

From Metrolink to Locallink; a decade of National Transport Planning



Anne Graham, Chief Executive Officer
TPS Planner of the Year¹ 2018

Who We Are

Non-commercial state agency

- Agency of the Department of Transport, Tourism & Sport
- Government legislation setting out our powers
- National body
- More specific powers in relation to the Greater Dublin Area
- Staff of 110 with outsourced support of another 200
- Other services outsourced e.g. taxi licencing administration

What We Were Set Up To Do

- Develop an integrated transport system
 - Safe, accessible, attractive, well-functioning
- Increased use of the public transport system
- Increased use of cycling and walking as a means of transport
- Value for money

What We Do

Bus, Rail & Light Rail Services



Taxi & Bus Licensing



Investment Projects



Integration & Technology



Transport Planning & Policy



Personal Travel Choices



Challenge in transport planning



Metrolink

Locallink



Sustainable Transport Usage



Key points on modal split in Ireland

National

- Sustainable Mode Share 30.1% in 2011 and 2016
- Car Mode Share 69.9% in 2011 and 2016

Greater Dublin Area

- Sustainable Mode Share 41.7% in 2011 and 42.8% in 2016
- Car Mode Share 58.3% in 2011 and 57.2% in 2016

Modal split inland passenger transport



Trend in trips by sustainable modes in Dublin city centre

2006



■ Sustainable Modes ■ Car, Goods and Other Modes

2017



Key points on modal split in Ireland

- ✓ High car usage nationally
- ✓ Mid-range compared to other EU countries
- ✓ Sustainable land transport
 - ✓ Low rail %age compared to UK
 - ✓ Higher bus %age compared to UK
- ✓ Growing mode share for cycling in cities

Developing Public Transport Services



Providing funded transport services

EU Regulation 1370/2007 & DTA Act 2008 governs public transport contracts

State companies provide the majority of subsidised public transport

10% of subsidised bus services provided by other operators such as GoAhead Ireland & JJ Kavanagh

10% of bus services provided on a fully commercial basis

- No public subsidy provided
- Mainly intercity services

Licensing of Public Passenger Services

Commercial Bus Services represents 10% of all public transport passenger journeys

Key issues

- **Competition regulated by NTA**
- Significant growth in services on intercity market and overall growth in passenger numbers
- Getting appropriate balance between commercial and subsidised services

Managing Rail Public Passenger Services



- NTA in contract with Railway Undertaking of IÉ only
- Dept of Transport, Tourism & Sport in contract with them for Infrastructure Manager
- New contract in 2019 will see stronger performance targets
- Underfunding of rail impacting on maintenance of infrastructure without compromising safety



- Radial intercity & commuter services into Dublin
- Focus on use of existing assets
- Efficiency of lightly-used lines
- Making case for investing in steady-state funding

Strategic Transport Planning



Strategic Transport Planning

- Develop evidence-based strategic plans
 - ✓ Transport Strategy for the Greater Dublin Area 2016-2035
 - ✓ Galway Transport Strategy
 - ✓ Cork Transport Strategy (almost complete)
- Waterford & Limerick to be completed in 2019



Regional Transport Modelling System

- Developed regional transport models to support
 - ✓ Transport Strategies
 - ✓ Transport Investment
 - ✓ Transport Appraisal



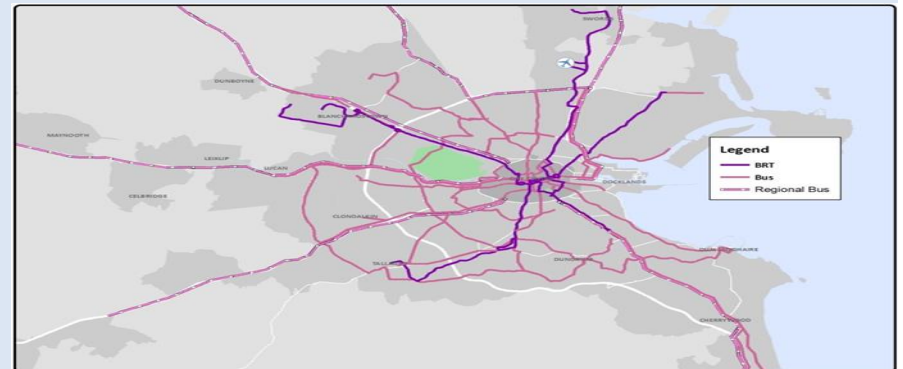
GDA Transport Strategy

Is now a statutory document

Some key items

- New Metro North and DART Expansion Programme included
- Luas extension Bray only after Green Line is upgraded to Metro
- Luas proposals: Luas to Finglas + Luas to Lucan + extension of Red Line to Poolbeg
- Implementation of a core bus network including BRT

GDA Transport Strategy



Heavy Rail Network

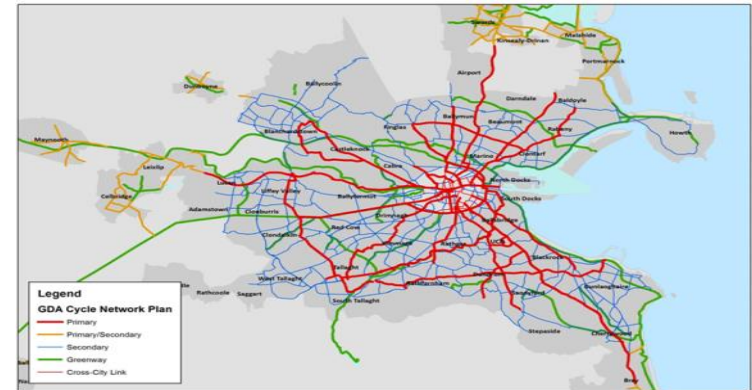
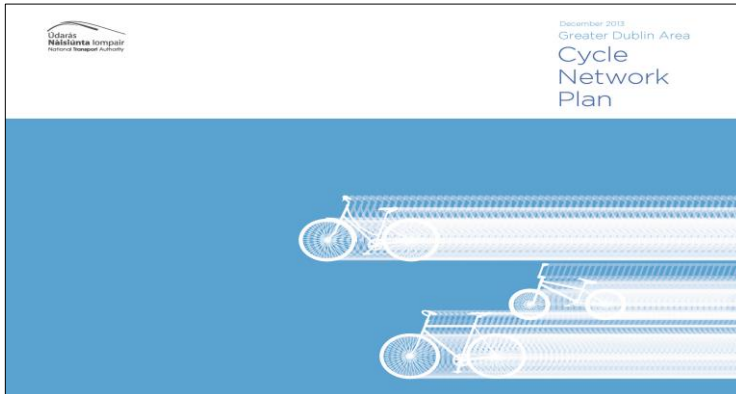


Light Rail Network



Cycling

- To construct the Greater Dublin Area Cycle Network, expanding the urban cycle network to over 1,485 kilometres in length, and with over 1,300 kilometres of new connections between towns in the rural areas of the GDA.



GDA Transport Strategy Outcomes

- Meets the required 25% increase in travel demand
- Commuting by car to work falls from 62% to 45%
- Walking and cycling to work rises from 16 % to 20%
- Overall approximate cost of the measures in the GDA Transport Strategy is €10 billion i.e. €0.5bn per year
- Benefit to Cost Ratio of 1.5:1

National Development Plan 2018 - 2027



Key Projects

- Metrolink €3bn
- BusConnects €2.4bn
- DART Expansion €2bn
- Cycling Infrastructure

METROLINK

TII
Bonneagar Iompair Éireann
Transport Infrastructure Ireland

NTA
Údarás Náisiúnta Iompair
National Transport Authority





MetroLink

- Emerging Preferred Route published in 2018 for a full north-south high capacity spine from Swords to Sandyford by 2027
- Preferred Route to be published next week
- MetroLink.ie

Key Facts

PASSENGERS



Cater for
15,000
passengers per
direction per hour

Carry
50+ million
passengers
per annum

JOURNEY TIME AND DISTANCE



26 kilometre route connecting Swords, Dublin Airport, City Centre and Sandyford

20 minutes
travel time from
city centre

25 minutes
from City Centre
to Swords

50 minutes
from Swords
to Sandyford

STATIONS & VEHICLES



« **60+ metres** »
vehicle length

15 new
Metro stations

« **30 trains** »
per hour in each direction



3,000
car spaces at
Estuary Park &
Ride location



4,000
jobs during
construction
phases

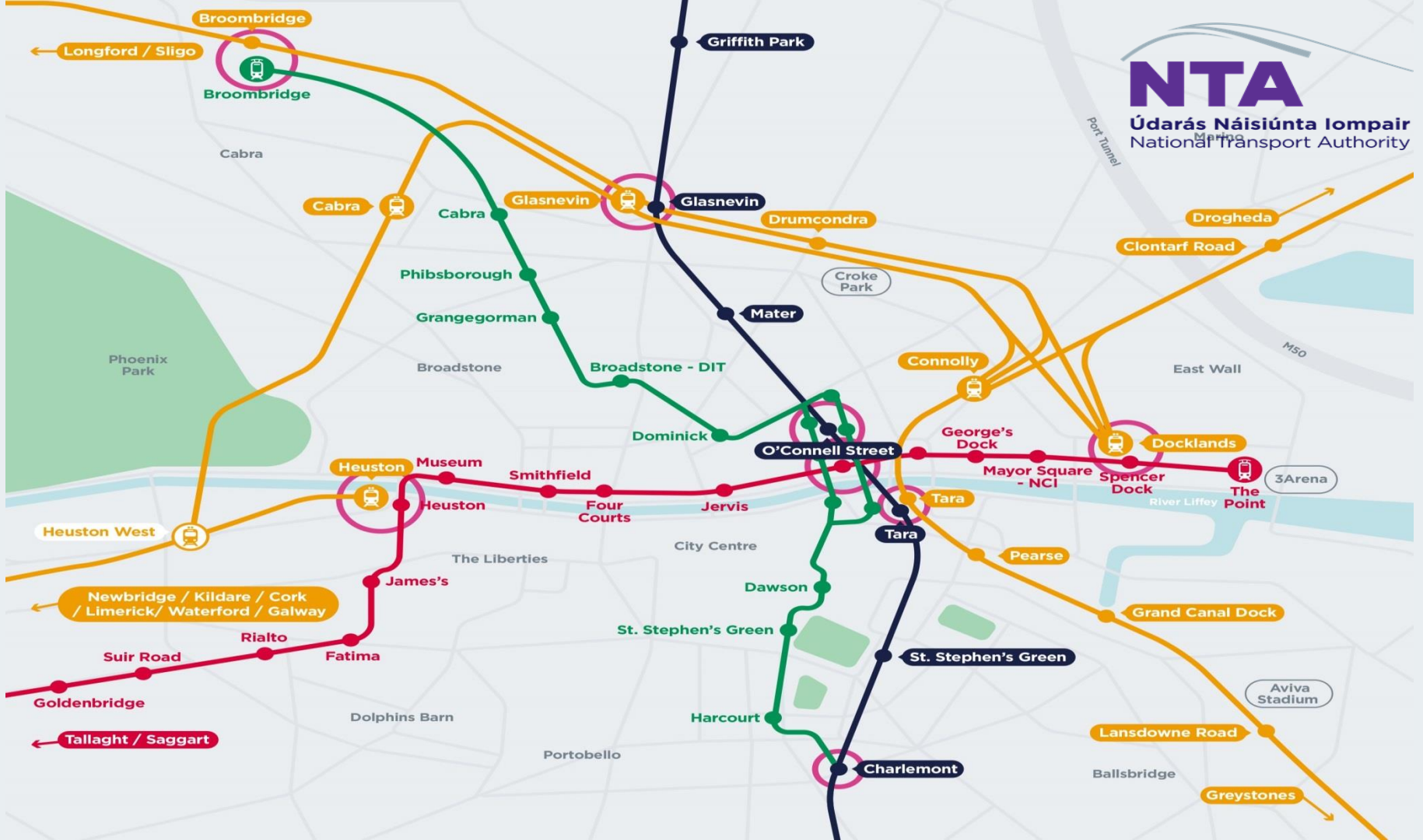


Connecting the DART system at Tara Street (city centre) & the Maynooth and Kildare Rail lines at Glasnevin

Preliminary cost estimate
is approximately
€3 billion*

*subject to change as the public consultation progresses and final design is agreed

Passenger
services to
commence in
2027



**BUS
CONNECTS**

TRANSFORMING CITY BUS SERVICES



BusConnects



- All our cities and towns low density layout means the bus system will form the backbone of the city's and town's public transport system
- Tackling each city region's congestion issues means focussing on the bus system
- **BusConnects** is a plan to fundamentally transform our cities and towns bus system



BUS CONNECTS

TRANSFORMING BUS SERVICES

National Development
Plan 2018-2027

- Bus Connects
- Rail



BusConnects: What is it?



A Network of “Next Generation” Bus Corridors



Complete Redesign of Bus Network



State-of-the-art Ticketing System



Simpler Fare Structure



Cashless Payment System



Park & Ride facilities



New Bus Livery



New Bus Stops + Shelters



Use of Low Emission Vehicles

**BUS
CONNECTS**

TRANSFORMING CITY BUS SERVICES

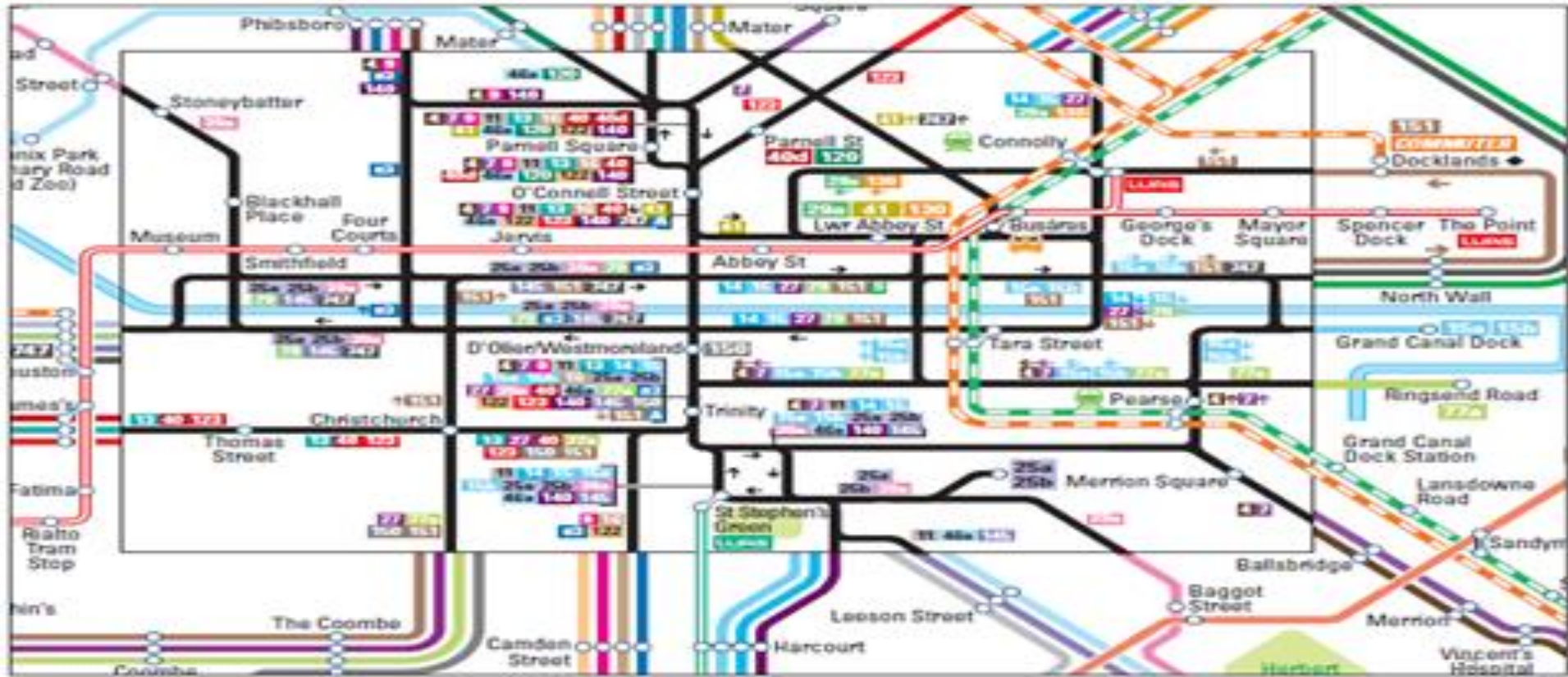
NTA
Údarás Náisiúnta Iompair
National Transport Authority

BusConnects Dublin Bus Services



- Current network:
 - is very complex and hard to understand
 - can be significantly optimised
 - provides too many direct routes into the city centre
 - new and improved rail/tram requires changes to exploit their full potential

Existing city centre bus routes too complex



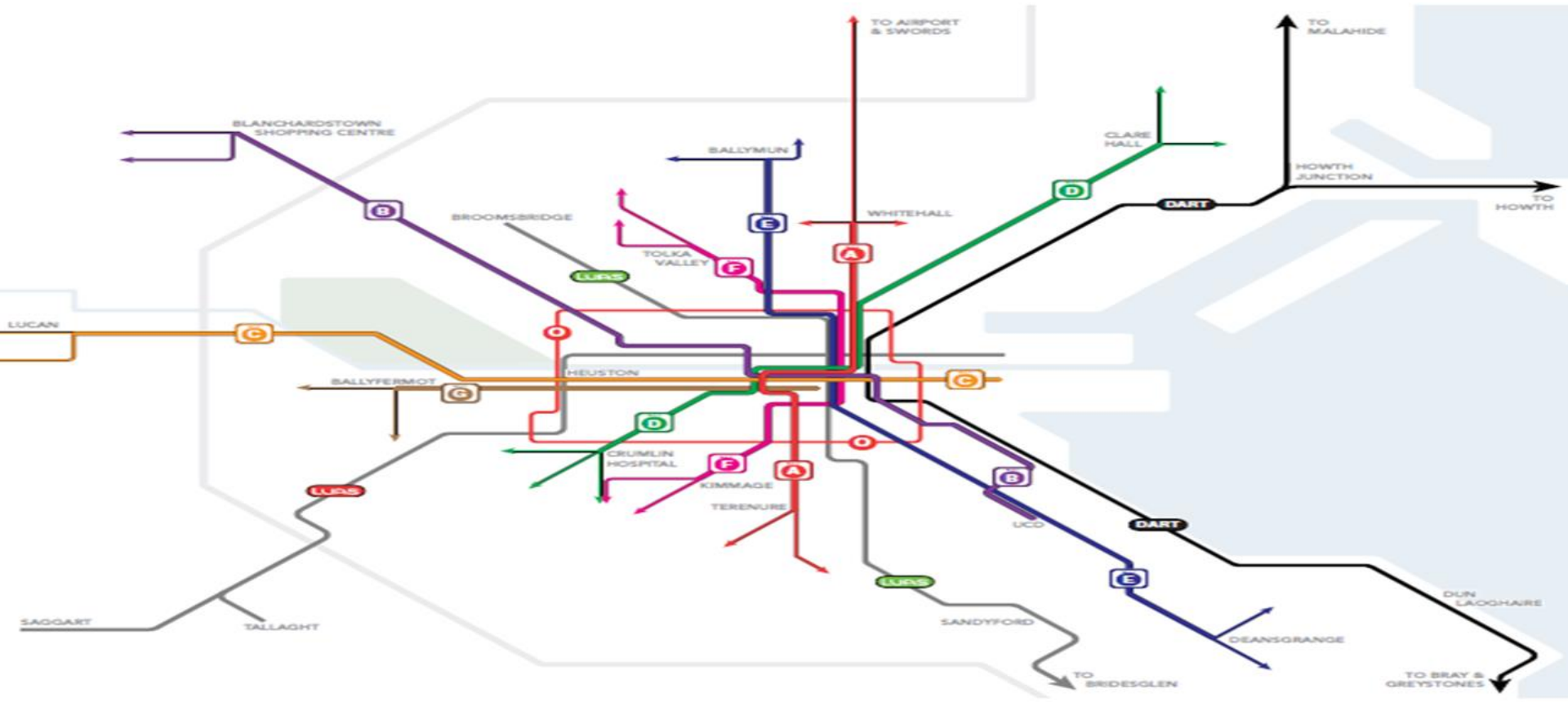
How will this be achieved?

- Provide new and frequent orbital services
- Simplify radial routes into simpler spines
- Provide more frequent all-day services
- Simplify fares structure across all Bus, all Luas and DART:

Outcome – much simpler services

**BUS
CONNECTS**

TRANSFORMING CITY BUS SERVICES



Existing suburban network too infrequent

**BUS
CONNECTS**

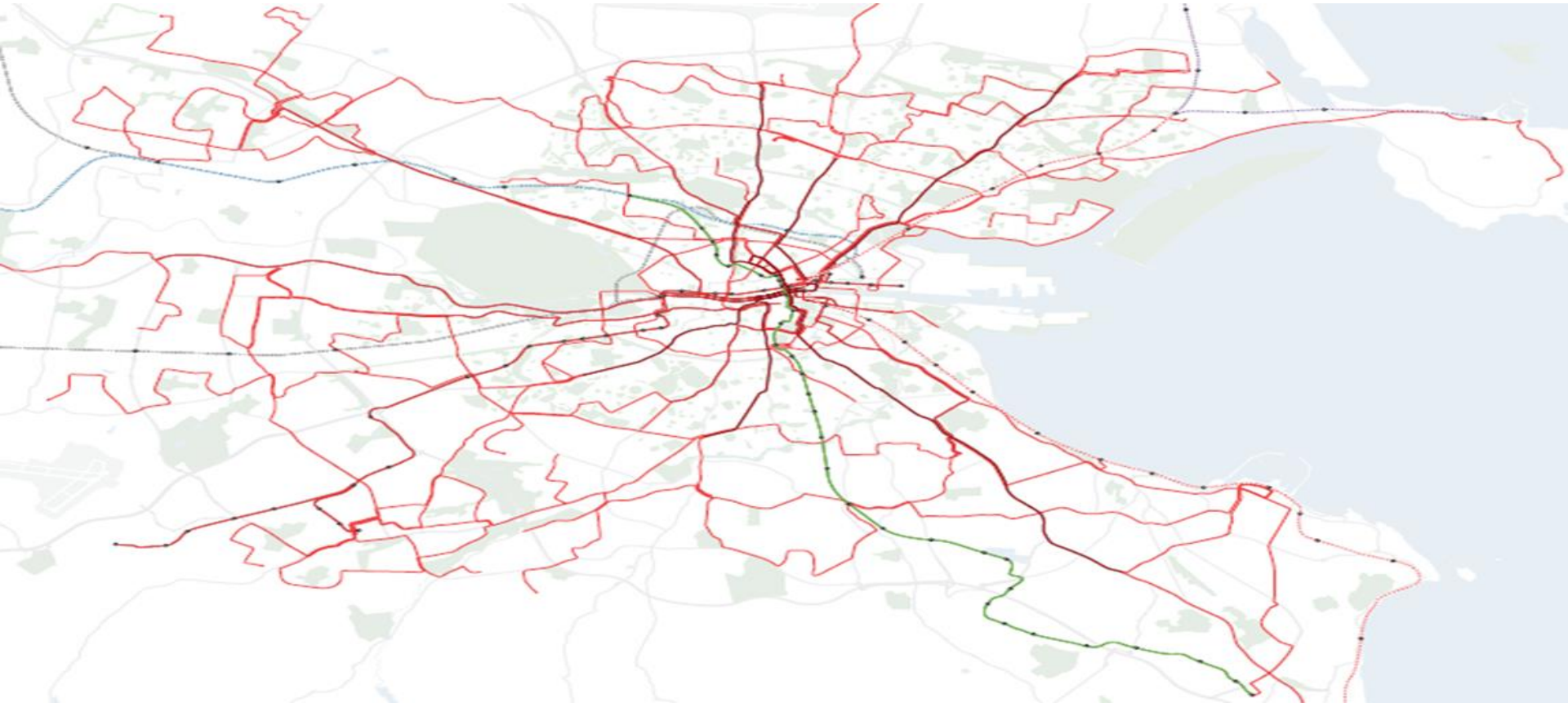
TRANSFORMING CITY BUS SERVICES



Outcomes: new network has higher frequencies

**BUS
CONNECTS**

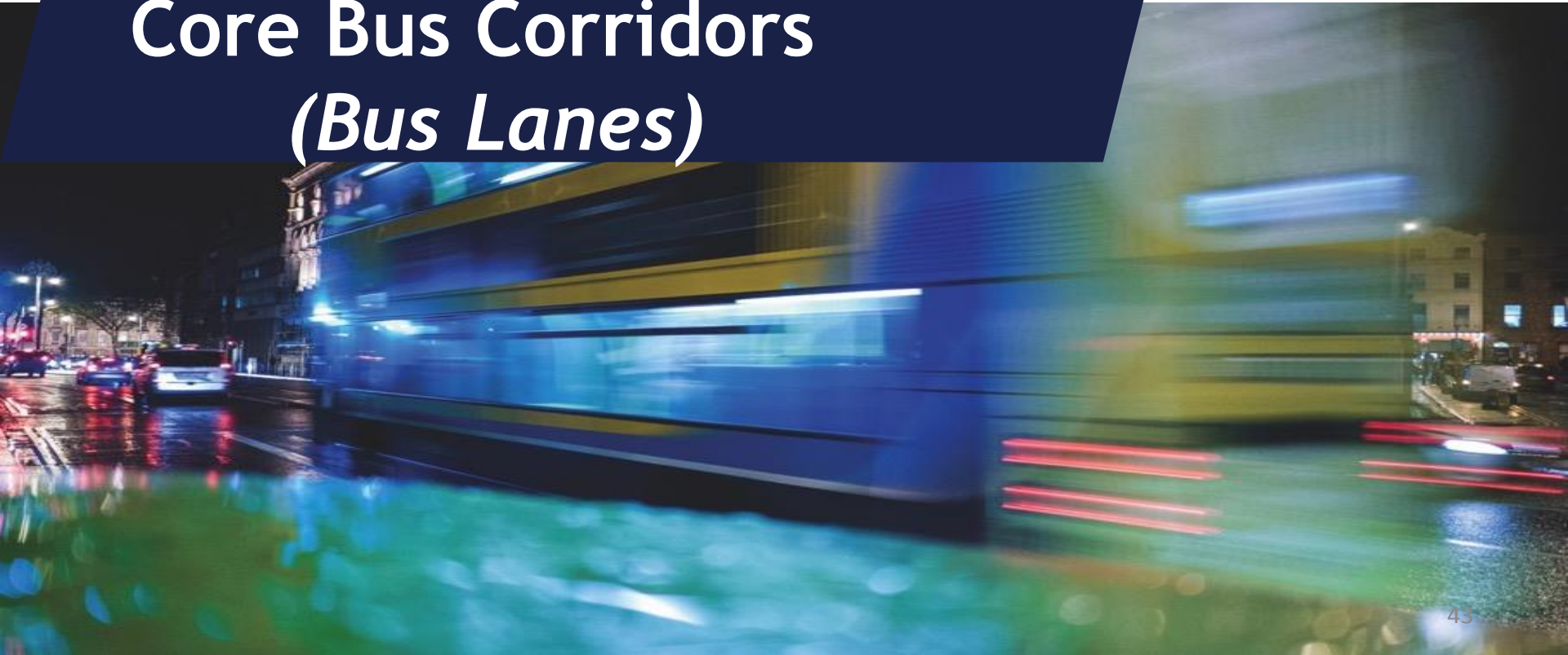
TRANSFORMING CITY BUS SERVICES



Key Outcomes

Outcome	Results
Increase in bus services across the Greater Dublin Area	+27%
Residents living within 400m of a bus service operating every 10 minutes or better	From 480,000 to 650,000 +35%
Jobs/college places within 400m of a bus service operating every 10 minutes or better	From 540,000 to 640,000 +18%
Residents living within 400m of a bus service every 15 minutes or better	From 765,000 to 1 million +31%

Core Bus Corridors (*Bus Lanes*)



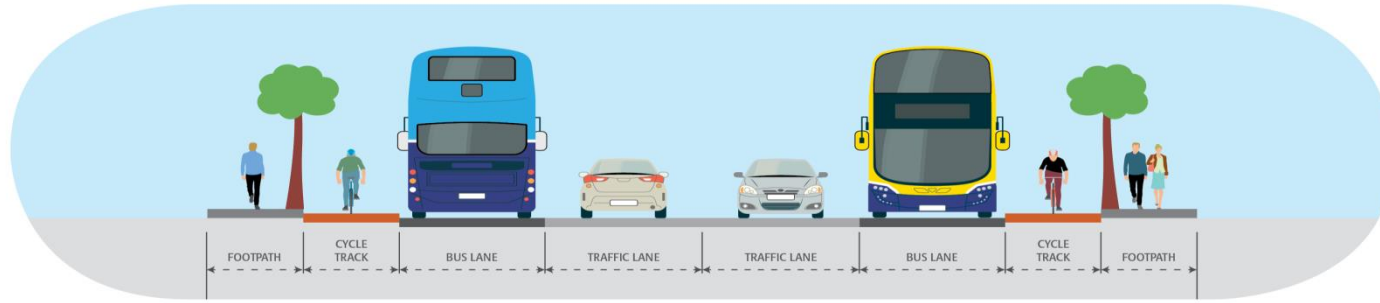
Core Bus Corridors

-  Core Bus Corridor
-  Train Station
-  Airport
-  Port



Target Road Layout

Optimum Road Layout



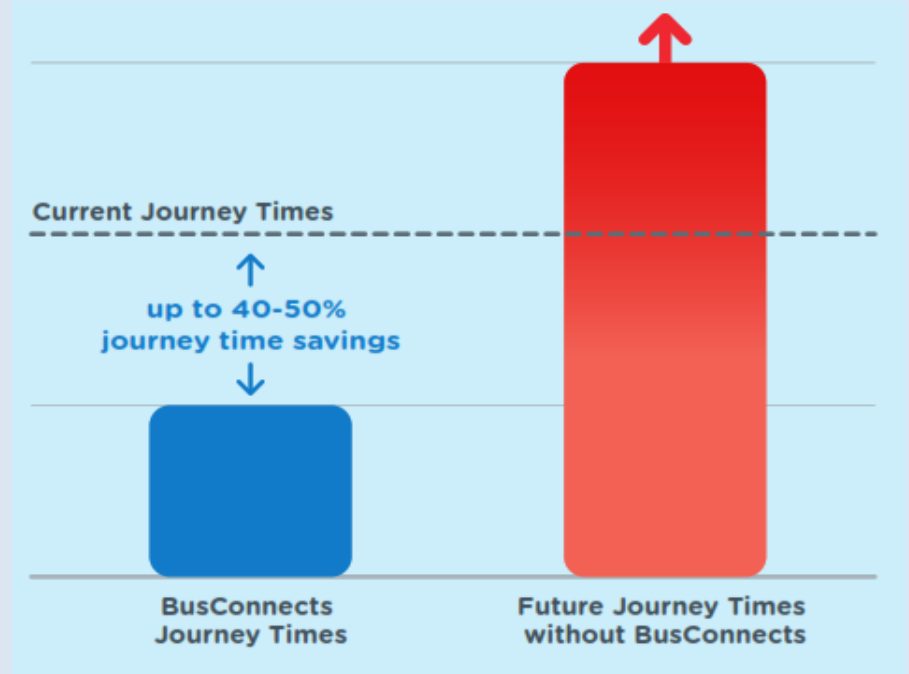
However, Dublin's roads and streets make it challenging to deliver this layout.

To achieve dedicated bus lanes & cycle tracks requires difficult decisions, including:

- Loss of portions of gardens and driveways
- Traffic changes
- Reduction of on-street parking
- Removal of trees

The Benefits it will bring: For bus users

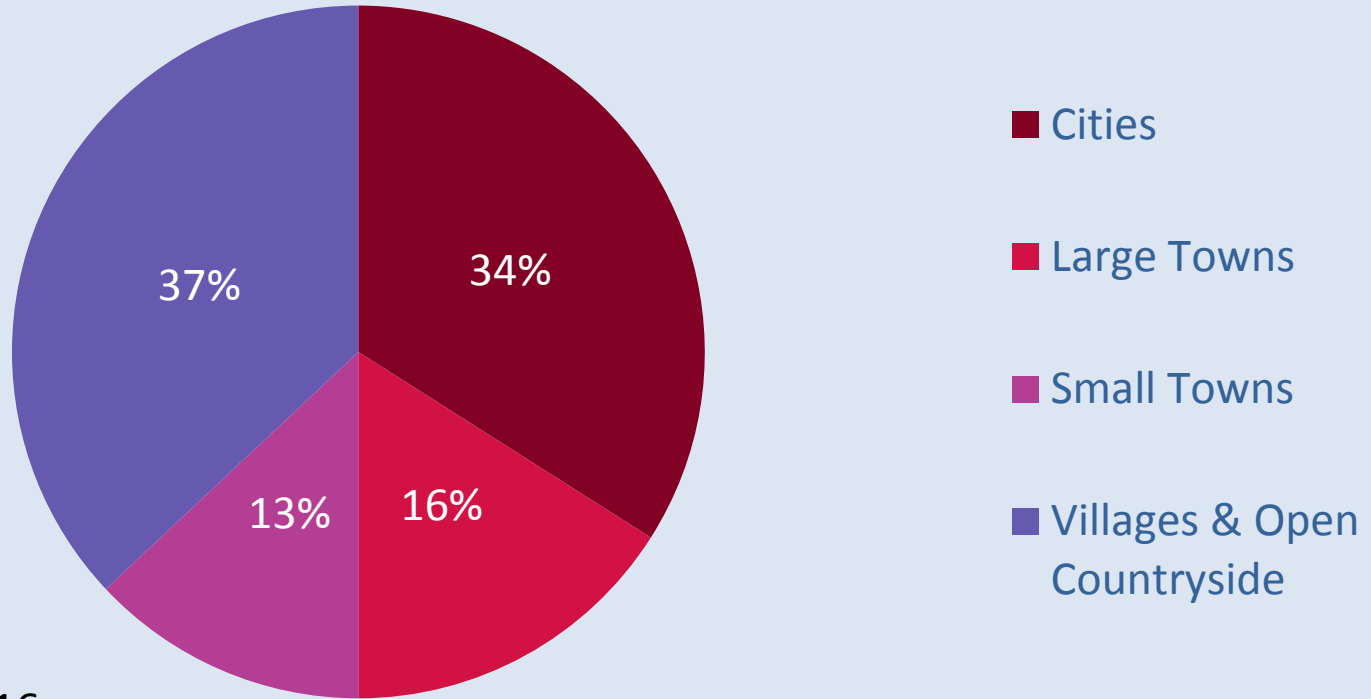
- **Time Savings:** Bus journey time savings of up to 40-50%
- **Reliability:** Reliable and punctual bus services
- **Capacity:** Increased capacity to carry a 50% uplift on current 140 million passengers per year.



Outside Dublin



Distribution of Ireland's Population



Source CSO: 2016

Public Transport Planning

- Continual public transport planning work undertaken by NTA
- Focus in recent years on the services in large towns
- Analysis of unmet demand for internal transport in large towns using travel demand data from POWSCAR 2011 (CSO)
- Looked at settlements graded from 1000+, 5000+, 20000+
- Identified gaps both spatial and temporal

Public Transport Planning

- Original listing of 19 towns greater than 10k population....
- Population, numbers of jobs and numbers of education are factors that influence the demand for transport.
- Of the 19 towns, only **11** have a regular public bus service serving internal demand
- Proposed high level interventions to close gaps

Setting appropriate service levels

- Set out to define what level of public transport service should be
- Design for service levels that would ensure survival without owning a car



Setting service levels



Service Definition

- Operates every weekday (m-f)
- More than one departure and return a day
- Maximum of one interchange

A Local Centre

One way Journey Time: **45 mins** / **30 mins**
Min time to spend in a Local Centre: **2 hours**

A County Town

One way Journey Time: **90 mins** / **60 mins**
Min time to spend in a County Town: **3 hours**

A Regional Centre/City

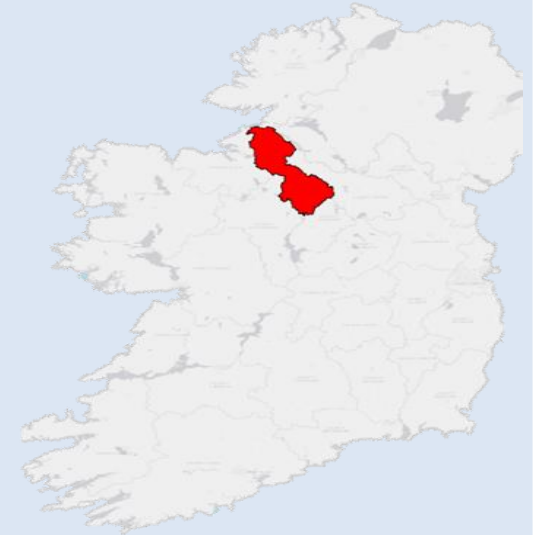
One way Journey Time: **3 hours** / **2 hours**
Min time to spend in a City: **4 hours**



Journey Time High & Low

Example - County Leitrim

- Pop: 32,044, smallest in Ireland
- 10% of population live in urban areas with a population of 1,500+ (State avg 63%)
- 90% population live in small villages/ribbon development/one off housing
- 1 County Town (Carrick-On-Shannon), 5 local centres and 7 villages identified



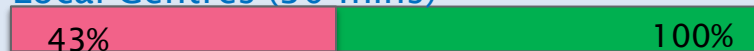
Leitrim Audit: % of Settlement types that meet the Service Standard after Revision

 Existing
 Proposed

Population

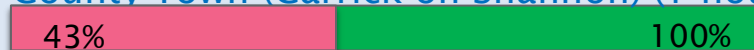
Villages to

Local Centres (30 mins)



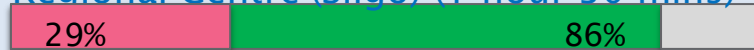
1,048/3,057 of 3,057

County Town (Carrick on Shannon) (1 hour)



1,048/3,057 of 3,057

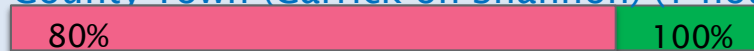
Regional Centre (Sligo) (1 hour 30 mins)



808/2,670 of 3,057

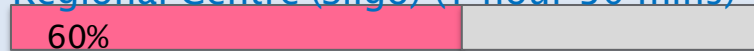
Local Centres to

County Town (Carrick on Shannon) (1 hour)



4,255/5,169 of 5,169

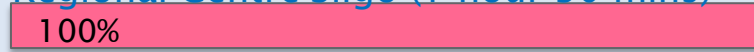
Regional Centre (Sligo) (1 hour 30 mins)



3,400/3,400 of 5,169

County Town to

Regional Centre Sligo (1 hour 30 mins)



4,062/4,062 of 4,062

- 39% of the Leitrim population live in CSO defined settlements (12,288 of 32,044)



TRANSPORT
FOR
IRELAND



local link

The new name for Rural Transport

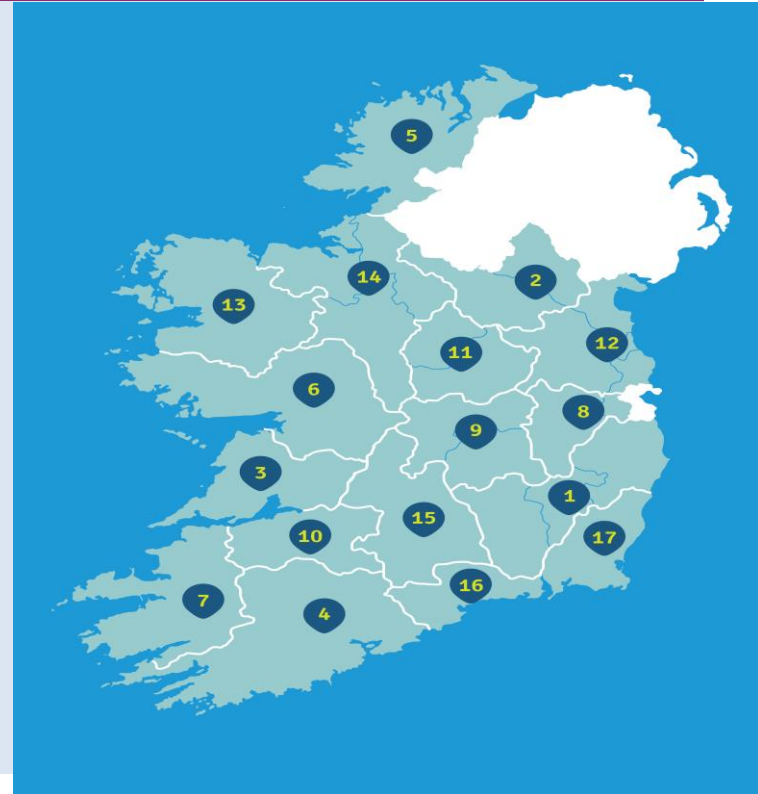
Rural Transport Services

- Budget of €16.5m
- 80% Demand Responsive services
- Managed by 17 local offices (down from 35)
- Up to 2 million passenger journeys per year



Rural Transport Services

- Developed a central booking service with a Driver app and an online booking facility
- Developed a brand & website – Locallink.ie
- Many Locallink offices in local authority premises



Rural Transport Services

- Huge latent demand for services
- Over 60 new services commenced in last 3 years
- New evening services introduced unkindly branded “Drinklink”



Rural Transport Services

- For very low demand in isolated areas we propose grant-aiding both:
 - Local Hackney services
 - Voluntary Community Car Schemes



What's been the outcome of ten years of transport planning?



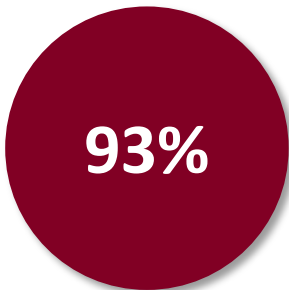
Subsidised Passenger Journeys

Passenger Journeys each year (millions)

Year	Total	% increase year on year
2014	216.37	3.8%
2015	224.31	3.7%
2016	234.32	4.5%
2017	250.54	6.9%
2018	266.23	6.3%
2014 to 2018	49.86	23%

Customer Satisfaction

All Public Transport



(+2)

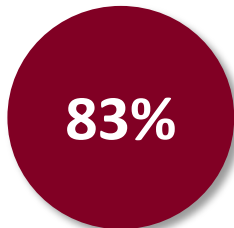
(Difference vs 2017 figures)



(+3)



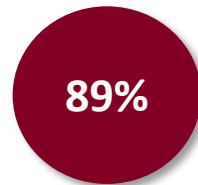
Dublin Bus



(-2)



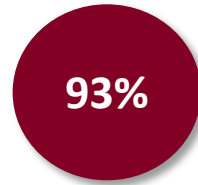
Bus Éireann



(-2)



Iarnród Éireann
Irish Rail



(+9)



DART



(-2)



LUAS

Key Learnings from NTA perspective

- Having statutory powers
- Making a statutory plan
- Using strong evidence and data based modelling
- Having ability to handle revenue risk of new services
- Designing multi-modal projects
- Involving the public in planning at earliest stage
- Being agile in delivery