



Cabinet Background Information and Talking Points

Cabinet Committee:	<i>Cabinet</i>
Paper Title:	Auckland Light Rail – decision to progress
Portfolio:	Transport

Background

- The Labour Party Election Manifesto committed to building a light rail connection from the Auckland City Centre to Māngere and the airport.
- In March this year, Cabinet agreed to set up an Establishment Unit to take the Auckland Light Rail (ALR) project forward through a public service delivery approach.
- The Establishment Unit has produced an indicative business case (IBC) on ALR that clarifies the strategic case for investment and provides a recommendation on the preferred mode and route.
- The Establishment Unit has now provided its advice to project sponsors and myself and the Minister of Finance are seeking Cabinet's agreement to progress.

The work that has been undertaken

- As New Zealand's largest and most complex infrastructure project, ALR has the potential to significantly improve transport access across the region and catalyse urban transformation along the Corridor.
- Rapid transit is a core component of our strategy for New Zealand's cities, giving people greater choice in how they travel, reducing their reliance on cars, and unlocking the sort of growth we need to create more connected, equitable and lower emission communities.
- Light rail represents just one initiative as part of our commitments to expand rapid transit networks in Auckland, Wellington and Christchurch, for which I aim to develop an enduring and consistent approach to funding and delivery.
- Taking this project forward requires bold decision-making. The stakes are high given long-term and far-reaching implications and the enduring commitments that are required by the Crown and its partners to deliver the project.

- The Establishment Unit has had cross-agency collaboration at its heart, leading to the successful development of an IBC that provides the evidence we need to progress the project with confidence.
- Light Rail has had a long 'stop start' history, and the Establishment Unit has been successful in improving social licence and achieving consensus on how best to progress.
- The Establishment Unit concludes that any of the shortlisted options would achieve the investment objectives, given the benefits that arise from ALR in relation to improved transport accessibility, congestion and emissions reductions driven by mode shift, as well as increased agglomeration and productivity.
- The Establishment Unit has nevertheless recommended Tunnelled Light Rail along Sandringham Road as the preferred mode and route. This has a P50 cost of \$14.6 billion [REDACTED]. Withheld to enable commercial activities
- This reflects the greater transport network capacity enabled by a tunnel, supporting higher levels of growth compared to surface running light rail. Tunnelling also reduces disruption to businesses and residents during construction.
- Tunnelling also helps ensure that ALR will be integrated into Auckland's wider rapid transit network. A tunnelled connection is being explored as an option in the Additional Waitematā Harbour Crossings project, meaning that Tunnelled Light Rail along CC2M keeps this option open.
- These findings are in line with a general level of support for investment, reflected in the responses the Establishment Unit has had in its engagement with communities.
- While the IBC provides an early indication of the viability of the project, much more work is needed to determine the detailed costs and approach to implementation. Governance, funding and the approach to consenting and land acquisition are among other aspects of the project that require further investigation.

A recommended way forward

- I propose advancing the project into a detailed planning phase that further supports Ministers and Cabinet in making final investment decisions on delivering the project. This will take forward Tunnelled Light Rail as the preferred option.
- A significant portion of the project benefits are linked to the high levels of urban development that can be enabled by investment, and the detailed planning phase must progress this project as part of an integrated urban development and transport programme to ensure that the investment and its benefits can be realised.

- The design of tunnelled light rail should enable a potential future connection to an Additional Waitematā Harbour Crossing. We have asked Officials to prepare advice on how these projects can be integrated, and the potential efficiencies of progressing both projects at once.
- A policy work programme will continue alongside the project development work, including work to advance an agreed funding package, noting that a range of funding sources will be needed to pay for the capital costs of the project, including a significant Crown contribution.
- A policy work programme will also be advanced to determine the parameters of the entity that will deliver light rail, and address matters such as final ownership and operating models. As part of this I have asked Officials to advise on how a more enduring and consistent approach can be taken to the funding and delivery of rapid transit in New Zealand.
- Officials have advised that final investment decisions on ALR are best made upon the conclusion of the detailed planning phase, which may last approximately 2 years.
- However, over the next 15-18 months a number of milestones will demonstrate this Government's commitment to the project, including early strategic land acquisitions, corridor protection activities, enabling works, the preparation of applications for consent and market engagement in advance of main works procurement.
- Strong and robust governance is vital to the success of the detailed planning phase, and the Ministers of Finance, Minister of Housing and myself intend to enter into an enduring partnership with Auckland Council and mana whenua, formalised through a Sponsors Agreement.
- An Auckland Light Rail Unit, hosted by Waka Kotahi, will be established, with a dedicated skills-based board that will be directly accountable to Ministers.
- I expect many of the core elements of governance to endure as we transition to the entity that will be responsible for delivering the project. I expect this transition to occur in the second half of 2022. Withheld as information is under active consideration
- [REDACTED] Crown funding is a necessary component of ensuring that there is direct accountability of the Unit and its board back to the Crown.
- The Ministers of Finance, Housing and I will report back to Cabinet on progress in April 2022. This will cover updates to the detailed planning phase, further details regarding the transition to the legal entity that delivers the project, and advice informing Cabinet's agreement to enter into a formal Sponsors Agreement with Auckland Council and mana whenua.

Responses to matters raised at CPC

1. International comparisons

- The Establishment Unit has considered a range of international rapid transit projects and networks in formulating its recommendations. These include:

<p>New Zealand</p> <ul style="list-style-type: none"> City Rail Link 	<p>North America</p> <ul style="list-style-type: none"> Seattle Light Rail Minneapolis Green Line Vancouver Sky Train
<p>Australia</p> <ul style="list-style-type: none"> Sydney Metro Brisbane Cross River Rail Melbourne Metro Gold Coast Light Rail Parramatta Light Rail Canberra Light Rail Sydney Light Rail 	<p>United Kingdom & Ireland</p> <ul style="list-style-type: none"> Dublin Light Rail Crossrail, London Northern Line Extension, London Croydon Tram, London

- Whilst not all of the above are comparable in scale with Auckland/ALR, all demonstrate the value of investment in rapid transit in terms of:
 - Improving access across large urban areas and corridors, especially when planned and developed from a 'network wide' perspective
 - Laying the foundations for city shaping, focussing population growth in highly accessible areas and along corridors
 - Improving the viability of new development, supporting land use change and regeneration
 - Increasing productivity and economic activity
 - Creating jobs (direct and indirect) during construction
- Case studies from Dublin, Seattle and Brisbane are further explored below

Dublin, Ireland - Light Rail (LUAS)

- Dublin has a population of c. 1.4 million
- The urban area of Dublin, Ireland was transformed through the delivery of the city's light rail system (LUAS).

- LUAS is Dublin's Light Rail Transit system. The network is made up of two street-running lines which intersect in the city centre:
 - **The Luas Red Line** = 21km long
 - **Luas Green Line** = 22km long
- There are a total of 69 stops and a fleet of 73 trams
- Luas customers have completed over 430 million passengers since passenger services started in 2004.
- The cost of the project (in 2004) is understood to have been c. \$1.3 billion (NZD)
- Initially, the uptake was so swift from the first day, that authorities soon extended the network and introduced longer trams.
- The original trams were 30m in length, but now over half of the fleet has had to be extended to 55m in length to accommodate increased demand.
- The old docklands area of Dublin has been transformed into an international banking and shopping destination with high density housing.

Seattle, United States – Light Rail expansion to West Seattle and Ballard

- Seattle has a population of c. 700,000
- In expanding Seattle's regional transit network, Sound Transit is working with the City of Seattle government to extend light rail along two new lines to West Seattle and Ballard
 - **West Seattle to Downtown** adds 7.5km of light rail service from Downtown Seattle to West Seattle's Alaska Junction neighbourhood and includes 4 new stations
 - **Ballard to Downtown** adds 11.4km of light rail service from Downtown Seattle to Ballard, and includes 9 new stations
- The project will also include two water crossings and a new tunnel through Downtown Seattle
- Both extensions are scheduled to begin construction and testing in 2026, with West Seattle concluding in 2032. The Ballard extension could be delivered all at once, or in phases 2037-2039.
- Officials understand that the cost of both lines are expected to be in the region of \$18 billion (NZD)
- Sound Transit partners with private and non-profit developers to build transit-oriented development (TOD)
- This example is broadly comparable to the Tunnelled Light Rail 'hybrid' being considered by Cabinet

Brisbane, Queensland – Cross River Rail

- Brisbane has a population of c. 2.6 million

- Cross River Rail is an underground railway project through central Brisbane, which is currently under construction.
- It is a 10.2km rail line from Dutton Park to Bowen Hills, which includes 5.9 kilometres of twin tunnels under the Brisbane River and the CBD.
- Cost: \$7 billion AUD
- Construction began in 2019, with an expected opening of 2025
- During its construction the project is estimated to provide an average of 1,500 jobs per year, which is more than 7,700 jobs during the life of its construction, including 450 apprentices and traineeship opportunities.
- In July 2020, more than 2,300 jobs had already been created.

2. Opportunities to phase the delivery of ALR

- Whilst phasing hasn't been explored in the IBC, earlier iterations of the project have considered the merits of phasing, and there are likely to be opportunities to do so. This will be explored in greater detail in the next phase.
- The detailed planning work I am asking Cabinet to agree to today will explore the opportunity to phase delivery in greater detail, as part of work to confirm the route and station locations, and refining costs and benefits.
- Work will need to consider what cost savings or efficiencies in spending could be achieved through phasing, as well as how phasing would impact on the timing of benefits being realised.
- The urban interventions/investments are likely to occur over several decades, and the phasing of the project will need to be considered alongside priorities for enabling growth and connecting communities.

Mount Roskill to City Centre (Tunnelled)

- The most likely option for the **first phase**.
- Provides the greatest uplift in transport capacity and urban development potential in the Corridor.
- Forecast to have 2-3 times more patronage, as well as employment & population growth, than the Airport to Mount Roskill section (see Annex A)
- This phase would likely bring benefits elsewhere in the Corridor and beyond, given the network-wide impact that a tunnelled connection from Mount Roskill to the City Centre would have.
- Tunnelling through the Central Isthmus and CDB could itself be staged, although this needs to be explored further

Links to the AWHC

- As work to align ALR with the AWHC project progresses, there may be opportunities to deliver a transit connection across the harbour as the **second phase**
- This will be explored as officials work to more closely align the planning and delivery of these two projects

Southern section (Airport to Mount Roskill)

- Communities such as Māngere will benefit from the network capacity increased brought by the tunnelled section (Mount Roskill to City Centre)
- A staged opening of the southern sections from Mount Roskill to Onehunga, Māngere and the Airport could be treated as a **second or third phase**
- Opening the southern section (Airport to Mount Roskill) as the first phase in advance of the tunnelled section is unlikely to represent value for money. The significant uplift in access and connectivity for places like Māngere is largely due to the tunnelled section, so delivering a connection to Māngere without connecting into a tunnel may not represent value for money.

3. Should we establish a tunnelling division/company?

- I would not propose that we set up a specific division or company at this stage
- Tunnelling expertise have been built by the market in New Zealand recently, through the City Rail Link and Central Interceptor projects.
- In the last 15 years Waka Kotahi has built three tunnels at Waterview, Victoria Park and Northern Gateway, and maintains the tunnels on its network.
- There is a risk that the critical expertise required to deliver projects such as ALR and other transit systems around the country will be lost should we continue to take a 'project by project' approach to procurement.
- We are not taking decisions on the ultimate delivery entity for ALR at this stage, although I agree that ensuring an enduring approach to tunnelling (and other technical expertise associated with mass transit projects of this nature) should be a critical consideration as we progress our work to determine the parameters and functions of this entity.
- Planning for the continuity of the existing tunnelling skills in New Zealand has already started, and the Establishment Unit has begun conversations with CRL Limited and the Central Interceptor project on how we can continue to attract and support the retention of these resources, and to align construction timescales.
- This will be an important consideration in better aligning the AWHC project with ALR

Annex A – patronage and growth comparisons between Mount Roskill – City Centre & Airport to Mount Roskill sections

		Mt. Roskill / City Centre	Airport / Mt. Roskill	Mt. Roskill/City Centre - Airport/Mt. Roskill	
				Difference	% Difference
2051 AM Peak Tunnelled Light Rail	CC2M Boardings	9,254	4,019	5,234	130%
	CC2M Alightings	10,013	3,260	6,753	207%
Forecast Employment and Population Growth, 2021 - 2051 Tunnelled Light Rail	Employment Growth	75,390	21,312	54,078	254%
	Population Growth	104,292	45,756	58,536	128%

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