



Auckland Strategic Spatial View

A Waka Kotahi view on Auckland's future growth and development

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More information

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If you have further queries, call our contact centre on 0800 699 000 or write to us:

Waka Kotahi NZ Transport Agency Private Bag 6995 Wellington 6141

This document is available on Waka Kotahi NZ Transport Agency's website at www.nzta.govt.nz

Waka Kotahi NZ Transport Agency

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Executive Summary

Context

The purpose of the Auckland Strategic Spatial View is to provide a clear and coherent view of Auckland's future growth and development that helps to inform and guide Waka Kotahi decision making and future work programmes. This view ensures that the work we do, both collaboratively with our co-investment partners and as an agency, is well-informed, up-to-date, and takes us towards the broader transport and urban development goals we are seeking to achieve.

A rapidly changing context for growth and urban development in Auckland over the past three to five years means future growth is likely to, and will need to, happen differently to what is envisaged by current forecasts and Auckland's two key long term growth plans: the Auckland Plan 2050 (a spatial plan published in 2018) and the Auckland Unitary Plan (Auckland's Resource Management rule book).

As New Zealand's largest urban area, the way Auckland grows and develops has national implications for the achievement of key outcomes such as reducing greenhouse emissions, mode shift and improving housing supply, affordability and adaptation to long term impacts of climate change. Therefore, to achieve many of the objectives the government is seeking, change to previous growth strategies is necessary.

While Waka Kotahi is typically not the primary urban development decision-maker, our work can have significant influence across central and local government, and the decisions we make often influence urban development and form. Waka Kotahi also seeks to support and enable partners to achieve urban form and transport outcomes where these are aligned with our strategic priorities.

Our board endorsed 'Urban Development Role and Position' statement is:

We actively support, enable and encourage quality, mixed-use, compact urban development that efficiently uses land, reduces travel distances and lowers reliance on private vehicles to enhance people's lives.

This provides a framework for this spatial view and its actions.

Recent influences and trends affecting Auckland's growth

There are several key influences and trends affecting Auckland's growth, resulting in growth strategies and forecasts which are no longer fit for purpose.

1. Significant shifts in transport and housing policy which will impact how Auckland grows. These include:
 - Greater focus on reducing greenhouse gas emissions and increasing recognition of urban form as a driver of transport emissions
 - Changes in housing policy, including stronger direction from National Policy Statements to both provide more capacity as well as better protection over the natural environment, and Resource Management Act amendments to enable more development through Medium Density Housing Standards
 - Emerging government partnerships such as the Auckland Housing and Urban Development Work Programme which are informing planning and investment decision making
 - The impacts of the COVID-19 pandemic, including potentially more long-lasting implications for growth and travel patterns.
2. A significant increase in housing consenting and construction.

Total housing construction has ramped up significantly in recent years. In 2021 over 20,000 building consents were granted for new dwellings, approximately double the number consented five years ago

3. An ongoing shift to higher density types of housing, particularly terraced housing.

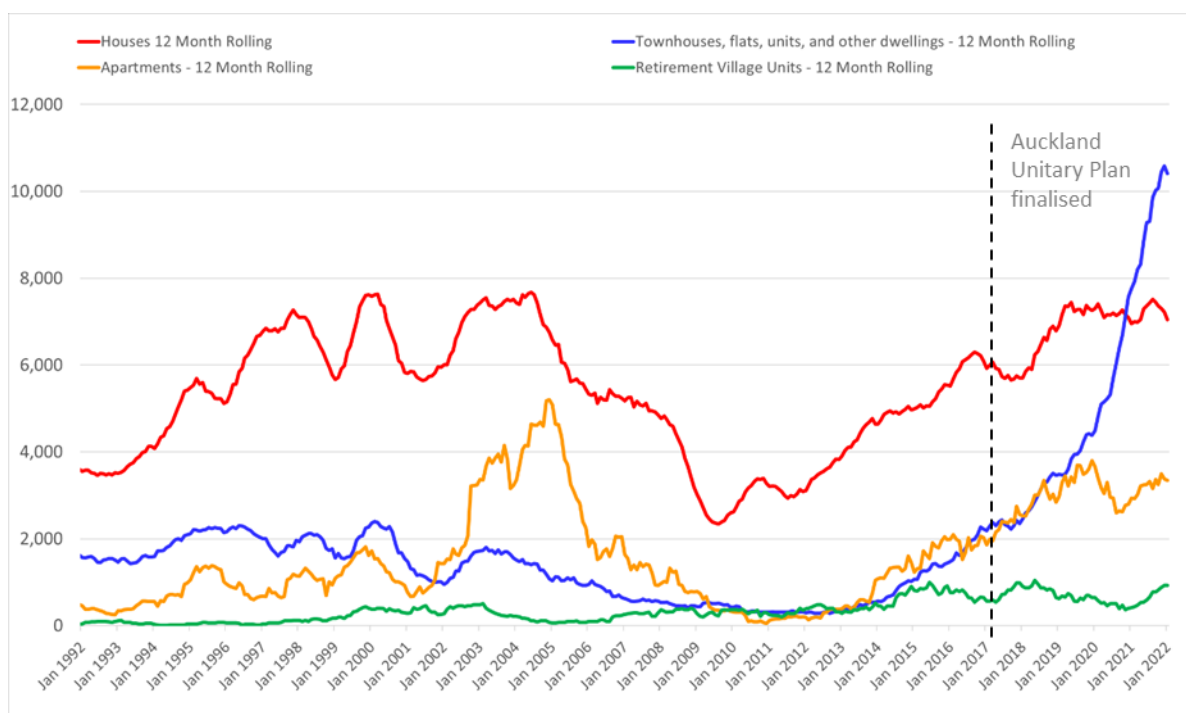


Figure 1 Auckland residential building consents by type, 12 month rolling total January 1992-2022. Source: Stats NZ

4. Central government has become more active in urban development particularly through The Ministry of Housing and Urban Development and Kāinga Ora.
5. New funding sources and tools have become available to enable and support urban development.

Our view of Auckland’s future growth

Our view considers how we think the current strategy guiding Auckland’s growth and urban development **could** change as a result of key trends and influences. We also consider how it **should** change to better align with our urban development role and position:

1. There is growing uncertainty about when and where growth will occur due to ongoing changes to planning regulation which will enable more development across the region. This creates several planning challenges which we will need to address with our partners.
2. A greater share of Auckland’s future growth will occur through brownfield intensification than previously anticipated. This shift should be encouraged through supporting intensification and delaying urbanisation in some major planned greenfield areas.
3. Intensification is likely to be spread across more of the existing urban area than anticipated. We will work with our partners to encourage growth into the most accessible locations.
4. A greater mix of uses should be enabled and encouraged, especially in centres and neighbourhoods. Enabling a greater mix of activities in residential areas is essential to improving walkability and reducing reliance on private vehicles for short trips.

Together, these suggest a different growth future for Auckland.

Actions for Waka Kotahi

Changes to how Auckland grows and develops will affect our work programmes, from where we focus our planning effort to investment priorities, how we develop major projects and how we collaborate with our co-investment partners. We have identified three key areas where we can act to directly respond to the challenges and opportunities outlined in the Auckland Strategic Spatial View.

1. Collaborate with partners to update growth strategies, align urban development outcomes and align investment decisions to maximise the value of public investment in Auckland. Namely, we will:
 - Influence policy direction to better integrate urban development and transport
 - Support the review of Auckland's Future Development strategy, including a review of the Future Urban Land Supply Strategy
 - Influence ongoing changes to the Auckland Unitary Plan
 - Encourage partners more directly involved in urban development to focus their development on locations highly accessible by public transport, walking and cycling.

2. Reduce risk from growth related investments by:
 - Improving the agility, efficiency and effectiveness of our planning and investment decision-making process
 - Shifting to programmes of smaller-scale, agile activities
 - Increasing certainty of growth outcomes where we make strategic investments
 - Encouraging integration across all transport investment in Auckland
 - Ensuring growth assumptions for key investments are fit for purpose.

3. Improve growth monitoring and forecasting capability by:
 - Developing more sophisticated approaches to growth forecasting
 - Improving our understanding of growth trends
 - Clearly identifying locations most suitable for future growth.

Introduction

Background

Auckland's Spatial Plan (known as Auckland Plan 2050) was published in 2018. It includes a development strategy, which outlines at a high level how the region will grow and develop over the next 30 years. This plan, along with the Auckland Unitary Plan (Auckland's RMA rule book), set the direction for Auckland's long term growth pattern.

However, since the Auckland Plan 2050 was last published, there have been significant changes which impact on the way Auckland will and should grow and develop over time. These include:

- **Changes to Government direction** including National Policy Statement on Urban Development requirements, the Emissions Reduction Plan, the National Adaptation Plan the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act and ongoing Resource Management Reform.
- **Changing patterns of growth and development** including record numbers of residential building consents across the region as well as more townhouse and apartments in urban areas.
- **A more proactive central government role in urban development** through new programmes, partnerships, funding and financing options, and processes including the Auckland Housing & Urban Development Joint Programme, Kāinga Ora development, Supporting Growth Alliance, Auckland Light Rail, NZ Upgrade Programme and the Housing Acceleration Fund.

Combined, these developments mean that previous assumptions about Auckland's growth need to be revisited. A review of Auckland's growth strategy will occur during 2022 and 2023, while planning and investment work continues on an ongoing basis. Previous assumptions are already being challenged through somewhat 'ad hoc' processes, with different business cases for major initiatives increasingly making different land-use assumptions. To effectively participate in the upcoming review of Auckland's growth strategy, and support ongoing decision-making in the interim, Waka Kotahi needs a clear and consistent 'up-to-date' view on Auckland's growth and development. This need led to development of the Auckland Strategic Spatial View.

Our role in Auckland's growth and urban development

Waka Kotahi is interested in urban development because urban form is a key factor that influences outcomes such as access, safety, mode shift, emissions reduction and resilience. The layout of urban centres determines the distance people need to travel to access jobs, education and other essential services, and the transport options to make those trips. Improving how we plan land-use with an integrated transport system will make our communities safer and healthier places to live.

While Waka Kotahi is not typically the primary urban development decision-maker, our work can have significant influence across central and local government and the decisions we make often influence urban development and form. Waka Kotahi also seeks to support and enable partners to achieve urban form and transport outcomes where these are aligned with our strategic priorities.

A complex range of factors and decisions affect how Auckland grows and develops over time. The location of places where people live, work, shop, get educated, access recreation and other activities they undertake is the result of thousands of decisions made by different people, businesses and public agencies over very long time periods. Key decisions affecting growth and urban development include:

- Regulatory decisions that manage the scale and type of development and land-use which can occur in different locations. In Auckland these decisions are made by Auckland Council through the Auckland Unitary Plan. The Auckland Unitary Plan is informed by strategic direction set in the Auckland Plan 2050. Urban form and land use regulation is also mandated through policy and legislative frameworks set by Central Government (most notably by the Ministry for the Environment and the Ministry of Housing and Urban Development).

- Investment and design decisions around the provision of infrastructure and services can be a strong driver to enable and shape urban development. These decisions are made by a number of organisations, including Waka Kotahi, Auckland Council, Auckland Transport, Watercare, Kāinga Ora and the Ministries of Health and Education.
- The decision to develop land is undertaken by landowners and the development sector. This decision is informed by enabling regulation, infrastructure provision and market factors such as demand and the cost of development. More recently, Kāinga Ora and Eke Panuku (Auckland Council’s development agency) are playing an increasing role in the delivery of urban development.

Waka Kotahi has recently confirmed our ‘role and position’ on urban form and development:

“We actively support, enable and encourage quality, mixed-use, compact urban development that efficiently uses land, reduces travel distances and lowers reliance on private vehicles to enhance people’s lives”

This position will help guide decision-making (by both ourselves and others) so that urban development better supports achieving the transport outcomes and priorities that have been set for us by government.

Our intervention hierarchy also highlights the important role of land-use planning in achieving key outcomes. The intervention hierarchy is used to shape the range of land-use and transport options available, in terms of their value for money, when responding to a challenge or opportunity. Integrating land-use and transport is the most cost-effective type of intervention for many problems and opportunities, and optimal responses will often include elements from other levels in the hierarchy:

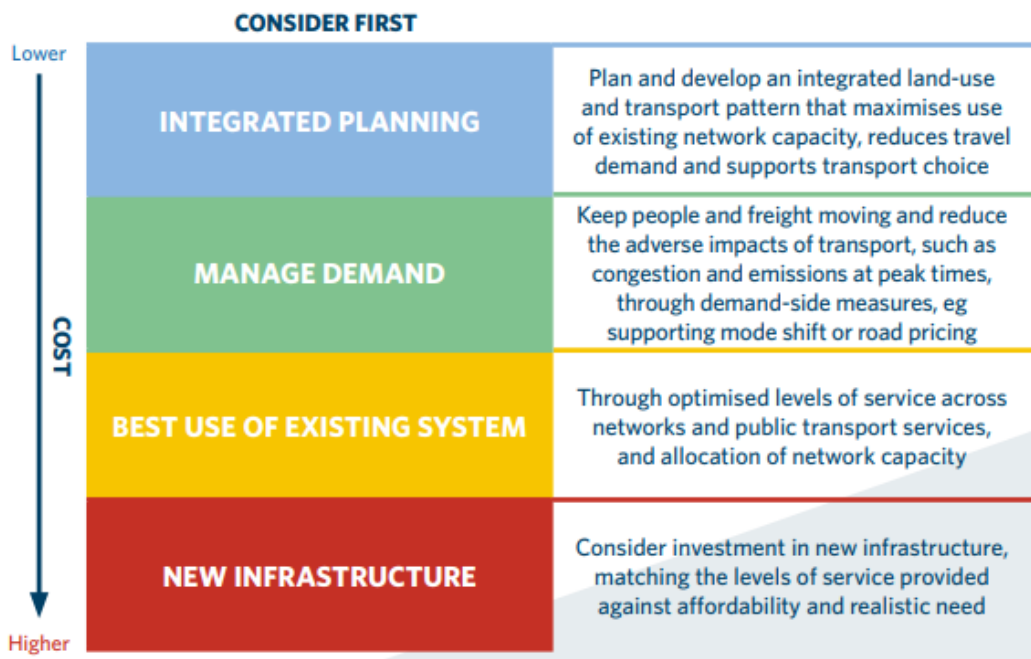


Figure 2 Waka Kotahi intervention hierarchy from Arataki Version 2. Source: Waka Kotahi

Having a clear view of Auckland’s future growth, supported by an agreed set of actions, is essential to inform robust Waka Kotahi decision-making. This helps ensure our input into, and to improve, urban form, as well as transforming urban mobility and emissions reduction.

Developing the Auckland Strategic Spatial View

The purpose of this project is to provide a clear and coherent view of Auckland's future growth and development that helps to inform and guide Waka Kotahi decision makers and future work programmes for Auckland.

The diagram below outlines at a high-level the key components of this project:



Figure 3 Auckland Strategic Spatial View process diagram methodology

This project has been created through a collaborative approach with key experts and teams across Waka Kotahi.

Auckland's current growth strategy

Auckland Council has developed a framework for how future growth is planned and delivered. This covers roles and responsibilities under the Local Government Act and the Resource Management Act. The diagram below summarises the different components of this framework and how they work together.

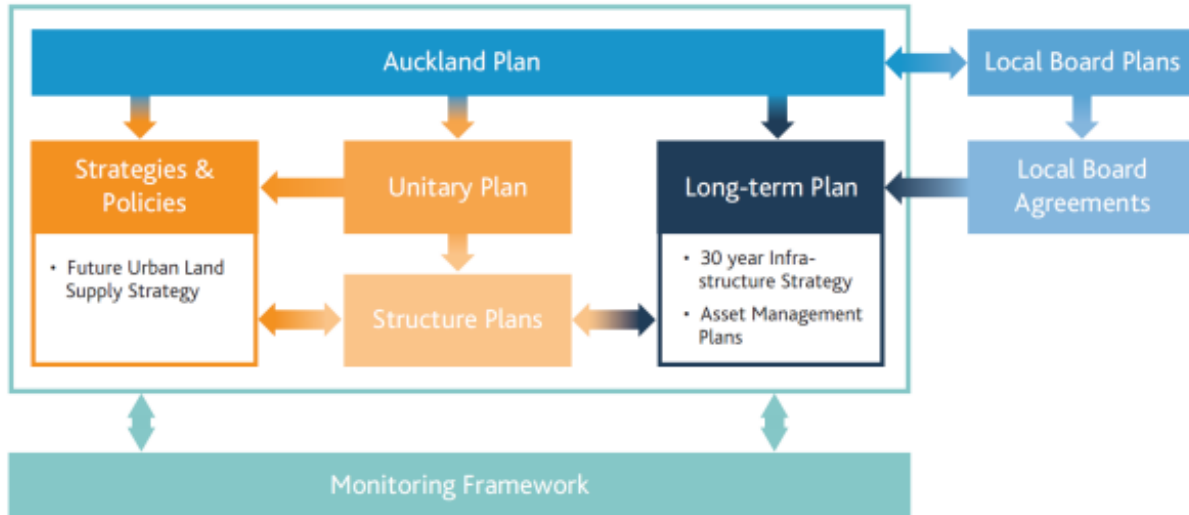


Figure 4 Auckland Council's planning framework, Future Urban Land Supply Strategy. Source: Auckland Council

Auckland Plan

The Auckland Plan is Auckland Council's key strategic document. Its development strategy outlines a plan to enable and support around 720,000 more people living in Auckland over the next 30-years. The Auckland Plan is implemented through several documents with a shorter-term focus, including the Auckland Unitary Plan, the Long-Term Plan and the Regional Land Transport Plan.

The Auckland Plan is a statutory requirement under the Local Government (Auckland Council) Act 2009. It was first published in 2012 to provide strategic direction to the newly formed Auckland Council and updated in 2018 as "Auckland Plan 2050". The 2018 refresh incorporated several changes to the planning and growth context over the intervening period, including development of the Auckland Unitary Plan, the Future Urban land Supply Strategy (FULSS), and the 2016 National Policy Statement on Urban Development Capacity.

The Auckland Plan Development Strategy is based around a 'quality compact' approach to growth, as detailed below:

The *quality* aspect of this approach means that:

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

The *compact* aspect of this approach means that:

- future development will be focused within Auckland's urban footprint, with most of that growth occurring in existing urban areas

- by 2050, most growth will have occurred within this urban footprint, limiting both expansion into the rural hinterland and rural land fragmentation
- this approach contributes to investment certainty by understanding where and when growth is likely to occur.

The Auckland Plan's Development Strategy accommodates growth by focusing the most change into a few parts of the city and sequencing that growth over time. This approach provides structure around location and timing to support other decision making such as infrastructure funding and delivery.

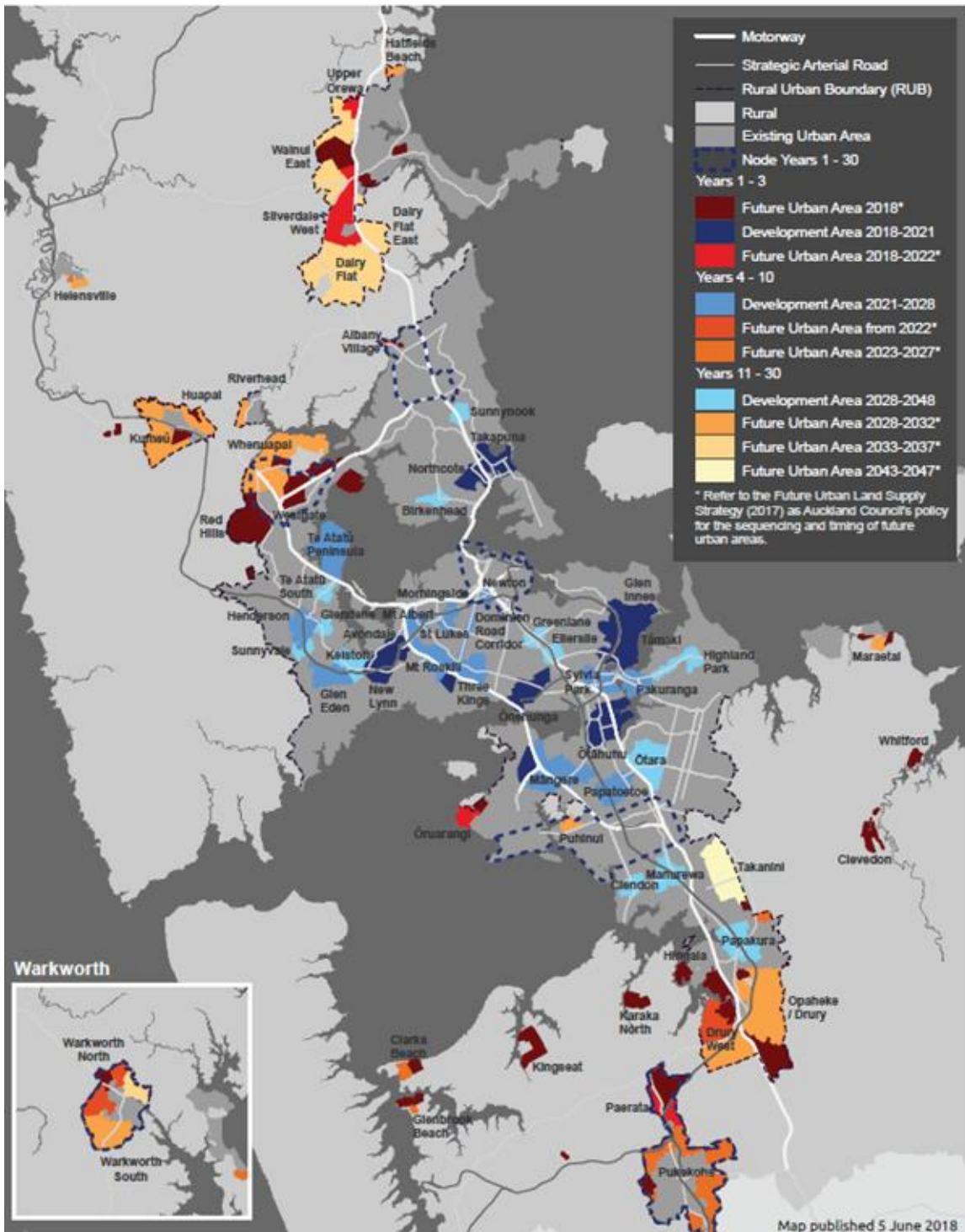


Figure 5 Auckland Plan 2050, development strategy map 28 - sequencing years 1 to 30. Source: Auckland Council

The development strategy sets out a multi-nodal approach within the urban environment, which includes:

- The city centre, which continues to be the focus of employment, tourism, education and cultural activities as well as a major residential centre
- Albany, Westgate and Manukau as growth nodes which will accommodate substantial growth in the north, north-west and south. They will contain a range of commercial activities, employment and residential development
- Satellite towns of Warkworth and Pukekohe act as rural nodes to serve the surrounding communities and accommodate residential and commercial expansion.

Alongside the growth nodes, the Development Strategy includes development areas to accommodate expected growth across the existing urban area that will accommodate a significant amount of housing and commercial development. A number of these development areas are a key focus for Kāinga Ora and government housing objectives, including the Tamaki, Mangere and Mt. Roskill large scale projects. The latter two are a focus for the Auckland Light Rail project.

The timing of future urban areas and development areas is intended to focus planning and infrastructure funding. However, in existing urban areas growth is typically already enabled by planning documents and can therefore happen earlier or later than envisaged by the Auckland Plan.

Auckland Unitary Plan

The Auckland Unitary Plan (AUP) is the statutory plan under the Resource Management Act that controls land-use and development across the Auckland region. It gives effect to the Auckland Plan's development strategy. The AUP contains objectives, policies and rules that direct where and what form new development can take. The land use zones identify the locations where greater density is enabled as well as locations where new development is more constrained. The AUP also identifies what rural land can be urbanised.

The Unitary Plan's zoning structure is broadly based around:

- Enabling growth in and around larger centres and high frequency public transport routes
- Protecting existing industrial areas
- Restricting development in areas with 'special character' and areas with environmental constraints.

Although generally giving effect to the Auckland Plan, the AUP enables significant development capacity across Auckland's urban area currently, rather than the sequenced and focused approach outlined in the Auckland Plan. Outer parts of the existing urban area, especially to the west, have substantial development capacity now even though the Auckland Plan may not sequence them for major growth for 10-20 years.

The AUP also restricts growth in some areas that the Auckland Plan signals for major change. These areas are restricted through controls that protect character areas or views to volcanic cones. Restrictions on growth and redevelopment are particularly notable in the central suburbs, a part of Auckland with the best access to opportunities by public transport.

The AUP continues to evolve through plan changes instigated by Auckland Council as well as landowners and developers (via private plan changes). Since 2018, there have been approximately 70 changes to the AUP notified, many of which seek to enable more or different development than what the plan currently allows.

Future Urban Land Supply Strategy

The Future Urban Land Supply Strategy (FULSS) identifies the sequencing and timing for urbanising the 15,000 hectares of land zoned 'Future Urban' in the Auckland Unitary Plan over 30 years. The strategy

seeks to guide when future urban areas will have bulk infrastructure in place and be ready for urban development. The FULSS was released by Auckland Council in 2017 and is incorporated into the Auckland Plan 2050's development strategy.

Below is a summary of the timing of dwellings and employment over the three decades of the FULSS. It is notable that the FULSS sequences release nearly all dwelling and employment capacity in the first two decades, even though it is intended to be a 30-year strategy.

Proposed Timing	Anticipated Dwelling Capacity	Anticipated Employment
Decade one (2018 – 2027)	22,000	27,250
Decade two (2028 – 2037)	66,300	21,350
Decade three (2038 – 2047)	4,500	50

Figure 6 FULSS timing and anticipated dwellings. Source: Auckland Council

Notably, after the first decade, the majority of greenfield growth is planned to be residential. This is in areas more distant from existing employment areas and in areas where employment self-sufficiency is already relatively low. This will have significant implications for vehicle kilometres travelled (VKT) and mode share.

If this capacity was fully built out, it would result in a total of 92,000 homes and 48,650 jobs over 30 years. Overall, the timing and sequencing outlined in the strategy will require significant investment in bulk infrastructure. The total indicative capital costs of transport, three waters, parks and community facilities to enable and support growth in these areas was estimated in 2017 at around \$20 billion, mostly split evenly across the three main areas (north, northwest and south Auckland).

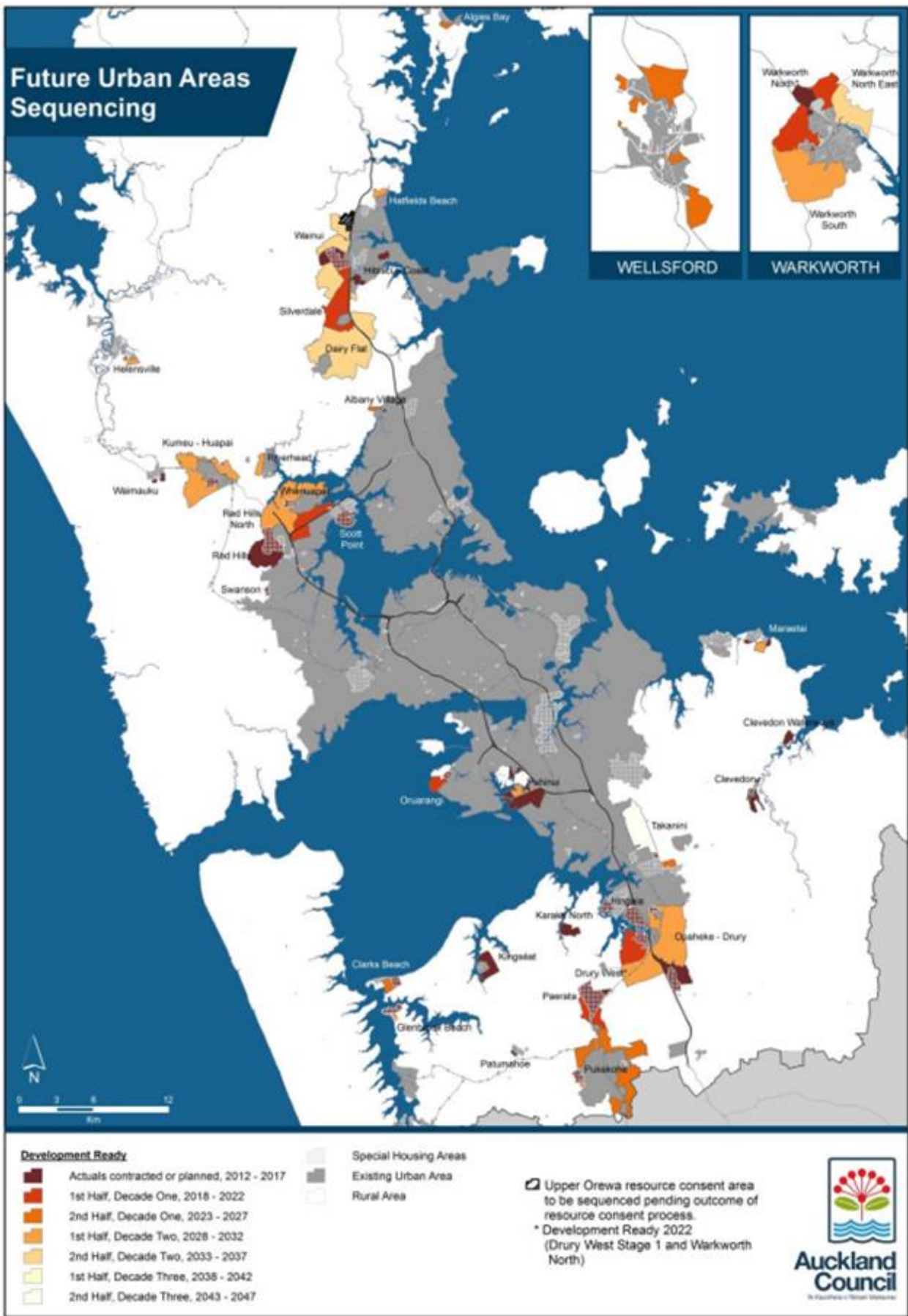


Figure 7 FULSS future urban areas sequencing. Source: Auckland Council

Auckland's growth forecast

Auckland Council forecast where and when household and employment growth will occur at a detailed level to inform future planning work. The most recently developed forecast, known as 'Scenario i11.6' is a key input to transport modelling and is used by both central and local government in Auckland.

The current growth forecast has a complex history. The original "Scenario I" forecast was developed and agreed in 2012 as part of the Auckland Plan using a sophisticated land-use transport integration model. Subsequent numerous modifications of this forecast over the years have all been done manually as inputs only into the strategic transport model.

The growth forecast gives effect to the policy direction in the Auckland Plan and Auckland Unitary Plan for where development will occur. It reflects both where growth will likely happen (based on factors such as development capacity and demand) as well as where the growth will achieve the outcomes identified in the planning framework (such as in spatial priority areas or locations for greenfield development).

The land use assumptions in the strategic transport model inform traffic demand and mode share assignment at the regional level and are used by the Auckland Dynamic Traffic Assignment Model (ADTA) and the Macro Public Transport Model (MPT). The land use assumptions and related vehicle and public transport assignments form the basis of much of the evidence behind Waka Kotahi and partners transport planning, including Auckland Transport Alignment Project (ATAP), the Regional Land Transport Plan (RLTP) and most business cases for Auckland's transport projects.

The maps below show the location and timing of household and employment growth forecast by Scenario i11.6. The forecast tends to show household and employment highly clustered in a few key locations. This reflects the focus on priority areas in the Auckland Plan development strategy, but arguably doesn't fully reflect the permissive zoning of the Auckland Unitary Plan.

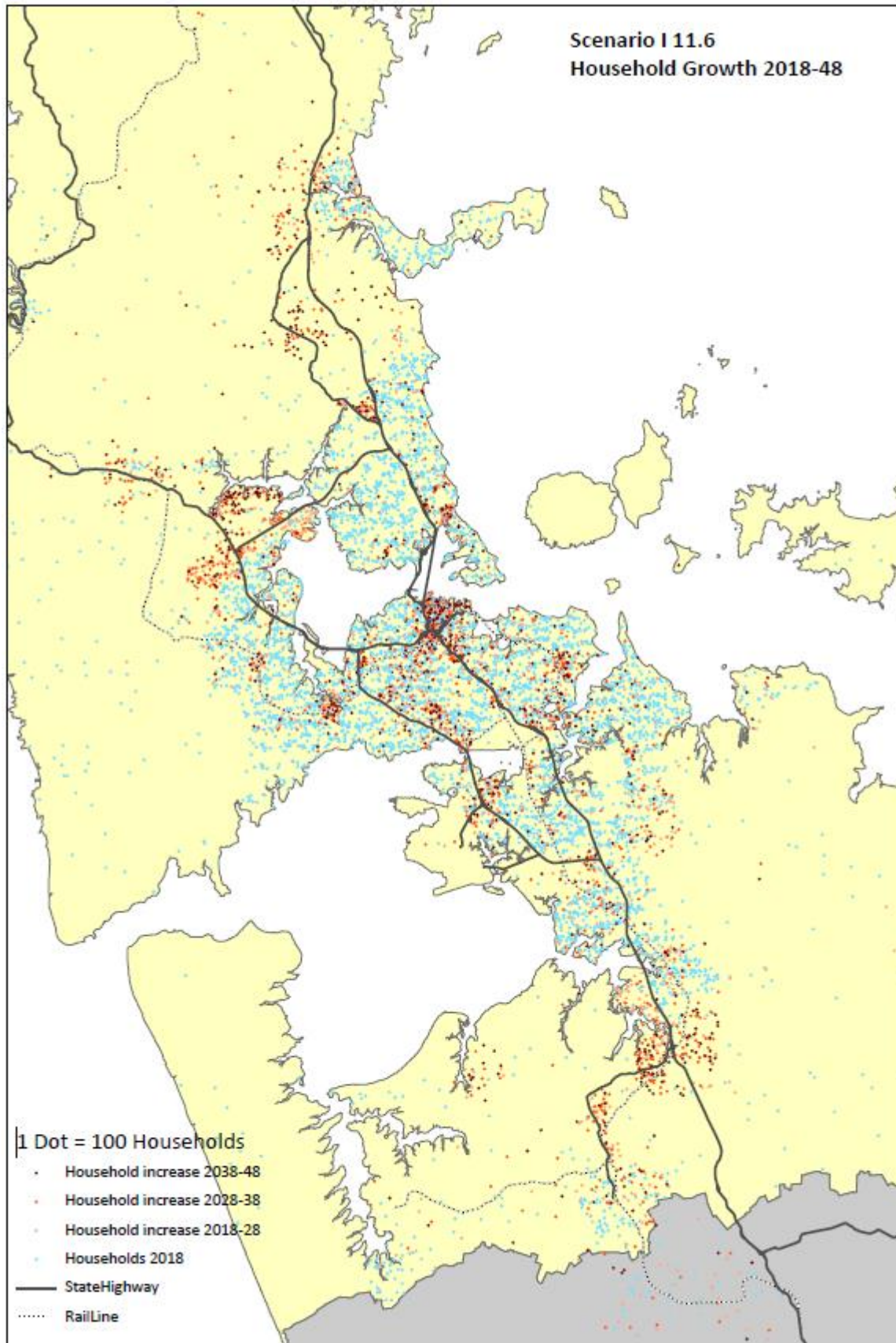


Figure 8 Scenario i11 v 6 household growth. Source: Auckland Council

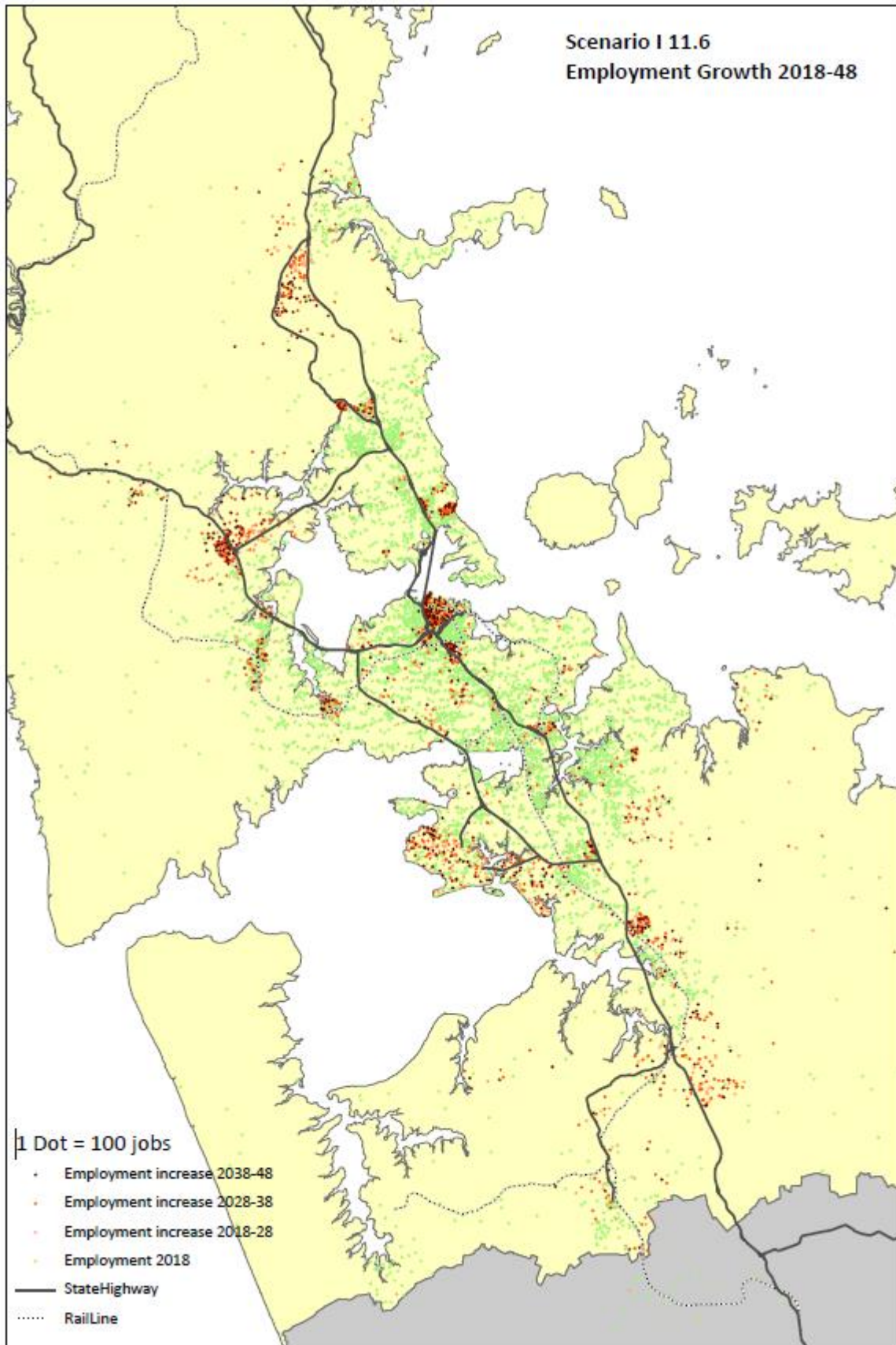


Figure 9 Scenario i11 v 6 employment growth. Source: Auckland Council

Summary

Overall, key aspects of Auckland's current growth strategy and some of their apparent inconsistencies are:

- The Auckland Plan development strategy seeks to focus future growth into existing urban areas, especially in and around centres, and where there is better quality public transport available. It outlines the locations and timing for where and when growth is expected to occur in both new and existing urban areas.
- The Auckland Unitary Plan enables medium-density development over a greater part of urban Auckland than was anticipated by the Auckland Plan, especially in suburban locations. This can be challenging for Waka Kotahi when taking a transport system perspective on infrastructure investment. Conversely, the Unitary Plan also constrains development in many inner areas, despite their proximity to the city centre and high-quality travel options.
- Greenfield growth areas are identified in the Auckland Unitary Plan and sequenced through the Future Urban Land Supply Strategy (FULSS). Most greenfield growth areas are sequenced to be released for development over the next 20 years, which appears inconsistent with the Auckland Plan development strategy's desire to see most growth occurring in existing urban areas.
- Auckland's growth forecast, which is relied on by Waka Kotahi and partners in transport modelling, is a precise view on where employment and household growth will occur. This forecast is strongly guided by the Auckland Plan development strategy with growth focused in a few locations, rather than the more widespread growth enabled by the Auckland Unitary Plan.

Key Trends and Influences

Introduction

The context for growth and urban development in Auckland has changed rapidly in recent years. While some of these changes in isolation might not result in a need to review significant components of Auckland's growth strategy, together they highlight that growth and urban development in Auckland over the next 30 years may (and may need to) occur quite differently from what was expected and desired only a few years ago.

Key trends and influences discussed further below are:

- Recent growth trends including the significant increase in housing construction, the ongoing shift to higher density housing types, and some key patterns of where growth is and is not occurring
- The impacts of the COVID-19 pandemic, including potentially more long-lasting implications for growth and travel patterns
- Significant central government policy shifts, particularly in relation to urban development (eg the National Policy Statement for Urban Development) and tackling climate change through significantly reducing emissions and vehicle kilometres travelled (VKT)
- A much more proactive urban development role that central government (and Auckland Council to some degree) are taking, including new organisations, partnerships and funding sources.

Recent growth trends

Growth drives many of Auckland's challenges, including transport. Yet growth also provides an opportunity to reshape and transform Auckland over time, delivering improved wellbeing and liveability.

Over recent years Auckland has experienced a significant increase in housing consent and construction, which is beginning to outpace population growth and address a long-standing housing shortage. Furthermore, the types of housing being built is changing, with a sharp increase in attached dwellings since the Auckland Unitary Plan was adopted. More development is occurring within the existing urban areas of Auckland, but the city centre fringe and inner urban areas are experiencing relatively low levels of residential development.

Commercial development has remained stable. New business floor area has been focused on already established centres and the city centre, which remains a focal point for employment. Less intensive development has been occurring in the already established industrial areas across Auckland.

Population trends

Up until 2020, Auckland's population continued to grow rapidly, increasing by at least 25,000 people per year since 2014. Over 1.7 million people now call Auckland home, an increase of half a million people since 2000. In the year to June 2021, Auckland's population declined slightly for the first time on record due to restrictions on immigration stemming from the COVID-19 pandemic. While short-term population projections remain highly uncertain, Statistics NZ advise that in the long-term Auckland's population is expected to grow, increasing by around 650,000 people to reach 2.3 million by 2048 (noting that these projections produced in 2020 are approximately 70,000 less than anticipated in the Auckland Plan).

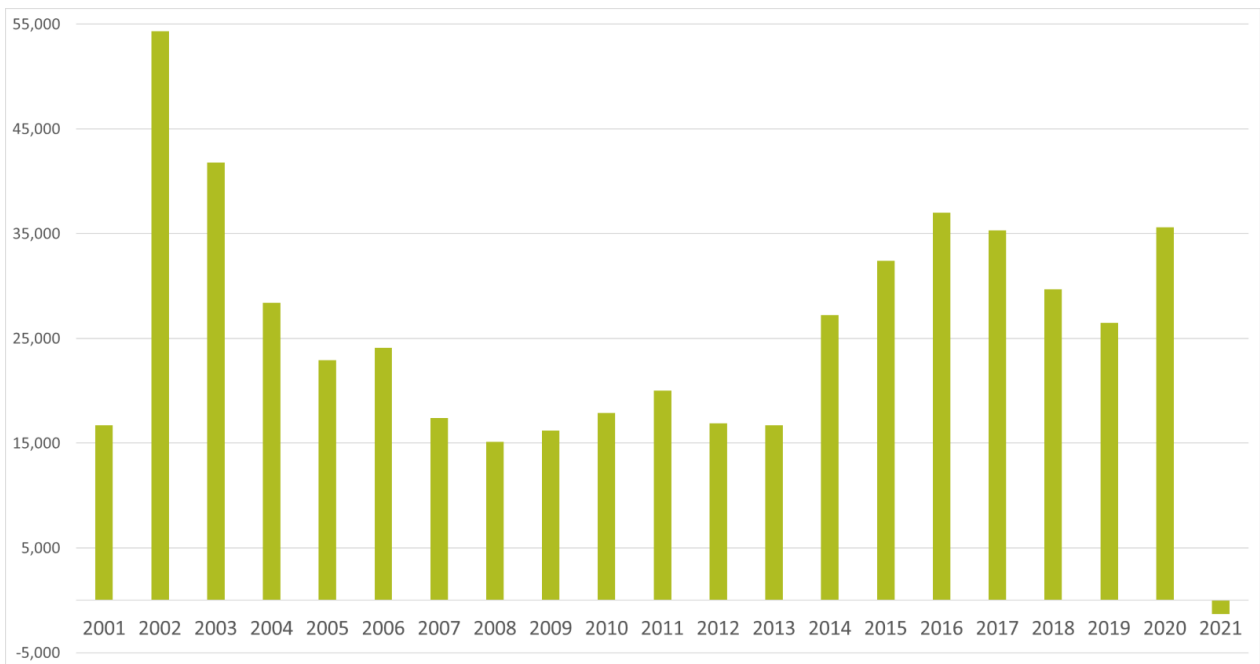


Figure 10 Auckland annual population change 2001 - 2021. Source: Stats NZ

Growth has occurred across most parts of Auckland over the past 20 years, with nearly every local board area increasing by at least 10,000 people.¹ Howick Local Board has grown the most over the past 20 years (growing by just over 60,000 people), followed by a group of other local boards (Hibiscus and Bays, Upper Harbour, Henderson-Massey, Waitemata and Manurewa) that have all grown by around 40,000 people over the past 20 years.

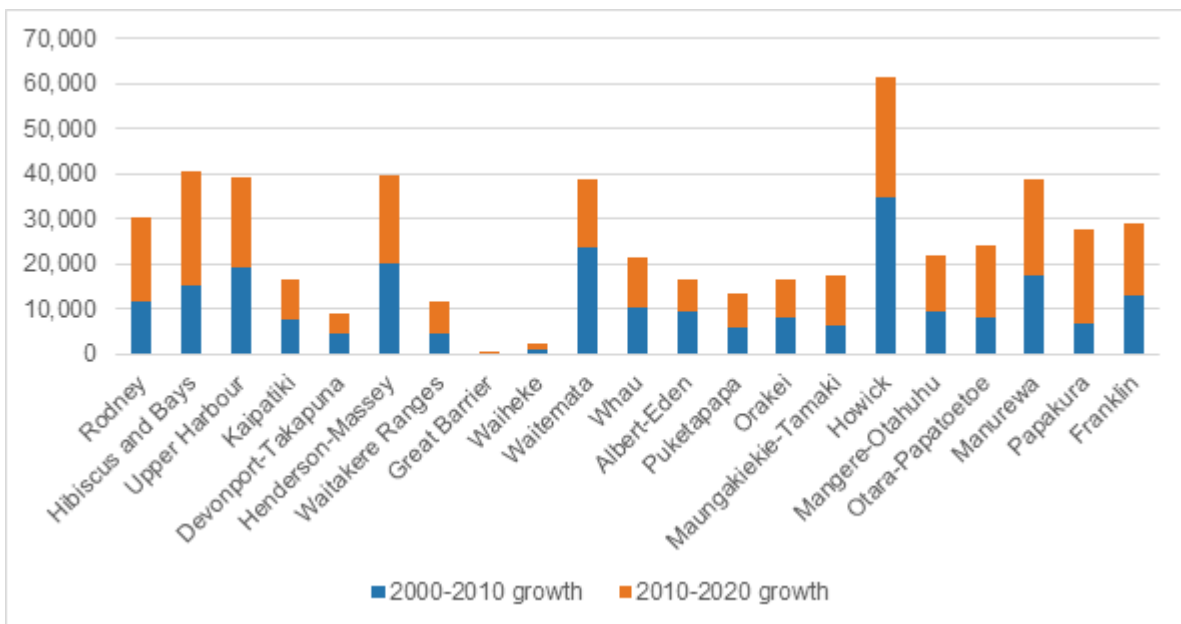


Figure 11 Auckland's population growth by local board. Source: Stats NZ

As shown in the population change and density maps below, it is notable that in the past 5 years there has been a greater increase in people and population density in outer areas than more central areas. People living in outer areas are both more likely to drive to work and services than those who live in more central locations, and to also travel further to work and other activities. The areas in central Auckland, that offer greater public transport and active mode travel options, have seen very low levels of growth or even a decline in population. This trend of population growth occurring more in outer areas and decline in central locations will in general work against achieving mode shift and VKT reduction.

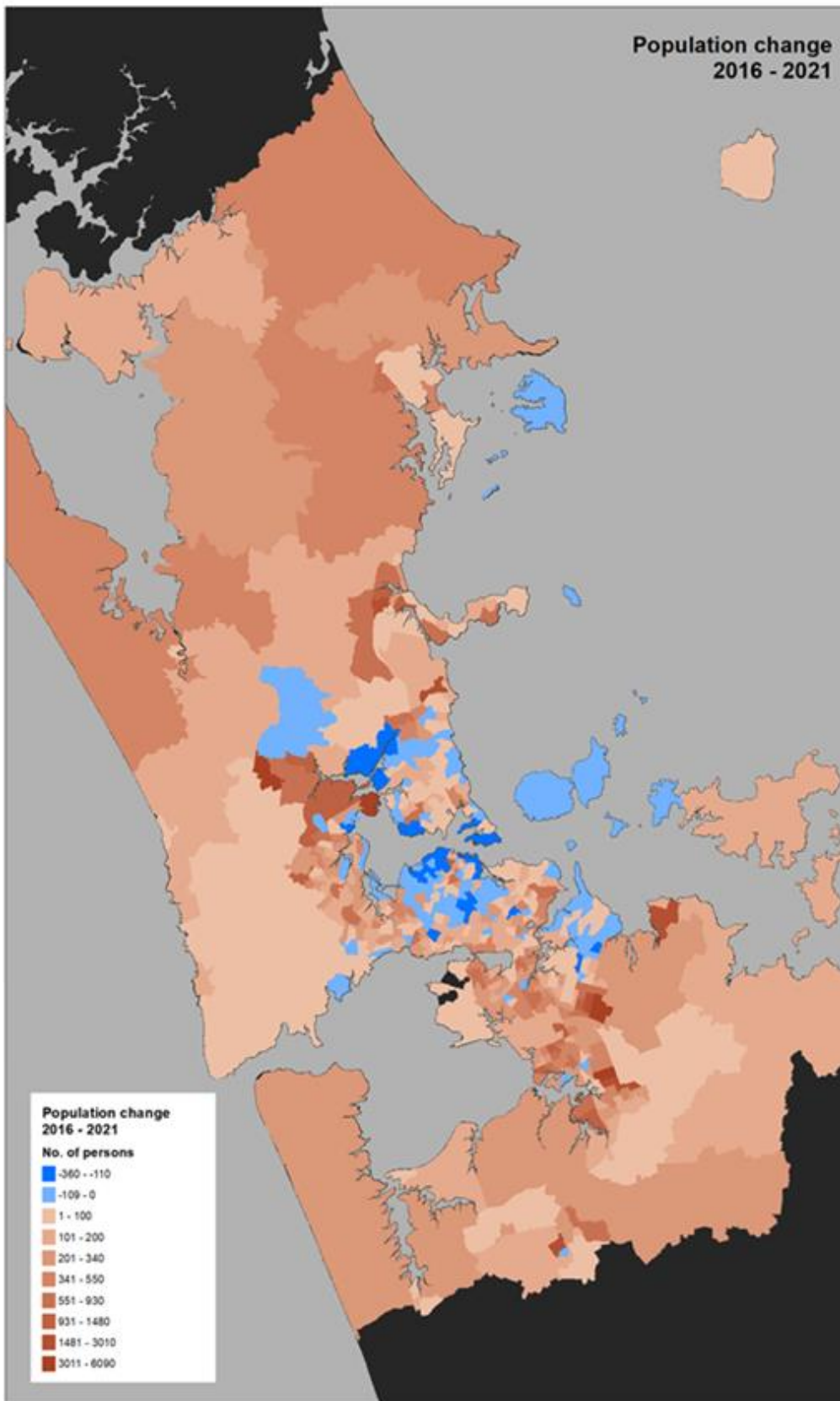


Figure 12 Population changes between 2016 and 2021 in Auckland. Source: Auckland Council

Housing Development Trends

Auckland's housing development trends have changed substantially over the past 10-15 years, particularly in relation to the amount, type and location.

- Total housing construction has ramped up significantly in recent years. In 2021, over 20,000 building consents were granted for new dwellings, approximately double the number consented five years ago (see figure 13).

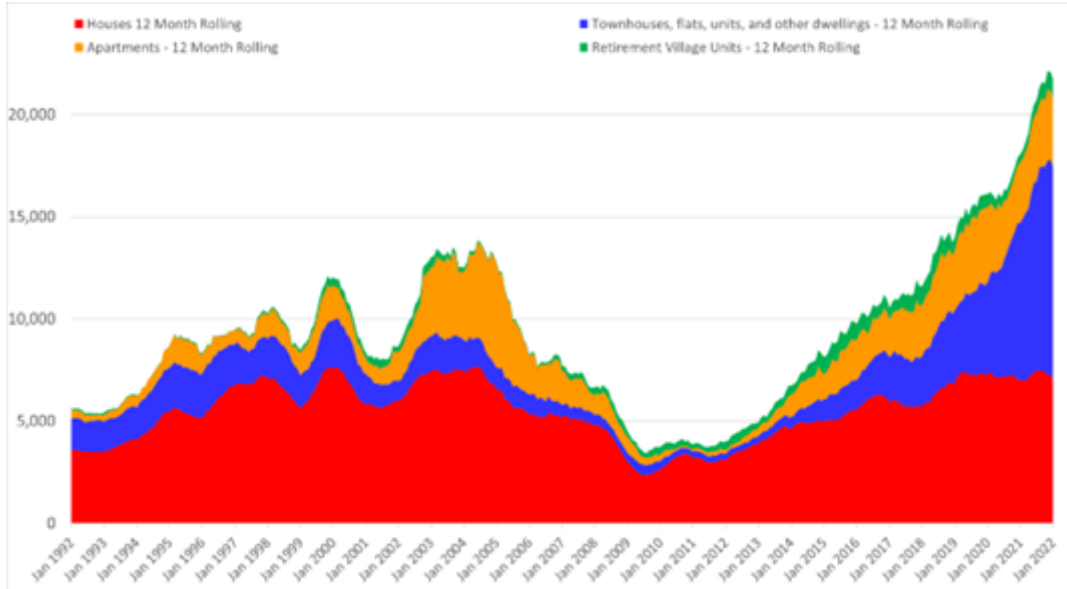


Figure 13 Auckland residential building consents by type, 12 month rolling total 1992-2022. Source: Stats NZ

- In terms of location, around 80% of consented dwellings over the past 12 months have been within the 2010 Metropolitan Urban Limits (MUL). This is higher than the 60-70% expected to occur over the next 30 years by the original 2012 Auckland Plan but is closer to the 76% that was expected from 2012-2022 decade. While a slightly higher proportion of growth has occurred within the 2010 MUL than was expected, the very high level of overall housing construction means that the number of new houses in greenfield locations is at historically high levels (see figure 14). Greenfield areas are also providing a wider variety of housing types (notably terrace and townhouses and some apartments) at higher densities than has occurred in the past.

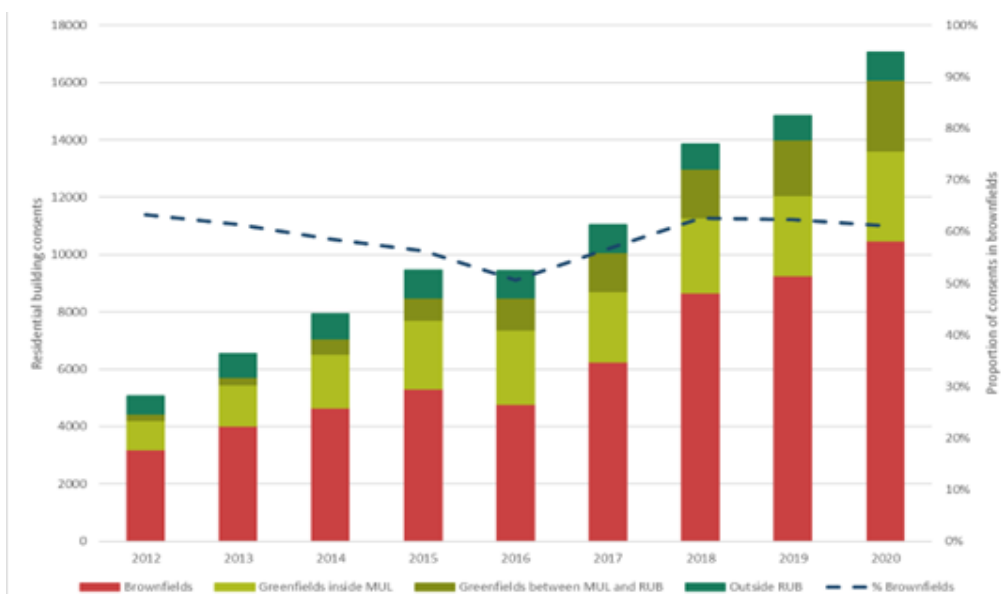


Figure 14 Auckland residential building consent by location (2012 – 2020). Source: Stats NZ

- There is also a noteworthy increase in the proportion of attached housing being built in Auckland. In 2021, around 67% of dwellings consented were attached (apartments, townhouses, terraced houses, retirement village units) and 33% were detached houses. This compared to only 16% of consented dwellings being attached in 2010 (see figure 15 and 16).

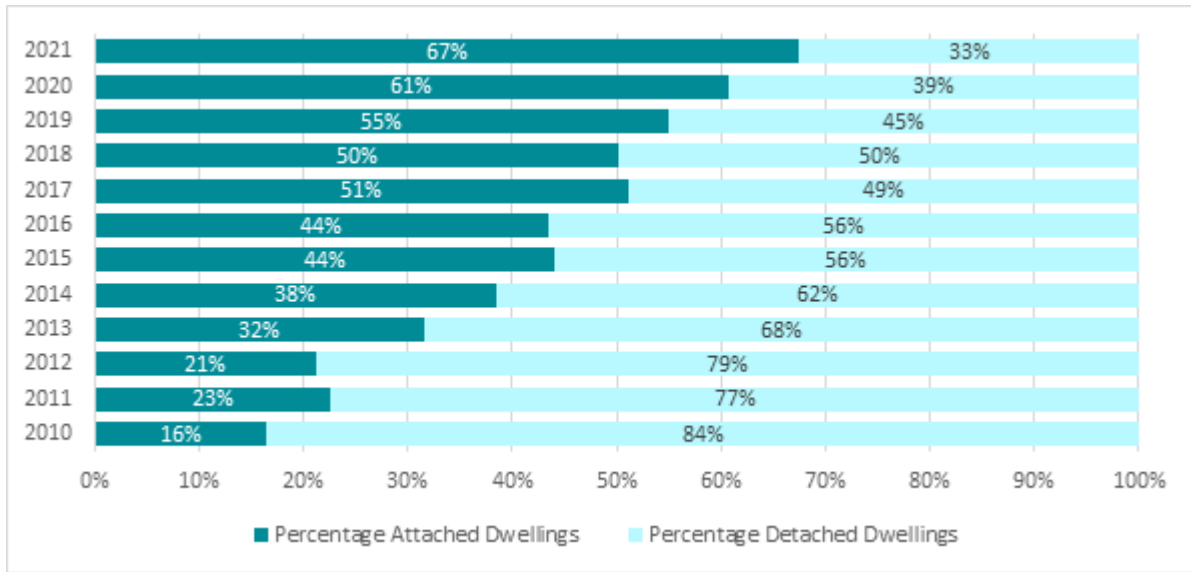


Figure 15 Building consents by attached and detached dwelling types in Auckland (2010 - 2021). Source: Stats NZ

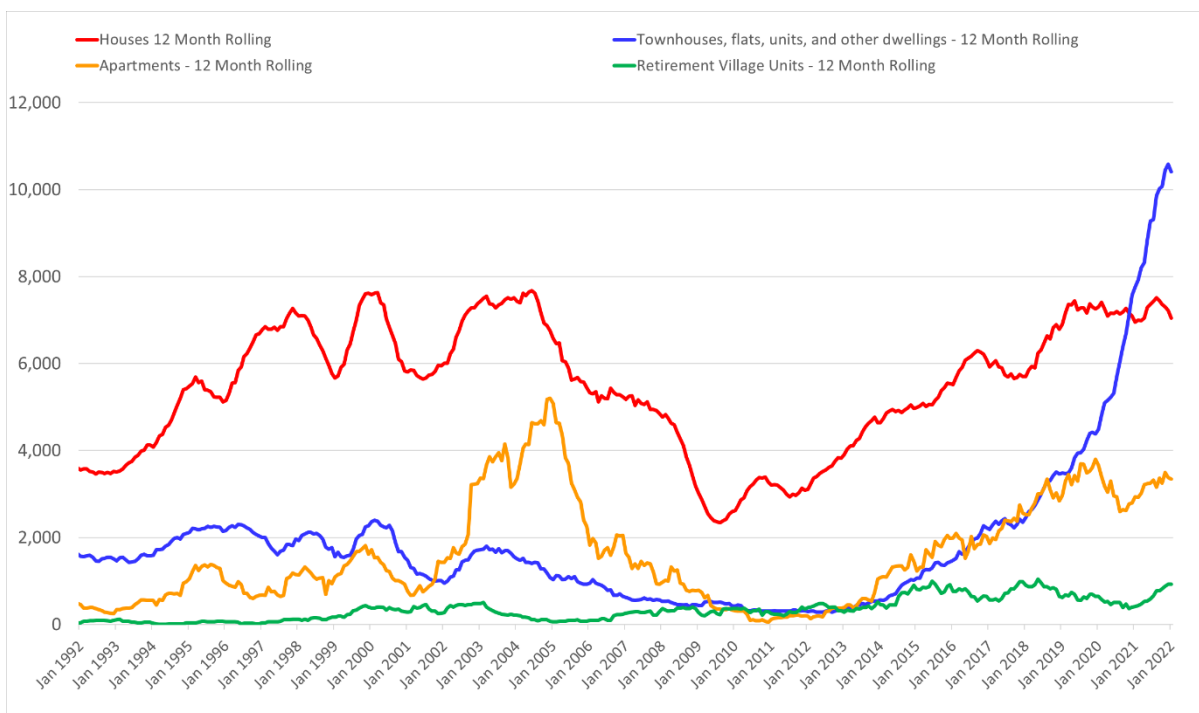


Figure 16 Auckland residential building consents by type, 12 month rolling total Jan 1992-2022. Source: Stats NZ

This increase in attached dwellings contributes to an overall denser Auckland. The map below shows the distribution of housing consents in Auckland since 2016. Quite noticeable is the uptake of apartment and townhouse developments in the Terrace House and Apartment (THAB) and Mixed Housing Urban zones in the west and south Auckland suburbs. There is a general lack of new housing consents issued in central parts of the Auckland Isthmus where there is Single House zone or other residential zones with overlays controls that protect character areas.

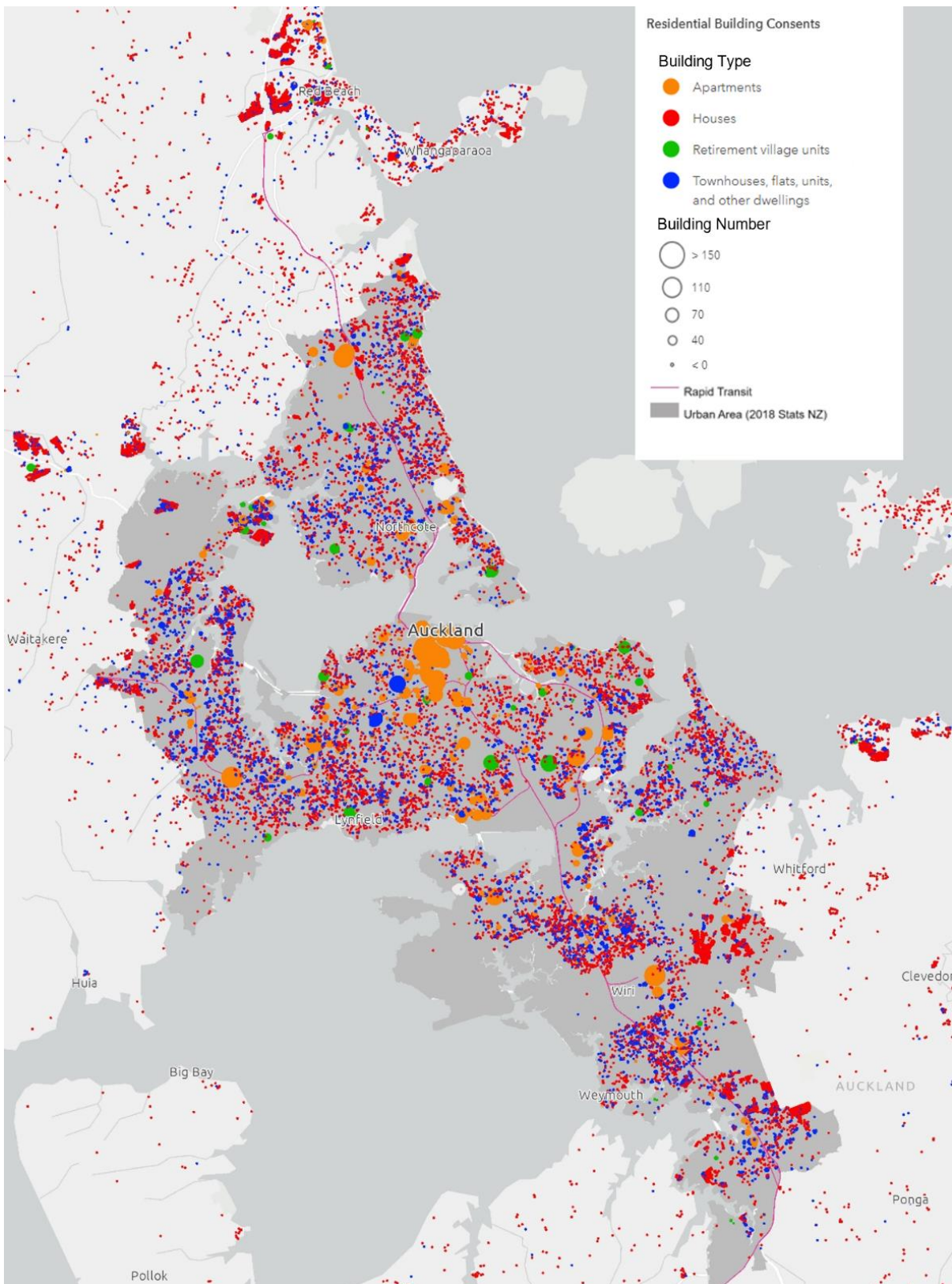


Figure 17 New residential building consents by type and number in Auckland 2016-2021. Source: Auckland Council

Employment and Commercial Development

Commercial building consent levels have remained steady over the past 10 years after a large volume of construction in the early 2000s. Key trends for employment and commercial development include:

- Majority of office, retail and hospitality development is occurring in Auckland's centres. However, apart from the city centre and Newmarket, most of this growth is in more fringe centre locations such as Westgate, Silverdale and Ormiston
- Factory and warehousing development remain concentrated in a 'diamond-shaped' area between Penrose, Auckland Airport, Wiri and East Tamaki
- Retailing and hospitality consents appear to be focused on larger-scale centres (eg CBD, Newmarket), newly developing areas (eg Hobsonville, Flat Bush, Westgate and Silverdale), or locations with high private vehicle accessibility (eg Lincoln Road).
- Outside of the city centre, Newmarket, Albany, Smales Farm and Silvia Park, there has been relatively little commercial activity being consented to in and around rapid transit stops.

As Auckland grows, the relationship between the scale, location and timing of housing and employment development has important implications for the transport system. The focus of non-residential development in commercial, centre and industrial zones is to be expected. However, this means that some residential areas (eg eastern suburbs such as Howick and some greenfield growth areas such as Huapai and Beachlands) do not have sufficient employment opportunities in close proximity. This results in longer journeys by private vehicle trips where public transport services are limited.

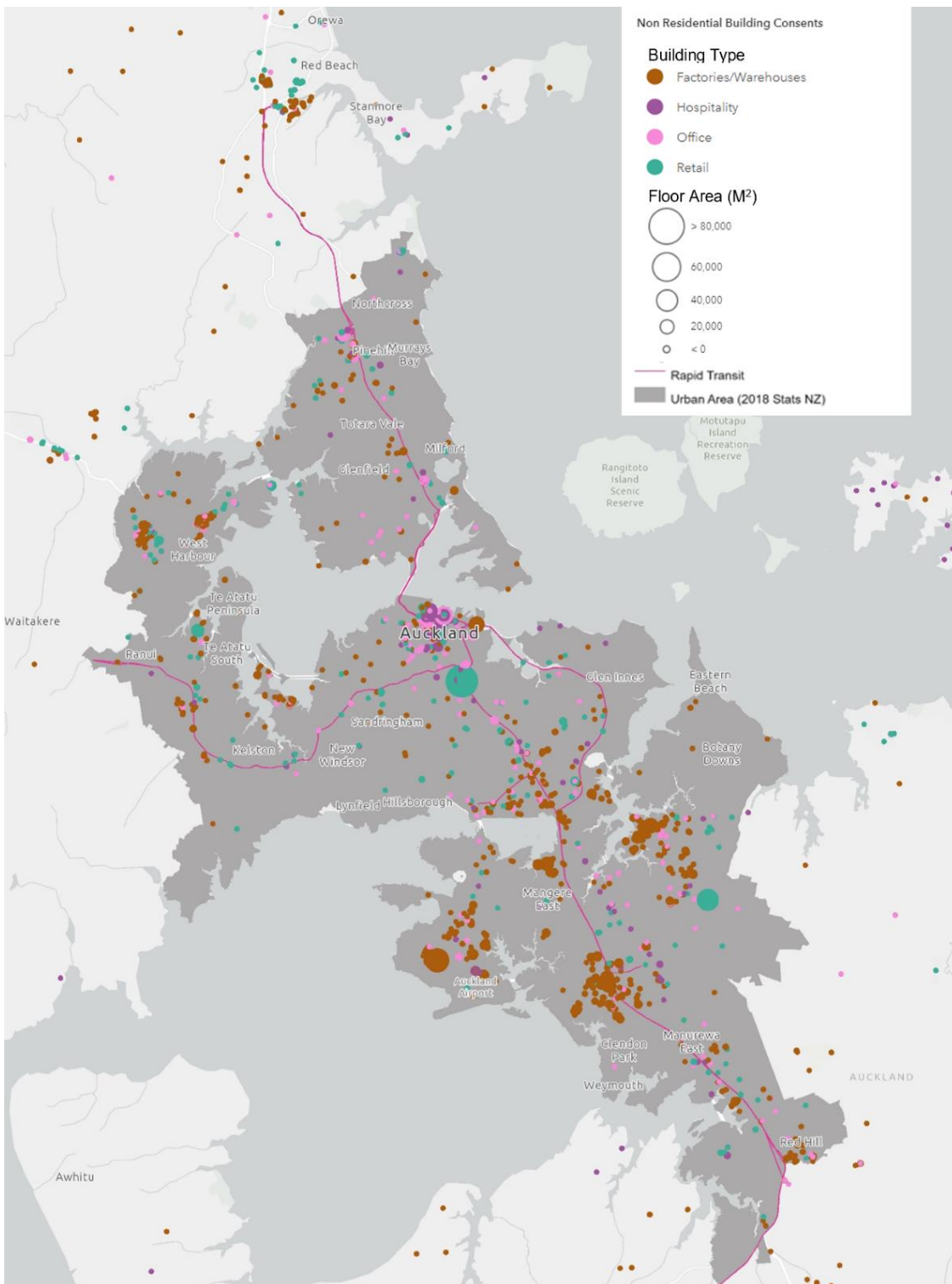


Figure 18 New non-residential building consents by floor area in Auckland 2016-2021. Source: Auckland Council

COVID-19 impacts

Since early 2020 COVID-19 has had a dramatic global impact. There is continued uncertainty on the longevity and severity of COVID-19 impacts. For Auckland, information gathering over the past 18 months since the first lockdown in March 2020 gives a good overview of these impacts. By looking at international trends, we begin to get a picture of what impacts could be longer lasting and what this means for Auckland’s transport system and future development.

Short-term impacts

Short-term impacts seen in Auckland include:

- A reduction in traffic volumes during lockdowns due to the requirements to work from home, closure of education facilities and the closure of retail and services.
- A significant reduction in public transport use due to a combination of:
 - closures of workplaces, services and education facilities
 - a reluctance to use public transport with COVID-19 present in the community
 - increased 'working from home' being concentrated among office workers who were most likely to previously use public transport.
- An absence of international tourists which has impacted the tourism and hospitality sector, although the severity of some of those impacts has been partially offset by increased domestic tourism
- A large increase in working from home during lockdowns. However, this does vary depending on the sector and classification of essential services. Office-based employment has generally seen the greatest amount of working from home
- A significant increase in online shopping, which has potentially accelerated existing trends for online services. However, there has also been an increase in using local shops, services and amenities within walking distance.

Longer-term impacts

Longer-term impacts are less certain. Continued monitoring of trends such as working from home, immigration and economic activity, will be important to form a view on the enduring trends which might impact the way Auckland grows. Based on what we know now, longer-term trends include:

- Increased levels of working from home, particularly for office-based jobs. This may impact on employment projections for locations which have a high proportion of office-based employment, such as centres and office parks. This could have flow on demand effects services in some neighbourhood and local centres from changing consumption patterns from home-based workers.
- Public transport use remained well below pre-COVID levels (especially peak time trips to the city centre), even during times of lower restrictions and few or no cases in the community. It may take many years before public transport usage returns to pre-COVID levels, especially if working from home trends persist.

The longer-term population impacts of COVID-19 are uncertain. While Auckland's population declined slightly in the year to June 2021, this is as a result of extremely low international migration numbers.

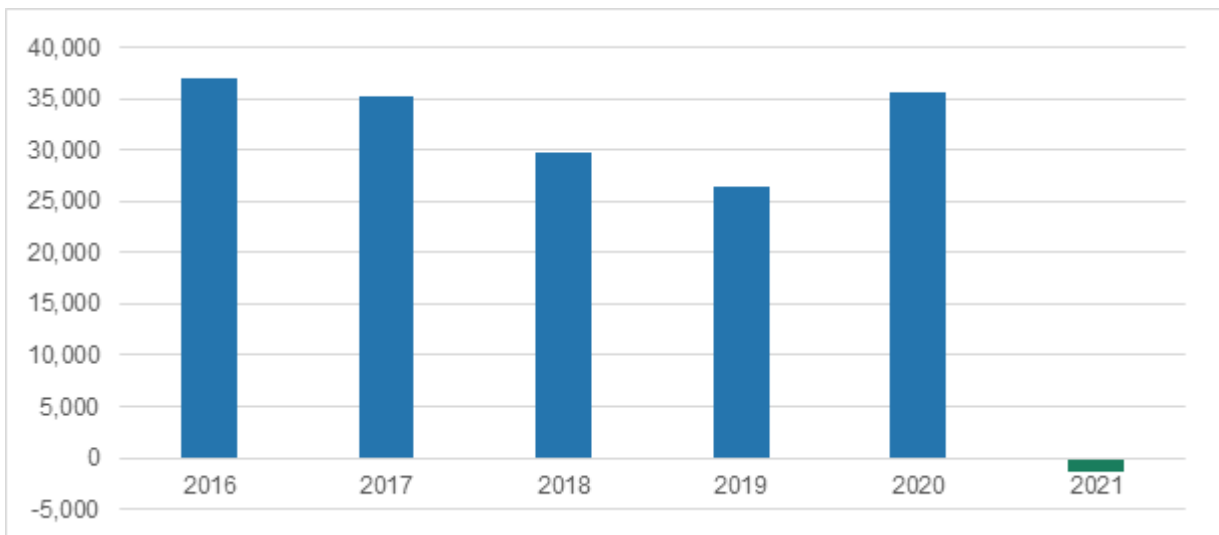


Figure 19 Annual change in estimated residential population for Auckland 2016 - 2021. Source: Stats NZ

International research suggests it could take up two - five years before migration levels return to 'normal'² but this is a dependant on several factors that remain uncertain, such as macro-economic conditions and potential new COVID-19 outbreaks. It is also unclear how the pandemic will impact people's desire to live and work in large cities due to the opportunities available through working remotely.

If population decline or low levels of growth continue for several years, this will have several impacts on Auckland growth. This includes the availability of housing if building rates continue to at their current levels (approximately 19,000 new houses were consented in 2021). However, other factors such as interest rate rises, greater inflationary pressures on the supply and cost of materials, and labour shortages may impact on house construction and affordability.

New legislation and policy shifts

Since the finalisation of the Auckland Plan 2050 in 2018, there have been significant changes to government policy and ongoing reforms initiated that will impact how Auckland grows. This section provides a brief overview of recent and future changes and their importance to Auckland. In summary these changes include:

- Increased direction from National Policy Statements to both provide more capacity (National Policy Statement on Urban Development) as well as to better protect the natural environment (National Policy Statements on Native Biodiversity and Highly Productive Land)
- Resource Management Act amendments to enable more development through Medium Density Housing Standards
- Ongoing Resource Management Act reform programme that will include the Strategic Planning Act requiring regional spatial plans to be developed
- Greater legislative focus on reducing greenhouse gas emissions and increasing recognition of urban form as a driver of transport greenhouse gas emissions
- Emerging government partnerships such as the Auckland Housing and Urban Development Work Programme which are informing planning and infrastructure decision making
- New government funding streams to deliver housing at pace and scale, such as the Housing Acceleration Fund (HAF).

National Policy Statement on Urban Development (2020)

The National Policy Statement on Urban Development (NPS-UD) directs local authorities to enable greater housing supply and ensure that planning is responsive to changes in demand. It also seeks to ensure that new development is of a form and in locations that meets communities' needs and encourages well-functioning urban environments. It also requires councils to remove overly restrictive rules that affect urban development outcomes in our cities.

The key impact for Auckland is that the NPS-UD requires more intensification than is currently enabled in the Auckland Unitary Plan. The NPS-UD intensification policy directs at least six storey developments within a walkable catchment of existing and planned rapid transit stops, as well as around the city centre and metropolitan centre zones. As noted earlier in this report, the current AUP zoning framework limits development in the inner suburbs through the use of overlays and lower density zoning in locations that, as per the NPS-UD, would be within a walkable catchment and therefore should be enabling more intensive development.

The differences between the current AUP and what is set out in the NPS-UD means that Auckland Council will undertake a plan change to amend the zoning and introduce more high-density zoning to these locations. Auckland Council can also use the 'qualifying matter' provisions to exempt the Single House zone from intensification if it can demonstrate that there is sufficient reason to do so, such as historic character. Figure 19 below is taken from Auckland Councils preliminary response to the NPS-UD released in April 2022 for public feedback. This will inform a plan change to the AUP. This highlights the opportunities for increased development (in the walkable catchments outlined in black) and the proposed application of the Terraced Housing and Apartment Zone which is shown in orange:

Other key implications of the NPS-UD include:

- Responsiveness policy enables out of sequence development to occur. If used, it is likely to release greenfield land and potentially enable development that could be misaligned with infrastructure funding and implementation
- The Housing Capacity Assessment shows demand for about 350,000 homes over 30 years. Current Auckland Unitary Plan residential zones alone have a feasible redevelopment capacity for around 840,000 homes. This assessment did not consider housing capacity in centres, mixed use areas and greenfield areas. It does not include the significant increase in capacity from current housing policy changes. With capacity so much greater than housing demand, it is extremely difficult to precisely forecast where growth will occur.
- The NPS-UD directs Auckland Council to produce a Future Development Strategy (which shows where and when new houses and businesses will be built) to inform the 2024 Long Term Plan. Auckland Council have recently confirmed that this process is starting.

It is also important to note that the proposed National Policy Statement for Highly Productive Land and Native Biodiversity will further limit opportunities for new greenfield development.



Figure 20 Auckland Councils preliminary response to the intensification requirements of the NPS-UD and MDRS.
Source: Auckland Council

Resource Management (Enabling Housing Supply and Other Matters) Amendment Act (2021)

This act makes changes to the Resource Management Act and the NPS-UD as summarised below:

- There is a requirement to make medium density zoning the default for most residential areas. The zoning includes the Medium Density Residential Standards (MDRS). This will allow people to build up to three homes of up to three storeys on most sites without needing a resource consent.
- NPS-UD policies on where to intensify housing will be changed to focus solely on accessibility to centres, rather than accessibility to opportunities via public transport and demand.
- It introduces a new streamlined planning process so Auckland Council can implement the intensification policies required by the NPS-UD from August 2023, at least a year earlier than expected.

These changes will have a significant impact on development in Auckland. The map (figure 20) released by Auckland Council in April 2022 shows the proposed application of the MDRS. This includes the ‘up zoning’ of many areas currently zoned Mixed Housing Suburban and Single House (illustrated by the areas shaded in light orange). Based on the cost benefit analysis supporting the Act, the MDRS could enable between 27,927 to 53,683 extra new homes to be built over the next five to eight years.

Resource Management Act Reforms

The Government is progressing plans to repeal the Resource Management Act 1991 (RMA) and replace it with three new pieces of legislation (Natural and Built Environment Act, Strategic Planning Act and the Climate Adaptation Act).

These reforms will have significant and wide-ranging changes for the way we plan and deliver future growth and development. From what we know about the reforms at this stage, the following key impacts are worth noting in the context of this report:

- The legislation will have a strong focus on emission reduction in the plan making and consenting process aligned with the Emission Reduction Plan
- The outcomes of National Policy Statements will be reinforced through a national policy framework, which will likely add further statutory weight to the principles such as well-functioning urban environments
- The Strategic Planning Act requires the development of a Regional Spatial Plan, which will include requirements for iwi and central government input. This will be a key process for Waka Kotahi and a means of incorporating the recommendations of this report. The Regional Spatial Plan will then inform the new planning regulations (replacement of the AUP) through the proposed Natural and Built Environment Act.

Government and Auckland Council greenhouse gas emission reduction plans

In the last few years there has been a much greater focus on the need to reduce greenhouse gas emissions to mitigate the impacts of climate change. Both the Government and Auckland Council are developing comprehensive plans that detail the scale of reduction necessary to meet international obligations. Transport is the largest generator of greenhouse gas emissions in Auckland, which means it must play a central role in meeting emission reduction goals.

The Government's 'Emission Reduction Plan' (ERP), Auckland Council's Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan and the Transport Emissions Reduction Pathway (TERP) clearly outline that transformational change to the transport system is necessary to achieve the required scale of emissions reduction. Councils TERP includes actions to give effect to Auckland's Climate Plan. A combination of reducing reliance on private vehicles, transforming the vehicle fleet to zero emissions, and decarbonising heavy transport and freight is required.

The emissions reduction plan sets a target of reducing vehicle kilometres travelled (VKT) by cars and other light vehicles by 20% by 2035 across the whole of New Zealand (compared to a baseline projection for that year). A much higher reduction will be required in major cities, potentially around 40% in Auckland. Te Tāruke-ā-Tāwhiri sets a similar target but suggests that this needs to be reached by 2030 rather than 2035 for emissions to be reduced sufficiently.

These strategic documents highlight the important role of land-use in helping to achieve this transformational change. Far greater integration between land-use and transport decision-making is signalled, with a strong focus on ensuring that decisions relating to growth and development support wider goals of VKT and emissions reduction.

This direction could have very significant implications for how Auckland grows and develops. To reduce overall VKT in a growing city, the additional travel by new residents must be more than offset by reductions in travel from existing residents. This means it will be important to both:

- Minimise the additional VKT from new residents, which means focusing growth in areas with better available travel options, shorter trip lengths and lower car mode share
- Reduce VKT of existing residents through changes to the transport system which enable and encourage people to change the way they travel.

If there is significant growth in locations with high car mode share and longer trips (which in Auckland means outer areas), then the scale of VKT reduction required from existing residents to offset this growth may become impossible to achieve.

Wider policy changes signalled in the government's emissions reduction plan, such as congestion pricing or encouraging the uptake of electric vehicles, could also impact on the way Auckland grows. Detailed impacts on growth patterns are uncertain:

- If the overall 'financial cost of travel' increases over time and becomes more visible, then that may act as an incentive for more growth in inner areas to reduce transport costs. However, this may be

counter-balanced by reduced congestion for longer trips, which could encourage more dispersed growth patterns, or

- If the overall financial cost of travel decreases over time (eg electric vehicles having lower running costs than fossil fuel powered vehicles), then this could incentivise more dispersed land-use patterns.

A more proactive central and local government role in urban development

Over the past five years both the government and Auckland Council have moved towards a much more proactive approach to urban development in Auckland. This shift encompasses:

- The creation of new organisations focused on urban development (the Ministry of Housing and Urban Development, Kāinga Ora and Eke Panuku), including new legal powers for Kāinga Ora in particular
- Increased collaboration between the government and Auckland Council on urban development
- New funding and financing sources and tools focused on enabling and supporting urban development.

These changes are discussed further below.

Kāinga Ora

Kāinga Ora was established in 2019 to act as both a public housing landlord and development agency. Kāinga Ora has a broad range of responsibilities which, alongside its considerable land holdings and funding, means that it could have significant impact in the future urban form of Auckland. As such, the following influences are important to consider:

- The role and powers of Kāinga Ora have the potential to deliver urban redevelopment at scale and in locations where the market may not be ready or willing to develop, for example the Northcote town centre redevelopment
- Large scale development undertaken by Kāinga Ora can result in wider investment being needed, including into transport infrastructure and services
- Kāinga Ora has access to considerable funding for land acquisition and development. Funding is also available for infrastructure to enable more housing development. The Housing Acceleration Fund (described on page 33) is their key funding pool. The approach of Kāinga Ora to housing development in Auckland is to largely focus on redeveloping their existing landholdings through a combination of small-scale and large-scale developments.

Their large-scale redevelopment projects are generally in locations with relatively good access to opportunities or will have their access improved significantly by planned investments (such as Auckland Light Rail). However, the scale of some redevelopment means that complex upgrades to infrastructure and services (including other infrastructure like water) is still required. The Urban Development Act (UDA) gives Kāinga Ora wide ranging powers to deliver development, including infrastructure provision, planning rules and consenting, rates and development contributions and land acquisition. The provisions of the UDA have not yet been used in Auckland. The current large-scale projects are outlined below.

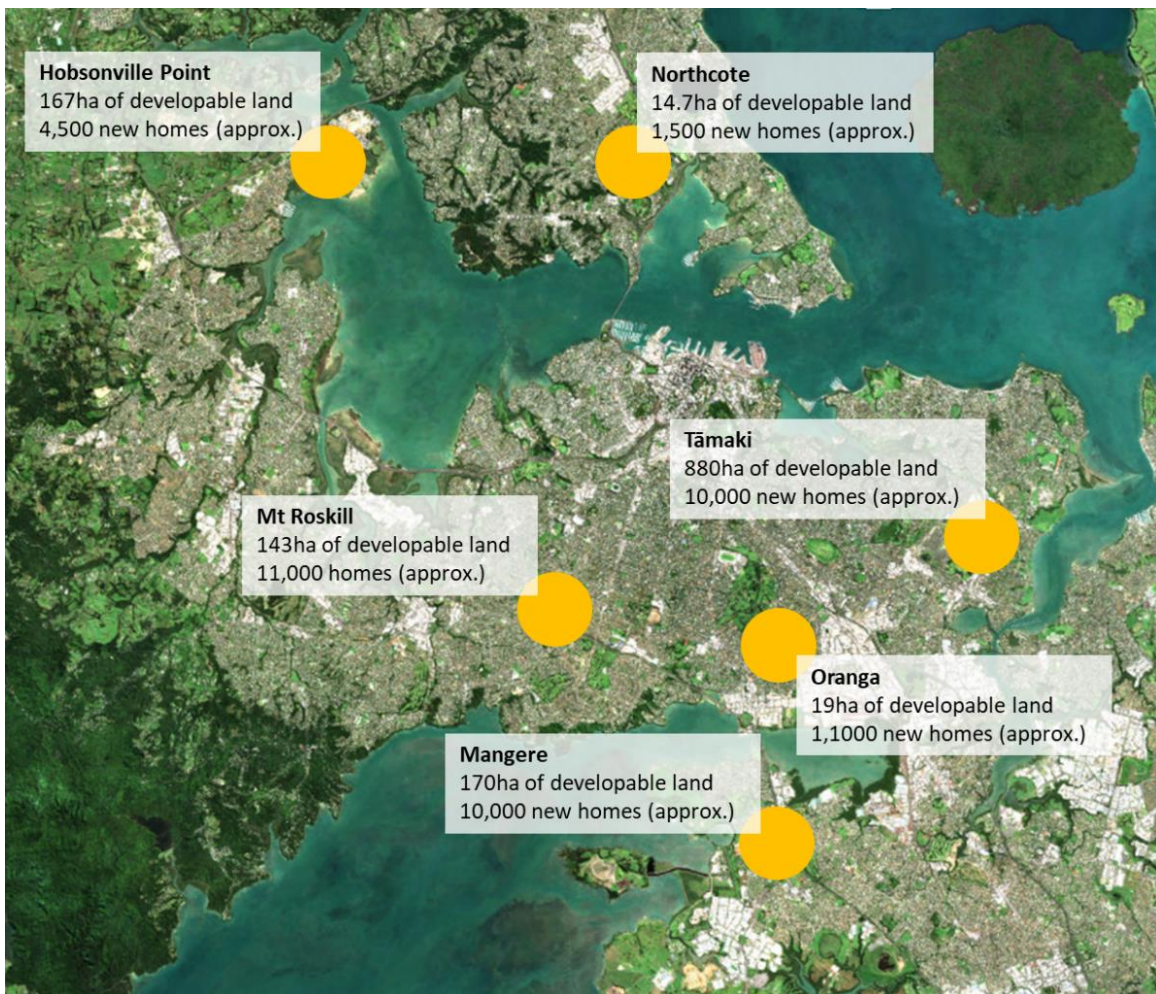


Figure 21 Kāinga Ora large scale development sites. Source: Kāinga Ora

Eke Panuku

Auckland Council is also taking a more active approach to urban development and regeneration through Eke Panuku, a council-controlled organisation established in 2017. Eke Panuku is currently undertaking development in 19 neighbourhoods with a focus on town centres including working in partnership with Kainga Ora on the Mt Eden transit orientated redevelopment. Although housing can be a component of Eke Panuku projects, there is a much broader focus on the regeneration of town centres, from streetscape improvements to larger scale redevelopment opportunities.



Figure 22 Eke Panuku current programme. Source: Eke Panuku

Urban Growth Agenda and the Auckland Housing and Urban Development Work Programme

Te Tūāpapa Kura Kāinga – Ministry of Housing and Urban Development (MHUD) play a leading role for the Urban Growth Partnership (UGA). The UGA has the primary objective of improving housing affordability underpinned by affordable urban land.

The UGA is a partnership between central government (including Waka Kotahi), local government, iwi and local communities. For Auckland, this has translated into the Auckland Housing and Urban Development Work Programme. This programme covers both agreed spatial priorities (eg development opportunities arising from the City Rail Link, the city centre to Mangere Light Rail Transit projects, Manukau centre and Drury) and policy priorities, such as how to deliver more affordable housing and quality intensification.

The Auckland Housing and Urban Growth Joint Programme will be important in both informing and implementing the Future Development Strategy required by the NPS-UD.

New funding to support a greater central government role in urban development

New government funding sources and models are part of taking a more proactive approach to urban development. This includes:

- **Crown Infrastructure Partners.** Funding for infrastructure to support development with \$91 million of roading and wastewater infrastructure to support 9000 homes being built in Wainui
- **The Housing Infrastructure Fund** is a \$1 billion fund that provided 10-year interest-free loans to high-growth councils. From this fund, \$340m was allocated to the Auckland Northwest for three waters and transport infrastructure

- **Infrastructure Funding and Financing Act 2020** creates a new funding model where a ‘Special Purpose Vehicle’ (SPV) can be used to fund and construct infrastructure to support housing and urban development. SPVs will repay any finance raised by charging a levy to those who benefit from the infrastructure. This may unlock development that is currently constrained by current council’s funding through the Long-Term Plan and/or development contributions. Milldale is an example of where an SPV has been used.
- **The Housing Acceleration Fund** is made up of several funds amounting to \$3.8 billion. The Large Scale Project component will initially provide \$282m (in a first tranche) of infrastructure to accelerate housing in Mt. Roskill, Mangere, Tamaki, Oranga and Northcote. The government announced in April 2022 a further \$1.4 billion allocated to housing projects across Auckland for Large Scale Projects. In addition, the Infrastructure Acceleration Fund, a contestable fund of up to \$1 billion, is available to some Auckland development applications. Successful Auckland applications will be announced in May 2022

Currently, these funding streams are largely one-off’s and do not generate reliable long-term support for urban development and transport improvements. Their strong focus on housing may also miss other important considerations, such as supporting successful centres and employment growth, and may enable development that is inconsistent with achieving transport outcomes.

In summary, the following points of are of key consideration to Waka Kotahi:

- Central government is becoming more active in the development of Auckland, through agencies such as Kāinga Ora. Future plans must therefore be developed in partnership with those active agencies
- To support greater central government involvement, and to address the constraints in funding, new resources and funding streams are available. This adds complexity and greater consideration is needed to align funding and planning for growth.

Our view of Auckland's future growth

Strategic context and summary

Our view considers both how we think the current strategy guiding Auckland's growth and urban development **could** change as a result of key trends and influences, as well as how we consider it **should** change to better align with our urban development position and government outcomes. There are four key aspects of our view:

1. There is growing uncertainty about when and where growth will occur due to ongoing changes to planning regulation which will enable more development across the region. This creates several planning challenges which we will need to address with our partners.
2. A greater share of Auckland's future growth will occur through urban intensification than previously anticipated. This shift should be encouraged through supporting intensification and delaying urbanisation in some major planned greenfield areas.
3. Intensification is likely to be spread across more of the existing urban area than anticipated. We will work with our partners to encourage growth into the most accessible locations.
4. A greater mix of uses should be enabled and encouraged, especially in centres and neighbourhoods. Enabling a greater mix of activities in residential areas is essential to improving walkability and reducing reliance on private vehicles for short trips.

For each aspect, in this section we discuss:

- Causes of the changes
- How this change may affect where and when growth occurs
- Key challenges and opportunities for Waka Kotahi
- Possible steps we could take (which are then integrated into recommendations and next steps in section five below).

Increased uncertainty about where growth will occur

Our view

There is growing uncertainty about when and where growth will occur due to ongoing changes to planning regulation which will enable more development across the region. This creates several planning challenges which we will need to address with our partners.

A combination of the Auckland Unitary Plan, NPS-UD and MDRS means that the capacity for new housing and employment growth is many times greater than likely 30-year demand. This means there are many ways in which future development could occur.

As discussed in section two, growth trends are already different to what was expected by the Auckland Plan. As planning controls continue to be reduced, uncertainty will increase further and other factors will become more important in determining the form, location and timing of growth, including:

- Market attractiveness of a location
- Infrastructure capacity to accommodate development and the cost of required new infrastructure
- Environmental constraints such as flood risk and biodiversity
- Cost of development such as geotechnical engineering requirements
- Stated long-term development programmes, particularly by public agencies such as Kāinga Ora.

Wider trends add to this uncertainty, for example:

- COVID-19 has significantly disrupted population trends and travel patterns. It is highly uncertain how long it may take for these trends to return to normal. Some changes, like increased working from home and a shift to online retailing, may never fully return to a pre-COVID state.
- The development market and housing preferences appear to be changing rapidly. A significantly greater proportion of dwellings are attached than before and there has been an enormous increase in terraced housing construction. There is uncertainty whether these trends will continue, accelerate, or return to what was more widespread previously.
- Employment and commercial development forecasts are particularly uncertain, given increased automation, the changing nature of work, and ongoing technological changes that make working from home easier than ever.

Overall, while there has always been uncertainty around how Auckland may grow in the long term, changes to planning controls and wider uncertain megatrends mean this uncertainty is not only greater than ever, but also relevant in the short term.

Challenges and opportunities for Waka Kotahi

Growth projections drive much of the work Waka Kotahi does. Anticipated future population and employment patterns shape expected future travel demand and potential mode choices, including where effort needs to be focused in making improvements to existing infrastructure and services. Growth projections also play a key role in modelling estimated benefits from transport investments.

The scale of uncertainty around how Auckland may grow in the future is a significant risk to our decision-making. Unless we change how we make assumptions about future growth patterns, we may inadvertently focus effort in the wrong places and invest in the wrong things at the wrong time. At the same time, Waka Kotahi cannot become paralysed by this uncertainty and avoid making decisions.

Steps we need to consider taking to respond to this uncertainty include:

- Better understand the factors driving growth trends, so we can adapt quickly and minimise the risk of doing the wrong things in the wrong places
- Better understand the likelihood of different growth outcomes, using scenarios to a greater extent, to know where 'safer' investment decisions can be made
- Focus more on developing programmes of many small-scale improvements across Auckland, which can respond to changing growth patterns in an agile way
- Focus more on using transport investment to shape urban development, rather than simply responding to it
- Work with others, especially agencies more directly involved in urban development, to increase certainty of growth outcomes.

Specific actions are discussed in section five below.

Increased share of growth in existing urban areas

Our view

A greater share of Auckland's future growth will occur through urban intensification than previously anticipated. This shift should be encouraged through supporting intensification and delaying urbanisation in some major planned greenfield areas.

Current growth plans expect around two-thirds of growth to occur within existing urban areas and one-third in greenfield areas over the next 30 years. Over the past decade development trends have generally been in line with this split: intensification has picked up faster than expected but significant greenfield growth is still happening (mostly in areas identified more than a decade ago or places that were designated 'Special Housing Areas' under special legislation passed in 2013 to accelerate housing delivery).

Several trends and factors point towards a higher share of future growth occurring in existing urban areas:

- Demographic trends (smaller household sizes, an ageing and more diverse population etc.) mean demand for standalone housing at the urban periphery may slow over time
- Auckland's success in ramping up housing supply without needing to rapidly open up greenfield areas shows the success of the Unitary Plan and an evolving development sector
- Housing policy changes will make intensification easier, potentially further reducing the demand for greenfield growth
- New funding and financing tools and changes to development contribution policies are likely to make the infrastructure costs of greenfield growth more transparent and less subsidised by others, discouraging development in expensive to serve areas. The Infrastructure Funding and Financing Act may also unlock development that is currently constrained by limited funding³
- Environmental constraints which will make it more difficult to urbanise new greenfield locations.

Recent planning work and policy direction also highlights compelling reasons to slow down greenfield growth, especially with housing demand able to be met through intensification.

- Greenfield areas (even those close to good public transport) generally have longer travel distances and higher car mode share than inner areas. This means greenfield growth generally works against reducing vehicle travel and emissions.
- Greenfield areas require significant investment to 'open up' that is difficult to fund and requires money that could otherwise be used for progressing other priorities. We are already progressing much slower than the FULSS envisaged.
- Resource management reform may make it more difficult to consent greenfield growth due to requirement for emissions assessments. Some elements may make greenfield easier (responsive planning in NPS-UD).
- National Policy Statements for Highly Productive Land, Indigenous Biodiversity and Freshwater Management will make greenfield development increasing difficult to support and/or more costly to implement.

The Scenario i11.6 growth forecast already anticipates greenfield growth to occur more slowly than envisaged by the FULSS, with some areas not urbanising until after 2050. This 'delayed implementation' should continue, with potentially substantially less growth in parts of the greenfield areas over the next 30 years than previously forecast. Dairy Flat, Warkworth and outer parts of the northwest (i.e. Kumeu/Huapai) are particular locations where delaying urbanisation would support better transport outcomes. Locations within the existing urban area that may grow more than previously expected are discussed in the next section.

Challenges and opportunities for Waka Kotahi

Overall, an increase in the share of growth occurring in existing urban areas is an opportunity to achieve better outcomes and aligns with our urban development position. More compact urban areas should lead to shorter journey distances and support mode shift to public transport, walking and cycling.

We will need to make sure we support, and do not inadvertently undermine, fully realising this opportunity. This is likely to mean shifts in where we focus our effort, as well as working more closely with our partners to continue this shift to growing 'up' rather than 'out'. Key steps we will need to consider are:

- Ensuring we are prioritising our planning and design work in the right areas and at the appropriate scale to support growth in a way that will achieve positive changes to travel patterns
- Ensuring that our funding continues to support and enable urban development in ways that support better transport outcomes
- Continuing to progress route protection work through the Supporting Growth programme so that we know what will be required when greenfield areas are eventually urbanised. However, care needs to be taken to ensure this work does not unduly encourage greenfield growth.

Specific actions are discussed in section five below.

Intensification more widely spread across the existing urban area

Our View

Intensification is likely to be spread across more of the existing urban area than anticipated. We will work with our partners to encourage growth into the most accessible locations.

As discussed in section three, intensification is already occurring across more of the existing area than growth forecasts expected. A combination of the Auckland Unitary Plan, the NPS-UD and the MDRS are likely to continue this trend, as most of the existing urban area will enable at least three-level development.

While the Auckland Plan, and the growth forecasts, appear to anticipate housing and employment growth to be largely focused in a few key locations, and sequenced in a manner similar to greenfield growth, it appears that development patterns are much more complex and widespread. More specifically, some areas may grow faster or more than previously expected and other areas slower or less.

Areas with high land values that have their current development potential constrained by the Unitary Plan are likely to grow faster or more than previously expected. This could include inner areas like Remuera, Mission Bay, Westmere, Pt Chevalier and Epsom, as well as areas close to rapid transit stops. There may also be more or faster growth in some market attractive locations further afield, especially around the coast on the North Shore, Whangaparaoa and in the wider Howick area.

Areas anticipating significant apartment development may grow more slowly than expected, especially if they are less market attractive and not in a location where publicly led redevelopment is planned.

Figure 23 below shows a 'quality capacity' assessment for Auckland, undertaken by PWC for the Ministry of Housing and Urban Development. This assessment uses property valuation data to get a score representing the value gap between the current use of the property and the potential use of the property. This serves as an estimate of how attractive the property is to developers. The assessment shows the highest quality capacity is highly concentrated in the inner isthmus and along the coast, with more moderate quality capacity in urban suburbs (such as Avondale/New Lynn, Te Atatu, Glenfield, Otahuhu/Papatoetoe, Howick). The quality capacity metric is a relevant tool to inform thinking about where growth may be more likely to happen. The quality capacity tool suggests market-led growth is more likely to occur in some locations than others.

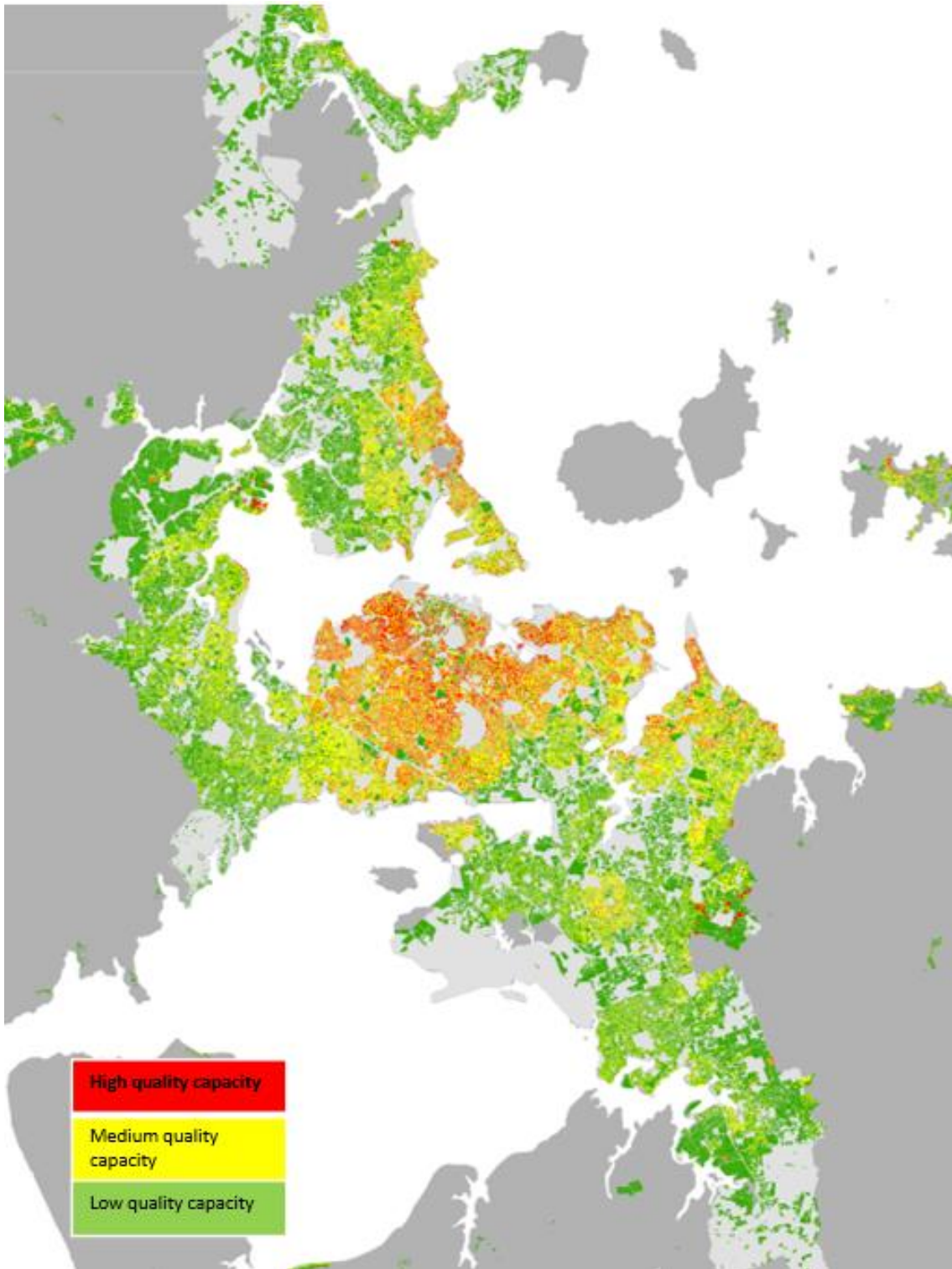


Figure 23 Map of 'quality capacity' for development in Auckland. Source: Ministry of Housing and Urban Development/PWC

Challenges and opportunities for Waka Kotahi

Having intensification spread across the existing urban area, rather than focused in a few locations, presents a bigger challenge for Waka Kotahi. Current 'geographically focused' planning work (within the existing urban areas) is limited to a handful of locations, including the city centre and the main locations where Kāinga Ora is undertaking significant redevelopment (eg Māngere, Mt Roskill and Tamaki). Responses to growth in other areas is managed through developing regionally based programmes (eg

safety, network optimisation, cycling etc), major strategic projects, or negotiated with developers through RMA processes.

This trend may also change the balance of our required investments into the future. Travel demand may be allocated across many corridors, rather than concentrated into a few, meaning it might be necessary to make less significant upgrades to more corridors. Programmes of small-scale investments will be especially valuable to prioritise.

There are also opportunities arising from this shift. The most likely locations to see more growth (ie inner city suburbs with high market demand but restrictive planning rules) generally have good existing travel choices and are among the parts of Auckland with the very best access to opportunities as shown in figure 24 below. More growth in these areas supports VKT reduction.

The scale of change required to deliver significant VKT reduction requires widespread transformation of the transport system across urban Auckland, not just focused in a few places. Therefore, growth happening in many locations presents an opportunity to support and enable VKT reduction and modal shift across Auckland, not just in a few locations.

Key steps we will need to consider in responding to widespread intensification include:

- Ensuring growth projections are fit for purpose and reflect recent trends and influences
- Reviewing the way planning work is undertaken to ensure effort is being focused on the most important locations. This needs to include a balance between location focused and network-based analysis
- Focusing on smaller-scale improvements across more of Auckland, rather than concentrating effort in large interventions in a few locations or along a few corridors
- Working with our partners to encourage growth in the most suitable locations. The more active role of public agencies in urban development will be key, alongside potential financial incentives or disincentives.

Specific actions are discussed in section five below.

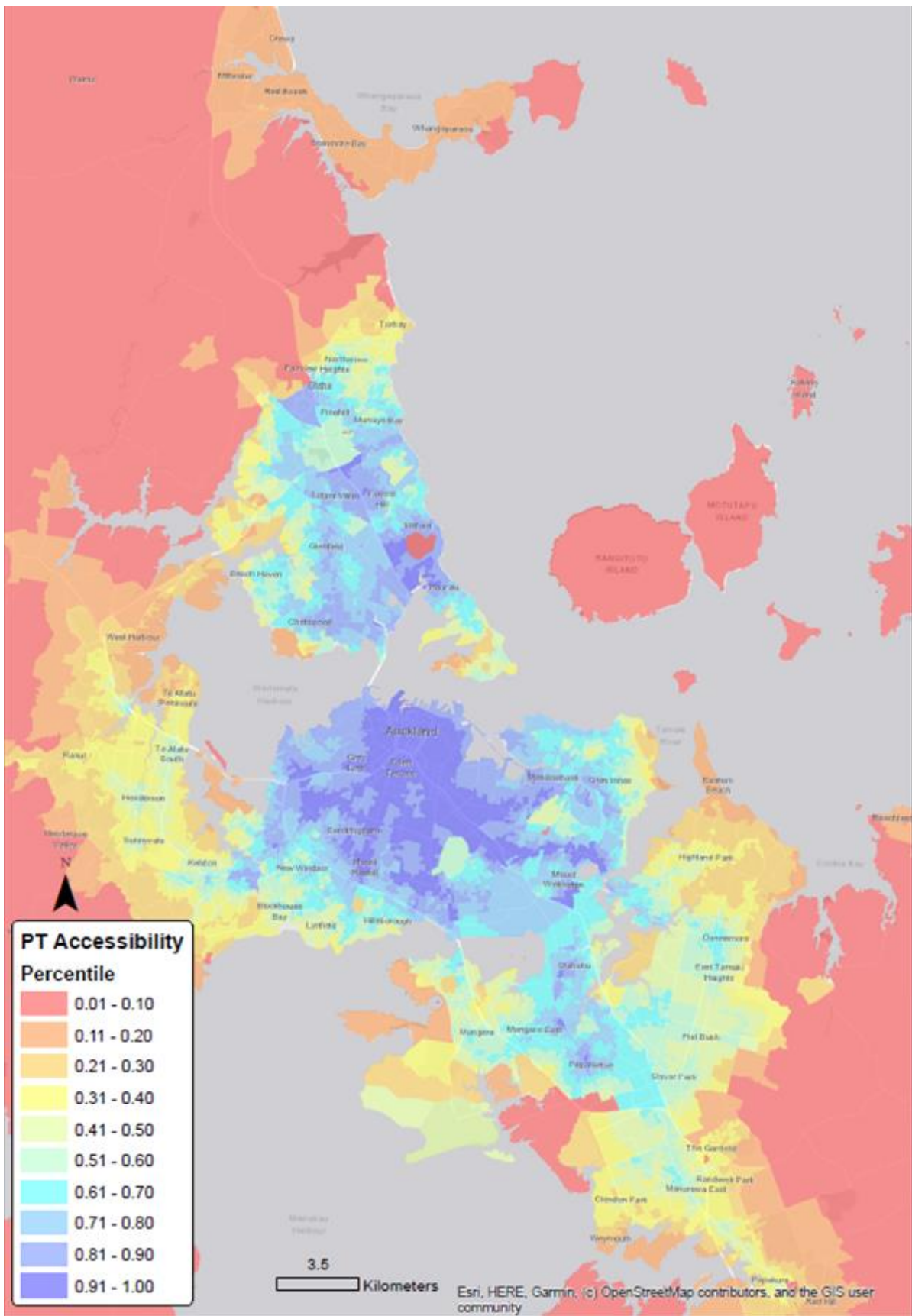


Figure 24 Public transport accessibility in Auckland based on current network and services. Source: Waka Kotahi

Support vibrant, mixed-use and walkable centres and neighbourhoods

Our view

A greater mix of uses should be enabled and encouraged, especially in centres and neighbourhoods. Enabling a greater mix of activities in residential areas is essential to improving walkability and reducing reliance on private vehicles for short trips.

Current plans seek to enable higher density development and a greater mix of uses in and around centres. This strategy remains sound, with the need to reduce VKT and emissions making it more important than ever for centres to be successful vibrant places where walking, cycling and public transport are attractive travel choices.

However, many centres have faced challenges for decades due to the rise of shopping centres and changing retail trends. More recently, the COVID-19 pandemic has created further challenges, especially if trends such as increased working from home or use of online shopping continue to rise in popularity in the medium to longer term. The most successful centres appear to be those that have evolved over time to meet changing needs through providing a growing variety of activities, including housing.

Some centres will need to evolve more than others to be successful and will therefore need more support. Many larger centres (eg Manukau, Albany, Botany, Westgate) were established during a highly car-dependent phase of Auckland's history and will need significant transformation to meet the needs of a 21st century city. Smaller centres need to be able to grow and diversify too, especially so they can act as community hubs and allow people to easily access many of life's daily necessities without having to drive.

A greater mix of activities also needs to be enabled beyond centres. Single-use zoning actively works against efforts to shorten trip lengths and forces people to drive by pushing apart the origins and destinations of trips. Enabling a wider variety of appropriately scaled non-residential activities throughout neighbourhoods, as well as allowing more business areas to evolve into mixed use developments, could make a very significant contribution towards reducing VKT and emissions. This also provides more local employment and business opportunities.

These changes would represent a shift from some elements of Auckland's current growth strategy, as well as the population and employment forecasts for the city. Key changes would be:

- Employment growth is currently forecast to be highly concentrated in a few locations, including the city centre, the Airport precinct and the area around Westgate and Whenuapai. Enabling more mixed-use development would allow employment growth to be more evenly spread across Auckland.
- Some locations which are currently exclusively used for business activity and are anticipating no population growth and slow employment growth (eg light industrial areas or office parks) should evolve into much more diverse mixed-use places, with an increase in population and a much wider range of employment and service opportunities.

Challenges and opportunities for Waka Kotahi

There are significant potential benefits to be achieved through supporting successful centres and a greater mix of activities. However, significant effort will be required to achieve these goals and there remains significant risk that centres struggle to successfully evolve, or that 'single use' urban development remains commonplace and undermines efforts to create walkable neighbourhoods.

To support successful centres, a much more 'hands on' approach will be required of public agencies, including Waka Kotahi. Major changes to street design and operation, to make centres safer and more walkable, is essential and will require substantial effort and investment over a sustained period of time. Agencies will need to be brave in pushing ahead with change, even where difficult trade-offs are required

in areas like road space reallocation, parking management or operational trade-offs to prioritise people rather than vehicles.

Rapid transit has a key role to play in supporting successful large centres. The unique ability of rapid transit to shift extremely high volumes of people in a very space-efficient way means it can support centres significantly increasing in density and diversity, without requiring additional road space and parking. However, rapid transit requires significant investment and can take many decades to plan and implement. This means effective integrated planning will be essential, so well-informed decisions are made about implementing rapid transit, while at the same time land-use decisions support these investments being successful and realising all the wider benefits of rapid transit. At a neighbourhood level, a greater mix of uses provides significant opportunities to support active modes for short trips, supporting mode shift and VKT reduction.

Key steps we need to consider to support vibrant, mixed-use centres and neighbourhoods include:

- Encouraging changes to planning rules, to allow a wider mix of uses and a shift away from 'single-use' zoning
- Supporting neighbourhood-level transformation through programmes of small-scale walking, cycling and safety projects that help create much more walkable neighbourhoods
- Supporting large-scale centres to evolve through:
 - partnering with others in supporting a more deliberate and 'hands on' approach to their planning and development
 - improving access to major centres through rapid transit network development
 - supporting transformational change to the design and operation of street networks in centres
- Responding to changes in the location of 'space extensive' industrial activity, to ensure continued support for efficient freight systems.

Recommended actions

The actions in this section of the report provide direction for our work programmes in Auckland. These actions will be implemented across various teams within Waka Kotahi and rely on a collaborative approach internally, as well as with our external partners.

The actions directly respond to the findings of this report, specifically the challenges and opportunities for Waka Kotahi identified in section four of this report.

Collectively, these actions identify how we can reflect and pursue our view on Auckland's growth and development. Most actions relate to partnering and influencing other agencies to achieve the desired outcome. They are mostly existing work but provide direction to what we are seeking to achieve through a series of business-as-usual activities, alongside some new work. These actions also require people from across Waka Kotahi to be involved in delivering them.

For each of the actions we have outlined a more detailed view on how they will be implemented.

Action 1: Collaborate with partners to update growth strategies and align urban development outcomes

Our direct influence on growth and urban development in Auckland is relatively limited because we are not the primary decision-maker. However, we have well developed relationships with key partners, including Auckland Council, Auckland Transport and Central Government agencies and can collaborate with them to maximise the value of public investments in Auckland. This also ensures we are contributing towards meeting the government's Te hau mārohi ki anamata / Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emissions reduction plan.

Influence policy direction to better integrate urban development and transport	Support the review of Auckland's Future Development Strategy	Influence a review of the Future Urban Land Supply Strategy (FULSS)	Influence ongoing changes to the Auckland Unitary Plan	Encourage partners more directly involved in urban development to focus their activity in highly accessible locations
<p>Work across government to advocate that new policy and legislation (eg resource management and local government reform) appropriately integrates land use and transport.</p> <p>Work with partners to better integrate transport planning processes (eg ATAP/RLTP/NLTP) with growth strategy development.</p> <p>Work with the Auckland, Waikato, Bay of Plenty and Northland regions to ensure strategy and planning decisions factor the inter-relationship of growth in the Upper North Island.</p>	<p>Encourage a more sophisticated approach to spatial priorities and development area that better distinguishes between priority areas for planning, investment and actual urban development.</p> <p>Advocate that spatial priorities and development areas are in locations that support transport and urban development outcomes to the greatest possible extent.</p> <p>Advocate that the review fully reflects implications from recent trends and policy changes and demonstrates the contribution of urban form to climate targets and reducing climate related risks</p> <p>Encourage an updated approach to centres to better reflect their intended future role</p>	<p>Advocate that the sequencing and timing of new greenfield development is revisited to support a greater focus on accommodating growth through intensifying existing urban areas.</p> <p>Advocate that the strategy is reframed to better incorporate transport infrastructure and service needs, costs and outcomes into the FULSS decision making.</p> <p>Advocate that the FULSS is fully integrated into the Future Development Strategy.</p>	<p>Work with Auckland Council and other government agencies to advocate that zoning frameworks, objectives, policies and rules of the Auckland Unitary Plan support:</p> <ul style="list-style-type: none"> • Alignment with the NPS-UD outcomes and implementation of the MDRS • Consideration of emissions reductions from the transport sector and VKT reductions (eg discouraging/delaying greenfield growth) • Enable more mixed-use development across urban areas • Implement the revised FDS and FULSS. • Consideration of the National Adaptation Plan <p>Continue to influence land-use planning processes to deliver good transport and urban development outcomes.</p>	<p>Use our technical expertise and data analysis to clearly identify locations where growth and urban development should be encouraged and discouraged, based on:</p> <ul style="list-style-type: none"> • Accessibility mapping • Investment pipeline information or influence • Transport system data sets • Guidance and best practice to support modal shift and VKT reduction <p>Promote this evidence and the identified locations where growth should and should not go with our growth partners and within the Auckland Urban Growth Partnership.</p> <p>Work with Kainga Ora to better coordinate planning and investment for future large-scale development.</p>

Action 2: Reduce risk from growth-related investments

Change and uncertainty about where and when Auckland may grow create significant investment risks for Waka Kotahi. Precise growth projections currently play such a significant role in our planning and investment decision-making processes. Reducing those risks requires change to how we undertake these processes, so we can adapt more quickly where required. It also means that where we do make transformational investments, we need to work in partnership with other agencies and developers to fully realise their benefits.

Improve the agility, efficiency and effectiveness of planning and investment decision-making processes	Greater focus on programmes of smaller-scale, agile activities	Increase certainty of growth outcomes where we make strategic investments	Encourage integration across all transport investment in Auckland	Ensure growth assumptions for key investments are fit for purpose
<p>Work with our partners to review and update how planning and design work is undertaken, with a focus on ensuring the right balance between 'network-based' and 'area based' planning work.</p> <p>Fully realise the benefits of investments through 'area-based' planning work focused in the most accessible locations that provide the best opportunities to support mode shift.</p>	<p>Encourage planning and business case work to focus on creating programmes of small-scale interventions that can be quickly and easily adapted in response to changing growth patterns.</p> <p>Consider how the Waka Kotahi investment decision-making framework can prioritise the development of smaller-scale, agile activities.</p> <p>Consider how future ATAP and RLTP updates can prioritise smaller-scale agile activities.</p>	<p>Work with our urban development partners to increase certainty about where and when growth will happen, as part of project development work.</p> <p>Work in partnership with other agencies and developers to fully realise the benefits of investments, including through active involvement in TOD design and structure/master planning.</p>	<p>Influence the development of GPS 2024 so it provides a clear and consistent strategy for transport investment across all funding sources – not just the National Land Transport Fund.</p> <p>Encourage future versions of ATAP to integrate all transport funding sources (including new growth-related funds) to deliver the best possible programme within the available investment.</p>	<p>In the short-term use multiple growth scenarios for planning and investment decision-making work where possible. This is particularly important for upcoming work on:</p> <ul style="list-style-type: none"> • Supporting growth programme • Rapid transit network planning • Additional Waitematā Harbour Connections • Auckland light-rail <p>In the longer term, once strategic growth work is completed, we need to move to a much more sophisticated approach for growth projections.</p>

Action 3: Improve growth monitoring and forecasting capability

Significantly greater uncertainty around where and when growth is likely to occur in Auckland means that current approaches to growth forecasting, especially the use of a single forecast many decades into the future, are no longer appropriate. We also need to better understand current and future growth patterns and trends to ensure our decision-making is informed by the best possible evidence and data.

Develop more sophisticated approaches to growth forecasting	Improve our understanding of growth trends	Clearly identify locations most suitable for future growth
<p>Advocate through existing partnerships for a more robust and transparent approach to the development of growth forecasts in Auckland, including a shift away from manual incremental changes to Scenario I.</p> <p>Advocate that existing growth models are being appropriately utilised and consider how these can be supplemented (eg. land-use transport integration and wider national modelling) to provide best practice information on growth forecasts.</p> <p>Explore with partners how growth forecasts can better represent uncertainty.</p> <p>Promote the use of multiple growth forecasts (scenario-based planning) as the land-use assumptions for Waka Kotahi planning work and major investments. Move away from 'project-specific' growth scenarios to ensure regionally consistent decision-making and the double counting of growth-related benefits.</p>	<p>Build relationships with development sector to better understand their key drivers and future plans.</p> <p>Develop a clearer view of current development patterns and trends, as well as known future developments and other potential influences of where and when growth may occur (eg.constraints on water infrastructure).</p> <p>Work with the council to better understand non-residential development patterns and methods for better forecasting of employment growth.</p>	<p>Develop and share maps identifying areas that are progressively better or worse for growth from a transport outcomes perspective.</p> <p>Base this analysis on prioritising locations:</p> <ul style="list-style-type: none"> • Where there is good accessibility to employment and other opportunities by public transport and active modes • Where the lowest amount of additional transport investment would be required to enable and support growth • Where growth would result in mode shift and help reduce VKT.

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