



BETTER TRANSPORT • BETTER PLACES • BETTER CHOICES

Bus Reference Case 2020

Final Report

Prepared for: Auckland Transport

Prepared by: MRCagney (NZ) Limited

Document Information

Project Name	Bus Reference Case Update 2020
Status	Final Report
Client	Peter Moth
MRC Reference	NZ 3056
File Name	Bus Reference Case 2020 Final Report 2020-11-27.docx

MRCagney (NZ) Ltd
Level 4, 12 O'Connell Street, Auckland, 1010
PO Box 3696, Shortland Street, Auckland, 1140
New Zealand

t: +64 9 377 5590
f: +64 9 377 5591
e: auckland@mrcagney.com
www.mrcagney.com

© 2020 MRCagney (NZ) Ltd Company Number 7771198

This document and information contained herein is the intellectual property of MRCagney (NZ) Ltd and is solely for the use of MRCagney's contracted client. This document may not be used, copied or reproduced in whole or part for any purpose other than that for which it was supplied, without the written consent of MRCagney. MRCagney accepts no responsibility to any third party who may use or rely upon this document.

Contents

Figures	4
Tables	4
Executive Summary	5
1 Introduction	9
1.1 Scope	11
1.2 Methodology	12
1.2.1 Baseline Conditions and Assumptions.....	12
1.2.2 Stakeholder Meetings	12
1.2.3 Workshop	13
1.2.4 Further changes	13
2 Major Projects	15
2.1 City Rail Link.....	15
2.2 Midtown Crossover	16
2.3 Downtown Crossover	19
2.4 North-Western busway interim improvements.....	20
3 City Centre Termini	21
3.1 Downtown East Bus Facilities	25
3.2 Lower Albert Bus Interchange.....	26
3.3 Learning Quarter	27
3.4 Wynyard Quarter.....	28
3.5 Victoria Quarter	28
3.6 Queen Street by The Civic & St James	29
4 City Centre Corridors	30
4.1 Symonds Street.....	30
4.2 Wellesley Street	31
4.3 Albert/Vincent/Pitt Streets	32
4.4 Victoria Street.....	33
4.5 Fanshawe Street	34
4.6 Customs Street.....	34
4.7 Karangahape Road	35
5 Key changes by date	37
5.1 2018.....	37
5.2 2021.....	37
5.3 2025.....	41

5.4	2028.....	43
6	Additional Considerations.....	45
6.1	Private Development Projects.....	45
6.2	Access for Everyone.....	45
6.3	Inter-Regional Coach Terminal.....	46
7	Conclusions	47
7.1	Ongoing Pressure in the City Centre.....	47
7.2	City Rail Link impacts.....	47
7.3	Midtown Crossover	47
7.4	Grafton Gully Terminal.....	47
7.5	Downtown Crossover	48
7.6	Future of Customs Street.....	48
7.7	Next Steps.....	48
Appendix A: Route Termini in the City Centre by Year		A-1

Figures

Figure 1: Bus Reference Case Planning Context.....	11
Figure 2: City Rail Link route and contracts. (CRLL, 2018)	15
Figure 3: Midtown Crossover essential infrastructure and service changes.....	18
Figure 4: Midtown Crossover essential and desirable infrastructure and service changes.....	19
Figure 5: Expected bus routes and termini, 2021.....	23
Figure 6: Expected bus routes and termini, 2025.....	24
Figure 7: Expected bus routes and termini, 2028.....	25
Figure 8: 2018 City Centre bus network.....	37
Figure 9: 2021 City Centre bus network.....	40
Figure 10: 2025 City Centre bus network.....	42
Figure 11: 2028 City Centre bus network.....	44

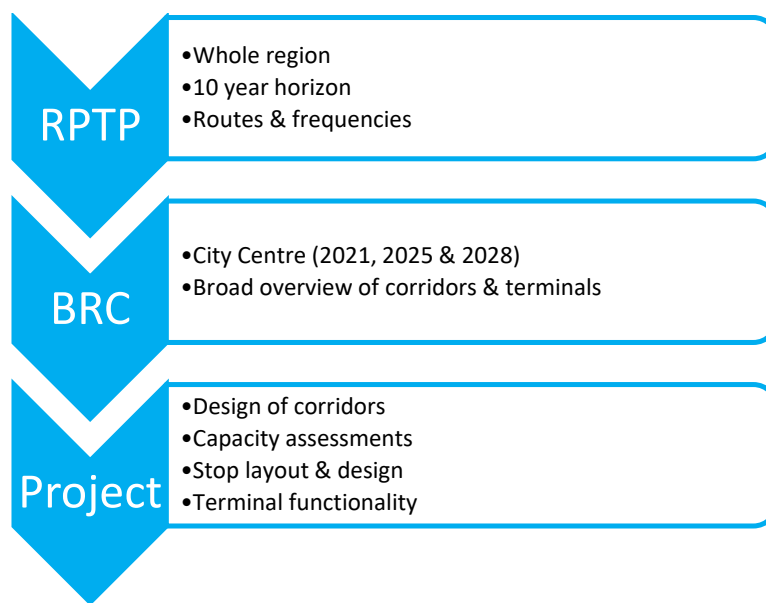
Tables

Table 2-1: City Rail Link road closure dates	15
Table 3-1: Bus routes terminating on-street versus off-street	22
Table 3-2: Downtown East and Beach Road bus routes and volumes	26
Table 3-3: Lower Albert Bus Interchange bus routes and volumes	27
Table 3-4: Learning Quarter bus routes and volumes.....	28
Table 3-5: Wynyard Quarter terminating bus routes and volumes	28
Table 3-6: Victoria Quarter terminating bus routes and volumes.....	29
Table 3-7: Civic & St James terminating bus routes and volumes.....	29
Table 4-1: Symonds Street bus routes and volumes (Karangahape Road to Wakefield Street).....	30
Table 4-2: Symonds Street bus routes and volumes (Wakefield Street to Mount Street).....	30
Table 4-3: Symonds Street bus routes and volumes (Wellesley Street to Grafton Road)	31
Table 4-4: Wellesley Street bus routes and volumes (Queen Street to Albert Street)	32
Table 4-5: Albert Street bus routes and volumes (north of Victoria Street).....	33
Table 4-6: Fanshawe Street bus routes and volumes (Daldy Street to Halsey Street)	34
Table 4-7: Fanshawe Street bus routes and volumes (Halsey Street to Nelson Street).....	34
Table 4-8: Customs Street bus routes and volumes (between Queen Street and Albert Street)	35
Table 4-9: Karangahape Road bus routes and volumes (between Ponsonby Road and Pitt Street)	36
Table 4-10: Karangahape Road bus routes and volumes (between Queen Street and Symonds Street)	36

Executive Summary

AT Service Network Development contracted MRCagney to produce a refresh of the Bus Reference Case (BRC). The purpose of the Bus Reference Case (BRC) is to provide a “single point of reference” on the future of the bus network in the Auckland City Centre in 2021, 2025 (post-CRL opening) and 2028 horizon years. This will ensure that all projects in the City Centre use the same set of assumptions, allowing for better coordination and planning. It achieves this by reviewing and consolidating existing plans and assumptions about City Centre bus networks and major City Centre projects that may impact on the bus network.

The bus reference case sits beneath the Regional Public Transport Plan (RPTP)¹ in the hierarchy of policy documents, as represented below. The BRC is completely consistent with the high-level routes and volumes anticipated in 2021, 2025 and 2028 as set out in the RPTP.



Baseline

This report was developed to describe the baseline “assumed” future scenario upon which current and future projects can be built. It includes completion of the Midtown Crossover, Downtown Crossover, and Lower Albert Street Bus Interchange, as well as progression and completion of City Rail Link. However, this scenario assumes the Light Rail project as previously planned does not proceed within the horizon of this document.

Assumptions

The future scenario assumptions were developed by the Project Team and refined through workshops and meetings with major projects teams (including City Rail Link and Light Rail) and internal and external stakeholders. The Light Rail project team was included in early internal engagement though, as described above, the current assumptions do not include construction of light rail or light metro within the time horizon of this report. The list of assumptions below is subject to change but represents the most recent available information for this study.

¹ <https://at.govt.nz/about-us/transport-plans-strategies/regional-public-transport-plan-rptp/>

The Bus Reference Case only considers AT Metro services. Therefore, private services such as SkyBus, InterCity, MahuCity Express, etc are not included.

2021 Key Changes

The following key changes to infrastructure and bus routing are expected to occur by 2021. These changes include long-term (2021-24) diversions due to the CRL C3 works. There may be additional short-term diversions in place due to shorter works, e.g., Watercare works on Wellesley Street in 2021, but these have not been included in these assumptions:

- **Queen Street trial ongoing**
 - The Queen Street trial to reduce general traffic and provide more priority for public transport and people walking and cycling will be ongoing. This is an ongoing project with co-design process. Specific details of future outcomes have not yet been determined.
- The **City Rail Link C3 (main works) contract underway**, involving multi-year closure of Mayoral Drive immediately south of Albert Street / Wellesley Street, full closure of Victoria Street at Albert Street and local access only on Albert Street between Wellesley Street and Wyndham Street
- **Albert Street reinstated** between Wyndham Street and Customs Street following completion of CRL construction in this section
- **Lower Albert Street Bus Interchange (LABI) completed** for bi-directional operation, supported by turnaround via Fanshawe Street, Market Place, Pakenham Street, Sturdee Street, Lower Hobson Street and Quay Street
- **Some western buses extended to LABI**
 - **18, 195, 209, 105, 106, 110, 125X, 129 extended to LABI** – diversion routing in place due to CRL C3 works closure of Mayoral Drive at Wellesley Street and Albert Street at Victoria Street
 - Inbound: via Queen Street (last stop), repositioning via Customs Street, Fanshawe Street, Market Place, Pakenham Street, Sturdee Street (layover), Lower Hobson Street, Quay Street and Albert Street (first stop)
 - Outbound: via Albert Street, Wyndham Street, Hobson Street, Pitt Street
 - **132, 133, 134 remain on Hobson Street at Swanson Street** – diversion routing in place due to CRL C3 works closure of Mayoral Drive at Wellesley Street and Albert Street at Victoria Street
 - Inbound: via Queen Street, Mayoral Drive, Cook Street, Nelson Street, Fanshawe Street, Hobson Street
 - Outbound: via Hobson Street, Pitt Street
 - **132X, 133X remain on Hobson Street at Swanson Street** – diversion routing in place due to CRL C3 works closure of Mayoral Drive at Wellesley Street and Albert Street at Victoria Street
 - Inbound: via Nelson Street, Fanshawe Street, Hobson Street
 - Outbound: via Hobson Street, motorway
 - **151X, 171X, 172X discontinued**
- Works completed to enable buses to **turn right from Wellesley Street East into Mayoral Drive** (for 22, 24, NX2);
- **Wellesley Street reinstated** between Elliott Street and Federal Street, allowing diverted Isthmus and North Shore buses to return routings used prior to February 2020 (except where noted):
 - **North Shore buses (82, 802, 923, 924) returns to former**

- Inbound (EB): Returns to former routing via Wellesley Street, Queen Street, Wakefield Street and Mayoral Drive
 - Outbound (WB): Returns to former routing via Wellesley Street
- **North Shore buses (NX2) inbound Wellesley E, Mayoral & Wakefield**
 - Inbound (EB): Returns to former routing via Wellesley Street East, new route via Mayoral Drive (at Kitchener Street) and Wakefield Street
 - Outbound (WB): Returns to former routing via Wellesley Street
- **101 & OuterLink returns to former**
 - Eastbound: Returns to former routing via Wellesley Street and Princes Street
 - Westbound: Returns to former routing via Symonds Street and Wellesley Street
- **22, 24 outbound via Wellesley E, Mayoral & Wakefield** – diversion routing in place due to CRL C3 works closure of Victoria Street at Albert Street
 - Inbound (WB): Returns to former routing via Symonds Street, Wellesley Street, to terminate on Victoria Street West
 - Outbound (EB): Shifted from former routing (Victoria Street east of Hobson Street, Bowen Avenue and Waterloo Quadrant), to run via Victoria Street West, Hobson Street, Wellesley Street, Mayoral Drive (at Kitchener Street), Wakefield Street and Symonds Street
- **75 outbound via Wellesley & Grafton** – diversion routing in place due to CRL C3 works closure of Victoria Street at Albert Street
 - Inbound (WB): Returns to former routing via Symonds Street to Wellesley Street
 - Outbound (EB): Shifted from former routing (Victoria Street east of Hobson Street, Bowen Avenue and Waterloo Quadrant), to run via Wellesley Street, Grafton Road and Park Road
- **22x & 24x services discontinued & reallocated** to all-stop service (i.e., 22, 24) – no net change in number of bus trips
- **Inner Link via Fanshawe Street and Halsey Street** – diversion routing in place due to CRL C3 works closure of Victoria Street at Albert Street
- **774 / 775** (Tāmaki Drive peak only routes) **extended to Wynyard Quarter** via Daldy Street, Madden Street, Beaumont Street, Jellicoe Street
- **CTY, TMK, 762** no changes
- **95G, 97V peak-only overlays discontinued**

2025 Key Changes

The following key changes to infrastructure and bus routing are expected to occur by 2025:

- **City Rail Link fully open**
 - **Albert Street/Vincent Street/Pitt Street** corridor fully reopened for bi-directional bus services, with all remaining western services shifted to this alignment (11, 18, 195, WX1)
 - **209 eliminated**
 - **Victoria Street reinstated** with one lane per direction between Elliott Street and Federal Street, and no buses operating between Queen Street and Albert Street
 - **INN returns to Albert Street** between Customs Street and Victoria Street, then Victoria Street West
 - **105, 106 return to Albert Street, continue to use LABI**

- **Manukau Road (30, 309, 309X, 295)** services return to original routing outbound from The Civic via Queen Street, Wellesley Street, Mayoral Drive, Queen Street
- **First Stage of North West interim improvements²** delivered:
 - **Upgraded or new facilities at Te Atatu, Lincoln and Westgate** (Northwest Centre)
 - **Implementation of WX1 & 11t/w** services to LABI via Pitt Street, Vincent Street, Mayoral Drive and Albert Street and associated consolidation of other North Western motorway services
 - **110, 125X, 129, 132, 132X, 133, 133X eliminated**
 - **134 rerouted – no longer serving city centre**
- **Wynyard Quarter changes:**
 - **New off-street bus terminal** on the site of the Jellicoe Street Carpark
 - **762 extended to Wynyard Quarter** via Customs Street, Fanshawe Street, Daldy Street
 - **TāmakiLink extended to SkyPath** via Customs Street, Fanshawe Street, Daldy Street, Gaunt Street, Beaumont Street to new terminal location west of bridge
- **Isthmus buses terminating in Victoria Quarter** (22, 24) turnaround via Victoria Park, replacing current facilities on Victoria Street between Dock & Graham Streets

2028 Key Changes

The following key changes to infrastructure and bus routing are expected to occur by 2028:

- **'Midtown Crossover'** shifts the running pattern and termini for Eastern and Isthmus services:
 - **Botany and Howick (70, 72X)**
 - **Pre-crossover:** via Symonds Street to terminate at Britomart East
 - **Post-crossover:** via Grafton Road and Wellesley Street to terminate at Victoria Park
 - **New North Road and Sandringham Road (22, 24) services**
 - **Pre-crossover:** via Wellesley Street to terminate at Victoria Park
 - **Post-crossover:** via Symonds Street to terminate downtown (see 'Downtown Crossover' below)
- **Manukau Road (30, 309, 309X, 295)** services terminate at Victoria Park instead of the Civic
 - **Inbound:** via Queen Street and Wellesley Street
 - **Outbound:** via Wellesley Street and Queen Street
- **'Downtown Crossover'** shifts the running pattern and termini for some North Shore and Isthmus services:
 - **Beach Road** layover required
 - **Customs St** upgrades required to provide transit priority or mall
 - **Northern Express and Birkenhead** services
 - **Pre-crossover:** terminating at LABI
 - **Post-crossover:** via Customs Street to a terminal location east of downtown
 - **New North Road, Sandringham Road and Mount Eden Road**
 - **Pre-crossover:** terminating at Britomart East
 - **Post-crossover:** crossing downtown via Customs Street to terminate at LABI
 - **321 and 755** continue west via Customs Street and terminate at LABI

² Per Memorandum from Auckland Transport on 8 September 2020: Development of a North West Bus Network

- If insufficient space is available at LABI, these services could use the current Birkenhead services stops on Quay Street. Alternatively, these routes could remain east of Queen Street due to the low service and passenger volumes on these services or another alternative location could be found closer to the Waiheke Ferry.
- **Wellesley Street Bus Improvements** project completed between Halsey Street and Kitchener Street, eliminating general traffic from Albert Street to Queen Street.
- **Grafton Gully terminal opened**, allowing consolidation of North Shore to Midtown and Learning Quarter services at this site:
 - **NX2, 82, 802, 923, 924** continue on Wellesley Street to terminal
 - **931, 933, 939** via Halsey Street and Wellesley Street to terminal
 - **101** continue on Wellesley Street to terminal

Infrastructure Improvements

Although the Bus Reference Case is not designed to reach consensus with all stakeholders, it is intended to identify areas for further analysis. The BRC notes the following infrastructure improvements that would be essential or highly desirable to delivering the assumed 2028 bus network:

- Additional Wynyard Quarter layover and staging
- Grafton Gully bus terminal to consolidate Learning Quarter buses
- Grafton Road bus priority
- Pitt / Vincent Streets bus priority
- Bus stops along Customs Street between Queen Street and Britomart Place
- New on- or off-street terminal facility located in the vicinity of Beach Road, including turnaround, layover and afternoon staging of NX1 and Onewa Road buses
- Full bus priority along Customs Street (potential transit mall) and Beach Road
- New on-street terminal facility located in the vicinity of Victoria Park, including layover and afternoon staging
- Bus-only designation along Wellesley Street in both directions, or similar restrictions to prevent through traffic across Wellesley Street

This 2020 update to the Bus Reference Case supersedes the previous 2016 version. A number of key factors in the city centre have changed since 2016.

- *This update reflects planning changes within the city centre, including the City Centre Masterplan, which was refreshed in March 2020.*
- *Proposals are draft working proposals, and subject to broader community and stakeholder engagement.*
- *A public facing White Paper is under development and this will sit above the Bus Reference Case document.*
- *The proposals in this document are subject to planning and development approvals including the AT board.*

The proposals in this document are subject to funding and business case approvals including Waka Kotahi, AT Board and other funders and stakeholders.

1 Introduction

The original Bus Reference Case was produced in 2015 and underwent several revisions throughout 2015 and 2016. The key output of the original BRC was to identify expected routes and volumes on key corridors and

terminals in 2018, 2026 and 2036. The original BRC also included assumptions regarding vehicle types and capacity, as well as stop capacity calculations. Key findings of the previous BRC were that City Centre corridor and terminal capacities were heavily constrained and further investment in supporting infrastructure for both buses and passengers was required.

AT Service Network Development initiated an update to the Bus Reference Case in late 2018. A new BRC was deemed necessary for the following reasons:

- The 'New Network' had been fully implemented, which confirms the baseline routes and numbers.
- Plans for corridors and terminals have evolved, with business case work underway on several key corridors. This has highlighted new constraints and opportunities.
- There was a greater degree of clarity regarding the timing and impacts of the City Rail Link.
- The Light Rail project had been confirmed by the Auckland Transport Alignment Project (ATAP) as proceeding within the next decade along the City Centre to Māngere (CC2M) and Northwest corridors. The business case process for the CC2M project was underway.

The first draft of the updated Bus Reference Case was produced in 2019, however due to significant changes in assumptions since early 2019, including delay of the Light Rail project, a 2020 update was deemed necessary.

The Bus Reference Case is designed to sit under the Regional Public Transport Plan (RPTP). A 2018 RPTP was released in early 2019, and the 2020 BRC is generally consistent with the 2018 RPTP, aside from some key changes that have developed since. The RPTP provides a schedule of the routes that are intended to be run by AT Metro in the next decade under a business as usual scenario and includes changes that are expected to be made to routes as a result of major new planned infrastructure. However, the RPTP does not include the details of alignments, or proposed routing in the City Centre. The BRC is therefore designed to give a greater level of detail where required for specific projects in the City Centre, providing a clear set of current assumptions to project teams. The BRC was not designed to assess any potential solutions to project-level issues that were revealed in developing these assumptions. However, where alternatives have emerged from the process, they have been noted and flagged for additional future assessment.

Currently there are several projects in the planning phase. The outputs from the Bus Reference Case will ensure these projects (and any others) work to a single agreed set of assumptions. The BRC will set out volumes for key corridors and terminals, while individual projects will work out the finer-grained details, such as stop location and sizes, layover and operation of the terminals.

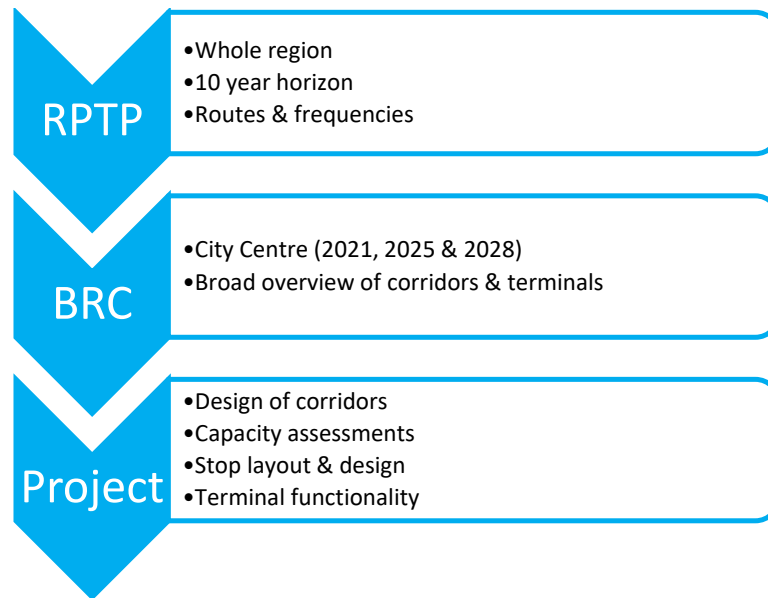


Figure 1: Bus Reference Case Planning Context

1.1 Scope

The Bus Reference Case is designed to document existing high-level assumptions for the City Centre bus network for the horizon years of 2021, 2025 (post-CRL opening) and 2028.³ This includes:

- Bus route alignments
- Bus frequency
- Bus terminal locations

However, this version of the BRC does not include the following:

- Stop locations
- Exact details of terminal operations, layover and staging
- Routes for out of service buses
- Movements, stops or facilities for private coaches, inter-regional buses or other commercially operated services (i.e., those not operated by AT)

The BRC represents the potential future City Centre bus network baseline state, as expected in mid-2020. There is still a significant degree of uncertainty around the timeframes and proposals the BRC outlines, particularly regarding the construction phasing in the city centre over the next 2-3 years. The BRC process has been designed to document anticipated changes to the bus network, note dependencies between projects, and to agree on the most reasonable assumptions, based on the most up-to-date information available. Some of the information has been supplied by parties outside of AT Metro. The BRC is not designed to resolve every small-scale issue that is known or is uncovered by the process. Resolving issues on this level falls within the scope of individual projects. The BRC will, however, identify potential issues that may require additional future work to reach an agreed resolution.

Similarly, the BRC is not intended to outline temporary changes to the bus network for construction mitigation. The BRC has made assumptions around large scale, multi-year changes to the bus network from

³ 2021, 2024, and 2028 were originally used as they are the reference years used in the Regional Public Transport Plan (RPTP) upon which the BRC is based. 2025 was used to include changes resulting from completion of the CRL project, expected by end of 2024.

CRL. However, the impact of these projects and their interaction is the responsibility of project teams, and smaller-scale disruptions will be handled by the AT Metro Services Day of Operations Team. The BRC provides a baseline from which to plan for these disruptions/diversions.

The following issues were not covered as they were outside of the project scope:

- Any planned or recommended changes to the ticketing system or fares
- Further development of specific projects beyond documenting anticipated bus route/frequency changes that are anticipated by AT from the projects
- Development of bus stop or infrastructure capacity aside from assumptions provided by AT
- Bus layover requirements or assessments
- Costing of infrastructure
- Assessment of any potential solutions to problems identified

The BRC is not intended to bring stakeholders to consensus on the impacts of different projects—the BRC simply seeks to document the assumptions considered by AT Service Network Development to form the most likely outcome. However, in order to maximise the chances of buy-in, the creation of the BRC update involved considerable stakeholder engagement in the form of multiple workshops (see 1.2.2 below).

1.2 Methodology

The following steps form the core of the methodology used to develop the BRC future network assumptions:

1. Set baseline conditions and assumptions with project team
2. Agree baseline conditions and assumptions with internal stakeholders and develop key questions for external stakeholder meetings
3. External stakeholder meetings to verify and refine baseline conditions and assumptions
4. Workshop final baseline conditions and assumptions with all stakeholders
5. Additional changes as identified by AT Service Network Development to reflect emerging conditions

1.2.1 Baseline Conditions and Assumptions

The first stage of the BRC was to gather existing information about the Auckland City Centre bus network, and how it is intended to change over the next decade. AT Service Network Development provided the latest internal information regarding the BEBI project, Albert Street bus routing, initial thinking about the proposed bus routing in each of the horizon years, and latest version of the Draft RPTP, including bus frequencies for each of the horizon years.

MRCagney used this information to develop an initial strawman list of assumptions and list of key questions about bus network routing and dates for major projects. This list of assumptions was further developed and refined into a first draft of assumptions over two meetings with AT Service Network Development in mid- and late- January 2019.

1.2.2 Stakeholder Meetings

Two meetings were held in February 2019 with Auckland Transport internal stakeholders, as identified by AT Service Network Development. The meeting attendees came from the following teams:

- AT Service Network Development
- AT Metro Service Delivery
- AT Planning and Investment

- AT Light Rail
- Downtown Programme

At these meetings, attendees were presented with the initial list of assumptions to test for accuracy, to uncover any missing information and highlight key issues.

Additional meetings were held with the following external stakeholders:

- Auckland Design Office
- Auckland Council Transport Strategy
- City Rail Link Limited

Initially a meeting was also planned with the Waka Kotahi-led Light Rail project team, but AT Service Network Development staff met with this team on other issues, and this provided the information required from this team.

1.2.3 Workshop

Once all of the bus volumes and project impacts had been documented and reviewed by the respective stakeholders, this information was assembled into a workshop presentation for internal and external stakeholders. The workshop outlined the changes that had been made to the assumptions since the previous meetings and presented preliminary conclusions that emerged from the process.

The workshop led to follow-up discussions with stakeholders from which the project team developed an additional future scenario for bus routings in the downtown area that could address some issues with Downtown bus circulation and terminal capacity (including the recent removal of Quay Street as a potential terminal location). This option is consistent with the emerging Access for Everyone City Centre transport strategy and would be supported by stakeholders. This potential alternative 'Downtown Crossover' scenario has since been identified by Auckland Transport as the emerging preferred option for downtown bus operations and is included in the 2028 horizon year assumptions.

1.2.4 Further changes

Throughout 2019 and into 2020 several key assumptions behind the Bus Reference Case changed. There were several key reasons for this:

- The timeframes of the City Rail Link street closures have been confirmed
- It became clear that Light Rail would not proceed on the timeframes originally envisaged, and further work was required to understand the impacts of this
- The scale and funding requirements for the infrastructure works required to enable both the 'Midtown Crossover' and the 'Downtown Crossover' meant these projects would take longer to complete than initially envisaged
- The 'Downtown Crossover' scenario has been identified by Auckland Transport as the Emerging Preferred Option for downtown bus operations
- The impacts of Covid-19 on the operating budget required changes to the network and schedules
- Alignment with emerging construction phasing for a range of City Centre projects, noting that assumptions regarding these projects are subject to change

The assumptions that were presented at the final workshop have been updated to reflect these changes in conditions within the City Centre and produce the final Bus Reference Case 2020 horizon year scenarios. These

assumptions reflect the latest CRL planning as of October 2020 - ongoing meetings with working group. This is the most relevant up to date info as of October 2020.

2 Major Projects

This section outlines key projects being undertaken in the City Centre that impact on a wide range of bus corridors and describes how bus routing will be affected by these impacts.

2.1 City Rail Link

The City Rail Link project involves building a 3.45km twin-tunnel underground rail link from Britomart Station to connect with the Western Line near Mount Eden station⁴. The project involves building new stations at Aotea (between Victoria Street and Wellesley Street) and Karangahape Road, as well as replacement of Mount Eden station. The current phases of the project involve works to Britomart station (C1) and cut-and-cover works under Albert Street between Britomart and Wyndham Street (C2). These construction phases have required several rounds of changes to the bus network. C2 works are expected to be complete by the end of 2020, including reinstatement of this section of Albert Street.

Contract 3 (C3) covers the major station and tunnel works from Wyndham Street south to the future tie in with the Western Line at Mt Eden. This will require cut and cover works along Albert Street around Aotea Station, as well as tunnelling works between Aotea and Mount Eden stations. The C3 contract was awarded in April 2019, major works started in early 2020 and construction is expected to be complete by the end of 2024⁵.

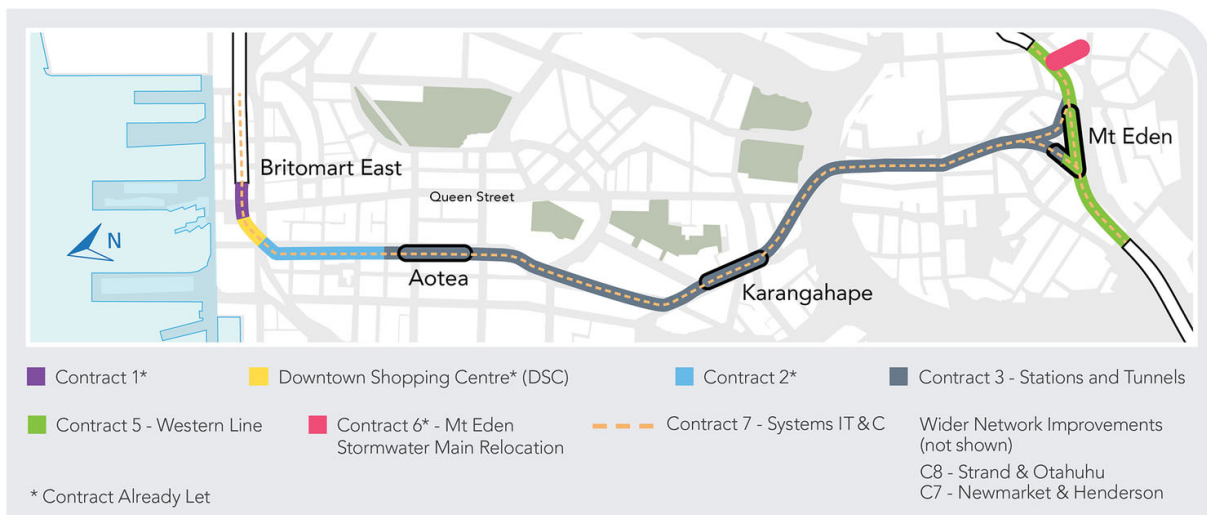


Figure 2: City Rail Link route and contracts. (CRL, 2018)

Construction of the City Rail Link will involve significant impacts to City Centre bus services. The construction involves several major stages. Estimated timeframes for key closures are outlined in Table 2-1 below.

Table 2-1: City Rail Link road closure dates

Section	Type	Anticipated Closure Commencement	Anticipated Road Reopening
Albert Street between Wyndham Street and Customs Street	Partial closure – local access retained	-	Late 2020

⁴ <https://www.cityrailink.co.nz/what-is-crl/>

⁵ <https://www.cityrailink.co.nz/city-rail-link-crl-cost-alliance-announcements>

Albert Street between Wyndham Street and Wellesley Street	Partial closure – local access retained	February 2020	Early 2024
Mayoral Drive between Civic Carpark and Wellesley Street West	Full closure	March 2020	Early 2024
Wellesley Street between Elliott Street and Federal Street	Full closure	March 2020	Mid 2021
Victoria Street between Elliott Street and Federal Street	Full closure	Mid 2021 (once Wellesley St reopened)	Early 2023

For the purposes of this report, the 2021 horizon date assumes Wellesley Street has reopened to allow buses, so will focus on bus routes planned for the Victoria Street closure.

The closures will force a range of short-term changes to the bus network, though AT Service Network Development is using this as an opportunity to move the City Centre bus network towards its long-term future state where possible, including routing outbound North Western services via Albert Street to Wyndham Street.

The 2018 Regional Public Transport Plan outlines that peak-only services to Glen Eden, Titirangi (151X, 171X, 172X) and Māngere (309X) will be removed when the CRL opens. The date to discontinue Glen Eden and Titirangi peak-only services has been brought forward to 2021 due to Covid-19 related budget constraints. However, Māngere services have been assumed to be retained because initial CRL operating patterns will not provide significant travel time savings for these customers. This will be considered further for the next RPTP update.

2.2 Midtown Crossover

The 'Midtown Crossover' is a proposed major change to City Centre bus routing. This plan was proposed by AT Service Network Development as part of the Wellesley Street Bus Improvements project to overcome constraints that were identified. The Midtown Crossover ensures isthmus buses can use Wellesley Street in both directions, thus not requiring the use of Victoria Street and allowing the Victoria Street Linear Park to proceed. This also avoids issues with bus operations along Bowen Avenue and Waterloo Quadrant. The Midtown Crossover is expected to be implemented by 2028.

The Midtown Crossover proposes that all isthmus buses entering the City Centre via Symonds Street will run along Symonds Street and Anzac Avenue to terminate at Britomart, while all isthmus buses entering the City Centre via Newmarket and Khyber Pass Road will run along Grafton Road and Wellesley Street to terminate in Victoria Quarter and/or Wynyard Quarter. This means the following key changes will occur:

- Services to Botany and Howick (70, 72X) that currently terminate at Britomart will shift to Wellesley Street.
- Services along Manukau Road and Gillies Avenue (30, 295, 309, 309X) that currently terminate at The Civic will be extended via Wellesley Street to terminate at Victoria Quarter.
- Services along New North Road and Sandringham Road (22 & 24) that currently terminate in Victoria Quarter will shift to Britomart.

Services along Manukau Road and Gillies Avenue (30, 295, 309, 309X) will be extended to Victoria Quarter, but will continue serving Khyber Pass Road, Symonds Street, Karangahape Road and Queen Street. These services

were originally planned to be rerouted to run along Grafton Road and Wellesley Street. Upon further review it was determined that these services would need to remain on Khyber Pass Road to retain access to that area.

The Midtown Crossover is dependent on new bus stop and terminal infrastructure being delivered along Wellesley Street and, if the Downtown Crossover (see below) does not proceed as planned, at Britomart East. The following changes are required to be made as a prerequisite for the implementation of the Midtown Crossover:

- New stops to be provided on Wellesley Street near Symonds Street to serve Auckland University
- Works to Grafton Road (including to the intersection with Park Road) to ensure this route is suitable for double decker buses. This work is expected to be completed in the outbound direction by 2021 to accommodate the Route 75 diversion resulting from CRL works
- Changes to either infrastructure or services (e.g., Downtown Crossover) at Britomart to ensure sufficient capacity for increased bus volumes

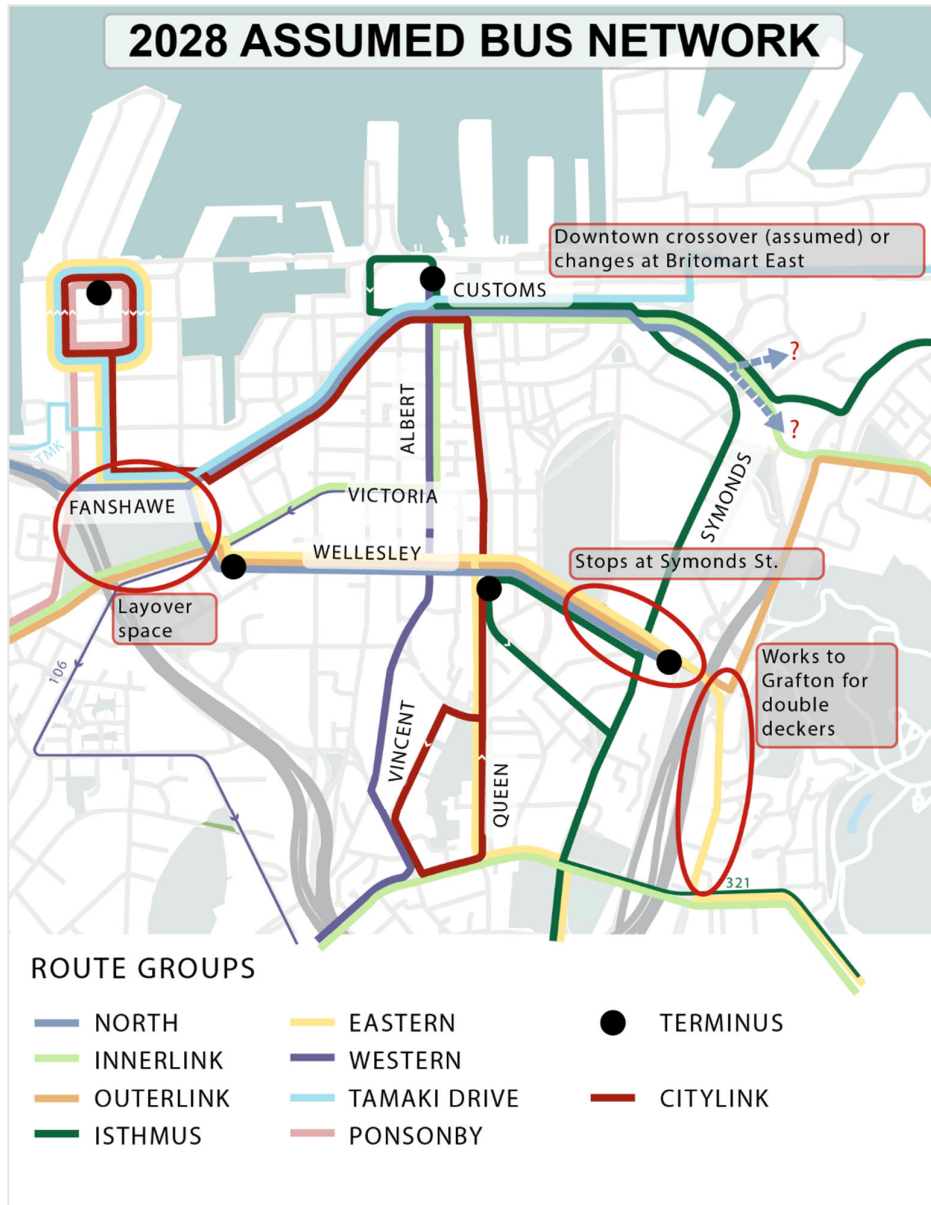


Figure 3: Midtown Crossover essential infrastructure and service changes

To ensure the success of the Midtown Crossover the following infrastructure and service changes are highly desirable:

- Tāmaki Drive services no longer terminate at Britomart East, but at Wynyard or an alternate location in the western City Centre (this is to reduce the number of buses terminating downtown)
- New Downtown East bus facilities to be completed, or Downtown Crossover completed
- Grafton Road bus priority
- Full Wellesley Street upgrades to be completed
- New high-quality stops to be provided on Wellesley Street adjacent to Symonds Street to serve the Learning Quarter precinct and allow easy interchange between Symonds and Wellesley Street buses

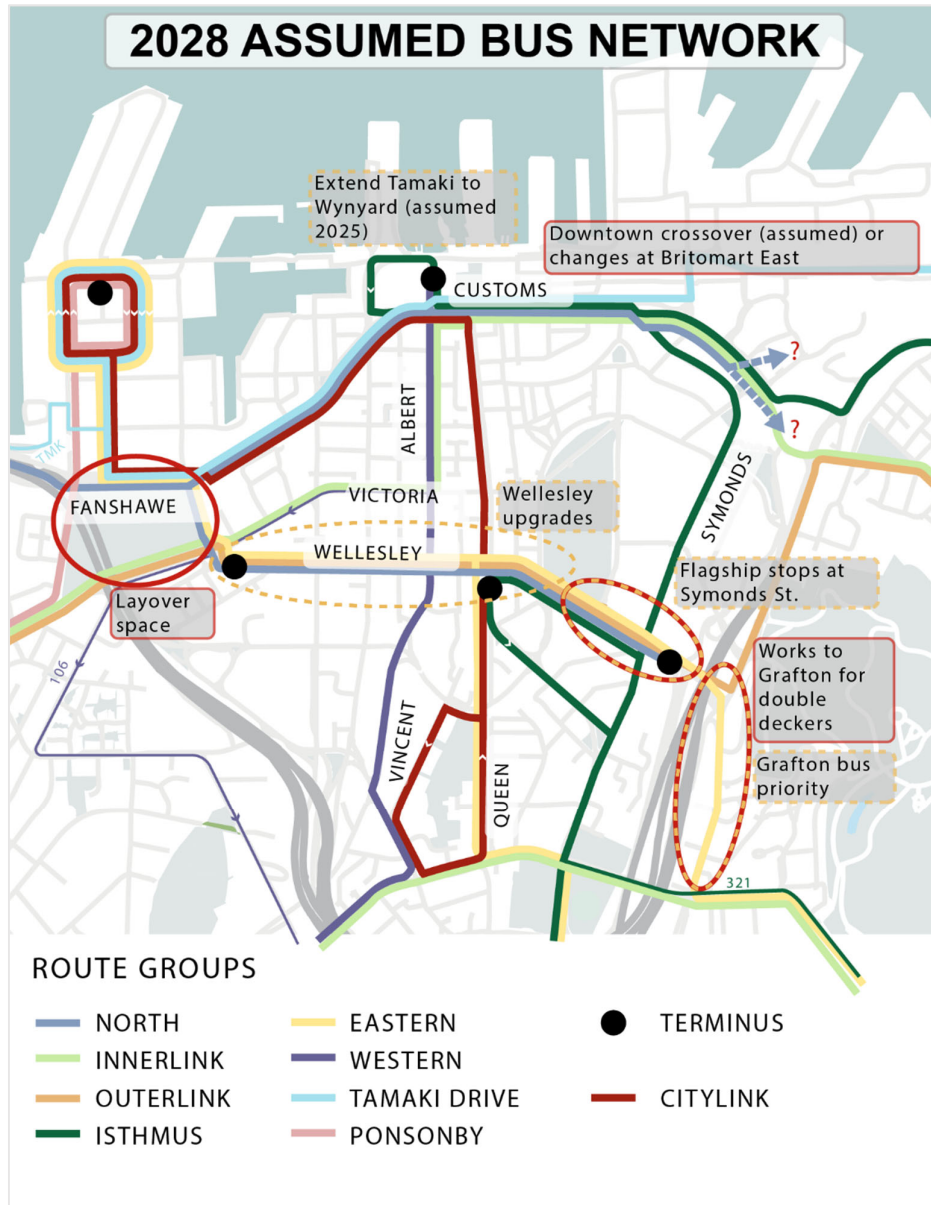


Figure 4: Midtown Crossover essential and desirable infrastructure and service changes

2.3 Downtown Crossover

The 'Downtown Crossover' is a proposed major change to City Centre bus routing. This plan was proposed during early workshoping for the Bus Reference Case update in 2019.

Previously, one of the core assumptions of Downtown bus terminals work undertaken is that bus services arriving in downtown should not cross the Queen Street valley, but rather terminate to the east or west of Queen Street, depending on which side they arrive in the city centre.

However, following the second stakeholder workshop, an additional bus routing option was developed that would be supported by stakeholders and potentially address some issues with Downtown bus circulation and terminal capacity (including the recent removal of Quay Street as a potential terminal location and unresolved issues regarding western bus circulation), while being consistent with the emerging Access for Everyone transport strategy described in the City Centre Master Plan⁶ refresh, which was adopted in March 2020. The scenario involves a 'Downtown Crossover' pattern whereby North Shore buses currently terminating on Lower Albert Street would be extended from Fanshawe Street via Customs Street to terminate east of the City Centre and buses that were planned to terminate at Britomart East would be extended west via Customs Street to terminate at Lower Albert Street. Because of its ability to meet a number of wider stakeholder objectives, this alternative scenario has been identified by Auckland Transport as the emerging preferred option and is supported by the stakeholder groups that were involved in the BRC workshopping and has been adopted by Auckland Transport as the assumed future scenario. However, substantial additional work outside the scope of the BRC will be required to advance this option.

The Downtown Crossover will entail running Northern Express and Onewa Road services through downtown via Customs Street to a terminal location east of downtown. Most or all buses currently assumed to terminate at Britomart East will continue via Customs Street and terminate on Lower Albert Street or Wynyard Quarter.

The Downtown Crossover option will involve the following specific changes to the assumed baseline bus network. These changes are assumed to take place from 2028:

- NX1 services would not terminate at Lower Albert Street, but instead continue in-service via Customs Street and Beach Road to terminate on the eastern edge of the City Centre (location to be determined)
- Onewa Road services (95 and 97) services would not terminate at Quay Street, but instead continue in-service via Customs Street and Beach Road to terminate on the eastern edge of the City Centre (location to be determined)
- Isthmus services (22, 24, 27) that were previously assumed to terminate at Britomart East continue west via Customs Street and terminate at the Lower Albert Street Bus Interchange
- Tāmaki Drive services (TāmakiLink, 76) extended via Customs Street to terminate at SkyPath (TMK) or in Wynyard Quarter (76)

The following downtown services would remain unchanged:

- Western services (11, 18, 105, 106, 195, 209, WX1) continue to use Lower Albert Street
- Tāmaki Drive services (774, 775) continue to use Customs Street and terminate in Wynyard Quarter
- The InnerLink and CityLink would remain unchanged
- The 321 and 755 continue west via Customs Street and terminate at Albert Street and Quay Street, either in the Lower Albert Street Bus Interchange or at the current Onewa Road services stops on Quay Street if capacity is limited in LABI. However, more detailed analysis would be needed to understand whether there would be sufficient stopping and layover space in this location in addition to the isthmus services.

2.4 North-Western busway interim improvements

Auckland Transport is currently progressing delivery of interim improvements to buses on the North-Western corridor, working towards the rollout of a rapid transit system on this corridor⁷. Ahead of any future decision or delivery of light rail, AT and Waka Kotahi propose:

⁶ <https://aucklandccmp.co.nz/access-for-everyone-a4e/>

⁷ <https://at.govt.nz/projects-roadworks/public-transport-improvements-for-the-northwest/>

- A series of early deliverables (1 - 5 years), that focus on interim bus interchanges at Westgate, Lincoln Road and Te Atatu, supported by extensions to bus shoulder lanes; and
- Future bus rapid transit that is focussed on further bus interchange development, including park and ride and busway development (5+ years), in a manner that does not preclude conversion to light rail.

These improvements include consolidation of western services into the City Centre.

The through services to the City Centre will be:

- All-day **Wx1** via SH16 between Fred Taylor Drive and Newton Road. This to have a headway of at least every 15-minutes during the day
- New **11t/w** which commences at the new facilities at the Northwest Centre (Westgate) and uses the old paths of the 14t/w through to Lincoln Road where it will access SH16 through to Point Chevalier, then use Great North Road into the City. This is to have a headway of at least every 15-minutes at all-times (5:30am to midnight)

The following services will be eliminated or removed from the City Centre:

- **110** – replaced with the **11t**
- **125x** – replaced with additional **125** trips, with transfer at Westgate for onward journeys to the city
- **129** – shortened to Lincoln Road facilities where passenger will transfer to either **Wx1 or 11t/w**
- **132, 132x, 133, 133x** – replaced with an upgraded 131, (#13) so passengers accessing the city will transfer to either **Wx1 or 11t/w** at the new facilities at Te Atatu Road
- **134** – modified to continue to the northern part of Te Atatu peninsula rather than the city. Passengers will transfer to either **Wx1 or 11t/w** at the new facilities at Te Atatu Road to access the city.
- **195** – modified to service Williamson Avenue to replace 134 service

For the purposes of this BRC, these changes are expected to be in place by 2025. No additional changes are assumed for 2028, except for additional trips on the 11 and WX1 services.

3 City Centre Termini

This section discusses each of the six bus terminal areas proposed in the Auckland City Centre, expected timelines for development, and how service patterns to these terminals are expected to evolve over time. Peak and off-peak volumes are provided for each terminal.

Well-designed and functioning terminals are essential to ensure efficient bus operations that offer a high level of customer experience. Bus terminals also need to be carefully designed to integrate into the City Centre context, where pedestrian activity and land values are high, and both on- and off-street space is at a premium.

Bus terminals are required in the Auckland City Centre to facilitate a range of both passenger and operational needs. Bus terminals serve as the first and last stop for passengers, and should offer high quality passenger facilities including shelter, customer information and be in legible locations close to major destinations. Bus terminals also need to ensure operational requirements are met. This includes layover space for buses to wait between trips (recovery) and allow drivers to take required rest breaks, and additional space for buses waiting to enter service on time in the evening peak (staging). Layovers and staging close to departure stops are essential to ensure buses depart on time, and sufficient layover space is required to cover the large variability in travel time on some trips due to traffic. Facilities are also required for drivers to be able to take short rest breaks, including adjacent toilets.

Bus terminals in Auckland City Centre will take a range of different forms and scales. Current City Centre termini consist of compact on-street facilities, utilising available kerbside space for both passenger stops and

operational requirements. These stop-based facilities are generally supported by dedicated kerbside layover spaces in a nearby location. Locations are chosen with an understanding of balancing competing uses for limited kerb spaces. There is limited availability of kerbside space in the City Centre, which can impact bus operations and reliability. Therefore, Auckland Transport is pursuing a strategy to provide off-street terminals have been proposed. These off-street facilities may include passenger stops, though stops can also be located on nearby streets if this offers greater connectivity for passengers. The size of the terminal will vary depending on the number of buses terminating at that location, but the limited availability of land in the city centre generally necessitates as compact a design as possible. Table 3-1 and Figure 5, Figure 6, and Figure 7 show bus routes and volumes terminating at on-street versus off-street termini in the horizon years.

Table 3-1: Bus routes terminating on-street versus off-street

Year	2018	2028
LABI purpose-built on-street terminal		
Routes	NX1, 95, 97	WX1, 11, 18, 22, 24, 27, 105, 106, 195, 321, 755
Other on-street termini		
Termini	AUT Britomart East Civic Customs West Hobson Street St James Symonds Victoria Street Wynyard	St James Victoria Park
Routes	CTY, 20, 25, 252, 253, 75, 76, 774, 775, 70, 72X, 295, 30, 309, 309X, NX1, NX2, 95, 97, 82, 101, 802, 923, 924, 931, 933, 939	25, 252, 253, 70, 72X, 295, 30, 309, 309X
Off-street termini		
Termini	-	Beach Road Learning Quarter (Grafton Gully) Wynyard (Jellicoe)
Routes	-	NX1, NX2, CTY, 20, 75, 76, 774, 775, 95, 97, 82, 101, 802, 923, 924, 931, 933, 939

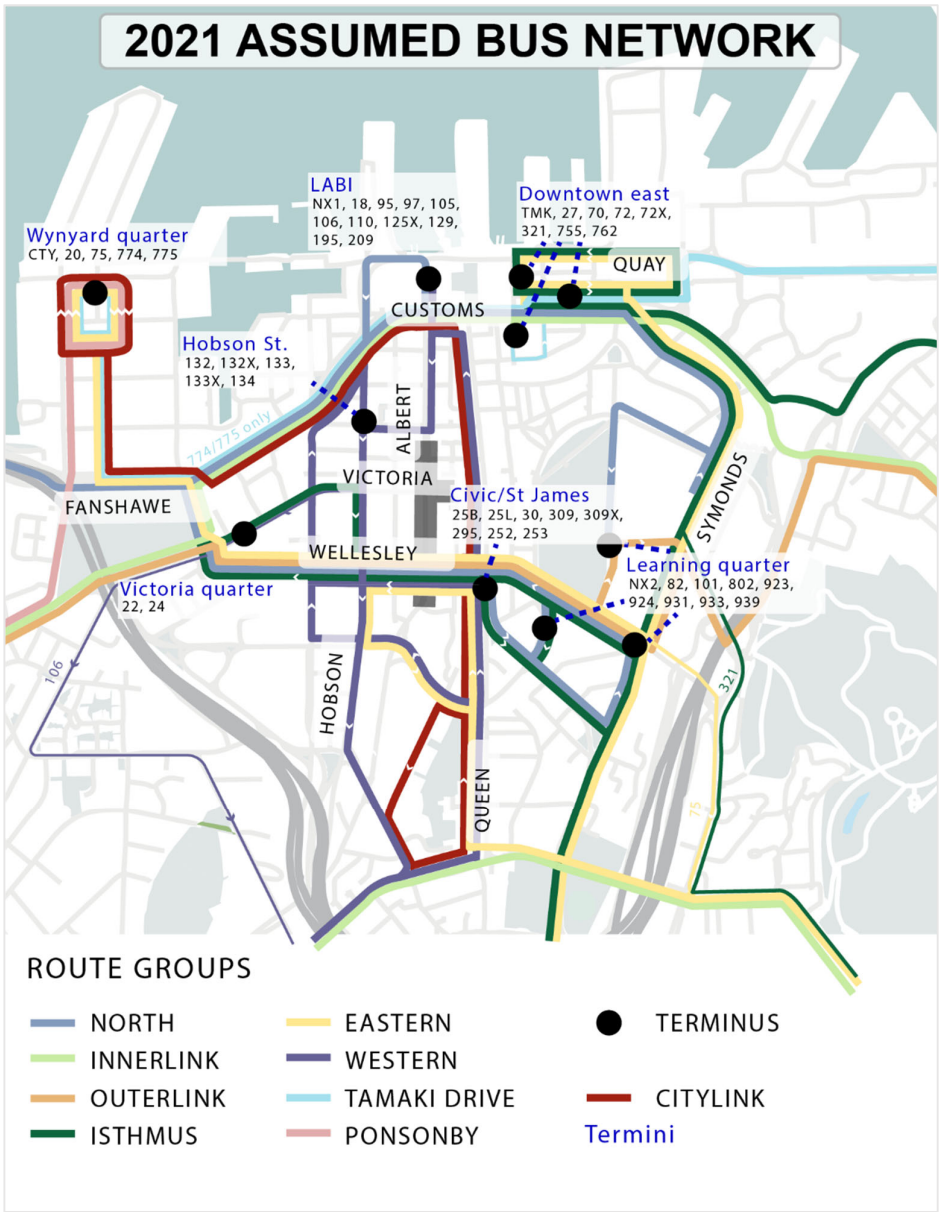


Figure 5: Expected bus routes and termini, 2021

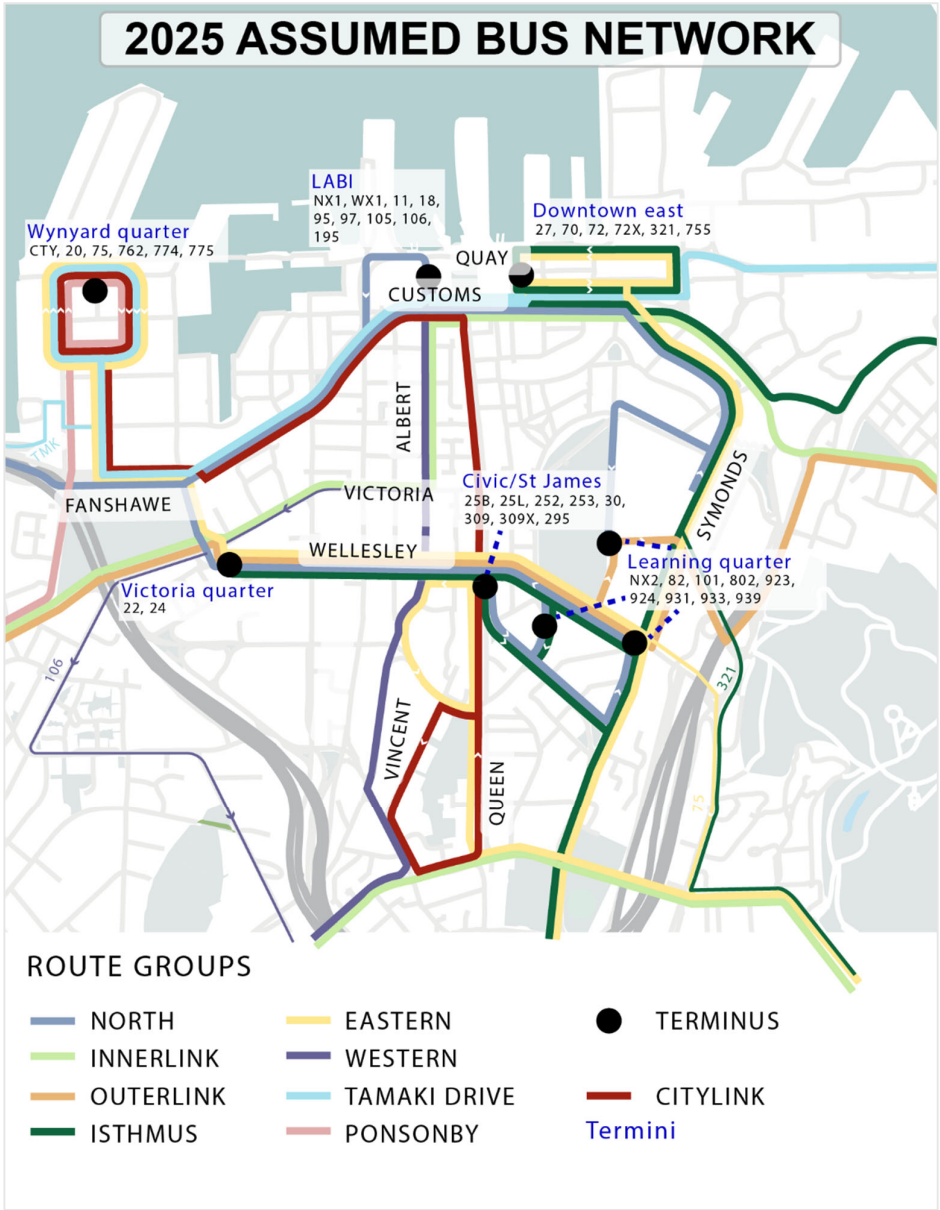


Figure 6: Expected bus routes and termini, 2025

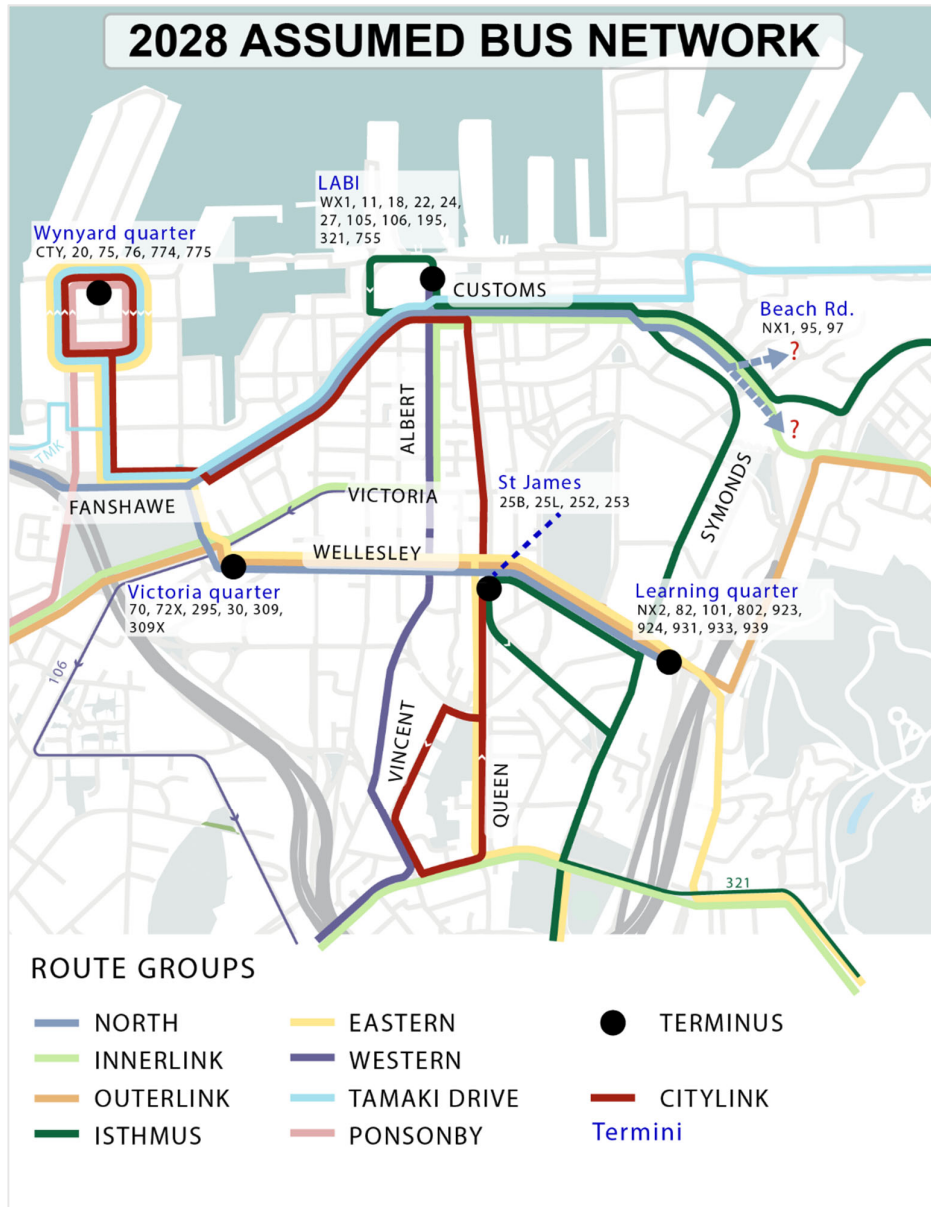


Figure 7: Expected bus routes and termini, 2028

Termini at Grafton Gully and Beach Road have yet to undergo detailed planning or construction. It is expected that projected terminating volumes at each could be accommodated with new facilities but will approach the maximum capacity that could feasibly be provided at Grafton Gully.

3.1 Downtown East Bus Facilities

The current layout of bus facilities in Downtown East was implemented because of CRL construction in Lower Queen Street and intended as a temporary arrangement. This involves bus stops on Commerce Street and Customs Street, supported by layover on Quay Street. Buses circulate either via Quay Street, Commerce Street and Customs Street (anti-clockwise only), or Customs Street, Commerce Street, Fort Street and Gore Street (both directions).

Various options have been investigated for improving or replacing the Downtown East facilities in their current general vicinity, however no appropriate solution has been found. Previous proposals (Known as the Britomart East Bus Interchange) but did not proceed as this was deemed incompatible with the vision for the Downtown Waterfront area⁸.

The emergence of the 'Downtown Crossover' as the preferred option for circulation of buses in the Downtown area has meant a Downtown East terminal facility will no longer be required in the long term. However, the 'Downtown Crossover' requires new infrastructure and land and is not expected to be implemented until 2028. Therefore, the current terminal arrangements are assumed to remain in place in 2021 and 2025, except for the extension of some Tāmaki Drive services to Wynyard. However, the Downtown East area will remain an important bus stop and passenger interchange area that will be crucial to the functioning of the City Centre bus network. Customs Street will play an increasingly important role for bus operations when some Tāmaki services are extended to Wynyard in 2021 and 2025, and especially following implementation of the Downtown Crossover in 2028. Existing on-street bus terminal stops at Downtown East will be discontinued in 2028 when a new bus terminal is provided at Beach Road as part of the Downtown Crossover.

Table 3-2: Downtown East and Beach Road bus routes and volumes

Year	2018 (Downtown East)	2021 (Downtown East)	2025 (Downtown East)	2028 (Beach Road)
Terminating services				
Routes	TMK, 27, 70, 72X, 321, 755, 762, 774, 775	TMK, 27, 70, 72X, 321, 755, 762	27, 70, 72X, 321, 755	NX1, 95, 97
AM peak inbound	57	59	51	64
Off-peak	22	24	18	20

3.2 Lower Albert Bus Interchange

The Lower Albert Bus Interchange (LABI) will be located on Lower Albert Street between Customs Street and Quay Street. The west side of LABI will function largely as it does today, being the drop-off, staging and departure point for Northern Express 1 (NX1) services (until 2028). The west side is also used for some drop-off and layover for Onewa Road (95 & 97) services. However, due to the continued growth of both NX1 and Onewa Road services this arrangement is not able to be retained. The Downtown Crossover will relocate the NX1 and Onewa Road services to a new terminal near Beach Road in 2028. This will allow isthmus services (22, 24, 27), as well as 321 and 755, to be extended from Britomart East to LABI.

The east side of LABI will be open for use as a bus terminal from 2021, when CRL and Commercial Bay works are completed. During the CRL C3 works (2021-2024) western services will be split. Most (18, 105, 106, 195, 209, 110, 125X, 129) will have their last stop on Queen Street at Customs Street and first stop in LABI. Henderson and Te Atatu services (132/X, 133/X, 134) will remain in their current location on Hobson Street near Wyndham Street.

From 2025 the east side of LABI is intended to be the first stop for all western buses that leave the city via Albert Street. These services currently terminate at various locations around the City Centre including Customs Street near Queen Street; Victoria Street between Queen Street and Albert Street; and Hobson Street near Wyndham Street.

⁸ http://infocouncil.aucklandcouncil.govt.nz/Open/2019/03/CEN_20190327_AGN_8345_AT.PDF

Western buses are intended to have their final drop-off stop on northbound Albert Street immediately before Customs Street. From here they need to access the departure stop, which is located on Lower Albert Street one block to the north of the final stop, in the southbound direction. This will require buses to circulate using Fanshawe Street, Market Place, Pakenham Street to layover on Sturdee Street before turning into Hobson Street and Quay Street. This loop would also require an unsignalised right turn across the Market Place cycleway which may cause conflict between right turning buses and bikes.

Table 3-3: Lower Albert Bus Interchange bus routes and volumes

Year	2018	2021*	2025**	2028**
Terminating services				
Routes	NX1, 95, 97	NX1, 18, 95, 97, 105, 106, 110, 125X, 129, 195, 209	NX1, WX1, 11, 18, 95, 97, 105, 106, 195	WX1, 11, 18, 22, 24, 27, 105, 106, 195, 321, 755
AM Peak	66	97	100	114
Off-peak	16	32	40	51

*Includes services terminating on Queen Street and starting at LABI

**Includes services terminating on Albert Street immediately south of Customs Street

3.3 Learning Quarter

North Shore buses that serve the Learning Quarter, and route 101 from Point Chevalier, currently terminate on-street in various locations:

- NX2 services via Midtown use Wakefield Street, Symonds Street and the upper level of Wellesley Street East
- North Shore services via Midtown from Takapuna, Northcote and Bayswater (82, 802, 923, 924) use Mayoral Drive opposite AUT
- Onewa Road to University of Auckland services via Downtown (931, 933, 939) terminate on Princes Street
- Route 101 uses Grafton Road between Symonds Street and SH16

Auckland Transport has identified a need in the medium term to consolidate these services at an off-street terminal site located in Grafton Gully adjacent to Wellesley Street East and State Highway 16. This site would allow all terminal operations to be moved off-street, allow for future growth in volumes and provide a high-quality facility for passengers. This facility could potentially include new high-quality stops for isthmus services using the Wellesley Street and Grafton Road corridor, thus improving the interchange facilities for isthmus bus passengers. This would also relieve pressure on the on-street terminal on Symonds Street and Wellesley Street as future demand is expected to exceed capacity by 2028. However, due to the complexities and cost involved with this project, the Grafton Gully facility is not expected to be available until 2028. It is assumed that all North Shore services will remain at their current locations until the Grafton Gully terminal is completed.

Table 3-4: Learning Quarter bus routes and volumes

Year	2018*	2021*	2025*	2028
Terminating services				
Routes	NX2, 82, 101, 802, 923, 924, 931, 933, 939	NX2, 82, 101, 802, 923, 924, 931, 933, 939	NX2, 82, 101, 802, 923, 924, 931, 933, 939	NX2, 82, 101, 802, 923, 924, 931, 933, 939
AM Peak	59	67	66	71
Off-peak	17	17	19	20

*Includes services terminating in the Learning Quarter that would be shifted to the Grafton Gully Terminal in 2028.

3.4 Wynyard Quarter

The Wynyard Quarter area is rapidly developing with increasing numbers of jobs, residents and attractions. The area also has a mandated maximum 30% of trips to and from Wynyard Quarter to be undertaken by single occupant vehicles⁹. This requires a high-quality level of bus service to connect Wynyard Quarter to the wider City Centre, including to Aotea and Britomart. The design of the street network in Wynyard Quarter (particularly the corner turning radii and lane widths) also restricts options for routing buses and the number of buses that can be accommodated. Various investigations have been undertaken into providing a bus terminal facility in Wynyard Quarter, notably the 'Wynyard Fanshawe Indicative Business Case'. Auckland Transport and Panuku are engaged in discussions to convert the Jellicoe Street carpark into an off-street bus terminal. It is assumed that this new terminal will be available by 2025. Until then, buses terminating in Wynyard Quarter will continue to use the terminal stop on Jellicoe Street, supported by layover spaces on Beaumont Street.

Peak-only 774 / 775 services will be extended to Wynyard in 2021. The remaining Tāmaki services, TMK and 762 (upgraded to frequent service 76 by 2028), will be extended to Wynyard Quarter in 2025. Subject to feasibility, TMK will also serve Wynyard Quarter, but will be extended to the Harbour Bridge SkyPath via Daldy Street, Gaunt Street, Beaumont Street and Westhaven Drive.

Table 3-5: Wynyard Quarter terminating bus routes and volumes

Year	2018	2021	2025	2028
Terminating services (Jellicoe Street)				
Routes	CTY, 20, 75	CTY, 20, 75, 774, 775	CTY, 20, 75, 762, 774, 775	CTY, 20, 75, 76 ¹⁰ , 774, 775
AM Peak	21	31	38	39
Off-peak	18	19	22	24

3.5 Victoria Quarter

Sandringham and New North Road services (22, 24) currently terminate on Victoria Street between Dock & Graham Streets. A new terminal facility is expected to be provided around Victoria Park by 2025, as part of the

⁹ <https://www.wqtma.co.nz/about-us> accessed 1 October 2020

¹⁰ 762 upgraded to frequent service 76 by 2028

Wellesley St Bus Improvements project. Buses would terminate on Wellesley Street between Sale Street and Halsey Street, then turn around out of service utilising Halsey Street, Fanshawe Street, layover on Beaumont Street and Victoria Street, before commencing their outbound services from stops on Wellesley Street between Victoria Street and Sale Street. Following implementation of the Midtown Crossover by 2028, isthmus services will be rerouted to terminate at LABI and the Victoria Quarter terminal will be used by Botany and Howick (70, 72X) and Manukau Road services (30, 309, 309x, 295).

Table 3-6: Victoria Quarter terminating bus routes and volumes

Year	2018*	2021*	2025	2028
Terminating services				
Routes	22, 24, 221X, 223X, 243X, 248X**	22, 24	22, 24	70, 72X, 295, 30, 309, 309X
AM Peak	36	36	37	45
Off-peak	8	12	12	20

*Services utilise the terminal stops on Victoria Street between Dock and Graham Streets

** Sandringham and New North Road express trips will be converted to local service in 2021

3.6 Queen Street by The Civic & St James

Queen Street between Wellesley Street and Wakefield Street is an important terminal for Dominion Road services (25, 252, 253) in the southbound direction and Manukau Road services (30, 309, 309X, 295) in the northbound direction. Manukau Road services will no longer use The Civic in 2028, when they will be extended to Victoria Park. St James will remain an important terminal location for Dominion Road services into the future.

Table 3-7: Civic & St James terminating bus routes and volumes

Year	2018	2021*	2025	2028
Terminating services				
Routes	25, 252, 253, 30, 309, 309X, 295	25, 252, 253, 30, 309, 309X, 295	25, 252, 253, 30, 309, 309X, 295	25, 252, 253
AM Peak	46	44	52	24
Off-peak	20	20	22	12

*Dominion Road peak express services will drop off on Mayoral Drive between Queen Street and Wakefield Street during the CRL C3 works (2021-2024) but will return to the St James terminal following completion of works.

4 City Centre Corridors

This section discusses seven major bus corridors that exist or are proposed in the Auckland City Centre. This includes expected timelines for development and how service patterns along these corridors will evolve over time. Bus routes and volumes are outlined for each major section of each corridor.

4.1 Symonds Street

The bus infrastructure along the Symonds Street and Anzac Avenue corridor is generally expected to remain unchanged over the next decade. However, the bus service patterns will change significantly once the Midtown Crossover is implemented from 2028. This will see a decrease in bus volumes south of Wellesley Street, and an increase in bus volumes north of Wellesley Street, leading to a fairly constant level of bus volumes along the corridor (which differs from the current situation where a number of services join or leave the corridor at different points). The City Centre Master Plan envisions a transit mall without general traffic on Symonds Street between Wellesley Street and Grafton Road¹¹. However, this is still a high-level concept which may not be realised within the time horizon of the BRC.

Table 4-1: Symonds Street bus routes and volumes (Karangahape Road to Wakefield Street)

Year	2018	2021	2025	2028
Routes	22, 24, 25, 27, 70, 72x, 75, 221X, 223X, 243X, 248X	22, 24, 25, 27, 70, 72x SB only: 75	22, 24, 25, 27, 70, 72x SB only: 75	22, 24, 25, 27, 321
AM Peak (NB / SB)	104 / 32	96 / 34	101 / 34	78 / 32
PM peak (NB / SB)	39 / 89	43 / 92	44 / 94	36 / 78
Off-peak (NB / SB)	41 / 36	43 / 38	43 / 38	35 / 35

Table 4-2: Symonds Street bus routes and volumes (Wakefield Street to Mount Street)

Year	2018	2021	2025	2028
Routes	22, 24, 27, 70, 72x, 75, 221X, 223X, 243X, 248X NB only: NX2, 25	27, 70, 72x NB only: NX2, 22, 24, 25	27, 70, 72x NB only: NX2, 22, 24, 25	22, 24, 25, 27, 321 NB only: 25
AM Peak (NB / SB)	133 / 24	129 / 15	131 / 15	78 / 24
PM peak (NB / SB)	45 / 78	53 / 40	53 / 42	36 / 67
Off-peak (NB / SB)	49 / 24	52 / 13	52 / 14	35 / 23

¹¹ <https://aucklandccmp.co.nz/opportunities/symonds-street-redesigned-to-support-the-learning-quarter/> accessed 9 September 2020

Table 4-3: Symonds Street bus routes and volumes (Wellesley Street to Grafton Road)

Year	2018	2021	2025	2028
Routes	27, 70, 72x SB only: OUT, 22, 24, 75, 101, 221X, 223X, 243X, 248X	27, 70, 72x SB only: OUT, 101	27, 70, 72x SB only: OUT, 101	22, 24, 27, 321
AM Peak (NB / SB)	33 / 28	41 / 20	43 / 20	67 / 24
PM peak (NB / SB)	12 / 85	15 / 51	15 / 53	24 / 65
Off-peak (NB / SB)	12 / 29	14 / 18	14 / 18	23 / 23

Routes that operate on specific sections of the corridor are as follows:

- Outer Link & 101 – southbound between Grafton Road and Wellesley Street, until the Grafton Gully Terminal is completed
- Hospitals service (321) – between Customs Street and Grafton Road, until the implementation of the Midtown Crossover when these services will run the length of Symonds Street
- Dominion Road services (25B, 25L) – inbound between Karangahape Road and Wellesley Street, and outbound between Wakefield Street and Karangahape Road
- New North Road (22), Sandringham (24) and Remuera Road (75) services
 - Inbound: currently operate northbound to Wellesley Street
 - Outbound: currently operate southbound from Waterloo Quadrant. From 2021 outbound 22 & 24 services will operate from Wakefield Street and outbound 75 services will not run on Symonds Street.
 - From 2028 22 & 24 services will run the full length of Symonds Street in both directions and 75 services will be removed from Symonds Street in both directions.
- NX2 – inbound services run northbound between Wakefield Street and Wellesley Street, and will be removed once the Grafton Gully terminal opens (expected 2028)

4.2 Wellesley Street

Diversions for the City Rail Link have temporarily required buses to be removed from much of Wellesley Street. Wellesley Street will reopen to buses in mid-2021. The next phase of CRL works will close Victoria Street at Albert Street, which will require diversion of outbound New North Road (22), Sandringham (24) and Remuera Road (75) services to Wellesley Street eastbound. Remuera Road services will travel the full length of Wellesley Street. New North Road and Sandringham buses will use Wellesley Street from Hobson Street to Kitchener Street. This will require enabling the right turn from Wellesley Street East to Mayoral Drive (at Kitchener Street). Inbound NX1 buses will also use this new right turn to avoid Queen Street.

The Wellesley Street corridor is set to be one of the two critical east-west bus corridors in Auckland City Centre, linking the Learning Quarter, Aotea Station, the Convention Centre and Victoria Quarter. The Wellesley Street Bus Improvements project is currently investigating bus improvements to this corridor, including stop locations, terminal requirements and bus priority. Some upgrades are expected to be completed in 2025 between Halsey Street and Kitchener Street. Full completion of the project is expected by 2028 which will convert Wellesley Street to a high-quality transit street with a bus-only transit mall between Elliott Street and Lorne Street. This infrastructure paves the way for the Midtown Crossover. This will also provide infrastructure supporting consolidation of buses terminating in the Learning Quarter (North Shore services and 101), which also requires a new off-street terminal at Grafton Gully by 2028.

When the Midtown Crossover is implemented (expected 2028), New North Road and Sandringham Road services will be removed from Wellesley Street and replaced by Howick and Botany services (70, 72X) from Grafton Road. Remuera Road services will stay on Wellesley Street, but will enter from Grafton Road instead of Symonds Street. Manukau Road services will travel on Wellesley Street from Queen Street to terminate at Victoria Park.

Table 4-4: Wellesley Street bus routes and volumes (Queen Street to Albert Street)

Year	2018	2021	2025	2028
Routes	OUT, NX2, 82, 101, 802, 923, 924 WB only: 22, 24, 30, 75, 221X, 223X, 243X, 248X, 295, 309, 309X	OUT, NX2, 22, 24, 75, 82, 101, 802, 923, 924 WB only: 30, 132, 133, 134, 295, 309, 309X	OUT, NX2, 22, 24, 75, 82, 101, 802, 923, 924 WB only: 30, 295, 309, 309X	OUT, NX2, 30, 70, 72X, 75, 82, 802, 101, 295, 309, 309X, 923, 924, 931, 933, 939
AM Peak (EB / WB)	60 / 74	77 / 83	76 / 81	104 / 79
PM peak (EB / WB)	28 / 82	66 / 103	66 / 99	83 / 104
Off-peak (EB / WB)	26 / 38	38 / 51	38 / 47	47 / 52

4.3 Albert/Vincent/Pitt Streets

The Albert Street corridor will once again be a major north-south corridor through the City Centre. However, this is currently disrupted by CRL works and the only section used by buses is southbound on Pitt Street before Karangahape Road. Following completion of City Rail Link construction, Albert Street will be reinstated as a high-quality transit street, with new bus stops and bus priority along the entire length. The first section (Quay Street to Wyndham Street) will be delivered in 2020, allowing some outbound western services to begin service at LABI and use Albert Street southbound between Quay Street and Wyndham Street from 2021. All western services will use Albert Street, Vincent Street and Pitt Street in both directions once the second section (Wyndham Street to Mayoral Drive/Cook Street) reopens upon completion of the CRL works at the end of 2024. Note that route numbers will change due to consolidation of western services through the North West Interim Bus Improvements.

The CRL C3 works will close the Albert Street corridor to buses from Wyndham Street to Cook Street. The works will also reduce Pitt Street to one lane in each direction between Greys Avenue and Karangahape Road. Maintaining this connection will be essential to ensure western buses can continue to run out of the City Centre.

Table 4-5: Albert Street bus routes and volumes (north of Victoria Street)

Year	2018	2021 (SB Quay St to Wyndham St only)	2025	2028
Routes	-	18, 125X, 110, 129, 195, 209	INN, 11, 18, 105, 106, 195, WX1	INN, 11, 18, 105, 106, 195, WX1
AM Peak (NB / SB)	-	0 / 10	41 / 28	50 / 37
PM peak (NB / SB)	-	0 / 26	29 / 44	34 / 54
Off-peak (NB / SB)	-	0 / 10	29 / 29	33 / 34

4.4 Victoria Street

Victoria Street is currently an important corridor for the InnerLink (west of Queen Street) and eastbound isthmus buses (22, 24, 75). Westbound Route 75 services are temporarily running on Victoria Street between Queen Street and Halsey Street due to the closure of Wellesley Street for CRL C3 works. Victoria Street is currently used by some western buses in the westbound direction between Queen Street and Hobson Street, with terminal stops between Queen Street and Albert Street. Once the northern section of Albert Street is available for western buses (expected early 2021) this terminal will relocate to Lower Albert Street.

When Victoria Street at Albert Street is closed for City Rail Link construction, isthmus bus routes will be removed from Victoria Street east of Hobson Street, and the InnerLink will be shifted to run via Halsey Street and Fanshawe / Customs Street. When Victoria Street is reinstated post-CRL, there will be one lane in each direction between Federal Street and Elliott Street and buses will no longer use Victoria Street between Queen Street and Albert Street.

Post CRL, it is assumed that the InnerLink will continue to use Victoria Street between Albert Street and College Hill. The InnerLink provides a valuable connection from midtown (including future Aotea station) to Ponsonby, as well as serving the SkyCity precinct which is a major generator of patronage for the InnerLink. However, the interaction of the InnerLink with the Linear Park project requires further discussion. Route 106 will also use Victoria Street west of Albert Street, though only in the westbound direction.

Table 4-4: Victoria Street bus routes and volumes (Hobson Street to Nelson Street)

Year	2018	2021	2025	2028
Terminating services				
Routes	EB only: 22, 24, 221X, 223X, 243X, 248X 75 WB only: INN, 106	22, 24 WB only: 106	INN WB only: 106	INN WB only: 106
AM Peak (EB / WB)	18 / 9	3 / 12	5 / 7	7 / 9
PM peak (EB / WB)	51 / 8	2 / 38	6 / 8	8 / 10
Off-peak (EB / WB)	18 / 9	2 / 12	6 / 8	8 / 11

4.5 Fanshawe Street

Fanshawe Street is the key corridor for buses entering the City Centre from the North Shore. It is also used by buses travelling between Britomart and Wynyard Quarter. A busway has previously been considered based on the future estimated volumes, but this work was put on hold when LRT was being considered to continue through to Wynyard. Should LRT not extend to Wynyard, it would be worth reviving planning for an urban busway which could result in reduced travel times, reliability benefits and an improved public realm.

Fanshawe Street can be divided into three major sections:

- Beaumont Street to Halsey Street – used by North Shore buses that traverse the city via Wellesley Street, as well as those that continue on Fanshawe Street. Buses travelling to Wynyard from the east also use this segment to Daldy Street. This will include all Tāmaki services from 2025.
- Halsey Street to Nelson Street – used by North Shore buses travelling along Fanshawe Street to Britomart and Downtown, as well as by buses travelling between Britomart and Wynyard Quarter. This will include all Tāmaki services from 2025.
- Nelson Street to Hobson Street – eastbound buses travelling to Britomart run along Sturdee Street and Customs Street West, while eastbound buses bound for Hobson Street and all westbound buses run along Fanshawe Street.

Table 4-6: Fanshawe Street bus routes and volumes (Daldy Street to Halsey Street)

Year	2018	2021	2025	2028
Routes	NX1, NX2, 82, 95, 97, 802, 923, 924, 931, 933, 939	CTY, NX1, NX2, 75, 82, 95, 97, 774, 775, 802, 923, 924, 931, 933, 939	CTY, TMK, NX1, NX2, 75, 82, 95, 97, 762, 774, 775, 802, 923, 924, 931, 933, 939	CTY, TMK, NX1, NX2, 75, 82, 95, 97, 76, 774, 775, 802, 923, 924, 931, 933, 939
AM Peak (EB / WB)	121 / 36	137 / 59	146 / 72	150 / 76
PM peak (EB / WB)	35 / 122	60 / 136	74 / 145	70 / 154
Off-peak (EB / WB)	33 / 31	48 / 49	58 / 59	61 / 68

Table 4-7: Fanshawe Street bus routes and volumes (Halsey Street to Nelson Street)

Year	2018	2021	2025	2028
Routes	CTY, NX1, 95, 97, 931, 933, 939	INN, CTY, NX1, 95, 97, 774, 775, 931, 933, 939	CTY, NX1, TMK, 762, 95, 97, 774, 775, 931, 933, 939	CTY, NX1, TMK, 76, 95, 97, 774, 775
AM Peak (EB / WB)	87 / 28	88 / 42	94 / 48	85 / 50
PM peak (EB / WB)	28 / 87	44 / 89	52 / 94	47 / 85
Off-peak (EB / WB)	28 / 28	34 / 35	38 / 38	40 / 42

4.6 Customs Street

Like Wellesley Street, Customs Street is set to be a key east-west corridor for buses, as outlined in the CCMP. However, relatively few buses currently travel along Customs Street past Queen Street. This will change when

the Downtown Crossover is implemented in 2028, making Customs Street the busiest bus corridor in the City Centre, and a step change in bus priority is needed. This will extend:

- North Shore services from LABI to a new terminal in the vicinity of Beach Road
- Isthmus services from Britomart East to LABI
- Remaining Tāmaki services from Britomart East to Wynyard

Access for Everyone is expected to reduce the role of Customs Street as a through route for general traffic. Additional improvements will be needed to upgrade Customs Street to provide high quality of service to the large number of buses that will be using it following the Downtown Crossover.

Customs Street currently has two distinct sections for bus operations:

- Albert Street to Commerce Street – used by buses that run east-west across the City Centre, including Britomart to Wynyard Quarter services, the InnerLink and Onewa Road to University of Auckland services.
- Commerce Street to Anzac Avenue – used by all services using the above section, as well as services accessing the Britomart East terminal stops.

This will change in 2028 with the Downtown Crossover when all remaining crosstown services downtown will use Customs Street for the entire length, except for the CityLink.

The following table shows the anticipated bus volumes on Customs Street between Queen Street and Albert Street. Under this proposal, Customs Street (by 2028) would carry as many buses as Fanshawe Street between Halsey Street and Beaumont Street does today.

Table 4-8: Customs Street bus routes and volumes (between Queen Street and Albert Street)

	2018	2021	2025	2028
Routes	CTY, 931, 933, 939 WB only: 105, 106	INN, CTY, 774, 775, 931, 933, 939 WB only: 105, 106	INN, CTY, TMK, 762, 774, 775, 931, 933, 939	INN, TMK, CTY, NX1, 22, 24, 27, 76, 95, 97, 321, 755, 774, 775
AM Peak (EB / WB)	22 / 18	27 / 35	35 / 37	121 / 128
PM peak (EB / WB)	12 / 30	26 / 33	43 / 36	127 / 121
Off-peak (EB / WB)	12 / 17	17 / 23	27 / 28	75 / 77

4.7 Karangahape Road

Karangahape Road is an important east-west corridor for buses and plays a key role in how western bus services access the City Centre. Karangahape Road will be impacted by several major projects over the coming years. The Karangahape Road enhancements will provide cycle lanes, improved pedestrian space and peak-period bus priority along the full length of the corridor. This is currently under construction and is expected to open by 2021¹². The City Rail Link construction will have a major impact on side streets on Karangahape Road and is likely to impact traffic flows. However, this will not result in any direct impacts to Karangahape Road itself.

¹² <https://at.govt.nz/projects-roadworks/karangahape-road-enhancements/>

Karangahape Road is a key corridor for four distinct groups of services: western (18, 105, 106, 110, 125X, 129, 132, 133, 134, 195, 209); InnerLink and North Shore routes traveling between Ponsonby and Newmarket (INN, 866, 966); Manukau Road (30, 295, 309, 309X); and the CityLink (CTY). Each of these is described below.

Western services (18, 105, 106, 110, 125X, 129, 132, 133, 134, 195, 209)

These routes use Karangahape Road eastbound between Great North Road and Queen Street, and westbound between Pitt Street and Great North Road. As North Western bus improvements are implemented the route pattern of the North West services will be simplified, and the number of unique western routes is expected to decrease from 13 to 5, though frequencies will stay relatively similar. When the CRL works are complete and Albert Street is reopened at end of 2024, western services will no longer use Karangahape Road between Pitt Street and Queen Street.

InnerLink (INN) and North Shore to Newmarket services (866 & 966) use Karangahape Road between Ponsonby Road and Symonds Street.

Manukau Road services (30, 295, 309, 309X) use Karangahape Road between Queen Street and Symonds Street.

CityLink (CTY) travels eastbound between Pitt Street and Queen Street.

Table 4-9: Karangahape Road bus routes and volumes (between Ponsonby Road and Pitt Street)

	2018	2021	2025	2028
Routes	INN, 18, 105, 110, 125X, 129, 132, 133, 134, 195, 209, 866, 966 EB only: 106	INN, 18, 105, 110, 129, 132, 133, 134, 195, 209, 866, 966 EB only: 106	INN, WX1, 11, 18, 105, 195, 866, 966 EB only: 106	INN, NX3, WX1, 11, 18, 105, 195, 966 EB only: 106
AM Peak (EB / WB)	53 / 29	59 / 29	56 / 31	67 / 42
PM peak (EB / WB)	31 / 51	31 / 55	35 / 53	40 / 65
Off-peak (EB / WB)	29 / 28	30 / 28	34 / 32	40 / 38

Table 4-10: Karangahape Road bus routes and volumes (between Queen Street and Symonds Street)

	2018	2021	2025	2028
Routes	INN, 30, 295, 309, 309X, 866, 966	INN, 30, 295, 309, 309X, 866, 966	INN, 30, 295, 309, 309X, 866, 966	INN, NX3, 30, 295, 309, 309X, 966
AM Peak (EB / WB)	32 / 31	26 / 28	33 / 34	37 / 37
PM peak (EB / WB)	34 / 25	28 / 26	35 / 30	40 / 36
Off-peak (EB / WB)	24 / 17	17 / 17	21 / 21	26 / 27

5 Key changes by date

The following section outlines the key changes to bus routing and infrastructure that are expected in each of the horizon years. This section is included for clarity and summarises information outlined in earlier sections. All these changes are reliant on assumptions discussed in previous sections.

5.1 2018

The 2018 Auckland City Centre bus network (pre-CRL closure of Wellesley St) is shown for comparative purposes in schematic form in Figure 8 below.

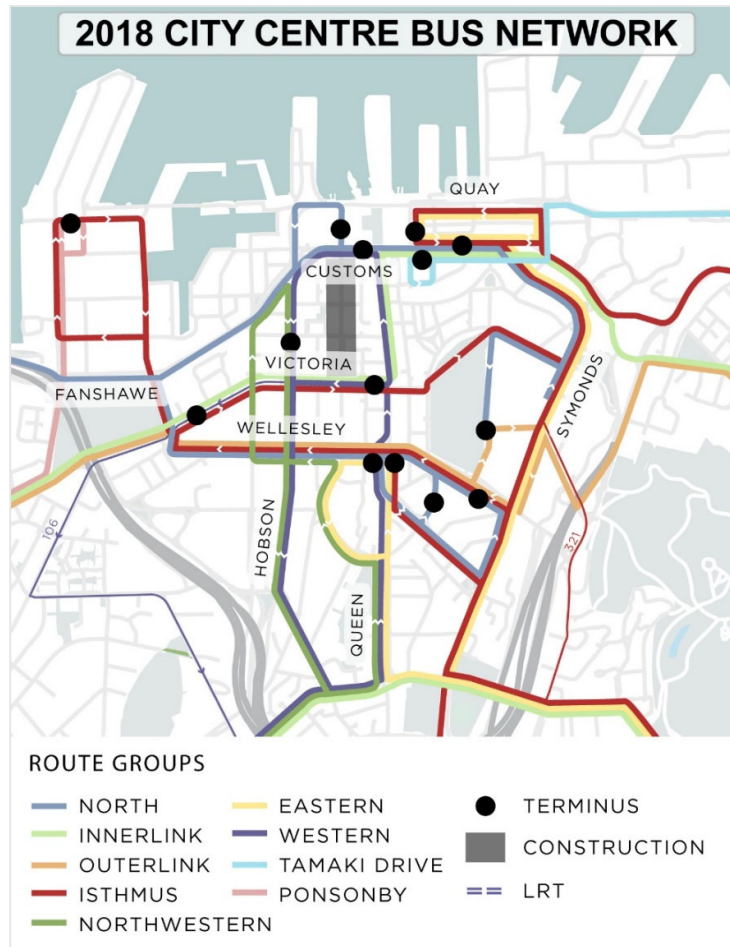


Figure 8: 2018 City Centre bus network

5.2 2021

The following key changes to infrastructure and bus routing are expected to occur by 2021. These changes include long-term (2021-24) diversions due to the CRL C3 works. There may be additional short-term diversions in place due to shorter works, e.g., Watercare works on Wellesley Street in 2021, but these have not been included in these assumptions:

- **Queen Street trial ongoing**

- The Queen Street trial to reduce general traffic and provide more priority for public transport and people walking and cycling will be ongoing. This is an ongoing project with co-design process. Specific details of future outcomes have not yet been determined.
- The **City Rail Link C3 (main works) contract underway**, involving multi-year closure of Mayoral Drive immediately south of Albert Street / Wellesley Street, full closure of Victoria Street at Albert Street and local access only on Albert Street between Wellesley Street and Wyndham Street
- **Albert Street reinstated** between Wyndham Street and Customs Street following completion of CRL construction in this section
- **Lower Albert Street Bus Interchange (LABI) completed** for bi-directional operation, supported by turnaround via Fanshawe Street, Market Place, Pakenham Street, Sturdee Street, Lower Hobson Street and Quay Street
- **Some western buses extended to LABI**
 - **18, 195, 209, 105, 106, 110, 125X, 129 extended to LABI** – diversion routing in place due to CRL C3 works closure of Mayoral Drive at Wellesley Street and Albert Street at Victoria Street
 - Inbound: via Queen Street (last stop), repositioning via Customs Street, Fanshawe Street, Market Place, Pakenham Street, Sturdee Street (layover), Lower Hobson Street, Quay Street and Albert Street (first stop)
 - Outbound: via Albert Street, Wyndham Street, Hobson Street, Pitt Street
 - **132, 133, 134 remain on Hobson Street at Swanson Street** – diversion routing in place due to CRL C3 works closure of Mayoral Drive at Wellesley Street and Albert Street at Victoria Street
 - Inbound: via Queen Street, Mayoral Drive, Cook Street, Nelson Street, Fanshawe Street, Hobson Street
 - Outbound: via Hobson Street, Pitt Street
 - **132X, 133X remain on Hobson Street at Swanson Street** – diversion routing in place due to CRL C3 works closure of Mayoral Drive at Wellesley Street and Albert Street at Victoria Street
 - Inbound: via Nelson Street, Fanshawe Street, Hobson Street
 - Outbound: via Hobson Street, motorway
 - **151X, 171X, 172X discontinued**
- Works completed to enable buses to **turn right from Wellesley Street East into Mayoral Drive** (for 22, 24, NX2);
- **Wellesley Street reinstated** between Elliott Street and Federal Street, allowing diverted Isthmus and North Shore buses to return routings used prior to February 2020 (except where noted):
 - **North Shore buses (82, 802, 923, 924) returns to former**
 - Inbound (EB): Returns to former routing via Wellesley Street, Queen Street, Wakefield Street and Mayoral Drive
 - Outbound (WB): Returns to former routing via Wellesley Street
 - **North Shore buses (NX2) inbound Wellesley E, Mayoral & Wakefield**
 - Inbound (EB): Returns to former routing via Wellesley Street East, new route via Mayoral Drive (at Kitchener Street) and Wakefield Street
 - Outbound (WB): Returns to former routing via Wellesley Street
 - **101 & OuterLink returns to former**
 - Eastbound: Returns to former routing via Wellesley Street and Princes Street
 - Westbound: Returns to former routing via Symonds Street and Wellesley Street

- **22, 24 outbound via Wellesley E, Mayoral & Wakefield** – diversion routing in place due to CRL C3 works closure of Victoria Street at Albert Street
 - Inbound (WB): Returns to former routing via Symonds Street, Wellesley Street, to terminate on Victoria Street West
 - Outbound (EB): Shifted from former routing (Victoria Street east of Hobson Street, Bowen Avenue and Waterloo Quadrant), to run via Victoria Street West, Hobson Street, Wellesley Street, Mayoral Drive (at Kitchener Street), Wakefield Street and Symonds Street
- **75 outbound via Wellesley & Grafton** – diversion routing in place due to CRL C3 works closure of Victoria Street at Albert Street
 - Inbound (WB): Returns to former routing via Symonds Street to Wellesley Street
 - Outbound (EB): Shifted from former routing (Victoria Street east of Hobson Street, Bowen Avenue and Waterloo Quadrant), to run via Wellesley Street, Grafton Road and Park Road
- **22x & 24x services discontinued & reallocated** to all-stop service (i.e., 22, 24) – no net change in number of bus trips
- **Inner Link via Fanshawe Street and Halsey Street** – diversion routing in place due to CRL C3 works closure of Victoria Street at Albert Street
- **774 / 775** (Tāmaki Drive peak only routes) **extended to Wynyard Quarter** via Daldy Street, Madden Street, Beaumont Street, Jellicoe Street
- **CTY, TMK, 762** no changes
- **95G, 97V peak-only overlays discontinued**

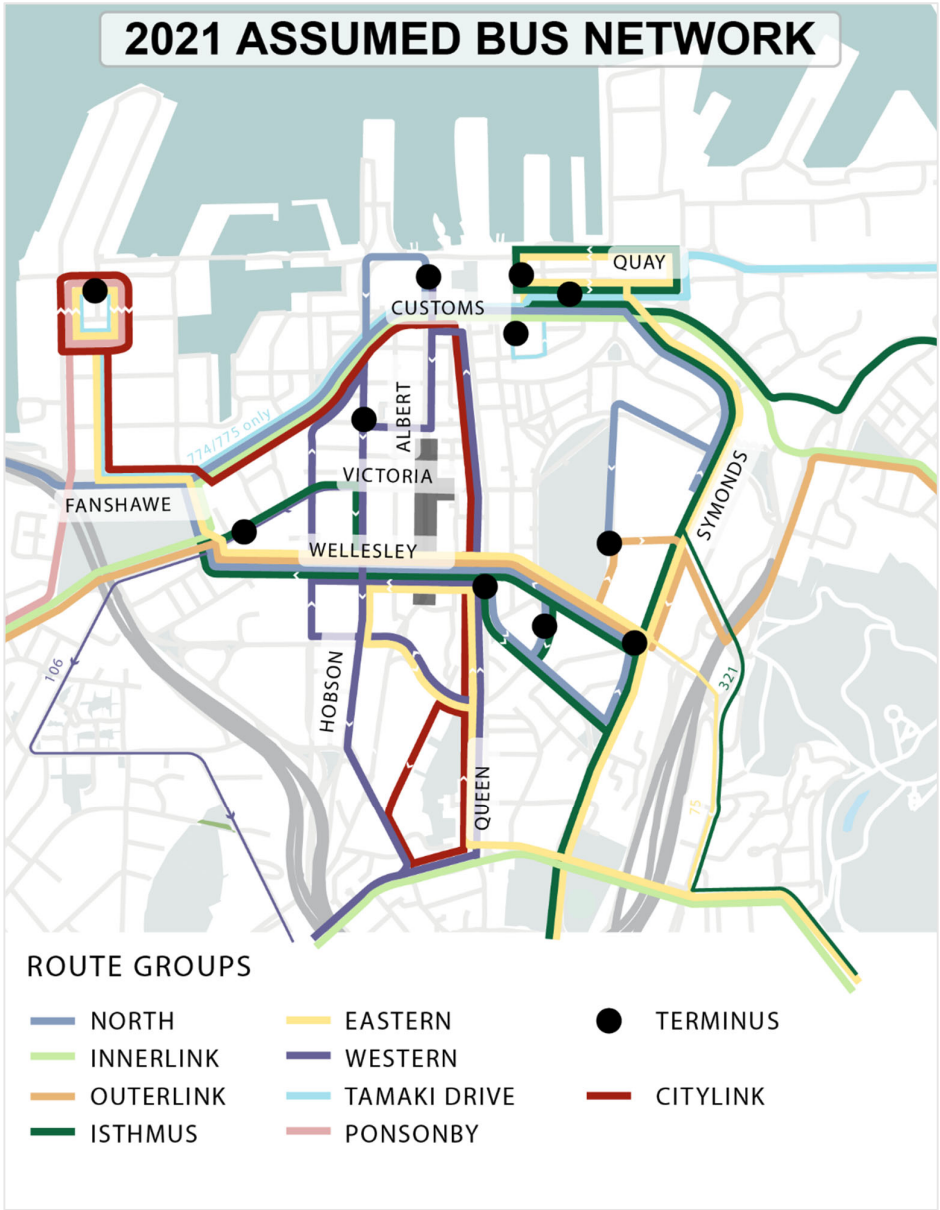


Figure 9: 2021 City Centre bus network

5.3 2025

The following key changes to infrastructure and bus routing are expected to occur by 2025:

- **City Rail Link fully open**
 - **Albert Street/Vincent Street/Pitt Street** corridor fully reopened for bi-directional bus services, with all remaining western services shifted to this alignment (11, 18, 195, WX1)
 - **209 eliminated**
 - **Victoria Street reinstated** with one lane per direction between Elliott Street and Federal Street, and no buses operating between Queen Street and Albert Street
 - **INN returns to Albert Street** between Customs Street and Victoria Street, then Victoria Street West
 - **105, 106 return to Albert Street, continue to use LABI**
 - **Manukau Road (30, 309, 309X, 295)** services return to original routing outbound from The Civic via Queen Street, Wellesley Street, Mayoral Drive, Queen Street
- **First Stage of North West interim improvements¹³ delivered:**
 - **Upgraded or new facilities at Te Atatu, Lincoln and Westgate** (Northwest Centre)
 - **Implementation of WX1 & 11t/w** services to LABI via Pitt Street, Vincent Street, Mayoral Drive and Albert Street and associated consolidation of other North Western motorway services
 - **110, 125X, 129, 132, 132X, 133, 133X eliminated**
 - **134 rerouted – no longer serving city centre**
- **Wynyard Quarter changes:**
 - **New off-street bus terminal** on the site of the Jellicoe Street Carpark
 - **762 extended to Wynyard Quarter** via Customs Street, Fanshawe Street, Daldy Street
 - **TāmakiLink extended to SkyPath** via Customs Street, Fanshawe Street, Daldy Street, Gaunt Street, Beaumont Street to new terminal location west of bridge
- **Isthmus buses terminating in Victoria Quarter** (22, 24) turnaround via Victoria Park, replacing current facilities on Victoria Street between Dock & Graham Streets

¹³ Per Memorandum from Auckland Transport on 8 September 2020: Development of a North West Bus Network

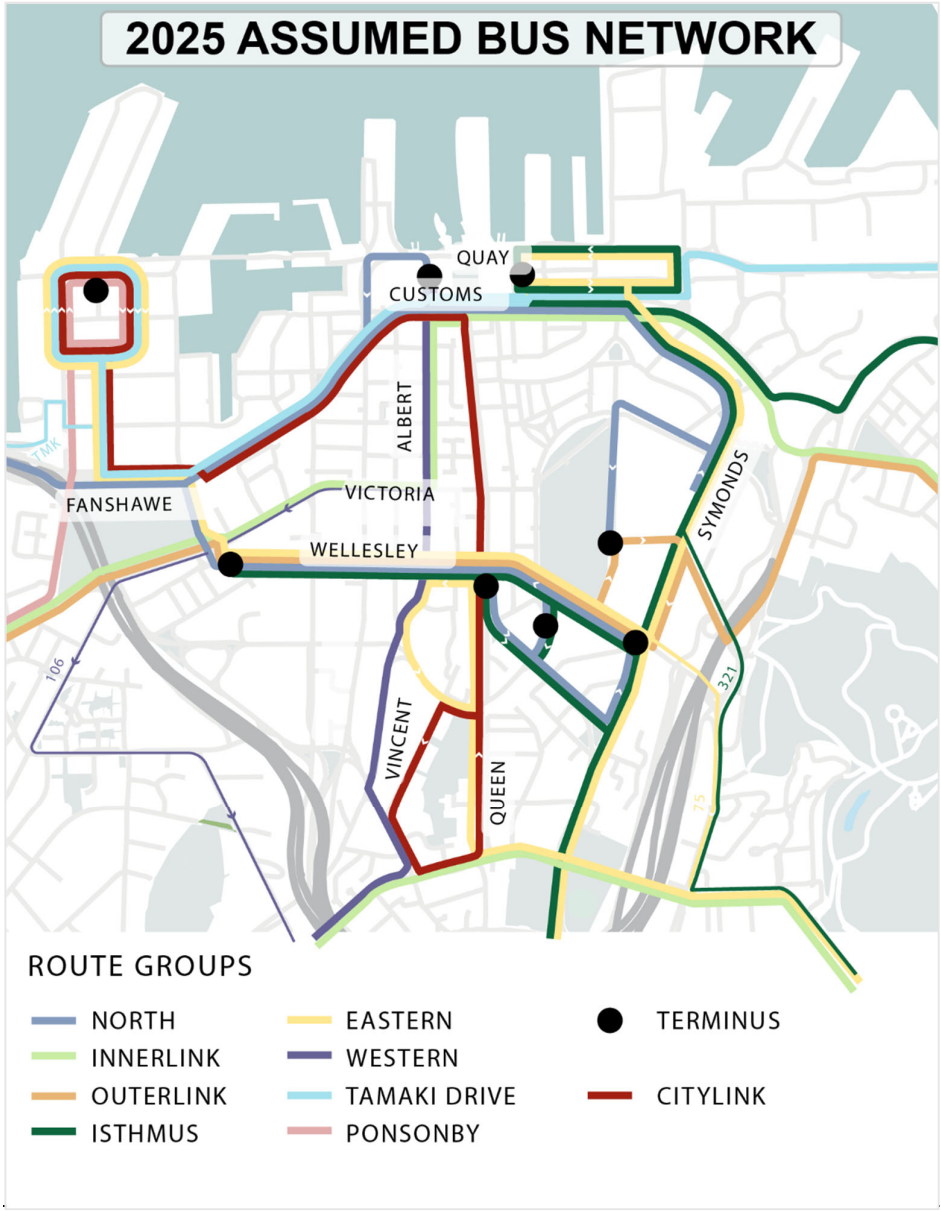


Figure 10: 2025 City Centre bus network

5.4 2028

The following key changes to infrastructure and bus routing are expected to occur by 2028:

- **'Midtown Crossover'** shifts the running pattern and termini for Eastern and Isthmus services:
 - **Botany and Howick (70, 72X)**
 - **Pre-crossover:** via Symonds Street to terminate at Britomart East
 - **Post-crossover:** via Grafton Road and Wellesley Street to terminate at Victoria Park
 - **New North Road and Sandringham Road (22, 24) services**
 - **Pre-crossover:** via Wellesley Street to terminate at Victoria Park
 - **Post-crossover:** via Symonds Street to terminate downtown (see 'Downtown Crossover' below)
- **Manukau Road (30, 309, 309X, 295) services** terminate at Victoria Park instead of the Civic
 - **Inbound:** via Queen Street and Wellesley Street
 - **Outbound:** via Wellesley Street and Queen Street
- **'Downtown Crossover'** shifts the running pattern and termini for some North Shore and Isthmus services:
 - **Beach Road** layover required
 - **Customs St** upgrades required to provide transit priority or mall
 - **Northern Express and Birkenhead** services
 - **Pre-crossover:** terminating at LABI
 - **Post-crossover:** via Customs Street to a terminal location east of downtown
 - **New North Road, Sandringham Road and Mount Eden Road**
 - **Pre-crossover:** terminating at Britomart East
 - **Post-crossover:** crossing downtown via Customs Street to terminate at LABI
 - **321 and 755** continue west via Customs Street and terminate at LABI
 - If insufficient space is available at LABI, these services could use the current Birkenhead services stops on Quay Street. Alternatively, these routes could remain east of Queen Street due to the low service and passenger volumes on these services or another alternative location could be found closer to the Waiheke Ferry.
- **Wellesley Street Bus Improvements** project completed between Halsey Street and Kitchener Street, eliminating general traffic from Albert Street to Queen Street.
- **Grafton Gully terminal opened**, allowing consolidation of North Shore to Midtown and Learning Quarter services at this site:
 - **NX2, 82, 802, 923, 924** continue on Wellesley Street to terminal
 - **931, 933, 939** via Halsey Street and Wellesley Street to terminal
 - **101** continue on Wellesley Street to terminal

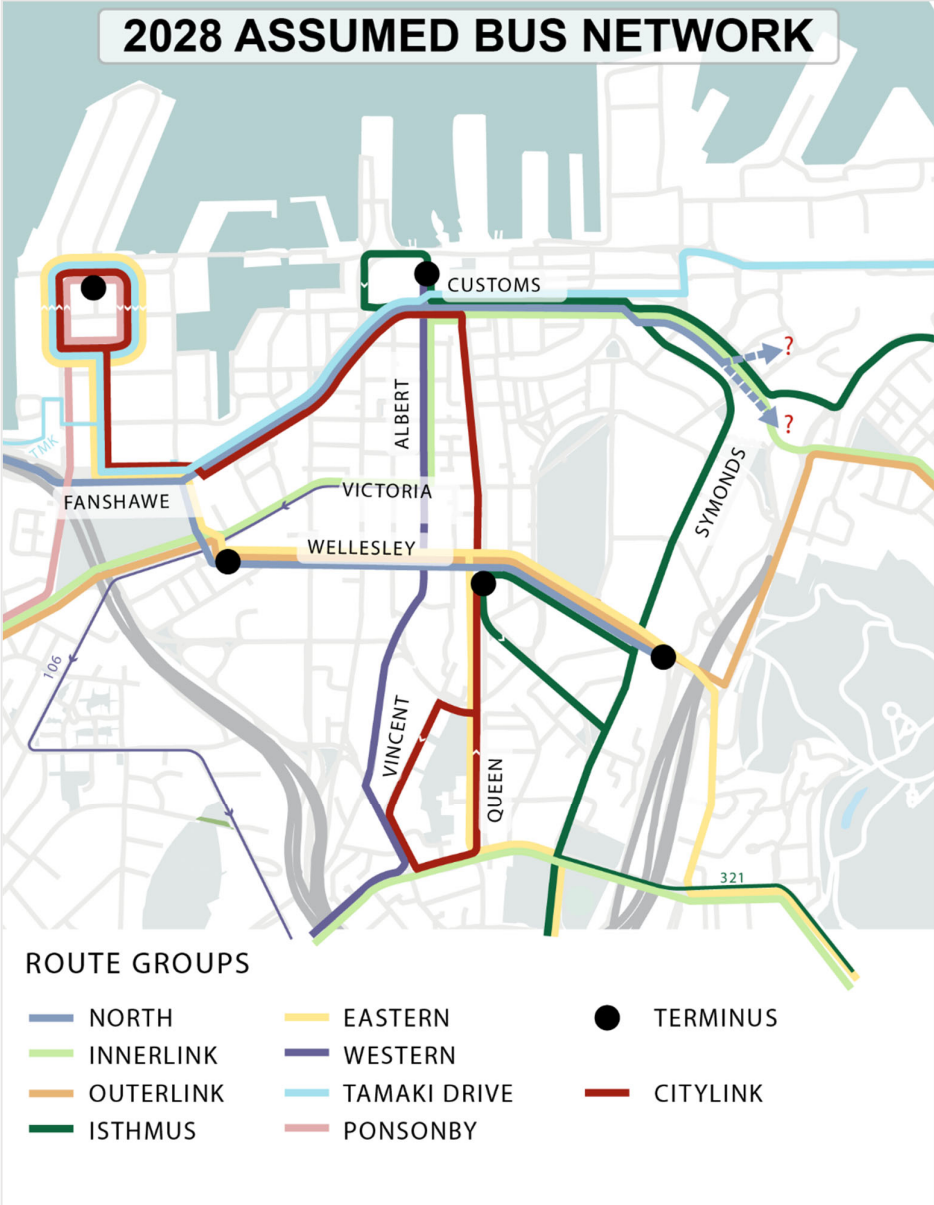


Figure 11: 2028 City Centre bus network

6 Additional Considerations

6.1 Private Development Projects

Auckland is currently undergoing a major construction boom with a wide range of private sector developments underway across the City Centre. This includes hotels, apartment buildings, new office space, retail development and civic buildings. The total value of announced new development has been estimated at \$10 billion¹⁴.

Private sector development has several impacts upon the bus network:

- Closure of bus stops and/or bus lanes for extended periods of time (often several years) to provide space for construction activity, including cranes, scaffolding and site deliveries
- Closure of traffic lanes adjacent to a development, which can lead to increased congestion and impacts to bus services
- Additional heavy vehicle trips on major roads across central Auckland
- Temporary closure of streets (for example over a weekend) to allow for major construction activity such as crane assembly
- Construction trucks utilising bus layover space to meet delivery windows

Private sector development is also subject to significant levels of uncertainty. The issuing of a resource consent or a building consent may not mean that development is imminent, and they are commonly delayed, so it is difficult to understand and plan for the timing of developments.

Resource consents have historically been permissive in allowing private sector construction activity to obstruct bus infrastructure. Growing constraints to bus operations and infrastructure in the City Centre and additional disruption caused by projects such as the CRL mean limited redundancy in the network for alternative route and stop arrangements. Therefore, Auckland Transport may not be in a position to allow closure of particular stops in the future without significant detrimental impacts on operations and reliability. This will require greater engagement between AT Service Network Development, and the AT planning staff that collate resource consent feedback and liaise with Auckland Council.

6.2 Access for Everyone

Access for Everyone is a City Centre transport strategy that is being investigated and developed by Auckland Council, Auckland Transport, and Waka Kotahi. It was a central piece of the adopted 2020 City Centre Masterplan. Auckland Transport is expected to begin a programme business case in 2020 to progress the strategy.

Access for Everyone builds upon previously agreed initiatives and projects that will restrict private vehicles from traversing the City Centre, such as the Victoria Street Linear Park and Queen Street pedestrianisation. The strategy proposes distinct zones in the City Centre that are accessed from the motorway network, with minimal unrestricted interzonal connections, and through traffic bypassing the City Centre via the motorway. Public transport vehicles will not face the same restrictions. The plan is expected to reduce conflicts between private vehicles, public transport, and people walking and cycling.

Understanding the full impacts of the concept on the public transport network will require further work. Given the current status of a network with more buses travelling on fewer constrained corridors, Access for Everyone

¹⁴ <http://www.emergingauckland.org.nz/about-auckland.html>

is expected to improve public transport access and operations by reducing traffic congestion within the City Centre and providing opportunities to expand public transport vehicle priority such as by converting Customs Street into a high-capacity transit corridor. Access for Everyone could unlock a variety of potential alternatives for bus operations in the City Centre that are not currently available. It could also increase demand for public transport within the City Centre (both for trips between the City Centre and the rest of the region, and for internal trips within the City Centre). This could have further implications for the bus network in terms of the capacity that needs to be provided, and therefore the volumes of services at terminals. It is expected that the Bus Reference Case may need to be updated again as the Access for Everyone Strategy is further developed.

6.3 Inter-Regional Coach Terminal

Auckland's Inter-Regional Coach Terminal (IRCT) is currently located on Hobson Street, within the SkyCity complex. From here customers can take coaches to various points across the North Island.

More than 70 regional coaches arrive in and depart from the facility every day, carrying approximately 3,000 people. These regional coach services provide an important mode of transport for both domestic and international travellers by connecting Auckland to the rest of New Zealand. In addition, SkyBus operate more than 30 trips per day to and from the airport, and dispersed coach facilities are available across the city centre on Customs Street, Federal Street, Sturdee Street, Wellesley Street and Nelson Street. Thus, there are many benefits of integrating these services into Auckland's public transport system and the wider city centre.

The current condition of the inter-regional facility offers a poor customer experience and is disconnected from the rest of the public transport system. The long-term needs of coach operators and customers cannot be met on the current site. Given the lack of space in the city centre and the potential benefits of the inter-regional facility being integrated in some way with bus services, AT will investigate the potential for an integrated facility.

7 Conclusions

7.1 Ongoing Pressure in the City Centre

An overarching conclusion that is apparent from the Bus Reference Case Update is that pressure on the City Centre bus network is continuing to increase. Buses are constrained to fewer corridors than in the past, with higher bus volumes on these limited corridors. Progressively fewer corridors will be available to operate buses on over the next decade. Those that remain have experienced significant construction disruption due to the initial stages of City Rail Link works. The next stages of works will stress the bus network significantly. Extensive road closures are expected during this time, and both buses and private traffic will be competing for this reduced space. The bus network will have limited resilience during this time for want of alternative diversion routes. This will leave the bus network vulnerable to disruption caused by any major events or incidents in the City Centre. AT Service Network Development should develop contingency plans to ensure alternatives are available when issues occur.

Similarly, bus stop and terminal space is under the same pressure with space being lost due to CRL works and private construction. Given the high bus volumes on limited corridors, adequate and well-located layover and stop spaces will become even more essential for efficient operations. There will be some improvements in downtown, with the completion of the Lower Albert Street Bus Interchange expected by 2021. However, additional private and public developments, and road network changes to provide for increased volumes of people walking and cycling in the City Centre will lead to more pressure on stop and layover space.

Construction disruption on some corridors may mean that stops and layovers become inaccessible or that access to these spaces becomes subject to unreliable journey times. Construction disruption may also result in stops losing capacity or being temporarily relocated to locations that do not have sufficient capacity. While the Bus Reference Case has not identified specific layovers, further work will be required to ensure sufficient stop and layover space is available throughout the City Centre to provide efficient and reliable operations.

7.2 City Rail Link impacts

City Rail Link construction will continue to cause significant disruption to bus services using the Victoria Street and Albert Street corridors. Planning for alternate bus routes, stops and layover locations is a challenge because of the limited space available on other City Centre bus corridors. The CRL bus diversions will impact upon stops and terminals across a much wider location than just the immediate vicinity of the CRL project, with broad impacts across the City Centre.

7.3 Midtown Crossover

Successful implementation of the Midtown Crossover will be dependent on a range of infrastructure projects being delivered, including new bus stop and terminal infrastructure being delivered along Wellesley Street and downtown; terminal and layover space in Victoria Quarter; and works to Grafton Road to accommodate double decker buses. Further projects will be highly desirable for the success of the Crossover, including Grafton Road bus priority; Beach Road bus facilities; and full Wellesley Street upgrades and high-quality stops at Symonds Street.

7.4 Grafton Gully Terminal

Increasing demand for bus services that are currently terminating on-street in various locations around the Learning Quarter will require the Grafton Gully off-street bus terminal by 2028 so these services can be consolidated. This will require improvements to Wellesley Street that are expected to be delivered as part of the Wellesley Street upgrades with the Midtown Crossover.

7.5 Downtown Crossover

The Downtown Crossover scenario, assumed for 2028, is consistent with the principles of Access for Everyone and has been identified by AT Service Network Development and stakeholders as the emerging preferred option, contingent upon the following infrastructure:

- Additional terminal capacity within Wynyard Quarter
- Lower Albert Street Bus Interchange
- Bus stops along Customs Street between Queen Street and Britomart Place
- New on- or off-street terminal facility located in the eastern edge of the City Centre, including turnaround, layover and afternoon staging of NX1 and Onewa Road buses
- Full bus priority along Customs Street (potential transit mall) and Beach Road

7.6 Future of Customs Street

The future form of Customs Street needs to be better understood to ensure this is an efficient corridor for proposed bus volumes. Customs Street is set to become an increasingly important transit corridor, with the extension of Tāmaki Drive services through to Wynyard Quarter. When the Downtown Crossover is progressed in 2028, Customs Street will become a very important east-west bus corridor (in excess of 120 buses per hour, per direction) that will require improved bus priority.

7.7 Next Steps

The Bus Reference Case is intended to provide a “single point of reference” on the future of the bus network in the Auckland City Centre so that all projects in the City Centre use the same set of assumptions, allowing for better coordination and planning. It achieves this by reviewing and consolidating existing plans and assumptions about City Centre bus networks and major City Centre projects that may impact on the network. The BRC is a snapshot of the current understanding of a constantly evolving public transport system and it is understood that the current assumptions will change as further work progresses on existing projects and new information emerges. The BRC was also tasked with identifying outstanding issues or areas that will require additional exploration. While the BRC has only considered scheduled public bus services, future projects will also have to take into consideration private bus services such as the SkyBus and Explorer services. The following list provides a summary of these potential study areas:

1. **Future state of Customs Street**
The future form of Customs Street in response to evolving transport strategy regarding traffic and bus routing needs to be better understood to ensure this is an efficient corridor for the proposed bus volumes.
2. **Impacts of Access for Everyone**
Access for Everyone is expected to improve public transport access and operations by reducing traffic congestion within the City Centre and providing opportunities to expand public transport vehicle priority. Access for Everyone could unlock a variety of potential alternatives for bus operations in the City Centre that are not currently available. However, additional study will be required to better understand the full potential and impacts on the bus network as this concept is progressed, including impacts on capacity and demand for public transport as a means of travel within the City Centre.
3. **Construction impacts**
Construction disruption on some corridors may mean that layovers become inaccessible or that access to these spaces becomes subject to unreliable journey times due to disruptions to in-service routes, stops and priority. While the Bus Reference Case has not identified specific layovers, further work will be required to ensure sufficient layover and stopping space is available

throughout the City Centre, with bus priority measures in place to provide efficient and reliable operations.

Furthermore, additional infrastructure requirements were identified in the process that will need to be addressed as part of the above listed projects or independently to support the assumptions described in this report:

1. Britomart West layover and staging requirements for western buses using LABI
2. Grafton Gully terminal
3. Grafton Road bus priority
4. Customs Street bus priority (particularly when the Downtown Crossover is implemented)
5. Pitt / Vincent Streets bus priority
6. Beach Road bus terminal

Appendix A: Route Termini in the City Centre by Year

Route	2021	2025	2028
Inner Link	Through service	Through service	Through service
Outer Link	Through service	Through service	Through service
20 - St Lukes to Wynyard Quarter	Wynyard Quarter	Wynyard Quarter	Wynyard Quarter
105 - Westmere to Britomart	Customs Street	Lower Albert Street	Lower Albert Street
106 - Freemans Bay	Customs Street	Lower Albert Street	Lower Albert Street
18 - Great North Road	Lower Albert Street	Lower Albert Street	Lower Albert Street
22 - New North Road	Victoria Quarter	Victoria Quarter	Lower Albert Street
24 - Sandringham Road	Victoria Quarter	Victoria Quarter	Lower Albert Street
25 - Dominion Road	Queen Street opp Civic	Queen Street opp Civic	Queen Street opp Civic
27 - Mount Eden Road	Britomart East	Britomart East	Lower Albert Street
30 - Manukau Road	Queen Street at the Civic	Queen Street at the Civic	Victoria Quarter
309 & 309X - Mangere Town Centre	Queen Street at the Civic	Queen Street at the Civic	Victoria Quarter
70 & 72X - Botany	Britomart East	Britomart East	Victoria Quarter
75 - Remuera Rd	Wynyard Quarter	Wynyard Quarter	Wynyard Quarter
295 - Gillies Ave	Queen Street at the Civic	Queen Street at the Civic	Victoria Quarter
321 - Hospitals	Britomart East	Britomart East	Lower Albert Street
755 - Portland Rd	Britomart East	Britomart East	Lower Albert Street
Tāmaki Link	Britomart East	Wynyard Quarter	Wynyard Quarter
762 (76 from 2025) - Kapa Rd	Britomart East	Wynyard Quarter	Wynyard Quarter
774/775 - Tāmaki Drive peak only	Wynyard Quarter	Wynyard Quarter	Wynyard Quarter
101 - Pt. Chevalier Beach	Grafton Road	Grafton Road	Grafton Gully

110 (11 from 2025) & 129 - Westgate to Britomart	Lower Albert Street	Lower Albert Street 129 Removed (2025)	Lower Albert Street 129 Removed (2025)
125x - Helensville to Britomart	Lower Albert Street	Removed	Removed
132, 133, 134 - Te Atatu Road	Hobson Street	Removed	Removed
151x - Glen Eden Express	Removed	Removed	Removed
171x & 172x - Titirangi Express	Removed	Removed	Removed
195 & 209 - Blockhouse Bay Road	Lower Albert Street	Lower Albert Street 209 Removed (2025)	Lower Albert Street 209 Removed (2025)
WX1 – Consolidated NW motorway services	-	Lower Albert Street	Lower Albert Street
Northern Express 1	Lower Albert Street	Lower Albert Street	Beach Road
Northern Express 2	Symonds Street	Symonds Street	Grafton Gully
82 - Milford and Takapuna	Mayoral Drive opp AUT	Mayoral Drive opp AUT	Grafton Gully
802 - Bayswater to Universities	Mayoral Drive opp AUT	Mayoral Drive opp AUT	Grafton Gully
923/924 - Hillcrest circuit to City	Mayoral Drive opp AUT	Mayoral Drive opp AUT	Grafton Gully
931, 933 & 939 - Onewa Road to Universities	Princes Street	Princes Street	Grafton Gully
95 - Glenfield Road	Lower Albert Street	Lower Albert Street	Beach Road
97 - Beach Haven	Lower Albert Street	Lower Albert Street	Beach Road
866 & 966 - North Shore to Newmarket	Through service	Through service	Through service