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Infrastructure New Zealand Submission on the Productivity Commission's Improving Economic Resilience Issues Paper

1. Introduction

- 1.1 Infrastructure New Zealand (INZ) welcomes this opportunity to submit on the Productivity Commission's Improving Economic Resilience Issues Paper.
- 1.2 INZ is New Zealand's membership organisation for the infrastructure sector. We promote best practice in national infrastructure development through research, advocacy and public and private sector collaboration. Our members come from diverse sectors across New Zealand and include infrastructure service providers, investors and operators.
- 1.3 While INZ has submitted as the peak infrastructure sector organisation, we have also encouraged our members to make their own submissions raising those issues specific to their areas of interest or expertise.
- 1.4 INZ would welcome an opportunity to meet with the Commission to discuss our submission.

2. General Remarks

- 2.1 Amid an increasingly complex geopolitical environment and in the face of the pressures of climate change as well as the likelihood of future supply chain disruption, INZ is encouraged by the issues paper's focus on lesson learning from covid-19 related disruption, private-public sector collaboration, and the prioritisation of the construction sector as a focus area.
- 2.2 We are also encouraged by the inquiry's focus on the medium term, and its desire to complement, not duplicate, existing strategies and shorter-term disruption response plans.

We see significant opportunity for its findings to aid in the progression of the recommendations included in the New Zealand Infrastructure Strategy - Rautaki Hanganga o Aotearoa.

- 2.3 Infrastructure New Zealand notes that the issues paper raises a broad range of complex challenges and opportunities. It is beyond the scope of INZ's submission to address all complexities in depth.
- 2.4 In submitting on the issues paper, INZ seeks to highlight lessons from the response to Covid-19 related supply chain disruptions that have prioritised engagement between the private and public sectors. We also encourage the Commission to consider the opportunities to invest in climate resilient, and critical infrastructure, as well as the need for integrated planning and improved procurement capacity to prepare the New Zealand economy to absorb and adapt to future supply shocks.

3. Infrastructure is a key lever for building resilience

- 3.1 International relations are growing more complex. New Zealand is vulnerable as a geographically isolated nation that has made its place in the world as a proponent of the rules-based multilateral order and free trade. Long supply chains will only become more vulnerable as the impacts of geopolitical tensions, and climate change among other pressures continue to threaten New Zealand's economic resiliency.
- 3.2 Our construction sector is an increasingly critical industry for New Zealand's growth and wellbeing. Construction and infrastructure supply chains have a significant impact on the broader economy. The issues paper notes that 90% of building materials are imported. Construction price increases have also, in recent years, contributed significantly to wider inflationary pressures.
- 3.3 We have the opportunity to learn from past and current disruption to build the sector's ability to adapt amid disruption and lift its capability to respond to future uncertainty.

4. Recent Covid-19 related disruptions provide key learnings

- 4.1 Taking learnings from industry and private-public sector engagement throughout Covid will be critical to ensuring greater resilience in the building materials supply chain as it faces upcoming challenges.
- 4.2 Since 2021, building material prices have increased 45 per cent on average¹. While price pressures are beginning to ease, the pandemic related disruptions to international supply

¹ EBOSS, 2023, *Construction Supply Chain Q1 Update*: [EBOSS-Supply-Chain-Q1-2023-Update_Final.pdf](#)

chains have highlighted the vulnerability of building material supply chains.

- 4.3 During the pandemic, all-time high building consents combined with building material supply chain disruptions combined to create chaos across the infrastructure and construction sectors. One instance where that was very clear was during the Gib crisis.
- 4.4 At the time, Te Waihanga – the New Zealand Infrastructure Commission highlighted how pre-existing conditions of workforce capacity and capability, material supply chains and investment volatility had made our construction market unusually vulnerable to the trade effects of Covid-19². The Commerce Commission’s Building Supplies Market Study has since highlighted additional vulnerabilities in the domestic supply chain³.
- 4.5 At the height of the Gib shortage, the Construction Sector Accord through the Ministry of Business Innovation and Employment (MBIE) played a key role in facilitating direct government-to-sector engagement. A taskforce was then established by the Minister for Building and Construction to engage industry expertise and provide plasterboard substitution guidance. In its building materials market study, the Commerce Commission drew lessons from this period in its recommendations to establish a national key building product register and build on knowledge sharing arrangements through a building consent authority ‘centre for excellence’⁴.
- 4.6 There is an opportunity for the Productivity Commission to explore opportunities to build on this approach to engagement and bring the sector more fully into the process through its inquiry.
- 4.7 On the other hand, we know that where industry is inadequately consulted, unintended consequences from strategic supply chain decision-making occur.
- 4.8 For example, the closing of Marsden Point without adequate understanding of the flow-on effects and likelihood of a CO₂ shortage has highlighted the value of broad industry engagement and strategic planning to ensure that the effects of critical infrastructure decisions are adequately understood.
- 4.9 A few years on, as the issues paper notes, supply chain disruption has yet to be fully resolved, and growing protectionism globally is a challenge as we move towards a ‘new normal’. Learnings from engagement between the private-public sectors throughout Covid-19 supply chain disruption should be a focus of the inquiry. The Government will need to work in partnership with industry to support economic resilience in an increasingly uncertain future.
- 4.10 Covid-19 also had a disproportionate impact on women in employment, with greater numbers of women experiencing job losses than men – two-thirds (22,000) of the fall in

² The New Zealand Infrastructure Commission, 2021, *Infrastructure Quarterly - October 2021*:

<https://www.tewaihanga.govt.nz/projects/infrastructure-quarterly/quarter-two-october-2021/>

³ Commerce Commission, 2022, *Residential Building Supplies Market Study*:

https://comcom.govt.nz/data/assets/pdf_file/0014/300704/Residential-Building-Supplies-Market-Study-Final-report-6-December-2022.pdf

⁴ Ibid.

employment were women⁵. As part of the Commission's focus on equity impacts, it should consider the importance of improving women's representation across key industries. The construction sector offers significant opportunity, where less than 20% of workers are women and even fewer in trades⁶⁷. The Commission should consider opportunities and policies that would enhance female representation in the sector to build greater workforce resilience.

5. Investment in resilient infrastructure will be key to future supply chain resilience

- 5.1 Investment in strategically planned and resilient infrastructure will be a key lever in growing New Zealand's supply chain resiliency. Involving private sector capital and delivery capacity will allow significant investment where it is necessary to build economic resilience.
- 5.2 In the face of future challenges, we will need to invest in port and freight transport capacity and efficiency to bolster resilience.
- 5.3 At present, New Zealand has an infrastructure deficit of at least \$210 billion⁸. Te Waihanga considers that the country would need to spend \$31 billion on infrastructure each year for the next 30 years, to build ourselves out the existing infrastructure challenges New Zealand faces.⁹
- 5.4 In the face of the effects of climate change, including damage resulting from the Auckland anniversary weekend floods and Cyclone Gabrielle, this number will only continue to rise.
- 5.5 Government cannot bridge this investment gap alone. To invest in crucial infrastructure for New Zealand's resilience and build our capacity to absorb and adapt to supply chain shocks, our use of private sector capital and delivery capacity will need to improve.
- 5.6 Improving the use of private capital through the use of public-private-partnerships, soft loans and leasing-style models, for example, would allow us to bring forward important

⁵ Statistics New Zealand, 2020, *COVID-19's impact on women and work*: <https://www.stats.govt.nz/news/covid-19s-impact-on-women-and-work>

⁶ Construction Sector Accord, 2021, *Construction Sector Accord partnership builds sustainable workforce*: <https://www.constructionaccord.nz/news/news-stories/construction-sector-accord-partnership-builds-sustainable-workforce/>

⁷ BCITO, n.d., *Women in Construction: Diversity is good for business*: <https://bcito.org.nz/resources/women-in-construction/>

⁸ Treasury, 2022, *He Puna Hao Pātiki: 2022 Investment Statement*: [He Puna Hao Pātiki: 2022 Investment Statement \(treasury.govt.nz\)](https://treasury.govt.nz)

⁹ The New Zealand Infrastructure Commission, 2022, *Rautaki Hanganga o Aotearoa 2022 - 2052 New Zealand Infrastructure Strategy*: <https://media.umbraco.io/te-waihanga-30-year-strategy/1sfe0qra/rautaki-hanganga-o-aotearoa-new-zealand-infrastructure-strategy.pdf>

transport projects which do not currently have funding attached, but would substantially improve New Zealand's freight connectivity and economic resiliency.

- 5.7 There are several key areas where infrastructure investment will be critical to building economic resilience. The Commission should consider how to best enable investment in these sectors to improve our ability to adapt to and mitigate the effects of future shocks.
- 5.8 Investment in port infrastructure will be crucial as we move towards greater use of hub and spoke supply chain models, as noted by the issues paper.
- 5.9 There is also a significant opportunity to diversify our exports through investment in renewable energy industries. Building on-shore capability and capacity across renewable industries will be important to growing New Zealand's competitiveness in this area. Involving overseas private sector delivery capacity would allow us to build expertise in New Zealand.
- 5.10 We also need to focus on investment in our digital capacity as a nation. The advantages of weightless exports have been well recognised in many sectors in New Zealand. Infrastructure lags behind and requires greater investment to grow digital capability, as well as a Government-led focus on creating an enabling environment for the realisation of efficiencies via digital technology for infrastructure projects.
- 5.11 In their infrastructure strategy, Te Waihanga recommends the investigation and progression of a national digital twin. We support further progression on this recommendation.
- 5.12 INZ encourages the Commission to consider how an enabling regulatory environment for digital capacity building might provide opportunities for improved resilience and efficiencies for critical infrastructure delivery.

6. Growing infrastructure resilience will require integrated planning and procurement efficiency

- 6.1 We note the importance of planning effectively to avoid incentivising development and investment in natural disaster-prone areas, and industries particularly vulnerable to supply chain shocks. There is a need to recognise that many of our infrastructure networks are interdependent and to plan accordingly.
- 6.2 As we continue to grapple with the effects of climate change alongside our long supply chains, New Zealand's critical infrastructure will be made increasingly vulnerable. To optimally benefit from investment in infrastructure to enable communities to absorb and adapt to shocks, and to respond to natural disasters, integrated transport and land use planning is required.
- 6.3 For example, Singapore is currently investing heavily in its airport and port infrastructure. It is seeking to co-locate important sectors, and infrastructure, to drive efficiency and capacity improvements in the face of the risk of future cost increases.

- 6.4 In our 2019 report *National Development: Insights from Asia*, we outline how Singapore's national planning approach which integrates its strategic, spatial and land use planning provides a whole-of-country opportunity for outcomes-focussed planning¹⁰.
- 6.5 INZ recognises that under the Resource Management reforms, subsequent replacement legislation and the introduction of Regional Spatial Strategies will go some way to encouraging joined up planning at the regional level, within the New Zealand context. In considering overseas approaches to investment in transport links, as well as port infrastructure and its connectivity, we encourage the Commission to consider opportunities that will arise out of the new regionalised approach to New Zealand's resource management system.
- 6.6 We also recommend that the Commission considers certainty of funding and improved capacity for local government entities to adequately integrate their transport and land use planning to support freight and supply chain resilience in the mid-term.
- 6.7 At a higher level, we have previously recommended a reallocation of roles and responsibilities between local and central government that would move towards a regional (or sub-regional where appropriate) model for local government to enable authorities to take advantage of efficiencies of scope and scale, and to collaborate across regions to deliver integrated plans with an overarching vision¹¹.
- 6.8 Additionally, there is a need for both central and local governments to become better procurers.
- 6.9 There is an opportunity for Government to lead procurement where expertise is needed to account for shocks, or leverage opportunities, across infrastructure supply chains. Entities like Te Waihangā and the soon-to-be stood up repurposed Ōtākaro are well placed to provide expertise.
- 6.10 To support the provision of guidance at the infrastructure-system level, Te Waihangā in particular will need to be enabled to take a system leadership role within the infrastructure system.
- 6.11 Pipeline certainty will also be a key driver for procurement improvements. Improved incentives at the local government level, and greater funding certainty for projects across the board will be required to improve the industry's ability to plan for the future and build its resilience to manage uncertainty.
- 6.12 The improved use of private capital would support increased certainty. To address the issue of economic resilience, the Commission should take a step back and look at how the system is set up to incentivise investment in critical infrastructure, as well as skills and capacity to plan for resilience.

¹⁰ Infrastructure New Zealand, 2019, *National Development: Insights from Asia*: <https://infrastructure.org.nz/wp-content/uploads/2021/08/Infrastructure-NZ-Insights-from-Asia-Report-single-pages.pdf>

¹¹ Infrastructure New Zealand, 2023, *Infrastructure New Zealand Submission on the Review into the Future for Local Government's Draft Report*: <https://infrastructure.org.nz/wp-content/uploads/2023/02/INZ-FFLG-Report-Submission.pdf>

- 6.13 Further, and as the issues paper notes, there is a need to align the Government's work in this space – such as the National Adaptation Plan, with other strategies in the sector, including the New Zealand Infrastructure Strategy, and the Construction Sector Accord's Transformation Plan, to ensure consistency. Greater alignment would provide certainty for the sector.
- 6.14 We welcome the Issues Paper's acknowledgement of this need and encourage the Commission to further consider alignment with the New Zealand Infrastructure Strategy as well as the Construction Sector Accord's transformation plan, among the array of strategies that intersect in this area.

7. Conclusion

- 7.1 We have summarised our submission against the four questions the Productivity Commission identifies in the issues paper.

Question	Summary remarks
1. What supply chain disruptions and trends are you worried about?	<ul style="list-style-type: none"> • Long supply chains and growing protectionism globally leading to increases in the price of materials. • Pandemic related disruptions to international supply chains have highlighted the vulnerability of building material supply chains. • Investment volatility. • Vulnerabilities in the domestic supply chain due to underinvestment.
2. What is your industry / community currently doing or planning to do to address supply chain concerns?	<ul style="list-style-type: none"> • 90% of building materials are imported which makes it challenging for industry to adapt to plan ahead to address supply chain concerns. • Activities and investment into building industry resilience more broadly are currently being undertaken through the Construction Sector Accord and as informed by the New Zealand Infrastructure Strategy.
3. How can the government help to enhance the resilience of your industry/community to supply chain disruptions?	<ul style="list-style-type: none"> • Greater certainty and clarity around the long-term infrastructure pipeline to enable industry to plan for and invest in its capacity to deliver future infrastructure in a sustainable and resilient way. • Greater government leadership of procurement processes where expertise is needed to account for shocks, or leverage opportunities, across infrastructure supply chains. • Increase workforce diversity (e.g. women in construction) to build greater employment resilience.
4. What should the Commission study to learn more about the economic resilience of industries and communities?	<ul style="list-style-type: none"> • Private and public sector collaboration in response to the supply chain disruptions that resulted from Covid-19, for example the work of the Construction Sector Accord during the Gib crisis. • Examples from overseas of policies that have strengthened local government entities capacity to adequately integrate their transport and land use planning to support freight and supply chain resilience in the mid-term. • Consider how an enabling regulatory environment for digital capacity building might provide opportunities for improved resilience and efficiencies for critical infrastructure delivery.

- 7.2 As previously stated, INZ welcomes this inquiry into New Zealand's economic resilience.
- 7.3 We encourage the Productivity Commission to further consider lessons from private-public collaboration through Covid-19 related disruptions to the building materials supply chains as it undertakes its work.
- 7.4 INZ further encourages the Commission to consider the broader context of investment in critical and climate resilient infrastructure, as well as local and central governments' capacity to strategically plan and deliver on future investment.
- 7.5 We would welcome the opportunity to discuss our submission with the Productivity Commission and look forward to engaging further as the inquiry progresses.

Yours sincerely,



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