

**Creating connections across Te Waitematā to deliver a thriving and sustainable Tāmaki Makaurau.**

*Whiria te taura here, whakawhitia a Te Waitematā, e tōnui ai, e toitū aihoki a Tāmaki Makaurau.*



# Waitematā Harbour Connections



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e tōnui ai, e toitū ai hoki a Tāmaki Makaurau*

**Creating connections across Te Waitematā that enable a thriving and sustainable Tāmaki Makaurau Auckland**

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

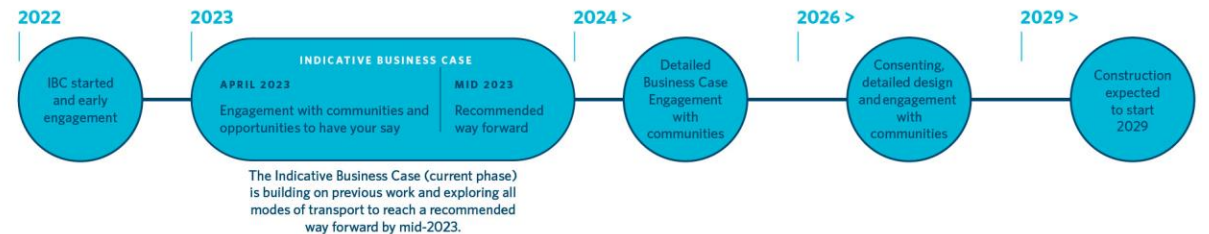
It will change the way we cross Te Waitematā (Waitematā Harbour) and use the wider transport system in the future —whether that’s walking, cycling, taking the bus, travelling by light rail, driving or transporting goods, services or freight—connecting people to transport options across the region and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



## Time frame from here





# Why do we need to invest in new connections?



## Urban development opportunities

Tāmaki Makaurau Auckland is forecast to continue growing. New convenient, accessible, multi-modal connections will play a critical role in supporting the social and economic wellbeing and quality future development of Tāmaki Makaurau and Aotearoa New Zealand.



## Sustainable transport choice

There is an urgent need to provide real transport choice to everyone to support mode shift and a shift to a lower carbon transport system.



## Resilient connections

The corridor is the busiest in New Zealand's transport network, with the Auckland Harbour Bridge carrying more than 254,000 people, 184,000 vehicles and 35,000 bus trips per day. The bridge is under increasing operational pressure. Together with more extreme weather events, this is affecting the resilience of the bridge and the wider network. New infrastructure is needed to provide resilient connections for the future.



## Connecting the Rapid Transit Network

High-capacity, quality rapid transit is critical to developing a modern, connected city, providing people with faster, safer and more reliable trips and reducing carbon emissions.



## Active Mode Gap

There is an existing gap across the Te Waitematā for people on foot and wheels so this project will investigate how to cross the harbour and tie into the wider walking and cycling network.



## Improving the freight network

With 12,000 freight trips per day, and a high proportion of travel heading beyond Auckland, this project will provide connection for the whole upper North Island and unlock significant value for the entire country.



# Te Waitematā

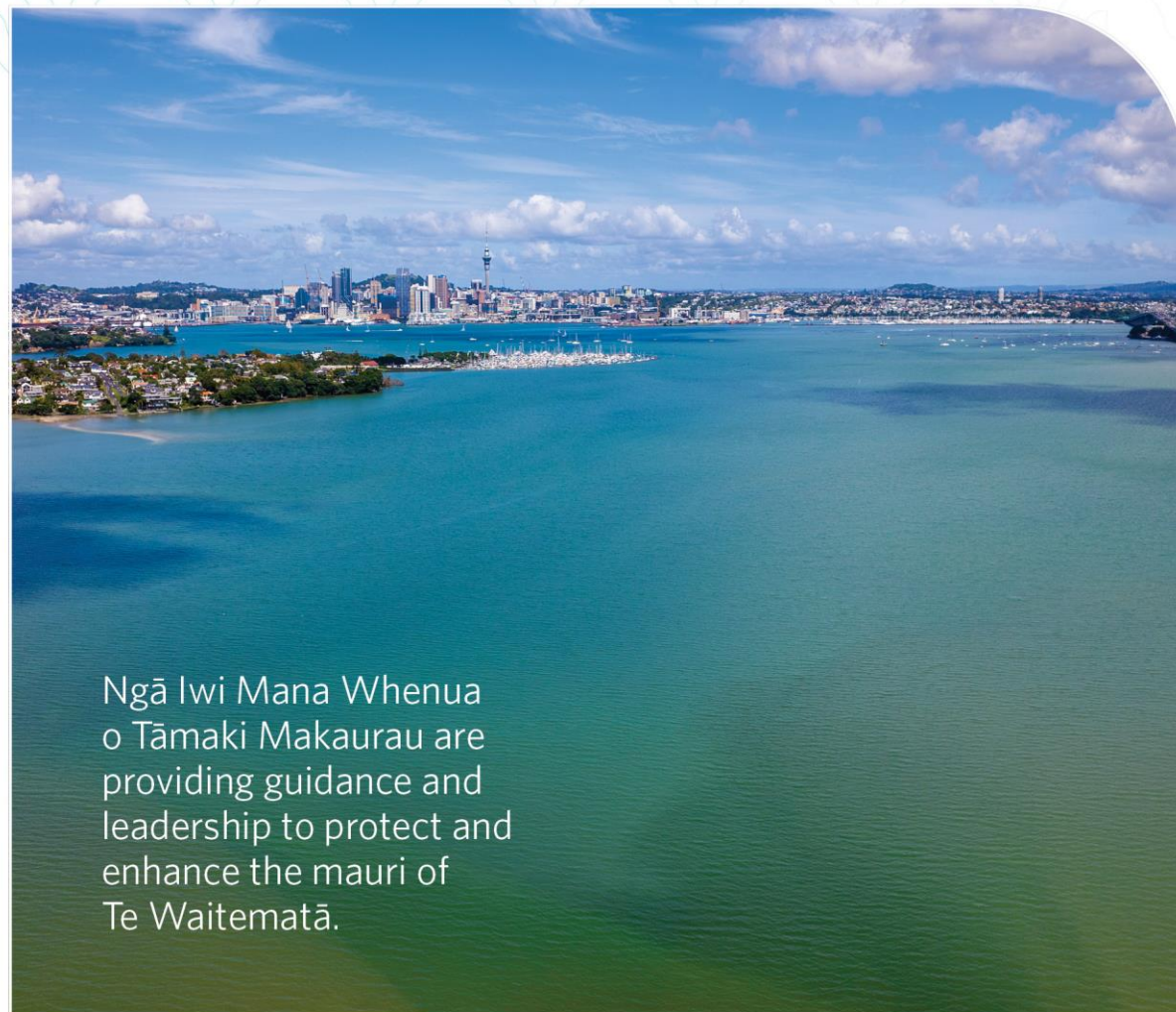
## – he taonga

Te Waitematā has significant environmental, social and cultural value and this value is felt far beyond Tāmaki Makaurau

We recognise the importance of Mana Whenua relationships to the lands and places of significance in Tāmaki Makaurau. We support Mana Whenua outcomes, aspirations, and expectations under Te Tiriti o Waitangi with our Treaty Partners.

Project partners Ngā Iwi Mana Whenua o Tāmaki Makaurau are providing guidance and leadership to protect and enhance the mauri of Te Waitematā as a taonga in the development and assessment of options.

For future connections and urban development, focus will be given to Aotearoa New Zealand's commitment to reaching net zero emissions by 2050 and will be supported by the Emissions Reduction Plan (ERP), Transport Emissions Reduction Pathway (TERP), developed by Auckland Council and Auckland Transport (AT) in response to te Tāruke-ā-Tāwhiri Auckland's Climate Plan.



Ngā Iwi Mana Whenua o Tāmaki Makaurau are providing guidance and leadership to protect and enhance the mauri of Te Waitematā.

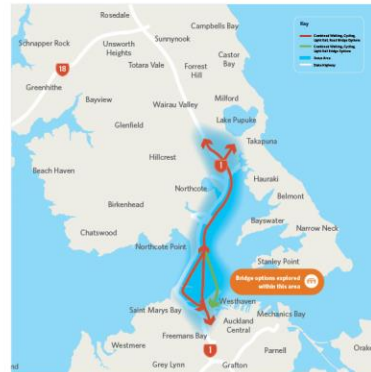
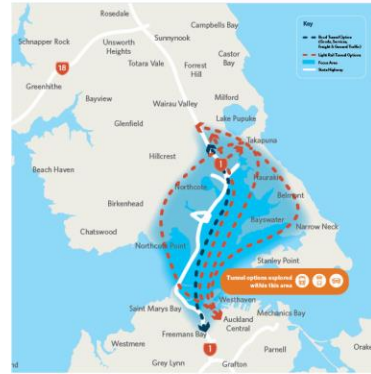


# Crossing Te Waitematā

Considering the long term outcomes we want from the new crossing investment and work done in previous studies and projects, we have 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 best to 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 or general traffic. This means better accessibility, travel choice and resilience crossing Te Waitematā for everyone.

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



Below is a summary of how bridge and tunnel crossings compare against a number of important project objectives and outcomes. Once a shortlist has been confirmed, a much more detailed assessment will occur for each option, informed by your feedback and ideas.

Project objectives & outcomes	Tunnel crossing options	Bridge crossing options
<b>Cost</b>	Requires more investment than bridges to construct and operate.	Requires less investment than tunnels to construct and operate. To mitigate the effects is likely to be more costly than mitigating tunnel effects.
<b>Resilience to differing events</b>	A new tunnel(s) would provide the highest level of resilience, with reduced impacts on the wider transport network from closures on the Auckland Harbour Bridge caused by accidents or weather events like high wind.	A new bridge(s) would reduce impacts on the wider transport network from closures on the Auckland Harbour Bridge caused by accidents, however they could still be impacted by high winds. If the existing Auckland Harbour Bridge is retained as SH1 for goods and services, freight and general traffic, it would be significantly less resilient.
<b>Growth opportunities</b>	Light rail tunnels provide the greatest opportunity to intensify communities and enable new connections between Smales Farm, Takapuna, and either the Devonport Peninsula or Northcote (if chosen) and the city centre.	Light rail bridges provide opportunity to intensify Takapuna through better connections between city centre.
<b>Efficiency</b>	Creates efficient movement of people and goods by separating local traffic from long distance traffic along SH1 between Akoranga and Central Motorway Junction. Light rail tunnel would provide the most direct and efficient movement of people.	Local and long-distance traffic uses the same section of SH1 between Akoranga and the bridge crossings, which impacts the efficient movement of people and goods.
<b>Protect and enhance Te Waitematā</b>	Opportunity to enhance the mauri of Te Waitematā and the wider taiao (environment), and provides the ability to protect and enhance wāhi tapu, sites of significance and taonga (treasure). Will have the least impact on Te Waitematā seabed. Does not require reclamation in the coastal marine area between Sulphur Beach, Onewa and Esmonde roads.	Impacts on areas of cultural significance including Te Waitematā, pā sites, geological and natural features. Impacts on Te Waitematā through bridge piers on the seabed. Requires large reclamation in the coastal marine area, between Sulphur Beach, Onewa and Esmonde roads.
<b>Carbon emissions during construction</b>	Generates significant embodied carbon during construction.	Generates significant embodied carbon during construction, but less than tunnels.
<b>Respond to sea level rise</b>	Enables opportunity to shift significant volumes of traffic away from SH1 prior to any work required to respond to sea level rise and flooding.	In raising the SH1 corridor to respond to flooding and sea level rise, there will be significant disruption to freight, general traffic and busses during construction.
<b>Impacts on land on the southern side of Harbour</b>	New infrastructure on the southern side of Te Waitematā has fewer permanent impacts at Victoria Park, Westhaven and Wynyard Quarter and opportunities to enable more public space along Westhaven Drive and Victoria Park.	New infrastructure on the southern side of Te Waitematā has a large permanent footprint impacting parts of Victoria Park, Westhaven and Wynyard Quarter.



# New Light Rail Tunnel (east), Road Tunnel, Walking and Cycling on Auckland Harbour Bridge

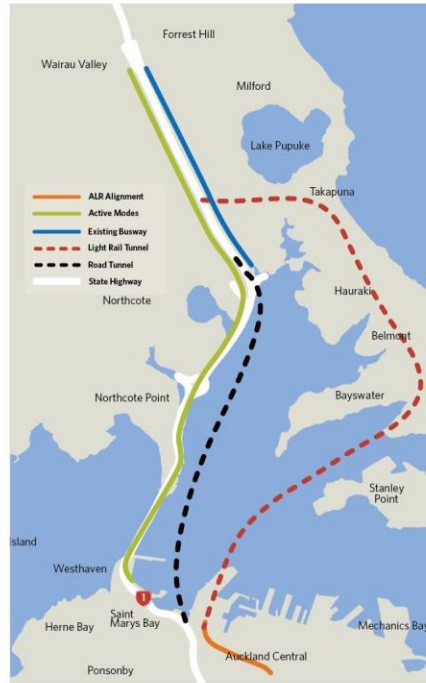
Tunnelled Light Rail to the east connecting Wynyard to Smales Farm via Belmont and Takapuna communities. Tunnelling to create a new section of SH1 directly between the Central Motorway Junction and Akoranga Drive. Walking, cycling and buses provided for by reallocating road space on the existing Auckland 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 and in the same footprint.
- Would allow for the 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.
- Walk and cycle connection can only be delivered after road tunnel completed.



To help develop a recommended 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.

- 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.

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 thumb up	2 thumbs up	2 thumbs up
Opportunity to protect and enhance Te Waitematā	4 fish	1 fish	2 fish	3 fish	3 fish
Carbon emissions during construction	4 CO2 icons	1 CO2 icon	2 CO2 icons	2 CO2 icons	2 CO2 icons
Disruption to address sea level rise	1 triangle	3 triangles	3 triangles	1 triangle	1 triangle
Time to build	2 circles	2 circles	3 circles	3 circles	3 circles
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



# New Light Rail, Road and Walking and Cycling Bridge

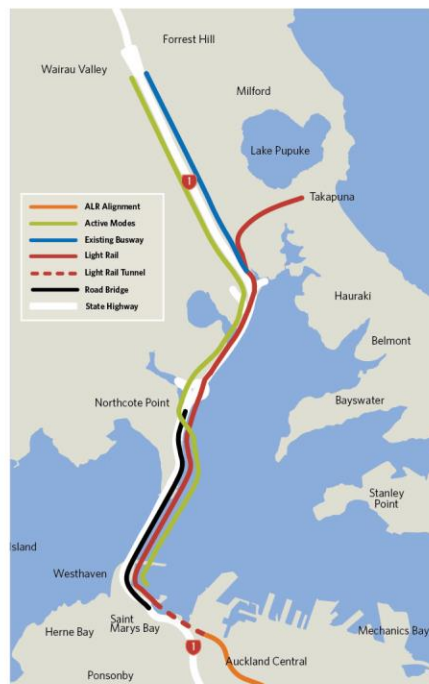
A new bridge next to the existing Auckland Harbour Bridge for light rail, walking, cycling and three additional general traffic lanes. This will provide five general traffic lanes in each direction at all times. This route connects Light Rail from Wynyard to Takapuna via Akoranga Station. The new bridge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



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- 🛡️ 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.

Criteria	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Cost	\$\$\$ \$\$	\$\$ \$	\$\$ \$\$	\$\$ \$\$	\$\$ \$\$
Resilience	🛡️🛡️	🛡️	🛡️🛡️	🛡️🛡️🛡️	🛡️🛡️
Efficiency	👍👍	👍👍	👍	👍👍	👍👍
Opportunity to protect and enhance Te Waitematā	🐟🐟🐟	🐟	🐟🐟	🐟🐟🐟	🐟🐟
Carbon emissions during construction	🌫️🌫️ 🌫️🌫️	🌫️	🌫️🌫️ 🌫️	🌫️🌫️ 🌫️	🌫️🌫️ 🌫️
Disruption to address sea level rise	⚠️	⚠️⚠️	⚠️⚠️	⚠️	⚠️
Time to build	🕒🕒	🕒🕒	🕒🕒	🕒🕒	🕒🕒
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



# 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 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 SH1.
- Significant impact on Wynyard Quarter, Westhaven and St Mary's Bay.
- Significant engineering complexity due to Ponsonby station depth at Highbury.



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- 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.

Criteria	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Cost	\$\$\$ \$\$	\$\$ \$	\$\$ \$\$	\$\$ \$\$	\$\$ \$\$
Resilience	🛡️🛡️	🛡️	🛡️🛡️	🛡️🛡️	🛡️🛡️
Efficiency	👍👍	👍👍	👍	👍👍	👍👍
Opportunity to protect and enhance Te Waitematā	🐟🐟🐟	🐟	🐟🐟	🐟🐟	🐟🐟
Carbon emissions during construction	🌫️🌫️ 🌫️🌫️	🌫️	🌫️🌫️ 🌫️	🌫️🌫️ 🌫️	🌫️🌫️ 🌫️
Disruption to address sea level rise	⚠️	⚠️⚠️	⚠️⚠️	⚠️	⚠️
Time to build	🕒🕒	🕒🕒	🕒🕒	🕒🕒	🕒🕒
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



# 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.

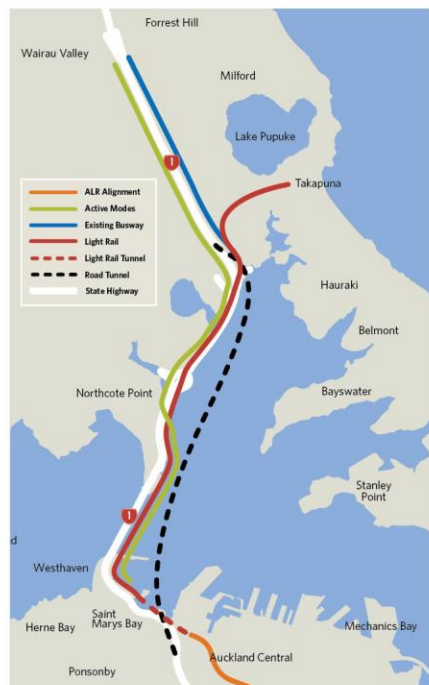
This route connects light rail from Wynyard to Takapuna via Akoranga Station. Tunnelling to create a new section of SH1 directly between the Central Motorway Junction and Akoranga Drive.

## 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 movement across Te Waitematā.
- Walk 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.



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- 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.

Criteria	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Cost	\$\$\$ \$\$	\$\$ \$	\$\$ \$\$	\$\$ \$\$	\$\$ \$\$
Resilience	🛡️🛡️🛡️	🛡️	🛡️🛡️	🛡️🛡️🛡️	🛡️🛡️
Efficiency	👍👍	👍👍	👍	👍👍👍	👍👍👍
Opportunity to protect and enhance Te Waitematā	🐟🐟🐟	🐟	🐟🐟	🐟🐟🐟	🐟🐟
Carbon emissions during construction	🌫️🌫️🌫️	🌫️	🌫️🌫️	🌫️🌫️	🌫️🌫️
Disruption to address sea level rise	⚠️	⚠️⚠️⚠️	⚠️⚠️	⚠️	⚠️
Time to build	🕒🕒	🕒🕒	🕒🕒🕒	🕒🕒🕒	🕒🕒
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



# New Light Rail, Walking and Cycling Bridge and Road Tunnel

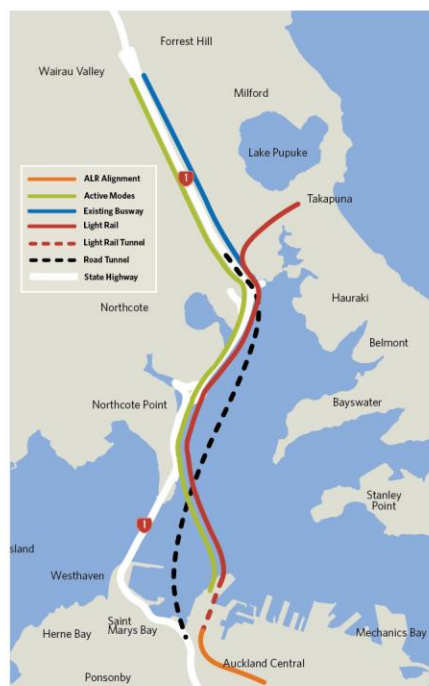
A new bridge for light rail and walking and cycling from Wynyard Point landing at Sulphur Beach. This route connects light rail from Wynyard to Takapuna via Akoranga Station. Tunnelling to create a new section of SH1 directly between the Central Motorway Junction and Akoranga Drive.

## 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 movement 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 Ponsonby at Akoranga Drive.



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- 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.

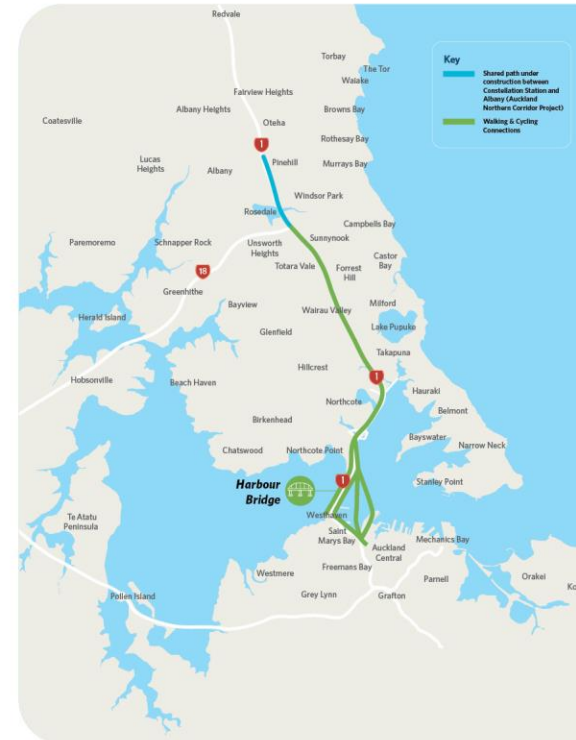
Criteria	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Cost	\$\$\$ \$\$	\$\$ \$	\$\$ \$\$	\$\$ \$\$	\$\$ \$\$
Resilience	3 shields	1 shield	2 shields	3 shields	3 shields
Efficiency	2 thumbs up	2 thumbs up	1 thumbs up	3 thumbs up	3 thumbs up
Opportunity to protect and enhance Te Waitematā	4 fish	1 fish	2 fish	3 fish	3 fish
Carbon emissions during construction	4 CO2	1 CO2	3 CO2	3 CO2	3 CO2
Disruption to address sea level rise	1 triangle	3 triangles	3 triangles	1 triangle	1 triangle
Time to build	3 circles	2 circles	3 circles	3 circles	3 circles
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





# Walking and Cycling

Previous engagement highlighted the importance of walking and cycling across Te Waitematā. The project is considering a number of options for a walking and cycling connection. All options would tie into the walking and cycling network on the North Shore and Auckland Central.



## All options will:

- Cross Te Waitematā between Auckland Central and Constellation Station.
- Link Akoranga Drive to Constellation Station on the western side of SH1, developed as part of the Northern Pathway project, and a shared path under construction between Constellation Station and Albany.
- Be on a bridge as it is not appropriate for users to be in a long tunnel, due to health, safety and amenity reasons.

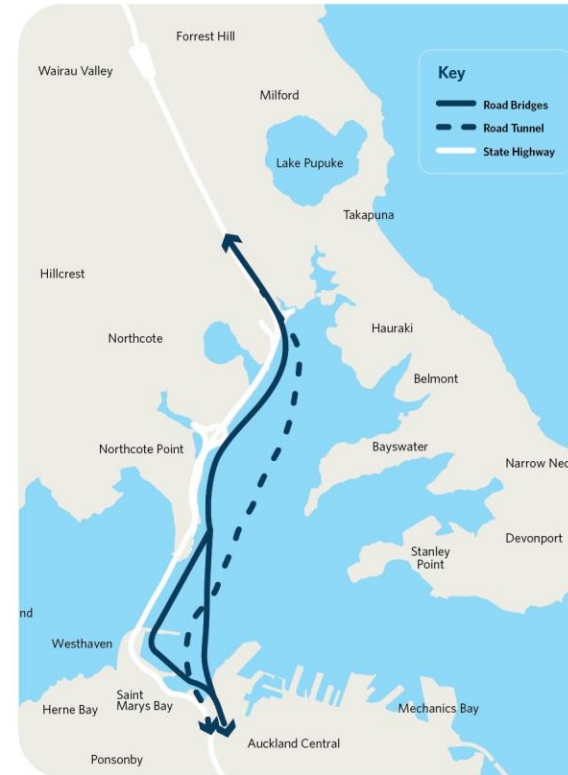
Road options that remove general traffic from the existing Auckland Harbour Bridge provide the opportunity to repurpose lanes on the Auckland Harbour Bridge for walking and cycling.





# Goods, Services, Freight and General Traffic

Options with a separate new road connection across Te Waitematā would provide resilience to the network, allow for improved reliability for goods, services, freight and general traffic and free up space on the Auckland Harbour Bridge for modes such as walking and cycling.



## These options will:

- Connect SH1 between Akoranga Drive and the Central Motorway Junction.
- Raise the existing SH1 between Onewa and Esmonde Road interchanges to address flooding and sea level rise.
- Reduce traffic loading on the existing Auckland Harbour Bridge allowing upgrade and maintenance of the bridge to occur without significant traffic disruption.
- Separate local and long-distance traffic movements when crossing Te Waitematā.

## Other options that retain the existing Auckland Harbour Bridge as SH1 for goods, services, freight and general traffic will:

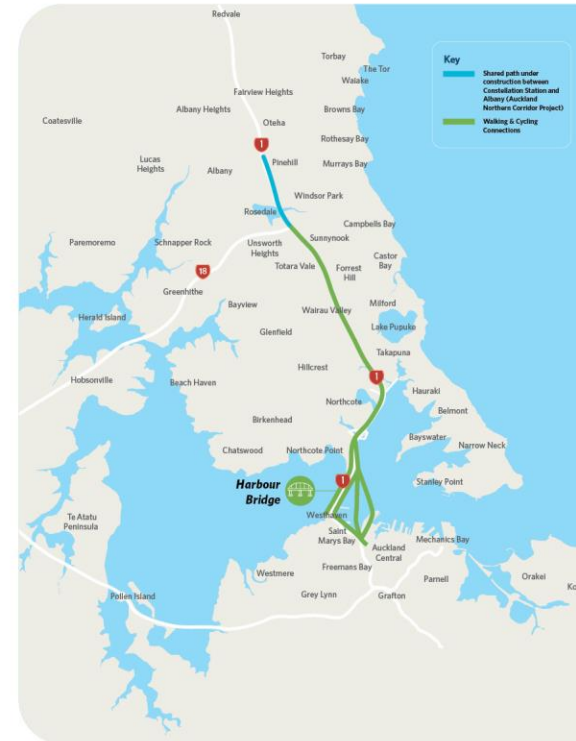
- Have ongoing resilience issues, which could increase in the future.
- Result in significant challenges with future maintenance and long-term operation.
- Be difficult to provide dedicated lanes for busway, freight or other users.
- Have a very low carbon impact during construction due to limited change to the existing bridge.





# Light Rail across Te Waitematā

We know from our previous engagement 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 options that we are considering.



## All options will:

- Connect to the Auckland Light Rail project at Wynyard Quarter.
- Provide faster travel times and a more reliable and resilient public transport connection across the harbour.
- Provide more transport capacity to allow growth and urban development opportunities at communities identified in existing plans and policies such as Smales Farm and Takapuna.

## All tunnel options will:

- Avoid impacts along Westhaven Drive, Westhaven Marina operations and along the coastal marine area between Onewa Road and Akoranga Drive.
- Enable an effective route that limits impacts on the environment by staying underground.



# 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 in areas such as Albany and Takapuna, which are already key employment and activity centres.

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.





# Timing of delivery

The staging of new connections across Te Waitematā is a key part of the project and requires careful consideration. This includes intergration with Auckland Light Rail, improvements to the Northern Busway, the timing of active modes, as well as the urgency to address resilience concerns along the existing State Highway 1 corridor.

## KEY FACTORS WE ARE CONSIDERING INCLUDE:

- **How we continue to improve the existing Northern Busway**
- **The early completion of a walking and cycling connection between Constellation Drive and Akoranga Station**
- **If the existing Auckland Harbour Bridge is reallocated to walking, cycling and buses this needs to be completed at the same time as a new road connection**
- **When to deliver light rail from the city to the North Shore and through the North Shore.**



Staging of light rail is being co-ordinated with the Auckland Light Rail project and this needs further consideration at a rapid transit network level to understand benefits, costs, affordability, and opportunities for transformational change in Tāmaki Makaurau.

Previously you have told us that providing for walking and cycling was important, however we want your feedback on all modes and if we had a choice, where we should prioritise early construction and the delivery of outcomes.