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Waitematā Harbour Connections engagement on concepts

For decision: For noting:

Ngā tūtohunga / Recommendations

That the Auckland Transport Board (board):

- a) Note that the Waitematā Harbour Connections (WHC) project is about to undertake significant community and stakeholder engagement on options for new harbour crossings, as well as alignments for a new North Shore rapid transit system.
- b) Note that these options each have potential to contribute significantly to Auckland Transport's (AT's) strategic objectives and regional transport outcomes for decades to come and AT has significant interests and multiple roles in the eventual project.
- c) Note that, although expected to be primarily funded by Central Government, these options will also have substantial financial, operational and asset implications for AT (e.g. costs for ongoing public transport operations, new local network connections for public transport, active modes and traffic, etc.).
- d) Note that feedback on the options is being provided by AT specialists, representatives on the WHC Project Steering Group and from the Design and Delivery Committee (committee) and that the emerging preferred option is expected to be brought to the board at its May 2023 meeting for endorsement ahead of the completion of the business case.

Te whakarāpopototanga matua / Executive Summary

1. Waka Kotahi New Zealand Transport Agency (Waka Kotahi), AT and Auckland Council (AC) are investigating a multi-modal system solution for connections to, from and within the North Shore, including active mode (long-term solution), rapid transit, and road network improvements for resilience and reliability. This work will also encompass demand management and land use-transport integration. The work will identify the preferred form and timing of any new harbour crossing, whether this is to be combined with other modes, and any supporting network changes or land use developments.
2. During November/December 2022, the project completed its first phase of community and stakeholder engagement, receiving over 4,200 survey responses. This showed broad public support for a multi-modal system solution (with 88% of respondents saying they would use public transport to cross the harbour if they could, compared to the current 30% who do) and a desire to 'just get on with it'. The project team is about to consult upon options still under development, in order to gain insights into community or stakeholder preferences and views, as these are an important input for the project team in determining the preferred option.

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3. These options include both bridge and tunnel options for the crossing of the harbour, along with options for the use of the existing Auckland Harbour Bridge. There is less detail on the potential alignment of the future North Shore rapid transit line (expected to be light rail in a form consistent with Auckland Light Rail (ALR)), as this is influenced by the crossing form and location, as well as further land use planning underway by the project team. The consultation will not be framed to select a preferred option, but rather to better understand what is important to the community and stakeholders and allow this feedback to shape a composite of options into refined composite option.
4. Each consultation option has differing potential to contribute towards AT's strategic objectives or regional transport outcomes, especially in terms of how well they provide for public transport and active mode trips, minimise additional vehicle travel and support a more compact urban form. Each option also has differing environmental impacts, with bridge options having more obvious impacts, whilst tunnel options involve significant volumes of embedded carbon. Tunnels are also likely to have higher ongoing operational costs.
5. One issue of interest to AT is the option to convert the existing Northern Busway to light rail (as opposed to building a new corridor). AT specialists have raised extreme concerns about the viability of the option, which would have a greater impact on AT's operations and customer service than the current Rail Network Rebuild by KiwiRail.
6. AT staff and management representatives are providing input into the project's option development and assessment. It is expected that an emerging preferred option will be available for consideration by the board at its May 2023 meeting, where an endorsement will be sought, ahead of this being provided to the Minister of Transport in mid-June. The full Indicative Business Case (IBC), once completed, will also be brought to the board later in 2023, as well as being presented to Auckland Council and the Waka Kotahi Board, with the final project decision resting with the Minister. AT clearly has significant interests and multiple roles in the eventual project, so needs to be closely involved in decision-making.

Ngā tuhinga ō mua / Previous deliberations

Date	Report Title	Key Outcomes
October 2019 Board	Additional Waitematā Harbour Connections Programme Business Case (PBC)	Approval of PBC to support future programme of busway improvements, rapid transit and network upgrades.
September 2020 Board	Additional Waitematā Harbour Connections: Northern Busway Enhancements	Approval of Detailed Business Case (DBC) for improvements to enhance Northern Busway performance
October 2022 Board	Waitematā Harbour Connections	Noting commencement of IBC and relevant matters for AT

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March 2023 – Design and Delivery Committee	Waitematā Harbour Connections engagement on concepts	Seeking briefing on consultation and greater understanding of AT's roles in project decision-making.
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Te horopaki me te tīaroaro rautaki / Context and strategic alignment

7. The need to improve cross-harbour connections, especially for those modes with critical gaps, has been known for many decades. This challenge has been exacerbated by the strong ongoing population and travel demand growth in Auckland, and the very limited network options across the Waitematā harbour, i.e. a single main north-south corridor catering for traffic, freight and public transport. Increasingly there has been concern at the resilience of the network as a whole and the Auckland Harbour Bridge as a structure.
8. The current phase of work is for an IBC which will develop options and confirm a multi-modal system solution for connections to and within the North Shore, including for active mode (long-term solution), light rail, and road network improvements for resilience and reliability. Any of the options, if delivered, will significantly contribute towards AT's strategic objectives, as well as regional transport outcomes, especially in terms of how well they provide for public transport and active mode trips, minimise additional vehicle travel and support a more compact urban form. AT clearly has significant interests and multiple roles in the eventual project, so needs to be closely involved in decision-making.

Ngā matapakinga me ngā tātaritanga / Discussion and analysis

9. The project team has been assessing a wide series of options (Long List) and refining these into a smaller set for more detailed assessment (Short List). As the harbour crossing section has very different factors for assessment and much more historic detail, than the light rail section through the North Shore, these have been assessed separately, with the emerging preferred option for each section to be put together at a later stage to form the overall project. The light rail elements are being considered in co-ordination with Auckland Light Rail, as there are interdependencies between each project's approach to operations.
10. Although previous studies had recommended cross-harbour tunnels for motorway traffic and/or light rail, the scope of the current work includes additional modes, so bridge options are being revisited in this work. All options also include an assessment of the future use of the existing harbour bridge. No bridge designs have been done, as the assessment is based on concepts on various alignments, with different modes provided for in different options. Should a bridge emerge as the preferred way forward, with a broad alignment identified, the next phase of investigation will undertake design steps, including further public engagement. Bridge crossing options are expected to be significantly cheaper than tunnel options, both in capital and operating costs, but obviously involve a visual and environmental impact upon the harbour.
11. A previous proposal for combined road/rail tunnels across the harbour remains an option, however this form and alignment is more difficult to integrate with ALR at Wynyard Quarter or to connect with Takapuna. Tunnels also are known to be significantly more expensive to build and

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maintain and, depending on the modes contained, may involve significant more complexity relating to safety and operations. Tunnels are also known to involve significant volumes of embedded carbon.

12. Alignment options for the North Shore involve exploring concepts based on serving the western or eastern suburbs or utilising the existing Northern Busway corridor. All aim to serve major North Shore centres, especially Takapuna, Smales Farm and Albany. AT specialists have raised extreme concerns about the busway conversion options, given the difficulty of continuing to operate a busy busway whilst relocating significant underground services and laying a new slab with tracks and power supply for light rail. This issue has similarities to the challenges and difficulties currently being experienced with the Rail Network Rebuild. A busway alignment would also enable significantly less land use and patronage uplift, as no new centres would be served. Alignments away from the busway corridor are challenging in terms of the North Shore’s topography and dispersed centres, making it harder to identify a sufficiently populous route to justify the expense of a new tunnel.
13. Recent community and stakeholder engagement showed broad public support for a multi-modal system solution and a desire to ‘just get on with it’. In the upcoming consultation, the project team intends to gain insights into community or stakeholder preferences and views on scenarios which capture the major differences of key elements rather than being finalised configurations. The project material will explore how light rail options could influence urban form, staging and alignment possibilities, and how different priorities result in different ways forward. AT’s feedback on the options is being provided by various staff specialists, representatives on the WHC Project Steering Group and from the Design and Delivery Committee.
14. Although there is positive integration with the ALR project (and the nascent Northwest Rapid Transit project), there remains a lack of cross-project governance, which risks allowing each project (each with unique governance arrangements) to progress in a disjointed way. AT clearly has a role as ‘owner’ of the rapid transit network and board direction is sought on how to resolve this matter.
15. The emerging preferred option is expected to be brought to the board at its May meeting for endorsement ahead of this being submitted to the Minister of Transport in mid-June. The full IBC, once completed, will be brought to the board later in 2023 before also being presented to Auckland Council and the Waka Kotahi board, with the final project decision resting with the Minister. If the project proceeds, the next step will be the commencement of more detailed planning, likely in co-ordination with the ALR and Northwest Rapid Transit projects.

Ngā tūraru matua / Key risks and mitigations

Key Risks	Proposed mitigations
The lack of detail in the options presented for consultation, or expectation from the community or stakeholders that greater progress should have been made.	Project team to acknowledge in consultation material that the options represent concepts for the purpose of feedback, ahead of more detailed design work being undertaken.
The fast pace of the project limiting the ability of governance bodies to be meaningfully engaged and to provide guidance and direction	Focus on sufficient AT resourcing and oversight of critical project processes, to ensure adequate consideration of implications for AT

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Option assessment does not adequately include consideration of matters of importance to AT	Greater AT specialist involvement in assessment and highlighting of AT concerns at governance level
Ineffective partnership and engagement with mana whenua and maata waka undermining inclusion of aspects related to Te Ao Māori	Continued efforts by Waka Kotahi and Minister to resource and engage appropriate representation from mana whenua

Ngā ritenga-ā-pūtea me ngā rauemi / Financial and resource impacts

16. Although expected to be primarily funded by Central Government, all of the project options will have substantial financial implications for AT (e.g. costs for ongoing public transport operations, new local network connections for active modes and traffic, etc.) Some options, notably tunnels, will require substantial ongoing opex, which imposes a burden on all future transport budgets. AT is seeking that a full understanding of capital and operational costs, across all agencies involved, be captured within the IBC.

Ngā whaiwhakaaro ō te taiao me te panonitanga o te āhuarangi / Environment and climate change considerations

17. The project options are being assessed on criteria including their influencing of land use development and altering of trip patterns, influencing of regional vehicle kilometres travelled (VKT) results, regional transport emissions and the level of embodied carbon. Reporting against these elements will be included in future board updates. All options include actions to address sea level rise, raising the land along Shoal Bay.

Ngā whakaaweawe me ngā whakaaro / Impacts and perspectives

Mana whenua

18. Progress is being made by Waka Kotahi on greater engagement and partnering with mana whenua. This will be both at the working and management level.

Ngā mema pōti / Elected members

19. Project briefings by the WHC team for elected members, including local boards, have occurred through February 2023, to raise awareness of the project and alerting to the imminent public engagement on the options. It is expected that Auckland Council's Governing Body will receive briefings in parallel with reporting to the Waka Kotahi Board and the board.

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Ngā rōpū kei raro i te Kaunihera / Council Controlled Organisations

20. Both the WHC and ALR project teams have engaged with Eke Panuku regarding how the projects may integrate with Wynyard Quarter planning, where Eke Panuku has ongoing programmes of work.

Ngā kiritaki / Customers

21. During November/December 2022, the project completed its first phase of community and stakeholder engagement, which showed broad public support for a multi-modal system solution and a desire to 'just get on with it'. Over 1,200 people were spoken with and over 4,200 survey responses were received. The upcoming consultation on scenarios and elements will gain insights into community or stakeholder preferences and views, which are an important input for the project team in determining the preferred way forward.

Ngā whaiwhakaaro haumaruru me ngā whaiwhakaaro hauora / Health, safety and wellbeing considerations

22. There are no health and safety considerations with this matter.

Ā muri ake nei / Next steps

23. It is expected that the emerging preferred option will be brought to the board for endorsement in May 2023, showing the preferred form and alignment of any new harbour crossing, as well as a concept for a North Shore light rail alignment. This should include the results of the recent public consultation and summary costs, benefits and issues. Further work will be undertaken to complete the IBC, which will then be brought to the board later in the year for approval.

Te pou whenua tuinga / Document ownership

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