilton and Tauranga.

Change in the make-up of business areas 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.

There remains a strong demand for industrial land which plays a critical role in providing services, economic activity and employment.

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



Key considerations

The changing context for business and employment in Tāmaki Makaurau indicates the need to consider how we make best use of existing business land, adapt to new ways of working and enable technological changes.

1. Making the best use of existing business land

The quality compact approach to accommodating future business growth 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. Integration of land use and transport to encourage mixed use neighbourhoods will better position the move to a low-carbon economy.

Existing business land, particularly important industrial areas, needs to be safeguarded. Once lost to other uses, such as housing, it is difficult to replace. Business land for land extensive industries has specific requirements for large, flat sites with good accessibility. A number of such sites have been identified in future urban areas and need to be protected for that purpose. Though it is possible that such land extensive industries will make more efficient use of land over time, as has started to occur in some international locations, it remains critical that these future urban business areas are protected.

2. Greater access to employment

Employment is currently concentrated in a small number of key economic places. Three broad areas (the city centre and fringe; Onehunga – Te Papapa to East Tāmaki; Manukau, Wiri and Auckland Airport) account for approximately 46% of jobs in Tāmaki Makaurau. Conversely, employment opportunities are under-represented elsewhere in the urban area.

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

Increasing business growth and employment opportunities around Albany, Westgate and Manukau – as sub-regional nodes - will help address several 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. A change in the location and spread of economic places, and the employment opportunities that comes with, will also assist with the target of achieving net zero emissions by 2050.

3. Enabling housing near employment

Enabling more high-density housing development near centres and transport corridors will create vibrant and thriving places where people can easily access services, employment, recreation and education by walking, cycling or public transport. The careful combination of different compatible land uses in these areas will contribute significantly to the reduction of greenhouse gas emissions and to the well-being of people.

Tāmaki Makaurau also needs to retain the integrity of its light and heavy business areas, and not expose them to reverse sensitivity issues particularly from residential and mixed-use activities. However, there may be areas close to, but sufficiently separated from industrial activity, that are suitable for more residential intensity. This will enable people greater accessibility to work opportunities while reducing VKT.

Way forward

Addressing the key considerations above points to the need to safeguard options for the future, in a changing business environment. This includes how business land in future urban areas is protected and ultimately developed, and strengthening the role of the urban nodes. The role public transport plays in improving accessibility to employment will also need to be addressed.

Safeguarding options for the future

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 opportunities and employment across Tāmaki Makaurau.

Safeguarding existing business land and managing the supply of different types of future business land ensures opportunity, flexibility and choice over the long-term. This means taking a well-considered approach to encroaching residential development.

Enabling Māori and Treaty settlement land

Development of Māori Land and Treaty settlement commercial redress land needs to be enabled. The limited extent of this land highlights its importance in lifting mana whenua social, cultural and economic well-being significantly.

Business land in future urban areas

Approximately 1,500-1,700 hectares of vacant business land is needed over the long-term. Business land is identified to serve the north, north-west and southern future urban areas. Sites for land extensive business are identified in Silverdale, Whenuapai and Drury-Ōpaheke. These future urban business areas meet the short, medium and long-term business land needs identified in the Housing and Business Capacity Assessment.

The exact location and quantity required will be confirmed through changes to the Auckland Unitary Plan. Infrastructure servicing will be in line with priorities set through the Future Development Strategy and implemented through the Long-term Plan.

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

Better access to employment

The city centre has been the traditional focus for much business activity in Tāmaki Makaurau. However, as the urban area has grown the role of the urban nodes (Albany, Westgate and Manukau) is becoming more important. These nodes all have major centres and significant business area within their catchments. Strengthening these nodes, in addition to the city centre, will enable stronger and more divers employment opportunities at a sub-regional scale. This in turn will lead to more opportunities in surrounding local centres.

Accessibility to these employment areas needs to improve. A number of transport projects currently at planning stage could assist with this. Some local projects are also incrementally building better public transport options. For example, the rail line and station at Manukau was followed by the development of the Bus Interchange and then the Puhinui station. These have improved wider access for local communities to employment areas.

Though still subject to investment decisions, projects such as Auckland Light Rail and the Waitematā Harbour Connections have region wide potential to change and improve people's travel to work choices. Other major projects such as the Airport to Botany Rapid Transit and Westgate to Albany/Constellation Linkage provide cross city connections that are needed to complete the rapid transit network.

Business land is identified in future urban areas. This includes areas where there had been past shortages, such as in the North-west at Whenuapai, and in the North at Silverdale. Development of business land in future urban areas will help address local and sub-regional employment inequities and contribute to emissions reduction. However, development of this land requires infrastructure, particularly rapid transit, which will have to align with the ability to finance it.

Supporting actions

The following actions support the spatial response of the Future Development Strategy and form part of its implementation.

- Investigate opportunities to intensify and diversify business areas and to increase housing capacity in surrounding areas.
- Identify and further enable and incentivise intensification close to optimal centres and rapid transit, and other areas that could be suitable for mixed use.
- Invest in public transport and active mode infrastructure and services to better serve and connect residential areas, centres and business areas.
- Investigate strengthening AUP provisions to further enable Māori economic, social and cultural development.
- Investigate strengthening AUP provisions to safeguard identified business land in future urban areas.

See Part 5 for more information.

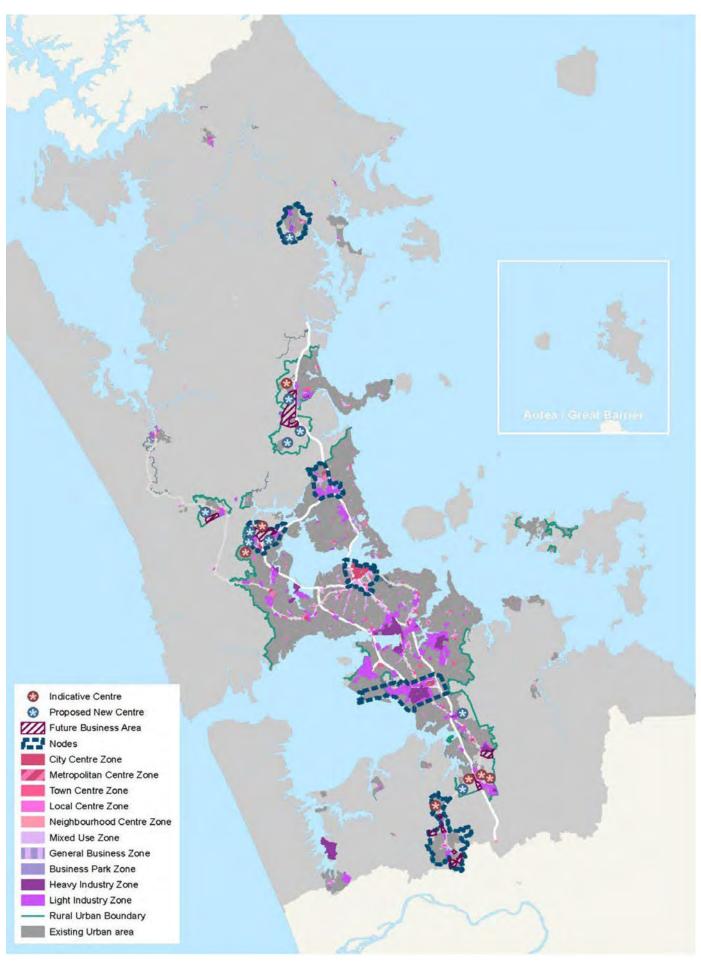


Figure 16: Business map

4.2.5 Prioritising areas for development

Background

The quality compact approach to accommodating growth has been pursued over successive strategic plans. Tāmaki Makaurau is at a point where most growth is through development - mainly intensification – in the existing urban area.

In past development strategies the council prioritised support for development in locations where significant growth was anticipated. Criteria for prioritisation addressed factors such as alignment with Auckland Plan 2050 outcomes, capacity for significant growth in housing and jobs, availability of infrastructure, or the ability to provide infrastructure, accessibility and alignment with existing development projects- both market and public led.

Many of the priorities identified as part of the first Auckland Plan in 2012 have remained on-going priorities over the last 10 years. It demonstrates both the scale of development in these locations and the long-term nature of development and pointed to the value of committing to projects on a long-term basis, and the need for integrated planning to achieve intended outcomes.

Major infrastructure projects not only help accommodate growth but also shape the city. For instance, the development of the tram network established compact, connected neighbourhoods on the isthmus whereas the Auckland Harbour Bridge resulted in a more expansive pattern of development for the North Shore (Figure 17).

Several other major projects are currently being planned (see Appendix 9: Information on major projects). These projects will influence development and will likely determine what will be priorities in the future.

Development of Māori Land and Treaty settlement commercial redress land needs to be enabled. The limited extent of this land highlights its importance in lifting mana whenua social, cultural and economic well-being significantly.

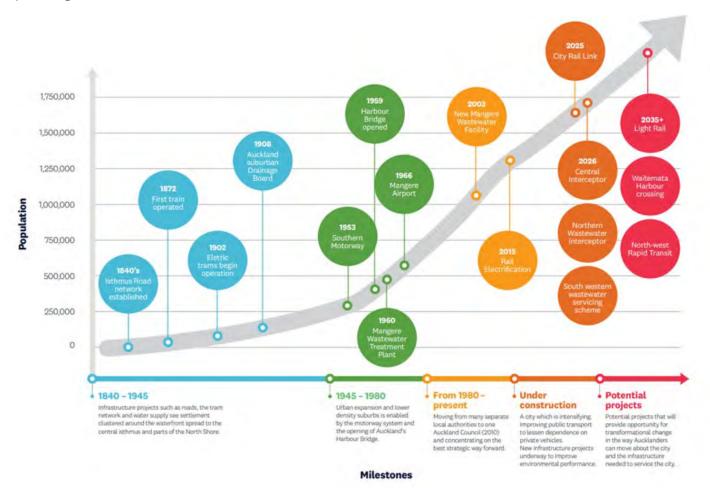


Figure 17: Major infrastructure projects past and future

Way forward

The matters raised in Parts 2 and 3, and the principles set out in Part 1, point to the following.

Prioritise locations that give the greatest benefits

In line with a quality compact approach to growth, investment, whether by council or central government, needs to be prioritised in locations that will achieve the greatest benefits, across multiple outcomes. This means investing primarily but not exclusively, in existing urban areas, with a strong focus on aligning land use and infrastructure.

Set region-wide priorities

Urban and future urban priorities need to be considered together as they are both part of the same spatial, interconnected network. This means prioritisation needs to be based on what provides the most benefit for the whole region, rather than considering outcomes in isolation or in separate geographic areas. This enables regional comparison and benefit evaluation of projects / investment.

Plan to support different types of spatial priorities

Four types of spatial priorities are identified. The timing and scale of the investment will vary over the next 30 years depending on the type of priority area. Areas are shown as short to medium-term, or long-term spatial priorities, depending on the timing and certainty of investment needs.

Short to medium-term priorities for investment (years 1-10)

The approach to spatial priorities recognises that there is greater certainty in the short to medium-term (1-10 years) about some locations and the subsequent investment required. Priorities in this timeframe are to be incorporated into Long-term Plan growth investments.

For large-scale investments, the funding, or partial funding, has generally been secured, which provides greater certainty about their likely progress. Prioritising these locations is an opportunity to consolidate progress. This enables projects to move from the initial planning phases, to delivering the supporting infrastructure and services needed, through to the eventual sale of homes and/or serviced sites.

For smaller-scale investments, the location, needs and funding requirements are also clearer than those in the longer-term.

The short to medium-term priorities for investment are shown on Figure 18, below.

Long-term priorities (years 11-30)

In the longer, 11-30 year timeframe, there is less certainty about which locations will incur significant growth and what investment will be required as a result. Long-term priorities are signalled to show the need to commit to areas and projects in order to support enabled capacity and realise intended outcomes. This approach reinforces the efficiency of committing to and delivering set priorities rather than changing priorities on an on-going basis. That is not to foreclose on private sector investment which adds capacity within the region without compromising council budgets or delivery programme.

Smaller-scale investment needs in this longer timeframe are less certain but are shown to signal improvements are likely to be needed, particularly once infrastructure constraints are addressed in the short to medium term.

Investment in these areas will be considered in future funding periods.

The long-term priorities are shown on Figure 19, below.

Types of spatial priorities

1. Nodes: The city centre, Albany, Westgate and Manukau play an important role in providing greater sub-regional sustainability. Their scale and importance mean that significant projects and investment are needed for one or more of the nodes on an on-going basis. As significant projects are completed in one node, another node is likely to become the priority in the next funding period.

Short to medium-term (years 1-10)

Focused areas within the city centre and Westgate nodes are identified as joint priorities between the council and central government for investment in the short to medium-term. These areas are discussed in more detail below.

Long-term (years 11-30)

All the nodes will require investment over the long-term. Albany and Manukau are not identified in the short to medium term (both have had recent investment), however to support the growth and subregional role of these two nodes, they are likely to become investment priorities in the next funding period. The rural nodes of Pukekohe and Warkworth will similarly have to be considered for investment in the longer term.

Further information on the nodes can be found in Appendix 5

2. Joint priorities between the council and central government:

These priorities focus on the Auckland Housing Programme. This programme includes the development of significant areas where bulk infrastructure is needed to enable regeneration, housing, jobs and recreation areas. Project timeframes span across two to three decades.

Short to medium-term (years 1-10)

These locations include:

- The Auckland Housing Programme priorities of Mt Roskill, M\u00e4ngere and Tamaki. In the case of Mt Roskill and M\u00e4ngere, prioritisation of these locations provides a pipeline for revitalising these locations in line with their longer-term link to the Auckland Light Rail project.
- The city centre, with the focus on completing work for the areas surrounding the Maungawhau and Karanga-a-Hape Stations.
- Westgate includes both live zoned land and a portion of future urban land. The focus is to advance funding and delivery of infrastructure for the wider North-west urban and future urban areas. This includes enabling employment opportunities in the Whenuapai future urban area.
- Drury- Ōpaheke area is too large to enable development as a single stage. The area for investment centres on land that is live zoned. This enables more efficient implementation of bulk infrastructure that is needed to service areas currently being developed, including that close to Drury rail station. This prioritisation also provides for the local improvements needed to develop the existing Drury town centre.

Further information on these joint priorities can be found in Appendix 10.

Long-term (years 11-30)

Investment needs are likely to continue in the locations identified above, but move into the wider area, beyond the focused areas of the short to medium term.

3. Local areas and community investment:

The focus of this investment is to support growth in the existing urban area, as it happens. Investment in these areas is to provide for projects that strengthen communities through smaller scale interventions. These projects are often focused on town centre regeneration (for instance, projects led by Eke Panuku), environmental outcomes (for instance, naturalising waterways) or improving accessibility (for instance, improvements to active mode infrastructure). These interventions and investments may be of shorter duration or broken into stages and may well be combined with local board funded projects and initiatives.

Short to medium-term (years 1-10)

Identifying local areas for investment in years 1-10 is part of Future Development Strategy implementation and will be done in conjunction with local boards. These priorities are not mapped.

4. Infrastructure deficit priorities:

These are areas where either bulk or more localised network infrastructure constraints (transport, water supply or wastewater) limit development in an otherwise good location. A smaller number of prioritised locations are identified that are market attractive, accessible and free from significant natural hazards. To enable development in these good locations, investment is needed to undertake the required improvements. In many cases the exact nature of the solutions to address the infrastructure deficit is yet to be confirmed.

Short to medium-term (years 1-10)

Infrastructure investment is to address the short to medium-term deficit identified.

The locations are:

- Chatswood
- Waterview
- Carrington / United
- Te Atatu South
- Blockhouse Bay
- Pakuranga
- M\u00e4ngere Bridge

The delivery of infrastructure by council and central government to support the development of the wider future urban areas is not prioritised in this strategy. This is in line with the need to develop efficiently, as well as the limits on council's ability to borrow and limits to how much investment can be financed.

Supporting actions

The following actions support the spatial response of the Future Development Strategy and form part of its implementation.

 Use Future Development Strategy Spatial Priorities to inform 2024-2034 Long-term Plan growth investments, including investigation of short to medium-term infrastructure deficit priorities

See Part 5 for more information.



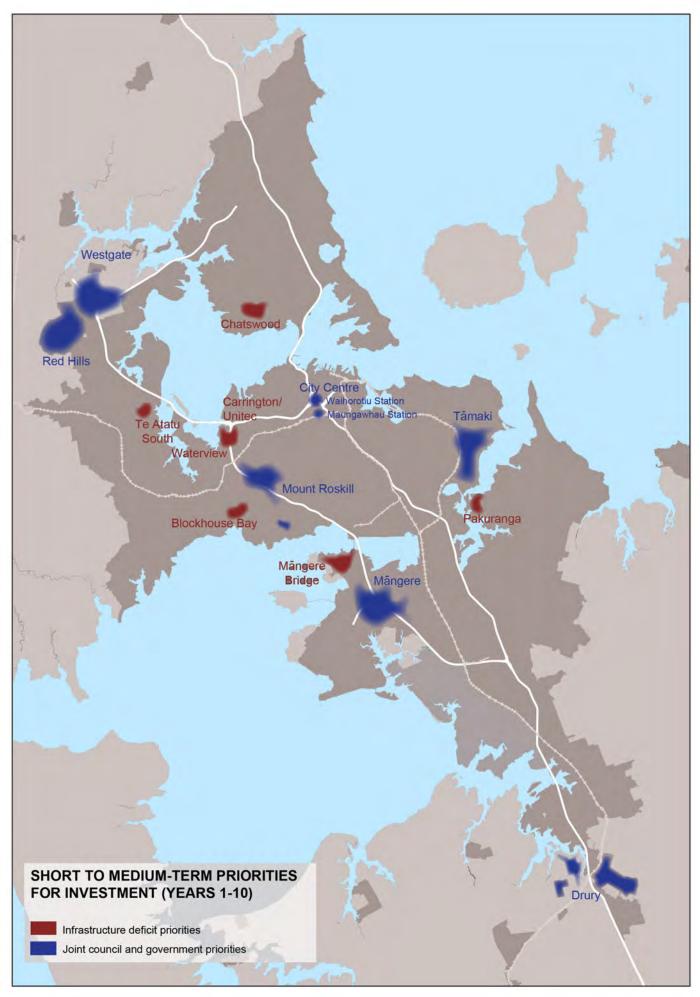


Figure 18: Short to medium-term priorities for investment

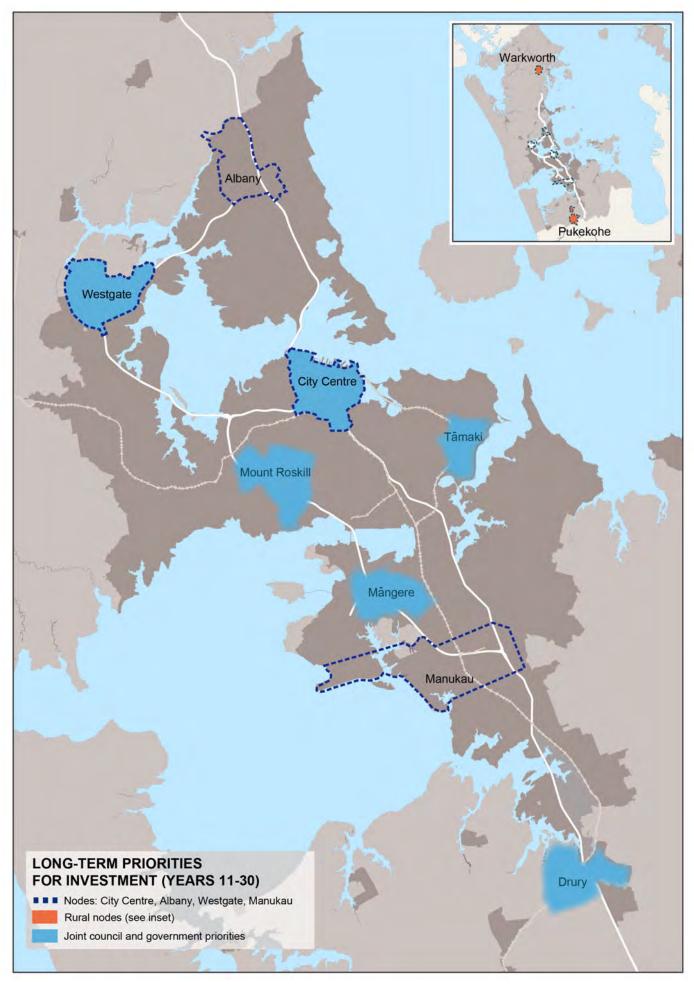


Figure 19: Long term priorities for investment

4.2.6 Future growth locations

Longer-term prioritisation (years 11-30) currently cannot be done with any degree of certainty.

As discussed earlier, there are potential major, city-shaping projects being planned that have the potential to create transformational change for Tāmaki Makaurau.

The specific locations that will be unlocked for development by these major projects depend on more detailed project planning, funding certainty and timing. For instance, whether the Waitemata Harbour Connections project unlocks development on the eastern or western side of the motorway, or both, is a prerequisite for determining which locations may become more market attractive and may be prioritised for further investment in the future.

The future growth locations map (see Figure 20), however, shows some potential major development locations.

These future growth locations are:

- Smales Farm Takapuna
- Glenfield
- Dominion Junction
- Morningside / St Lukes
- Te Atatu Peninsula
- Ranui and Swanson
- Henderson
- Onehunga
- Botany

These locations may become future priorities for investment. As these are based on broad assumptions, more work on the development impacts of these major projects will be needed before any more definitive prioritisation can occur.

Again, as this is a projection into the future, these locations may change and/or other locations may emerge as circumstances change.



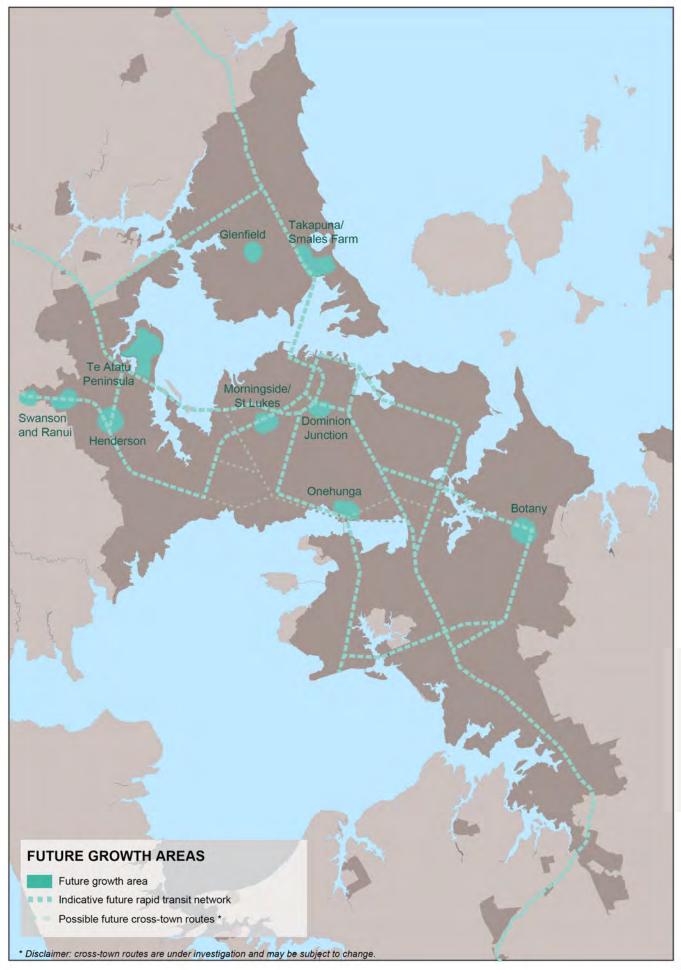


Figure 20: Future growth areas (years 11-30)

4.2.6 Approach to natural hazard constrained areas

Background

There are many locations across Tāmaki Makaurau that are constrained, to various degrees, by different types of hazards (see Appendix 1 and 2 for further information on constraints on development). A natural hazard constraint does not however automatically indicate a high level of risk exposure to life or property. Still, in some cases the level of risk exposure may be sufficiently high to warrant a limit on further development in that area.

Constraints are included in assessing the suitability of areas for development in the region. The approach to constrained areas has two key aspects.

The first takes a region-wide approach and identifies locations most constrained by hazards in the existing urban area. This is where the council should focus initial investigations into appropriate adaptation responses.

The second relates to future urban areas and considers a range of criteria, primarily hazard constraints, to assess the suitability of these locations for future development.

Key considerations

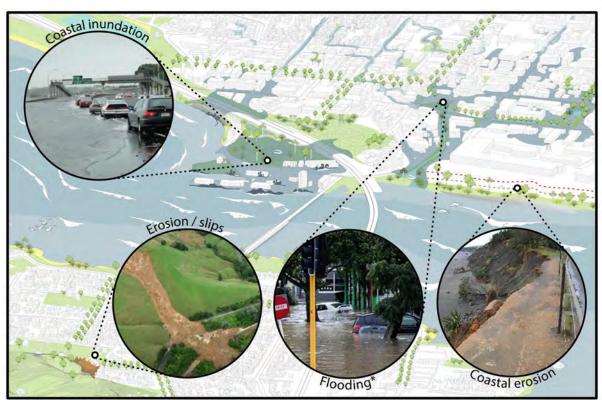
Though all risk exposure posed by hazards need to be assessed, the scale and the size of the region means potential hazard risks cannot practically be assessed everywhere, all at once.

The focus needs to be on a smaller number of constrained locations as the initial start. In these locations, further investigation is needed to support communities to determine feasible adaptation responses over time (as discussed under Principle 2). The appropriate adaptation response options will depend on a combination of factors and will need to be worked through with mana whenua and the local community in each location.

The criteria used to identify areas to focus efforts on initially are the:

- extent of constrained area impacting residential and business zoning per location
- existing population density (i.e., how many people might be affected)
- the NZ deprivation index score, to ensure the focus is firstly on our most vulnerable communities (as communities with higher deprivation scores may have more difficulties adapting to, and recovering from, the impacts of hazards).

Future urban areas are yet to be developed and therefore do not have to same population density as existing urban areas. However, these areas equally need to be assessed to avoid potential future risk.



Flooding can occur as result of surface water, ground water, watercourse (fluvial), or overland flow path inundation

Way forward

Approach to hazard constraints in existing urban areas

Figure 21 highlights locations which are highly constrained by hazards, have the highest population density and also the highest levels of deprivation. These locations are shown in the darker red and orange, while beige shows those locations with the lowest combination of constrained areas, population density and levels of deprivation. This provides an overview and snapshot in time of where the council should initially focus adaptation efforts.

Further work undertaken through council's Resilient Auckland programme will need to understand the

individual hazard risks and extent in these locations to determine appropriate adaptation responses, and to align any initiatives with the council's shorter term flood response to the extreme weather events in 2023.

Depending on the outcomes of adaptation planning, housing and business capacity may be affected. Should plan-enabled capacity be reduced or constrained, the approach set out in Principle 5 (c) will apply.

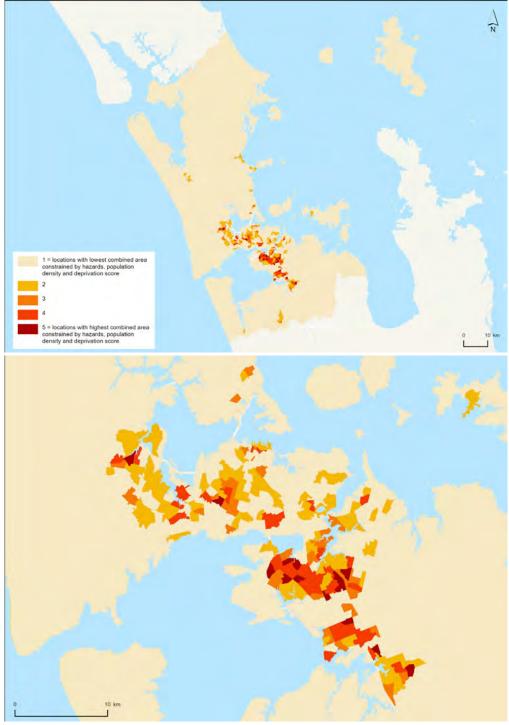


Figure 21: Map showing locations which are highly constrained by hazards with highest population density and deprivation (as at June 2023)

Approach to constraints in future urban areas

The Future Development Strategy provides strategic direction to remove future urban areas, or parts of future urban areas, that are the most constrained by natural hazards. This is to ensure these areas are not developed in a manner that would otherwise place more people and property in harm's way. This results in strategic direction for the partial or entire removal of four future urban areas, as listed below, from being identified as areas suitable for urban development. For further information and maps see Appendix 7

- Hatfields Beach stage 2
- Parts of Kumeū-Huapai-Riverhead
- Southern part of Takaanini
- · Parts of Drury-Ōpaheke

The council will develop more detailed evidence to input into the consideration of future plan changes to the Auckland Unitary Plan to re-zone these areas to an appropriate non-urban zoning. The boundaries of the areas affected are currently indicative and will be further refined through plan change processes. Whilst the exact extent of areas considered no longer appropriate for urban development and to be removed as FUAs is yet to be finalised through applicable resource management processes, this may affect overall housing capacity. Where plan-enabled capacity is reduced, the approach set out in Principle 5(c) will apply.

In some cases, areas are being retained as future urban areas (FUAs) but 'red flagged' to ensure that specific requirements are met for development to occur, whichever land use change or resource consent application process is followed. These requirements are set out in applicable resource management and stormwater management documents or instruments.

Hatfields Beach stage 2

The entire Hatfields Beach stage 2 FUA (Figure 22) is no longer considered appropriate for urban development due to extensive exposure to both flooding and coastal inundation hazards, particularly through the lower portion adjacent to the Hibiscus Coast Highway, where development is not appropriate due to the risks to life and property. Topographical constraints in land outside of the flood hazard area limit the implementation of an integrated stormwater management solution. These remaining areas outside the natural hazard areas would also be geographically orphaned and difficult to integrate into the wider urban development.

Kumeū-Huapai-Riverhead

The northern portion of the Kumeū-Huapai-Riverhead FUA located within the 1% Annual Exceedance Probability (AEP) floodplain of the Kumeū River and Riverhead River is no longer considered appropriate for urban development. Development in these

locations is not appropriate due to the risks to life and property. There is no feasible option to appropriately mitigate this without having potentially significant effects downstream.

The remaining portion of the FUA to the south is 'red flagged'. Due to the extensive nature of the upstream catchments, development will exacerbate flood risk downstream if it is not appropriately managed. This includes effects within the existing Kumeū-Huapai and Riverhead townships, as well Parakai and Helensville, which are also in the Kumeū River catchment. These areas are shown in Figure 23.

Takaanini

The southern portion of the Takaanini FUA is no longer considered appropriate for urban development. This portion of the FUA is within the 1% AEP floodplain and is underlain by peat soils. Flooding in this portion of the FUA poses risks to life and property that cannot be feasibly mitigated. Additionally, due to the underlying geology, liquefaction is possible, and development could result in extensive and uneven settlement, damaging property and infrastructure.

Downstream flow constraints, the extensive nature of the upstream catchment and topography mean that while the northern portion of the FUA may not be within the 1% AEP floodplain, there is a risk of exacerbating flood risk downstream within the existing Takaanini urban area. Therefore, this portion of the FUA is 'red flagged'. These areas are shown in Figure 24.

Drury-Opaheke

The Drury-Opaheke FUA is located in the Otūwairoa Stream (Slippery Creek) catchment. The 1% AEP floodplain of the Otūwairoa Stream is one of the most extensive floodplains in the region. The depth and extent of this floodplain presents risks to life and property and cannot be feasibly mitigated through an integrated catchment approach. Because of this, the portion of the FUA within the contiguous 1% AEP Otūwairoa Stream floodplain is no longer considered appropriate for urban development. There are several locations to the east of this floodplain within the FUA that become geographically orphaned as a result of this. These areas cannot be feasibly serviced through an integrated approach and would result in urban form challenges. These areas are therefore also no longer considered appropriate for urban development.

The remainder of the FUA is 'red flagged'. This is due to risks associated with exacerbating downstream flooding within the existing Drury urban area, including interactions with flows from the neighbouring Hingaia Stream catchment. These areas are shown in Figure 25.

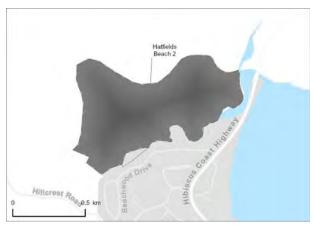


Figure 22: Hatfields Beach

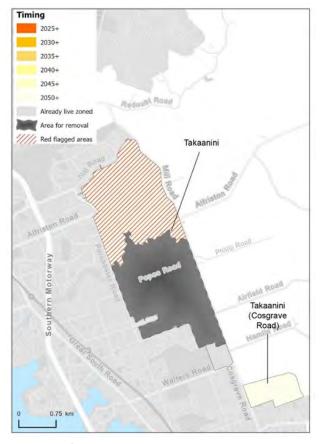


Figure 24: Takaanini

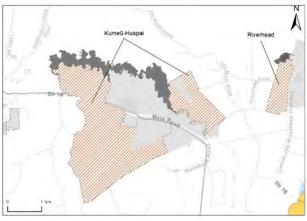


Figure 23: Kumeū-Huapai-Riverhead

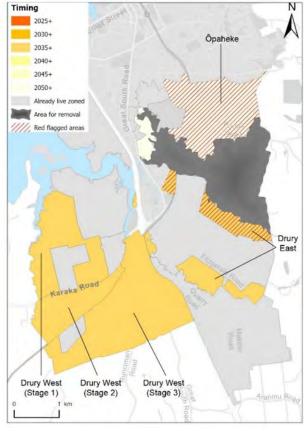
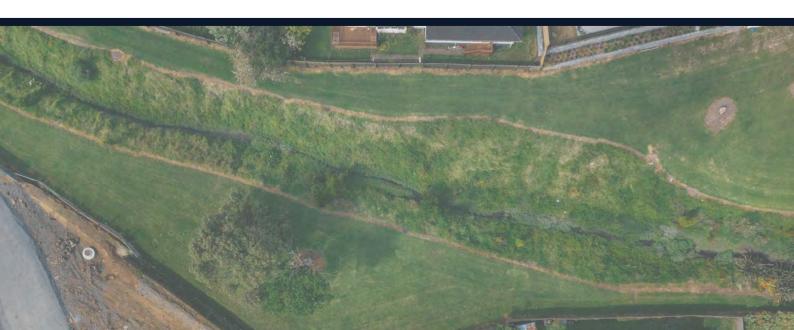


Figure 25: Drury-Ōpaheke



Red flag requirements

Unless appropriately managed, development in 'red flagged' areas will likely exacerbate flood risk within the future urban area and existing urban area / rural settlements downstream. Given this, specific requirements need to be considered from the start of the development process, including within structure planning, plan changes and resource consent processes. More detail on these requirements for development in 'red flag' areas is outlined in Appendix 8. However, in brief, the purpose of these requirements is to articulate expectations under existing regulatory instruments and place particular emphasis on some requirements because of the critical need for an integrated approach.

These requirements cover:

- Integrating land use change identifying stormwater management solutions that service the sub-catchment long-term, holistic contaminant loading assessments, hydrologic and hydraulic modelling, erosion assessments and life-cycle costings.
- Hydrology mitigation and erosion protection to streams and watercourses - erosive flows in streams and appropriate approaches.
- Flooding development within the 1% AEP floodplain, earthworks and modelling, and appropriate mitigation.
- Stormwater infrastructure sub-catchment servicing, reliance on public conveyance infrastructure and infrastructure to be vested to public ownership.

The description of these requirements here and in Appendix 8 do not fully represent the requirements as set out in the relevant regulatory instruments, nor substitute due process associated with those instruments.

Remaining future urban areas

Appendix 7 presents maps for all of the other FUAs and information about their timing and any exposure to hazards that will need to be factored into the design and structure planning for any future development proposals.

Supporting actions

The following actions support the spatial response of the Future Development Strategy and form part of its implementation.

- Further investigate hazard types and exposure to risk, starting with the initial existing urban locations identified in the Future Development Strategy, and pilot programmes to develop appropriate adaptation responses.
- Strengthen natural hazard risk management plan provisions in the AUP, and the requirement to take an integrated catchment management approach to hazards within structure planning (Appendix 1 of AUP).
- Initiate a plan change to remove Hatfields Beach future urban area, and remove parts of the future urban areas in Kumeū-Huapai, Takaanini, Drury-Ōpaheke, being inappropriate for future urban development (as detailed in Appendix 7 and 8).

See Part 5 for more information.



4.2.8 Approach to iwi development

Background and key considerations

Te Tiriti guaranteed Māori authority over their lands and villages. Land confiscation and alienation of Māori land by the government occurred in Tāmaki Makaurau within a few decades of the signing of the Treaty leaving iwi and hapū virtually landless. In addition, statute, regulations, and policy were tools used to advance settler outcomes and which continue to undermine Māori socio-economic outcomes.

If land was retained, it was often in places of little economic use or importance. These are now places of ecological importance or significance with associated restrictions and community expectations of use.

The council recognises that the vast majority of land returned through Treaty settlements and Māori land is located outside of the existing urban and future urban areas and there are therefore development limitations that disadvantage Māori socio-economic opportunity and undermine redress intent.

Way forward

Enabling Māori and Treaty settlement land

Development of Māori Land and Treaty settlement commercial redress land²⁶, wherever these lands are situated, needs to be enabled. The limited extent of this land highlights its importance in lifting mana whenua social, cultural and economic well-being significantly.

Iwi ²⁷ economic wellbeing through the use and development of iwi-controlled or iwi-owned lands²⁸ or 'significant iwi developments' within the rohe or heartland of iwi that may not otherwise be within the urban or future urban area of Auckland needs to be enabled.

Māori land and iwi strategic developments will be enabled / not constrained by the Future Development Strategy. These developments and uses will be determined by subsequent planning processes. Where requested by iwi, the supporting actions below may help support aspirations. In some cases, local rural areas of Māori land will be actively supported, for example, where land is adjacent to rural towns or settlements, or rural enterprise compatible with surrounding activity.

Figure 26 below shows the general locations of Māori Land and Commercial redress land across Tāmaki Makaurau.

Supporting actions

- Initiate joint priorities between the council and iwi to focus on opportunities linked to the enablement of economic development of Māori land and Treaty settlement land.
- Expedite mapping hapū and iwi cultural landscapes and investigate opportunities to strengthen protection.
- Investigate strengthening AUP provisions to further enable Māori economic, social and cultural development.

²⁶ See Auckland Unitary Plan definitions of Māori land and Treaty Settlement Land (Chapter J)

²⁷ See Auckland Unitary Plan Glossary of Māori terms (N1)

²⁸ An implementation action of this strategy (see Part 5) is to investigate strengthening AUP provisions to further enable Māori economic, social and cultural development. As part of this implementation action, the FDS envisages inclusion of a definition for iwi-controlled and iwi-owned lands. This could include:

at least 50% iwi ownership

iwi commercial development being 25% or more, provided the development is identified in an iwi planning or strategic document (i.e. Iwi Management Plan, Strategic Plan, Annual Plan) setting out how the development contributes to the economic, social and cultural wellbeing of the iwi.

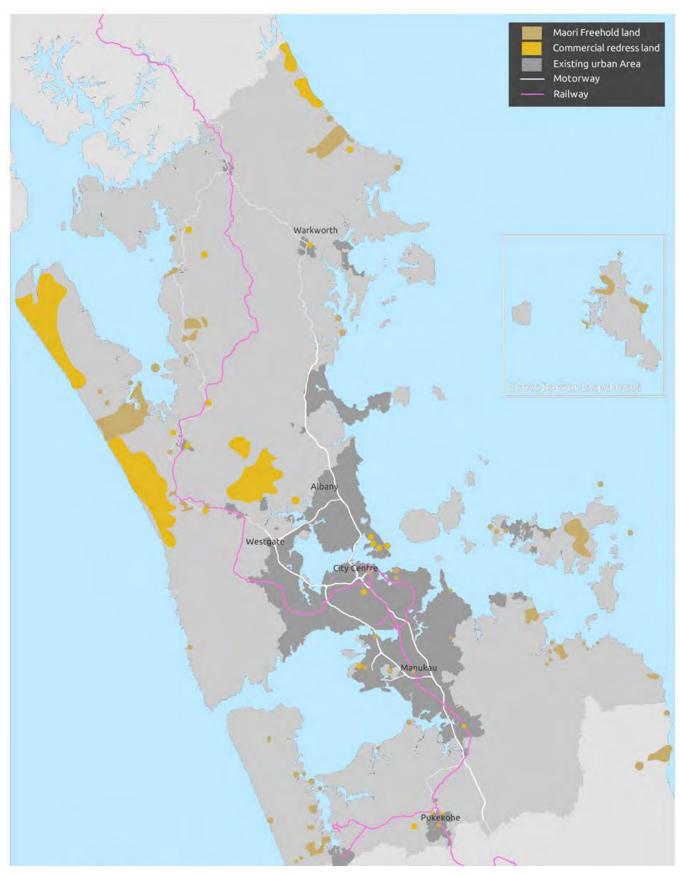


Figure 26 Locations of Māori Land and Commercial redress land across Tāmaki Makaurau



Wāhanga | Part 5: Te whakatinanatanga Implementation

As said in Part 3, setting the most appropriate land use pattern is part of achieving better long-term outcomes, but it needs to be supported by strong policy and implementation frameworks. To achieve the vision, principles and spatial outcomes of the Future Development Strategy, additional implementation actions are required as part of the 'response package'.

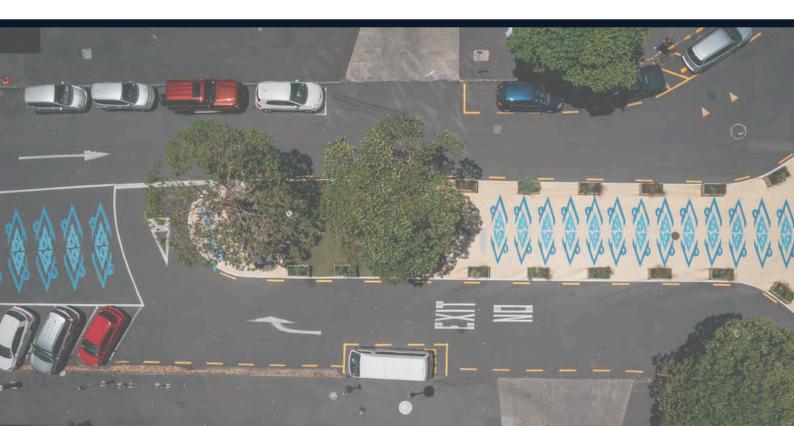
The detail or specifics of these actions are not yet known as they need to be further scoped and also aligned with other council work programmes such as Resilient Auckland, current flood recovery work, the Transport Emissions Reduction Pathway etc... Still, the essence of these actions is included here.

Key implementation actions that relate directly to the different spatial environments are highlighted in Part 4. The table below sets out the full list of implementation actions which are categorised across four broad spatial categories:

- Region-wide
- Existing Urban
- Future Urban
- Rural

A comprehensive implementation plan will be developed in accordance with the requirements of the NPS-UD. The implementation plan will provide more detail on the scope on these implementation actions, and ascribe roles and responsibilities. It will also set out indicative timeframes for implementing actions, noting that associated resourcing is a matter for Annual Plan and Longterm Plan decision making.

The implementation plan will be reviewed annually and updated as required to respond to emerging challenges and change.



CATEGORY 1: REGIONAL - ACROSS ALL SPATIAL LOCATIONS

Implementation Action	Associated FDS Principle
Expand and tailor the NPS UD definition of well-functioning urban environment for Auckland in the Auckland Unitary Plan (AUP)	Principles 1/2/3/4/5
Embed climate change mitigation and adaptation considerations into the AUP	Principles 1/2
Investigate the use of economic instruments (such as financial contributions) under the RMA as a method to adapt to and mitigate the effects of climate change	Principles 1/2
Use Future Development Strategy Spatial Priorities to inform 2024-2034 Long- term Plan growth investments, including investigation of short to medium-term infrastructure deficit priorities	Principles 2/3
Identify areas in need of green public spaces for flood mitigation and use it as a base for a blue-green network plan. Use the findings of the council's flood risk investigation and Māori cultural mapping to inform this work.	Principles 2/4
Incorporate the infrastructure investment hierarchy in the council group asset management plans and the 2024 Infrastructure Strategy (part of the 2024 Longterm Plan)	Principle 3
Initiate joint priorities between the council and iwi to focus on opportunities linked to the enablement of economic development of Māori land and Treaty settlement land.	Principle 5
Strengthen the Regional Policy Statement's considerations of alignment between land use planning and infrastructure investment, and provide stronger direction in the AUP to assess these matters when evaluating plan changes	Principles 3/5
Prioritise integrated, nature-based, regenerative and resilient infrastructure in the 2024 Infrastructure Strategy	Principle 3
Strengthen the AUP to create ecological connections by protect existing vegetation and encouraging or requiring new planting.	Principle 4
Expedite mapping hapū and iwi cultural landscapes and investigate opportunities to strengthen protection in the AUP	Principles 4/5
Investigate strengthening AUP provisions to further enable Māori economic, social and cultural development.	Principle 5

CATEGORY 2: EXISTING URBAN LOCATIONS

Implementation Action	Associated FDS Principle
Identify, further enable and incentivise residential capacity (with some opportunity for small scale non-residential use) in locations of high demand close to optimal centres, employment, rapid transit and with low hazard risk.	Principle 1/5
Investigate opportunities to intensify and diversify business areas, including increasing housing capacity in surrounding areas.	Principle 1/5
Invest in public transport and active mode infrastructure and services to better serve and connect residential areas, centres and business areas.	Principle 1/3/5
Investigate funding tools, including private sector funding, and options to ensure development in existing urban areas is appropriately supported by investment in infrastructure, services and local amenity. This can include collaborative infrastructure solutions by partnering with others.	Principle 1/3/5
Further investigate hazard types and exposure to risk, starting with the initial locations identified in the Future Development Strategy (4.2.7), and pilot programmes to develop appropriate adaptation responses.	Principle 2/4
Support local level planning to inform investment requirements and coordination, and potentially initiatives that require community action rather than investment.	Principle 1/5
Offset forgone residential capacity by increasing capacity in good locations elsewhere, so that overall capacity is created and maintained overtime.	Principle 5

CATEGORY 3: FUTURE URBAN LOCATIONS

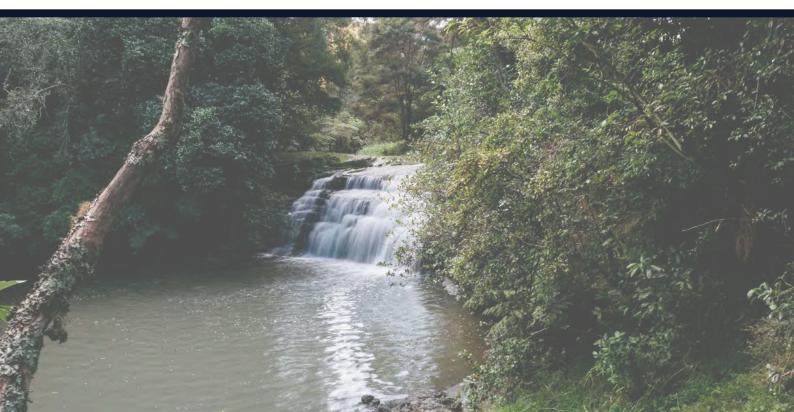
Implementation Action	Associated FDS Principle
Initiate an AUP plan change to remove Hatfields Beach Future Urban Area, and remove parts of the future urban areas in Kumeū-Huapai-Riverhead, Takaanini, and Drury-Ōpaheke and amend the Rural Urban Boundary in the AUP to align with amended future urban zones	Principles 2/4
Support future urban area planning that, for example, coordinates existing and future live zoned areas and gives more detailed direction on achieving well-functioning urban environment outcomes, prioritising Whenuapai as the first.	Principles 2/4
 Strengthen the AUP in relation to: assessing plan changes (including infrastructure and occupation prerequisites and potential trade-offs) taking an integrated catchment management approach to hazards within structure planning (Appendix 1) alignment between land use and infrastructure planning, including consideration of financial costs and benefits, infrastructure efficiency and well-functioning urban environments for out of sequence proposals 	Principles 2/3/4/5
Investigate strengthening AUP provisions to safeguard identified business land in future urban areas	Principle 5

CATEGORY 4: RURAL LOCATIONS

Implementation Action	Associated FDS Principle
Update information on rural settlements, environments, productivity and employment and develop a Rural Strategy (prioritising the southern rural area) to inform the future approach to rural areas.	Principles 1/2/3/4

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Appendix 1: Constraints on development

This appendix contains five maps (figures 27-31), each showing the extent of the different groups of constraints to development¹:

- natural hazards
- natural environment
- natural heritage
- highly productive land
- cultural heritage.

The different types of constraints have been grouped and categorised into three levels (primary/secondary/tertiary) as shown in Table 1 in Appendix 2: The types of constraints and level of constraints they present to development, take into account some or all of the following factors:

- the current level of their environmental or cultural sensitivity/vulnerability to development
- the potential level of constraints posed by natural hazards
- the likely impact of regulations/policies that preclude development, e.g., through National Policy Statements, National Environment Standards and/or the Auckland Unitary Plan
- the ability to avoid or reduce negative impacts of development on the constrained area and whether it could be managed through design and engineering solutions.

Primary constraints represent a higher level / more challenging constraint to development. These cannot be easily avoided or mitigated (e.g., coastal erosion or a Significant Ecological Area). Secondary constraints pose more moderate level constraints to development. Tertiary constraints pose a low level of potential constraint and are more likely to be able to be avoided and/or mitigated.

All constraints have been jointly overlayed, and their primary, secondary or tertiary category weighting accounted for, to identify particularly constrained areas where more than one constraint to development is present. The darker shaded areas on the maps overleaf show where there is more than one primary level constraint, in addition to other secondary and/or tertiary constraints. The lighter shaded areas represent less constrained areas in the region.

¹ The Future development strategies fact sheet (MfE, July 2020) advises that constraints may include hazards, for example, high-risk flood zones or areas with land instability. It may also include areas already protected for their environmental values, or important historic or cultural values.

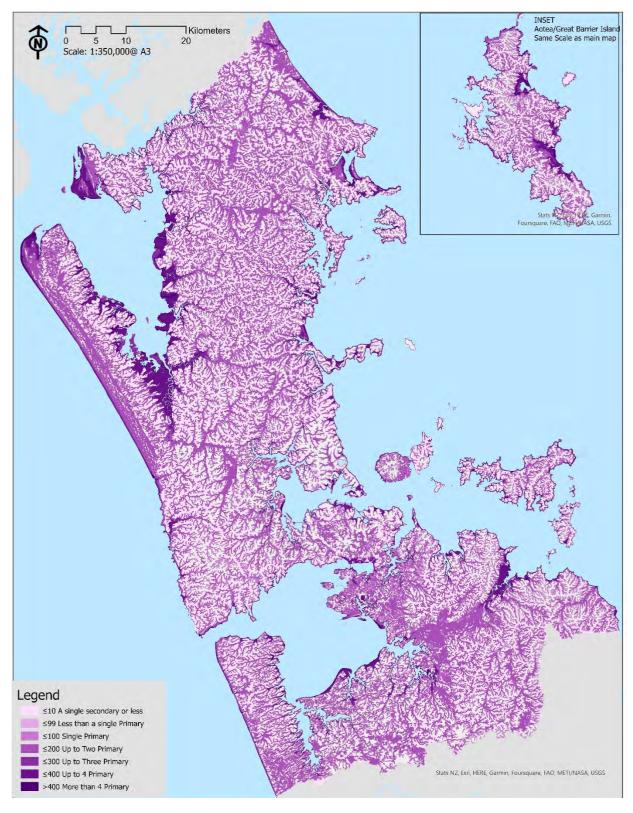


Figure 27 - Natural hazard constraints

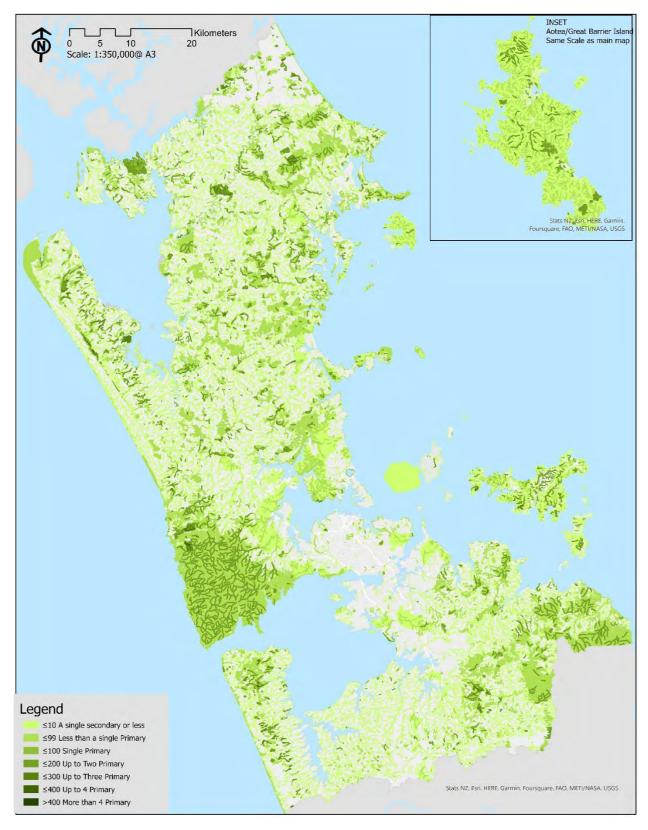


Figure 28 - Natural environment constraints

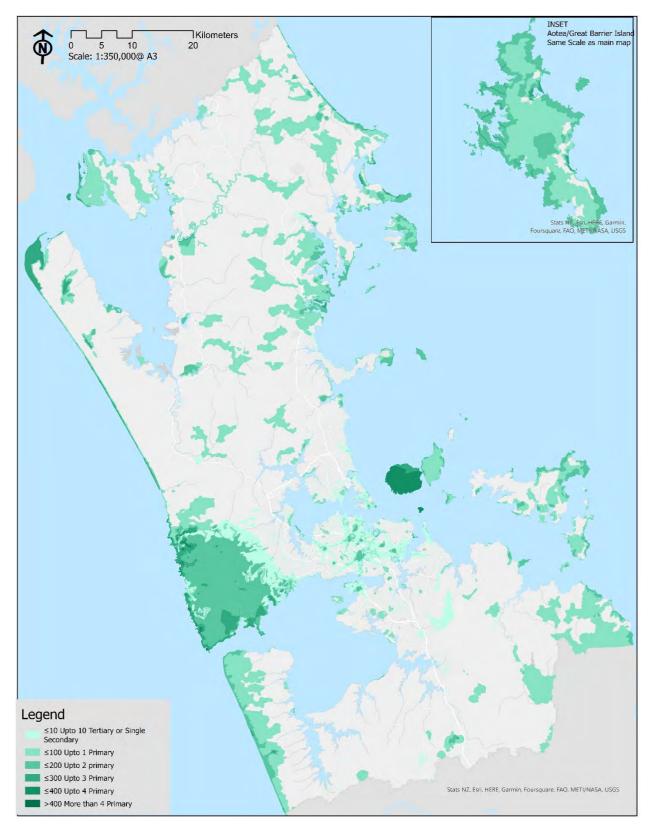


Figure 29 - Natural heritage constraints

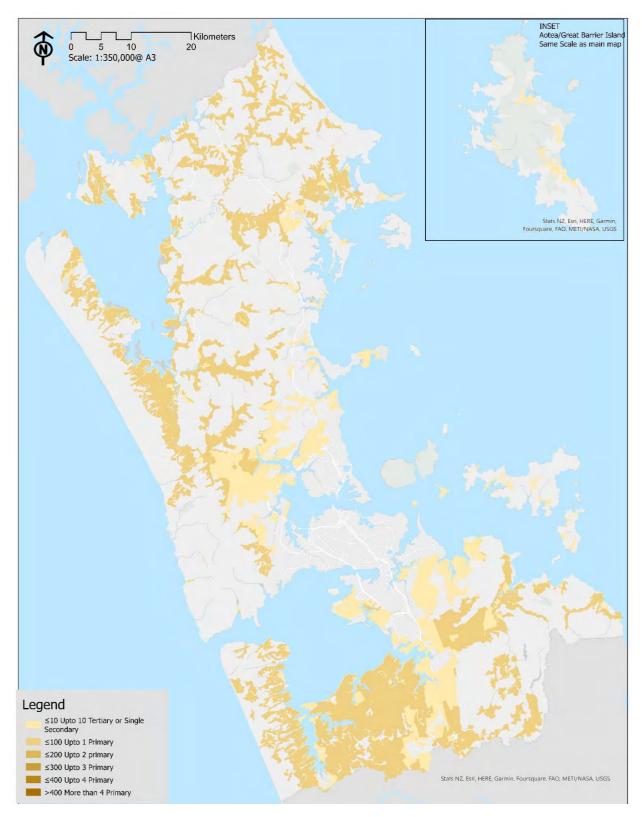


Figure 30 - LUC Class 1, 2, and 3 constraints

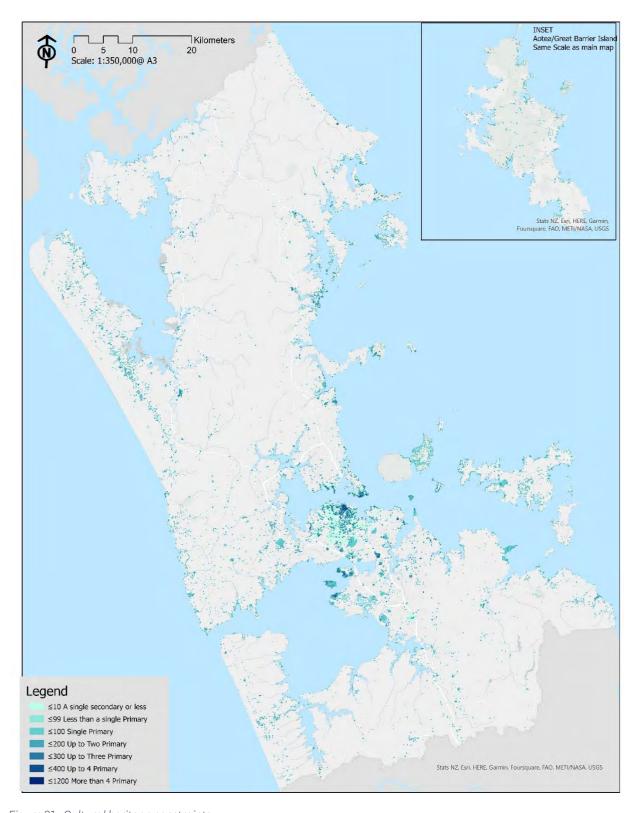


Figure 31 - Cultural heritage constraints

Appendix 2: Types of constraints in Tāmaki Makaurau and level of constraint they present to development

Table 1 – Types of constraints in Tāmaki Makaurau and level of constraint they present to development

Constraint group	Level of constraint	Individual constraint name/description
Natural herita	ge	
Natural Primary heritage		Outstanding natural features and outstanding natural landscape
neritage		Outstanding natural character and high natural character
	Secondary	Waitakere Ranges Heritage area
		Notable trees
	Tertiary	Volcanic viewshafts and height sensitive areas overlay
		Ridgeline protection
Cultural and n	atural herita	ge
Cultural heritage	Primary	Historic heritage overlay
neritage		Heritage NZ Covenants
	Secondary	Special character area Residential and Business (aligned with changes to qualifying matters)
	Tertiary Cultural Heritage Inventory	
Mana whenua Primary Sites of Māori		Sites of significance for mana whenua (Schedule 12 of the AUP)
values	Secondary	N/A
	Tertiary	N/A
Natural enviro	nment	
Freshwater and coastal	Primary	Natural inland wetlands – ecosystem current extent (Singers and Rogers) and wetland management areas
water ecosystems		Lakes (Natural Lakes Management Areas overlay and Urban Lakes Management Areas overlay)
	Secondary	Streams / Rivers (Natural stream management areas overlay; permanent and intermittent watercourses)
	Tertiary	Stormwater management area – Flow 1 and 2
Terrestrial	Primary	Significant Ecological Areas (SEAs) - Terrestrial
ecosystems		QEII covenants
	Secondary	Mapped Singers and Rogers Indigenous terrestrial ecosystems outside of SEAs
	Tertiary	N/A

Constraint group	Level of constraint	Individual constraint name/description	
Natural hazards			
Coastal erosion	Primary	Areas Susceptible to Coastal Instability and Erosion (ASCIE) 2130 RCP 8.5 H+	
	Secondary	N/A	
	Tertiary	N/A	
Coastal inundation	Primary	One per cent annual exceedance probability (1% AEP) plus 1m sea level rise (SLR)	
		1% AEP plus 2m SLR	
	Secondary	N/A	
	Tertiary	N/A	
Flooding	Primary	1% AEP flood plains	
	Secondary	Flood prone areas	
	Tertiary	Flood sensitive areas	
Land instability	Primary	N/A	
instability	Secondary	N/A	
	Tertiary	Landslide susceptibility 1997: High category	
Liquefaction	Primary	N/A	
Secondary N/A		N/A	
	Tertiary	Liquefaction Vulnerability Areas (2021): Level A – Liquefaction Damage is Possible	
Geohazards			
Settlement risk/Peat	Primary	N/A	
soils	Secondary	N/A	
	Tertiary	Peat soils	
Contaminated land	Primary	N/A	
tanu	Secondary	N/A	
	Tertiary	Closed landfills	
Highly Produc	tive Land		
Highly productive soils	Primary	Land identified in accordance with Clause 3.5(7) of the National Policy Statement for Highly Productive Land 2022, which is a transitional definition required to be used in advance of the council adding maps to the AUP	
	Secondary	N/A	
	Tertiary	Land identified as Land Use Capability classes 1, 2 and 3, outside the Highly productive soils primary constraint identified above. The FDS considers that the productive values of this land should be considered as a potential constraint in the Auckland region.	

Appendix 3: Infrastructure to support development capacity

Auckland's infrastructure networks provide essential bulk services that enable the growth anticipated over the life of the Future Development Strategy. The following tables and maps show the likely bulk/significant development infrastructure and additional infrastructure required to support or service the development capacity. The following map shows the general location of the corridors and sites of required infrastructure over the first decade.

This appendix identifies the current major projects that are either committed and funded or signaled for funding as part of the council or central government budgets (noting that Waka Kotahi (New Zealand Transport Agency) and Kiwi Rail projects are also subject to funding by central government). The timing of these key projects helps to inform a broad understanding of when and where growth on a scale is likely to occur. There is particular uncertainty around the timing and delivery of medium and long-term projects due to the constrained financial environment and current planning underway. The public delivery of infrastructure may be supplemented by other funding mechanisms (including the private sector), which may enable land to be development-ready ahead of the programmed timelines set out in the tables below.

Alternative ways to fund infrastructure must ensure that it is delivered and, where appropriate, operational at the time of occupation of land for residential and / or business purposes.

Note: The projects listed in the following tables are based on currently published information (for example the 2021 RLTP), are not exhaustive and there are interdependencies which may change as further investigations are completed. There are two key transport documents being consulted on and finalised in 2023 that will affect the number and timing of projects in the transport list. They are the Auckland Rapid Transit Plan (ARTP) and the Tāmaki Makaurau Integrated Transport Plan (TMTP).

Decade One (2023+)	Decade Two (2033+)	Decade 3 (2043+)
 Northwestern Bus improvements Lincoln Road Corridor Improvements Project(multi-modal) City Rail Link Carrington Road Upgrade Eastern Busway (Pakuranga to Botany) Airport to Botany Stage 2 Bus Improvements Papakura to Pukekohe Rail Electrification Drury Railway Station (Drury Central) Ngākōroa Railway Station (Drury West) Paerātā Railway Station (Paerata) Third Main Line Rail Network Rebuild 	 Northern Busway Enhancements State Highway Improvements (north)# Walking and Cycling path along SH1 (Albany to Grand Drive, Ōrewa) Connection from the active mode corridor at Silverdale to Highgate Parkway (the Silverdale to Highgate Active Mode connection) Wainui interchange active modes upgrade Northwest Rapid Transit Network (City centre to Westgate) Upper Harbour (SH18) Rapid Transit Network Waitematā Harbour Connections Downtown Bus Improvements Auckland Light Rail (City	 North Shore Rapid Transit Network Northwest Rapid Transit Network (extension to Huapai) New Lynn to Ōnehunga (shared path)

^{*}These projects are delivered by Auckland Transport with support from Waka Kotahi and Kiwi Rail

Road network projects *

Decade One (2023+)	Decade Two (2033+)	Decade 3 (2043+)
 Penlink Ara Tūhono project (Pūhoi to Warkworth) The Papakura ki Pukekura - Papakura to Bombay project (Stage 1 Papakura to Drury) 	 Ara Tūhono project (Warkworth to Wellsford) State Highway Improvements (north)# SH1 widening	Mill Road State Highway Improvements (north)#

^{*}These projects are largely delivered by Waka Kotahi with support from Auckland Transport.

^{*}Projects still subject to business case work and statutory processes.

^{#1}Full description of the Mill Road north area: Redoubt Road from Hollyford Drive to Mill Road; Murphys Road from Flatbush School Road to Redoubt Road; Mill Road from Redoubt Road to Hamlin Road; Cosgrave Road from Hamlin Road to Fernaig Street.

Water supply projects*

Decade One (2023+)	Decade Two (2033+)	Decade 3 (2043+)
 Tamaki regeneration and Kainga Ora water network upgrades Wellsford water treatment plant upgrade Huia water treatment plant Redoubt Road reservoir expansion Hingaia east-west resilience Watermain & BSP Waikato A water treatment plant 	 Waikato 2 watermain Helensville water treatment plant upgrade Trig Road reservoir North Harbour No.2 watermain Orewa 3 watermain Pukekohe West Reservoir Wesley-Paerata Watermain Waikato A water treatment plant 	 Warkworth water supply capacity upgrade Waitematā Harbour Connections (watermain) Ardmore water treatment plant upgrades

Wastewater projects*

 Servicing Snells Beach Wastewater Treatment Plant North East Warkworth Sub-regional wastewater servicing Whenuapai wastewater packages Hibiscus Coast wastewater network improvements Rosedale wastewater Treatment Plant capacity upgrade Northern Interceptor Phase 2 Brigham Creek wastewater pump 	Decade One (2023+)	Decade Two (2033+)	Decade 3 (2043+)
Treatment Plant upgrade Western Isthmus Water Quality Improvement Programme Helensville wastewater Treatment Plant upgrades Central Interceptor South-west wastewater scheme Pukekohe trunk sewer Treatment plant Upgrades Māngere wastewater treatment plant capacity upgrade Hingaia Rising Main Southern Auckland Wastewater Service Scheme Paerata transmission wastewater pumpstation Beachlands – Maraetai	 Warkworth wastewater Growth Strategy and Servicing Snells Beach Wastewater Treatment Plant North East Warkworth Sub-regional wastewater servicing Whenuapai wastewater packages Wellsford wastewater Treatment Plant upgrade Western Isthmus Water Quality Improvement Programme Helensville wastewater Treatment Plant upgrades Central Interceptor South-west wastewater scheme 	 Army Bay wastewater treatment plant upgrade Hibiscus Coast wastewater network improvements Rosedale wastewater Treatment Plant capacity upgrade Northern Interceptor Phas 2 Brigham Creek wastewater pump station Helensville wastewater treatment plant upgrades Māngere wastewater treatment plant capacity upgrade Hingaia Rising Main Southern Auckland Wastewater Service Scheme Paerata transmission wastewater pumpstation 	 Army Bay wastewater treatment plant upgrade Māngere wastewater treatment Plant capacity upgrade

^{*}These projects are delivered by Watercare

Stormwater projects*

Decade One (2023+)	Decade Two (2033+)	Decade 3 (2043+)
 Awakeri Wetlands Bottle Top Bay Asset Acquisition and Redevelopment Te Whakaoranga o te Puhinui (Puhinui Stream regeneration): Rata Vine Stream Naturalisation Hayman Park Wetland Upgrade (Stage 1) Stream Restoration DHB Land Tararata Creek catchment flooding (Moyle Park Detention) Te whakahou wai ua i Te Kūiti Te Atatū (Te Atatū Peninsula stormwater upgrade) Redhills HIF stormwater unanagement 	 Flannagan Road / NIMT culvert upgrade Hayman Park Wetland Upgrade (Stage 2) 	Takanini North Conveyance channels and stormwater mitigation devices

^{*}these projects are largely delivered by Auckland Council

Additional Infrastructure (community facilities, solid waste) projects*

Decade One (2023+)	Decade Two (2033+)	Decade 3 (2043+)
Waste	Waste	Waste
Food scraps services bins	VISY Materials	New food scraps
Community	Recovery Facility	processing facility
Recycling Centres	(MRF) upgrade	New Materials
(CRCs)		Recovery Facility
Refuse Transfer Stations		(MRF)
Community Facilities	Community Facilities	Community Facilities
• Community	Community	• Community
Facilities Network	Facilities Network	Facilities Network
Action Plan/	Action Plan/	Action Plan/
Community Services	Community Services	Community Services
Provision projects	Provision projects	Provision projects

^{*}Understanding where facilities are needed across a regional level is an important aspect to supporting development capacity.

Non-council additional Infrastructure

In addition to the council infrastructure that will be necessary to support growth and development in the future, a wide range of infrastructure will need to be provided by parties other than the council. Social

infrastructure – such as schools and healthcare facilities – is critical to supporting growth and ensuring well-functioning communities. It is important that council communicates with, and plans alongside, key government ministries and agencies tasked with the delivery of this social infrastructure, such as the Ministry of Education and Ministry of Health. In particular, the location of such social infrastructure has a strong influence on urban form and transport outcomes.

In addition to this social infrastructure, the planning and delivery of network utilities such as electricity, gas and fuel supply, and telecommunications and digital infrastructure is also critical. Liaising with the providers of these utilities is important, early in the structure planning process for new urban areas, or even earlier where possible. See Figure 34 below for a map showing Auckland's critical infrastructure.

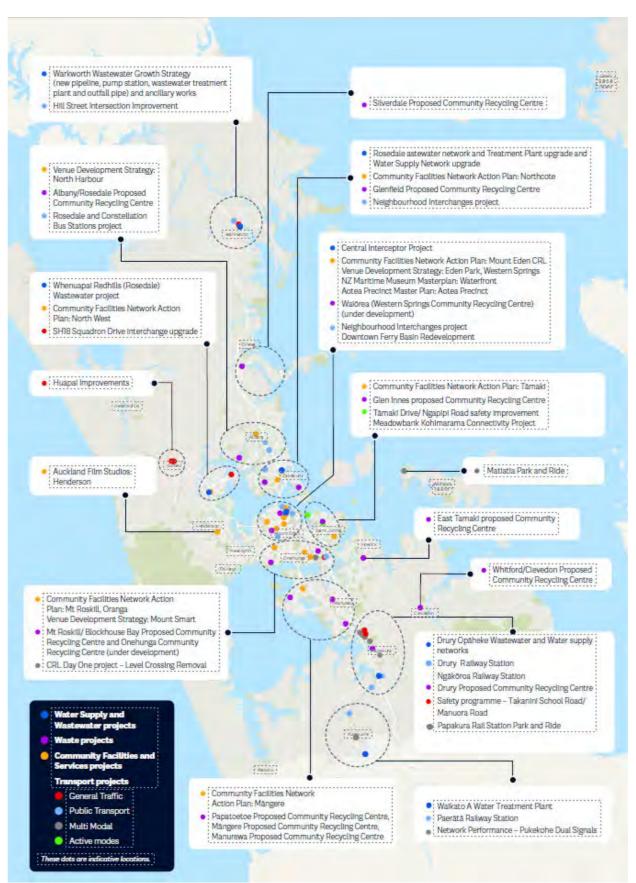


Figure 32 - Key infrastructure growth projects to support development capacity (Years 1-10)



Figure 33 - Key transport projects (based on 2021 RLTP) to support development capacity (Years 1-10)

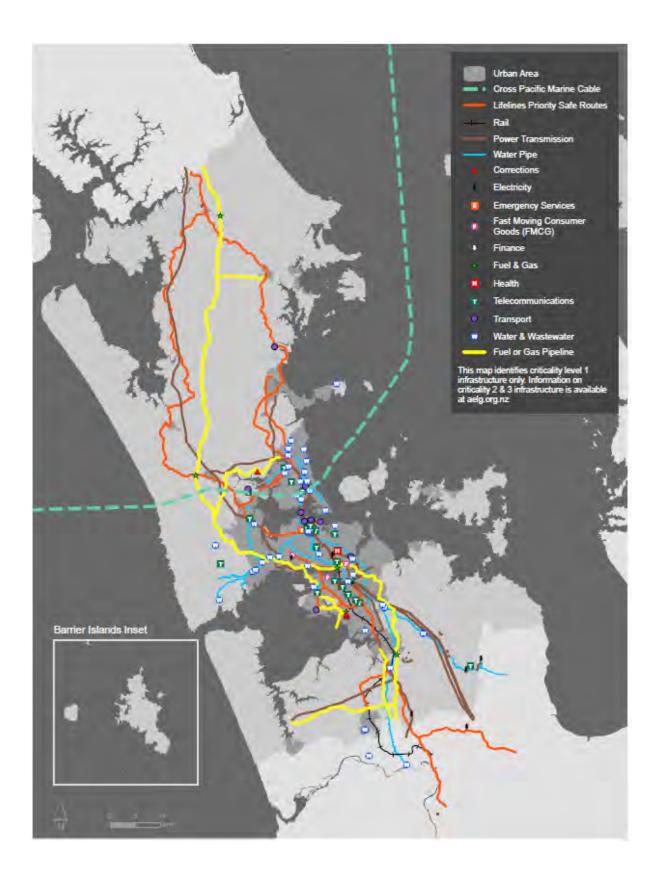


Figure 34 – Critical Infrastructure

Appendix 4: Development capacity

To meet expected demand for housing over the next 30 years in Tāmaki Makaurau, around 773,000 dwellings in total (or 227,000 additional) are needed to provide sufficient development capacity¹. The total plan-enabled net housing capacity is 2,615,580. Infrastructure constraints and to a lesser extent, feasibility reduces the likely to be realized capacity, but at the aggregate level there is at least sufficient potential development opportunities.

Tables 2a and 2b summarise the 2023 HBA residential and business development capacity assessment for Auckland – more detail on how the figures have been calculated are provided in the HBA.

These aggregate figures should not be taken to mean there are no concerns or improvements to be made. Housing affordability will remain a challenge, even with the greater level of flexibility on almost every residentially zoned urban site provided by the more permissive MDRS 3 story building envelope and permitted 3 dwelling potentials. Some locations with high demand are disproportionately constrained by planning regulations protecting existing amenity, and more outlying areas are constrained by the high cost and consequent availability of bulk infrastructure, in particular the transport infrastructure required to enable these areas to be well functioning.

For business, PC78 has not significantly altered development potential outside of centers with increased height limits, where the aggregate demand for floorspace above ground floor from both apartments and offices is unlikely to result in take-up challenges in most locations. Some smaller centers and business areas may have specific challenges, and the City Centre, already the most intensively developed and most expensive land per square metre in the country, is also expected to continue to see strong employment and residential growth, which will require high levels of redevelopment. Retail and other services are also well serviced by ground floor options across all centres and mixed-use areas. However, land extensive activities that favour light industrial zones like warehousing, industrial and large format retail, will find it increasingly difficult to find affordable space in an intensifying city, as other activities that are able to use land more efficiently, and are willing to pay more, increasingly outbidding them. Some smaller, more central industrial areas may be appropriate to transition to other more intensive uses. Other larger areas of industrial activity with key agglomerations may need to be better protected from residential creep and other sensitive uses that reduce suitability for business use. Additional land, with the attributes suitable for these light industrial activities, can practically only be provided in greenfield areas, particularly where this land is flatter, and has excellent freight transport access and is sufficiently large in area to provide some level of protection to activities within it.

This assessment is based on the Housing and Business Assessment 2023, which is required to assess *existing* published land use and funding plans and strategies. This includes Auckland Unitary Plan Operative in Part (AUPOIP) (2016), in the short term, Plan Change 78 (PC78) as notified, which includes Auckland Council's proposed response to the Medium Density Residential Standards (MDRS), and Policy 3 of the NPS-UD in the medium term. The long term includes the 'white out' area (as show in figure 27) which has been assessed using assumed upzoning consistent with PC78 principles around existing centers and walkable catchments² in the Auckland Light Rail Corridor area,

¹ Figures include the 15% competitiveness margin required by the NPSUD.

² ALR route and station locations are still unknown – future variations would respond to the newly established RTN walkable catchments and likely increase capacity further.

and further greenfield areas as per the current Auckland Plan 2050 and FULSS (2017), which times the staging and release of Future Urban Areas³.

PC78 (as notified) has been used as a basis for calculating future existing live zoned capacity from the medium term⁴ as Auckland Council's response to the National Policy Statement on Urban Development 2020 and the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act. This requirement, passed into law on 20 December 2021, brought forward and strengthened the National Policy Statement on Urban Development (NPS-UD) with the aim to increase housing supply in most of the urban environment.

The increase in plan-enabled supply from the proposed PC78 (implementing MDRS on most residentially zoned sites in the urban area, and an increase in intensification opportunities in walkable catchment of rapid transit and town centres) is significant. A high proportion of the additional plan-enabled capacity is also feasible.

Infrastructure provision remains challenging, but constraints reduce over time, with some challenges remaining mainly on the fringes. The 2021 Housing Assessment (based on pre-PC78 AUPOIP capacity) confirmed, at least at the general quantum level, that the then-current AUP was likely to be sufficient, so a more enabling planning system (i.e., PC78) adds to this existing sufficiency – particularly of dwellings, and particularly in those higher demand locations where PC78/MDRS has upzoned relative to AUPOIP.

Figure 27 shows the distribution of plan- enabled floorspace in the business zones, mixed use and centre zones, and residential zones. This excludes the ALR 'white out' area which is subject to future planning decisions.

These tables highlight the key regional summary figures that the HBA is required to determine, utilizing the 'most likely' forecast, in this case a medium growth scenario based on an Auckland Council March 2023 commissioned update to Stats NZs December 2022 population projections release.

Housing demand and capacity summary (Table 2a) is based on this projected population growth, converted to households taking account of expected demographics. Household growth is faster than population growth because of declining average household sizes over time. Each additional household required at least one additional dwelling to be appropriately housed. Total households and net additional are shown. The housing bottom lines include a 20% 'competitive margin' in the short and medium terms, and a 15% margin in the long term.

Housing supply must be greater than the housing bottom lines (which are to be inserted into the RPS) in each of the three time periods. A series of filters is applied to arrive at a supply of housing that is (or will be) a combination of plan enabled, serviced by infrastructure, feasible for developers to build, and likely to be realised.

Our assessment shows that what is reasonably likely to be supplied considering these matters is in excess of the housing bottom lines. These headline figures highlight infrastructure challenges. Detailed analysis also reveals considerable affordability challenges, and there are location specific

³ This FDS has Future Urban Area timing sequencing and land use variations that may differ from these existing plan assumptions that are required to be used in the HBA. Future HBAs will reflect these changes in due course.

⁴ Refer NPS-UD Clause 3.4

planning and infrastructure constraints outlined in more detail in the HBA and this FDS.

Table 2a – Housing I	Demand and cap	acity summaı	ries from the 20	023 H	ousing and	Business	S Asse	essment.		
Housing Demand and Development Capacity	For more detail see:	TimeFrame						Note		
			DEMA	ND						
March 2023 Series, Medium	Housing Affordability Model 3G, Resident Households	2022	2 569,950					Household Projections from StatsNZ March 2023 Population projections (medium)		
		Short Term	589,310							
		Medium Term	640,860							
		Long Term	767,060							
			Net Additional Dwellings	Comp	Required Hous npetitiveness Margin Bottom					
		Short Term	19,400	3,880		23,280		593,000	Additional dwellings @ 1	
Housing Demand with	Housing Affordability	Medium Term	70,900		14,180	85,080		655,000	per Household; Competitiveness Margin	
Competitiveness Margin	Affordability Model 3G	Long Term	197,100	6	29,570		70 797,000		+20% to 2032, +15% to 2052 (NPS-UD)	
			SUPF	LY						
			Residential Z	ones	Business	Zones	Tot	al Dwellings		
Existing Dwellings	AC 2022		480,320		97,53	97,530 5'		577,850	Existing - Auckland Council 2023	
Plan-enabled Housing Development Capacity	MDRS No QMs Exclude PC79, Net Dwelling Capacity	2022	2,108,280		507,3	00 2,615,580		2,615,580	Net Additional Capacity enabled: Auckland Council 2023	
Plan-enabled and Infrastructure Ready Housing Development	Water and Wastewater and	Short Term	622,000		150,0	00	772,000		Capacity adjusted for estimated Infrastructure	
	Transport, Net Dwelling Capacity	Medium Term	1,424,000	1,424,000		343,000		1,767,000	constraints (Sep 2023): -	
Capacity		Long Term	1,833,000	· · · · · · · · · · · · · · · · · · ·				2,274,000	(2032), -13% (2052)	
Plan-enabled,	ME Model, Net Dwelling Capacity	Short Term	,		105,000		540,000		Capacity adjusted for estimated feasibility (Sep 2023): 70% (2025), 80.5% (2032), 87.5% (2052)	
Infrastructure Ready and		Medium Term	dium Term 1,146,000		276,000		1,422,000			
Feasible Housing Capacity		Long Term	1,604,000		386,000		1,990,000			
Plan-enabled, Infrastructure Ready,	ME Model, Net Dwelling Capacity	Short Term	218,000		53,000		271,000		Feasible Capacity	
		Medium Term	630,000		152,000		782,000		adjusted for estimated RER (Sep 2023): 50%	
Feasible and RER Housing Capacity		Long Term	962,000		232,000		1,194,000		(2025), 55% (2032), 60% (2052).	
			SUFFICI	ENCY						
	Plan-enabled, Short Term 247,720								Not Curplus / Deficit is	
Housing Development	Infrastructure Ready, Feasible	Medium Term	696,920			Net Surplus / Deficit is RER capacity less				
Capacity (surplus/deficit)	and RER Housing Capacity LESS Housing Bottom Line	Long Term	967,330				projected Housing Bottom line in each period.			
·	1									

Business demand and capacity summary (Table 2b) is structured similarly to the housing summary, with some business specific differences. Like housing demand, employment demand is driven by population projections, where the expected workforce (expressed as MECs⁵) is derived using demographics. The

⁵ Modified Employment Count, a combination of Stats NZs Employment Count data, plus sole proprietors and self-employed who are not included in StatsNZs EC figures to give a truer reflection of total people working who need floorspace.

existing economic structure, the existing and expected spatial structure of Auckland (including the distribution of population and timing and location of new greenfield business land⁶), and the projected growth in population, households and firms, both in Auckland, the rest of NZ and assumed export growth, also drive an estimated future economy that this workforce could be fully employed in⁷. Different industries have different floorspace densities per employee, and as the economy evolves, MECs by industry are converted to floorspace demands. They are different, but equivalent measures of 'business demand' and allows direct conversion between 'the economy' and 'the planning system' – the amount of floorspace and the zoning of land it is developed on are controlled by the planning system and infrastructure availability, but employees themselves are not.

Like residential, business demand also has a competitiveness margin added to ensure there is an additional buffer built into the demand side that the supply must be demonstrably above.

Like residential, business supply is filtered and must be plan enabled, and supported by infrastructure. The next test is that the location is 'suitable' for the respective industry to use, as commercial feasibility is more complex to ascertain given the wider variation in development and investment approaches in commercial and industrial real estate and across different industries.

The analysis shows that under the assumptions made about employment intensification, vacant and underdeveloped land take up, and redevelopment, even with limited greenfield land supply, there is at least sufficient infrastructure ready and suitable land for business. Like residential, this high-level assessment does not delve deeply into particular issues, in particular the need for more light industrial land both for growth and relocation of existing business, to ease pressure on existing rents and limited vacancy, though improved land and development market competitiveness, and also to provide new centres in new greenfield areas to meet the needs of new local communities and ensure they are well functioning.

⁶ Population distribution assumptions follow the SNZ Dec 2022 Local Board assumptions and greenfields land is limited to 3 arbitrary centres. This scenario (absent gain a better appreciation of the likely scale of greenfields business land demand. Post FDS decisions the model will be recalibrated to reflect FDS consistent population distributions and greenfields land timings.

⁷ Like the housing demand projection, this is not necessarily 'the future economy', it's an economy based on extending existing relationships and trends, that would need to exist in order to fully employ the future population projection-based workforce and articulate the floorspace and land needs to ensure that we have a planning system and the infrastructure 'at least sufficient' to avoid precluding that future from happening.

Table 2b – Business demand and capacity summaries from the 2023 Housing and Business Assessment.

Business land demand and development capacity	For more detail see section:	Total FS and EM					Note		
DEMAND									
					Floorspace (m²x1000)	Employment (MECx1000)			
Estimated business	Auckland Economy				28,920	670	From HBA modelling.		
demand Growth I	Growth Model 2023,	Short term			29,950	702	From HBA modelling; allowing		
(AC March 2023	not incl. competitiveness	Medium term			31,050	744	for employment growth and floorspace per person		
Medium projection)	Margin	Long term			33,740	861	demand.		
			Additional FS Demand	Required Competitiveness Margin	Total Additional FS Capacity Requirement	Additional Employment Demand			
Additional business	Auckland Economy Growth Model 2023	Short term	1030	210	1,240	32	From HBA modelling of		
demand with Au		Medium term	2130	430	2,560	74	employment growth and floorspace demand; Competitiveness Margin		
		Long term	4820	720	5,540	191	added (NPS-UD)		
		•	S	UPPLY					
Plan enabled	Auckland Economy Growth Model 2023 :	Short term			120,930	6,160	From HBA modelling of net		
business land development Auckland E Growth Mod		Medium term			120,930	6,160	additional plan-enabled floorspace capacity (Auckland		
	Enabled Less Used	Long term			120,930	6,160	Council) for employment growth.		
Plan enabled and		Short term			35,700	1,820	Plan-enabled net additional		
infrastructure ready	Water and	Medium term			81,700	4,160	floorspace capacity adjusted for estimated Infrastructure		
business land Wastewater and development Transport capacity		Long term			105,100	5,350	constraints (Sep 2023): -70% (2025), -32% (2032), -13% (2052)		
Plan enabled,		Short term			33,900	1,730			
infrastructure ready,	infrastructure ready, Land Suitability @	Medium term			77,600	3,950	Plan-enabled additional capacity adjusted for Land		
and suitable business land development capacity	Long term			99,800	5,080	Suitability (95%)			
SUFFICIENCY									
Plan-enabled, Business land Infrastructure Read development Feasible and RER capacity Business Capacity surplus/deficit LESS Business FS o MEC demand		Short term			32,660	1,698	Net Surplus / Deficit = net		
	3	Medium term			75,040	3,876	additional plan-enabled capacity suitably located, less net additional floorspace demand, each period.		
	Business Capacity LESS Business FS or	Long term			94,260	4,889			

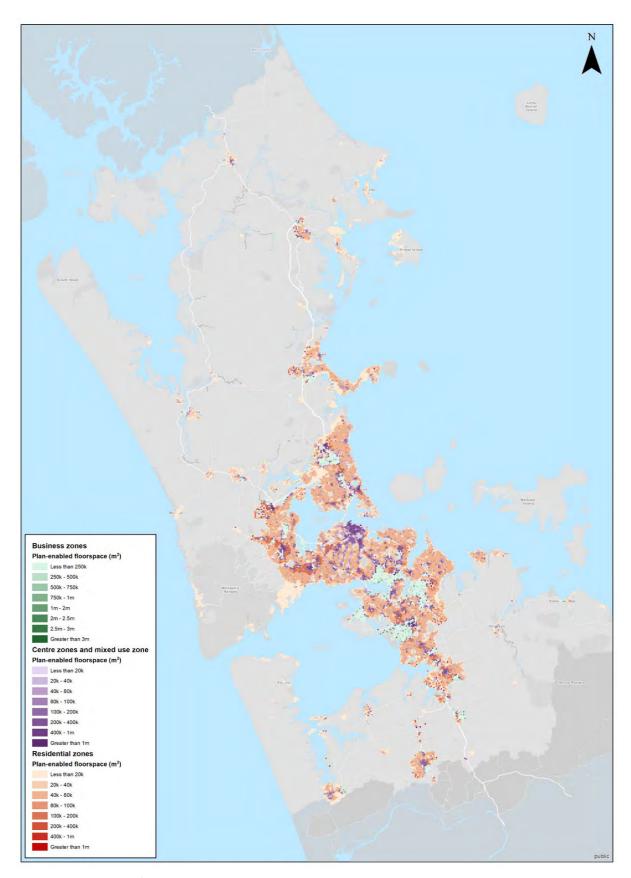


Figure 35 - Distribution of plan-enabled capacity

Appendix 5: Information on the nodes

Albany

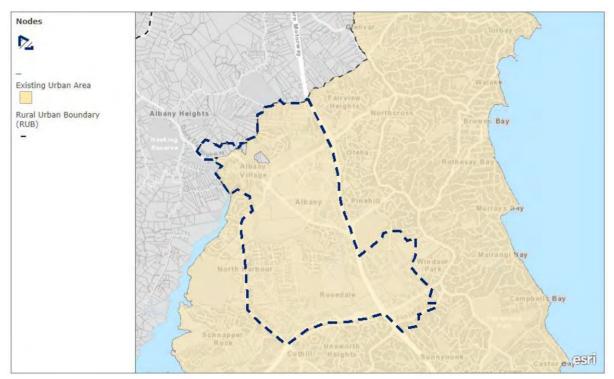


Figure 36 - Albany urban node

Albany has a significant strategic role as an urban node. It will continue to evolve and develop as the key node for the north of Tāmaki Makaurau. Albany has significant opportunities for additional business and residential growth.

The last five years have brought several major infrastructure projects that will have significant positive impact on growth within the node. Possible future major projects such as the Waitematā Harbour Connections will also accelerate further future growth in the area.

Opportunities:

- Residential intensification and mixed use
- Albany does not yet have many higher density mixed use residential developments typical of more established centres, such as Takapuna. However, recent developments such as Library Lane and the Rose Garden Apartments are proving successful and increasing its residential appeal.
- Improved connectivity with nearby employment areas in Rosedale and Apollo Drive
- Good location to centralise major facilities and services such as hospital, court, university, library
- Partner with mana whenua

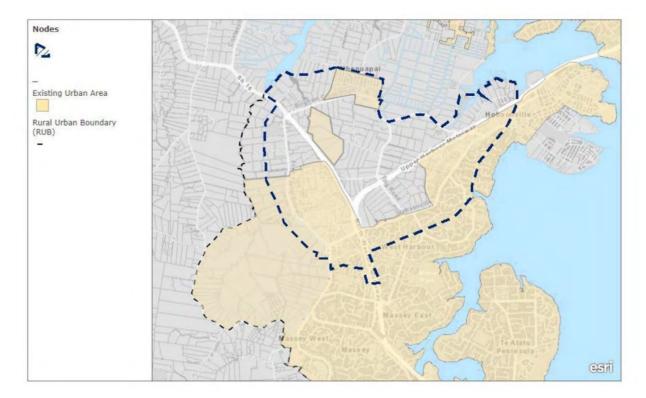


Figure 37 - Westgate urban node

Westgate is at an early stage of development compared with the other nodes. Westgate serves local established residential areas such as Henderson and Massey. It is a focal point for the significant growth area of the north-west, including the future urban areas around Red Hills, Whenuapai and Kumeū-Huapai.

Its development focuses on business and employment areas that are key to the sustainable development of the north-west. The area is well connected to the other parts of the city via the north-western motorway.

Westgate will require substantial future transport and other infrastructure investment to perform well and to service the existing surrounding growing residential areas.

Opportunities:

- Integrated development of the surrounding future urban areas
- Improved public transport
- Transformation of parts of the existing business and employment areas to mixeduse environments where practicable
- Future urban business land is identified in the short, medium and long-term
- Integration and enhancement of the natural environment into the future urban areas of the node
- Partner with mana whenua



Figure 38 - City centre urban node

The city centre plays a critical role in the success of both Tāmaki Makaurau 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 Tāmaki Makaurau. As the other nodes further develop and strengthen their role as sub-regional focal points, it is expected that the city centre will become an integral part of a network, supporting the multimodel growth approach.

The city centre has changed substantially over the past years, as a result of significant public and private investment in infrastructure and development projects.

The city centre node includes the city fringe.

Opportunities

- Improved accessibility/connectivity to wider areas City Rail Link, Auckland Light Rail, Frequent Transit Network (FTN) and Rapid Transit Network (RTN)
- Redefining the new character of the city centre
- The city fringe, including Newmarket, Ponsonby, Parnell will also experience growth in their own way – they are already significant centres in their own right. Providing better connections between the city centre and the fringe would form a strong network of centres
- Partner with mana whenua.

Manukau



Figure 39 - Manukau urban node

Manukau is the largest and most established of the nodes outside of the city centre. Its civic, retail, education and cultural facilities provide for the wider population of the south. It includes key business and employment areas such as the Airport and Wiri. Manukau is in close proximity to major transport routes and interchanges.

Over the last five years major investments in the area have included rail electrification, the Puhinui train station upgrade, and the first stage of the Airport to Manukau Rapid Bus Transit. Significant residential growth is expected in Puhinui, Māngere, Middlemore, and Otara neighbourhoods.

Manukau has some challenges to address natural hazards, including a large floodplain, and some liquefaction potential associated with Puhinui Stream, to west of Manukau city centre,

Opportunities:

- Improved accessibility/connectivity to wider areas –Auckland Light Rail, Airport to **Botany Rapid Transit**
- Provide better local transport services to link with subregional and regional services
- Improvements to Manukau Central through projects such as Eke Panuku's Transform Manukau
- Reflect the multi-cultural community and culturally significant places
- Interpreting medium-high density housing in a local cultural context e.g., multigeneration housing, housing for larger families
- Linking residential with environmental enhancements
- Enhancement of the natural environment through integrated catchment management, Puhinui Stream regeneration and increased tree coverage
- Partner with mana whenua
- Future urban business land is identified in the medium-term (Puhinui Stage 2)

Warkworth

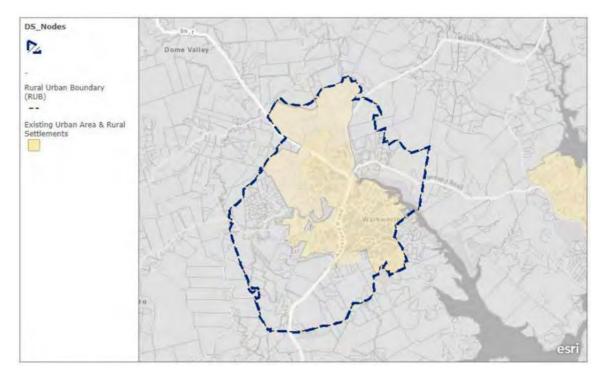


Figure 40 - Warkworth rural node

Warkworth is a growing rural node and is the largest rural town in the north. It serves a large rural catchment that extends beyond the regional boundary. Significant residential and employment growth is expected in Warkworth over the next 30 years with around 1100 hectares identified as future residential and business land.

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.

Warkworth will benefit from a number of recent investments in major roading projects that serve the recent growth in the north.

Opportunities:

- Integrated growth of land use, transport, and other infrastructure
- Providing sufficient employment areas to help ensure people can live and work locally without the need for long commutes.
- Natural environment, including the extensive coastal areas, are an integral part of the Warkworth rural node identity that require enhancement and improvement of the health of watercourses
- Partner with mana whenua
- Future urban business land is identified in the long-term

Pukekohe

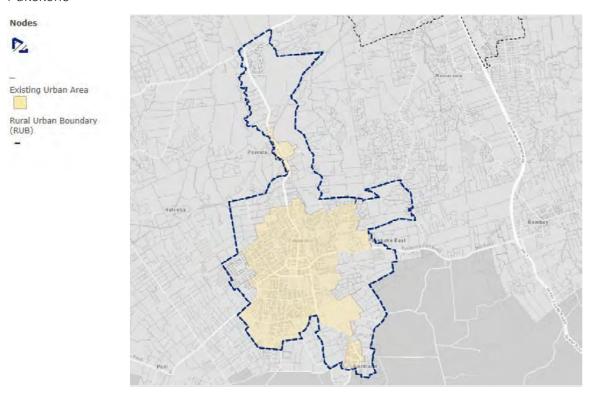


Figure 41 - Pukekohe rural node

Pukekohe is an established rural node located approximately 50 kilometers south of the city centre that serves a wide rural catchment. It is located on the rail line and is connected to State Highway 1 and the rest of the region via State Highway 22. Significant growth is anticipated in this area over the next 30 years. Upgrades to water, wastewater, stormwater and transport will be required.

The past five years have brought important major investments to the area such as rail electrification, express rail to Hamilton to strengthen its connection to nearby Waikato rural towns and settlements (Waikato Growth Strategy).

Opportunities:

- Build on the 'Auckland's food basket' concept to reinforce local identity
- Enhance sub-regional tourism by horticulture and equestrian-related activities/events
- Address the challenge of Drury's growth
- Further upgrades to infrastructure in an integrated way in order to be able to continue servicing the surrounding rural areas and communities
- Partner with mana whenua
- Future urban business land is identified in the long-term

Appendix 6: Future urban infrastructure prerequisites

Infrastructure prerequisites make a more specific link between growth in future urban areas and the infrastructure necessary to support that growth. Prerequisites and their respective timing were developed with the key lead infrastructure providers for development which are water, wastewater, stormwater and transport.

Infrastructure prerequisites is a term introduced into this Future Development Strategy as a tool to guide the timing of development of future urban areas and where development relies on, connects to, or has an impact on water, wastewater, stormwater, or transport networks. Infrastructure prerequisites indicate the infrastructure required to support development, and the timing of when the council is able to fund that infrastructure. This leads to the timing for an area to be ready for development, based on "not before" a year, rather than the 5-year periods as was the approach in the Future Urban Land Supply Strategy 2017 (FULSS). The FULSS 5-year period indicated when future urban land was anticipated to be ready for development based on a set of principles, which included information on infrastructure readiness.

These prerequisites set a clear expectation as to the new or upgraded services needed to support growth in future urban areas and reflect the feasible date by which council can commit to funding and delivering that infrastructure. There may be times where alternative methods or technologies that achieve the same or similar outcome are available, or alternative funding methods or partners enable all or parts of these future urban areas to be live zoned earlier than where the provision of infrastructure solely rely on council funding. Council will collaboratively engage when such opportunities arise, as described in section 4.2.2.

Infrastructure prerequisites update the likely timing and specify the development infrastructure project and additional infrastructure project(s) that would be required to enable the area to be ready to be live-zoned. It is important to note that the infrastructure prerequisites (and associated timing) are high level and coarse, and beyond these requirements more detailed levels of planning are required.

This approach is based on the principle of aligning the location and timing of growth in future urban areas with council's investment into the construction and delivery of bulk and cumulative infrastructure to service and support new urban development. This is necessary due to the limits on the council's ability to finance infrastructure investment.

However, there is a high level of uncertainty in growth planning. This prerequisite approach is taken to balance the tension between providing certainty for infrastructure providers, with flexibility for development aspirations. Along with assisting the integration of planning decisions under the RMA with infrastructure planning and funding decisions, responsive planning is a key principle of the NPS-UD. By clearly stating the infrastructure prerequisites required for the development of future urban areas, it provides the potential for the private sector to fund and finance that infrastructure and potentially bring the development of future urban areas forward, noting there may be strategic reasons beyond council's financial resources as to why the timing of development should not be brought

forward.

While infrastructure prerequisites signal likely timing for zoning changes for a whole future urban area or sub-area, the projects generally have a level of uncertainty until they are funded.

The infrastructure prerequisites are linked to bulk development infrastructure delivery. The locations and timing of the projects identified as development infrastructure prerequisites are based on broad assumptions, including that they are delivered by council and central government entities. These projects are in the future and generally not yet confirmed and funded in plans such as a 10-year budget. In practice, the timing of the delivery of infrastructure projects will increase with certainty as they become funded. This can be 7-10 years out from their delivery.

By integrating the timing of development of future urban land with infrastructure prerequisites this FDS indicates when a programme of delivering the bulk infrastructure would likely have confirmed funding and be initiated. This provides clear guidance around the timeframes for rezoning and development activities. This also provides the potential for the private sector to find alternative funding sources for required infrastructure, which may enable the timing of rezoning and development to be brought forward.

The prerequisites will be reviewed regularly to ensure they reflect the latest project information and funding availability. In order to allow for the adjustment of prerequisites, one implementation action for the FDS is to incorporate principles around development of future urban areas, infrastructure provision, and the role of prerequisites in the Regional Policy Statement of the Auckland Unitary Plan. The specific prerequisite information, including what infrastructure is required and when this is planned, will remain within the FDS and/or related implementation plan.

Prerequisites are used to ensure well-coordinated development that makes an important contribution to achieving well-functioning urban environments

Aligning future urban areas with planned (bulk) infrastructure delivery ensures that development is well-coordinated and is able to provide a safe, sustainable environment for communities.

An important part of ensuring well-coordinated development is ensuring that the delivery of the infrastructure prerequisites is not considered in isolation of wider system upgrades and initiatives required in any given location. These wider network considerations are critical, although greater flexibility (as compared to the bulk infrastructure required as prerequisite) will typically be available to work around their delivery. For example, with regards to transport, beyond bulk infrastructure, interim transport works or upgrades can and will occur to enable development. These can be scoped and staged to allow for upgrades which support the level of proposed development without compromising the ultimate form of a wider transport project.

Infrastructure prerequisites do not constrain development

The Future Development Strategy and the implementation of infrastructure prerequisites do not prevent private plan change requests. Council cannot predict private plan change

requests and can therefore not rely on this 'method' when planning for regional growth and infrastructure provision across a 30-year horizon.

However, a pathway exists for the timing that future urban land can be developed to be brought forward where the requestor of a private plan change can fund the infrastructure prerequisites (that is, there is no cost to council), or can, conditional on acceptance by council, identify alternate or new infrastructure funding tools which limit impacts on council's financial position and commitments.

The need for infrastructure occurs progressively from the time of occupation. Land development, subdivision, and construction is a multi-year programme. By concurrently delivering infrastructure, land development and construction, there are economic efficiencies from the infrastructure investment.

Also, not all infrastructure is needed for initial new residential or business communities. The council will therefore consider the staged roll out of infrastructure upgrades commensurate with demand and / or staging of development where such roll-out and/or staging is to the satisfaction of the relevant and ultimate infrastructure owner, and again where such staged roll out does not impact the council's debt profile nor its ability to fund infrastructure it has committed to or prioritised. Staged provision commensurate with progressive growth will ensure a new community is serviced, with subsequent growth stages triggered by a developer commitment to upgraded infrastructure.

Therefore, infrastructure prerequisite projects will not always need to have finished construction prior to development commencing. There will be scenarios where the development consenting and construction process can commence prior to completion of prerequisite infrastructure. When development can commence needs to be considered on a case-by-case basis and will, amongst others, depend on perquisite design and construction lead times.

It is potentially also possible that development can commence so far ahead that dwellings (or business premises) are ready to be occupied before prerequisite infrastructure is in place and able to be connected to. This is therefore another consideration for when it might be appropriate for development to commence. 'Occupation triggers' as a date before which a dwellings or premises cannot connect to a network infrastructure could be an additional condition attached to development commencing prior to infrastructure prerequisite dates.

The NPS-UD allows the use of infrastructure prerequisites

The NPS-UD does not prevent a sequencing approach to strategic planning. It emphasizes an approach where council planning decisions (including on plan changes) on urban development that affect urban environments are integrated with infrastructure planning and funding decisions. For Auckland this enables the council to continue with a strategic planning approach that utilises sequencing as developed in the FULSS 2017. At the same time, the NPS-UD requires the council to be responsive to plan changes that would add significantly to development capacity and contribute to well-functioning urban environments, even if the development capacity is unanticipated by RMA planning document or out-of-sequence with planned land release. However, this cannot be at the

expense of achieving a well-functioning urban environment or other valid and important resource management considerations.

As a result, a strategic planning approach that aims for a good degree of certainty but allows for appropriate flexibility (or responsiveness) is required. Infrastructure prerequisites allow for this certainty and flexibility.

The following table sets out the timing of future urban areas and the key (bulk) infrastructure prerequisites associated with these. The timing of the live-zoning future urban areas spans over 30 years from 2023 – 2050+ and is necessary in acknowledging the council's limitations in funding infrastructure to support growth. Distributing the live zoning of future urban areas over this timeframe enables proactive planning in an orderly and cost-efficient way, ensuring the areas are supported by the required bulk infrastructure and able to deliver the quality urban outcomes anticipated in this FDS.

Note: The key bulk infrastructure prerequisites listed in the following table is not an exhaustive list, is based on current information and may be subject to change as further strategic planning is developed (e.g. Auckland Rapid Transit Plan (ARTP) and the Tāmaki Makaurau Integrated Transport Plan (TMTP)). The timing of the individual infrastructure prerequisite projects will be included in the FDS Implementation Plan and reviewed annually to ensure they reflect latest information.

Future Urban	Staging	Timing	Infrastructure
Areas	breakdown		prerequisite
			Key bulk infrastructure projects to
			support development readiness
			(not an exhaustive list)
			Colour coding legend:
			Wastewater projects
			Water supply projects
			Rapid Transit projects
			Other Transport projects
Warkworth	Warkworth North	Live zoned	
	Manhous attacht	Not before	Mastern Link Newth
	Warkworth North	Not before	Western Link North
		2035+	Matakana Road Upgrade
			Sandspit Link
			Sandspit Road Upgrade
			Northern Public Transport Interchange
			Warkworth Wastewater Growth
			Strategy (new pipeline, pump
			station, wastewater treatment
			plant and outfall pipe) and
			ancillary works
			Warkworth WW Growth Servicing
			(Gravity pipe from the
			showgrounds to Lucy Moore PS)
	Warkworth West	Not before	SH1 Southern Interchange
		2040+	Woodcocks Road upgrade
			Wider Western Link
			Warkworth Wastewater Growth
			Strategy (new pipeline, pump
			station, wastewater treatment
			plant and outfall pipe) and
			ancillary works
			Warkworth WW Growth Servicing
			(Gravity pipe from the
			showgrounds to Lucy Moore PS)

Central 2040+ Woodcocks Road upgrade Western Link south Southern Public Transport Interchange SH1 South Upgrade Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Warkworth South Warkworth South Warkworth South Upgrade Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Warkworth North East Warkworth North East Warkworth North East Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Sandspit Road Upgrade Sandspit Link Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Silverdale, Dairy Flat, Wainui East SHA Live zoned Silverdale West (stage 1) Pine Valley Road upgrade SH1 Interchange upgrades and new interchanges including active modes (Wilks Road, Redvale & Silverdale) North Shore Rapid Transit (extension to Millidale) Army Bay Wastewater Treatment Plant Lipgrade Silverdale West Centralised WW PS		Warkworth South	Not before	CH1 Couthorn Interchange
Western Link south Southern Public Transport Interchange SH1 South Upgrade Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Warkworth South East Warkworth South East Warkworth South Western Link Southern Public Transport Interchange SH1 South Upgrade Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works SH1 South Upgrade Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Silverdale, Dairy Flat, Wainui East SHA Wainui East, Upper Orewa Silverdale West (stage 1) Not before 2045+ Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater Treatment plant and outfall pipe) and ancillary works Silverdale, Dairy Flat, Wainui East SHA Wainui East, Upper Orewa Silverdale, Dairy Flat, Wainui East, Wainui East, Wainui East, Wainui East, Wainui East, Wainui East,				SH1 Southern Interchange
Southern Public Transport Interchange SH1 South Upgrade Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Warkworth South East SHA Live zoned Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works SH1 Southern Interchange SH1 South Upgrade Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works SH1 Southern Public Transport Interchange Wider Western Link Southern Public Transport Interchange Wider Western Link Southern Public Transport Interchange SH1 South Upgrade Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Sandspit Link Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Sandspit Link Warkworth Wastewater Growth Strategy (new pipeline, pump station, wastewater treatment plant and outfall pipe) and ancillary works Silverdale, Dairy Flat, Wainui East, Upper Orewa Silverdale West (stage 1) Pine Valley Road upgrade SH1 Interchange upgrades and new interchanges including active modes (Wilks Road, Redvale & Silverdale) Army Bay Wastewater Treatment Plant and upgrade SH1 Interchange upgrades and new interchanges including active modes (Wilks Road, Redvale & Silverdale) Army Bay Wastewater Treatment Plant upgrade Silverdale West Centralised WW PS File Valley Road Upgrade Silverdale West Centralised WW PS File Valley Road Upgrade Silverdale West Centralised WW PS Silverdale West Centralised WW PS Silverdale West Centralised WW PS		Central	2040+	, ,
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Silverdale West (stage 2)	* some business can take advantage of existing capacity, these are the projects required to support full build out.	Dairy Flat Highway upgrade SH1 Interchange upgrades and new interchanges including active modes (Wilks Road, Redvale & Silverdale) North Shore Rapid Transit (extension to Milldale) Army Bay Wastewater Treatment Plant Upgrade Silverdale West Centralised WW PS
Silverdale West (stage 3)	Not before 2035+	Dairy Flat Highway upgrade Dairy Flat to Redvale Interchange Arterial SH1 Interchange upgrades and new interchanges including active modes (Wilks Road, Redvale & Silverdale) North Shore Rapid Transit (extension to Milldale) Army Bay Wastewater Treatment Plant Upgrade Orewa 3 Watermain
Weiti	Not before 2035+	Dairy Flat Highway to Penlink upgrades East Coast Road upgrade Wilks Road interchange Army Bay Wastewater Treatment Plant Upgrade Orewa 3 Watermain
Dairy Flat	Not before 2050+	Dairy Flat Highway upgrade SH1 Interchange upgrades and new interchanges including active modes (Wilks Road, Redvale & Silverdale) Bawden Road upgrade East Coast Road Upgrade North Shore Rapid Transit (extension to Milldale) Army Bay Wastewater Treatment Plant Upgrade Orewa 3 Watermain
Upper Orewa	Not before 2050+	Wainui Road upgrade Milldale and Grand Drive connection North Shore Rapid Transit (extension to Milldale) Army Bay Wastewater Treatment Plant Upgrade

	Wainui East	Not before 2050+	Pine Valley Road upgrade Dairy Flat Highway upgrade SH1 Interchange upgrades and new interchanges including active modes (Wilks Road, Redvale & Silverdale) North Shore Rapid Transit (extension to Milldale) Army Bay Wastewater Treatment Plant Upgrade Orewa 3 Watermain
Scott Point	Scott Point	Live zoned	
Red Hills	Red Hills	Live zoned	
	Red Hills North	Not before 2035+	Fred Taylor Drive Upgrade Northwest Rapid Transit Whenuapai and Redhills Wastewater Scheme Brigham Creek Pump Station + Northern Redhills to Brigham Creek Wastewater Project North Harbour No.2 Watermain Project
Whenuapai	Whenuapai	Live zoned	
	Whenuapai South	Not before 2035+	Trig Road upgrade SH16 to SH18 Connections Hobsonville Road Upgrade Northwest Rapid Transit Whenuapai Wastewater Package 2 Trig Road Water Reservoir, North Harbour No.2 Watermain Project
	Whenuapai Business	* some business can take advantage of existing capacity, these are the projects required to support full build out.	Spedding Road/ Northside Drive connection over SH16 SH16 to SH18 Connections Spedding Road Upgrade and Extension Mamari Road Upgrade and Extension Trig Road Upgrade North Western Bus Improvements (not rapid transit) Northwest Rapid Transit Whenuapai Wastewater Package 1 Whenuapai Wastewater Package 2 Trig Road Water Reservoir, North Harbour No.2 Watermain Project
	Whenuapai West	Not before 2035+	Brigham Creek Road upgrade SH16 to SH18 Connections Spedding Road Upgrade and Extension Northwest Rapid Transit Whenuapai Wastewater Package 1 Whenuapai Wastewater Package 2

	Whenuapai East Whenuapai North (stage 1)	Not before 2035+ Not before 2035+	Brigham Creek Road upgrade SH16 to SH18 Connections Hobsonville Road Upgrade Upper Harbour (SH18) Rapid Transit Whenuapai Wastewater Package 2 (Southern portion only) Trig Road Water Reservoir, North Harbour No.2 Watermain Project SH16 to SH18 Connections Brigham Creek Road upgrade Northwest Rapid Transit Upper Harbour (SH18) Rapid Transit Whenuapai Wastewater Package 1 Whenuapai Wastewater Package 2 Trig Road Water Reservoir,
			North Harbour No.2 Watermain Project
	Whenuapai North (stage 2)	Not before 2050+	SH16 to SH18 Connections Brigham Creek Road upgrade Northwest Rapid Transit Upper Harbour (SH18) Rapid Transit Whenuapai Wastewater Package 1 Whenuapai Wastewater Package 2 Trig Road Water Reservoir, North Harbour No.2 Watermain Project
Kumeu-Huapai,	Kumeu-Huapai	Live zoned	
Riverhead	Kumeu-Huapai & Riverhead	Not before 2050+	Brigham to Waimauku SH16 Upgrade SH16 Main Road Upgrade Alternative State Highway Access Road upgrade Coatesville-Riverhead Highway upgrades Northwest Rapid Transit extension to Huapai Riverhead separation from the KHR WW Main
Hingaia	Hingaia	Live zoned	
Takaanini	Takaanini (Walters Rd) Cosgrave Rd (Takaanini)	Not before 2050+	Mill Road Takaanini FTN Upgrade
	Takaanini	Not before 2050+	Mill Road Takaanini FTN Upgrade
Opaheke	Bellfield Rd (Opaheke)	Live zoned	N/A complete
	Opaheke	Not before 2050+	Mill Road Opaheke Road upgrade Southern Auckland Wastewater Service Scheme

Drury	Drury South	Live zoned	
	Bremner Rd (Drury West)	Live zoned	
	Ōpaheke-Drury	Live zoned	
	Drury East	Not before 2035+	Drury Arterials Drury Railway Station Papakura to Pukekohe Rail Electrification Hingaia Rising Main Southern Auckland Wastewater Service Scheme
	Drury West Stage 1	Not before 2035+	SH22 upgrade Drury Arterials Papakura to Pukekohe Rail Electrification Ngākōroa Railway Station Hingaia Rising Main Southern Auckland Wastewater Service Scheme Hingaia east-west resilience Watermain & BSP
	Drury West Stage 2	Not before 2035+	Drury Arterials SH22 upgrade Ngākōroa Railway Station Hingaia Rising Main Southern Auckland Wastewater Service Scheme
	Drury West Stage 3	Not before 2035+	Drury Arterials SH1 Drury South Interchange Drury West and South Drury Connection Great South Road Upgrade SH22 Upgrade Ngākōroa Railway Station Hingaia Rising Main Southern Auckland Wastewater Service Scheme
Pukekohe & Paerata	Belmont (Pukekohe)	Live zoned	
	Wesley (Paerata)	Live zoned	
	Paerata South	Not before 2035+ (Was previously 2030+)	SH22 - Paerata Station Connection Drury-Paerata Link Paerata Arterial Paerātā Railway Station Paerata Transmission Wastewater Pumpstation Wesley-Paerata Watermain
	Pukekohe East	Not before 2035+	Pukekohe South East Arterial Mill Road Upgrade (Bombay Interchange and Harrisville Road) Papakura to Pukekohe Rail Electrification Pukekohe Trunk Sewer
	Pukekohe Southwest	Not before 2035+	Pukekohe South West Upgrade Papakura to Pukekohe Rail Electrification

	Paerata West	Not before	SH22 - Paerata Station Connection
		2040+	Drury-Paerata Link
			Paerata Arterial
			SH22 Safety Improvements
			Paerata Train Station
			Paerata Transmission Wastewater
			Pumpstation
			Wesley-Paerata Watermain
	Pukekohe	Not before	Pukekohe North East Arterial
	Northeast	2040+	Paerata Arterial
			Papakura to Pukekohe Rail
			Electrification
			Isabella Drive Pump Station
			New Bulk Supply Point at
			Pukekohe East Reservoir
	Pukekohe	Not before	Pukekohe Southeast Arterial
	Southeast	2040+	Papakura to Pukekohe Rail
			Electrification
	Pukekohe	Not before	Pukekohe North West Arterial
	Northwest	2040+	Isabella Drive Pump Station
			New Reservoir Adams Road South
Puhinui	Puhinui (stage 2)	Not before	20Connect Project (SH20B)
		2030+	

Rural and Coastal Settlements	Timing indication	Infrastructure prerequisite Key bulk infrastructure projects to support development readiness (not an exhaustive list)
Wellsford	Not before 2030+	Wellsford Wastewater Treatment Plant upgrade Wellsford Water Treatment Plant upgrade
Algies Bay	Not before 2025+	Snells Beach Wastewater Treatment Plant
Albany Village Stage 2	Not before 2025+	N/A (serviced by existing capacity)
Hatfields Beach Stage 2	Live Zoned	
Helensville Stage 1	Not before 2035+	Helensville Wastewater Treatment Plant upgrade Helensville Water Treatment Plant upgrade
Helensville Stage 2	Not before 2035+	Helensville Wastewater Treatment Plant upgrade Helensville Water Treatment Plant upgrade
Oruarangi Stage 2	Not before 2025+	N/A (serviced by existing capacity)
Clarks Beach Stage 2	Not before 2030+	South-West Wastewater Upgrade

Glenbrook Beach Stage 2	Not before 2030+	South-West Wastewater Upgrade
Maraetai Stage 2	Not before 2035+	Beachlands Maraetai servicing

Appendix 7: Future urban area summary

The Future Development Strategy reassessed all future urban areas (FUAs) that had not been live zoned (as at 2023). The purpose of this reassessment was to evaluate the appropriateness of areas for future growth. This appendix summarises changes made following this reassessment. Refer to the associated *Future Urban Areas* evidence report for detail, including the criteria used and assessment of each FUA.

Four future urban areas will be partially or entirely removed for urban development because of significant hazard constraints where new development would be inappropriate due to risk to life and property. The council will develop more detailed evidence to input into plan changes for these areas to be rezoned to an appropriate non-urban and non-future urban zone. The boundaries of the areas to be removed are currently indicative and will be further refined through a plan change process. These areas include:

- Hatfields Beach stage 2
- Parts of Kumeū-Huapai-Riverhead
- The southern part of Takaanini
- Parts of Drury-Ōpaheke

In some cases, parts of FUAs have been 'red flagged'. Red flagged areas recognise that while these areas could be developed in the future, particular regard is required to ensure development occurs through an integrated catchment approach. Refer to *Appendix 8:* Requirements within red flagged FUAs for more information. Red flagged areas:

- Parts of Kumeū-Huapai-Riverhead
- The northern portion of Takaanini
- Parts of Drury-Öpaheke

The remaining FUAs that are not yet lived zoned are retained within the FDS. However, the timing of when many FUAs will be able to be developed has changed since the FULSS 2017 due to updated information on deliverability of key infrastructure to support these areas.

Overview of Future Urban Area timing

The following table outlines updated timings for future urban areas within the FDS. This table excludes areas that have been live zoned since the FULSS 2017 and the four future urban areas that are removed for urban development. The proposed timeframe indicates when the infrastructure required to service the full build-out of the area is likely to be implemented and is based on current information. As described elsewhere, infrastructure projects will not always need to have finished construction prior to development commencing.

More information on timing and key infrastructure project prerequisites for each FUA can be found in *Appendix 6: Future urban infrastructure prerequisites*. It should be noted that the prerequisites will be reviewed regularly to ensure they reflect the latest project information and funding availability.

Future urban cluster	Future urban area	Timing
North		
Warkworth	Warkworth North (remainder)	2035+
	Warkworth West (remainder)	2040+
	Warkworth South- central	2040+
	Warkworth South- east	2045+
	Warkworth South- west	2045+
	Warkworth North- east	2045+
Silverdale West, Dairy Flat,	Silverdale West (Stage 1)	2030+
Wainui East and Upper Ōrewa	Silverdale West (Stage 2)	2030+
	Silverdale West (Stage 3)	2035+
	Weiti	2035+
	Dairy Flat	2050+
	Wainui East	2050+
	Upper Ōrewa	2050+
North-west		
Whenuapai	Whenuapai North (Stage 1)	2035+
	Whenuapai North (Stage 2)	2050+
	Whenuapai Business	2025+
	Whenuapai East	2035+
	Whenuapai West	2035+
	Whenuapai South	2035+
Red Hills	Red Hills North	2035+
Kumeū-Huapai and Riverhead	Kumeū Huapai and Riverhead	2050+ (including red flag)
South		<u> </u>
Ōpaheke, Drury East, Drury	Ōpaheke	2050+ (including red flag)
West	Drury East	2035+ (including red flag)
	Drury West (Stage 1) (remainder)	2035+
	Drury West (Stage 2)	2035+
	Drury West (Stage 3)	2035+
	(remainder)	
Pukekohe and Paerata	Paerata South	2030+
	Paerata West	2040+
	Pukekohe North-east	2040+
	Pukekohe North- west	2040+
	Pukekohe East	2035+
	Pukekohe South-east	2040+
	Pukekohe South- west	2035+
Puhinui	Puhinui (Stage 2)	2030+
Takaanini	Takaanini (Cosgrave Rd)	2050+
	Takaanini	2050+ (including red flag)
Rural and coastal settlements		
North	Wellsford	2030+
	Algies Bay	2025+
	Albany Village 2	2025+
	Helensville 1	2035+
	Helensville 2	2035+
South	Oruarangi 2	2025+
	Clarks Beach 2	2030+
	Glenbrook Beach 2	2030+
	Maraetai 2	2035+

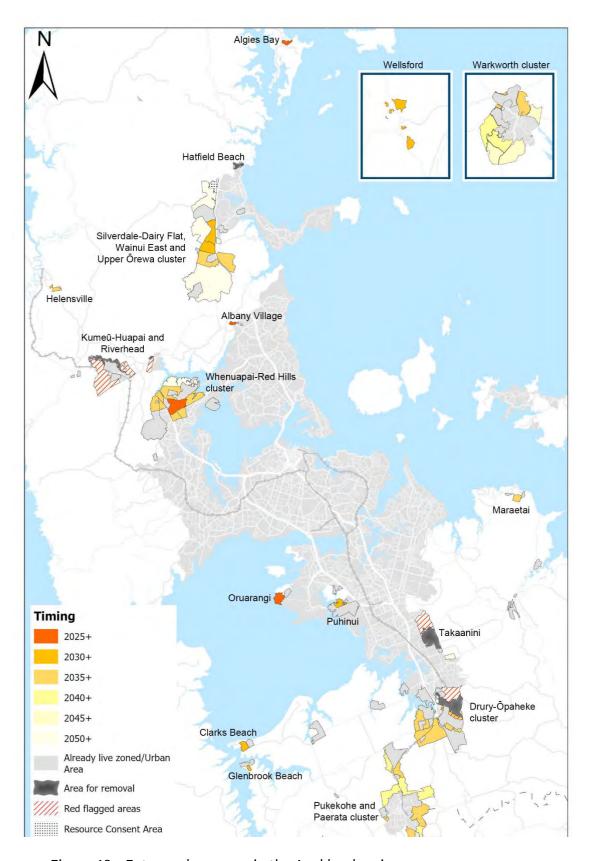


Figure 42 – Future urban areas in the Auckland region

Future Urban Areas in the North

Warkworth

Bulk infrastructure delivery for the Warkworth FUA cluster is not planned to support development until the following timeframes:

- Warkworth North (remainder) 2035+
- Warkworth West (remainder) 2040+
- Warkworth North-East 2045+
- Warkworth South-central -2040+
- Warkworth South-east 2045+
- Warkworth South-west 2045+

Reassessment of the Warkworth future urban area cluster did not identify significant challenges that would otherwise make development in the FUAs inappropriate, provided plan changes occur in line with the associated Auckland Council Structure Plan⁸ and after all infrastructure prerequisites are met. Refer to the *Future Urban Evidence Report* for more detail on this assessment.

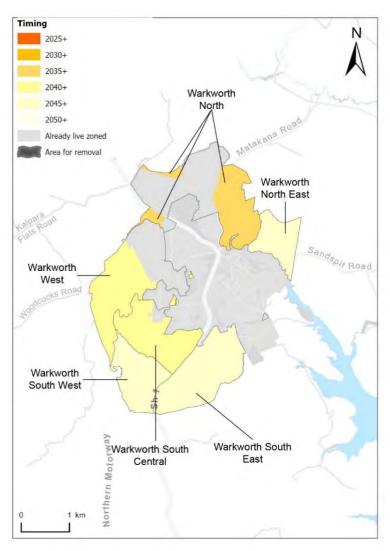


Figure 43 – Warkworth FUA cluster

⁸ Warkworth Structure Plan. Auckland Council, June 2019. See: <u>Warkworth Structure Plan</u> (<u>aucklandcouncil.govt.nz</u>)

Silverdale-Dairy Flat, Wainui East and Upper Ōrewa

Bulk infrastructure delivery for the Silverdale-Dairy Flat, Wainui East, Upper Örewa cluster is not planned to support development until the following timeframes:

- Silverdale West (Stage 1) 2030+
- Silverdale West (Stage 2) 2030+
- Silverdale West (Stage 3) 2035+
- Weiti 2035+
- Dairy Flat 2050+
- Wainui East 2050+
- Upper Ōrewa 2050+

Reassessment of the Silverdale-Dairy Flat, Wainui East and Upper Ōrewa cluster did not identify significant challenges that would otherwise make development of the FUAs inappropriate. It is noted that moderate natural hazard risk exists, in particular flooding extent, within the FUA cluster. These effects can be appropriately managed, if structure planning and subsequent plan changes take an integrated catchment management approach. At the time of writing, structure planning has only been completed for the Silverdale West (Stages 1-3) FUAs. Plan changes in relation to Silverdale West must align with this existing structure plan³, and any new structure planning carried out for the remaining FUAs in the cluster must be accompanied by a stormwater management plan that outlines an integrated approach for all drainage sub-catchments. Refer to the *Future Urban Evidence Report* for more detail on this assessment.

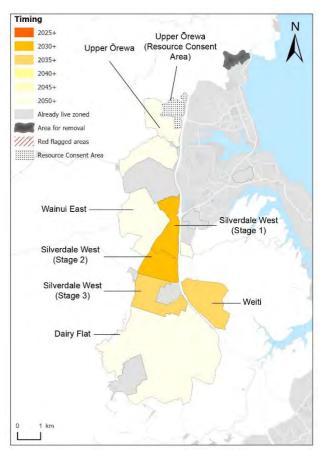


Figure 44 -Silverdale-Dairy Flat, Wainui East

⁹ Silverdale West Dairy Flat Industrial Area Structure Plan. Auckland Council, April 2020. See <u>Silverdale West Dairy Flat Industrial Area Structure Plan (aucklandcouncil.govt.nz)</u>

Future Urban Areas in the North-West

Kumeū-Huapai and Riverhead FUAs

Bulk infrastructure delivery for the Kumeū-Huapai and Riverhead FUAs is not planned to support development until 2050+. Any future structure planning and plan changes must demonstrate alignment with the red flag requirements outlined in appendix 8.

Reassessment of the Kumeū-Huapai and Riverhead FUAs demonstrated risk to life and property within the 1% AEP floodplain of the Kumeū and Riverhead Rivers respectively. The northern portion of the now superseded FUA is removed for urban development and is no longer part of the FUA within the FDS. Refer to the *Future Urban Evidence Report* for more detail on this assessment.

In the remaining southern portions of the Kumeū-Huapai and Riverhead FUA, while reassessment did not demonstrate that future development would itself be in high-risk locations, it did highlight increased potential effects on exacerbating existing flood risks downstream. Because of this, the southern portions of the FUAs have been "red flagged". Refer to Appendix 8 for more information on requirements in red flagged areas.

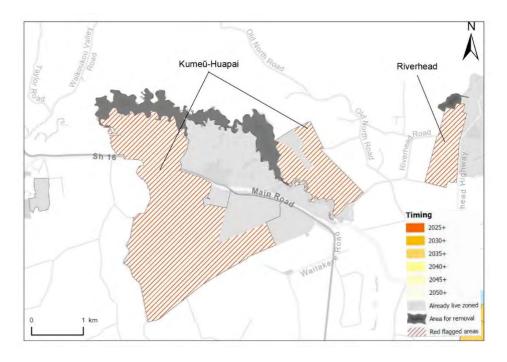


Figure 45 – Kumeū-Huapai-Riverhead FUA

Whenuapai and Red Hills

Bulk infrastructure delivery for the Whenuapai and Red Hills cluster is not planned to support development until the following timeframes:

- Red Hills North 2035+
- Whenuapai North (Stage 1) 2035+
- Whenuapai North (Stage 2) 2050+
- Whenuapai Business 2025+
- Whenuapai East 2035+
- Whenuapai West 2035+
- Whenuapai South 2035+

Reassessment of the Whenuapai and Red Hills cluster did not identify significant challenges that would otherwise make development in the FUAs inappropriate, provided plan changes occur in line with the associated Auckland Council Structure Plan¹⁰ and after all infrastructure prerequisites are met. It is noted that the reassessment highlighted particular risks associated with coastal instability and erosion. It is important that these current and future risks are appropriately managed in future plan changes. Refer to the *Future Urban Evidence Report* for more detail on this assessment.

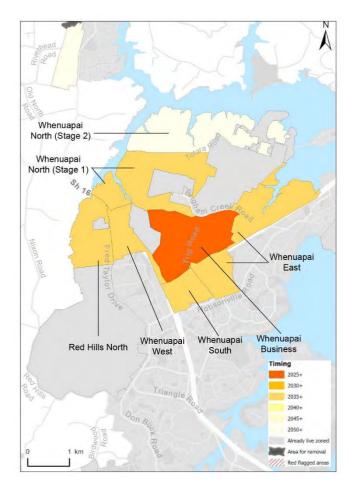


Figure 46 Whenuapai-Red Hills cluster

¹⁰ Whenuapai Structure Plan. Auckland Council, September 2016. See <u>Whenuapai Structure Plan</u> (aucklandcouncil.govt.nz)

Future Urban Areas in the South

Puhinui

Bulk infrastructure delivery for the Puhinui Stage 2 FUA is not planned to support development until 2030+.

Reassessment of Puhinui (Stage 2) did not identify significant challenges that would otherwise make development in the FUA inappropriate, provided all infrastructure prerequisites are met. Refer to the Future Urban Evidence Report for more detail on this assessment.

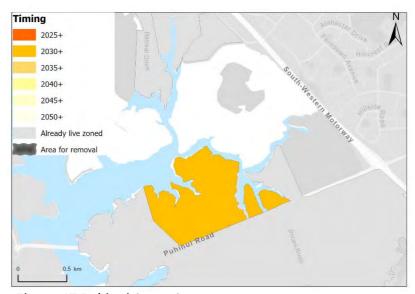


Figure 47 Puhinui Stage 2

Takaanini and Cosgrave Road

Bulk infrastructure delivery for the Takaanini and Takaanini (Cosgrave Road) FUAs is not planned to support development until 2050+.

Reassessment of the Takaanini FUA demonstrated risk to life and property within the 1% AEP floodplain of the Papakura Stream. Furthermore, underlying geology in the southern portion of the FUA means liquefaction damage is possible and development could result in extensive and uneven settlement, damaging future property and infrastructure. This southern portion of the now superseded FUA is removed for urban development and is no longer part of the FUA within the FDS. Refer to the *Future Urban Evidence Report* for more detail on this assessment.

In the remaining northern portion of the Takaanini FUA, while reassessment did not demonstrate that future development would itself be in high-risk locations, it did highlight increased potential effects on exacerbating existing flood risks downstream. Because of this, the northern portion of the FUA has been "red flagged". Refer to Appendix 8 for more information on requirements in red flagged areas.

Reassessment of the Takaanini (Cosgrave Road) FUA demonstrated that while significant flood risks exist within the FUA, unlike the Takaanini FUA, these risks can be appropriately mitigated through existing and planned infrastructure investments.

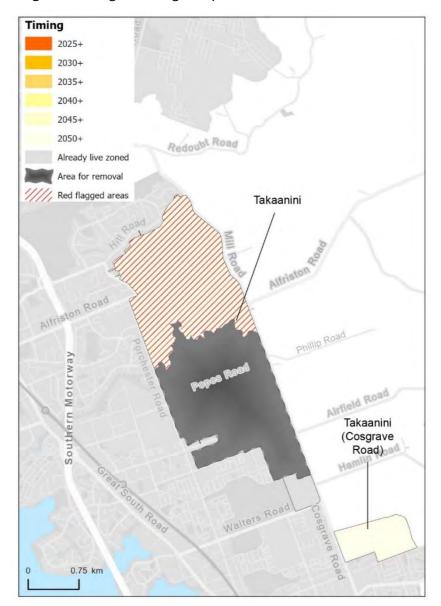


Figure 48 - Takaanini and Takaanini (Cosgrave Road) FUAs

Drury-Ōpaheke

Bulk infrastructure delivery for the Drury-Opaheke cluster is not planned to support development until the following timeframes:

- Ōpaheke 2050+
- Drury East 2035+
- Whenuapai North (Stage 2) 2050+
- Drury West (Stage 1) (remainder) 2035+
- Drury West (Stage 2) 2035+
- Drury West (Stage 3) (remainder) 2035+

The reassessment of the Ōpaheke-Drury cluster demonstrated risks to life and property within the 1% AEP floodplain of the Otūwairoa Stream (Slippery Creek). This area, within the now superseded Ōpaheke FUA, is removed for urban development and is no longer part of the FUA within the FDS. As a result of this removal, land immediately to the east has also been removed as it would become geographically orphaned. This land immediately to the east cannot be feasibly serviced through an integrated approach and would result in urban form and infrastructure provision challenges. While reassessment within the remaining area of the Ōpaheke FUA to the north did not demonstrate that future development would itself be in high-risk locations, it did highlight increased potential effects on exacerbating existing flood risks downstream in the Drury urban area. Because of this, the northern portion of the FUA has been "red flagged". Refer to Appendix 8 for more information on requirements in red flagged areas.

Reassessment of the remaining FUAs within the cluster did not identify significant challenges that would otherwise make development in the FUAs inappropriate, provided plan changes occur in line with the associated Auckland Council Structure Plan¹¹ and after all infrastructure prerequisites are met. Refer to the *Future Urban Evidence Report* for more detail on this assessment.

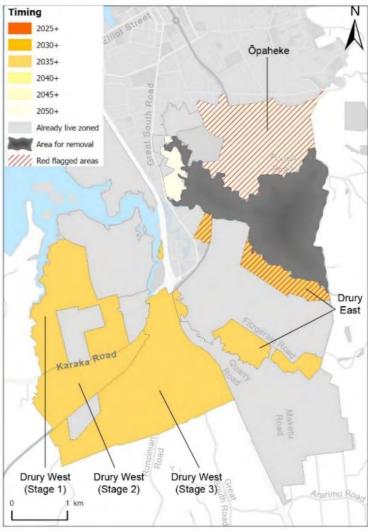


Figure 49 - Drury-Ōpaheke FUA cluster

¹¹ Drury – Opāheke Structure Plan. Auckland Council, August 2019. See <u>Drury-Opāheke Structure Plan</u> (<u>aucklandcouncil.govt.nz</u>)

Pukekohe and Paerata

Bulk infrastructure delivery for the Pukekohe and Paerata cluster is not planned to support development until the following timeframes:

- Paerata South 2030+
- Paerata West 2040+
- Pukekohe North-east 2040+
- Pukekohe North- west 2040+
- Pukekohe East 2035+
- Pukekohe South-east 2040+
- Pukekohe South- west 2035+

Reassessment of the Pukekohe-Paerata future urban area cluster did not identify significant challenges that would otherwise make development in the FUAs inappropriate, provided plan changes occur in line with the associated Auckland Council Structure Plan¹² and after all infrastructure prerequisites are met. Refer to the *Future Urban Evidence Report* for more detail on this assessment.

In is noted that while the Pukekohe FUA does have a high proportion of prime and elite soils, because the area assessed is already zoned future urban, pursuant of the National Policy Statement for Highly Productive Land 2022, this land cannot be assessed as highly productive land and therefore provides limited ability for reconsideration on these grounds.

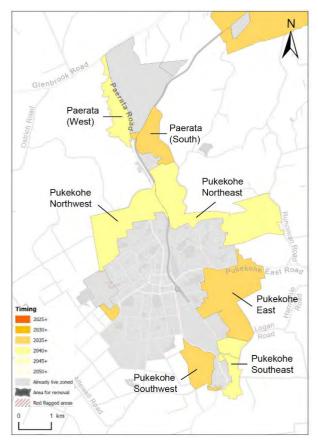


Figure 50 - Pukekohe and Paerata FUA cluster

¹² Pukekohe-Paerata Structure Plan. Auckland Council, August 2019. See <u>Pukekohe-Paerata Structure Plan</u> (aucklandcouncil.govt.nz)

Rural, coastal and urban fringe settlements

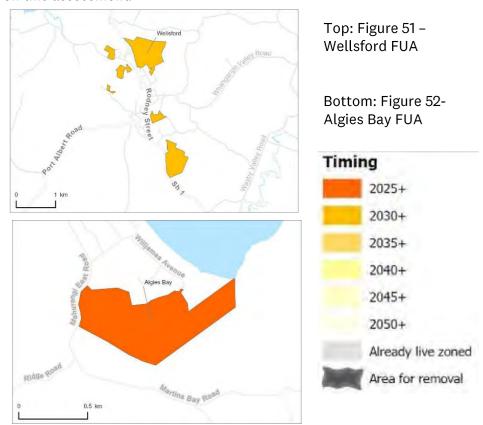
Bulk infrastructure delivery for the rural, coastal and urban fringe settlement FUAs across Auckland are not planned to support development until the following timeframes:

- Wellsford 2030+
- Algies Bay 2025+
- Albany Village 2-2025+
- Helensville 1 2035+
- Helensville 2-2035+
- Oruarangi 2-2025+
- Clarks Beach 2-2025+
- Glenbrook Beach 2-2030+
- Maraetai 2 2035+

In most rural, coastal and urban fringe settlement FUAs reassessment did not identify significant challenges that would otherwise make development in the FUAs inappropriate, provided all infrastructure prerequisites are met. Refer to the Future Urban Evidence Report for more detail on this assessment.

In Oruarangi 2, it is important to recognise mana whenua values in the area. While consultation is required for all plan change applications, particular emphasis is required in this location, including early and meaningful mana whenua engagement before a plan change is proposed.

In Hatfields Beach 2, reassessment demonstrated risks to life and property associated with flooding and coastal inundation. This coastal FUA is removed for urban development and is no longer part of the FUA within the FDS. Refer to the Future Urban Evidence Report for more detail on this assessment.



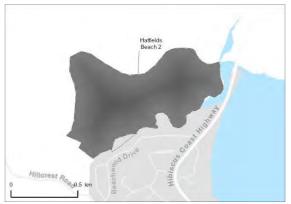


Figure 53 – Hatfields Beach FUA

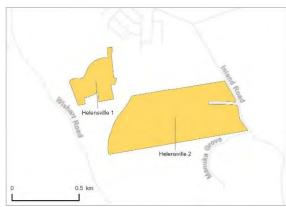


Figure 54 – Helensville FUAs



Figure 55 – Albany Village FUA



Figure 56 – Oruarangi FUA

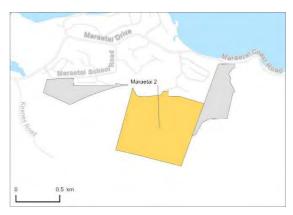


Figure 57 - Maraetai FUA



Figure 58 – Clarks Beach FUA



Figure 59 – Glenbrook Beach



Appendix 8: Requirements within red flagged FUAs

Several FUAs are 'red flagged' within the FDS. 'Red flagged' areas recognise that, while parts of FUAs might not be directly within hazards that pose risks to life and property, development in these areas needs to be appropriately managed to enable an integrated catchment approach. Most notably, development in these areas presents a greater risk of exacerbating downstream flooding effects within the existing urban area and / or rural and coastal settlements. Because of this, in addition to associated timing and infrastructure prerequisites, structure planning, master planning and subsequent plan change, or other land use change applications will be subject to certain requirements. These requirements are already enabled through a variety of regulatory instruments including the Auckland Unitary Plan (Operative in Part) (AUP), Healthy Waters regionwide Network Discharge Consent (NDC) and the Auckland Code of Practice for Land Development and Subdivision: Stormwater Chapter. However, the purpose of broadly setting out requirements in "red flagged" areas, as below, is to assist the reader with expectations under these existing regulatory instruments and to place particular emphasis on some requirements because of the critical need for an integrated approach early in the development process. The description of these requirements here does not fully represent the requirements as set out in those regulatory instruments, nor supersede due process associated with those instruments.

Integration of Land Use Change

Structure planning / master planning needs to be completed for the drainage sub-catchment of the FUA for any land use change application. Land use changes and development applications of isolated or individual parcels can result in perverse outcomes for infrastructure required to service the sub-catchment long-term. Isolated developments do not promote Policy E1.3.10 of the AUP. Any proposed development is required to provide stormwater management that aligns with Schedule 4 of the NDC. Where a Best Practicable Option (BPO) is promoted by a land use change or development application, and/or applicants propose earthworks within the FUA to modify the floodplain, applicants need to provide detailed hydrologic and hydraulic modelling to clearly identify impacts of this floodplain removal on adjacent properties. The Healthy Waters' catchment models will not provide the necessary details to complete this assessment and the applicant will need to undertake the detailed modelling themselves to submit the application.

Any lot creation will need to meet the shape factors set out in Chapter E38.7.3.3 and E38.7.3.4 of the AUP at all stages of regulatory consenting. Any change in land use or consent application cannot result in the creation of new flood prone areas, unless there is adequate space accounted for in land use zoning.

Where downstream impacts on flood risk are identified, it will be necessary for any application to consider an appropriate mitigation strategy. This should be through attenuating flows to a percentage of pre-development peaks, thus extending the traditional 24-hour consideration to an appropriate time span that will not result in increased flood risks.

Stormwater Infrastructure

Any development application will need to holistically consider the stormwater infrastructure necessary to service the entire FUA drainage sub-catchment. Stormwater infrastructure to be vested to public ownership will need to be designed considering the maximum probable development in the area with clear demarcation of the assumed stormwater drainage catchment to be serviced. Public infrastructure will need to be designed to comply with the Healthy Waters (or relevant water entity) Code of Practice and be accompanied by whole of life cost estimates. For both public and private stormwater devices, the application will need to contain sufficient

site investigation results to confirm that the proposed stormwater management will achieve what is stated. This includes soakage testing to demonstrate the potential for achieving retention presented in the application. Where an application does not undertake site investigations, then a worst-case scenario should be assumed with clear direction provided in the Stormwater Management Plan (SMP) of site investigations to be undertaken during the design process to achieve the outcomes intended from the stormwater management. Where stormwater conveyance infrastructure is reliant on public infrastructure downstream of the FUA, the applicant will need to undertake a detailed flooding assessment.

Stormwater infrastructure to be vested to public ownership may be subject to a defects liability period.

Modelling

Healthy Waters' catchments models have been produced for the purpose of identifying potential flood hazard. These models are not appropriate to be used for site specific assessments, although they may be suitable to provide boundary conditions associated with a development proposal. It is recommended that discussions be held with Healthy Waters (or the appropriate water entity) when scoping the extents of the assessment to be undertaken.

Appendix 9: Information on Major Projects

This appendix sets out relevant major projects that have potential transformational, city shaping impacts and that are currently being planned. These projects could move from planning to reality over the next thirty years.

Auckland Light Rail (ALR)

The City Centre to Māngere light rail (ALR) is a planned rapid transit line that will provide a fast and efficient connection between the city centre and Auckland Airport and have numerous stations. The route alignment has not been confirmed at this time.

Currently further design, planning and consultation works are being carried out to enable approval and investment by central government. It is anticipated that the planning and consenting phase will take two to three years, and construction will then take six to eight years.

The urban outcomes sought are vibrant, dense, mixed-use areas around the stations that provide workplaces, amenities and services close to the route. High-quality residential intensification and improved connectivity within the corridor is also desired. Current forecasts show that potentially 66,000 new dwellings and 97,000 new jobs would be created by 2051 if ALR was implemented.

Waitematā Harbour Connections

The Waitematā Harbour Connection project is investigating multi-modal solutions for future options to cross the Waitematā Harbour. The project looks at how people using all modes of transport could cross the harbour, what infrastructure would be needed to cater for this and how some or all of these modes may extend into the North Shore. The long-term solutions are anticipated to involve significant investment and require complex construction.

The project seeks to create well-functioning urban environments along the corridor(s) and on the North Shore by creating greater mode choice and accessibility, additional areas of employment and enabling high-quality residential development that is close to rapid transit stations. The opportunities for catalysing significant development in both Albany and Takapuna is being explored.

North-west Rapid Transit

The North-west rapid transit project is a planned rapid transit corridor that will provide a dedicated and direct connection between Brigham Creek to the City Centre and will have several stations along the route. The route alignment and mode have not been confirmed at this stage.

Currently, the detailed business case is being undertaken for the project and this includes community consultation and preferred option is expected to be confirmed as part of the business case. It is anticipated that if funding is confirmed, the planning and consenting phase would take five years and construction and delivery is expected to be within ten to fifteen years.

The project is seeking to create a more resilient urban form in the North-west by providing a greater range of transport choices and accessibility through a range of transport modes. Supporting high quality residential development and additional areas of employment close to the corridor is also sought.

Airport to Botany Rapid Transit

The Airport to Botany Rapid Transit project will provide enhanced access to the southern and eastern areas of Tāmaki Makaurau by improving travel choices, with a reliable and fast journey time between Auckland Airport and Botany. Further, the project will improve accessibility in the south and east of Tāmaki Makaurau including the major employment areas of Auckland Airport and Manukau.

The project presents the opportunity to support high quality residential growth along the route and high-quality residential development in close proximity to the employment areas and centres.

The project was identified as a 'next highest priority' after the completion of the Eastern Busway (Pakuranga to Botany) in the Auckland Rapid Transit Plan. This plan stated that it should be operational within the next 30 years.

A single stage business case was completed in 2021 that identified this corridor as having good potential for bus rapid transit. The timings of when this may happen is currently uncertain, however. As such, it has been identified as a potential major project in this Future Development Strategy. Subsequent Future Development Strategies will provide more information about this project's likely impact on accommodating growth as more decisions are made.

Westgate and Albany /Constellation Connection Rapid Transit

The project is a potential rapid transit corridor from Westgate to Albany or Constellation Drive potentially via Hobsonville and would provide for direct public transport between the North Shore and West Auckland, which is currently poorly served by limited public transport.

The project presents the opportunity to support high quality public transport to West Auckland from the North Shore and potentially help to support and growth employment in the Westgate area and on the North Shore reducing the flow of commuters.

The route, alignment, stops and funding / construction is not known at this stage and is currently at a conceptual level.

Ports of Auckland

The Ports of Auckland currently occupies 77 hectares of land on the city centre waterfront.

Several studies have examined the future of the Ports of Auckland in its current location and the impacts of relocating some, or all, of the Port to elsewhere in the region or outside the Tāmaki Makaurau region.

The council's current letter of expectation to the Ports of Auckland signals that planning should start in anticipation of a future relocation. Eke Panuku has also started work to consider what such a move could mean for the city centre and the wider Tāmaki Makaurau region. The potential transport implications of a relocation of the Ports of Auckland are currently also being analysed as part of the development of the joint council/central government Tāmaki Makaurau Integrated Transport Plan.

Therefore, the relocation of the Ports of Auckland, both in terms of the likely timing and its future location, is currently uncertain. Future decisions on the nature and timing of the relocation of the Ports of Auckland will impact on subsequent land use decisions. These

decisions could have a significant impact on the city centre, its sub-regional nodes and the future supply of industrial land.

The relocation of Ports of Auckland would also have significant infrastructure implications, especially for transport. It is too early in the current review processes to forecast these requirements with any certainty.

In terms of planning for this Future Development Strategy, the amount of uncertainty means that the Ports of Auckland relocation has been registered as a potential major transformation opportunity. Future Development Strategies will provide more detail on the potential regional land use and employment impacts as future decisions are made.

Appendix 10: Information on joint priorities between the council and central government

This appendix sets out information on the six short to medium-term (years 1-10) joint priority areas between the council and central government.

Mt Roskill

Mt Roskill is located less than 10km from the city centre. With frequent buses along Sandringham, Mt Eden and Dominion Roads and a bus connection between Mt Albert Road and Mt Albert rail station, the area has good accessibility to services and employment opportunities within the Tāmaki Makaurau isthmus area.

Kāinga Ora is currently progressing developments in Roskill South. This is being complemented by pedestrian, cycling and open space improvements. Large-scale development including new homes, town centre upgrade and new cycleways is also anticipated for the remaining parts of Mt Roskill. Significant transport, stormwater and community infrastructure is required to support future growth in this area.

There is a large migrant and refugee community residing in the area. These communities have their own centres, speciality shops, and places of worship that are important to preserve as this area develops.

Auckland Light Rail could further improve accessibility of this area and act as a catalyst for increased development.

Māngere

Māngere is located close to Auckland Airport and Wiri, two major business and employment areas. It has the largest Pasifika population in Tāmaki Makaurau, a sizeable Māori population, as well as migrant and refugee ethnic groups.

Māngere has experienced significant residential growth through both public and private development. Central government has been undertaking smaller redevelopments in the northern part of Māngere. There is potential for larger scale redevelopment in the remaining parts of Māngere given Kāinga Ora's significant land ownership. A potential new light rail station in Māngere town centre would trigger widespread redevelopment and greatly improve overall accessibility.

Significant transport, stormwater and parks infrastructure is required to support this area. Some infrastructure upgrade projects are currently underway.

Tāmaki

Tāmaki is currently the focus of an urban transformation project led by the Tāmaki Redevelopment Company and Kāinga Ora. This is a large-scale regeneration project.

It includes delivering a mixture of state and private homes, undertaking town centre and

street upgrades, and providing social infrastructure.

While there is some committed funding for infrastructure upgrades, significant investment in stormwater and transport infrastructure is still required to support future growth in this area.

The area has a range of attractive amenities such as beaches, parks and a recently constructed cycleway. The train station near the town centre, as well as several bus services, provide good access to the wider area, including the city centre. There are large employment areas adjacent to and part of the area, particularly Tāmaki, Mt Wellington, and Panmure.

Drury

The Drury Spatial priority is an investment priority to support residential, centre and business development in this future urban area. It is a defined area of live zoned land approved through the Special Housing Areas and Private Plan Changes, enabling urban development ahead of the rest of the future urban zoned land. Housing development is already happening in parts of these live zoned areas. A range of infrastructure is required to support these newly establishing communities.

A major centre is under development east of State Highway 1, at the Drury motorway interchange near the existing Drury Village. The existing area of Drury (including the town centre) has an interface with the future urban area which is now live zoned. The integration and development of this area, and particularly the walkable catchment of the Proposed Drury Railway station (2025+), needs to be considered in this planning.

The new Drury East station will support a multi-modal transport network and anchor Drury as a strategic centre. Connections between development areas (both for residential and commercial development) are critical to ensure integrated development.

The other key priority area is the industrial business land on the south-eastern edge of Drury. A large area of new industrial business land is needed in Drury-Ōpaheke to meet future demand and provide job opportunities in close proximity to the new communities being built. Social infrastructure must also be provided to support the new communities, with the location and type of infrastructure important to support a growing new community.

City Centre

The city centre is Auckland's focus for business, tourism, educational, cultural and civic activities in Tāmaki Makaurau.

It is also a focus for Auckland's public transport system. There has been substantial public and private investment in infrastructure and development projects in the last decade. As part of the Central Rail Link (CRL) two new train stations (Maungawhau and Karanga-a-Hape) will create two new major transport hubs with increased residential development, services and amenities, planned.

In the future, on-going infrastructure investment will be required for ALR to connect the city centre to Mangere. Other projects include the Eastern Busway and the planned Waitemata

Harbour crossing.

Wastewater and stormwater infrastructure in the city centre is largely sufficient, and the proposed central interceptor will significantly reduce wastewater overflows into central Tāmaki Makaurau waterways.

The city centre is also a node. See Appendix 5 for further information on nodes.

Westgate

Westgate has a large catchment with potential to accommodate residential and business and employment growth. While Westgate is well connected via the state highway it needs investment in public transport as a priority. The north-western rapid transit corridor has potential to transform Westgate into a key transport interchange for the surrounding areas and support residential intensification in and around the centre. This will allow people to live closer to services and jobs.

Westgate is linked with the Whenuapai future urban area which is expected to provide a range of employment opportunities. The delivery of infrastructure for Whenuapai future urban area supports unlocking business land much needed in the north-west. to help address the shortage of employment land.

Prioritising funding for delivery of a range of infrastructure projects in the short to medium- term will ensure Westgate, including the Whenuapai area, is well-prepared to take up the benefit of rapid transit. Projects needed to unlock this area include several local road and State Highway upgrades, pump station upgrades, wastewater projects and a watermain project. In particular, the delivery of infrastructure for Whenuapai future urban area will support unlocking business land that is much needed in the north-west.

Westgate is also a node. See Appendix 5 for further information on nodes.

Auckland future development strategy 2023-2053

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