

AUCKLAND RAPID TRANSIT PATHWAY – PLANNING FOR AN UNCERTAIN FUTURE

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Rapid transit is the backbone of the public transport system, moves large volumes of people across the region, and is crucial to the prosperity of our cities. However, projects are often big and expensive, and take many years to plan and build.

This paper will outline how the Auckland Rapid Transit Pathway (ARTP) helps us coordinate between projects, and deliver benefits for our customers in the short, medium and long-term.

The paper will cover how the ARTP was developed, key changes from previous plans or strategies, and how the new way forward will help NZ's largest city confidently plan its long-term rapid transit infrastructure – despite an uncertain future.

This will include reference to resilience, staging, adaptability and flexibility. The material will also cover affordability and value for money. The audience will come away with a better sense of the complexity and challenges in planning Auckland's rapid transit system, and also how this was approached by a targeted and collaborative effort.

INTRODUCTION

Rapid transit is the backbone of Auckland's public transport system. The network moves large volumes of people across the region and is crucial to the prosperity of our city. However, rapid transit projects by their nature are often big and expensive, and take many years to plan and build, which means they must withstand several election cycles.

This paper outlines how the new Auckland Rapid Transit Pathway (ARTP) helps Auckland's transport agencies coordinate between rapid transit projects, and deliver benefits for customers in the short, medium and long-term.

The paper covers how the ARTP was developed, key changes from previous plans or strategies, and how the new way forward will help Auckland confidently plan its long-term rapid transit infrastructure – despite an uncertain future.

WHAT IS RAPID TRANSIT?

Rapid transit is a form of public transport that provides high levels of fast, frequent, reliable, and space-efficient people movement between major destinations. Rapid transit uses corridors largely (but not always) separated from other modes of transport, and unaffected by congestion.

Auckland's existing rapid transit network is made up of the train network and busway network.



Image: Northern Busway

Rapid transit is a critical component of Auckland's existing and future transport system. Rapid transit will support increased access and economic opportunity for the region and counter the effects of congestion.

Auckland has had a troubled history with rapid transit, from removing the comprehensive tram network and expanding a car-dominated motorway network, to current efforts to revitalise the heavy rail network (such as through the nearly-complete City Rail Link).



Image: Heavy rail services

Although rapid transit has been under-invested-in and underappreciated for some time, evidence shows that, where it is provided, Aucklanders flock to it. The Northern Busway and recent heavy rail improvements (e.g. electrification, new fleet, etc) have all resulted in greater patronage uptake than projected.

The interim Northwestern Bus Improvements (WX1) along State Highway 16 (effectively bus shoulder running and temporary bus stops, ahead of a full busway) which commenced in 2023 have proven so successful that patronage is tracking well ahead of that of the Northern Busway when it opened in 2008.



Image: The interim WX1 service, preceding a Northwestern Busway service

AUCKLAND RAPID TRANSIT PLAN HISTORY

The Auckland Rapid Transit Pathway (ARTP) is a technical document outlining a development pathway for Auckland's rapid transit system over the next 30 years and beyond.

Modelling undertaken as part of the ARTP and other work has demonstrated that, without further investment in rapid transit, travel times on the network will increase significantly for all modes, including the movement of freight. This will have a profound impact on Auckland's prosperity in the future.

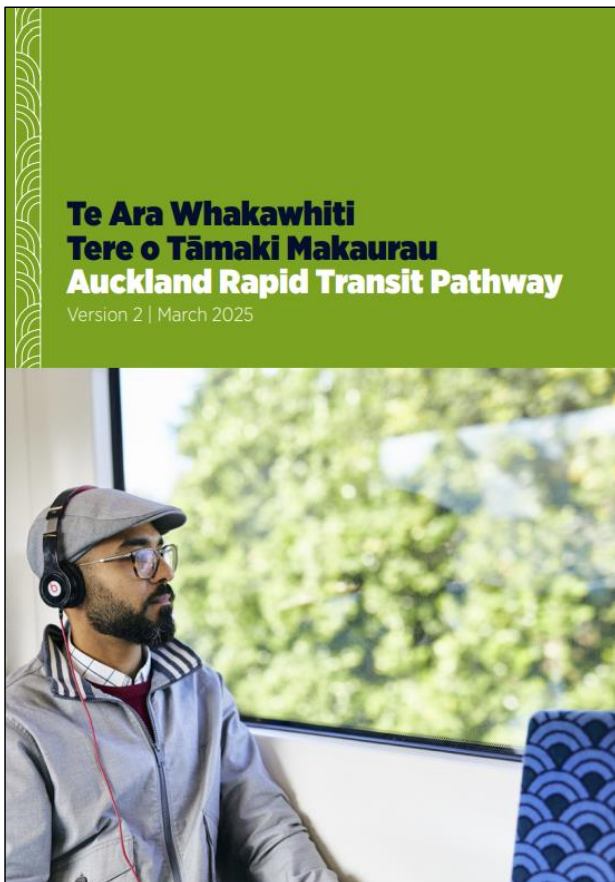


Image: ARTP front cover

The ARTP provides a consolidated 'network view' by bringing together:

- a. decisions made in higher order documents 'top down', such as the Regional Land Transport Plan, Auckland Plan 2050, Government Policy Statement on Land Transport
- b. technical evidence from existing plans 'bottom up', strategies, and business cases, such as the Rail Programme Business Case or work done on the Northwestern Busway and Additional Waitemātā Harbour Connections projects

While not a formal decision-making document or strategy, the ARTP aims to support informed and aligned decisions about Auckland's rapid transit network.

The rapid transit network within the ARTP seeks to integrate with the wider network – both for public transport and other modes as well. This means there is a strong alignment with other shorter-term documents like Future Connect (AT's multi-modal network plan), the Regional Public Transport Plan, Regional Land Transport Plan, and other key strategic documents.

The ARTP has been in development for approximately five years, through collaboration with the Auckland Transport Alignment Project (ATAP) agencies: NZ Transport Agency, KiwiRail, Ministry of Transport, Auckland Council, and AT. In 2023, the AT Board approved the first version of the ARTP for release. That version of the ARTP was released as an AT-only document, as not all agencies felt able to endorse the plan. Although a critical first step, further work was completed to improve buy-in from those agencies.

Since 2023, representatives from the agencies have worked collaboratively together to make sure the document is framed in a way that it supports all the organisations to deliver good outcomes.

A new approach to the ARTP principles was key to securing multi-agency support, and these are outlined below.

A REFINED PLANNING APPROACH

One of the shortcomings of the original ARTP, and indeed many long-term strategic plans, is the inclusion of long-term project specifics that may actually be uncertain, alongside shorter-term projects with a higher degree of certainty.

In the case of the original ARTP, this manifested in concerns that specific modes, forms and corridors were identified (e.g. tunnelled light metro to the North Shore in Decade Three) when in fact there was a large likelihood that future decisions in policy direction and funding would change this course. What was certain was that an intervention would be needed, but more work and time was needed to confirm the details.

There was a concern from some agencies that endorsement of the ARTP was seen as endorsement of all projects within it, regardless of their certainty.

The original ARTP tried to somewhat address this by describing implementation phases instead of decades, as the length of a phase can change depending on funding availability, changed growth assumptions, and other factors.

The updated ARTP has addressed these concerns, by reducing the emphasis on solutions, and focusing more on needs. It puts uncertainty at the heart of the document, which is a realistic representation of how rapid transit is actually delivered around the world.

The updated ARTP is most detailed about the earliest phase, as the proximity of the projects is closest, and many decisions have been made. The details for future phases are not necessarily needed yet but should be planned for during Phase 1. Hence, every ARTP corridor identifies either some kind of project or improvement, or an investigation requirement.



ARTP first phase

The refined approach also has a new focus on making incremental and interim improvements. This avoids ‘all or nothing’ thinking, unlocks early benefits, and is consistent with how rapid transit has been successfully delivered in Auckland and other cities around the world. This approach considers affordability and value for money through an increased focus on the use of interim improvements and staged delivery.

This approach is demonstrated by the WX1 service in North-west Auckland, and the AirportLink service in the south. This has the benefit of not just a lower investment requirement, but also allows for patterns of travel to build up over time, giving benefits to customers sooner, and helping to ‘prove’ the need for a future permanent rapid transit project (and equally, to help check whether demand for such a service is actually there).

NETWORK UPDATES

The updated ARTP provides updated information on the next step for each of the corridors. These

for this future corridor but shows the likely need for it to serve areas away from the existing busway corridor. This reflects the most recent technical work from the Waitematā Harbour Connections project (noting that the scope of the current work does not include progressing this rapid transit corridor).

City Centre to Māngere: the original ARTP reflected (now-cancelled) plans for tunnelled light-rail to be implemented within the first phase. Recent and ongoing improvements in City Centre bus planning have enabled upcoming patronage growth to be better managed, and have taken pressure off this corridor. This means there is time to investigate and confirm a new approach for this corridor during Phase 1 of the ARTP, with staged delivery throughout Phases 2 and 3.

Northwest: the original ARTP assumed light rail as the mode for this corridor, with potential for this to need to be upgraded to light metro to match the previous version of the CC2M corridor. Since then, NZTA has confirmed the project as a busway, to be delivered in stages and building upon the existing WX1 bus service.

Rail network: The updated ARTP has more coherent messaging for rail, with considered technical evidence from the Rail Programme Business Case. Updates to the ARTP tell the story of the future Avondale-Southdown corridor (which could be preceded by an interim bus-based service), and its benefits to the wider rail network.

Work on the ARTP projects and network developments continues. Each month, the Rapid Transit Working Group, containing representatives from AT, Auckland Council, NZTA, Ministry of Transport and KiwiRail, convenes to share information on projects, discuss actions and issues.

CONCLUSION

Auckland has had a troubled history with rapid transit, but evidence shows that, where it is provided, Aucklanders flock to it.

The updated ARTP aims to better serve Auckland and Aucklanders – and deal with an uncertain future. The ARTP has a refreshed and adaptable approach to the implementation of the network over time.

This includes focus on interim improvements ahead of longer-term interventions, and leaves flexibility in the network to allow for future investigations to be undertaken. The result has been greater acceptance of the ARTP by key transport agencies, which should smooth future funding and approval pathways.

This paper has been prepared to give a better sense of the complexity and challenges in planning Auckland's rapid transit system, and how this was approached by a targeted and collaborative effort.

AUTHOR CONTRIBUTION STATEMENT

The two authors collaborated in the preparation of this paper.