

Discussion Questions1.

What are your views on the proposed 2050 infrastructure vision for New Zealand?

We are of the view that, consistent with te ao Maori, a healthy environment is critical to the wellbeing of all New Zealanders and that this holistic perspective should be better carried through the strategy.

Q2. What are your views on the decision-making outcomes and principles we've chosen? Are there others that should be included?

1 The proposed strategy would benefit from having an increased focus on environmental outcomes threaded through, more than a token principle.

Add an outcome specific environmentally focused to provide for protection and /or restoration of natural environments and healthy ecosystems, preserving the balance between the wider environment and wellbeing of the community. Such an outcome would note adherence or acknowledgment of environmental regulation (not limited to- Aotearoa New Zealand Biodiversity Strategy / Te Mana o te Taiao and National Policy Statement for Freshwater Management (NPS-FM)). Alignment between national policy and the strategy would allow for more holistic planning and implementation of each.

2 Infrastructure decisions need to include an assessment of the infrastructure output being resilient, flexible and agile in order to respond to known or potential future challenges. **Add principle:**
Resilient: infrastructure, and decisions pertaining to, shall be resilient, flexible and agile.

3 We consider the integrated principle needs to reflect partnership working as well as the influence and impact of networks on each other. Reword the principle as follows-

Integrated: We ~~think~~ work collaboratively across infrastructure networks ~~and avoid siloed thinking and decision-making.~~ reflecting our part in the national system (e.g. central government, territorial authorities, public and private entities)

Q3. Are there any other infrastructure issues, challenges or opportunities that we should consider?

1 The strategy is silent on multiple local government infrastructure groups. For GWRC perspective public transport, flood protection, parks and ports are missing from the draft. These are critical to community wellbeing- the purpose of Te Waihangā and its strategy.

We discuss public transport further in this submission. Flood protection and parks and reserves we will discuss here.

Aotearoa New Zealand's parks, reserves and open space are a taonga. They cover more than a third of our land (by area), are a mainstay of our economy (natural capital, tourism/recreation and employment) and a massive carbon sequestration sink. The strategy gives little emphasis to this asset group, arguably continuing the ongoing disregard of parks and recreation assets. The scale of challenges faced-against the benefits provided- are huge: parks, reserves and open space warrant Te Waihangā attention.

We know that around 1.5 million hectares of our most productive and intensely used land, and over 100 towns and cities around the country are protected by a flood scheme. Schemes provide value of

around five times the amount of their capital worth. Research on the effectiveness of New Zealand's existing flood protection demonstrates that whilst schemes cannot completely contain major flood events impacting our communities, to date they have provided safety and security from the full force of such events. They are at greatest risk from, yet provide our greatest defence to, increasing surface water flooding. Flood control infrastructure needs inclusion in the strategy.

2 For there to be meaningful change of the scale intended in the Strategy, it needs to acknowledge the effects of electoral cycles and changes in policy direction on infrastructure planning. The radical shifts between governments sees divergent values and processes and infrastructure not implemented completely or as intended, frequently without gauge of the full implications. The Strategy needs to recognise the uncertainty and destabilising effect on enabling long term design and delivery of infrastructure policy.

The strategy should facilitate the cascade from government plans and policies to delivery nationally, regionally and on a local authority level. For example - The Government Policy Statement on Land Transport 2021 (GPS) provides national strategic transportation direction and priorities, and guides funding allocation by Waka Kotahi. The National Land Transport Programme (NLTP) ensures transport can be delivered nationally, regionally and on a locally. The GPS and NLTP confirms the Government's commitment to the New Zealand Rail Plan (NZRP). The NZRP in turn identifies the future opportunities for the Wellington Metro Rail Network and services. The Regional Land Transport Plan (RLTP) and the Regional Public Transport the guide local delivery of public transport. The RPTP is a statutory document under the Land Transport Management Act 2003 and aligns to, and helps achieve, central government policies including the Government Policy Statement on Transport 2021, the National Policy Statement on Urban Design, and the Government's Declaration of a Climate Emergency. The Wellington RPTP sets out our key initiatives for public transport centred on the three strategic priorities of mode shift, decarbonisation of the public transport fleet and improving customer experience.

Having this visibility of how the various government plans and policies inform and influence more local plans and delivery for all infrastructure sectors should be a key output from Te Waihangā and its strategy.

3 Agree all the contributing challenges- but believe the following are missing and deserve consideration-

- The current national, regional and territorial split in responsibilities for transport infrastructure delivery and public transport services creates coordination problems and is significant barrier to change in land transport systems.
- Inaccessible, poor quality and low performing education and medical building stock.
- High price of electricity to some communities ("Many infrastructure sectors are natural monopolies".)
- Fragmented planning creating low quality urban environments- the lack of sufficient and affordable housing, limited access between housing, employment, education, and medical services.
- Waste management and minimisation, and emissions.
- Equity of access for the transport-disadvantaged (people with low income, who are dependent upon others for travel to access employment, health care, education and other services)
- Appropriate ownership structures to ensure (that once established) new infrastructure is held by the party /parties best positioned to fund and oversee service outcomes and future long term asset management

- There is a need to build agility into the systems of infrastructure development and encourage adaptation to changing conditions – climate, population, digital etc (relates to resilient principle/ outcome suggestion)
- The text about diversity and inclusion is not very well articulated. In terms of the long-term trend regarding diversity and inclusion society expects that all groups would be represented in professional and decision-making roles.
- The scale and significance of existing legacy infrastructure including management implications and costs

Q4. For the 'Building a Better Future' Action Area and the Needs:

• What do you agree with?

Support the focus on demand management to make better use of existing infrastructure and extend its life.

We need a common definition of critical infrastructure that is well understood by the sector, and an identification of the assets that fall within the definition. Te Waihanga should progress a definition of critical infrastructure with IIMM, Lifelines/ NEMA and relevant industry bodies. As well as consideration be given to using the RMA definition of infrastructure, and Nationally Significant and Regionally significant infrastructure (definitions) and assets already in regional policy statements, and regional and district plans.

Given the scale, importance and life expectancy of critical infrastructure, there is prudent need to take a 100 year planning horizon and be built to a standard that can withstand natural hazard and climate change impacts. This may require siting them out of high hazard areas. The Strategy should include a new bullet **F6.3 Resilience of critical infrastructure**

• What do you disagree with?

1 *'The unique features of infrastructure'*. Are these challenges? Or features of infrastructure that influence the issues and challenges

2 Ecosystem services is a significant element that is missing from [the alternative ways of working focus of] the strategy. To the list of F1. Tasks add a new F1.9 as follows- **F1.9 An ecosystem services approach** is a way of quantifying and incorporating into decision-making the value of these benefits provided by the natural environment and from healthy ecosystems. Nature based design solutions also help mitigate against natural hazards and reduce embodied carbon within infrastructure.

• Are there any gaps?

1 The strategy must provide commentary on the proposed Climate Change Adaptation Act and support a range of flexible and anticipatory adaptive pathways responses.

2 Te Waihanga need to drive the decisions of no new development/ retreat from, high risk lands, based on decreasing long term risks, costs and delivering fair intergenerational equity. Further climate change adaptation mechanisms must be designed in such a way as to minimise the long-run costs of adaptation and should include incentives to avoid activity that would add to these costs.

3 Introduce the UN Sustainability Goals to the strategy ensure infrastructure delivery addresses inequality, climate change, environmental degradation, and intergenerational equity.

4 GWRC supports the issues considered on page 48 of the strategy, and suggests that these considerations become standard practice for infrastructure development. GWRC in particular supports the consideration of lifecycle carbon costing; the bright line resilience test; and that the options are maintained where possible to allow for the uncertain timing and severity of climate impacts and adaptable responses.

Q5. How could we better encourage low-carbon transport journeys, such as public transport, walking, cycling, and the use of electric vehicles including electric bikes and micro-mobility devices?

GWRC are supportive of the move to low carbon transport as proposed in the Ministry of Transport's Hīkina te Kohupara (MoT)– Kia mauri ora ai te iwi - Transport Emissions: Pathways to Net Zero by 2050. All infrastructure needs to contribute to net zero carbon 2050 – roads, rail, digital, built and energy. Achieving this will require a combination of well-designed services, price signalling and a significant attitudinal shift.

Pricing externalities and co-benefits in cost benefit analyses prior to investment decisions will also assist. If the co-benefits are to be achieved through mode shift (including decreased congestion, increased mental and physical health, decreased air pollution, decreased fuel costs, decreased carbon emissions, decreased traffic noise, increased greening of urban centres and increased sequestration opportunities) it is important that all of these benefits are appropriately valued.

Q6. How else can we use infrastructure to reduce waste to landfill?

GWRC supports the move from waste disposal to waste recovery infrastructure, to better manage the waste stream and reduce carbon emissions.

There are huge opportunities to improve smarter use/reuse/ repurposing of existing assets, to require separation and recycling of construction and demolition streams, all moving towards a circular economy.

Taking a waste hierarchy approach to managing the waste from the disposal of assets should be a factor considered when making an investment decision.

Te Waihangā should facilitate making the necessary changes required to reduce waste, and recycle more- centralising separation of waste streams and product stewardship.

Q7. What infrastructure issues could be included in the scope of a national energy strategy?

Infrastructure issues that should be included in the national energy strategy are such issues identified in regional strategies, such as Wellington Regional Growth Framework (WRGF) i.e. providing for low emission transport and capability in growth areas. National Strategy should identify renewable energy zones and where demand growth will be located (e.g. industrial heat users and cities). Distribution networks should be developed to this plan with spare capacity for the future growth, without the costs being loaded onto the first customers. It may be appropriate to review the national direction under the Resource Management Act for Renewable Energy Generation and Electricity Transmission to examine the extent to which they adequately protect potential renewable energy generation, transmission and storage requirements. Also we support appropriate incentives that align energy strategy with the phase out of fossil fuels for energy services.

Q8. Is there a role for renewable energy zones in achieving New Zealand's 2050 net-zero carbon emissions target?

The Council believes there is a role for renewable energy zones in achieving New Zealand's 2050 net-zero carbon emissions target. We support renewable energy zones and a move to authorisation, not consenting. This could include offshore wind.

Q9. Of the recommendations and suggestions identified in the Ministry of Business, Innovation and Employment "accelerating electrification" document, which do you favour for inclusion in the Infrastructure Strategy and why?

Support measures suggested and others in accelerating electrification that lowers consenting barriers. Suggest also that the electricity market is reformed so fossil fuelled thermal plant is not the price-setter for all generators including legacy hydro. There is a perverse incentive where operators profit from dry years/use of coal, and therefore are reluctant to help address the issue.

Q10. What steps could be taken to improve the collection and availability of data on existing infrastructure assets and improve data transparency in the infrastructure sector?

The infrastructure world will become more data, and data analytics, driven. The Industrial Internet of Things (IIOT) offers huge opportunities to strengthen business, governance, asset management, education and the services we provide the community. Mastering how we make decisions based on our data at our disposal will be crucial. Embracing digital, leveraging data and treating data as an asset, with a lifecycle.

Requiring asset data and information in each step of an assets creation –e.g. contract clauses requiring BIM /metadata to be supplied, as well as enabling smarter design, build, creation and repair and maintenance and monitoring, ability to store, access, and manipulate data.

Encouraging standardisation, digitisation and an open data approach to all asset data, or at least enabling agencies to share asset data, will effectively deliver better outcomes for New Zealand. Having agencies share and use each other's asset data leads to efficiencies, allows meaningful insights and evidence to inform lifecycle management, services and decision-making.

Te Waihanga should commit all sectors to build an 'open by design' approach into infrastructure data management and governance, and commit to the NZ Open Data Action Plan.

Robust security, privacy and transparency will remain both core principles and challenges.

Q11. What are the most important regulatory or legislative barriers to technology adoption for infrastructure providers that need to be addressed?

Te Waihanga needs to understand the infrastructure sectors digital needs, opportunities and the gaps and work to satisfy these areas.

To drive innovation, there has to be room for "fail fast". Current approach to funding and business casing requires certainty of the return prior to investment so many of the public owned organisations will not be early adopters or innovators. Also, many have very old assets – digital and physical so changing is going to be expensive and funding needs to consider a longer term for return on investment.

The strategy needs to contain actions ensuring capability and training for new ways of thinking and working, supporting digital technologies innovation, policy, construction techniques and investment.

Te Waihanga are suited to drive national strategic direction for technology for infrastructure networks, especially those where market forces do not exist to drive technology take up and change (social and linear infrastructure). They could lead work packages around digital/technology enabling work for services to be delivered differently (and therefore lead to some ability to lower emissions, reduce energy use and change the nature of the infrastructure we may need in the future).

Q12. How can we achieve greater adoption of building information modelling (BIM) by the building industry?

Building on the success of the Waka Kotahi and the water industry metadata standards, national direction on, and/or development of, metadata standards for all asset groups – including BIM requirements and standards.

Q13. How should communities facing population decline change the way they provide and manage infrastructure services?

Population decline in relation to the strategy includes affordability to operate, maintain, and replace infrastructure. A more equitable funding model will be needed, that shifts funding from local government (rates) towards central government (tax). It should be noted that population changes (ageing, ethnicity) also have significant impacts on infrastructure demand. Using spatial planning to manage where growth/decline areas to reduce risk of underutilised or stranded infrastructure and costs to remaining community of meeting levels of service.

Q14. Does New Zealand need a Population Strategy that sets out a preferred population growth path, to reduce demand uncertainty and improve infrastructure planning?

The Council believes an infrastructure strategy based on population projections would be more advantageous than a population strategy alone.

We agree Aotearoa NZ needs a population strategy. Such a strategy and approach should recognise that population and economic growth (as measured by GDP) are not de facto measures of prosperity and that they do not necessarily help improve societal welfare, environmental well-being, equality or sustainability.

Q15. What steps can be taken to improve collaboration with Māori through the process of planning, designing and delivering infrastructure?

GW supports the intent that all decision making must be guided by and recognise the people who use infrastructure and the principles of Te Tiriti o Waitangi (the Treaty of Waitangi) – tangata whenua and the focus on aiming for infrastructure that supports 'safe communities iwi hapū and whānau' which reflects the Treaty of Waitangi principle of protection.

GW recognises the need to work in effective partnerships with mana whenua and Maori. Infrastructure development objectives should align with comprehensive Māori frameworks that include economic, social, cultural and environmental aspirations and goals. The strategy should embrace broad approaches to work programmes and services that specifically support kaitiakitanga (intergenerational sustainability), and whanaungatanga (connectedness and relationships) of people

and whenua to support any proposed new governance structures. This approach would enable the Treaty of Waitangi principle of participation.

GW considers that managing our systems in a way that prioritises the mana, health and wellbeing of our community and environment is a first step of this Mahi Ngātahi journey which should be undertaken through a strong partnership-based approach.

Q16. What steps could be taken to unlock greater infrastructure investment by Māori?

Māori communities remain overrepresented social housing, poor-quality housing, crowded housing, education services, transport, communications and healthcare. Fixing systematic wrongs and addressing long standing issues- raising incomes, increasing the supply and affordability of housing, improving physical and social connections and education opportunities, and lifting quality of life- will go along way to improving participation and representation.

When infrastructure development objectives align with Māori social, health, cultural and economic aspirations and objectives there will be greater participation and 'investment'. GW considers that iwi and Maori businesses will make their own decisions on whether they unlock greater infrastructure investment. This will be determined by their own analysis of the business decision making frameworks they operate within, the drivers they recognise and the outcomes they are committed to delivering.

It is unclear which Treaty of Waitangi principle the document's proposal aligns with that this Crown strategy should seek greater investment by Maori in infrastructure.

The document requires greater explanation on the links between 'growing strength of the Maori economy and iwi asset base means that Maori will play an increasingly significant role in the infrastructure sector and the under-representation of Maori in professional decision making roles'. The proposal to improve knowledge in the infrastructure sector and build economic capability of iwi business is not in line with the evidence of the growth in the Maori economy.

Q17. What actions should be taken to increase the participation and leadership of Māori across the infrastructure system?

GWRC supports the need to increase participation and leadership by working in partnership with tangata whenua from start to finish. This means establishing effective systems including co-governance, co-management, co-design, co-delivery and co-review structures that deliver mutually beneficial outcomes. Such partnerships can be established either through existing partnerships between mana whenua and councils or through the National Iwi Chairs Forum where such partnerships do not already exist.

In addition to the questions 15,16 and 17 – GWRC is alarmed that Te Mana o te Wai as legislatively required under the Water Services Bill and the NPS-FWM 2020 features so little in the Strategy. All persons and duties in water services functions must give effect to Te Mana o te Wai. The same intent is in the Aotearoa New Zealand Biodiversity Strategy / Te Mana o te Taiao. Te Waihanganga should ensure the concept of Te Mana o te Wai is incorporated into Te Waihanganga strategy, planning, functions and duties while recognising that Te Tiriti is the cloak over all.

Q18. For the 'Enabling Competitive Cities and Regions' Action Area and the Needs:

- What do you agree with? • What disagree with? • Are there any gaps?

The proposed strategy needs an increased focus on environmental outcomes threaded through.

To build competitive cities, the Council believes we need to build up rather than out. Quality, compact, urban forms with higher population densities will make more efficient use of land allowing for increased and more affordable housing, greater access to public transport and employment, connectivity with social services and recreation opportunities. This will also allow New Zealand to move away from a car dependency towards a multi-modal and public transit focused society.

Compact urban forms, and recognising the vital importance of an integrated catchment management approach, will also preserve indigenous habitats and productive farmland allows New Zealand to retain biodiversity and protect dwindling forests and productive soils while still allowing for population growth in a sustainable manner. Access and connectivity to nature in urban settings is an important feature of mental and physical health outcomes, this includes WSUD.

The Wellington Regional Growth Framework (WRGF) is a spatial plan that describes a long-term vision for how the region will grow, change and respond to key urban development challenges and opportunities in a way that realises the best outcomes and maximises the benefits across the region. It is a collaboration between local councils, central government and māna whenua. As such we support Government's intent for regional strategic spatial plans, and C2.5 Implement regional spatial planning. The strategy should be aligned with regional spatial planning partnership approaches. All spatial planning needs to take account of natural hazards, climate change impacts and environmental values, ecosystem services.

GWRC support (in principle) the new Strategic Planning Act; continuing to review and reform urban planning (implementing the Randerson recommendations), merging regional and district plans into a 14 combined plans and a new National Planning Framework, and NPS-UD requirements to up-zone around transit and centre zones.

Recommendation S1.1 raises one of the issues of concern with the proposed Strategic Planning Act. There is a degree of expectation that funding should follow strategies. That is to say that the partners involved in identifying the objectives and designing the strategic plans should be prepared to support the achievement of the plans beyond their adoption.

The strategy has a significant amount to say about the resource management reforms including specific recommendations around spatial planning and content for the proposed Natural and Built Environments Act. The omission of a specific recommendation around ensuring the proposed Climate Change Adaptation Act supports a range of flexible and anticipatory responses is a 'must have' in a credible strategy.

Support consideration of C1.2 through the RMA reform process.

C1.3 is already required through the NPS UD so this action is superfluous.

Add **education** to the needs bullet - Improve access to employment and education.

Support volumetric monitoring, and charging if appropriate, for water supply and wastewater. It's consistent with the notion of managing drinking water and wastewater as an integrated whole.

Strongly support mandating on site rainwater / greywater collection and reuse to better manage water use, and provide community resilience in an emergency.

Q19. What cities or other areas might be appropriate for some form of congestion pricing and/or road tolling?

The council support road pricing/ congestion charging as one way to mobilise mode shift. However, viable alternatives to private motor vehicle must exist – such as public transport, walking and cycling prior to the introduction of charging measures.

Both asset and non- asset based solutions need to be considered against the increasing scenarios of digital evolution and remote, online working, which have created huge opportunity and transition for people to work flexibly and remotely, resulting in less vehicle movements. Embracing and accelerating digital and remote working is fundamental to the shifts required in the Strategy. Lockdown demonstrated the additional benefits of working from home/remotely on peoples physical, emotional and mental wellbeing.

GWRC believe that any revenue from road pricing schemes should be directed into maintaining and improving the transport network, particularly active modes and public transport. However, pricing schemes should be designed primarily to reduce demand for car travel, and such revenue should not be relied upon as a sustainable source of transport funding.

Q.20 What is the best way to address potential equity impacts arising from congestion pricing?

The council strongly support the MoT's "Avoid and Shift" approach to move towards a carbon zero transport sector. This will include measures supporting public transport, incentivising electric vehicle uptake and providing infrastructure that supports walking and cycling.

Road pricing will have, and is intended to have a major impact on the micro-economy of road transport, and through that impacts on modal choice and land use (both urban and rural). For road pricing to produce the modal shifts necessary to meet demand management objectives, viable alternatives to private motor vehicle must exist. This includes initiatives such as passenger transport, car-sharing schemes, cycle and walking facilities, and remote working. The introduction of road pricing etc, raises potential issues regarding equality of access for those with low incomes and the potential to exacerbate transport disadvantage. Some transport choices come with some means for recognising particular income or access issues through concessionary fares. It also underscores the need to have alternative modes of transport in place to coincide with these measures. These should be explicitly considered in the transitional plan.

Q21. Is a 10-year lapse period for infrastructure corridor designations long enough? Is there a case for extending it to 30 years consistent with spatial planning?

Providing for lead infrastructure will ensure that development can be planned with some certainty, and in a coordinated way.

A 10-year timeframe provides certainty, however where designations are consistent with a spatial plan their timeframe should be 30 years.

Q22. Should a multi-modal corridor protection fund be established? If so, what should the fund cover?

Yes, a multi-modal corridor protection fund should be established. It should be used to ensure the future corridors required to support transport connections are preserved. This might include land purchase, planning and designation, design and maintenance of any purchased land or assets until the time that it is required without pre-determining the transport mode that the corridor will be used for.

Any connected discussion needs to highlight the need for low carbon and sustainable transport options such as promoting rail and sea and exploring options and promoting R&D for low/zero carbon air and road freight (eg, hydrogen or electric).

Consideration should also be given to expanding the concept to include other strategic land acquisitions such as transport hub or depot locations.

GWRC strongly supports the increased role of rail and coastal shipping in Aotearoa NZ's transport system to enable increasing volumes of freight to be moved off the roads and onto rail and provide modern transit systems in our largest cities (as per New Zealand Rail Plan (NZRP)). We agree with Te Waihanga developing a long-term national freight supply chain strategy covering airports, ports, road, rail and coastal shipping to support the creation of a fully integrated, multi-modal freight supply chain system. We acknowledge that in a modern economy we cannot reduce the need for freight without risking significant economic disruption or harm. The combination of *Shift, Avoid and Improve* measures is required.

Q23. What infrastructure actions are required to achieve universal access to digital services?

Refer to the New Zealand Digital Strategy 2.0 – Smarter through Digital.

Q24. For the 'Creating a Better System' Action Area and the Needs: • What do you agree with? • What do disagree with?

The Council agrees with the action areas and needs listed. However, Aotearoa NZ's infrastructure world is spinning on its head –especially at a local and regional government level. With extensive legislative, regulatory and structural reviews and reform nothing will be as it was before. We don't know what our new shape, role or funding and delivery responsibilities will be, the only certainty is climate change!

Further options to improve New Zealand's governance, planning, funding and delivery of infrastructure need to be explored when the recommendations and changes from the above reforms are understood. We ask Te Waihanga to wait until these reviews are sufficiently advanced before pre-empting outcomes and impacts or making any decisions for the Creating a Better System needs list.

The Strategic Planning Act will be an opportunity to improve coordination across the infrastructure planning and delivery. It will ensure that infrastructure needs will be collaboratively met, that they are funded and that they can be implemented.

• Are there any gaps?

One of the more significant handbrakes on the delivery of infrastructure is the availability, recruiting and retaining skilled staff, particularly regulatory and engineering staff. Multiple industry bodies

have recognised this challenge and producing sector workforce strategies and training programmes to address the current capability gaps, and better position the sector for the workforce needs of the future. Capacity and capability needs require far greater emphasis in the strategy

Valuing the infrastructure sector for its full worth would mean recognising its importance as a long term and viable sector for future employment. In the face of radical digital technological disruptions this sector is one that will continue to be a key employment opportunity (compared with retail where on-line services will significantly impact on the number of people employed). The infrastructure sector is key to Aotearoa NZ's economic prosperity and social wellbeing: linking the strategy to Aotearoa's education strategies and career/skills/training sectors is vital.

Alongside is the inherent connection to green technologies and innovation. To drive the uptake of digital evolution of things like autonomous vehicles in places like public transport, we should be taking the advantage and enabling shift with strategies to re and upskill workers.

Q25. Does New Zealand have the right institutional settings for the provision of infrastructure?

No, current institutional settings have resulted in a steady increase of local government spending on infrastructure while central government spending on the same has declined from the 1970s and 80s. Further, current institutional settings may incentivise decisions that lack sufficient consideration of long-term implications. This has the potential to lead to legacy costs, stranded investments, and has contributed to the current infrastructure gap.

We also note that the system has continually allowed for the transfer of responsibilities from central government to local authorities, resulting in council's expenditure responsibilities being greater than their revenue-raising capacity. Te Waihanga should appreciate the ability and/or 'willingness to pay' currently falls to the community whether as rates or taxes. This pool of funding is finite, and other options and mechanisms need to be explored.

GWRC do not support any integration or change of institutions and ownership ahead of the outcome of various other reforms is known.

The Strategic Planning Act will is an opportunity to improve coordination across the infrastructure planning and delivery.

Q26. How can local and central government better coordinate themselves to manage, plan and implement infrastructure?

There are a lot of institutions involved (Central Agencies; Crown Agents; Crown Companies; State-Owned Enterprises; Local Government; Private and Mixed Ownership) and there is an ongoing need to coordinate them all by creating a central government agency that is responsible for effective infrastructure delivery and investment at all levels of government, much like the former Ministry of Works and Development. This would ensure a holistic, collaborative approach to infrastructure planning and delivery.

The Strategic Planning Act will is an opportunity to improve coordination across the infrastructure planning and delivery. It will ensure that infrastructure needs will be collaboratively meet, that they are funded and that they can be implemented.

Q27. What principles could be used to guide how infrastructure providers are structured, governed and regulated?

The Council believes a principled approach to guide infrastructure structure, governance, and regulation. These principles should reflect a number of sources-

- Te Tiriti o Waitangi
- The four well-beings
- UN Sustainability Goals to ensure infrastructure delivery addresses inequality, climate change, environmental degradation, and intergenerational equity
- The principles and outcome from this Te Waihanga Strategy (efficient, equitable and affordable' and future focused, transparent, option focused, integrated and evidence based).

Q28. What steps could local and central government take to make better use of existing funding and financing tools to enable the delivery of infrastructure?

There is a significant gap between the (specifically 3 waters, flood control and active and public transport provision) infrastructure that we need and what we can afford. There is growing recognition that our revenue and funding models are flawed. Without adequate resources or new revenue streams to cover the costs of the new responsibilities and mandates, these will remain underfunded and the infrastructure needs of Aotearoa New Zealand will not be delivered. It is recognised existing funding models (local-government rates, development contributions and central-government user charges and taxes) are not going to address the scale of this problem. Different models of delivery funding and financing will play an increasing role in funding the future.

We agree - it's not just a case of building more. Funding, financing and decision-making accountabilities that are clear and aligned with strategic plans. There is need for access to finance and to borrow prudently in a way that recognises intergenerational equity.

Q29. Are existing infrastructure funding and financing arrangements suitable for responding to infrastructure provision challenges? If not, what options could be considered?

The benefit principle should be key in determining who should pay for infrastructure services including where those services generate national benefit (e.g. flood protection for our most productive land, towns and cities and state highways; local roads for public transport or Kiwi Rail assets for metro rail services). However, there is a direct impact that people's ability to pay (via rates) has on local government decisions making strict adherence to the benefit principle unrealistic

The problem with retreating and relocating assets is 'who is going to pay? Councils don't have the money. The council supports a Climate Change Adaptation Fund and also the concept of an EQC-sque fund to secure land for managed retreat. Add a work area – **S2.6 Fund Managed Retreat**

GWRC would also like to see mandatory biodiversity and climate-related financial disclosures all infrastructure provision and organisations

Q30. Should local authorities be required to fund depreciation as part of maintaining balanced budgets on a forecast basis?

GWRC doesn't fund depreciation; our capex is loan funded. The Council considers local authorities- and all asset owners- should account fully for depreciation (via cash or loan funding), over the life of the asset.

(And agree that the Crown should be paying fairly determined rates on all properties and not be exempt from paying development contributions.)

Q31. What options are there to better manage and utilise existing infrastructure assets?

GWRC support demand management to make better use of existing some infrastructure, and reduce the need and cost of upgrading. Reducing the demand for some infrastructure can mean it performs better and reduces the need to build new infrastructure.

Dedicated bus lanes on our urban highways (operating similarly to passenger train services) could increase the capacity of these roads to move people. Similarly devoting segregated space on arterial roads for cycling could enable far more people to move through these corridors at peak times.

GWRC recognises that demand management may not be practical for some assets. For some assets it will be better to adopt a data driven approach to asset management to ensure we are investing in the right asset at the right time for the cost and risk. Tools such as risk, criticality, and health modelling when combined with data can make a large difference to an investment plan. Mandating best practice lifecycle asset management – guided by the International Infrastructure Management Manual (IIMM) - for all infrastructure and long term works programmes, will guarantee better management of assets, and improvements in the infrastructure decision-making culture than currently.

Again it's not just a case of building more; we need to prudently manage and maintain what we have. When requiring business cases, we must consider repurposing of existing infrastructure. This would act to reduce carbon emissions three fold – by extending lives of assets where the carbon is already spent, and secondly by reducing future carbon spend (or at least defer those projects until lower carbon technologies are developed to effectively deal with these problem areas) and thirdly by reducing the volume of carbon waste/landfill. It would also drive innovation and increase industry knowledge about repurposing and life extension projects.

Decision makers need to give far greater weight to these options ahead of the current norm of building new regardless. This would highlight the need for agencies to become smarter about maintaining their existing infrastructure assets because they will more fully understand the whole of life implication of future infrastructure.

Q32. Are there benefits in centralising central government asset management functions? If so, which areas and organisations should this apply to?

Asset management spans the whole lifecycle. The Council feel it generally impractical and would end up creating inefficiency to centralise some functions or areas. The asset management responsibility should reside with the party who own the risk.

The Council believes the more suitable approach lies with obligatory, agreed standards across each infrastructure provider, to ensure consistent, best practice asset management – guided by the International Infrastructure Management Manual (IIMM).

The Local Government Act (2014) (the Act) requires local authorities to provide for their community investment in infrastructure and the requires asset management practices and long term works programmes to deliver agreed levels of service, in the most cost effective manner, throughout their lifecycle. Section 101B(1) of the Act requires a local authority, as part of its long-term plan, prepare

and adopt an infrastructure strategy for at least 30 consecutive financial years, which identifies significant issues, principle options for managing the issues and implications of these options.

Such 30 year infrastructure strategies should be a requirement on each infrastructure owner.

Q33. What could be done taken to improve the procurement and delivery of infrastructure projects?

Aotearoa New Zealand has a quasi-consistent project-delivery framework, career or training path and development model for project deliverers, adherence with which varies across the sectors. Procurement practices should encourage strong partnerships between designers and constructors. Designers and constructors collaborating from the early stages to ensure designs are constructible and having the designer stay involved throughout the project are most beneficial. This ensures that if plans need to change, those changes can be implemented realistically and rapidly.

The Strategic Planning Act will is an opportunity to improve coordination across the infrastructure planning and delivery.

Q34. Do you see merit in having a central government agency procure and deliver infrastructure projects? If so, which types of projects should it cover?

A central government agency procuring and delivering infrastructure projects would be a substantial change for the industry. GWRC support a centralised framework and standards approach for procurement and delivery activities. This would guarantee a consistent joined up approach to planning and delivery.

We **do not** support one single, centralised agency responsible for all procurement and delivery activities.

Q35. What could be done to improve the productivity of the construction sector and reduce the cost of delivering infrastructure?

Continued contractor and designer involvement would improve the productivity of the construction sector and reduce the cost of delivering infrastructure. Supporting practice that provide visibility of the infrastructure project 'pipeline' at local, regional and national levels will also promote private sector investment in capacity and capability, leading to improve competition and productivity.

Training and capability building initiatives and resourcing including competitive pay to ensure the resources to deliver on the pipeline of work.

Q36. What components of the infrastructure system could have been improved to deliver effective stimulus spending during the Covid-19 pandemic?

Many Shovel Ready projects were those that had been shelved because of poor benefit cost ratings etc. Projects weren't zero carbon and circular green economy focused, or relevant to 2020s, they were in-effect an acceleration of conventional business-as-usual. While the Government aspires to build back better and direct the COVID-19 monetary and fiscal stimulus towards a low-emissions economy, Energy Policy Tracker (EPT) analysed New Zealand's response against other major countries¹. Focusing on energy policy, EPT assessed New Zealand invested 44.6% in fossil fuel-

¹ [New Zealand's COVID-19 stimulus is a 'lost opportunity' to move towards a low-emissions economy \(theconversation.com\)](https://theconversation.com/new-zealand-s-covid-19-stimulus-is-a-lost-opportunity-to-move-towards-a-low-emissions-economy)

related activities and 54.5% in clean energy, a middling performance compared with other countries. Additionally, EPT asked whether the investments had conditions attached and discovered that one-twelfth of fossil fuel-related spending is conditional compared to 75% of clean energy spending. These results suggest a bias towards traditional, well-understood investments, missing the opportunity to innovate and direct funds towards a climate-aligned investment pipeline². Building capability in low-carbon infrastructure development, as well as nature based solutions, is required.

² [Developing Robust Project Pipelines for Low-Carbon Infrastructure | en | OECD](#)

2 July 2021

File Ref:

100 Cuba Street
Wellington 6011
PO Box 11646
Manners Street
Wellington 6142
T 04 384 5708
F 04 385 6960
www.gw.govt.nz

Te Waihanga Infrastructure Commission
WELLINGTON
info@infracom.govt.nz

Tēnā koutou katoa,

Submission on Te Waihanga -Infrastructure Commission 30-year Infrastructure Strategy

Thank you for the opportunity to submit on the He Tūāpapa ki te Ora Infrastructure for a Better Future Consultation Document (the strategy). In addition to answering the Commissions questions (attached), Greater Wellington Regional Council's (the Council's) make the following submission.

GWRC owns and manages infrastructure assets with a replacement cost in excess of \$1.5 billion. Infrastructure groups that Greater Wellington holds and considers to be strategic are;

- Regional bulk water supply network¹
- Flood protection assets on the region's major waterways
- Regional parks and forests (including water supply catchments)
- Plantation and reserve forest lands
- Harbour navigation aids and communications
- Rail rolling stock and other rail infrastructure
- GWRC bus related assets
- Environmental monitoring equipment
- Corporate property
- ICT assets and data

¹ Greater Wellington owns the bulk water supply infrastructure. Wellington Water Limited, a council-controlled organisation owned by six local authorities, is contracted to manage the water supply activity on the Councils' behalf, including asset management.

We welcome the establishment of Te Waihanga Infrastructure Commission (the Commission) and their responsibility of lifting infrastructure planning and delivery to a more strategic level. The Council recognises the importance of a robust, strategic, and long-term infrastructure plan for Aotearoa New Zealand. GWRC support the fundamental principle that infrastructure should ensure oranga tangata or the wellbeing of people.

The Council generally concurs with the 3 action areas (Building a Better Future, Enabling Competitive Cities and Regions, Creating a Better System) and recommendations that the Commission has made as standalone matters or as suites dealing with identified issues.

The Commission's mandate arises from legislation. You do not own or manage any infrastructure, but have a key role in delivering better infrastructure outcomes in the long term. This position is apparent through the strategy; you are positioned to, and advocate for, identifying a pathway for driving collaborative, consistent management and delivery of infrastructure across Aotearoa New Zealand.

This has not been an easy document to assess. It is very lengthy, doubles back and its recommendations are presented in an inconsistent way. In some cases the recommendations are sector specific, others deal with a specific challenge. The strategy also recommend numerous work packages that are also in existence or under way. As such the strategy is a collection of ideas, mostly good, that lacks overall direction or strategy.

There are aspects of the strategy that require greater clarification and definition. Specifically;

- For Mahi Ngātahi (collaboration with Māori) to be sincere, equal and meaningful, iwi-Māori communities need to be active participants in planning, decision making and delivery, not merely represented
- Workforce capacity, capability and skills needed to deliver the huge pipeline of work require far greater prominence
- The critical changes infrastructure needs to make in terms of climate action, adaptation, disclosures and emissions reduction to achieve Carbon Neutrality by 2050
- Despite an earlier stocktake of council assets, the strategy is relatively quiet on local government infrastructure specifically flood protection, parks and public transport.
- The environment needs an increased focus threaded throughout, more than a token principle
- The strategy ignores, or is inconsistent, with government policy and direction, and in short offers no strategic direction
- Collaborative, regional spatial planning is key and should be principle of the strategy

- Different models of delivery, funding and financing will play an increasing role in funding the future and flexibility in policy settings is required to enable this
- The industry acknowledge the challenges facing infrastructure can't be managed with a traditional approaches to prioritising, planning, funding and delivery. The quantum and paradigm shifts happening around us all require bold changes to what was business as usual.

We are all working in a challenging strategic and operational environment. The Council supports a courageous, collaborative approach to consistent management and delivery of infrastructure across Aotearoa New Zealand.

Our submission has been drafted with reference to, and in support of, the refreshingly bold Taituarā — Local Government Professionals Aotearoa submission.

Should you have any queries regarding the content of this document please contact [REDACTED], Strategic Infrastructure Advisor, directly on [REDACTED].

We thank you for your consideration of this submission and hope we can work with the Commission on any issues explored during the strategy development.

Ngā mihi nui

[REDACTED]

[REDACTED]

Chair

cc: [REDACTED], Deputy Prime Minister and Minister for Infrastructure