



UNIVERSITY OF
AUCKLAND
Waipapa Taumata Rau
NEW ZEALAND

KOI TŪ:
THE CENTRE FOR
INFORMED FUTURES

REIMAGINING TĀMAKI MAKAURAU AUCKLAND HARNESSING THE REGION'S POTENTIAL

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March 2022





KOI TŪ: THE CENTRE FOR INFORMED FUTURES

We are an independent and non-partisan think tank and research centre based at the University of Auckland with associate members across New Zealand and the world.

We undertake transdisciplinary research and analysis, and generate knowledge, commentary, and tools to address critical long-term national and global challenges arising from rapid and far-reaching social, economic, technological, and environmental change.

Our name, Koi Tū, was gifted by Ngāti Whātua Ōrākei. It means the sharp end of the spear. Like a spear, Koi Tū aims to get to the heart of long-term issues challenging our future.

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FOREWORD

Tāmaki Makaurau Auckland is Aotearoa New Zealand's largest and most diverse city. It is the economic and financial capital of New Zealand, and the country's main gateway for people and goods. Auckland has the largest Māori and one of the largest Polynesian populations in the world and will soon be a region of two million people, a remarkable resource for the entire country.

The time is right for well-informed, deep and wide discussions about Auckland's future:

- It is now more than 10 years since the eight former Auckland councils were amalgamated
- The Covid-19 pandemic has fundamentally changed our perceptions of normality
- We need to explore new ways for central and local Government to engage for long-term projects.

Auckland Unlimited, with the support of Auckland Council, the Auckland Policy Office and Eke Panuku, commissioned Kōi Tū: The Centre for Informed Futures to prepare this independent paper about ways to harness Auckland's potential.

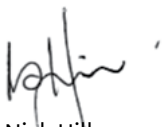
Reimagining Tāmaki Makaurau Auckland: Harnessing the Region's Potential is a provocation about Auckland's multi-generational future. It explores nine interconnected scenarios to harness Auckland's assets. Interwoven in all of them is an appreciation of te ao Māori and recognition of Te Tiriti o Waitangi: understanding and celebrating Auckland's indigenous history.

The purpose of this paper is to stimulate open-minded conversation and debate about what kind of city Tāmaki Makaurau Auckland could become. The scenarios challenge the status quo and describe a view of future Auckland that sets the stage for future generations.

It is not intended nor designed to be a detailed strategy or plan for Auckland's future. It aims to provoke debate on Auckland's future with participation from a wide range of stakeholders including the public, central and local government, iwi groups and the private sector.

Reimagining Tāmaki Makaurau Auckland: Harnessing the Region's Potential calls for the use of new techniques for engaging citizens and stakeholders in discussion and debate to ensure the vision we create for Auckland is well-informed, democratic and shared.

We are excited by this insightful and inspiring report and the prospect of facilitating robust discussion and debate among Aucklanders and New Zealanders so Tāmaki Makaurau Auckland can realise its great potential to benefit us all.



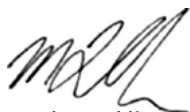
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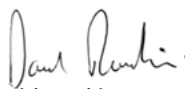
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ACROSS GENERATIONS

Professor Sir Peter Gluckman

Cities are built over generations and must evolve as they grow. In doing so, they must consider both the needs of the current generation and those that will follow. More and more of the world's population now live in cities – urban areas which have become the primary units of innovation and experimentation, and the source of economic and social wellbeing for people and nations.

Auckland Unlimited asked Kōi Tū: The Centre for Informed Futures to reflect on Tāmaki Makaurau Auckland's future, but to do so differently. Rather than focus on today's problems or be constrained by plans already underway, we instead leap forward at least two generations – 50 years or more – to think about what kinds of actions and changes today would enable Auckland to reach its potential as one of Asia-Pacific's primary cities.

This 'provocation' paper was developed through processes of expert and stakeholder engagement using futures and foresighting methodologies. It is neither a plan nor a strategy: rather, its purpose is to stimulate new thinking about our future. It identifies intangible assets that could be used much better, and highlights the barriers that inhibit Auckland's progress. As a provocation, its role is to encourage dialogue and consultation on how we might think about Tāmaki Makaurau over the longer term, and identify areas for more formal research and analysis.

The region's unique position between three harbours and a narrow isthmus, capped by multiple maunga (mountains) and blessed with fertile soil and waters, long attracted Māori, making it one of the most densely populated and contested parts of Aotearoa well before Pākehā arrived. Hence its name Tāmaki Makaurau is loosely translated as the place desired by many.

More than 180 years after Pākehā arrived, Auckland is New Zealand's gateway to the world. It is the country's economic and financial capital. It is the most ethnically and culturally diverse region in Aotearoa and boasts the world's largest Māori and Polynesian populations. It will soon be home to 2 million people, and in that remarkable and diverse human resource there is great potential for the entire country to benefit.

It is a city with many opportunities, but not all have been invested in with strategic intent. This provocation identifies those opportunities and suggests more promising ways forward. They include fostering the potential of our diverse people and cultures, the density of tertiary education, and the size of the business community. An innovation culture is emerging which needs fostering and stewardship.

It is a decade since the 'supercity' was formed, but it is not apparent that citizens feel any more engaged or have a more unified view of the future. During the last decade, Auckland has faced phenomenal growth in population, then a Covid-induced freeze and severe disruption to its economic and social life. While it is remarkable how officials and planners managed to cope with that rapid growth, the consequences are apparent in the infrastructure gap, persistent traffic and housing concerns, and unequal access to quality education, health services and other civic amenities.

Geographical realities create constraints on some aspects of planning, but the broader region has resources that should play a far greater role in our quality of life.

There are also significant challenges for Auckland in its relationship with the rest of New Zealand. There are obvious demographic, historical and cultural differences, and political tensions and conflicts. In these conflicts, New Zealand is the loser.

Too often, progress is undermined by conflicting priorities between central and local government processes, leaving Auckland's residents somewhat disaffected and disempowered.

Such contestation also leads inevitably to short-term thinking. Resolving contested ownership of governance, planning and management between Auckland and Wellington, and achieving alignment between the multiple players with roles in each, is essential.

We urge a greater emphasis on long-term decision making. Actions taken now will have implications over multiple generations. Whether they are about climate change, providing education services, or embracing Auckland's cultural diversity, a long-term lens is needed. A long-term focus is central to this provocation. Future generations must be as central to our thinking as are today's citizens.

Over the next 50 years and beyond, the aspirations of Auckland's diverse peoples need to be better met, including those who currently face real barriers to sharing in all that the region has to offer. The economy will need to shift and adapt in the face of domestic and global pressures, including climate change and environmental challenges, and we must use technology wisely to promote economic growth.

This paper aims to frame further discussion by sketching out an image of where Auckland could go if we are ambitious about building a positive future. It does not pretend to present a consensus view, nor is it designed to map a path from where we are now – rather, it tries to look ahead to what we might be. This allows us to collectively backcast to identify the decisions we need to make now.

A report such as this can only sketch general directions. Further work, deeper analysis and consultation will be needed to flesh out the propositions put forward, explore their interrelationships, and define priorities.

A provocation is designed to promote deeper reflection, dialogue, formal consultation, and analysis. Continuing the conversation through deliberative engagement with the public, *mana whenua*, the business community and other stakeholders, experts and decision makers would be essential to start shaping a consensus view on the future we want to see. From there, we can work out the changes needed to achieve it.

We must find the path to live up to the implied meaning of the name *Tāmaki Makaurau*, 'the place desired by many'. At its full potential, Auckland could stand out in the Asia-Pacific region as a city and region that offers remarkable value – economically, environmentally, culturally, and socially – and will enhance the wellbeing of future generations of all New Zealanders.

EXECUTIVE SUMMARY

“Innovation starts with a story about the future. Imagining and sharing desires and fears about the future is a way for all of us to shape it.” (Bland & Westlake, 2013, p 5)

Imagining Auckland’s future: 2070 and beyond

The purpose of this provocation is to encourage open-minded conversation, consultation and debate on where Tāmaki Makaurau Auckland should head and what kind of city it should aim to be in the future – looking ahead over perhaps two generations. It does so by presenting a number of integrated scenarios that challenge the assumptions of current trends, priorities and practices. These nine elements, when considered as a whole, represent the kind of optimistic but plausible outcomes that might be achieved by harnessing the potential of Auckland’s many assets, particularly those that are under-appreciated and under-leveraged. Together, these elements describe a view of future Auckland and set the stage for future generations of Aucklanders, with flow-on benefits to the whole of New Zealand. Some suggestions build on existing plans; others suggest bolder moves to reduce inequities in opportunity and access to services and amenities, and to enhance social cohesion, sustainability, liveability and connection to the natural environment, while supporting a thriving innovation ecosystem that powers New Zealand’s economy.

The scenarios were developed using well-established futures and foresighting methodologies. They incorporate a wide range of inputs from expert and stakeholder interviews and diverse focus groups, which were structured to capture a range of perceptions, trends and dynamics. This exercise is not intended to replace traditional planning or consultation processes but rather to complement them by promoting conversation about possible transformations that could be made. The vision created does not simply respond to historical or ‘predictable’ trends but accepts a level of uncertainty as an opportunity to shape the future. In this way, the elements of the interconnected scenarios test common assumptions about the future to inspire innovative thinking and explore better courses of action.

Addressing barriers to progress

As Aotearoa-New Zealand’s largest and most culturally and economically diverse city and region, Auckland is also its primary engine of innovation and its gateway to the world. But many things are impeding its evolution into a truly global, liveable and sustainable city that is fit for the future. In particular, the region is constrained by fragmented decision-making and outdated funding processes and by the lack of a joined-up vision and strategy that is agreed by both central and local government and endorsed by its citizenry.

Strategic thinking and planning are not the same: the former describes the goals and destination we want to achieve; planning describes the path we choose to reach them. While much endeavour has focused on the planning dimension, less effort has been made to achieve a broadly owned vision of Auckland’s future. Given the many challenges ahead – from technological change to climate change – a more coherent and widely accepted vision is needed for Auckland to reach its potential as a globally relevant, important Pacific city attracting talent, investment and giving all its citizens an unsurpassed quality of life.

Many of Auckland’s challenges have been debated publicly for decades. Despite the commitment and goodwill of many leaders, decision-makers, private-sector actors and NGOs, the challenges continue to be addressed solely through a short-term lens. In the face of multiple intersecting technological,

environmental, demographic and geopolitical transitions, Auckland needs to rethink its resilience. How can it break down these planning barriers, look further ahead when investing in infrastructure and technology, leverage opportunities, and make bolder moves to improve the long-term outlook for both the city and New Zealand?

Our future will be shaped by decisions society makes now about how we want to interact with each other, educate ourselves, develop economically, and live our lives. Short-term decision-making can lock in behaviours that are ultimately unsustainable and lead to poor outcomes. The approach presented here challenges decision-makers to consider transformative change in some areas.

It is not a matter of trying to ‘have it all’. Planning always involves trade-offs. But envisioning the future through optimistic but plausible scenarios provides a tool to reimagine that future: one that is achievable by organisational redesign, stakeholder engagement, and a clear view of the future.

Enabling change

Changing Auckland’s future trajectory of development with a more active and aligned sense of direction will require rethinking its structures of governance, management, planning and funding. Auckland’s size, shape, needs, and contributions to New Zealand justify a distinct design for its governance.

Most critically, central and local government need an aligned vision and a jointly-owned long-term strategy for Auckland, developed and maintained through a mechanism that is sufficiently stable to survive political cycles. There are a number of ways to redevelop the democratic oversight and effective management of Auckland to enhance citizen engagement and support long-term solutions. New modes of participatory and deliberative democracy, designed for our specific cultural context, can be used to flesh out a collective view of our future.

With an agreed vision, the changes required to bring the preferred future to life need to be articulated. Some crucial tactical decisions must soon be made, such as the location of the port and the nature of a second harbour crossing, before Auckland can move beyond unambitious incremental change. Inevitably there will be different views, preferences and values, but these can be deliberated upon provided there is a clear long-term direction and a consensus on the desired destination. We have chosen not to discuss these immediate operational decisions other than to state that continuing to defer them is clearly not an option.

A key enabler for this unified approach would be a singular Auckland-focused unit for data, research and planning that is accessible to all those with responsibilities for decision-making about Auckland irrespective of whether they are agencies in Auckland or Wellington. Decisions need to be based on common goals and information, deliberated by a plurality of voices, expertise and experiences. Mana whenua are critical partners in building Auckland’s future, and Te Tiriti o Waitangi must be woven into and underpin the deliberations. Such a holistic approach engenders citizens’ trust in the vision and enhances social cohesion for cooperative action.

The approach we suggest upholds the principles of the Treaty (partnership, participation and protection) and Auckland’s indigenous history by weaving Māori culture and worldviews into transgenerational thinking, foresight and planning. Intergenerational thinking is at the heart of maintaining the mana of whakapapa.

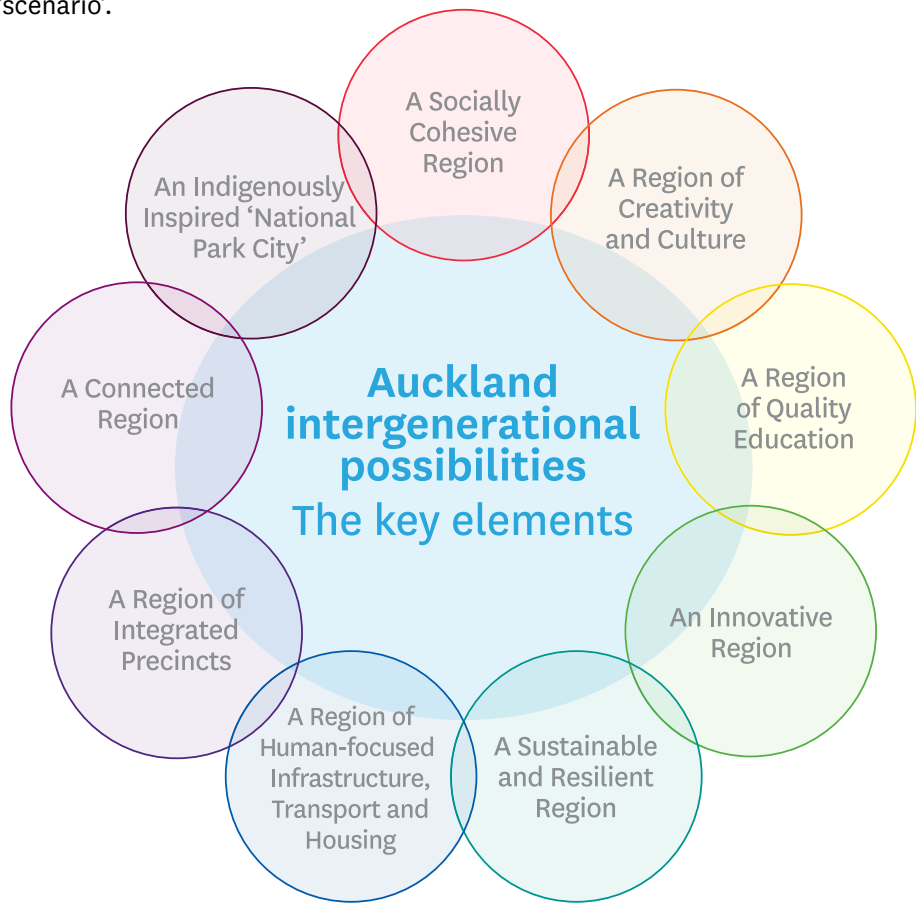
*“Te Tiriti o Waitangi recognises the rangatiratanga of Auckland’s hapū and iwi, and the inseparable bond between Tāmaki Makaurau the people and Tāmaki Makaurau the place.”
(Ōtara-Papatoetoe Local Board Plan, 2020, p 9)*

The picture being developed here is looking ahead approximately two generations from now, recognising the inherent limitations of any future-casting. Depending on the acceptance of the general direction, progressive implementation of the suggested transformations would begin to show benefits much sooner than this, setting the stage for positive impacts much further into the future, even if the future changes from that currently foreseen. Intergenerational planning would be enhanced and safeguarded by establishing an Auckland Commission for Future Generations, entrusted to protect the interests of generations to come, along with new modalities that would allow effective input from emerging generations into current decision-making. Enhancing participatory and deliberative democracy with culturally appropriate processes that improve access and transparency could allow a wider diversity of Aucklanders to engage more actively in their own future and that of their descendants.

The integrated scenarios outlined here present a positive developmental trajectory for Auckland leading up to 2070 and beyond, but as a provocation they are intended to start a discussion rather than claim to represent a consensus view. The peoples of Auckland, and those in positions to make decisions about the city’s future, need to agree on what the vision should be. Once this happens, a deeper dive will be needed into barriers and enablers to achieving it, and an enabling environment will need to be built. This will involve capacity building, knowledge sharing (including knowledge resources relevant to local contexts), strategic planning, and coordination of effort across agencies, businesses and communities. Critically, it will involve reflecting on the emerging meanings of Te Tiriti and an indigenously inspired, co-designed democratic process, and thinking more systemically and much further into the future than is typical, to create collective knowledge from which new strategies can emerge.

Describing the future

For practical and illustrative reasons, we have described the future of Auckland in several dimensions, which all overlap and interrelate. We have termed each of these elements of an envisaged future condition a ‘scenario’.



Realising these will require:

1. An agreed, long-term vision.
2. A transdisciplinary, systems-oriented approach to research and planning – potentially best served by a singular research and planning unit through which all decisions are analysed, deliberated and implemented.
3. Reconsideration of decision-making processes to reduce conflicts between central and local decisions and to enable coordination of decisions and planning.
4. Democratic institutions and processes that enable broad citizen participation and deliberation in future planning, such as citizens' assemblies and youth assemblies with genuine influence on decision processes.
5. Innovative support for technological advances, allowing Auckland to be a test-bed for advanced sustainability-supporting technologies.
6. Establishing an institution for ensuring the interests of future generations, such as a Commission for Future Generations, to ensure goals and policies fit with a future that extends well beyond any political cycle.
7. Sustainable financing models that support long-term future development policies and projects, fostered by open dialogue between private and public sectors.

AT A GLANCE: INTEGRATED SCENARIOS FOR 2070 AND BEYOND

Auckland has enormous potential – it could be a globally significant city. The whole of New Zealand will benefit if that can be achieved. Its inherent assets as a city and a region can be better developed and utilised.

This provocation sets out elements that could describe a possible road ahead. They provide a view of Auckland's future that is people-focused and socially cohesive; a place of culture and creativity; a place of bicultural and multicultural richness; a centre for education; an innovation hub; a smart, sustainable and liveable city; and a region with its endowment protected. Together they provide a vision of Auckland in 2070 as a city and region living up to its potential – a place where people thrive and want to live, with an identity they are proud of.

Scenario 1: A Socially Cohesive Region

Auckland is a diverse and inclusive region that celebrates different peoples, cultures and religions.

- Auckland has a unique identity that all its citizens are proud to support. It has specifically enhanced the visibility, mana and empowerment of Māori and Pacific people and cultures, while also recognising and celebrating Auckland's wider cultural diversity.
- Respect for Te Tiriti o Waitangi has fostered strong partnerships with and participation of Māori in decision-making. Mana whenua have a clear role in governance over their people and lands. This has been achieved by honouring the past and applying the Treaty in a contemporary and future-focused context that helps define Auckland's unique identity.
- The region benefits from a strong foundation of intercultural understanding and knowledge.
- Diversity (culture, ethnicity, ability, age, gender, etc.) and inclusion are woven into all social and economic policies.
- More effective modes of inclusive and trusted democracy have been established.
- Social equity is promoted by listening to the voices and understanding the needs of all Aucklanders, and acting on these to support all people to thrive.
- Connections between people are enhanced through designing integrated precincts that support inclusion and diversity, providing high-quality educational facilities and employment opportunities, as well as improved social amenities in all areas.
- All abilities are recognised and catered for.

Scenario 2: A Region of Creativity and Culture

Creativity, culture and innovation pervade all communities.

- Auckland is a place where creativity, culture and innovation thrive.
- Cultural and creative elements are integrated into the everyday lives of Aucklanders.
- The region's unique cultural mix is showcased in a range of creative media that reinforce Auckland's identity and foster a sense of civic pride. Cultural infrastructure is connected in a way that tells the unique story of Tāmaki Makaurau.
- The region's sporting and recreational culture contributes to its identity and sense of cohesion, as well as providing outlets for promoting wellbeing. Its large-scale infrastructure supports a wide range of sporting and cultural activities.
- Creative, cultural and innovation precincts have been established throughout the city and surrounds, e.g. a core entertainment and arts precinct in midtown, a cultural creativity precinct in South Auckland, and a film precinct in the West.
- Precinct-located and domain-focused educational institutes provide creative talent for the precinct industries to support creative activities.
- Entrepreneurship in social, economic and creative domains is supported (e.g. creative launch pads, incubators and networking hubs).

Scenario 3: A Region of Quality Education

Auckland is a place where all its residents can access quality education for life. The education system has creativity at its heart, producing innovative thinkers who can adapt and thrive in the face of continuous change.

- Auckland's education system is radically transformed to address previous inequities and provide high-quality schools and kura at all levels across the region.
- The city fosters a future-focused curriculum that revolves around critical thinking and creativity, while supporting the development of traditional academic skills. Specialised training contributes to the weightless knowledge economy to provide a counterbalance to New Zealand's diminishing commodity export industries.
- The export education industry is supplemented with digital education, primarily for students in the Asia-Pacific Region, leveraging time zone advantages and drawing educators from its diverse local ethnic mix.
- The tertiary education sector is fully engaged with the city and their barriers with communities and businesses have been reduced. Arrangements linking tertiary institutions with public and private sectors have built on models successfully applied in places like Canada's Waterloo, Silicon Valley and Tel Aviv.
- Specialty training hubs and small institutes are distributed around Auckland, matching the industries clustered in each integrated precinct.
- An environmental education hub informed by Māori kaitiakitanga and manaakitanga practices attracts students both locally and globally and supports the city's conservation and environmental endeavours.

Scenario 4: An Innovative Region

Auckland is the engine of New Zealand's weightless economy.

- The region benefits from agglomeration effects by concentrating on areas of New Zealand's strength and potential, and addressing infrastructural barriers.
- Policy settings that have held back economic development have been addressed.
- Areas that could create a point of global or regional differentiation are supported, e.g. sustainable finance, creative sector, gaming, space systems and engineering, medical technology, and some sectors of artificial intelligence.
- The Māori and Pasifika economies are thriving, with innovative firms that are driven by multiple bottom lines and take a long-term view.
- Functional linkages and support structures for innovation have been established.
- Auckland's attractiveness is largely attributed to its high social cohesion, cultural diversity and quality of life, along with its world-class education system that is efficiently linked to private sector innovation.
- Immigration settings have been changed to account for the needs of the advanced economy. Multinational corporations are encouraged to base research and development activity in Auckland.
- Auckland is promoted as a test-bed for new urban and people-centric technologies.

Scenario 5: A Sustainable and Resilient Region

A resilient region where future generations thrive, and people are connected to and take responsibility for the environment.

- Transformative moves have been made across all sectors to improve efficiencies and reduce environmental impacts. The vision of a sustainable region, and the policies enacted, are supported by Aucklanders, who have taken an active role in behaviour change.
- Climate change and environmental sustainability are central to all planning decisions, particularly for long-lived infrastructure.
- Energy efficiency is the norm, in buildings, transport and delivery of services.
- The region supports a circular economy by reducing consumption, reusing and recycling, and minimising waste.
- Nature-based infrastructure is commonplace.
- Efficient resource management is promoted and supported by policies and investment in smart-tech solutions.

Scenario 6: A Region of Human-Focused Infrastructure, Transport and Housing

Future-focused innovation and infrastructure for better quality of life for all.

- Auckland has been a pilot city for a number of future- and human-focused technologies in infrastructure and housing, and has incorporated cutting-edge smart-city features for enhanced liveability.
- These have vastly reduced the region's environmental impact and have provided a better quality of life for all citizens by reducing inequities in housing affordability and transport accessibility.
- Significant investment made in digital infrastructure supports and connects innovation precincts and provides opportunities for high-skilled employment throughout the region, serving as a drawcard for high-tech industries.
- Digital technologies are fully embedded in the region's infrastructure, greatly increasing operational efficiencies.
- The radically transformed transportation system utilises cutting-edge, high-speed transport technology that addresses the issues of complex geography, and connects all of the city's precincts, regional hubs, and the neighbouring cities of Hamilton, Tauranga and Whangārei.

Scenario 7: A Region of Integrated Precincts

Auckland is a region of 'places with purpose'. People feel connected to and proud of local communities, and their cultural and industrial character, which provide a wide range of opportunities to live, work and play.

- Place-based strategies leverage competitive advantage through focused development, creating a sense of place and identity.
- Specialised innovation and cultural precincts are established across the region. Precincts each have a unique character that attracts innovators to form a cluster of complementary activities.
- Well planned and fully integrated precincts are also thriving communities offering educational, employment, cultural, social and recreational opportunities for residents, with a mix of housing and transportation options.
- Networking opportunities in precincts facilitate exchange of information, knowledge and ideas between different stakeholders.
- Localised training centres are matched to precinct specialisation.
- Core regional facilities (e.g. museums, stadiums, galleries, etc.) are strategically located. The activities of the CBD are balanced with activities in the periphery.
- Social amenities are equitably distributed, promoting equity in education, health, sporting, recreation and other services.
- Collective ownership models promote community empowerment.

Scenario 8: More Than a City: A Connected Region

Recognising and leveraging Auckland's wider regional assets.

- The region's diverse natural assets are protected.
- Decision-making ensures better linkages across the region.
- Participatory and deliberative democratic processes allow the voices of all Aucklanders to contribute more effectively to regional development.
- The Māori heritage across the region is promoted.
- Tourism is promoted across the region.
- Rural Auckland is recognised and supported, and productive soils are protected.
- Satellite towns are planned and promoted, giving them special character and identity.
- An effective four-city cluster has been established (Auckland, Whangārei, Tauranga and Hamilton).

Scenario 9: An Indigenously Inspired 'National Park City'

An overarching, integrating scenario that enhances natural, human, cultural and social capital.

- Auckland is a designated National Park City and region, inspired by the values of kaitiakitanga and intergenerational wellbeing.
- Conservation and regeneration of the region's natural taonga and rich cultural heritage are at the forefront of planning and decision-making.
- Tūpuna Maunga have been recognised as a World Heritage site.
- The region's numerous reserves and sanctuaries, marine parks, and conservation domains ensure that biodiversity is sustained and teem with native flora and fauna.
- Auckland is notably natural and green. Its parks and reserves flourish, and its harbours and waterways are clean and protected.
- Continuous corridors for biodiversity connect and enhance green and blue spaces.
- Green infrastructure is commonplace (e.g. permeable pavements, rain gardens, urban farms, community gardens, green walls, rooftop parks and gardens).
- The National Park City promotes outdoor recreation and learning, cycling, walking, kayaking, outdoor art and performance, and public green spaces in the city centre and throughout its connected precincts and communities.

How do we get there? The key enablers

- Auckland needs vastly more consistent, aligned and integrated planning across multiple agencies both in Wellington and Auckland, and an agreed long-term view of Auckland's future. Without agreement between key stakeholders on the desired destination, any road will do.
- A strong caucus of Auckland MPs working regularly with the Mayor is needed.
- Planning should occur within a framework of an overall aligned strategy looking out over generations, and structures should be created to ensure this.
- Auckland's future will be greatly enhanced by the creation of a single, whole-of-Auckland planning and strategy unit with integrated data capacities.
- The relative role of central and local government merits reconsideration.
- Auckland should take a lead in incorporating participatory and deliberative democratic methodologies into its democratic processes.
- Auckland should establish mechanisms such as a Commission for Future Generations to emphasise its commitment to the future.

APPROACH AND METHODOLOGY

Our brief from Auckland Unlimited aimed to take a long-term view of Auckland's potential as a sustainable, innovative and liveable city and region, considering its current trajectory, underleveraged assets and potential. The work has been guided by the vision and priorities established in the Auckland Plan 2050. It considers and expands on other past work relevant to Auckland's identity,¹ economic development and growth. It builds on work done by Treasury in 2017 on Auckland.² It has been coordinated with an update of that analytical work running in parallel and led by the Auckland Policy Office. This provocation also links with discussions underway on the future of local government.

We took a deliberative, future-focused and evidence-driven approach that adds to and complements these other initiatives. It looks over a longer and more holistic horizon and extends to broad domains such as governance, equity, culture, technology, innovation, and environmental requirements for a successful future for Auckland. While commissioned by Auckland Unlimited and shared with the wider Council group, the work is an independent analysis. Its primary purpose is to initiate discussion, and it does not claim to represent the views of Auckland Council or Auckland Unlimited.

The work utilised several futures methodologies designed to inform long-term strategic thinking.³ It involved wide-ranging expert and stakeholder engagement via a modified Shell interview approach⁴ (see Appendix) to explore how Auckland is perceived by its residents and other New Zealanders, and to identify the potential opportunities and barriers the city faces. Our brief was to develop a provocation about the future, not to develop a consensus document. Rather the report might serve as the basis of a series of more formal consultations and discussions.

The research team carried out in-depth structured interviews and focus groups with more than 120 participants. The purpose of these interviews was to help shape our view of the possibilities. Diverse and relevant insights into Auckland were gained from interviewees, including the region's rangatahi (young people), Māori, current and former leaders from different parts of the Auckland community across the region, and academic and industry experts from a range of disciplines.

The synthesis of interviewee and focus group perspectives and our own analyses led to the development of nine elements (termed scenarios) that together form a holistic vision for Auckland's future that takes in the breadth of important issues. Some aspects of the paper support current planning and strategy work, whereas others potentially challenge present systems. The scenarios intersect and synergise with each other, and all consider the issues of social, demographic, economic, climate and technological changes that Auckland will inevitably confront.

The scenarios presented here focus on progress towards a future city that will promote wellbeing for many generations to come. The year 2070 is roughly two generations away, and is sufficiently distant to reach beyond the automatic path dependency of many current initiatives.

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- 1 In 2019, ATEED (now known as Auckland Unlimited) released the Auckland Playbook, designed as a tool to help partners across the region communicate what makes Auckland unique and desirable. This is Auckland's narrative and positioning, which stems from significant research into Auckland's identity. It was intended to align communications, with the aim of increasing Auckland's reputation as a great place to live, work, study, invest and do business. The "Auckland Narrative" (which canvasses core trends and data) and the Auckland Brand Playbook (which examines perceptions and projections of the city and its emotional and rational appeal from a brand perspective) are key inputs into this work.
 - 2 In 2016–17, the Treasury led a research project to understand the role Auckland plays in the national economy with the aim of helping articulate the Auckland that New Zealand needs, known as the 2017 Auckland Story.
 - 3 The 'Futures Toolkit', presented by the UK Government Office for Science, can be found here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/674209/futures-toolkit-edition-1.pdf
 - 4 <https://foresightprojects.blog.gov.uk/2018/05/01/7-questions-futures-technique/>

While we do not focus on some of the urgent tactical decisions that are needed, and which require detailed analysis beyond the scope of this work (e.g. regarding the second harbour crossing or Ports of Auckland relocation), we point out the need to resolve these issues urgently in order to move forward effectively.

A provocation is foremost a conversation starter – a high-level, evidence-informed perspective on the possibilities. It is designed to stimulate thinking and conversation, and can help inform a long-term strategy, but it is not a detailed plan. This can only emerge after the ideas outlined here are considered in more depth by the full range of stakeholders (the public, central and local government, iwi groups, private sector, etc.), and more detailed analysis is conducted in critical areas. We suggest that this could start with deliberative democratic and participatory processes such as citizen assemblies developed to suit the New Zealand context, taking into account Treaty obligations and cultural values.

An extension of this project would entail deeper, more representative and formal consultation and formal analysis of aspects of this provocation.

CHAPTER 1 WHERE IS AUCKLAND NOW?



Tāmaki Makaurau⁵ is founded on a rich history of Māori and eventually European settlement, marked by both cooperation and conflict (see [Box 1](#)). As its Māori name implies, it is the ‘place desired by many’, boasting a beautiful natural environment of beaches, waterways, waterfalls and green spaces, and an extensive and fertile rural domain. The vibrant Auckland region, with its lively creative sector and growing innovation economy, has attracted businesses, education seekers, and a huge diversity of people looking to live and prosper in this unique environment.

Box 1. Auckland’s historical foundations

The ancestors of modern-day Māori first settled on the Auckland isthmus around 1350 AD. In the centuries that followed, multiple tribes formed prosperous settlements across the region. By 1750, Tāmaki Makaurau had become New Zealand’s wealthiest and most populous area, with Māori populations estimated to be in the tens of thousands. There was continuous competition for Auckland’s treasured isthmus and skirmishes between different groups.

Māori hoped the signing of the Treaty of Waitangi in 1840 would lead to greater stability. The initial positive partnership that founded post-Treaty Auckland was soon replaced by dispossession of land and erosion of Māori status and rights. It was not until settlements under the Treaty of Waitangi Act began in the 1980s that mana started to be restored and redress implemented.

Over the 180 years since British settlement, the mercantile nature of Auckland continued to evolve, and by the 1970s it was becoming the country’s financial capital. The region’s economic, demographic and geographical attractiveness led to increased inward migration from within New Zealand and overseas. The population grew rapidly, and the villages and towns agglomerated into the functional urban conurbation of the Auckland region from the 1980s onward. The Auckland of today is working to reconnect to its Māori heritage while accommodating a growing number of ethnicities and cultures.

These features have made Auckland New Zealand’s largest city and most populous region. Auckland’s population was estimated at 1.72 million in 2020 and is expected to reach 2 million by 2030 (Infometrics, 2021; Statistics New Zealand, 2021). Extending far beyond the Central Business District (CBD) and the sprawling urban suburbs surrounding it, Auckland spans from Wellsford in the north to Pukekohe in the south, and includes Waiheke and Great Barrier Islands, forming a complex geographical region that is 70 percent rural. This latter fact is often forgotten by the 90 percent of Aucklanders who live in urban areas⁶ and by decision-makers in central government.

The importance of Auckland for New Zealand

As New Zealand’s primate city,⁷ Auckland is unmatched in economic activity and socio-cultural influence. But unlike most primate cities, it is neither a national nor a state capital.⁸ This may play into how the region is perceived internally, externally and through a political lens. Its voice is significantly weakened by the absence of a strong multiparty Auckland caucus in Wellington that is able to put partisanship aside for the good of the region.

5 Tāmaki Makaurau is the Māori name for Auckland. Tāmaki Makaurau typically refers to areas in and around the metropolitan part of the Auckland region, but its geographical borders remain contentious. In the context of this report, Tāmaki Makaurau refers to the entire Auckland region.

6 See <https://worldpopulationreview.com/world-cities/auckland-population>

7 A primate city is the largest in a country or region, and is disproportionately larger than others. Primate cities are usually also the seats of governance for a country or province, which is not the case for Auckland.

8 Other primate cities that are not national or state capitals include New York, Los Angeles, Vancouver, Montreal and Amsterdam. Compared to Auckland, they generally have much stronger local government authority and roles.

Auckland is arguably New Zealand's only city of global scale and relevance, and is a critical asset to generate the cultural, social and economic energy that helps the country to thrive. It is New Zealand's most culturally and ethnically diverse region, containing the largest population of Māori and Pacific Peoples on the globe. The region's diversity distinguishes it from other New Zealand regions, which presents extraordinary opportunities if planned and managed well.

As the gateway to New Zealand, Auckland has an important role to play in facilitating tourism and migration, attracting foreign investment, and serving as a hub for businesses to prosper and compete internationally. It is difficult to overstate the economic importance of Auckland and its pivotal role in ensuring a prosperous future for all of New Zealand. With a regional gross domestic product (GDP) of \$122.8 billion, Auckland accounted for 37.9 percent of New Zealand's total GDP in 2020 (despite the impact of the pandemic),⁹ while employing 35.5 percent of New Zealand's workforce.¹⁰ Auckland's workers are on average 11.1 percent more productive than workers outside of Auckland, and even greater advantages are seen in industries such as finance, information and communications technology (ICT), and wholesale trade, which are largely concentrated in the Auckland region.¹¹

The Māori economy

The Māori Plan for Tāmaki Makaurau¹² set out by Auckland Council sets forth a vision for health and prosperous Tāmaki Māori (mana whenua and mātāwaka): *Te Pai me te Whai Rawa o Tāmaki Māori*. Māori are committed to this goal, with the Māori economy having contributed an estimated \$9.6 billion to Auckland's GDP in 2018, or 9 percent of Auckland's economy. Nationally, the Māori economy is growing rapidly and was worth \$68.7 billion in 2018, a growth of 60 percent compared to 2013. New Zealand Trade and Enterprise estimates that the Māori economy should reach an estimated \$100 billion by 2030,¹³ but it will achieve this earlier if the current growth trajectory continues.¹⁴

Māori make up 12 percent of the Auckland population and are on average much younger than Auckland's total population, so they represent a significant pool of future workers and entrepreneurs. Facilitating and supporting Māori entrepreneurship is a huge economic opportunity, but to harness this incredible potential, challenges of under-education and high disengagement (e.g. youth NEET¹⁵) must be addressed, as well as barriers to self-employment and to entering leadership positions.

Some of Auckland's challenges

Lack of strategic alignment in planning and decision-making

The question of where and how decision-making is best done is complex for a small nation dominated by a city of very different character to the rest of the country. But it is in the interest of everyone in New Zealand that Auckland thrives.

The Auckland supercity was formed in 2010 through the amalgamation of Auckland's regional council and seven local councils to form a unitary body, the Auckland Council (Department of Internal Affairs, 2011). This was done primarily to attempt to improve the efficiency and coordination of services. The

9 Authors' calculation with data derived from <https://ecoprofile.infometrics.co.nz/Auckland/Gdp/Growth>

10 Authors' calculation with data derived from <https://ecoprofile.infometrics.co.nz/Auckland/Employment/Structure>

11 Authors' calculation with data derived from <https://ecoprofile.infometrics.co.nz/Auckland/Gdp/Growth> and <https://ecoprofile.infometrics.co.nz/Auckland/Employment/Structure>

12 See <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/unitary-plan/history-unitary-plan/docs316maoridevelopment/Appendix-3.16.4.pdf>

13 See https://docs.wixstatic.com/ugd/f09098_5bf4b8058e8845038cd9b9d776c1c3f6.pdf

14 See <https://chapmantripp.com/trends-insights/maori-economy-soars-to-68b-a-growth-of-60-in-five-years/>

15 Not in employment, education or training.

previous local authorities had challenges but supported a sense of relationship between citizens and local authorities. The relative loss of relationship brought about by the supercity formation remains an issue for local body leaders.

Since the supercity was formed, significant progress has been made in many operational areas,¹⁶ though serious difficulties in strategic planning are evident. Local body governance has been confounded by tension between centralisation and devolution, with central government increasingly making decisions that affect how Auckland operates and individuals live in the region. The apparent hesitance of central government to grant decision-making and resourcing power to Auckland limits the ability of local governance to influence critical local issues. These issues are reduced in most other primate cities internationally as they are generally national or state capitals, or because local authorities hold much stronger powers. As a result, its long-term strategic capacities are weakened, and Auckland Council's dominant function has become service provision (e.g. some aspects of transport, roading, and utilities provision).

The disconnect between local and central government comes inevitably at the expense of integration and alignment of planning. Inherently, the perspectives, intervention logics and priorities of central and local decision-makers will often differ. The resulting planning can be contradictory (as was demonstrated over the cycling bridge debacle and continuing debates over the purpose, priority and nature of light rail) or paralysing (e.g. the persistent delays over decisions surrounding the second harbour crossing and the location of the Ports of Auckland). The focus has been predominantly on the short term, and there is little evidence of a shared vision or clear intent for developing Auckland as a socially cohesive, economically innovative and sustainable global city.

These issues compromise the ability of civil society and the private sector to plan for the future. Auckland's uniqueness and complexity of issues suggest the need for strongly aligned governance and planning arrangements between central and local authorities. New models are needed.

The challenge of perception: from the outside, from the inside

Auckland has many exceptional attributes and assets, and its continually growing population indicates that it is 'a place where people want to live'. However, the value proposition of Auckland for the rest of New Zealand is often not recognised or understood.

Many people in the rest of New Zealand perceive Auckland as a 'city of problems'. There are obvious challenges that fuel this perception: the high cost of living (including housing and public transport costs),¹⁷ traffic congestion, infrastructure problems (including inadequate public transportation networks), governance issues, law enforcement biases, and Auckland stereotypes (the slang term "JAFA", for example).¹⁸

Within Auckland, people are proud of their local communities but generally lack a broader sense of civic or regional pride. These communities are disconnected from one another, which means that the region shares no common identity or purpose. People in Flat Bush and Dairy Flat may not see themselves as part of the same city.

16 For example, infrastructural development and the 2012 launch of a region-wide transport ticket covering multiple modes of public transport.

17 Auckland has the third most expensive public transportation fares in the world. See <https://www.greaterauckland.org.nz/2018/06/11/aucklands-expensive-pt-fares/>

18 JAFA, an acronym for "Just Another F***ing Aucklander", is a New Zealand derogatory term for an Auckland resident. The term alludes to the alleged arrogance of Aucklanders and a perception that Auckland is a drain on New Zealand's national resources (Auckland History Initiative, 2021).

The productivity challenge

Although Auckland's total economic contribution to New Zealand is greater than its employment share, agglomeration effects have been weak,¹⁹ showing less productivity uplift than could be reasonably expected compared to other primate cities across the globe. London's economic activity accounts for 23.6 percent of the UK's GDP but contains only 13.4 percent of its population; Copenhagen accounts for 40.6 percent of Danish GDP and contains 31.6 percent of the total population; the Paris Region accounts for 31.2 percent of the French GDP and contains only 18.3 percent of the population.²⁰ The Auckland region's economic activity accounts for 37.9 percent of New Zealand's total GDP and employs 35.5 percent of the national workforce.

Because Auckland is less productive than these other major cities, many in central government have downplayed the importance of agglomeration effects rather than asking the important question – why is Auckland not more productive? Agglomeration is a well-recognised economic principle, and it is therefore important to understand why Auckland is not demonstrating it to a greater extent.

Population growth

Changes to New Zealand's immigration policy starting in the 1980s led to a population boom. Auckland's population increase over recent years has been driven mainly by international migration (Statistics New Zealand, 2018). With Auckland being New Zealand's gateway, it is logical that most migrants will settle in the city, and particularly in areas where there are higher concentrations of people from their culture. The region currently hosts over a third of New Zealand's population (about 34 percent), of which about 39 percent were born overseas. This has led to Auckland becoming New Zealand's most ethnically and culturally diverse region, adding to its vibrancy and richness. It is not clear that there has been adequate planning for the optimal physical, social and cultural infrastructure needed for a population with a very different ethnic profile to the rest of New Zealand.

Auckland has been growing at the fastest rate of any Australasian city in recent years, and its growth rate is significantly above the OECD average. The pace of growth in the last decade has put pressures on infrastructure, service and goods provision, and not least on the housing market.

The changing age structure of Auckland also needs to be considered. Auckland's population is younger than the rest of New Zealand, reflecting its importance in employment and education, but it is ageing both numerically and structurally. However, over the next 30 years, older people will make up a greater proportion of Auckland's growing population (Spoonley, 2020). This will have multiple impacts across Auckland in terms of housing, employment, education and healthcare, as well as community makeup and cohesion.

Business as usual: Where are we heading?

Considering the challenges Auckland is currently facing, the opportunity costs of continuing with a business-as-usual approach are high. It denies taking advantage of clearly under-leveraged opportunities and removing barriers to progress. The risks of inaction can have intergenerational consequences.

19 Agglomeration effects refer to the efficiencies derived from firms and households being located close together. Agglomeration benefits include deeper and wider labour markets for employees and firms, greater specialisation in the supply of inputs to production, and knowledge spillovers through local networks. Firms in the same industry often cluster together in distinct precincts in order to take advantage of the benefits of agglomeration and create their local ecosystems. In doing so, they increase the incentives for other firms in the same industry or related support services ('localisation economies'); in turn this attracts firms from other industries to locate in the city ('urbanisation economies'), creating a self-reinforcing positive feedback loop (Greenaway-McGrevy et al., 2020).

20 Data derived from https://ec.europa.eu/growth/index_en

Ageing infrastructure, poor transport and housing options

Auckland will always be confounded by its geography. Nevertheless, it has grown and spread without adequate consideration of how its transport systems should connect the sprawling outer suburbs to the places where people work. Yet we are currently building, and even still planning for, infrastructure to support transport technologies designed for the 1950s or even earlier. If planning is not geared towards a smarter city and region and smarter transport systems of the 2050s and beyond, Auckland will inevitably fail to compete on a global scale. This could lead to economic stagnation or even decline.

Risk of a ‘hollowed out’ Auckland

Housing unaffordability and transport problems have had a disproportionately high impact on lower-income workers, of whom some are forced to live far from their places of employment. Despite high rates of inward migration and a rising population overall, the region has seen negative net internal migration in recent years as young people and young families opt to live in other parts of New Zealand where house prices are cheaper and commute times shorter.²¹ There is also a growing trend of young people heading overseas for employment opportunities and more affordable living. This “brain drain” saps the available talent pool, and harms Auckland’s employment market, potentially making the region less attractive for international investors to set up operations. Left unaddressed, the precious resource of young talent could become ever more scarce.

Growing inequality

Economic inequality is obvious in Auckland, and relates closely to unequal access to quality education and healthcare. The benefits from the region’s economic growth and development are shared unequally, with some parts of the city facing intergenerational cycles of economic deprivation. Significant action is needed to break these cycles for the wellbeing of vulnerable groups and Auckland as a whole.

Declining social cohesion

Auckland also faces significant threats to its social cohesion if the factors described above are not addressed. Social cohesion is not just about different ethnicities ‘getting along’; it is about being able to work constructively together towards societal goals, even if members of society hold different world views. This is under threat as polarisation increases over matters ranging from immediate concerns (e.g. vaccine mandates) to longer-term issues such as constitutional change.

Climate change impacts

The Intergovernmental Panel on Climate Change (IPCC) warns that some major climate changes are now inevitable (IPCC, 2021). Human activity has undeniably changed Earth’s climate and the impacts are already becoming apparent in New Zealand. Sea-level rise in the Australasian region has now exceeded the global average rate, while in New Zealand there has been 1.1°C of warming since 1910 (Meyer, 2021). More extreme and prolonged weather events are also likely in coming decades. According to the 2021 IPCC report, high temperatures are expected to lead to fires and drought in the east and north, and heavy rains to lead to floods in the south and west (IPCC, 2021).

Auckland’s current trajectory would leave it vulnerable to the impact of climate change in multiple ways. Sea-level rise and extreme weather events are likely to threaten much of its coastal infrastructure and related housing stock. All development projects and infrastructure plans need to consider their adaptability to climate change, as well as their contribution to it in terms of carbon and environmental footprint. Beyond these direct effects, climate change will drive substantive changes in travel

21 See <https://www.nzherald.co.nz/nz/home-truths-exodus-young-families-flee-auckland-for-cheaper-housing/RVICW6FWCZC5PLAEDRMEZER4S4/> and <https://www.newzealandmovers.co.nz/blog/property-crisis-1-in-3-have-looked-at-leaving-auckland>

preferences (thus impacting on tourism), the shape of the food industry with a decline in consumer preferences for ruminant products (thus impacting how food is produced locally), and potentially in supply line arrangements (which could be particularly significant in terms of fuel and food provision). Business-as-usual planning is not sufficient to ensure a positive trajectory for Auckland, which could even enter a spiral of decline such as that seen in some North American cities (Box 2).

Box 2. Auckland in 2070 – the business-as-usual trajectory

- Infrastructure development, already deficient, fails to keep up with demand (population growth, changing economy and nature of work, lifestyle preferences), and is not adequately focused on future technology or climate change.
- Transport issues mean that the greater Auckland region remains disconnected, increasing existing inequities and holding back productivity.
- Housing unaffordability and liveability issues (e.g. transport and congestion, living near good schools and amenities) lead to loss of young families and young talent from Auckland.
- Access to high-quality education and healthcare remains unequal, and disparities worsen.
- Income and wealth disparities increase as some areas remain disconnected from Auckland's innovation sector and higher-income jobs, further marginalising some communities and straining social cohesion.
- Opportunities in the knowledge and innovation economy are not sufficiently leveraged. Foreign direct investment is limited, and large multinational companies do not establish in New Zealand because they cannot draw on sufficient local talent or bring in talent from overseas (due immigration problems, affordability, etc.)
- The city is showing the characteristics of a hollowed-out city in a spiral of decline.
- Climate change is not well addressed.

Building on our assets – a common vision for the future

“Ki te kāhore he whakakitenga ka ngaro te iwi

(Without vision, the people will be lost).” – Kīngi Tāwhiao Pōtatau te Wherowhero

What are the characteristics of a future Auckland that would inspire support from Aucklanders (present and future) and the rest of Aotearoa-New Zealand? There are many possibilities for a positive and sustainable future for the region that encompasses its unique people, culture, economy and magnificent natural environment. Once we can agree on what we see as a desirable future, then a plan can be developed for how to get there. The path won't be straightforward. It will require genuine public engagement, longer-term thinking, and the capacity to make decisions on investments that may not produce immediate benefit, but will set us up for a better future.

The way the Climate Change Commission operates provides a useful alternative framework for planning for the future: a destination has been set, and based on this, plans have to be developed to reach that destination from where we are now. Decision-making across multiple sectors needs to align with those plans, in order to maintain the direction of travel regardless of the whims of the political cycle. This report challenges Auckland to think similarly about what Auckland could be.

“Auckland is like that dysfunctional friend you have who has a lot going for them, but doesn't quite recognise their potential.” – An interviewee

Thinking across generations

Auckland (and the rest of New Zealand) is currently in the fourth stage of the ‘Demographic Transition Model’²² marked by low birth and death rates, resulting in an ageing population (Spoonley, 2020). While Auckland as a whole will age, ageing patterns will differ across our diverse ethnicities. But even so, Auckland will continue to have more than 20,000 births each year and the pressures on amenities such as health and education will continue to grow. An infant born in 2022 will enter the workforce likely between 2040 and 2045 and probably live into the 22nd century. They may well not leave the workforce until 2090 or later. Their own children will be born between 2040 and 2060. Climate change is a real threat for them, and many other transitions and transformations will occur in their lifetimes that must be considered now (Gluckman, 2021). As will be discussed in [Chapter 3 – Enabling change](#), we need to make specific efforts to engrain intergenerational thinking; for example, by establishing a Commission for Future Generations to ensure their interests are properly taken into account in decision-making. Moreover, any analysis and forethought for the future must consider a range of megatrends that are expected to affect Auckland’s current and future generations, regardless of the path forward. This makes them an important consideration in the planning and decision-making process. Some of these trends are listed in [Box 3](#).

Box 3. Megatrends

Auckland’s future over a generation or more must be considered in the context of megatrends. These are long-term driving forces that are observable now and predicted to have a global impact, which will in turn impact on New Zealand and Auckland. These include:

- Accelerating technological change
- Hyperconnectivity by virtual means
- Changing nature of work
- Growing resource scarcity and more vulnerable supply lines
- Climate change
- Environmental degradation
- Changing security environment
- Demographic change
- Growing risks to social cohesion
- Changing global power and geostrategic relationships
- Changing nature and diversification of education and learning
- Growing expectations by citizens
- Shifting health needs, new health technologies
- Changing governance systems.

Modified from https://knowledge4policy.ec.europa.eu/foresight/tool/megatrends-hub_en#explore

22 The Demographic Transition Model (DTM) is based on historical population trends of birth rates and death rates, and suggests a country’s population growth transitions through stages of the country’s economic development. See: <https://populationeducation.org/what-demographic-transition-model/>

CHAPTER 2 SCENARIOS FOR AUCKLAND'S FUTURE



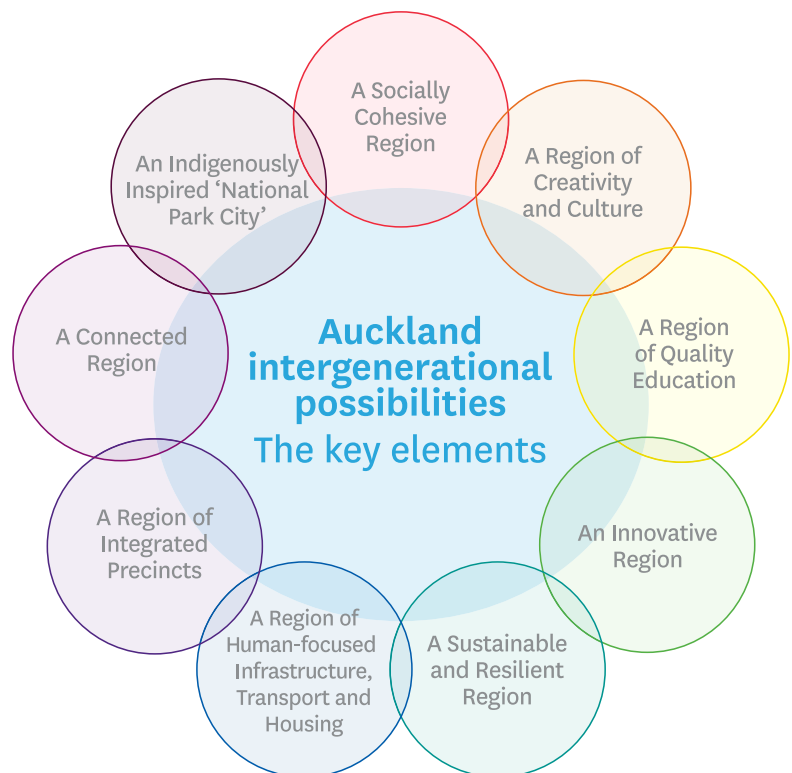
This provocation starts by exploring nine interconnected scenarios that illustrate how Auckland's assets and potential might be harnessed for a sustainable, resilient and thriving city of the future. They are underpinned by five primary considerations:

- i. A commitment to a coherent, long-term vision integrating human, social, environmental, economic and cultural domains.
- ii. An intergenerational perspective.
- iii. A positive and constructive approach to build off the efforts to date to ensure Auckland is a thriving global city meeting the needs of all its citizens, thereby strengthening New Zealand as a whole.
- iv. Building off Auckland's remarkable diversity of peoples and its significant Māori, Pacific and Asian populations.
- v. Identifying and leveraging the untapped potential of Auckland's many assets.

Together, these scenarios lay out a holistic vision of a path based on a clear sense of Auckland's unique identity and purpose. Interwoven in and underpinning our analysis is Te Tiriti o Waitangi and the recognition of mana whenua and mātaṃwaka as critical partners in building a sustainable future for Auckland. The vision upholds Auckland's indigenous history by weaving Māori culture and worldviews into foresight and planning, and by thinking trans-generationally.

The nine scenarios for discussion are:

1. A Socially Cohesive Region
2. A Region of Creativity and Culture
3. A Region of Quality Education
4. An Innovative Region
5. A Sustainable and Resilient Region
6. A Region of Human-focused Infrastructure, Transport and Housing
7. A Region of Integrated Precincts
8. A Connected Region
9. An Indigenously Inspired 'National Park City'



All these scenarios require deeper exploration and consultation, but they present what Auckland *could* be if we can develop a shared vision and are motivated to achieve it. The scenarios are not independent of each other – by considering each with respect to the others in a systems-thinking approach, they can be combined into an integrated whole. There is a need to then consider the enablers that would allow such optimistic scenarios to be reached. This in particular requires coordinated planning, and aligned governance and management, which is discussed in more detail in [Chapter 3](#).



Scenario 1 **A Socially Cohesive Region**

What is social cohesion and why do we need it?

Social cohesion has different meanings in different contexts. For our purposes, it is defined broadly as the presence of high levels of trust both between groups within the society as well as in the institutions of governance, a sense of belonging, and a willingness to participate and help others for the good of society as a whole. This value set is essential if society is to be resilient to shocks and stresses, and to adapt positively in the face of potentially disruptive change. Social cohesion is therefore critical for a city and region to thrive when facing an uncertain future.

Social cohesion relies on people feeling connected to others in their community, perceiving their society is fair, and feeling able to participate in societal decisions that affect them. It is strengthened when all members of society are allowed to express their individual identities while feeling valued and included as an important part of a greater whole. These things are supported by institutions of health, education, justice and governance. This means giving everyone equal access to opportunities in education, employment, health, recreation and participation in community activities and decision-making, allowing them to trust in the institutional processes and in each other.

When one examines the various factors that contribute to strengthening or weakening social cohesion (Bardsley et al., 2021), it is striking how vulnerable Auckland may be. Policymakers need to be more aware of these risks given the city's diversity of cultures and worldviews, the relative ghettoisation of some communities, the growing economic tensions exacerbated by the high cost of housing, and the often confused decision-making which can undermine trust in governance processes.

Where is Auckland now? Opportunities and barriers

Tāmaki Makaurau is often loosely translated as the place desired by many. Those many – ngā tāngata, the people – have shaped the city and region, and are its greatest asset. The region has flourished from the many cultures and identities that have now been drawn to it.

Māori foundations

Tāmaki Makaurau is steeped in Māori history, both rich and complex. Many tribes have fought with each other for prominence over the years, and Auckland Council now recognises 19 iwi authorities with territorial affiliations to the region. In practical terms this creates some difficulties in dialogue. Auckland's unique indigenous history and culture needs to be understood and celebrated as a huge part of who we are yet is surprisingly under-emphasised throughout the city and its surrounds. Part of this is recognition of historical conflicts between iwi and following British settlement, which have left scars that are still healing. On the surface, Auckland seems to enjoy a high level of social cohesion, but there is much more work to be done, particularly given the intergenerational struggles Māori have faced and continue to face.

Aotearoa is in the midst of a strong resurgence of Māori identity, culture and language, accompanied by expansion of kura and a thriving Māori economy. Questions of governance in relation to Te Tiriti o Waitangi, across New Zealand and particularly in Tāmaki Makaurau Auckland will be a central part of the discussion on New Zealand's democratic future in coming years.

Pacific cultural influence

Pacific peoples' relationship with New Zealand stems from the geographical proximity of their homelands and historical, economic and political links between the countries. They also have a special bond with Māori through their shared indigeneity to Te Maona nui a Kiwa (the Pacific Ocean) (Lopesi, 2018). Auckland's large population of Pacific Islanders grew following waves of migration after World

War II from the former New Zealand territories of Western Samoa, Niue and the Cook Islands, and from Tonga and Fiji. They filled labour shortages and at the same time transformed parts of Auckland by suffusing Pacific cultures into the communities. These Pacific cultures, in all their linguistic and cultural diversity, are a significant part of Auckland's identity.

Over time, however, Pacific peoples have become somewhat segregated in South and West Auckland, and face significant economic, educational and health inequities. We cannot celebrate Auckland being a Pacific city (boasting Polynesian culture) while Pacific people continue to be marginalised. The positive impacts of Auckland's diversity are reduced by this spatial separation (Maré & Poot, 2019).

"Pacific parents in the 1970s used to bring up their children to be doctors and nurses in New Zealand. Migrant parents today just aim for their children to get a job....The dream is still able to lure people here, but the dream is now one of dependence and entitlements, not independence."
– Wesley Talaimanu (former CE of Fonua Ola, quoted in the Guardian) (Roy, 2018)

The Pacific population of New Zealand is younger than the overall population (as are Māori), giving greater importance to youth voices (Ward et al., 2010). As the rest of the country ages, Pacific and Māori increasingly provide a larger proportion of youth – they are our future, and they need to be provided every opportunity to succeed and excel.

"In a country that is otherwise aging – the median Pākehā population age is 38 – one of the young and bright spots is the youthfulness of Māori (median age 23.9) and particularly of Pacific people (median age 22.1). However it might play out, the future will increasingly rest in the hands of Pacific, Māori and Asian peoples, and they will lift an even greater share of growing and sustaining New Zealand's economy, society and way of life." – (Salesa, 2017, p 1)

The Asian Dimension

Peoples from South and East Asia have lived in Auckland for well over a century, and there is a significant New Zealand-born population of Asian descent. But since the early 1990s, countries of Asia have become important sources of new migrants to New Zealand, particularly Auckland. In 1991, about 5 percent of the Auckland population identified with an Asian ethnicity. In the 2018 Census, that proportion rose to 28.2 percent and represents the greatest concentration of Asian peoples of any New Zealand region (Auckland Council, 2018). This rapid growth was largely driven by high levels of immigration in the mid-1990s and again since 2001 (Auckland Council, 2018).

'Asian peoples' is a very broad classification, and it encompasses a wide range of migrant origin countries and ethnic identities. The two largest migrant origin countries are China and India, representing 36 percent and 32.3 percent, respectively, of the Auckland Asian population (Auckland Council, 2020). Within national identities such as Chinese, Korean and Fijian Indian, there also exist many more specific ethnic identities such as Tamil, Cantonese and Sichuan (Friesen, 2015).

The broad Asian population are an important part of the demographic makeup of Auckland. It is the second largest and fastest growing ethnic group in Auckland, contributing to the vibrant ethnic makeup of the region. Like the Māori and Pacific populations, Asian peoples are younger than the Auckland population as a whole (Auckland Council, 2018). They tend to attain a higher level of educational qualification, but lower participation rates in the labour force and a slightly higher unemployment rate which may inhibit rapid integration. These lower participation rates may be related to a disproportionately younger population (aged 20–34), many of whom are engaged in tertiary study, slower economic integration amongst some groups, and gendered attitudes towards wage employment (Friesen, 2015).

Population projections by Statistics New Zealand indicate that the proportion of Asian peoples living in Auckland is expected to increase to 35 percent by 2038 (Auckland Council, 2018) continuing to shift Auckland's multi-ethnic environment, "creating new and different spaces and sense of place" (Friesen, 2015). There is a need to ensure that these diverse groups integrate well with the rest of the Auckland population and are provided with the opportunities to thrive culturally, socially and economically.

Growing superdiversity

Changes to New Zealand's immigration policies starting in the 1980s have had a significant impact on Auckland's demographic makeup and have boosted its ethnic and cultural diversity. Approximately a quarter of New Zealand's population was born overseas. Auckland is considered 'super-diverse' by international standards (Cain, 2017).²³ It is home to more than 100 ethnicities speaking more than 150 languages (Education Review Office, 2018).

Auckland's multicultural landscape is typically viewed in a positive light by politicians and other decision-makers, who are aware that the migrant population has made an important contribution to New Zealand's economy (Hodder & Krupp, 2017). The contributions of migrants to Auckland's economic development are notable and directly impact the region's economic resilience (Hodder & Krupp, 2017). Auckland's mix of migrants of different ethnicities brings skills that complement native New Zealand talent. Their connections with their home countries serve to increase New Zealand's global connectedness.

Recognising all abilities

Inclusion is a critical prerequisite for social cohesion and is often thought of in terms of marginalised or minority ethnic groups, but it applies equally to people with disabilities. People who identify as having some form of disability account for almost a quarter of the New Zealand population, a large number of whom reside in Auckland (Ministry of Health, 2018; Statistics New Zealand, 2013). Compared to non-disabled people, these people are typically older on average, have worse outcomes in their economic and social lives, are less likely to live in a safe, comfortable home, and are less likely to have trust in public institutions (Statistics New Zealand, 2020b). Yet disability is an area often overlooked in Auckland, where the planning and availability of services and infrastructure targeted towards the disabled community remain incomplete and inadequate. When planning fails to recognise all abilities, people with disabilities are further marginalised and excluded from activities that promote social cohesion, including a choice of where to live. This has flow-on effects on the lives of caregivers, who often feel abandoned by the system and lose trust in decision-making bodies.

Fragile cohesion

Auckland has thus far fared relatively well in maintaining harmony in an increasingly multicultural society, even in the face of rapid change. But social cohesion is always fragile and needs to be nurtured. It can erode rapidly through misinformation and social media-facilitated polarisation, producing vulnerabilities, heightening conflict and undermining collective effort, as is beginning to be seen in the pandemic. Further, the rapid shifts in cultural, ethnic and religious demographics that Auckland has experienced has the potential to create tensions arising from fear of change and loss of the status quo, which has historically privileged some more than others.

There have been moves towards improving engagement and inclusiveness of diverse groups (e.g. the launch of the Ministry for Ethnic Communities in 2021), but Auckland remains a region of fragmented

23 Auckland was first labelled 'super-diverse' by Paul Spoonley; see https://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle_uid=04929314-54B9-4A9B-A200-FF43C20C366E

ethnic communities. While the vast majority of Aucklanders believe that having a sense of community is important, a substantially smaller proportion (roughly half) actually experience this vibe in their neighbourhood (Nielsen, 2018).

The responses to Covid-19 vaccination and mandates highlight the fragility of social cohesion. Evidence suggests a close relationship between belief in disinformation and a loss of trust in societal institutions (Freeman et al., 2020). The ethnic variation in vaccine uptake, while in part driven by policy decisions, also reflects the reality that the system has not done well by some, and in turn this attitude has many spillover effects for society as a whole.

A vision of Tāmaki Makaurau Auckland in 2070: A socially cohesive city and region

In the Auckland of 2070, social cohesion is strong because citizens experience a sense of community, identity, belonging, fairness and trust. Cohesion within and between Auckland's distinctive communities, some of which are now organised around integrated precincts that facilitate exchange of cultural knowledge and a diversity of ideas and information, help drive cooperative and constructive action. This has boosted Auckland's resilience to economic shocks and stresses.

Auckland's Māori foundations and its complex ethnic and cultural diversity is fully welcomed and celebrated. The spiritual, ancestral, cultural, customary and historical significance of Māori in Tāmaki is prominent in the city's identity. Māori worldviews emphasise social cohesion, and the city has also embraced the concept of *kotahitanga*, meaning togetherness, solidarity and collective action. This is supported by weaving a tikanga Māori approach appropriately, but with respect for universal democracy, into inclusive decision-making processes, allowing a plurality of voices to be heard and ideas to be deliberated.

The public actively participates in adaptive planning for the city and region, and people are proud of their communities. The concept of *kaitiakitanga* – stewardship of the natural environment and intergenerational reciprocity – has been woven more consistently into strategies and planning such that decision-making has shifted beyond the political cycle, allowing for greater long-term gains. Māori culture and worldviews encourage us to look beyond the individual and the present moment to the wellbeing of the collective and of future generations.

New Zealanders in general understand the benefit of diversity, seeing that there is much to learn from other cultures that can enhance their collective wellbeing, and recognise that Tāmaki Makaurau is a particular asset in this regard. Auckland's diverse workforce of 2070, including its increasingly home-grown talent brought up in its unique educational and economic precincts, is seen as a major asset in the global marketplace. Increasing multiculturalism has continued to shape the region's identity, and Auckland has fully embraced this richness. Its diverse people bring different perspectives and an array of creative talents and skills that drive innovation and economic development.

Tāmaki Makaurau has worked through its constitutional issues, giving Māori an appropriate footing in decision-making through what has been described as 'an indigenously inspired Western democracy'. Intercultural capability has been built over many years, creating a new model for navigating increasingly complex cultural circumstances.²⁴ This has been enabled through the

24 Te Ahukamarū Charles Royal, Koi Tū webinar: Intercultural capability, the Treaty of Waitangi, science and Mātauranga Māori. 10 Nov 2021. See <https://informedfutures.org/webinar-intercultural-capability-treaty-of-waitangi-science-matauranga-maori/>

establishment of firm partnerships between the public sector and iwi, along with other cultural and ethnic groups (Pasifika, Asian and other migrants), and in cooperation with businesses and civil society.

Changes have come about through policies developed based on a holistic understanding of the complex social, cultural and economic contexts, and the many factors that influence both vertical and horizontal trust across the population. The policies and actions represent not just a 'whole of government' approach, but also a supported, community-led approach that ensures the core elements of social cohesion – belonging, participation, inclusion, recognition and legitimacy (Spoonley et al., 2005) – so these are continually enhanced. Concerted effort has kept at bay the risks of discrimination, isolation and exclusion.

The broader diversity of culture in Auckland is recognised in the shape of its housing, amenities and cultural activities. Auckland has a true sense of multiculturalism, and Aucklanders feel comfortable and take pride in this diversity. Cultural barriers have been broken and while identities are sustained, transcultural competencies are the norm. The region's multiple ethnicities and cultures are fully engaged in both deliberative and participatory democratic mechanisms wherein complex issues that touch on contested values are respectfully explored.

Policies and plans have been enacted to make Auckland truly inclusive to people of all abilities. This has meant ensuring that infrastructure investments embrace universal design principles, and the needs of people with disabilities are incorporated into the design of urban environments, roads, schools, public facilities and transport accessibility (Spoonley et al., 2016). People with disabilities that once caused them to be marginalised are now able to find appropriate housing and schools where they want to live, and enhanced opportunities to participate in all aspects of community life. They are seen as valuable contributors to the richness of society.

While Auckland has grown, it has adopted strategies so that connections among its people are many and deep, and through the diverse cultures these also reach out and connect Auckland to the world.

Further considerations and questions

Understanding the dynamics that either bolster or undermine social cohesion is fundamental for developing policies to enhance resilience in the face of current and future challenges. Inevitably many will be on a scale that will require cooperation across cultures, communities and worldviews. Identifying and deliberating on the factors that are most important, and how they interact, could allow communities, private sector businesses, non-governmental organisations and governmental actors to collaboratively work towards positive change.

Many Aucklanders have intersecting circles of identity, so we may need to start thinking differently about issues of identity and power. Will Auckland have a more pluralistic identity? We know that feeling comfortable in one's identity is empowering, and that encouraging this can reduce tension between identities and cultures, and increase horizontal trust. We will need to find ways to celebrate individual cultures and identities, while engendering pride in our cohesion.

Strategies for social cohesion must be community-driven, but government-enabled. Policies and action need to foster and encourage high achievement in all communities and cultures, while valuing all labour and ensuring dignity in meaningful work. Can we create a culture shift from the idea that the 'Tall Poppy' should be cut down, and instead encourage the high achievers and support the

aspirations of every community and individual? Every child should see unlimited potential, no matter their background. An example to potentially expand upon is the Pūhoro STEM Academy, which encourages rangatahi Māori into STEM fields by creating pride in culture. The programme provides “a transformational springboard for Māori secondary students providing a pathway towards tertiary study and potential careers in science and engineering”.²⁵

²⁵ <https://www.puhoro.org.nz/>

Scenario 2 A Region of Creativity and Culture



The value of creativity and culture

The intercultural capability and inclusive, multifaceted decision-making of a socially cohesive city and region (**Scenario 1**) is a springboard for fostering Auckland as a city of creativity, culture, sports and recreation. Creativity and culture are essential features of a vibrant city. Creative pursuits bring people together and breathe life into communities. Expressions of culture provide educational experiences and help people understand and appreciate differences. Music, language and art link cultures, and help to support social cohesion that contributes to community wellbeing.²⁶ Sports, both recreational and professional, add to a city's identity and encourage people to use physical activity and social interaction to enhance wellbeing.

In addition, fostering creative skills generates value across the economy. Not only does the creative sector provide jobs for creatives (artists, musicians, performers, etc.), but creativity also brings innovation to a wide range of industries. Creativity and culture also contribute to innovative thinking and collaboration, which are critical for sustainable urban development.

“As a source of exchange, innovation and creativity, cultural diversity is as necessary for humankind as biodiversity is for nature” – Universal Declaration on Cultural Diversity (UNESCO, 2001)

Where is Auckland now? Opportunities and barriers

Auckland is already home to many creative industries and creative people. In particular, the strength and diversity of the music industry in the city led to Auckland being designated a UNESCO City of Music in 2017, thus becoming a member of the larger UNESCO Creative Cities Network (UCCN).²⁷ The UCCN was established in 2004 and promotes cooperation among cities that put “culture and creative industries at the heart of their development plans”. This important accomplishment deserves higher visibility and consequent support for creative industries in Auckland so the designation can be upheld. This has not consistently been the case.

It is interesting to note that the process of achieving the UCCN designation brought to light some of the issues that this strategy seeks to address, particularly the lack of unification of the many important pieces of work that have been and are currently being pursued.

“The rigorous application process (approved by the Mayor and Governing Body) was in itself a worthwhile task, finding out along the way that Auckland City commits more budget to music than any other artform by quite some margin...However, even within the Council whanau this was largely carried out by various departments and organisations individually rather than in a unified manner.”

– Mark Roach (Reid, 2019)

The original draft Auckland Plan 2050 did not make any reference to arts or culture. The final plan considers these briefly under Focus area 7. There are, however, some very good existing strategies for the creative sector (e.g. Toi Whītiki – Auckland's Arts and Culture Strategic Action Plan, and the Auckland Music Strategy: Te Rautaki Puoro o Tāmaki Makaurau 2018-2021), but they are not well known or linked to a broader vision for Auckland's future.

Innovators in Auckland are already demonstrating how creativity can shift our economic base. Creative thinking is evident in the mixing of arts, science and digital innovation in the city's burgeoning gaming sector and other technological advances at the human-machine interface, as exemplified by the

²⁶ See <https://www.arts.gov/about/news/2021/new-report-examines-role-arts-and-culture-fostering-social-cohesion-and-community-well-being> and <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4021113/>

²⁷ See <https://en.unesco.org/creative-cities/auckland>

success of Soul Machines’ ‘digital people’²⁸ and other cutting-edge technology companies based in Auckland. Some organisations that already back creativity hubs in Auckland include The Arts Foundation, GridAKL and the FOODBOWL (part of New Zealand’s Food Innovation Network).

Sports and recreation are also critical to Auckland’s wellbeing, and central to its identity and culture. Sporting success by a city team often gives a city a unifying sense of pride and identity. New Zealand has a recreational culture, and Auckland is in a great position to foster this, but its facilities are not currently accessible to all. Stadia and performance venues help give a city and region identity and attract major events that showcase a global city. Auckland is in need of adequate facilities across the region, but must also definitively decide where a major stadium (or stadia) of international quality will be located.

28 See <https://www.soulmachines.com/>

A vision of Tāmaki Makaurau Auckland in 2070: A region of creativity and culture

In the decades leading to 2070, Auckland has extended its creative reach far beyond arts and culture – it has integrated creativity into social, technological, environmental, political and economic activities. Epitomising Auckland’s creative city character is the capacity of its people to address issues in inventive ways from multiple perspectives, appreciating the value of cultural diversity to enhance their lives. This also means its workforce is highly adaptable and innovative.

Auckland’s creative and cultural elements have been integrated into people’s everyday lives, and its unique cultural heritage and te reo Māori is celebrated in outdoor spaces, on public transport, and in community centres. The design of buildings, public spaces and developments acknowledges and connects to the cultural landscape and mana whenua. A mana whenua cultural centre takes prominence in midtown.

Programmes like Creative New Zealand’s Creative Communities Scheme²⁹ have been going strong for years, sponsoring cultural events and projects throughout the region. Cultural and creative institutions have become transformative agents, supporting social inclusion and intercultural dialogue (reinforcing [Scenario 1: A Socially Cohesive Region](#)).

Auckland’s cultural diversity is what UNESCO refers to as “a living, renewable treasure” (UNESCO, 2001), but this taonga is not unchanging. The government has taken an adaptive approach to multicultural expression and celebration of the growing number of ethnicities and ethnic mixes in its population. The people of Auckland feel comfortable expressing their own cultural and/or religious identities (and often their intercultural identities) while also participating in and valuing the wider New Zealand society.

Auckland has established a number of unique precincts that not only showcase the city’s creative talent, its Māori heritage and its multicultural identity but also support thriving industries unique to each area. These industry clusters (performance and entertainment, music, film, gaming and others) reinforce the precinct identities and deliver positive social outcomes, including a strong economy and a range of highly skilled jobs that continue to draw talent from the co-located educational institutes. Creative launchpads, incubators and network hubs within precincts across Auckland facilitate the exchange of ideas and provide opportunities for people to work on

29 See <https://www.creativenz.govt.nz/find-funding/funds/creative-communities-scheme>

and implement projects together, promoting entrepreneurship in social, economic and creative domains. (see [Scenario 7](#) for further expansion of this idea).

Since schools and kura tend to provide one of the first formal environments that spur creative thinking, plans for enhancing creativity have been linked to a comprehensive education strategy (see [Scenario 3](#)). The traditional ‘factory model schools’³⁰ that mainly focused on producing specific results have been transformed to foster exploration, experimentation, risk-taking, adaptability, different forms of intelligence, and entrepreneurship. A creative school network has been developed, linking creativity programmes across the region and providing much greater access for communities. Specialty educational institutes have been set up; for example, a film and media studies school in the West Auckland precinct has become a prosperous hub for the film industry. A school for indigenous arts and cultural expression is situated amongst the thriving cultural precinct in South Auckland.

Physical activity and recreation are part of Auckland’s cultural psyche. The city ensures a balance of recreational and sporting facilities suitable for all sections of the community to use, and which are equitably distributed across the region. A range of stadia and performance venues are supported. At least one world-class stadium exists in central Auckland to ensure that the city can attract global sporting, entertainment and cultural events. This has helped to grow Auckland’s sports teams and there is a flourishing e-sports sector. This has created a sense of loyalty, while providing entertainment to residents and visitors. The network of parks and open spaces has been developed to provide recreational, cultural and educational experiences that are widely accessible to all.

30 See <http://hackededucation.com/2015/04/25/factory-model>

Scenario 3 A Region of Quality Education



What do we need from education in the future?

Education plays a central role in generating societal wellbeing. It is critical to the quality of life of participating individuals, improving their incomes, breaking generational cycles of poverty, and improving population health, resilience to change and individual and whanau wellbeing. A city's education system can also be a critical channel for its sustainable development because education plays an important role in diffusing knowledge and skills that enable societies to find solutions for current and future challenges. Education can help tackle global challenges such as climate change, poverty and inequality.

Like the rest of the world, Auckland is facing rapid technological transformations that will drastically change the nature of economies and the future of work. It needs an education system that prepares learners and a workforce for this future. Traditional academic skills will remain important, but these will not be enough – we need to develop an education system compatible with today's and tomorrow's worlds.

For Auckland to live up to its potential, all its people, and especially its children – the vital human resources of the future – need the same opportunities to thrive in tomorrow's workforce but to do so education needs to evolve. Many highly demanded jobs of today did not exist a decade ago, and there will be jobs of the future that do not exist today. Some estimate that about 65 percent of children entering primary school today will end up working in entirely new fields of employment that do not yet exist (World Economic Forum, 2016). The future workforce will need to be trained to be adaptable. Further, psychological resilience is essential to cope with continuous change, and education has a critical role to play in developing and enhancing such resilience.

A future-focused education system needs distinctive attributes: to build the capacity of its graduates to think critically and be resilient to rapid change and technological developments; to confer the broad range of literacies³¹ necessary for personal wellbeing and for operating in a fast-changing world; and the empathic skills to work with a broad range of people. Such skill sets must be developed cumulatively from early childhood into post-secondary education. The children of today will be grossly disadvantaged if they do not have equitable access to the teachers and facilities that can provide such education. It is therefore critical that the serious inequities in educational opportunity across the Auckland region be addressed.

“The generation of those who are now in elementary or secondary education may need to change the nature of their jobs 5 to 10 times during their lives. Constant change will become the most important feature of life and the key challenge will be the capacity to remain relevant.” (Šucha & Gammel, 2021, p 36)

Where is Auckland now? Opportunities and barriers

An education trap is as disadvantageous as a poverty trap, and too often these coexist. New Zealand has one of the most unequal education systems in the developed world, ranking 33rd out of 38 OECD countries on UNICEF's 2018 Innocenti Report Card.³² Moreover, there is a digital divide that inhibited thousands of students from being able to access online educational facilities during Auckland's Covid-19 lockdown periods.³³ Many of those worst affected by education inequality tend to be from disadvantaged backgrounds, with Māori and Pasifika populations being disproportionately affected.³⁴

31 Beyond reading and numeracy, this includes fiscal, scientific, cultural, civic and computational literacies.

32 See <https://www.unicef-irc.org/publications/?SeriesId=16>

33 See <https://www.stuff.co.nz/national/education/126304348/lockdown-reveals-a-digital-divide-but-one-not-for-profit-is-bridging-the-gap>

34 See <https://www.newsroom.co.nz/nzs-unequal-education-system>

Currently, resourcing decisions about Auckland schools and kura are made by Wellington, dislocating them from the many other decisions that need to be made about an evolving city. This has had multiple flow-on effects, influencing where people live, the nature of local neighbourhoods and, consequently, what opportunities are available for young people who cannot access schools which are perceived to offer the most thorough quality teaching and resources. It has economic consequences for different areas and direct effects on land values and housing affordability. The system reinforces ghettoisation.

Because of how education is governed (see [Chapter 3](#)), Auckland has little or no say over how schools are developed or located, let alone their character and investment. This contrasts with many major cities overseas. The concept of integrated precincts (see [Scenario 7](#)) invites serious thinking about establishing special-character public schools in different locations. Given how central education is to Aucklanders and Auckland's future, the region must find a way to either influence core decisions about schools or to provide additional resources to improve the equity of education.

Auckland's potential strength in higher education is reflected in its three universities. According to QS World University Rankings 2022, Auckland's universities are all ranked among the top 500 in the world, with the University of Auckland ranking highest in New Zealand but worryingly only ranks seventh in Australasia (QS Quacquarelli Symonds Limited, 2021). It is critical that the academic standards of the universities are continually reinforced to prevent what is becoming an alarming trend: our high-achieving high school students seeing more attractive offerings offshore. In order to thrive into the future, New Zealand and Auckland needs a university that is ranked much higher than any are at the moment.

Universities do more than train students – they undertake research and they provide access to expertise for both the public and private sector. Throughout the consultations to this provocation, the feedback was almost unanimous and vehement in the view that Auckland's universities are relatively unresponsive, slow and expensive for external parties to interact with, that administrations create barriers between experts and potential clients, and that they would need to work hard to change their relationship with the public and private sector if the city is to thrive.

Many students come to Auckland to take advantage of the educational offerings, from primary to tertiary education. Prior to Covid-19 travel restrictions, the city attracted thousands of foreign students, and in doing so contributed \$2.76 billion to the New Zealand economy in 2017 – more than half of the \$5.1 billion the country earned in export education (Hipkins, 2018). It was also a source of talent, as many skilled graduates chose to stay in New Zealand after their studies.

We can no longer expect international students to come to Auckland in droves. First, the pandemic has forced education at all levels to transition into online modalities, which are likely to persist, and second, long-haul air travel must reduce to combat climate change. However, we retain the advantage of a time zone appropriate for delivering live online learning to the Asia-Pacific region, our largest market for international students. The online education curriculum must be geared for the changing demands of a technological future so that this once-thriving sector may continue.

Glimpses of the future include the emergence of innovative modes of modern learning, such as Auckland's Mind Lab³⁵ and Tech Futures Lab.³⁶ These offer a range of accredited courses, including micro-credentialing, to add variety to the way in which people learn and relearn across the life course. But there's much more potential. The model could be expanded to sector-specific training, either under the umbrella of current tertiary institutions or separately (public and/or private sector and/or industry-operated) in precinct specific developments.

35 See <https://themindlab.com/>

36 See <https://techfutureslab.com/>

A vision of Tāmaki Makaurau Auckland in 2070: A region of quality education

Leading to 2070, the New Zealand economy's shift away from commodity exports towards a knowledge-based workforce has substantially transformed the nature of work. Auckland's education system evolved strategically to promote intergenerational mobility and greater opportunities for individuals and employers. The city is well known for the universal quality of its educational offerings, from the compulsory years through to tertiary education and life-long learning. It is now a UNESCO Learning City³⁷ and its educational facilities support a highly innovative and adaptive population that is thriving in New Zealand's knowledge economy, of which Auckland is the centre. Jobs have become more complex and fluid, and the Auckland education system has taught its citizens the necessary creative thinking skills to flourish. Life-long learning is encouraged through short course offerings and micro-credentialing in rapidly moving areas, supported by advanced technology institutes operating flexibly in pathways outside the degree-providing universities.

To close socioeconomic divides, significant changes have been made to early childhood education and the compulsory education system. A large boost in investment established a quality school network that reaches across the Auckland region, including primary, secondary and tertiary institutions, as well as specialised training hubs and/or small tertiary institutes located within precincts. The education funding model focuses on achieving excellent education for all, and individual achievement is now substantially higher and more equitable in all areas and across demographic groups.

Many of the changes involved learning from other jurisdictions, particularly the Finnish education model, where government fully supports universal access to high-quality schools in all areas at no (or very low) cost to parents so that there is no competition to live in a particular school zone. Auckland's school network has established new schools and kura and/or reinvigorated older ones and ensured the appropriate infrastructure to offer aligned, high-quality education no matter where a family lives. This lessens the anxiety and cost for parents trying to find the 'right' school for their children and pays dividends for all of society.

This has spillover benefits to precinct development and to where people choose to live. The education system supports place-based strategies that leverage the competitive advantage and distinct characteristics of different parts of the region. High-quality specialty training facilities have been established in locations that match areas of existing and potential strength. These supply an ongoing source of talent to industry clusters in the area and provide highly skilled, local employment opportunities for people.

The tertiary education sector, once largely disconnected from the workings of Auckland and its people, now explicitly fosters collaborations with business and public sectors, and plays a critical role in the knowledge economy. It has become the 'go to' resource for the city, the business community and the policy community, and it actively helps to map Auckland's future development. These changes have come about through learning from other global cities, such as Copenhagen, Tel Aviv, Geneva, Waterloo (Canada) and Silicon Valley, where academic and business environments have long been interconnected and driven the cities' competitive successes. The collaborations develop skills diversity that mutually benefits the academic research environment and the sectors with which they interact, serving as a continuously filling reservoir of creative ideas.

Of particular note is the development of an environmental education hub informed by Māori *kaitiakitanga* practices. It has attracted students both locally and globally, and supports the city's conservation and environmental endeavours.

³⁷ <https://uil.unesco.org/lifelong-learning/learning-cities>

Scenario 4 An Innovative Region



What do we mean by an innovative region?

A well-functioning innovation region leverages knowledge and creativity as an asset for economic prosperity and societal wellbeing. Focusing on the weightless knowledge economy provides a path to sustainable growth.

It is now widely accepted internationally that cities are the primary units of innovation and economic activity, and that cities must take the lead in developing appropriate policies. It is the environments they create and the clustering of activity and talent that leads to innovation in services and products, and thus to economic competitiveness. An innovative region provides all the ingredients to train, attract and retain talent and to draw in investment that lifts the standard of living for all its people.

Where is Auckland now? Opportunities and barriers

Auckland is home to a number of high-tech firms and has begun to show its potential for specialisation in some areas. Its nascent gaming, digital services (including sustainable finance) and artificial intelligence (AI) sectors are all rapidly sprouting green shoots in what must become a more strategically aligned view of the future. Areas such as medical technology and selected financial services offer further opportunities.

However, some key policy settings in New Zealand are weak, and tend to inhibit rather than grow innovation economies. Public sector investment in R&D is low by global standards. Unlike most small advanced nations, our industrial and innovation policies do not clearly identify and invest in sectors³⁸ and then take a multidimensional approach to support and stimulate them. Yet in recent years there has been rapid growth in the high-tech sector. However, opportunities may be lost in the global competition for talent and ideas. Certainly current migration settings are disadvantageous and limiting the potential of firms that are here.

Problems of scale

Auckland has a mercantile history. It is now New Zealand's main business hub, it is the country's international entry point and is its only city of real scale. Its economic influence extends across New Zealand. The region hosts many local and foreign businesses that are making their mark in diverse fields such as agritech, manufacturing, healthcare and information technology. However, for the most part these companies have failed to scale up to a point where they can successfully compete in and continue to grow within the global economy. Some of this lack of scale is impacted by the relatively low productivity of Auckland's firms, which in part reflects New Zealand's obsession with small businesses. New Zealand's frontier firms are less than half as productive as those of other small advanced economies (New Zealand Productivity Commission, 2021). However, by some measures, Auckland is more productive than other parts of New Zealand.

One obvious impediment to Auckland's productivity is the combination of its inefficient transport network and 'awkward' geography, which presents transport difficulties and incurs major costs to business: more transport equipment costs, more staff and more inefficiency.³⁹ The interface between industry and academia is also less efficient and less productive than is typical given the size of the tertiary sector, possibly because Auckland's size is not yet large enough for agglomeration effects to be optimally demonstrated. But as the population approaches 2 million, the effects of agglomeration should be better demonstrated if barriers are removed.

38 Arguably the film sector has been the only exception.

39 If a company relies on and needs trucking transport, the traffic situation in Auckland is such that the company might have to use 10 trucks a day rather than the 7 which might be possible if the traffic system was more efficient, to make the same number of deliveries. This adds 42 percent to the firm's transport costs due to more trucks and more staff for no more revenue.

Auckland's corporate mix

Auckland's corporate mix creates other issues. As a whole, New Zealand's mix of innovation-focused companies is dominated by small- and medium-sized companies to a degree which is exceptional in the OECD. Even within that classification, New Zealand companies tend to be smaller. Size matters, in terms of ability to scale to offshore markets and to have a plurality of inputs. Our large companies tend to be branches of large Australian companies (e.g. major banks or Countdown supermarkets). But again green shoots are emerging: as a result of its purchase of an Auckland-based technology start-up,⁴⁰ Apple now has a significant R&D base in Auckland. Several of the major data companies are establishing data centres in the Auckland region. In interviewing their CEOs, a consistent finding was that Auckland had many attractions that led them to want to be here, but issues of skilled immigration and workforce development were holding them back.

In general, New Zealand's small internal market points to the need to develop globally reaching companies that remain anchored in New Zealand. We have a few examples where that has been achieved in the service sector (e.g. Beca) and manufacturing sector (e.g. Fisher & Paykel Healthcare). The challenge is how to develop more of these and keep them here irrespective of ultimate ownership.

The role of multinational ecosystems and corporations

Multinational Corporations (MNCs) have a key role to play in driving specialisation and stimulating innovation. They account for the majority of private innovation investment in most developed countries (Bilir & Morales, 2016) and create an ecosystem that smaller companies providing services and technologies operate among. In other small advanced economies it is often MNC executives and technologists with global expertise that revolve out to reach into domestic new technologies to create successful start-ups. A common response we received from the domestic sector was the difficulty of finding globally experienced executive staff in New Zealand. Traditionally New Zealand has been hesitant about attracting MNCs into the ecosystem, but the evidence for their essentiality in a technology-focused ecosystem is clear.

Qualities such as New Zealand's ease of doing business, talented workforce, safe environment and trustworthy government makes it attractive to foreign investors, despite its geographical location. The country's handling of the Covid-19 pandemic also adds to its attractiveness. This presents an amazing opportunity for New Zealand to attract large MNCs, and since Auckland is the country's primary business hub, most companies will inevitably settle there. However, the right incentives are not in place to attract the scale of foreign direct investment that is needed to meaningfully move the dial.

Recently some multinationals have been seeing the advantage of a greater footprint in Auckland. Auckland must work to establish the pipeline of staff and opportunities to leverage off their research development presence. The same potential exists in other areas.

The role of universities and CRIs

Universities provide a city with a nidus of well trained graduates, research, innovative ideas and opportunities. Universities and Crown Research Institutes (CRIs) can create the reputation needed to attract investment, but to do so they must look to remove barriers which exist between the private and public sectors that wants access and the institutions. They must evolve as they have in many other countries to embrace a true partnership with the city. This would involve reviewing their cost structure to enable closer access for policymakers and the private sector to the expertise that lies within the university, and seeing such engagement as a metric to celebrate alongside more traditional academic outputs. Geneva, Tel Aviv, Waterloo CA, Cambridge UK are but a few examples where greatly changed relationships have enhanced both the university and the city that they are central to.

⁴⁰ Ultimately the result of IP developed in the University of Auckland.

A vision of Tāmaki Makaurau Auckland in 2070: An innovative region

Auckland's future is built around a relatively weightless economy. Exporting commodities, and even value-added goods, carries a premium because of increasing inhibitory transport costs and emissions footprints which had become inhibitory. Ruminant production and value have been particularly affected as the world turned against food products with high emissions footprints. The arrival of 3D printing means that templates rather than products are exported. The city has grown its specialty industries in medical technology, space, gaming, digital services and sustainable finance (see below).

In this mix, innovative Māori and Pasifika firms driven by multiple bottom lines and their long-term view of sustainability thrive in the world of 2070 and will continue to do so long into the future. Māori values differentiate the distinctiveness of products and add value for brand Aotearoa, conveying environmental and social credentials.

Auckland as a global centre for sustainable finance

In the face of increasing pressures of climate change, fragility in supply lines, resource depletion and environmental contamination, the arena of sustainable finance evolved into a critical component of financial markets. In the decades leading to 2070 Auckland established itself as an international leader in this area, thanks to pioneering work by the Aotearoa Circle in the early 2020s. Sustainable finance is now the norm, taking into account environmental, social and governance (ESG) considerations when making business and investment decisions (European Commission, 2021). This focus for Auckland aligned well with New Zealand's environmental reputation, and has continued to strengthen.

Success in this area has come about through developing executive education and training along with a range of consultancies, expertise and financial house arrangements to cluster such activity in one of the Auckland precincts. Joined-up activity by the private sector, Auckland city and the universities has established a recognised niche in this area of increasing global significance – setting an example for other areas of niche innovation.

Precincts, innovation hubs and agglomeration effects

Auckland in 2070 has well demonstrated the advantage of focusing investment in creating innovation hubs within integrated, highly liveable community precincts (see more in [Scenario 7](#)). The experience of digitalisation has shown that even though it allows for more distant forms of clustering, it is the human interactions between individuals and companies that drive innovation. Like other cities around the world that have done well as innovation hubs (e.g. Singapore, Waterloo in Canada, Toronto, Tel Aviv and Geneva) Auckland has invested significantly in mechanisms to drive such communication through communal services and infrastructure, and by developing close partnerships between the tertiary sector and businesses.

From only a few existing or proposed industry clusters in the early 2020s,⁴¹ the emergence of numerous distinct precincts with both public sector R&D and private sector activity has greatly

41 The film sector is moving towards a west Auckland precinct but to complete it would need the other elements such as highly creative education, civic amenities strengthened and focused.

enhanced localisation efficiencies.⁴² The precincts house accelerators and incubators that provide active interface support.⁴³

Attracting and embedding multinational companies

Starting in the early 2020s, Auckland began a concerted effort to entice large companies to make future-focused investments in the city, such as setting up R&D operations. The accompanying large-scale infrastructural developments have been built to endure, providing innovation opportunities for current and future generations. Auckland's multicultural population provides a diverse employee base, enhanced by much stronger connections forged between large MNCs and the tertiary education sector (see [Scenario 3](#)).

This strategy has provided not only innovation, productivity and employment opportunities, but also resilience in the economy. This is because larger companies tend to have greater scope in decision-making and their size tends to make them more resilient to external shocks, so they have greater ability to handle crises like pandemics.

Towards a weightless economy

Auckland has found its niche in the global economy by focusing on a few areas of distinct competitive advantage in the knowledge economy. This has allowed New Zealand to move closer to a carbon-neutral state. This shift has offset the foreseen decline in New Zealand's former ruminant and export economy, and overcome problems of long supply chains necessitated by New Zealand's geographical location and their consequent high-carbon footprint and high cost. Alongside this, in-person export education is no longer a viable economic model, nor is the high-volume tourism that was once a staple of the New Zealand economy.

The relatively weightless economy has therefore become the point of focus, growing from green shoots in the gaming industry, film industry and service sector. The universities and specialised institutes continue to inform this sector of the economy.

42 One concept under consideration is a medical digital technology precinct leveraging off the globally successful Auckland Bioengineering Institute of the University of Auckland.

43 Examples include MARS in Toronto or Communitel in Waterloo or, more recently, the Biotechnology campus in Geneva.

Further considerations

Towards a more integrated economic strategy for Auckland

Many of the other scenarios in this provocation feed into developing the city to be more productive and relevant, which will positively impact the rest of the country because firms and activity in the rest of New Zealand will leverage off Auckland's capacities. These are long-term strategies that require adaptability, growing the entrepreneurial and risk appetite, attracting and growing talent, and having a clear and linked-up industrial and innovation policy.

Innovation comes in many forms: management, prediction, design – but ultimately it is a human endeavour. New Zealand has been slow to insert digital technologies deep into its companies (New Zealand Productivity Commission, 2021). Public sector investment in R&D is low by global standards, and private sector investment is small largely because of our company mix.⁴⁴ The private sector should

44 Globally, large companies make the bulk of the investment in R&D which is disproportionate in areas in which New Zealand is not strong – defence, automobiles, pharmaceuticals, IT – of these IT is the one area NZ could develop.

take an active role in arguing for public sector investment because there is strong evidence that it underpins much innovation (e.g. Levy, 1990; Levy & Terleckyj, 1983; Mazzucato, 2015).

The food sector has traditionally been a large part of Auckland's economy. But within 30 years, most global predictions suggest a shift away from ruminant products, extensive use of genetic engineering (GE) and genetic modification (GM) technologies with plant-based foods, and the growth of products produced by precision fermentation (e.g. algae-based food). Food security is a growing global issue in the presence of climate change. It is unclear how long the current sector's value will hold up, and how rapidly and significantly consumer attitudes and supply line costs will shift. This will impact rural Auckland and the rest of New Zealand, and creates a strategic challenge which would be best met by investing in more advanced food technologies to cover more options.

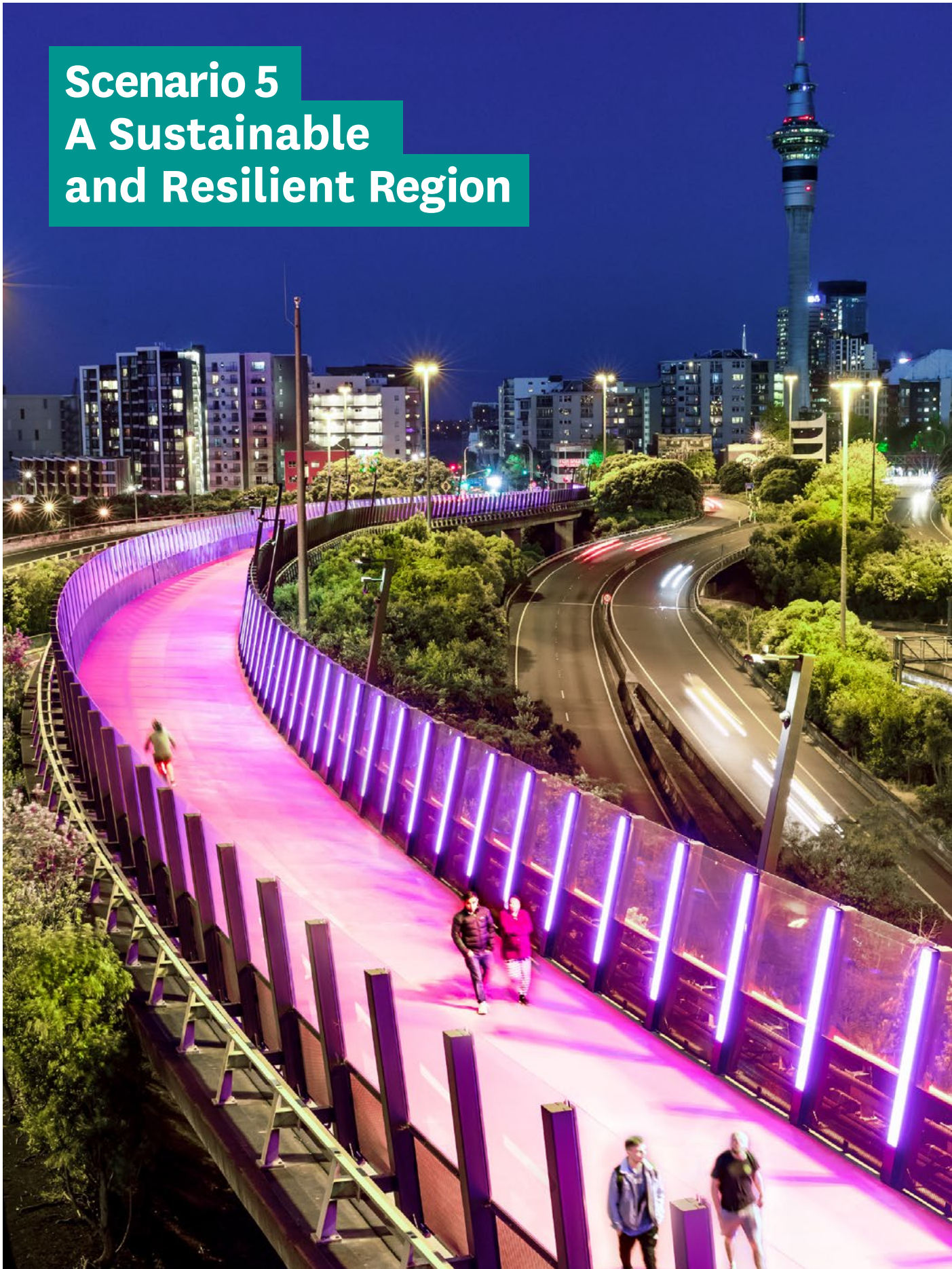
In the short and medium term, value should be added to primary sector products. In Auckland, Māori initiatives are taking place, suggesting we could create a valuable brand, narrative and products. A profile as a sustainable and indigenously inspired National Park City and Region (see [Scenario 9](#)) could add a certified, value-added component that is attractive to consumers. Interaction between Auckland's tertiary institutions and food companies could result in innovative approaches to future food needs.

There are other opportunities to improve our current situation. Aside from developing a clear, long-term innovation strategy and sorting out some of the policy and infrastructure issues described above, Auckland and New Zealand should and could be a test-bed for many technologies, as we have been in the past.⁴⁵ In this fast-moving world we need to respond rapidly to opportunities that emerge. The country would need to be much more open and urgent in allowing the rapid attraction of overseas expertise and removing some of the barriers to migration and investment.⁴⁶ But to be ambitious we must start with workforce development, which in turn requires attention to primary, secondary and tertiary education. It likely means a promotion of short courses and micro-credentialing in rapidly moving areas, and perhaps advanced technology institutes operating more flexibly than degree-providing universities (see [Scenario 3](#)) and located in precincts where those industries flourish.

45 EFTPOS is an example.

46 This is not the place to discuss long-term migration policy in detail, but if New Zealand is to effectively compete in the global competition for talent of the type needed to grow the weightless economy, it both must do more to retain those who current leave rather rapidly fly for overseas opportunities and it must reduce the very real barriers to inward migration of such talent and accompanying investments – for example some of the OIA settings are problematic. The short-term issues associated with Covid are real, but this report is focused on much longer issues of talent development and capture.

Scenario 5 A Sustainable and Resilient Region



What does it mean to be a sustainable and resilient region?

Sustainability is the central concept of all realistic future-focused strategies. Every city and region need to make sustainability a policy priority if their plans are to support the wellbeing of current and future citizens. Sustainability is not just about doing less harm, but about implementing approaches that aim for a net positive effect – putting back into society and the environment more than is extracted from it, which is also known as being ‘regenerative’. From this viewpoint, cities must be sustainable not just environmentally, but socially, culturally and economically.

Sustainable cities are purposefully designed (through urban planning) to lessen their negative environmental impact. This means minimising waste and addressing climate change by reducing emissions now, and planning for technologies and practices of the future that are carbon neutral and sustainable. Such practices, by and large, are known to improve the health, longevity, wellbeing and quality of life for residents (Rodriguez, 2015). A plethora of existing plans and strategies, and many individual actors, are seeking to make a dent in unsustainable practices. Each has merit, but only by working together towards a clear and common goal will they affect the necessary scale of change.

Where is Auckland now? Opportunities and barriers

The UN Sustainable Development Goals (SDGs) serve as an international guide to sustainability for nations and cities. Auckland would do well by keeping these in sight. The OECD measures how far different countries are from reaching these goals. SDG 11 calls for cities to be “inclusive, safe, resilient and sustainable”, while SDG 14 and 15 deals with conserving life below water and life on earth, respectively (UNDP, 2021). New Zealand ranks relatively highly for each of these goals.⁴⁷

However, a sustainable future for the Auckland region may be in jeopardy if the region follows a business-as-usual scenario. Compared with New Zealand as a whole, Auckland is doing significantly worse in reaching several goals, including SDGs 14 and 15 relating to marine and terrestrial ecosystem health (OECD, 2020b). The region saw an 18 percent rise in household emissions in 2018 compared to 2007 (Statistics New Zealand, 2020a). The largest emitter of greenhouse gasses in Auckland is transportation, which accounts for about 44 percent of the region’s carbon footprint, with the majority of emissions coming from road transport.⁴⁸

“With a changing climate, the legacy of our ancestors that we leave for future generations lies in the balance.” – Te Tāruke-ā-Tāwhiri: Auckland’s Climate Plan.

Climate projections by the National Institute of Water and Atmospheric Research (NIWA) indicate that if international emissions are not stabilised, Auckland will experience extreme weather conditions that are expected to have negative environmental, economic and health impacts on future generations (Pearce et al., 2018). Climate change and environmental degradation are undoubtedly critical global challenges that require local responses. To address these issues, Mayor Phil Goff joined Auckland into the C40 network of cities (see Box 4). The 100 mayors who make up the C40 Cities network have committed their cities to limit global warming to 1.5 degrees. This means that Auckland has to immediately take some very bold steps to drastically reduce its emissions from transport, buildings, industry and waste. The C40 Cities’ climate plan attempts to address international commitments in the Paris Agreement and SDGs in its development strategy, highlighting six main goals: 1) transport

⁴⁷ See <https://www.oecd.org/wise/measuring-distance-to-the-sdgs-targets.htm>

⁴⁸ See <https://www.stuff.co.nz/environment/climate-news/122203542/auckland-has-a-climate-action-plan-now-it-desperately-needs-action>

and access, 2) environmental and cultural heritage, 3) opportunity and prosperity, 4) belonging and participation, 5) Māori identity and wellbeing, and 6) homes and places.⁴⁹

Auckland is currently at a critical crossroad where decisions it makes today will have a strong impact on the type of region left for future generations, and ultimately the future of the planet. The pandemic has created a great opportunity for Auckland to reset its policies for sustainable development, and it should consider the environmental, social and economic implications of its decisions.

Box 4. The C40 Network

The C40 network aims to protect the environment and strengthen the economy while cutting emissions. It thereby supports the commitment to an equitable future outlined in the Global Green New Deal through:

- Resilience planning – building redundant and diversified critical systems.
- Energy and buildings – green construction, clean energy, energy efficiency.
- Transportation and urban planning – mass transit, mobility management (including demand management), walking and cycling, zero-emissions vehicles.
- Land use planning – reducing urban sprawl, planning for denser, more liveable neighbourhoods with close amenities, while preserving open spaces. Also planning around transport (“transit-oriented development”).
- Air quality.
- Circular economy.
- Sustainable food, waste and water systems.

Source: <https://www.c40.org/global-green-new-deal>

Box 5. Thinking outside the box: Kinetic pavements for the CBD?

Kinetic pavements were used to generate energy from foot traffic at the London 2012 Olympic Games. Using this technology, one footstep generates 5 watts or ~3 joules of energy, and this energy could either be stored or instantly supplied to nearby electronics like street lamps (GOTO Energy (UK) Limited, 2019; Power Technology, 2020). It takes around 25 footsteps to charge a standard mobile phone.

The number of pedestrians on Queen Street has doubled since 2012 to around 60,000 per day, sometimes more (Heart of the City, 2021). One application for this increase in foot traffic is to develop kinetic pavements to harness the energy that could be produced by this boost in foot traffic.

49 See <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/environmental-plans-strategies/aucklands-climate-plan/response/Pages/international-commitments.aspx>

A vision of Tāmaki Makaurau Auckland in 2070: A sustainable and resilient region

Auckland made some bold choices in the early 2020s, and in the decades to 2070 its outlook and sustainability status has changed dramatically. Climate change and environmental sustainability considerations were placed at the heart of all urban decision-making, particularly for long-lived infrastructure. Following concerted and coordinated action by iwi, advocacy groups and future-thinking politicians and policymakers, a standing Citizens' Assembly co-led by Māori kaitiaki was formed to work in conjunction with a Sustainability Commission and a Commission for Future Generations to formulate recommendations for investment and policymaking that would be supported by citizens and would endure beyond the political cycle. Auckland's Climate Plan 2020 had outlined eight priorities for action where the region can have the greatest impact in reducing emissions and adapting to climate change.⁵⁰ The Citizens' Assembly deliberated with the help of experts on how to implement regional programmes to meet these and other sustainability targets. The assembly and the commission worked to hold government agencies to account in their spending priorities in key areas such as transport, housing and buildings, energy and green infrastructure.

Green / low-carbon infrastructure

The Auckland Plan 2050 defined green infrastructure, in the broad sense, as “any system that fuses natural and built environments to reduce the environmental impact of core infrastructure and the built environment” (Auckland Council, 2018). Key policies implemented in support of green infrastructure included incentivising and normalising energy efficiency in buildings, transport and delivery of services, and using solar, wind, kinetic and other forms of energy to generate power. A consistently applied certification scheme for green buildings was put in place, to which all new builds complied. These actions tied into the progressive greening of the city through urban farming and ecosystem restoration (hydroponic vertical farming, rooftop gardens, planter boxes, permeable pavements, urban forests, etc.), and broadening public access to green and blue spaces (e.g., urban and marine parks), aligning with the National Park City vision (see [Scenario 9](#)).

Embracing a circular economy

Circular economy principles encompass reducing consumption, increasing reuse and recycling, composting, minimising and ultimately eliminating waste by keeping products and materials in circulation rather than being discarded. The Southern Initiative (TSI) made ground-breaking headway in the early 2020s to develop an eco-park that functioned under a circular economy framework and provided a test-bed for technology and innovation in this space. The initiative not only reduced waste through its operations, but was socially entrepreneurial in providing training and creating high-skilled jobs for the residents of South Auckland. This model led the way to spreading circular technologies and zero-waste practices throughout Auckland and the rest of New Zealand, and has become known internationally for expertise in this area. The long-standing

⁵⁰ The eight priority areas of Auckland's Climate Plan 2020 are natural environment, built environment, economy, transport, communities and coast, food, Te Puāwaitanga ō te Tātai, and energy and industry. See <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/environmental-plans-strategies/aucklands-climate-plan/Documents/auckland-climate-plan.pdf>

Para Kore initiative⁵¹ continues to lead in protecting Auckland's natural resources and modelling zero waste practices.

Decarbonising transport

Decarbonising transport was a critical factor in Auckland's move to a carbon-neutral city. This required a transformational change in how Aucklanders thought about mobility, and a commitment to radical moves in transport infrastructure planning. The clean car discount scheme was introduced by the New Zealand government in 2021 to make electric vehicles and plug-in hybrid electric vehicles more affordable,⁵² triggering the move away from fossil fuels in the transport fleet, which picked up momentum as infrastructure and public perceptions began to shift. This was supported by investment in infrastructure for pedestrians and cyclists, and significant upgrades to make public transportation more accessible and reliable.

Changes in housing models have also supported this shift, with far fewer households relying on private vehicles. Autonomous vehicles, sharing models, high-tech public transport and goods transport (see [Scenario 6](#)) have completely changed the mobility landscape for Auckland, reducing its environmental footprint and the stress of congestion that Aucklanders previously suffered, and improving air quality.

Resource management

Auckland's resource management processes have been streamlined, but environmental management remains a top priority. Decisions are aided by greater access to data, information resources and advice through a centralised urban planning and research facility (see [Chapter 3](#)). This has enabled a more unified planning approach that balances environmental, social, economic and cultural considerations to ensure sustainability and environmental protection while providing a high-quality living environment. Measures to ensure efficiency in water use and wastewater management utilise sensor technology and data that also monitor the city's interconnected green and blue infrastructure. The people of Auckland understand the importance of nature-based infrastructure and actively engage in protecting it.

51 See <https://www.parakore.maori.nz/>

52 See <https://www.nzta.govt.nz/vehicles/clean-car-programme/clean-car-discount/>



Scenario 6

A Region of Human-focused Infrastructure, Transport and Housing

How should a region evolve its infrastructure?

A smarter city is one that incorporates evolving technology for sustainability and liveability into all aspects of how the city operates and how people live and work within it. Such cities utilise data to improve efficiencies and reduce inequities across all of the building blocks of communities, from mobility and housing to the public realm and provision of public services. This improves the city and region's liveability by providing all its residents with better access to necessities and amenities that support a high quality of life.

Sustainable urban development requires future-focused infrastructure planning that anticipates how cities and communities will function in the future, and how technology might assist this. There is merit in making better use of existing systems and renewing old infrastructure by overlaying new technology where possible.

Where is Auckland now? Opportunities and barriers

Liveability issues

In pre-Covid years, Auckland failed to rank highly in global indices in terms of liveability. In the two years preceding the pandemic, Auckland did not penetrate the top 10 most liveable cities list in the EIU's Global Liveability Index. The Nielsen 2018 Quality of Life Survey ranked Auckland lowest of all New Zealand cities on quality of life among residents. Not surprisingly, the low ranking was attributed to issues such as housing unaffordability, lack of satisfactory infrastructure and amenities, and traffic congestion (Nielsen, 2018). The survey also found that Māori and Pacific Peoples were less positive about their quality of life than Auckland as a whole. The 2020 Quality of Life Survey highlighted the differences across the region in how Aucklanders feel about their area (Allpress & Reid, 2020). Not surprisingly, larger proportions of residents in higher-income areas of North and Central Auckland rated their area as a great place to live compared to residents of South and West Auckland (Allpress & Reid, 2020).

Transport infrastructure

Designing transportation infrastructure for Auckland's complex geography is hard. It is also extremely difficult to retrofit surface-level infrastructure into a well-established urban environment. But since liveability is critically related to how easy it is for people to access their workplace, schools, entertainment, and other facilities, improving transport infrastructure is a central to human-centered design for cities. Smart transport systems can reduce costs, stress, and inequities associated with travel for daily living. A recent study found that New Zealand's (and particularly Auckland's) transport network was associated with psychological distress, particularly for lower-income residents (Wild et al., 2021).

"In order to enable lower-income communities to maintain mental health, transport systems need to be low-cost or free, reliable, and flexible enough to enable people to access all types of employment, including shift work." (Wild et al., 2021, p 27)

In Auckland, transportation issues and increasing traffic congestion top the list of negative impacts on quality of life (Allpress & Reid, 2020) and create a negative impression of the city for others outside of Auckland, including for international investors. Congestion has large costs, in terms of both money and time, and is a contributing factor to environmental pollution and is a major factor in Auckland's relatively low productivity. The economic cost of congestion in Auckland is estimated at about \$1.3 billion per year (Leung et al., 2017).

Auckland's transport network upgrades have not kept up with increasing congestion or the need to promote climate-sensitive transport modalities. Although some progress has been made, the city still lacks interconnected cycleways and the public vehicle fleet is still largely fossil-fuel driven and the roads are gridlocked by goods transport from the port. The transport network also lacks resilience and redundancy – one road accident or rail failure can cause massive disruptions in the entire system, as demonstrated in 2020 when a truck damaged a crucial beam on the Harbour Bridge, cutting off the primary connection between Auckland's North Shore and the CBD.⁵³

Moreover, reliable and affordable public transport choices are lacking for many across the region. Auckland's public transport fares remain the third highest in the world (Greater Auckland, 2018). These problems contribute to transport poverty, a situation which arises when people pay more than they can afford for transport (Ministry of Transport, 2020). Most people in Auckland feel they need to own a car because they lack access to public transport options. Māori and Pasifika disproportionately experience transport poverty since they tend to have lower average incomes than other Aucklanders, and many live in places that are not well served by public transport (Ministry of Transport, 2020).

Transforming Auckland's transport network is a work in progress. The proposed light rail link connecting the city centre to Māngere and the airport is still in the planning and design stage,⁵⁴ and work will likely not start until at least 2024. It is a highly politicised decision with only vague undertakings to later connect the city centre to West (Kumeū) and North (Orewa) Auckland, and to link all of these through rapid busways and the City Rail Link, which will double the capacity of the existing rail network. The shape of the network may make sense, with proposed development of denser housing at important transport nodes, but far more could be done to improve long-term resilience by considering newer technologies and transport modes (see [Box 5](#)).

Housing woes

Auckland's population will continue to grow in the coming decades and will host almost 40 percent of New Zealand's population by 2048 (Statistics New Zealand, 2021). With this population growth will come further housing demand. Where and how will this development occur? Will housing developments continue to sprawl over the prime productive land on Auckland's rural outskirts? Or will future Aucklanders prefer, or accept, a denser form of living rather than the classic Kiwi quarter-acre dream? How should we design living spaces, including high-rise housing, that sustains a quality of life over generations, allows for the diverse needs of a diverse population and cultures, and avoid the mistakes that have been seen in some cities overseas? High-rise living requires even greater attention to the civic amenities that must be collocated, and planning must not be left by default to the intent of individual developers.

The supercity must be prepared to increase affordable and desirable housing supply to meet increased demand by Auckland's growing population. There will be important trade-offs to consider based on variation in the ways Aucklanders of the future may choose to live, but increased density will likely need to be part of the equation for a sustainable future. Higher density is linked to lower greenhouse gas emissions and positive health benefits due to factors like reduced automobile use, increased public transport use, increased biking and walking, preservation of natural habitats and conservation of prime agricultural land (Angel et al., 2021).

53 See <https://www.newsroom.co.nz/podcast-the-detail/broken-bridge-crippled-city>

54 See https://www.lightrail.co.nz/?gclid=EAlaIqobChMjOLkz5CZ8wIVVBwrChOUGwHoEAAAYASAAEgKd_fd_BwE&gclsrc=aw.ds

A vision of Tāmaki Makaurau Auckland in 2070: A region of human-focused infrastructure, transport and housing

Since the 2020s, Auckland has made some bold strategic moves to transform into an innovative, internationally recognised city with a thriving urban centre and integrated precincts throughout the surrounding communities. It has invested in digital technologies and has been forward-thinking in both new infrastructure investments and in utilising new technology to improve the function of existing infrastructure. By 2070, the city is a model of how to use technology wisely to enhance liveability and wellbeing for its citizens.

Reimagining transport

To reduce demand on its existing transport network and to deter commuters from driving private vehicles, Auckland made some big decisions in the mid-2020s to transform its transport network. In its 2021 Long-term Insights Briefing (LTIB), the Ministry of Transport chose to focus on how autonomous vehicles on New Zealand's roads could affect the transport system and transport outcomes in the future (Ministry of Transport, 2021). Following this decision, Auckland chose to be a test-bed for self-driving taxis, and established a rideshare programme that over time vastly reduced congestion and improved road safety in the city centre and other precincts.

The success of that trial prompted moves to pilot other sustainable, high-tech, future-focused transport technologies, including a Kiwi-designed version of emerging hyperloop technologies, one of the first new modes of mass transportation to be advanced in about 100 years. This technology promised to revolutionise transport, not just of people, but of goods both large and small, in a manner that is reliable, accessible, flexible and quick (see [Box 5](#)). The trial was successful, incorporating gondola-like transport of containers that effectively removed the majority of large trucks from Auckland's roads, and facilitated the movement of containers from the relocated port to destinations all over Auckland. Auckland's smart transport system continues to expand and evolve, connecting people within Auckland and also connecting Auckland to its neighbouring cities. This not only addresses the needs of all manner of travellers, commuters and businesses, but also goes a long way to mitigate the environmental impact of the transport system.

The transport system extends to Auckland harbours, on which autonomous electric ferries carry people to and from numerous jetties and terminals to link Auckland's coastal suburbs with the downtown transport hub and with each other. All aspects of the transport system use encrypted data technology and advanced sensor systems linked to the Internet of Things to run efficiently at least cost both to people and the environment.

Smart tech for sustainability

The smart city of 2050 has designed its infrastructure to accommodate other technologies to both save and generate energy (see [Box 6](#)). The population of Auckland in 2050 enjoy the city's many low-stress transport options and comfortable homes. They lead healthier lifestyles fostered by appealing, accessible outdoor environments linked by walking and bike paths through a network of green corridors (see [Scenario 9](#)).

The integration of digital technology into urban development required different approaches to planning and design. Fundamentally, responsible data use and the digitally-enabled services for a place was addressed as core to development planning.

Smart homes and buildings, new housing models

Auckland has long since implemented regulations to encourage sustainability, and in 2070 all new buildings and homes exclusively use sustainable materials, green building techniques and renewable power. The city has integrated 'smart' technology for homes and buildings throughout the city. These buildings use technology to allow various systems and electronics to communicate with one another, regulating heating, cooling, lighting, water use and other features for maximum efficiency (Harvey, 2021). Auckland's ageing population benefits from smart home technologies that enable remote monitoring of the elderly using wearable and environmental medical sensors, actuators and communication technologies at a relatively low cost (Majumder et al., 2017). This has enabled many elderly people to continue residing in their own homes rather than healthcare facilities, and many former retirement villages and nursing homes have been converted to mixed occupancy communities enjoyed by families, singles and the elderly alike.

Alternative housing models such as build-to-rent and shared ownership schemes have been developed throughout the city and its precincts, offering a wide variety of affordable and highly desirable housing options that also provide residents a great sense of community. Home ownership and property investment no longer represent the ideal in the minds of Aucklanders. Apartment buildings with modular floor plates have created flexible homes that can be reconfigured to match the evolving needs of communities and whanau. Many housing developments have embraced Māori values of human-centred design, enabling communal living in a contemporary context that promotes social wellbeing, and integrates natural and human systems.

Connecting the dots

Developing transport and housing infrastructure for liveability entails creating communities where people want to live, socialise, work and play. It means improving the connectivity of each community with others, allowing free movement to increase access to good jobs and good schools. It means greening the public sphere and connecting people to nature. This vision is conveyed in the City Centre Master Plan (CCMP), but we suggest this needs to be extended to connect other community centres as described in [Scenario 7](#), the Integrated Precincts scenario, and to include a more extensive network of 'green links' that also speaks to [Scenario 9](#), the 'National Park City' scenario.

Box 6. Thinking outside the box: Transport options for Auckland's future

A high-speed tube transportation system (hyperloop) for Auckland

The hyperloop seeks to disrupt the existing transport paradigms by being both fast and inexpensive for people and goods. Despite the futuristic image that these systems convey, the original idea actually dates back to 1799, when George Medhurst took out a patent for a method of transporting goods at high speed through tubes, using atmospheric pressure and compressed air for propulsion (Buchanan, 1992). The modern hyperloop systems are designed for high-speed tubular transport of both people and freight. Low-pressure tubes are fitted with pods (specially designed tube cars) which accelerate via electric propulsion through the tubes. Magnetic levitation can be used to float the pods along the track, enabling them to glide at very high speeds across long distances due to low aerodynamic drag (Virgin Hyperloop, 2021). These systems operate on renewable energy so there is minimal cost to the environment. Hyperloops can accommodate a wide variety of terrains and can be fitted to above-ground, subterranean or underwater environments. They can also be designed to conveniently deliver people and goods inside buildings. Designs exist to transport shipping containers, gondola-style, under the tubes, in a manner more flexible and adaptable than rail, and offering an environmentally friendly alternative to road shipping.

Some possible pilot programs for Auckland could include: 1) moving containers from the Ports of Auckland to their destination, 2) transporting people to and from the airport, 3) as a third harbour crossing, and 4) making use of the airspace above Auckland's rail lines, which operate on a similar turning radius.

Hyperloops could potentially facilitate high-speed travel across the Auckland region and to other parts of New Zealand, and could be built around existing infrastructure. The productivity benefits of being able to travel, for example, between Auckland and Hamilton in less than 15 minutes in 2070 could be substantial.



Scenario 7 A Region of Integrated Precincts

What's the big idea?

Precincts are not a new idea. Clustering of compatible business activities is known to create synergies and to increase productivity and innovation through agglomeration effects. But the precincts we refer to here go well beyond this idea to create a series of liveable and highly integrated precincts with unique character and purpose that provide new opportunities, equitable amenities and infrastructure for desirable and affordable housing, efficient transport, and a high quality of life for residents. The precincts build on the particular strengths, evolving identities and cultural aspects of different parts of Auckland, but are linked together by transport and digital infrastructure such that they form an integrated whole.

A major advantage of integrated precincts is that it reduces the burden on the transport system, as it allows people to live, work, socialise and recreate locally.

Where is Auckland now: Opportunities and barriers

Auckland City Centre is in the process of developing several connected service and character precincts that all have distinct characters. From the shopping and heritage centre of Queen Street, to the entertainment, dining and harbour views of the Viaduct and waterfront, to the innovative businesses located at Wynyard Quarter, each precinct offers unique experiences that adds to the vibrancy of the CBD.⁵⁵ The clustering of related activities in the city centre precincts gives each area its own character and provides the opportunity for high-quality amenities, business activity, high-value jobs, educational facilities, health facilities and entertainment facilities to be located there. As these areas are upgraded and develop a unique character, they will become increasingly attractive for people to live and work in, which prompts property developers to provide multiple levels of living arrangements in these areas. The City Centre Masterplan⁵⁶ outlines the vision for upgrading and connecting these precincts, and there is potential for further enhancements – for example, the Arts precinct around Aotea Square as part of Auckland's midtown regeneration,⁵⁷ which ties in with **Scenario 2** (A Region of Creativity and Culture) discussed above.

Like the city centre, there are other parts of the Auckland region that show potential for the development of specialised innovation and cultural precincts. As Auckland's population continues to grow, decisions about the region's future need to be inclusive and should focus on the development of the wider Auckland region, including south, west, north and rural areas, not just the isthmus area. As it stands, the region remains fragmented in terms of people, business, entertainment experiences and educational opportunities, and the disconnect inhibits social cohesion and hurts the region's productivity. Yet the opportunities for integrated liveable precincts with distinctive character and linked to economic opportunity are rife, and should be explored.

The critical point is that these precincts should all be connected to each other, offering a wide range of options around Auckland, while also fully providing for the communities in which they are set. A successful precincts strategy prioritises activities and develops characteristics that are unique, distinctive and meaningful to the place and the people who live there. This means that an integrated precinct must offer a full spectrum of social amenities (e.g. health, education, recreation, retail), and suit the needs of people across the economic spectrum. It must offer employment opportunities locally and generate the cluster effect that gives advantage to the businesses located there.

55 See more on Auckland's City Centre precincts at: <https://www.hotcity.co.nz/city-centre/city-centre-precincts>

56 See <https://www.aucklandccmp.co.nz/>

57 See <https://www.greaterauckland.org.nz/2021/09/28/midtown-regeneration/>

Place-based strategies help leverage competitive advantage through focused development, and create empowered communities and a sense of place and identity. For example, West Auckland is already home to a number of film studios, and could be developed as a film and production precinct, including specialised training facilities and educational offerings starting in primary school.

A vision of Tāmaki Makaurau Auckland in 2070: A region of integrated precincts

In 2070, Auckland boasts a large number of unique and thriving precinct communities. The precincts have developed around the strengths of their specific industries, but also showcase different cultures. They incorporate quality housing, amenities, infrastructure and good governance, and institutions are in place to support the precinct communities. High-tech networks (see [Scenario 6](#)) mean it is easy to move between precincts in different parts of the region, and a digital strategy supports appropriate digital infrastructure for all precincts. Co-locating bespoke educational facilities aligned with the type of industry clustered in each precinct helps ensure that young people have clear opportunities to succeed and industries can develop the needed skills from homegrown talent.

The integrated precincts include a number of knowledge-intensive and creative hubs with varying characteristics, drawing on the unique qualities and strengths of different parts of the region, including cultural and ethnic attributes. Many developments within the precincts are community led, and this has particularly empowered the more disadvantaged communities of Auckland to change the narrative of opportunity. Developing these places with distinct personalities has in turn attracted private and public sector investment.

Auckland's diverse population has inspired the development of cultural sub-precincts. These cultural hubs are places for different groups to share their culture with other Aucklanders, including food, art, festivals, architecture and other aspects that make them unique. Ethnic enclaves across the region are integrated into the precincts and showcase the diverse peoples of the Auckland region, countering the narrative of segregation.

Scenario 8 More than a City: A Connected Region



What's the big idea?

Auckland is more than a city. It is connected to its wider region, encompassing rural communities, islands, satellite towns and large regional parks. These are important parts of Auckland's identity that are often forgotten in discussions of Auckland's future. The city should nurture its connections to the region and to its beautiful rural, coastal and native bush environments, its history and culture, its rural and tourism economy, and its people – who are, after all, Aucklanders.

The connections between Auckland's urban and rural domains need to be reinforced for mutual benefit.

Where is Auckland now: Opportunities and barriers

Auckland is often mistakenly understood as an urban conurbation consisting of the isthmus area and surrounding suburbs and towns. However, the wider Auckland region extends to Wellsford in the north and Pukekohe in the south, and includes Great Barrier and Waiheke. About 70 percent of the region is considered rural. Rural Auckland is made up of several towns and villages, including the largely independent satellite towns of Pukekohe and Warkworth, which form an important part of Auckland's character. These areas boast significant and varied natural environments which help contribute to Auckland's regional output through a range of economic activities, including agriculture, horticulture and forestry (Auckland Council, 2018). It also hosts countryside living and lifestyle farms, which all contribute to Auckland's unique character.

Yet the 70 percent of the Auckland region that is rural is often underappreciated in the minds of most Aucklanders. In line with the global trend, the majority of Auckland's residents (about 90 percent) currently reside in urban areas (World Population Review, 2021). As the population continues to grow, more people are expected to settle in Auckland in coming decades. On this current trajectory, it is expected that most future growth will continue to accrue in urban areas, as Auckland's development strategy aims to control housing sprawl. Nonetheless, the pressure on peri-urban and rural zones is increasing, with notable reductions in availability of land for primary production, particularly around Pukekohe. Removing the productive capacity of soils in this area in favour of low-density housing developments might provide additional housing for Auckland, but could be considered an imprudent use of valuable productive land. Rural land close to Auckland has also been substantially fragmented by development of lifestyle blocks.

Auckland's important regional assets need to be better recognised and planned for to ensure a well-connected, liveable and sustainable region in the future. These assets generate wellbeing for both their immediate residents, and for the city and country, and the connections between them need to be strengthened.

Further considerations: Hearing the voices of the regions

Implementing a successful strategy that integrates the wider Auckland region entails engaging citizens in planning and decision-making. Because Auckland is so dispersed and diverse, hearing the voices from across the entire region is important as views and values will vary by towns and villages, and may be different for urban vs rural inhabitants. Incorporating deliberative and participatory forms of democracy could be a way to empower citizens to more effectively contribute to the decision-making process, by involving people with direct knowledge of their particular communities in evidence-informed deliberation on options and tradeoffs. These alternative forms of democracy are discussed in [Chapter 3](#).

A vision of Tāmaki Makaurau Auckland in 2070: More than a city: A connected region

The Auckland region has transformed from itself from series of disconnected urban and rural communities, islands and satellite towns to become a well-functioning, connected and vibrant region with a distinctive identity. Auckland's geographically dispersed areas are linked via effective and efficient high-tech transport links and all areas are served by high-quality, accessible amenities. Each area has developed a unique character and identity, and a real sense of community pride.

Rural Auckland has become increasingly important, both as a place for people to live, as a key to regional sustainability, and an attraction for recreation and tourism (see [Scenario 9](#)). With the increasing challenges of climate change, Auckland has been able to increase its local food production and decrease its food miles. The region's fertile land is well protected to provide for sustainable food production and horticulture. The rural communities around Auckland are thriving and provide the city with locally grown food. The transport links makes it easy for people from the city to visit the market gardens, and for those living rurally or in satellite towns to socialise in the city. This improved connectivity brings Auckland's diverse peoples together, promotes tourism and cultural experiences, and helps boost the region's economic output.

A four-city cluster

By 2070, high-speed transportation has improved to allow Auckland to connect more easily not only within its region but to its neighbouring cities of Hamilton, Whangārei and Tauranga. With hyperloop transport technology, goods and people are able to move between Auckland and Tauranga in about 15 minutes,⁵⁸ decreasing production costs in terms of both time and money, and boosting productivity. Such linkages had been signalled in the Auckland Plan 2050,⁵⁹ and were supported by the Upper North Island Strategic Alliance (UNISA), which was established in 2011 with the aim of managing common interests in this broader region. The realisation of these goals has expanded Auckland's economic boundaries into a productive cluster that is mutually beneficial to all four cities, producing agglomeration effects that have uplifted the productivity and economic development of the broader region. The region now produces a much larger share of New Zealand's GDP.

58 Calculated with Virgin Hyperloop's route estimator: <https://virginhyperloop.com/>

59 See map page 11 <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/about-the-auckland-plan/docsprintdocuments/auckland-plan-2050-print-document.pdf>

Scenario 9

An Indigenously Inspired 'National Park City'



What's the big idea?

There has been a recent global trend towards enhancing the natural environment of the world's urban areas with the aim of creating national park cities or urban national parks.⁶⁰ The National Park City Foundation⁶¹ strives to make cities around the world greener, healthier and more natural ('wilder') to support wellbeing and resilience. Just as Auckland has been designated a UNESCO City of Music, it could similarly pursue a designation of a National Park City, and could do so in a uniquely Aotearoa way.

A National Park designation confers protection of the natural environment and biodiversity, which would include enhanced protection of all of Auckland's green and blue spaces (urban parks, harbours, gulf, beaches, islands, marine reserves, Waitakere and Hunua Ranges, and rural areas) and its wildlife. It also places conservation status on the region's cultural values and taonga (treasures) such as ngā Tūpuna Maunga (ancestral volcanic mountains), which have been proposed as a Mixed Cultural and Natural Heritage Site under the UNESCO World Heritage Convention.

While the designation of a National Park City is internationally recognised, the possibility of enriching it with local flavour is exciting. The Māori world view is one of Papatūānuku as Earth mother and the natural environment as a life-giving taonga to be respected and conserved through *kaitiakitanga*. The mātauranga (knowledge) that mana whenua have of the environment offers a perspective that must be protected. Should this knowledge be offered and shared as part of this initiative, Tāmaki Makaurau Auckland could be the world's first indigenously inspired National Park City. The spin-off benefits to identity, regional pride, tourism and business would be immense.

Where is Auckland now? Opportunities and barriers

Auckland has some of the most stunning natural landscapes and coastlines in the world on its doorstep and within its wider region. These taonga are unparalleled, unique and rich – but also under threat. With climate change and ongoing environmental degradation, especially in urban areas, there is a need to protect Auckland's natural environment for this and future generations. The Hauraki Gulf has Marine Park status and Auckland is endowed with an outstanding collection of regional parks, marine parks, reserves, conservation areas and sanctuaries – a network which we should continue to enhance.

Urban development often comes at the expense of agricultural land, green spaces and wetlands, leading to habitat fragmentation. For example, New Zealand has lost the vast majority of its wetlands, with greatest losses occurring in Auckland (Denyer, 2020). Habitat connectivity plays an important role in ecosystem health and resilience, and this is being increasingly challenged as Auckland continues to sprawl. Habitat and biodiversity loss is also a concern, with increased density expected in and around the CBD.

Auckland needs to consider practical ways to ensure environmental protection in the planning process. Green infrastructure should be promoted in urban planning and design to minimise the environmental impact of the built environment, and better connections between green spaces are needed.

60 <https://www.nationalparkcity.org/>

61 <https://www.nationalparkcity.org/>

A vision of Tāmaki Makaurau Auckland in 2070: An indigenously inspired National Park City

Tāmaki Makaurau Auckland has always had incredible parks and reserves within its urban domain, and the city is surrounded by two harbours, the Hauraki Gulf Marine Park, regional parks and stunning rural landscapes. Given this endowment, the National Park City movement that came to prominence in the early 2020s inspired Auckland to work towards National Park City designation. Embracing the Māori principle of *kaitiakitanga* (environmental stewardship), Auckland seized its huge opportunity to link the region's green spaces in a vast network – scaling up the City Centre Master Plan's greenlink strategy to encompass the entire Auckland region in what has become known as the world's first 'indigenously inspired National Park City.' Fully implemented and continually improving, in 2070 this nature-based urban green network ensures accessibility and availability of green and blue spaces to residents of all abilities, all across the city. By linking biodiverse green spaces with forested corridors, wildlife dispersal and movement is facilitated, helping to protect and restore Auckland's unique biodiversity. The movement has enhanced the protection of Ngā Tūpuna Maunga, which have been designated as a World Heritage Site recognising their outstanding natural or cultural value.

Green links provide accessible and attractive pedestrian paths between the city's green and blue spaces, which were previously lacking. Cycle paths and disability access throughout the network makes it convenient for diverse groups of people to access these links. Activities and amenities such as urban community gardens, family music shows and cultural festivals are accommodated at different points along green links, adding to the vibrancy and community engagement in and around the city, and supporting social cohesion.

The National Park City designation also means that Auckland promotes nature-based community projects and solutions. Learning from cities like Tokyo and Singapore, Auckland's urban development policies actively encourage tree planting in the city, and the development of urban gardens and urban farming, including rooftop gardens and green walls on building exteriors.

The green network also serves as a platform to promote and enhance Auckland's Māori heritage and its multicultural richness. Generously, mana whenua have shared and showcased their traditional wisdom of rongoā, mahinga kai (food cultivation) and other traditional land and conservation practices. Not only is this cherished by Māori as it supports their strong spiritual bonds with the whenua and te taiao, but it teaches and inspires rangatahi of all ethnicities to connect with the whenua. The parks along green links are used by different groups to showcase their cultural activities, artwork, and other meaningful aspects of their cultures. The benefits are shared by all Aucklanders living in both urban and rural areas: improved wellbeing and quality of life through improved mental and physical health; cooler, cleaner air; and less congestion.

Domestic and international tourists increasingly have seen Tāmaki Makaurau as a destination, civic pride and identity for all Aucklanders is greatly enhanced, businesses have found opportunities in being located in such an environment and its attractiveness for foreign investment in the Auckland weightless economy has led to major global activities to locate here. As a result, Auckland has become a true global centre for sustainability finance and related activities.

CHAPTER 3

ENABLING CHANGE



Governance, Management and Planning

Enabling change

The key enablers to moving Auckland forward are the agencies of central and local government. This provocation suggests the need for substantive but pragmatic changes in the way governance and planning for Auckland occurs. In particular it would require:

- 1. System-wide alignment on a long-term vision and strategy for Auckland.** There needs to be consensus both on direction and process between the central and Auckland agencies responsible for Auckland's long-term development.
- 2. An integrated planning system.** Ideally this requires a singular planning agency sharing common data and strategic planning between central and local decision-makers
- 3. Buy-in to the vision by Auckland citizens and the rest of New Zealand.** This requires building trust and transparency in the decision-making process. It would be helped by more expansive modes of engagement and participation.
- 4. Taking an intergenerational perspective** by appointing an empowered Commission for Future Generations. Appointing rangatahi advisory groups to local boards.

The most dominant theme to emerge in our discussions about Auckland's future is the growing frustration and concern regarding the lack of alignment between actors in decision-making about Auckland's operation, planning and future strategy. There is uncertainty about where decisions are made and concern about the apparent disconnect between decision-making entities both in Auckland and Wellington, which manifests in disjointed planning and divided views of what matters for Auckland's future.

There will always be a tension between Wellington's desire to have tight control on decisions about Auckland, being 40 percent of the economy and population, and the fundamental democratic principle that decisions should be made closest to where they have impact. Inevitably, our particular form of Westminster democracy means that central government decision-making primarily focuses on the short-term because of the influence of the electoral cycle.

The principle of subsidiarity is not well elucidated in current local government arrangements. The Three Waters debate highlights the difficulties of a 'one size fits all' solution for local authorities of vastly different scale. New Zealand has traditionally had weak local authorities with limited revenue raising capacity, despite them having long-term responsibilities which are increasing with growing societal expectations and complexity. Auckland is a city of sufficient scale and potential that merits deeper consideration of how and where decisions are made. Too many civil servants we met with were refreshingly honest in their statements that they "do not really understand Auckland" even though they have responsibilities that directly impact on Auckland.

The single most critical enabler for Auckland to progress in a more desirable direction is to ensure alignment of its governance, strategy and planning infrastructures. Without enhancing the coordination of planning and providing clear strategic visioning, Auckland is likely to fail to meet its full potential. This is despite the best efforts of the many actors engaged, including elected, appointed and employed officials in multiple agencies who possess responsibility for, or influence on, Auckland's future.

Auckland Council and its agencies have made enormous and laudable efforts to plan Auckland's future. The pile of reports available is high and reflects a lot of thinking and analysis, but many of these are

virtually unknown except to their authors. They do not impact on decision-making by agencies (other than those of the authors) or on civil society, including businesses and their decision-makers. For example, how many Aucklanders know that Auckland is one of UNESCO's 47 'Cities of Music'? And to what extent has that been leveraged across industries, from tourism to entertainment to education? This simple example highlights the need for far better integration and communication. The vast array of plans suggests a more basic need. Each plan is self-contained, but they need to be part of a large co-owned, long-term strategy. Otherwise, it is like 100 builders setting off to a building site, each with their own set of plans. The building can never take shape.

We noted a large amount of deeply embedded scepticism among the business community, many NGOs and civil organisations, and engaged citizens that Auckland, as currently governed, can navigate its way proactively, rather than reactively, through the complex transitions and challenges ahead. In the near future, Auckland will accommodate and service more than 2 million people. Only by aligning central and local government decisions, and basing them on an agreed long-term vision that is not subject to the vicissitudes of electoral cycles, will Auckland be able to solve issues such as those related to housing, transport and horizontal infrastructure. Outstanding issues such as port location, a second harbour crossing, and the question of a world-class stadium remain unresolved despite being on the table for a long time.

Auckland will need to take real action on climate change and promote a greener economy while significantly enhancing its productivity. Only then can it properly support the wellbeing of its residents and of New Zealand but to do so requires long-term aligned thinking and buy-in from all stakeholders.

The structure of local democracy (at least for Auckland), and potentially even modifications to the supercity model, will inevitably change in the coming decades. This report highlights some of the reasons why change is needed. Our decision-making culture is generally conservative and risk-averse, and needs to be bolder, more effective and visionary. Decision-makers tasked with addressing Auckland's future must ensure society's wellbeing for the short-term as well as over intergenerational timeframes. This is core to the concept of stewardship which defines the essential responsibility of public governance. A distinct governance model for Auckland would benefit New Zealand as a whole, if it led to better decisions on the critical issues affecting 40 percent of its people and an even larger proportion of its economy.

Developing a shared vision

Strategy and planning are not the same: the first must inform the second and will involve both different and overlapping actors. Planning alone cannot determine strategy in a democracy. Integration of and alignment in long-term strategic definition and planning is needed if Auckland is to thrive. This vision should not only be understood and accepted by both central and local governments, but must also be accepted by the peoples of Auckland. This is fundamental to a healthy democracy.

The many plans that have been developed for various aspects of Auckland's future do not form a cohesive strategy. Until there is agreement on the road to be travelled, the plans will be disparate and either ignored or seen as marketing and political documents that allow any road to be followed. Without a singular approach to strategy, supported by an integrated planning unit and a singular data source that informs and is accepted by all the relevant central and local planning agencies, progress will be uncertain and potentially undirected.

Enhancing societal cohesion

How collective decisions are made has a critical impact on societal cohesion, which depends on vertical and horizontal trust within a society (Chan et al., 2006). Vertical trust is between citizens and the institutions that govern them. Making significant decisions without inclusive and meaningful consultation can undermine such trust and a sense of empowerment among citizens over their futures. The typically and persistent low turnout to local body elections (Read, 2018) and growing frustrations by many Aucklanders over basic issues of services and amenities such as transport, housing and equitable access to quality education and healthcare suggests that vertical trust is currently suboptimal. There is room here for new models of participatory and deliberative democracy, which are increasingly used in local body governance globally. These are discussed below.

At the same time, the diversity of Auckland's population can only be a strength if horizontal trust (the ability of different sections of a community to work constructively together for common goals) is sustained and strengthened. Auckland's high level of diversity compared to the rest of New Zealand means that horizontal trust must be continually reinforced by appropriate, inclusive and equitable planning and community engagement. This report suggests a number of strategic directions that would enhance social cohesion.

Auckland is different, so why is it governed the same?

The fact that Auckland's nature and needs differ from elsewhere in New Zealand suggests that Auckland's governance merits reconsideration. There is little logic in categorising Auckland's governance and related needs as being comparable to that of (say) the Chatham Islands, but currently the two regions fall under the same governance paradigm.

One step that could have significant impact would be if the large cohort of Members of Parliament (MPs) representing Auckland in central Government started functioning (where possible) as a non-partisan caucus alongside Auckland Council to advance Auckland's situation. This could even be established as a formal body with the mayor invited to chair it. While it is understandable that MPs focus on their national and partisan roles, that added and collective interest in Auckland would support their electorate roles.

This provocation has been written at a time when a review of local body governance is underway, and we have raised some of these issues with that panel. We also acknowledge that exploring changes to governance raises broader constitutional issues, including those of what a Te Tiriti inspired solution would look like. In this context, the Auckland situation is complex, with many hapu and iwi needing to be at the table. The issues of governance cannot be ignored if Auckland is to meet its potential for the future.

The need to connect knowledge and decision-making

There are incongruent interests between central and local government, and inconsistency in who is responsible for what. At times, the central Government has devolved activities to local bodies and later reversed the devolution. Examples of this include responsibility for wellbeing, which has moved between central and local government twice over the past four decades, and the current debate over water management.

We have seen ongoing tension between local and central government over environmental regulation, planning and intent in areas as fundamental as land use. The revision of the Resource Management

Act (RMA) into three Acts is still a long way from conclusion. It remains highly debatable whether this will clarify matters and lead to more alignment of planning needs. Indeed, it could actually undermine progress in some of the areas suggested in this paper.

Operational matters that belong appropriately with responsible agencies are distinct from those with long-term implications. However, even short-term decisions can have long-term consequences. Central agencies can have a dominant role in determining Auckland's future because of spillover effects they are not required to consider, and they may not fully understand or acknowledge the consequences of their decisions. School resourcing in Auckland, as discussed elsewhere in this report, is an example of major spillover consequences. There are several additional factors at play:

- inherent differences and tensions in the political considerations of central and local government actors;
- inherent differences and tensions between how central government and local government view Auckland;
- a tendency to see Auckland as just an urban conglomerate built around a CBD rather than a very diverse, complex urban and rural region;
- the shape and powers of local government;
- the level of true engagement of and consultation with citizens;
- issues of funding and revenue generation for a large local body; and
- the lack of a common data and research infrastructure used by all those with planning and strategic responsibilities.

There is no obvious structure for coordination across central government agencies or with Auckland, beyond the relatively small Auckland Policy Office. Given Auckland's size, economic and social potential, this attitudinal and knowledge gulf can create major issues. For example, the need for a second harbour crossing to accommodate growth and provide redundancy has been obvious for decades yet remains a political football. Similarly, ongoing indecision about Auckland's port location creates huge uncertainty for future physical and commercial planning. Economic, environmental, cultural and social factors are critical in deciding the future of the port and the port land. The Three Waters reform, despite its merits, does not distinguish the complexity of Auckland's growth and investments from that of many small local bodies, and highlights the inevitable problem for Auckland being the extreme outlier in a 'one size fits all' solution.

Existing planning units for Auckland, even within Auckland Council and council-controlled organisations (CCOs, which include Auckland Transport, Auckland Unlimited, Eke Panuku Development and Watercare), are somewhat siloed. Yet, they can have overlapping interests, and lack of full alignment inevitably constrains their ability to plan for a complex future. Given these complexities and our short political cycles, these units can be inhibited in their ability to have real impact when they try to look ahead in a way that promotes a long-term vision. Hence, it is unsurprising that even in 2021 we continue to focus on 1950s transport solutions rather than see Auckland's potential to be a global test-bed for more efficient and environmentally appropriate future-focused solutions (see [Scenario 6](#)).

The 2010 reforms to create the Supercity were well-intended and fixed some issues, but unfortunately did not produce sufficient alignment for the longer-term. For example, is it logical to have only one person (the mayor) out of more than 200 elected officials (Council and Local Boards) elected across the whole region? Some innovative solutions are conceivable that would promote greater inclusivity

and citizen engagement. Why is it that the reforms led to separate planning and strategic units that are inevitably not well integrated? There is a strong argument for further change to be considered, particularly in light of Aotearoa's evolving understanding of co-governance and the generational evolution of tikanga in our collective decision-making. This should not be in isolation from thinking through how deliberative and participatory governance should be developed for Auckland.

An urban research and strategy unit for Auckland

Vision creation and planning must be based on robust analysis of multidimensional data on demographic, social, economic and environmental issues, including international comparisons. In any large city under rapid transition, these different domains are inextricably linked. To better understand this complexity and to support more integrated decision-making for the future, an increasing number of cities have established a single high-quality, academically informed planning unit able to encompass all domains and access all necessary data. Examples include the Singapore Urban Redevelopment Agency, the Gauteng City Region Observatory in South Africa, and the Lisbon Regional Development and Coordination Commission. An equivalent institution in Auckland would overcome much of the present disjointedness.

Data should be supplemented by urban research, which is now a major focus of the global scientific and academic community and promoted by the Sustainability Development Goals (SDGs). In some cities, councils, universities and the private sector have formal agreements to create urban observatories to observe the city's development, undertake relevant research and synthesise evidence to take the city forward.

A local form of this might be a formal collaboration between a planning unit and an applied academic unit that takes advantage of the skills available in the Auckland tertiary institutions and their international connectivity. This must extend beyond planning departments to infrastructure and engineering, geography and related areas, futures studies, social and political sciences and related areas.

In practice, a two-tiered structure might comprise a singular strategy and operational research unit reporting to the policy stakeholders both in Auckland and Wellington, with resources to contract to and partner with academia. This might include a virtual cluster across Auckland's academic centres in a model akin to a tertiary sector centre of research excellence. This would have the secondary benefit of bringing the universities closer to the region's policy community. The business community and civil society could also be engaged.

Most citizens live very busy lives and attention spans are short; a long document outlining plans for Auckland's future in relatively technical language may not appeal or even be accessible to most. Technology like 3D digital models and digital twins can present a visual representation of a future Auckland. This could be a valuable platform to assist decision-makers and residents to visualise the possibilities. Making such models accessible in a public setting or online could enhance citizen engagement in the planning process and create more collective ownership of future plans.

Who pays, who decides?

Currently, Auckland's core financial and strategic decision-making is disproportionately weighted towards central government. This limits the Council's input into the decision-making about Auckland's future in many domains, pushing their focus towards short-term service delivery. Yet, in many areas, it is local democracy that may be best placed to evaluate strategic priorities.

Council's main financial tool other than service charges is collecting rates from property owners. Rates have risen at a rate far in excess of incomes and inflation (Harris, 2018). Council also collects development contributions for new subdivisions and intensive developments in existing areas so as

not to impose significant new costs on existing ratepayers. The nature of the current arrangements, including the constraints on raising debt,⁶² inhibit adequate investment in long-term infrastructure.

There have been a number of proposals to fund Auckland's and other local bodies' developments in other ways.⁶³ Such a discussion was beyond the brief for this initial provocation but is an increasingly urgent matter needing resolution. It is at the heart of the local body dilemma.

The Council

Auckland's diverse population is becoming increasingly isolated from and confused by decisions made about them and for them.⁶⁴ This is not just true of central government, but also of the multiplicity of decision makers in local government – the Council, local boards and the CCOs. The nature of local body politics in Auckland, which has no strong and well-recognised political party framing, means that many voters do not have any real sense of what their vote for a particular candidate implies.

There may be real advantages that Auckland Council members are not constrained by allegiance to national partisan identities, which do not by definition necessarily align with decisions that a local body must take. But partisan alignment in national politics allows voters to vote for a party (the key vote in a MMP environment) that aligns best with their worldviews and aspirations on the one hand, and their trust and confidence in the candidate on the other.

In contrast, in Auckland only the mayor is elected by everyone, and party politics are not generally evident. Each voter elects a ward representative, and local boards act as groups of individuals who offer at best an informal association as a group, without clear manifestos. They are elected primarily on ward-related matters, interests and identity. This structure of local governance compounds the limited scope of Council decision-making. The short electoral cycle also inhibits long-term planning and favours short-term expedient planning.

So, while the Council debates and votes on many issues, these votes have not been subject to realistic and appropriate democratic input. A more active use of deliberative and participatory democracy techniques is clearly needed and discussed below. Perfunctory consultation, which is dominated by interest groups, is not adequate.

Auckland's governance arrangements and challenges are not unique. They are similar to those in other large cities such as Vancouver (Hutton & Barnes, 2016) and Brisbane (Bajracharya & Khan, 2020). However, quite different models are used in other very successful cities such as Dublin (MacCarthaigh, 2007) and Amsterdam (Gilderbloom et al., 2009). There may be much to learn from them, and we recommend a more extensive consideration of these and other models.

The Council Controlled Organisations (CCOs)

The CCOs are designed to ensure commercially savvy and dedicated governance to particular components of the portfolio of assets owned by Auckland and thus assist Auckland's development. They manage the majority of services Aucklanders need and expect, control the majority of Council's assets and expend half the Council's budget. They determine much of the shape of Auckland, but their relationship to the Council and an integrated view of the future is unclear to many. Some tension between corporate and democratic oversight is inevitable, but this could be reduced if a common long-term vision was agreed upon.

62 As evidenced in the application of the Three Waters proposal.

63 For example, a local sales tax (or a distribution of a component of GST) is a common model used overseas.

64 The 2018 Nielsen Quality of Life Survey found 70 percent of Aucklanders believe the public has little influence on Council processes.

In recent times, Watercare, Auckland Transport and the Ports of Auckland have struggled in their relationships with Aucklanders. This is unfortunate because they are perhaps the most obvious ways citizens view the governance and management of their city.

The CCOs have recently been subject to a review that highlighted their strengths and areas for improvement.⁶⁵ The review recommended improving how they relate and integrate with the Council, local boards and each other, and how they engage with the community as a whole and with Māori in particular.

Other global cities, for example, Copenhagen, have found effective models for achieving this, ensuring greater connectivity between the democratic process and management of core assets. Future work should explore these comparative models. Ultimately the issue becomes one of aligning performance to a jointly owned vision – that is, a vision jointly owned by Council, government, citizens, and agencies, including the CCOs.

Engaging citizens

Citizens generally only engage with local body politics when a specific issue directly affects them. There is very low turnout in local body elections. There is scepticism about the way the system operates for citizens' benefit in the areas that most affect the quality of life and opportunity of Aucklanders: transport, housing, infrastructure and education. The planning process is seen as obtuse and inaccessible to many and is largely related, at least in citizens' minds, to spatial planning and property development rights. The forms of consultation used over specific matters are often tokenistic, poorly publicised, and tend only to reach certain parts of the population or are dominated by vocal interest groups. This is not helped by the often-shallow and heavily filtered nature of the media in reporting Auckland issues.

For Aucklanders, many decisions made by central Government that directly relate to the way Auckland functions and evolves can seem disconnected from local contextual understandings. For example, as we have suggested in [Scenario 3](#), the way the Ministry of Education makes planning and funding decisions about the location and resourcing of schools in Auckland has multiple long-term, flow-on effects.

This can drive the sense that electing a local body member matters little, and thus it is not surprising that a minority of Aucklanders vote in local body elections. Even in matters of direct relevance to citizens, the presence of the dominant hand of central government combined with seemingly opaque planning processes in CCOs like Auckland Transport creates a further sense of disempowerment. This is perhaps inevitable in a country that has not developed a robust and devolved second tier of government.

However, new methods exist that can strengthen citizen engagement and thus democracy. Indeed, local governments across the developed world have been at the forefront of developing new models of deliberative and participatory democracy. They are designed to create a trusted and inclusive input into decision-making.

Strengthening democracy in Auckland

Current consultation by Auckland agencies typically request input into standardised questions posted online. Such approaches mainly attract special interest groups and are effectively unknown or inaccessible to many affected members of the community. Non-rate-paying residents and the younger generation are particularly disadvantaged. Such processes do not reflect the nuanced and broader

⁶⁵ See <https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/council-controlled-organisations/Documents/CCO-review.pdf>



Watercare is currently experimenting with the use of deliberative democratic methods. Photo: Watercare.

perspectives and iterative discussions that are needed, particularly for complex issues with multiple consequences to any one decision.

In contrast, *deliberative democracy* approaches engage citizens in learning, deliberation and reflection on specific issues before elected officials make decisions. Commonly these take the form of a citizens' assembly or citizens' jury (OECD, 2020a). *Participatory democracy* involves large numbers of citizens more directly in some decisions. This requires a genuine commitment to informed and facilitated consultation, often using new digital technologies that go well beyond standard surveys, and involve non-biased information sharing and quality communication.

Employing these two approaches regarding Auckland's long-term strategy and on key and contested issues could be a way to avoid public pushback by empowering more citizens to have a say in how Auckland is governed, and to build trust in the decision-making processes. Domestic experiments with such processes are overdue, and should consider specifically how they are co-designed to reflect te Tiriti in the process. It is possible to co-design approaches that would allow indigenously inspired democracy to flourish using these methodologies so that all citizens, including mana whenua, feel more empowered.

On the most contentious matters involving values and interests, citizens' juries and other deliberative assemblies of randomly-selected citizen representatives are much more equitable and acceptable ways of reaching a conclusion, compared with relying on web-based consultation. Citizens' juries allow for a group of citizens to be fully informed of the evidence on all sides of an issue and to deliberate on this evidence, calling in experts as needed, over several sessions. These are increasingly used in local-body decision-making in Europe and Australia over issues of contention. They identify areas of agreement and contention through respectful dialogue and ultimately reach a consensus on what is acceptable (Chwalisz, 2019). These processes may result in binding decisions or simply provide transparent

recommendations to the responsible agency or Council, which become hard to ignore.

Watercare, in partnership with Koi Tū: The Centre for Informed Futures, is currently experimenting with the use of deliberative democratic methods as a way of enhancing the validity of its consultations.⁶⁶ This has involved independent process design and facilitation, and engagement of external experts to answer questions directly from citizen participants. Other complementary new methodologies exist to enhance the explanation of complex systems and to explore citizen's views, and these should be explored for Auckland.

One advantage of citizens' juries is that they can be more reflective of Auckland's diverse human landscape. There are methods of sortition that would allow diversity to be well represented. Diversity, in this sense, should be based on multiple domains, and can respond to partnership obligations of the Treaty while reflecting our multicultural diversity. Diversity of ethnicity, ability/disability, age, gender, country of origin, and location (urban vs rural) is essential in ensuring the decisions are inclusive. Knowing that all voices are being fairly considered in the decision-making and consensus-building process gives comfort even to those whose views are not necessarily reflected in the decisions. Providing minority views with confidence in the process and outcome is important to a cohesive and fair society.

Māori input in governance and planning

Constitutionally and morally, Māori as mana whenua have a particular role in planning and thinking about the future of Tāmaki Makaurau. The history of Auckland and the many iwi and hapū with a stake in the region have led to perceived complexity in their inputs into governance. Further, many Māori living in Auckland are mātāwaka who do not see themselves as primarily linked to one of the 19 recognised iwi and hapū.⁶⁷

Auckland, as we now know it, exists in part because of the invitation in 1840 by Ngāti Whātua Ōrākei to the British Crown. There were many decades in which the trust was broken by the Crown and settlers, but following the Bastion Point protests in 1988 and the Treaty settlement with Ngāti Whātua Ōrākei in 2011, we are starting to see the resurgence of hapū with a strong identity and future. The same must be achieved for all Māori living in Auckland, particularly those with historical ties to the broader Auckland region. The challenge of Ihumātao highlights the importance of ongoing reconciliation and understandings. This is a complex journey with very different world views which are not uniform within Māoridom, nor indeed among Pākehā. But Auckland, as one of the most multicultural cities in the world with a strong bicultural underpinning, must find ways to forge an approach that all our citizens will be proud of.

This means that Māori must have an appropriate voice in those aspects of planning and strategy reflected in Te Tiriti o Waitangi. The form this takes is still to be determined, and will require national consensus and the recognition that Māori (like Pākehā) do not speak with one voice. In Tāmaki Makaurau, the Independent Māori Statutory Board has been a powerful instrument for Māori to be included and give voice to the Council and CCOs on Māori outcomes, along with the Mana Whenua Kaitiaki Forum which identifies priorities for the 19 hapū and iwi authorities. Co-governance has been developed for some important natural resources including maunga, and is in progress for the Gulf. This provocation was not constructed or briefed to consider this aspect of local governance further. Nonetheless, experiments in co-designed, equitable, indigenously inspired deliberative democracy have the potential to facilitate progress towards meeting the aspirations of every Aucklander and build on Te Tiriti.

Beyond the enormous potential within our Māori population, which has been cumulatively

66 See Koi Tū (2021) Developing better ways to engage the public around complex issues <https://www.complexconversations.nz/>

67 Auckland City and its Agencies recognise 19 Hapū and Iwi as mana whenua. They are invited to select the nine members of the Independent Māori Statutory Board which has seven iwi/hapū and two mātāwaka representatives.

disadvantaged over many decades, Auckland is built on a rich precolonial history which remains an under-leveraged asset into its future. The strategies identified elsewhere in this provocation have been formulated with a view to advancing Māori aspirations, and if they are further co-developed with Māori, can help address their concerns.

Committing to future generations

This provocation was briefed by Auckland Unlimited to focus on Auckland's long-term future. We have approached it by comparing a business-as-usual approach to what could realistically be achieved if a more strategic approach was adopted based on a collective vision of our long-term destination. But decisions made now have intergenerational echoes and consequences.

There are nearly 400,000 Aucklanders whose voices cannot easily be heard, because they are too young to vote. Decisions made in the coming years will affect their lives far more significantly than the lives of the current decision-makers. This is most dramatically seen in the global movement of young people pushing decision-makers to recognise that climate change is an urgent and existential problem.

This report has taken 2070 as an arbitrary target for planning – approximately two generations from now – and in turn, it sets the path forward towards the 22nd Century, when most of those 400,000 will still be alive. Their interests must be protected. Setting a trajectory towards these desired outcomes for 2070 should also protect the interests of many generations to come.

Our vision is that Auckland must be a city that thinks intergenerationally. This aligns strongly with Māori worldviews of both *whakapapa* and *kaitiakitanga* – that is, stewardship of people and place over generations. The voices of tamariki and rangatahi of all our cultures need to be reflected in the decisions made for the future.

What mechanisms could be developed to achieve this? Should rangatahi consultative groups be a required component of every local board, or of the Council itself? The answer seems self-evident, given that there are many issues on which young peoples' voices should be heard.

We would argue that there are even further considerations and interests to consider. The Welsh Government has shown the way in establishing a Future Generations Commissioner and enacting the Wellbeing of Future Generations (Wales) Act 2015.⁶⁸ The Commissioner's role is to advise on the long-term implications of any strategic choice or plan operating over a generation or more. Adopting a similar model, in the form of a Commission for Future Generations for Auckland, would be groundbreaking for a local authority. It would protect the interests of future generations and assist those involved to better understand the longer-term or spillover implications of different decisions.

Earlier in this report, we pointed out a significant risk of the city being hollowed out, losing its young people if it does not become future-focused. The development of such a commission would be a powerful signal not only to those who are here but to the world, including potential investors, that Auckland is committed to being a place that supports the next generations to live well, allowing the region to continue to thrive.

68 See <https://www.futuregenerations.wales/about-us/future-generations-commissioner/>

CHAPTER 4 **TOWARDS AN INTEGRATED** **PERSPECTIVE ON** **AUCKLAND'S FUTURE**



A perspective on Auckland's future

Auckland has enormous potential – it could be a globally significant city. The whole of New Zealand will benefit if that can be achieved. Its inherent assets as a city and region can be better developed and utilised.

Auckland needs vastly more consistent, aligned and integrated planning across multiple agencies both in Wellington and Auckland, and an agreed long-term view of Auckland's future. Without agreement between key stakeholders on the desired destination, any road will do.

This provocation sets out nine elements that could describe a possible road ahead. They provide a view of Auckland's future that is people-focused and socially cohesive; a place of culture and creativity; a place of bicultural and multicultural richness; a centre for education; an innovation hub; a smart, sustainable and liveable city; and a region with its endowment protected. Together they provide a vision of Auckland in 2070 as a city and region living up to its potential – a place where people thrive and want to live, with an identity they are proud of.

Planning should occur within a framework of an overall aligned strategy looking out over generations, and structures should be created to ensure this.

Auckland's future will be greatly enhanced by the creation of a single, whole-of-Auckland planning and strategy unit with integrated data capacities.

The relative role of central and local government merits reconsideration.

Auckland should take a lead in incorporating participatory and deliberative democratic methodologies into its democratic processes.

Auckland should establish mechanisms such as a Commission for Future Generations to emphasise its commitment to the future.

As a provocation, this document's primary purpose is to raise questions that initiate conversation and debate. It does not claim to be either a strategy or a planning document. It is intended to help shift our collective thinking by offering a frank, high-level assessment of where the city could develop over the next two generations if there was consensus on a vision, and effort made to better coordinate action on opportunities and to minimise barriers. By taking such an approach, we can explore options within each dimension of the direction suggested, recognising that some suggestions are more straight-forward than others. For practical reasons we present our thinking as nine different scenarios, but they feed into each other and should be considered as a whole.

We have focused on evaluating what would be needed to shift Auckland's trajectory under the business-as-usual model to a more productive and wellbeing-focused future. Rather than looking only at the next step forward, we have suggested scenarios that look further ahead to what is desirable and feasible if we are not locked into the path dependencies of current thinking. From there, it becomes possible to 'backcast' to map the road to that desirable future by identifying the decisions and actions that must be taken.

Futures thinking and anticipatory foresight is not intended to predict the future, but to help define our preferred destination and the impact of decisions made today on whether we can reach it. As we undertook this analysis, we looked at the opportunities ahead, and we asked the many respondents we interacted with what the barriers were to achieving them. Much more analysis and work would be needed to move beyond this initial phase of reimagining Auckland's future. This will require more extensive integration with planning efforts across the Auckland system, and structured engagement with many more stakeholders than was possible in this phase. Most areas need to be fleshed out much more and supplemented with comparative analysis of case studies elsewhere.

This phase of work identified some of the structural barriers related to planning and governance arrangements, and others that lie simply in the lack of permission to imagine and present a cohesive view of the future. The embedded scepticism of many who could help make a change can only be overcome through information, discussion and analysis, and ensuring that democracy is rejuvenated.

The political philosopher Roman Kraznaric, in his book *The Good Ancestor* (2020), notes that

“Cities are far more effective than nation states at tackling long-term problems ... If you are looking for innovative long-termism, the place to find it is at city level”.

He gives examples of how quality cities are looking to the future. Many are of a scale similar to Auckland. Certainly, the inherent assets of Auckland could form the basis of a remarkable pathway forward if some of the issues we have raised are addressed. However, if insufficient alignment remains between central and local government and among the multiplicity of agencies at both levels of government involved in determining Auckland’s shape, it is likely that the future will remain muddled, uncertain and suboptimal.

The constraints on Auckland’s abilities to choose its own future are real; for one, the current funding arrangements for such a large local body are inhibitory. But this must not be an excuse – there are many things Auckland could itself do that would help it to be a global player in the weightless economy of the future. Other barriers lie with our institutions: for example, many people highlighted to us the inefficient, unresponsive and expensive nature of attempts to engage with the tertiary sector, yet it should be one of Auckland’s best assets.

There will inevitably be a tension between what is needed to fix past problems vs present issues vs investment for a positive future. A defensive attitude to past decisions must be avoided. Setting a forward-looking approach while not ignoring the current issues is the only way. Like all complex challenges, there is no silver bullet solution for Auckland. What we have presented suggests that multiple strategies could be developed and integrated to make Auckland meet the expectations of all its citizens.

Auckland is a youthful city by global standards. It has developed rapidly in the 181 years since Āpihai Te Kawau and his iwi, Ngāti Whātua Ōrakei, invited the Crown and settlers to Auckland in hope that peace would reign on the isthmus. But over the next generation, Auckland will need to take greater and more ambitious leaps forward if it is to have a positive future. We have outlined the initial shape of what could be a description of where we want to go, and what kind of city and region we want to be in the future.

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Koi Tū's Reference Group

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APPENDIX A: GLOSSARY OF MĀORI TERMS

Māori Term	Description
Aotearoa	The Māori name for New Zealand. The term roughly translates as ‘the land of the long, white cloud’.
Hapū	Subtribe. A section of a large kinship group (iwi/tribe) sharing descent from a common ancestor.
Iwi	Tribe. This term often refers to a number of hapū (section of a tribe) related through a common ancestor with a distinct territory.
Kai	Food, to eat.
Kaitiakitanga	Guardianship or stewardship.
Koi Tū	The sharp end of a spear.
Kotahitanga	Unity, togetherness, solidarity, collective action.
Kura	School.
Mahinga kai	Food cultivation.
Mana	Authority, status, prestige.
Mana Whenua	Rights and authority possessed by a particular tangata whenua group with respect to a geographic area.
Manaakitanga	Hospitality, kindness, generosity, support - the process of showing respect, generosity and care for others.
Māori	The indigenous people of Aotearoa-New Zealand.
Mātauranga	Knowledge.
Mātāwaka	Māori living in Auckland who are not members of one of the 19 recognised iwi and hapū of Auckland. (Their tribal affiliations lie outside of Auckland.)
Maunga	Mountain, mount, peak or volcanic cones.
Moana	Sea, ocean or large lake.
Ngā Tūpuna Maunga	Ancestral mountains.
Pākehā	Any non-Māori living in New Zealand. The term is commonly used to describe New Zealanders of European descent.
Papatūānuku	Earth mother.
Rangatahi	Young people; the younger generation.
Rangatiratanga	Sovereignty, self-government, autonomy; the right of Māori people to rule themselves. Chieftainship.
Rongoā	Traditional Māori medicine.
Tāmaki Makaurau	The Māori name for Auckland. The term translates to ‘Tāmaki of a hundred lovers’.
Tamariki	Children.
Tangata whenua	The indigenous people (Māori) who have historic and territorial rights over the land. The term refers to Māori tribal groups who can exercise these rights in Tāmaki Makaurau.

Te Ao Māori	The Māori world.
Te Moananui-a-Kiwa	The great ocean of Kiwa; the Pacific Ocean.
Te Reo Māori	The Māori language.
Te Taiao	Natural resources; the environment that contains and surrounds us.
Te Tiriti o Waitangi	This term translates to the Treaty of Waitangi, which is the constitutional document which establishes and guides the relationship between the Māori and the Crown (represented by the government) in Aotearoa.
Tikanga	Māori customary practices, values and behaviours that have developed over time and are deeply embedded in the social context.
Tūpuna	Grandparents or ancestors.
Whakapapa	Genealogy, genealogical table, lineage, descent.
Whānau	Extended family or family group. In modern usage, the term can also be to describe a group of people who are not related, but who share a common cause or interest.
Whenua	Land, soil, country, earth, ground, etc.

APPENDIX B: QUESTIONS USED IN THE STRUCTURED INTERVIEWS

1. How do you perceive Auckland at the moment?
2. What would you see as the significant factors that have produced the current state of Auckland?
3. What would be your vision for what Auckland will be in 30-40 years' time? (i.e., if things went well, being optimistic but realistic, what would you see as a desirable outcome?)
4. What are the critical issues that would need to be addressed to achieve this long-term vision?
5. What factors might undermine the ability to achieve your vision (i.e., what can you foresee possibly going wrong?)
6. What are the key changes (structural, operational, cultural, etc.) that would need to be made to reach a favourable outcome?
7. What would be the priority decisions and actions needed and by whom?
8. What do you perceive as the most significant knowledge gaps that need to be filled?
9. What else, in an ideal world, would you consider to achieve a positive vision for Auckland?



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