The Treasury

Update on Infrastructure Reference Group (IRG) Infrastructure Projects Information Release

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Office of the Minister of Finance
Office of the Minister for Infrastructure

Chair
Cabinet Economic Development Committee

Update on Infrastructure Reference Group (IRG) Infrastructure Projects

Proposal

1. This paper seeks Cabinet's agreement to:

- authorise the Minister of Finance and the Minister for Infrastructure together with the Associate Ministers of Finance (IRG Ministers) to make final decisions on projects in the shortlist in Attachment A to be funded from the $3 billion Infrastructure Tagged Contingency including decisions on timing and announcements.

- the role of government agencies to deliver the IRG projects, including:

    i. the relevant central government procurement agencies (such as New Zealand Transport Agency, Kainga Ora and Ministry for the Environment), for those projects best delivered by these agencies.

    ii. the Provincial Development Unit (PDU) within MBIE for projects that are under $20 million and where they are best placed to deliver (such as those within the scope and objectives of the Provincial Growth Fund).

    iii. Crown Infrastructure Partners (CIP) for other local government and non-government (including private sector) projects that do not have an existing central government delivery agency that is best placed to deliver them.

- authorise delegated Ministers and the relevant portfolio Minister to make the necessary changes to appropriations (including establishing new appropriations) to implement decisions to be taken around funding projects.

Relation to government priorities

2. While the immediate public health threat from COVID-19 has diminished, the economic impact remains significant. There is further work we must do now to support New Zealand's economic recovery.

3. Infrastructure is an important enabler of economic, environmental and social outcomes, and will play a key role in New Zealand's long-term economic recovery from COVID-19.

4. Investment in construction ready projects will inject fresh capital, confidence and jobs into our economic recovery. This investment will provide much needed stimulus and fill the gaps in economic activity that we are starting to see. This investment will also help

to advance some of our wave three recovery objectives around energy, community development, housing and urban development.

Executive Summary

5. Infrastructure investment will play a key role in New Zealand's longer-term economic recovery from the impacts of COVID-19. As a result, Ministers announced the establishment of the Infrastructure Reference Group (IRG) to provide a list of infrastructure projects that are ready (or near ready) for construction and could be deployed as part of a stimulatory package. The IRG was directed to focus on immediate job creation and income growth, and providing public confidence that economic activity is back underway.

6. On 11 May 2020, Cabinet agreed to a $3 billion tagged contingency to provide investment in infrastructure to support New Zealand's economic recovery as part of the COVID-19 Response and Recovery Fund (CRRF) Foundation Package (CAB-20-MIN-0219.04 refers).

7. The IRG has now provided its final report to Ministers, which includes a total of 802 projects seeking $33 billion in funding or financial support. Following the receipt of this report, Ministers directed CIP and officials to identify a shortlist of projects to fund from the Infrastructure Tagged Contingency, with a focus on the following sectors: housing and urban development; energy; community development; water and waste; and other central and local government projects.

8. This shortlist of projects is set out in Attachment A and includes 177 number of projects seeking $3.3 billion of funding and financial support and is estimated to enable 26,000 jobs and a total value of projects worth $6.6 billion.

9. This investment offers an opportunity for new employment, the preservation of jobs and the redeployment of workers in our hardest hit communities and sectors. We are also focused on investing in the direction that we want New Zealand to move towards in the future - transitioning towards a more productive, sustainable and inclusive economy, enabling our regions to grow, and supporting a modern and connected New Zealand.

10. We are seeking Cabinet authorisation for the Minister of Finance and the Minister for Infrastructure together with the Associate Ministers of Finance and the Minister of Economic Development (IRG Ministers) to make final decisions on which projects to fund from the shortlist in Attachment A (including decisions on timing and announcements). We are also seeking Cabinet agreement to the following criteria that IRG Ministers will use to make these final decisions:

    - The number of jobs created
    - Regional impact and distribution
    - Project achievability and readiness
    - Net Public benefit
    - Alignment with wider government objectives.

11. When making final decisions on projects from the shortlist in Attachment A, we are seeking Cabinet's agreement for IRG Ministers to prioritise "preferred" projects over

"reserve" projects in the first instance, on the basis that they are more likely to achieve the Government's objectives.

12. We are also seeking Cabinet's agreement to the agencies responsible for delivering these projects including existing central government procurement agencies (such as New Zealand Transport Agency, Kainga Ora and Ministry for the Environment), the Provincial Development Unit (PDU) and Crown Infrastructure Partners.

13. We plan on making decisions on these projects as soon as possible to enable projects to quickly get underway. We also plan to make announcements on projects as soon as next week. All early announcements will be in principle and will require negotiations and funding agreements to be put in place following announcement (similar to how Provincial Growth Fund announcements are made).

Background

Infrastructure Reference Group

14. On 1 April 2020, the Minister for Economic Development and the Minister for Infrastructure announced the establishment of the Infrastructure Reference Group (IRG) headed by CIP Chairman Mark Binns.

15. The IRG was established in response to the current COVID-19 situation and concerns of a large downturn in the infrastructure and construction sectors. The IRG was tasked with preparing a list of infrastructure projects that are ready (or near ready) for construction, meet certain national/regional benefit criteria, are aligned with government policy, and could be deployed as part of a stimulatory package.

16. On 29 April 2020, DEV agreed to the establishment of the IRG process including a Terms of Reference (DEV-20-MIN-0056 refers). Cabinet also invited the Minister for Economic Development and the Minister for Infrastructure to report back to DEV on the final IRG report.

17. The objectives the IRG were asked to consider in collating its report align with the short-term objectives agreed in the repurposing of the Provincial Growth Fund (PGF):

    - an increased focus on immediate job creation and income growth
    - construction activity that will be underway within the next 12 months, and
    - a high degree of visibility to the community, to give the public confidence that renewed economic activity is underway.

18. The IRG delivered their final report to Ministers on 17 May, identifying 802 projects across central government, local government and the non-government sector (including the private sector). The IRG report also ranks projects with a score, largely driven by assigning a 1-5 score for the sector to which a project belongs, a measure of labour intensity and other small adjustments. The original IRG report is attached in Attachment B.

19. One of the key observations in the IRG report is that the home building and commercial building sectors are the most vulnerable in the recovery. These sectors make up the majority of employment in the construction sector and comprise a large number of small business, especially in the home building sector.

20. Across the 802 IRG projects, a total of $33 billion of government financial assistance (excluding guarantees) was requested. Requests for other forms of assistance included subsidies, fast-tracking building and resource consents, changes to procurement practices, and land acquisitions.

21. From the 802 IRG projects, IRG Ministers requested the CIP and officials to identify a shortlist of projects that could be funded from the $3 billion Infrastructure Tagged Contingency.

$3 billion Infrastructure Tagged Contingency

21. On 11 May 2020, as part of COVID-19 Response and Recovery Fund (CRRF) Foundation Package decisions, Cabinet agreed to a $3 billion tagged contingency to provide investment in infrastructure to support New Zealand's economic recovery (CAB-20-MIN-0219.04 refers). Cabinet also:

   a. agreed that the purpose of the Tagged Contingency was to provide for investment in infrastructure to support the economic recovery from COVID-19, and

   b. noted that decisions on funding projects from the Tagged Contingency would be taken either through a future iteration of the CRRF process, or a bespoke process involving Cabinet approval.

The shortlist of projects (Attachment A) and delegation of final decisions

The shortlist of projects for Cabinet agreement (Attachment A)

22. Attachment A shows the shortlist of 177 projects that we have identified primarily from the IRG list of 802 projects. In finalising this shortlist we considered advice from CIP and officials.

23. This shortlist represents $3.3 billion of requested government financial assistance and is estimated to enable 26,000 jobs and a total value of projects worth $6.6 billion.

24. This investment offers an opportunity for new employment, the preservation of jobs and the redeployment of workers in our hardest hit communities and sectors. It also signals to the construction sector that the Government sees infrastructure as playing a key role in New Zealand's economic recovery, which should bolster demand and market confidence over the coming months.

25. We are also focused on investing in the direction that we want New Zealand move towards in the future in the future - transitioning towards to a more productive, sustainable and inclusive economy, enabling our regions to grow and supporting a modern and connected New Zealand.

26. This shortlist represents a focus on the following key sectors:

   26.1. **Housing and Urban Development:** Projects or packages that are consistent with the Urban Growth Agenda and the key economic shift to transform our housing market to unlock productivity growth and make houses more affordable. This includes horizontal and vertical infrastructure necessary to support increased housing supply.

26.2. **Energy:** Projects or packages that are consistent with the key economic shift to sustainable and affordable energy systems.

26.3. **Community:** Development **(including small scale projects**): Projects or packages that support strong and revitalised communities in both cities and regions

26.4. **Water and Waste:** Projects or packages that are consistent with the key economic shift so that land and resource use delivers greater value and improves environmental outcomes, which could include flood protection, irrigation and waste infrastructure.

26.5. **Other key:** Central **and Local Government infrastructure**: Projects that achieve the Government's wider objectives, and support the recovery.

27. The decision to focus on these key sectors has also been made with reference to the other large infrastructure investments this Government has made, including the $12 billion New Zealand Upgrade Program (NZUP) that included significant investment in roads, rail, public transport, health and education.

28. In addition to these key sectors, the list represents a distribution of projects across regions including those regions worst impacted by COVID-19 (or those with pre-existing infrastructure deficits) such as Bay of Plenty, the West Coast and Otago.

29. The IRG report emphasised regions with a high concentration of tourism and construction, relative to the size of the total workforce, having the greatest need for additional investment to support the local economy.

30. Annex 1 shows CIP's estimates of the regional impact from COVID-19 on jobs and GDP. Employment and GDP in the West Coast and Otago regions are estimated to decline significantly with GDP estimated to decline around 10% in the year to March 2021 in the West Coast and Otago.

31. Annex 1 also shows an indication of the possible ranges for what proportion of the Tagged Contingency could be allocated to reach region taking into account population and COVID-19 impact.

32. The shortlist also includes projects proposed by Māori and/or projects that will have significant benefits for Māori.

33. We have also worked with officials and departments to ensure that these projects are coordinated with existing funding programmes and programmes of work to ensure integration and consistency.

34. [37]

35. The shortlist in Attachment A also reflects advice received from the Provincial Development Unit (PDU) which has a role in prioritising projects under $20 million and has been working alongside the IRG and CIP in assessing projects.

Delegation of final decisions

36. We propose that the Minister of Finance and the Minister for Infrastructure, in consultation with the Associate Ministers of Finance (IRG Ministers) to make final decisions on projects in the list in Attachment A to be funded from the $3 billion Infrastructure Tagged Contingency including decisions on timing and announcements.

37. In making final decisions on what projects are funded from the shortlist in Attachment A, we recommend that Cabinet agrees to IRG Ministers using the following criteria:

Criteria	**Key questions**
Job creation	What is the estimated number of jobs that this project could create? Is the project within a region that has underutilised labour/sector capacity or could benefit from labour redeployment as a result of new projects?
Impacted regions and regional distribution	Is the project within a region that has been hard hit by COVID-19, or is forecast to be hit by the impacts of COVID-19 in the near, medium or long-term? Is there an opportunity to consider this project as part of a regional investment pipeline?
Project achievability and readiness	How is this project or package sequenced to be construction ready over the next 6 to 12 months? Is the delivery timeframe realistic? What is the capability and capacity of the procuring party to procure and deliver this project?
Net public benefit	What is the net public benefit associated with this project (including value-for-money and, where applicable, whole of life costs)?
Wider government objectives	How does the project support the Government's wider objectives towards a productive, sustainable and inclusive economy, including enabling a step change for Māori and Pacific economies?

[37]

39. We recommend that, when making final decisions on projects, IRG Ministers prioritise preferred projects over optional projects in the first instance, on the basis that they are more likely to achieve the Government's objectives.

40. In the following situations, we recommend that IRG ministers consider the reserve projects for delivery:

- information arises for a preferred project that means it is less beneficial or more costly than originally estimated, or the requirement for government support has otherwise changes, and IRG Ministers want to consider different projects that can better meet the Government's objectives set out in this paper,

- there is sufficient unallocated funds in the Tagged Contingency to allow for consideration of more projects than those on the preferred list, or

[37]

[37]

43. We also intend to make global allocations across the following project categories:

- **River management for flood protection ($200m)** – investment in to river management to protect communities, towns and rural land from flooding.

  This represents a systemic nationwide investment in river management to deliver integrated flood protection systems through upgrades and renewals in all regions. This will future proof flood management for climate change and other contemporary causes of flooding and create close to 1000 jobs.

  Around the country there is a need to invest in river management for flood protection, to protect communities living alongside rivers in towns and cities and to protect our productive and significant rural land. This is needed now and into the future to ensure flooding, our most common natural hazard, does not undermine our way of life. This investment in river management will ensure New Zealand's flood management system is substantially upgraded or renewed to meet contemporary challenges. This includes adaptation to cope with more frequent and intense climate change induced flood events.

- **Digital connectivity ($50m)** – to address rural connectivity issues that arose during COVID-19 lockdown, including increased broadband capacity to areas that experienced congestion and further funds to connect broadband to more Marae that can provide a rural digital hub.

  This investment would be across most regions with an emphasis on Tai Tokerau (Northland), Bay of Plenty, Waikato, Top of South and Canterbury, and, secondly, Gisborne, Manawatu-Wanganui, Auckland rural area and Otago and thirdly Hawkes Bay, West Coast, Taranaki, Wellington (rural), and Southland.

- **Fire stations (around $50 million)** – this would provide funding to upgrade 16 fire stations in **areas** eligible for PGF funding related to seismic strengthening or upgrades to rural fire stations that are not fit for purpose and three FENZ bids submitted to the IRG in the large metros.

Delivery of projects

Delivery agencies

44. For those projects progressed by IRG Ministers that are best delivered by relevant central government agencies, we recommend those agencies are funded to deliver those projects including, where applicable, New Zealand Transport Agency, Kainga Ora and Ministry for the Environment.

45. For central government projects, we propose that the Treasury works with the relevant central government agency and puts in place the necessary steps to finalise support for projects, including reporting back to Ministers if project details have changed (for example, if costs are higher than first indicated).

46. For local government or non-government projects, we have less visibility of the capacity and capability of project Owners to deliver these projects. For these projects we recommend the following:

    - The PDU within MBIE deliver projects that are under $20 million and where they are best placed to deliver (such as those within the scope and objectives of the Provincial Growth Fund).

    - CIP for other local government and non-government (including private sector) projects that do not have an existing central government delivery agency that is best placed to deliver them.

47. Both the PDU and CIP roles should also include:

    - Carrying out any necessary due diligence, negotiations, funding arrangements, establishment of investment objectives and appropriate risk-sharing arrangements,

    - Procuring projects directly where necessary,

    - Administering the funding to those entities directly procuring projects (such as local government authorities), and

    - Monitoring projects until their completion.

48. For the procurement of large construction projects from local government or the non-government sectors, CIP is proposing the following approach:

    - ensuring that the obligation to procure remains clearly with the project owner who will be responsible for all pre-construction costs associated with getting the project started within an agreed timeframe,

    - CIP retaining the right to withdraw funding if delays are seen to be as a result of the project owner or the emergence of some obstacle that has not been disclosed to CIP – funds will not be disbursed to project owners until the project has commenced and will likely be disbursed in accordance with an agreed schedule of milestones,

- all risks of cost overruns will sit with the project Owner,

- any exceptions to these principles would be brought to the IRG Ministers for approval.

Project announcements, due diligence and construction readiness

49. We plan to make announcements on projects as soon as next week, as these are agreed. All early announcements will be in principle and will require negotiations and funding agreements to be put in place following announcement (similar to how Provincial Growth Fund announcements are made).

50. Treasury advises that central Government projects on the shortlist are the most announcement-ready, as they are less likely to be subject to the risks outlined above.

51. IRG Ministers will seek additional information from CIP and PDU where necessary ahead of announcements, which will be coordinated by IRG Ministers' offices and the Prime Minister's Office.

52. In most instances, the shortlist also references the expected timing of when the projects will be ready to commence construction within the next 12 months. This builds from the IRG report that assessed and defined projects in three categories of construction readiness:

    - Category A: Projects that are, or were, already in construction.

    - Category B: Projects that have a high expectation of commencing in the next six months, where the six-month period is defined as up to 31 October 2020.

    - Category C: Projects that are expected to commence construction in the next 12 months, where the 12-month period is defined as up to 30 May 2021.

    - Category D: Projects that are not in Category A, B or C.

53. Government construction projects can face delays for many reasons, both external (consenting, business case reviews, and contractor challenges) and internal (challenges related to governance and decision-making, and cumbersome procurement processes). Fast-track consenting and/or designation may be needed to accelerate some of the projects, to enable projects to get underway as quickly as possible and to maximise the stimulatory effect of the Government's infrastructure investment.

54. The COVID-19 (Fast-track Consenting) Bill will provide temporary powers to fast-track resource consenting and designating processes for specific developments and infrastructure projects. These temporary powers are proposed to be available for two years. The IRG projects requesting fast-track resource consenting could be considered through this fast-track process.

55. The Construction Sector Accord ('the Accord') has been working with senior leaders across the sector to identify common pitfalls in project delivery and share lessons from the effective use of rapid mobilisation in the past (such as the mobilisation following Kaikōura and Christchurch earthquakes). To support agencies to learn from these lessons and understand how to follow best practice project delivery and procurement

methodologies, the Accord is currently producing a playbook (‘the Rapid Mobilisation Playbook’), which will:

a. help project owners to understand what resources and expertise they need at different stages of the project,

b. share project delivery methodologies that are fast, safe and will enable the project to deliver economic, social and environmental outcomes,

c. promote the behavioural change required to achieve the Accord goals and outcomes, such as a more productive sector, improving resilience and restoring confidence, pride and reputation.

Programme governance and monitoring

56. The projects in Attachment A have been submitted by a range of entities across central government, local government and the non-government sector (including the private sector).

57. Regardless of which projects are progressed by IRG Ministers, there are common factors that need to be in place to ensure project success. The most important factors are clear governance and reporting arrangements; clear objectives about what we are trying to achieve through each project; and clear expectations about how risks are managed over the life of the project.

58. As we move forward on these infrastructure projects, we will therefore need to establish appropriate governance and oversight arrangements. These arrangements will be necessary to ensure that we know how projects are tracking against Cabinet’s expectations.

59. We propose to establish a monitoring approach to track the progress of these projects similar to our approach to the New Zealand Upgrade Programme (NZUP), incorporating lessons from other successful approaches such as Stronger Christchurch Infrastructure Rebuild Team (SCIRT). This approach could have an Oversight Group to provide IRG Ministers with rigorous, independent and integrated advice on the risks and delivery performance of the selected projects.

60. IRG ministers will report back to Cabinet on the programme governance and monitoring arrangements after final decisions on projects have been made.

61. Relevant portfolio Ministers will also have an important role in overseeing the alignment of construction ready projects with other investment programmes underway or being commissioned through the CRRF. They also have a potential role in intervening, where necessary, to ensure the selected projects stay on track and deliver the agreed outcomes. Relevant portfolio Ministers will be consulted over any required changes to appropriations as the projects proceed.

62. The Treasury, MBIE (through NZGPP) and the New Zealand Infrastructure Commission, Te Waihanga, have well established support networks with central government key delivery agencies. The Infrastructure Commission and MBIE can provide procurement support for these agencies where necessary and appropriate, and there is an expectation that the Accord’s Rapid Mobilisation Playbook will be utilised.

63. The governance and support networks are less well established for projects that may be selected for funding in the local government and non-government sectors. It will be

important for PDU and CIP to feed into the Oversight Group to provide IRG Ministers with the right information to monitor the delivery of projects.

64. The agencies involved in delivering third sector projects must ensure there is a consistent application of centre-led good practice guidance, tools and processes, and timely referral of any procurement issues back into the centre for resolution. The Treasury, MBIE (through NZGPP) and the New Zealand Infrastructure Commission can provide support for these agencies, where necessary and appropriate. This expectation is designed to keep the selected third sector projects on track and supported for success.

Alignment with future CRRF funding decisions

65. Infrastructure projects funded through the $3 billion Infrastructure Tagged Contingency are part of a broader package of infrastructure investment, which will support New Zealand's economic recovery and further the Government's wider objectives. This includes providing support to enable continuation of the Government's large transport investment programme through the National Land Transport Fund.

66. As part of CRRF funding decisions to be taken on 6 July, Budget Ministers will consider proposals that relate to housing and urban development, three waters, energy and waste. As part of this process, we will ensure investments are aligned with projects and packages funded through the Tagged Contingency so we can achieve the best outcomes for the Government's investment.

Financial Implications

68. On 11 May 2020, as part of COVID-19 Response and Recovery Fund (CRRF) Foundation Package decisions, Cabinet agreed to a $3 billion tagged contingency to provide investment in infrastructure to support New Zealand's economic recovery [CAB-20-MIN-0219.04 refers]. Cabinet also:

- agreed that the purpose of the Tagged Contingency was to provide for investment in infrastructure to support the economic recovery from COVID-19, and
- noted that decisions on funding projects from the Tagged Contingency would be taken either through a future iteration of the CRRF process, or a bespoke process involving Cabinet approval.

69. This paper seeks Cabinet agreement to:

- authorise the Minister of Finance, and the Minister for Infrastructure, together with the Associate Ministers of Finance (IRG Ministers) to make final decisions on projects in the shortlist in Attachment A to be funded from the $3 billion Infrastructure Tagged Contingency.
- the role of government agencies to deliver the IRG projects, including:
    - iv. the relevant central government procurement agencies (such as New Zealand Transport Agency, Kainga Ora and Ministry for the Environment), for those projects best delivered by these agencies
    - v. the Provincial Development Unit within MBIE for projects that are under $20 million and where they are best placed to deliver (such as those within the scope and objectives of the Provincial Growth Fund).

vi. Crown Infrastructure Partners for other local government and non-government (including private sector) projects that do not have an existing central government delivery agency best placed to deliver.

- authorise IRG Ministers and the relevant portfolio Minister to make the necessary changes to appropriations (including establishing new appropriations) to implement decisions to be taken around funding projects.

70. We note that, depending on the projects chosen, the phasing of expenditure and split between operating and capital expenditure could alter what is included in the forecasts.

Legislative Implications

71. This paper has no legislative implications.

Impact Analysis

Regulatory Impact Statement

72. The Treasury Regulatory Quality team has been consulted and has confirmed that a regulatory impact statement is not required for this proposal.

Climate Implications of Policy Assessment

73. The Ministry for the Environment has been consulted and confirms that the CIPA requirements do not apply to this proposal.

Population Implications

74. Population implications are considered in the table below.

Population group	**How the proposal may affect this group**
Māori	Māori and Pacific peoples make up a high proportion of the construction workforce. The Government is focused on investing in projects that would support immediate job creation, distributed across different regions. This investment should provide employment opportunities that would benefit Māori and Pacific peoples. This impact could be further enhanced through the application of social procurement practices to facilitate Māori and Pacific people's access to business and employment opportunities. Social procurement practices are also being considered for PGF projects. A number of projects identified on the shortlist attached to this paper have been proposed by Māori and/or will have significant benefits for Māori.
Women	Women are under-represented across all levels of the construction industry, but are over represented in the sectors hardest hit by COVID-19, such as tourism, hospitality and retail. Infrastructure projects may provide redeployment opportunities for workers impacted by COVID-19, including women. However, this may not be realised unless women are actively targeted as a population group. Women are overrepresented in NEET statistics, so

	represent a significant latent source of labour, including for construction.
Disabled people	The proposals in this paper are not expected to have a significant impact on disabled people.

Human Rights

75. The proposals in this paper are consistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Consultation

76. This paper was prepared by the Treasury in consultation with the Ministry of Business, Innovation, and Employment. This paper includes information provided by the IRG and Crown Infrastructure Partners. The Ministry of Housing and Urban Development, the Ministry of Transport and the Department of Internal Affairs were consulted as part of the evaluation of projects. The Department of the Prime Minister and Cabinet was informed.

Communications

77. IRG Ministers will determine the approach to communications, taking into account other COVID-19 announcements.

Proactive Release

78. We propose to release a copy of this paper within 30 days with any redactions we consider appropriate under the Official Information Act 1982.

Recommendations

The Minister of Finance and the Minister for Infrastructure recommend that the Committee:

Background

1 **note** that on 17 May**,** the final Infrastructure Reference Group (IRG) Report was received by the Minister of Finance, Minister for Economic Development, Minister for Infrastructure and Associate Finance of Minister.

2 **note** the final IRG report includes 802 infrastructure projects from central government, local **government**, the private sector and other entities requesting government financial support of $33 billion.

3 **note** that through the COVID-19 Response and Recovery Fund (CRRF) Foundation Package, Cabinet agreed to a $3 billion Tagged Contingency to provide for investment in infrastructure to support the economic recovery from COVID-19.

The shortlist of projects

4 **note** that we requested further advice from CIP and officials and have established a shortlist of 177 projects seeking an estimated $3.3 billion government funding in Attachment A, which focus on the following key sectors: housing and urban development, energy, community development, waste and water, and other central and local government infrastructure.

5 **note** that the projects in Attachment A achieve a wide distribution of investment across the regions of New Zealand, including a focus on those regions most impacted by COVID-19 such as the Bay of Plenty, the West Coast and Otago.

6 **note** that this shortlist of projects is estimated to enable 26,000 jobs and a total value of projects worth $6.6 billion.

Delegation of final decisions

7 **authorise** the Minister of Finance and the Minister for Infrastructure together with the Associate Ministers of Finance (IRG Ministers) to make final decisions on projects in the shortlist in Attachment A to be funded from the $3 billion Infrastructure Tagged Contingency including decisions on timing and announcements.

8 **agree** that IRG Ministers take into consideration the following criteria when making final decisions on which IRG infrastructure projects to fund from the $3 billion Infrastructure Tagged Contingency:

8.1 The number of jobs created

8.2 Regional impact and distribution of projects

8.3 Project achievability and readiness

8.4 Net public benefit

8.5 Alignment with wider Government objectives.

9 **agree** when making final decisions on projects from the shortlist in Attachment A, IRG Ministers prioritise “preferred” projects over “reserve” projects in the first instance, on the basis that they are more likely to achieve the Government’s objectives.

[38]

12 **authorise** IRG Ministers and the relevant portfolio Minister to make the necessary changes to appropriations (including establishing any new appropriations) to deliver projects following decisions from IRG Ministers.

Delivery agencies

13 **agree** that for those projects progressed by IRG ministers that are best delivered by relevant central government agencies, those agencies will be funded to deliver those projects including, where applicable, New Zealand Transport Agency, Kainga Ora and Ministry for the Environment.

14 **invite** the relevant portfolio Ministers to engage with central government agencies on the delivery of projects described in recommendation 13 above.

15 **agree** for the Provincial Development Unit (PDU) within MBIE to be responsible for delivering projects progressed by IRG Ministers that are under $20 million where they are best placed to do so such as those within the scope and objectives of the Provincial Growth Fund.

16 **note** that Cabinet agreement may be needed to allow PDU to deliver projects that are currently outside its mandate (for example, social infrastructure in districts currently outside the PGF scope) but that it is best placed to deliver.

17 **agree** to appoint Crown Infrastructure Partners (CIP) to be responsible for delivering other local government and non-government (including private sector) projects progressed by IRG Ministers but that do not have an existing central government delivery agency best placed to deliver them.

18 **agree** for the PDU and CIP roles to include:

18.1 carrying out any necessary due diligence, negotiations, funding arrangements, establishment of investment objectives and appropriate risk-sharing arrangements,

18.2 procuring projects directly where necessary,

18.3 administering the funding to those entities directly procuring projects (such as local government authorities), and

18.4 monitoring projects until their completion.

19 **direct** the shareholding Minsters of CIP (the Minister for State Owned Enterprises and the Minister of Finance) to direct CIP under the company constitution to carry out the role in recommendations 17 and 18 above.

[37]

Programme Governance and Monitoring

23 **note** we propose to establish a monitoring approach to track the progress of these projects similar to our approach to the New Zealand Upgrade Programme (NZUP) incorporating lessons from other successful approaches such as Stronger Christchurch Infrastructure Rebuild Team (SCIRT).

24 **note** this monitoring approach could also have an Oversight Group to provide the IRG Ministers with rigorous, independent and integrated advice on the risks and delivery performance of the selected projects.

25 **invite** IRG ministers will report back to Cabinet on the programme governance and monitoring arrangements after final decisions on projects have been made.

Project announcements

26 **note** that IRG Ministers plan to make announcements on projects as soon as next week and all early announcements will be in principle and will require negotiations and funding agreements to be put in place following announcement (similar to how Provincial Growth Fund announcements are made).

27 **note** IRG Ministers will seek additional information from CIP and PDU where necessary ahead of announcements, which will be coordinated by IRG Ministers' offices and the Prime Minister's Office.

Authorised for lodgement

Hon Grant Robertson
Minister of Finance

Hon Shane Jones
Minister for Infrastructure

Date:

Annex 1 – CIP estimates of the regional impact from COVID-19 on jobs and GDP and an indication of the possible ranges for what proportion of the Tagged Contingency could be allocated to reach region

District / Region	Population 2020	Population %	Pre-Covid Jobs (2020)	Pre-Covid GDP $m (2020)	CIP Estimated job losses post COVID-19	CIP Estimated GDP losses post COVID-19	Possible allocation of Tagged Contingency
Tai Tokerau / Northland	189,734	3.80%	74,728	6,466	9.4%	7.2%	up to 10%
Auckland	1,685,124	33.75%	923,587	99,894	10.1%	8.4%	20-40%
Waikato	483,778	9.69%	223,683	20,829	9.1%	6.6%	up to 20%
Bay of Plenty	332,485	6.66%	157,167	12,550	8.9%	6.8%	up to 10%
Gisborne	49,434	0.99%	22,230	1,662	7.4%	5.6%	up to 10%
Hawke's Bay	174,707	3.50%	83,494	6,473	8.3%	6.2%	up to 10%
Taranaki	123,697	2.48%	58,550	7,439	8.9%	7.9%	up to 10%
Manawatu-Whanganui	250,509	5.02%	117,042	9,449	8.4%	6.0%	up to 10%
Wellington	532,428	10.66%	294,909	34,345	8.8%	7.1%	up to 20%
Top of the South	158,822	3.18%	82,421	6,512	9.6%	7.6%	up to 10%
West Coast	32,508	0.65%	16,050	1,486	11.7%	9.5%	up to 10%
Canterbury	637,846	12.77%	330,997	31,152	10.4%	8.3%	up to 20%
Otago	241,172	4.83%	131,003	11,141	13.0%	10.4%	up to 20%
Southland	101,276	2.03%	53,423	5,151	9.3%	6.7%	up to 10%
Total	**4,993,520**	**100.00%**	**2,569,284**	**254,549**	**9.8%**	**7.9%**	

Data source: Crown Infrastructure Partners

Attachments (see separate documents)

IRG Project Readiness Report

18 May 2020

Public version

IRG
Infrastructure Reference Group

Table of Contents

1 Executive Summary

1.1 Establishment and Purpose of the Infrastructure Reference Group (IRG)

1.1.1 The Infrastructure Reference Group (**IRG**) was established by the Government in response to the COVID-19 (**CV19**) crisis and the likely negative impact on the infrastructure and construction sectors. It has been asked to prepare a list of projects that can be in construction within 12 months. These projects are to be in the public or local government sectors or, where there is public benefit or the project can be repurposed, from the private sector.

1.1.2 Ministers advised that they wish to understand the availability, benefits, geographical spread and scale of ‘shovel ready’ projects in New Zealand. These projects will be considered in the context of any potential Government response to support the construction industry, and to provide certainty on a pipeline of projects.

1.1.3 The Government has asked the IRG to consider the following objectives in preparing this report (**Report**):

(a) an increased focus on immediate job creation and income growth;

(b) construction activity that will be underway within the next 12 months; and

(c) a high degree of visibility to the community, to give the public confidence that renewed activity is underway.

1.1.4 The Government appointed Crown Infrastructure Partners Limited (**CIP**) to act as the IRG’s secretariat.

1.2 Process and Rating Criteria

1.2.1 On 1 April 2020, the IRG issued a Project Information Form (**PIF**) template and Guidelines seeking submission of project information from the public, local government and private sector project owners (**Project Owners**) for the IRG to consider.

1.2.2 The Guidelines noted that the criteria the IRG would consider were:

(a) construction readiness - the project being construction ready now or within a realistic 6 - 12 months;

(b) size ($10m+) and material employment benefits; and

(c) the overall benefits and risks of the project.

1.2.3 The Project Lists contained in this Report have been prepared applying the Rating Criteria developed by the IRG taking into account the Government’s priorities. The Rating Criteria applied has a 60/40 weighting for public benefit and employment. The IRG also considered Rating Criteria with a weighting of 80/20 for public benefit and employment. This had the effect that projects with lower employment numbers but strong public benefit rated higher on the Project Lists (e.g., 3 waters projects). If Government wishes to alter the weightings, which increases/ decreases the ranking of labour intensive work in the Project Lists, that can be readily arranged.

1.2.4 Project selection is for the Government and it may have a different view as to applicable criteria or the need to support regions which have been hardest hit by CV19 or segments of the population that have been disproportionately affected. Potential additional factors for consideration by Government when selecting projects such as what co-funding conditions should be imposed are detailed in Section 9 of this Report.

1.2.5 It should also be noted that the Rating Criteria have been applied to projects per se which ignores the market dynamics that might apply. An example being renewable energy projects where there is a sophisticated market and price signals are given to the company with the lowest cost generation project as to when a project may be viable. The large participants in the industry have the balance sheets to undertake the projects themselves and most large projects are unlikely to proceed until Rio Tinto, the owner of Tiwai Point aluminium smelter indicates whether it wishes to close the facility or not. [34]

1.2.6 The Project Lists in this Report do not contain all of the projects held in the IRG database. If Ministers would like access to this additional information, that can be arranged.

1.3 The Projects

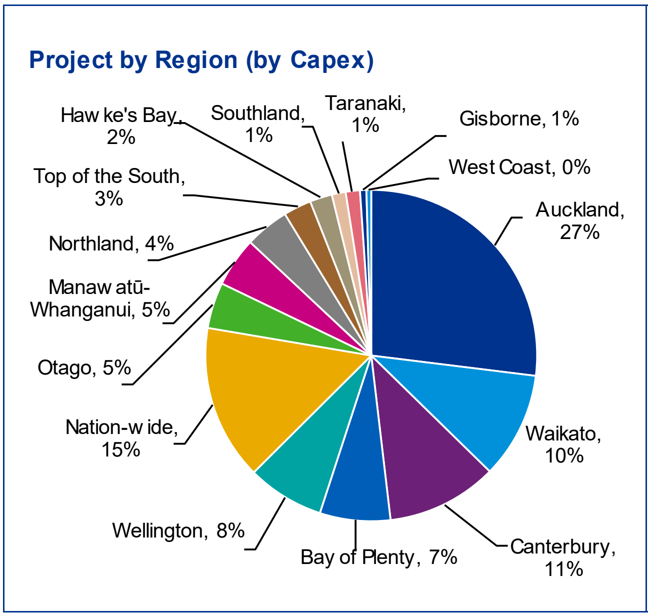
1.3.1 After completion of the review process (as detailed below) a total of 802 Projects with an estimated Capex of $51 billion have been included in the Project Lists in this Report.

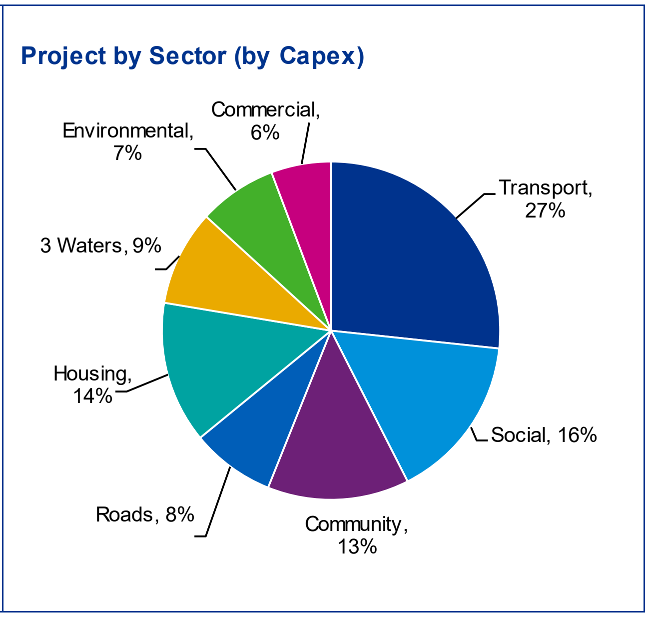
1.3.2 The distribution of the Projects by Region and by Sector:

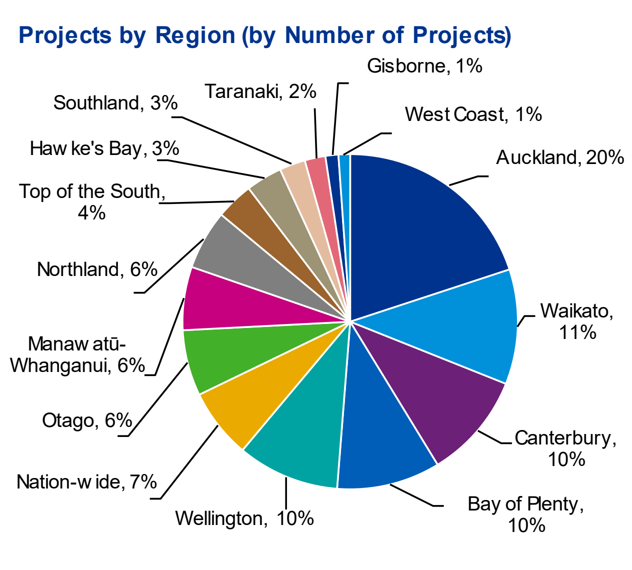
(a) by estimated Capex; and

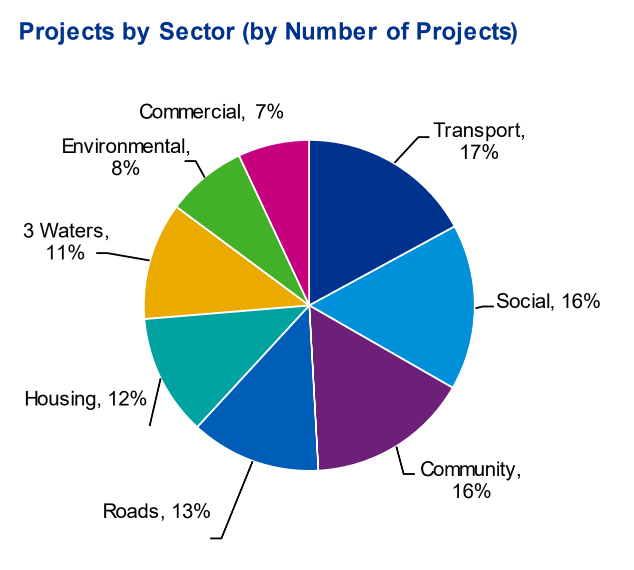
(b) by number of Projects,

are summarised in the following four pie charts:









1.3.3 Project Owners were asked to identify the extent of assistance required. This ranged from assistance with RMA, other consenting issues and procurement processes (non-financial assistance) to concessionary loans, underwrites and grants (financial assistance). In total 95% of Projects sought financial assistance, totalling $33 billion in financial assistance across all Projects. Those Projects not requiring financial assistance (over and above any already appropriated funds in the case of Government agencies) are separately identified in Annexure A (By Sector) and B (By Region).

1.3.4 Project Owners were asked to confirm the Capex and direct employment numbers on a full time equivalent (FTE) basis for each Project. The Capex information presented in this Report relies on the information as supplied. The direct FTE employment numbers provided by Project Owners' were tested against benchmarks provided by BECA for the nature of the construction involved and the FTE employee information presented in this Report has been moderated accordingly.

1.3.5 The direct employment FTE by Sector can be seen in the following table:

Projects by Sector	No. of Projects #	%	Employment FTE	%	Capex $B	%
Transport	137	17%	32,598	25%	$13.7	27%
Social	130	16%	23,737	18%	$8.1	16%
Community	127	16%	22,478	17%	$6.9	14%
Roads	102	13%	14,737	11%	$4.1	8%
Housing	95	12%	15,927	12%	$6.9	14%
3 Waters	92	11%	5,936	4%	$4.7	9%
Environmental	63	8%	8,242	6%	$3.8	7%
Commercial	56	7%	8,689	7%	$2.9	6%
Total	**802**	**100%**	**132,344**	**100%**	**$51.2**	**100%**

1.3.6 Some Projects offer a higher degree of employment intensity than others due to relatively low mechanisation. Rail would be a case in point where there are a number of Projects that require a high level of semi and unskilled labour (e.g., track clearing in some instances).

1.4 Enabling Legislation

1.4.1 The IRG was asked to advise on the changes in relevant legislation that would be necessary if Projects were to be procured under urgency. This is discussed in Section 7.4 and a summary of this advice is included in Schedule 2 (Fast-track Consenting Legislation). At writing, the Minister for the Environment has announced proposed changes to the Resource Management Act 1991 (**RMA**). However, we have flagged the need to amend the Public Works Act 1981 (**PWA**) processes and to ensure Building Act consents are processed in a timely manner, if a number of Projects are to be made construction ready in the timeframes indicated.

1.5 Procurement

1.5.1 Encouraging Government agencies and Local Authorities to adopt efficient fast-track procurement methods is imperative to achieving momentum. MBIE is leading this process. The IRG agrees with MBIE's view that there is no need to change the Government Procurement Rules as there is already sufficient flexibility. What is needed is for those Project Owners that are subject to the Government Procurement Rules, to proactively adopt fast-track procurement methods to meet the construction commencement dates that have been indicated.

1.6 Recommended Approach

1.6.1 The IRG's Terms of Reference are such that it has a short term (12 month) focus. The Government should recognise that in all likelihood this current crisis will have longer term implications (as noted below) for New Zealand and its ability to deliver quality infrastructure in the future for nation building purposes.

1.6.2 In selecting any Projects for inclusion in any possible stimulus package, the Government should consider the following principles:

(a) [34]

(b) [34]

(c) [34]

(d) [34]

[34]

(h) [34]

We note that the Infrastructure Commission is mandated to assist local authorities and other agencies in handling these procurement and other processes better.

1.7 Guiding Principles for Recipients of Government Financial Support

1.7.1 Government should set minimum expectations of Project Owners that it supports. These are set out in Schedule 4 (Guiding Principles for Recipients of Government Financial Support), however, the key points are that any offers of financial assistance should be time limited (Projects should be made construction ready within agreed timeframes) and Project Owners should be expected to act in a manner that does not heighten the risks of poor industry behaviours and project outcomes [34]

1.8 Future Considerations

1.8.1 As noted the focus of the IRG has been short term. However, it notes the need for a longer term view to be adopted given the likelihood of an extended construction downturn. In particular:

(a) the taking of a holistic view of the construction supply chain;

(b) the adequacy of skills training;

(c) the prioritisation of projects and an understanding of the potential effects of one or two large Projects on a small industry by international standards; and

(d) the developing views as to what infrastructure is required to best position New Zealand in a post CV19 world.

The longer terms issues flagged together with the information produced in this report and the database created should be picked up by the Infrastructure Commission in planning for a more extended downturn in the construction sector and the longer term infrastructure New Zealand requires.

2 Key Observations

2.1 Key Observations

A. Market Assessment

2.1.1 [34]

2.1.2 The shape of any recovery in the sector is impossible to predict given the global nature of the CV19 pandemic and the unknown course it will take. [34]

[34]

B.

2.1.3

2.1.4 This programme or fund would need to be run by a Government agency with the requisite commercial skills to negotiate commercial arrangements and administer it.

C. Guiding Principles

[34]

2.1.5

2.1.6 [34]

2.1.7 The sanction for willing failure to abide by the guidelines, other than withdrawal of assistance if a Project did not commence in the timeframes the Government has been told, would be potential exclusion from any further funding.

2.1.8 The set of the IRG's proposed Guiding Principles are set out in more detail in Section 9 (Recommendations to Government) and Schedule 4 (Guiding Principles for Recipients of Government Support).

D. Impact of CV19 on New Zealand economy and the regions

2.1.9 Infometrics was commissioned by the IRG to examine the impact of CV19 on different parts of New Zealand, identifying the key industry drivers of local economic activity, how different regional economies will perform throughout the pandemic and associated economic downturn, with a particular focus on the tourism and construction sectors (the report is attached as Schedule 7 (Economic Impact of Covid 19)).

2.1.10 It should be noted that the Infometrics report (attached as Schedule 7 (Economic Impact of Covid 19)) and the BECA/ RCP capacity analysis (attached as Schedule 3 (Regional/ Sector Capacity)) were prepared before the 2020 Budget announcement and do not take into account the full extent of the stimulus announced in the 2020 Budget.

2.1.11 Overall key findings of potential forecast economic impact:

(a) CV19 presents the greatest economic shock in living memory. Infometrics is currently forecasting an 8% contraction in economic activity and more than 250,000 jobs to be lost over the year to March 2021.

(b) Infometrics focus on the importance of tourism and construction, where they forecast GDP in Otago to decline by more than 10%, the West Coast GDP by 9.5%, similarly due to a high concentration of international tourism activity.

(c) Meanwhile, regions with large agricultural and food processing sectors including Hawke's Bay, Manawatu-Whanganui, and Gisborne are expected to experience much less declines.

(d) The five Local Authorities with the largest decline in output are expected in the South Island. Infometrics forecast GDP in Queenstown-Lakes and Mackenzie District to decline by more than 20%.

(e) Areas with high concentrations of tourism and construction will take the hardest relative declines in job losses, however, the largest job losses will occur in the large metropolitan areas. Infometrics forecast more than 130,000 jobs to be lost in Auckland, Wellington and Christchurch cities.

(f) Nationally, Infometrics estimate the value of residential building work put in place to decline by 19% and the value of non-residential work put in place to decline by 18% over the year to March 2021. Residential consents are set to decline by 35% over the year to March 2021 (non-residential consents are forecast to decline 17%) together with an 11% drop in average house prices nationally between mid-2020 and the end of 2021.

(g) Over the next five years (2021-25) it is forecast that there will be a cumulative $23b reduction in total work placed versus the previous five years (2016-20) due to lower residential consent volumes. Even with already announced pre-budget infrastructure investment factored in, construction volumes will be $15.5b lower over the next five years compared to the previous 5 years. These declines will leave spare capacity in the construction industry in these areas.

(h) The regional impacts outlined below and the sector impacts above indicate where the main focus on supporting construction activities should be directed. Focus in metros should be on Auckland and Christchurch in particular due to reductions in construction activity and to a lesser extent Hamilton and Tauranga. Key regional focuses should be on the regions and Local Authorities most heavily impacted by tourism and construction down turns in particular Queenstown Lakes, West Coast, parts of Canterbury and Northland.

2.1.12 Key regional and metro impacts:

(a) South Island areas face the largest declines due to tourism and construction. Job losses in tourism alone will account for a 20% decline in employment in Mackenzie District and 19% in Queenstown. Other districts experiencing large overall declines in employment due to tourism job losses are Westland (13%) and Kaikōura (13%).

(b) Queenstown's huge reliance on tourism and its secondary dependence on construction will result in a 23% reduction in economic activity. As a result of lower tourism and related construction activity it is expected that a quarter of jobs will be lost in the Queenstown Lakes District. Tourism employment is expected to fall by ~31% and tourism economic activity by ~70% driven by reductions in visitor spends by similar magnitudes.

(c) The West Coast with its high dependency on tourism, especially Westland will see a 12% overall reduction in economic activity and a ~9.5% loss of employment.

(d) Other parts of the lower South Island, particularly in Canterbury such as Selwyn (10.4% economic decline due to residential housing contraction) and the two other major international tourism markets Kaikōura (13% economic decline) and Mackenzie (22% economic decline) are also significantly impacted.

(e) 1.9% of Northland's pre-pandemic total workforce is expected to be lost due to reduced construction activity alone. Overall employment in Northland is expected to contract by over 9% on top of already higher levels of unemployment, and the highest rate of Jobseeker Support claims nationally. The result highlights Northland's higher concentration of construction workers relative to the total workforce, alongside declines in construction efforts, lower tourism activity (particularly in the Far North), and lower output from Marsden Point Refinery in Whāngārei.

(f) The major metropolitan areas will not be hit as hard as the above areas in relative terms, but the sheer size of metropolitan workforces means that most job losses will be in the main centres, on a total employment basis. Auckland is expected to lose upwards of 90,000 jobs, Hamilton and Tauranga approximately 7,000 each (which is lower than Queenstown at 8,000) and Christchurch at approximately 23,000.

(g) Construction activity will decrease in residential and non-residential work placed in the major metros (Auckland, Wellington, Tauranga, Hamilton and Christchurch) by $4.0b (Dunedin is supported by the Hospital construction) over the next three years compared to the previous three years resulting in employment losses in 2021 of ~13,500.

(h) Ōtorohanga District is a key exception to a decline in construction activity, with two large projects – the Happy Valley Milk factory and the Waikeria Prison upgrade – adding construction jobs over the next year, illustrating the value of the wider economic benefits of construction within a targeted area.

E. [34]

2.1.13 [34]

[34]

[34]

3 Project Lists

3.1 Introduction

3.1.1 A total of 1,926 projects were submitted with a total Capex of $134 billion. After the filters described in Section 6.3 were applied, a total of 802 Projects remained and are listed in the tables in Annexure A (by Sector) and Annexure B (by Region). The information below relates only to those Projects on the Project Lists.

3.1.2 In the Project Lists:

(a) there are 802 Projects in total which involve total Capex of $51 billion and total employees of 132k FTEs;

(b) of these 484 Projects are in Construction Readiness Category A or B and 318 Projects are in Construction Readiness Category C;

(c) in aggregate the Projects seek a total of $33 billion of Government financial assistance (excluding guarantees);

(d) there are 44 Projects requiring no Government financial assistance (excluding guarantees) but which sought non-financial assistance from the Government (such as lowering regulatory barriers, adjusting Government procurement practices and fast-tracking resource consent processes);

(e) the most represented type of Project Owner (by number of Projects) are Local Authorities (48%) and Central Government (17%); and

(f) the most represented Sectors (by Capex) are Transport ($14 billion) and Social ($8 billion) and by FTEs are Transport (33k) and Social (24k).

3.1.3 In the Project Lists and Project information presented elsewhere in this Report:

(a) the Capex information relied on the information as supplied by Project Owners, but in some cases needed to be moderated in the Technical Review for consistency with their view on the project;

(b) the direct FTE employment numbers provided by Project Owners were tested against benchmarks provided by BECA for the nature of the construction involved and were moderated accordingly;

(c) the financial assistance relied on the information as supplied by Project Owners, but in some cases was moderated so that it did not exceed the Capex; and

(d) in cases where information was not provided or was clearly presented in error, a best estimate was used based on the judgements of the Technical Review and Moderation.

3.1.4 In running this process, we have had to categorise projects and use generic labels for those categories. A significant amount of effort was applied in assessing and understanding the projects (as set out in this Report). However, inevitably the categorisation and labelling will not always reflect the broad range of nuances or specifics of every project.

3.1.5 The IRG has a small number of projects that have been submitted late and that, after preliminary consideration, warrant further scrutiny. Details on these will be provided to Ministers in due course.

3.2 Projects Overview

3.2.1 The table below summarises Project numbers, Capex and FTEs by a) Project Owner type and b) Sector. The far right column provides the average Final Rating for Projects in each Sector. As illustrated below, the highest rating Sectors were Social (primarily healthcare and education), Housing and Environmental.

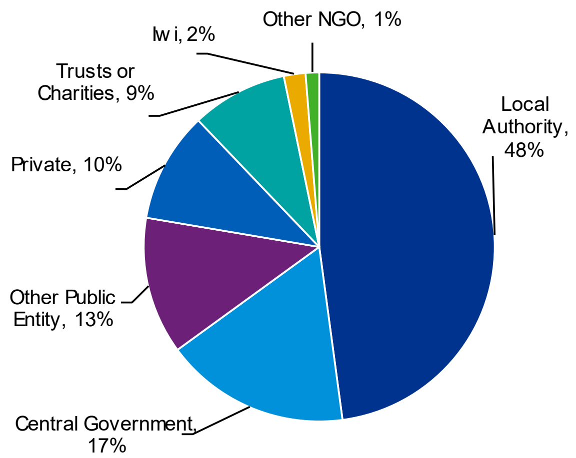
Project Information Table

	Central Government			Local Authority			Other Public Entity			Private			Trusts or Charities			Iwi			Other NGO			Total			Average Final Rating
	#	$m	FTE	#	$m	FTE	#	$m	FTE	#	$m	FTE	#	$m	FTE	#	$m	FTE	#	$m	FTE	#	$m	FTE	
3 Waters				86	$3,533	5,191	6	$1,151	745													92	$4,684	5,936	3.2
Commercial	6	$651	1,390	16	$441	1,288	11	$624	1,817	11	$893	2,835	8	$222	931	3	$91	405	1	$10	23	56	$2,931	8,689	2.8
Community	2	$418	872	81	$3,350	11,100	9	$1,295	5,383	3	$210	420	22	$1,154	3,248	4	$346	930	6	$166	525	127	$6,939	22,478	3.4
Environmental	3	$180	332	30	$1,266	2,641	5	$446	705	16	$1,156	2,655	5	$557	1,314	4	$228	595				63	$3,833	8,242	3.5
Housing				43	$2,938	5,622	2	$81	176	26	$2,957	7,024	19	$637	2,140	4	$302	776	1	$31	189	95	$6,945	15,927	3.6
Roads	38	$2,323	8,971	62	$1,708	5,540	1	$28	151				1	$42	75							102	$4,101	14,737	2.9
Social	54	$3,615	11,884	3	$127	418	37	$2,707	6,811	19	$900	2,530	16	$510	1,775	1	$250	319				130	$8,109	23,737	3.8
Transport	34	$7,547	18,246	63	$3,953	8,573	31	$1,706	4,437	7	$429	1,206							2	$30	136	137	$13,665	32,598	3.4
Total	**137**	**$14,733**	**41,695**	**384**	**$17,315**	**40,373**	**102**	**$8,039**	**20,225**	**82**	**$6,545**	**16,670**	**71**	**$3,121**	**9,483**	**16**	**$1,217**	**3,025**	**10**	**$237**	**873**	**802**	**$51,206**	**132,344**	**3.4**

3.3 Distribution by Project Owner

3.3.1 The following pie chart shows the distribution of Projects by the type of Project Owner.

Project by Project Owner (by Number of Projects)



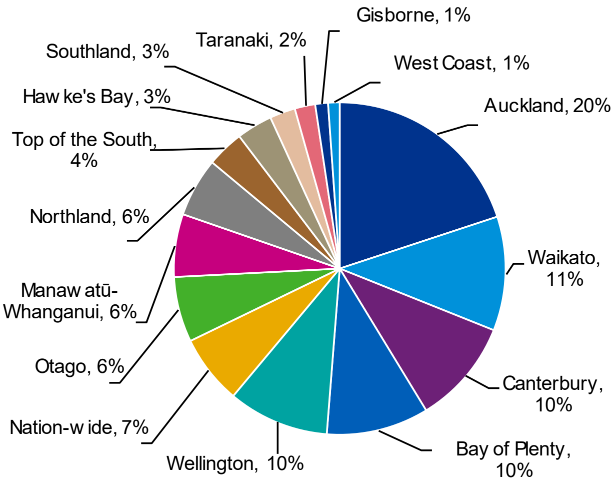
Project Owner	No. of Projects #	%	Employment FTE	%	Capex $B	%
Local Authority	384	48%	40,373	31%	$17.3	34%
Central Government	137	17%	41,695	32%	$14.7	29%
Other Public Entity	102	13%	20,225	15%	$8.0	16%
Private	82	10%	16,670	13%	$6.5	13%
Trusts or Charities	71	9%	9,483	7%	$3.1	6%
Iwi	16	2%	3,025	2%	$1.2	2%
Other NGO	10	1%	873	1%	$0.2	0%
Total	**802**	**100%**	**132,344**	**100%**	**$51.2**	**100%**

[25]

3.4 Distribution by Region and Sector

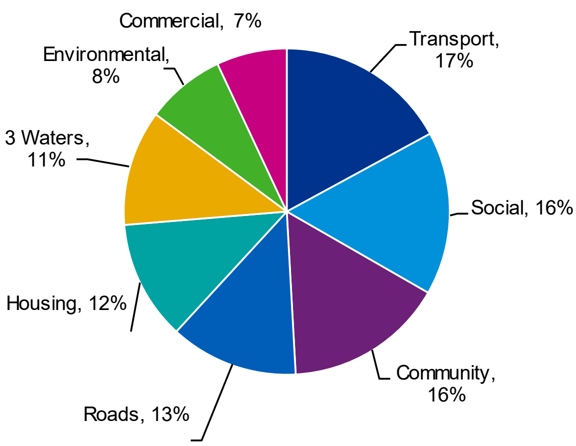
3.4.1 The following pie charts illustrate the distribution of the Projects by Region and by Sector (by number of Projects). The accompanying tables provide the breakdown of a) number of Projects and b) FTEs and c) Capex by Region and Sector:

Projects by Region (by Number of Projects)



Projects by Region	No. of Projects #	%	Employment FTE	%	Capex $B	%
Auckland	160	20%	33,956	26%	$13.8	27%
Waikato	89	11%	12,176	9%	$5.3	10%
Canterbury	82	10%	15,295	12%	$5.5	11%
Bay of Plenty	80	10%	9,699	7%	$3.5	7%
Wellington	79	10%	9,376	7%	$3.9	8%
Nation-wide	54	7%	24,173	18%	$7.8	15%
Otago	51	6%	6,386	5%	$2.3	4%
Manawatū-Whanganui	49	6%	5,703	4%	$2.5	5%
Northland	46	6%	5,477	4%	$2.2	4%
Top of the South	29	4%	2,468	2%	$1.4	3%
Hawke's Bay	28	3%	2,833	2%	$1.1	2%
Southland	20	2%	1,828	1%	$0.7	1%
Taranaki	16	2%	1,632	1%	$0.7	1%
Gisborne	10	1%	869	1%	$0.3	1%
West Coast	9	1%	473	0%	$0.2	0%
Total	**802**	**100%**	**132,344**	**100%**	**$51.2**	**100%**

Projects by Sector (by Number of Projects)



Projects by Sector	No. of Projects #	%	Employment FTE	%	Capex $B	%
Transport	137	17%	32,598	25%	$13.7	27%
Social	130	16%	23,737	18%	$8.1	16%
Community	127	16%	22,478	17%	$6.9	14%
Roads	102	13%	14,737	11%	$4.1	8%
Housing	95	12%	15,927	12%	$6.9	14%
3 Waters	92	11%	5,936	4%	$4.7	9%
Environmental	63	8%	8,242	6%	$3.8	7%
Commercial	56	7%	8,689	7%	$2.9	6%
Total	**802**	**100%**	**132,344**	**100%**	**$51.2**	**100%**

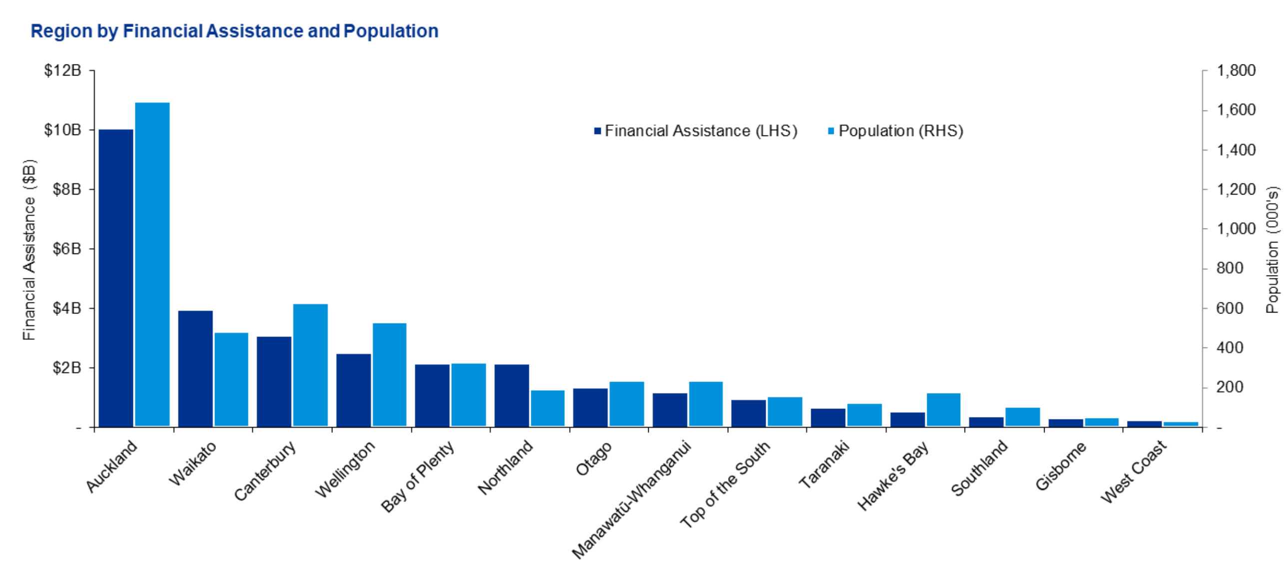
3.5 Financial Assistance Distribution

3.5.1 The following chart compares the financial assistance requested by the Project Owner with the population distribution in each Region.

3.5.2 In some cases, the financial assistance is not reflective of the relative population in that Region. For example, Waikato and Northland are over represented in terms of financial assistance requested whereas Wellington and Canterbury are under-represented.

3.5.3 This is because the Project Lists reflect the information as it was received. The IRG has assessed projects in accordance with the Methodology set out in Section 5, however, there has been no attempt to moderate the results to ensure a proportionate distribution across the country.

3.5.4 The IRG has assumed that the Government will consider the distribution by Region and by Sector in the selection of Projects it supports in addition to the factors outlined in Section 1.6 and Section 9.



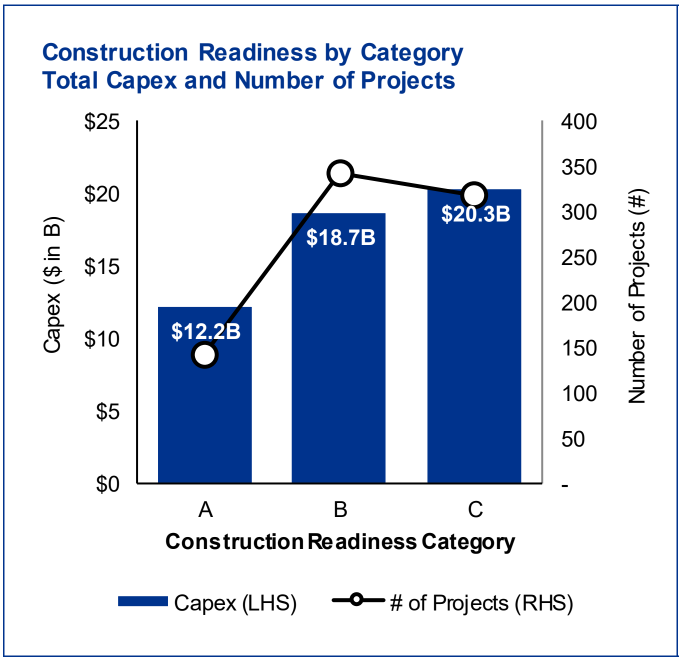
3.6 Construction Readiness

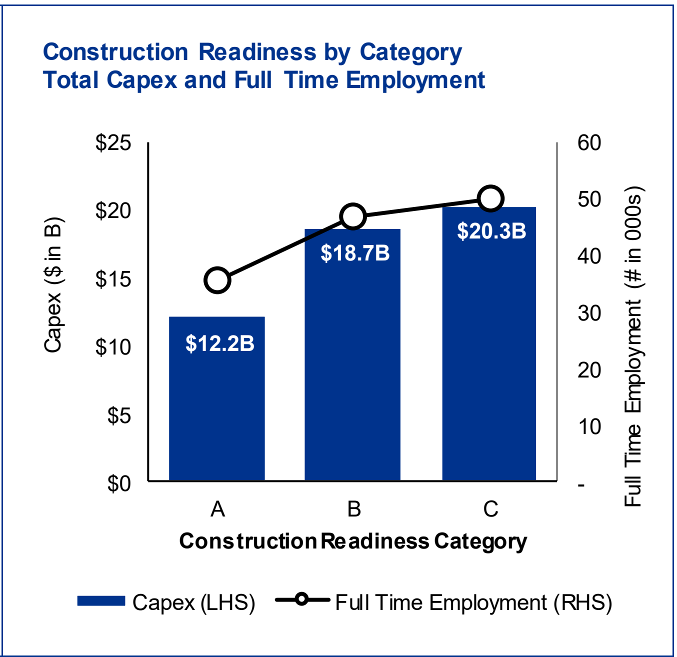
3.6.1 The following charts illustrate the distribution of the Projects between the following construction readiness categories (by Capex, number of Projects and FTEs):

(a) Construction Readiness Category A (Projects which currently are (or were) in the construction phase);

(b) Construction Readiness Category B (Projects which have a high expectation of commencing the construction phase within the next six months (by 31 October 2020); and

(c) Construction Readiness Category C (Projects which could have been expected to commence the construction phase within the next 12 months (by 30 May 2021).





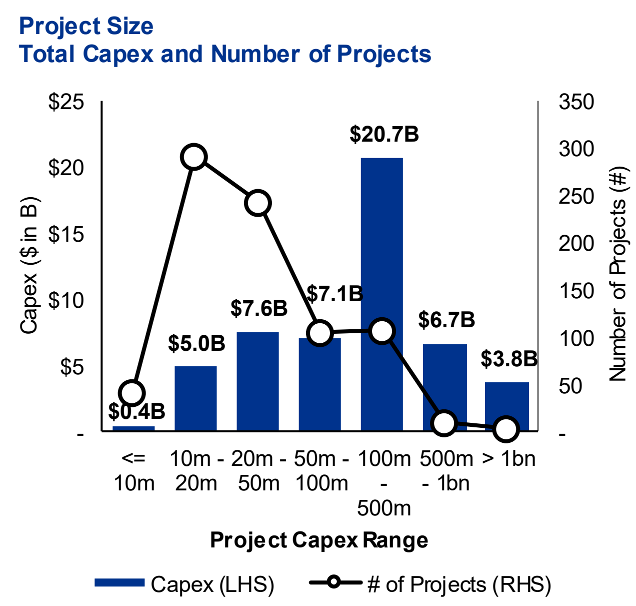
3.7 Size of Projects

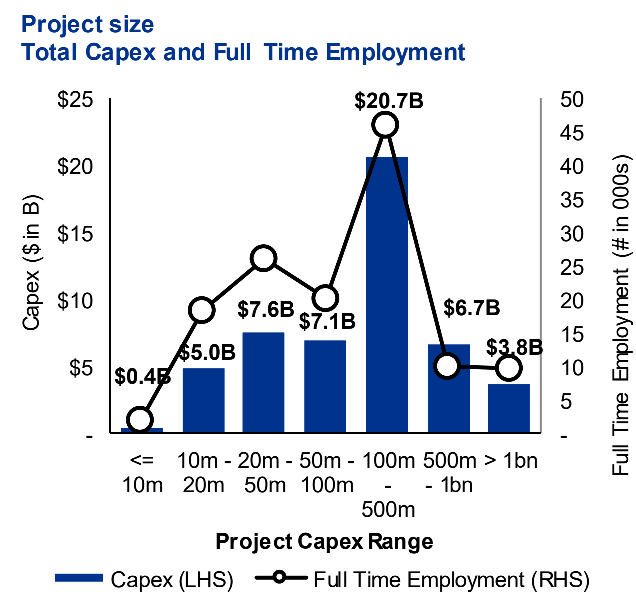
3.7.1 The following charts illustrate the distribution of the Projects by Capex and FTE showing:

(a) the total Capex of all Projects within each Capex range;

(b) the total number of Projects within each Capex range; and

(c) the total number of FTEs created within each Capex range.





3.8 Government Assistance

3.8.1 Information on the financial assistance and non-financial assistance sought from Government for the Projects is contained in Section 7.

3.9 Project Lists Annexed

3.9.1 Projects are listed in the following Annexures:

(a) Annexure A – sets out all Projects by Sector; and

(b) Annexure B – sets out all Projects by Region.

3.9.2 It is important to note:

(a) all Projects are included in each of Annexure A and Annexure B;

(b) the Final Rating has been used to order the Projects in Annexures A and B– with the Projects with the highest Final Rating at the top of each table;

(c) each table in Annexure A and Annexure B is split into three parts:

(i) Part 1 (Projects that fall within Construction Readiness Category A and B and request Government financial assistance);

(ii) Part 2 (Projects that fall within Construction Readiness Category C and request Government financial assistance); and

(iii) Part 3 (Projects that do not request Government financial assistance); and

(d) the level of detail provided on each Project in Annexures A and B is brief (by necessity, given the number of Projects).

3.9.3 The IRG's database holds a further level of detail on all Projects on the Project Lists and all other projects submitted. This information can be provided on request by Ministers and officials and further interrogation/ presentation of data can be undertaken as required. In addition, key officials can be provided with access to an online data visualisation tool (which presents IRG's project database information) if that is appropriate. Note that:

(a) a table listing the variables in the project database for each Project is set out in Schedule 6 (Variables in the Project Database); and

(b) any access to additional information must be for the purpose of progressing the Government's initiative to identify and consider suitable shovel ready projects for a potential construction industry recovery response. Protocols for accessing and using the data will be provided to those officials that require access to ensure that the information will be used in this manner.

4 Assumptions

4.1 Introduction

4.1.1 In assessing projects against the Rating Criteria and ultimately:

(a) identifying the Projects to include in this Report and the Project Lists in Annexures A and B; and

(b) presenting this Report for consideration by Government,

the IRG has had to make a number of key assumptions.

4.1.2 The key assumptions made by the IRG are set out in this section.

4.2 Reliance on the Project Information Forms (PIFs)

4.2.1 In order for a project to be assessed by the IRG, a Project Owner had to submit the project to the IRG by completing a PIF and sending that PIF to the IRG.

4.2.2 Given the time constraints associated with the preparation of this Report, the IRG has had to base its assessment of projects on the basis of:

(a) the PIFs as submitted; and

(b) a short form request for clarification of requested Government financial support and non-financial assistance – sent to Project Owners of 941 Projects on 3 May 2020 (**Support Clarification Request**).

4.2.3 The PIFs submitted to the IRG took varying approaches relation to matters such as Capex, project duration and employees and were of varying quality and completeness. For example, approximately 4% of PIFs received did not complete the key field related to construction readiness. In addition, the Support Clarification Request was initiated because approximately 25% of the PIF responses did not provide a type of financial assistance and approximately 50% did not specify an amount.

4.2.4 For the purposes of assessing projects and presenting Project information in the Project Lists and elsewhere in this Report:

(a) the Capex information relied on the information as supplied by Project Owners, but in some cases needed to be moderated in the Technical Review for consistency with their view on the project;

(b) the direct FTE employment numbers provided by Project Owners were tested against benchmarks provided by BECA for the nature of the construction involved and the FTE employee information presented in this Report has been moderated accordingly;

(c) the financial assistance relied on the information as supplied by Project Owners, but in some cases was moderated so that it did not exceed the Capex; and

(d) in cases where information was not provided or was clearly presented in error, a best estimate was used based on the judgements of the Technical Review and Moderation.

4.2.5 The same approach was adopted for the purposes of applying the Rating Criteria, with the exception that, as with the FTE employment numbers, the Capex and construction period information was tested against benchmarks provided by BECA for the nature of the construction involved and the Capex numbers used for that purpose have been moderated accordingly.

4.2.6 The IRG has therefore endeavoured to complete the assessment of all projects submitted fairly and equitably in accordance with its processes and policies, notwithstanding the varying quality of the individual PIFs received and the different approaches to the PIF content taken by submitters.

4.3 Enabling Legislation

4.3.1 The Technical Review considered whether Government assistance for regulatory relief for RMA consenting (in response to CV19) would adjust the construction readiness categorisation for projects, for example move a Construction Readiness Category D project to Construction Readiness Category C or move a Construction Readiness Category C project to Construction Readiness Category B.

4.3.2 69 or 20% of the Projects currently in Construction Readiness Category B were originally Construction Readiness Category C, and 51 or 16% of the Projects currently in Construction Readiness Category C were originally Construction Readiness Category D. The collective Capex of these Projects is $7.2b and FTEs is 18.4k.

4.3.3 The assumption applied in the Technical Review was that any acceleration through Government assistance for CV19 would follow similar timeframes for granting RMA consents to the approach adopted in enabling legislation passed for the Kaikōura earthquake rebuild, where consent decisions were made within 21 working days of the application being lodged.

4.3.4 The proposed CV19 recovery fast-track RMA consent legislation (**Proposed CV19 Fast-track Legislation**) provides for consenting decisions to be made within 25 working days (potentially 50 working days for complex projects) of the expert consenting panel (to be established under the Proposed CV19 Fast-track Legislation) receiving comments on the application (with a yet to be specified reduced timeframe for comments to be received).

4.3.5 Assuming comments are required within a short truncated period under the Proposed CV19 Fast-track Legislation, the accelerated consenting timeframes under the proposed legislation and the Kaikōura earthquake rebuild legislation are similar.

4.3.6 This supports the validity of adjustments made to construction readiness categorisation under the Technical Review.

4.3.7 Note that in making adjustments to construction readiness categorisation for projects:

(a) [34]

(b)

4.4 Due Diligence and Negotiations

4.4.1 Given the reliance on PIFs and responses to the Support Clarification Request, it has been assumed that prior to confirming the selection of a Project as a recipient of Government support, Government will want to ensure that:

(a) the Project undergoes subsequent due diligence (where appropriate) to confirm the details and validity of the Project (including the Regional capacity of the industry to deliver the Project), the Project Owner's ability to deliver the Project and the Project's ability to support the Government's objectives; and

(b) it negotiates and documents key aspects of any Government support for the Project including:

(i) the co- funding obligations of the Project Owner – if any;

(ii) the nature and scope of any Government support to be provided;

(iii) the appropriate delivery agency and delivery model for the Project; and

(iv) core obligations of the recipients of the Government support, including obligations to undertake construction within agreed timetables, deliver specified employment benefits and deliver public benefit.

4.4.2 This topic is addressed in greater detail in Section 9 (Recommendations to Government).

4.5 CV19 Alert Levels

4.5.1 It has been assumed that New Zealand will move to and maintain a CV19 alert level which allows for reasonably unconstrained construction activities for at least the next 12 months, including continued access to construction sites and efficient (while safe) work practices on site.

4.6 Recommended Considerations

4.6.1 Prior to confirming the selection of a Project as a recipient of Government support, it has been assumed that the Government will consider various matters, including those recommended by the IRG in Section 9.

5 Rating Criteria and Methodology

5.1 Introduction

5.1.1 As Chair of the IRG, Mark Binns released a letter to the sector on 25 March 2020 in connection with the project information gathering process and the types of projects to which it would relate. The four criteria identified in the letter were:

(a) **Criteria 1:** The extent to which the project is construction ready now or within a realistic 6 to 12 months - construction readiness;

(b) **Criteria 2:** the project is of an infrastructure nature, either horizontal or vertical, and that the project is public or regional benefit infrastructure;

(c) **Criteria 3:** Whether the project is of a size ($10m+) and has material employment benefits; and

(d) **Criteria 4:** The overall benefits and risks of the project.

5.1.2 On 1 April 2020 CIP issued Guidelines which outlined the process that CIP and the IRG would follow (See Schedule 1 (Guidance on Nature of Projects)). Relevant to the Rating Criteria and Methodology it stated:

Step 2: Review and Categorisation of Projects

Step 2A: Criteria 1, Construction Readiness Assessment

CIP will consider the ***construction readiness*** of the project based on the PIF. We propose to adopt the following categorisation:

- **Category A -** Projects which currently are (or were) in the construction phase, but have been put on hold due to COVID 19 and are likely not to progress, or to progress at a much slower rate or scale/scope, if not supported post COVID 19.
- **Category B -** Projects which have a high expectation of commencing the construction phase within the next six months (by 31 October 2020), but are unlikely to do so due to COVID 19.
- **Category C -** Projects which could have been expected to commence the construction phase within the next 12 months (by 30 May 2021) but are unlikely to do so due to COVID 19.

Step 2B: Project classifications: infrastructure type, value and employment benefits

Criteria 2: Consideration will be given to whether the project has a ***public or regional benefit.***

Criteria 3: Whether the project is of a ***size and has material employment benefits*** of $10m+.

Step 2C: Overall Benefits national and regional

CIP will also categorise by the ***overall benefits* of** the project. The matters which will be considered under this heading include:

- Economic/Social/Environmental benefits; and
- Regional/Nationwide benefits.

This will include any project, either public or private, that will benefit the wider public or a particular regional area due to its nature. Given the breadth of infrastructure it is acknowledged this may include private sector projects that demonstrate wider public benefits.

Please note you should not submit any project that does not demonstrate some wider public benefit.

Step 2D: Project risks

Risks will be categorised in three groupings:

- risk of the project not commencing within the advised timescale;
- risk the project will not be completed on time, to cost or to specification; and
- risk the project will not obtain the benefits outlined in the Overall Benefits section above.

5.2 Overview

5.2.1 Three Rating Criteria were used in order to present the Project Lists in this Report:

(a) Criterion 1: Construction Readiness;

(b) Criterion 2: Direct Employment Benefit; and

(c) Criterion 3: National/ Regional Benefit.

5.2.2 The Rating Criteria adopted by the IRG are consistent with the criteria outlined in the Guidelines referred to above.

5.2.3 The Rating Criteria are also based on the Government's overriding priorities and objectives being economic stabilisation, stimulation and rebuild.

5.2.4 The Rating Criteria and Methodology the IRG has adopted in order to present the Project Lists are focussed on these objectives and are summarised below.

Criteria	Purpose	Rating	Weighting
Criterion 1: Construction Readiness	Determine if the Project is construction ready (A) now (B) within a realistic 6 months or (C) within a realistic 12 months.	Used to categorise projects	0%
Criterion 2: Direct Employment Benefit	Rates Projects according to labour intensity for a FTE on site during the construction period.	Scale 1-5	40%
Criterion 3: National/ Regional Benefit	**Initial Rating** (1 - 4) based on whether the generic project type is expected to deliver economic, social and environmental national and regional benefits, with the **adjustments** set out below (see Section 5.5.3).	Scale 1-5	60%
Leverage Adjustment	An adjustment to reflect the quantum and form of financial assistance requested from the Government.	Scale 0 – 1.5	Added to score following application of Criteria 2 &3
Final Rating	**The Leverage Adjustment is added to Criterion 2 & 3 score to get the Final Rating (maximum of 5).**	0-5	

5.2.5 The IRG adopted the above Rating Criteria and Methodology 'settings' as they were viewed to be consistent with the Guidelines and the overall objective of this process. Settings such as the Weightings, the Initial Rating for Criterion 3 and the Leverage Adjustment scale can be easily modified to produce various views of the Project Lists if required.

5.2.6 Modifying the Weightings will shift the focus between Criterion 2: Direct Employment Benefit and Criterion 3: National/ Regional Benefit. As an example, 3 waters Projects tend to have lower labour intensity than other Projects. This means that if the Weightings were shifted in favour of Criterion 3 that 3 waters Projects in general will have a higher ordering than in the current Project Lists.

5.2.7 Modifying the Initial Rating for Criterion 3 will shift the baseline score for the Criterion 3: National/ Regional Benefit of generic projects. As an example, public transport, shared use and general roading Projects have an Initial Rating of 4.0, 3.0 and 2.0 respectively. This means that currently public transport Projects will generally be ordered higher than general roading Projects in the current Project Lists. If the Initial Rating for general roading Projects was increased from 2.0, then general roading Projects will have a higher ordering than in the current Project Lists.

5.2.8 Modifying the Leverage Adjustment scale will shift the focus more or less on those Projects which have 'leverage'. Leverage refers to where the Crown is only required to fund a portion of the Project or the form means the funding is likely to be returned. As an example, if the current sliding scale of 0 – 1.5 for the Leverage Adjustment is reduced to 0 – 1, then Projects with leverage with have a lower ordering than in the current Project Lists.

5.3 Criterion 1 – Construction Readiness

Criteria	Purpose	Rating	Weighting
Criterion 1: Construction Readiness	Determine if the Project is construction ready (A) now (B) within a realistic 6 months or (C) within a realistic 12 months.	Used to categorise projects	0%

5.3.1 In relation to Criterion 1 the PIFs sought submitters' own views on construction readiness and information about milestones in the Project lifecycle.

5.3.2 The Technical Workstream made an independent assessment of the Construction Readiness Category (A, B or C) that applies:

(a) where no non-financial Government assistance is provided to the Project; and

(b) where the requested non-financial Government assistance is provided to the Project (capped at the powers granted during the Kaikōura earthquake).

5.4 Criterion 2 – Direct Employment Benefit

Criteria	Purpose	Rating	Weighting
Criterion 2: Direct Employment Benefit	Rates Projects according to labour intensity (based on FTEs on site) during the construction period	Scale 1-5	40%

5.4.1 Criterion 2 rates more highly Projects which are labour intensive during the construction phase. Direct construction employment also serves as a proxy for the immediate regional employment benefit of a Project.

5.4.2 Criterion 2 relies on the following raw score which can be interpreted as construction employees per $1m capex per annum:

(a) average number of direct construction FTEs working on the Project over the duration of the construction period; divided by

(b) annualised Project Capex (calculated as total Project Capex divided by the expected construction period in years).

5.4.3 Each of the above inputs (based on PIF information) were reviewed during the Technical Review to assess consistency against industry standards and across Projects. The Technical Review provided estimates/adjustments where the inputs were not considered reflective of the project and associated risks. This assessment involved professional judgement and adjustments applied were at a high level. While the assessment placed some reliance on the underlying PIF information, the output is based on professional assessment and therefore the outputs differ from those that which would be obtained by using the information as stated in the PIF (including Capex presented in the Project Lists which is the based on the PIF information).

5.4.4 In cases where any of the inputs into the raw score described in 5.4.2 above was not provided or was clearly presented in error, a best estimate was used based on the judgements of the Technical Review and Moderation.

5.4.5 The resulting distribution of raw scores was considered during Moderation and outliers were reviewed and (where necessary) adjusted through an additional Technical Review.

5.4.6 The raw scores after Moderation were stratified to create a scale from 1-5 which was used for Criterion 2.

5.4.7 The FTE numbers provided in this Report and the Project Lists reflects the above adjustments and therefore may not reconcile with the employee estimates provided in the PIF.

5.5 Criterion 3 – National/ Regional Benefit

Criteria	Purpose	Rating	Weighting
Criterion 3: National/ Regional Benefit	**Initial Rating** (1 - 4) based on whether the generic project type is expected to deliver economic, social and environmental national and regional benefits, with the **adjustments** set out below.	Scale 1-5	60%

5.5.1 Criterion 3 rates projects according to the benefits it is expected to deliver. It does this by applying an Initial Rating based on the Sector classification of the project which is then subject to adjustments for growth, regional benefit and risk according to the specifics of that project.

5.5.2 Details of the Sector classifications and the Initial Ratings are set out in Schedule 5 (Initial Ratings – Detailed List). This includes the mapping of the Sector classifications to the priorities set out in the Government's Economic Plan[1] and Budget Policy Statement 2020[2].

5.5.3 Adjustments to the Criterion 3 Initial Rating (maximum of 5) were then applied:

(a) growth or new infrastructure (-0.5 to +0.5): Reflecting the relative benefit from projects which cater for growth and/or deliver improved services;

(b) key regional or national benefit over time (+0.5): Reflecting transformational projects that have greater potential for benefit in a region or New Zealand; and

(c) benefit risk (-1.0 to +0.5): Adjustment to reflect where the risk of benefit realisation is either higher or lower than a generic project (based on independent professional judgement).

[1] https://www.beehive.govt.nz/sites/default/files/2019-09/Economic%20Plan.pdf
[2] https://treasury.govt.nz/publications/budget-policy-statement/budget-policy-statement-2020-html

5.5.4 The initial judgements in relation to Criterion 3 were made by the Regional Leads and the General Review Team. The resulting Criterion 3 score was then assessed / stress tested by the Sector Experts. The PDU's views were also taken into account where available. Further detail is provided in Section 6.

5.5.5 The application of Criterion 3 to a hypothetical Project is set out below. It assumes a Project with the following characteristics:

(a) a social housing Project (Initial Rating = 4.0);

(b) the Project is a new build and caters for growth and/or deliver improved services (Growth Adjustment = +0.5);

(c) it does not have regional or national benefits over time (Regional Adjustment = 0); and

(d) the risk of benefit realisation is assessed as being significantly higher than a generic project (Benefit Risk Adjustment = -1.0).

The Criterion 3 rating for this hypothetical Project is set out below:

Project Number	Project Name	Project Description	Sector Category	Region	Initial Rating	Growth adj	Regional adj	Benefit Risk adj	Criterion 3 rating
P677	Project Name	Description	Social housing	Auckland	4.0	0.5	-	(1.0)	3.5

5.5.6 Based on the application of Criterion 2 and Criterion 3, each Project received a weighted average score between 1 (lowest) and 5 (highest) (**Criteria 2 & 3 Score**).

5.6 Leverage Adjustment

5.6.1 This Criteria 2 & 3 Score was then adjusted for the amount of financial assistance requested from the Crown as a proportion of Capex (**Leverage Adjustment**).

Criteria	Purpose	Rating	Weighting
Leverage Adjustment	An adjustment to reflect the quantum and form of financial assistance requested from the Government. **The Leverage Adjustment is added to Criterion 2 & 3 score to get the Final Rating (maximum of 5).**	0 – 1.5	Added to score following application of Criteria 2 &3.

5.6.2 The Leverage Adjustment depends on the predominate request for form and quantum of financial Government assistance requested as set out in the following table:

Incremental Rating Points added for Leverage						
Financial Assistance / Capex	**Grant / Budget Allocation**	**Loan-Concessionary**	**Loan - Commercial**	**Equity**	**Guarantee**	**Other / Not-Specified**
None			+1.50			
>0-20%	+ 0.50	+ 1.00	+ 1.00	+ 1.00	+ 1.00	+ 0.50
20-40%	+ 0.375	+ 0.75	+ 0.75	+ 0.75	+ 0.75	+ 0.375
40-60%	+ 0.25	+ 0.50	+ 0.50	+ 0.50	+ 0.50	+ 0.25
60-80%	+0.125	+0.25	+0.25	+0.25	+0.25	+0.125
80% +	-	-	-	-	-	-

5.6.3 The form and quantum of the financial Government assistance requested was taken from the information provided in the Support Clarification Request. Where no information was provided or where financial assistance was requested, but no amount specified, it was assumed 100% of the Capex was sought by way of grant.

5.6.4 In relation to the Leverage Adjustment:

(a) scoring is in bands depending on the amount of Financial Assistance as a proportion of Capex (as assessed by the Technical Review team); (i) no financial assistance requested, (ii) 0-20% of Capex, (iii) 20-40% (iv) 40-60% of Capex (v) 60-80% of Capex and (vi) 80% +;

(b) the adjustment differentiates between financial assistance type: Loans and Equity (where capital is expected to be recycled) and Guarantees (where the obligation is contingent) score twice high as a Grant / Budget Allocation;

(c) the highest adjustment is +1.5 marks if no assistance is requested. This equates to the maximum adjustments applied in Criterion 3;

(d) leverage is measured from the view point of this process only i.e., if the Project Owner has Crown funds already committed for a Project, it will receive the Leverage Adjustment; and

(e) regardless of Leverage Adjustment, the Final Rating is capped at 5.

5.7 Final Rating

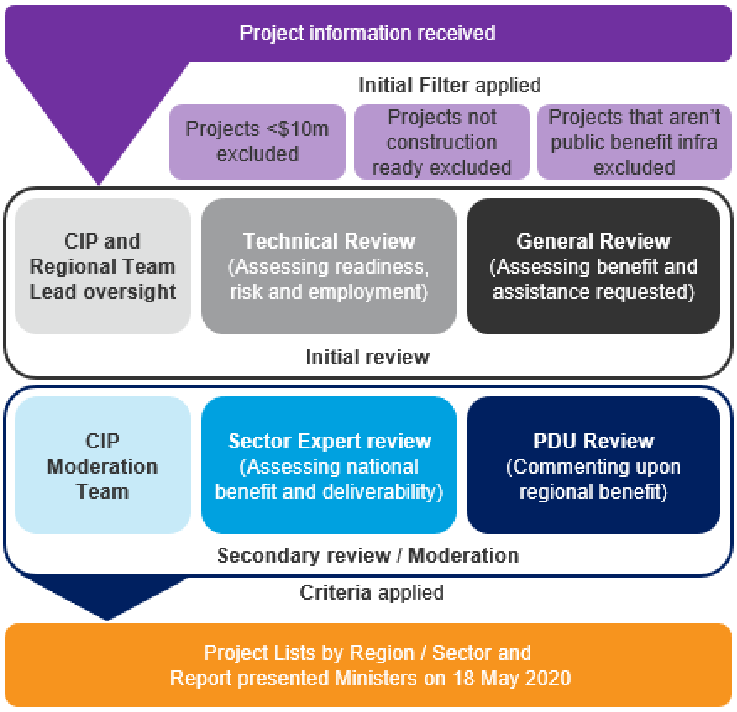
5.7.1 The Criteria 2 & 3 Score, plus the Leverage Adjustment following Moderation as described in Section 6.10 provides the **Final Rating** (0-5).

6 Process

6.1 Overview

6.1.1 This section of the Report provides an overview of the process the IRG implemented to receive and review project information in order to apply the Criteria Rating and prepare the Project Lists and other aspects of the process adopted by the IRG.

6.1.2 The diagram below demonstrates the process:



6.2 Receive Project Information

6.2.1 A form and database was developed to collect the information required to assess each project received against the Rating Criteria.

6.2.2 On 1 April 2020, the PIF and Guidelines were distributed to several mailing lists including to infrastructure industry members, central government chief executives, local authorities and to iwi groups available through CIP's mailing lists. A press release was also released by the Beehive in an effort to ensure that all interested parties would be made aware of the process.

6.2.3 The deadline to receive project information was 5pm 14 April 2020, although some PIFs were received after this date.

6.2.4 A total of 1,926 projects were submitted with a total Capex of $134 billion.

6.3 Project Filters

6.3.1 Once projects were received and entered into a database, a number were filtered out for one of the reasons outlined below (reflecting core criteria for the process as set out in the Guidelines). This was based on the information contained in the PIF in the first instance or following the reviews outlined in Sections 6.4-6.10:

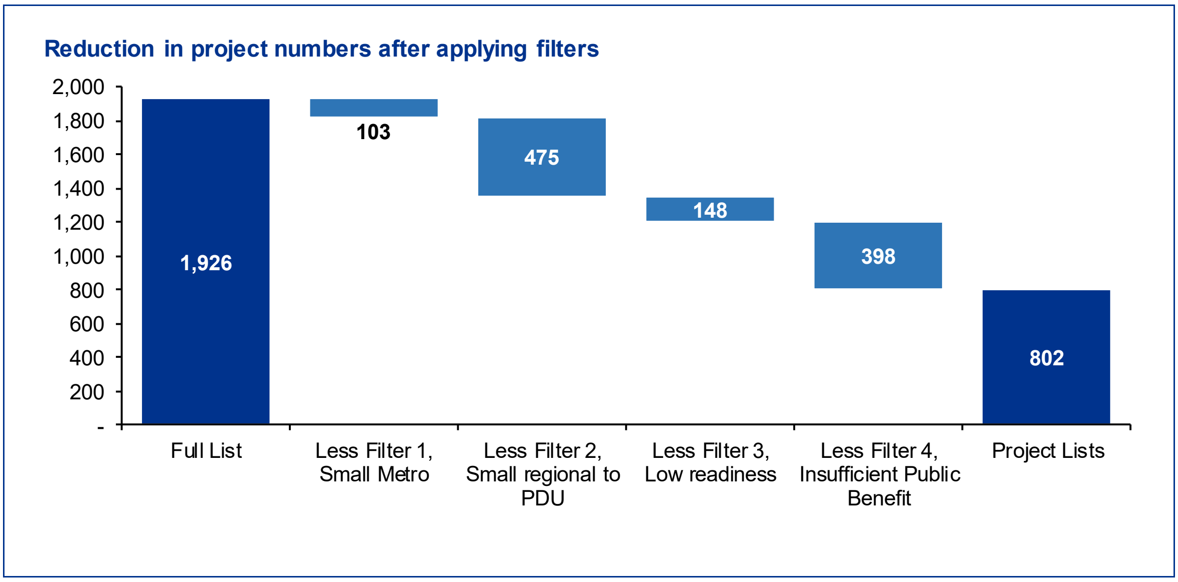
(a) Small, Metro: projects located in the major metro centres (Auckland, Wellington (incl. Hutt, Upper Hutt and Porirua) and Christchurch) that have a Capex of less than $10m (which were excluded from further review);

(b) Small, Regional: projects located outside the major metro centres that have a Capex of less than $10m were excluded from further review (noting that the Projects in this category have been forwarded to the PDU to be considered by the PDU for possible support outside of this process);

(c) Low Readiness: projects which did not meet the construction readiness criteria were excluded from further review; and

(d) Insufficient Public Benefits: projects which were (i) not considered to be infrastructure projects, (ii) not promoted by the relevant project sponsor, or (iii) not considered to have sufficient public benefit for inclusion in the Project Lists, were excluded from further review.

6.3.2 802 Projects remained after this filtering process (as demonstrated by the following chart). These 802 Projects are presented in the Project Lists:



6.3.3 Projects located outside the major metro centres that have a Capex of between $10m and $20m (inclusive) have been included in this process and the Project Lists. Projects in that category (other than those relating to 3 waters, healthcare, education and flood protection) have been brought to the attention of the PDU as part of this process. If the PDU subsequently decides to support one of those Projects then the Project would cease to be eligible for Government support under this process.

6.4 Initial Reviews

6.4.1 Three initial desktop reviews were conducted on each project not already excluded according to the filters outlined above. These were the Technical Review, General Review and Regional Lead Benefit Reviews. These reviews (described below) were generally limited to the information provided in the completed PIF and undertaken in line with the Rating Criteria and Methodology.

6.5 Technical Review

6.5.1 Projects were channelled to Technical Review teams made up of engineering consultants with relevant sector expertise from RCP, BECA, and Mott Macdonald. The primary purpose of the Technical Review was to provide an independent assessment of:

(a) construction readiness;

(b) cost confidence;

(c) reasonableness of employment assumptions, based on the project information provided; and

(d) risks of the project not commencing within the advised timescale and the risk a project not been completed on time, to cost or to specification.

6.5.2 The Technical Review considered:

(a) the construction readiness of the project based on the information provided in the PIF regarding risk, programme, design, consenting and procurement deliverables, particular requirements sought and the reviewer's judgment to determine the readiness based on the adopted categorisation (Construction Readiness Category A, B, and C);

(b) the duration of construction programmes or milestones identified; and

(c) whether Government assistance for regulatory relief for RMA consenting would adjust the construction readiness categorisation, for example move a Construction Readiness Category C project to a Construction Readiness Category B. This assessment was determined based on professional judgement on the certainty of the information provided in the PIF.

6.5.3 The Technical Review also provided a high level review of Capex and its reasonableness (including material cost risk) to establish the project cost confidence (at a high level). The review of Capex information provided in the PIFs involved assessing this information against estimates provided by industry experts for each segment (i.e., civil engineering, commercial or residential development).

6.5.4 The Technical Review also assessed the reasonableness of direct construction employment FTE assumptions in the PIFs. This involved assessing this information against estimates provided by industry experts for each segment. The FTE used in this Report and applying the Criteria Rating is based on this assessment (although also has a degree of reliance on the underlying information as submitted in the PIFs).

6.5.5 Project information submitted by NZTA and KiwiRail did not receive a full Technical Review in relation to construction readiness and Capex. The IRG made a decision to rely on the NZTA and KiwiRail technical information as it was provided (rather than undertake Technical Reviews referred to above). In relation to assessing the FTEs, the process described in Section 6.5.4 was applied.

6.6 General Review

6.6.1 The General Review was conducted by a team with financial and commercial experience from CIP, KPMG and Mafic Partners Limited, who assessed the benefits and funding requirements of projects as set out in the PIF.

6.6.2 The General Review sought to confirm that the projects aimed to deliver public benefit and/or were regionally significant infrastructure. The review assessed the level of confidence that can be placed in the benefits described in the PIF based on the supporting evidence provided.

6.6.3 The General Review also considered the availability of existing funding to the Project, previous applications for Government support, and the quantum and type of financial and non-financial assistance requested from the Crown based on the PIF submission.

6.7 Regional Lead Benefits Review

6.7.1 In the Regional Lead Benefits Review, consideration was given at a high level to the benefit of projects from the perspective of the importance of a project to a Region. This benefits assessment was first undertaken by the Regional Leads within the Technical Review teams who reviewed the PIFs and supporting information.

6.7.2 The Regional Leads considered this information and provided an assessment of the benefits for the purposes of Criterion 3 based on their understanding of the project and its importance to a particular region based on the likely benefit outcomes.

6.8 Sector Experts

6.8.1 Sector Experts reviewed the Sector classification of projects and the Criterion 3 (National/ Regional Benefit) ratings emerging from the reviews referred to above.

6.8.2 The Sector Experts were selected by the IRG as being suitable qualified and experienced experts in their respective sectors (such as roads, rail, health, Māori interest, education etc.,) from both the public and private sector.

6.8.3 Sector Experts were asked to apply their experience and judgement to provide an impartial “NZ Inc” perspective on the classification of the project, the benefits associated with the relevant project, alignment with relevant Government policy and deliverability of the project in a Region.

6.8.4 More specifically, Sector Experts were asked to conduct a desktop review to:

(a) assess the Criterion 3 (National/Regional Benefit) overall rating: Sector Experts assessed whether they disagree with the Criterion 3 overall rating assigned for a project in the desktop review, or whether they disagree with the Criterion 3 overall rating assigned for a project relative to other projects in the Sector Expert’s Sector of expertise;

(b) consider alignment with Government policy: Sector Experts were asked to note:

(i) whether they disagreed with the assessment in the desktop review of how a project maps to the “key economic shifts” needed to achieve the Government’s Economic Plan; and

(ii) whether a project aligns with Government policy/ies applicable to a Sector Expert’s Sector of expertise e.g., for roading – NZTA Government Policy Statement, for housing – Urban Growth Agenda;

(c) consider Regional deliverability: Sector Experts were also asked to comment on issues with the deliverability of multiple projects in the relevant Sector in each Region in New Zealand; and

(d) provide any further comments: Sector Experts were asked to provide any further comments to give context to their assessment or other comments to help us understand material issues that the Sector Expert believed, from their perspective, might impact on how IRG should rate a particular Project e.g., material project risk items, timetable concerns or other issues connected with readiness or deliverability.

6.9 Provincial Development Unit

6.9.1 The PDU was asked to provide comments on the projects from a regional perspective which were taken into account in the Moderation review referred to below.

6.10 Moderation Review

6.10.1 A moderation review team was established with representatives of CIP, lead partners of Mott MacDonald, KPMG and Mafic Partners Limited.

6.10.2 This team reviewed the outputs from the various reviews to ensure the Rating Criteria and Methodology was being applied correctly and consistently and reviewed the Final Ratings of the Projects for consistency. Where considered appropriate, moderations were made.

6.11 Outcome of Reviews

6.11.1 Once the Final Rating for each Project was determined, the resulting Project Lists were reported to the Project Steering Group for consideration and were in turn considered by the IRG for inclusion in this Report.

6.12 Quality Assurance

6.12.1 Checks and reviews occurred during the process to ensure that only projects which met the Rating Criteria remained in the review process.

6.12.2 Likewise, checks and reviews occurred at each exit stage of the process to ensure no projects were incorrectly removed from the process.

6.13 Standards and Conflicts of Interests

6.13.1 This is not a procurement process, however the IRG sought to ensure the similar high public sector standards were applied. This included treating all parties who provided a PIF fairly and consistently, both when corresponding with them and when dealing with the information provided.

6.13.2 The IRG also ensured appropriate confidentiality and conflicts of interest policies and protocols were implemented across the IRG and project team. Each of the IRG member's disclosed their potential conflicts of interest and these were recorded and managed in accordance with the conflict of interest protocols.

7 Government Assistance Sought

7.1 Introduction

7.1.1 The PIF requested that submissions briefly outline the top 2-3 things that the Government could do to help progress the project, including both financial and non-financial levers (such as lowering regulatory barriers, adjusting Government procurement practices and fast-tracking resource consent processes).

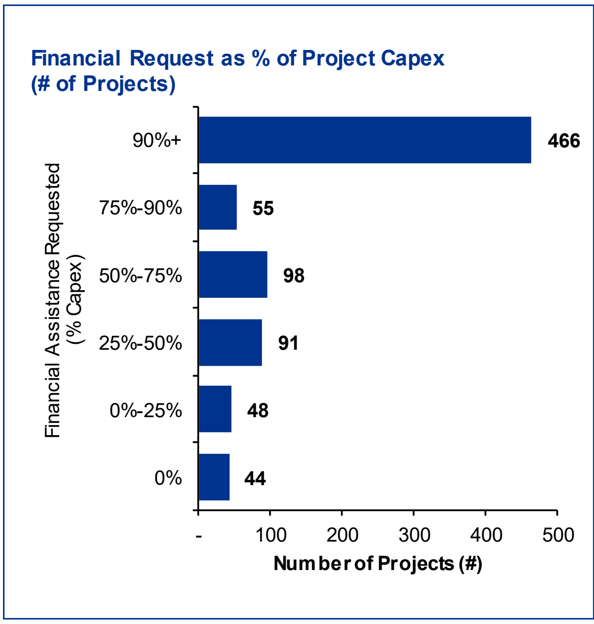
7.1.2 Additional detail on the Government assistance sought for the Projects was requested via a supplementary Support Clarification Request sent to relevant Project Owners on 3 May 2020.

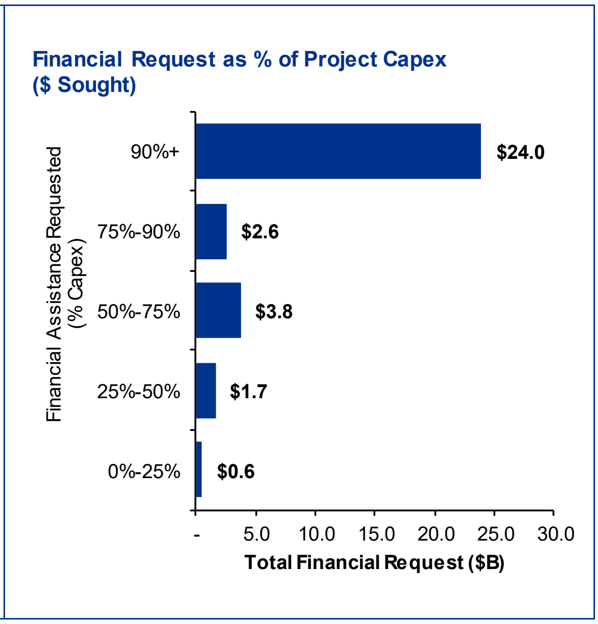
7.1.3 The charts below summarise the responses to these Government assistance questions for the Projects. We note that the amount of the Government financial assistance actually provided for any Project will be a matter for negotiation with the Project Owner.

7.2 Financial Assistance Sought - Overview

7.2.1 The majority of Projects (95%) asked for financial assistance (excluding guarantees) totalling $33 billion contribution towards Capex, defined as the amount of funding sought from Central Government as part of this process (excluding any other sources of funding that remain available to the Project).

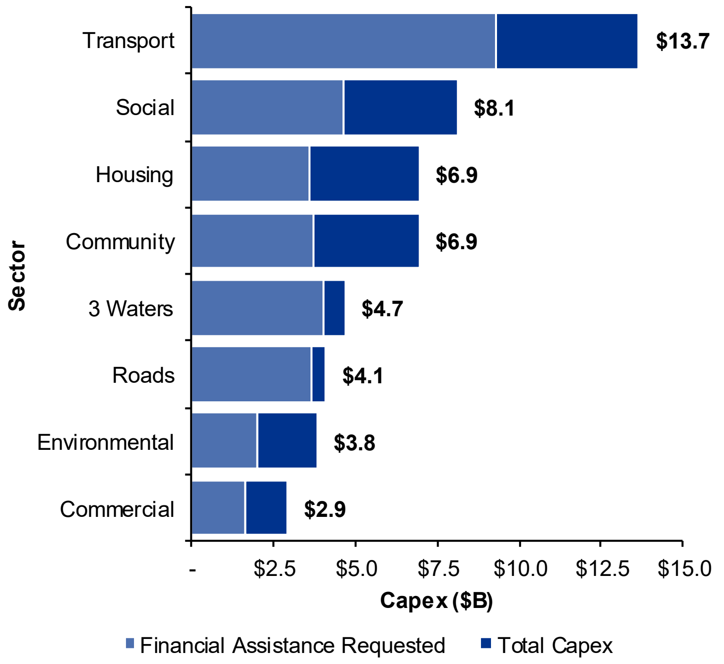
7.2.2 The charts below illustrate the proportion of financial assistance sought relative to total Capex (assistance requested/Capex as a %). The majority of Projects (466 out of 802, (or 58%) requested financial assistance of 90% or more of total Capex. These figures exclude requests for Government guarantees or underwrites.





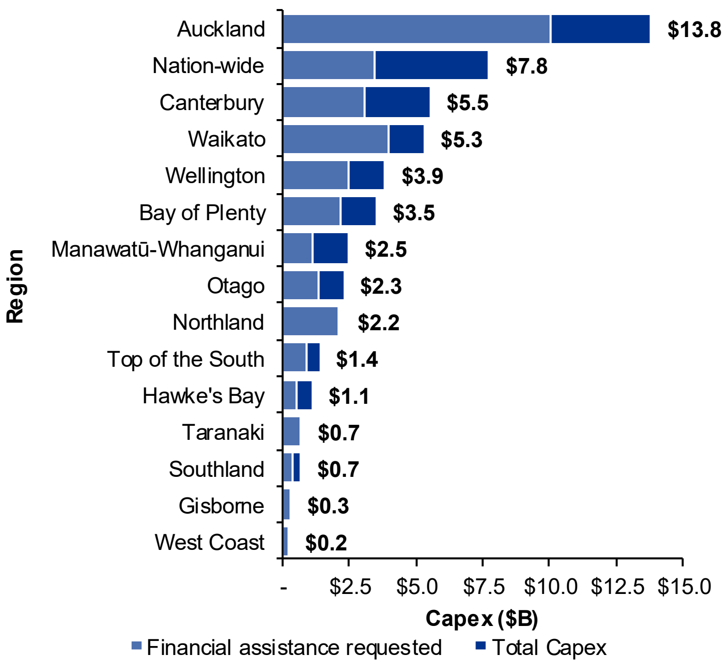
7.2.3 The dollar amount of financial assistance sought by Sector, Region and Project Owner type (out of total Capex) is shown in the charts below.

Financial Request and Capex by Sector ($B)

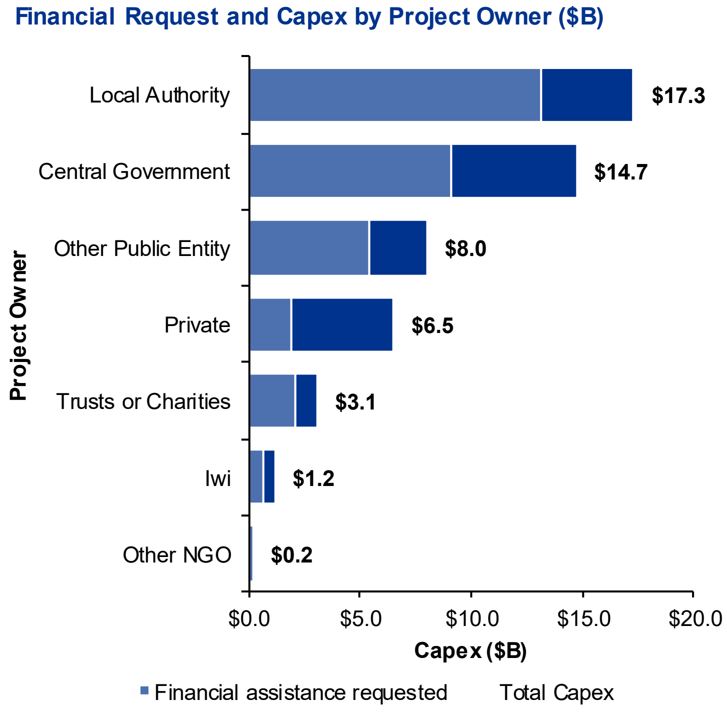


Sector	Fin. Request $B	% Capex	Capex $B
Transport	$9.3	68%	$13.7
Social	$4.6	57%	$8.1
Housing	$3.6	52%	$6.9
Community	$3.7	54%	$6.9
3 Waters	$4.0	86%	$4.7
Roads	$3.7	90%	$4.1
Environmental	$2.0	52%	$3.8
Commercial	$1.6	56%	$2.9
Total	**$32.6**	**64%**	**$51.2**

Financial Request and Capex by Region ($B)

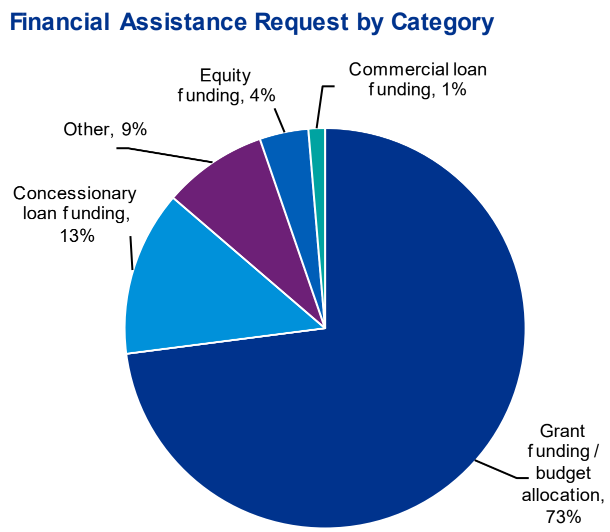


Region	Fin. Request $B	% Capex	Capex $B
Auckland	$10.0	73%	$13.8
Nation-wide	$3.4	44%	$7.8
Canterbury	$3.1	56%	$5.5
Waikato	$3.9	74%	$5.3
Wellington	$2.5	65%	$3.9
Bay of Plenty	$2.1	61%	$3.5
Manawatū-Whanganui	$1.2	47%	$2.5
Otago	$1.3	57%	$2.3
Northland	$2.1	96%	$2.2
Top of the South	$0.9	66%	$1.4
Hawke's Bay	$0.5	45%	$1.1
Taranaki	$0.7	91%	$0.7
Southland	$0.3	50%	$0.7
Gisborne	$0.3	92%	$0.3
West Coast	$0.2	97%	$0.2
Total	**$32.6**	**64%**	**$51.2**



Project Owner	Fin. Request $B	Fin. Request % Capex	Capex $B
Local Authority	$13.2	76%	$17.3
Central Government	$9.1	62%	$14.7
Other Public Entity	$5.4	67%	$8.0
Private	$2.0	30%	$6.5
Trusts or Charities	$2.1	67%	$3.1
Iwi	$0.7	54%	$1.2
Other NGO	$0.2	86%	$0.2
Total	**$32.6**	**64%**	**$51.2**

7.2.4 The split of the type of financial assistance sought is illustrated in the chart below, with the most commonly requested type of financial assistance being (i) grant funding (or budget allocation in relation to Central Government agencies) (73%) and (ii) concessionary loan funding (13%).



Category	Fin. Request $B	%
Grant funding / budget allocation	$23.8	73%
Concessionary loan funding	$4.4	13%
Other	$2.7	8%
Equity funding	$1.3	4%
Commercial loan funding	$0.4	1%
Total	**$32.6**	**100%**

7.2.5 The table below provides a breakdown of financial assistance sought by category and Project Owner.

Financial Assistance by Project Owner								
$m	Central Government	Local Authority	Other Public Entity	Private	Trusts or Charities	Iwi	Other NGO	Total
Grant funding / budget allocation	$7,696	$10,960	$3,012	$536	$1,164	$266	$175	$23,809
Concessionary Loan funding	$2	$1,502	$1,065	$919	$543	$295	$29	$4,354
Other	$357	$582	$1,215	$358	$152	$85		$2,749
Equity funding	$1,082	$29	$93	$39	$32	$9		$1,285
Commercial Loan funding		$110	$14	$107	$205			$436
Total	**$9,137**	**$13,182**	**$5,399**	**$1,959**	**$2,097**	**$655**	**$204**	**$32,633**

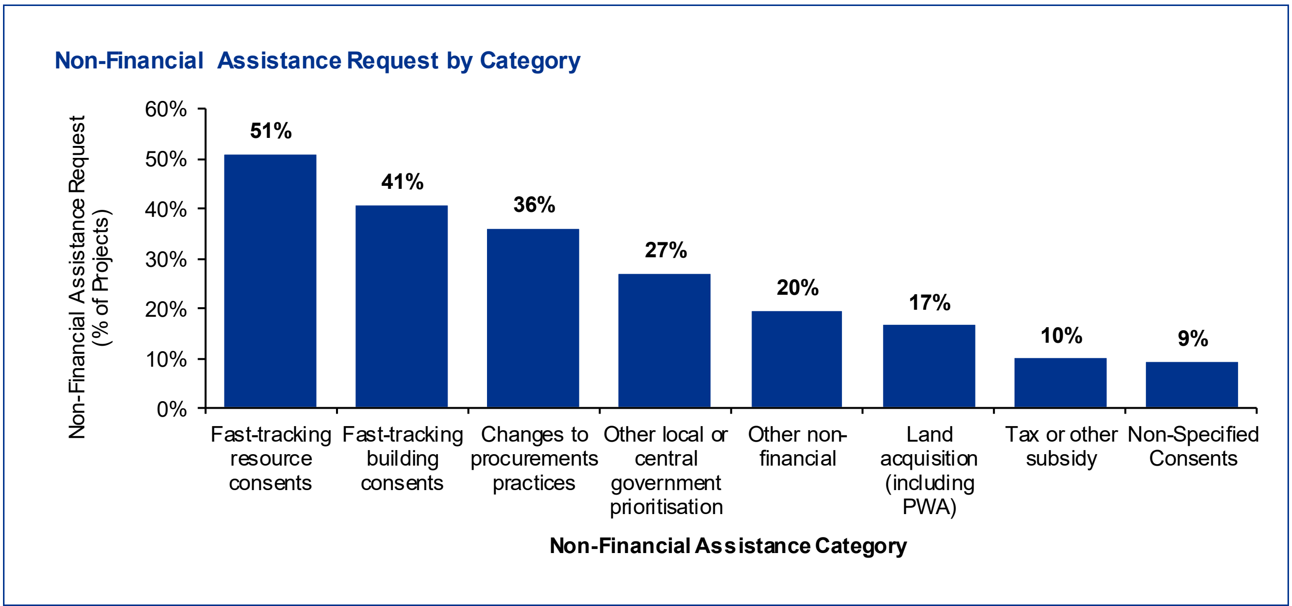
7.2.6 The table below provides further detail on financial assistance requested and FTEs created by Project Owner type and Sector. The table also presents the ratio of FTEs created to financial assistance sought.

Financial Assistance/Employment by Project Owner and Sector																								
	Central Government			Local Authority			Other Public Entity			Private			Trusts or Charities			Iwi			Other NGO			Total		
	$m	FTE	FTE/$m	$m	FTE	FTE/$m	$m	FTE	FTE/$m	$m	FTE	FTE/$m	$m	FTE	FTE/$m	$m	FTE	FTE/$m	$m	FTE	FTE/$m	$m	FTE	FTE/$m
3 Waters				$2,914	5,191	1.8	$1,124	745	0.7													$4,038	5,936	1.5
Commercial	$352	1,390	4.0	$243	1,288	5.3	$496	1,817	3.7	$356	2,835	8.0	$126	931	7.4	$59	405	6.9		23		$1,631	8,689	5.3
Community	$63	872	13.9	$2,073	11,100	5.4	$417	5,383	12.9	$54	420	7.9	$733	3,248	4.4	$257	930	3.6	$143	525	3.7	$3,739	22,478	6.0
Environmental	$100	332	3.3	$811	2,641	3.3	$67	705	10.5	$389	2,655	6.8	$536	1,314	2.5	$107	595	5.5				$2,010	8,242	4.1
Housing				$2,326	5,622	2.4	$81	176	2.2	$583	7,024	12.0	$369	2,140	5.8	$212	776	3.7	$31	189	6.1	$3,602	15,927	4.4
Roads	$2,323	8,971	3.9	$1,283	5,540	4.3	$28	151	5.3				$42	75	1.8							$3,677	14,737	4.0
Social	$1,926	11,884	6.2	$97	418	4.3	$2,040	6,811	3.3	$255	2,530	9.9	$291	1,775	6.1	$20	319	16.0				$4,628	23,737	5.1
Transport	$4,375	18,246	4.2	$3,434	8,573	2.5	$1,147	4,437	3.9	$323	1,206	3.7							$30	136	4.5	$9,308	32,598	3.5
Total	**$9,137**	**41,695**	**4.6**	**$13,182**	**40,373**	**3.1**	**$5,399**	**20,225**	**3.7**	**$1,959**	**16,670**	**8.5**	**$2,097**	**9,483**	**4.5**	**$655**	**3,025**	**4.6**	**$204**	**873**	**4.3**	**$32,633**	**132,344**	**4.1**

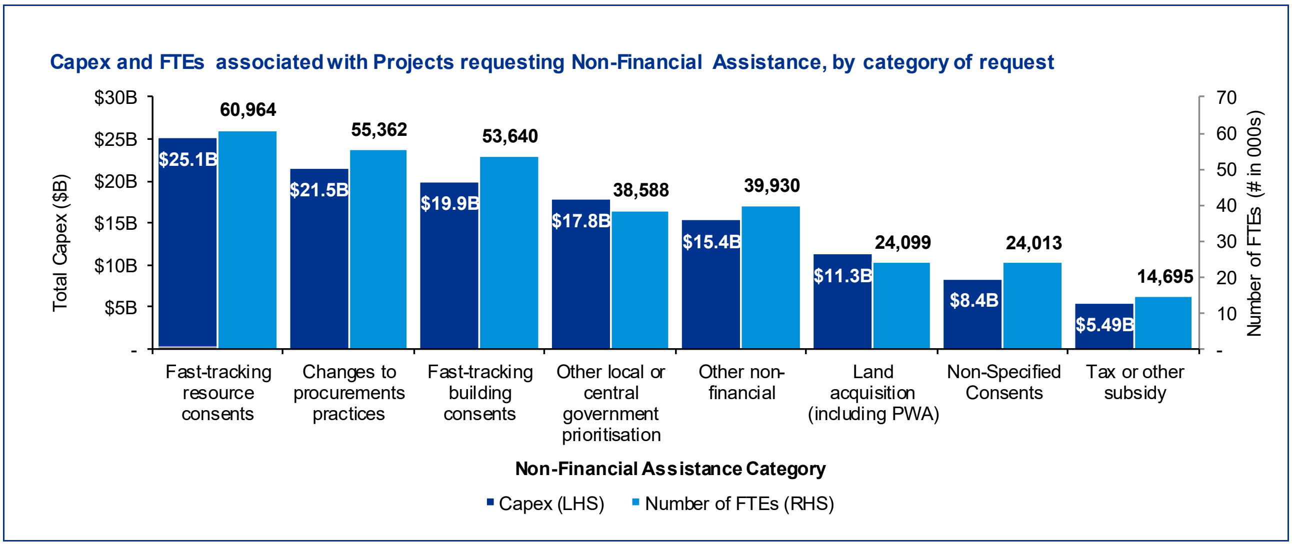
7.2.7 16% of Projects also requested financial assistance in the form of a government guarantee or underwrite (over and above the financial assistance detailed above). A total of $4.7 billion in the form of guarantees or underwrites was requested.

7.3 Non-Financial Assistance Sought - Overview

7.3.1 90% of Projects also requested at least one type of non-financial assistance, with the most commonly requested non-financial assistance being fast-tracking resource consents (requested by 51% of Projects) and fast-tracking building consents (requested by 41% of Projects), as illustrated in the chart below.



7.3.2 The chart below illustrates the total Capex and FTEs associated with Projects requesting each type of non-financial assistance. Please note, as most Projects requested more than one type of non-financial assistance, total Capex and FTEs across all categories shown in the chart below exceed total Capex and FTEs for all Projects.



7.3.3 The table below illustrates the total number of requests for non-financial assistance by category. The total number of non-financial assistance requests was 1,695 (more than twice the number of Projects). The right hand columns in the table below also illustrate the number of Projects that requested only one type of non-financial assistance. For example, 58 Projects requested fast-tracking resource consents only.

Non-Financial Assistance, by category of request	Total requests #	Total requests %	Unique requests #	Unique requests %
Fast-tracking resource consents	409	51%	58	7%
Fast-tracking building consents	328	41%	30	4%
Changes to procurements practices	291	36%	53	7%
Other local or central government prioritisation	218	27%	41	5%
Other non-financial	158	20%	68	8%
Land acquisition (including PWA)	134	17%	4	0%
Tax or other subsidy	81	10%	3	0%
Non-Specified Consents	76	9%	22	3%
Total	**1,695**	**211%**	**279**	**35%**

7.4 Fast-track Consenting Legislation

7.4.1 [34]

7.4.2 [34]

7.5 Rapid Procurement Response

7.5.1 Ensuring Government agencies and Local Authorities adopt effective and efficient fast-track procurement methods is imperative to achieving momentum. Project Owners will need to rapidly procure Projects to meet the construction commencement dates that have been indicated in their PIFs and this can be achieved through a number of mechanisms, including the efficient use of supplier panels, standard form contracts, sustainable contract price and delivery models (e.g., alliances, shared risk models, cost reimbursement, stipulated rates and margins, etc.).

7.5.2 Government will need to assess central and local government agencies' capability, capacity and maturity to procure Projects at speed, and should provide direction and support to agencies on appropriate procurement methods and contract delivery models, to ensure the Government's risk position is applied consistently, and sustainable models are adopted for suppliers in an environment of heightened risk resulting from CV19. We understand MBIE is identifying the processes and guidelines required to achieve rapid procurement, and these will need to be implemented in time to enable Projects to be accelerated as intended.

7.5.3 [34]

7.5.4 Procurement plays an integral role with respect to any funding released to support the construction of any Projects under the proposed economic stimulus package for two key reasons:

(a) public value - robust procurement processes ensure the selection of the right supplier under the most appropriate contract delivery model to go a long way to ensuring best public value from the investment; and

(b) acceleration - the faster projects reach physical construction the faster economic stimulus can be activated through the deep supply chains construction projects offer.

8 Risks

8.1 Introduction

8.1.1 In considering which Projects to support there are a number of key risks that the Government needs to be aware of. These risks, and the associated implications for selecting which Projects the Government will support are set out below.

8.2 Risks that could Increase Central and/or Local Government Exposure

8.2.1 The key risks to Government in providing financial support through central and local government agencies to the construction industry are tabled below. We have put forward potential mitigation measures that would assist with the rapid procurement of Projects in the short term (some of which we understand are in the process of being considered or adopted).

8.2.2 We understand that MBIE is currently working on identifying and developing a set of initiatives to assist central and local government agencies that will require support, to efficiently procure and contract Projects in the short term. A medium to longer term approach to procurement will also need to be considered once the impacts of CV19 on the industry are more clearly understood.

Risk	Caused By	Mitigated By

[34]

Risk	Caused By	Mitigated By
		].

8.3 Risks to Industry

8.3.1 The key risks to the construction industry resulting from CV19 are tabled below. The mitigation measures, if and to the extent available, will assist projects funded and procured through Government agencies and local government. The private sector remains significantly exposed given the competing interests of principals / contractors to manage their respective risks.

Risk	Caused By	Mitigated By
[34]		

Risk	Caused By	Mitigated By

8.4 Risks from Early Announcement of Government Support

8.4.1 Once the Government publicly announces that it is going to support a particular Project (or even that it intends to support a particular Project) the expectations of the public and the Project Owner will be set.

8.4.2 [34]

8.4.3 These matters and associated mitigations are addressed further in Section 9 (Recommendations to Government).

8.5 Risk that the Rating Criteria and Process are Criticised

8.5.1 There is a risk that the Rating Criteria, this process and its results are subject to criticism.

8.5.2 Key factors giving rise to this risk and mitigations are set out are set out below:

Key Factor	Mitigation(s)

[34]

9 Recommendations to Government

9.1 Introduction

9.1.1 The IRG has used the Final Rating to establish a baseline ranking of the Projects in the tables in Annexures A and B. The Projects that deliver the highest combined score taking into account Criterion 2: Direct Employment Benefit and Criterion 3: National/Regional Benefit as adjusted by the Leverage Criteria are at the top of each table. As noted above the Rating Criteria take into account the Government's overriding priorities and objectives being economic stabilisation, stimulation and rebuild.

9.1.2 The IRG recognises that Government may want to consider additional factors not included in the Rating Criteria to determine which Projects should receive Government support (if any). Particularly it should be noted that the IRG has not included any weighting for Regions that may suffer disproportionately from CV19 or any capacity constraints by Region and construction discipline (i.e., horizontal, vertical or home building). We have, however, provided information relating to the expected impact of CV19 on the Regions (see Part D and Part E of Section 2, Schedule 3 (Regional/ Sector Capacity) and Schedule 7 (Economic Impact of Covid 19)). Government will need to undertake the assessment of which, if any, Projects should be selected for Government support as viewed through the lens of the Government's overall financial capacity, objectives and priorities and its views on issues such as those noted above.

9.1.3 In this section of the Report, we set out the IRG's recommendations to Government on:

(a) Matters to be considered by Government when selecting which Projects should receive Government support (if any) - see Section 9.2 below; and

(b) The nature of the support to be provided and how it should be provided (including conditions that should be placed on the provision of support) - see Section 9.3 below.

9.2 Considerations when Selecting Projects to Support

9.2.1 The IRG recommends that the Government consider a broad range of factors when considering which Projects to support. The following is a summary of key factors that the IRG specifically wants to draw to the Government's attention.

9.2.2 It should be noted that the IRG has not had sufficient time to investigate all of the factors noted below in depth and the IRG recommends that the Government seek guidance from its specialist agencies on factors as appropriate. At the same time though, the IRG recognises that the purpose of this report is to prepare a list of projects that can be in construction within 12 months so this may require Government to take a pragmatic approach to considering these other factors so it can conclude its deliberations on a timely basis.

A. Impact of non-central Government Projects

9.2.3 A number of Projects would, if supported by Government, be delivered by entities outside of central Government (including private sector, iwi and Local Authorities) (**Non-Government Projects**). All Non-Government Projects on the Project Lists have an identifiable public benefit.

9.2.4 In many cases Non-Government Projects offer the Government opportunities and benefits that cannot be obtained through Projects delivered by central Government (**Government Projects**), including the ability to:

(a) highly leverage the Government's contributions (if any) – i.e., the commitment of Government support results in a disproportionately higher level of benefits achieved through the consequential commitment of the Project Owner's capital to the Project (noting many Non-Government Projects do not request any financial support from the Government and many involve the commitment of private capital);

(b) avoid the cost and resourcing commitments associated with procuring and delivering projects (subject to our comments below regarding successful project delivery); and

(c) require the commitment of private capital into projects in advance of Government support (de-risking the delivery of the project and associated benefits for the Government) – i.e., back end finance.

9.2.5 It should also be noted that Government support for Non-Government Projects could have the unintended consequence of passing value to the private sector or crowding out private finance that would have otherwise been available and utilised for the Project.

9.2.6 The Government should view Non-Government Projects positively if maintaining and protecting construction jobs is the priority and, where they offer opportunities, benefits and risk reduction such as those identified above, then the Government should consider prioritising Non-Government Projects in preference to Government Projects.

B. Regional v metropolitan employment impacts

9.2.7 As noted in Part D of Section 2 (and set out in more detail in Schedule 7 (Economic Impact of Covid 19), the available data indicates that the impact of CV19 on employment levels will not be evenly felt between New Zealand's metropolitan and regional areas, with regional areas and districts (e.g., Queenstown) being much harder hit in relative terms.

9.2.8 The Government should consider how it's selection of Projects can best alleviate the disproportionate negative impact of CV19 on employment across the Regions.

C. Regional and discipline capacity

9.2.9 We expect that the Government's overall objectives and priorities will drive the distribution of Projects supported across Regions and construction discipline (i.e., horizontal versus vertical).

9.2.10 However, when selecting which Projects to support the Government should consider the infrastructure delivery capacity of each Region (including by construction discipline).

9.2.11 If these factors are not adequately considered on a regional basis by Government, then there is a very real risk that:

(a) unnecessary inflationary cost pressure in the Region will be created – this will have a negative impact not only on the Projects selected for the Region, but all construction activity in the Region (and could have the perverse unintended effect of causing the failure of construction projects in the Region); and

(b) the ability of the industry to successfully deliver the Projects (in the required timeframe) will be endangered and consequently the delivery of the very benefits the Government is seeking to achieve.

9.2.12 When considering capacity, it will be important to consider all aspects of the supply chain, including consultants and indirect suppliers.

9.2.13 We note available capacity in most (if not all) Regions is expected to increase due to the impact of CV19 on existing pipeline projects and labour substitution between sectors and industries (e.g., from tourism to construction).

9.2.14 To assist the Government in its assessment of Regional capacity:

(a) we have, as noted above, prepared a brief summary of the state of capacity across New Zealand, and specifically in each Region (see Part E of Section 2 and Schedule 3 (Regional/ Sector Capacity); and

(b) we provided the "Assessment of the Impact of CV19 on Current New Zealand Infrastructure Projects" report to Ministers on 8 April – which included observations on the capacity of the industry in a CV19 environment.

D. Benefits of selecting a diverse range of Projects (Projects types /Regions)

9.2.15 By supporting a Project, the Government will:

(a) save the jobs of the individuals that will work on constructing the project;

(b) provide support to the entities that employ those individuals;

(c) help preserve the infrastructure industry and its capacity to deliver for New Zealand in the years to come;

(d) promote labour retraining and substitution from sectors and industries hard hit by CV19 (e.g., tourism); and

(e) secure the delivery of associated public benefits.

9.2.16 In order to maximise those benefits for New Zealand, it will be important for the Government to support a breadth of Projects across:

(a) Regions;

(b) construction discipline (horizontal and vertical); and

(c) sectors.

E. Impact on iwi

9.2.17 The Government should consider the extent to which Project selection may advantage or disadvantage iwi.

9.2.18 The selection of iwi owned Projects is a straight forward mechanism to enable iwi to leverage their asset base and benefit directly from this process. Examples of iwi owned Projects included in the Project List include the following (noting that these examples are provided for illustrative purposes only):

Project Number	Project Name	Project Owner	Project Owner Type	Sub Sector	Construction Employment (FTE)	Total Capex	Assistance		Final Rating
							Financial (excl. Guarantees)	Other[3]	

[25]

[3] See Annexure A for a definition of terms.

9.2.19 In addition, consideration should be given to how Projects can indirectly advantage iwi. Examples of such project types would include social housing, irrigation/ water storage projects that benefit iwi owned land and projects delivering significant employment benefits to Regions with high iwi unemployment rates. [25]

Project Number	Project Name	Project Owner	Project Owner Type	Sub Sector	Construction Employment (FTE)	Total Capex	Assistance		Final Rating
							Financial (excl. Guarantees)	Other[4]	

9.2.20 In the time available to the IRG we have not been able to prepare more detailed guidance on how Māori issues should be considered, however, we understand that the PDU has done work in this area of project selection and impact on Māori development (in the context of the PDU's work) which may be of assistance to Ministers. Senior Officials in the Whenua Māori fund should be utilised to bring their existing knowledge of existing areas of opportunities to increase the opportunity for a positive outcome for Māori entities. This may include a variable acceptance criteria for projects that will enhance Māori outcomes. [34]

F. Alignment with other initiatives and priorities

9.2.21 Government should consider the extent to which Projects support, or are aligned with, existing Government or Local Authority initiatives and priorities. In addition, Government should consider the impact of existing, funded capital projects that will continue to be pursued outside of the IRG initiative by Government. Ensuring that there is co-ordination from a whole of Government perspective (not only in relation to any projects pursued under the IRG initiative) will be to key to ensuring that the risks outlined paragraph 9.2.11 above are mitigated.

9.2.22 Examples would include:

(a) identifying Projects that align with Regional apprenticeship programmes supported by the PDU or other parts of Government;

(b) liaising with the New Zealand Infrastructure Commission to confirm whether they are aware of factors relevant to the selection of individual Projects (such the Project being inconsistent with New Zealand's longer term infrastructure strategy);

(c) alignment with current Government commitments relating to environmental outcomes; and

(d) confirming whether Regional Projects are consistent with relevant Economic Strategy Documents (including economic action plans).

G. Projects as part of a wider programme

9.2.23 Government should consider the extent to which a Project may form part of, or facilitate, a wider programme which taken as a whole, gives rise to greater benefits than those created by the Project when viewed on a standalone basis.

[4] See Annexure A for a definition of terms.

9.2.24 An example of this would be where the delivery of a roading Project allows adjoining land to be developed or intensified for social and/or affordable housing development. [25]

Project Number	Project Name	Project Owner	Project Owner Type	Sub Sector	Construction Employment (FTE)	Total Capex	Assistance		Final Rating
							Financial (excl. Guarantees)	Other[5]	

H. Training

9.2.25 The CV19 crisis provides an opportunity for the training/ retraining of New Zealand's workforce to support employment and the delivery of Projects and New Zealand's future infrastructure requirements over the years to come.

9.2.26 There will be sections of the labour market that suffer significantly as a result of the CV19 crisis (for example the tourism sector).

9.2.27 Consideration should be given to how selection of Projects can be aligned with existing apprenticeship programmes and support new programmes (including requiring Projects supported by Government to provide minimum levels of support to apprenticeships as further set out in the Guiding Principles).

I. The post CV19 economy

9.2.28 While it is obviously challenging (or impossible) to accurately predict the nature of the post CV19 New Zealand economy, there are some reasonable assumptions that can be made relating to the short to medium term to guide Government's decision making.

9.2.29 For example, there are sectors that will likely remain depressed for some time post CV19 including domestic and international tourism (including airports). Any potential Government support in such areas should be carefully considered.

J. Environmental/ sustainability considerations

9.2.30 The IRG expects the Government's overall environmental and climate change objectives will impact on any decision making. The Government should consider sustainability and the extent to which Projects may have positive or negative impacts on the environment.

9.2.31 [25]

Project Number	Project Name	Project Owner	Project Owner Type	Sub Sector	Construction Employment (FTE)	Total Capex	Assistance		Final Rating
							Financial (excl. Guarantees)	Other[6]	

[5] See Annexure A for a definition of terms.

[6] See Annexure A for a definition of terms.

9.2.32 Some State Governments in Australia have adopted an "Infrastructure Sustainability" rating to ensure sustainability issues will be considered through construction. This could be considered but the IRG could not do so within the timeframe.

K. Ability of entities to successfully deliver projects

9.2.33 The Government is aware that there is a broad range in the ability of organisations (both public and private) to successfully procure and deliver infrastructure projects (noting this was a key factor in the Government's decision to establish the New Zealand Infrastructure Commission).

9.2.34 In light of this, the IRG recommends that in deciding whether to support a Project, the Government must consider, and where necessary determine, the organisation that will procure and deliver the project (as a condition of receiving Government support). In some instances, this may result in an entity other than the entity that submitted the Project (the Project Owner) being given these responsibilities.

L. Consideration of risks

9.2.35 In its consideration of which Projects to support and the delivery of those Projects, the Government needs to consider the key risks set out in Section 7 (Risks), particularly those risks that go directly to:

[34]

M. Other potential funding sources

9.2.36 The Government should consider the extent to which Projects are eligible (or indeed already benefitting from) other existing Government funding sources (such as the New Zealand Green Investment Finance Limited fund and the PGF).

9.2.37 To the extent that a Project is eligible for funding under another source it may be an opportunity for Government to highlight that alternative source and use it to fund the Project.

9.3 Guidance on Providing Support

A. Mandating competent Government agencies

9.3.1 There are a number of core Government agencies that obviously possess the ability to successfully progress the procurement and delivery of the Projects they have submitted into the IRG process (**Experienced Government Procuring Agencies**). Examples of Experienced Government Procuring Agencies include:

(a) the New Zealand Transport Agency;

(b) KiwiRail;

(c) the Department of Corrections; and

(d) Kāinga Ora.

9.3.2 The IRG recommends that the Government mandate Experienced Government Procuring Agencies to progress the procurement and delivery of selected Projects and make provision for fast-tracking associated funding mechanisms to those agencies.

B. Alternative delivery agent/ mechanisms

9.3.3 In relation to any Project that is not being procured and delivered by an Experienced Government Procuring Agency (i.e., where the Government has concerns about the Project Owner's delivery model or capabilities), the Government should consider the appropriate organisation to be tasked with procuring and delivering the project and the delivery model or assistance that needs to be provided to the Project Owner. As noted above, this may require Government to insist that an entity other than the Project Owner be given those responsibilities or that an alternative delivery model be used (as a condition of receiving Government support).

9.3.4 This could extend to certain Government Projects being delivered with private sector assistance through a variety of procurement/ delivery models.

9.3.5 However, in considering the use of alternative procurement/ delivery models sight should not be lost of the fact that the range of models realistically available will, to an extent, be constrained by:

(a) the fact that this process is intended to result in construction commencing within 12 months on all selected Projects (making the negotiation and implementation of complicated or bespoke models challenging in the timeframes); and

(b) the CV19 environment, including the risks set out in Section 8 (Risks).

C. Selection of Projects and negotiating Government support

9.3.6 [34]

9.3.7 [34]

(a)

(b)

(i)

(ii)

(iii)

(iv)

9.3.8 [34]

D. Guiding Principles

9.3.9 [34]

(a)

(b)

[34]

9.3.10

9.3.11 [34]

(a)

(b)

(c)

(d)

(e)

(f)

(g)

(h)

9.3.12 A suggested set of Guiding Principles is set out in Schedule 4 (Guiding Principles for Recipients of Government Support).

E. Non-financial Government support

9.3.13 As noted above, a significant number of Projects requested assistance from Government in relation to:

(a) consenting; and

(b) procurement rules.

9.3.14 The Government asked the IRG what changes, if any, should be made to both consenting legislation and Government procurement rules to enable Projects to proceed at pace and release the associated benefits to New Zealand.

9.3.15 The IRG recommends Government consider the IRG's comments on these matters as set out in Section 7.4 and 7.5 respectively.

10 Next Steps

10.1 Introduction

10.1.1 We set out below our suggestions to Government for next steps following the Government's consideration of this Report and the Projects.

10.2 Next Steps to Confirm Selection of Projects

10.2.1 Government to confirm whether it needs any further information regarding Projects from the IRG and instruct the IRG to provide that information.

10.2.2 Once the Government has identified the Projects it wants to support (based on the information available to the Government), we recommend that the Government:

(a) communicate to the Experienced Government Procuring Agencies:

(i) the relevant Projects that they are to progress;

(ii) the Government's key expectations in relation to the delivery of those Projects; and

(iii) associated matters including funding arrangements.

(b) in relation to all other Projects the Government wants to support:

(i) appoint an agency to undertake the appropriate due diligence, a business case (where appropriate) and negotiation exercises recommended in this Report; and

(ii) provide clear guidance to that agency on the Government's expectations regarding:

- timeframes for the due diligence and negotiation exercises;
- extent of available Government support;
- minimum expected benefits;
- suitable procurement model and delivery agencies; and
- delegated authority and process for Government approval of any negotiated arrangements.

(c) confirm whether it intends to announce the Guiding Principles and, if it does, instruct an agency to further develop the Guiding Principles for approval by Government and implementation.

10.3 Fast-track Consenting Legislation

10.3.1 [34]

10.4 Rapid Procurement Response

10.4.1 [34]

10.5 Appointment of Delivery Agent

10.5.1 Where appropriate, we recommend that the Government appoint an agency or agencies to undertake or oversee the procurement and delivery of individual Projects where the Government has material concerns about the Project Owner's delivery model or capabilities that cannot be overcome by the appointment of appropriate resources by the Project Owner.

10.6 Continuing Oversight of Shovel Ready Programme

10.6.1 We recommend that the Government appoint an agency to have continuing oversight of the procurement and delivery of all Projects that benefit from Government support as a programme to ensure and oversee:

(a) delivery of agreed Government support;

(b) achievement of the benefits the Government expects in return for its support of Projects; and

(c) that Crown funds are appropriately applied to the purpose intended.

10.7 Communications

10.7.1 Following the provision of this Report to Ministers, the IRG will send out letters to all entities that submitted project information as part of this process.

10.7.2 The letter will confirm whether or not the project was included in the Project Lists in this Report. The letter will also provide an update on process and next steps.

10.7.3 The IRG has worked with the offices of Minister for Infrastructure and Minister for Economic Development to prepare the draft letters and will await confirmation from the Minister for Infrastructure before sending these letters out.

10.7.4 All media enquiries will be directed to the offices of the Minister of Infrastructure and the Minister for Economic Development.

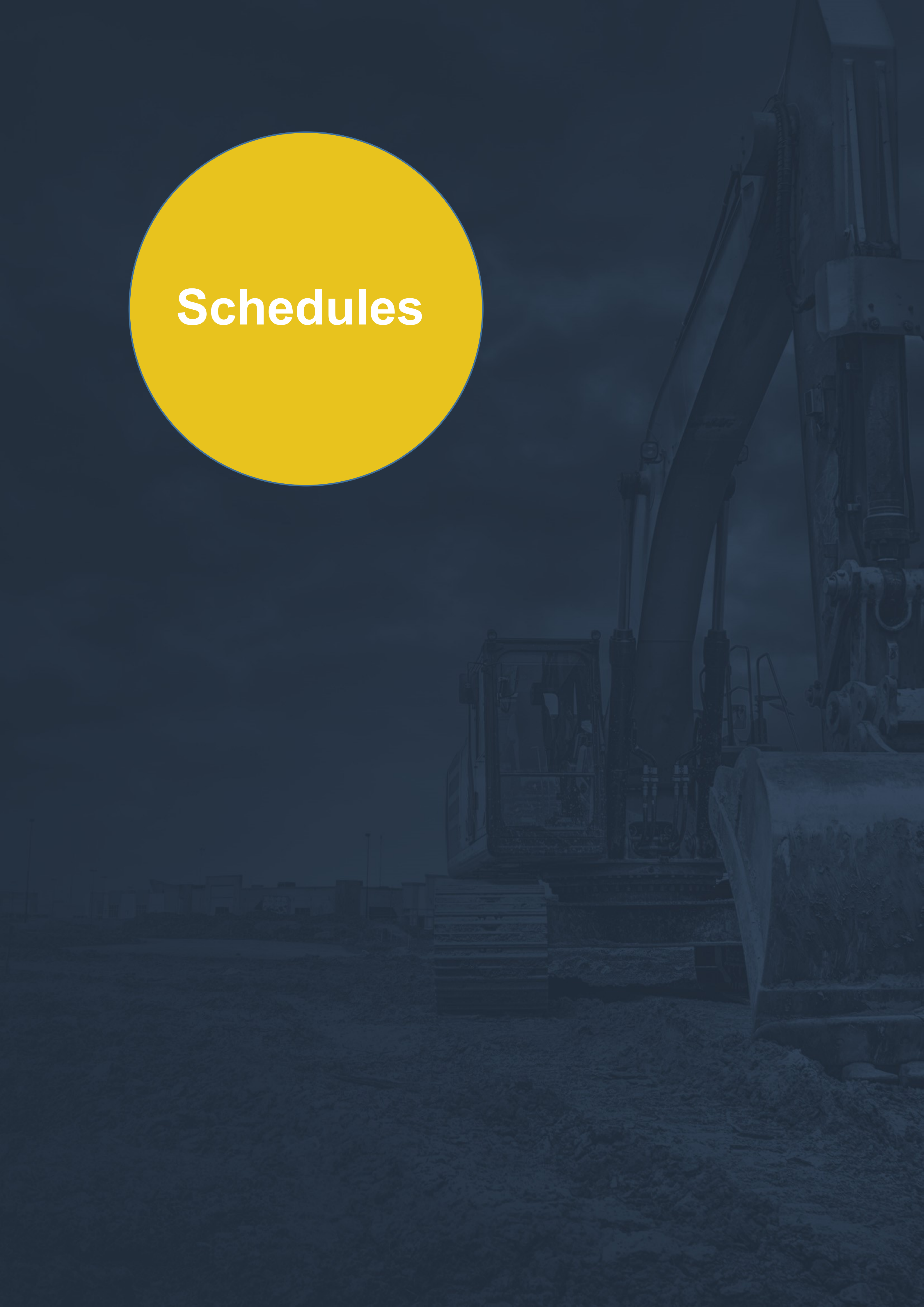
Glossary

Term	Definition
Alert Level	Alert levels under New Zealand's CV19 4-level alert system specifying measures to be taken against CV19 at each level.
Capex	Capital expenditure related to the Project.
CIP	Crown Infrastructure Partners Limited.
Construction Readiness Category	Construction Readiness Category A, Construction Readiness Category B or Construction Readiness Category C.
Construction Readiness Category A	Projects which currently are (or were) in the construction phase.
Construction Readiness Category B	Projects which have a high expectation of commencing the construction phase within the next six months (by 31 October 2020).
Construction Readiness Category C	Projects which could have been expected to commence the construction phase within the next 12 months (by 30 May 2021).
Construction Readiness Category D	Projects which are not in Category A, B or C.
Criteria 2 & 3 Score	The weighted average score between 1 (lowest) and 5 (highest) following the application of Criterion 2 and Criterion 3 (as described in Section 5.5).
Criterion	A criterion set out in Section 5.
Criterion 2: Direct Employment Benefit and **Criterion 2**	The Criterion set out in Section 5.4.
Criterion 3: National/ Regional Benefit and **Criterion 3**	The Criterion set out in Section 5.5.
CV19	COVID-19.
Economic Strategy Document	A document that is produced with the support of central Government in partnership between a Local Authority and regional stakeholders, which sets out the economic initiatives of the regional economy to which the relevant Local Authority relates, including any of the following: I. economic action plans; II. regional growth strategies; and III. economic development strategies.
Experienced Government Procuring Agencies	Core Government agencies that possess the ability to successfully progress the procurement and delivery of the Projects they have submitted into the IRG process.
Final Rating	The final rating score for a Project determined through the application of the Rating Criteria and the Methodology (as described in Section 5.7).
FTE	The average number of direct full time equivalents (FTEs) (based on a 40 hour week) working on the Project over the duration on the construction period (noting that the number of FTEs may vary week to week over the construction period).
General Review	The review exercise described in Section 6.6.
General Review Team	The individuals that performed the General Review.

Term	Definition
Government's Economic Plan	The Government's Economic Plan for a Productive, Sustainable and Inclusive Economy (September 2019).
Government Procurement Rules	The Government procurement rules published by MBIE (4th edition, effective from 1 October 2019), and any amendments to such rules.
Government Projects	Projects delivered by central Government.
Guidelines	The guidelines issued on 1 April 2020 which outlined the nature of the projects sought and the process that the IRG would follow (as set out in Schedule 1).
Initial Review	The review and moderation exercise set out in Section 6.4.
IRG	The Infrastructure Reference Group.
Leverage Adjustment	The adjustment made to the Criteria 2 & 3 Score set out in Section 5.6.
Local Authority and Local Authorities	Any Regional Council, Territorial Authority or Organisation.
MAR	"Money at Risk".
MBIE	Ministry of Business, Innovation and Employment.
Methodology	The methodology the IRG has adopted in order to present lists of Projects as set out in Section 5.
Moderation	The review and moderation exercise set out in Section 6.10.
Non-Government Project	Entities outside of central Government, including private sector, iwi and Local Authorities.
Organisation	Any company or entity that is a "council-organisation", "council-controlled organisation" or "council-controlled trading organisation" within the meaning of section 6 of the Local Government Act 2002.
PDU	The Provincial Development Unit, which administers the PGF.
PGF	The Government's Provincial Growth Fund.
PIF	A Project Information Form, or equivalent project information provided by Project Owners.
PWA	Public Works Act 1981.
Project	A project included in the Project List.
Project List	The list(s) of Projects set out in Annexures A and B of the Report.
Project Owner	An entity that submitted a PIF in relation to a project.
Proposed CV19 Fast-track Legislation	The proposed COVID-19 Recovery (Fast-track Consenting) Bill 2020 currently being developed by Government.
Rating Criteria	All the Criterion set out in Section 5.
Region and Regions	New Zealand wide (NZ), Northland (North), Auckland (Akld), Waikato, Bay of Plenty (BoP), Hawke's Bay (HB), Gisborne/ Tairawhiti (G/T), Taranaki, Manawatu-Whanganui (M-W), Wellington (Wgtn), Top of the South (ToS), Canterbury (Ctby), West Coast (WC), Otago and Southland/ Murihiku (S/M).
Regional Council	A "regional council" as listed in Part 1 of Schedule 2 of the Local Government Act 2002.
Regional Lead Benefit Review	The review exercise set out in Section 6.7.

Term	Definition
Regional Leads	The regional lead members of the Technical Review teams which undertook the Regional Lead Benefit Review.
Report	This report, prepared by the IRG for the Government and dated 18 May 2020.
RMA	The Resource Management Act 1991.
Sector	A sector listed in the table in Section 3.2.1. Details of the sub-sectors included in each Sector (for the purposes of this Report) can be found in Annexure A.
Sector Expert Review	The review exercise set out in Section 6.8.
Sector Experts	The experts described 6.8.1.
Support Clarification Request	The short form request for clarification of requested Government financial support and non-financial assistance sent to Project Owners on 3 May 2020 as further set out in Section 4.2.3.
Technical Review	The review exercise set out in Section 6.5.
Territorial Authority	A city council or a district council as listed in Part 2 of Schedule 2 of the Local Government Act 2002.
The Construction Sector Accord	A joint commitment from Government and industry to work together to create a high performing construction sector for a better New Zealand.
Weighting	The relative importance between Criteria 2 and Criteria 3 used to determine the Criteria 2 & 3 Score as shown in Section 5.2.

Schedules



Schedule 1

Guidance on Nature of Projects

‘Shovel Ready’ Infrastructure Projects: Project Information Guidelines

Introduction

The Government is seeking to identify *‘shovel ready’* infrastructure projects from the public sector and (where projects can be repurposed for public benefit) the private sector that have, in each case, been impacted by COVID-19.

Ministers have advised that they wish to understand the availability, benefits, geographical spread and scale of *‘shovel ready’* projects in New Zealand. These projects will be considered in the context of any potential Government response to support the construction industry, and to provide certainty on a pipeline of projects to be commenced or re-commenced, once the COVID 19 Response Level is suitable for construction to proceed.

The Infrastructure Industry Reference Group (Reference Group), chaired by Mark Binns, is leading this work at the request of Ministers, and is supported by Crown Infrastructure Partners Limited (CIP).

CIP is now seeking project information from relevant industry participants on projects/programmes[1] that may be suitable for potential Government support.

These Guidelines outline the approach CIP will adopt in categorising the project information it receives.

Mark Binns released a letter to the sector on 25 March 2020 in connection with this information gathering process and the types of projects to which it would relate. The four criteria identified in the letter were:

- Criteria 1: The extent to which the project is construction ready now or within a realistic 6 - 12 months - ***construction readiness;***
- Criteria 2: the project is of an infrastructure nature, either horizontal or vertical, and that the project is ***public or regional benefit infrastructure;***
- Criteria 3: Whether the project is of a ***size and has material employment benefits*** (i.e., $10m+); and
- Criteria 4: The ***overall benefits and risks*** of the project.

As an initial task the Reference Group has been asked to prepare a report to Ministers on infrastructure projects/programmes that are ready for construction and that could, if the Government deemed it appropriate, be deployed as part of a stimulatory package.

[1] We refer to “projects” throughout. This term includes programmes of work in all cases.

To support this process, CIP will provide a report to the Reference Group summarising the projects and their key attributes, categorised in terms of the criteria referred to above based on the information provided by, and on any subsequent discussions with, participants.

It should be noted that the full impact of COVID 19 on the economy will not be known for some time, and the Government's decision to accelerate any construction-related spend will be determined by its assessment of priorities at the time. This information is being sought in good faith, but no undertaking can be made that the criteria or other considerations will not change or that any projects coming forward from the Reference Group will be accelerated, or any of the Reference Group's recommendations adopted. This situation we all find ourselves in is truly dynamic.

Process

The process that CIP will follow is outlined below.

Step 1: Receipt of project information

CIP has prepared a Project Information Form (PIF) to enable relevant industry participants to nominate project(s) for consideration. All responses are to be provided using the attached PIF and sent to: projectinformation@crowninfrastructure.govt.nz **by 5.00pm on Tuesday 14 April 2020.**

If you are providing PIFs for more than one project, please also provide, in your covering email, your own views on the relative priorities of these projects.

Step 2: Review and Categorisation of Projects

Step 2A: Criteria 1, Construction Readiness Assessment

CIP will consider the ***construction readiness*** of the project based on the PIF. We propose to adopt the following categorisation:

- **Category A -** Projects which currently are (or were) in the construction phase, but have been put on hold due to COVID 19 and are likely not to progress, or to progress at a much slower rate or scale/scope, if not supported post COVID 19.
- **Category B -** Projects which have a high expectation of commencing the construction phase within the next six months (by 31 October 2020), but are unlikely to do so due to COVID 19.
- **Category C -** Projects which could have been expected to commence the construction phase within the next 12 months (by 30 May 2021) but are unlikely to do so due to COVID 19.

  This may include projects currently in a procurement phase including where:
  - a suitable Tender has been completed;
  - a Tender Evaluation is in progress;
  - a Request for Tender is in the market; or
  - the principal is about to put out a Request for Tender to the market.

  This may also include maintenance and asset replacement projects which require little design or consenting, such as local/regional roading and three waters projects.

Step 2B: Project classifications: infrastructure type, value and employment benefits

Criteria 2: Consideration will be given to whether the project has a ***public or regional benefit*.** CIP will categorise projects based on the following categories:

- Transport
- Three waters
- Buildings and Structures
- Other infrastructure

The infrastructure will be classified as

- Critical infrastructure
- New infrastructure
- Replacement/refurbished infrastructure
- Repurposed infrastructure

Criteria 3: Whether the project is of a ***size and has material employment benefits*** of $10m+.

While we have referred to a minimum project size of $10m, we recognise that this might be too high a threshold for some of the smaller regions or districts in NZ. Note that this could include programmes of work, for example a series of road maintenance/resealing projects or a series of three-water pipe renewals/replacements. PIF's for projects under the $10m threshold in smaller (by population) territorial authorities' areas can be submitted to CIP and CIP will provide them to the Provincial Development Unit (PDU) for consideration given the PDU is best equipped to consider those projects.

The threshold would remain for larger regions.

Step 2C: Overall Benefits national and regional

CIP will also categorise by the ***overall benefits* of** the project. The matters which will be considered under this heading include:

- Economic/Social/Environmental benefits; and
- Regional/Nationwide benefits.

This will include any project, either public or private, that will benefit the wider public or a particular regional area due to its nature. Given the breadth of infrastructure it is acknowledged this may include private sector projects that demonstrate wider public benefits. Examples include (but are not limited to) transport (including public transport, roads, cycling infrastructure and bridges), wastewater treatment, potable water, stormwater, schools, hospitals, tertiary education, community facilities, energy, regionally or nationally significant infrastructure such as airports and ports or infrastructure that supports our key industries such as tourism and agriculture. Projects that have a strong regional benefit will also be considered.

Ministers will be particularly interested in investments that modernise the economy and set it up to enhance sustainable productivity into the future rather than those that replicate the current economic arrangements.

In line with Treasury's Living Standards Framework[2] and Sustainable Development Goals[3] consideration will also be given at a high level to whether a project brings real value (in an economic, social and/or environmental sense) to New Zealand as a whole or the region in which it is located.

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[2] https://treasury.govt.nz/information-and-services/nz-economy/higher-living-standards/our-living-standards-framework

[3] https://www.mfat.govt.nz/en/peace-rights-and-security/work-with-the-un-and-other-partners/new-zealand-and-the-sustainable-development-goals-sdgs/

The Government Policy Statement on land transport, and the priorities that it establishes, will also be taken into account

These benefits should be readily identifiable and determined by an assessment such as a Business or Investment Case that supported the decision to deliver the project.

Please note you should not submit any project that does not demonstrate some wider public benefit.

Step 2D: Project risks

Risks will be categorised in three groupings:

- risk of the project not commencing within the advised timescale;
- risk the project will not be completed on time, to cost or to specification; and
- risk the project will not obtain the benefits outlined in the Overall Benefits section above.

Each risk should be ranked as high, medium or low and include a short explanation as to why it was given that risk rating.

Step 2E: Impacts of Covid-19

We seek to obtain a general understanding of the impacts that COVID 19 has had on the project. We are therefore seeking information in relation to:

- the likelihood of that project recommencing once the COVID 19 Response Level is suitable for construction to proceed, whether it would recommence but required to be scaled down or stopped indefinitely;
- an estimate of the financial implications of COVID 19 on the project; and
- confirmation whether the project has already, or is likely to benefit from already announced Government led financial support for businesses (e.g. wage subsidy scheme/business finance guarantee scheme).

Step 3: Clarifications

CIP may seek any additional clarification on the project information received, and will require responses no later than 5 pm on Monday 27 April 2020.

Step 4: Next steps

CIP and the Reference Group will provide information on the projects to Government.
CIP intends to contact all parties that provide Project Information once Government has advised what the next steps are.

Use of information

a. *Each party that completes a PIF agrees that the information it provides may be used or referred to in preparation of reports to the Reference Group and central Government and for other associated purposes. Any such reports may be publicly disclosed (in whole or in part). Publically released versions of any such reports will be redacted or anonymised to exclude any specific information identified, in the PIF response, as being commercially sensitive. Information may also be disclosed as required by law, including under the Official Information Act 1982.*

b. *The request for project information is not a Notice of Procurement nor does it form part of any procurement process.*

Schedule 2

Fast-track Consenting Legislation

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Schedule 4

Guiding Principles for Recipients of Government Financial Support

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Schedule 5

Initial Ratings – Detailed List

Sector Classification	Description	Government's Economic Plan[1] category	Strength of link	Budget Policy Statement 2020[2] category	Strength of link	Rating
Education - Primary/Secondary	Schools and teaching facilities for primary/secondary education	People	Very strong	Child Wellbeing / P&M Wellbeing / Māori & Pacific	Very strong	4.0
Social housing	Residential development (or bulk housing infrastructure) where the primary purpose is provision of social housing (excludes affordable housing)	People	Very strong	Child Wellbeing / P&M Wellbeing / Māori & Pacific	Very strong	4.0
Three waters – H&S	Potable waters infrastructure where the primary purpose is to meet new water regulations for public health	Productivity / People	Strong	Child Wellbeing / P&M Wellbeing	Very strong	4.0
Healthcare - Public	Public hospital or medical facilities (including hospice mental health facilities and radiology/Xray facilities etc)	Productivity / People	Strong	Child Wellbeing / P&M Wellbeing / Māori & Pacific	Very strong	4.0
Public transport	Public transport projects (includes commuter/light rail, busways/stations, ferries)	Productivity / Energy	Very strong	Just transition / P&M Wellbeing	Very strong	4.0
Green energy	Energy sector infrastructure which supports "just transition" (e.g., solar, wind, hydro generation)	Energy	Strong	Just transition	Very strong	4.0
Affordable housing	Residential development (or bulk housing infrastructure) where the primary purpose is provision of affordable housing (excludes social housing)	People	Very strong	Child Wellbeing / P&M Wellbeing / Māori & Pacific	Strong	3.5
Social housing improvements	Heat and energy efficiency programs directed at social housing	People	Very strong	Child Wellbeing / P&M Wellbeing / Māori & Pacific	Strong	3.5

[1] https://www.beehive.govt.nz/sites/default/files/2019-09/Economic%20Plan.pdf
[2] https://treasury.govt.nz/publications/budget-policy-statement/budget-policy-statement-2020-html

Sector Classification	Description	Government's Economic Plan[1] category	Strength of link	Budget Policy Statement 2020[2] category	Strength of link	Rating
Māori interest	Community infrastructure with a specific Māori focus including development of Marae (and associated facilities)	Māori and Pacific	Very strong	Māori & Pacific / Child Wellbeing / P&M Wellbeing	Strong	3.5
Climate resilience	Infrastructure where the primary purpose is climate resilience (includes stop banks, flood protection, sea walls etc)	Land / Productivity	Moderate	Just transition	Very strong	3.5
Environmental infrastructure	Infrastructure aimed at protecting the environment, achieving NZ's zero carbon objectives or managing natural resources (including replacing coal fired boilers with electricity etc), excludes waste related projects	Land / People	Moderate	Just transition	Very strong	3.5
Waste	Infrastructure used to process/sort/divert waste or focused on achieving a circular economy (includes waste to energy plant, resource recovery centres)	Land	Moderate	Just transition	Very strong	3.5
Three waters - General	Three waters or other water related infrastructure with a primary purpose other than catering for urban development, irrigation/water shortages or health and safety	Land	Very strong	P&M Wellbeing	Strong	3.5
Emergency services	Infrastructure supporting Police, FENZ and Ambulance	Productivity / People	Moderate	P&M Wellbeing	Very strong	3.5
Rail	Freight/heavy rail (includes above and below track infrastructure)	Productivity / Energy	Very strong	Just transition / P&M Wellbeing	Strong	3.5
Urban regeneration and residential development	Residential development including broader urban development / mixed development (e.g., education, commercial, retail, hotels, office space) includes associated infrastructure (e.g., roading and three waters)	Housing	Very strong	P&M Wellbeing	Moderate	3.0
Healthcare - Private	Private hospital or medical facilities (including hospice mental health facilities and radiology/Xray facilities etc)	Productivity / People	Strong	Child Wellbeing / P&M Wellbeing	Strong	3.0
Education - Tertiary	Tertiary education facilities (includes university teaching facilities, further learning, research and development)	Productivity / People	Very strong	P&M Wellbeing	Moderate	3.0
Digital connectivity	Ultra-fast broadband network infrastructure (includes fibre, wireless broadband, backbone fibre links)	Productivity	Strong	Future of work	Strong	3.0
Justice and defence	Infrastructure supporting defence, security intelligence, prison population, courts, offenders rehabilitation etc	Productivity / People	Moderate	P&M Wellbeing	Strong	3.0

Sector Classification	Description	Government's Economic Plan[1] category	Strength of link	Budget Policy Statement 2020[2] category	Strength of link	Rating
Distribution centres	Distribution centres associated with freight / heavy rail	Productivity	Strong	Just transition	Strong	3.0
Public transport - Shared use	Cycleways and footpaths	Productivity / Land	Very strong	P&M Wellbeing	Moderate	3.0
Port	Port infrastructure and associated facilities/services	Productivity	Very strong	N/A	N/A	3.0
Aged care	Residential care for elderly or disabled individuals (includes medical facilities where the primary purpose is to support the provision of aged care)	People	Moderate	P&M Wellbeing	Strong	3.0
Convention /event centre	Convention/event centres and associated facilities	Productivity / People	Very strong	N/A	N/A	3.0
Film studio	Film Studios and other filmography related facilities/services	Productivity / People	Very strong	N/A	N/A	3.0
Education - Ancillary	Facilities which support tertiary education (includes student accommodation)	People	Strong	P&M Wellbeing	Moderate	2.5
Town centre regeneration	Projects where the primary purpose is regenerating town centres	Land	Strong	P&M Wellbeing	Moderate	2.5
Community facilities – Operating	Community facilities that have a material ongoing operational or revenue aspect (e.g., library, museum, pools, community halls etc)	People	Strong	P&M Wellbeing	Moderate	2.5
Roading – H&S	Local road or state highway projects primarily relating to health and safety improvements	Productivity / People	Strong	P&M Wellbeing	Moderate	2.5
Airport	Core airport infrastructure (excludes ancillary services)	Productivity	Strong	N/A	N/A	2.5
Irrigation/water storage	Water related infrastructure with a primary purpose of addressing water shortages in drought prone areas or providing irrigation	Productivity / Land	Strong	N/A	N/A	2.0
Roading – General	Roading projects with a primary purpose other than enabling urban development and/or health and safety improvements	Productivity / Land	Strong	N/A	N/A	2.0
Tourism	Infrastructure to support industry related to domestic and international visitors (e.g., vehicle parking, freedom camping grounds, DOC tracks, attractions)	Productivity	Strong	N/A	N/A	2.0

Sector Classification	Description	Government's Economic Plan[1] category	Strength of link	Budget Policy Statement 2020[2] category	Strength of link	Rating
Agriculture	Infrastructure supporting the primary sector (e.g., growing crops, livestock farming, fishing)	Productivity / Land	Strong	N/A	N/A	2.0
Community facilities – Passive	Community facilities or reserves that do not have a material operating or revenue aspect (e.g., sports fields, town centres, parks)	People	Moderate	P&M Wellbeing	Moderate	2.0
Social associated facilities	Supporting facilities to social infrastructure (e.g., hospital car parks)	People	Moderate	Child Wellbeing / P&M Wellbeing	Moderate	2.0
Commercial property	Property development for business activities (e.g., retail, office space, manufacturing/industrial property, hotels)	Land	Moderate	N/A	N/A	1.5
Airport - Ancillary	Non-core airport facilities/services	Productivity	Moderate	N/A	N/A	1.5
Manufacturing and industrial	The production and distribution of goods (this category includes businesses in the industrial and manufacturing sector)	Productivity	Moderate	N/A	N/A	1.5
Other utilities	Electricity and gas networks (includes distribution and transmission networks)	Productivity	Moderate	N/A	N/A	1.5

Schedule 6

Variables in the Project Database

Bold = those variables presented in the Annexures A&B

Sources

PIF = Information provided in the Project Information Form, or equivalent project information provided by Project Owners.

Support Clarification Request = Information provided by the Project Owner in the short form request for clarification of requested Government financial support sent to Project Owners on 3 May 2020 as further set out in Section 4.2.3.

Review Output = Information as a result of the review process outlined in this Report.

Note that in cases where information was not provided or was clearly presented in error, a best estimate was used based on the judgements of the Technical Review and Moderation.

Source	Variable	Description
PIF	Response date	Date application received
PIF	**Project Name**	**Name and title of the project**
PIF	**Organisation**	**Name of the applicant and categorisation of the organisation entity (e.g., private, trust & charities etc)**
PIF	Contact details	Key contact details and role
PIF	Project Description	A brief description of the scope of the project
PIF	Territorial authority	Territorial authority district the project applies to
PIF	**Region**	**The Region the project is based in**
PIF	Economic Sector	Economic sector the project is relevant to (e.g., Energy, Tourism, Construction etc)
PIF	Type	Project type (e.g., New infrastructure, critical infrastructure or replacement infrastructure)
PIF	Total cost (NZ$'m)	Total cost of the project and high level cost break down of major project component
PIF	Construction jobs	Number of construction jobs the project is anticipated to create
PIF	Operation / wider jobs	Other jobs the project is anticipated to create
PIF	Intended funding	How the project is/was intended to be funded
PIF	Applied for government funding	Whether the applicant has applied for previous government funding before. If so, the government body, contact and outcome
PIF	Project status	A general description of the current project status
PIF	Status category	Three categories of construction readiness (A. Under construction; B. Within 6 months; C. Within 6-12 months)
PIF	Milestones	Description of the status of key milestones; — Procurement — Detailed design — Designations / Consents — Land Acquired — Business Case
PIF	Project benefits	A high level overview of project benefits
PIF	Employment contribution	Number of employment opportunities as a result of the project

Source	Variable	Description
PIF	Key risks	A. The risk of the project not commencing within the advised timescale B. The risk the project will not be completed on time, to cost or to specification C. Risk the project will not realise the benefits outlined above
PIF	COVID-19 impact on project	A high level overview of COVID-19 impact on the project
PIF	Benefit from announced Govt support	Statement whether the project benefited from Government support already
PIF	Support details	Level of support received if the project benefited from announced Government support
PIF	What the Government can help with	A high level overview of top 2-3 ways the Government can help
Review output	**Financial Assistance amount ($m)**	**The dollar amount of Financial Assistance requested by the submitter as part of the Support Clarification Request but in some cases was moderated so that it did not exceed the Capex, or was assumed to equal Capex where no information was provided**
Support Clarification Request	Financial Assistance Type	Form of financial assistance: **Guarantee,** Grant, Concessionary Loan, Commercial Loan, Equity, Other
Support Clarification Request	**Non-Financial Assistance Type**	**Fast-tracking building consents, Non-Specified Consents, Other, Other local or central government prioritisation, Changes to procurements practices, Land acquisition (including PWA), Fast-tracking resource consents, Tax or other subsidy**
Review output	**Sector**	**High level sector (Social, Transport etc)**
Review output	**Sub-sector**	**Sub-sector (as per Criteria 3)**
Review output	Readiness Assessment (pre-regulatory change)	Three categories of construction readiness based on professional review (A. Under construction; B. Within 6 months; C. Within 6-12 months)
Review output	**Readiness Assessment (post-regulatory change)**	**Three categories of construction readiness based on professional review assuming there is regulatory change (A. Under construction; B. Within 6 months; C. Within 6-12 months)**
Review output	Construction Programme/Period.	Construction Programme/period as stated in the PIF in Months
Review output	Reasonableness of project duration.	Based on the reviewer's judgement of the stated constriction programme and assessment of the project completion risk
Review output	**Moderated Construction Programme/Period.**	**Construction Programme/period moderated for the reviewers' assessment of reasonableness above**
Review output	**Total Capex ($m) and breakdown**	**Total Capex costs associated with the project and high level breakdown**
Review output	Cost confidence.	Reviewer's confidence level based on the level of detail provided in the Capex breakdown
Review output	Confirm reasonableness of capital cost estimate	Reviewer's judgement of the Capital Cost Total, the provided cost breakdown and cost confidence
Review output	Moderated Capital Cost	Capital Cost Total moderated for the reviewers' assessment of reasonableness above

Source	Variable	Description
Review output	Stated construction phase employment.	Number of FTEs employed during construction phase
Review output	Confirm reasonableness or direct employment estimate.	Reviewer's judgement on the direct employment estimate
Review output	**Moderated Employment (FTE)**	**Construction employment (FTE) moderated for (i) the reviewers' assessment of reasonableness above and (ii) on an industry benchmark basis**
Review output	Impact of COVID and requested Government assistance has had on delivery of the project.	Reviewer's view based on project information given
Review output	Vertical or Horizontal project.	Reviewer's view based on project information given

Schedule 7

Economic Impact of Covid 19

Economic impact of COVID-19 on the New Zealand economy and implications for the regions

for Infrastructure Reference Group

May 2020

Infometrics

Economics put simply

Authorship

This report has been prepared by Brad Olsen, Andrew Whiteford, and Andrew Beattie, with the input of David Friggens, Gareth Kiernan, and Dr Adolf Stroombergen.

Email:
[35]

Table of contents

Executive summary

Examining the impact of COVID-19 on NZ economy and the regions

Infometrics has been asked by Infrastructure Reference Group (IRG) to examine and report on the impact of COVID-19 on different parts of New Zealand. This report details some of the key industry drivers of local economic activity, how different regional economies will perform throughout the pandemic and associated economic downturn, and finally some recommendations on some areas to best target for investment.

The greatest economic shock in living memory

COVID-19 presents the greatest economic shock in living memory, and although the full extent of the shock is still to play out, it is clear that the economy will be irrevocably changed by this pandemic. Infometrics is currently forecasting an 8% contraction in economic activity in the New Zealand economy over the year to March 2021. This contraction is set to be at least four times larger than anything seen before. We expect more than 250,000 jobs to be lost over the year, a decline of nearly 10%. Under these conditions the unemployment rate will push towards double digits.

We describe our key assumptions on which our modelling is based.

The outcomes of various forces are different for regional areas

New Zealand's regional and local economies encompass a range of employment concentrations and structural differences. These differences play a key part in determining the expected economic fortunes across different areas. Although many regional trends can be broadly explained by contribution from tourism, construction, or the primary sector, there are other forces that can play key localised roles.

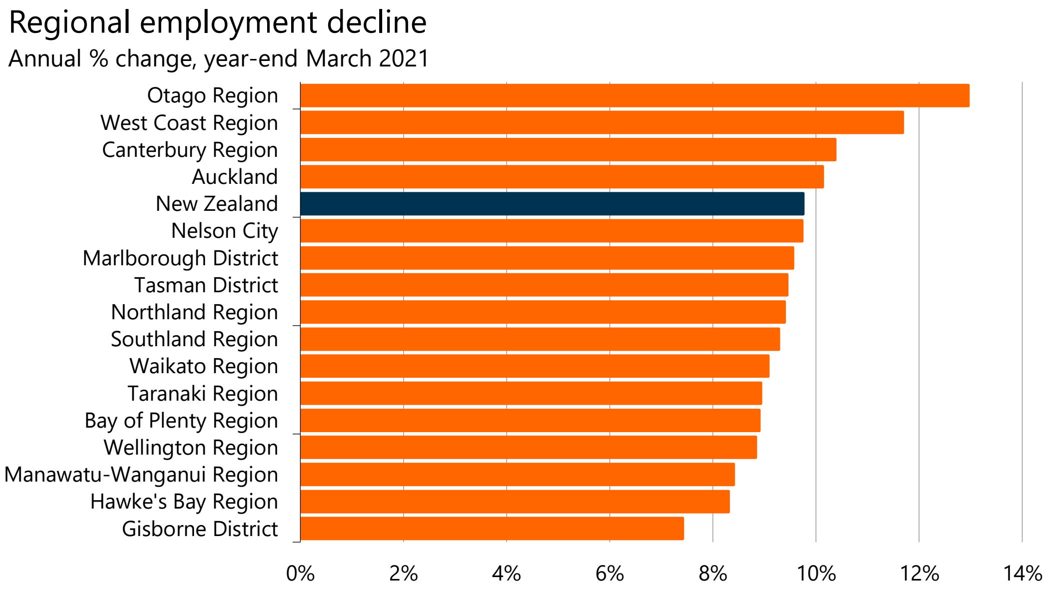
Given the importance of tourism and tourism-related construction, we expect GDP in Otago to decline by more than 10% over the year to March 2021. West Coast GDP is expected to decline by 9.5%, similarly due to a high concentration of international tourism activity. Meanwhile, regions with large agricultural and food processing sectors including Hawke's Bay, Manawatu-Whanganui, and Gisborne are expected to experience much less severe declines.

Focusing on territorial authorities, the top five declines in output are expected in the South Island. We expect GDP in Queenstown-Lakes and Mackenzie District to decline by more than 20%.

Job losses, relative to the size of the workforce, demonstrate some of the areas in greatest need of additional investment to reinvigorate the local economy. Although areas with high concentrations of tourism and construction will take the hardest relative hit, the largest job losses will occur in the large metropolitan areas. We expect more than 130,000 jobs to lost in Auckland, Wellington and Christchurch cities. A full list of employment declines by local council area is set out in Appendix B.

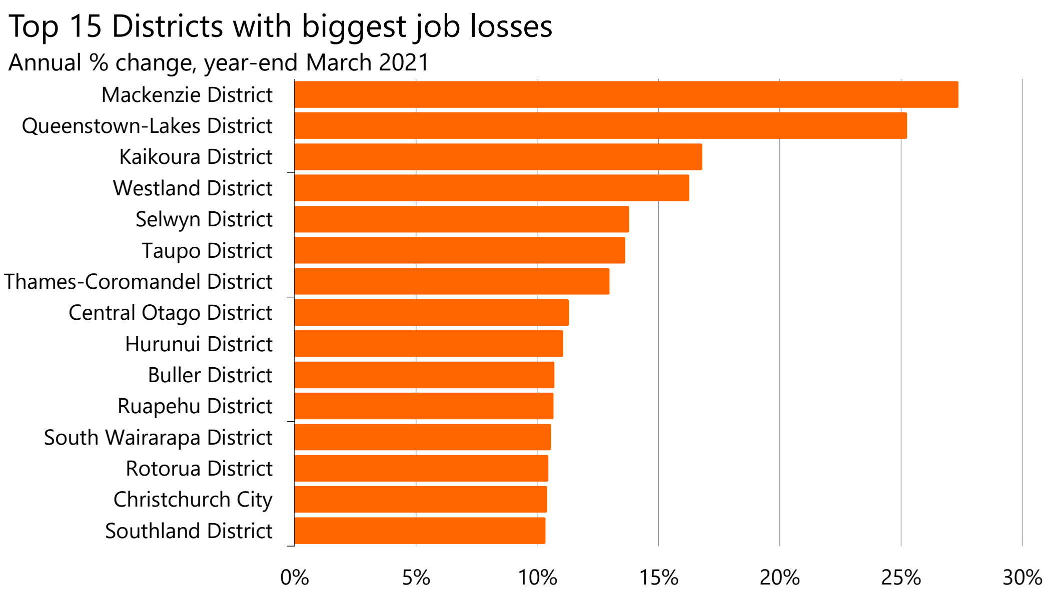
Graph 1 shows the expected regional decline in employment across New Zealand over the March 2021 year. A more detailed regional assessment is outlined on Page 24.

Graph 1



Graph 2 shows the top 15 local declines in employment across New Zealand. Further details are outlined on Page 25.

Graph 2



Key areas should be focussed on for additional investment and assistance

Our regional economic analysis provides an evaluation of the expected economic declines across New Zealand's regions and local areas. Some areas stand out as requiring additional investment and assistance.

- **Queenstown**'s huge reliance on tourism will substantially reduce economic activity in the area. Lower tourism activity is expected to see a quarter of jobs lost in the District.
- Aligned to this tourism focus, the **West Coast** also clearly demonstrates a need for additional investment, with a significant concentration of tourism-based activities in the regional economy.
- **Parts of the Lower South Island**, with a focus on southern Canterbury around **Selwyn**, and support for investment around **Tīmaru** and **Mackenzie** to provide additional stimulus to counter declines in tourism and construction.
- **Northland Region** appears as an area with a high concentration of construction employment which is set to see a considerable fall in building activity. With Northland already facing higher levels of unemployment, and the highest rate of Jobseeker Support claims, additional investment is likely required.

  Alongside lower construction activity, higher tourism exposure in the Far North, the concentration of the Whāngārei economy on the Marsden Point Refinery, and continued drought concerns highlight the potential for additional investment in water storage options, alongside evaluation of other projects such as the proposed Dry Dock in Whāngārei.
- The **metropolitan areas** will not be hit as hard as the above areas in relative terms, but the sheer size of metropolitan workforces means that the majority of job losses will be in the main centres, on a total employment basis.

Some industries will be hit hardest

The COVID-19 pandemic and resulting economic downturn will impact industries differently. We expect the fortunes of regional economies to be determined by their relative exposure to a range of key industries.

The impact of the economic downturn will be felt most keenly by the tourism sector[1]. This translates through to the accommodation and food services industry showing the greatest loss in employment, with just over 56,000 jobs expected to be lost. Retail and wholesale trade are also negatively affected by the loss of tourism activity generally, as well as lower household spending due to job losses and low consumer confidence, with more than 44,000 jobs expected to be lost. Lower house prices and lower drivers of building activity is set to impact the construction industry, which is expected to lose around 29,000 jobs.

[1] Tourism is not defined as a unique industry. It comprises parts of various industries including accommodation, food services, transport and retail trade.

In the report we outline the main drivers behind the impact on each of the 18 broad industry categories.

We focus on tourism….

With foreign tourism arrivals expected to decline by 91% and domestic tourism by 21% the impact on tourism is the single biggest driver of economic decline in the regions. Tourism has become a critical component of New Zealand's economic fortunes in recent years, with some regional areas having a heavy reliance on tourism activity.

Infometrics expect more than 48,000 jobs to be lost in the tourism sector over the year to March 2021. The biggest losses are expected in Auckland and Otago regions (-13,000 and -7,500, respectively). However, the impact will be most severe in parts of the country in where tourism employment makes up a large portion of total employment. Job losses in tourism alone will account for a 20% decline in employment in Mackenzie District and 19% in Queenstown. Other districts experiencing large overall declines in employment due to tourism job losses are Westland (13%) and Kaikoura (13%).

…. and construction

Construction has been the fastest growing industry over the past five year and is a key industry in many parts of the country. The expected decline in construction will impact some regional areas more than others. Nationally, we estimate the value of residential building work put in place to decline by 19% and the value of non-residential work put in place to decline by 18% over the year to March 2021. Residential consents are set to decline by 35% over the year to March 2021, with a 17% drop in non-residential consents.

In contrast, prospects for civil construction are positive outside Level 4 lockdown conditions, with a greater share of funding stemming from public funds (central or local government investment). We anticipate that there is limited scope to significantly bolster the volume of infrastructure activity in the short-term.

The decline in construction employment in some parts of the country will have a significant impact on total employment. The decline will leave spare capacity in the construction industry in these areas. Over the next five years (2021-25), residential consent volumes will be a cumulative $23b lower than the total work over the last five years (2016-20). Even with already announced infrastructure investment factored in, construction volumes will be $15.5b lower over the next five years compared to the previous 5 years.

Northland comes out as the hardest hit region for employment declines, with 1.9% of the region's pre-pandemic total workforce expected to be lost due to reduced construction activity. Other areas, like Otago are easier to immediately interpret, with lower tourism activity in Queenstown a driving factor behind the Otago region's decline. Mackenzie District is expected to lose nearly 8% of total employment and Selwyn more than 7%.

Targeting effective support

Infometrics has been asked by Infrastructure Reference Group (IRG) to examine and report on how the economic downturn from COVID-19 will impact different parts of New Zealand. These insights will be used to inform the Government's approach to investment and support as the economy is rebuilt.

To best target interventions and achieve the greatest return on investment, understanding the key challenges and expected fortunes of different parts of New Zealand is important.

This report details some of the key industry drivers of local economic activity, how different regional economies will perform throughout the COVID-19 pandemic and associated economic downturn, and finally some recommendations on some areas to best target for investment.

The greatest economic shock to New Zealand in living memory

COVID-19 presents the greatest economic shock in living memory, and although the full extent of the shock is still to play out, it is clear is that the economy will be irrevocably changed by this pandemic. The speed with which the economic outlook changed during March far exceeded anything experienced during the Global Financial Crisis (GFC) of 2008/09.

Infometrics is currently forecasting an 8% contraction in economic activity in the New Zealand economy over the year to March 2021, with most of the decline occurring in the June 2020 quarter due to the Level 4 lockdown. This contraction is set to be at least four times larger than anything seen before, so there is understandably considerable scope for error in this estimate.

We expect more than 250,000 jobs to be lost over the year to March 2021, a decline of nearly 10%. Under these conditions the unemployment rate will push towards double digits.

By March 2022, we expect quarterly GDP to be 6.6% below its December 2019 level. We estimate the unemployment rate will peak at 9.5% in the September 2021 quarter, and will remain above 8% until the December 2023 quarter. In addition, underemployment is set to rise, while some of the unemployed will drop out of the labour force or seek out education opportunities in order to reskill. These factors will contribute to a decline in the labour participation rate, which we predict could fall to its lowest level since 2001.

Our key assumptions

We have made the following assumptions when modelling the effects of the COVID-19 pandemic, the economic downturn, and the government's policy responses on the New Zealand economy.

- **Lockdown is 4½ weeks at Level 4 and 2 weeks at Level 3** - we have based our industry employment and output modelling on Level 4 being in place for 4½ weeks and Level 3 being in place for two weeks, with implicitly lower economic activity throughout the rest of the period.

- **Economic activity is constrained across the entire economy** - we estimate that, nationally, approximately 65% of economic activity can take place under Level 4. This estimate includes people that can work from home and those people working in essential services. Under Level 3, our estimate of potential economic activity taking place rises to 82%.

- **Global demand for food products will hold up but non-food exports will take a hit** – people still need to eat during a recession, which will limit the reduction in our food exports. We have allowed for a 16% contraction in non-food manufacturing export volumes over the coming year, and a 9.5% reduction in international demand for unprocessed forestry exports such as logs.

- **Foreign tourism tanks** – we have estimated a 91% reduction in foreign tourist spending in New Zealand over the coming year, and a similarly sized reduction in New Zealand tourists spending money overseas.

- **Domestic tourism spending will drop** – despite more New Zealanders choosing to have domestic holidays rather than travel overseas, we estimate a 21% decline in domestic tourism spending from the previous year.

- **International education revenue halves** – we estimate the number of international students at schools and tertiary education provider this year to be 79% of normal levels and predict a 49% reduction in international education revenue during the year to March 2021.

- **Domestic education demand will increase** – we have allowed for a lift in total demand for tertiary training from domestic students over the coming year of 8.3%, which is similar to what we saw following the GFC.

- **The housing market takes a hit** – our assumptions include an 11% drop in average house prices nationally between mid-2020 and the end of 2021.

- **Construction is also hit hard** – the housing market downturn will drag down the rate of residential construction nationally by nearly 20%, while non-residential construction activity will decrease by a similar magnitude. In contrast, prospects for civil construction are positive outside Level 4 lockdown conditions.

- **Government comes to the party** –our modelling includes a $10b wage subsidy scheme and a further injection of $2.5b through a one-off increase in social welfare benefits of $25 per week.

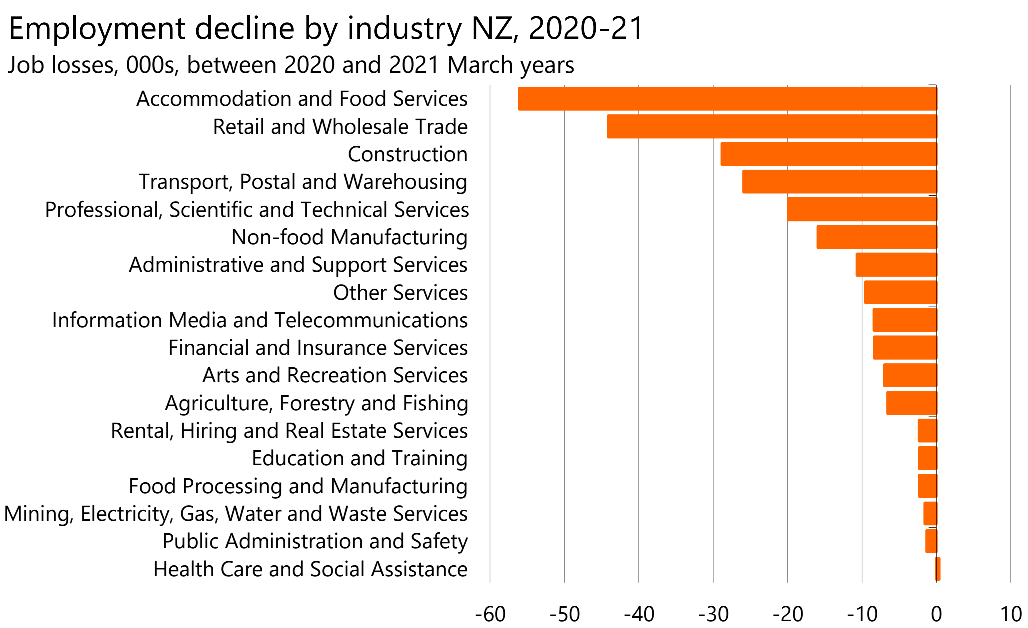
Industry impacts will vary

The COVID-19 pandemic and resulting economic downturn will impact industries differently. For some industries, demand for goods and services will hold up. Others will see demand evaporate. Supply chains are being substantially disrupted both domestically and globally, which will result in a reorientation of New Zealand's economy.

More than 250,000 jobs to be lost

Graph 3 outlines the expected job losses by industry over the year to March 2021.

Graph 3



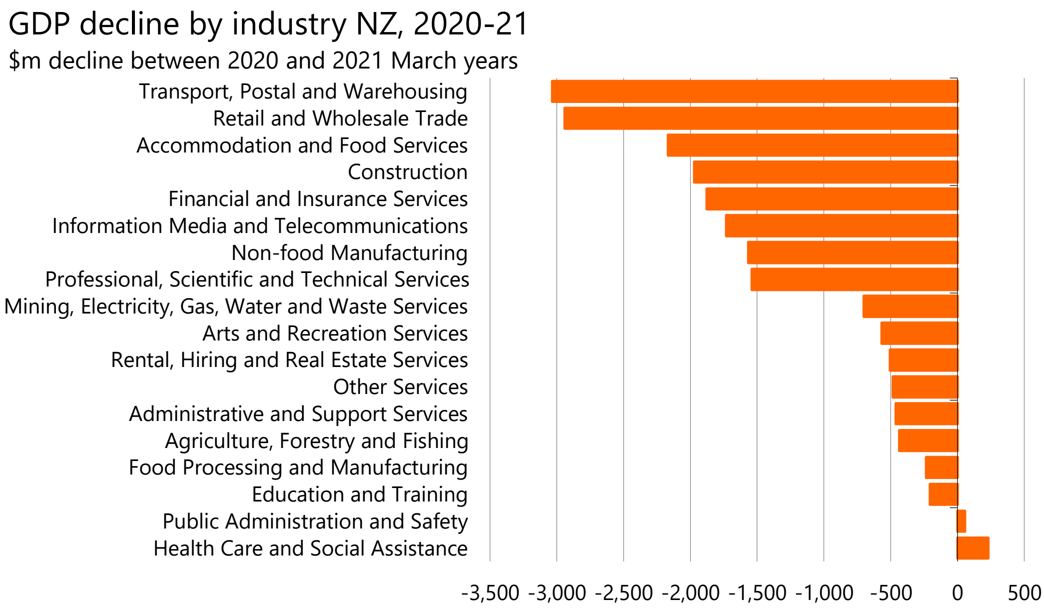
The impact of the economic downturn will be felt most keenly by the tourism sector, with a reduction in international tourist spending, and lower household incomes restricting domestic activity. Tourism is not defined as a unique industry. Instead, it comprises parts of various industries including accommodation, food services, transport and retail trade.

Although the full impact on the tourism sector is detailed later in this report, the hit to the tourism sector translates through to the accommodation and food services industry showing the greatest loss in employment, with just over 56,000 jobs expected to be lost. Retail and wholesale trade are also negatively affected by the loss of tourism activity generally, as well as lower household spending due to job losses and low consumer confidence, with more than 44,000 jobs expected to be lost. Lower house prices and lower drivers of building activity is set to impact the construction industry, which is expected to lose more than 29,000 jobs making it the third hardest among the 18 broad categories.

Lower economic activity felt most in transport

The impact of the pandemic on economic output (or gross domestic product, "GDP") differs from the impact on employment, which reflects the differences in labour productivity among industries. The largest impact to GDP will be on transport, postal and warehousing which has high productivity, especially air travel which is capital intensive. Graph 4 outlines the expected declines in GDP.

Graph 4



Although accommodation and food services will shed the most jobs, it is a low productivity industry and it ranks at number three in terms of impact on GDP.

Examining the key drivers of industry fortunes

Noting that not all industries will be affected to the same degree by the economic downturn facing New Zealand, we have summarised the key drivers of industry fortunes.

- **International education**. We expect the amount of spending brought into New Zealand by international students will be greatly diminished over the next year, which will cause a decline in both education-related revenue, but also consumer spending from international students.
- **Tourism activity**. Infometrics expects a substantial decline in tourism spending, as domestic tourism activity is subdued over the next year, and international tourism levels remain severely limited. Lower tourism activity is likely to be felt most in the accommodation and food services industry.
- **Transport**. Lower tourist numbers will reduce the need for some transport activities, with a greatly reduced aviation sector expected. Lower transport volumes will also occur due to weaker household spending, with reduced volumes of goods freight as spending declines.

- **Retail and wholesale trade**. With lower demand from households, who have weaker incomes (because of job losses, reduced hours, or pay cuts), general spending activity is expected to remain softer. Weaker business activity will also dampen spending levels from suppliers.
- **Non-food based manufacturing**. Lower business activity, and softer global trading conditions, will reduce manufacturing output demanded.
- **Energy and mining**. Lower energy needs in New Zealand, with fewer businesses operating, and lower spending by households, will reduce energy needs. Lower international demand and production will also reduce demand for mining outputs and the value that is added by New Zealand energy production to valuable manufacturing processes.
- **Food-based primary sector and manufacturing**. Infometrics expects food-related sectors to hold up better during the COVID-19 downturn. The world, and New Zealand, still need to eat, and trade data confirms that our food-based exports are holding up.
- **Forestry**. With lower global demand, and a drop of more than 20% in prices recently, forestry and logging are set to see a softer period of activity. Exports over the February to April 2020 period are already down more than 40% compared to a year earlier.
- **Health and social assistance**. In the midst of a pandemic, health care and social assistance activity is likely to hold up relatively well although some parts of private health have a discretionary component. The industry provides a stable base of employment that will react less to substantial changes in economic conditions.
- **Construction**. We anticipate that higher unemployment, lower house prices, lower net migration, and softer business investment will see construction levels decline from current peaks.

Key industries will determine regional declines

We expect the fortunes of regional economies to be determined by their relative exposure to a range of key industries. Some industries will provide more economic support to a local area, whereas others will be significantly weaker and be a drag on local economic activity. Infometrics has assessed the regional changes expected for two key areas – tourism and construction – that will see significant declines in employment which signal towards a need for investment: tourism and construction.

Tourism facing a substantial hit

The sections below describe our outlook for tourism over the year to March 2021.

Foreign tourism tanks by 91%

We expect New Zealand's borders to effectively remain closed for a year, with either complete closures or, at a minimum, a mandatory 14-day quarantine requirement for people arriving from overseas. However, we also recognise that there is scope for a trans-Tasman or wider Polynesian travel "bubble" to be introduced later in the year if COVID-19 infection conditions allow. We have assumed that this "bubble" could be implemented from December onwards, and could result in 50% of usual tourist travel on NZ-Australia and NZ-Pacific Island routes.

Travel up until November will be very limited – we have allowed for visitor numbers to be at just 0.8% of their usual levels. This figure allows for a small amount of non-holiday travel, and it is equivalent to total international arrival numbers (including returning New Zealanders) for the week to 14 April 2020. We have also maintained this assumption for countries outside Australia and the Pacific Islands beyond November 2020, on the basis that COVID-19 case numbers overseas will warrant ongoing strict controls. The allowance for small visitor flows in and out of New Zealand recognises there will be some people who are required to travel for work purposes.

Taken together, these assumptions result in an estimated 91% or $11.6bn reduction in foreign demand for tourism over the coming year, and a similarly sized reduction in New Zealand demand for international tourism.

Domestic tourism spending drops by 21%

With New Zealanders effectively unable or unwilling to travel overseas during the coming year, at least some of the pool of $5.4b that was spent on international tourism during 2019 is likely to be spent on holidays within New Zealand instead.

Having looked at domestic and international tourism spending patterns, we estimate that total spending on a holiday in New Zealand is likely to be about 69% of what would be spent on an equivalent holiday overseas. Some of this gap arises because a domestic holiday will naturally involve less spending on airfares. Furthermore, people on holiday within their own country also tend to spend less, on average, on both accommodation and eating out.

Reallocating this proportion of overseas tourism spending by New Zealanders to domestic spending results in a total pool of about $21b of potential spending for the coming year. However, the economic downturn will have a negative effect on people's willingness to spend on travel and holidays. For example, there was an 8.6% drop in annual spending on restaurants and hotels between March 2008 and December 2009 during the GFC.

Furthermore, there have been severe limitations on people's ability to travel domestically during the 6½ weeks of Level 3 and Level 4 lockdown, and these restrictions will only be partially relaxed when we move to Alert Level 2. We note that The Treasury's Scenario 1 assumes we could remain in Alert Levels 1 and 2 for a total of 10 months, although the specific timings across each of these Alert Levels is not stated.

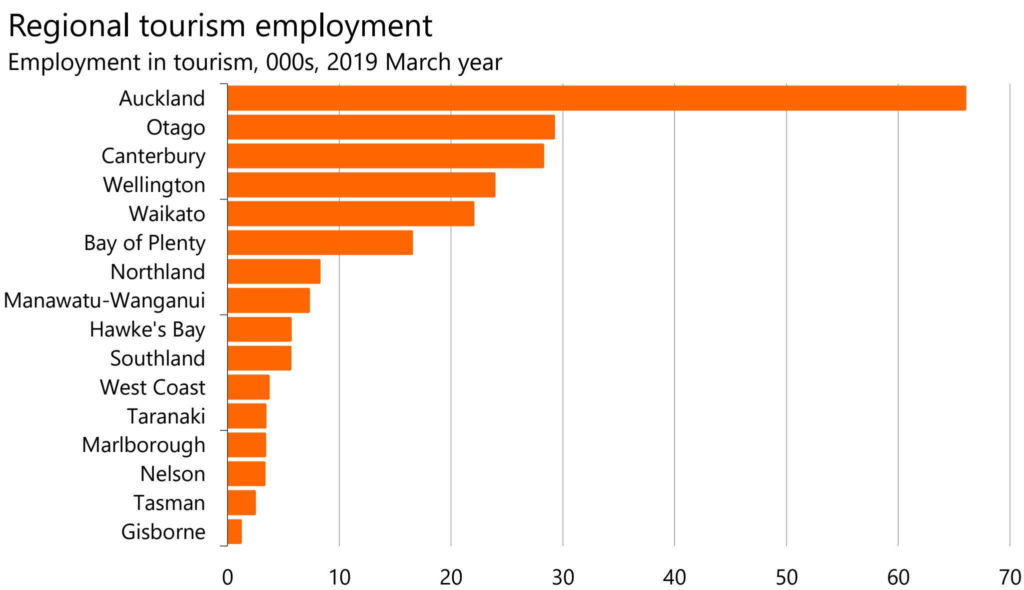
Taking all these considerations together, we estimate that spending on domestic holidays over the coming year could be constrained by 35%. After incorporating the increased pool of potential spending due to a lack of international travel, these constraints imply a 21% decline in domestic tourism spending from the previous year.

Some parts of New Zealand are heavily exposed to tourism

Tourism has become a critical component of New Zealand's economic fortunes in recent years, with some regional areas having a heavy reliance on tourism activity. This section describes the state of the tourism sector in New Zealand prior the COVID-19 pandemic.

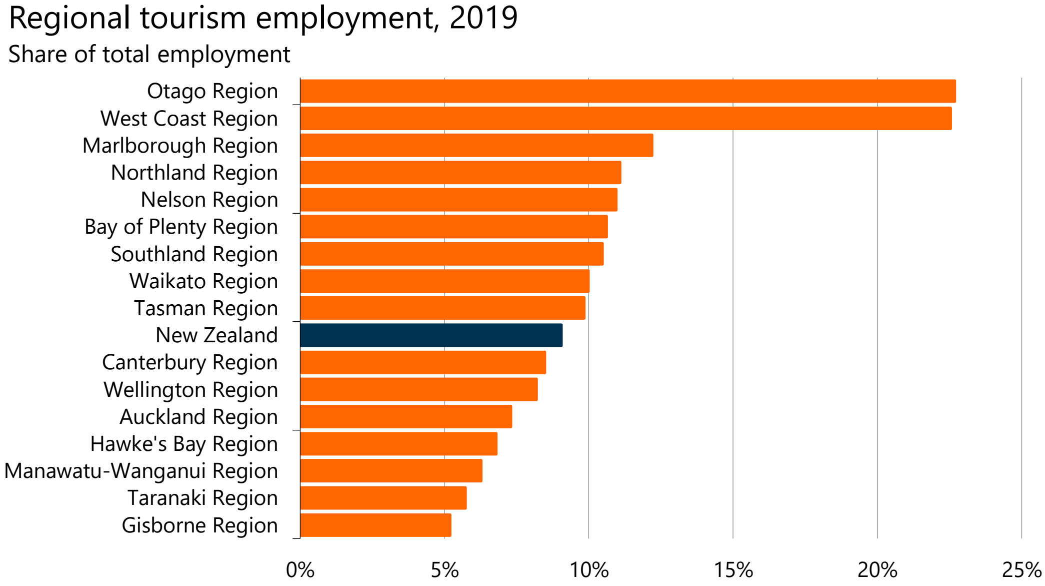
Unsurprisingly given its sheer size, Auckland has by far the largest tourism sector, measured in terms of employment, among the 16 regions of New Zealand (see Graph 5). Otago, dominated by Queenstown, has the second largest regional tourism workforce.

Graph 5



Although Auckland has the largest tourism workforce, the region is less exposed to tourism activity because tourism only makes up a small part of its overall economy. Graph 6 shows the exposure of New Zealand's 16 regions to tourism. Otago and West Coast have the highest exposure, with tourism employment accounting for more than 22% of total employment in both regions.

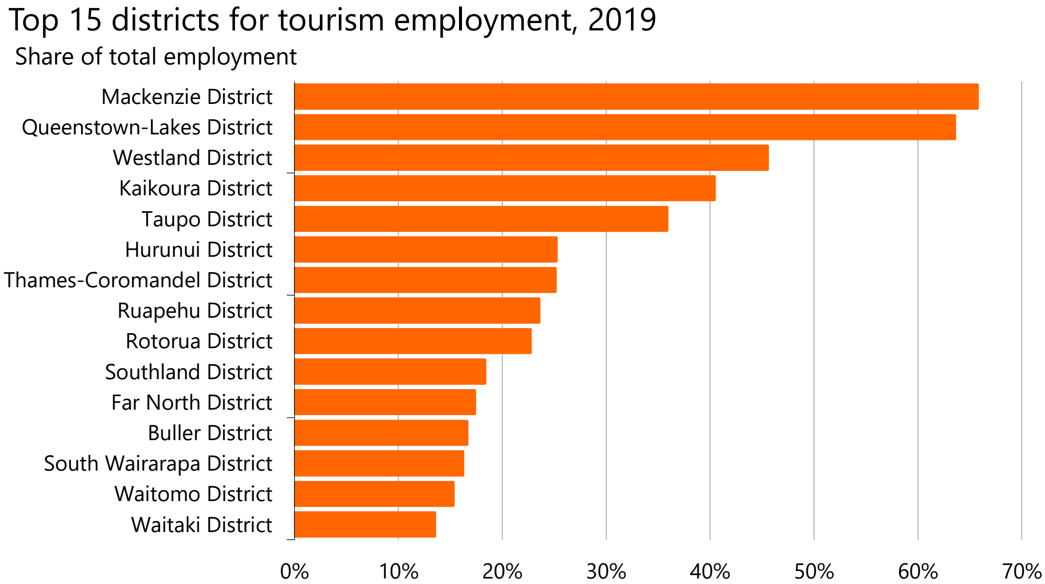
Graph 6



Gisborne has a low exposure to tourism with the sector accounting for slightly more than 5% of employment.

However, regional comparisons of tourism employment can mask the concentrations found in many districts and cities throughout New Zealand. Graph 7 details the top 15 territorial authorities which are most exposed to tourism. Mackenzie District and Queenstown are the standout districts, with tourism accounting for more than 60% of employment in each district.

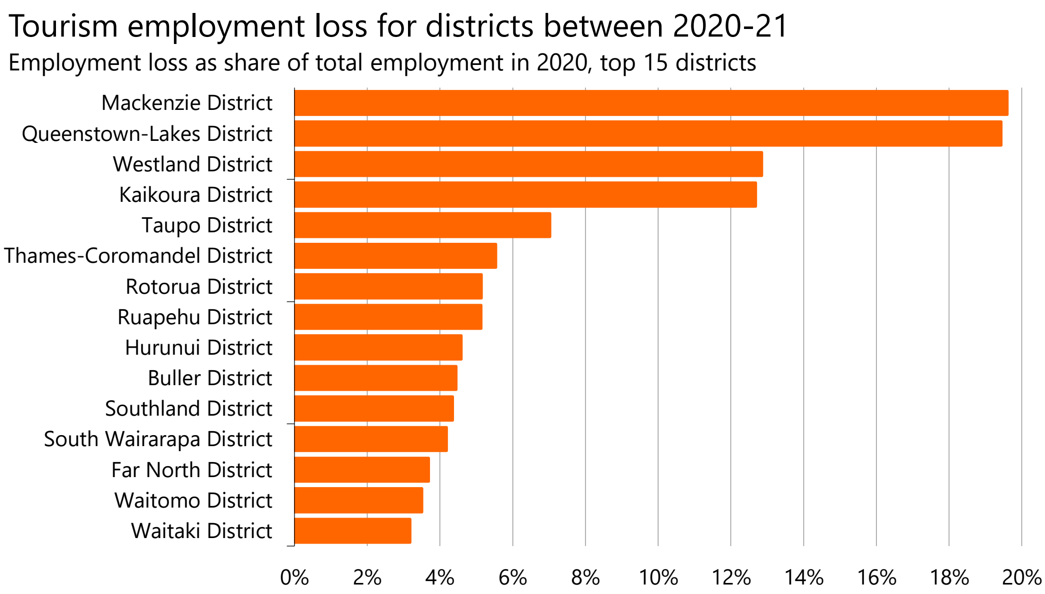
Graph 7



Tourism job losses will be heavy in some parts of the country

Infometrics expect about 48,000 jobs to be lost in the tourism sector over the year to March 2021. The biggest losses are expected in Auckland and Otago regions (-13,000 and -7,500, respectively). The impact will be most severe in parts of the country in where tourism employment makes up a large portion of total employment. Graph 8 shows that job losses in tourism alone will account for a 20% decline in employment in Mackenzie District and 19% in Queenstown.

Graph 8



Other districts experiencing large overall declines in employment are Westland (13%) and Kaikoura (13%).

Auckland's position as the largest regional economy in the country (comprising 14% of the total tourism workforce nationally) means the region will face the largest drop in absolute job numbers. Just over 13,000 tourism jobs in Auckland are expected to be lost, a decline equivalent to 1.4% of pre-pandemic employment.

Construction to decline, hitting jobs

Construction is a key industry across the country, and was the fastest growing industryt over the last five years as measured by employment. With expectations for lower residential and non-residential building activity, the construction industry is also vulnerable to the COVID-19 economic downturn and will impact some regional areas more than others.

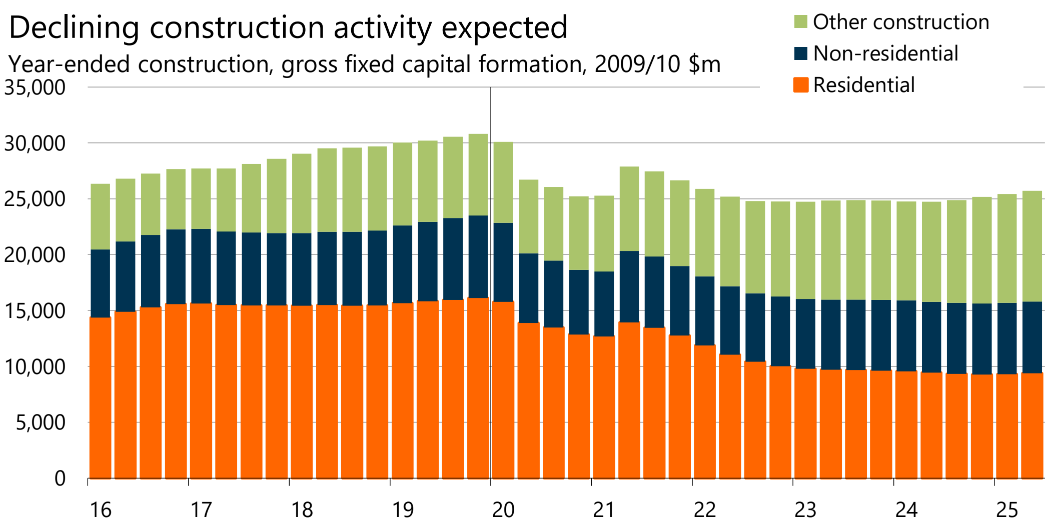
Lower underlying demand and less private investment hits building activity

The substantial rise in unemployment associated with many of the outcomes of the pandemic will have a significant negative effect on the housing market. Lower incomes, a result of job losses, pay cuts, and lower hours, will reduce household income and in turn limit the ability for households to service higher mortgages or rents. Furthermore, border closures for the next year mean that net migration will be close to zero, and population growth is set to drop to a 30-year low of 0.5%pa. These results will considerably reduce underlying demand for new housing.

We estimate an 11% drop in average house prices between mid-2020 and the end of 2021. We note that house price falls in the short-term will be restrained by the mortgage holiday scheme that the government has negotiated with retail banks. Nevertheless, this housing market downturn will drag down the rate of new residential construction, particularly given that banks are likely to be very reluctant to finance property development over the next year.

Lower house prices and constraints on investment will limit private sector property development, with lower incentives than previously to attract and retain development potential. Nationally, we estimate the value of residential building work put in place to decline by 19% over the year to March 2021, with a 35% reduction in consent numbers.

Graph 9

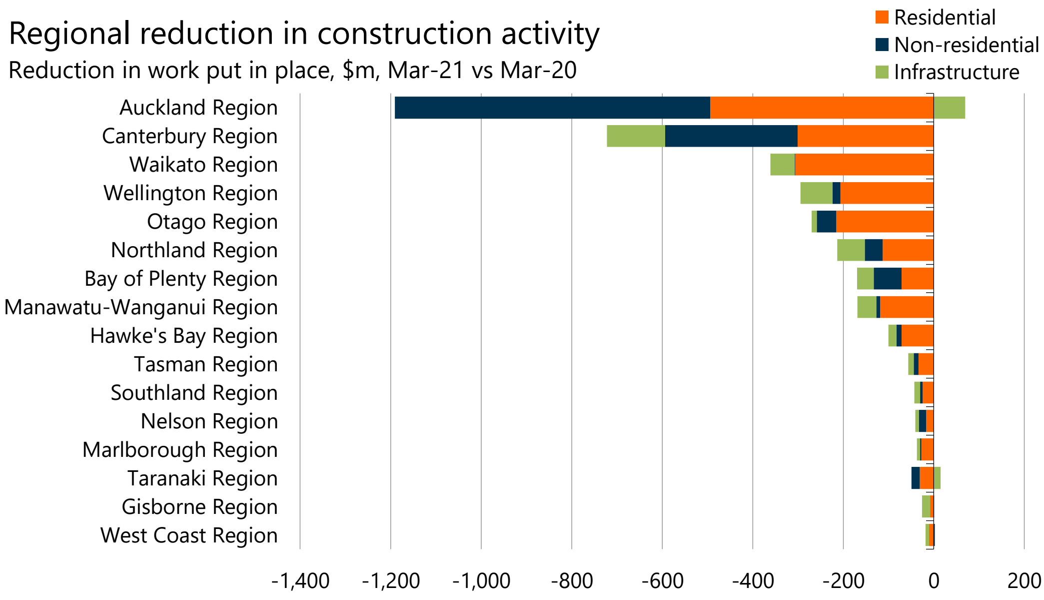


There is a risk that the sudden decline in construction activity will see the supply capacity of the construction sector falls by a greater degree than demand. This risk were to be borne out, the construction sector would likely take longer to regain momentum, which would leave demand in future years above construction supply levels.

Non-residential construction activity will also come under downward pressure given declines in key drivers for private sector investment, including lower employment, household spending, and tourism activity. We estimate the value of non-residential work put in place to decline by 18% over the year to March 2021.

The largest decline in construction activity is expected in Auckland, followed by Canterbury and then Waikato Regions (see Graph 10).

Graph 10



Investment needed to maintain infrastructure capital works

In contrast, prospects for civil construction are positive outside Level 4 lockdown conditions, with a greater share of funding stemming from public funds (central or local government investment). We anticipate that there is limited scope to significantly bolster the volume of infrastructure activity in the short-term. However, we see potential government capital investment, through the Infrastructure Reference Group, as a key driver of ensuring previously planned capital investment continues.

Pressure on funding for capital investment could, during a recession, see previously planned investments deferred or scaled back. But with lower residential and non-residential construction activity and emerging spare capacity, additional investment in construction can both assist regional areas shoulder the economic impact of COVID-19, as well as keep infrastructure commitments viable to resist any further decline in activity.

Immediate funding for shovel-ready projects will ensure current and near-term investments occur, propping up construction workforces around the country. Over the medium-term, we expect that there is likely to be faster growth in infrastructure activity, given the time lag to fully complete planning, design, and consenting requirements.

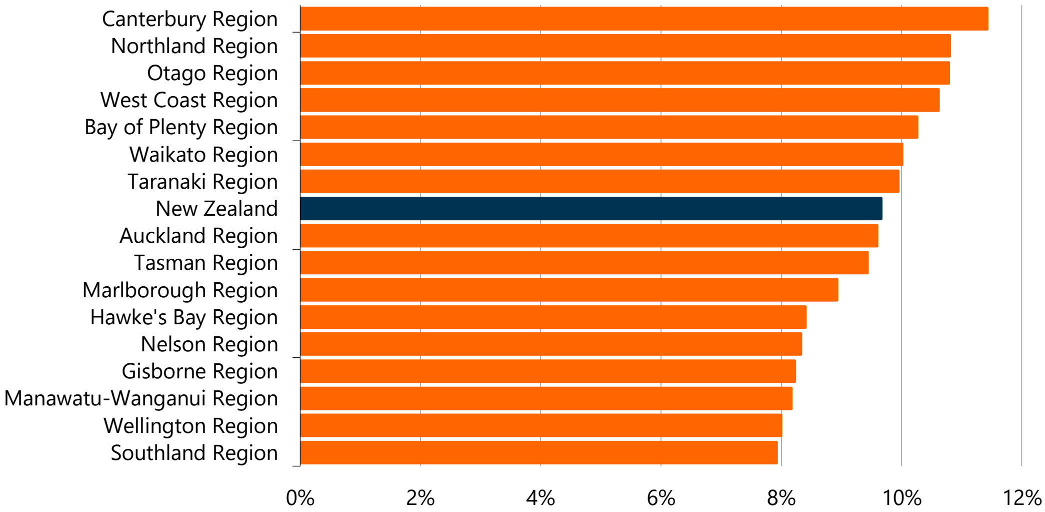
Construction is a significant regional employer

Regionally, the construction industry is a key component of all regional economies. Graph 11 shows that employment in construction accounts for between 11% (Canterbury) and 8% (Southland) of regional economies total employment.

Graph 11

Regional employment in construction, 2019

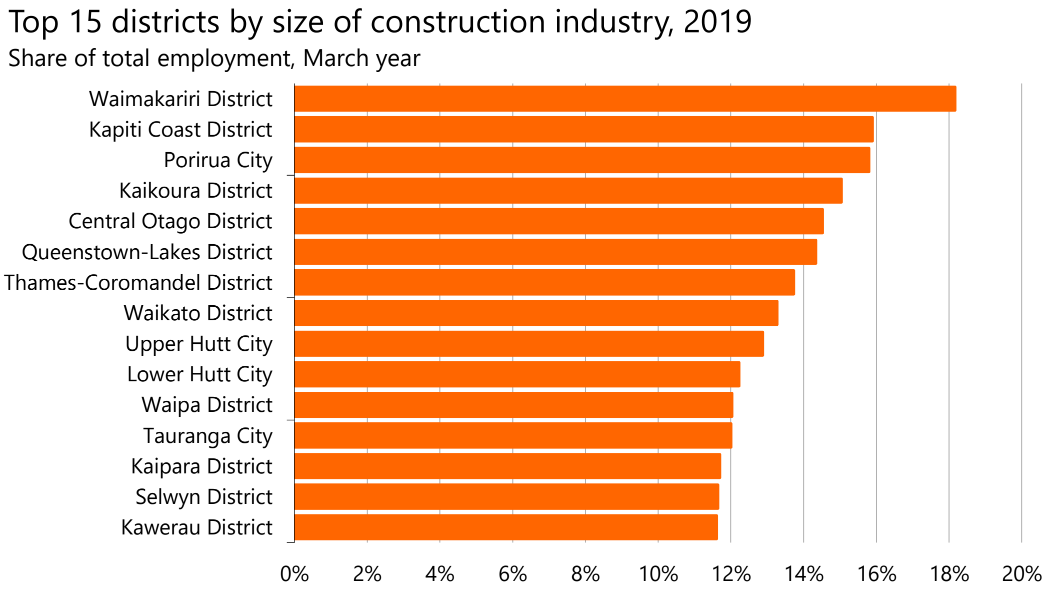
Share of total employment, March year



In some parts of the country the construction industry makes up an even greater proportion of the workforce. Graph 12 shows that construction accounts for more than 12% of the workforce in 10 territorial authorities. Waimakariri and Kāpiti Coast have the largest proportions construction industry concentrations, with 18% and 16% respectively. The knock to the construction sector will hit these districts harder than most.

Auckland's share of workers, at 9.6% belies the fact that the region has more than 86,000 construction workers.

Graph 12

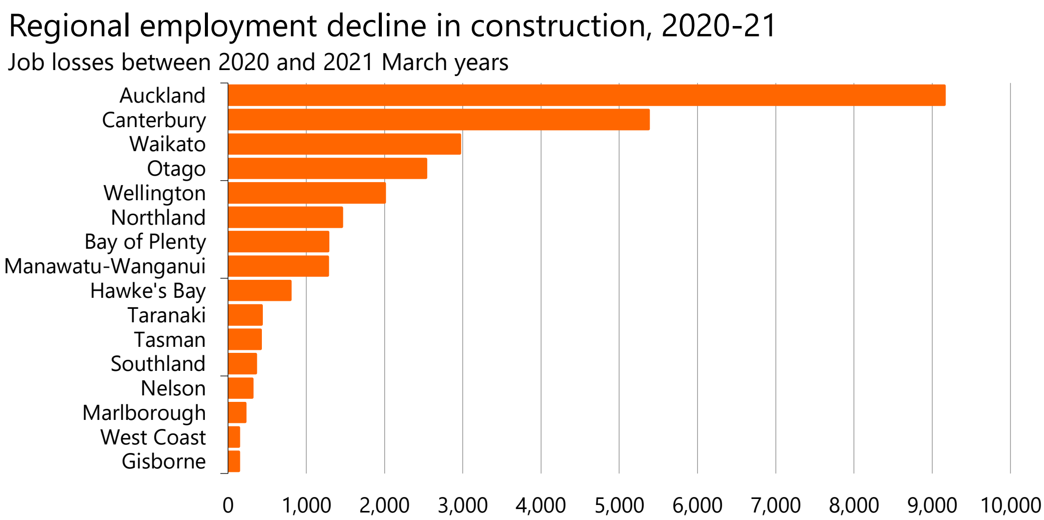


In general, these areas with a greater concentration of construction employment are more exposed to a downturn in construction activity. This exposure, coupled with the expected declines in actual work put in place, will be key contributor to some regional declines.

Construction downturn will leave spare capacity

The decline in construction employment in some parts of the country will have a significant impact on total employment. The decline will leave spare capacity in the construction industry in these areas. Metropolitan areas will see the greatest absolute declines in job numbers, with Auckland expected to see around 9,000 fewer construction workers employed in 2021 (see Graph 13).

Graph 13

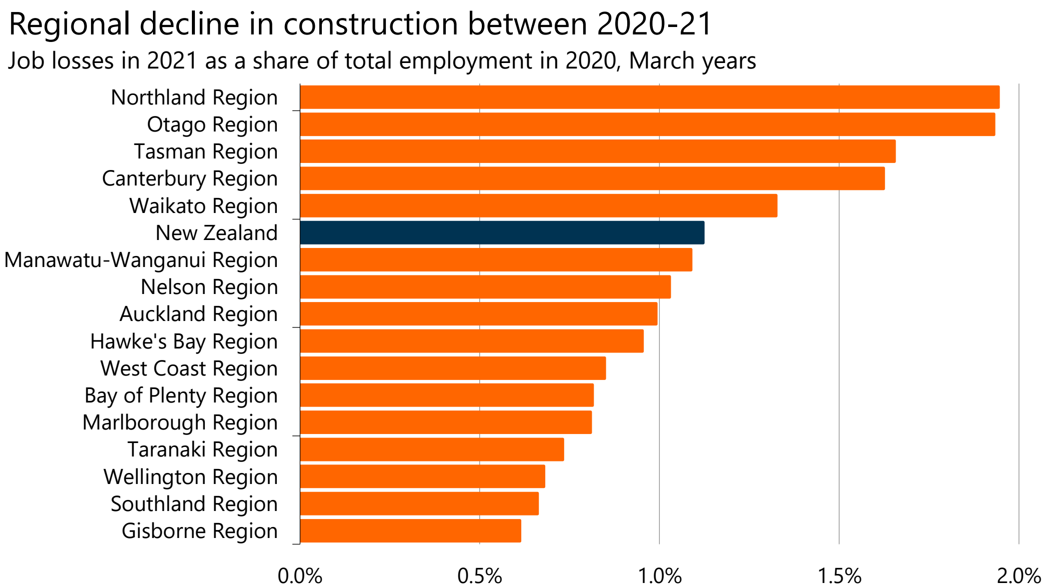


Other areas still show sizable declines, with Christchurch expected to shed nearly 3,000 construction jobs (see Graph 14).

Graph 14

Graph 15 shows the decline in jobs across New Zealand regions as a share of total pre-pandemic employment.

Graph 15



Northland comes out as the hardest hit region for employment declines, with 1.9% of the region's pre-pandemic total workforce expected to be lost due to reduced construction activity. The result highlights Northland's higher concentration of construction workers relative to the total workforce, alongside declines in construction efforts, lower tourism activity (particularly in the Far North), and lower output from Marsden Point in Whāngārei, which will lower construction efforts.

Other areas, like Otago are easier to immediately interpret, with lower tourism activity in Queenstown a driving factor behind the Otago region's construction decline.

Many of these higher regional declines are driven by localised impacts. Graph 16 shows the districts that are expected to lose the largest proportion of their total employment due to the fall in construction activity. Mackenzie District is expected to lose nearly 8% of total employment and Selwyn more than 7%.

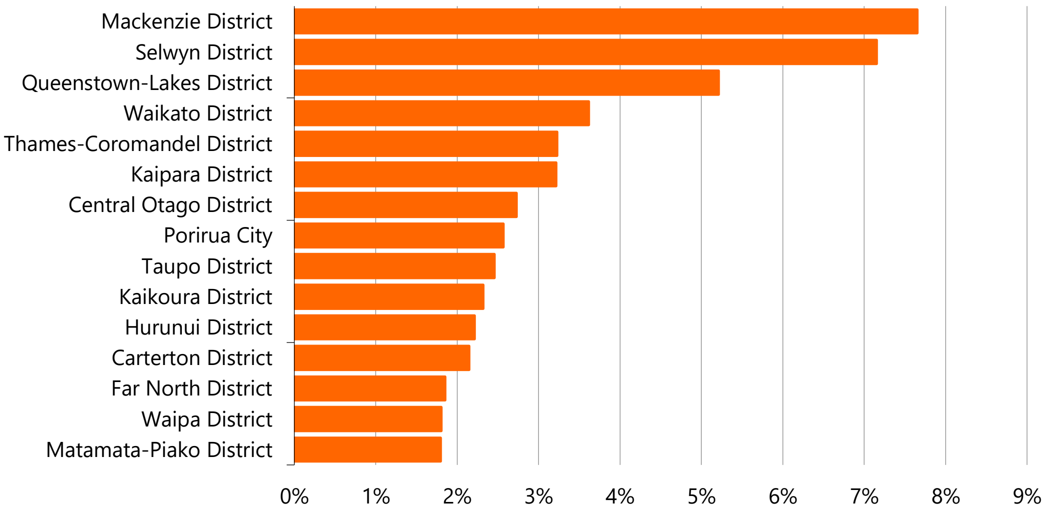
Lower activity in Selwyn is a key contributor to Canterbury Region's decline in the construction workforce. The combination of the 14th-largest construction employment concentration and softer forecast construction volumes results in a 7.2% fall in total employment in the District due to construction job losses.

Ōtorohanga District is a key exception to a decline in construction activity, with two large projects – the Happy Valley Milk factory and the Waikeria Prison upgrade – adding construction jobs over the next year.

Graph 16

Top 15 districts for construction job losses

Job losses in 2021 as a share of total employment in 2020, March years



Similarly, Waikato District's 8th-largest construction employment concentration plays a key role in total expected declines in the District. Previously, Waikato District's construction activity has been driven by an expansion in housing and commercial sites in southern Auckland. Parts of the Waikato District are a key supplier of workers to southern Auckland, particularly around Drury, which contributed to previous growth in construction. However, with lower net migration, and softer private investment expected, we expect the demand for construction in southern Auckland will reduce, contributing to the decline in Waikato District's construction workforce.

Although Tauranga City has a larger construction industry (relative to the size of the workforce), the area does not face the same levels of declines as expected in other areas. The larger sizes of New Zealand's metropolitan areas mean that, as a proportion of total employment, construction declines are not as pronounced. However, in absolute terms, job losses in these urban centres are sizable, with more than 9,100 job losses in Auckland, and 2,800 in Christchurch.

Social housing investment also viable

Earlier in May, Infometrics released analysis outlining the potential for additional state housing investment to both support the construction sector while also increasing public housing volumes.

Infometrics estimates that if the government were to build 9,400 states houses over the next two years, the state house waiting list would return to 2014/15 levels, prior to a large increase in state housing demand.

Our analysis points towards some areas, like Gisborne, Rotorua, and Napier as areas that would benefit from a coordinated effort to increase the local state housing stock. Our full analysis is provided in Appendix D.

Regional fortunes differ considerably

New Zealand’s regional and local economies encompass a range of employment concentrations and structural differences. These differences play a key part in determining the expected economic fortunes across different areas.

Although many regional trends can be broadly explained by contribution from tourism, construction, or the primary sector, there are other forces that can play key localised roles.

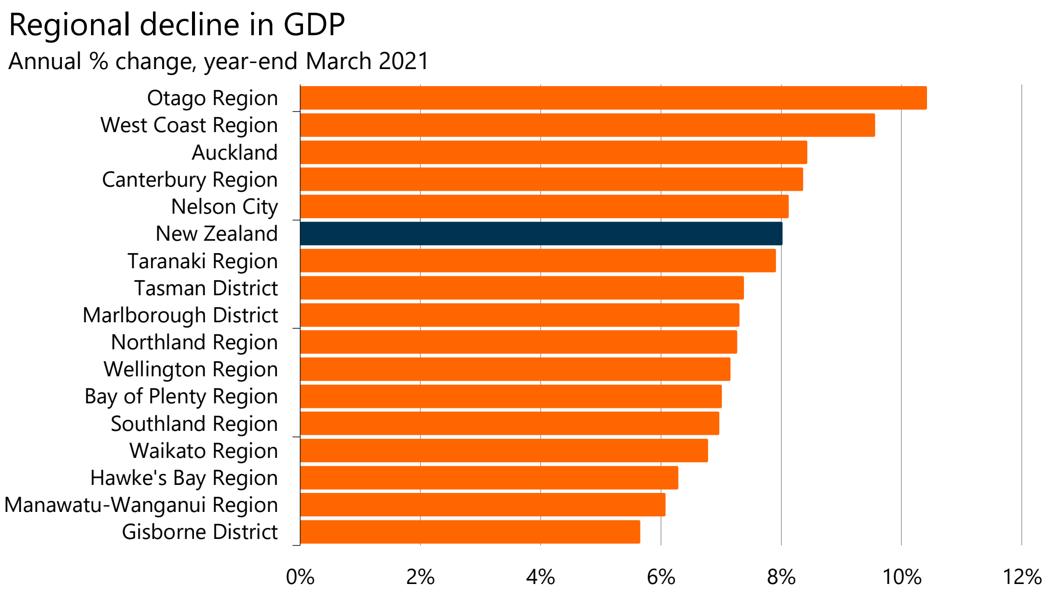
In this section we describe the collective effect of all the forces effecting regions and territorial authorities and identify which areas will take the hardest economic knock.

Otago and West Coast will be the hardest hit

Graph 17 shows the regional economic decline in GDP across New Zealand. The major forces negatively affecting areas are the rapid drop in tourism spending and the decline in construction activity, especially residential construction.

Given the importance of tourism and tourism-related construction, we expect GDP in Otago to decline by more than 10% over the year to March 2021. West Coast GDP is expected to decline by 9.5%, similarly due to a high concentration of international tourism activity.

Graph 17



Meanwhile, regions with large agricultural and food processing sectors including Hawke’s Bay, Manawatu-Whanganui, and Gisborne are expected to experience the smallest declines.

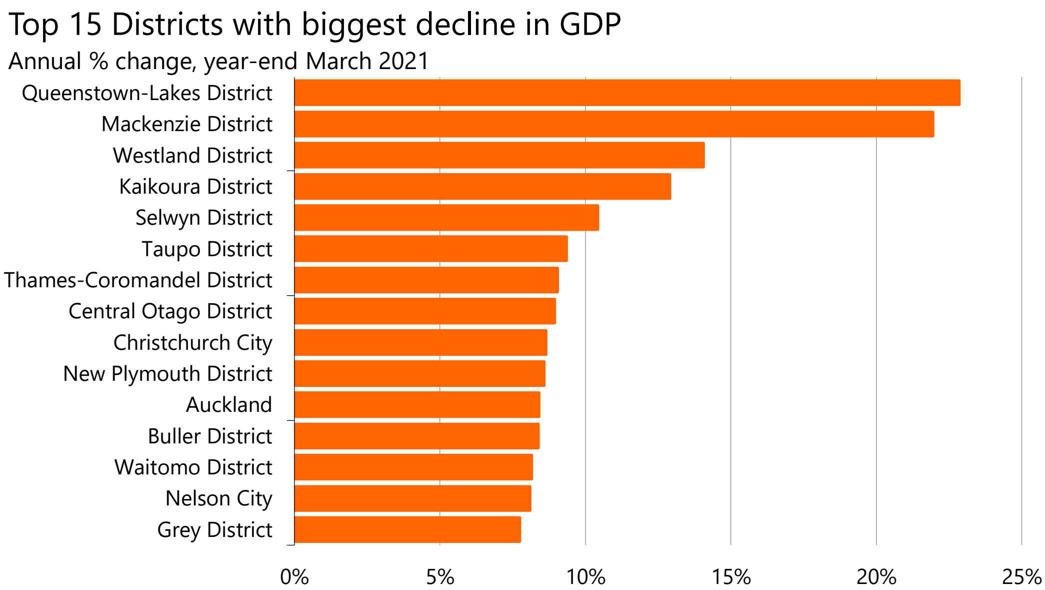
Food manufacturing industries will be cushioned from the impact of the pandemic. Agricultural commodity prices and food exports to the rest of the world are holding up considerably better than other exports, which means that rural-based regional economies will generally be given some relief from the worst impact of the pandemic. However, this will not fully offset tourism, construction, or energy concentrations.

Other regional drivers, such as lower energy, mining, and fuel demands will affect regions such as Taranaki, Waikato Region, and Northland.

South Island areas face largest local declines

Focusing on territorial authorities, the top five declines in output are expected in the South Island. We expect GDP in Queenstown-Lakes and Mackenzie District to decline by more than 20% (see Graph 18). The decline in most of the largest affected districts is driven by lower tourism activity.

Graph 18

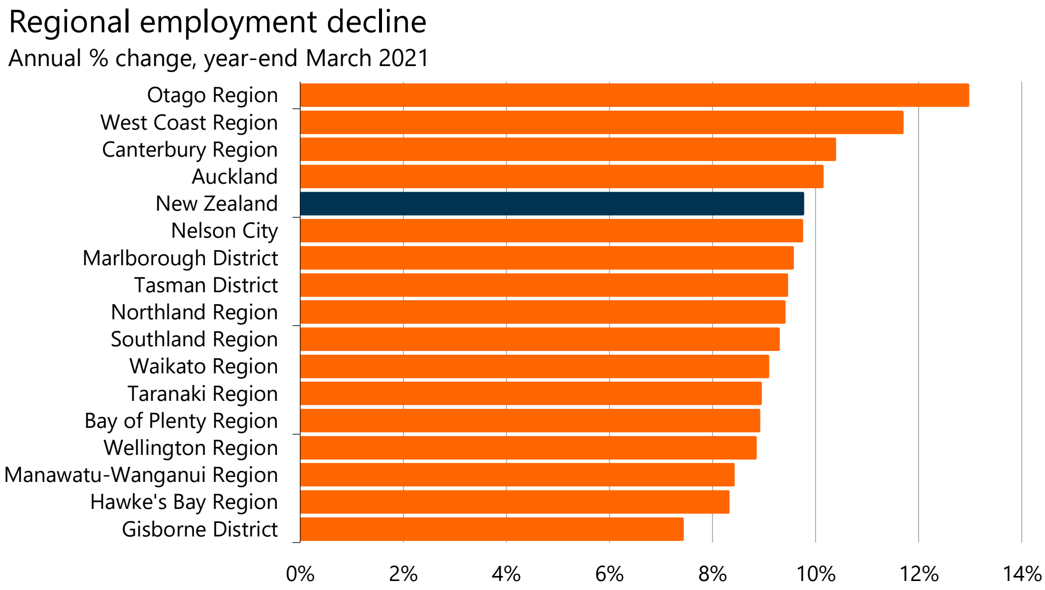


However, some districts are driven predominantly by a decline in construction. An example is Selwyn District which is expected to experience the fifth largest decline in GDP (-10.4%). Nearby Christchurch is one of the key metro centres that shows up in the top declining areas, highlighting a greater focus on tourism than other areas. However, higher construction activity in the post-earthquake environment has limited the scope for additional infrastructure investment to the degree possible in other areas.

Employment losses show a similar pattern

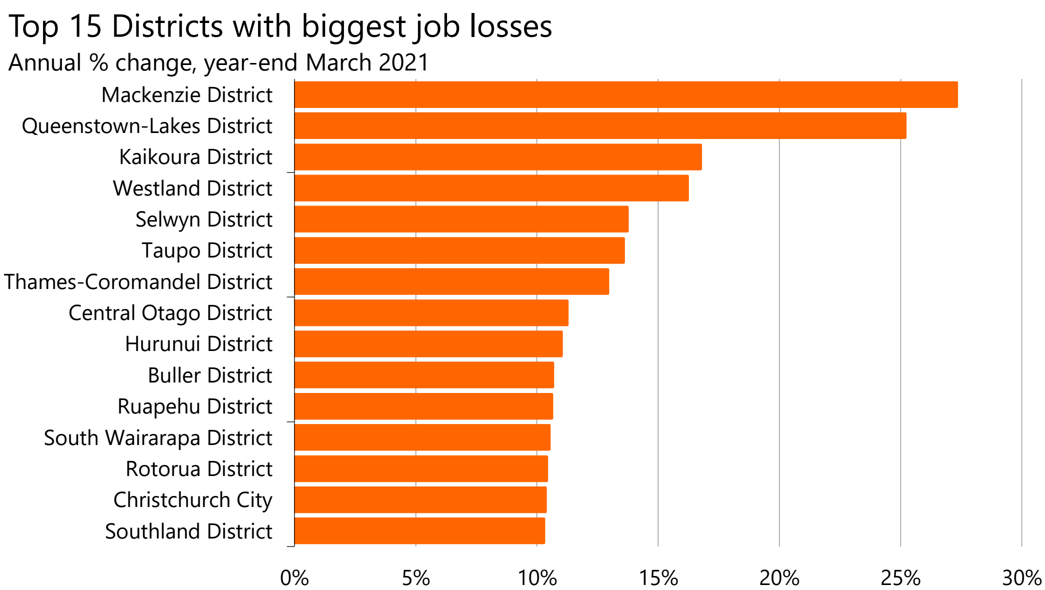
Turning to employment, the trends for regional areas are similar. Graph 19 shows that Otago is facing a 13% decline in employment, with West Coast close behind on 12%.

Graph 19



However, significant differences emerge when the top regional employment declines are examined. As Graph 20 shows, some of the key declines in employment are different from output declines. The top five areas in the South Island remain, as expected due to lower tourism and construction employment expected. But the emergence of Rotorua, Hurunui, Ruapehu, and South Wairarapa demonstrate the larger hit to jobs that tourism contributes.

Graph 20



Job losses, relative to the size of the workforce, demonstrate some of the areas in greatest need of additional investment to reinvigorate the local economy. A full list of employment declines (total, construction, and employment) by local council area is set out in Appendix B, in both graphical and table form.

Areas of greatest need for additional investment and assistance

Our assessments of the regional economic implications of the COVID-19 pandemic and economic downturn are useful to better inform Infrastructure Reference Group about key areas of focus. Determining the best allocation of infrastructure investment will require a wider set of insights, including the full suite of viable projects, strategic alignment, and government decisions. Importantly, some areas entered the economic downturn from a starting point of higher unemployment and greater spare capacity. Although some of these areas may not face the same level of economic declines as other areas, the overall capacity remaining in regional areas, alongside the far larger share of unemployed workers, is also likely an area of further investigation. Areas such as Tairawhiti and Northland emerge as key considerations.

Our regional economic analysis provides a clear evaluation of the expected economic declines expected across New Zealand's regions and local areas. The analysis also highlights some key areas of focus that are readily identified as areas that face more pronounced economic impacts that Infrastructure Reference Group should be aware of. Although these insights are not an exhaustive list and should not be considered as Infometrics' **only** recommended areas of focus, the following areas are more frequently highlighted in our analysis with greater economic declines:

- **Queenstown** stands out as an area in need of additional support with the sheer concentration of tourism set to substantially reduce economic activity in the area. Lower tourism activity is expected to see a quarter of jobs lost locally.
- Aligned to this tourism focus, the **West Coast** also clearly demonstrates a need for additional investment, with a significant concentration of tourism-based activities in the regional economy.
- **Parts of the Lower South Island**, with a focus on southern Canterbury around **Selwyn**, and support for investment around **Tīmaru** and **Mackenzie** to provide additional stimulus to counter declines in tourism and construction.
- **Northland Region** appears as an area with a high concentration of construction employment which is set to see a considerable fall in building activity. With Northland already facing higher levels of unemployment, and the highest rate of Jobseeker Support claims, additional investment is likely required.[2]
- Alongside lower construction activity, higher tourism exposure in the **Far North**, the concentration of the **Whāngārei** economy on the Marsden Point Refinery, and continued drought concerns highlight the potential for additional investment in water storage options, alongside evaluation of other projects such as the proposed Dry Dock in Whāngārei.

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[2] Ministry of Social Development. (2020). Income Support and Wage Subsidy Weekly Update – 1 May 2020. Ministry of Social Development.

Appendix A: Industry Insights

Transport, postal, and warehousing has been significantly affected by the pandemic. The largest effects are on air transport and scenic and sightseeing transport due to the downturn in tourism activity. As is the case for accommodation and food services, these effects will continue long after the lockdown ends. Other parts of the transport and logistics industry have been weakened by factors such as reduced commuter travel and cutbacks in distribution and freight requirements caused by the lockdown. Some of these effects will start to reverse out with a pick-up in online spending outside Level 4, but this positive influence on activity is likely to be outweighed by the reduction in overall spending caused by the weaker labour market and incomes.

Retail and wholesale trade has experienced a significant drop in demand under Level 4, and restrictions will remain in place under Level 3 as well. These effects are not being felt equally, with supermarkets enjoying periods of higher-than-usual demand. Other businesses that can sell online will be able to operate under Level 3, although we do not expect spending patterns during this period to be normal. The declines in tourism activity and other discretionary spending will also be felt disproportionately by retailers selling more luxury or higher-end products.

Accommodation and food services will be arguably the most heavily affected part of the economy by the COVID-19 pandemic and its aftermath. The disappearance of international tourism and declines in domestic tourism and other discretionary spending are key factors in the industry's contraction. Activity will continue to be severely constrained under COVID Alert Level 3, while domestic travel will also remain restricted under Alert Level 2.

Construction activity was close to peaking even before the COVID-19 pandemic occurred. Rising unemployment, falling house prices, slower population growth, and tighter bank lending conditions will all weigh on activity over the next 1-2 years across both the residential and non-residential subindustries. Prospects for infrastructure look more promising given the government's desire to use this channel to try and stimulate the economy's recovery. We also note that strong growth in the population and building stock over recent years has increased the baseline level of maintenance work that needs to be done, mitigating the downturn for those parts of the industry that tend to be less cyclical.

Financial and insurance services will be squeezed by the downturn in economic activity. Lockdown conditions are likely to have increased the amount of work being done electronically across parts of this industry, and this shift could potentially hasten the trend towards reduced job numbers for some occupations. More difficult business and financial market conditions could also negatively affect the viability of some firms in this industry. However, we note that the overall strength and robustness of the financial system is much better than it was between 2006 and 2010 when the industry grappled with the finance company collapses and the Global Financial Crisis.

Information media and telecommunications activity will also come under pressure, despite the short-term boost to selected businesses from the increase in remote working that has taken place. Traditional media such as newspapers and magazines were already under significant pressure prior to COVID-19. Substantial drops in advertising revenue have exacerbated this situation and will lead to job losses, despite government support. Significant job losses in areas such as libraries, movie theatres, and some parts of telecommunications are also possible.

Arts and recreation services are suffering the twin effects of a reduction in discretionary spending and restraints on what services and products can actually be offered to consumers. Performing arts, professional and community sports, horse racing, casinos, and other entertainment and events will continue to be constrained at Alert Levels 2 and 3, with restrictions on gathering numbers at both indoor and outdoor events. Ongoing border restrictions are also set to disrupt the ability of promoters to run events where they are reliant on entertainers or sportspeople coming into New Zealand from overseas.

Professional, scientific, and technical services is the fourth-largest industry by employment in the New Zealand economy. So despite the industry being less directly affected by COVID-19 than many other industries, the forecast drop in job numbers is still large. Cost-cutting by firms and a reduction in business numbers across the economy will negatively influence demand for services within this industry across the board. Areas that are likely to be most heavily affected include those subindustries that are closely linked with construction activity.

Non-food manufacturing tends to be less labour-intensive than many other industries, but the downturn in the global economy will have a significant negative effect on demand for the industry. Manufactured exports are expected to be squeezed by weak demand conditions across much of Europe, North America, and Australia. The Global Financial Crisis also demonstrated the strong links between parts of non-food manufacturing and building work within New Zealand. Consequently, the forecast downturn in construction activity will also contribute to a decline in employment and output in this industry.

Administrative and support services are expected to mirror broader economic trends in business activity, with cost cutting, business failures, and the weak labour market negatively affecting this industry. Given the downturn in tourism, travel agents will be by far the most heavily hit, with modest declines in employment across other parts of the industry.

Appendix B: Regional Insights

Graph 21

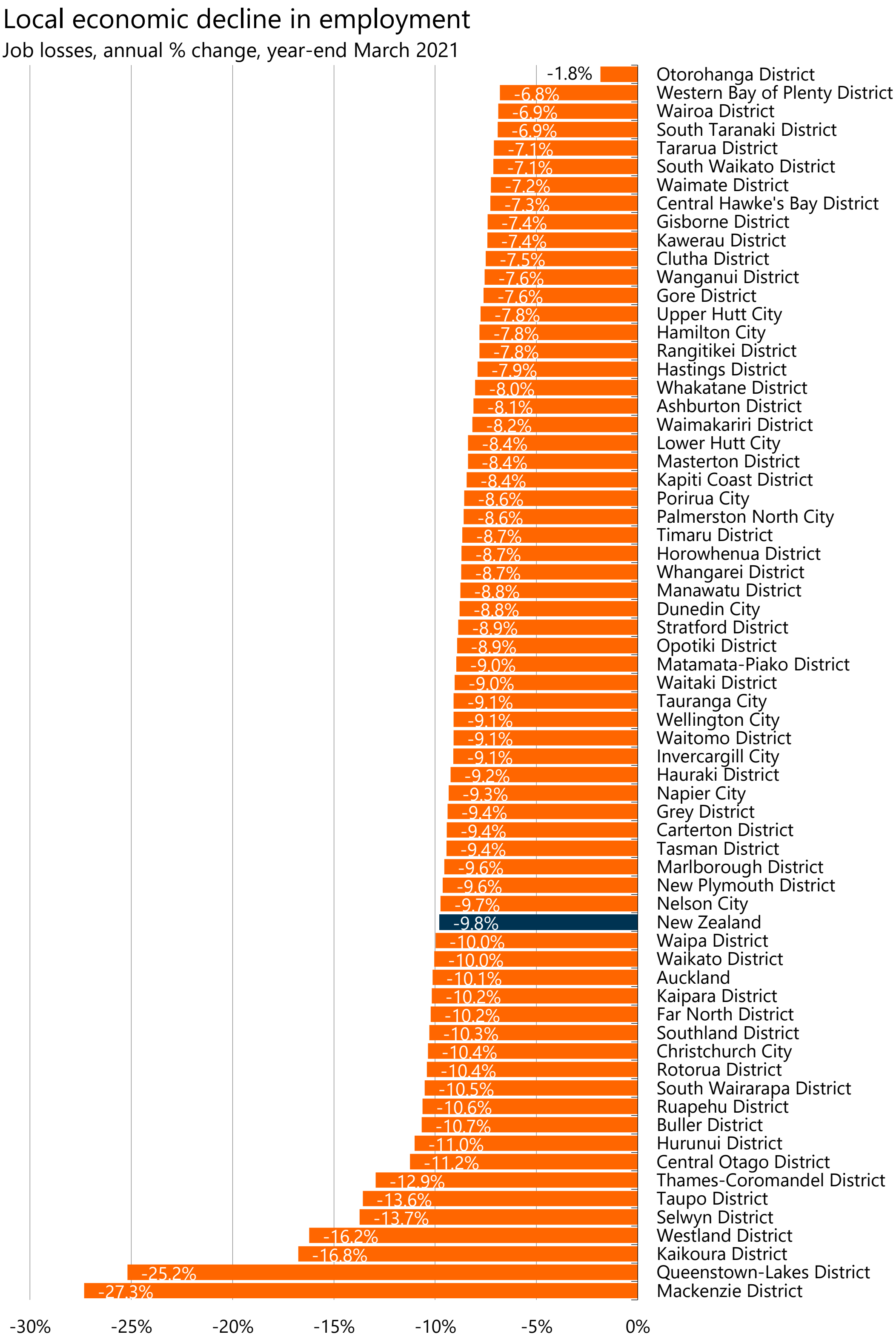


Table 1

Assessing regional impacts of COVID-19
Job losses in 2021, as a share of total employment in 2020, March years

	Employment	Construction Employment	Tourism Employment
Far North District	10.2%	1.9%	3.7%
Whangarei District	8.7%	1.7%	1.2%
Kaipara District	10.2%	3.2%	1.4%
Auckland	10.1%	1.0%	1.4%
Thames-Coromandel District	12.9%	3.2%	5.5%
Hauraki District	9.2%	1.5%	1.6%
Waikato District	10.0%	3.6%	0.6%
Matamata-Piako District	9.0%	1.8%	0.9%
Hamilton City	7.8%	0.6%	1.1%
Waipa District	10.0%	1.8%	0.9%
Otorohanga District	1.8%	-5.5%[1]	1.0%
South Waikato District	7.1%	0.3%	0.8%
Waitomo District	9.1%	0.3%	3.5%
Taupo District	13.6%	2.5%	7.0%
Western Bay of Plenty District	6.8%	1.4%	0.5%
Tauranga City	9.1%	0.5%	1.5%
Rotorua District	10.4%	0.7%	5.1%
Whakatane District	8.0%	1.3%	1.1%
Kawerau District	7.4%	1.1%	0.2%
Opotiki District	8.9%	1.0%	1.1%
Gisborne District	7.4%	0.6%	0.8%
Wairoa District	6.9%	0.9%	0.5%
Hastings District	7.9%	1.1%	0.7%
Napier City	9.3%	0.6%	2.4%
Central Hawke's Bay District	7.3%	1.6%	0.4%
New Plymouth District	9.6%	0.7%	1.4%
Stratford District	8.9%	1.0%	0.9%
South Taranaki District	6.9%	0.6%	0.4%
Ruapehu District	10.6%	1.3%	5.1%
Wanganui District	7.6%	0.8%	0.7%
Rangitikei District	7.8%	1.0%	1.4%
Manawatu District	8.8%	1.7%	0.4%
Palmerston North City	8.6%	1.1%	0.9%
Tararua District	7.1%	0.2%	0.7%
Horowhenua District	8.7%	1.7%	0.7%
Kapiti Coast District	8.4%	1.0%	1.2%
Porirua City	8.6%	2.6%	0.4%
Upper Hutt City	7.8%	1.1%	0.4%
Lower Hutt City	8.4%	0.5%	0.6%

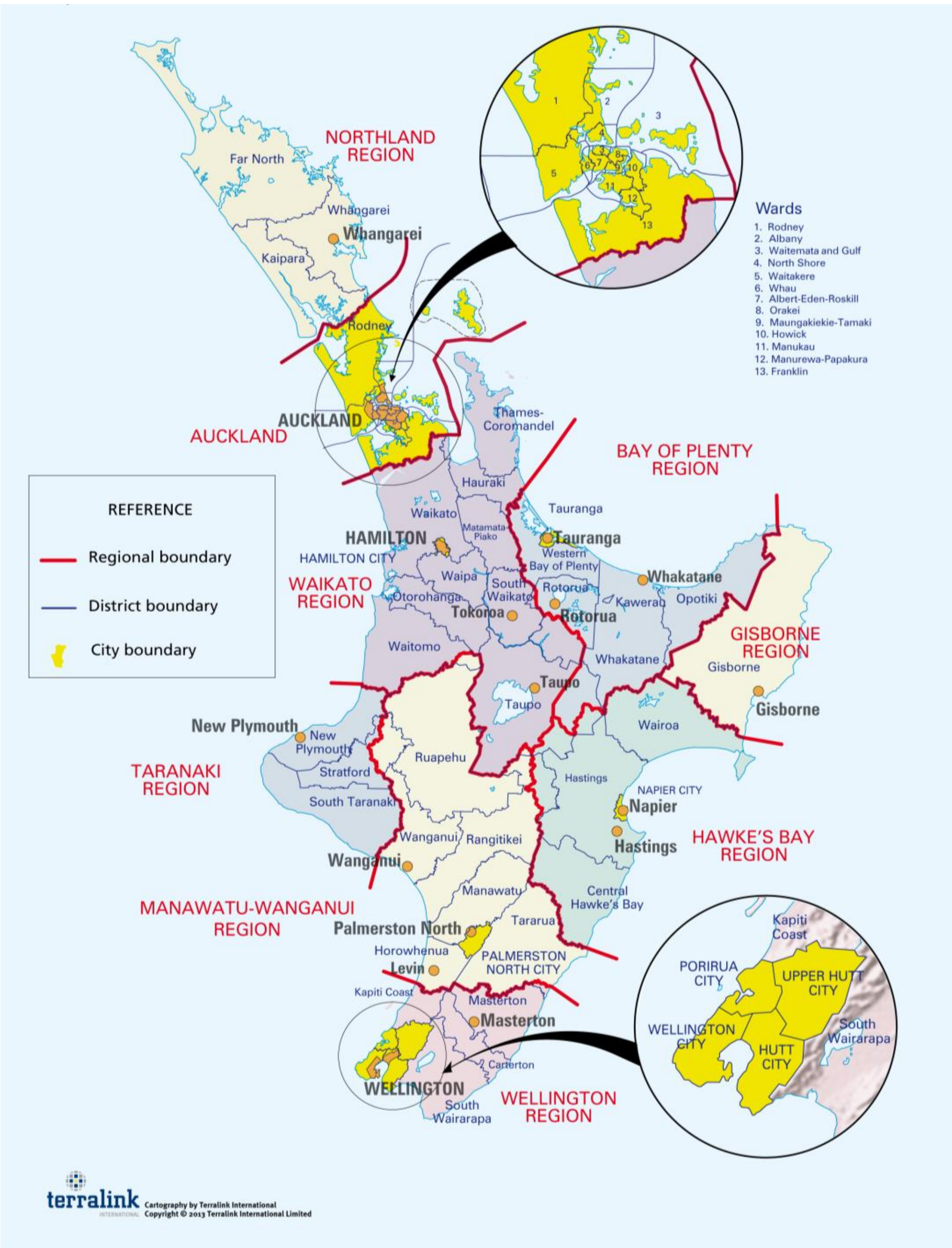
Wellington City	9.1%	0.3%	2.4%
Masterton District	8.4%	1.4%	1.0%
Carterton District	9.4%	2.1%	0.5%
South Wairarapa District	10.5%	1.5%	4.2%
Tasman District	9.4%	1.7%	2.1%
Nelson City	9.7%	1.0%	2.2%
Marlborough District	9.6%	0.8%	2.6%
Kaikoura District	16.8%	2.3%	12.7%
Buller District	10.7%	0.9%	4.5%
Grey District	9.4%	0.6%	2.3%
Westland District	16.2%	1.1%	12.9%
Hurunui District	11.0%	2.2%	4.6%
Waimakariri District	8.2%	1.3%	0.4%
Christchurch City	10.4%	1.2%	1.6%
Selwyn District	13.7%	7.2%	0.7%
Ashburton District	8.1%	0.5%	1.4%
Timaru District	8.7%	0.5%	1.2%
Mackenzie District	27.3%	7.7%	19.6%
Waimate District	7.2%	0.6%	0.4%
Waitaki District	9.0%	0.8%	3.2%
Central Otago District	11.2%	2.7%	2.5%
Queenstown-Lakes District	25.2%	5.2%	19.4%
Dunedin City	8.8%	0.5%	1.9%
Clutha District	7.5%	1.1%	0.9%
Southland District	10.3%	0.9%	4.3%
Gore District	7.6%	-0.6%[1]	1.4%
Invercargill City	9.1%	0.8%	1.3%
New Zealand	**9.8%**	**1.1%**	**1.9%**

Source: Infometrics

[1] A negative job loss denotes an increase in employment in 2021

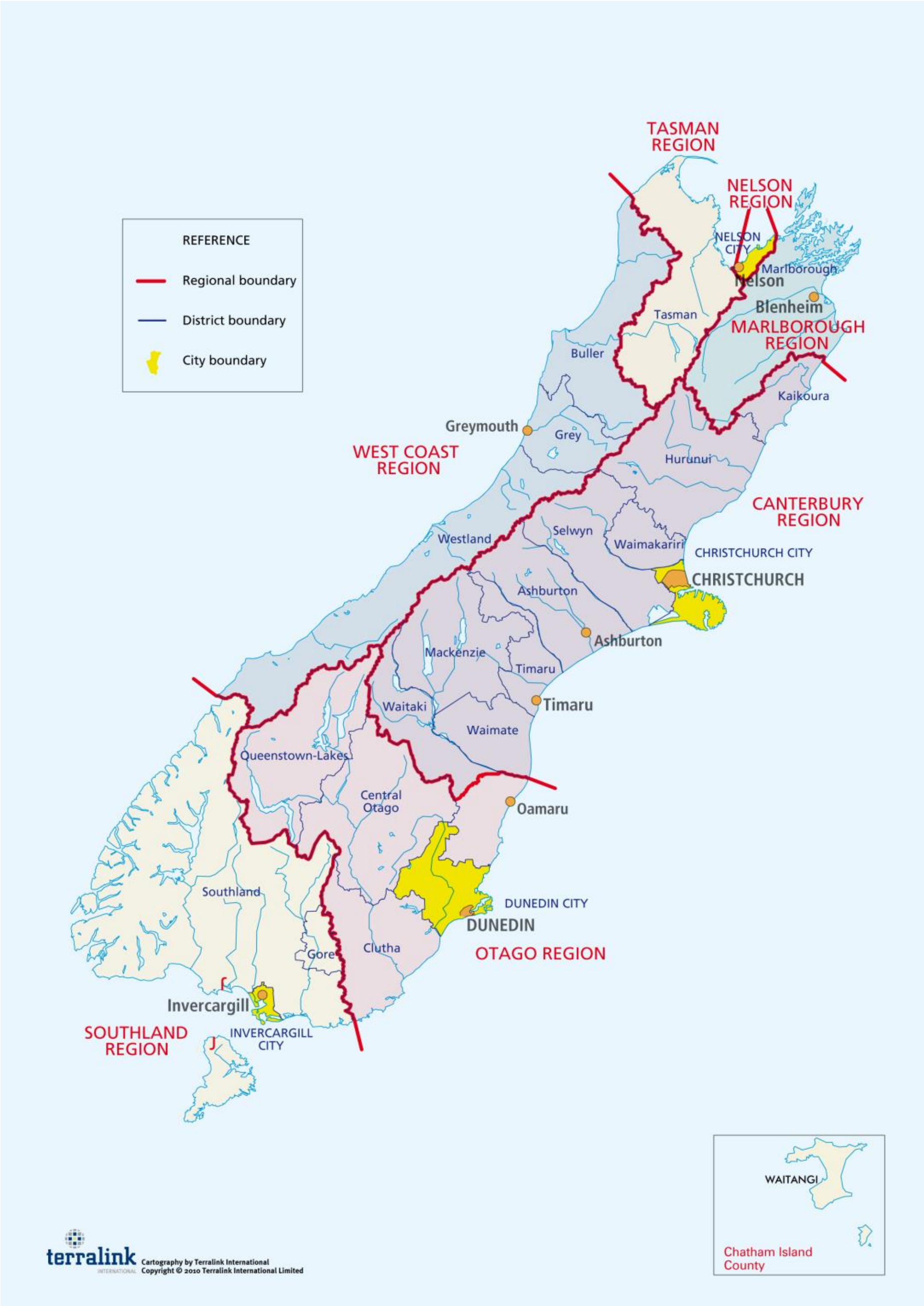
Appendix C: Local Council Maps

Figure 1: North Island



Source: Local Government New Zealand

Figure 2: South Island



Source: Local Government New Zealand

Appendix D: Supporting construction while rectifying state housing

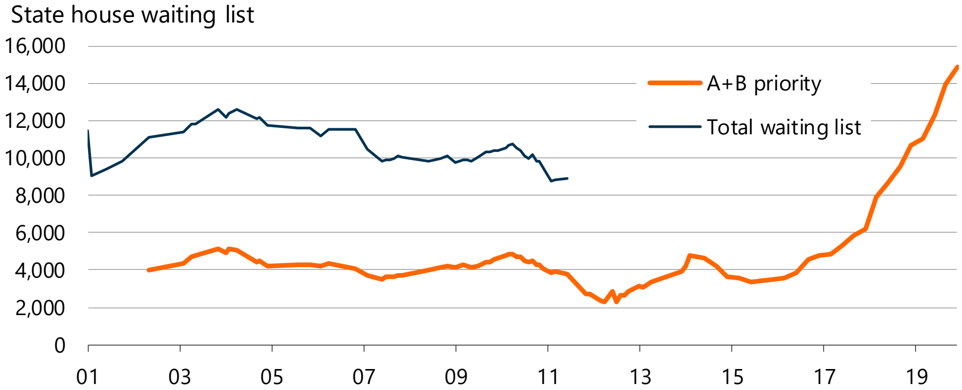
The waiting list for state houses has more than quadrupled over the last four years, in part because rents have consistently risen faster than incomes, leaving more people in vulnerable housing situations and requiring assistance. With a massive spike in unemployment coming between now and the end of 2021, this waiting list is only likely to get longer. At the same time, economic uncertainty will see private sector residential building activity slashed.

A commitment from the government to build an additional 9,400 state houses over the next two years would mitigate the construction sector's downturn, helping to prevent a repeat of the massive loss of capacity that occurred following the Global Financial Crisis. It is also an opportunity for the government to make a real difference in housing outcomes for some of society's most vulnerable people, contributing to better wellbeing in a way that KiwiBuild was never going to do.

The scale of the state house shortage

The number of applicants on the waiting list for a state house has blown out since mid-2015, from 3,352 to 14,869 by the end of last year. Chart 1 shows that this increase is extremely unusual, with the number of applicants never previously getting above 5,200 in the last two decades.[3] Virtually all the increase in the waiting list since 2015 has been for Priority A applicants, deemed to have a severe or urgent housing need.

Chart 1: The critical shortage of state houses



We are not aware of any policy changes regarding the state house waiting list as shown by the Ministry of Social Development's Housing Register. The fact that growth in the

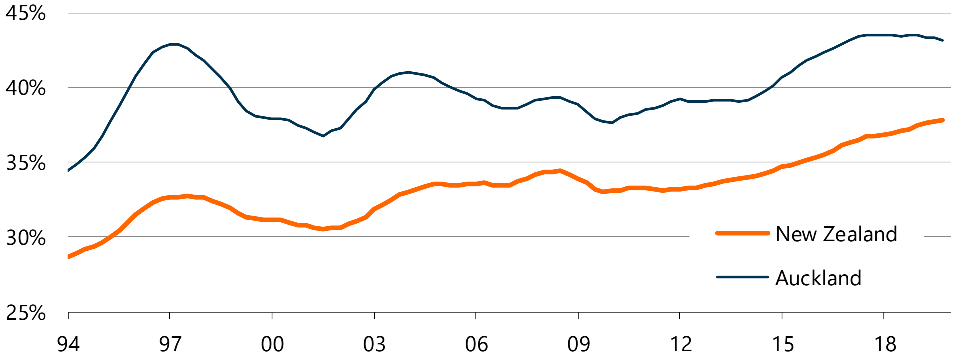
[3] In 2011, the Government changed its waiting list for state housing and no longer assigned applicants to the lowest priority (C and D) groupings.

waiting list has continued for over four years, including through a change of government, suggests that there is a genuine crisis in social housing needs.

Increasing rents are likely to have played a role in this unfolding crisis – and not just in Auckland. Rents have continually risen faster than incomes since 2011, and the nationwide ratio of rents to personal incomes is well above its previous high recorded in 2008 (see Chart 2). Auckland's ratio is also high, although it is at a similar level to where it was in 1997.

Chart 2: Renting gets less affordable

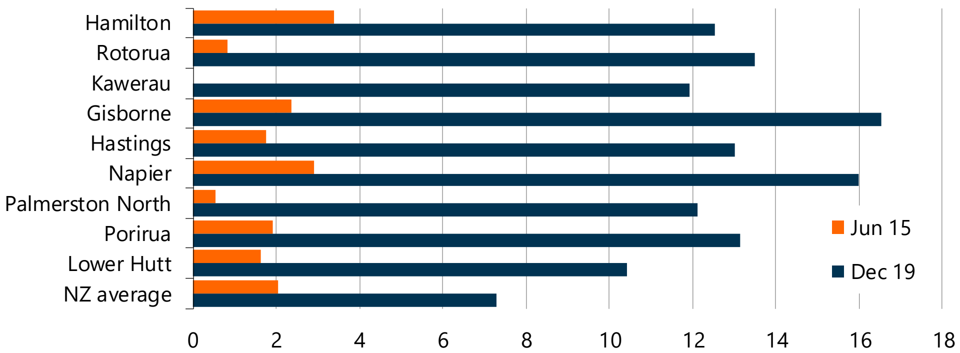
Average weekly rent as a % of weekly personal income (QES)



Although there is a logical connection between rising rents and increasing demand for social housing, the areas with the largest lifts in rents relative to incomes do not fully correlate with the areas that have recorded the biggest jumps in the waiting list for state houses. The latter areas are typically a mix of lower socioeconomic areas across the North Island, with areas down the east coast of the Island and around Wellington overrepresented (see Chart 3).

Chart 3: The biggest waiting list increases

Applicants on state house waiting list per 1,000 houses

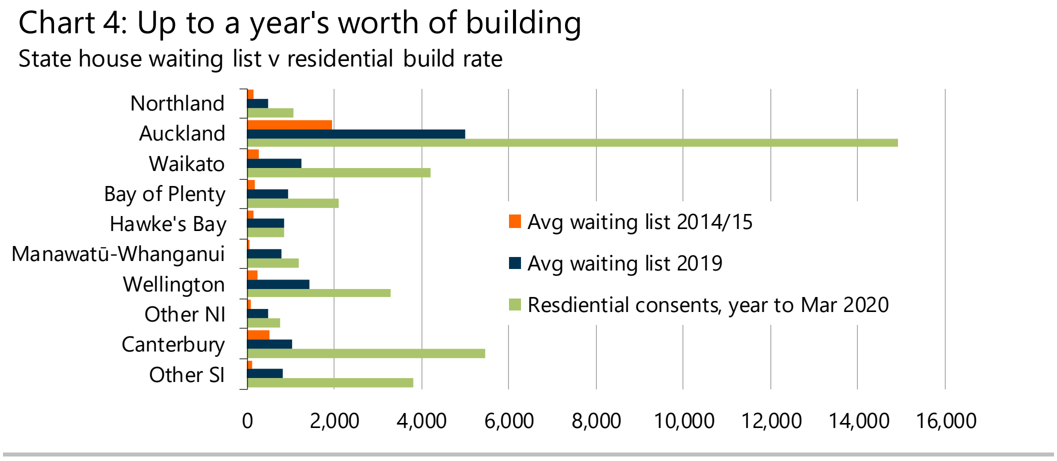


An ideal time to support construction activity

Whatever the drivers, let's turn our attention to the extent of the response required by the government. Chart 4 compares the state house waiting lists by region in 2014/15 and 2019 with the residential build rate over the last year. Two points stand out.

- All regions have recorded a substantial increase in the waiting list.

- The additions to the state housing stock required to meet demand is substantial in some regions, representing between 62% and 102% of a year's worth of residential construction activity in Hawke's Bay, Manawatū-Whanganui, and "Other North Island" (the latter is primarily caused by Gisborne).



This file provides a full breakdown of possible state housing requirements by city and district council area and Auckland local board, compared to the most recent residential build rate for each area.

Reducing the state house waiting list to the "normal" levels that prevailed in 2014/15 would require about 9,400 additions to the state housing stock. Our latest residential construction forecasts predict that residential consent numbers will drop from a peak of 37,882pa in the year to February 2020 to around 24,000pa by mid-2021 and 18,400 by mid-2022. This plunge represents a massive amount of spare capacity that will emerge in the residential construction industry, even recognising how stretched the industry had previously been by strong demand, as well as the potential disruption to the supply of workers from overseas caused by the current border closures.

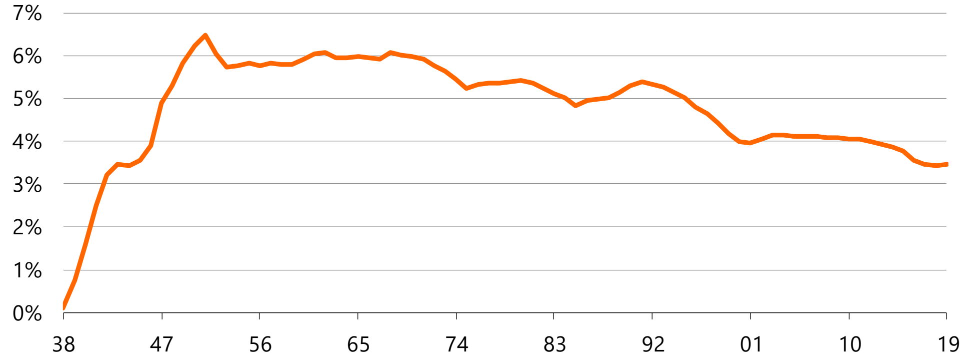
The lack of spare capacity in the construction industry was one of the reasons behind the failure of KiwiBuild. Instead of boosting the supply of housing as it was supposed to do, the policy ended up taking work that was planned by the private sector and simply adding a "Kiwibuild" sticker on. But our forecasts show the government now has scope to announce a major state housing initiative that would support the residential construction industry as well as addressing a significant aspect of the housing crisis. The government might be wary of numerical targets, but if it could successfully commit to building an additional 4,700 state houses over each of the next two years, it would help avoid a repeat of the major loss of workers and capacity in the industry that occurred in the wake of the Global Financial Crisis.

A 1930s-style solution for a 1930s-style downturn

Furthermore, this lift in the number of state houses would not unduly increase the government's role in housing provision. Increasing the stock of state houses by 9,400 would only push the proportion of state houses up to about 4% of the total dwelling stock – the same level as it was back in 2012, and lower than any figure recorded between 1947 and 2000 (see Chart 5).

Chart 5: State housing being left to fade away

State houses as a % of the total dwelling stock



Indeed, the rise in state housing in the aftermath of the Great Depression of the 1930s highlights the increased need for additional state housing capacity. With twin aims of providing housing for those who cannot afford it and keeping more people in employment, the opportunity to boost state housing volumes is a clear area of investigation for the government.

We recognise there are other factors to consider regarding the government's ability to deliver such a large building programme, not least of which is the availability of land. Even if more land becomes available as private sector development dries up, the government will be keen to avoid the early model of state houses being built en masse in one area, which created entire suburbs with poor socioeconomic outcomes. The Tāmaki Regeneration and Porirua Development projects shape as models that can potentially be applied in other areas where large numbers of new state houses are required.

Finally, we note that the surge in unemployment during 2020 and 2021 due to the COVID-19 pandemic and its aftermath has the potential to significantly add to demand for state houses. If the waiting list has increased by almost 10,000 applicants since mid-2015, how much worse might it look by the end of 2021? Bearing that in mind, the current economic downturn is an ideal opportunity for the government to revisit the role it plays in housing New Zealand's most vulnerable citizens.

Annexures

Annexure A

Projects Listed by Sector

[25]

Annexure B

Projects Listed by Region

[25]

IRG
Infrastructure
Reference
Group