City Rail Link Day 1 – Level Crossing Removal Programme

Aronga / Purpose

1. To update on the status of rail level crossing risk mitigation planned prior to operation of the City Rail Link (CRL) Day 1 train timetable and the wider Strategic Level Crossing Removal Programme over the years post CRL Day 1, and to provide the presentation provided to the Auckland Council Transport and Infrastructure Committee on 21 September 2023.

Ngā tūtohunga / Recommendations

That the Auckland Transport Board (board):

- a) Note the status of rail level crossing risk mitigation planned and underway prior to CRL Day 1.
- b) Note the status of the Strategic Level Crossing Removal Programme addressing all other crossings on the Auckland Metro Rail Network (AMRN) post-CRL Day 1.
- c) Note that updates on the progress of both the CRL Day 1 level crossing risk mitigation and the Strategic Level Crossing Removal Programme will continue to be provided through regular reports to the Design and Delivery Committee (committee) on the Auckland Rail Programme.

Te horopaki / Background

- 2. The CRL project is currently under construction to deliver a 3.45km long tunnel underneath Auckland's City Centre, between Britomart and Mt Eden stations along with new stations at Aotea / Te Wai Horotiu, Mt Eden / Maungawhau and Karanga-a-Hape.
- 3. The benefits from the CRL and wider AMRN investment will be realised through staged increases to passenger train services and therefore passenger capacity. The first significant increase will occur following introduction of 'CRL Day 1' train services currently targeted for 2026 with a further timetable increase potentially planned from 2031 subject to patronage growth and demand.
- 4. The increases in train frequencies will lead to more frequent operation and longer down time of the barrier arms that provide protection at level crossings through physical separation of trains and road users / pedestrians. This will result in road and rail network inefficiencies as well as increasing driver and pedestrian frustration and the likelihood of risk taking around level crossings. In general, any increase in traffic over a level crossing (trains, vehicles, pedestrians, cyclist) will contribute to an increased probability and therefore risk of an incident.
- 5. There are 52 rail level crossings on the AMRN. AMRN level crossings are already equipped with the highest standard of protection permitted in New Zealand (Half Arm Barriers, Flashing Lights and Bells). The next level of intervention is elimination of the risk by removal of the crossing





through closure or grade separation. It is desirable that all level crossings be removed from the AMRN as soon as practical and funding allows, however this is not practically achievable in the short term.

- 6. As part of previous timetable reviews (2014 and 2016) and with the development of the CRL Day 1 train timetable, safety risk around rail level crossings is being assessed and mitigated so far as is reasonably practicable. Auckland Transport (AT) is working with KiwiRail (KR), Auckland One Rail (AOR) and Waka Kotahi New Zealand Transport Agency (Waka Kotahi) on the CRL Day 1 train timetable, traffic impact assessments and Level Crossing Safety Impact Assessments.
- 7. Rail Safety Case variations will need to be submitted by AOR and KR to demonstrate that the CRL tunnels and train services are safe to operate. The rail regulator Waka Kotahi will assess and approve updated Rail Safety Cases prior to CRL Day 1 operations.
- 8. Prior to Day 1, network wide risk associated with level crossings is being reduced. This includes removal of two vehicle level crossings and one pedestrian crossing on the western line (Porters Avenue, Normanby Road and Fenton Street) as part of the CRL project. Funding has been secured by AT to remove an additional vehicle level crossing at Church Street East, and six pedestrian level crossings that were considered reasonably practical to remove (these are termed Group 1 crossings). In addition, an ongoing programme to install electronically locking gates at all pedestrian level crossings will also be completed by AT shortly.
- 9. Post-CRL Day 1, removal of the remaining level crossings (termed Groups 2 to 6) will be required over several years to permit the staged increase of train frequencies. An overview of this Strategic Level Crossing Removal Programme is provided at Attachment 1, the presentation provided to the Auckland Council Transport and Infrastructure Committee meeting on 21September 2023. A Single Stage Business Case (SSBC) to identify the preferred programme is planned for completion in December 2023 and will be presented for approval to the board. Funding has not yet been secured for the post-CRL Day 1 Strategic Level Crossing Removal Programme. The highest priority crossings for removal (termed Group 2) are clustered around Takaanini on the Southern Line and are subject to SSBC recently presented to the board as part of the Supporting Growth Alliance (SGA).

Me mōhio koe / What you need to know

- 10. As previously presented to the board, a CRL Day 1 train timetable provides for enhanced train frequencies through the CRL tunnels and the inner part of the AMRN for CRL Day 1 services. While increasing core network frequencies, it also mitigates barrier crossing closure time through reduced counter-peak services on the outer network.
- 11. AT has identified a programme for the staged removal of all AMRN rail level crossings through either grade separation or road / footpath closure. Three level crossings are already being removed by CRL (Porters Avenue, Normanby Road and Fenton Street). The forward programme comprises six groupings of level crossings as detailed at Attachment 1:
 - a. Group 1: six pedestrian and one road crossing that can be removed prior to CRL Day 1 providing funding is confirmed in FY25 to FY27; and





- b. Groups 2-6: indicative staged removal of the remaining crossings across the AMRN post CRL Day 1 the Strategic Level Crossing Removal Programme.
- 12. The Group 1 six pedestrian and one road level crossings that can technically be removed prior to the introduction of the CRL Day 1 timetable are:
 - a. O'Neill's Road (pedestrian).
 - b. Corbans Estate (pedestrian).
 - c. Lloyd Avenue (pedestrian).
 - d. Kingdon Street (pedestrian).
 - e. Homai Station (pedestrian).
 - f. Tironui Station Road (pedestrian).
 - g. Church Street East (road).
- 13. Detailed design has been completed for O'Neill's Road and Corbans Estate level crossings. Detailed design for the remaining level crossings is due by the end of this year. As part of the closures AT will provide alternative routes and upgrade footpaths.
- 14. The removal of this first group of crossings will improve safety and help to further mitigate the operational impacts of the CRL Day 1 timetable above and beyond the three level crossing grade separation projects delivered by CRL. It will however lead to some reduction in access for certain parts of the community. In addition, an ongoing programme to install electronically locking gates at all pedestrian level crossings will also be completed by AT shortly.
- 15. We are currently completing additional risk assessments of all remaining level crossings to identify interventions other than closure that can be delivered prior to CRL Day 1. These are expected to be of the nature of maintenance activities such as vegetation removal, additional signage and road markings. Information campaigns prior to introduction of the new timetable will also be undertaken.
- 16. Engagement with Waka Kotahi has commenced regarding the introduction of the CRL Day 1 timetable and the proposed Group 1 risk mitigations. To date, there is good engagement between all parties and therefore we are confident that an acceptable timetable that preserves the CRL Day 1 operation and benefits will be approved.
- 17. Further train frequency improvements post-CRL Day 1 to offer staged capacity improvements over subsequent years to deliver on full CRL business case benefits will likely not be possible until there is certainty over the timing of removal of further vehicular crossings. Group 2 crossings are the next highest priority with Spartan Road the highest priority of Group 2. Costs and timings for removal will be confirmed as part of the SSBC for the Strategic Level Crossing Removal Programme.





Financial and resource impacts

- 18. \$12m has been allocated in FY24:
 - a. Start Group 1 pedestrian crossing removals.
 - b. Completion of the Group 1 Church Street East Business Case.
 - c. Completion of the Groups 2-6 Strategic Level Crossing Removal Programme SSBC.
- 19. \$67.1m has been proposed for FY25-FY27 to conclude the Group 1 CRL Day 1 programme:
 - a. Completion of the Group 1 pedestrian crossing removal.
 - b. Completion of Group 1 Church Street East removal.
 - c. Implementation of programme of other safety interventions.
- 20. The significant cost for the implementation of the Groups 2-6 Strategic Level Crossing Removal Programme is being further developed through the Rail Programme Business Case to be presented to the board in coming months and will likely require consideration of alternative financing and delivery mechanisms.

Customer and Stakeholder engagement

- 21. Customer engagement has been held for two locations Corbans Estate and O'Neill's Road. This has resulted in some negative community, stakeholder and social media reaction. Engagement is continuing at additional locations including Lloyd Avenue, Kingdon Street and Tironui Station Road.
- 22. The project team has recognised and acknowledge feedback from the community engagement and have agreed to keep the final assessment and determination open based on that feedback and may reconsider options based on available funding.

Health, Safety and wellbeing considerations

- 23. More frequent train services at the opening of the CRL will increase the risk to members of the public. Near misses and collisions between train services, pedestrians and road users creates trauma for train crew and members of the public.
- 24. Based on data from Waka Kotahi, the Coroner's Office and our train operator, 17 pedestrians have sadly lost their lives on the AMRN from March 2013 to August 2023, ten of those at level crossings, with the most recent on 19 August 2023. In the same period, there have been 239 near-misses with pedestrians at level crossings and 7 collisions with motor vehicles.





25. The increase in level crossing barrier closures will lead to an increase in road traffic congestion requiring the safety improvement programme to implement additional maintenance or minor works to manage those increases.

Ā muri ake nei / Next steps

- 26. Deliver Group 1 CRL Day 1 level crossing programme, including public consultation on alternative route options.
- 27. By December 2023 provide the committee with an update on discussions with Waka Kotahi on the scope and agreement on the CRL Day 1 train timetable, including any further level crossing safety improvements required.
- 28. By December 2023 provide the committee with an update on the development of the Groups 2-6 Strategic Level Crossing Removal Programme and SSBC.

Te whakapiringa / Attachment

Attachment number	Description
1	Level Crossing Removal Programme – Overview – Presentation provided to Auckland Council Transport and Infrastructure Committee on 21 September 2023.

Te pou whenua tuhinga / Document ownership

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