BUS CONNECTS DUBLIN

Progress Report March 2025

NTA
Údarás Náisiúnta Iompair
National Transport Authority

BUS CONNECTS

Rialtas na hÉireann
Government of Ireland

Tionscadal Éireann
Project Ireland 2040

Table of Contents

BusConnects Programme 5
BusConnects Dublin Programme 6
a. Core Bus Corridors 6
b. Next Generation Ticketing 8
c. Simpler Fare Structure 8
d. Transition to Zero 8
e. Stops & Shelters 9
f. Livery 9
g. Network Redesign 10
Programme Key Performance Indicators Update 14
Conclusion 21

Purpose of the BusConnects Programme Progress Report

The purpose of this report is to update on the progress of the BusConnects Dublin Programme. It has been prepared in response to recommendations provided to the National Transport Authority (NTA) in July 2023 by the Public Accounts Committee (PAC) and is published to the BusConnects website on a twice-yearly basis. The key recommendations of the PAC were:

- that the NTA publishes a twice-yearly update on the BusConnects Programme on the dedicated BusConnects website. As part of these updates, customer satisfaction surveys should be undertaken, and the results published, and;
- that the NTA provides detailed metrics that demonstrate the success of initiatives implemented under the BusConnects Programme, and specifically for the Network Redesign Project.

This progress report will include status updates on the projects that make up the BusConnects Dublin Programme and the progress towards achievement of the Programme's outcomes. The key metrics included will apply to projects and initiatives that have been implemented more than six months prior to the report to allow for appropriate time to collect and analyse the relevant data while also acknowledging that results of these implementations may require several months or more to materialise.

Specific to the Dublin Network Redesign Project that is part of the BusConnects Dublin Programme, the NTA will report on the following metrics, among others, as a means of measuring the success of newly implemented Phases: annualised cost changes; annualised passenger number changes; punctuality; reliability; and a yearly customer satisfaction. To account for the impacts of COVID-19, 2019 was chosen as the baseline year for comparison.

This document also includes general information about the BusConnects Programme, including the vision and strategic objectives of the five BusConnects Programmes, information on the component projects of the BusConnects Dublin Programme, and an update on the current status of each project. As other BusConnects Programmes in Cork, Galway, Limerick and Waterford move into implementation, the report will expand to include relevant progress updates for each.

BusConnects Dublin Programme Progress MARCH 2025

BusConnects is a strategic programme aimed at enhancing sustainable transportation across five cities in Ireland - Dublin, Cork, Limerick, Galway, and Waterford. The BusConnects Programme represents a transformation of bus services to deliver outcomes greater than what can be achieved through individual network interventions.

Vision

To connect people and places through an enhanced bus system together with improved cycling and pedestrian facilities

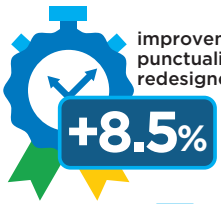
Strategic Objective	Programme Outcomes
Strategic Objective A To provide reliable and frequent bus services with improved cycling and pedestrian facilities	Make bus and active travel a more reliable transport option Improve bus journey times, frequency and punctuality Enhance the people carrying capacity and cater for future demand
Strategic Objective B To connect people and places through an expanded, integrated and accessible sustainable transport system	Increase destinations served by the bus and active travel networks Simplify interchange between bus services and other transport modes Improve inclusivity and accessibility of the bus and active travel networks
Strategic Objective C To enhance quality of life through a safer and greener transport system	Enhance the safety and security and provide safer cycling and pedestrian networks Deliver enhanced bus and active travel options that reduce climate impact Improve air quality along key BusConnects corridors Improve health and wellbeing of bus and active travel users

BusConnects Dublin Initiative	Progress as of End of March 2025
Network Redesign	Implemented 6 out of 11 phases of the redesigned network
Core Bus Corridors	11 of 12 schemes received planning approval by An Bord Pleanála
New Generation Ticketing	Project now in analysis and design stage
Fares	90-minute fare used almost 30 million times by bus passengers in 2024
Livery	New bus livery (branding, colours) introduced on most Dublin buses
Stops and Shelters	Installed approximately 1900 bus poles along the redesigned network
Transition to Zero	110 fully-operational electric buses launched in Dublin city and chargers installed

Progress at a Glance

48% increase in passenger boardings on the redesigned bus network vs. 8% increase on non-BusConnects routes

more kilometres per year with the redesigned bus network, a 71% increase on previous service provided

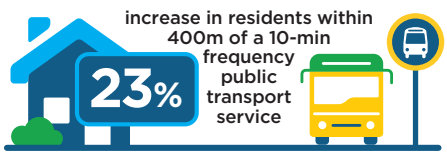


improvement in punctuality rate in the redesigned bus network vs. 2.3% increase on non-BusConnects routes

increase in access to employment locations within 30 minutes

uses of the 90-minute fare on buses in 2024

improvement in reliability of bus services on the redesigned network



increase in residents within 400m of a 10-min frequency public transport service

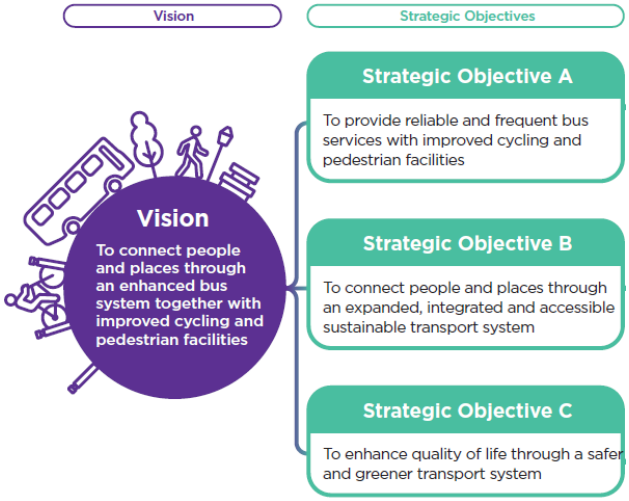
and additional weekend service in the redesigned network

1900 Tonnes CO2 emissions avoided thanks to electric bus fleet

BusConnects Programme

BusConnects is the National Transport Authority's (NTA) Programme to transform bus services in Irish cities by connecting people and places through an enhanced bus system and improved cycling and pedestrian facilities. It is a key part of national policy and aligns with Government's goal to improve public transport to support population and economic growth as well as address climate change.

***Figure 1*:** BusConnects Programme Vision and Strategic Objectives



The broad geographical coverage including the cities of Dublin, Cork, Limerick, Galway, and Waterford and the comprehensive approach of the Programme underscore its potential nationwide impact and demonstrate the concerted efforts of these regions in advancing sustainable urban mobility agendas.

The scale and transformative potential of the BusConnects Programme reinforces its central role in influencing the future roadmap of Ireland's transport system. It delivers on commitments within the National Development Plan 2021-2030, the Climate Action Plan 2024, the National Planning Framework 2040, the Transport Strategy for the Greater Dublin Area 2022-2042 and other metropolitan area transport strategies.

The BusConnects Programme is intended to fundamentally transform cities' bus system so that journeys by bus will be fast, reliable, punctual, convenient and affordable. It will also transform cycling infrastructure by improving cycle facilities on key corridors, including providing segregated cycling routes and reducing the need to share limited road space directly with the improved bus services.

These improvements are being achieved through the different initiatives listed below:

Figure 2: BusConnects Programme Initiatives

BusConnects Dublin Programme

The BusConnects Dublin Programme is the most advanced of the BusConnects Programmes across the country. Many of the benefits of BusConnects Dublin identified in the business case require implementation of all of its component projects before benefits can be fully realised. For example, the implementation of the 12 Core Bus Corridor schemes will greatly improve the reliability and punctuality of the bus services along these corridors as they remove buses from traffic through the provision of bus lanes or other priority arrangements. Realisation of the Programme's benefits will be tracked as each initiative is implemented to ensure confidence that all benefits can and will be realised upon Programme completion.

The subsequent sections of this report provide an overview and progress update for each project in the BusConnects Dublin Programme.

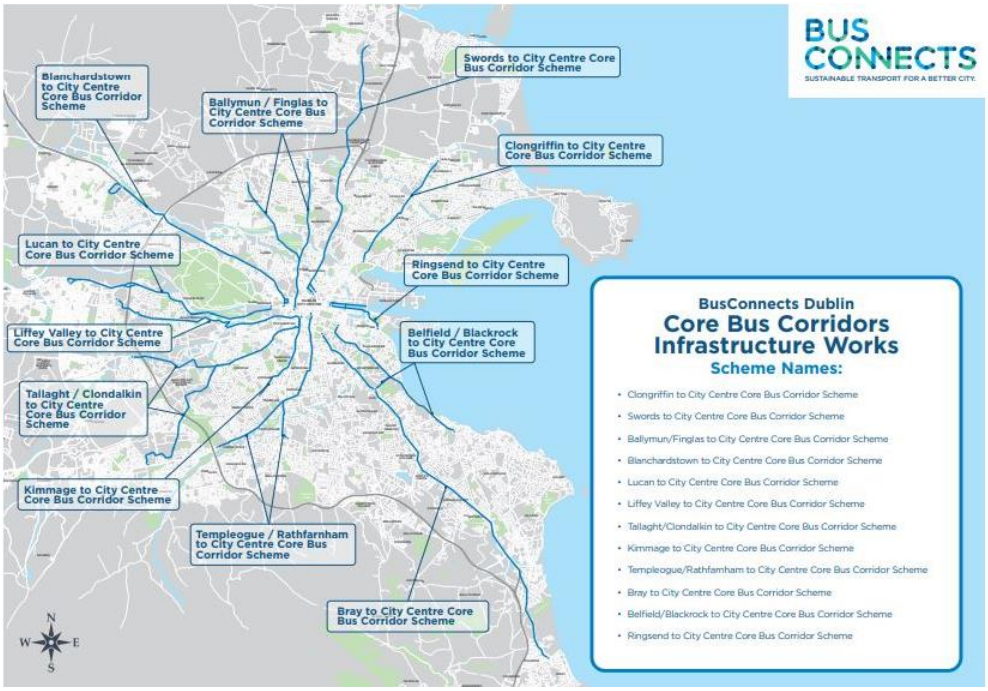
a. Core Bus Corridors

The Core Bus Corridors (CBC) Project involves the development of continuous bus priority infrastructure and improved pedestrian and cycling facilities on key radial corridors across the Dublin region. Its objectives are:

- To enhance the capacity and potential of the public bus system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements; and
- To enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.

The CBC Project encompasses the delivery of approximately 230 kilometres of dedicated bus lanes and 200 kilometres of cycle tracks in 12 separate schemes across five local authority areas, as shown in the figure below:

Figure 3: 12 Core Bus Corridors Schemes in the BusConnects Dublin Programme



The NTA and its BusConnects Core Bus Corridor team undertook a lengthy period of non-statutory public consultation to engage stakeholders across Dublin. There has been a total of three rounds of non-statutory public consultations conducted through a dedicated website, public information events, community events, a range of digital channels, traditional published material, press and radio advertising, outdoor advertising, presentations, infographics and virtual formats.

At present, planning consent applications for all 12 CBC schemes, together with associated compulsory purchase orders, have been submitted to An Bord Pleanála. Planning consents have now been granted for the 11 schemes listed below, marking a significant milestone in the BusConnects Dublin Programme:

- Clongriffin to City Centre
- Swords to City Centre
- Ballymun/Finglas to City Centre
- Blanchardstown to City Centre
- Liffey Valley to City Centre
- Belfield/Blackrock to City Centre
- Ringsend to City Centre
- Tallaght/Clondalkin to City Centre
- Lucan to City Centre
- Templeogue/Rathfarnham to City Centre
- Bray to City Centre

Following receipt of planning consents for the initial schemes, the focus of activity has now moved to the construction stage for the first two schemes (noting that some schemes are subject to Judicial Review). The NTA is currently establishing a framework of contractors to build the schemes, with procurement of the first two schemes in progress. It is expected that the first two scheme construction contracts will be awarded and construction will commence this year, followed subsequently by the award of contracts for an additional two schemes.

The construction of the corridors will be delivered on a phased basis in order to reduce the traffic impacts that could arise should a majority of the schemes be constructed concurrently. Given the traffic management requirements during construction, it is considered that a maximum of four schemes can be built concurrently. Detailed communication arrangements for the construction phase will be developed over the course of this year to ensure that residents, community groups, businesses and public representatives are kept fully informed and have access to relevant liaison personnel during construction of the schemes. Those will include:

- Community Engagement: Two-way communication with the local community will be vital during the implementation of the BusConnects Programme. Engagement and ongoing communication will be a central part of the infrastructure works and will take place through a range of formats and channels. This will ensure that the public are aware of upcoming works in the area, how construction is progressing and allow for questions to be answered.

- Communication Channels: For all queries and regular updates, there will be a dedicated phone number including out of hours and weekend availability, email and website for each scheme.

- Local Area Engagement Groups: These groups will comprise of representatives from residents, business groups and public officials as a forum to engage with the NTA on a regular basis to discuss and collaborate on issues, upcoming works schedules, and other relevant themes.

b. Next Generation Ticketing

The ticketing systems on rail and bus are approaching the end of their useful life and require updating to a modern, faster and more efficient system. As part of the BusConnects Programme, a new ticketing system will be introduced which will incorporate the latest developments in account-based ticketing technology, including allowing use of credit / debit cards or mobile devices as a convenient means of payment. It will also enable more ticket choices, which cannot be currently provided in the existing system, as well as allowing faster introductions of fare alterations.

Following a highly competitive procurement process, in April 2024 the NTA awarded an overall framework contract for the design, supply, installation and operation of a new multi-modal ticketing system to a Spanish information technology company—Indra Sistemas S.A.—who have designed, installed and operated similar systems internationally.

This large and complex technology project is now in the analysis and design phase and will take approximately three years to deliver.

c. Simpler Fare Structure

The previous 'stage' payment system that operated for the Dublin urban bus system has now been simplified with a new fares structure. The new fares structure was introduced in November 2021 and comprises of a short-distance fare on single leg journeys (approximately three kilometres or less) and a 90-minute fare that allows customers to seamlessly switch between any combination of Bus, DART/Commuter Rail and Luas services at no extra cost subject to commencing the last leg within 90 minutes of first boarding.

This new system has made movement between different modes and different services of the same mode easy and convenient and has introduced new journey possibilities for many people.

As these new fares have been implemented in the last few years, the impact of the project is being continually assessed to determine if the anticipated benefits have been realised, including increase in LEAP card usage and public transport passengers. **In 2024, the 90-minute fare was used 29.8 million times** by bus passengers transferring from DART, Luas or another bus service within the preceding 90 minutes.

d. Transition to Zero

BusConnects Dublin includes the transition to a zero-emission bus fleet to create a cleaner and more liveable city, contributing to the national priority to tackle climate change. The Transition to Zero Project also includes the electrification of existing bus depots and the construction of new depots to support operation of the fully electric fleet.

To date, the project has introduced 110 electric buses into service, with charging capacity in place in Summerhill and Phibsborough depots. In total, the electric bus fleet covered nearly 2 million kilometres in 2024. This led to **approximately 1,900 tonnes of avoided CO2 emissions,** when compared to the emissions of diesel buses travelling the same distance. This is enough to fill 383 Olympic-sized swimming pools with CO2.

Reducing CO2 emissions will play a significant role in advancing the decarbonisation efforts of public transport, aligning with the goals of the Climate Action Plan.

The NTA intends that 85% of the Dublin metropolitan area urban bus network will be operated by low and zero emission buses by 2032, and solely by zero emission buses by 2035.

e. Stops & Shelters

The BusConnects Dublin Programme includes construction of enhanced bus stops and shelters across Dublin to align with the redesigned network and construction of the Core Bus Corridors. The new style of TFI (Transport for Ireland) bus stops and shelters are shown below.

Figure 4: New TFI Bus Stops and New Bus Shelter

Along the 12 Core Bus Corridors, enhanced bus stops, most to be equipped with bus shelters and real time passenger information signs, will be provided as part of the construction of the individual corridors. Along the other sections of the new bus network, 1,900 TFI bus poles will have been installed in tandem with the roll out of the phased Network Redesign up to and including Phase 6a (E-Spine).

f. Livery

As part of BusConnects, the exterior and interior of buses, known as the bus livery, has been standardised across different operators in Dublin to give the bus system a modern and consistent look to improve the passenger experience. As part of BusConnects, a new TFI livery has been introduced consisting of green, yellow and black paintwork overlaid with white vinyl, providing a standardised, singular design unifying the overall fleet.

Figure 5: New Bus Livery

This new design, mirroring the same colour palette of the new bus stops is intended to reinforce the integrated nature of the Public Service Obligation (PSO) fleet, allowing passengers to more easily identify these services alongside other commercial operations. Careful consideration was given to accessibility needs as part of the new livery design, with a full yellow front on the buses and yellow banding on the entrance door, both designed to assist people with visual impairments.

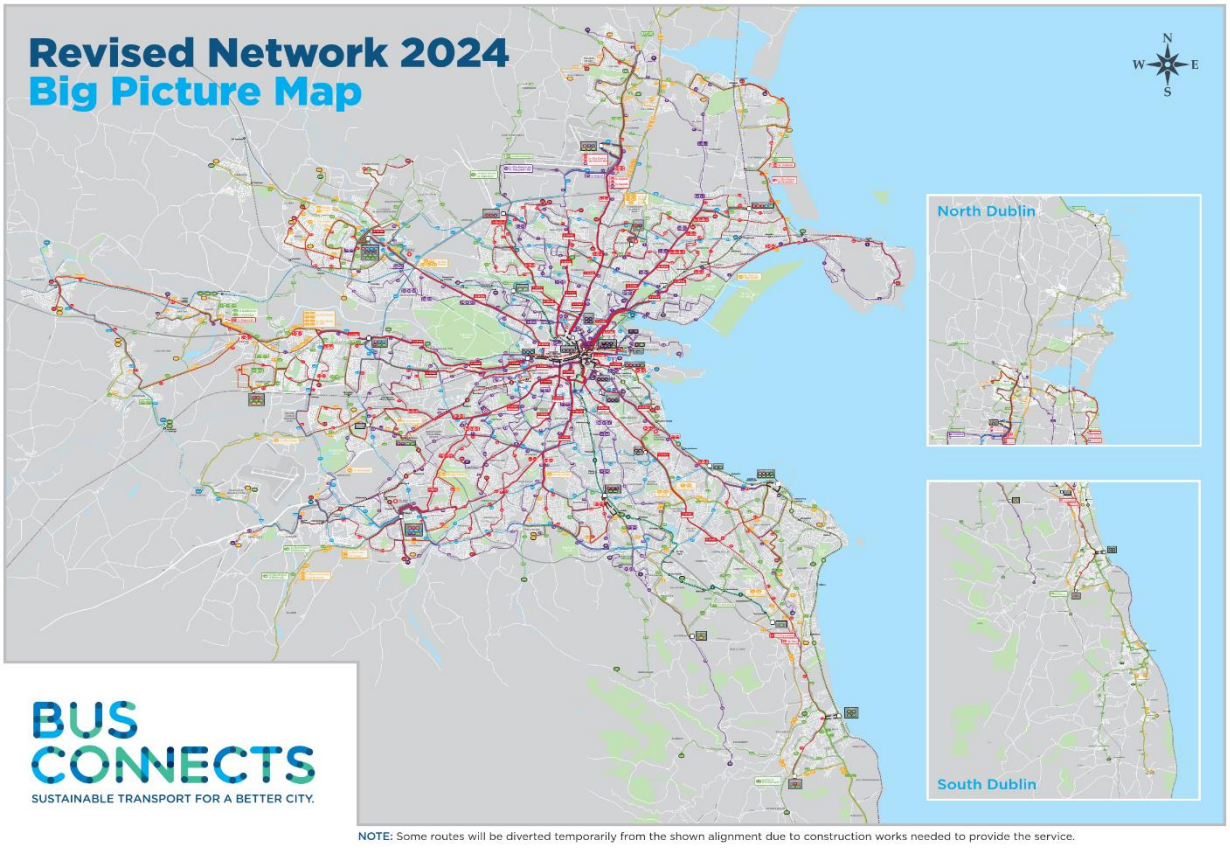
While newly purchased fleet is painted in the new livery at the manufacturing stage, the rollout of the new livery for the existing fleet is taking a number of years, with the changeover on each vehicle occurring at its next scheduled re-painting date with bus re-painting occurring approximately every four years. In this way, no additional repainting costs are being incurred as part of the livery transition.

g. Network Redesign

Following three rounds of public consultation that began in 2017, the NTA finalised and published the new Dublin area bus network in September 2020. The overall objective of the new network is to provide a network that better meets the needs of the overall region and takes account of the growing population and changing travel patterns.

Key characteristics of the proposals include a simpler network centred on eight main spines labelled A to H, more frequent services, particularly at off-peak times and at weekends, plus better coverage of the city including more orbital connections.

Figure 6: [Dublin Revised Network 2024]



The redesigned network represents a major investment in enhanced bus services, delivering a 35% increase in annual "in-service" kilometres, a significant increase in overall capacity and frequency for customers, as well as more evening and weekend services. As well as this, **9 new 24-hour routes have been launched so far as part of Network Redesign**. This new bus network plan considered issues raised by over 72,000 submissions at the various stages of public consultation. The implementation of the new network, known as the Dublin Network Redesign Project, is being delivered in Phases over a number of years, starting in 2021. The Phases implemented to date are described below.

Phase 1 (incorporating H-Spine routes)

The NTA launched Phase 1 of the new network for Dublin in June 2021. Phase 1 included routes connecting Dublin's northeast to the city centre covering the areas of Howth, Baldoyle, Donaghmede, Raheny, Malahide and Portmarnock.

The H-Spine branches deliver fast and frequent services to the city centre. Services on H1 (from Baldoyle), H2 (from Malahide) and H3 (from Howth) provide greater levels of service to these residents and the surrounding communities.

This Phase provides an annual increase of 616,000 kilometres or 44% in scheduled service kilometres, compared to equivalent routes operating prior to the launch of Phase 1.

Phase 2 (incorporating C-Spine routes)

Phase 2 of Network Redesign launched on 28 November 2021 serving the communities of Maynooth, Celbridge, Leixlip, Lucan, Adamstown, Liffey Valley and Palmerstown to the City Centre as well as Ringsend and Sandymount.

This saw the introduction of the C-Spine (C1, C2, C3, C4), Route 52, eight peak only routes (P29, X25, X26, X27, X28, X30, X31 and X32) and six local routes (L51, L52, L53, L54, L58 and L59). Two night-time routes (C5 and C6) were also introduced. This Phase is primarily operated by Dublin Bus, with the exception of the L51 and L52 which are operated by Go-Ahead Ireland.

This Phase provides an annual increase of 1,943,000 kilometres or 37% in scheduled service kilometres, compared to equivalent routes operating prior to the launch of Phase 2.

Phase 3 (incorporating northern suburban N orbital routes)

Phase 3 of Network Redesign launched on 29 May 2022 in the north of Dublin. This Phase introduced northern orbital routes N4 (City Docklands-Finglas-Blanchardstown) and N6 (Kilbarrack-Finglas), with Route N4 operating on a 24-hour basis each day. The introduction of these new routes coincided with the removal of the previously existing 17a and 31d.

This Phase provides an annual increase of 1,624,000 kilometres or 170% in scheduled service kilometres, compared to equivalent routes operating prior to the launch of Phase 3.

Phase 4 (incorporating G-Spine routes)

Phase 4 launched on 16 October 2022 serving the areas of Red Cow, Ballyfermot, City Centre, Spencer Dock, Liffey Valley Shopping Centre, Clondalkin, Cherry Orchard, Decies Road, Islandbridge and Sir John Rogerson's Quay.

This Phase saw the introduction of the G-Spine routes G1, G2 and Route 60, all operated by Dublin Bus, with G1 and G2 Spines operating on a 24-hour basis. Routes 79, 79a and the Western part of Route 40 were discontinued as part of this Phase.

Phase 4 provides an annual increase of 937,000 kilometres or 32% in scheduled service kilometres, compared to equivalent routes operating prior to the launch of Phase 4.

Phase 5a (incorporating outer western suburban W orbital routes)

Phase 5a launched on 25 June 2023, comprising the W Orbital routes in the west and south-west regions of Dublin, serving the areas of Newcastle, Saggart, Citywest, Tallaght, Liffey Valley, Lucan, Blanchardstown, Hazelhatch, Maynooth, and Celbridge.

This Phase saw the introduction of new W Orbital routes W4, W61 and W62, all operated by Go-Ahead Ireland. These three new routes run on average every 15-30 minutes on weekdays and every 30-60 minutes on Saturday and Sunday.

Phase 5a provides an annual increase of 1,254,000 kilometres in scheduled service kilometres. There were no equivalent routes operating prior to the launch of this Phase.

Phase 5b (incorporating western and southern suburban W and S orbital routes)

Phase 5b of Network Redesign commenced on the 26 of November 2023 and involved the introduction of new Southern orbital, radial and local routes. Routes S2, 74 and L25 are operated by Dublin Bus and Routes S4, S6, S8, W2 and L55 are operated by Go-Ahead Ireland. Legacy orbital routes 17, 18, 75/a, 76/a and 175 were removed.

There was an annual increase of 2,978,000 kilometres or 112% in scheduled service kilometres, compared to equivalent routes operating prior to the launch of Phase 5b.

Phase 6a (incorporating E-Spine and associated routes)

Orbital route N2 commenced service at the end of September 2024, serving areas including: Blackhorse Avenue, Nephin Road, Broombridge, Ballyboggan Road, Old Finglas Road, Griffith Avenue, Marino and more. It offers brand new connections and interchange opportunities with other TFI bus, rail and tram services.

The rest of Phase 6a launched on the 26 January 2025, with 24-hour spine routes E1 and E2 serving areas including Bray, city centre, Ballymun and Santry, and a new radial route 19 serving the Airport, Ballymun, Drumcondra and the city centre. Phase 6a also includes the introduction of local routes L1, L2, L3, L12, L14, L15, L26, L27 and express routes X1 and X2. Legacy routes replaced by Phase 6a were: 46a, 46e, 63, 63a, 84, 84a, 84x, 143, 144, 145, 155, 184 and 185.

As this Phase was launched within the last three months, data is not yet available for analysis and will follow in the next progress report.

Programme Key Performance Indicators Update

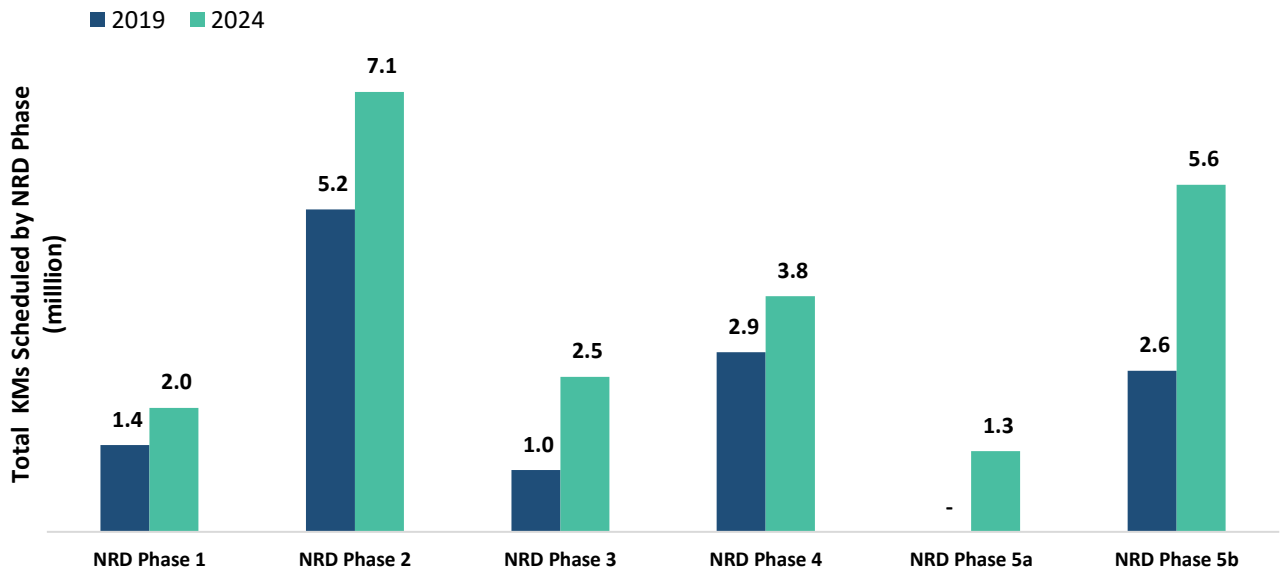
Key performance indicators (KPIs) are being used to measure the progress and realisation of the BusConnects Dublin Programme benefits. The metrics below show the progress of the Programme, highlighting the impact of the partial implementation of the Dublin Network Redesign (NRD) Project.

Comparisons were made for NRD Phases 1-5b before launch (from Q2 2019) and after launch (from Q2 2024). These same time periods were used to calculate changes to the KPIs across the full bus network and routes not included in these Phases. Phases 1-5b have been assessed for changes in passenger boardings, punctuality, regularity, reliability and access to opportunities, with all NRD Phases showing an overall improvement across metrics.

Scheduled Kilometres Operated

Overall, there has been **an annualised increase of 9,351,000 scheduled kilometres**, or 71% scheduled service kilometres in Phases 1-5b, compared to equivalent routes operating prior to Network Redesign. NRD Phase 5a has no legacy routes to act as 2019 baseline.

Figure 7: Annual Kilometres Covered by Implemented Network Redesign Phases



Access to Opportunities

The increased coverage and frequency of services associated with the NRD Phases introduced to date have resulted in a **12% increase in the number of people in Dublin who have improved access to frequent public transport services** to avail of employment, retail, social and other opportunities.

The Network Redesign Project contributes significantly to the BusConnects Dublin Programme benefits that will be realised upon completion of the entire Programme.

a) On average, 18% more places of employment could be reached by Dublin-area residents in 30 minutes of travel time.
b) 14-20% more jobs and university places will be available to people within the same travel times as now.

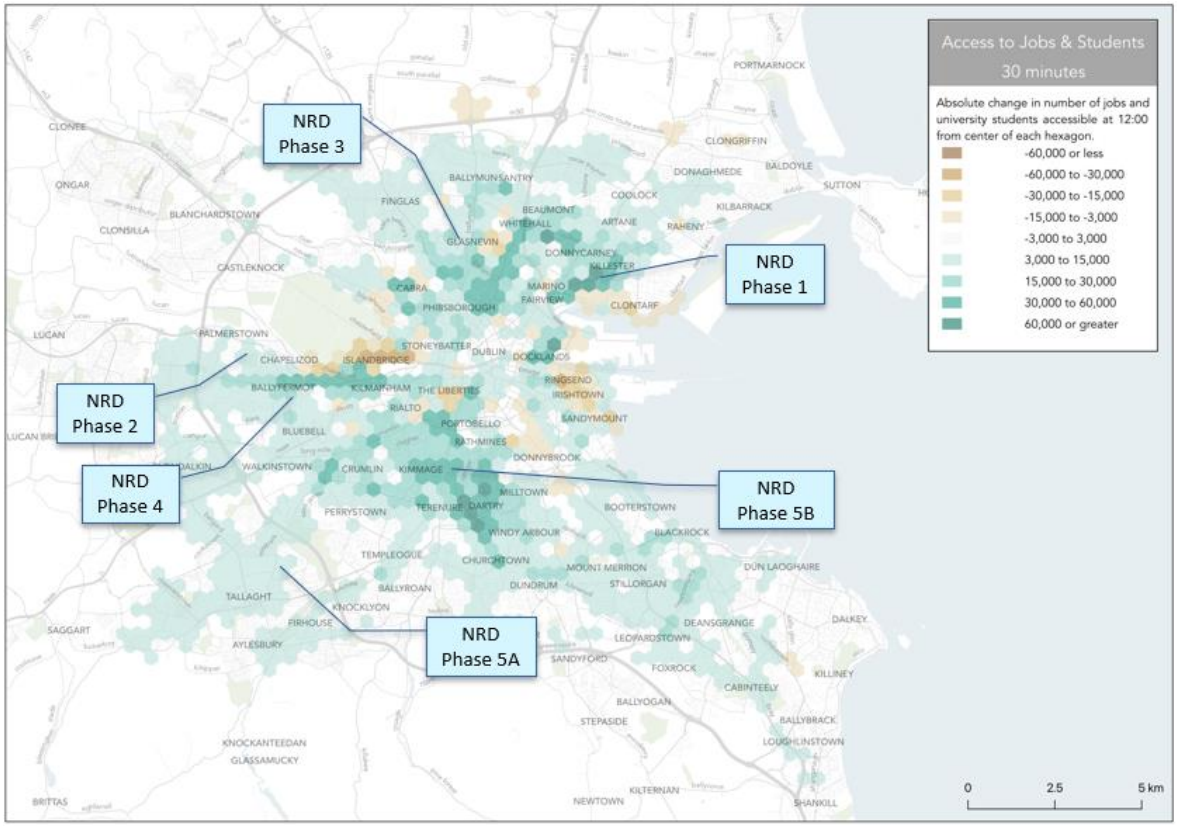
c) Number of residents located within 400 metres of a 10-minute frequency public transport service would increase by 35%.
d) Nearly 1,000,000 residents to be located within 400 metres of a 15-minute frequency service.
e) 16% increase in the number of residents located within 400 metres of a 15-minute bus service to the city centre.

The NTA has conducted an interim analysis of Dublin's bus network to monitor progress towards these benefits. The results following the implementation of NRD Phases 1-5b, as shown below, are consistent with the findings from the last report. The next report will include data from Phase 6a.

a) On average, 12% more places of employment are already reachable within 30 minutes with the redesigned network, when compared to the pre-BusConnects network - *of a 18% target to be reached after the conclusion of the BusConnects Dublin Programme*.
b) 11-17% more jobs and university places are available to people within the same travel times, when compared to the pre-BusConnects network - *of a 14-20 % target to be reached after the conclusion of the BusConnects Dublin Programme.*

The map below shows the increase in access to jobs/places of employment and university places that has been achieved by the network implementation of NRD Phases 1-5b. The implementation of new NRD Phases is not completed and there is a significant progress towards both targets identified above.

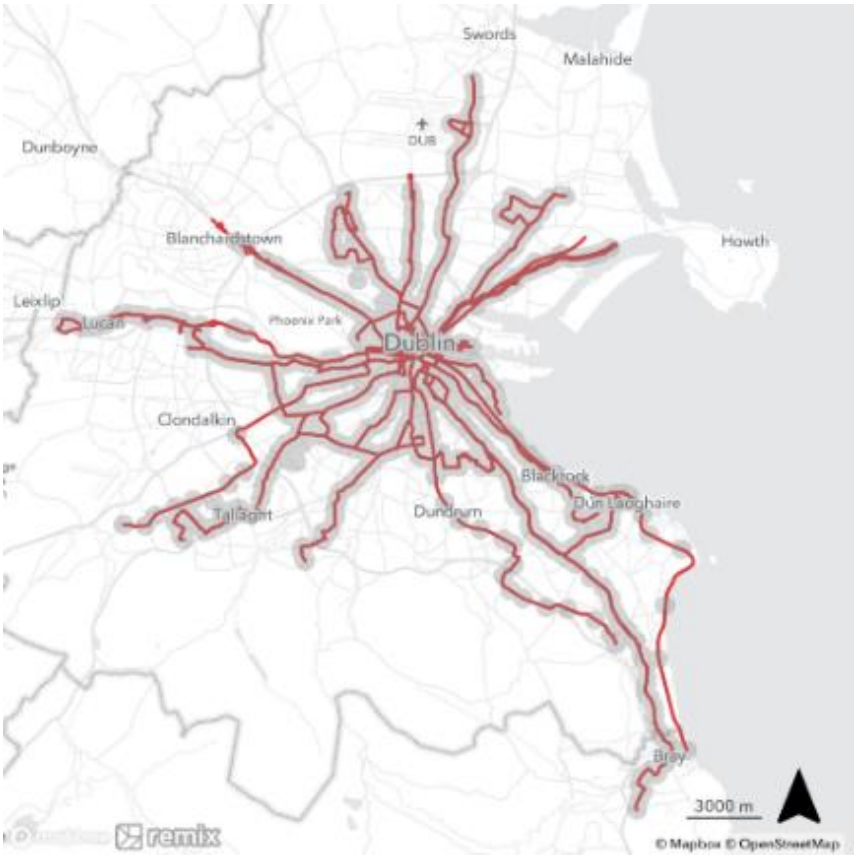
Figure 8: Map Showing Increased Access to Opportunities by Implemented Network Redesign Phases



c) Number of residents located within 400 metres of a 10-minute frequency public transport service increased by 23% with the redesigned network, when compared to the pre-BusConnects network - o*f a 35 % target to be reached after the conclusion of the BusConnects Dublin Programme*.

Figure 9 shows a map of Dublin's 10-minute public transport network. With NRD Phases 1-5b now in place, there are over 632,000 residents of Dublin living within 400 metres of a 10-minute public transport stop or station. People with this access level live in grey areas surrounding each line.

Figure 9: Dublin 10-minute Frequency Public Transport Network (Phase 1-5b)



d) Over 900,000 residents living within 400 metres of a transit stop that is served by a 15-minute or better public transport service with the redesigned network, when compared to the pre-BusConnects network - o*f the 1,000,000 residents target to be reached after the conclusion of the BusConnects Dublin Programme*.

e) 9% increase in the number of residents located within 400 metres of a 15-minute bus service to the city centre with the redesigned network, when compared to the pre-BusConnects network - o*f a 16% target to be reached after the conclusion of the BusConnects Dublin Programme*.

The increases outlined above relate entirely to the redesigned bus network implemented as part of NRD Phases 1-5b. If population growth in the vicinity of the network since the commencement of the Dublin Network Redesign Project was also taken into account, the percentage increases would be higher. With most of the network still to be implemented, it is expected that targets will be met, and possibly exceeded.

Passenger Boardings

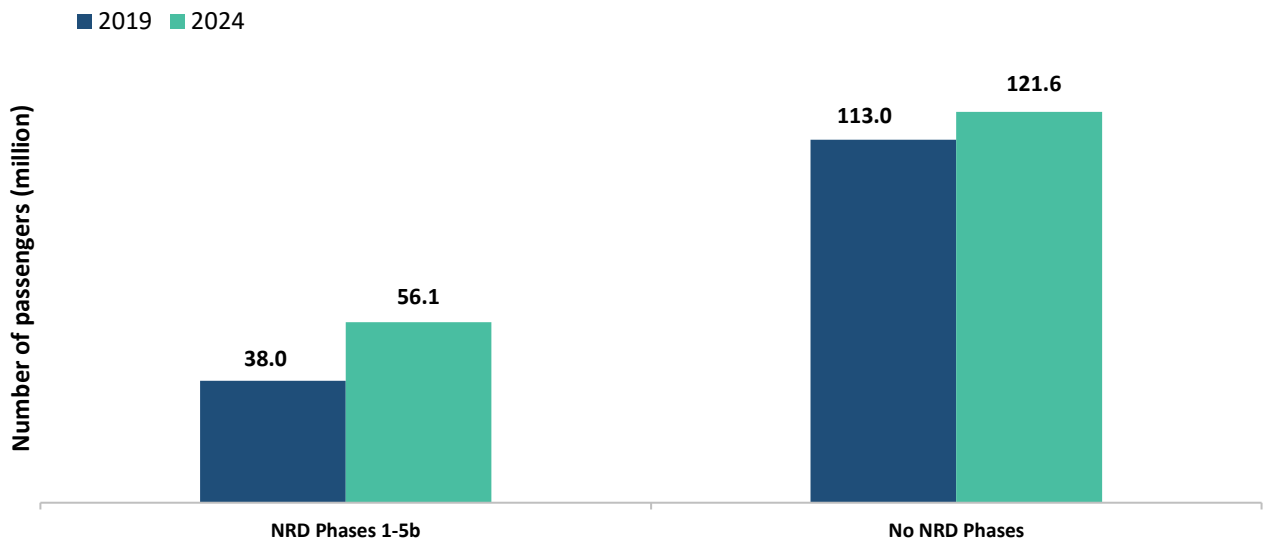
Passenger boardings in Q2 2024 on routes included in NRD Phases 1-5b increased by 40% when compared to Dublin metropolitan bus routes that have not yet been altered in the redesigned network. Overall, the

redesigned routes saw a 48% increase in passenger boardings, while other routes experienced an increase of 8%.

Assuming the 'excess' growth rate of approximately 40% experienced on NRD Phase 1-5b routes compared to the rest of the bus network were replicated over a full year, it is estimated that an additional 27 million passenger boardings could be expected as a result of these route changes.

Figure 10 below shows annualised estimates of passenger boardings for NRD Phases 1-5b, if all these Phases had been in place over the full year 2024.

Figure 10: Passenger Boardings for Implemented Network Redesign Phases



When we look at annualised passenger boarding changes by implemented Phase, we can see passenger growth is related to increase in kilometres operated. The analysis shows that passenger demand is related to additional services supplied broadly similar to what has been observed internationally. However, the response to Phase 3 (provision of additional northern orbital services) and Phase 5b (incorporating western and southern suburban W and S orbital routes) has been exceptionally strong.

Figure 11: Passenger Boardings by Implemented Network Redesign Phase

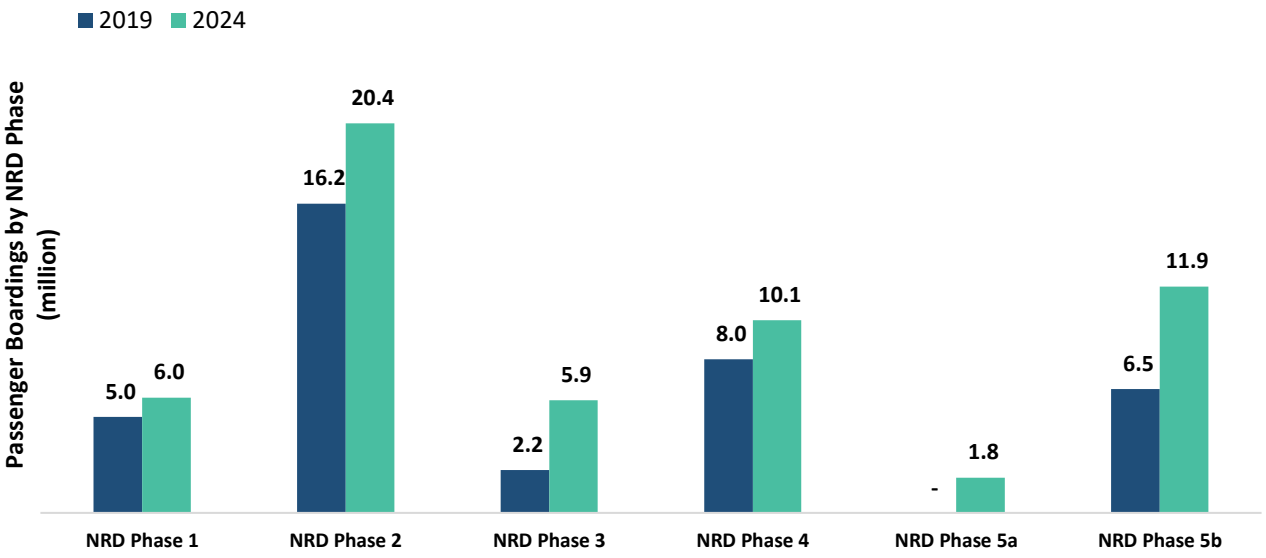


Table 1: Increase in Kilometres and Passengers by Implemented Network Redesign Phase

	Kilometre Increase	Passenger Increase
NRD Phase 1	44%	20%
NRD Phase 2	37%	26%
NRD Phase 3	170%	163%
NRD Phase 4	32%	25%
NRD Phase 5a	*No previous services*	
NRD Phase 5b	*112%*	*83%*

Passenger boardings on several routes in NRD Phases 1-5b continue to grow disproportionately compared to routes remaining in the legacy network, so as time progresses, we expect that the percentage passenger increase relative to an unchanged network will increase further.

Punctuality and Regularity

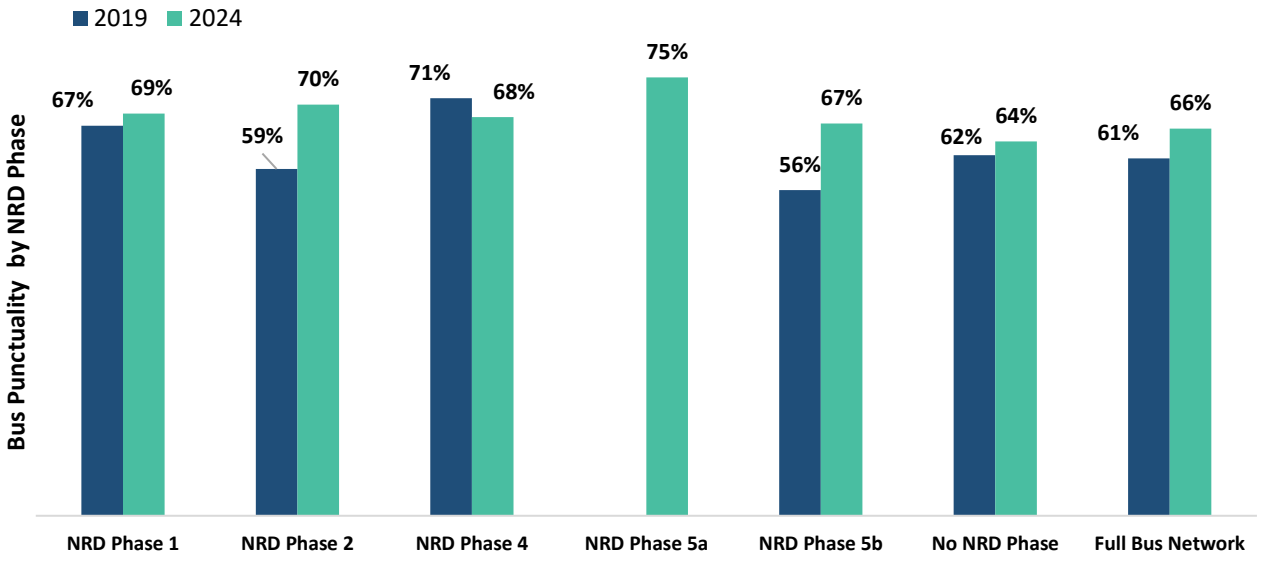
Punctuality of low frequency services (operating four or less services per hour on a weekday) and regularity, or regular spacing, of high frequency services (operating five or more services per hour on a weekday) have improved when compared to performance before the NRD Phases were launched, in part due to more accurate timetables, and in part due to better operator control and management of services. Notwithstanding this, there is significant room for further improvement, which will be dependent to a large extent on bus priority delivered by the Core Bus Corridors and improved boarding experience provided by the Next Generation Ticketing Project.

Punctuality of low frequency bus routes is assessed against the scheduled departure times for every stop. A bus is deemed to be 'on time' if it departs no more than one minute before or five minutes and 59 seconds after the scheduled departure time for each stop.

The measure of low frequency routes is calculated as follows:

$$\text{Punctuality (\%)} = \frac{\text{Number of Actual Departures on Time}}{\text{Number of Actual Departures}} \times 100$$

Figure 12: Bus Punctuality by Implemented Network Redesign Phase

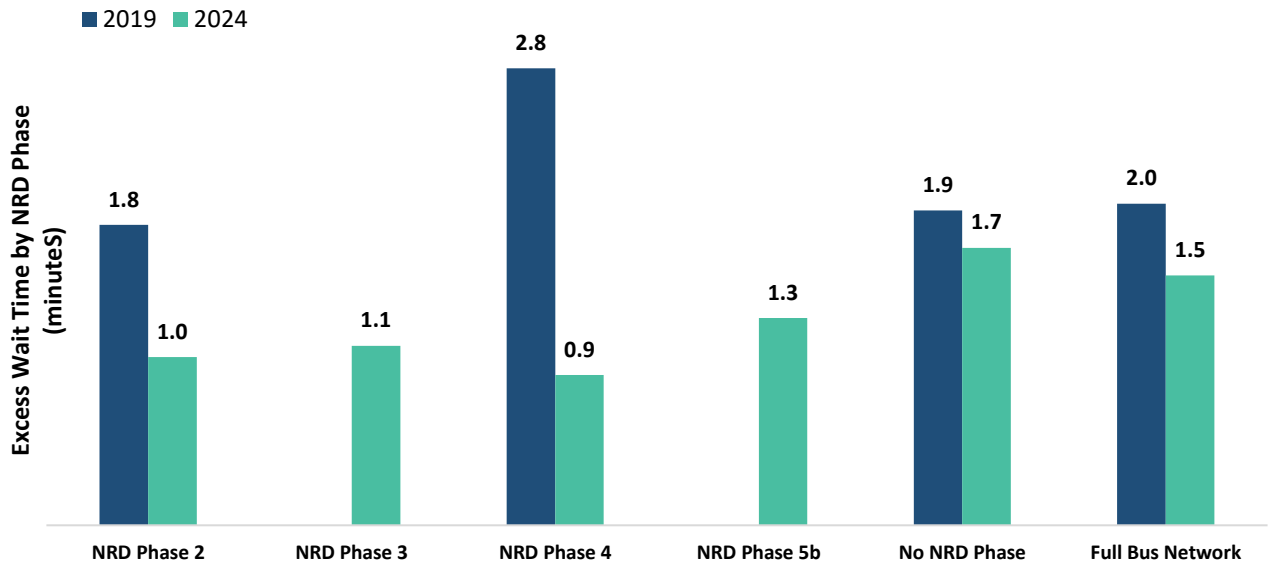


The measure of the performance of high frequency routes, regularity, considers the Excess Wait Time (EWT). EWT provides a measure of the average time a passenger must wait for the next high frequency bus, in excess of the wait time which would be expected as per the schedule.

The regularity measure of high frequency routes is calculated as follows:

EWT (min) = Average Actual Waiting Time (min) - Average Planned Waiting Time (min)

Figure 13: Excess Wait Time by Implemented Network Redesign Phase



Reliability

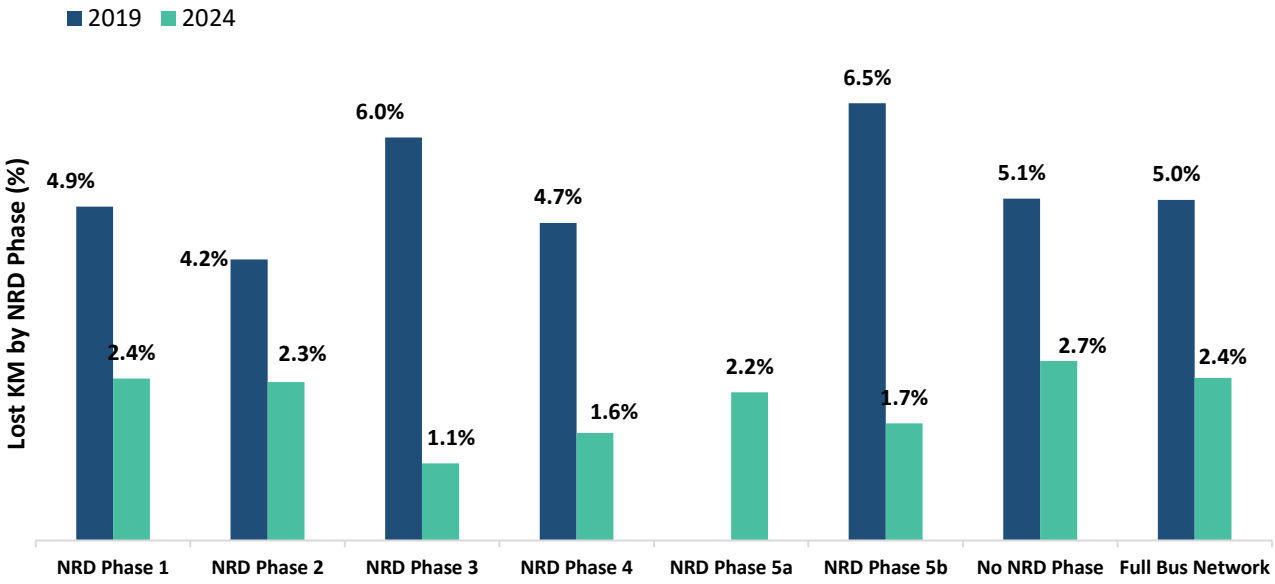
Reliability, measured by kilometres operated compared to scheduled services, has shown a 48% reduction to lost kilometres rate across the entire bus network. Routes implemented as part of Network Redesign have seen a reduction of lost kilometres rate by 64%. This is likely due to improved timetables with more realistic journey times, avoiding the need to cancel or curtail bus services to keep on schedule. In the chart shown below, the lost kilometre rate decreases per Phase which indicates an improvement in the performance.

The Lost Kilometre Rate is calculated as follows:

Step 1: Number of Lost Kilometres (Km) = Total Scheduled Services (Km) – Total Services Operated (Km)

Step 2: Lost Kilometre Rate (%) = $\left(\frac{\text{Number of Lost KM (Km)}}{\text{Total Scheduled Services (Km)}}\right) \times 100$

Figure 14: Kilometres Lost by Implemented Network Redesign Phase



Cost per Kilometre

The average cost per kilometre of NRD Phases 1-5b is €6.01 per kilometre. This cost compares to a cost per kilometre for equivalent routes operating prior to Network Redesign of €6.11 per kilometre. The average cost is influenced by several factors, such as the enhanced service levels during weekends and night-time, as well as the varying expenses associated with different operators managing the routes.

Conclusion

The BusConnects Dublin Programme has already delivered significant passenger benefits through the components initiated so far. However, several key initiatives still need to be implemented to fully realise the Programme's benefits. The introduction of bus priority along the Core Bus Corridors and the new ticketing system will improve journey times, service punctuality and reliability, thereby making bus an even more attractive option.

The BusConnects Dublin Programme has shown significant improvements in key performance indicators. For instance, there has been an annualized increase of 9.35 million, or 71%, in scheduled service kilometres in NRD Phases 1-5b compared to equivalent routes operating prior to the Network Redesign Project. Passenger boardings on routes included in NRD Phases 1-5b increased by 40% when compared to Dublin metropolitan bus routes that have not yet been altered in the redesigned network. Overall, the redesigned routes saw a 48% increase in passenger boardings, while other routes experienced an increase of 8%. Additionally, the interim analysis indicates that 12% more places of employment are now reachable within 30 minutes with the redesigned network, compared to the pre-BusConnects network, moving towards the 18% target.

The holistic approach of the BusConnects Programme aims to improve customer experience across the entire bus service, addressing concerns such as waiting times and accessibility. This comprehensive strategy sets it apart from isolated projects that may overlook the broader context and user experience. The early positive results in customer satisfaction published in the last report indicate that the Programme is already having a beneficial impact on passengers. Customer satisfaction is measured annually, and the next report will include the latest data.

As recommended by the Public Accounts Committee, the BusConnects Programme will continue to publish semi-annual reports documenting and updating the progress of the Programme. This ongoing transparency and evaluation will ensure that the Programme stays on track to deliver its full range of benefits to the public.

More information can be found in Sustainable transport for a better city | Busconnects. (https://busconnects.ie/)

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