

# BusConnects Programme Progress Report

July 2024



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## **Purpose of the BusConnects Programme Progress Report**

The purpose of this report is to provide a progress update on 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 will be 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 update 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 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 customer satisfaction. In all cases, relevant comparisons are made from 2019 bus network performance to demonstrate the impact of the Network Redesign Project as phases are implemented.

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.

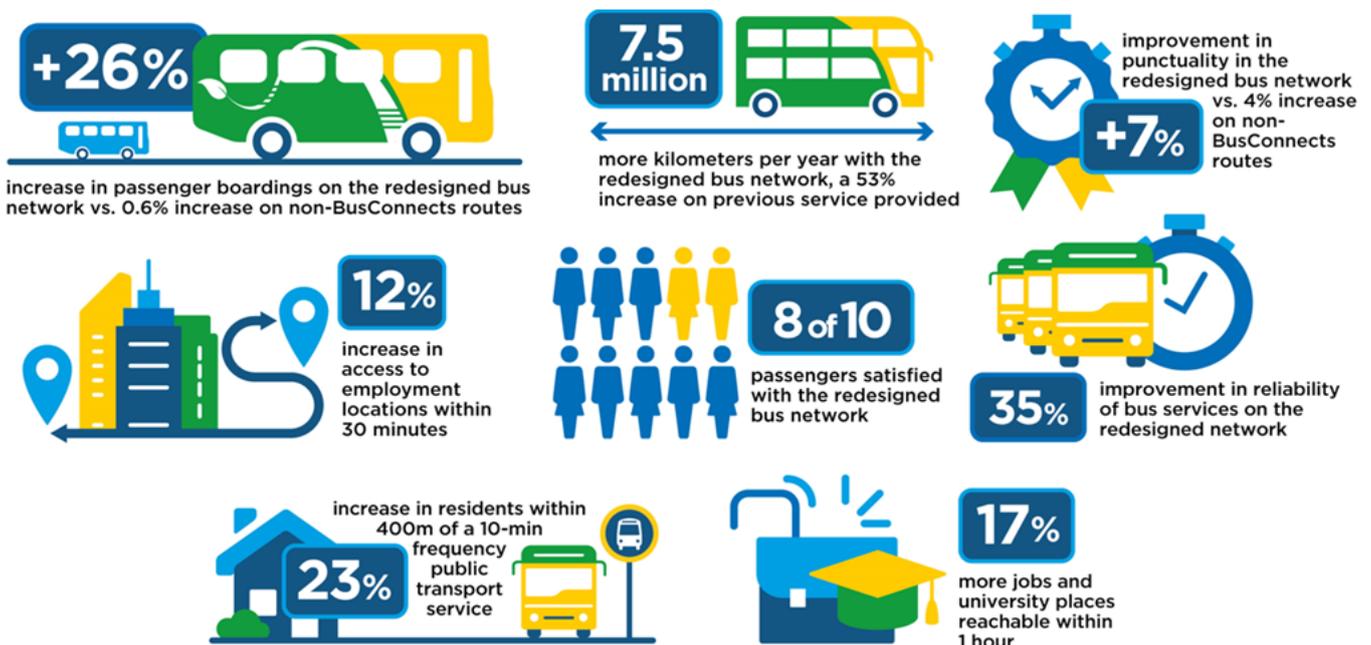
## BusConnects Dublin Programme Progress JUNE 2024

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.

<b>VISION</b>	To connect people and places through an enhanced bus system together with improved cycling and pedestrian facilities		
<b>STRATEGIC OBJECTIVES</b>	To provide reliable and frequent bus services with improved cycling and pedestrian facilities	To connect people and places through an expanded, integrated and accessible sustainable transport system	To enhance quality of life through a safer and greener transport system
<b>DUBLIN PROGRAMME OUTCOMES</b>	<ul style="list-style-type: none"> <li>• Make bus and active travel a more reliable transport option</li> <li>• Improve bus journey times, frequency and punctuality</li> <li>• Enhance the people carrying capacity and cater for future demand</li> </ul>	<ul style="list-style-type: none"> <li>• Increase destinations served by the bus and active travel networks</li> <li>• Simplify interchange between bus services and other transport modes</li> <li>• Improve inclusivity and accessibility of the bus and active travel networks</li> </ul>	<ul style="list-style-type: none"> <li>• Enhance the safety and security and provide safer cycling and pedestrian networks</li> <li>• Deliver enhanced bus and active travel options that reduce climate impact</li> <li>• Improve air quality along key BusConnects corridors</li> <li>• Improve health and wellbeing of bus and active travel users</li> </ul>

BusConnects Dublin Initiative	Progress as of End of June 2024
Network Redesign	Implemented 5 out of 11 phases of the redesigned network
Core Bus Corridors	6 of 12 schemes received planning approval by An Bord Pleanála
New Generation Ticketing	Contract awarded to experienced contractor for implementation
Fares	90-minute fare implemented across all public transport in the Great Dublin Area
Livery	New bus livery (branding, colours) introduced on most Dublin buses
Stops and Shelters	Installed approximately 1400 bus poles along the redesigned network
Transition to Zero	83 fully-operational electric buses launched in Dublin city and chargers installed

### Progress at a Glance



## BusConnects Programme

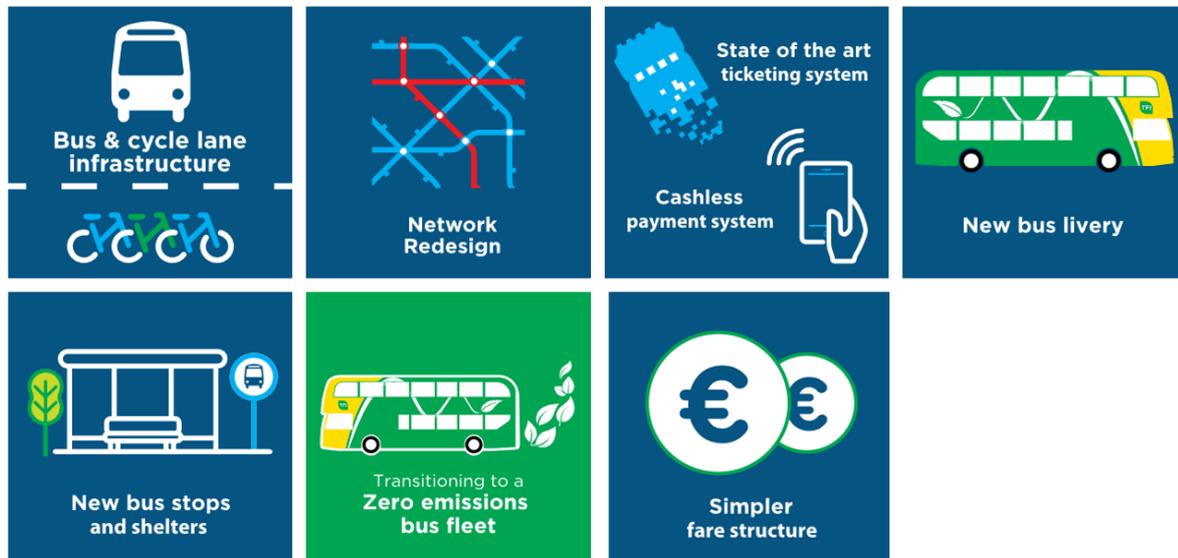
The BusConnects Programme is a strategic national-level intervention aimed at enhancing sustainable transportation across five regions in Ireland—Dublin, Cork, Limerick, Galway, and Waterford. The broad geographical coverage and comprehensive approach of the programme underscore its potential nationwide impact and demonstrate the concerted efforts of these regions in advancing sustainable urban mobility agendas. The vision of the BusConnects Programme is to connect people and places through an enhanced bus system together with improved cycling and pedestrian facilities.



*Figure 1:* BusConnects Programme vision and strategic objectives

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 2023, the National Planning Framework 2040, the Transport Strategy for the Greater Dublin Area 2022-2042 and other metropolitan area transport strategies.

The BusConnects Programme will improve the public transport network by redesigning bus routes, upgrading bus, cycling and pedestrian infrastructure, and promoting safer, cleaner travel. These improvements are being achieved through the different initiatives listed below:



**Figure 2:** BusConnects Programme Initiatives

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 Preliminary Business Case (PBC) 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 congestion 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 230km of dedicated bus lanes and 200km of cycle tracks in 12 separate schemes across five local authority areas, as shown in the figure below:

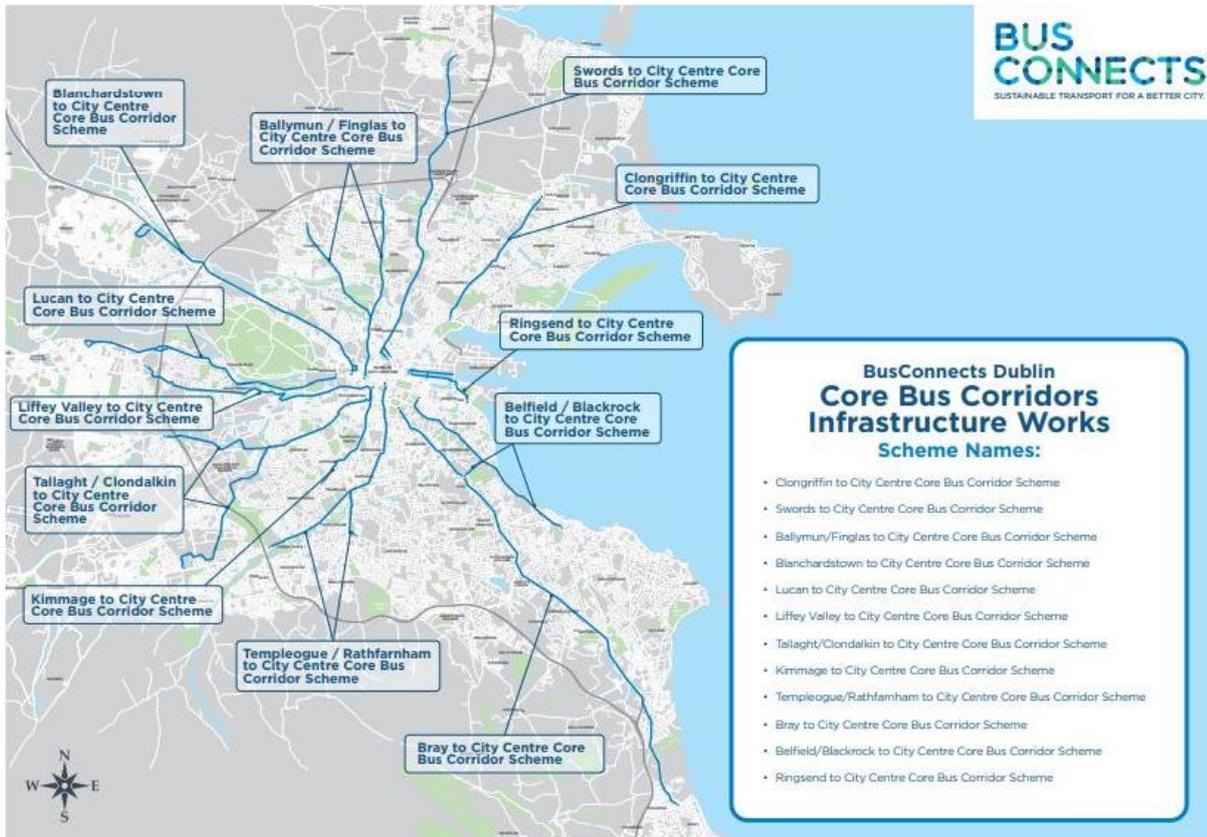


Figure 3: 12 Core Bus Corridors schemes in the BusConnects Dublin Programme

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 shown in the figure below:



Figure 4: Timeline of Stakeholder Engagement on the Core Bus Corridors

The public consultation was 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. The following is a summary of the CBC communication channels and engagements since the first round of consultation was launched in November 2018:

- ▶ One to One/Face-to-face meetings with Potentially Impacted Properties: 579
  - ▶ Public Information Events & Attendees: 18 public information events with approx. 1,600 attendees
  - ▶ Community Forums & Attendees: 41 community forums with membership of 1,400 (Approx. 5,000 attended across all forums)
  - ▶ Resident Group Meetings: Meeting with 39 groups across the 12 schemes with approx. 90 meetings.
  - ▶ No. of submissions received in total - 17,132
  - ▶ Printed Brochures - no. in total: 32,650
  - ▶ Website visitors - Total to-date: 143,775
  - ▶ Twitter: 3.6 million tweet impressions, 4,316 followers
  - ▶ Emails and Freephone numbers: 11,630 emails (excluding submissions)
  - ▶ Freephone: 3672 calls received
  - ▶ Virtual Room visitors - Total: 6,039
  - ▶ Number of letters issued: Approx. 4,732 to-date
  - ▶ Public information advertisement campaigns: 81 newspaper advertisements, 418 radio advertisements, 776 bus shelter public consultation information messages, on bus - Dublin Bus A2 x 500, GAI A2 x 40, 55 x Luas Portraits, 150 x Luas Straplins, 15 x Luas Columns, various social media campaigns also took place
- (Audience Reach for these campaigns was 9,821,969 for print and online reach was 33,685,566. Audience reach data is sourced from MediaTel and gives an indication of the potential audience your coverage has reached. Online reach is derived from unique daily user figures and is adjusted for Ireland internet audience size.)*

**Figure 5:** Summary of CBC Public Consultation

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 six 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

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 are currently establishing a panel of contractors to build the schemes, with procurement of the first two schemes to commence this year. It is expected that the first two scheme construction contracts will be awarded in the first half of next year, followed subsequently by the award of an additional two schemes for construction. Given the traffic management requirements during construction, it is considered that a maximum of four schemes can be built concurrently.

Additionally, as part of the BusConnects Dublin Core Bus Corridors infrastructure works, the Liffey Valley Bus Plaza was opened in February 2023, providing high quality facilities to support bus routes running from the Liffey Valley Shopping Centre serving the surrounding areas and the city centre.



*Figure 6:* Liffey Valley Bus Plaza

## **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, 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 is a large and complex technology project, and it is likely to take between three to four years to fully roll out the new system. Exact timelines will be finalised in the coming months as the newly appointed supplier commences the detailed design stage of the technology solution.

### 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 3kms 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 opened up new journey possibilities for many people.

### 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. This project also includes the electrification of existing bus depots and the construction of new depots to support operation of the fully electric fleet.

The project is on track to introduce the first 100 electric buses into service by the end of summer 2024, with charging capacity in place in Summerhill and Phibsborough depots. 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 Core Bus Corridors. The new style of TFI (Transport for Ireland) bus stops are shown below.



**Figure 7:** New TFI Bus Stops

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, approximately 1400 TFI bus poles have been installed in tandem with the roll out of the Network Redesign Project up to and including Phase 5b (southern orbital routes).

## 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 8:* New Bus Livery

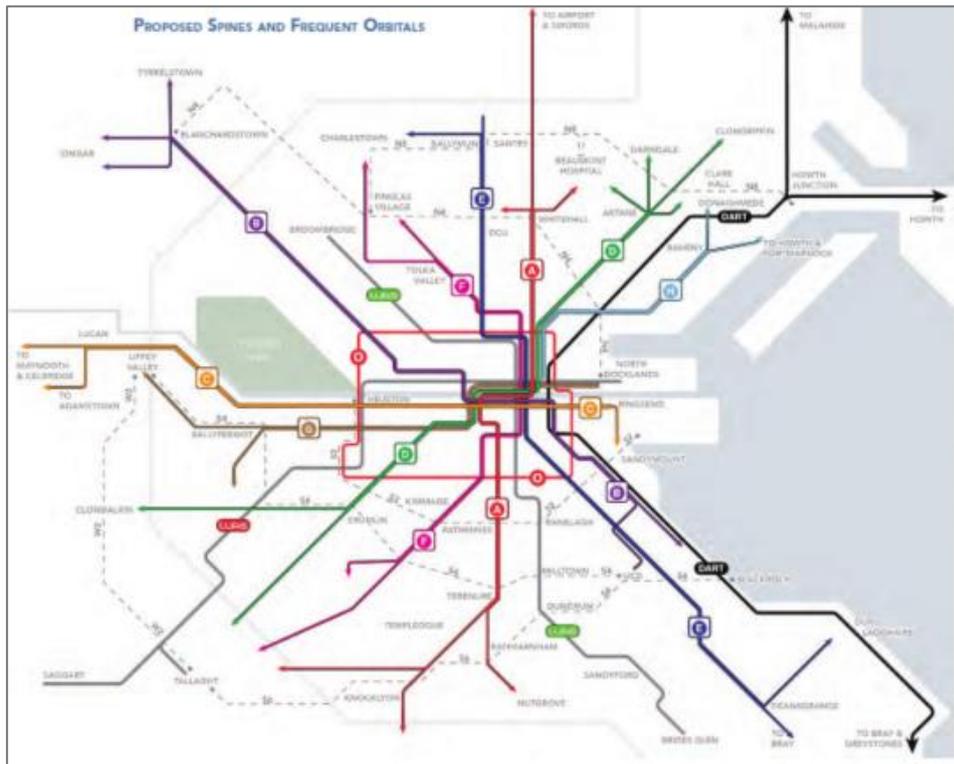
This new design, mirroring the same colour palette of the new bus stops is intended to reinforce the integrated nature of the Public Service Obligation (PSO) fleet, allowing passengers to more easily identify these services alongside other commercial operations. Careful consideration was given to accessibility 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 9:** Redesigned Network Key Spines and Orbitals

The overall network represents a major investment in enhanced bus services, delivering a 35% increase in annual scheduled service kilometres, a significant increase in overall capacity and frequency for customers as well as more evening and weekend services. 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 617,000 km 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 the 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 1,649,000 km or 32% 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 the 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 1,376,000km or 108% 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 24-8hour 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 937,000km 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 1,254,000km 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.

As this Phase was only recently initiated, it is not included in our updates on cost, passenger numbers, punctuality and reliability as a minimum of six months of operation is recommended prior to measuring performance.

There was an annual increase of 1,697,000km or 51% in scheduled service kilometres, compared to equivalent routes operating prior to the launch of Phase 5b.

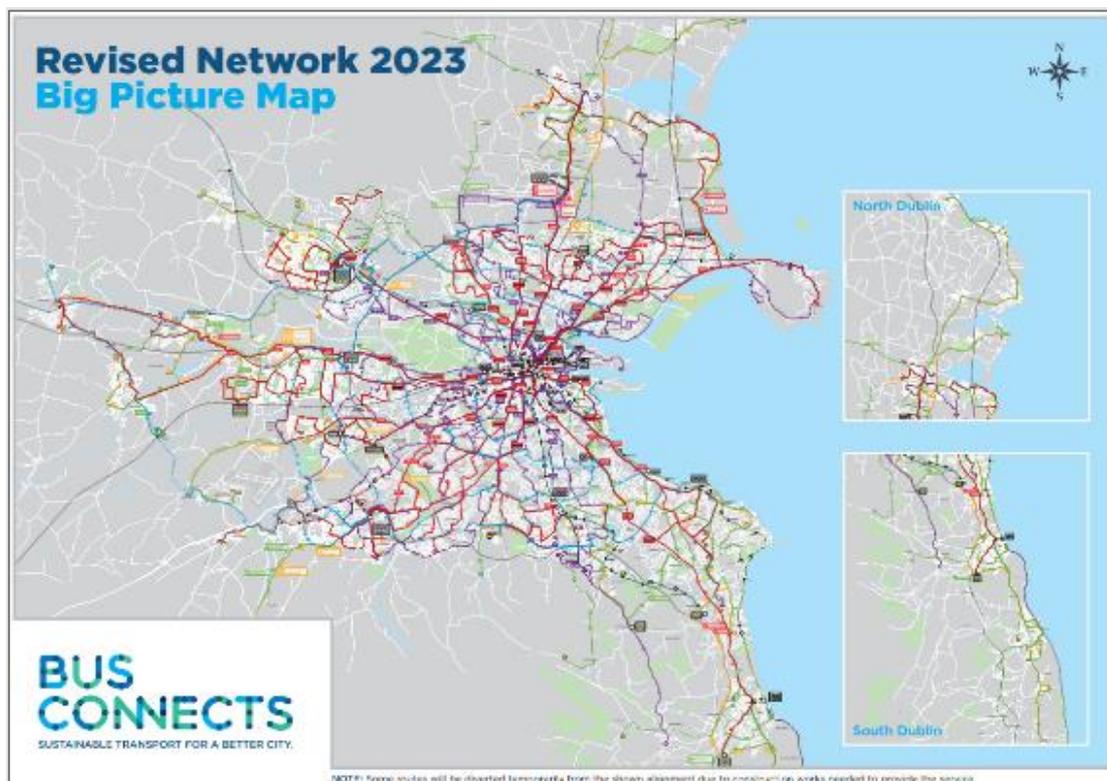


Figure 10: [Revised Dublin Network Map](#)

## 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 Network Redesign project.

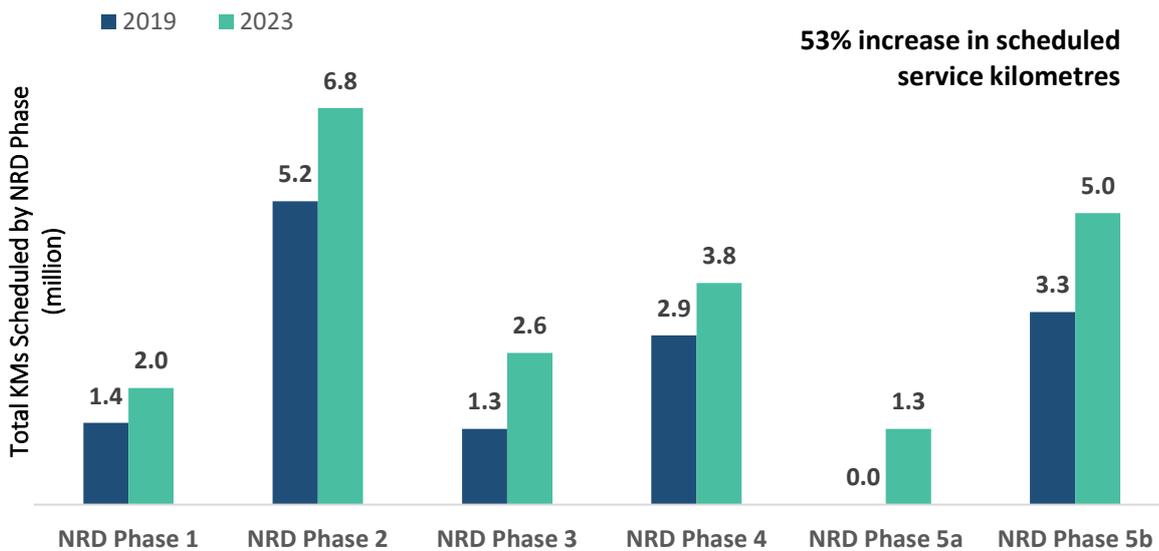
Comparisons were made for Network Redesign Phases 1-5a before launch (from Q4 2019) and after launch (from Q4 2023). These same time periods were used to calculate changes to the KPIs across the full bus network and routes not included in these Phases. Phases 1-5a have been assessed for changes in passenger boardings, punctuality, regularity, reliability and access to opportunities, with all Phases showing improvement across all metrics. Phase 5b hasn't been included in passenger boardings or performance

metrics yet, as it was only launched during Q4 2023, but Phase 5b is included in kilometres operated and access to opportunities analysis. The customer satisfaction survey considers public perception over implementation of Phases 1-4.

### Kilometres Operated

Overall, there has been an annualised increase of 7.529m km, or 53% in scheduled service kilometres in Phases 1-5b, compared to equivalent routes operating prior to Network Redesign.

Figure 11: Annual Kilometres Covered by Implemented Network Redesign Phases



### Access to Opportunities

The increased coverage and frequency of services associated with the Network Redesign Phases introduced to date have resulted in a large increase in the number of people in Dublin who have better access to frequent public transport services to avail of employment, retail, social and other opportunities.

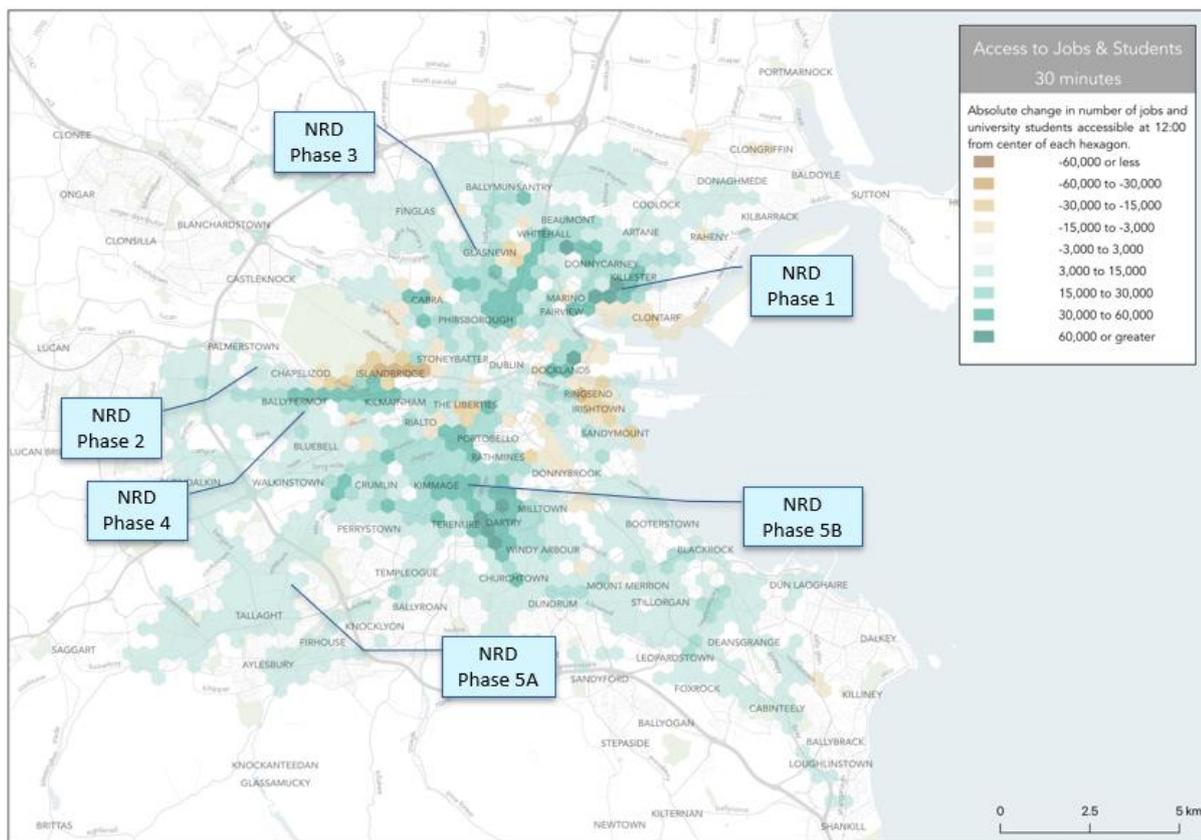
The Network Redesign project contributes significantly to the BusConnects Dublin Programme benefits that will be realised upon completion of the entire programme.

- On average, 18% more places of employment could be reached by Dublin-area residents in 30 minutes of travel time.
- 14-20% more jobs and university places will be available to people within the same travel times as now.
- Number of residents located within 400m of a 10-minute frequency public transport service would increase by 35%.
- Nearly 1,000,000 residents to be located within 400m of a 15-minute frequency service.
- 16% increase in the number of residents located within 400m 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. Below are the results as of December 2023, following the implementation of Network Redesign Phases 1-5b:

- a) On average, 12% more places of employment are already reachable within 30 minutes with the 2023 network, when compared to the pre-BusConnects network - *of a 18% target to be reached after the conclusion of the 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 programme.*

The map below shows the increase in access to jobs/places of employment and university places that has been achieved by the network as of December 2023. The implementation of new Network Redesign phases is not completed and there is a significant progress towards both targets identified above.



**Figure 12:** Map Showing Increased Access to Opportunities by Implemented Network Redesign Phases

- c) Number of residents located within 400m of a 10-minute frequency public transport service increased by 23% with the 2023 network, when compared to the pre-BusConnects network - *of a 35 % target to be reached after the conclusion of the Programme.*

Figure 13 shows a map of Dublin’s 10-minute public transport network. With Phases 1-5b now in place, there are over 632,000 residents of Dublin living within 400m of a 10-minute public transport stop or station. People with this access level live in grey areas surrounding each line.



**Figure 13:** Dublin 10-minute Frequency Public Transport Network (2023)

- d) Over 900,000 residents living within 400m of a transit stop that is served by a 15-minute or better public transport service with the 2023 network, when compared to the pre-BusConnects network - *of a Nearly 1,000,000 residents target to be reached after the conclusion of the Programme.*
- e) 9% increase in the number of residents located within 400m of a 15-minute bus service to the city centre with the 2023 network, when compared to the pre-BusConnects network - *of a 16% target to be reached after the conclusion of the Programme.*

The increases outlined above relate entirely to the redesigned bus network implemented to date. If population growth in the vicinity of the network since the commencement of the 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.

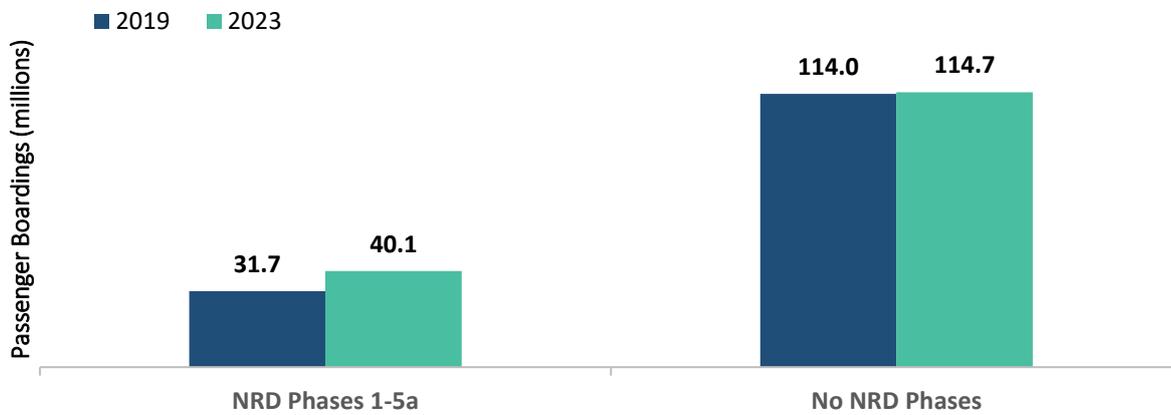
### **Passenger Boardings**

Passenger boardings in Q4 2023 have increased by 26% on routes included in Network Redesign Phases 1-5a, compared to equivalent routes that were in place in Q4 2019. Passenger boardings in Q4 2023 on Dublin metropolitan bus routes that have not yet been altered in the redesigned network were 0.6% higher than in Q4 2019.

Assuming the “excess” growth rate of approximately 25% experienced on Network Redesign Phase 1-5a routes compared to the rest of the bus network were replicated over a full year, it is estimated that an additional 9.7 million passenger boardings could be expected as a result of these route changes.

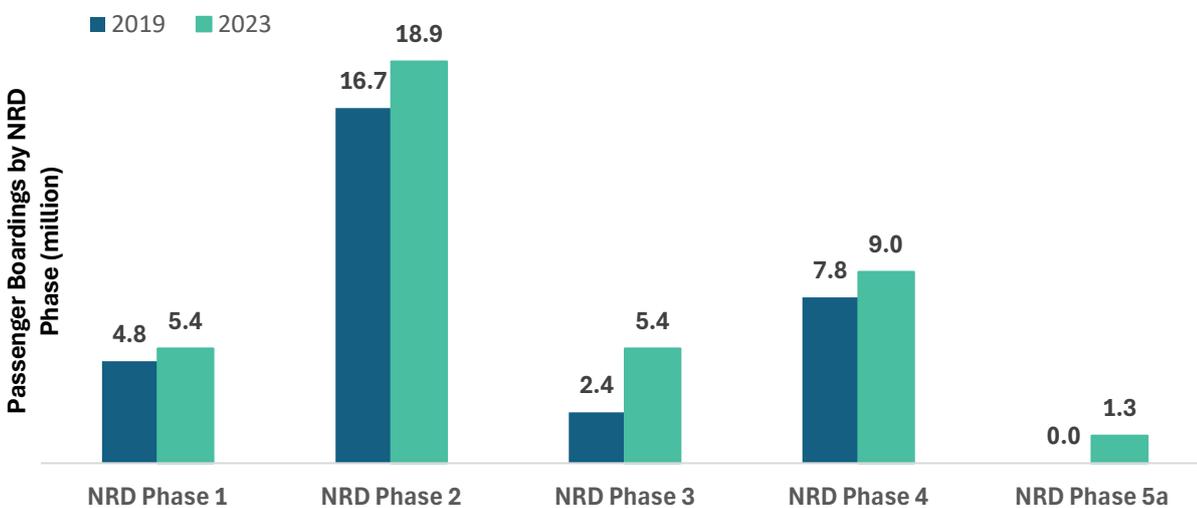
Figure 14 below shows annualised estimates of passenger boardings for Phases 1-5a, if all these phases had been in place over the full year 2023.

**Figure 14:** Passenger Boardings for Implemented Network Redesign Phases



When we look at 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) has been exceptionally strong.

**Figure 15:** Passenger Boardings by Implemented Network Redesign Phase



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

	Kilometre Increase	Passenger Increase
Phase 1	44%	12%
Phase 2	32%	13%
Phase 3	108%	127%
Phase 4	32%	16%
Phase 5a	No previous services	

Passenger boardings on several routes in Phases 1-5a 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

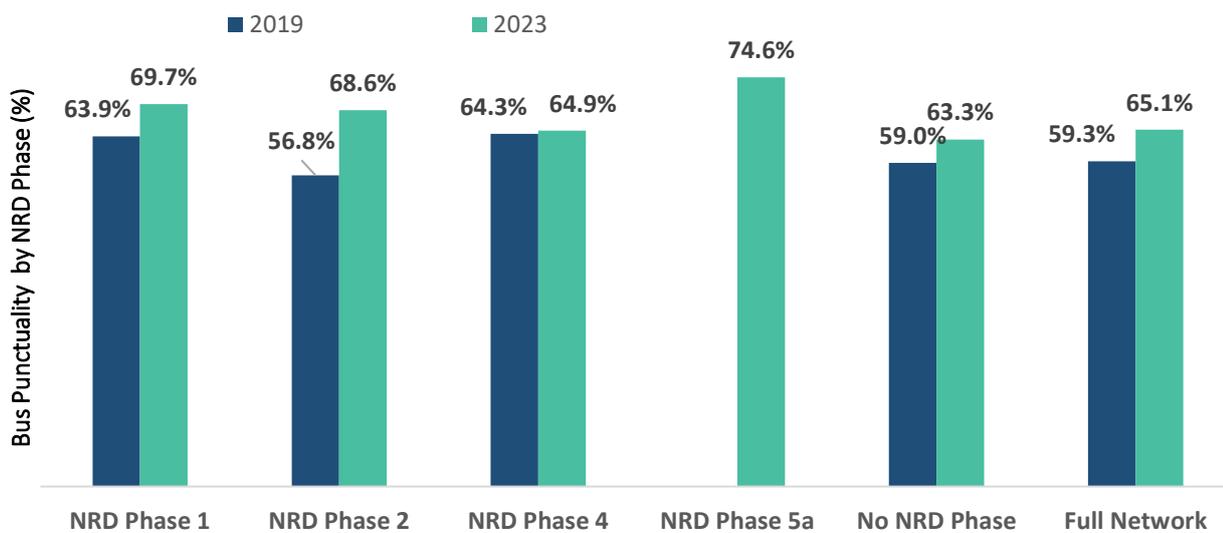
Punctuality of low frequency services (operating four or less services per hour on a weekday) and regularity, or regular spacing, of high frequency services have improved when compared to performance before the Phases were launched, in part due to more accurate timetables, and in part due to better operator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

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 16: Bus Punctuality by Implemented Network Redesign Phase

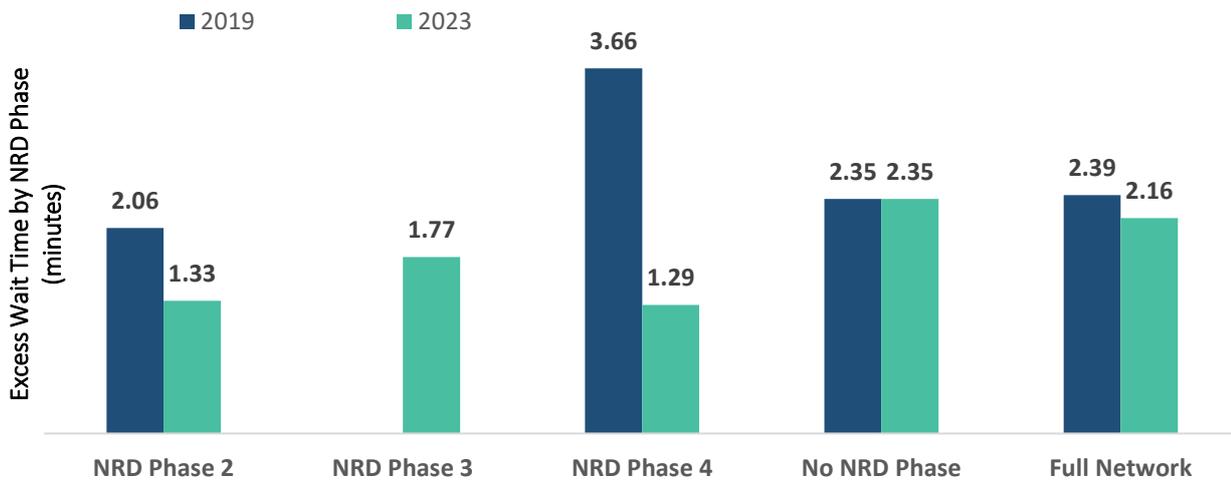


The measure of the performance of high frequency routes, regularity, considers the Excess Wait Time (EWT). EWT provides a measure of the average time a passenger must wait for the next high frequency bus, in excess of the wait time which would be expected as per the schedule.

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

$$\text{EWT (min)} = \text{Average Actual Waiting Time (min)} - \text{Average Planned Waiting Time (min)}$$

**Figure 17:** Excess Wait Time by Implemented Network Redesign Phase



### Reliability

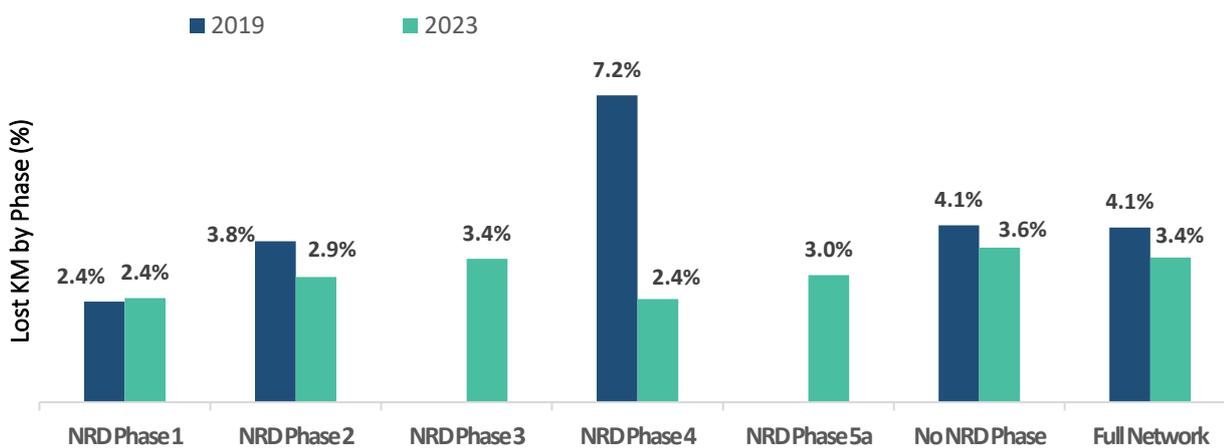
Reliability, measured by kilometres operated compared to scheduled services, has shown a 35% improvement on average across all Phases compared to 13% on routes not included in the redesigned network. This is likely due to improved timetables with more realistic journey times, avoiding the need to cancel 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 18:** Kilometres Lost by Implemented Network Redesign Phase



### Cost per Kilometre

The average cost per kilometre of Phases 1-5a is €6.28/km. This cost compares to a cost per kilometre for equivalent routes operating prior to Network Redesign of €5.80/km. The increase in costs is due to a number

of factors, including increased weekend service and night-time service levels, and different costs, depending on which operator is operating the routes.

### Customer Satisfaction

The customer satisfaction research was designed to evaluate Phases 1-4 of the Network Redesign project. The research aimed to assess users’ satisfaction with the new bus routes, including in comparison to the previous routes, and also the perceived impact on public transport usage. The research was based on 1,905 face-to-face interviews spread across days of the week and time of the day, between April and May of 2024.



Figure 19: Customer Satisfaction Survey Infographic

The results show that Phases 1-4 of the Network Redesign project are positively rated by the users, with 8 in 10 users of the new bus routes satisfied, and 44% indicating they are ‘very’ satisfied with the service.

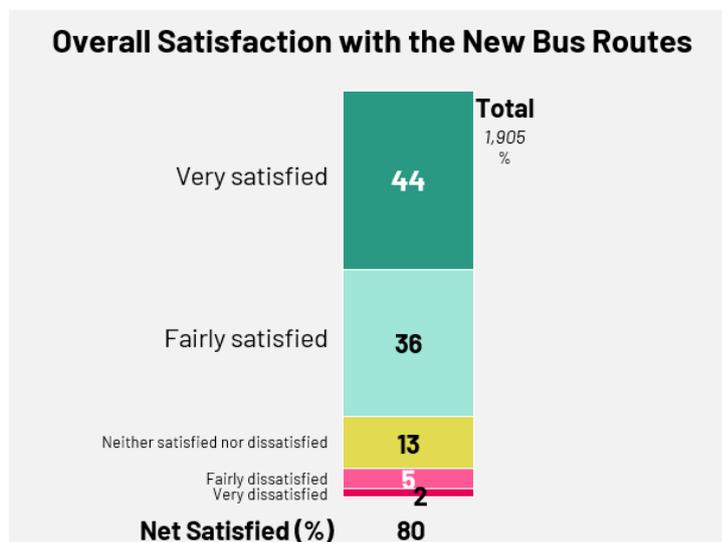


Figure 20: Overall Satisfaction with the New Bus Routes

Satisfaction was higher for the H-Spine and N-Orbitals (89% and 84%, respectively) while the lowest satisfaction is registered for the C-Spine (73%). Satisfaction with G-Spine is in line with the average (76%).

The redesigned routes have attracted new users and have increased frequency of use amongst existing passengers, with 14% of participants claiming they have started using the bus since the Phases have been

launched. More than 1 in 3 are using the bus more since the redesigned routes have been introduced and this incidence is higher for the H-Spine with 40% reporting increased usage.

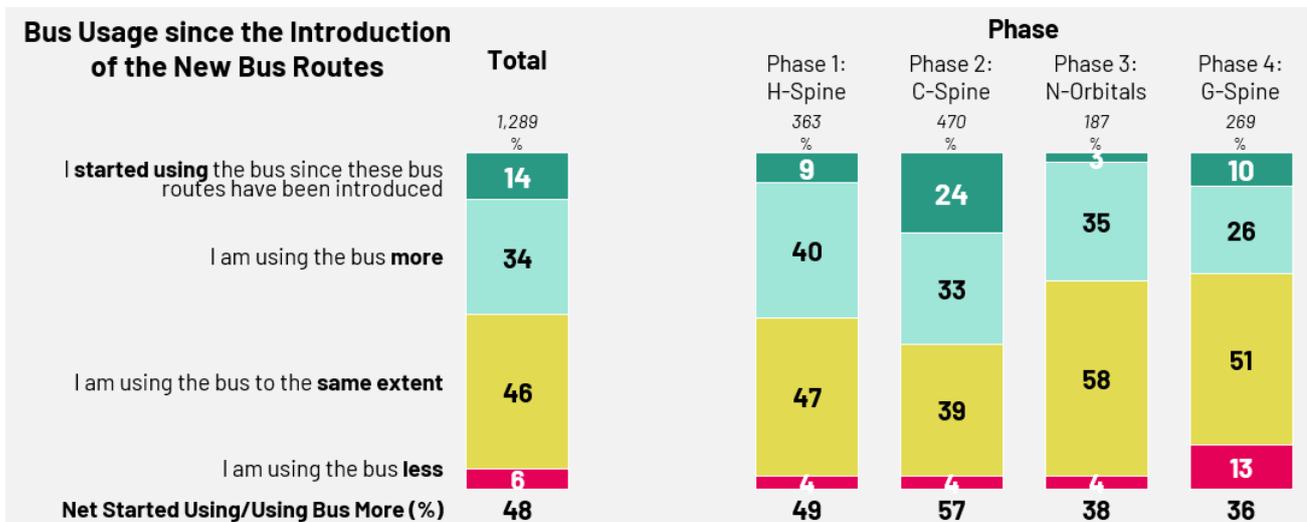


Figure 21: Bus Usage Since the Introduction of the New Bus Routes

Nearly half of users surveyed indicated that the service is better now, compared with previous routes, especially for the N-Orbitals where 58% reported improvement.

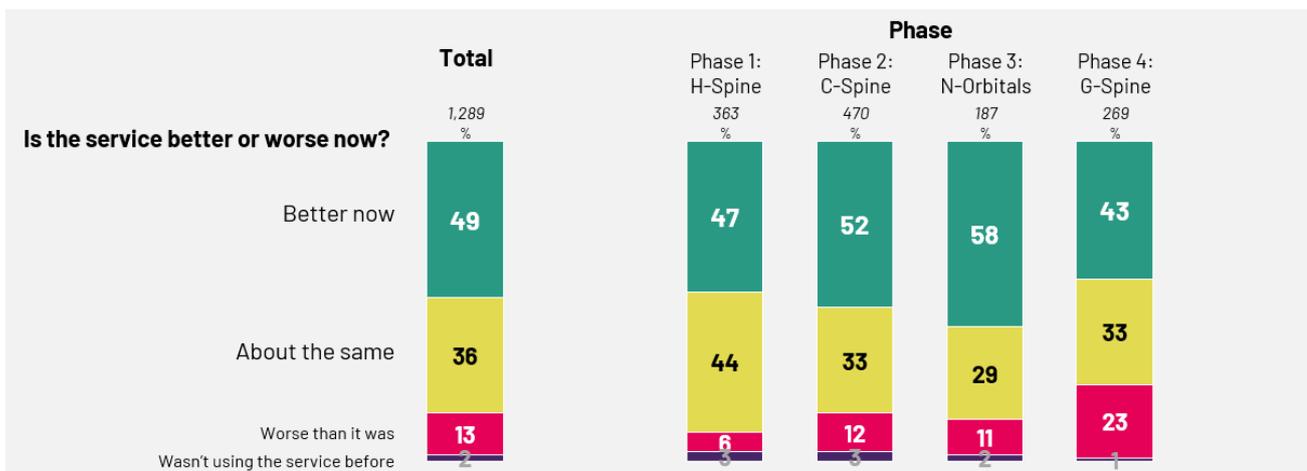


Figure 22: Evaluation in Comparison to the Previous Routes

A fully integrated bus network will only be delivered when all Network Redesign Phases are implemented. It is at this point that the success of the project can be fully assessed. Furthermore, the other elements of the BusConnects Programme, in particular the Core Bus Corridors, will need to be delivered to fully realise the benefits of the BusConnects Programme. In the interim the NTA will continue to evaluate and report on the benefits of Network Redesign project and other initiatives implemented as part of the BusConnects Dublin Programme.

## Conclusion

Although benefits have already been delivered on components of the BusConnects Programme initiated to date, there are still several key initiatives that have yet to be delivered that will contribute to realisation of the programme benefits set out in the Preliminary Business Case. For example, the punctuality and reliability of service will continue to improve and progress towards the overall programme benefits with the implementation of bus priority along the Core Bus Corridors and the implementation of a new ticketing system allowing for easier passenger boarding.

BusConnects aims to address customer experience across the entire bus service, including concerns as waiting times and accessibility, which sets it apart from isolated projects that may inadvertently overlook the broader context and user experience. The positive results in customer satisfaction indicates that the programme efforts are already producing positive impacts on passengers, even though the programme is still in the early stages of implementation.

As recommended by the Public Accounts Committee, the BusConnects Programme will publish reports on a semi-annual basis to its website documenting and updating the BusConnects Programme progress.

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

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