

**11 March 2021**

**OC210055**

**T2021/630**

**Hon Grant Robertson**  
**Minister of Finance**

**Action required by:**  
Wednesday, 17 March 2021

**Hon Michael Wood**  
**Minister of Transport**

## **New Zealand Upgrade Programme - Funding Risks and Programme Options**

### **Purpose**

Provides initial advice on options for prioritising the transport aspects in the New Zealand Upgrade Programme, reflecting current information about its projects. More certain information is being considered through the current baseline process. This advice seeks feedback on your preferences so we can use this to undertake a more detailed prioritisation exercise to inform any final decisions.

### **Key points**

- Delivery agencies have advised there is \$4 to \$5 billion of cost increases forecast across the transport aspects of the New Zealand Upgrade Programme (the Programme), which means the current Programme cannot be fully delivered within the fixed funding envelope of \$6.8 billion.
- Baselineing is underway and is a high priority for Waka Kotahi NZ Transport Agency (Waka Kotahi) and KiwiRail to give a better picture of what is achievable within the fixed funding envelope.
- The level of certainty and supporting detail will vary across projects. However, the baseline will still provide a stronger basis for deciding how to proceed with the Programme and how to manage remaining uncertainties.
- Prioritisation choices within the current \$6.8 billion funding allocation will be challenging. We are seeking your direction on your priorities for the Programme so we can prepare some options for you to re-consider the make-up of the Programme, informed by the baseline results.
- There is about \$2.2 billion of funding required to deliver on five committed projects that are already being constructed, or are about to commence with procurement or construction. There may be additional costs associated with stopping or deferring

## SENSITIVE

these projects. This would adversely impact on market confidence and the intent to provide fiscal stimulus through the Programme.

- There are ten smaller scale projects forecast to cost \$467 million that could be delivered at minimal cost risk to the overall Programme. The smaller scale of these projects means they are easier to implement and will therefore provide more direct economic benefits, whilst also benefitting a range of communities across New Zealand. You could choose to commit to these now, or wait until baselining is completed to preserve options.
- There is a remaining \$4.1 billion of the current funding allocation that could be prioritised across a remaining 11 transport projects in the Programme (which represent \$9.9 billion of spend using latest forecast cost estimates) based on your preferences for the Programme.
- Officials, the New Zealand Upgrade Programme Oversight Group and the delivery agencies all advise that final decisions on individual projects' within the Programme, their scope and their cost should be informed by the confirmed baseline information due at the end of March 2021. Re-forecasted outcome and benefit information, as well as scope, cost and schedule are the main information gaps in the current Programme.
- To assist with this, officials will assess the remaining projects' alignment with the following areas to identify package options within the remaining Programme allocation of \$4.1 billion:
  - other Government priorities such as the Auckland Transport Alignment Project, Let's Get Wellington Moving, and a resilient and reliable rail system, which was agreed by Cabinet in the Future of Rail review
  - economic stimulus and supporting recovery
  - emissions reduction
  - housing and transit orientated development.
- If you indicate your preferred priorities for the Programme, this will assist officials in working with the delivery agencies to provide you with more detailed prioritisation and / or packaging options, informed by outcomes, after baselining is complete.
- Based on the results of the baseline process, we will also provide advice on purchase arrangements for the Programme. This includes issues such as the appropriate level of contingency in light of confidence in the Programme, and where there are issues such as geo-technical uncertainty that drive greater uncertainties and could be resolved early.
- We suggest that all remaining projects should be progressed to decision stage gates, and detailed business cases or route protection (funded through the Programme), regardless of whether their delivery remains part of the Programme. A decision can then be made by Ministers to confirm the delivery of these projects if further funding or delivery options become available.

SENSITIVE

## Recommendations

We recommend you:

Minister of Finance    Minister of Transport

- |   |   |          |          |
|---|---|----------|----------|
| 1 | <b>note</b> that there is between \$4 to \$5 billion of cost increases forecast across the New Zealand Upgrade Programme (the Programme), which means the current Programme cannot be fully delivered within the fixed funding envelope of \$6.8 billion.   |          |          |
| 2 | <b>agree</b> to commit to the five committed projects forecast to cost \$2.2 billion that are already being constructed, or are about to commence with procurement or construction, as there may be additional costs associated with stopping or deferring these projects.  | Yes / No | Yes / No |
| 3 | <b>agree</b> to commit to ten smaller scale projects, forecast to cost \$467 million, to as they provide economic stimulus, are geographically spread, and have minimal cost risk on the overall Programme.   | Yes / No | Yes / No |
| 4 | <p><b>indicate</b> your preferred ranking of the following priorities to support Ministry of Transport and Treasury officials in identifying package options within the remaining Programme allocation of \$4.1 billion:</p> <ul style="list-style-type: none"> <li>• alignment with other Government priorities, such as the Auckland Transport Alignment Project (ATAP), Let's Get Wellington Moving, and a resilient and reliable rail system (which was agreed by Cabinet in the Future of Rail review)</li> <li>• economic stimulus and supporting recovery</li> <li>• housing and transit orientated development</li> <li>• emissions reduction</li> <li>• any other priorities you wish to be considered for the Programme.</li> </ul> |          |          |
| 5 | <b>agree</b> for all projects to progress to decision stage gates, such as completion of business cases or route protection, at a relatively low cost to enable Ministers to make decisions if funding is available, either through the Programme or other avenues.   | Yes / No | Yes / No |
| 6 | <b>note</b> that there will continue to be risks and uncertainties even if de-scoping and re-prioritisation of the Programme occurs.  |          |          |
| 7 | <b>note</b> that Ministry of Transport and Treasury officials will work with Waka Kotahi NZ Transport Agency and KiwiRail to report back on how these risks can be managed, including the appropriate level of contingency to reserve in the \$6.8 billion envelope and the decision making framework across the Programme.   |          |          |
| 8 | <b>note</b> that ATAP is planned for a high level announcement by the Minister of Transport and the Mayor of Auckland on Friday 12 March 2021 and the release of the public-facing ATAP document is planned for March 2021.   |          |          |

- 9 **note** that ATAP includes references to around \$3.5 billion of Programme projects, including projects in the Drury corridor such as Mill Road, the Drury train stations, SH1 Papakura to Drury South, and the Papakura to Pukekohe rail electrification project.
- 10 **note** that, given the concurrent consideration of the ATAP and the Programme, Ministers should caveat discussions on Programme projects until final decisions are made following the baselining in April 2021 to reflect the potential for change.
- 11 **note** that the Treasury has sent further information on ATAP, including on the proposed announcement for Friday 12 March 2021, to the Minister of Finance's office.

---

David Taylor  
**Manager, National Infrastructure Unit**  
**The Treasury**  
 11 / 03 / 2021

---

Tim Herbert  
**Manager, Investment**  
**Ministry of Transport**  
 11 / 03 / 2021

---

Hon Grant Robertson  
**Minister of Finance**  
 ..... / ..... / .....

---

Hon Minister Wood  
**Minister of Transport**  
 ..... / ..... / .....

**Minister's office to complete:**     Approved                                     Declined  
 Seen by Minister                                     Not seen by Minister  
 Overtaken by events

**Comments**

To protect the privacy of individuals

**Contacts**

Name	Telephone	First contact
Tim Herbert, Manager, Investment, Ministry of Transport	██████████	✓
Robert Anderson, Manager, Governance, Ministry of Transport	██████████	
David Taylor, Manager, National Infrastructure Unit, The Treasury		
Mark Hodge, Senior Analyst, National Infrastructure Unit, The Treasury	██████████	✓

## New Zealand Upgrade Programme - Funding Risks and Programme Options

### Background

- 1 On 29 January 2020, \$6.8 billion of Crown funding was allocated towards transport projects in the New Zealand Upgrade Programme (the Programme). The Programme was set to provide fiscal stimulus to modernise infrastructure and future proof the New Zealand economy. Joint Ministers (Ministers of Finance and Transport) asked delivery agencies (Waka Kotahi NZ Transport Agency and KiwiRail) to give priority to delivery momentum and speed across the Programme.
- 2 In July 2020, Joint Ministers approved the Establishment Reports as a starting baseline for the Programme. Joint Ministers also delegated the individual project level decisions to the Boards of the delivery agencies.
- 3 The intent of this was to create and maintain delivery momentum in the Programme, but was subject to Joint Ministers being involved in decisions where there are any significant changes to:
  - scope, and where outcomes and outputs are significantly impacted, reduced, or changed from those identified in the Establishment Report
  - cost estimates that are expected to impact the delivery of the Programme within the Crown's fixed funding envelope of \$6.8 billion
  - timing, where there is a forecast delay to the construction start or construction completion dates.
- 4 Following its establishment in July 2020, the New Zealand Upgrade Programme Oversight Group (the Oversight Group) asked the delivery agencies to provide a fresh baseline for the NZUP transport projects. The Oversight Group provides assurance around the Programme's delivery, and its fit with your outcomes as it evolves over time. The request for a fresh baseline reflected that overall, the original Establishment Reports did not provide enough clarity on project scopes, risks and costs. Furthermore, risks and cost escalations were materialising across multiple projects, early in the Programme's life.
- 5 It remains a priority for Waka Kotahi NZ Transport Agency (Waka Kotahi) and KiwiRail to deliver the Programme's baseline by the end of March 2021. We expect that the baseline information's quality and level of detail is likely to vary across the Programme. But it will inform your choices on how you would like to purchase the Programme, such as how much contingency, how this is managed, and whether there are risks (e.g., outstanding geo-technical issues) that you would like resolved early.

### There are significant cost increases forecasted across the Programme

- 6 There are significant forecast cost increases across the Programme against the Crown funding allocations reported in the Establishment Reports. While acknowledging that the baselining process is still in progress, the Ministry of Transport (the Ministry) considers that the level of forecasted cost increases that have been disclosed through the baselining process to date, now requires active trade-offs

to be made to manage the Programme within its fixed funding envelope. This will involve challenging choices between the 26 projects.

- 7 The delivery agencies estimate that the total cost of the Programme could exceed the \$6.8 billion funding allocation by around \$4 to 5 billion, which includes contingency. A detailed summary of the current status of each project in the Programme is provided in Appendix 1.
- 8 The forecast cost increases are primarily driven by the Waka Kotahi component of the Programme.
- 9 The most recent Oversight Group Report (OC210094 refers) notes a range of factors that Waka Kotahi has provided for to explain the further increases in costs. Further information on the drivers for the cost increases, compared to the Establishment Reports, will be provided following the completion of the baseline exercise.
- 10 The baselining process will provide more certainty on what individual projects may cost and what the key scope choices are in light of the outcomes you are seeking. We recommend you wait until this information is received before making final decisions on the Programme, and provide us with a steer on your desired outcomes to help us provide you with choices.

### Summary of choices in the Programme

- 11 Officials and the delivery agencies are working under the assumption that there is little or no further funding available outside the existing \$6.8 billion funding allocation, and that you would like to prioritise within the 26 transport projects in the Programme. Officials and delivery agencies consider this could include:
  - progressing with committed projects that are already under construction or procurement. We have identified five projects that fall within this category. These projects are forecast to cost \$2.2 billion.
  - progressing with smaller scale, lower cost projects that have low risk to the overall Programme. We have identified ten projects that fall within this category. These projects are forecast to cost \$358 to \$467 million.
- 12 This would leave \$4.1 billion to allocate across \$9.9 billion worth of remaining projects in the Programme.

*Five projects in the Programme are already being constructed, or are about to commence with procurement or construction*

- 13 As some projects in the Programme are already being constructed, or are about to commence with procurement or construction, officials consider that the ability to make scope changes or deferral decisions on these projects will be limited, and could come at an extra cost. This would be on top of the existing sunk costs (i.e. costs already incurred) across the Programme.
- 14 Officials recommend continuing with these projects as it would align with the original intent of the Programme to provide fiscal stimulus to the sector and provide greater confidence in the construction pipeline.

SENSITIVE

Table One: Projects in the Programme already in, or about to commence with construction or procurement

Project	Status of construction or contract arrangements	Other considerations	Original Programme allowance	Latest cost estimate
SH58 Safety Improvements	Construction contract awarded for Stage 1A (circa \$15 million).		\$59 million	\$135 to \$150 million
SH1 Papakura to Drury South Stage 1	Construction contract for Stage 1A (circa \$150 million) anticipated to be awarded in February 2021.	Important to Drury growth plans and the Auckland Transport Alignment Project (ATAP). Benefits and outcome contingent on Stage 1B delivery.	\$423 million	\$650 to \$700 million  This includes the delivery of Stage 1A, 1B1 and 1B2, which are all required to realise the outcomes and benefits of the project, but not the cost of Stage 2 which is a further \$500 to \$550 million.
Takitimu North Link Stage 1	Construction tender currently underway, targeting award in April 2021.	A committed project in the Urban Form and Transport Initiative (UFTI).	\$478 million	\$650 to \$700 million
Wiri to Quay Park (Third Main Line)	Construction is underway	Important to the delivery of benefits of the City Rail Link.	\$315 million	\$315 million
Papakura to Pukekohe electrification	Enabling construction is underway and the main contractor has been appointed – their submission for the Target Outturn Cost is due 28 May 2021. Award is targeted for June 2021.	Important to Drury growth plans and ATAP.	\$371 million	\$371 million
<b>Total committed funding</b>			<b>\$1,646 million</b>	<b>\$2,121 - \$2,236 million</b>

*Ten projects are considered to have minimal cost risk to the overall Programme*

- 15 Delivery agencies have indicated there are ten low cost projects in the Programme that have minimal cost risk to the overall Programme. These are:
- the Canterbury package, which include six projects (\$210 to \$280 million)
  - the Queenstown package, which includes three projects (\$110 to \$140 million)
  - SH1/SH29 (\$38 to \$47 million), in the Waikato/Bay of Plenty area
- 16 Officials consider there is benefit in progressing with these projects in the Programme as they provide economic stimulus to the regions, and are geographically spread. These projects are forecast to cost \$358 to \$467 million, and present minimal cost risk to the overall Programme.

**There remains \$4.1 billion in the current Programme allocation that you could choose to prioritise within**

- 17 If you agree to progress with the 15 projects above, there remains \$4.1 billion in the current Programme allocation that you could choose to prioritise within. Officials propose assessing the remaining projects' alignment with the following areas to identify package options within the remaining Programme allocation:
- other Government priorities, such as the Auckland Transport Alignment Project, Let's Get Wellington Moving, and a resilient and reliable rail system, as agreed by Cabinet in the Future of Rail review
  - economic stimulus and supporting recovery
  - housing and transit orientated development
  - emissions reduction
- 18 This assessment requires more complete information as the Oversight Group has observed that one of the major information gaps across the Programme is on expected outcomes and benefits of some projects.
- 19 Further information from the baseline will help to confirm options for project phasing, geographic spread, and scope choices available to align with the above outcomes for the Programme.

*Eight of the remaining projects in the Programme support broader Government commitments*

- 20 Eight of the remaining projects in the Programme support broader Government commitments. This includes projects, which have not yet started, that support the Auckland Transport Alignment Project (ATAP), Let's Get Wellington Moving, and a resilient and reliable rail system.



- 21 These projects are currently forecast to cost \$4.8 to \$6.0 billion, which means that consideration should be given to re-scope and re-phasing, or de-prioritising projects where they do not represent value for money. These projects are:
- Mill Road (\$2,800 to \$3,400 million)
  - Penlink (\$560 to \$800 million)
  - Northern Pathway (\$520 to \$675 million)
  - Drury rail stations (\$276 to \$327 million)
  - SH1 Papakura to Drury South Stage 2 (\$500 to \$550 million)
  - Wellington Railway station safety improvements (\$70 to \$90 million)
  - Wairarapa Rail upgrades (\$90 to \$110 million)
  - Capital Connection Interim Replacement Rolling Stock (\$27 million)
- 22 The Northern Pathway has risen in cost, above the \$360 million funding allocation set out in the Establishment Report, and it is not clear how the project can be constructed. The increase is driven by the 'Auckland Harbour Bridge clip-on' option becoming unfeasible, due to bridge loading concerns, and the need to develop and assess other options to deliver the project.
- 23 This means that for the time being at least, there is not a clear way forward for the Northern Pathway project. The Project Alliance is currently considering alternate solutions and expect to present recommendations to the Waka Kotahi Board in March 2021. Officials recommend Ministers reconsider how this project could be funded given significant scope and cost change. This would help manage pressure on the Programme.
- 24 Officials are preparing detailed advice on how the Mill Road and SH1 Papakura to Drury South projects could contribute to transit orientated development, climate change outcomes and housing development. This includes possible staging options alongside the investments in the Drury and South Auckland area.
- 25 We have commenced this work with Waka Kotahi, Auckland Council, Auckland Transport and KiwiRail. In terms of staging options for Mill Road, we are reviewing the staging that existed prior to the Programme.

*Two of the remaining projects, or stages of projects, have not yet begun but have strong interdependencies with local government priorities*

- 26 Delivery agencies indicate there are two of the remaining projects, or stages of projects, that have not yet begun but have strong interdependencies with:
- projects already being constructed, or about to commence with procurement and construction
  - local authority priorities, such as the Melling Interchange (with Hutt City Council and Wellington Regional Council), and Tauranga (and the Urban Form Transport Initiative).

- 27 These investments form part of wider investments already planned by Local Government and other partners, and includes Melling Interchange (\$370 to \$415 million) and Takitimu North Link Stage 2 (\$550 to \$700 million).

*All remaining projects can be progressed to decision stage gates now at a relatively low cost*

- 28 You could allow these remaining projects to reach decision stage gates now, such as completion of business cases, regardless of whether they remain part of the Programme. This would present a relatively low cost risk to the overall Programme and enable projects to have greater levels of readiness if additional funding or delivery options become available.
- 29 In the case of confirmation of designations to protect routes, this will vary by project, but has the benefit of improving certainty for communities, reducing future costs and signalling commitment for projects to proceed even if they are delivered outside of the Programme.
- 30 There are a number of large projects where staging options are available. These staging options may provide benefits in terms of optimising land use and transport infrastructure timing, and would provide a substantial contribution to managing current funding pressures. The most notable projects are Takitimu North Link Stage 2 and SH1 Whangarei to Port Marsden.
- 31 Progressing with these projects to business case stage and route protection would provide flexibility for future decisions on their timing, funding, and delivery mechanism. Waka Kotahi have also advised that there are high expectations from the community that route protection will be completed for Otaki to North of Levin and Mill Road.
- 32 This would allow you to re-examine funding sources and the relationships between the Programme and the National Land Transport Plan (NLTP) process for some projects at a later date. This could involve indicating where projects should be considered through future NLTP processes, and with what level of priority. The delivery of these projects could then be revisited in the future if alternate funding or delivery options become available.

*We will provide you with further advice using the baseline information to assess remaining projects' alignment with your priorities*

- 33 Officials will provide you with advice on the remaining projects' alignment with the interdependencies above. We have prepared the table below as our indicative understanding of how the current Programme could support your priority outcomes and seek your indication of your preferred ranking of these:

Desired outcome	Description	Our advice
Economic stimulus and supporting recovery	The Programme continues to support economic stimulus, job creation and economic recovery across New Zealand.	<p>There are a range of different considerations for economic stimulus and supporting recovery, including providing confidence to the market through a clear pipeline of projects; short-term employment benefits; and wider economic development outcomes (such as urban growth outcomes). You also need to consider the geographical spread of stimulus, for example, on whether you would prefer support to be focused on Auckland or spread across the regions.</p> <p>Prioritising this outcome could involve choosing to continue the delivery of the Waka Kotahi and KiwiRail projects closest to delivery for immediate stimulus. Though we recommend seeking a spread of projects over time to provide a forward pipeline of work, to support market confidence.</p>
Emissions reduction	The Programme is prioritised and project scopes are reconfigured to support emissions targets.	Outside of rail projects, some of the individual projects are likely to contribute to an increase in emissions from road transport. You can contribute to mode shift through scope choices and prioritising investments that emphasise walking, cycling and support for public transport. You can also ensure the overall investments in urban areas enable the effective movement of people and goods, without inducing demand away from public transport. This could be accomplished, for example, through changing the scale and nature of some projects. Reducing the scale of Mill Road and focusing on connections to rail stations and other transit, could also save costs and deliver in reductions in emissions.
Housing and transit orientated development	The Programme is prioritised to enable urban development and increased housing supply in future urban growth areas located on current and planned rapid or frequent transit networks.	<p>This outcome would prioritise urban and housing development concentrated around the new rail stations in Drury Central, Drury West and Paerata over roading projects such as Penlink and Takitimu North Link Stage 2 where there is only limited opportunity for transit-orientated development as a result of the investment (or indeed any housing development at scale).</p> <p>The ongoing priority of Mill Road and potential scope options will be a key consideration of this focus, and the likelihood that the increase in road capacity will induce</p>

		<p>new road traffic. However, smaller portions of Mill Road can be critical enablers for housing and urban development, such as the Northern Link to Manukau, and the Southern Link into Drury East and the Drury Crossing business park. Many of these benefits could also be achieved with a scaled down Mill Road project with more focus on connections to rail stations and other transit.</p> <p>The Ministry of Housing and Urban Development has indicated that it considers the Drury projects are the priority from a housing perspective.</p>
--	--	--

- 34 If there are any other factors that you would want to consider for the Programme, we recommend that you indicate these to officials. We will then assess the scopes and forecast cost estimates from the baseline information across the Programme more clearly based on these priorities. We will then provide you with possible package options within the remaining Programme allocation of \$4.1 billion.
- 35 This provides an opportunity for Ministers to focus on the benefits of each individual project, and their contribution towards other Government priorities.

**We are seeking direction so we can prepare some options for you to consider**

- 36 If Joint Ministers intend to deliver the Programme investment within its fixed funding envelope of \$6.8 billion, a decision will be required by Joint Ministers on which projects should proceed.
- 37 This briefing has grouped the projects in the Programme based on their current delivery status to help you. However, fuller information on each project is being provided as part of the baseline process but we expect the baseline information's quality and level of detail is likely to vary across the Programme. We are receiving this information in tranches at present.
- 38 There will be trade-offs for Ministers to consider when prioritising the Programme based on the choices above. Once officials have a clear direction on your priorities for the Programme, we can then work with the delivery agencies to develop prioritisation options, such as phasing and scope options, for the projects in the Programme.
- 39 Given the early stages of some projects in the Programme, there will remain risks and uncertainties across the Programme that cannot be completely eliminated through any prioritisation of the Programme. The management of this will require a suitable funding contingency and decision-making framework, and appropriate purchase arrangements for the Programme, which will be included in our upcoming advice.
- 40 Waka Kotahi will continue to investigate other levers to manage project costs. This includes consideration of procurement options, and a review of standards to ensure projects meet appropriate regulations and represent value for money.

**Next steps**

- 41 Officials will work with the delivery agencies to prioritise the delivery of the projects in the Programme and provide you with advice on trade-offs, and possible options to give effect to your Programme priorities in early April 2021.
- 42 Additionally, we will advise on the purchase arrangements for the Programme, appropriate level of contingency and decision making framework in light of confidence in the Programme, and remaining risks and uncertainties across the Programme and how to manage them alongside our advice on baseline results in early April 2021.
- 43 We understand that the Minister of Transport intends to make announcements on ATAP soon. Given the concurrent consideration of ATAP and the Programme, Ministers should preserve flexibility on projects, where possible, to mitigate the risks of constraining future trade-off decisions. We recommend Ministers caveat discussions on Programme projects until final decisions are made in April 2021, to reflect the potential for change.

Proactively released by the  
Ministry of Transport  
and Treasury

**Appendix 1: New Zealand Upgrade Programme – Project Considerations**

Proactively released by the  
Ministry of Transport  
and Treasury

## Appendix 1 – NZUP Project Considerations

Current cost estimate range is indicative only and may alter as part of the current baselining completion. These numbers are also reflective of current project phase.

### Notes:

\* A high-level assessment of level of certainty around scope and cost i.e. red rating typically reflects projects still progressing through business case phase, with significant design, investigation and consenting work still to be completed.

\*\* Current cost estimate range is indicative and may alter as part of the current baselining completion. These numbers are also reflective of current project phase.

\*\*\* Timelines assuming that these are not adjusted based on baselining and prioritisation decisions.

### Waka Kotahi NZ Transport Agency Sub-Programme

Project	Scope/ cost certainty level*	Grouping	Funding Allocation	Current cost estimate range**	Commitment summary and timeframes***	Outcomes and benefits	Scope or staging options	Additional considerations
Takitimu North Link Stage 1	High	Early delivery	\$478M	\$650M - \$700M	Current phase - Physical works procurement  Timing - Physical works contract award in April 2021	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>Economic prosperity</li> <li>Safety</li> <li>Inclusive access</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>Economic stimulus – early delivery opportunity to construction market</li> <li>Housing release – supports growth plans</li> <li>Emissions reduction – provides facilities to support mode shift (i.e. shared path and managed lanes)</li> </ul>	Scope options - Minimal  Staging options – None for Stage 1 but there is option to defer parts of Stage 2	Local/ central government interdependences – committed project in Urban Form and Transport Initiative (UFTI)
Papakura to Drury South Stage 1	Medium	Early delivery	\$423M (for Stage 1)	\$650M - \$700M	Current phase - Physical works procurement  Timing - Physical works contract awarded (stage 1A) in February 2021	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>Economic prosperity</li> <li>Safety</li> <li>Inclusive access</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>Economic stimulus – early delivery opportunity to construction market</li> <li>Housing release – supports growth plans</li> </ul>	Scope options – Minimal  Staging options – Minimal for Stage 1 without significantly reducing benefits. Option to defer Stage 2	Local/ central government interdependences – Included in Auckland Transport Alignment Project and part of Drury Transport Investment Programme
Canterbury <ul style="list-style-type: none"> <li>Walnut</li> <li>Brougham</li> <li>Halswell</li> <li>Rolleston</li> <li>Tinwald</li> <li>Weedons</li> </ul>	Medium	Smaller projects	\$159M	\$210M - \$280M	Walnut: construction tender process commenced in February 2021  Other projects: business cases completed early/ mid 2021	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>Safety</li> <li>Inclusive access</li> <li>Environmental sustainability</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>Housing release – supports growth plans for Christchurch and Rolleston</li> <li>Emissions reduction – is part of wider public transport and active modes transport system</li> </ul>	Scope options – Minimal  Staging options – Moderate. Urban packages provide some options to reduce number of intersections that are upgraded	Local/ central government interdependences – Christchurch city and Rolleston projects have independencies with local authority projects and public transport system
Queenstown	Medium	Smaller projects	\$90M	\$110M - \$140M	Current phase – Pre-implementation  Timing – Business Case approved in February 2021	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>Safety</li> <li>Inclusive access</li> <li>Environmental sustainability</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>Economic stimulus – early delivery opportunity to construction market, alongside Crown Infrastructure Partners work</li> <li>Emissions reduction – is part of wider public transport and active modes transport system</li> </ul>	Scope options – Minimal  Staging options – Minimal without significant reduced benefits	Local/ central government interdependences – Part of integrated package with Queenstown Lakes District Council (which includes both NZUP and CIP funding). Also interdependences with public transport system
SH1/ 29	Medium	Smaller projects	\$58M	\$38M - \$47M	Current phase – Pre-implementation  Timing – Notice of Requirement lodged in mid/late 2021	Most significant transport benefits areas: <ul style="list-style-type: none"> <li>Safety</li> <li>Resilience</li> </ul>	Scope options – Minimal  Staging options - None	There is a design interface with the longer term SH1 Cambridge to Piarere upgrade, however these projects will be delivered at separate times

SENSITIVE

Project	Scope/ cost certainty level*	Grouping	Funding Allocation	Current cost estimate range**	Commitment summary and timeframes***	Outcomes and benefits	Scope or staging options	Additional considerations
SH58	Medium	Smaller projects	\$59M	\$135M - \$150M	Current phase – Construction/ Pre-implementation  Timing – Detailed design complete for Stage 2a in mid-2021	Most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Safety</li> <li>• Resilience</li> </ul>	Scope options – Minimal  Staging options – Minimal without significant reduced benefits	N/A
Papakura to Drury South Stage 2	Lower	South Auckland/ Auckland Transport Alignment Project	Not funded	\$500M to \$550M	Current phase – Pre-implementation  Timing – Consents lodged in 2022	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Economic prosperity</li> <li>• Safety</li> <li>• Inclusive access</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>• Housing release – supports growth plans</li> <li>• Emissions reduction – part of wider system mode shift plan</li> </ul>	Scope options – Minimal  Staging options – Option to defer Stage 2, but with reduction in benefits	Local/ central government interdependences – Included in Auckland Transport Alignment Project
Mill Road	Lower	South Auckland/ Auckland Transport Alignment Project	\$1,354M	\$2,800M - \$3,400M	Current phase – Business Case phase  Timing – Business Case approved in early 2022	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Economic prosperity</li> <li>• Safety</li> <li>• Inclusive access</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>• Housing release – supports growth plans</li> <li>• Emissions reduction – Whilst Mill Road in isolation isn't reducing emissions, it forms part of the overall South Auckland transport package, which is expected to result in a net reduction in emissions</li> </ul>	Scope options – Moderate  Staging options – Could be staged, with focus on sections that provide greatest safety, mode shift or support for growth outcomes i.e. Northern and Drury South sections progressed as part of NZUP. Papakura section deferred.	Local/ central government interdependences – Included in Auckland Transport Alignment Project  Route protection – Prior to NZUP, commitments were made by Waka Kotahi to fund and complete route protection to give communities greater certainty.
Northern Pathway	Lower	Auckland Transport Alignment Project	\$360M	\$520M - \$675M	Current phase – Pre-implementation	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Inclusive access</li> <li>• Environmental sustainability</li> <li>• Safety</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>• Emissions reduction – key link in wider active mode transport system and mode shift plan</li> </ul>	Scope options – Several alternative options exist. Requires further work which will be completed by end of March and subsequent direction from Ministers.	Local/ central government interdependences – Included in Auckland Transport Alignment Project
Penlink	Lower	Auckland Transport Alignment Project	\$411M	\$560M - \$800M	Current phase – Pre-implementation  Timing – Physical contacts award in late 2021	Most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Economic prosperity</li> <li>• Safety</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>• Economic stimulus – early delivery opportunity to construction market</li> </ul>	Scope options – Minimal  Staging options – Minimal but could reduce level of future proofing (i.e. reduce scope at interchange with SH1)	Local/ central government interdependences – Included in Auckland Transport Alignment Project
Melling	Lower	Smaller projects	\$258M	\$370M - \$415M	Current phase – Pre-implementation  Timing – Notice of Requirement lodged in mid-2021	Most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Inclusive access</li> <li>• Safety</li> <li>• Resilience</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>• Flood protection</li> <li>• City centre revitalisation</li> </ul>	Scope options – Minimal  Staging options - None	Local/ central government interdependences – Highly integrated with Hutt City Council, Wellington Regional Council and KiwiRail projects (covering flood protection and urban outcomes, as well as transport outcomes)
Whangarei to Port Marsden	Lower	Larger projects	\$692M	\$1,200M - \$1,300M	Current phase – Business Case phase  Timing – Business Case approved in mid/late 2021	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Safety</li> <li>• Resilience</li> <li>• Economic prosperity (particularly freight benefits)</li> </ul>	Scope options – Moderate  Staging options - sections of corridor improvements could be staged i.e. urban or rural	
Otaki to North of Levin	Lower	Larger projects	\$817M	\$1,200M – \$1,500M	Current phase – Business Case phase  Timing – Detailed Business Case complete in mid/late 2021	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Economic prosperity,</li> <li>• Safety</li> <li>• Inclusive access</li> </ul>	Scope options – Moderate  Staging options - Minimal	Route protection – Prior to NZUP, commitments were made by Waka Kotahi to fund and complete route protection to give communities greater certainty.
Takitimu North Link Stage 2	Lower	Larger projects	\$455M	\$550M - \$700M	Current phase – Pre-implementation  Timing – Lodge consent applications late 2021	Three most significant transport benefits areas: <ul style="list-style-type: none"> <li>• Economic prosperity,</li> <li>• Safety</li> <li>• Inclusive access</li> </ul> Other significant wider benefits <ul style="list-style-type: none"> <li>• Housing release – supports growth plans</li> </ul>	Scope options – Moderate  Staging options - Option to defer Stage 2, but with reduction in benefits	Local/ central government interdependences – part of Urban Form and Transport Initiative



## KiwiRail Sub-Programme

Project/project stage	Confidence Level *	Grouping	Establishment Cost	Current cost estimate range **	Commitment summary and timeframes ***	Outcomes and benefits	Scope or staging options	Additional considerations
Wiri to Quay Park		South Auckland/ ATAP	\$315M	\$315M Base cost being finalised - expected to be in line with Establishment Cost estimate  (plus) \$40-60m optional additional scope items	Current phase: Design and Tender phase with stage 1 construction works underway.  Timing: Construction is underway	Main Benefits: <ul style="list-style-type: none"> <li>• Environmental benefits</li> <li>• Economic prosperity</li> <li>• Resilience</li> <li>• Transit-oriented development</li> <li>• Healthy and safe people – improved community health</li> <li>• Inclusive access - Increased passenger and freight journeys</li> </ul>	KiwiRail has identified an optional increase in scope to develop Middlemore to enable additional works related to a future 4 <sup>th</sup> Main. Cost for this option is estimated at \$40-60M	Included in ATAP and important to the delivery of benefits of the City Rail Link Early project with Ministerial approval to proceed
Papakura to Pukekohe		South Auckland/ ATAP	\$371M	\$371M Base cost being finalised - expected to be in line with Establishment Cost estimate  (plus) \$32m optional additional scope items identified	Current phase: Design and Tender phase with enabling works underway.  Timing: Main contractor appointed – submission for Target out-turn cost is due end May 2021. Contract award targeted for June 2021	Main Benefits: <ul style="list-style-type: none"> <li>• Economic prosperity</li> <li>• Inclusive access - better access to jobs, education and core services</li> <li>• Environmental benefits through diesel fleet replacement and avoided car travel</li> <li>• Transit-oriented development</li> <li>• Resilience</li> </ul>	KiwiRail has identified optional increases in scope to future proof some elements of the power system. Cost for these options is estimated at \$32m	Included in ATAP Early project with Ministerial approval to proceed
Drury Rail Stations		South Auckland/ ATAP	\$247M	\$276M to \$327M (2 station option plus land for 3 <sup>rd</sup> station) Costings under review and other options and costings to be included in baselining	Current phase: Pre-project  Timing: The project scope is currently in progress with options developed. KiwiRail has recommended that two stations are built.	Main Benefits: <ul style="list-style-type: none"> <li>• Economic prosperity</li> <li>• Inclusive access</li> <li>• Safety</li> <li>• Environmental benefits from mode shift</li> <li>• Transit-oriented development</li> </ul>	Parallel workstream on scope extension is underway with MoT/MHUD officials.  Other options and costings will be available through baselining (e.g. for all 3 stations)	Included in ATAP and part of Drury Transport Investment
Wellington Regional Rail - Wairarapa Rail Upgrades		Review of Rail	\$126M	\$90M-\$110M (reduced scope option)	Current phase: Pre-project  Timing – confirm scope and concept design Q2 2021	Main Benefits: <ul style="list-style-type: none"> <li>• Safety</li> <li>• Resilience</li> <li>• Environmental benefits through mode shift for freight and passenger</li> </ul>	KiwiRail is working on a recommended reduced scope option, to progress to business case for later decision.	Other stakeholders: Greater Wellington Regional Council
Wellington Railway Station safety improvements		Review of Rail  Safety	\$70M	\$70M - \$90M	Current phase: Pre-project  Timing – confirm scope and concept design Q2 2021	Main Benefits: <ul style="list-style-type: none"> <li>• Safety</li> <li>• Resilience</li> <li>• Capacity Improvements</li> <li>• Environmental benefits through enabling public transport capacity</li> </ul>	Replacing the signalling control system (c\$35m early estimate) is minimum scope.  Workstream underway to determine logical break points for track works once signalling work is completed	Other stakeholders: Greater Wellington Regional Council, Waka Kotahi (Safety Regulatory Arm), Transport Accident Investigation Commission
Capital Connection Interim Replacement Rolling Stock		Review of Rail	\$15M	\$27M	Current phase: Pre-Implementation. Carriages procured.  Timing: Seed funding will be exhausted end Mar 2021, long lead materials required to be procured April 2021	Main Benefits: <ul style="list-style-type: none"> <li>• Inclusive access</li> <li>• Resilience</li> <li>• Environmental benefits (public transport)</li> </ul>	Includes minimum specification platform works.  KiwiRail has briefed the Minister of Transport separately in relation to this investment	Other stakeholders: Greater Wellington Regional Council, Horizons Regional Council, Waka Kotahi