

Ministerial Briefing
IN-CONFIDENCE

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| To | Hon Michael Wood, Minister of Transport | 30 September 2022 |
| Cc | Hon Grant Robertson, Minister of Finance Hon Dr David Clark, Minister for State Owned Enterprises David McLean, Chair, KiwiRail Peter Reidy, Chief Executive, KiwiRail | |
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AUCKLAND CATCHUP RENEWALS WORK SCHEDULE

PURPOSE

1. This briefing outlines KiwiRail’s and Auckland Transport’s coordinated approach to undertake catchup renewals across the Auckland Metro Rail Network over the next two years and manage the disruption to customers. This work is crucial to enable network-wide commuter benefits from the City Rail Link but will disrupt current commuter services for varying lengths of time.
2. Clear and timely communications with stakeholders and the public is an important part of the project. This briefing outlines the planned communications approach.

BACKGROUND

3. The Auckland metro rail network is in a state of transformation to enable a substantial uplift in public transport patronage by 2030 – with the aim of delivering a world-class rail system for the city.
4. There are three major NZ Upgrade Programme (NZUP) funded improvement projects being undertaken by KiwiRail:
 - a. Wiri – Quay Park, including a new 3rd Main Line between Wiri and Westfield which will remove rail congestion in the busiest part of the network and better separate freight from commuter services;
 - b. extending the electrified network south from Papakura to Pukekohe; and
 - c. building three new stations around Drury to create better commuter access for growing housing areas in the south of Auckland.

5. The City Rail Link (CRL) is an essential component to increase service options from 2025 onward – enabling faster, more frequent and more convenient metro commuter services across the entire network.
6. In the latter half of 2020 KiwiRail undertook urgent track renewals to ensure the safety of rail operations, as part of responding to Rolling Contact Fatigue issues. However, there is still a significant amount of other renewal needed across the 184km network to raise it to a resilient and reliable state.
7. The urgent need for these renewals now reflects the fact that the increase in service frequency and patronage growth in Auckland commuter rail over the last few decades was not matched with funding for ongoing network maintenance. This resulted in an increasing number of Temporary Speed Restrictions being placed on parts of the network, which slow commuter services.
8. The focus is on completing these upgrades – known as the Rail Network Growth Impact Management (RNGIM) project – to the most important sections of the network before CRL begins operating. The benefits of CRL will not be realised without these renewals.
9. The renewals must be done, and they will be disruptive. Both Auckland Transport and KiwiRail are of the view that high levels of disruption prior to CRL opening is better overall and easier to explain, as opposed to having that level of disruption post CRL opening. Aucklanders know that we are working towards a post-CRL goal of improved commuter services.

IMPACT OF WORK ON COMMUTERS

10. RNGIM involves replacing the formation (compacted gravel), the underlying foundation that the rail network is built on; ballast (the rocks that sits between the formation and the tracks); and resolving drainage issues in the rail corridor. See the graphic in **Appendix B**. This work is necessary to safely enable more frequent commuter services and is overdue, with formation in some areas not being replaced since the network began being built in the 1870s.
11. The work involves removing sections of rail and sleepers, replacing and compacting the material underneath, then reinstating and realigning the rail. It is a labour-intensive process and KiwiRail will be making significant use of specialist machinery to undertake the work as efficiently as possible.
12. Completing RNGIM is difficult in an operating environment and requires a lot more access to the Auckland metro network. Essentially, there are about 1,060 work-days on the network needed to complete RNGIM and we calculate that under the current access arrangement (focused around long weekend shutdowns) it could theoretically take to 2041 for RNGIM to be completed.
13. RNGIM work can be completed without the need for a full network shutdown. However, parts of the network will need to be fully closed to commuter services (and some rail freight shunts movements for set timeframes) for a few months at a time. Lines, or sections of line, will be upgraded before moving onto new sections, progressing over the entire metro network in the years ahead. The Auckland Metro Network has been divided up into eight stages of work.
14. Unfortunately, this will create significant disruption to commuters over the next two years. The ongoing programme of works will also impact customers attending Special Events, where rail replacement options will need to be used.
15. Auckland Transport (AT) will be using a mix of bus replacement and existing bus services to help manage commuter disruption. Given the general inconvenience to the public in stopping regular rail services and potential capacity issues with bus replacements and existing bus services, we do expect to see a drop in public

transport use in specific areas as people choose to work from home, cycle or drive instead.

16. However, we expect this will be limited to the period of works and AT will be encouraging people back to trains once work is finished in each stage. Given the renewals will remove existing Temporary Speed Restrictions, we expect more reliable services across the network over the next few years, prior to the start of CRL operations.
17. KiwiRail and AT have agreed the timing of the first two stages of work, with exact timing of the remaining stages yet to be finalised. The focus is on completing the inner and other key parts of the Auckland Metro Network before CRL begins operating in 2025. The Manukau Branch Line, Newmarket Line (which needs to be used for CRL commissioning but will see train frequency drop from 18 to four trains an hour once CRL begins operating) and the Swanson – Henderson section of the Western Line, which has lower commuter use, are expected to be completed by Q3 2025.
18. The map on page 5 outlines the stages of work. Also see the table, which highlights expected impacts on commuters and public transport mitigations in **Appendix A**.
19. Where possible, work stages are timed to coincide with other projects, to avoid creating further disruption later. For example:
 - a. While the Eastern Line is closed, AT is co-ordinating its work to install a new pedestrian underpass near the Meadowbank train station.
 - b. Renewals on the Southern Line between Papakura and Pukekohe will be undertaken while the line is already closed to metro commuter services for the electrification project. This means it will already be up to standard when commuter trains again run on the line from late-2024, cementing the improved level of service on this section of line. The building of new motorway overpasses in the area will also be undertaken during the line closure.
 - c. The Western Line will be broken into sub-stages and will be aligned with installation of a new power feed at Glen Eden, funded through KiwiRail’s Rail Network Investment Programme (RNIP) – which will help reduce commuter disruption. We will also prioritise the section between Newmarket and Kingsland, so it can be used to support transport to events at Eden Park.
 - d. As noted above, Henderson – Swanson and the Newmarket Line may need to be left to post CRL opening. The decision on when to open CRL will include consideration of the RNGIM works. During renewals work in each stage we will also do other maintenance, where possible. This could include, replacing sleepers that may need to be replaced in the next year or two, or remove trees that we can see being a problem later. This is about thinking ahead and trying to avoid the need to come back and cause further disruption in the coming years.
20. Rail freight will continue flowing through Auckland, to avoid significant national supply chain disruption. Movements to and from Ports of Auckland in the first year of RNGIM will require rail freight to take a different route to Westfield. Freight flows south of Westfield are not affected in the first year of RNGIM, given the ability to switch between tracks and around worksites between Pukekohe and Papakura. This track switching will also allow freight to pass around other work areas on the Southern Line in 2024.
21. Te Huia and the Northern Explorer scenic train will continue travelling to The Strand for the first year of RNGIM at least. This is due to their relative infrequency (Te Huia into/out of Auckland twice a day and Northern Explorer into and out of Auckland every two days) and ability to take different routes through the network. In discussions with the Waikato Regional Council, KiwiRail has urged that any increase in Te Huia frequency happens after CRL begins operating.

22. KiwiRail and AT have investigated alternatives to full commuter rail closures – for example allowing peak rail services to the CBD in the morning and back in the evening. However, given the overhead electric cables will need to be turned on for EMU services this presented an additional safety risk to track workers. KiwiRail freight trains, Te Huia and the Northern Explorer are diesel and do not require the overhead cables to be switched on. In addition, running peak daily EMU services introduces further operational complexity, which would extend completing renewals to key parts of the network beyond the start of CRL.

MAP INDICATING SEQUENCE OF RNGIM WORK ON THE AUCKLAND RAIL NETWORK



Rail Network Rebuild

Onehunga Line & Southern Line: Ōtāhuhu - Newmarket
 All services between Ōtāhuhu/Onehunga and Newmarket affected
 Work: January – March 2023

Eastern Line
 All Eastern Line services between Ōtāhuhu and Britomart affected
 Work: March – December 2023

Southern Line: Pukekohe - Papakura
 Line currently closed to commuter services until late-2024
 Work: Late 2023 – 2024

Western Line
 All Western Line services affected between Swanson and Newmarket
 Work: 2024 into 2025
 Will be carried out in sections. The final section Henderson – Swanson will likely be done towards the end of the project in 2025

Southern Line: Papakura - Puhinui
 All Southern Line services affected between Papakura and Puhinui
 Work: 2024

Southern Line: Puhinui - Ōtāhuhu
 All Southern Line services affected between Puhinui and Ōtāhuhu
 Work: 2024

Manukau Branch Line
 All services affected between Manukau and Puhinui
 Work: 2025

Newmarket Line
 All services affected through Parnell Station
 Work: 2025. Likely to begin after CRL opens and most trains between Newmarket and Britomart stations are travelling through CRL

Note: Dates are subject to change

COMMUNICATIONS

23. KiwiRail and AT have worked together and will continue to do so, to inform stakeholders and communicate with the affected public. Communications will include:
- a. RNGIM will be referred to publicly as the "Rail Network Rebuild".
 - b. A press release (and opportunity for media interviews) will be issued outlining the entire rebuild programme on 3 October. This will be followed by rolling announcements ahead of work beginning on each stage, with details of public transport alternatives, starting with Stage 1 (Otahuhu – Newmarket/Onehunga Branch Line) in early November.
 - c. Ongoing written and face-to-face engagement with key stakeholders, including councillors, community boards, MPs, business associations, and affected organisations such as Auckland Airport, hospitals and schools.
 - d. The aim is to ensure affected commuters are aware of closures/alternate public transport options before work begins on each stage. Communications will include posters at stations and on trains; audio announcements at stations and on trains; notifications on the AT Mobile app; direct email to customers; ambassadors distributing information leaflets at stations and assisting customers with digital tools (subject to funding being identified); e-briefings for affected communities; AT and KiwiRail websites; AT's Journey Planner and AT Mobile app; and information on real time departure boards.
 - e. Letterbox drops to rail corridor neighbours ahead of work beginning.
 - f. Continually look for ways to learn and improve customer experiences throughout the course of this project. Activities include understanding and improving end-to-end customer journeys for key recommended alternative routes; and customer testing and surveys before and during the project (subject to funding being identified).
24. All public communications will reiterate that the renewals work is crucial to enabling higher service frequency to come with CRL. It is part of wider improvements (such as the three NZUP projects) to deliver a world-class railway for Auckland.

FUTURE MAINTENANCE

25. RNGIM will significantly raise the reliability and resilience of the Auckland Metro Network, but we have to ensure it remains at that level – and in a post-CRL environment where more frequent commuter services will create additional wear and tear on the network.
26. To ensure work and disruption on RNGIM's scale does not have to be repeated, AT and KiwiRail are working on a new, ongoing maintenance regime which will come into effect once CRL begins operating. Given the improved standard of the network, we are able to move from the current "reactive maintenance" approach to a "preventative maintenance" one.
27. It will be a more efficient and co-ordinated approach to maintenance, with activities planned many months in advance. It will also make greater use of specialist machinery and see more rail materials stored around Auckland for easier accessibility.
28. Discussions around this longer-term approach are ongoing between KiwiRail and AT, but we do expect it will require greater access to the network than currently. The key point is that this preventative maintenance approach will be designed to avoid the kind of large-scale shutdowns, and resulting disruption, that will be seen with RNGIM.
29. It's also worth noting that in the years and decades ahead a range of other capital projects will need to be carried out in Auckland to enable commuter capacity to grow to 54,000 passenger trips an hour. KiwiRail and Auckland Transport are currently working on a programme business case to confirm the cost of this investment and timeframes for when work needs to be done.

RECOMMENDATION

30. KiwiRail and Auckland Transport requests you:

Note the content of this briefing

APPENDIX A - RNGIM WORK SCHEDULE AND IMPACTS

| Stage | Stage/Section of Line affected | Timing | Stations/Services affected | Estimated number of trips affected (Based on 2019 figures. Each customer typically makes more than one trip per day.) | Public transport alternatives (Two-digit bus numbers and Link services are frequent routes running at least every 15 minutes 7am-7pm, seven days a week, at least every 30 minutes in the evening. Three-digit bus numbers are less frequent routes. Bus numbers with the X-suffix are routes that run at peak times only.) |
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| Stage 1 | Southern Line: Otahuhu - Newmarket & Onehunga Branch Line | Starts during Xmas 2022 block of line, continues January – March 2023 | Stations closing: Onehunga, Te Papapa, Penrose, Ellerslie, Greenlane, Remuera Not closing, but affected: Newmarket Parnell | 6,000 per day | Trains will switch between the Southern and Eastern lines at Otāhuhu and continue running between South Auckland and Britomart Alternative bus/train options for affected stations: <ul style="list-style-type: none"> • Onehunga: 30, 36, 298, 309, 670, 743 • Te Papapa: 670, 743 • Penrose: 66, 298, 321, • Ellerslie: 70, 298, 321 • Greenlane: 70 • Remuera: 70 • Newmarket: InnerLink, OuterLink, 30, 70, Western Line • Parnell: InnerLink, OuterLink, Western Line train |
| Stage 2 | Eastern Line | March – December 2023 | Stations closing: Sylvia Park Panmure Glen Innes Meadowbank Orakei | 12,000 per day | Trains will switch between the Eastern and Southern lines at Otāhuhu and continue running between Manukau and Britomart Alternative bus/train options for affected stations: <ul style="list-style-type: none"> • Sylvia Park: 32, 66, 743, 782 • Panmure: 70, 72X, 323, 743, 744 • Glen Innes: TamakiLink, 75, 743, 744, 762 • Meadowbank: 782 • Orakei: 781 |
| Stage 3 | Southern Line: Papakura – Pukekohe | Late 2023 – 2024 | No services affected | 0 | Alternative bus/train options for affected stations: 394 |
| Stage 4 | Western Line | TBC – majority in 2024, Henderson – Swanson in 2025 | Can be done in sub-sections: <ul style="list-style-type: none"> • Newmarket – New Lynn (prioritising Newmarket – Kingsland) • New Lynn – Henderson • Henderson – Swanson | 9,000 to 25,000 per day depending on section | Various, with new frequent routes being implemented in 2023. Train services TBC |
| Stage 5 | Southern Line: Papakura – Puhinui | 2024 | Papakura – Puhinui | 9,000 per day | Under development, but expected to include 33 Train services TBC |
| Stage 6 | Southern Line: Puhinui – Otahuhu | 2024 (following completion of the 3 rd Main Line) | Puhinui – Otahuhu | 10,000 per day | Under development, but expected to include 33 Train services TBC |
| Stage 7 | Manukau Branch Line | 2025 | Puhinui – Manukau City Centre | 3,000 per day | Under development, but expected to include AirportLink Train services TBC |
| Stage 8 | Newmarket Line | 2025 | Newmarket – Britomart | 17,000 per day | Under development, but expected to include InnerLink, OuterLink, 30, 70, 75 Train services TBC |

Note: In addition to these line closures, the standard network closures over Christmas and long weekends will continue, to undertake other maintenance and project work.

APPENDIX B: EXAMPLE GRAPHIC OF THE WORK FOR PUBLIC COMMUNICATION

