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Budget 2022 Information Release

August 2022

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[33] 9(2)(f)(iv) - to maintain the current constitutional conventions protecting the confidentiality of advice tendered by ministers and officials

[34] 9(2)(g)(i) - to maintain the effective conduct of public affairs through the free and frank expression of opinions

[35] 9(2)(g)(ii) - to maintain the effective conduct of public affairs through protecting ministers, members of government organisations, officers and employees from improper pressure or harassment;

[36] 9(2)(h) - to maintain legal professional privilege

[37] 9(2)(i) - to enable the Crown to carry out commercial activities without disadvantage or prejudice

[38] 9(2)(j) - to enable the Crown to negotiate without disadvantage or prejudice

[39] 9(2)(k) - to prevent the disclosure of official information for improper gain or improper advantage

[40] Out of Scope

[41] 18(c)(i) - that the making available of the information requested would be contrary to the provisions of a specified enactment

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TE TAI ŌHANGA
THE TREASURY

Treasury Report: Investment Panel Advice - Budget 2022

Date:	11 February 2022	**Report No:**	T2022/76
		File Number:	ST-4-8-4-11-5-2022

Action Sought

	Action Sought	Deadline
Minister of Finance Hon Grant Robertson	**Note** the recommendations that the Investment Panel has outlined to support the decisions and trade-offs you will make as part of Budget 2022. **Refer** to the Associate Ministers of Finance for their information.	18 February 2022

Contact for Telephone Discussion (if required)

Name	Position	Telephone		1st Contact
Hamish Journeaux	Senior Analyst, Investment Management and Asset Performance (IMAP)	[39]	N/A (mob)	✓
Craig Murphy	Manager, Investment Management and Asset Performance (IMAP)		[35]	

Minister's Office Actions (if required)

Return the signed report to Treasury.

Refer to the Associate Ministers' of Finance for their information.

Note any feedback on the quality of the report	

Enclosure: No

Treasury Report: Investment Panel Advice - Budget 2022

Executive Summary

This report provides you with advice from the Investment Panel (the Panel) to support the decisions and trade-offs you will make as part of Budget 2022 (B22). It supplements the Treasury's Emerging Budget 2022 Package Advice [T2022/6 refers].

Overview of the Panel's evaluation

The Panel evaluated the 44 initiatives totalling $11.2 billion based on **achievability** (including level of planning and system insight on capability, capacity and deliverability) and **attractiveness** (including alignment to Government priorities). The achievability and attractiveness of each initiative were both categorised on a three-point scale.

Given the capacity constraints the Panel has identified, there is greater emphasis in this report on the achievability of initiatives. References to the achievability categories have the following meanings:

- High achievability – Applies to initiatives with limited achievability concerns. These initiatives are considered achievable as-is.
- Medium achievability – Applies to initiatives with some achievability concerns and are likely to require additional work by the agency or support of a system leader (e.g., governance and assurance support). These initiatives are candidates for funding deferral.
- Low achievability – Applies to initiatives with material achievability concerns. These initiatives will require a significant amount of support to realise their stated benefits and are not ready for a funding decision.

Table 1: Summary of initiatives reviewed by investment type

Investment type	Number of initiatives	Total capital funding ($m)	Total operating funding ($m)	Total funding ($m)
Change	3	[33]		
Data/Digital/ICT	22			
Infrastructure	15			
Specialist equipment	4			
Total	**44**	**3,959**	**7,197**	**11,155**

Two initiatives from the Ministry of Health were not assessed by the Panel due to a lack of information. These initiatives were the [33]

initiatives. While these initiatives lacked the information required to be assessed, these are important initiatives that should be considered as part of the capital package.

Results of the Panel's evaluation

Table 2: Achievability and attractiveness categorisation for each initiative by investment type

	Low Achievability	Medium Achievability	High Achievability
High Attractiveness		• 1 x Digital ○ [33]	
Medium Attractiveness	• 1 x Org. Change ○ [33] • 6 x Digital ○ [33] • 3 x Infrastructure ○ [33]	• 1 x Org. Change ○ [33] • 2 x Spec. Equipment ○ [33] • 12 x Digital ○ [33] • 8 x Infrastructure ○ [33]	
Low Attractiveness	• 1 x Org. Change ○ [33] • 2 x Spec. Equipment ○ [33] • 2 x Digital ○ [33] • 1 x Infrastructure ○ [33]	• 1 x Digital ○ [33] • 3 x Infrastructure ○ [33]	

The Panel concluded that no initiatives could be categorised as having 'high' achievability, primarily due to capability and capacity constraints within agencies and the wider market in the current environment and a lack of planning.

There are achievability challenges facing all initiatives submitted for funding in B22. Accordingly, for all initiatives, the Panel has recommended considering deferring funding decisions to future Budgets or until Cabinet approval of relevant business cases.

We recognise that you have wider considerations in your decision-making process, therefore if initiatives are to be funded, where possible, the Panel has provided recommendations aimed at improving the achievability of each investment (and to manage risk). These recommendations are attached at Appendix A of this report.

Themes identified by the Panel

The Panel identified three themes that have contributed to the deliverability challenges faced by B22 initiatives:

1. **Agency and market capacity and capability constrains how much we can deliver:**

    - The Panel identified the availability of labour and supply chain issues as the most acute issues constraining delivery (due to low unemployment/high participation rate, constrained migration flows, and disruption to global supply chains); and

    - The Panel also had concerns about the capability within some agencies to deliver the initiatives for which they were seeking funding (i.e., complex projects being undertaken by policy agencies with limited operational expertise, as well as agencies managing multiple investments simultaneously). In addition, agencies seeking to recruit the necessary expertise are operating in a constrained economic/labour environment and will be competing for resources with each other and private firms (risking further cost increases and crowding out private investment).

2. **A lack of sufficient planning, reflected by few developed business cases**: Projects with business cases generally scored higher; however, the business cases that were submitted were still insufficiently developed to enable informed and confident investment decisions (e.g., poor options analysis). Good planning is important to identify options for delivery and strategies for managing risk, so decision makers are fully informed of the merits of the proposal and have confidence in an investment's achievability – before funding decisions are made.

3. **The risk of cost escalations is high but can be mitigated through prioritising and sequencing well-planned investments**: The Panel considered that the risk of cost escalations across the government's portfolio of current and near-term investments is high. The Panel is concerned that the cost contingencies proposed for each initiative may not be sufficient to cover risks around cost inflation and scope changes as design proceeds. The Panel observed that additional Government investment in the short term is also likely to exacerbate the risk of ongoing cost increases.

Members of the Panel have provided sector specific commentary based on their assessment of the initiatives which are attached at Appendix B of this report.

Recommendations of the Panel

The Panel recommends the following to manage deliverability challenges at a system-level:

1. **Consider deferring funding decisions for initiatives that have not completed sufficient planning** to support an investment decision (i.e., a Cabinet-approved Detailed Business Case or where additional work is required). Recent examples of infrastructure stimulus programmes, such as New Zealand Upgrade Programme, illustrate that a lack of planning is leading to slow delivery. Deferring funding decisions where there is insufficient planning will help to ensure that investments funded by the Government through B22 can be delivered in a constrained market, adequately understand the residual risks, and will deliver the benefits promised.

2. **Consider funding agencies to prepare the relevant business case** for investments that you may wish to fund, but which do not have a completed Detailed Business Case (or Single Stage Business Case). This will help to establish a pipeline of future investments that have been sufficiently planned and can be prioritised, sequenced and funded through future Budgets, which will also help to manage, and grow, market capacity and manage cost escalations.

3. **If funded, for data, digital and cyber security investments, focus on foundational investments** that will enable other, more specific investments in the future. Further consideration should be given to the most appropriate and cost-effective sequencing of investments to mitigate capacity issues and reduce duplication of effort and resource use across agencies.

4. **For climate related investments, funding should be strategically targeted** toward investments that result in, or contribute towards, the highest reduction in greenhouse gas emissions for the lowest cost. An overarching strategic approach would ensure that investment decisions represent the best value for money, which will be necessary for New Zealand to meet its target of net-zero emissions by 2050 in an affordable manner. It would also require agencies to collaborate on programme-wide initiatives, to ensure that the implications of trade-offs between different projects or programmes, or sectors of the economy, are understood and support the government's long-term goals.

Cost escalations

You have requested advice on options for how to handle the eventual cost increases that will be felt across the Government's infrastructure programme.

This report includes the Panel's recommended approach to those initiatives that are yet to receive funding decisions (that is, establish a pipeline of investments to manage market and agency capacity and capability, defer funding decisions for initiatives that haven't completed sufficient planning, or consider funding agencies to undertake this planning).

In mid to late February, the Treasury and Te Waihanga will provide you further advice on options and recommendations on how to manage cost escalation for those projects which have already received funding decisions.

Recommended Action

We recommend that you:

a **note** the Investment Panel recommends that you:

i. consider deferring making funding decisions for initiatives that have not completed sufficient planning to support an investment decision;

ii. consider funding agencies to prepare the relevant business case for investments that you may wish to fund, but which do not have a completed Detailed Business Case (or Single Stage Business Case) to support prioritisation and sequencing and the management of cost escalation due to capacity constraints;

iii. if you are to consider funding for data, digital and cyber security investments, focus on foundational investments that will enable other, more specific investments in the future; and

iv. for climate related investments, funding should be strategically targeted toward investments that result in, or contribute towards, the highest reduction in greenhouse gas emissions for the lowest cost.

b **note** that the Investment Panel recommendations outlined in recommendation a above will support you to manage the cost increases that will be felt across the Government's infrastructure portfolio for those projects that are yet to receive funding decisions.

c **note** that in mid to late February 2021, the Treasury and Te Waihanga Infrastructure Commission will provide you with further advice on managing cost increases for those projects that have already received funding decisions.

d **refer** to the Associate Ministers of Finance for their information.

Refer/not referred.

Craig Murphy
Manager

Hon Grant Robertson
Minister of Finance

Treasury Report: Investment Panel Advice – Budget 2022

Purpose of Report

1. This report provides you with the Investment Panel's (the Panel) advice based on its assessment of initiatives submitted by agencies in Budget 2022 (B22).

2. The Panel reviewed 44 initiatives totalling approximately $11.2 billion. Initiatives that are proposed to be funded from specific funds (such as the Covid-19 Response and Recovery Fund and the Climate Emergency Response Fund) were specifically excluded as these have been assessed as part of a devolved process.

3. This report is set out in four sections:

   a **Overview of the Panel's evaluation**: Provides an overview of the Panel process and assessment framework;

   b **Results of the Panel's evaluation**: Provides a summary of the results of the Panel's assessments. Results of individual initiative assessments are set out in Appendix A;

   c **Themes identified by the Panel**: Provides the three themes noted by the Panel about government investment, and the implications of these themes. Additional system leader views are set out in Appendix B; and

   d **Recommendations of the Panel**: Provides the portfolio level recommendations identified by the Panel.

Overview of the Panel's evaluation

Background

4. Since Budget 2020, we have provided you with advice about capital or other significant investments using the "3As Framework" (outlined below).

5. Our focus for B22 has been to build on the foundations of previous years' experience and to further refine the evaluation approach. The most significant change since last year's Budget is the introduction of sub-panels for Infrastructure, Data/Digital/Cyber, and Specialist Equipment and Organisational Change Programmes (the Sub-Panels). This gave the Panel greater reach and better matched expertise with the type of initiatives being assessed.

The 3As Framework

6. The 3As Framework comprises three aspects:

   a Achievability – Capability, capacity and deliverability;

   b Attractiveness – Alignment to Government strategies; and

   c Affordability – Consideration of the financial constraints.

7. The focus of this advice is on the initiatives' achievability and attractiveness – Ministers apply the affordability constraint through the Budget process.

The evaluation process

8. The Panel and the Sub-Panels were comprised of senior representatives from system leaders critical to government investment, including members from Te Waihanga, the Government Chief Digital Officer (GCDO), Government Chief Data Steward (GCDS), New Zealand Government Procurement (NZGP), Ministry for the Environment (MfE) and the Treasury.

9. The achievability and attractiveness of each initiative were initially assessed by members of a Sub-Panel. The resultant Sub-Panel reports formed the basis of the Panel's subsequent evaluation.

10. The achievability and attractiveness of each Initiative was categorised by the Panel as high, medium or low.[1]

11. Given the capacity constraints the Panel has identified, there is greater emphasis in this report on the achievability of initiatives. References to the achievability categories have the following meanings:

    a. High achievability – Applies to initiatives with limited achievability concerns. These initiatives are considered achievable as-is.

    b. Medium achievability – Applies to initiatives with some achievability concerns, are likely to require additional work by the agency or support of a system leader (e.g., governance and assurance support). These initiatives are candidates for funding deferral.

    c. Low achievability – Applies to initiatives with material achievability concerns. These initiatives will require a significant amount of support to realise their stated benefits and are not ready for a funding decision.

12. The Panel's advice supplements the detailed initiative level advice that is provided by the Treasury's Vote Teams. The Panel has not prepared a capital package; instead, it supplements the Treasury's Emerging Budget 2022 Package Advice [T2022/6 refers].

Results of the Panel's evaluation

13. The Panel reviewed 44 initiatives totalling approximately $11.2 billion.

Table 3: Summary of initiatives reviewed by investment type

Investment type	**Number of initiatives**	**Total capital funding ($m)**	**Total operating funding ($m)**	**Total funding ($m)**
Change	3	[33]		
Data/Digital/ICT	22			
Infrastructure	15			
Specialist equipment	4			
Total	**44**	**3,959**	**7,197**	**11,155**

1 A description of the achievability and attractiveness categories and the indicators used to assess an initiative's achievability and attractiveness is set out in Appendix C.

14. In general, the information provided to the Panel to support the assessment of the Initiatives was insufficient or required further development (e.g., poor options analysis). This lack of planning, as well as significant agency and market capability and capacity constraints, resulted in none of the Initiatives being categorised as having ‘high’ achievability.

15. We recognise that you have wider considerations in your decision-making process, therefore, should the Government decide to fund a particular initiative, the Panel identified practical recommendations to address any specific areas of concern. Detail on the assessment of each initiative and the accompanying recommendations are attached at Appendix A.

Themes identified by the Panel

16. The Panel observed three main themes arising from its evaluation of the initiatives, which are explored in this section:

    a. Agency and market capacity and capability constrains how much we can deliver;

    b. A lack of sufficient planning, reflected by few developed business cases; and

    c. The risk of cost escalations is high but can be mitigated through prioritising and sequencing well-planned investments.

Agency and market capacity and capability constrains how much we can deliver

17. The Panel identified the availability of labour and supply chain issues as being the most acute economic issues constraining the delivery of new or scaled-up investments.

18. Capability and capacity constraints within the New Zealand economy and government agencies are already limiting, and will continue to limit, the ability to deliver additional investments in the medium term.

19. New Zealand’s unemployment rate remains low and our participation rate is at an historic high. This indicates limited capacity in the domestic labour market to effectively respond to labour intensive investments.

20. Furthermore, migration flows remain subdued due to New Zealand’s pandemic border controls and the Government has indicated that, while borders are likely to open progressively throughout 2022, immigration settings are unlikely to return to their pre-Covid state. As such, agencies should not rely on the availability of the non-resident workforce to support the delivery of initiatives.

21. Disruption to global supply chains has contributed to material shortages and placed upward pressure on costs. While the Treasury had forecasted some easing of this disruption throughout 2022,[2] the emergence of the Omicron variant and China’s adherence to its zero-Covid policy make this prediction more uncertain.

22. The Panel has concerns about the capability within some agencies to deliver the Initiatives for which they are seeking funding. In particular, agencies ordinarily focussed on policy advice rather than service delivery are likely to lack the specific skillsets to plan and deliver complex investments.

[2] Half Yearly Economic and Fiscal Update 2021

23. Agencies seeking to acquire the necessary expertise are recruiting in the constrained labour market described above and will be competing for resources with each other and private firms. This increases the risk of government investment crowding out private investment and driving additional increases in the cost of labour and materials.

24. The resources required for some investment proposals, such as large-scale organisational change programmes, are so specific that it is unlikely that simultaneous programmes across government could be realistically delivered. Sequencing specialised projects like this in an investment pipeline would reduce the delivery risk for each programme by ensuring it is appropriately resourced, and enable lessons learned and expertise developed in the delivery of one programme to be applied to future programmes.

A lack of sufficient planning, reflected by few developed business cases

25. Of the 44 bids assessed by the Panel, only 13 (30%) were submitted with a business case of any kind.[3] This is consistent with last year's Capital Panel Advice Budget 2021 in which fewer than half of the initiatives assessed were submitted with a business case [T2021/465 refers].

26. Initiatives with business cases generally scored higher on both attractiveness and achievability. This reflects the fact that these projects have put more effort into appropriately defining the problem the investment is intended to solve, identifying and comparing potential solutions, and assessing the cost and deliverability of the preferred option.

27. Notwithstanding this outcome, the achievability and attractiveness scores were not as high as could be expected. The Panel found that, even where a business case was submitted:

    a. the quality of problem definition and options analysis was variable and generally poor; and

    b. risks in the delivery of the preferred solution were insufficiently assessed (particularly resourcing and supply chain risks given the market constraints).

28. Given the importance of thorough planning to the successful delivery of a significant project or programme, as set out in the Investment Management and Asset Performance in the State Services Cabinet Circular, the Panel considers that a Cabinet approved detailed business case should be a minimum requirement for agencies seeking funding for initiatives.

29. While undertaking high-quality planning comes at a cost to agencies, the size of the business case and the time taken to prepare it should be proportionate to the size of the investment.

30. While agencies would normally be expected to cover the costs of business cases from baseline funding, in cases where the underlying rationale of an investment is compelling but insufficient planning has taken place, the Panel recommends providing funding for the preparation of business cases, rather than committing to fund the initiative as part of B22. This would have the following benefits:

    a It would provide greater assurance to Ministers that initiatives funded by the Government represent the best public value and are well planned to reduce the risk of delivery failure and cost escalations;

[3] The Detailed Business Case analyses the short-list of investment options and recommends the preferred option that optimises value for money/public value. It seeks approval from decision-makers to go to market and to finalise design and planning.

b It would provide an opportunity to build a pipeline of investments over which Ministers have greater visibility, which Ministers could then use to prioritise, sequence and fund projects to manage market capacity and cost escalations; and

c It would provide greater market confidence in a pipeline of government investments, which will enable businesses to invest in labour and resources to grow capacity and capability.

31. The Treasury provided you with the Budget 2022 Investment Pipeline (based around the planning cycle) in September 2021 [T2021/2406 refers]. Relatively few of the initiatives submitted for B22 aligned with their assessment in this report, which demonstrates that the current level of planning by agencies requires improvement.

The risk of cost escalations is high but can be mitigated through prioritising and sequencing well-planned investments

32. You have requested advice on options to manage the eventual cost increases that will be felt across the Government's infrastructure programme.

33. Advice in relation to those projects which are yet to receive funding decisions is outlined below. We have broadened our advice to include recommendations to cover the wider capital portfolio as the risk of cost increases also exists for non-infrastructure projects.

34. The Treasury and Te Waihanga will provide you with further advice in mid to late February for those projects which have already received funding decisions.

35. The risk of cost escalations across the government's portfolio of current and near-term investments is high. This risk applies to both physical (i.e., built infrastructure) and non-physical (i.e., digital or organisational) investments.

36. Infrastructure projects are already facing cost pressures and there is risk of further significant increases in labour and material costs [T2021/2883 refers].

37. As outlined in paragraph 30 above, the Panel recommends that Ministers only provide funding for the preparation of business cases for those initiatives it wishes to progress (rather than partially or fully fund these initiatives). In addition to managing market capacity and capability by providing a visible pipeline of investments, this would help to mitigate potential future cost increases for these projects by:

a reducing the likelihood of changes to the scope of the investment after the decision to invest; and

b highlighting potential resourcing issues and risks an investment may encounter and identify options to mitigate those issues.

38. Even with good planning to support an investment proposal, the Panel recommends that funding for an initiative includes an appropriate contingency for cost increases. Most infrastructure projects the Panel reviewed requested a contingency of 10 per cent or less.

39. Most of the non-physical investment initiatives contain a significant digital, data or cyber element, for which there is currently a shortage of skilled candidates available.[4]

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[4] For example, in the IT sector, a 2021 survey of government agencies by the GCDO demonstrates the scale of the shortage of IT workers within government, with 712 current vacancies reported across the agencies that responded. 91 per cent of agencies identified "better remuneration" as the main driver for staff turnover, indicating that the labour shortage is driving wage competition across employers within the sector. 82 per cent of agencies report that they are unable to offer the right level of remuneration to attract and retain senior digital personnel, which may indicate that

This shortage is already impeding the delivery of existing initiatives as agencies struggle to recruit suitable employees.

40. Increased competition between agencies and the private sector for these workers is anticipated which will drive up the cost and increase the timescales for these initiatives.

41. The Panel observed that if the Government chooses to fund initiatives (either physical and non-physical) that have a short delivery timeframe and that have not been signalled to the market, the risk of ongoing cost increases across the portfolio is likely to be exacerbated.

42. In contrast, signalling a commitment to investment in the medium term by undertaking detailed planning of initiatives will help build an investment pipeline which will support increased capacity and capability in the market, enable more deliberate prioritisation and sequencing, increase the likelihood of successful delivery and result in better value outcomes.

Recommendations of the Panel

43. The Panel recommends the Government takes the following actions to support an increase in long-term market capacity and to manage the fiscal pressures faced in B22:

   a **Consider deferring funding decisions for initiatives that have not completed sufficient planning** to support an investment decision (i.e., a Cabinet-approved Detailed Business Case or where additional work is required). This will help to ensure that investments funded by the Government through B22 can be delivered in a constrained market, adequately understand the residual risks, and will achieve the benefits promised.

   b **Consider funding agencies to prepare the relevant business case** for investments that you may wish to fund, but which do not have a completed Detailed Business Case (or Single Stage Business Case). This will help to establish a pipeline of future investments that have been sufficiently planned and can be prioritised, sequenced and funded through future Budgets.

   c **If there are data, digital and cyber security investments that you wish to fund, focus on foundational investments** that will enable other, more specific investments in the future. Further consideration should be given to the most appropriate and cost-effective sequencing of investments to mitigate capacity issues and reduce duplication of effort and resource use across agencies. Initiatives that have been identified as foundational are marked as such in Appendix A.

   d **For climate related investments, funding should be strategically targeted** toward investments that result in, or contribute towards, the highest reduction in greenhouse gas emissions for the lowest cost**.** An overarching strategic approach would ensure that investment decisions represent the best value for money, which will be necessary for New Zealand to meet its target of net-zero emissions by 2050 in an affordable manner. It would also require agencies to collaborate on programme-wide initiatives, to ensure that the implications of trade-offs between different projects or programmes are understood and support the government's long-term goals.

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public sector employers are struggling to compete to attract the necessary talent in an environment where workers are demanding higher wages.

Appendix A has been withheld in full under section 9(2)(i) - [37]

APPENDIX B
SECTOR INSIGHTS

Te Waihanga

The construction section is maxed out and inelastic – we cannot do more in the short term

New Zealand has $61 billion worth of infrastructure projects planned in its pipeline of upcoming work – and most of these are projects intended within the next five years. There is also significant demand for residential and other types of construction that adds to our capacity challenges.

The share of construction firms reporting labour shortages is now the highest ever, a situation made worse by ongoing international competition for talent. Australia also has a severe labour shortage - and with weekly wages that are, on average, NZD$500 higher than ours, many New Zealanders are likely to cross the Tasman for work. This will likely result in further erosion of workforce when the border reopens.

Excessive competition for resources results in projects failing to achieve on the onsite productivity included in baseline estimates. This prolongs project durations and results in higher costs to complete the job. Pushing projects ahead when markets are tight also creates quality challenges risking leaving a generation or projects with legacy issues that will be expensive to correct. All of these issues will be exacerbated if the spread of Omicron in 2022 results in periods where many workers are unable continue site work either due to sickness or isolation requirements.

There are also shortages in other aspects of infrastructure planning, delivery and maintenance besides the construction element that impair our ability to provide the infrastructure that we need. We see evidence of this in poor infrastructure outcomes, a lack of planning and limited asset management.

In this context, we recommend that you do not progress any new construction projects into delivery until 2023. In our view, none of them are ready for this anyway. Instead, you could:

- Increase the quality of choices in B23 (and reduce risk) by funding projects to develop a Detailed Business Case
- For those with a sufficient Detailed Business Case, consider funding land acquisition, design and consenting
- Consider immigration settings to enable elasticity – so the market can grow to meet demand

Cost escalations higher than expected (with ongoing and increasing risk)

Construction price inflation has surged over the last quarter, and NZIER forecasts now indicate annual non-residential construction cost inflation will increase to 10 percent in March 2022.

Construction price inflation forecasts have been revised upwards several times in 2021 and so it reasonable to expect ongoing volatility and risk. Generally, this can be attributed to:

- Unavoidable / input cost increases – This largely relates to rising costs in commodities and materials like iron, copper and services like international freight.

- Domestic capacity challenges – Materials shortages include structural and non-structural wood, electrical equipment and plumbing materials and fittings, and domestic competition for labour.
- Problems with time and scheduling – even where materials and labour are available, there are bottlenecks causing issues in supply-chains and delivery, which can have cumulative effects.
- Management and practice problems – other issues can be exacerbated by poor practice (like scope creep) or failure to anticipate or manage risks.

In the coming year these problems will likely be exacerbated further, with the Omicron variant likely to result in lower productivity, supply chain disruptions, and labour market constraints (reflecting ongoing high demand for construction and lags in training and international recruitment).

Infrastructure projects need to be assigned sufficient contingency, and then managed diligently to ensure this is used for appropriate pressures, and that all possible mitigations have been applied.

Government Chief Digital Officer (GCDO)

<u>Accelerating workforce shortages impacting government outcomes</u>

The growing gap between the demand for and supply of digital, data and cyber security workforce will increasingly inhibit Government and broader New Zealand aspirations. This includes the ability to maintain minimum digital, data and cyber security capabilities, undertake any supplementary transformation, and support and enable strategic outcomes. This issue is also likely to create competition between agencies and cause cost escalation. Resolution of supply issues in the short and medium term rely on access to international labour markets. Even if Covid-related border restrictions can be reduced significantly in 2022, the supply of internationally sourced specialist labour is unlikely to improve significantly until 2023.

<u>Alignment with Government strategy</u>

Overall, there continues to be limited alignment with All of Government direction as outlined in the Strategy for a Digital Public Service and digital, data and ICT investment Principles. A more sustained strategic approach is required over multi-year time horizons to ensure the most efficient investments that support Government outcomes are identified and prioritised. This will require agencies to:

- Provide adequate visibility of investment planning to functional leads to enable them to develop accurate AoG investment pipelines and broker collaborative opportunities between agencies. This transparency will be crucial in identifying possible interventions required to reduce poor investments, monitor delivery risk (achievability), and the management of the asset. This effort has been helped by a recent Cabinet decision (ERS-21-MIN-0049) that provides the digital, data and cyber security functional leads with access to agencies baseline spend information 'as required' to undertake this work.
- Engage earlier with the digital, data and cyber security functional leads regarding the development of both baseline and new initiatives. There is currently inadequate time for All of Government strategies and requirements to be embedded in initiatives which leads to weaker investment outcomes.

- Actively adopt a less siloed, agency specific view of digital investments and take up opportunities to share capacity and capability and build inter-agency interoperability. This could be on a bi-lateral basis between agencies, within clusters, sectors or wider government.

Opportunities within the current context

While the current capacity and capability issues will continue to challenge agencies ability to deliver both existing and new digital initiatives, there are opportunities for better investment outcomes to be achieved. These include:

- Investment efficiencies by agencies coming together to achieve cost savings and avoid duplicative investments. This was highlighted with the cyber security bids in B22 that could have been more joined up, particularly given the acute workforce challenges and achievability risk. There are opportunities for significant savings across Government.
- Better digital infrastructure and outcomes through shared inter-agency planning. Digital investments are frequently amenable for a shared investment approach across multiple agencies and sectors and this interoperability is usually highly desirable. Government would benefit from better digital outcomes by identifying what infrastructure could and should be shared.
- Adopting a stronger system investment approach across the investment management system and for the respective (investment) functional leads to drive better outcomes. Momentum over recent years needs to be built upon. This could include by (a) reiterating the collective mandates of the respective functional leads (b) increasing the opportunities for functional leads to influence agency investments beyond the annual Budget process (c) providing functional leads multiple 'gates' throughout the yearly budget cycle to review (prospective) budget initiatives (d) strengthening the capacity in system leads to provide oversight including the pursuit of an increasingly 'data driven' approach (e) supporting more cross agency governance mechanisms. The Budget 22 process noted the possibilities within the Justice and Primary sector clusters and Health sector for more cross agency governance. These mechanisms could support greater transparency, accountability, sharing of resources, and better overall outcomes.

Government Chief Data Steward (GCDS)

The data-related bids often lacked the level of detail required to support sound assessment of their attractiveness, achievability and affordability. Consequently, some of these bids may have been scored lower than they would had better information been provided.

A particular issue was the absence of sufficiently detailed business cases and accompanying cost benefit and options analyses. Data-related bids generally require the employment of specialist labour to both build and operate the data part of the investments. While risks of securing these resources was generally acknowledged, there was little evidence of mitigation measures in the proposals. Given the current shortage of skilled labour, this also raises the risk of competition between agencies and the private sector for these scarce resources.

The GCDS expects that in future budget rounds agencies will be able to align the data-related aspects of their budget bids with the Data Strategy and Roadmap and the Data Investment Plan. These products were not published until later last the year and were therefore were not often referenced in the 2022 bids. The GCDS is now actively promoting these products to agencies and will continue to develop and refine the Data Investment Plan, providing a clearer view of data investment opportunities and intentions. The GCDS will also be working more actively with agencies to assist data investment planning and to achieve better system wide coordination.

GCDS commentary and recommendations on the bids largely relate to maximising the value of data and ensuring good data practice. For example, making sure data can be integrated across the system, thinking more about leveraging the wider system-value of the data, and ensuring that good data management practices are being adopted.

The bids also revealed a healthy demand for guidance/support on Māori data issues. On this range of issues, we recommend agencies discuss or seek support from the GCDS to ensure consistency and alignment across the government data system.

Government Chief Information Security Officer (GCISO)

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New Zealand Government Procurement (NZGP)

The Procurement Functional Leadership function involves growing and improving the procurement capability and practices of agencies across government, and providing specialist procurement advice on high value/high risk commercial cases. In reviewing the 2022 Budget bids, New Zealand Government Procurement (NZGP) made a number of key observations.

<u>Failure to plan for market conditions</u>

Labour and product supply constraints feature heavily on overall market capacity in many sectors – particularly evident from a procurement point of view. With current market constraints, new initiatives will likely push up costs and potentially divert resource from other government and private sector projects. Large-scale public sector investment proposals need to carefully consider and manage such impacts. Agencies can pro-actively drive efficiency and innovation by engaging the market as 'government' in a more coordinated way. Instead, we note competition between agencies for limited market resources and a lack of system (portfolio) planning. Addressing this issue at a system level is a central theme for a strategic refresh of government procurement settings that is currently underway.

<u>Strategic investment case is missing or insufficiently specific</u>

We noted many bids that were weak regarding the clarity of the strategic need for, and purpose of, the initiative. Often this translated into a lack of clarity about the overall scope of the initiative. Proposals that manage strategic need and intent well are able to establish clear benefits in a logical, convincing fashion. We found this to be missing or insufficient in a number of bids.

The procurement approach is often unclear

Central to effective public procurement is clarity about the public value proposition of the initiative, including its contribution to Broader Outcomes (i.e., leveraging the procurement spend to achieve wider social, economic, environmental or cultural benefits). Surprisingly, we noted many business cases that failed to identify their contributions to Broader Outcomes, the procurement approach, or even just the factors for consideration.

Insufficient attention to supplier management and benefit realisation

We noted numerous instances of inadequate investment in the performance and management of suppliers in relation to benefit realisation. Strengthening supplier relationship and contract management (SRM) to realise intended benefits is a central theme of the procurement system strategic refresh.

Poor procurement planning and risk management

Comprehensive procurement planning involves robust options analysis that identifies and compares options for cost efficiency; sound cost escalation risk and contingency management; and evidence that key risks are being taken seriously and managed appropriately. Many proposals we saw rated average to poor in terms of comprehensive planning. The ones that did provided the panel with much greater assurance, and consequently scored well.

Digital procurement

In their procurement planning, agencies must consider Broader Outcomes including the priority outcome of increasing access for New Zealand ICT businesses. The assessment of the Initiatives indicated few agencies had incorporated this requirement into their procurement process.

Building ICT capacity and capability in New Zealand can take significant time, and agencies need to communicate their requirements through earlier engagement with the supply market. This will allow the market time to build their capability and capacity while informing the procurement design to ensure its success.

Good planning well in advance of the tender is crucial to allow suppliers sufficient time to come up with innovative and responsive solutions.

Ministry for the Environment

Climate Change

While the Budget bid template seeks a brief commentary on whether the initiative supports climate goals – both emissions reduction and increasing resilience – there is still a need to improve the strategic approach to these issues by agencies and to see this demonstrated in their Budget Initiatives.

Further emphasis through 2022 on providing guidance for agencies will help to build capacity and capability across New Zealand and within the public sector.

Further to declaring the climate emergency, work is progressing to deliver tools towards ensuring that climate change is at the heart of the Government's decision-making. The release of the Emissions Reduction Plan (May 2022) in response to the Climate Change Commissions' advice, and the National Adaptation Plan (August 2022) in response to the National Climate Change Risk Assessment (2022) will provide road maps for work programmes, and support Government departments in setting their own strategic approach to respond to these Plans.

In turn, this will support the future alignment of investment across portfolios that are needed to deliver reductions in emissions and/or build resilience to the impacts of climate change.

As noted in the "Further observations" in the body of the report, a strategic approach is required to ensure that work programmes are invested in which will, in the longer term, support our reduction in emissions and improvements in resilience. At the same time, all projects should be evaluated for their emissions or resilience impact/cost – in a similar way to the current use of CIPA in RISs. Note that, as referenced elsewhere in a general sense, it is important that the relevant expertise is used in both the development of the initiatives, and in the evaluation by the Investment Panel and sub-Panels. There is limited information available on negative climate impacts, both through emissions and resilience, and where information is not provided, limited ability to sense check that. There is a risk of creating a greater hurdle for those investments focussed on contributing to NZ's climate change goals than those which work against them.

Natural environment objectives

The Government, through the reform of the Resource Management System, has endorsed the objective of protecting and restoring the natural environment, including its capacity to provide for the wellbeing of present and future generations. This sits alongside four other objectives, including better enabling development, giving effect to the principles of te Tiriti, reducing emissions and improving resilience to climate change impacts, and improving system efficiency and effectiveness.

In regards to the delivery of physical infrastructure, the new system provides opportunities to improve how it is planned and delivered. The proposed regional spatial strategies, to be legislated through the proposed Strategic Planning Act provide an opportunity for agencies to develop and deliver a national-level strategic approach. Updates to the provisions for designations, and how they might fit with the Natural and Built Environment Plans will also contribute to more effective and efficient planning and consenting for infrastructure. National direction – to be delivered through a National Planning Framework as secondary legislation – will also provide integrated guidance to support delivery through the Strategic Planning Act and the Natural and Built Environment Plans.

Agencies delivering physical infrastructure should be encouraged, through improved business case planning, to consider the full life cycle of the project, including the likely requirements that will arise through the resource management system, in a more strategic way. It could be useful to identify places, and provide questions/guidance in the IMAP and Budget/Investment Panel processes that encourages this strategic view of the project early on.

Given the current design phase of the resource management reform policy programme, providing linkages back through the IMAP and Budget processes might need to be staged on a longer timeframe. But it would be useful to take advantage of any arising changes, such as a potential review of CO(19)6, to introduce this concept.

APPENDIX C
ACHIEVABILITY AND ATTRACTIVENESS

The achievability and attractiveness of each initiative were categorised as high, medium or low.

The table below describes the achievability and attractiveness categories applied to each initiative.

Table 6: Description of achievability and attractiveness categories

Categorisation	Achievability	Attractiveness
High	Applies to initiatives with low achievability concerns based on an assessment of the achievability indicators outlined in Table 7. These initiatives are achievable as-is.	Applies to the most attractive initiatives based on an assessment of the attractiveness indicators outlined in Table 7.
Medium	Applies to initiatives with some achievability concerns based on an assessment of the achievability indicators outlined in Table 7. These initiatives are achievable subject to additional work by the agency or the support of a system leader.	Applies to somewhat attractive initiatives based on an assessment of the attractiveness indicators outlined in Table 7.
Low	Applies to initiatives with material achievability concerns based on an assessment of the achievability indicators outlined in Table 7. These initiatives will require a significant amount of support to realise their stated benefits.	Applies to the least attractive initiatives based on an assessment of the attractiveness indicators outlined in Table 7.

The table below summarises the indicators used to assess each initiative's achievability and attractiveness category.

Table 7: Indicators of achievability and attractiveness

Achievability	**Management**: Can the proposal be successfully delivered?	1. Has the Initiative been sufficiently tested through the business case process?
		2. Does the proposed approach to delivery provide sufficient assurance?
		3. Does the agency have the right capability and capacity to deliver?
	Commercial: Is the proposal viable?	4. Is the market and/or supplier well positioned for the nature of the Initiative?
		5. What is the level of risk around market stability and capacity?
		6. Has risk been appropriately managed?
Attractiveness	**Strategic case**: Is there a compelling case to commit?	1. Does the Initiative focus on critical areas?
		2. Does the Initiative align to government strategies?
		3. Is there an imperative to commit now?
		4. Does the recommended solution address the identified need?
	Economic case: Is there a strong value proposition?	5. Does the Initiative focus on critical areas?
		6. Does the Initiative align to government strategies?
		7. Is there an imperative to commit now?