

In confidence

AHB judicial review reconsideration

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Whāinga | Purpose: For decision

The purpose of this paper is to seek the Board's endorsement of management's proposed response to a request by Movement for reconsideration of the decision to decline to trial reallocation of lanes to active modes on the Auckland Harbour Bridge.

He kupu whakatau | Recommendations

Management recommends the Board:

- Endorses that Waka Kotahi will not engage in the reconsideration proposed by Movement and Management will respond to Movement to decline its request (enclosing a copy of this Board paper and the relevant extract of the Board minutes).
- Notes that, having reviewed errors alleged by Movement and considered further information
 prepared and analysis undertaken since November 2021, Management's opinion remains that
 trialling lane reallocation is not an appropriate solution for cross-harbour walking and cycling.

Take matua | Key points

- Movement has alleged the decision of Waka Kotahi not to reallocate lane space on the Auckland Harbour Bridge was flawed and requested Waka Kotahi reconsider the decision.
- Management does not consider Movement has identified any error in the decision at the time, and subsequent analysis of lane reallocation confirms that a trial of reallocating lane space would not be appropriate at this time.

He kōrero mō tēnei kaupapa | Background

The Board has considered reallocation of lane space for walking and cycling over the Auckland Harbour Bridge on a number of occasions over recent years (Attachment 1 summarises this consideration). In October 2021 the Minister of Transport invited Waka Kotahi to consider trialling lane reallocation to active modes over summer or a long weekend. In November and December 2021 Waka Kotahi decided not to endorse a trial and instead endorsed a series of events on the Harbour Bridge.

Movement has threatened to judicially review the decision not to trial reallocation of lanes unless Waka Kotahi agrees to engage in a process with it to reconsider the decision. Given the challenge relates to a decision considered at Board level, management wishes to update the Board and seek endorsement of its preferred approach to responding to Movement.



New Zealand Government

Kia mōhio mai koe | What you need to know

Management has reviewed the concerns raised in Movement's letter and considers that Movement has not identified errors in the trial decisions that warrant reconsideration. A summary of management's response to each key allegation is set out in Attachment 2 to this paper.

Additional work carried out since 2021 has reinforced that the safety and network impact issues associated with lane reallocation mean it is not a preferable option. Attachment 1 summarises the further work on lane reallocation this year.

A trial would itself involve considerable resources, requiring development of similar infrastructure to a more permanent solution, and create the safety risks present in a permanent lane reallocation. To provide realistic and useful information, it would also need to risk the network impacts that modelling has indicated are likely to occur for the duration of the trial. Management does not consider those costs, risks and adverse effects on users of the land transport system to be justified given the extensive options analysis to date that indicates that there are better options for establishing a walking and cycling link across the Waitematā Harbour.

Ā muri ake nei | Next steps

If the Board endorses the recommendations above, management will respond to Movement to inform it that Waka Kotahi declines its invitation to reconsider its decision and to provide a copy of this Board paper.

Ngā whakapiringa | Attachments

Attachment 1	Summary of consideration of lane reallocation
Attachment 2	Table of Movement allegations and responses

Attachment 1

Summary of consideration of lane reallocation

Board consideration of lane reallocation on the Auckland Harbour Bridge

The Board has considered lane reallocation on the Auckland Harbour Bridge on a number of occasions.

Consideration prior to November 2021

In December 2019, the Board approved the Auckland Harbour Bridge Shared Path Single Stage Business Case, and funding for the pre-implementation phase of the Shared Path. The Business Case identified several options for allocating an existing lane to walking and cycling, one of which was shortlisted. However, lane reallocation was not recommended as it was concluded that it could not provide an appropriate balance of safe levels of service for all users. The business case recommended an independent shared path structure attached to the concrete piers of the existing bridge.

Subsequent analysis of the option recommended in 2019 indicated that it would not be feasible to attach the proposed shared path to the existing bridge structure. Consequently, the Northern Pathway Alliance undertook further technical work to investigate alternative options to the originally recommended design. This work took place in the context of the Northern Pathway NZ Upgrade Programme project and its results were presented to the Board for its 25 March 2021 meeting. The board paper recommended the Board endorse a separate structure across the Waitematā harbour for active modes as the preferred long-term solution for the Northern Pathway project. This recommendation was endorsed by the Board. Although considered, lane reallocation was not shortlisted as an option for detailed analysis. The paper explained this was because:¹

- reallocation of two lanes would be required in order to mitigate safety risk. A single lane would be less than 3 m wide (once barriers, gradients and shoulders were taken into account). Given forecast volumes, the speed differential of different users and gradients of the bridge, this would not meet required standards and would carry safety risks;
- reallocating two lanes would result in current demand exceeding capacity from 5am to 8pm on an average weekday (excluding any allowance for growth, which was forecast); increase levels of congestion on the bridge, which would disproportionately impact the performance of the busway, and likely require the closure of the Shelley Beach off ramp;
- reallocation of two lanes would also have considerable impact on the operation of the wider strategic transport system.

The Minister approved the preferred separate structure option in June 2021. However, due to the time-frame for construction, the Minister asked Waka Kotahi to investigate interim options for achieving walking and cycling access across the Waitematā Harbour. To assist with its analysis of options, the Northern Pathway team commissioned a Traffic Impact Analysis ("**TIA**") from ASM as well as assistance from external consultants (Resolve) to assess options. A summary of the options analysis from Resolve was presented to the Board in a paper dated 13 August 2021.² The analysis by Resolve indicated that all options had safety risks and/or risks of detrimental consequences to the operation of the network, including:

¹ Board Paper "Northern Pathway Update" 18 March 2021 at 6.

² Board Paper "Auckland Harbour Bridge update" 13 August 2021.

- the steep gradient of the bridge would significantly increase the operating speed of cyclists, scooters and other wheeled transport, posing a risk to other shared path users;
- while a two-lane solution would provide improved safety for path users, the traffic modelling in the TIA indicated it would lead to detrimental traffic flow effects throughout the Auckland motorway network.

On the basis of the safety risks the Board decided to rule out lane reallocation as an option.

Response to a request for a trial

In October 2021 the Government announced it would not proceed with the separate structure as part of NZUP. The Minister asked Waka Kotahi to investigate alternative medium-term options for a walking and cycling link (i.e. for the next 15-20 years, pending completion of a new multi-modal Waitematā Harbour Crossing).

The Minister also wrote to the Board Chair in early October 2021 to request that Waka Kotahi consider whether a temporary trial could occur over the summer holiday months or a long weekend. On 24 November 2021, on the recommendation of the Investment and Delivery Committee, the Board directed further exploration of active mode access being provided to the bridge for the event, but not for a "trial" that would set an expectation of further consideration being given to live lane access. This decision was based on the investigation earlier in 2021 of implementing lane reallocation as a short term option and its conclusion that the only viable option that would not create operational or structural issues or cause significant traffic congestion (without a large mode shift) would be a temporary access arrangement like the format used for the Auckland Marathon.³ The paper also explained that Waka Kotahi had commenced work on finding a medium term solution for achieving a walking and cycling link across the Waitematā Harbour.

On 16 December 2021, the Board endorsed a recommended series of walking and cycling events for the Auckland Harbour Bridge to commence from ^{\$ 9(2)(g)(i)}.

Further analysis since November 2021

After the decision not to hold a trial, the Northern Pathway team carried out further analysis of lane reallocation in the context of its consideration of medium-term options for walking and cycling access across the Waitematā harbour.

Options were developed collaboratively with mana whenua and a wider stakeholder group, including Auckland Transport, Eke Panuku Development Auckland, Bike Auckland and other technical specialists and special interest groups. Further technical work was carried out to support and inform this assessment. The results of this analysis and a preferred option to recommend to the Minister were presented to the Board in a paper dated 22 February 2022.⁴

The project team initially shortlisted ten options consisting of three modal types, ferry, bus and lane reallocation. The team then assessed the best performing option from each mode against the others to select a preferred option. The team selected a ferry option as the preferred option. Lane reallocation was not selected as a preferred option because:⁵

³ I & D Committee Paper "Auckland Harbour Bridge Walking and Cycling Event" 23 November 2021 at 2.

⁴ I & D Committee Paper "Northern Pathway Rescope Update" 22 February 2022.

⁵ At 3.

- the project team considered a one-lane reallocation was preferable due to the two-lane reallocation resulting in significant wider network congestion;
- a one-lane allocation had significant residual safety risks to users, engineering challenges such as lane barriers, ramps, screens and weight restrictions and negative wider network impacts including operational impacts from congestion;
- the ferry option could be implemented with a manageable risk profile at a similar peak hour capacity to the one lane reallocation option.

Subsequent analysis of lane reallocation has also included completion of a safe system assessment and a further "phase 2" Traffic Impact Analysis, completed on 30 June 2022:

The safe system assessment identified a number of safety risks that would be increased by reallocation of one or two lanes compared to the current bridge configuration. These included pedestrian versus cyclist crashes being highly likely in either a one or two-lane reallocation, and a head-on cyclist versus cyclist crash being highly likely in a one lane reallocation and likely in a two lane reallocation. The assessment noted that due to there being a 6% downhill gradient cyclists could achieve speeds of up to 60km/hr. At this speed a head-on collision with another cyclist would increase DSI risk and a collision with a child or elderly pedestrian would also be of high severity.

The "phase 2" Traffic Impact Analysis comprised further assessment of two options for a 24/7 active mode facility on the southbound (eastern) clip on lane – a one-lane option and a two-lane option. Both options were assessed for their impact on "typical weekday" (50th percentile) traffic demands ("**Tier two assessment**"). This additional assessment included further and more detailed assessment of credible maximum and minimum traffic demand and improved calibration of traffic capacity.⁶ The Tier Two assessment indicated:

- that the impacts of removing two lanes from the Auckland Harbour Bridge on State Highway 1 and the surrounding arterial network would be likely very high, leading, even allowing for highly optimistic behaviour change assumptions, to close to a doubling of motorway congestion hours along with a doubling of the total length of on-ramp queues (compared to 2019).⁷ The modelling also indicated a best case scenario of delays to freight in the inter-peak as well as PM period of 20-30 minutes.⁸
- moderate impacts from the one-lane option, although the loss of one general lane is likely to adversely impact the travel time reliability of services on the northern busway.⁹

ASM carried out a further refined "Tier 3" assessment of the one-lane option (which calibrated assumptions in the modelling more closely to observed values and included an assessment under 90th percentile demand conditions). The 90th percentile conditions are likely to occur 25 times a year and actual impacts are expected to fall somewhere between the tier two assessment result and the tier three assessment results 40% of the time.¹⁰ The Tier 3 analysis indicated that removal of one lane would result in a capacity shortfall across the bridge in the inter-peak period, which would create a backlog on the Southern Motorway that could not be cleared before the onset of the PM peak on higher demand days.¹¹ Although Waka Kotahi could attempt to manage this through

¹¹ At 47.

⁶ Auckland Harbour Bridge Active Mode Provision – Traffic Impact Assessment Phase 2 30 June 2022 at 20.

⁷ At 3, 31 and 35.

⁸ At 34.

⁹ At 35.

¹⁰ At 3 and 36.

varying the timing of the lane shift on the Auckland Harbour Bridge, this would likely lead to wider variability of congestion levels on the Northern motorway in response to variation in day to day traffic demands, reducing network reliability and predictability of customer journeys.¹²

Attachment 2

Management assessment of Movement claims

The table below summarises Movement's key allegations and the Waka Kotahi responses. There are some additional allegations of bias/conflict of interest that are not well founded and are therefore not addressed in the table below.

The decision not to trial reallocation to active modes in December 2021 was predetermined, and Waka Kotahi did not seriously consider a trial, as Waka Kotahi had already decided against lane allocation in August 2021.	Waka Kotahi declined to undertake a trial for legitimate reasons. A trial could set unrealistic expectations around the likelihood of a dedicated lane becoming available in the short term. The decision accurately reflected work that had been carried out to date, where Waka Kotahi had concluded that lane reallocation was not a viable short term option.
The decision was illegal because in coming to it Waka Kotahi failed to take into account and/or gave inadequate consideration to mode shift.	Waka Kotahi has considered lane reallocation as an option for achieving mode shift in the context of projects intended to achieve mode shift through improving walking and cycling access across the Waitematā harbour. It rejected lane reallocation on the basis there were better options for achieving this walking and cycling access. The purpose of the series of events endorsed by the Board is to leave Aucklanders feeling positive about walking and cycling in their city – i.e. to promote mode shift.
The decision was not mode neutral in that it clearly favoured perceived needs of private car owner, referred to in the TIA as 'customers' and their trips as 'customer journeys', with the obvious inference being that cyclists and pedestrians are not customers.	Decision-making in relation to lane reallocation has not been biased towards private car owners. Decisions have taken safety considerations into account, in particular for active mode users of reallocated lanes, and have appropriately taken into account the likely impact of lane reallocation on congestion in the context of assessing lane reallocation against other options.
The decision did not take into account, at all, the extent to which reallocating a lane or lanes to active modes might reduce carbon emissions.	Emissions modelling by Resolve informed the decision in August 2021 not to recommend lane reallocation as an interim option.
The decision did not exhibit a sense of social and environmental responsibility because it failed to take into account mode shift and decreased carbon emissions.	The options analysis took into account matters relevant to social and environmental responsibility. All options were developed and assessed to consider how best to improve walking and cycling access across the Waitematā harbour.
The Waka Kotahi decision-making process was not transparent. Waka Kotahi gave the Minister the appearance of considering trialling of reallocation of lanes to active modes, whilst unsubtly steering him away from the idea and changing the idea from a "trial" to an "event".	Waka Kotahi clearly and transparently communicated to the Minister that on the basis of its previous analysis of lane reallocation it would not undertake a trial but instead would endorse a series of events to promote walking and cycling across the Waitematā harbour.

mis flaw mis and	e decision was based on multiple takes of fact – expert reports were ved, and their conclusions were interpreted/selectively interpreted misrepresented by Waka Kotahi to ister.	The reports do not contain the alleged errors suggested by Movement and were not misrepresented to the Minister. Waka Kotahi staff appropriately drew on expertise and experience to advise the Board and Minister on the implications of the technical analysis. See detailed responses below in relation to the TIA Report and Resolve report.
	The TIA report assumes active mode trips are equally distributed across 24 hours when obviously they would not be.	The modelling undertaken in the TIA assessment took into account the likely distribution of active mode trips across the day.
	The TIA compares average annual daily walking and cycling trips with weekday traffic demand.	Reference to annual daily and cycling trips was for the purpose of determining a reasonable range of walking and cycling demand to use for the purpose of modelling. The demand range used was reasonable for the purposes of the modelling.
	The TIA does not account for vehicle trips made at different times, more locally or not taken at all.	For the purposes of this analysis it was reasonable to assume that total cross-harbour trip demands remained constant.
	The TIA is based on the widely discredited 'Bathtub Theory'.	The theory is not discredited and in any event the analysis in the report is based on the application of the models described in the report rather than the theory.
	The TIA report plots only one demand reduction scenario for each option. The TIA failed to present option 3 under traffic demand reduction levels 2, 3 and 4. Had that been done, it would have shown that at traffic reduction level 3 there would be neutral impact and at level 4 virtually no congestion.	Although only one demand reduction scenario was plotted in the report the assessment took into account other demand scenarios to generate a high-low range of impacts. Demand reduction levels 1 and 2 were applied to single lane reallocation and demand reduction levels 3 and 4 were applied to two-lane reallocation (as demand reduction would be higher with two lane allocations). The report acknowledged that early tests indicated that option 3a would require weekday level 3 demand reduction to achieve neutral impacts.
	The TIA assumes that the unexpected loss of a lane caused by a traffic incident would have the same effect as the reallocation of a lane to active modes. This conclusion ignores the reduction in demand that occurs due to behaviour change in response to a known reallocation.	This is incorrect. There is reference to the truck strike incident as an event providing some insight on the effects of lane closure at times when traffic demand exceeds remaining capacity over longer periods. The effect of reallocation is modelled separately and that modelling takes into account demand reduction as the result of a known reallocation and provision of an additional walking and cycling option.
	The TIA report fails to model what the Minister has actually asked for (a temporary trial in the quieter months).	The TIA report was commissioned to respond to the Minister's request to investigate lane reallocation as an interim option pending construction of a standalone bridge. The utility and appropriateness of a trial was appropriately considered in light of the earlier consideration of permanent lane reallocation

The TIA report erroneously applies demand reduction level 4 to option 9.	The reference to demand reduction level 4 in the option 9 title bar is an error, however, the analysis recorded in the report was on the basis of demand reduction scenarios appropriate to the lane configuration that would be in place for option 9.
The report focuses on highlighting the risks of each of the reallocation options rather than the solutions. It does not mention at all the risks of <i>not</i> trialling reallocation e.g. never knowing whether it will work and whether road space reduction will be offset by demand reduction through mode shift etc.	The Resolve report was not commissioned to assess the risks of not conducting a trial. It was commissioned to support analysis of lane reallocation as an interim option pending construction of a stand-alone bridge. It appropriately identified the risks involved in options for lane reallocation.
The Resolve report failed to acknowledge that the ASM's report "Concept of Logistics – AHB Active Modes" found Option 3a to be operationally viable.	The Resolve report referred to a general range of operational risks and issues, without specifically ruling out any options on that basis (see page 24 and 29).
The decision was unfair because there was not consultation with the wider Auckland community or groups representing active modes of transport such as Movement and Bike Auckland. Movement, Get Across and Bike Auckland had a legitimate expectation they would be consulted by Waka Kotahi regarding decision-making around active mode access across the Harbour.	Consultation was not required. Waka Kotahi has subsequently engaged with stakeholders, including Bike Auckland, in relation to permanent lane-reallocation and other options for improving walking and cycling access across the Waitematā harbour
Unreasonableness: No reasonable decision maker could or should have rejected the opportunity to at least trial non carbon emitting active modes on a central link in a large city's transport network.	There were reasonable grounds for declining to undertake a trial, including the analysis that had already been undertaken. Management's view remains that the decision is the appropriate decision.