

New Network Plan

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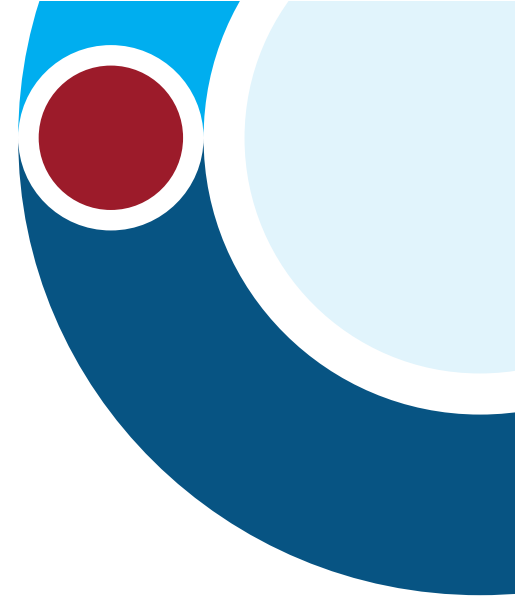
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1 Summary

What is BusConnects Waterford?

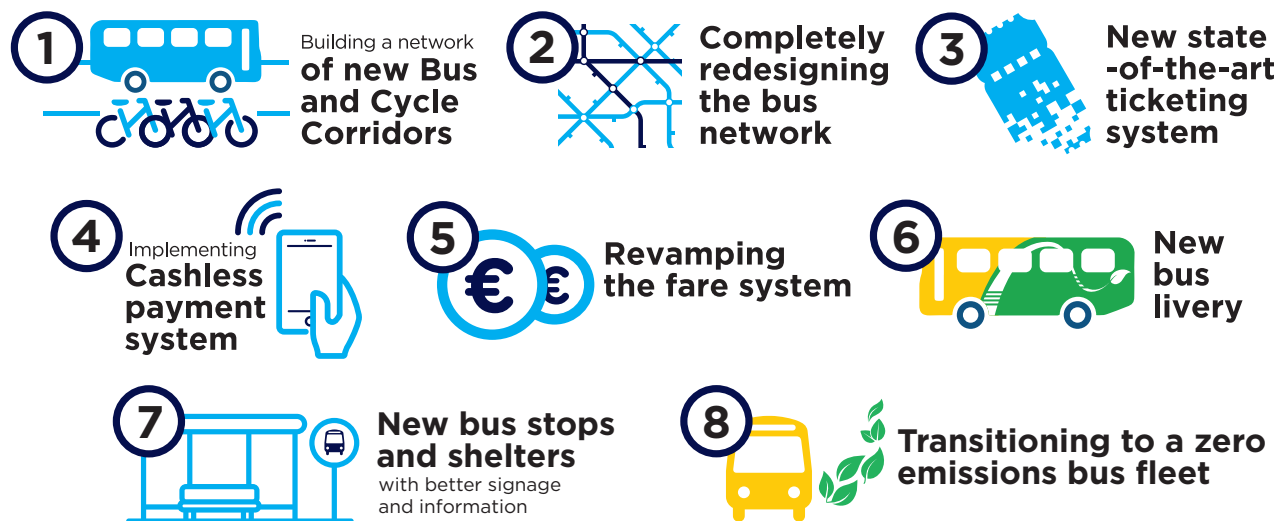
BusConnects is a programme of public transport investment in Ireland's major urban centres. It is developed and managed by the National Transport Authority (NTA), and funded by Project Ireland 2040.

BusConnects includes many elements:

- Redesigning the bus network
- Building new bus corridors and cycle lanes
- Implementing a state of the art ticketing system
- Implementing a cashless payment system
- Simpler fare structure
- New bus livery
- New bus stops and shelters
- Transitioning to a new zero emissions bus fleet

BusConnects Waterford will help realise these local and Government strategies and plans:

- Waterford Metropolitan Area Transport Strategy (WMATS)
- Regional Spatial and Economic Strategy for the Southern Region
- Waterford City and County Development Plan 2022-2028



This redesign of the Waterford bus network is one of the eight strategies that make up the BusConnects programme.

- National Development Plan 2021-2030
- National Sustainable Mobility Policy
- Climate Action Plan

WMATS foresaw this major investment in bus service, infrastructure and priority measures. WMATS planned for approximately 63 kms of bus lanes and bus priority measures alongside new cycling routes and greenways. The new bus network will incorporate the relocation of Plunkett Station to a new site in the North Quays, and the available pedestrian and cycling

connections over the new active-travel bridge. Finally, BusConnects will increase the number and quality of bus vehicles in service, as planned in WMATS, and will deploy new zero-emission buses.

What is the Network Redesign?

The Waterford bus network has evolved with the growth of the city. Recent improvements to bus frequencies, weekend service levels and reliability have improved the usefulness of public transport in the city.

The Waterford Metropolitan Area is expected to grow 50% more populous by the year 2040. In order to accommodate this growth whilst maintaining a high quality of life, a step-change in the level of use of public transport will be needed. There is an urgent need to build on recent success in Waterford by restructuring the Waterford urban bus network and making greater investments in useful, reliable bus services.

This network redesign is one step in that process of restructuring and reinvestment. It is a collaboration among:

- National Transport Authority
- Waterford City and County Council
- Kilkenny County Council

The bus network redesign is a review of where and how often the bus should come. This includes which roads buses run on, times and days of

service, frequencies, stop locations, and how people will interchange between routes.

The network has been reinvented from a blank slate, rather than adjusted from the current network. There is no assumption that inherited patterns of bus service must be maintained for the sake of tradition or to avoid change.

Redesign Process

This report concludes a public consultation process. The planning team began with an assessment of existing services, then presented a Draft New Network to the public, collected feedback on that Draft, and then refined the Draft to produce this final New Network Plan.

This report includes:

- Key principles and choices in redesigning the bus network.
- The New Network Plan.
- A summary of public feedback and how it influenced the New Network Plan.

Every detail of the existing network is something somebody relies on. Any large change to a bus network

will result in inconvenience for some people, even if it benefits most people.

This New Network Plan will benefit large numbers of Waterford residents, visitors and workers. Reasonable efforts and expenditures have been included to reduce (but not eliminate) disruptions to existing bus users in the city.

Implementation of route changes is expected to begin in 2026. As conditions evolve the routes may be modified from what is shown in this Plan, and the changes may be made in phases rather than all at once.

Routes Under Review

The network redesign was focused on the urban portions of Counties Waterford & Kilkenny (as shown on the next page). This urban area is currently served by PSO routes:

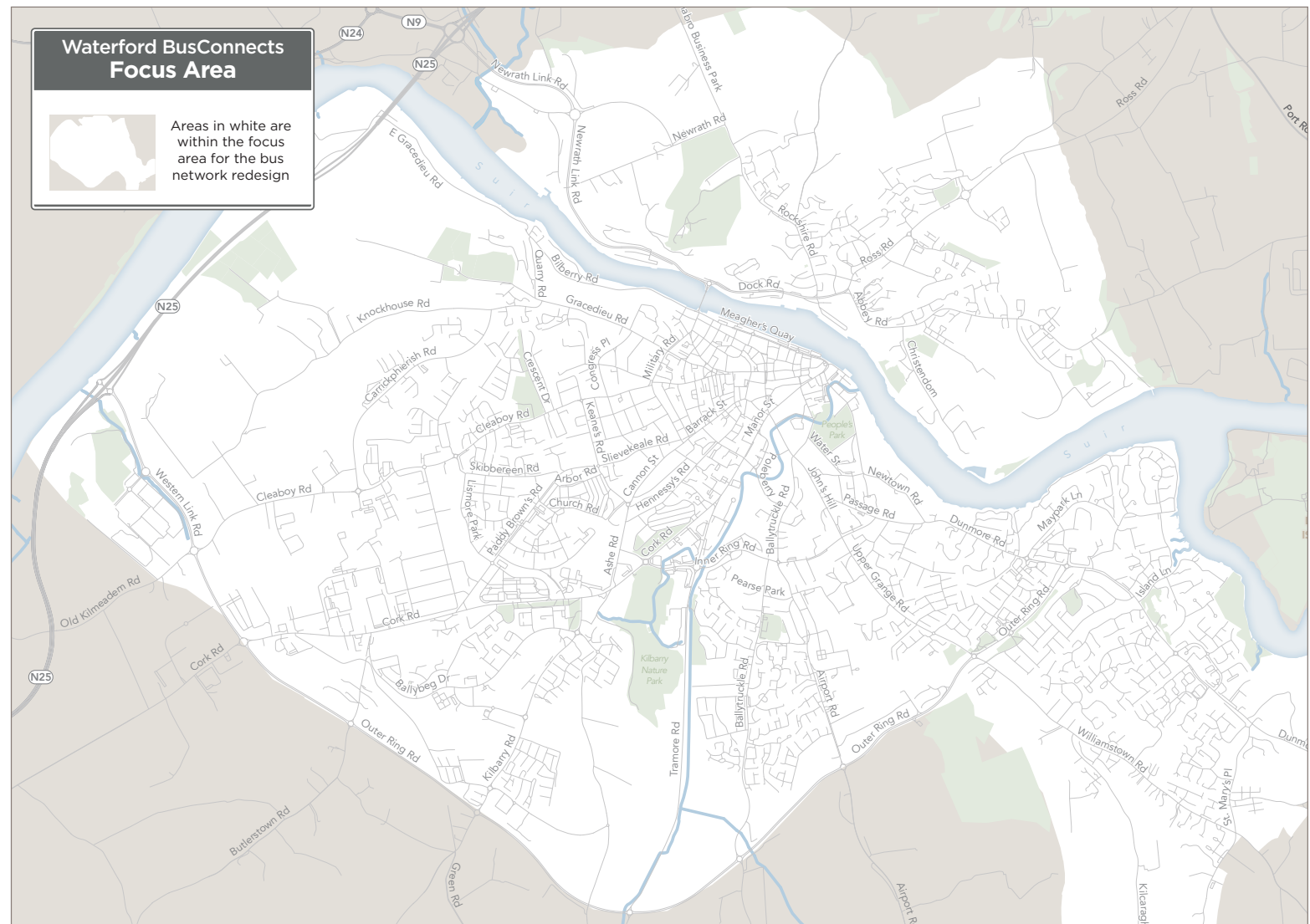
- W1: Clock Tower - SETU Cork Road - Merchants' Quay
- W2: Clock Tower - SETU Cork Road - Meagher's Quay
- W3: Clock Tower - St. John's Park - Meagher's Quay
- W4: Peter Street - Carrickphierish - Browns Road

Focus Area

- W5: Oakwood - Waterford Hospital

This focus area is also served by the urban commercial Routes 607, 617 and 627, operated by J.J. Kavanagh, and by long-distance routes (such as Route 360 from Tramore and 40 from Wexford).

Services among smaller towns and villages, outside of this urban area, are not part of BusConnects. They are addressed through the Connecting Ireland Rural Mobility Plan, a national programme to improve public transport between cities and towns, and within rural areas.



How to Read the Network Maps

New Route Numbers

For this planning process, all of the planned routes have been given new numbers, without the “W” prefix, to differentiate them from existing routes.

Ireland has a new national system for assigning bus route numbers, which helps online and phone-based journey planners work well for journeys among Irish cities and towns. That new system will include Waterford. The numbers for each route in this plan are therefore likely to change again, to integrate with the national system, when the network is put in place.

Line Width Shows Frequency

In the maps on the next two pages **the thickness of the lines represent the route frequency.** Thicker lines are routes coming every 15 minutes, Monday through Sunday, whilst thinner lines are routes coming every 30 minutes.

Route Branching

Some routes in the New Network will branch, shown on the maps with this diagram:

What does it mean when two branches split on the map?



Route branches continue at lower frequency

These are not interchanges. The buses on the less frequent “branches” run together to form the more frequent “trunk.”

This is proposed for:

- Route 3 at Pearse Park
- Route 4 in Ferrybank and at the Outer Ring Road
- Route 5 at Ballybeg

No interchange is necessary between the two segments of the route, but the inner segment would offer shorter waits for a bus than the outer segment.

Route 6 is proposed to have a similar structure, but with only one branch. A high frequency will operate between University Hospital Waterford and

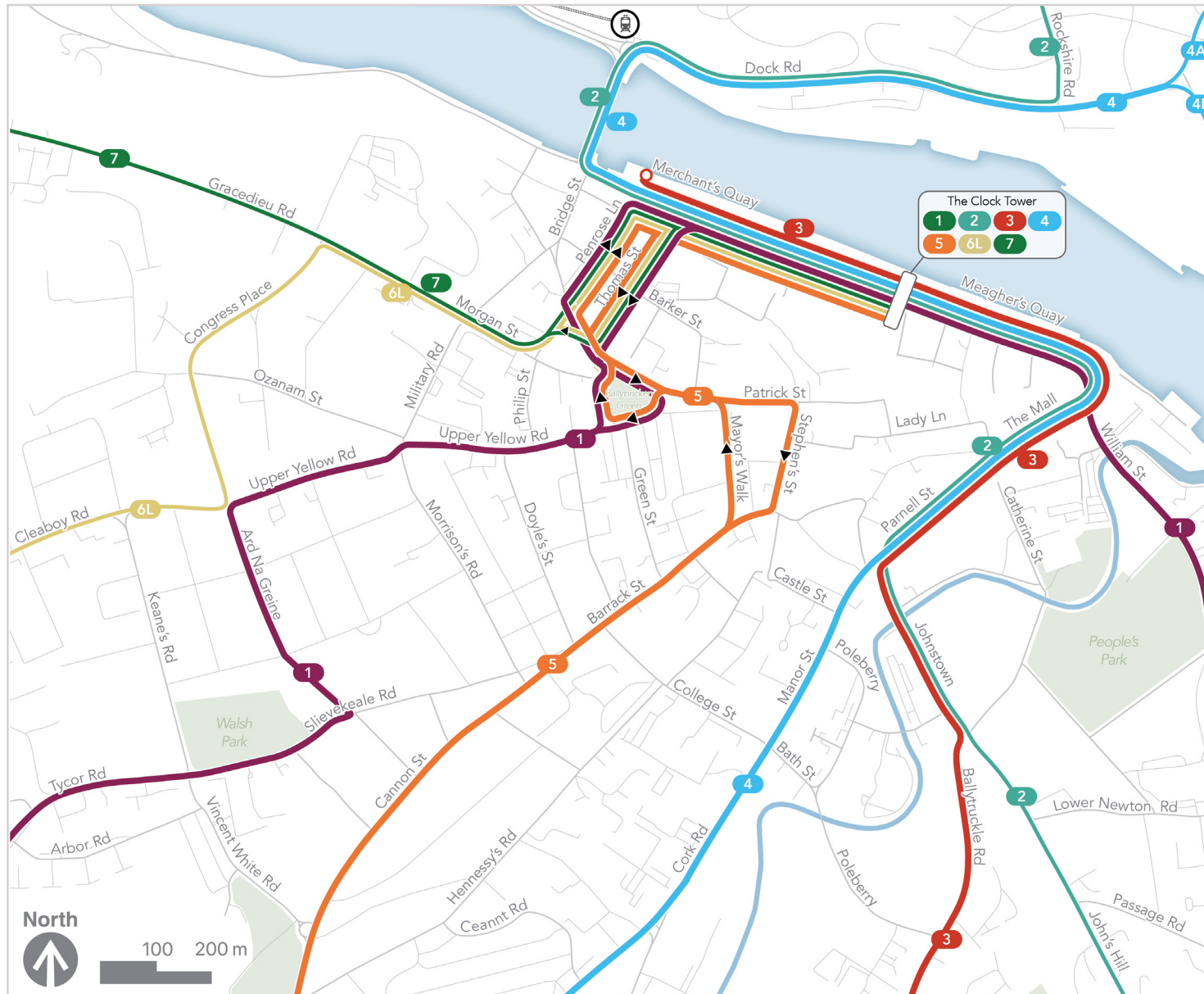
SETU Cork Road (every 15 minutes), and this segment is marked “6” on the map on the next page. A lower frequency continues on through Skibbereen and Cleaboy, terminating at the Quays, and this segment is marked “6L” (for “long”) on the map. Essentially, every second bus will continue past SETU Cork Road towards Cleaboy, with no interchange needed.

Route Descriptions

Street-by-street descriptions of each proposed route are provided starting on [page 33](#).

Text descriptions of proposed frequencies are given in the appendix starting on [page 78](#).

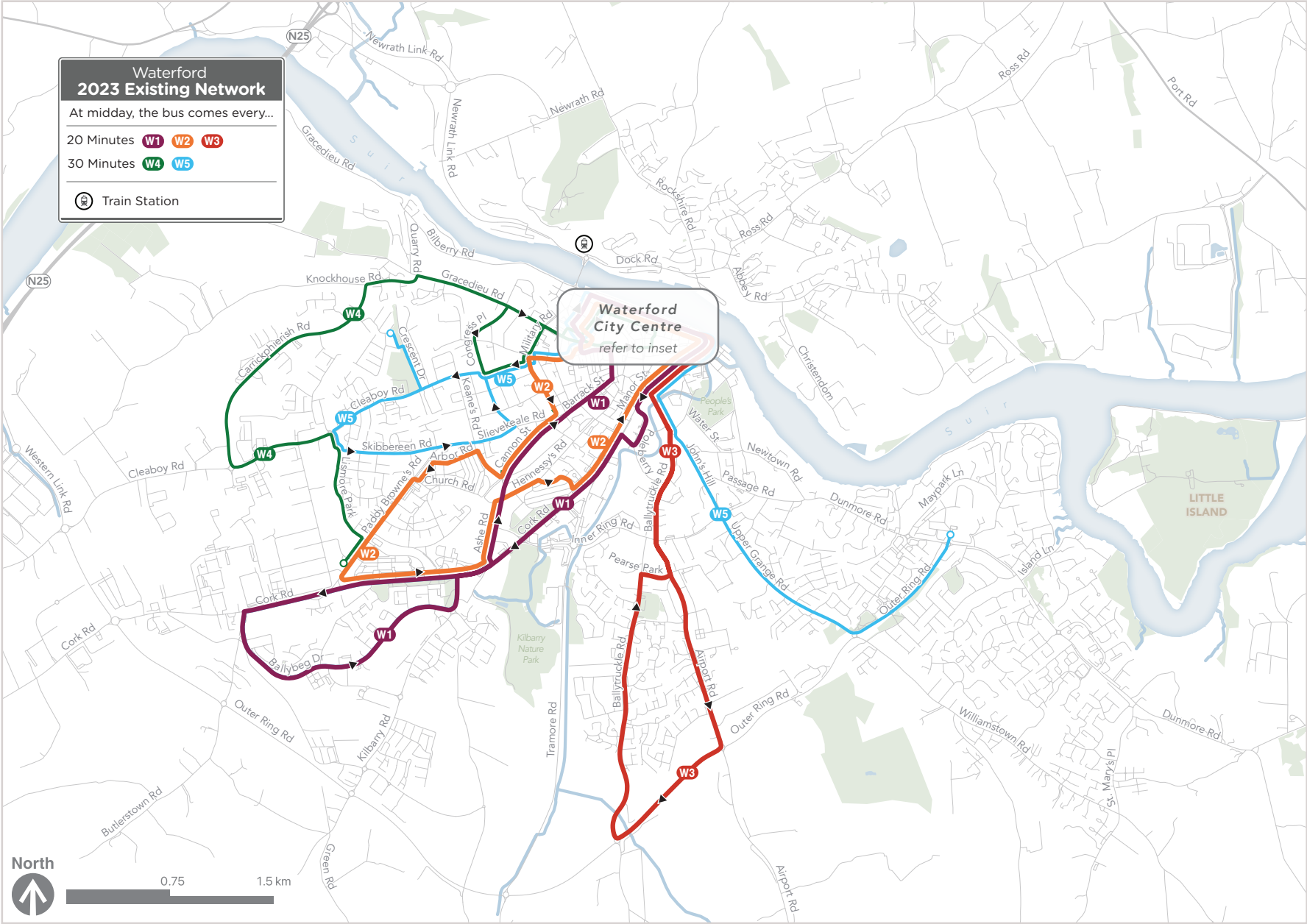
City Centre



For a closer look at the city centre in the New Network Plan, please visit busconnects.ie and the online map.

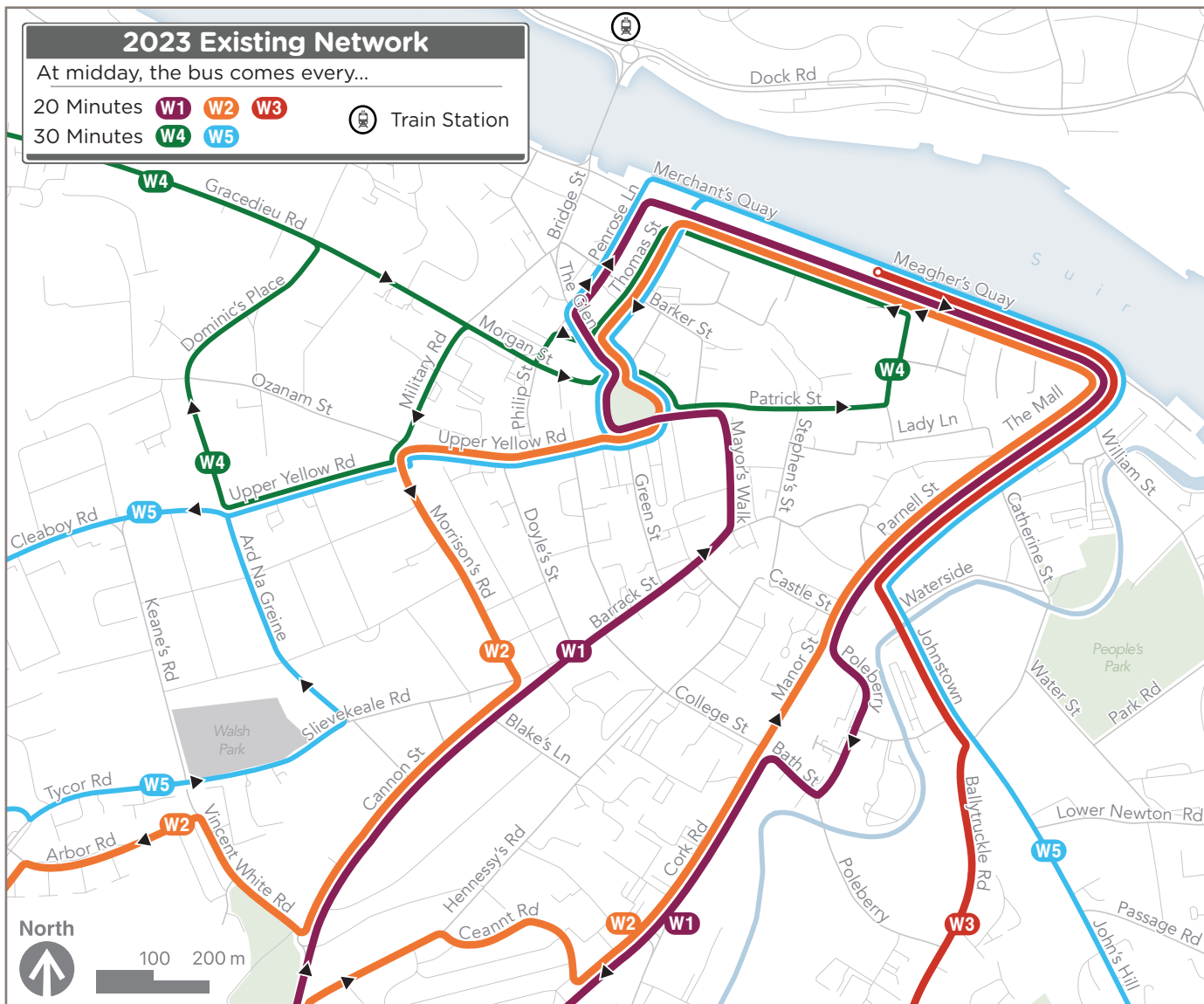
Maps of the 2023 Existing Network

PSO Services



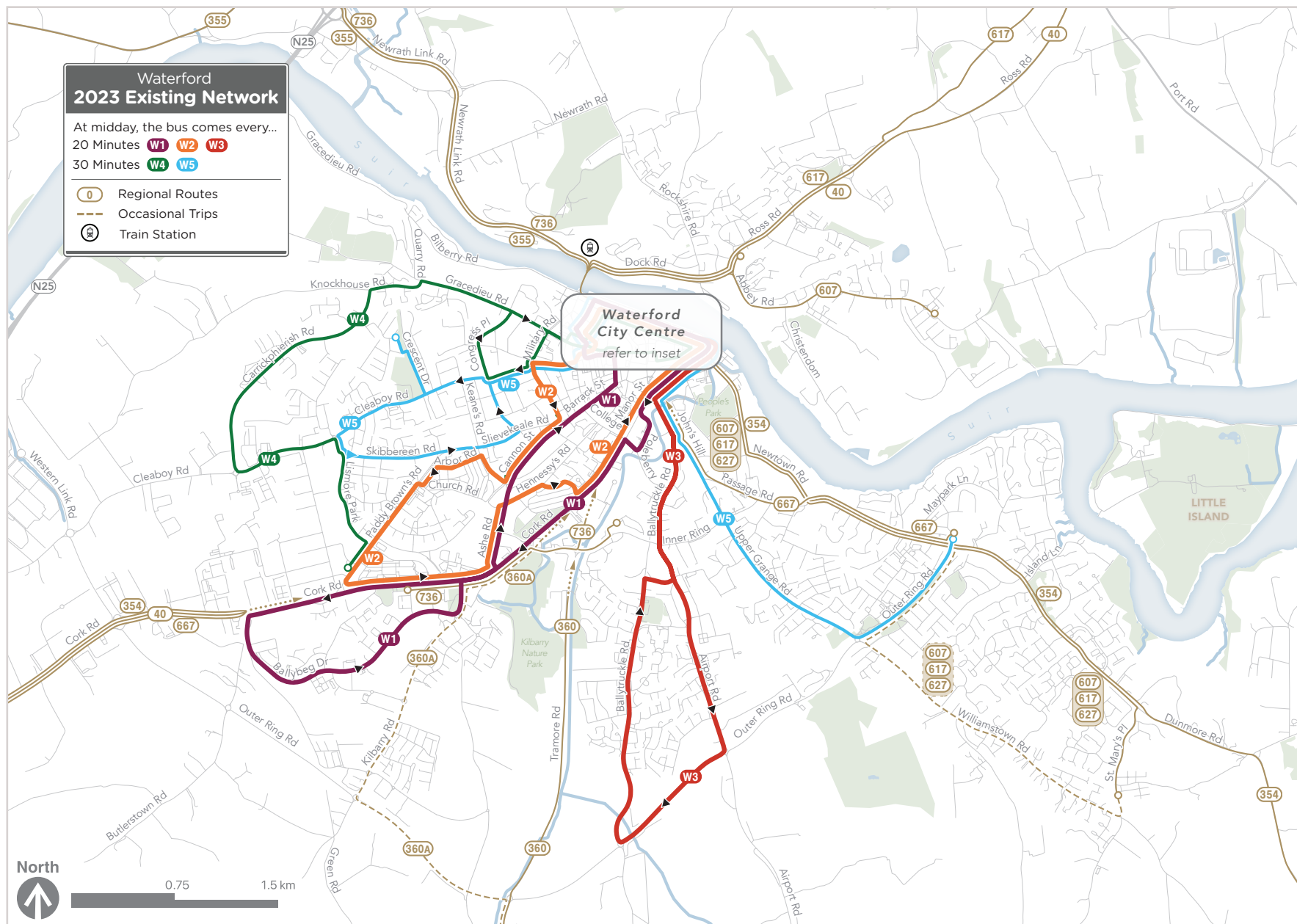
This map shows the existing urban PSO routes in the focus area as of autumn 2023.

2023 PSO Services in the Centre



This map shows the existing urban PSO routes in Waterford city centre as of autumn 2023.

2023 All Services



This map shows all routes (PSO, Expressway, commercial, etc.) that offered day-long services in the focus area as of autumn 2023.

More Service Investment

Added Services

The existing PSO bus network does not adequately address local or national goals for growth, quality of life and sustainability. The NTA is planning a major increase in services through BusConnects Waterford.

This plan will *more than double* the amount of service in the Waterford Public Service Obligation (PSO) bus network. This increase includes some service that can be seen on a map – such as new route segments – and some service that appears in timetables:

- New routes covering new areas.
- Better frequencies where the most people are travelling.
- Earlier morning starts on all routes.
- Higher frequencies on Sundays, and for more hours of each day.
- Two-way services in areas that are today served in one direction only.

Patronage vs. Coverage

One of public transport's main goals is high patronage. High patronage is necessary to meet climate, growth and liveability goals. High patronage generally results when places with many people are connected by frequent, fast and linear services.

But patronage is not public transport's *only* goal. Public transport is also expected to provide services to all urbanised areas, even where few people live or work, and even where patronage is low. The purpose of such services is to prevent isolation and support people's needs for mobility no matter where they live.

These two goals are in tension. The more buses are concentrated into frequent, all-day routes, in the areas where the large numbers of people live and work, the less they can spread out to cover all areas.

Not all of the routes planned in the New Network are expected to attract high patronage. Some of them cover areas where patronage will likely be low, but inclusion is important nonetheless.

What is the value of high patronage?

- Make public transport relevant for more people
- Support dense and walkable development
- Improve access to jobs, education and other opportunities for large numbers of people
- Encourage people to switch from car to public transport
- Combat traffic congestion
- Reduce carbon emissions

What is the value of coverage?

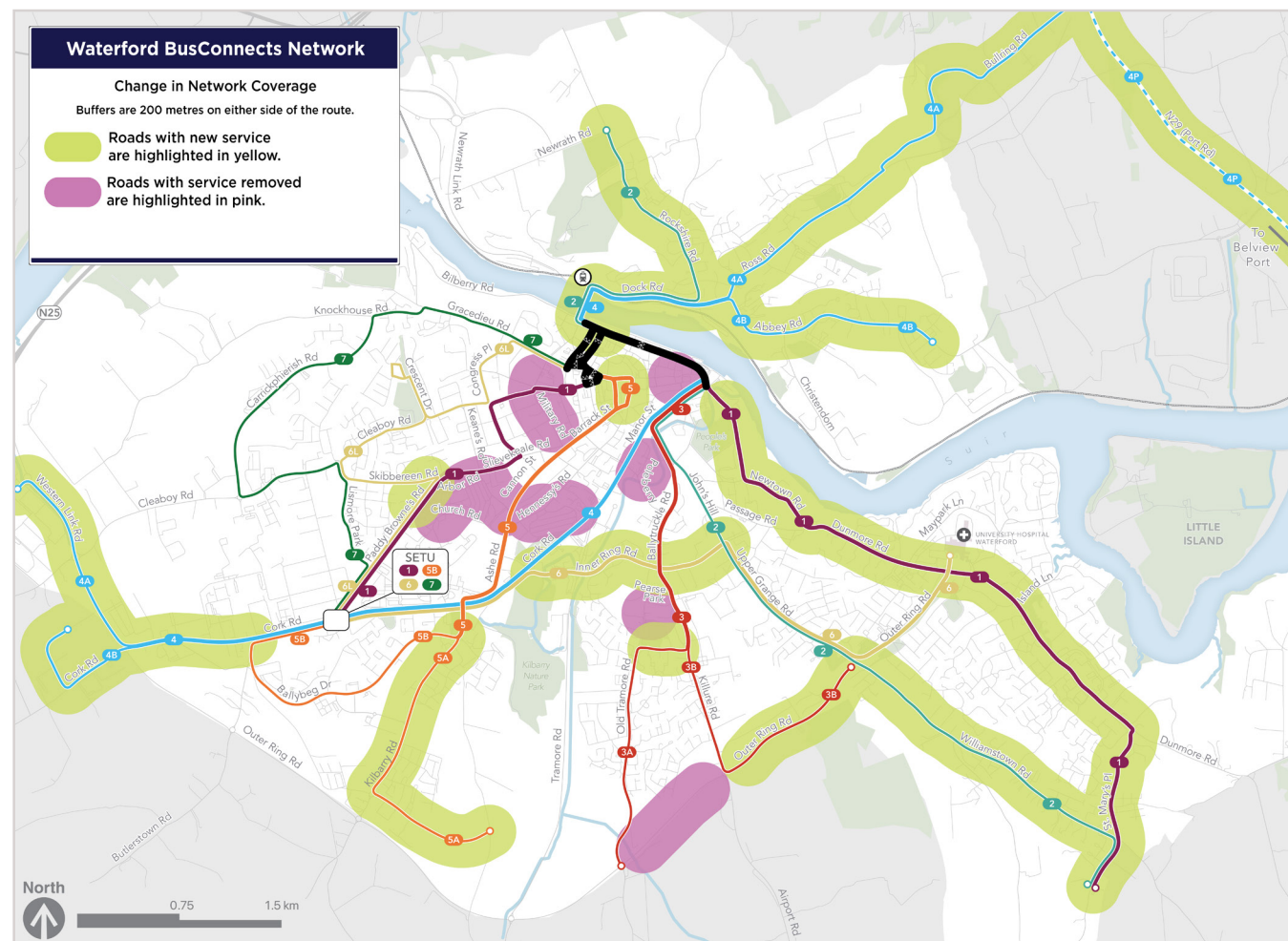
- Promote social and economic inclusion, regardless of where people live
- Prevent isolation for people who live in less-populated areas
- Include everyone in the benefits of public transport

Services to More Areas

The New Network Plan will provide PSO services in certain areas which are not served today. They are marked in yellow on the map to the right. Some of these areas (such as Dunmore Road and Slieverue) are currently served by non-PSO, commercial routes.

The New Network Plan will also remove services on a few streets, which are marked in pink on the map below. In these cases, the total number of people affected will be small, and improved services will be provided within a short walk of all existing bus stops. Removing these few, small segments has a benefit to a large number of people: it allows bus routes to be more linear and direct, more frequent, and makes the network simpler.

Overall the share of residents within 400 metres of a bus stop (about a five minute walk) will increase from 67% to 74% (measuring on weekdays at midday). Across every demographic group measured, the proportion near a service will increase with the New Network Plan. The percent of jobs and school enrolments near a service will also increase.

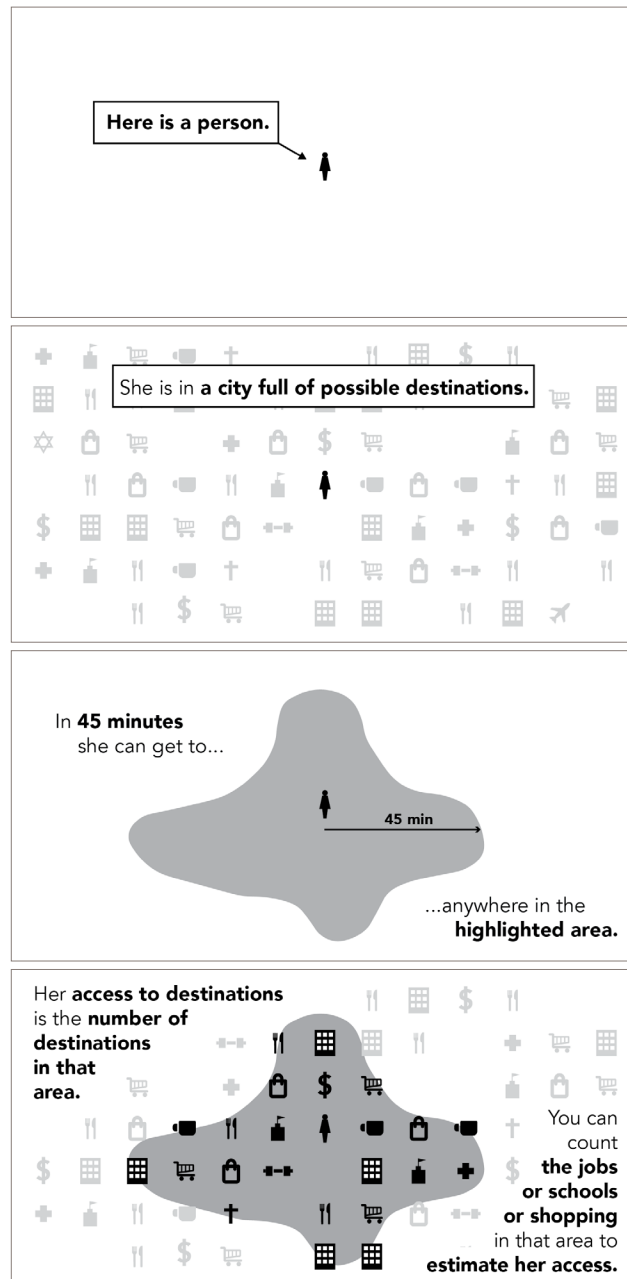


More Access to Opportunity

It's impossible to predict how many people will use an improved bus network. The future is inherently unpredictable, as our recent experience with the Covid-19 pandemic demonstrated. Models can be used to forecast future public transport patronage, but they require myriad assumptions about the future, at least some of which will turn out to be wrong.

At the individual level, it is also hard to predict public transport patronage. It is difficult to know how someone will make their travel decisions in the future if there are changes in where they live, where they work, fuel prices, traffic congestion, the quality of public transport service, improvements to cycling and walking facilities, their own ability to drive a car, etc.

In the face of so much uncertainty, we rely on simpler measures that focus on the near-term consequences of a change and that require fewer guesses about the future. One such measure is "access," also sometimes called "accessibility." Access measures the usefulness of a public transport network for any person who has a limited amount of time to spend traveling.



Public transport is useful to the extent that it allows people to go where they want in a reasonable amount of time. **The more destinations you can reach in a reasonable amount of time, the greater your access to opportunity.**

When we measure access, as illustrated at left, we use arithmetic to sum travel times among all residents, jobs and schools. Faster journeys mean that people can access more within a limited amount of travel time.

Designing cities and their public transport networks so that more people have access to more opportunities, within a reasonable journey time, is a reliable way to increase patronage.

The New Network Plan will improve access throughout the week:

- **People will be able to reach 69% more jobs within 30 minutes**, all day on weekdays.
- **Youths will be within a 30-minute bus journey of 83% more school places**, on weekdays at rush-hours.
- **On Sundays, residents will have access to 82% more jobs within 30 minutes**, plus the shops and services those jobs represent.

How to Learn About the New Network Plan

In this Report

This Report is one source of information about the New Network Plan. Within this Report you will find:

- The principles used in bus network design, starting on [page 18](#).
- A description of the New Network Plan, starting on [page 26](#).
- A summary of public feedback, and how it informed the final New Network Plan, starting on [page 38](#).
- Analysis of how residents' access to services and to destinations will change with the New Network Plan, starting on [page 38](#).

Online Map

To explore what the New Network Plan will mean for your area and for your journeys, you can refer to the online webmap available at the [BusConnects Waterford website](#).

The online map allows you to:

- Zoom in and see detailed routing.
- Look at areas that are difficult to show on these small pages.
- See how average access to jobs or residents will change from your area.
- Create your own access map comparing how far you could travel using the Existing or New Network.