

20 November 2020

OC200807

Hon Grant Robertson
Minister of Finance
Action required by:
 Monday, 23 November 2020

Hon Michael Wood
Minister of Transport

NEW ZEALAND UPGRADE PROGRAMME – TRANSPORT UPDATE NOVEMBER 2020

Purpose

Provides an overview of the governance and assurance arrangements in place for the New Zealand Upgrade Programme (the Programme), and an update on progress of the Programme to 31 October 2020. The briefing includes an overview of the Programme's Oversight Group (OSG), and the issues and challenges that the Programme is facing.

Key points

- The Minister of Finance and the previous Minister of Transport (Joint Ministers) agreed on a programme-level governance, assurance and oversight arrangement for the transport aspects of the Programme. An Oversight Group (OSG) was established in July 2020, and comprises three external members and five cross-agency senior officials.
- Based on the delegation letters of August 2020, Joint Ministers originally delegated individual project level decisions to the Waka Kotahi and KiwiRail Boards to maintain delivery momentum of the Programme. However, changes to project or programme baselines require Joint Ministers' approval.
- State Highway One Papakura to Drury South, Northern Pathway, State Highway 58 Safety Improvements, Takitimu North Link Stage 1, and Penlink are the "first five" Waka Kotahi projects closest to delivery.

State Highway One Papakura to Drury South, Northern Pathway, and State Highway 58 Safety Improvements are forecast to exceed their funding allocation by \$355 million. There are also cost risks to the Mill Road, Otaki to North of Levin, and Whangarei to Port Marsden projects. Waka Kotahi is actively working through these issues, informed by advice from the OSG. No KiwiRail project is currently forecasted to exceed their funding allocations.

- OSG member agencies are concerned that the Programme in its current form is not feasible within the \$6.8 billion funding envelope. Based on best available information,

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independent advisers provisionally estimated that the total cost estimate could exceed the \$6.8 billion funding allocation by \$1.7 billion, which includes the reported \$355 million increase. The OSG meeting in September 2020 identified that the immediate focus should be on establishing a robust baseline for the Programme.

- Up to \$900 million of major decisions from Waka Kotahi are required before June 2021, and officials would like to seek clarity from Joint Ministers on the relative importance of accelerating delivery of the first five projects, versus optimising the Programme's value-for-money. With the exception of the Drury Stations decision in February/March 2021, major decisions required by KiwiRail up to April 2021 consist of internal decisions
- In relation to the Auckland Transport Alignment Project programme of investment, there are complex inter-dependencies for projects in South Auckland as well. Given the complexities around the Programme's cost risks and inter-dependencies, you will be provided with advice around these projects around February/March 2021 as the baseline is completed. The advice will cover final scope decisions on the State Highway One Papakura to Drury South, and the Drury rail stations projects.
- Officials are of the view that the Programme baselining will need to be completed to provide a full set of options to align programme, scope, cost, and timing. However, you may already have a sense of what the Programme's priorities should be. Should you prefer to make earlier decisions on certain projects prior to the full completion of the baseline, officials will be able to advise accordingly and ensure that these early decisions feed into the baselining process. These early decisions may need to be based on early information and judgement, given that they are being made ahead of the baselining being completed.
- Officials have prepared letters for you to send to the Chairs of Waka Kotahi and KiwiRail to formally convey your expectations on baselining the Programme.

Recommendations

We recommend you:

- 1 **note** the Ministry of Transport has established an Oversight Group, consisting of cross-agency officials and external experts to provide assurance and oversight over the \$6.8 billion transport component of the New Zealand Upgrade Programme (the Programme)
- 2 **note** the significant cost pressures faced by the Programme, with current analysis showing that the Programme in its current form is not feasible within the \$6.8 billion funding envelope
- 3 **note** that changes to project or programme baselines require approval from the Ministers of Finance and Transport (Joint Ministers)
- 4 **agree** to discuss with officials the relative importance of accelerating the delivery of the first tranche of projects, versus maximising the Programme's value-for-money Yes / No
- 5 **note** that when a more robust baseline is established in March 2021, officials will offer a full set of choices in respect of scope and cost trade-offs for individual projects in the Programme

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- 6 **note** that should you prefer to make earlier decisions on certain projects, officials will be able to assist and advise as well

- 7 **sign** the attached letters to the Chairs of Waka Kotahi and KiwiRail conveying your expectations for the baselining work, to be completed by end of March 2021. Yes / No

Bryn Gandy
Deputy Chief Executive, System Strategy and Investment

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Hon Grant Robertson
Minister of Finance

..... / /

Hon Michael Wood
Minister of Transport

..... / /

Minister's office to complete:

Approved

Declined

Seen by Minister

Not seen by Minister

Overtaken by events

Comments

Contacts

Protect the privacy of individuals

Name	Telephone	First contact
Bryn Gandy, Deputy Chief Executive, System Strategy and Investment	██████████	✓
Robert Anderson, Acting Manager, Governance and Commercial	██████████	

New Zealand Upgrade Programme Update - November 2020

A programme-level governance, assurance and oversight arrangement has been established for the transport component of the New Zealand Upgrade Programme

1. On 29 January 2020, the Prime Minister announced the New Zealand Upgrade Programme (the Programme), a \$12 billion infrastructure investment package. Around \$6.8 billion will be invested in transport (rail, roads, walking and cycling) over the next ten years. The Programme's funding arrangements differ to those of other transport projects, in that the Crown plays the role of "funder" and "programme owner" by directly funding the projects and taking on risk.
2. The Minister of Finance and the previous Minister of Transport (Joint Ministers) agreed to implement a governance, oversight and assurance framework for delivery of the transport component of the Programme (OC200119 refers).
3. This included the establishment of an Oversight Group (OSG) with responsibility for providing independent assurance and oversight for the transport component of the Programme, the appointment of independent assurance and technical advisers, and dedicated programme management capability within the Ministry of Transport.
4. These arrangements seek to provide independent, programme-level oversight and assurance for the delivery of the Programme. Waka Kotahi NZ Transport Agency and KiwiRail Holdings Limited (Waka Kotahi and KiwiRail, together the Delivery Agencies) will be accountable for decision making, governance and assurance activities to deliver specific projects they have responsibility for within the Programme.

The Oversight Group comprises three external members and four cross-agency senior officials

5. The NZUP Oversight Group comprises of:
 - Brian Wood, external OSG member, Chair of OSG
 - Mike Howat, external OSG member, formerly of Fulton Hogan
 - Michael O'Halloran, external OSG member, currently of Mott MacDonald
 - Bryn Gandy, Deputy Chief Executive, System Strategy and Investment, Ministry of Transport
 - Brent Johnston, Acting Deputy Chief Executive, System Performance and Governance, Ministry of Transport
 - Andrew Hagan, Acting Deputy Chief Executive Financial and Commercial, Treasury
 - Paul Laplanche, Chief Financial Officer, Ministry of Transport
 - Dan Cameron, Principal Advisor, Infrastructure Commission
6. The success of the OSG is reliant on having independent and external experts who bring technical experience in the successful oversight and delivery of large and complex infrastructure projects. The Ministry has appointed Brian Wood, Mike Howat and Michael

O'Halloran who collectively bring significant engineering, construction and infrastructure delivery experience to the Oversight Group.

7. Independent advisers from Deloitte and AECOM were also engaged to build the assurance, governance and oversight framework around the OSG. This has included the creation of a Programme dashboard, showing key Programme, Delivery Agency and project-level indicators, data, and commentary. The dashboard will be shared with your respective offices in due course, and will form the basis of future reporting.
8. The OSG met for the first time on 23 July 2020 to consider the establishment of the core oversight and assurance arrangements for the transport component of NZUP. Since September 2020, the OSG has met on a monthly basis, with Delivery Agencies attending parts of the meeting for the OSG to inquire on key areas of interest.

Based on the delegation letters of August 2020, changes to project or programme baselines require Joint Ministers' approval

9. In July 2020, Joint Ministers approved the Establishment Reports as a starting baseline for the Programme. Joint Ministers delegated individual project level decisions to the Waka Kotahi and KiwiRail Boards to maintain delivery momentum of the Programme (OC200503 refers).
10. The intent of the delegations to Delivery Agencies in the letters of August 2020 was to support the delivery momentum of 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 funding envelope
 - timing where there is a forecast delay to the construction start or construction completion dates.
11. As stated in letters to the Boards of Waka Kotahi and KiwiRail, Joint Ministers' expectation is that the transport projects will be delivered within the fixed funding envelope of \$6.8 billion across both Waka Kotahi and KiwiRail projects. Copies of the letter are attached in Appendix One.
12. The \$6.8 billion funding envelope does not allow for cost escalation. Officials previously raised with Joint Ministers that Waka Kotahi had been under the impression that Ministers had agreed to meet any cost escalation, either as a further Crown contribution or reprioritisation from the National Land Transport Fund (OC200793 refers).
13. The decision-making approach recognises the Crown's objectives for the Programme, its role as Programme funder and owner, and the fixed funding envelope and timeframe commitments of the Programme.
14. As the operating environment is fiscally constrained, particularly as a result of the impacts from COVID-19, it is critically important that the Programme is sufficiently well scoped and defined so Joint Ministers are clear on both what the Crown is purchasing through each of the projects, the associated costs and benefits, and the relevant trade-offs that may be required.

The OSG meeting in September 2020 identified that the immediate focus should be on establishing a robust baseline for the Programme

15. At the 4 September 2020 OSG meeting, OSG members considered that the lack of a defined programme baseline, encompassing benefits, scope and cost, is a key risk for the transport component of the programme that needs to be resolved (OC200793 refers). A robust baseline is critical so that Ministers, as purchaser, have a clear view on the achievability of the programme and any deviations from Ministerial expectations.
 16. OSG member agencies are concerned that the Programme in its current form is not feasible within the \$6.8 billion funding envelope. Based on best available information, independent advisers provisionally estimated that the \$6.8 billion funding allocation could eventually be exceeded by \$1.7 billion, or 25 percent over the \$6.8 billion. The OSG is also concerned that project-level reporting appears to focus on allocated budget rather than a robust estimate of delivery costs, although the baselining work that Delivery Agencies are undertaking will help improve project-level reporting.
 17. The OSG has requested that the immediate focus of Delivery Agencies should be establishing a robust baseline to better define benefits, scope, schedule and cost estimation. The OSG's independent advisers are working closely with Delivery Agencies to support development of the baseline. Waka Kotahi and KiwiRail have committed to treat the baseline development as a project in its own right.
 18. Some level of choices or trade-offs may be required to manage within the Programme's current fiscal envelope. The OSG will provide advice to Joint Ministers on these matters post March 2021, when the baseline will be completed.
 19. Officials are of the view that the Programme baselining will need to be completed to provide a full set of options to align programme, scope, cost, and timing. However, you may already have a sense of what the Programme's priorities should be. You may prefer to make earlier decisions on certain projects prior to the full completion of the baseline. Officials will be able to advise accordingly and ensure that your decisions feed into the baselining process.
- Three of Waka Kotahi's "first five" projects closest to delivery are forecast, by Waka Kotahi, to exceed their funding allocation to a total of \$355 million*
20. State Highway One Papakura to Drury South, Northern Pathway, State Highway 58 Safety Improvements, Takitimu North Link Stage 1, and Penlink together form the "first five" projects, representing the five projects closest to delivery (OC200793, the Programme update for September, refers).
 21. Based on Waka Kotahi's reporting, the following three projects of the first five projects now forecast to exceed their funding allocation by a total of \$355 million:
 - State Highway One Papakura to Drury South
 - Northern Pathway
 - State Highway 58 Safety Improvements.
 22. The State Highway One Papakura to Drury South project now has an estimated cost at completion of \$669 million, \$246 million over the project's funding allocation of \$423 million. The cost increase is because there was a mismatch between the funding allocation and the project scope that was announced by Government in January 2020.

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While the funding allocation allowed for an upgrade from Papakura to Drury, the announced scope extended further to Drury South.

23. The Northern Pathway project now has an estimated cost at completion of \$434 million, \$74 million over the project's funding allocation of \$360 million.
24. State Highway 58 Safety Improvements now has an estimated cost of completion of \$94 million, up \$35 million on the original estimate of \$59 million. Waka Kotahi and the supplier are exploring available options to reduce project costs through a value engineering exercise, although there is expected to be limited opportunities to reduce costs for this project.
25. The OSG understands there are cost risks to Takitimu North Link Stage One, Northern Pathway (in addition to the \$74 million cost estimate over the allocated budget noted above), and Penlink that have not yet been quantified. Further advice will be provided by officials on the quantum of these potential cost risks as part of upcoming advice on the status of the Programme upon the completion of the baseline.
26. Penlink is undergoing a scope review as a result of risks relating to scaling the options appropriately with respect to budget. The scope review will also cover the impact of demand management, in particular tolling and ongoing operations. Decisions on the inclusion of tolling will require approval from Ministers and Cabinet.
27. For Penlink, consideration is also being given to the level of future proofing to allow development to a four lane alignment sometime after construction. This includes items such as earthworks and structures that could be disruptive and costly to undertake in the future. This work will help refine the scope of the project (two versus four lanes).
28. The OSG is concerned that challenges in delivering the first five projects in line with the Establishment Report parameters may lead to cost overruns, scope changes and further delay delivery of the Programme. The OSG also has the view that the first five projects are at a stage where influencing delivery cost, schedule or scope is challenging.

Officials have also identified cost risks to the Mill Road, Otaki to North of Levin, and Whangarei to Port Marsden projects

29. Officials understand the cost risk for Mill Road may be in the order of \$800 million above the current funding allocation of \$1.354 billion. Waka Kotahi is working to further quantify this risk.
30. Waka Kotahi has advised that the cost risks on Mill Road relate principally to physical work requirements and assumptions, such as earthworks and ground improvements, and property cost increases.
31. The OSG understands there are also cost risks to the Otaki to North of Levin and Whangarei to Port Marsden projects that have not yet been quantified. Further advice will be provided on the quantum of these potential cost risks as part of upcoming advice on the status of the Programme based on the completed baseline.

It is estimated that the total cost of the Programme could exceed the funding allocation by \$1.7 billion

32. Analysis by independent advisers currently indicate that Programme targets are unachievable within the \$6.8 billion funding allocation. Modelling of key risks, including Mill Road cost increases, indicates that the Programme's total cost could eventually exceed \$1.7 billion or 25 percent of the \$6.8 billion funding allocation, under conservative assumptions.

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33. This estimate is based on the Delivery Agencies' indicative and early information, including the reported \$355 million cost increase across the "first five" projects. The estimate also takes in account price inflation and quantified cost increases reported, but limited by incomplete information in some instances. The \$1.7 billion cost estimate also excludes consideration of any COVID-related costs, with detailed design and geotechnical work yet to be carried out on many of the projects.

34. While these figures are preliminary, the size of the challenge is significant. These figures total more than a 30 percent increase from the Establishment Reports, or 25 percent above the \$6.8 billion Programme allocation.

Up to \$900 million of major decisions are planned by Waka Kotahi before June 2021, which will require action from you in due course

35. The major decisions primarily relate to physical works contract awards for the first five projects and early property purchases for a number of other projects. These decisions and associated costs are presented in the Table One on the next page.

36. These decisions planned by Waka Kotahi may effectively commit the Crown to fund the delivery of projects to realise benefits, presenting a significant "value-for-money" risk, if decisions are undertaken prior to completion of a Programme wide baseline.

37. In addition to these decisions, there are other internal financial decisions required, as well as non-financial activities that will increase expectations of future expenditure. These include:

- Professional services contracts to progress business cases and design - these are already occurring across most projects, with further decisions required over the coming months
- Landowner and community engagement – between now and June 2021, the most significant activities in this space relate to the Mill Road and Whangarei to Port Marsden projects
- Engagement with the supply market – suppliers are mobilised and progressing with Waka Kotahi through procurement processes for all first five projects and the market is also increasing its readiness for other projects in the Programme.

38. Officials would like to seek clarity from Joint Ministers on the relative importance of accelerating delivery of the first five projects, versus optimising the Programme's value for money.

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Table One: upcoming major decisions required by Waka Kotahi between now and June 2021¹

Expenditure type	Project	Decision summary	Decision value (approximate)	Decision date
Physical works construction award	Northern Pathway	Continue interim alliance agreement phase	\$12 million	November 2020 (note Construction Contract Award is post March 2021)
	Papakura to Drury South	Award stage 1a physical works contract	\$140 million contract (\$160 million total stage 1a cost)	December 2020
	SH58 Safety Improvements	Award stage 2a physical works contract	\$15 million contract	November 2020
	Queenstown package	Award contract (staged)	\$5 million of NZUP funding (with further costs to Queenstown Lakes District Council (QLDC))	February 2021 (initial award primarily QLDC projects, with NZUP not awarded until late 2021)
	Takitimu North Link	Award physical works contract	\$420 million contract (\$570 million total project cost)	February 2021
Property purchase	Penlink and Mill Road	Purchase Auckland Transport Property	\$96 million	Complete
	Various	Early purchases	\$15 million	Various from October to June 2021

¹ The decision values are contract values. There are also professional services, property, cost escalation and contingency costs separate from these for each project mentioned. All projects will also incur professional services costs to progress business cases and design.

With the exception of the Drury Stations decision in February/March 2021, decisions required by KiwiRail up to April 2021 consist of internal decisions

39. At the 4 November Oversight Group meeting, KiwiRail presented a number of decisions it needs to make across the projects it is leading (Table Two below refers). Independent advisers note that the decisions are internal to KiwiRail with the exception of the decision on the scope for Drury Stations, which will be presented to Joint Ministers in February/March 2021.

Table Two: upcoming major decisions by KiwiRail between now and April 2021

Project	Milestone	Decision date
Wellington programme	Scope confirmation for Capital Connection carriages	November 2020
	Scope confirmation for civil work projects	March 2021
Drury Stations	Selection of station sites and issue Notices of Requirement	November/December 2020
	Report to Minister on prospect for 2 versus 3 stations within the \$247 million funding limit	February/March 2021
Wiri to Quay Park	Fix target overrun cost and sign final contract	February 2021
Papakura to Pukekohe Electrification	Fix target overrun cost and sign final contract	April 2021

There are complex inter-dependencies for projects in South Auckland as they relate to the Auckland Transport Alignment Project programme of investment

40. At a high level, the OSG notes that there is significant complexity associated with the delivery of the Programme within the scope, benefit, cost and scheduled parameters presented in Establishment Reports. Further complexity is driven by dependencies on programmes and projects being delivered by other organisations. In particular, the south of Auckland area presents a challenge due to the number of projects planned to support growth, which impacts on key projects such as Papakura to Drury South.

41. During 2020, work has been underway on developing potential options for the 2021-31 Auckland Transport Alignment Project (ATAP) programme of investment. This has consisted of cross-agency work with ATAP partners Auckland Transport, Waka Kotahi, KiwiRail, Auckland Council and the Ministry.

42. The previous Minister of Transport requested this work also consider and present options for local investment in Drury for transport infrastructure to support the NZUP investments in Auckland. The package options focus on growth, increased mode shift across Auckland, and the role transport can play in addressing climate change.

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43. These options will be presented to political sponsors for consideration in late November 2020. You will be receiving advice on the Drury projects, and information about its inter-dependencies with other Auckland projects, through this work.

You receive further advice on the State Highway One Papakura to Drury South, and the Drury rail stations projects, in February/March 2021

44. In July 2020, officials highlighted potential cost risks for State Highway One Papakura to Drury South and the Drury rail stations projects in the Programme, and recommended Joint Ministers retain decision making on proposed scope changes for these projects subject to advice from the agencies (OC200503 and T2020/2205 refers).

45. In the delegation letters of August 2020, Joint Ministers requested that the transport agencies work with the Ministry and the Treasury to provide further advice on the marginal costs, benefits and outcomes of the different scope options compared to the base case.

46. Waka Kotahi will aim to provide advice, and seek a decision to include Stage 2 in the State Highway One Papakura to Drury South project, after the completion of the baseline in March 2021.

47. For the Drury Stations project, KiwiRail has begun working with agencies on an options paper which will enable Ministers to make a final decision on the option to be progressed. This is now expected to be completed in February/March 2021. In the interim, KiwiRail has provided Joint Ministers with an update on the project's progress on 17 November.

48. Officials will work with Waka Kotahi and KiwiRail to provide you with advice on possible options and trade-offs across the Programme after March 2021, such as committing further funding or re-scoping certain projects

Officials have prepared letters for you to send to the Delivery Agencies' Board Chairs to formally convey your expectations on baselining

49. The outcome of the baselining work will be important in providing you with an understanding of the overall shape of the Programme. With this information, you will be better placed to direct officials on managing any risks or issues that may arise around the overall scope and cost of the Programme.

50. You should also expect that Delivery Agencies will provide full and real time visibility to you, the Ministry, and Treasury of current and pending project commitments, risks as they arise with associated management activities, and development of project and programme baselines.

51. Officials have prepared letters (attached in Appendix Two) for you to send to the Chairs of the Delivery Agencies that formally convey your expectations. Along with expectations of the baseline being completed by March 2021, the letter also notes that Delivery Agencies must keep you, the Ministry, and Treasury informed of significant decisions. The letter sets out the expectation Delivery Agencies should not presume any particular funding options, or trade-offs, will be used to manage the Programme's cost risks.

Next steps

52. You will be meeting with Brian Wood, Chair of the Oversight Group, and officials between 5pm and 6pm in your office, on 25 November 2020.

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53. The next Oversight Group meeting, and the last for 2020, will be held on 9 December 2020. You can consider attending this meeting to meet with the remainder of the Oversight Group.
54. The first Oversight Group meeting for 2021 will be held on 3 February 2021. Officials will continue to update you after each Oversight Group with a briefing, based on data analytics and discussions from that month's Oversight Group meeting. Officials will also update you regularly via the Weekly Report on briefings and any project-specific advice you may be receiving.
55. Leading up to the end of March 2021 deadline for the baselining, officials will be updating you on progress and where possible, share and test with you baselines for individual projects before a programme-level baseline is fully completed. A completed baseline will form the basis for subsequent discussions on trade-offs and decisions you will need to make across the Programme.

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by the Ministry of Transport

Appendix 1: letters to the Board Chairs of Waka Kotahi and KiwiRail on delegations

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Appendix 2: letters to the Board Chairs of Waka Kotahi and KiwiRail on baselining expectations

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