

AGENDA ITEM 18 BOARD DECISION PAPER		
То:	Board	
From:	Jenny Chetwynd, EGM Planning and Investment	
Reviewed:	Dean Kimpton, Chief Executive Officer	
Date:	28/11/2023	
Title:	30-Year Heavy Rail Investment Programme	

Aronga / Purpose

1. To seek approval of the joint Auckland Transport (AT) / KiwiRail 30-year heavy rail network investment programme and supporting Programme Business Case (PBC).

Tuku mana / Delegation

2. Board approval is sought under DFA 1.1 approve feasibility / new business case. The PBC recommends a 30-year programme of investments which will be subject to new future business cases which will be progressed through the Regional Land Transport Plan (RLTP).

Ngā tūtohunga / Recommendations

That the Auckland Transport Board (board) recommend that the Auckland Transport Board:

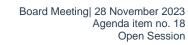
- a) Approves the 30-year heavy rail investment programme outlined within the Rail Programme Business Case.
- b) Notes Auckland Transport will continue to work with KiwiRail to develop and seek approval for a preferred programme procurement and resource strategy to realise and maximise programme efficiencies, benefits, and outcomes.
- c) Notes Auckland Transport will continue to work with KiwiRail to advocate for alternate funding mechanisms for the programme as a single investment.

d) Notes that the Rail PBC 30 year investment programme will form a key input into the development of the Auckland Integrated Transport Plan.

Te whakarāpopototanga matua / Executive summary

- 3. AT and KiwiRail have jointly developed a 30-year heavy rail investment programme and supporting PBC that seeks to maximise the use of the existing shared network, including City Rail Link (CRL), provide capacity to meet projected quintupling of annual passengers and freight carried, improve the network resilience, level of service and reliability and contribute to sustainability targets. Outcomes of the programme are shown in attachment 1.
- 4. The recommended programme will significantly contribute towards Council and national strategic and policy outcomes including intensification of land use development, reduced road-based vehicle kilometres travelled (VKT) and emissions reduction from both passenger and freight transport. The programme also provides the base infrastructure to support moving to larger nine-car passengers trains and extended freight trains that will increase the overall capacity of the network by an additional 30%. This is forecast to be required beyond the 30-year period.
- 5. The programme identifies the investment needed to optimise and maximise the capacity of the existing heavy rail network including current designations The Transport and Infrastructure Committee questioned why the programme did not incorporate additional links. The programme does not identify new routes as these are determined in within the Rapid Transit Network plan (RTN). Should the RTN identify the need for a new heavy rail route, it would then be incorporated into the 30-year programme.
- The 30-year investment is approximately \$21 billion (P50) split 67% KiwiRail and 33% AT. Operating costs over the period are forecast to increase to between \$14 billion and \$22 billion but will in part be offset though increase in revenue. The programme has been split into seven sub-programmes that will deliver defined outcomes.
- 7. The programme has been used to inform development of the Council Long Term Plan (LTP), 2024 Regional Land Transport Plan (RLTP), Rail Network Investment Plan (RNIP) and the National Land Transport Plan (NLTP). For AT, the required funding for the first decade is currently only available within the "accelerated" LTP bid.
- 8. There are funding challenges under current mechanisms and alternate funding mechanisms are required if the programme is to be delivered. The programme







is of a similar scale and complexity to the mega projects in Auckland and investment in the existing rail system is required whether the mega projects proceed or not.

9. The next phase of the programme is the development of the detailed solutions, business cases, programme phasing and designations. KiwiRail and AT propose a joint procurement and resource strategy to work with industry to deliver the next phases of work and to build up skills and future workforces that will be required to deliver.

Ngā tuhinga ō mua / Previous deliberations

Date	Report Title	Key Outcomes
November 2023 Design and Delivery Committee	Auckland Rail – Programme Business Case Preferred Programme	The Committee supported the the Rail Programme Business Case and noted: the need to include rail outcomes in the integrated transport plan for Auckland to show the context for rail in the development of the region; highlighted the opportunity for the removal and transfer of freight from the road network; the requirement for the delivery of the programme and initial required budget to be prioritised though the RLTP process.
October 2023 Design and Delivery Committee	Auckland Rail – Programme Business Case Preferred Programme	The Committee supported the overall direction of the programme, the partnership approach with KiwiRail and the need to advocate for alternative funding for the programme alongside the Auckland mega projects
June 2023 Design and Delivery Committee	Auckland Rail – Programme Business Case Emerging Preferred Programme	The Committee supported that local boards and Council Committees are engaged on the programme, that the importance of the programme is identified in line with Auckland mega projects for regionwide outcomes and the affordability conversation is elevated to understand priorities and investment values

October 2022 Design and Delivery Committee	Auckland Rail - Programme Business Case Project Update and Shortlist	The Committee supported the identification of Transport Emissions Reduction Pathway (TERP) and Emissions Reduction Programme (ERP) lens across the programme. It acknowledged that the patronage expectations are post rail disruptions and identified the need to create patronage projections. It also noted that the Rapid Transit Network (RTN) plan will look at future requirements for additional RTN routes
---	--	--

Te horopaki / Background

- 10. The Auckland heavy rail network is unique in the international context as it is shared between passenger and freight services. It caters to demand in Auckland, inter-regionally and nationally and as such is critical to the long-term economic growth of both Auckland and New Zealand.
- 11. Without investment the capacity of the existing rail system will be constrained by the early 2030s resulting in reduced level of service to freight and passengers, and adverse impact on climate targets.
- 12. Investments were only included in the programme where no practicable noncapital solutions, such as service planning, were feasible. To mitigate this, the 30-year heavy rail investment programme has been jointly developed by AT and KiwiRail in partnership with Waka Kotahi New Zealand Transport Agency (Waka Kotahi) and Auckland Council.
- 13. The programme aligns with key documents including the Auckland Plan, AT's Statement of Intent (SOI), the Auckland Rapid Transit Network (RTN) Plan, the Regional Public Transport Plan (RPTP), The New Zealand Rail Plan and the National Freight Strategy. The programme has also considered scenarios related to port growth and the potential impact to rail incorporating Northport, Port of Auckland, and Port of Tauranga.
- 14. The scope of the programme is limited to the existing network, beyond City Rail Link (CRL) Day 1, including current designated routes. The plan does not preclude any future new rail routes. If these are determined within the RTN plan, they would subsequently be incorporated into the 30-year programme.





Te hononga ki te "Statement of Intent 2023 - 2026"/ Alignment to Statement of Intent 2023 – 2026

15. The development of the 30-year programme aligns with the statement of intent in ensuring the region gets the most out of the existing network to accommodate growth in passenger, inter regional passenger and freight prior to staged investment requirements. The programme is designed to leverage and maximise the investments being made in the CRL and improve travel times across the rail and road network. The programme has been developed from a customer centric lens to provide service improvements though capital and operational solutions that also consider affordability and value for money.

Me mohio koe / What you need to know

- 16. The programme will deliver network optimisation, efficiencies, renewals, and capacity to support a forecast tripling of annual passenger trips to over 76 million trips per year and of freight tonnes to 17million per year as shown in Attachment 2 and 3.
- 17. While not forecast within the 30 years, the programme provides the base infrastructure to support nine-car passengers trains (up from current six-car units) and extended freight trains of over 1,000m (up from 750m) which would increase the network capacity by a further 30%.
- 18. The programme is split into six investment groups: maintenance and renewals, level crossing removal, signalling and power, fleet depots and stabling, additional capacity and station upgrades (see Attachment 3). These outputs are then incorporated into seven sub-programmes, each which delivers defined outcomes. This approach enables the programme to be phased while ensuring defined outcomes are delivered, see Attachment 4.
- 19. The first sub-programme is the detailed investigation and development phase. This would develop of the detailed solutions, business cases, procurement strategy and designations required for the entire programme. This phase would also review the makeup and phasing of the subsequent sub-programmes.
- 20. The programme business case was presented to the KiwiRail Board in September which received positive support for the development of the 30 year investment programme.
- 21. The key risks and mitigations are identified in Attachment 5.

Ngā ritenga-ā-pūtea me ngā rauemi / Financial and resource impacts

- The total 30-year capital investment is approximately \$21 billion (P50 with a P95 cost of \$27.8b) with the investment split 67% KiwiRail (\$14.3b) and 33% AT (\$6.7b). For AT this comprises \$2.7b for level crossing removal, \$2b for station upgrades and \$2b for fleet upgrades (new and renewals) and depot / stabling.
- 23. The incidental operational expenditure over 30 years is \$22.5 billion with the cost split 95% AT and 5% KiwiRail. This does not take into account farebox recovery which could be in the region of 30%. If no additional capital is invested, there would be an increased operational expenditure demand of approximately \$14.5 billion, over the same period, to maintain the existing infrastructure.
- 24. There is a significant risk that the programme will not be fully funded through existing mechanisms. For example, the AT component of the programme would consume approximately 75% of the draft annual Government Policy Statement (GPS) National Land Transport Fund (NLTF) allocation for public transport infrastructure for the next 10 years.
- 25. The programme is being used to inform the draft RLTP and the LTP funding bids to Council. In the "constrained" LTP bid there is no funding for rail, the "balanced" bid includes funding for only Takanini level crossing removals and a small allowance for planning and the total 10-year funding is within the "accelerated" bid.
- 26. If the programme is to be delivered, alternative funding mechanisms are required. The programme is sufficiently large and complex with local, regional, and national implications that it should be considered in the same conversation as the Auckland mega projects. Particularly as the investment in the existing rail system is required whether the other mega projects proceed or not.
- 27. It is proposed to immediately progress, in partnership with KiwiRail, into the detailed investigation and development phase to develop the most effective and efficient programme and to inform alternate funding conversations. This phase will require AT to invest \$207m over the next 10-year RLTP period.







Ka whaiwhakaaro ki te Tiakanga Taiao / Climate change and sustainability considerations

- 28. Enabling mode shift for both passenger and freight is a primary objective of the programme which aligns with the priorities of both Central Government's ERP and Council's TERP.
- 29. Achieving the ERP target requires an increase in rail passenger patronage of approximately four times pre-covid volumes to circa 86 million by 2035 and for TERP, volumes would need to be 5.5 times higher to circa 120 million. Similarly, to achieve the required freight target would necessitate volumes to increase from 16% of the accessible market to/from Auckland to around 26%.
- 30. While the recommended programme provides the infrastructure to improve capacity, levels of service, reliability, and frequencies to make rail an attractive choice, it acknowledges that the infrastructure alone will not meet ERP and TERP targets.
- 31. Achieving the target would require the whole 30-year programme to be delivered by the early 2030's, the transition to nine-car passenger services requiring an additional \$1b of investment and the implementation of non-infrastructure investments, such as changes to local and central government policies, which sit outside of the scope of this programme and the remit of AT and KiwiRail.

Ngā whakaaweawe atu anō / Other impacts

Relationship	Consulted Y/N	Views and Perspectives Received
Māori	Yes: ⊠ No: □	The AT "hui tables" have been used to present the development of the rail PBC and to determine the process for ongoing engagement as the programme progressing into the next round of delivery
Elected members	Yes: ⊠ No: □	Workshops and business meetings completed with 17 local boards with 16 of them submitting resolutions of support. Feedback was supportive of the programme and investment needs for the network. Key issues raised include:

- Maungakiekie-Tāmaki opposes the use of the Avondale Southdown Designation for rail, has concern over impact and mitigation proposed for level crossing removals and levels of graffiti and maintenance of the current rail network.
- Rodney have sought extension of passenger services to Huapai and further improvement to rail to accommodate freight to Northland (including a transfer station in Warkworth)

The programme was presented to the Transport and Infrastructure Committee at its October 2023 meeting.

- The Councillors questioned why the programme was not more ambitious with new extensions for the rail network to Huapai, Airport and in East Auckland. Further information will be supplied to the Committee to align how the rail programme sits within the RTN plan that identifies corridors and mode for future RTN extensions including rail. AT confirmed that the 30-year vision for the transport system is the RTN plan and that the 30-year programme does not preclude any new heavy rail route. The RTN plan will be presented to Councillors in December 2023.
- The impact to the Community of utilising the existing Avondale to Southdown designation was expressed strongly by a Local Councillor with further conversations outlining the issues between local and regional benefit and disbenefit. KiwiRail noted the designation has been in place since the 1940s and most of the properties concerned are leased from KiwiRail.







		 There was discussion and support for level crossings removal, and desire to start the works but noting the need for close consideration of the impacts on the communities.
Council Controlled Organisations	Yes: ⊠ No: □	Discussions have been undertaken with Eke Panuku to outline the PBC proposed outcomes and identify any joint opportunities in the delivery of future workstreams

Ā muri ake nei / Next steps

- 32. The 30-year investment programme and business case will be presented to the KiwiRail Board in November 2023 for approval.
- 33. Subject to AT and KiwiRail Board approval, the programme and PBC will be presented to the Waka Kotahi Board in December 2023 for endorsement.
- 34. Funding, both opex and capex, for the delivery of the programme will progress through the existing mechanisms of RLTP, RNIP and NLTP processes for 2024. In addition, AT and KiwiRail will engage with the Crown to seek alternative funding for the programme as a single investment as the Auckland mega projects.
- 35. KiwiRail and AT propose to develop a joint procurement and resource strategy to work with industry to deliver the next phases of work and to build up skills and future workforces that will be required to deliver. Options will be developed and progressed with Waka Kotahi seeking the relevant delegation approval from AT and KiwiRail.

Ngā whakapiringa / Attachments

Attachment #	Description
1.	Outcomes of the 30-year investment programme
2.	The preferred programme -service uplifts over time
3.	Future demand and key investment focus areas
4.	A 30 year roll out of rail services and infrastructure investment

Key programme risks and proposed mitigations
--

Te pou whenua tuhinga / Document ownership

5.

Submitted by	Recommended by	Approved for submission
Matthew Rednall	Chris Watson	Dean Kimpton Chief Executive
Manager, Investment Development Central	Group Manager, Investment Development	The .
	Jenny Chetwynd Planning and Investment (Executive General Manager)	
	p.d.	

