

24 May 2021

OC210394

Hon Michael Wood
Minister of Transport

Action required by:
Tuesday, 25 May 2021

Hon Grant Robertson
Minister of Finance

NEW ZEALAND UPGRADE PROGRAMME - PROGRAMME OPTIONS

Purpose

To provide you with a draft paper seeking a Cabinet decision on changes to the transport components of the New Zealand Upgrade Programme (the Programme).

Key points

- This briefing accompanies a draft paper seeking Cabinet decisions on changes to the transport components of the New Zealand Upgrade Programme (the Programme).
- The Cabinet paper reflects previous decisions you have taken, and seeks approval for additional funding to enable delivery of the updated Programme.
- This briefing provides further detail on two outstanding issues, for which our preferred positions are reflected in the draft Cabinet paper, but that we have not yet sought decisions from you on. These are:
 - Route protection — a decision by Cabinet is required as to whether funding will be directed towards future-proofing routes originally in the Programme that are now not being progressed
 - Emissions considerations — full information on emissions considerations is not available for all of the projects proposed for funding.
- Given the time pressures, we have had limited opportunity to engage with the Treasury on the development of the financial recommendations.
- The Ministry of Transport and the Treasury will reflect any revisions in the draft paper before it is lodged with the Cabinet Office on 27 May 2021.

Recommendations

We recommend you:

- 1 **agree** to lodge the draft Cabinet paper on changes to the transport components of the New Zealand Upgrade Programme, for consideration by Cabinet. Yes / No

Tim Herbert
Manager, Investment
Ministry of Transport

24 / 05 / 2021

Hon Michael Wood
Minister of Transport

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

Comments

Withheld under Section 9(2)(a) of
the Official Information Act 1982

Contacts

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NEW ZEALAND UPGRADE PROGRAMME - PROGRAMME OPTIONS

A draft paper has been prepared for you to consult with other Ministers and lodge for Cabinet approval

- 1 You previously directed Ministry of Transport (the Ministry) and Treasury officials to provide you with a draft paper to seek Cabinet decisions on changes to the transport components of the New Zealand Upgrade Programme (the Programme).
- 2 The paper has been updated to reflect Treasury's paper of 21 May 2021 [T2021/1283 refers].

The draft Cabinet paper seeks approval to proceed with route protection for the projects no longer being delivered within the Programme

- 3 Route protection, via a designation, protects transport corridors from land development pressures which would otherwise prevent or hinder the delivery of a public work project. Among other benefits, route protection:
 - 3.1 means the project can be implemented faster following a future decision to proceed
 - 3.2 provides certainty to landowners and the community, including for planning around future transport corridors
 - 3.3 enables development around the area
 - 3.4 enables transport planning to take future connections into account
 - 3.5 reduces future cost risk with regards to property purchase (as land purchased now can increase in value).
- 4 The costs of route protection include completing indicative business cases, consenting processes (lodgement, hearings), contractor and management fees, community, and iwi engagement. In addition, once a designation is in place, Waka Kotahi NZ Transport Agency (Waka Kotahi) is required to purchase property in certain circumstances. Based on previous experience, around 20–50 percent of the property required for a project is purchased before a decision is taken to proceed with the project.
- 5 A decision not to fund route protection will be seen as a confirmation the Government does not intend to progress these projects in the medium-long term.
- 6 Waka Kotahi estimates the following costs for route protection for projects not proceeding in the Programme.

Table 1: Estimated route protection costs

Project	Transport Corridor length (km)	Route designation costs (\$m)	Indicative Property Cost (20–50 percent of total property purchase cost) (\$m)
Mill Road	22	55–65	150–390
Papakura to Drury South Stage 2	2	7–10	30–75
Whangārei to Port Marsden	25	30–40	50–120
Takitimu North Link Stage 2	7	10–14	18–43
Total	56	102–129	248–628

- 7 Waka Kotahi proposes that the designation costs are fully funded through the Programme, and property purchase through a combination of the Programme and future National Land Transport Programmes.

Ministry and Treasury view

- 8 While route protection may make sense from the perspective of keeping future options open, it is also important to consider that:
- 8.1 progressing route protection when there are no future plans to progress a project represents poor value for money, particularly given the broader constraints on the Programme
 - 8.2 there is no funding available to complete these projects within the Programme
 - 8.3 the Government Policy Statement on land transport 2021/22–2030/31 signals that there will be no funding for new major roading infrastructure in the next 10 years
 - 8.4 we are unaware of any future intentions for the Government to commit significant investment into roading projects
 - 8.5 the funding to pay for route protection would enable greater progress on alternative projects in the Programme (such as increased safety improvements between Whangārei and Port Marsden, or more local improvements in South Auckland)
 - 8.6 not protecting the route provides an element of confidence to the community that the particular solution will not progress.
- 9 The Ministry and Treasury consider that while route protection might be important, it is no longer a key part of delivering the projects being included in the Programme. As the costs are high, we consider that the funding would be better prioritised towards progressing projects that are included in the Programme. If route protection is required in the future, it will need to be funded through the National Land Transport Programme. Given funding constraints, we note that this will likely mean that route protection will not be undertaken for these projects in the near future.
- 10 Given the implications of not proceeding with route protection, it is important to include sufficient context in the Cabinet paper to enable Cabinet to make an explicit

decision. We propose that the attached paper on route protection, developed by Waka Kotahi, is included as an appendix to the Cabinet paper.

11 We have also included a recommendation in the draft Cabinet paper to reflect this.

Emissions analysis and Climate Implications of Policy Assessment (CIPA) requirements

12 Waka Kotahi and KiwiRail are still developing analysis on the forecast emissions impacts across the Programme. Given some of the projects in the Programme have changed as a result of the baselining and reprioritisation processes, or are in the very early stages of development (without preferred options or detailed business cases), it has not been possible to undertake detailed emissions assessments across all of the projects, or at a Programme level.

13 Since 5 December 2019, there has been a requirement, pursuant to a Cabinet Office Circular, to include a climate implications of policy assessment (CIPA) disclosure. Given the scale of the likely emissions increase as a result of the Programme, we are working on the basis that a CIPA will be needed. However, given the limited nature of previous emissions analysis, and the timeframes under which the Cabinet paper has been prepared, we have not been able to produce an adequate CIPA.

14 The Ministry for the Environment has advised that it would like the Cabinet paper to note that it considers that the CIPA requirements apply. It also notes that despite a CIPA not being available to support the decisions in the Cabinet paper, it will work with the Ministry and delivery agencies as part of future decisions to allocate funding.

[Redacted]

15 [Redacted]

Withhold under s9(2)(h) of the Official Information Act 1982

16 [Redacted]

[Redacted]

17 [Redacted]

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[REDACTED]

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20 Waka Kotahi and KiwiRail are continuing developing emissions analysis. By the time of lodgement on Thursday 27 May 2021, they expect to be able to demonstrate the work done to date, and any further work still required to meet the CIPA requirements. We will provide this to your Office before the Cabinet paper needs to be lodged.

Consultation

21 Given the limited timeframes for developing the paper, engagement with other Government departments and agencies has been limited to those directly involved (Waka Kotahi and KiwiRail on all advice and content, as well as Ministry of Housing and Urban Development on specific transport improvement aspects of the projects, and the Ministry for the Environment on the CIPA obligations)

22 We have also had limited time to engage with the Treasury on the financial recommendations. As a result, we will need to work further with the Treasury and your offices over the coming days to finalise the recommendation section of the paper.

23 We will also require additional time if you wish for us to undertake broader departmental consultation before you engage with other Ministers.

Next steps

24 The Ministry and Treasury will reflect any revisions in the draft Cabinet paper before it is lodged with the Cabinet Office on 27 May 2021.

Proactively released by the Ministry of Transport

[REDACTED]

[REDACTED]

APPENDIX 1: ROUTE PROTECTION

The following note provides a summary of benefits and costs associated with route protection. In particular, it has focused on the following corridors/ projects:

- Whangārei to Port Marden
- South Auckland (Mill Road and Papakura to Drury South Stage 2)
- Takitimu North Link Stage 2

Benefits of route protection - general

- Route protection via a designation, protects transport corridors from land development pressures which would otherwise prevent or hinder the delivery of a public work, project.
- Designations can be prepared in a manner which maximises flexibility for future implementation and types of corridor use.
- Enables more timely implementation in the future when the need and funding is required, as statutory approvals providing for the works are in place.
- Provides certainty to landowners, the existing community and future customers. This can minimise the risk of social disruption that can occur when infrastructure is retrospectively delivered within developing and established urban areas. It can also enable new and establishing communities to plan with more certainty (e.g. they can move to an area knowing there will be public transport travel options for them in the future).
- Enables developers to commit investment to progress infrastructure. Where a transport network affects multiple parcels of land, the certainty of route protection enables developers to commit to provision of early 'contributing' infrastructure, with the expectation that subsequent stages of development will complete other elements of the network.
- Provides a mechanism for Waka Kotahi to plan for future financial investment while retaining flexibility on the detailed development of the recommended future network, enabling it to respond to the pace, scale, and exact location of future growth or changes to the performance of the existing transport network. This means that projects can be delivered to meet project objectives, with the transport network in mind and gives certainty that the transport system can be operated
- Reduces future cost risk. If the corridor is protected by either early acquisition or notices of requirement, then there is an opportunity to reduce some land costs. This is in part associated with the increasing land values that occur as 'live zones' are implemented, and costs savings associated with the control or management that route protection can place on development on the land.
- Early route protection of a corridor provides the opportunity for early acquisition of land which has the potential to increase in value over time. This is particularly the case where there is significant growth pressure where rezoning of land will result in a significant increase in land value.
- Supports Council's subsequent stages of land use planning and development and improves the quality of the urban environment with more certainty. For example, enabling Council to identify areas of higher density residential development in areas that will be serviced by public transport networks.

Benefits of route protection – Whangārei to Port Marden specific context

- This project is part of a wider transport corridor response from Auckland to Whangārei over the next 30 years. This section is for a multi-modal transport response, including walking and cycling as well as public transport provision, providing the northern most section of the wider corridor strategy including the connection to Whangārei.
- With short term safety works proposed, undertaking long term route protection for the wider corridor at the same time will enable a single property acquisition discussion with property owners along the route. This would provide efficiency and certainty for these property owners who would otherwise need to be involved twice in the process (short term safety works and then long term eventually) which is inefficient, frustrating and likely to result in increased project costs in the long term
- Provides other property owners in the corridor certainty on the future to allow them to make investment decisions with this long term property requirements clearly understood.
- Will provide increased confidence for stakeholders and the wider northland community that the long term solution has not been permanently discarded.
- Enables increased certainty for KiwiRail to implement the Marsden Link extension with certainty of the long term transport corridor alignment, providing increased efficiency of delivery and costs for both KiwiRail and Waka Kotahi.

Benefits of route protection -South Auckland (Mill Road and Papakura to Drury South Stage 2) specific context

- The joint Waka Kotahi and Auckland Transport alliance have been working towards route protection of the future urban networks since 2018, which includes Mill Road and also wider southern network.
- Corridor protection provides investment flexibility for staged delivery of the identified full-system solution for growth in southern Auckland (as it occurs), noting this full system response has been designed for net carbon-positive outcomes. A critical part of that solution involves providing corridors that connect the existing and future growth communities east of SH1. This flexibility also allows the form of the transport corridor to be confirmed closer to implementation, whilst protecting the corridor from development pressure.
- It allows integration of land use and transport planning in areas like Drury West currently being considered for development, that would otherwise be blighted by uncertainty of the corridor alignment
- Allows for land use planning and staged housing release of the identified future growth areas adjacent to the corridor, such as Takaanini
- It prevents against development build-out of options for needed corridors, which is a particular concern in this corridor given the growth aspirations identified.

Benefits of route protection – Takitimu North Link Stage 2 specific context

- Ministers have agreed in principle this project should be funded from the National Land Transport Fund (NLTF) and not NZUP. Current pressures on the NLTF indicated Takitimu North Link Stage 2 would not be funded in the next three years and would be unlikely to be funded in the next ten years.
- To protect the route from growth (The Western BOP one of fastest growing regions in NZ and route protection would ensure the transport corridor is protected from other

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uses. Without route protection, it is expected developers will seek to use the land for future housing developments

- Route protection would also provide route certainty to landowners, who have had a different option given to them three times since 2017 due to re-evaluation impacts in 2018. There are 60+ landowners in this section with a number of hardship acquisitions.
- Route certainty is also important to our Council partners and realise commitments made in the Board approved Urban Form and Transport Initiative (UFTI) which supports prioritised growth area in Omokoroa and the associated infrastructure needs. This includes Western Bay of Plenty District Council who will notify their Structure Plan this month, and move the town centre, including industrial and commercial, to the area where the designation will be.
- In addition, the Ministry of Education, who are in the process of committing to school sites, and the Ministry of Housing and Urban Development for affordable housing.

Costs of route protection

The costs of route protection comprise two primary components

- **Route designation** – This includes funding for the Indicative Business Case, consenting process (lodgement, hearings), contractor and management fees, community and iwi engagement and some contingency.
- **Property purchase** – Once a designation is in place, history suggests a proportion of the total property required maybe purchased by the requiring authority prior to construction. It is assumed that most property transactions would take place in the three years prior to implementation, with approximately 20-50% of transactions taking place prior to this period (over 10-20 years).

Work undertaken by the Support Growth Alliance in Auckland (which is focussed on route protection of the future transport system in Auckland) indicates a return on investment of route protection of well over two.

High level estimates for each of the projects are:

Project	Transport Corridor length	Route designation costs	Indicative Property Cost (20% property)	Indicative Property Cost (50% property)
Mill Road	22km	\$55-\$65 million	\$150 million	\$390 million
Papakura to Drury South Stage 2	2km	\$7-\$10 million	\$30 million	\$75 million
Whangārei to Port Marsden	25km	\$30-\$40 million	\$50 million	\$120 million
Takitimu North Link Stage 2	7km	\$10-\$14 million	\$18 million	\$43 million

Given the property purchase requirements for the full corridors may be realised over a number of decades it is anticipated that funding from the NLTF is likely to be required for this property liability in addition to NZUP.

In Confidence

Office of the Minister of Finance
Office of the Minister of Transport
Chair, Cabinet Example Committee

The New Zealand Upgrade Programme - an update on programme options

Purpose

- 1 This paper seeks a Cabinet decision on changes to the transport components of the New Zealand Upgrade Programme (the Programme)

Background

- 2 On 29 January 2020, the Government announced it would invest \$12 billion in capital projects including \$6.8 billion in transport projects in order to future proof and grow our economy.
- 3 This significant capital investment reflects the Government's commitment to addressing our nation's infrastructure deficit, while also providing a vital economic stimulus to firms and households
- 4 The Programme is making good progress with four projects already under construction (SH1 Papakura to Drury South Stage 1, SH58 Safety Improvements Stage 2, Papakura to Pukekohe electrification, Wiri to Quay Park).
- 5 As at the end of April 2021, the Papakura to Pukekohe and Wiri to Quay Park projects employ 278 FTE staff and contractors, and there is an estimated 800 people, employed both part time and full time, working across the 20 state highway projects and providing programme support. Collectively, these jobs continue to support our recovery from COVID-19.
- 6 Since the Programme was first announced, a number of significant changes have occurred, not least the now fiscally constrained environment following the impacts of COVID-19.
- 7 Delivery agencies with support from the Oversight Group's independent advisors undertook a baselining exercise to seek better information on what was being delivered, when, and for how much.
- 8 This exercise means we have better awareness of forecast cost estimates across the Programme against the Crown funding allocations reported in the Establishment Reports. When the Programme was developed and announced, some projects were in their early stages of development, with detailed project information still being established. It is common that, as

infrastructure projects are developed, a better understanding of risks and costs is gained over time.

- 9 The Programme as announced is now forecast to cost up to \$13.1 billion, and cannot be fully delivered within the fixed funding envelope of \$6.8 billion.
- 10 The increase in forecast cost estimates are driven by a range of factors including scope changes, the increased cost of property acquisitions, changes in designs based on updated standards and assumptions, and construction price inflation. The updated cost estimates also include significant contingency to mitigate against the risk of future increases in cost.
- 11 In particular, the following projects have increased in cost by a range of \$3.8 (P50) to \$5.2 billion (P95) from their original allocations:
- South Auckland projects (Mill Road, Drury rail stations, Papakura to Drury South), now forecast to cost \$4,478 (P50) to \$5,315 (P95) million
 - Ōtaki to North Levin, now forecast to cost \$1,200 (P50) to \$1,500 (P95) million
 - Whangārei to Port Marsden, now forecast to cost \$1,200 (P50) to \$1,310 (P95) million
 - Northern Pathway, now forecast to cost \$650 (P50) to \$785 (P95) million
 - Takitimu North Link Stage 2, now forecast to cost \$545 (P50) to \$630 (P95) million.
- 12 The “P50” is a project management term that, in the simplest sense, refers to a “middle estimate” In this case, this is the modelling level at which 50 percent of costs fall below and 50 percent of costs fall above in simulations. Similarly, a “P95” estimate is the modelling level at which 95 percent of costs fall below and five percent of costs fall above in simulations.
- 13 There is a need for Cabinet to provide some certainty now in order for the delivery agencies to take the Programme forward. There are two options for Cabinet to consider.

Option 1: Agree to provide additional Crown funding of \$4.5 to \$6.4 billion to deliver the full Programme (not preferred)

14 The latest cost estimates for the individual projects in the Programme are:

Project	Original allocation (\$ million)	Latest cost estimate P50 (\$ million)	Latest cost estimate P95 (\$ million)
1. SH58	59	105	130
2. SH1/29	58	40	50
3. Takitimu North Link Stage 1	478	655	740
4. Canterbury Package	159	218	300
5. Queenstown Package	90	115	145
6. Wiri to Quay Park	315	305	318
7. Papakura to Pukekohe electrification	371	356	375
8. Wellington Railway Station safety	70	82	88
9. Wairarapa Rail Upgrades	126	145	156
10. Capital Connection Interim replacement rolling stock	15	24	26
11. Drury Rail Stations (three stations)	247	413	495
12. Melling	258	375	420
13. Penlink	411	740	830
14. Papakura to Drury South	423	1,165	1,320
15. Northern Pathway	360	650	785
16. Whangārei to Port Marsden	692	1,200	1,310
17. Otaki to North of Levin	817	1,200	1,500
18. Takitimu North Link Stage 2	455	545	630
19. Mill Road	1,354	2,900	3,500
Total	6,758	11,233	13,118

15 Cabinet could agree to provide additional Crown funding of \$4.475 to \$6.360 billion over and above the original funding allocation. This would be sufficient to take the full Programme forward with the projects announced in January 2020.

Option 2: Agree to a revised package balancing delivery of the majority of projects in line with their original scope and managing the fiscal cost for taxpayers (preferred option)

- 16 Given the current fiscal context, we have reassessed the delivery of some projects to prioritise value for money, impact on housing and climate change and to manage the risk on the Crown.
- 17 We propose to fully deliver projects 1 through to 13 (above) based on updated baseline scope and forecast cost estimates. This will give communities across New Zealand greater certainty and confidence.
- 18 Given the scope and cost challenges, we directed officials to provide advice on potential options for the following high cost projects (projects 14 – 19 above) within agreed funding envelopes, and we seek Cabinet endorsement to investigate these options further:
- Northern Pathway (\$0.785 billion) – The preferred option includes a new dedicated walking and cycling bridge which we propose to be funded at its P95 cost estimate. Appendix 1 includes additional detail.
 - Whangārei to Port Marsden (\$0.692 billion) – This option includes safety improvements along the existing state highway, and a new rail line between Northport and the existing North Auckland Rail Line. The costs for this project are not baselined – are currently indicatively estimated at \$0.632 to \$0.790 billion. Further work is required to understand scope, schedule, costs and benefits but this project is proposed to be funded at P95 cost estimate. Appendix 2 includes additional detail.
 - Ōtaki to North of Levin (\$1.5 billion of funding allocated) – We propose to proceed with the original scope of this project at its P95 baseline cost estimate. Appendix 3 includes additional detail.
 - South Auckland projects (\$2.024 billion) – We propose to progress with a rescope/scaled new northern end of Mill Road (two lanes rather than four), providing partial funding for supporting investment in the wider Drury network for local infrastructure, including active modes and public transport. This would replace the existing proposals for Mill Road and Papakura to Drury South Stage 2. The costs for this programme are not baselined and further work is required to understand scope, schedule and cost, but this project is proposed to be funded at its P95 cost estimate. Appendix 4 includes additional detail.
 - Takitimu North Link Stage 2 – We propose that Stage 1 of the project is fully funded through the Programme and proceeds immediately. For Stage 2 we propose the business case is progressed but not to provide further funding through the Programme, with the expectation it will be considered through the National Land Transport Fund (NLTF) in the future.

- 19 Our preferred approach to managing Programme costs and risks (Option 2) will require total funding of \$8.669 billion. This includes additional portfolio contingency of \$0.240 billion to provide a greater level of assurance across the Programme.
- 20 An additional \$1.911 billion of Crown capital will enable Option 2 to be fully delivered. Options for how this will be managed are proposed below.
- 21 Officials advise that proceeding with projects with unclear benefits may not represent value for money as there will be trade offs against other investments the Crown could make that may present better value for money.
- 22 If Cabinet agrees to Option 2, we will direct officials to continue developing the potential scope choices above (for projects 14 – 19), with revised project cost, scope, and schedule to be agreed by the Minister of Finance and Minister of Transport (Joint Ministers) before final decisions are made on the revised scope of projects. The revised project cost, scope and schedule for these projects will form a baseline on which progress on the revised Programme in Option 2 can be monitored.

Managing costs and risks moving forward

- 23 It is not intended for any further Crown funding to be added to the Programme in the future. If there are further increases in Programme costs, we expect for this to be managed through scope changes or within the programme contingency provided.
- 24 The Ministry of Transport and the Treasury consider that the risk of cost increases remains, even after Option 1 or 2, due to the early stage of many of the projects in the Programme, and the considerable work required to confirm uncertainties for some of the projects
- 25 To manage the residual cost risks in the Programme, we propose a tagged contingency for accessing any additional funding above the amounts allocated in this paper. This provides us with levers to manage any calls on Crown funding, support value for money, and incentivises the delivery agencies to deliver in a cost efficient manner.
- 26 In addition, we propose that the Programme will continue to have an appropriate degree of monitoring and oversight arrangements going forward. To protect the Crown and Joint Ministers' interests, as well as continuing to support successful delivery, these arrangements should give us sufficient oversight and assurance that the Programme is being delivered to its baselined outcomes, scope, cost, schedule and benefits.
- 27 This approach mitigates the future risk of needing to decide to commit further funding but does have a trade-off of not providing full certainty to some communities and the sector now, as to the projects that will proceed.

- 28 If Cabinet agrees to our approach, we will direct Ministry of Transport and Treasury officials to work closely with the delivery agencies to investigate how this would work in practice.

Route protection

- 29 Route protection, via a designation, protects transport corridors from land development pressures which would otherwise prevent or hinder the delivery of a public work project. Route protecting future projects now also ensures efficiencies at the point in time that they are approved, and gives certainty to communities about future infrastructure. For the projects that were initially in the Programme that we propose do not proceed, there is a decision as to whether route protection is progressed.
- 30 For Mill Road, Papakura to Drury South stage 2, Takitimu North Link stage 2, and Whangārei to Port Marsden, the consenting and designation costs associated with route protection are expected to be around \$100–\$130 million. Once the routes are designated, some circumstances will require property purchases, which could range from \$250–\$630 million over the next few years.
- 31 Given the focus of the Programme on delivering projects, and uncertainty around the future funding availability to progress the projects we are not proceeding with, we propose that route protection not be progressed as part of the Programme. This is likely to be seen as a commitment to the local communities that the relevant projects will not be progressed in the near future, and the Minister of Transport will work with officials to develop a communications approach.

Financial implications

- 32 We are proposing to change the project funding allocations within the existing New Zealand Upgrade appropriations across both road and rail to reflect revised cost estimates and treatment of contingency. In line with existing delegations, we propose that more detailed changes are delegated to Joint Ministers to manage based on advice from Delivery Agencies and Officials.
- 33 We note that the cost increases across the projects are significant and further Crown funding is required.
- 34 We therefore seek agreement to establish a tagged capital contingency of \$1.869 billion to:
- Manage cost increases for risk for projects above the appropriated allocations
 - Provide a funding allocation for re-scoped projects (Whangārei to Port Marsden and South Auckland Projects) pending further work on scope, cost and schedule before investment decisions are made.

- 35 We seek agreement to authorise the Minister of Finance and the Minister of Transport (as Joint Ministers) to jointly draw down on this tagged capital contingency subject to:
- for high-risk and rescope projects, agreement from joint Ministers to a Detailed Business Case
 - for all projects, confirmation from the Delivery Agencies that:
 - 35..1 the project is likely to fall within the total funding allocation
 - 35..2 there are appropriate processes, capacity and capability in place to successfully manage the project
 - 35..3 the Delivery Agency will follow its internal process for each project
 - Climate Implications of Policy Assessments being completed for individual projects and the Programme as a whole
- 36 This approach will help keep tension in the Programme to ensure that outcomes are being delivered appropriately, and cost risks to the Crown are being managed, while also ensuring that delivery entities are confident in managing their projects. It will also provide enough flexibility so that we can adjust the approach to contingency management within the Programme over time.

Legislative and population implications

- 37 There are no legislative or population implications arising from this paper.

Impact Analysis

- 38 Impact analysis requirements do not apply to the proposals in this paper.

Climate Implications of Policy Assessment

- 39 The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirements apply to this proposal, as one of the objectives of the baseline and reprioritisation exercise was to consider the impacts of greenhouse gas emissions.
- 40 Quantification of emissions impacts is challenging for transport infrastructure and the Ministry of Transport is working with the delivery agencies to develop the necessary information to complete the CIPA for the Programme. Emissions impacts can only be quantified once the final scope of the Programme is decided, and for this reason are not currently available.
- 41 The Ministry for the Environment is supportive of the intended investment in projects that will directly reduce emissions, such as public transport, rail and walk/cycleways, however we are mindful that other roading related projects

may increase emissions and may be inconsistent with our transition to a low emissions economy.

42 It is also important to weigh the imperative to reduce emissions against other outcomes, such as increasing housing supply. To a certain extent, the potential for emissions mitigation or reduction is constrained by land-use decisions, such as greenfield developments in Drury.

43 Officials have proposed a way forward for the Programme that prioritises projects that could be delivered in a way to achieve housing benefits and address key transport network issues, while potentially resulting in less emissions than other projects.

44 The Ministry for the Environment is supportive of the consideration given to emissions reduction in the prioritisation exercise undertaken to develop Option 2 (preferred option), and for this reason consider it likely that this option aligns better with our intended emissions reduction targets.

45 Although a full CIPA has not been prepared, Waka Kotahi and KiwiRail have advised that:

- [placeholder for further work by Agencies being developed]

46 The CIPA team will work with the Ministry of Transport to assess the emissions impacts as decisions to progress projects by Joint Ministers are made.

[REDACTED]

[REDACTED]

[REDACTED]

Withheld under
s9(2)(h) of the
Official
Information Act
1982

[REDACTED]

[REDACTED]

Human Rights

49 The proposals in this paper are not inconsistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Consultation

50 This paper was prepared by the Treasury and the Ministry of Transport. Waka Kotahi and KiwiRail were both consulted on this Cabinet paper. The Department of the Prime Minister and Cabinet was informed.

Communications

- 51 There will be announcements that will need to be made regarding the proposals in this paper.
- 52 We recommend that this is delegated to Joint Ministers so that we are able to ensure the affected communities are appropriately informed of any future investment decisions made on the individual projects within the Programme.

Proactive Release

- 53 This paper will be proactively released within 30 business days of decisions being confirmed by Cabinet.

Proactively released by
the Ministry of Transport

Recommendations

We recommend that the Committee:

- 1 **note** that on 29 January 2020, the Government announced \$12 billion capital investment through the New Zealand Upgrade Programme (the Programme) to future proof our economy
- 2 **note** that the Programme reflects the Government's balanced transport policy with \$6.8 billion of Crown capital investment in road, rail, public transport and walking and cycling infrastructure across New Zealand
- 3 **note** that on 21 July 2020, the Cabinet Priorities Committee (CPC-20-MIN-006 refers) noted that:
 - 3.1 the Minister of Finance and Minister of Transport had delegated responsibility to approve the Establishment Reports (outlining objectives, scope, timeframe and budget)
 - 3.2 the Minister of Finance and the Minister of Transport have the authority to make further delegations for decision making to the respective agency Boards
 - 3.3 the New Zealand Upgrade Programme Oversight Group has been established to provide Programme level assurance and regular reporting to the Minister of Finance and Minister of Transport on the delivery of the Programme
- 4 **note** that when the New Zealand Upgrade Programme was first announced, some of the more significant projects were still in early stages, with detailed project information still being developed
- 5 **note** that the baselining exercise has increased understanding of project scope and schedule, and updated forecast cost increases mean the Programme as it was announced cannot be fully delivered within the fixed funding envelope of \$6.8 billion
- 6 **agree** to provide additional Crown funding of \$1.869 billion to take forward a revised package of New Zealand Upgrade Programme transport investments that balances delivery of the majority of projects in line with their original scope and managing the fiscal cost for taxpayers, to manage calls on Crown funding, support value for money, and incentivise the delivery agencies to deliver in a cost efficient manner
- 7 **agree** that the additional Crown funding at recommendation 6 above includes;
 - 7.1 \$240.000 million of additional contingency to manage residual risk in the Programme
 - 7.2 \$785.000 million of separate Programme and project contingency to P95 cost estimate level for various projects

- 7.3 \$844.000 million of contingent funding to proceed with rescoped projects
- 8 **agree** in principle that the following projects should proceed to delivery at their revised cost estimates:
- 8.1 SH58
 - 8.2 SH1/29
 - 8.3 Takitimu North Link Stage 1
 - 8.4 Papakura to Drury South Stage 1
 - 8.5 Canterbury Package
 - 8.6 Queenstown Package
 - 8.7 Wiri to Quay Park
 - 8.8 Papakura to Pukekohe electrification
 - 8.9 Wellington Railway Station safety
 - 8.10 Wairarapa Rail Upgrades
 - 8.11 Capital Connection Interim replacement rolling stock
- 9 **agree** in principle that the following high-risk projects should proceed to delivery at their revised cost estimates
- 9.1 Drury Rail Stations (three stations)
 - 9.2 Melling
 - 9.3 Penlink
 - 9.4 Northern Pathway
 - 9.5 Ōtaki to North of Levin
- 10 **authorise** Joint Ministers to further investigate the following rescoped projects:
- 10.1 Whangārei to Port Marsden
 - 10.2 the South Auckland projects (Mill Road and SH1 Papakura to Drury South Stage 2)
- 11 **authorise** Joint Ministers to make investment decisions on the rescoped projects in recommendation 10 above subject to:
- 11.1 more satisfactory information regarding scope, cost and schedule, and

- 11.2 the completion of a satisfactory Detailed Business Case for proposals within each corridor
- 12 **invite** Joint Ministers to report back to Cabinet on the outcomes of the decisions described in recommendation 11 above and the affordability of the projects within the Programme
- 13 **note** that officials are still completing Climate Implications of Policy Assessments for individual projects, and the Programme as a whole, and that further investment decisions will be considered by Joint Ministers once final Climate Implications of Policy Assessments are complete
- 14 **note** that, when emissions impacts are modelled for the Programme Waka Kotahi NZ Transport Agency and KiwiRail will share the analysis with the Ministry for the Environment’s Climate Implications of Policy Assessment team
- 15 **agree** to establish a tagged capital contingency of up to the amount below as follows in Vote Transport to provide for the policy decisions in recommendations 6 to 12 above

	\$m – increase/(decrease)				
	2020/21	2021/22	2022/23	2023/24	2024/25
New Zealand Upgrade Transport Projects – Tagged Capital Contingency	-	1,869.000	-	-	-

- 16 **authorise** the Minister of Finance and Minister of Transport (as Joint Ministers) jointly to draw down the tagged capital contingency funding in recommendation 15 above on a project-by-project basis subject to:
- 16.1 for high-risk and rescoped projects, agreement from joint Ministers to a Detailed Business Case
- 16.2 for all projects, confirmation from the Delivery Agencies that:
- 16.2.1 the project is likely to fall within the total funding allocation
- 16.2.2 there are appropriate processes, capacity and capability in place to successfully manage the project
- 16.2.3 the Delivery Agency will follow its internal process for each project
- 16.3 Climate Implications of Policy Assessments being completed for individual projects and the Programme as a whole

- 17 **agree** that the tagged capital contingency in recommendation 15 above be charged to the Multi-Year Capital Allowance
- 18 **agree** that the tagged capital contingency in recommendation 15 above will expire on 30 June 2031
- 19 **note** that there will continue to be appropriate monitoring and oversight arrangements of the Programme to protect the Crown and Joint Ministers' interests, as well as continuing to support the successful delivery of the Programme going forward

Authorised for lodgement

Hon Grant Robertson

Minister of Finance

Hon Michael Wood

Minister of Transport

Proactively released by
the Ministry of Transport

APPENDIX ONE - NORTHERN PATHWAY

Summary

A walking and cycling connection across the Waitematā harbour is a nationally significant project, and part of the strategic regional network that has been delivered over the last ten years. It would provide increased multi-modal accessibility across the harbour and deliver mode shift that would reduce vehicle kilometres travelled (Vkt) on the busiest section of the NZ transport system, providing a reduction in carbon.

The original scheme assumed that the proposed walking and cycling facility could be attached to the existing Auckland Harbour Bridge.

The recommended solution is a full-height separate bridge option. It presents the best performing long-term solution as it provides a dedicated 24/7 cross harbour connection, a high level of amenity for users and can meet forecasted demand (with scope for further growth in demand)



Figure 1 – potential view of dedicated walking and cycling pathway across Waitematā Harbour

This solution would take in the order of five years to be operational (including consenting and design development) and is estimated to cost between \$650 million (P50) and \$785 million (P95).

Context

The Northern Pathway walking and cycling path is a critical missing strategic link in the Auckland active modes network. It will provide a walking and cycling link across the Waitematā Harbour, connecting the north shore of Auckland with the central isthmus, linking the extensive walking and cycling investment already made by Waka Kōwhiri and Auckland Transport (circa \$300-400M) on either side of the harbour. This will provide transport, environmental and user health benefits as well as providing increased access to one of the world's great harbours.

Auckland is one of the most car dominated cities in the world with around 70% of all journeys to work made by car, with many of these journeys able to be undertaken by cycling or walking.

The National and Regional transport policies are aligned in the need to increase mode choice for users and to increase active mode share, not only to address the overall performance of the transport system, but also for the health benefits of the system users. The latest RLTP is seeking that 70% of new trips are absorbed by public transport or active modes.

The Northern Pathway project was included in the NZ Upgrade Programme announced by Government in January 2020. The budget allocation for this project set out in the Establishment Report is \$360m.

The Additional Waitematā Harbour Crossing Connections joint Auckland Transport/ Auckland Council/ Waka Kotahi business case requires the Northern Pathway to be in place providing a separate walking and cycling solution, due to the need to provide relief to the existing bridge so that the increasingly onerous maintenance requirements can be undertaken whilst maintaining its operation.

The original scheme assumed that the proposed walking and cycling facility could be attached to the existing Auckland Harbour Bridge. However, work undertaken to date by Waka Kotahi and the established Northern Pathway Alliance has determined that it is not feasible to continue with this plan.

Identifying alternate options for delivering safe cycling and walking across the harbour

Before arriving at a recommended option, Waka Kotahi and the Northern Pathway Alliance explored several potential solutions. They were:

- **SkyPath:** This option did not meet the current loading standards in the bridge manual and would require restrictions to be in place to operate safely.
- **Utilising existing lanes on the Auckland Harbour Bridge:** This option would require 2 lanes to be used to provide safe walking and cycling facilities, creating a significant impact on bridge traffic capacity during peak hours (20-40% capacity impact), which would also impact public transport services. Further, modelling indicates the resultant congestion will encourage general traffic to uptake the alternative longer SH16 route and these emissions will exceed any reductions from users transferring to walking and cycling. An option to take a single lane was also considered, however this has considerable safety and user experience concerns and was not progressed further as a result.
- **A separate multi-modal structure for walking, cycling and public transport:** The current 'pinch point' for traffic in the corridor is not the bridge itself, but rather the approaches on either side, which is why dedicated bus lanes are provided either side of the bridge and not on the bridge itself. Therefore, providing additional bus lanes across the harbour has reduced economic benefit. Waka Kotahi estimates an additional investment of circa \$1 billion (in addition to the new bridge) would be required for the work on either side of the proposed structure and significant additional public transport investment in the corridor would still be required.
- **Full height separate walking and cycling structure:** This is the recommended option and is outlined in more detail below.
- **Mid-height separate walking and cycling structure, opening or fixed:** The mid-height and opening span options would either impact navigational height requirements or affect user experience. The opening span option would also further increase the cost of the project.
- **Gondola:** This option would cost approximately as much as a new bridge and have an additional annual operating cost compared with other options. It would also require a transfer for users, and therefore not provide the seamless walking and cycling experience.
- **Waiting for the Additional Waitematā Harbour Crossing:** Putting the walking and cycling link in the proposed tunnels has significant (fatal flaw) user safety challenges and would also not attract the forecast demand due to the poor user experience. In addition, any spare capacity the Additional Waitematā Harbour Crossing creates on the existing Auckland Harbour Bridge would not ideally be

used for a walking and cycling path as an important driver of the long-term crossing solution is to provide relief to the existing bridge so that the increasingly onerous maintenance requirements can be undertaken whilst maintaining its operation.

- **Operational solutions, e.g. a dedicated ferry or bus service:** Although the operational solutions could be implemented in a relatively short time period (subject to consenting) they are only considered to be an interim solution (due to capacity) as they don't provide a seamless walking and cycling connection as part of the wider Auckland active mode network. These options require a transfer for users (onto a bus or ferry to get across the harbour) and would therefore be less attractive, offer less benefits (including health related benefits) and also have operational complexities due to capacity constraints at transfer points. There is also the challenge of accommodating these services within the current fare structures on parallel services. These options would also not be 24/7 operation.

Recommended option – full height separate structure for walking and cycling

The full-height bridge option is the best performing long-term solution as it provides a dedicated 24/7 cross harbour connection, a high level of amenity for users and can meet forecasted demand (with scope for further growth in demand).

This solution would take in the order of five years to be operational (including consenting and design development), which is two years later than outlined in the NZ Upgrade Programme Establishment Report.

Assessing the project against the current Investment Decision Management Framework (IDMF) shows the value of the project, with the highest rating against the GPS Alignment (Very High) and Schedule (High) criteria. This is due to the mode shift, reduced emissions and completion of a strategically important link characteristics of the project.

The preferred option is strongly aligned with the GPS and the current Waka Kotahi Investment Decision Management Framework (IDMF) due to mode shift, reduced emissions and completion of an established active mode network.

This project has the opportunity to provide a step change in mode shift and carbon emissions reduction in the country's busiest corridor. And whilst this is an expensive scheme, providing this scale of intervention for user needs to be done right to maximise the considerable opportunity to realise the step change in outcomes.

Waka Kotahi believes all modes will ultimately need to be provided for across the harbour and this is supported by all the historic studies into the AWHC and aligns with the GPS. We therefore believe this option is the most efficient way to achieve the Walking and Cycling component either now or into the future.

Figure 1 above and Figure 2 below show the potential look and feel of the standalone structure alongside the existing Auckland Harbour Bridge.

Figure 2 – potential view of dedicated walking and cycling pathway across Waitematā Harbour



Cost and benefit implications

Waka Kotahi's baseline estimate for delivering the Northern Pathway as a separate structure was \$760m (P50) - \$830m (P95). It should be noted this figure was estimated before a preferred solution was identified. The recommended full height structural bridge option has a cost estimate of \$650m (P50) - \$785m (P95), subject to further design decisions.

Additional funding would be required to deliver the preferred option given the current funding allocation of \$360 million within NZ Upgrade Programme for this project. This funding gap of \$290-\$425 million (P50-P95), would require either savings to be found from across the NZ Upgrade Programme or through additional Crown investment.

While this is a significant increase in cost, when considered in the context of supporting the wider transport strategic objectives for this corridor, i.e. the Additional Waitematā Harbour Crossing (AWHC), which will be circa \$15Bn, this is an investment that supports future development.

The benefit cost ratio (BCR) for the project is currently estimated to be around 0.4-0.6. However, this assessment is based on an old assessment using traditional methodology which Waka Kotahi believes does not consider the full benefits of the current scheme. When this is reassessed, we believe the BCR will be more favourable due to the recommended option allowing improved user amenity benefits, greater resilience, increased land use forecasts and therefore demand changes to how micro-mobility is addressed and improvements to Economic Evaluation Manual (EEM) that lengthen the benefits period.

The Northern Pathway Alliance – a risk if decisions are delayed

There is a well-established Northern Pathway Alliance that has effectively worked together to get the project to this stage. The Alliance funding is due to run out at the end of May 2021. If the project is not confirmed to proceed before the end of May, the Alliance will either need to be closed down or additional funding provided to continue. The cost to extend the Alliance for a further two months is \$4 - \$5m and would enable them to continue the design progression at a pace that supports the timelines required for fast track act consent.

The recommended structure is expected to take 5 years to implement. If the project is not approved to proceed in the next month or two, there is a risk an additional 12 months will be required to complete the project. This delay would be a result of missing the fast track consenting pathway window and the need to remobilise the Alliance. This could add another \$10-15m to the project costs.

Implications of a decision to stop the project

If a decision was made to stop the project completely, with a view of not doing it in the future, there would be financial and reputational impacts.

The project has already spent money and it is estimated the total sunk costs if the project were cancelled altogether would be approximately \$35 million. This would include the cost to date, and the cost to demobilise.

The reputational impact would be extreme with regards to property owners and stakeholders such as Bike Auckland, environmental groups, climate change considerations and iwi partner expectations. In addition, our Tier 1 contractors and suppliers who have bid and mobilised key resources (locally and internationally) will be extremely cautious for future procurement of this project or others of a similar nature.

This project is also a critical piece of the future Harbour Crossing Strategy, which would need to be updated along with other strategies as they assume a walking and cycling option will already be in place. This would require significant re-engagement with ATAP and other stakeholders who endorsed the current strategy.

Risks

The main risks associated with the recommended option include:

- **Partner and Stakeholder Engagement:** This is a significant project in the Auckland landscape and will attract strong views and perspectives from partners (such as Iwi and Council) and the wider community. This is a risk that delays or increases the cost of the project if not managed appropriately. There would also need to be engagement with wider stakeholder groups and the community as this option is not in the public domain as yet.
- **Materials:** This is a significant structure and the availability of specialist skills and materials is a risk in the current COVID environment.
- **Statutory Approvals:** A project of this significance is not without approval risks during the consenting phase. For this option, these include visual impacts, impacts on the harbour (ecological predominantly) and Iwi implications (particularly the Pa site on the northern landing)

Next Steps

Subject to Cabinet approval of the project and the additional funding required, the next steps for the Northern Pathway project are:

- Undertake the development of a design for the entire project that will confirm the crossing's exact form (structural and architectural) and the amenity outcomes which will be delivered for users, including obtaining the necessary consents for the long-term structure.
- Engage with stakeholders and the community throughout the above steps to build support for the project and understand community concerns.

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COMMERCIAL IN CONFIDENCE**APPENDIX TWO – ŌTAKI TO NORTH LEVIN****Summary**

Palmerston North continues to grow as an economic and freight hub for the lower North Island and the population in the Horowhenua and Kāpiti area is increasing. Both are increasingly putting pressure on the transport connections to Wellington

The original scope of the Ōtaki to North of Levin project involved upgrading 24km of new (realigned) SH1 to four lanes plus a walking and cycling path. This would include a lane in each direction utilised for public transport, electric vehicles and high occupancy vehicles, where appropriate. It was the only option assessed that delivers fully against the project objectives and also achieves the wider housing outcomes but does not decrease carbon (due to the growth forecast).

The funding allocation for this project at programme establishment was \$817 million. The preferred option (including future revocation of the existing SH1) would cost \$1,200 million (P50) - \$1,500 million (P95), requiring approximately an additional \$400 million (P50) - \$700 million (P95) in funding to the current budget allocation.

The next steps on the preferred option, including technical work and communications are completion of the business case, commencement of statutory approvals and development of the procurement strategy for implementation. Waka Kotahi will also assess the project for tolling, as per their usual policy.

Context

Palmerston North continues to grow as an economic and freight hub for the lower North Island and the population in the Horowhenua and Kāpiti area is increasing. Both are increasingly putting pressure on the transport connections to Wellington

State Highway 1 (SH1) is New Zealand's primary national corridor, but the section between Ōtaki and Levin is afflicted by several serious safety, efficiency and resilience problems.

The importance of this section of SH1 is characterised by its function in connecting Wellington to the North Island, where no other resilient route exists. It also provides an essential economic connection to Palmerston North (via SH57), the largest freight node in central New Zealand.

KiwiRail also operates a daily PN-WGTN-PN service "The Capital Connection" which uses diesel hauled carriages. The renewal of this fleet (an interim solution) is a separate and approved NZUP project.

Original option announced in January 2020

The scope of the original option is:

- New 24km offline SH1 alignment from North Levin to Ōtaki
- two of the four lanes will be for general traffic and where appropriate, two lanes will prioritise public transport, high occupancy vehicles and potentially freight
- separated walking and cycling path along the entire length of the new alignment

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- alignment with the Safe Network Programme to reduce the number of deaths and serious injuries along the existing corridor.

Outcomes sought

The key outcomes sought by the investment in this project are:

- **Safety** – to save lives and to reduce the risks of deaths or serious injuries
- **Resilience** – to enhance the resilience of the state highway network by reducing the number and duration of journeys affected by closures and delays
- **Regional Growth** – support inter regional growth and productivity through the efficient movement of people and freight (and improving reliability of journey times)
- **Provide connections** that integrate the state highway and local road network which serves the growth in urban areas
- **Mode shift and mode choice** – prioritise public transport, higher occupancy vehicles, freight vehicles and access to multi modal connections.

Investment options

Investment options considered in the preparation of this paper are:

- Option 1: Proceed with the currently proposed option (Joint Ministers' recommended option)
- Option 2: Safety improvements along the existing state highway, targeted improvements on the existing state highway to facilitate development and route protection of the long-term state highway works
- Option 3: Safety improvements along the existing state highway, route protection of the long-term state highway works and upgrading of the rail services in the corridor

Further detail on the Joint Ministers recommended option is outlined below.

Recommended Option

Progression of the current proposed project, with additional funding allocated to the project to enable its completion

The proposed new route is required to provide the level of safety improvements required and provide for the resilience and growth outcomes sought for the corridor. The shared user path will also increase mode choice for users in the area.

The funding allocation for this project at programme establishment was \$817 million. With this current budget allocation, approximately an additional \$400 million (P50) - \$700 million (P95) is required.

Risks

Risks with the preferred option are largely typical for the type of project proposed (completion of a new corridor) and its current phase (business case). Key risks include consenting and property acquisition, cost and schedule management.

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Next steps for preferred option

The next steps on the preferred option, including technical work and communications are completion of the business case, commencement of statutory approvals and development of the procurement strategy for implementation.

While preferred option for progression via the NZ Upgrade Programme does not include improvements to rail (beyond the Capital Connections project), it is noted that a separately funded business case is already underway, that will include consideration of the viability of enhanced passenger rail services for this area.

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COMMERCIAL IN CONFIDENCE**APPENDIX FOUR – REVISED OPTION FOR SOUTH AUCKLAND****Summary**

The original scope of the South Auckland Package included a range of projects to address existing safety, mode share, accessibility and resilience issues and support the significant scale of planned growth for this southern part of Auckland. It included rail electrification, two new rail stations, additional capacity and walk/cycle facilities on SH1 between Papakura and Drury South and the full length of the Mill Road corridor connecting existing and new communities east of SH1 between Manukau and Drury.

Joint Ministers asked for an alternative option that expanded the rail investment to three new rail stations, sought alternative options for the SH1 and Mill Road elements that could be deliverable within the original Establishment Report funding allocation for the package and could assist releasing new housing consistent with Government's decarbonisation goals.

The Joint Ministers' preferred approach for the SH1 (Papakura to Drury South) project is to progress delivery of Stage 1 of the Project (being upgrades between Papakura and Drury), but defer delivery of the section between Drury and Drury south.

The joint Ministers' preferred option for Mill Road is a smaller scale project in the north between Flat Bush and Alfriston, comprising an upgraded two-lane facility connecting into the existing urban section near Manukau and with the same targeted safety upgrades between Alfriston and Papakura. Only conceptual consideration of this option has been undertaken but indicates potential opportunity for savings that could be used for investment in local upgrades to support releasing additional housing in Drury.

The new preferred option is not as advanced as the original NZUP option and therefore carries risk around cost certainty, the scale of the likely benefits and the scale of funding able to support additional housing in Drury. More work is needed to address this risk/uncertainty. There is also stakeholder risk given the previous priorities for both the Mill Road and local Drury projects agreed through the ATAP process.

There is also a significant stakeholder risk with any reduced Mill Road option, given the long standing interest in this development from various Auckland Stakeholders and the assumption that Mill Road has been funded by a number of recently lodged Private Plan changes in the Drury Area.

Next steps for the preferred option are:

- Ongoing consenting and delivery of the rail and SH1 (Stage 1) elements
- Liaise with Auckland Council for land use planning around the accelerated Drury West station
- Investigation to confirm the reduced-scale element of Mill Road in the north
- Engagement with ATAP partners on the opportunity for local network upgrades to support release of additional housing in Drury West
- Progress route protection for the longer-term SH1 and Mill Road corridors

Context

This corridor comprises the key strategic rail and road links entering Auckland as well as including the largest proportion of the planned greenfield growth outlined for future development within the Auckland Unitary Plan, comprising almost 100,000 people.

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There are significant growth pressures on this corridor from both brownfield intensification, inter-regional growth and new growth areas, including seven Private Plan Changes in the Drury area about to be considered for approval by an independent hearings panel.

A Business Case was approved by the Boards of both Auckland Transport and Waka Kotahi for a full-system response with staged implementation that included extensive upgrades to the rail system, complementary bus networks, a full network of separated walk and cycle facilities and new or upgraded corridors to address safety, provide wider network resilience and improve accessibility to social and economic opportunities. Reducing the need to travel and shifting to sustainable modes of travel were key elements of this system response, which included integration with Auckland Council's land use planning.

As part of the ATAP 2021-31 Programme of Investment, Drury investment was considered. The outcome of the 2021-31 investment was an allocation of \$243 million for local road route protection and roading connections.

Auckland Council are considering opportunities for developer and/or land-owner contributions to the needed upgrades for the local network, however significant funding challenges mean that there remain a number of significant gaps in the local network that would either constrain the planned new developments or compromise the desired transformation to more sustainable travel and urban forms.

Original option announced in January 2020

- Electrification of the rail network between Papakura and Pukekohe
- Two new rail stations in Drury
- Upgrades to SH1 between Papakura and Drury South
- The full, 4-lane Mill Road corridor between Manukau and Drury South, including walking and cycling facilities and two of the 4 lanes to be managed for use by high-priority vehicles

Outcomes sought

Ministerial outcomes from which we have taken direction are:

- Improve safety outcomes
- Support increased housing supply in the area in a way that is consistent with the Government's decarbonisation objectives
- Work within the original funding envelope across the South Auckland projects.

These outcomes support the overall system response outcomes for Southern Auckland (as identified by the Supporting Growth work) which are safety, mode shift and mode choice, resilience, regional growth and improving accessibility.

Investment Options - The Recommended Option

The Joint Ministers provided guidance on investment priorities, which confirmed (and expanded) the rail elements and confirmed delivery of only the first stage of the SH1 upgrade. Ministers were also supportive of a scaled back option for Mill Road. The Joint Ministers indicated a preference for the following option:

- Rail electrification between Papakura and Pukekohe
- Three new rail stations (two in Drury plus Paerata)

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- Upgrades to SH1, only between Papakura and Drury
- A reduced-scale of the Mill Road corridor with local investment in Drury to support release of additional housing (Option 2)

Mill Road

The preferred option by Ministers for Mill Road is a rescoped/scaled northern end of Mill Road with two lanes rather than four and the option also provides partial funding for supporting investment in the wider Drury network for local infrastructure, including active modes and public transport. The option includes:

1. A two lane upgrade to Mill Road in the north which will tie in to the existing dynamic lanes on Redoubt Road
2. Construction of a two lane divided facility between Redoubt Road and Alfriston (within the designation and with future proofing of significant infrastructure e.g. bulk earthworks)
3. Targeted safety treatment through Takaanini
4. Potential cost savings from approximately 2km less of road upgrade (via a tie-in to the existing urban section), a reduced speed environment, reduced earthworks, reduced road pavement and potentially reduced bridge and wall structures.
5. Route protection for the full Mill Road corridor (from Manukau to Drury)
6. Safety upgrades on the adjacent, high-volume 2-lane rural section of Mill Road from Alfriston to Papakura. This would be targeted at remaining within the existing 20m road reserve with a change from rural to an urban speed environment with footpaths, edge and intersection treatments

The opportunity offered by this option is for savings from the reduced scope of Mill Road to be used to fund upgrades needed to release housing and associated local Centres in Drury. The scope of projects that could be considered would depend on the cost savings from Mill Road, however consideration could be given to the following:

- Projects within or crossing the State Highway corridors, to help address severance, safety and capacity issues of those corridors to release additional housing in Drury West
- Regional (strategic) cycleways connecting communities along the rail corridor that are outside local or collector road corridors
- Arterial corridors that provide direct walk/cycle or bus access to stations to support release of new housing areas
- Local transport projects that support housing supply and Transit Oriented Development (TOD) reviewed in light of what the ATAP funding has already addressed

This additional funding and investment could help assist bringing forward further funding from other sources (i.e. developers, IFF agreements) to support release of more housing and associated local centres with the desired urban form and mode share outcomes.

Key Risks of Preferred Option

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The reduced-scale option for Mill Road north and the funding of local projects in Drury are conceptual only and require additional investigation to understand key risks, including:

1. **Engineering Feasibility:** The property, topography and environmental constraints in the corridor are such that the resulting design and cost of a reduced-scope project that meets the primary safety objectives may be greater than expected.
2. **Cost Savings:** Detailed investigations would be required to confirm the construction costs of the northern Mill Road project, and hence the scale of any cost savings within the available funding envelope to be reallocated to local transport infrastructure.
3. **Future-Proofing:** The 2-lane concept for Mill Road, budget constraints and immediate focus on treating safety issues may mean that decisions are required that could make future expansion of the corridor to support the planned growth complex, expensive and with potential redundancy in the interim works.
4. **Cross-jurisdictional delivery:** Although the State Highway elements of any Drury Local package could be delivered by Waka Kotahi (i.e. the SH22 urban upgrade or SH1 local crossings), other potential cycleway or station access roads would likely need delivery by Auckland Transport or KiwiRail. The opportunity to use such funding to leverage developer funding inputs could also require complex agreements and processes.
5. **Partner Alignment:** The short timeframes in which this concept option was developed mean that engagement with Auckland Council / Auckland Transport has not been possible. While the potential local Drury projects would be drawn from the projects identified in Council's Drury Infrastructure Funding and Finance (DIFF) study, the selection, funding and delivery methods for such projects would require alignment with the other parties, including Auckland Council and the Ministry of Housing and Urban Development.
6. **Urban Form.** To achieve the desired high density urban form around the rail stations requires detailed land use and master planning, which has occurred (in various forms) around the Drury Central and Paerata Stations. Land use planning immediately around Drury West Station would need to be accelerated ahead of Auckland Council's land release strategy to realise the desired outcomes. This accelerated land use may require additional local network upgrades not anticipated in the short term. This work will be integrated with the station design to optimise connectivity to the station.
7. **Redundancy of investment.** Development of this reduced scope project would require careful balancing to ensure that the design of a new 2 lane Mill Road addresses the immediate safety issues but is also able to be affordably expanded to 4 lanes in the future to provide for the surrounding growth areas
8. **Constrained Growth.** The shortened length and scope (2-lanes) of Mill Road would not provide capacity to support the planned growth in northern Papakura, Takaanini, Opaheke or Drury east (including recent private plan changes that have been lodged with Auckland Council).
9. **Reputation:** The shortened, 2-lane version of Mill Road would improve access to the existing roads north of Papakura via intersection treatments, but would not provide any material improvement in accessibility, reliability of resilience through the corridor

Route Protection

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Both projects (State Highway 1 Papakura to Drury South and Mill Road) include route protection for the full corridors. This allows for any future development of these corridors at an appropriate time and using an appropriate mode.

The Drury-Ōpaheke Structure Plan assumes both corridors are necessary for the future development of the area.

Risks with not Proceeding with previous Option

1. **Constrained Growth.** The shortened length and scope (2-lanes) of Mill Road would not provide capacity to support the planned growth in northern Papakura, Takaanini, Ōpaheke or Drury east (including recent private plan changes that have been lodged with Auckland Council).
2. **Reputation:** The shortened, 2-lane version of Mill Road would improve access to the existing roads north of Papakura via intersection treatments, but would not provide any material improvement in accessibility, reliability or resilience through the corridor

Next Steps for Preferred Option

Rail Electrification

- Ongoing delivery by KiwiRail

Rail Stations

- Ongoing consenting by SGA. Delivery by KiwiRail with engagement with Auckland Council on accelerated land use planning to support acceleration of the Drury West station

SH1 Papakura-Drury South

- Ongoing Delivery of stage 1 (Papakura to Drury) by Waka Kotahi
- Route protection of the subsequent stages between Drury and Drury South

Mill Road

- Engagement with ATAP parties on the preferred option, including the opportunity for funding of local upgrades to release additional housing in Drury
- Investigation, design, consenting and delivery of the northern section by Waka Kotahi
- Business case and route protection of the remainder of the corridor

COMMERCIAL IN CONFIDENCE**APPENDIX THREE – REVISED OPTION FOR WHANGĀREI TO PORT MARSDEN****Summary**

State Highway 1 (SH1) is New Zealand's primary highway, but the section between Whangārei and SH15 (being the turnoff to Marsden Point) is afflicted by a number of serious safety, efficiency and resilience problems.

The original scope of the Whangārei to Port Marsden turnoff project involved upgrading 22km of SH1 to four lanes, with a lane in each direction utilised for public transport, freight, electric vehicles and high occupancy vehicles, where appropriate. The 2021 baseline cost estimate for this was \$1,200 million (P50) to \$1,310 million (P95).

Due to the financial constraints on the wider NZ Upgrade Programme the Joint Ministers asked for an alternative option that would provide targeted road safety and Northport Rail upgrades and be deliverable within the original Establishment Report funding allocation for the project.

The Joint Ministers' preferred option includes investment in the provision of a rail link from Northport to the North Auckland Rail line, providing increased opportunity for freight transfer to rail from road. This work would be supplemented with upgrading the section of the NAL between Otiria and Whangārei to 18 tonne axle load safety upgrades to the existing state highway as well as route protecting the long term state highway corridor scheme. These interventions would replace the previous option of upgrading the existing state highway.

This new preferred option would need to be properly baselined as a next phase. At this very early stage and in the limited timeframe for this paper, a high level cost estimate is \$632 million to \$790 million, being made up of:

- Rail at \$450 million to \$500 million for the Marsden Link and other enabling rail works to the north of Whangārei
- Road at \$150 million to \$250 million for safety improvements on SH1
- Corridor route protection costs would be approximately \$32 million to 40 million, not including any property purchase. This would cover a detailed business case, the consenting process and fees and iwi and community engagement through the process.

The new preferred option is not as advanced as the original NZUP option and therefore carries significant risk around cost certainty and the exact scale of the benefits likely. For example, AECOM's 2019 business case for Northland Rail indicated a very low benefit cost ratio of 0.32 for a rail connected port option. More work is needed to address this risk/uncertainty and in light of updated and increased capital costs. There is also stakeholder risk given their strong support for the original NZUP option and the fact they have not been engaged with yet on the potential change in scope.

The next steps on the preferred option, including technical work and communications are:

Rail

- Further understanding of demand and supporting measures needed to achieve mode shift

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- Updated assessment of the commercials for the service, including customer projections, ongoing costs to serve and expected renewals, noting that for KiwiRail as an SOE, the service would need to be profitable.
- Updated cost estimates for rail works to create the line to Marsden Point and potential future requirement for NLTF funding for renewal and maintenance
- Updated rolling stock cost estimates
- Stakeholder engagement and commitment of Stakeholders, such as Northport, to support rail services

Safety Improvements on SH1

- Development of larger scale short term safety works, including updating costs and benefits to the same level as the recently baselined projects.

Route Protection of SH1 long term upgrades

- This involves completion of the business case and route protection for the long term solution

Communications

Due to significant stakeholder, partner and community interest, development of a clear communications plans will be critical and must address:

- Gaining community buy-in to any adjustments to the original scope
- Clarity on timeframes and process from here
- Providing scope certainty

Context

Northland is one of the fastest growing regions in the country, due in part to its proximity to Auckland. It is also one of the most deprived regions in the country.

The importance of this section of SH1 is characterised by its function in connecting Northland to the rest of the North Island, where essentially no other road route exists. It also provides an essential economic connection to Northport, the largest freight node in Northland.

Prior to the Provincial Growth Fund investments, the rail network had been poorly integrated into the wider transport system and was a clear example of "Managed Decline". There was no rail connection to Northport.

Original option announced in January 2020

The scope of the original option was:

- upgrading 22km of SH1 to four lanes through a mix of offline and online improvements between Whangārei and SH15 (Port Marsden Highway), including upgrading the SH1/ SH15 intersection
- two of the four lanes would be for general traffic and where appropriate, two lanes would prioritise public transport, high occupancy vehicles and potentially freight
- separated walking and cycling path between Whangārei and SH15

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- alignment with the Safe Network Programme to reduce the number of deaths and serious injuries between the Whangārei and Port Marsden turn off.

Current status of rail

Recent Crown investment of \$178.5m through the Provincial Growth Fund (PGF) has enabled the following areas to be addressed:

- From 11 January 2021 the line between Whangarei and Auckland can now take conventional 9'6" shipping containers
- Post Xmas 21/22 that same section of line will be able to take an 18-tonne axle load meaning KiwiRail's standard North Island locomotive and wagon fleet can operate; whereas at present only light axle locomotives can be used
- Post Xmas 22/23 the section of line from Kauri to Otiria will be re-opened for low speed operation of light axle locos

In addition, KiwiRail has been allocated \$40m from the PGF to purchase the land necessary for the connection to Northport.

The investment in the existing line helps the exporter connect to Ports of Auckland and Tauranga, but the absence of a rail connection to Northport means any export goods from Whangarei and north must either travel by road to the port, or by road/rail to ports to the south.

Development of a rail enabled export port at Marsden Point needs to be viewed in context of the overall supply chain system. For Marsden Point the defining question is whether:

- The Port is seen as primarily serving the Northland export base with some additional competition driven capture of import/export traffics from Ports of Auckland (or)
- The Port investment is additionally intended as part of the strategy to materially diminish operations in Ports of Auckland (Downtown) and distribute its business elsewhere.
- Certain of the system investments will be similar, others will differ both in scope and timing depending on the answer to those questions. The rail investments proposed under this NZUP package are equally applicable to both scenarios and coupled with investments by Northport in its load and unload facilities will provide the baseline fixed infrastructure in order to achieve the first objective.

None of the investment is redundant if a subsequent decision is taken to pursue the second objective.

KiwiRail believes there is a real opportunity to increase volume on rail through the expansion of the port and servicing further container ship calls.

This has been seen through recent experience with the role of rail in responding to the disruption to the NZ supply chain.

Outcomes sought

The key outcomes sought by the investment in these improvements are:

- **Safety** – to save lives

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- **Resilience** - to support growth in the Northland region.
- **Economic growth** – to enhance the movement of freight between Whangarei, Ruakaka and the rest of New Zealand and connecting growth areas of Whangarei and Ruakaka. Rail investment will contribute to reduction in the cost of moving freight (including increased productivity), employment and jobs, Northport throughput, business growth and number of new businesses.
- **Efficiency** - To reduce the cost and impact of transport for Northland-based businesses and New Zealand more generally and to encourage better use of existing infrastructure.
- **Mode shift** – particularly in the Whangārei urban area. Rail investment would increase the proportion of Northland freight moved by rail and reduce truck movements on constrained parts of the State Highway system. Rail produces 70% fewer emissions than heavy road freight transport per tonne of freight carried.

Investment options

Investment options considered in the preparation of this paper are:

- **Option 1:** Proceed with the currently proposed option. This option has a very low level of confidence of completing the full project within the \$692 million initial funding allocation.
- **Option 2:** Safety improvements along the existing state highway, and the completion of the first (urban) stage of the current state highway project. This option has a medium level of confidence of delivery within the \$692 million initial funding allocation.
- **Option 3:** Safety improvements along the existing state highway, construction of a new rail link to Northport and further upgrade of the existing line from Whangarei to Otiria. This option has a medium level of confidence of delivery within \$692 million initial funding allocation. This is the Joint Ministers recommended option.

Further detail on the Joint Ministers recommended option is outlined below:

The recommended option

The recommended option includes both road and rail components.

Rail

As noted above, the rail investment option is linked to broader supply chain considerations. It assumes the network investment is matched by investment in port infrastructure coupled with a shift of some Upper North Island containerised export traffics to enable benefits to be achieved.

With respect to road traffic from the Far North, and in particular forestry exports, there would need to be pricing arrangements or other commercial constructs that discouraged logging trucks from making the journey directly from cutting face to port. Updated work on commercials would need to be completed.

Under current commercial and economic settings direct road from cutting face to port, will be cheaper to the exporter on many occasions. The type of model that needs to be embedded if there is to be mode shift, reduce demand and improve safety on SH1 is:

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- Truck - cutting face to rail head
- Rail – from railhead to port

For trucking operators to have a viable business operating a short haul business, capital investment in improvements outlined above will need to be matched with changes to operation and contract forms.

In summary, the rail option involves completing the Marsden Point Link, noting Port Grid development would be required (co-funded by Port Company), upgrading the line between Otiria to Whangarei to 18 tonne axle capability, and yard/CT sites/Log Loading areas.

The total high level estimated cost of the rail components (excluding the Port grid) is \$450-500m.

1. Marsden Point Connection

The corridor must be delivered in full to have any value (i.e. there is no halfway option).

The most recent estimate KiwiRail has is \$289m (excluding land purchase) which was pre-Covid and based on an assumption of works commencing 1 July 2020. This estimate is from 2018 and would need to be updated, with escalation expected. A very indicative updated estimate (including escalation and 25% contingency) could be c\$400m.

The connection traverses some significant hilly and unstable terrain and coastal marine areas which will require specialist civil construction resources that are in short supply. In addition, parties would need to consider whether the marine causeway was developed solely for rail or to enable the future roadway, as this would influence cost estimates.

2. Port Grid

To maintain the free and frank expression of opinions

The costs of the Marsden Point connection indicated above exclude the on-port rail grid which is assumed to be funded by the Port Company as part of the development.

This would need to be further tested.

3. Rail Connections from the Far North to the Marsden Point Link

The current Northland PGF project funds re-opening the section from Otiria in the Far North to Kauri as a minimum viable product, which translates to a slow-moving low axle weight operation.

If the goal is to make a material shift of forestry and containerised export freight off SH1 and through the urban areas to connect to Northport, then this segment of the line needs to be upgraded to an 18 tonne axle. KiwiRail had previously advised the cost of this from Otiria to Kauri and then on to Whangarei yard would be c\$60m. Again, this cost estimate would need to be refined.

If this work was to be funded, KiwiRail recommends re-purposing \$8m of PGF funds to achieving 18 tonne axle loads as the PGF funded work it is shortly to embark on in this section would be totally redundant.

4. Yards/CT Sites/Log Loading Areas

In addition, there are other system investments required. This includes basic log loading areas plus improvements to the Whangarei CT yard plus an expansion of the proposed Otiria

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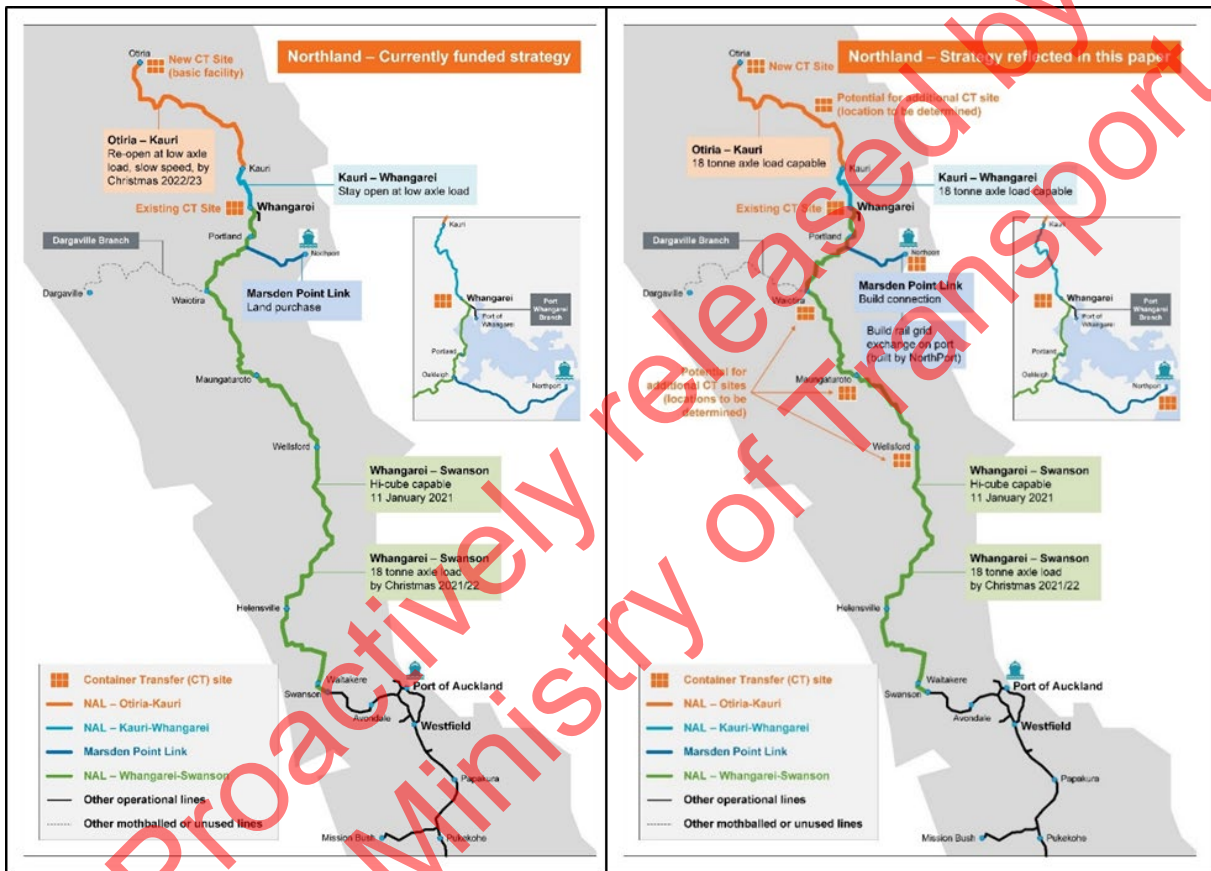
Yard and other nodes on the corridor. Costing for these investments would need to be confirmed (high level estimate \$20-30m).

5. Other cost considerations

Ongoing cost of the network (such as renewal and maintenance) would need to be funded through the NLTF – this would require an increase from current levels in the rail activity class.

In addition, the business case would need to show that commercials could support investment in locomotives and wagons for the above rail service.

Figure 1 – comparison of currently funded rail strategy and rail strategy reflected in this paper



Transport Corridor

SH1 corridor investments would be progressed, with a focus on safety improvements and securing the corridor for the long-term upgrade that will be required:

- **Focused safety interventions along the existing route** – Including limited localised widening, but essentially providing a three barrier system along the length of the route. This will require localised widening (with property take required) and some restrictions in access for some properties. These restrictions will be resolved through turning facilities or roundabouts. The package also provides for some bridge widening to allow the barrier to continue over the bridge. These works will reduce the deaths and serious injuries (DSIs) on the route. This is estimated to cost in the order of \$150 million to \$250 million.
- **Route protection of the long-term upgrade** – The long-term upgrade will be required in the future and protecting the route now will provide stakeholders and

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landowners with greater certainty. It is also the most cost effective time to undertake this protection now, with costs only increasing over time. This is estimated to cost in the order of \$180-\$300 million. This includes completing the Detailed Business Case, Notice of Requirement and 50% to 100% of property purchase. If progressed alongside implementation of immediate safety measures, this route protection would still give some confidence that the safety measures are interim and the longer-term strategy will be progressed in the future, confirming the progression of an entire package of short to long term interventions.

Risks

Risks with the Joint Ministers' recommended option

- **Benefits, scope, cost and timeframes for alternatives investments** – The existing information is dated and would need further work to provide an equivalent level of confidence to scope/ projects recently baselined NZUP option.
- **Economic Analysis** – operating model forecasts need to be updated to include future rail and port capital cost and operating revenue prospects including long-term costs of managing maintenance on the extension to the rail network
- **Partners and stakeholders** – there is likely to be little support from Councils and the general public for the revised option. Extensive engagement would be required to address these concerns.

Risks with not progressing the original scope:

- **Efficiency of existing corridor** – the short state highway corridor performance will continue to degrade, increasing user frustration

Next steps for recommended option

The next steps on the Joint Ministers' recommended option, including technical work and communications are:

Rail

Technical work:

- Further understanding of demand and supporting measures needed to achieve mode shift
- Updated assessment of the commercials for the service, including customer projections, ongoing costs to serve and expected renewals, noting that for KiwiRail as an SOE, the service would need to be profitable.
- Updated cost estimates for rail infrastructure works and potential future requirement for NLTF funding for ongoing renewal and maintenance
- Stakeholder engagement and commitment of Stakeholders such as Northport to support rail services

Safety Improvements on SH1

- Development of larger scale short term safety works, including updating costs and benefits to the same level as the recently baselined projects.

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Route Protection of SH1 long term upgrades

- This involves completion of the business case and route protection for the long term solution

Communications

Due to significant stakeholder, partner and community interest, development of a clear communications plans will be critical and must address:

- Gaining community buy-in to any adjustments to the original scope
- Clarity on timeframes and process from here
- Providing confidence/assurance decisions won't change again

Proactively released by
the Ministry of Transport

Route protection

The following note provides a summary of benefits and costs associated with route protection. In particular, it has focused on the following corridors/ projects:

- Whangārei to Port Marden
- South Auckland (Mill Road and Papakura to Drury South Stage 2)

Benefits of route protection - general

- Route protection via a designation, protects transport corridors from land development pressures which would otherwise prevent or hinder the delivery of a public work, project.
- Designations can be prepared in a manner which maximises flexibility for future implementation and types of corridor use.
- Enables more timely implementation in the future when the need and funding is required, as statutory approvals providing for the works are in place
- Provides certainty to landowners, the existing community and future customers. This can minimise the risk of social disruption that can occur when infrastructure is retrospectively delivered within developing and established urban areas. It can also enable new and establishing communities to plan with more certainty (e.g. they can move to an area knowing there will be public transport travel options for them in the future).
- Enables developers to commit investment to progress infrastructure. Where a transport network affects multiple parcels of land, the certainty of route protection enables developers to commit to provision of early 'contributing' infrastructure, with the expectation that subsequent stages of development will complete other elements of the network.
- Provides a mechanism for Waka Kotahi to plan for future financial investment while retaining flexibility on the detailed development of the recommended future network, enabling it to respond to the pace, scale, and exact location of future growth or changes to the performance of the existing transport network. This means that projects can be delivered to meet project objectives, with the transport network in mind and gives certainty that the transport system can be operated
- Reduces future cost risk. If the corridor is protected by either early acquisition or notices of requirement, then there is an opportunity to reduce some land costs. This is in part associated with the increasing land values that occur as 'live zones' are implemented, and costs savings associated with the control or management that route protection can place on development on the land.
- Early route protection of a corridor provides the opportunity for early acquisition of land which has the potential to increase in value over time. This is particularly the case where there is significant growth pressure where rezoning of land will result in a significant increase in land value.
- Supports Council's subsequent stages of land use planning and development and improves the quality of the urban environment with more certainty. For example, enabling Council to identify areas of higher density residential development in areas that will be serviced by public transport networks.

Benefits of route protection – Whangārei to Port Marden specific context

- This project is part of a wider transport corridor response from Auckland to Whangarei over the next 30 years. This section is for a multi-modal transport response, including walking and cycling as well as public transport provision, providing the northern most section of the wider corridor strategy including the connection to Whangarei.
- With short term safety works proposed, undertaking long term route protection for the wider corridor at the same time will enable a single property acquisition discussion with property owners along the route. This would provide efficiency and certainty for these property owners who would otherwise need to be involved twice in the process (short term safety works and then long term eventually) which is inefficient, frustrating and likely to result in increased project costs in the long term
- Provides other property owners in the corridor certainty on the future to allow them to make investment decisions with this long term property requirements clearly understood.
- Will provide increased confidence for stakeholders and the wider northland community that the long term solution has not been permanently discarded
- Enables increased certainty for KiwiRail to implement the Marsden Link extension with certainty of the long term transport corridor alignment, providing increased efficiency of delivery and costs for both KiwiRail and Waka Kotahi

Benefits of route protection -South Auckland (Mill Road and Papakura to Drury South Stage 2) specific context

- The joint Waka Kotahi and Auckland Transport alliance have been working towards route protection of the future urban networks since 2018, which includes Mill Road and also wider southern network.
- Corridor protection provides investment flexibility for staged delivery of the identified full-system solution for growth in southern Auckland (as it occurs), noting this full system response has been designed for net carbon-positive outcomes. A critical part of that solution involves providing corridors that connect the existing and future growth communities east of SH1. This flexibility also allows the form of the transport corridor to be confirmed closer to implementation, whilst protecting the corridor from development pressure.
- It allows integration of land use and transport planning in areas like Drury West currently being considered for development, that would otherwise be blighted by uncertainty of the corridor alignment
- Allows for land use planning and staged housing release of the identified future growth areas adjacent to the corridor, such as Takaanini
- It prevents against development build-out of options for needed corridors, which is a particular concern in this corridor given the growth aspirations identified.

Benefits of route protection – Takitimu North Link Stage 2 specific context

- Ministers have agreed in principle this project should be funded from the National Land Transport Fund (NLTF) and not NZUP. Current pressures on the NLTF indicated Takitimu North Link Stage 2 would not be funded in the next three years and would be unlikely to be funded in the next ten years.

- To protect the route from growth (The Western BOP one of fastest growing regions in NZ and route protection would ensure the transport corridor is protected from other uses. Without route protection, it is expected developers will seek to use the land for future housing developments
- Route protection would also provide route certainty to landowners, who have had a different option given to them three times since 2017 due to re-evaluation impacts in 2018. There are 60+ landowners in this section with a number of hardship acquisitions.
- Route certainty is also important to our Council partners and realise commitments made in the Board approved Urban Form and Transport Initiative (UFTI) which supports prioritised growth area in Omokoroa and the associated infrastructure needs. This includes Western Bay of Plenty District Council who will notify their Structure Plan this month, and move the town centre, including industrial and commercial, to the area where the designation will be.
- In addition, the Ministry of Education, who are in the process of committing to school sites, and the Ministry of Housing and Urban Development for affordable housing.

Costs of route protection

The costs of route protection comprise two primary components

- **Route designation** – This includes funding for the Indicative Business Case, consenting process (lodgement, hearings), contractor and management fees, community and iwi engagement and some contingency.
- **Property purchase** – Once a designation is in place, history suggests a proportion of the total property required may be purchased by the requiring authority prior to construction. It is assumed that most property transactions would take place in the three years prior to implementation, with approximately 20-50% of transactions taking place prior to this period (over 10-20 years).

Work undertaken by the Support Growth Alliance in Auckland (which is focussed on route protection of the future transport system in Auckland) indicates a return on investment of route protection of well over two.

High level estimates for each of the projects are:

Project	Transport Corridor length	Route designation costs	Indicative Property Cost (20% property)	Indicative Property Cost (50% property)
Mill Road	22km	\$55-\$65 million	\$150 million	\$390 million
Papakura to Drury South Stage 2	2km	\$7-\$10 million	\$30 million	\$75 million
Whangarei to Port Marsden	25km	\$30-\$40 million	\$50 million	\$120 million
Takitimu North Link Stage 2	7km	\$10-\$14 million	\$18 million	\$43 million

Given the property purchase requirements for the full corridors may be realised over a number of decades it is anticipated that funding from the NLTF is likely to be required for this property liability in addition to NZUP