

WAITEMATĀ HARBOUR CONNECTIONS

Have your say

As a major part of Tāmaki Makaurau Auckland's transport network, Waitematā Harbour Connections is Aotearoa New Zealand's most significant city-shaping project.

It will change the way we cross Te Waitematā (Waitematā Harbour) and use the wider transport system in the future — whether that's walking, cycling, taking the bus, travelling by light rail, driving or transporting goods, services or freight — connecting people to transport options across the region and beyond.

Waitematā Harbour Connections is looking at what new infrastructure is needed to cater for these modes, where it will go, and how we make the best use of what we already have, including the Auckland Harbour Bridge.

A key connection for Tāmaki Makaurau Auckland's future rapid transit network, Waitematā Harbour Connections will recommend ways to integrate transport improvements with quality urban development, to enable a thriving and sustainable city for generations to come.

We're in the planning stage and to help us develop preferred connections, we are now seeking feedback on potential scenarios and options. We want to understand what is important to you and your community.

How to have your say

Complete this form and send it to us by:

- Email to info@awhc.co.nz
- Post to: Waka Kotahi NZ Transport Agency
National Office
Private Bag 6995
Wellington 6141
ATTENTION: WAITEMATĀ HARBOUR CONNECTIONS
- Bring it to us at one of our in-person events. Details available at nzta.govt.nz/awhc
- If you need help filling out this form, call our helpline 0800 210 311

All information and a digital version of this form is available on our website nzta.govt.nz/awhc

The feedback period is from 30 March – 1 May 2023



About you

We are now going to ask some questions about you. The purpose of these questions is to understand who we've heard from. All personal information will be kept confidential.

1 Who are you responding on behalf of?

- Myself or my family
- A group, organisation or other entity (please let us know which group/organisation/entity you are responding on behalf of) _____

2 Where do you live?

- Northland
- Auckland (please tell us which suburb) _____
- Central North Island
- Lower North Island
- South Island
- Other New Zealand
- Outside of New Zealand

3 Which age group are you in?

- Under 10
- 10-19
- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80+
- Prefer not to say

4 Which ethnic group(s) do you identify with?

Select all that apply to you

- New Zealand European
- Māori
- Samoan
- Cook Island Māori
- Tongan
- Niuean
- Chinese
- Indian
- Other (please specify)

Prefer not to say

5 If you have selected Māori, please tell us which iwi you are affiliated with.

You may write as many iwi as are applicable. Skip this question if unknown or you do not wish to answer

6 Which gender do you identify as?

- Male
- Female
- Gender non-binary/gender diverse
- Prefer not to say

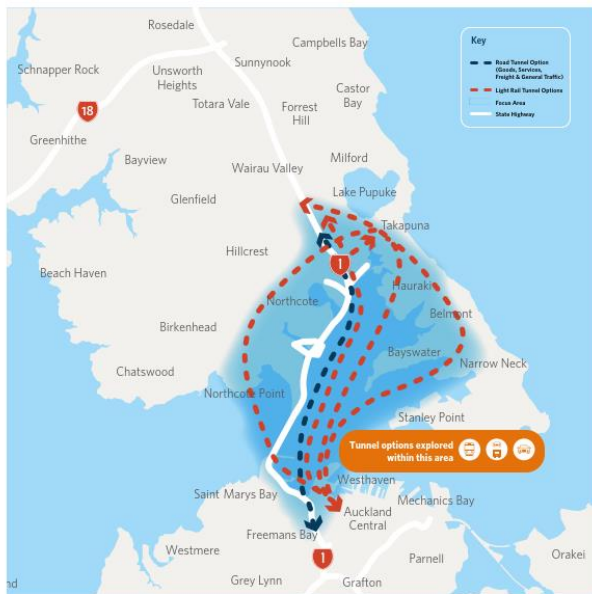
Crossing Te Waitematā

Considering the long-term outcomes we want from the new crossing investment and work done in previous studies and projects, we've looked at multiple options. We've carried out an assessment of how we could cross Te Waitematā in the future via new connections (bridges, tunnels, or a combination of the two), while also looking at how to best use the existing Auckland Harbour Bridge. With all the options, there are a range of impacts, opportunities and constraints.

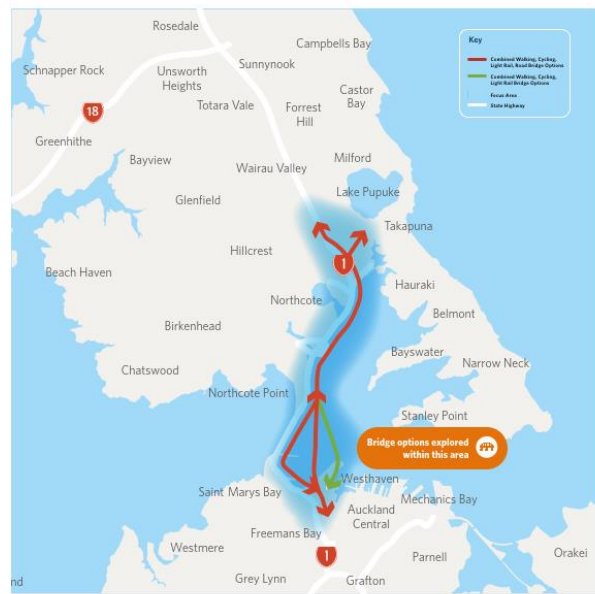
The options considered provide facilities for all modes of travel, whether it be by walking, cycling, light rail, bus, goods and service vehicles, freight and general traffic. This means that everyone will get better accessibility, travel choice and resilience crossing Te Waitematā.

The two maps below show new bridge and tunnel crossings being considered. It is important to note each option being considered has different combinations of how the existing harbour bridge is used, the modes using new bridges or tunnels varies, and in some situations, options considered include a new bridge and a new tunnel. We have identified scenarios that show how these options work in different ways.

Tunnel options



Bridge options



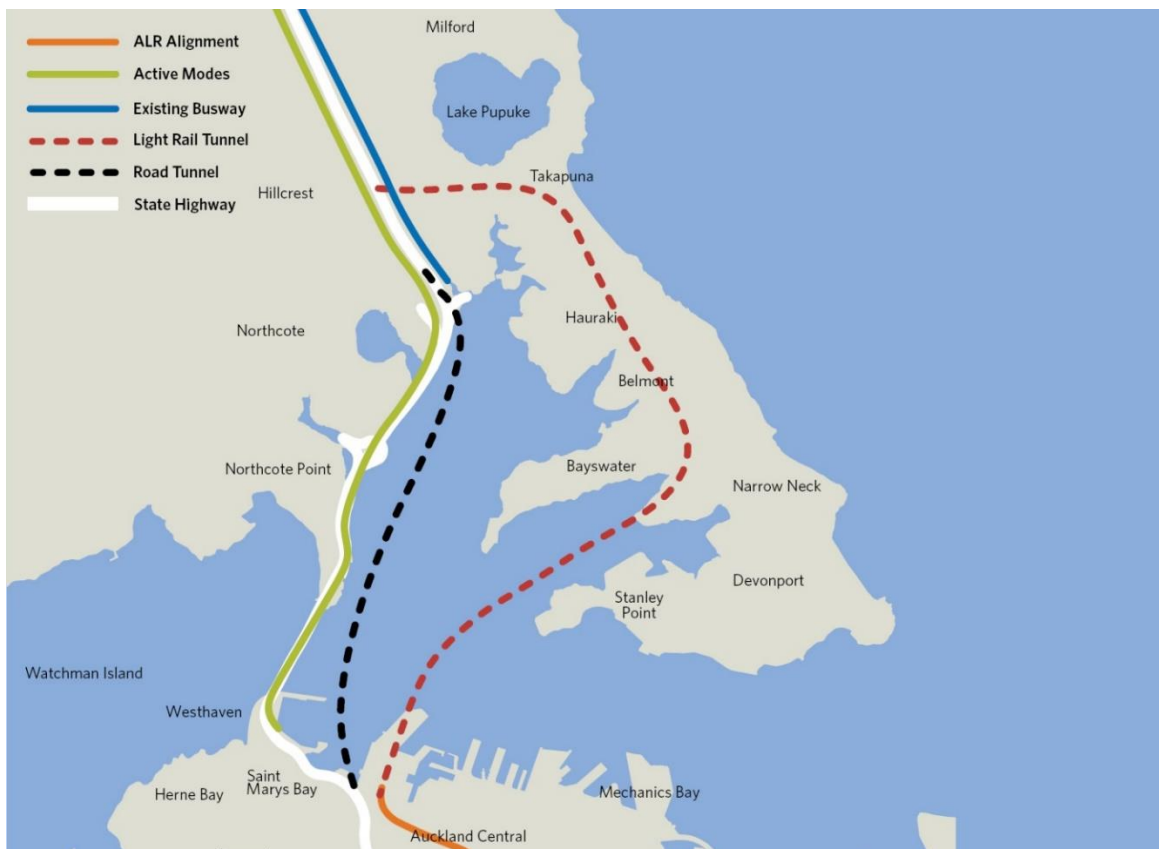
We are considering a range of scenarios for crossing Te Waitematā and have included some high-level information about the various benefits and challenges of each scenario.

All scenarios include:

- a new walking and cycling link across Te Waitematā
- a new light rail link across Te Waitematā connecting to Auckland Light Rail
- the ability to improve resilience of SH1 and the existing Auckland Harbour Bridge to maintenance and climate events such as high winds, sea level rise and flooding.

Scenario 1: New light rail tunnel (east), road tunnel, walking and cycling on Auckland Harbour Bridge

Tunnelled Light Rail to the east connecting Wynyard to Smales Farm via Belmont and Takapuna communities. Tunnelling to create a new section of SH1 directly between the Central Motorway Junction and Akoranga Drive. Walking, cycling and buses provided for by reallocating road space on the existing Auckland Harbour Bridge once tunnel is available for goods, services, freight and traffic.



Benefits

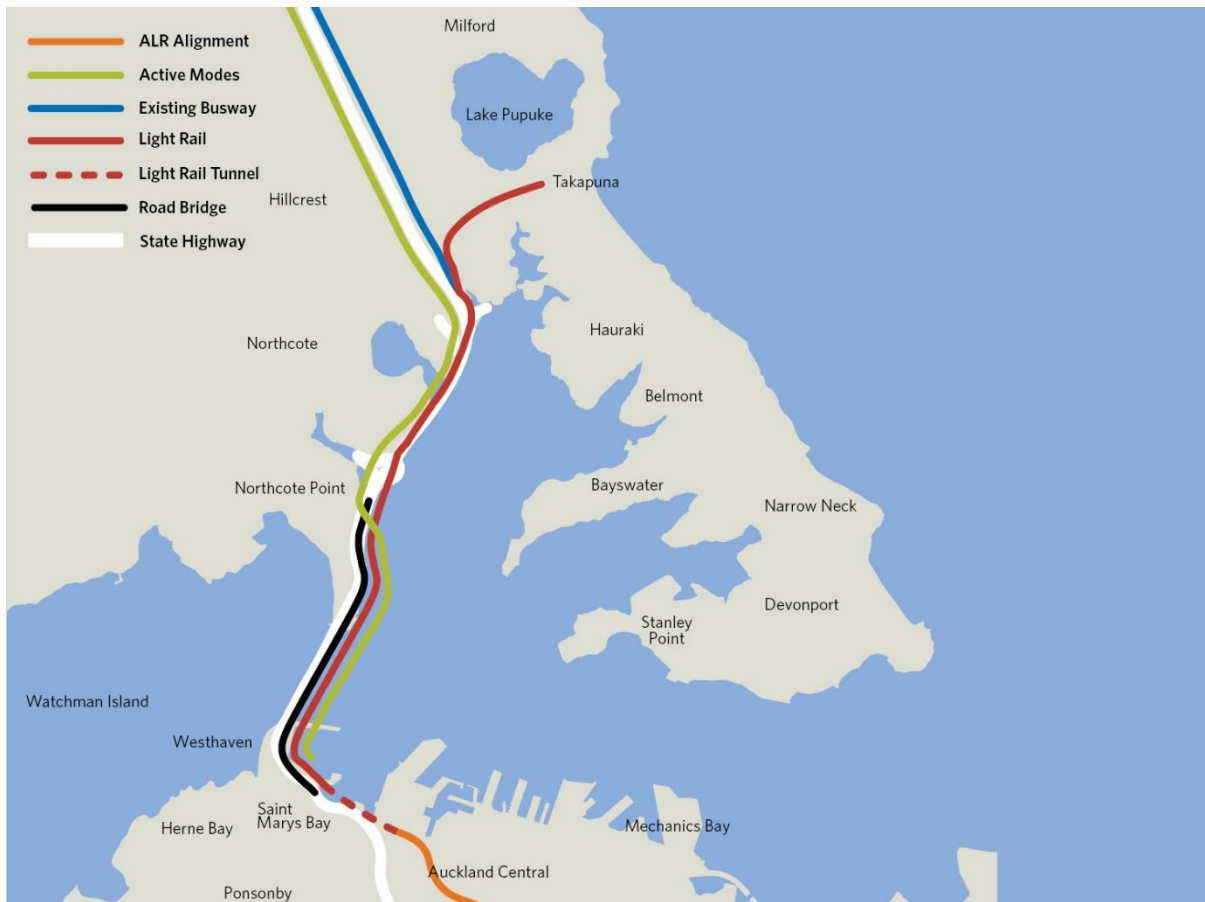
- Would provide alternative transport corridors for all modes to cross the harbour, making a more resilient network
- Light rail connects the Devonport peninsula communities to social and employment opportunities in the city centre and Takapuna
- Enables the best opportunity to protect and enhance Te Waitematā, and avoids impact on wāhi tapu, the need for reclamation, and structures on the seabed
- Allows the existing corridor to be raised in the same location, with much less disruption to movements across Te Waitematā in the same footprint
- Would allow for removal of Victoria Park Viaduct and relocation of space within St Mary's Bay.

Challenges

- Most expensive to construct and operate
- Highest carbon emissions to construct
- One of the longest durations to construct
- Walking and cycling connection can only be delivered after road tunnel completed.

Scenario 2: New light rail, walking and cycling, and road bridge

A new bridge next to the existing Auckland Harbour Bridge for light rail, walking, cycling and three additional general traffic lanes. This will provide five general traffic lanes in each direction at all times. This route connects Light Rail from Wynyard to Takapuna via Akoranga Station. The new bridge would be of a similar gradient and height to the existing bridge.



Benefits

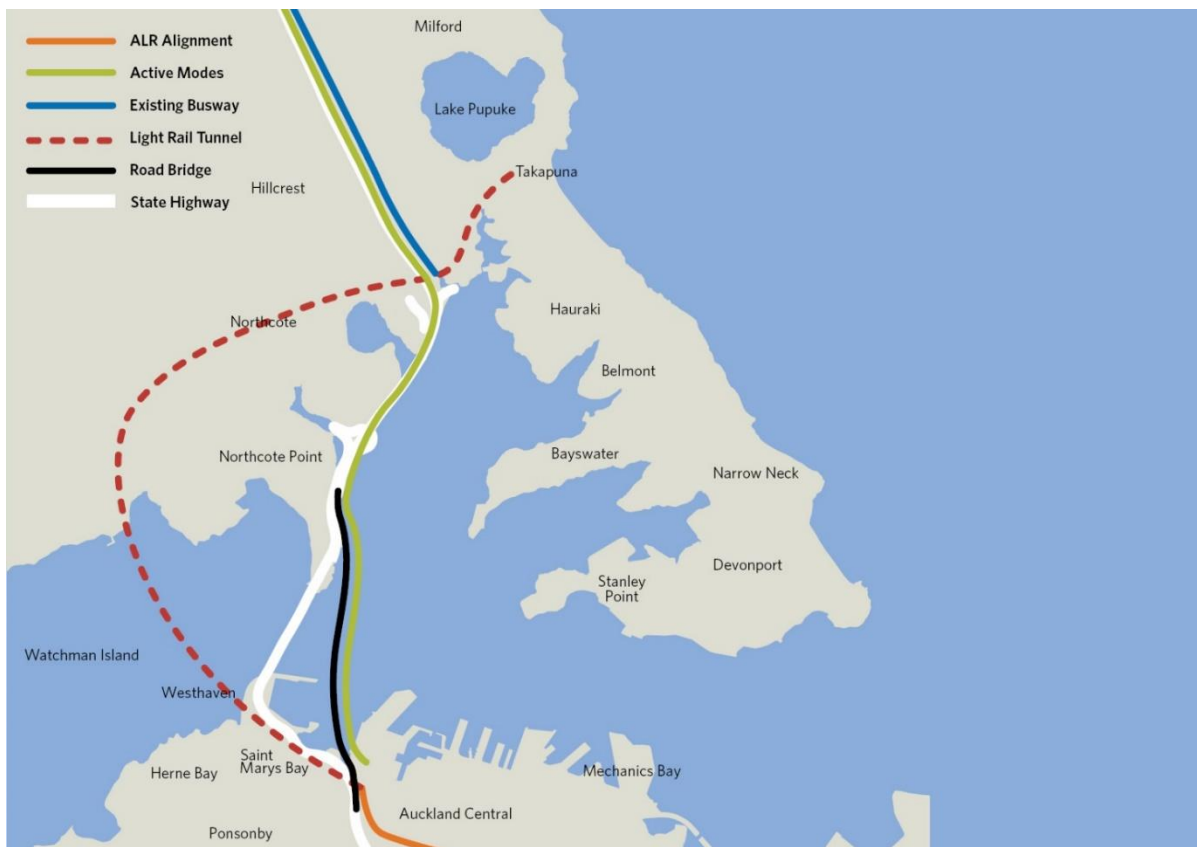
- Least expensive to construct and operate
- Lowest carbon emissions to construct
- Shortest duration to construct
- Would enable the walking and cycling connection to open at the same time as all other modes.

Challenges

- Least resilience for all modes due to reliance on a single transport corridor to cross Te Waitematā
- Significant impact on Te Waitematā and wāhi tapu due to structures on the headlands, the need for reclamation, and structures on the seabed
- Significant disruption to SH1 between Akoranga Drive and Onewa Road to address impacts of sea level rise
- Significant impact on Westhaven and St Mary's Bay.

Scenario 3: New light rail tunnel (west), new road and walking and cycling bridge

Tunnelled Light Rail to the west connecting Wynyard to Takapuna via Birkenhead (Highbury), Northcote and Akoranga Station. A new bridge for SH1 traffic directly between the Central Motorway Junction and Sulphur Beach. Walking and cycling provided on the new bridge linking Westhaven to Sulphur Beach. The existing Auckland Harbour Bridge is retained for local traffic and buses.



Benefits

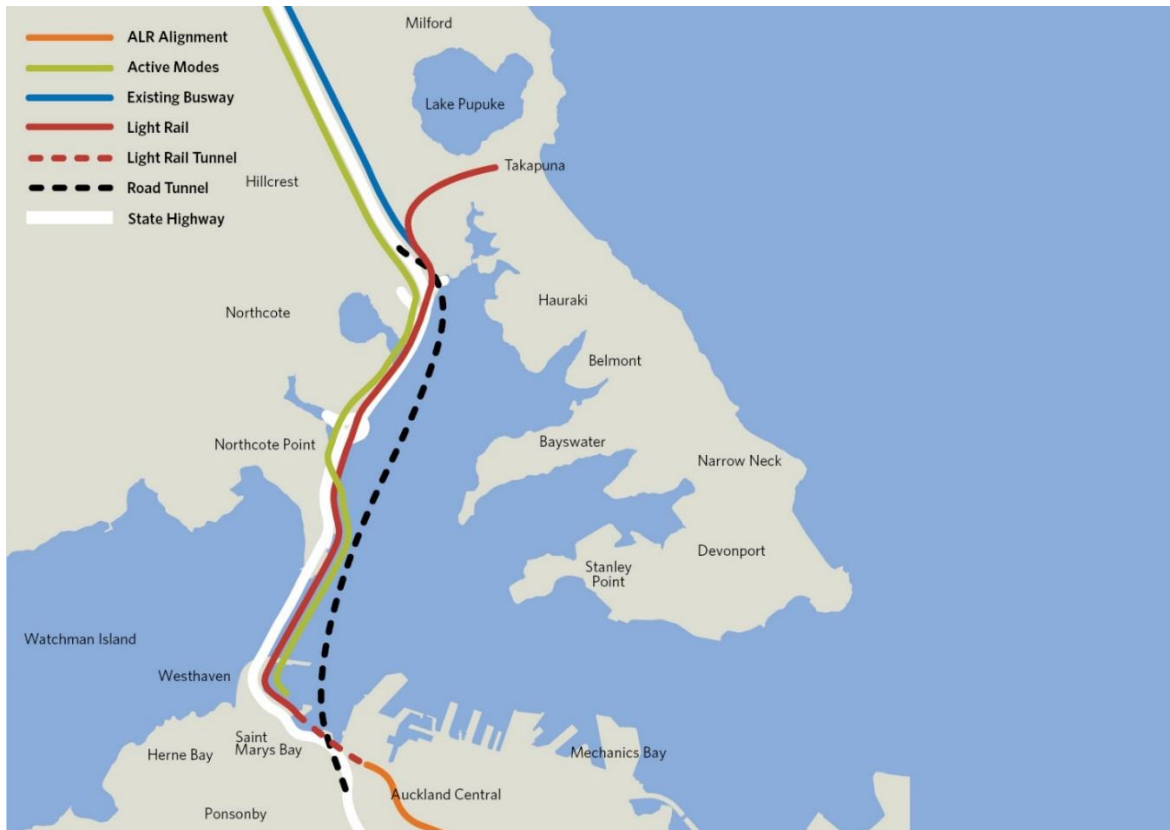
- Walking and cycling connection open with new bridge completion
- More direct walking and cycling routes to the city centre.
- Light rail connects the Birkenhead and Northcote communities to social and employment opportunities in the city centre and Takapuna
- Some improved resilience due to separation of the light rail and road system.

Challenges

- Expensive to construct and operate
- High carbon emissions to construct
- One of the longest durations to construct
- Significant impact on Te Waitematā and wāhi tapu due to structures on the headlands, the need for reclamation, and structures on the seabed
- Significant disruption to movement across Te Waitematā while raising the existing State Highway 1
- Significant impact on Wynyard Quarter, Westhaven and St Mary's Bay
- Significant engineering complexity due to station depth at Highbury.

Scenario 4: New light rail, walking and cycling bridge and road tunnel

A new bridge next to the existing Auckland Harbour Bridge for light rail, walking and cycling landing at Sulphur Beach. The new bridge would be of a similar gradient and height to the existing bridge. This route connects light rail from Wynyard to Takapuna via Akoranga Station. Tunnelling to create a new section of SH1 directly between the Central Motorway Junction and Akoranga Drive.



Benefits

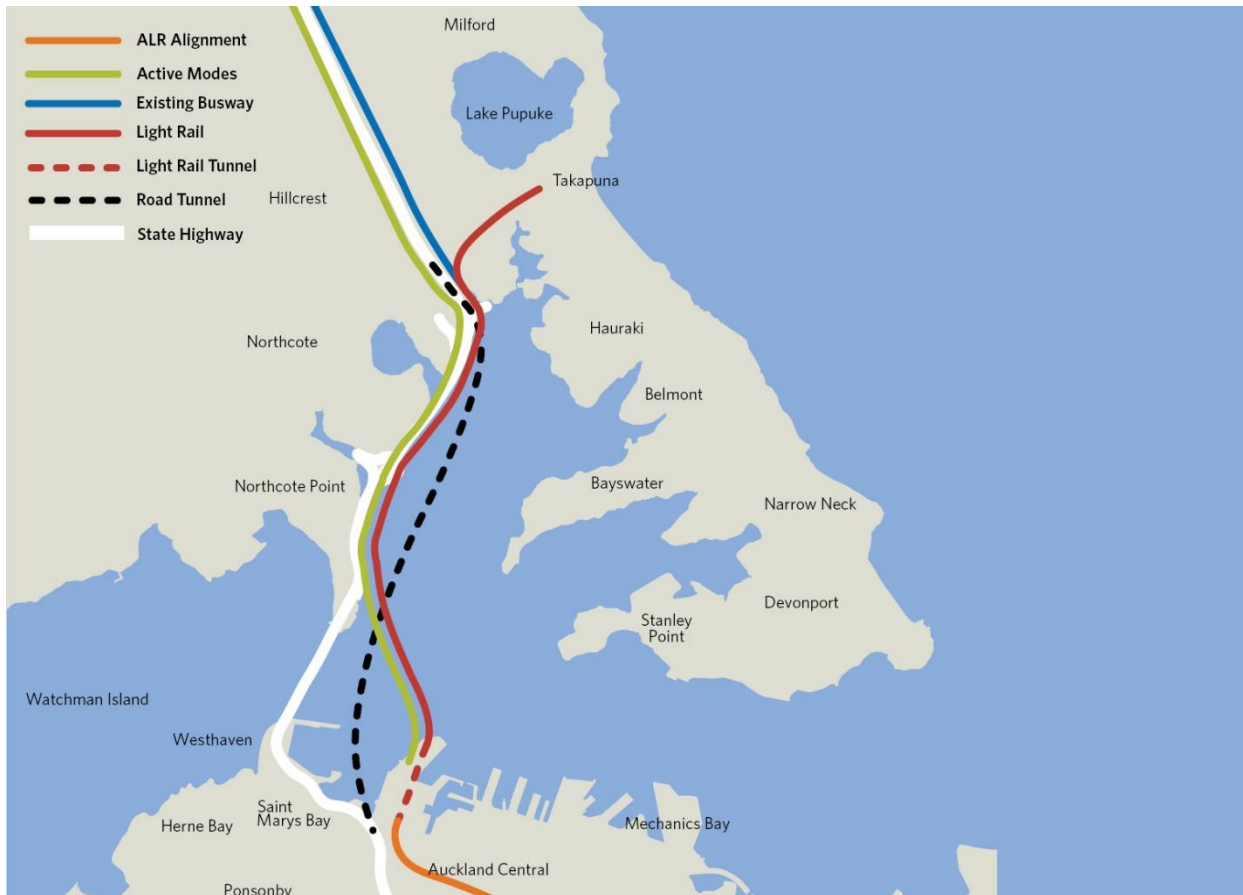
- Reduced disruption for movement across Te Waitematā as maintenance requirements increase for the ageing Auckland Harbour Bridge
- Would provide alternative transport corridors for all modes to cross Te Waitematā, making a more resilient network
- Allows the existing corridor to be raised, with much less disruption to movements across Te Waitematā
- Walking and cycling and cycle connection open with the new bridge completion.

Challenges

- Expensive to construct and operate
- High carbon emissions to construct tunnel
- Impact on Te Waitematā and wāhi tapu due to structures on the headland and on the seabed – extent of reclamation will be less compared to other bridge options
- Impact on Westhaven and the marina - this would be more significant if light rail constructed before road tunnel.
- One of the longer durations to construct
- Significant engineering and staging complexity due to road and light rail crossing at both ends.

Scenario 5: New light rail, walking and cycling bridge and road tunnel

A new bridge for light rail and walking and cycling from Wynyard Point landing at Sulphur Beach. This route connects light rail from Wynyard to Takapuna via Akoranga Station. Tunnelling to create a new section of SH1 directly between the Central Motorway Junction and Akoranga Drive.



Benefits

- Reduced disruption for movement across Te Waitematā as maintenance requirements increase for the ageing Auckland Harbour Bridge
- Provide alternative transport corridors for all modes to cross Te Waitematā
- Allows the existing corridor to be raised, with much less disruption to movements across Te Waitematā
- Walking and cycling connection open with new bridge completion
- A more direct walking and cycling connection to the city centre.

Challenges

- Expensive to construct and operate
- High carbon emissions to construct tunnel
- Impact on Te Waitematā due to the need for reclamation, and structures on the seabed
- Significant impact on Wynyard Quarter due to transition from tunnel to bridge
- Impact on vessels navigating to Westhaven marina from the east
- One of the longer durations to construct
- Significant engineering and staging complexity due to road and light rail crossing at Akoranga Drive.

To help develop a recommend option, there are some important criteria to consider and trade-offs to be made. This is a key part of developing the indicative business case. The table below represents a quantitative and qualitative comparison of the scenarios against several criteria.

Criteria	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Cost	\$\$\$ \$\$	\$\$ \$	\$\$ \$\$	\$\$ \$\$	\$\$ \$\$
Resilience	3 shields	1 shield	2 shields	3 shields	3 shields
Efficiency	2 thumbs up	2 thumbs up	1 thumbs up	3 thumbs up	3 thumbs up
Opportunity to protect and enhance Te Waitematā	4 fish	1 fish	2 fish	4 fish	4 fish
Carbon emissions during construction	4 CO ₂ icons	1 CO ₂ icon	3 CO ₂ icons	3 CO ₂ icons	3 CO ₂ icons
Disruption to address sea level rise	1 triangle	3 triangles	3 triangles	1 triangle	1 triangle
Time to build	3 clock icons	2 clock icons	3 clock icons	3 clock icons	3 clock icons
Staging and sequencing	Tunnel for road or light rail first, cycle upgrade follows road tunnel	Bridge for road, light rail and cycle improvements all together	Either bridge for road and cycle improvements first, or tunnel for light rail first	Either bridge for light rail and cycle improvements first, or tunnel for road first	Either bridge for light rail and cycle improvements first, or tunnel for road first

Each symbol represents a \$5 billion cost range.

More symbols represent an enhanced ability to provide alternative corridors, more mode choices across Te Waitematā and reduce reliance on the ageing Auckland Harbour Bridge.

More symbols represent a greater opportunity to segregate local and state highway movements crossing Te Waitematā as well as the ability to improve directness for most users.

More symbols represent a greater opportunity to avoid wāhi tapu, reduce reclamation into Te Waitematā and limit the impact on the seabed.

More symbols represent a higher likely magnitude of emissions generated to construct the new tunnels and bridge combinations envisaged for each scenario. It takes into account the length of the crossings and factoring in that tunnel construction is likely to generate more carbon emissions than bridges.

More symbols represent a higher likely magnitude of disruption to northern busway services and state highway traffic when raising the section of motorway between Onewa Road and Akoranga Drive.

Each symbol represents an approximate 5-year construction period.



7 What features of these scenarios do you like?

8 What features of these scenarios don't you like?

9 Is there anything we have missed?

10 Thinking about the possible scenarios, what factors are important to you?

	1 – least important	2	3	4 - neutral	5	6	7 – Most important	Unsure
Cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potential land impacts at connection points on North Shore and City Centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Efficiency – getting around faster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resilience to differing events – like accidents or extreme weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carbon emissions during construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sea level rise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timing – how long it takes to complete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Growth opportunities – developing and enhancing communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protect and enhance the harbour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Public transport across Te Waitematā

We know from our previous survey that you want to see more reliable rapid transit to and from the North Shore, and that Takapuna is a key destination. The project will decide how to enhance the existing busway and connect Auckland Light Rail at Wynyard to the North Shore. There are a number of possible corridors that we are considering.



11 What is more important when connecting to the North Shore?

- Link via Highbury to Takapuna (Option A)
- Direct link to Takapuna for the Central City (Options B and C)
- Link via Bayswater to Takapuna (Option D)
- No preference
- None of these options

12 Please tell us why:

Connecting the North Shore

The North Shore is expected to see significant population growth in the coming years, with most of the growth and activity expected in areas such as Albany and Takapuna, which are already key employment and activity areas. To accommodate this growth, we are considering ways to improve the public transport network around the North Shore and across Te Waitematā, to make getting around safer, more convenient, sustainable, and resilient in the long term. Each option displays different ways growth and rapid transport could occur in the future creating opportunities for associated communities. This could happen in stages over the coming decades as growth and demand increases.

13 Do you want to see an increase in housing, jobs and services around the Northern Busway corridor or in other existing communities on the North Shore?

- Around existing Northern Busway
- In other existing communities on the North Shore
- Both
- No preference

Improved public transport connections can be achieved through a combination of the options listed below, please tell us what you think of each. The corridors could be designed to run on the surface (using existing roads) or in a tunnel.



Option 1: Increase capacity of the existing Northern Busway

- [Detailed Business Case](#) by Auckland Transport has been completed and work is being progressed
- More improvements could be considered to increase capacity in the future
- Efficient use of existing corridor
- Growth will occur in communities along the busway that are identified in existing plans and policies.

14 How favourable is increasing capacity of the existing Northern Busway?

	1 – Not at all favourable	2	3	4 - neutral	5	6	7 – Extremely favourable	Unsure
Option 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Option 2: Convert the existing Northern Busway to light rail

- Efficient use of existing corridor
- Significant impact during construction on the existing busway with sections of this will be out of action during construction
- Opportunities for additional urban development.

15 How favourable is converting the Northern Busway to light rail?

	1 – Not at all favourable	2	3	4 - neutral	5	6	7 – Extremely favourable	Unsure
Option 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Option 3: New light rail to the west of SH1 and retain Northern Busway

- Increases the number of communities with access to rapid transit on the North Shore.
- More capacity and resilience for the public transport network by retaining the existing busway and construction of a new light rail line.
- Facilitates changes in land use planning to deliver more diverse housing and employment choices.

16 How favourable is new light rail to the west of SH1 and retaining the Northern Busway?

	1 – Not at all favourable	2	3	4 - neutral	5	6	7 – Extremely favourable	Unsure
Option 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Option 4: New light rail to the lower/south-west and retain Northern Busway

Similar outcomes to Option 3, and:

- Directly connects lower-west communities to Takapuna, AUT and the rest of the Rapid Transit Network.
- Significant opportunities for urban development.

17 How favourable is new light rail to the lower/south-west and retaining the Northern Busway??

	1 – Not at all favourable	2	3	4 - neutral	5	6	7 – Extremely favourable	Unsure
Option 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Option 5: New light rail to the Devonport Peninsula and retain Northern Busway

Similar outcomes to Option 3, and:

- Directly connects lower-east communities to Takapuna and the rest of the Rapid Transit Network.

18 How favourable is new light rail to the Devonport Peninsula and retaining the Northern Busway?

	1 – Not at all favourable	2	3	4 - neutral	5	6	7 – Extremely favourable	Unsure
Option 5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19 What new areas would you like to see grow and connect with light rail that are not identified above?

Delivery

The timing and staging of improvements for the Waitematā Harbour Connections project is a key part of the project. Careful consideration needs to be given to how it integrates with Auckland Light Rail, enhancements to the busway, the timing for walking and cycling, as well as the urgency to address resilience concerns.

This is a complex project with more planning, design and consenting work to do following confirmation of a preferred option. Elements of the project could be delivered within the decade and construction is likely to begin by 2029.

20 How important are the following elements to you?

	1 – Very unimportant	2	3	4 - neutral	5	6	7 – Very important	Unsure
Northern Busway improvements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking and cycling connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Light rail connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goods, services and freight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General traffic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21 Do you have any other feedback?

If you have any supporting documentation or extra pages, you can attach these to this feedback form.

22 Did you find the information useful for giving feedback?

	1 – Not at all useful	2	3	4 - neutral	5	6	7 – Very useful	Unsure
Usefulness of the information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23 If you would like us to keep you informed about the project through our e-newsletter, please write your email address below:

Thank you for your feedback. You can stay up to date on the project on our website nzta.govt.nz/awhc

Privacy information

The information requested is to enable Waka Kotahi to contact you in relation to your feedback and to provide you with updates for the Waitematā Harbour Connections project. To help make it quick and easy for you to provide feedback we use Consultation Manager, a company based in Australia, to collect and process your information. Consultation Manager collect and process your information using their interactive geo mapping and tagging tool, Social Pinpoint. The information you provide will be used by Consultation Manager in accordance with its privacy policy. Waka Kotahi will use your information only for the purposes for which it has been collected. Your information will be treated as confidential by Waka Kotahi, subject to the Official Information Act 1982 and the Privacy Act 2020.

[Consultation Manager privacy policy](#)

Providing your information is voluntary. Should you chose to provide us with your feedback you are required to agree to Consultation Manager's terms and conditions. Should you choose to provide us with your information you have the right, under the Privacy Act 2020 to request access to and correction of any personal information you supply as a part of this process from Waka Kotahi. Should you wish to exercise these rights, please contact:

Waka Kotahi NZ Transport Agency
Private Bag 11777
Palmerston North 4442
Email: info@nzta.govt.nz

If you chose not to provide your information, you'll be required to write anonymous into spaces where your information is requested and your consultation feedback will be submitted anonymously.