

# Keeping Ireland Moving



Transport & Mobility Forum Cork  
Mix Your Mode Seminar  
March 2020



# What We Do

## Bus, Rail & Light Rail Services



## Taxi & Bus Licensing



## Investment Projects



## Integration & Technology



## Transport Planning & Policy



## Personal Travel Choices



# Current Issues facing our Cities

- Low density layout
- An over-reliance on private car travel;
- Significant peak-hour congestion and journey time unreliability;
- Significant dispersed traffic movements to, through and around the city centre area;

# Current Issues facing our Cities

- An inappropriate mix of transport modes within in the city centre due to limited road space;
- A public transport service and network in need of enhanced capacity and additional priority;
- A limited, discontinuous cycle network;
- Restricted footpaths, poor accessibility for disabled / mobility impaired

# Current Travel Mode Patterns in Cities

	Greater Dublin	Cork	Limerick	Galway	Waterford
<b>Car</b>	<b>51.4%</b>	<b>62.3%</b>	<b>59.4%</b>	<b>60%</b>	<b>68.1%</b>
<b>Bus &amp; Rail</b>	<b>19%</b>	<b>10.8%</b>	<b>7.5%</b>	<b>8%</b>	<b>4.4%</b>
<b>Walking &amp; Cycling</b>	<b>23%</b>	<b>22.5%</b>	<b>25.1%</b>	<b>28%</b>	<b>20.1%</b>

Travel to Work & Education : 2016 census ; 2011 census for  
Galway

# Longer Commutes - Census 2016

- Commuting times rose in every county;
- The average commute for those at work rose in 2016 to 28.2 minutes, having fallen between 2006 (27.5mins) and 2011 (26.6mins);
- Close to 200,000 commuters (11% of all commuters) spent an hour or more commuting to work in 2016;
- This has increased by almost 50,000 persons (31%) on the 2011 figure of 152,000.

## Longer commutes - Census 2016

- Dublin city and suburbs saw a 10.9% increase in the number of workers commuting from outside the urban area;
- Number of workers commuting in to Cork city and suburbs increased by 13.5% between 2011 and 2016 and Limerick city and suburbs saw a rise of 13.1%;
- Over 40 % of workers in Cork commuted from outside the urban area while in Limerick and Galway city and suburbs, half the workforce commute from outside the urban area.

# What's the Solution?

## Reduce demand for travel

- Better integration of land-use & transport planning



## Introduce demand management measures

- tolling, congestion charging, parking charges





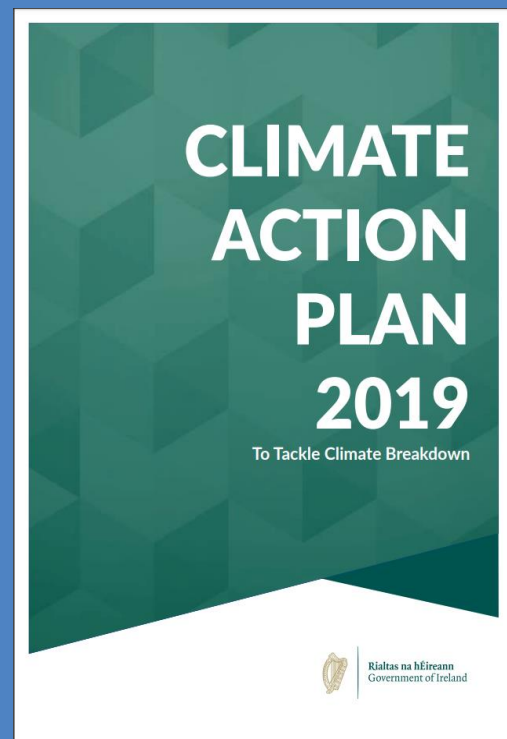
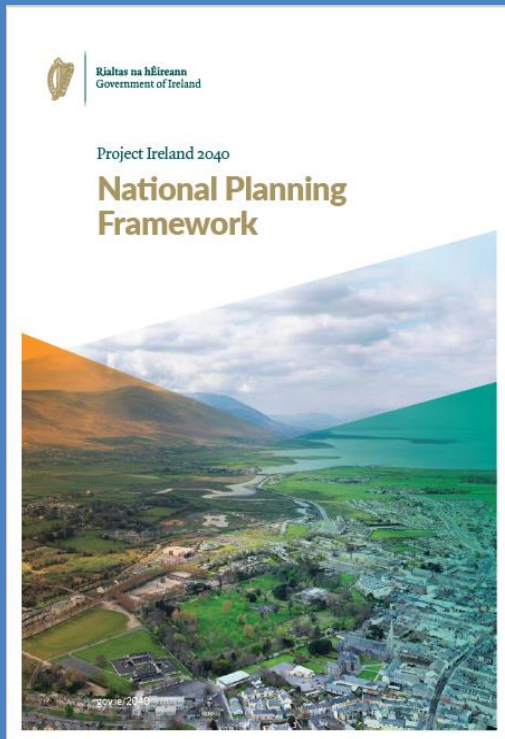
# What's the Solution?

## Encourage greater use of sustainable modes

- Make existing public transport services more attractive
- Provide new public transport infrastructure
- Give higher priority to sustainable modes on existing roads
- Provide safe segregated walking & cycling routes
- Change attitudes to sustainable transport



# National Strategies

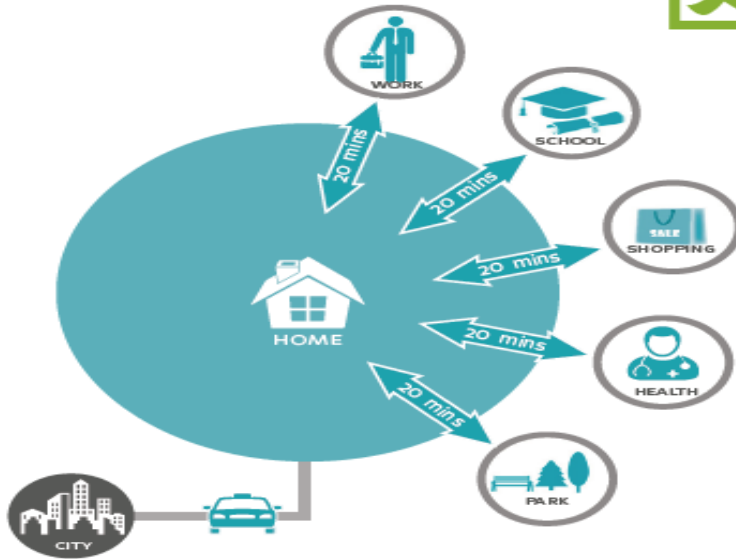


# Project 2040



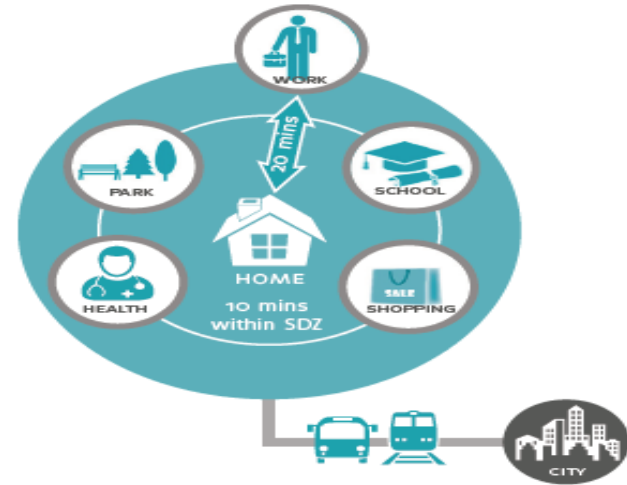
# Compact Growth

## DESTINATIONS FURTHER FROM HOME



Destinations further from home increase car use adding to congestion.

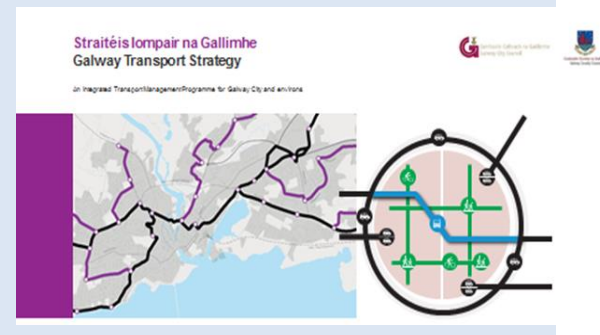
## BRINGING DESTINATIONS CLOSER TO HOME



Destinations closer to home reduce car use and congestion

# Strategic Transport Planning

- Develop evidence-based strategic plans
  - ✓ Transport Strategy for the Greater Dublin Area 2016-2035 (Six-yearly review to commence in 2020)
  - ✓ Galway Transport Strategy
  - ✓ Cork Transport Strategy
- Limerick – public consultation April 2020
- Waterford to commence in 2020



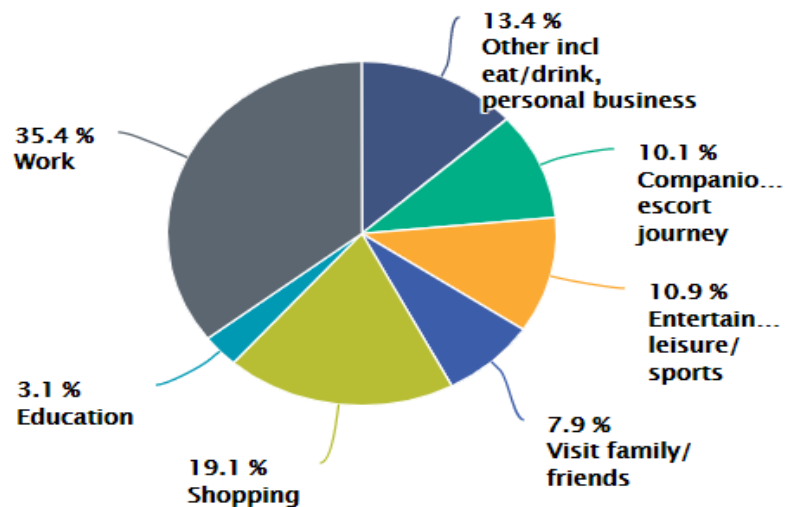
# Regional Transport Modeling System

- Developed regional transport models to support
  - ✓ Transport Strategies
  - ✓ Transport Investment
  - ✓ Transport Appraisal
- Focus can be on peak trips to work/education
- Hard to model cycling outcomes



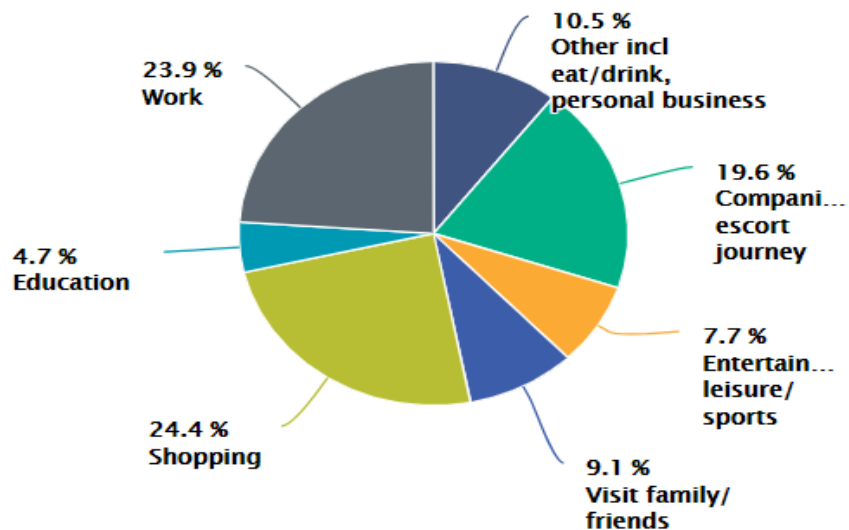
# Trip Purpose by Gender

Figure 3.1 Distribution of journeys by purpose –  
Males 2016



Source: CSO Ireland

Figure 3.2 Distribution of journeys by purpose –  
Females 2016



Source: CSO Ireland



# CORK METROPOLITAN AREA

DRAFT TRANSPORT STRATEGY 2040

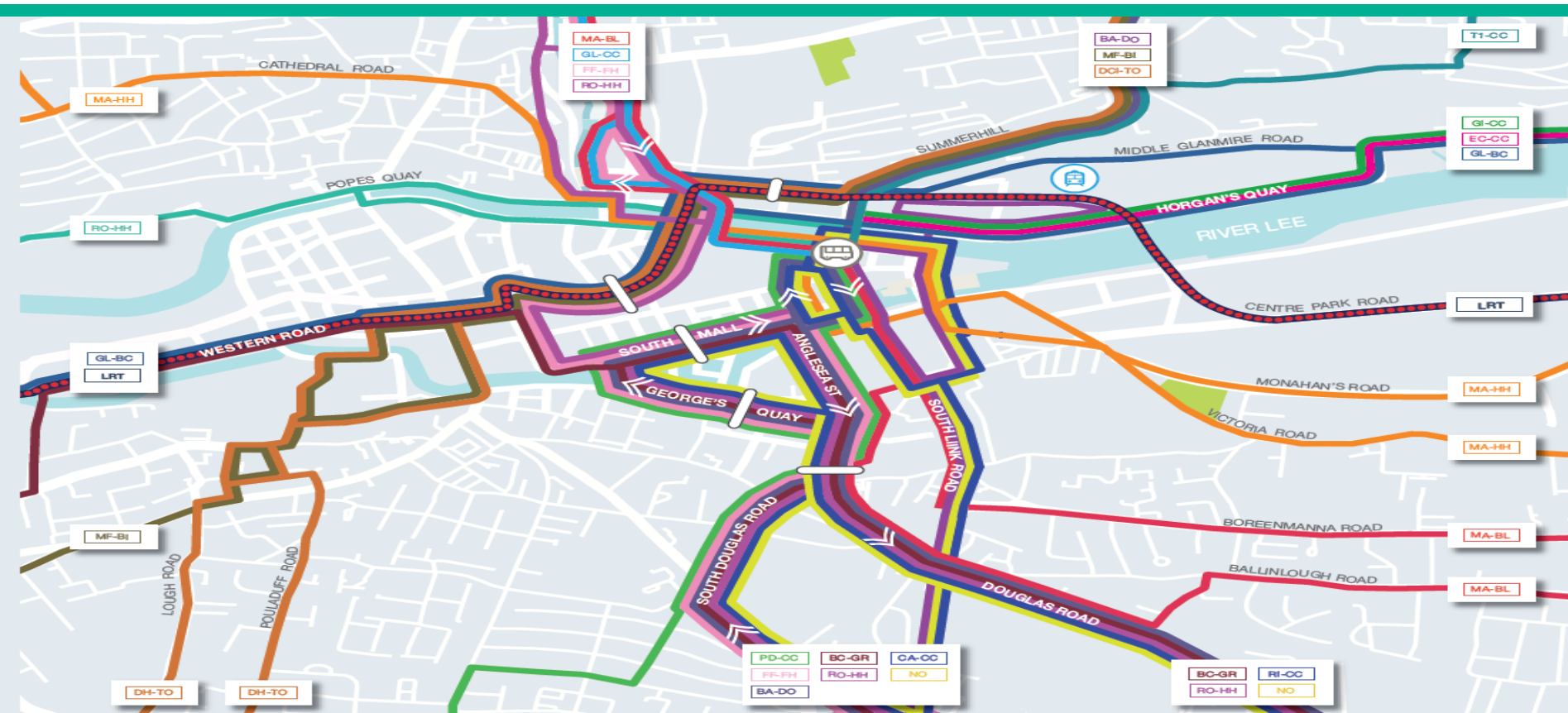




# Cork BusConnects

# BUS CONNECTS

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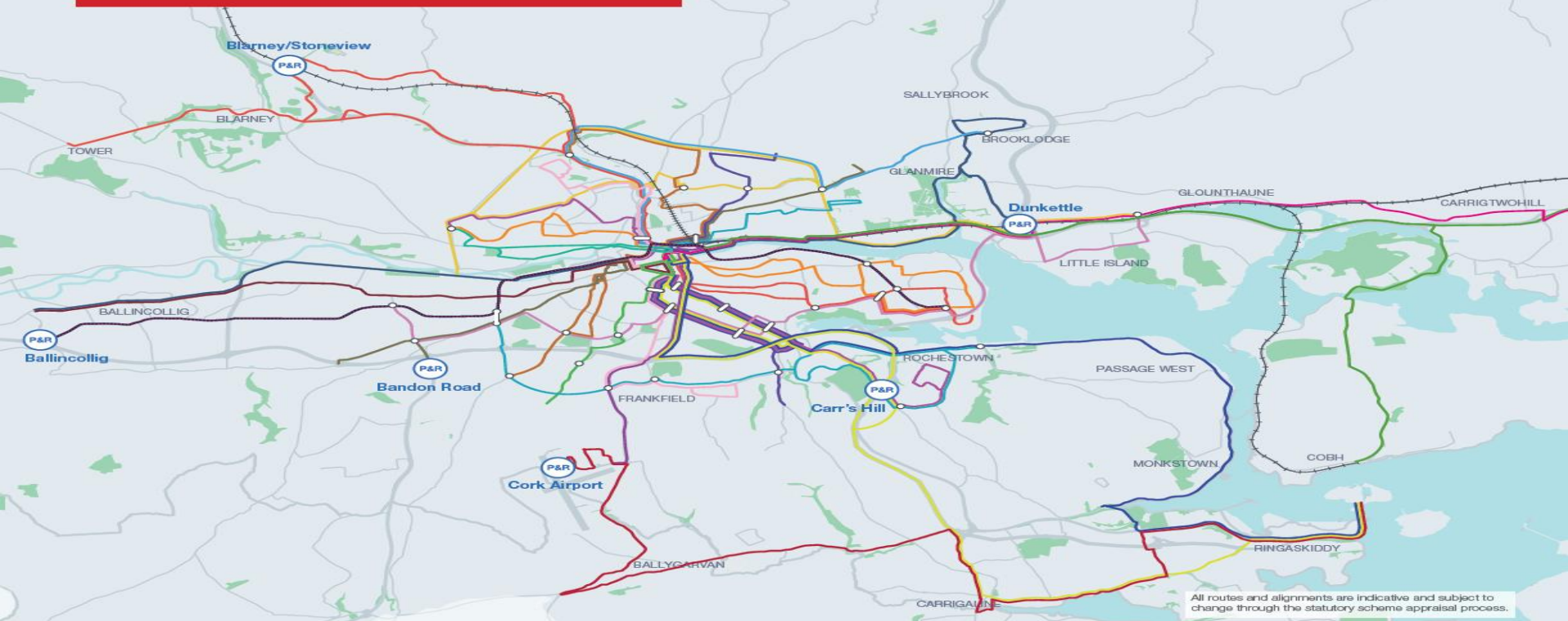


# Cork Park & Ride

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## Indicative Strategic Park and Ride locations



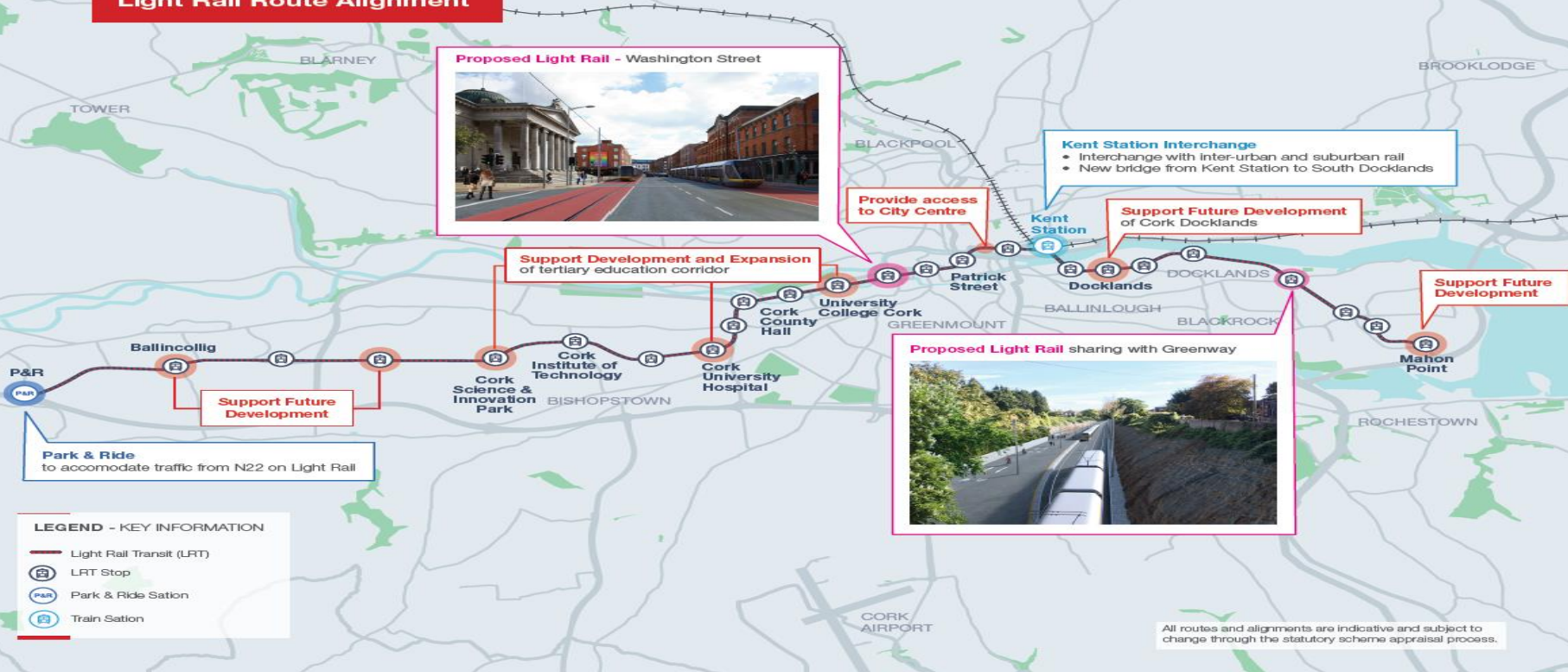
# Cork Suburban Rail services





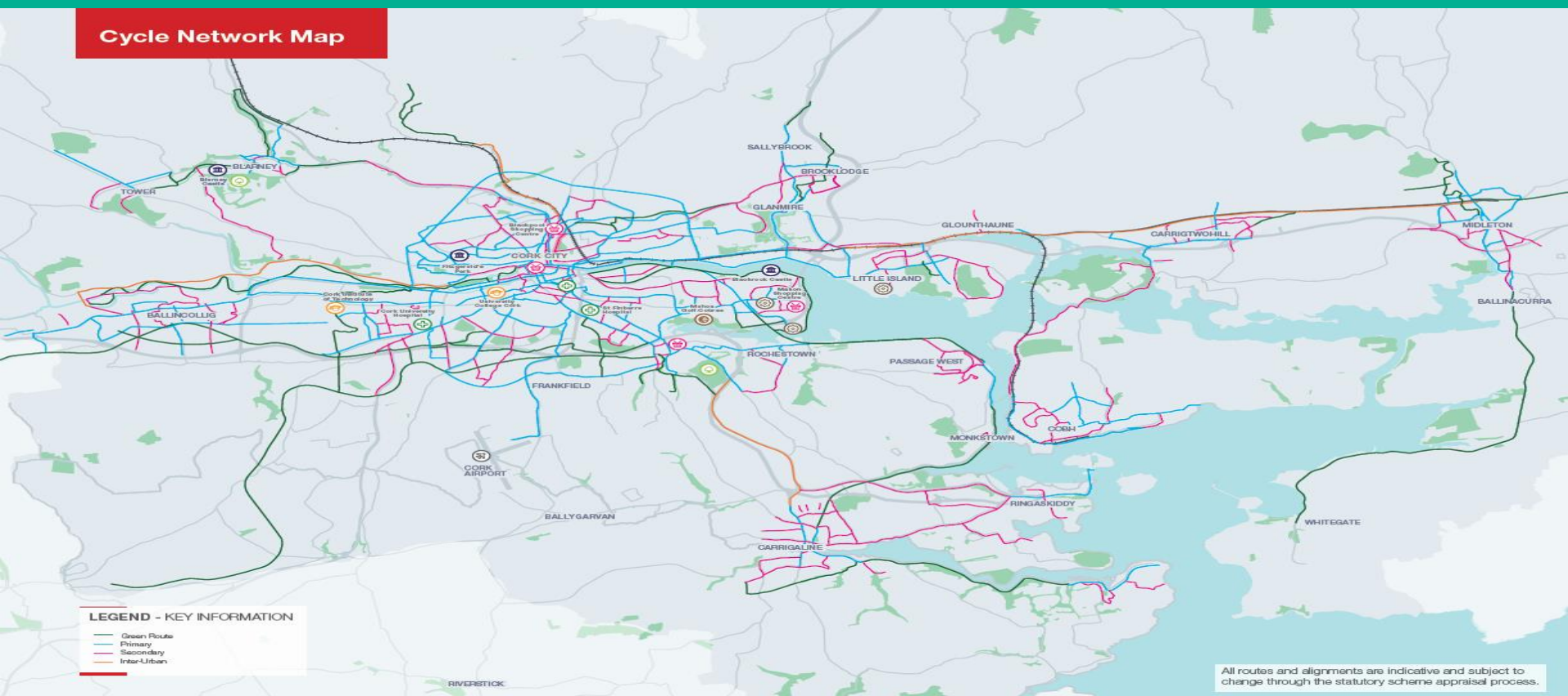
# Cork Light Rail

## Light Rail Route Alignment



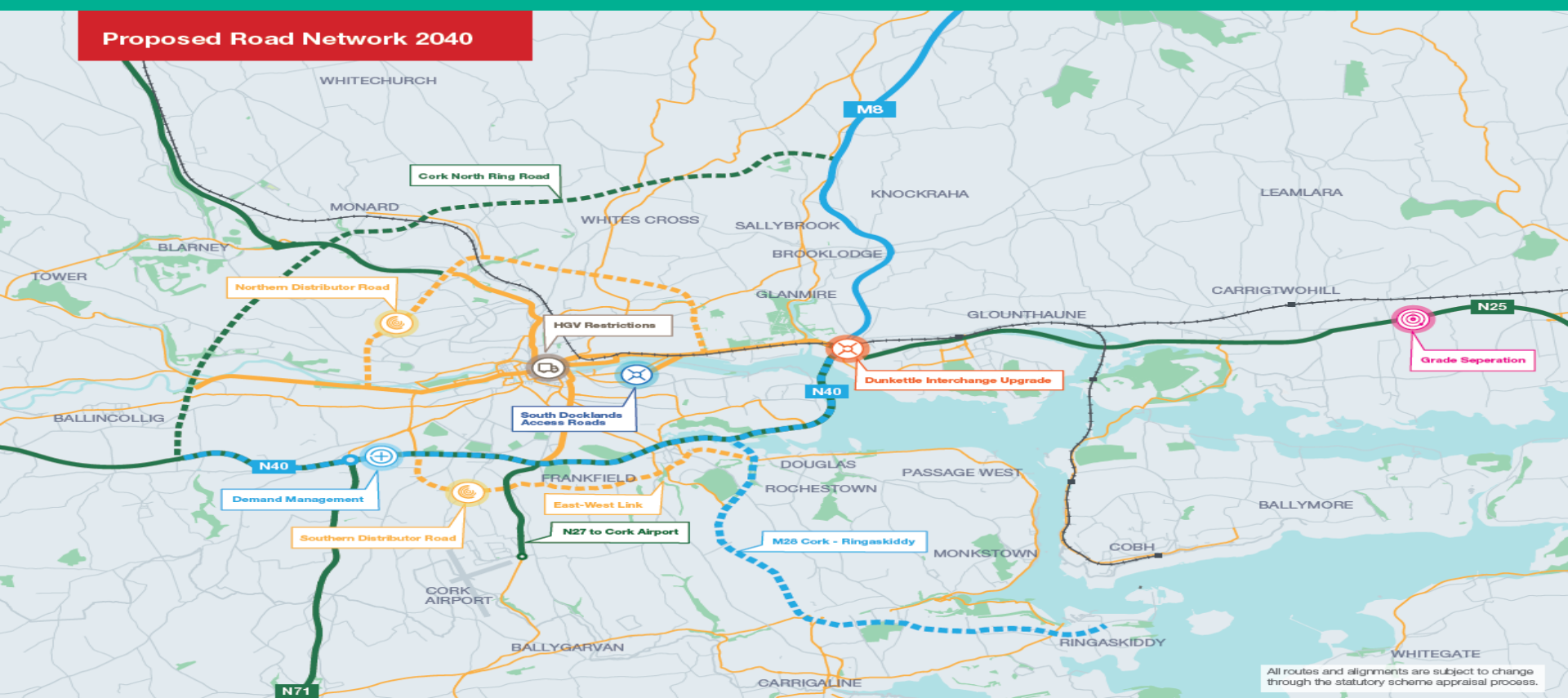
# Cork Cycling Network

## Cycle Network Map



All routes and alignments are indicative and subject to change through the statutory scheme appraisal process.

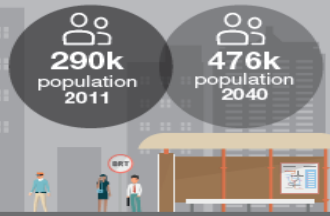
# Cork Roads Network





# STRATEGY OUTCOMES

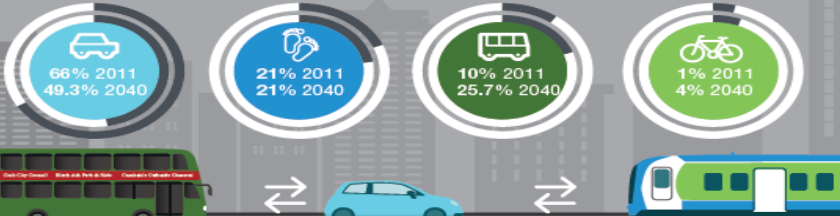
## FUTURE GROWTH



## DAILY DEMAND FOR TRAVEL



## AM PEAK MODE SHARE 2011 - 2040



## ACCESSIBILITY AND SOCIAL INCLUSION



### Suburban Rail Catchment

19% of population

30% of jobs



### Light Rail Catchment

32% of population

60% of jobs



### Social Inclusion:

up to 10.9% increase in PT mode share for disadvantaged and very disadvantaged areas

Illustration of a train and people walking.

## SAFETY & ENVIRONMENTAL

Over a 30 year strategy period



Reduction in fatal casualties

15



Reduction in serious casualties

68



Reduction in slight casualties

1,700

### Environmental:

46,000 tonnes pa reduction in vehicular emissions

Illustration of a car and a hospital building.

## ECONOMY & COST ESTIMATE



Present Value of Costs: €2.3bn

Present Value of Benefits: €5.7bn

Net Present Value: €3.7bn

Benefit to Cost Ratio: 2.48



Total Strategy Cost Estimate

€3.5bn

Illustration of a bus and a train.



# Cork Strategy Next Steps

- Report on 171 submissions completed
- Final strategy to be published this afternoon
- Incorporation by Cork City Council & Cork County Council in their next development plans
- BusConnects team being established by Cork City Council & the NTA
- NTA will pursue implementation of Cork BusConnects & heavy rail improvements & the feasibility study on light rail



# Making public transport services more attractive



# Technology and integration

- National intermodal online journey planner and app has been completed
- Real Time Passenger Information signs & app available at [www.transportforireland.ie](http://www.transportforireland.ie)
- Integrated ticketing via our Leap card



# Public transport improvements

- Additional services
- Improved reliability & punctuality
- Improved information at stops
- Transport for Ireland brand developed as the unifying brand



# Measuring customer satisfaction

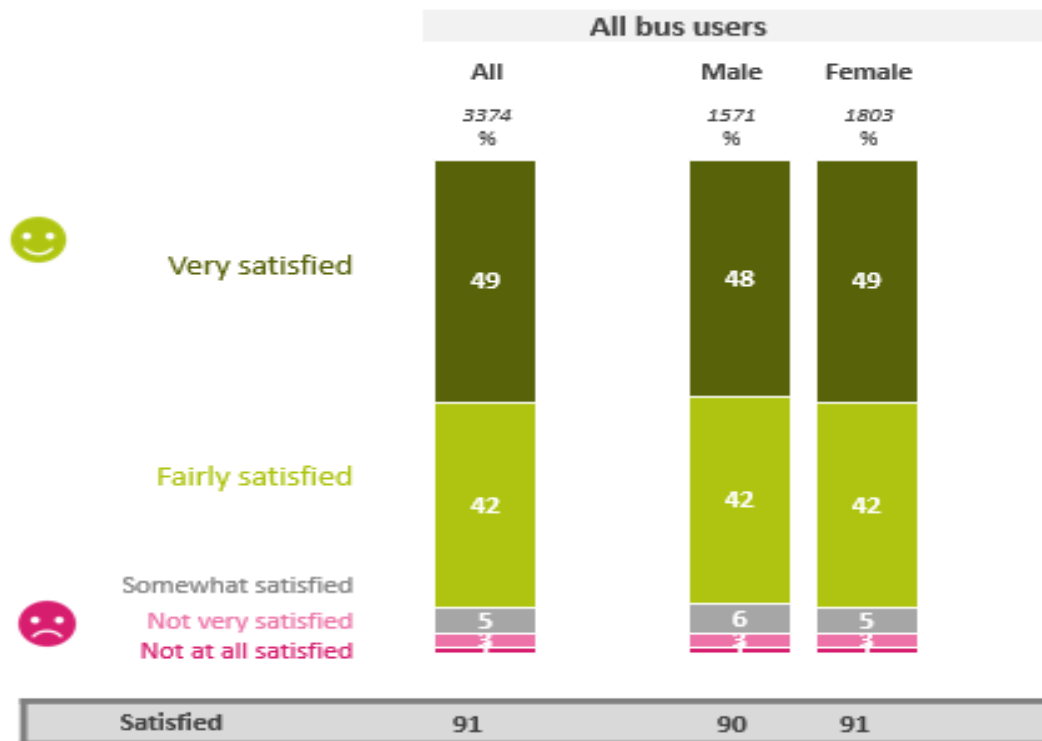
Satisfaction with personal safety at the stop by gender

Satisfaction with personal safety during journey by gender



# Measuring customer satisfaction

Satisfaction with routes being convenient by gender:





**#AndSheCycles campaign**

## Provide new public transport infrastructure



# National Development Plan 2018 - 2027





## Key Projects - Allocated Funds

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

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**Údarás Náisiúnta Iompair**  
National Transport Authority

# BusConnects



# BusConnects: What is it?

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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

# Low Emission Vehicles



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- **BusConnects** will contribute significantly to tackling the challenges of climate change and reducing carbon emissions.
- Framework contract now in place for diesel electric double deck buses for urban services – first 100 to be delivered commencing Q3 2020
- Procurement of single deck electric buses to commence shortly
- Bus trial with 3 hydrogen fuelled double deck buses to commence in 2020



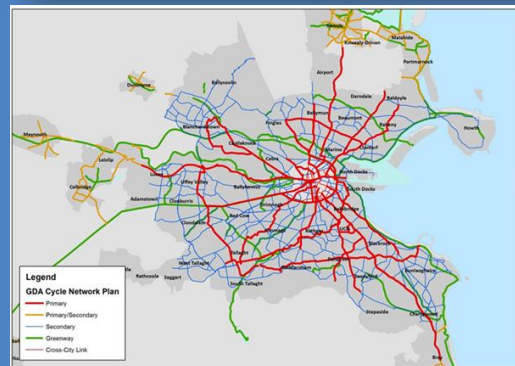
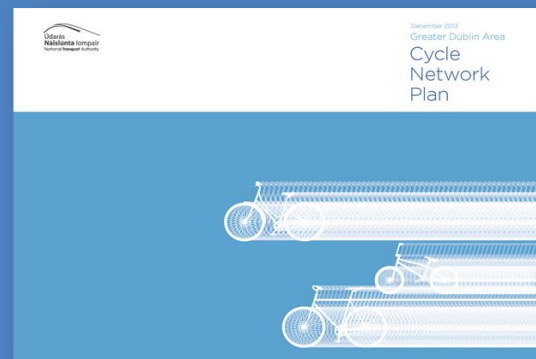
# Cycling Infrastructure



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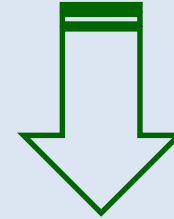


- Bus Connects will deliver improved cycling & walking infrastructure
- Cycle Network plans in place for all cities
- Need to dramatically improve our delivery rate of segregated cycling infrastructure
- New NTA Cycle Design Office



# Next Generation Ticketing

- **NGT** will include the move to account-based ticketing technology including open payments
  - Cashless city bus services
  - simpler & more integrated fares
  - allowing easier transfer between buses and onto trains and trams
  - Contactless EMV
  - “Mobile first”





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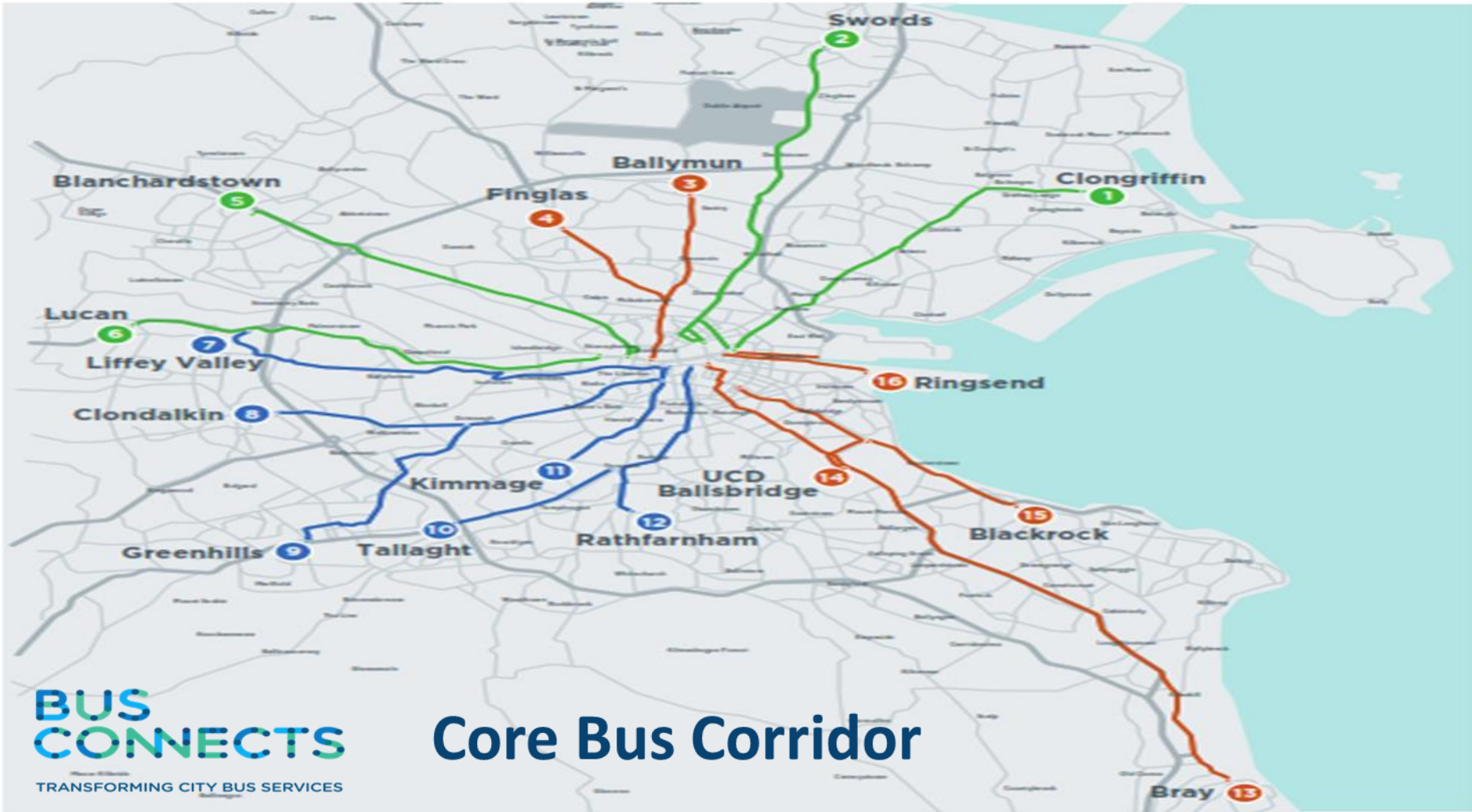


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**NTA**  
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National Transport Authority

# BusConnects Dublin

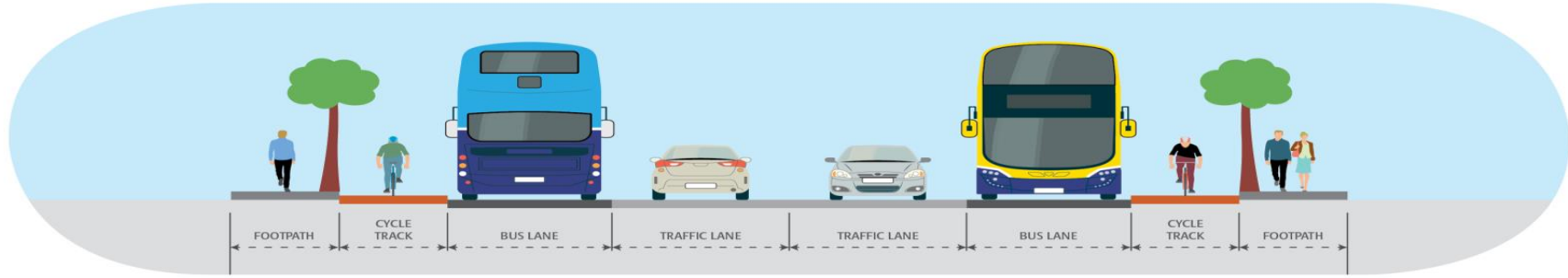






# Target Road Layout

## 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

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# BusConnects Dublin Bus Services



# Redesigning the Bus Network

- With over 130 routes (excluding Nitelink and Expresso) the current system of bus routes is complex, radially focussed and with limited orbital connections.
- The system is not designed to allow easy interchange between services.
- Under ***BusConnects*** we have undertaken a major redesign of the bus network.



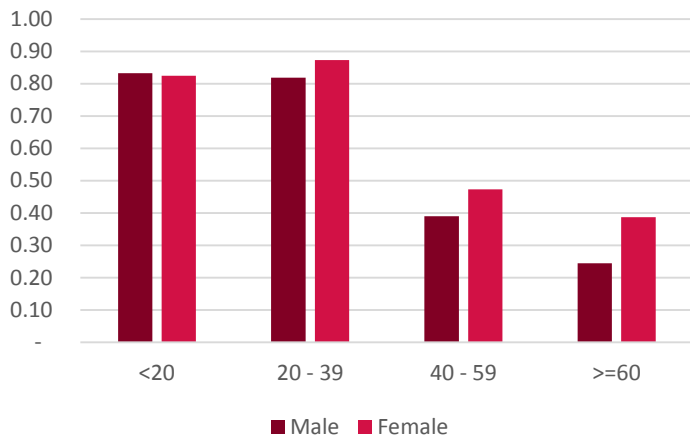
## Objective

To prepare a plan supporting equality of access to the bus network. **Approach**

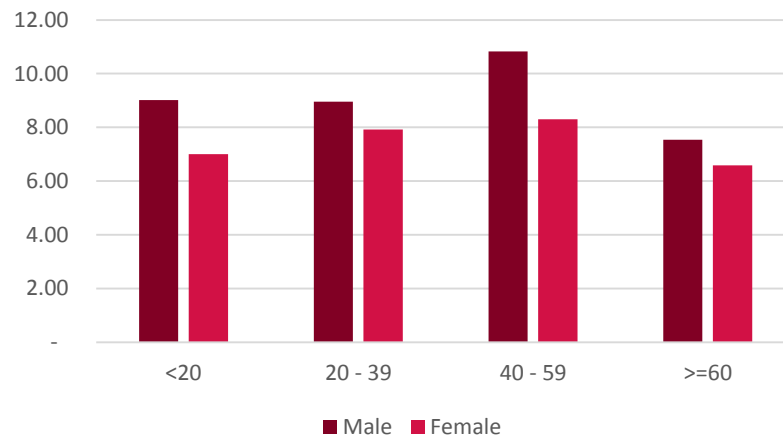
1. Consider **existing barriers** to equal access and what is being done to mitigate them.
2. Review a **sample of bus stops and journeys**, to support development of baseline data and assessment methodologies.
3. Prepare a **draft Action Plan**, consolidating and integrating existing actions with new activities.

# BusConnects Dublin Network - Equality Plan

Bus Trip Rates by Age and Gender

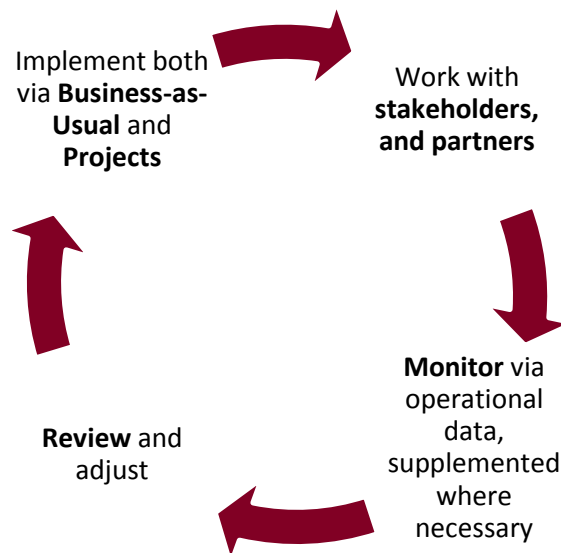


Bus Trip Lengths (Km) by Age and Gender



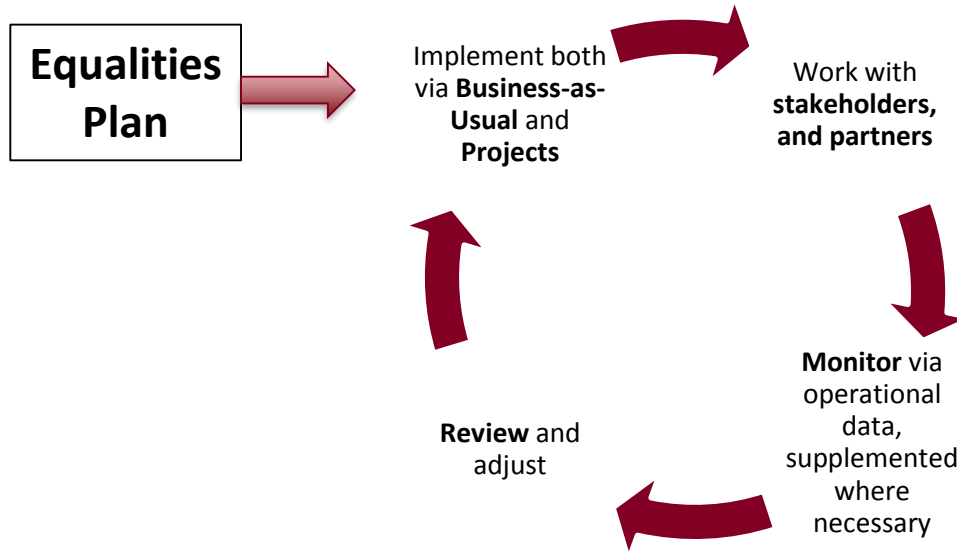
Women's trip rates are somewhat higher, while trip lengths are a little shorter.

# BusConnects Dublin Network - Equality Plan



**Enhancing equal access is a continuous process working across all activities**

# Implementation Process



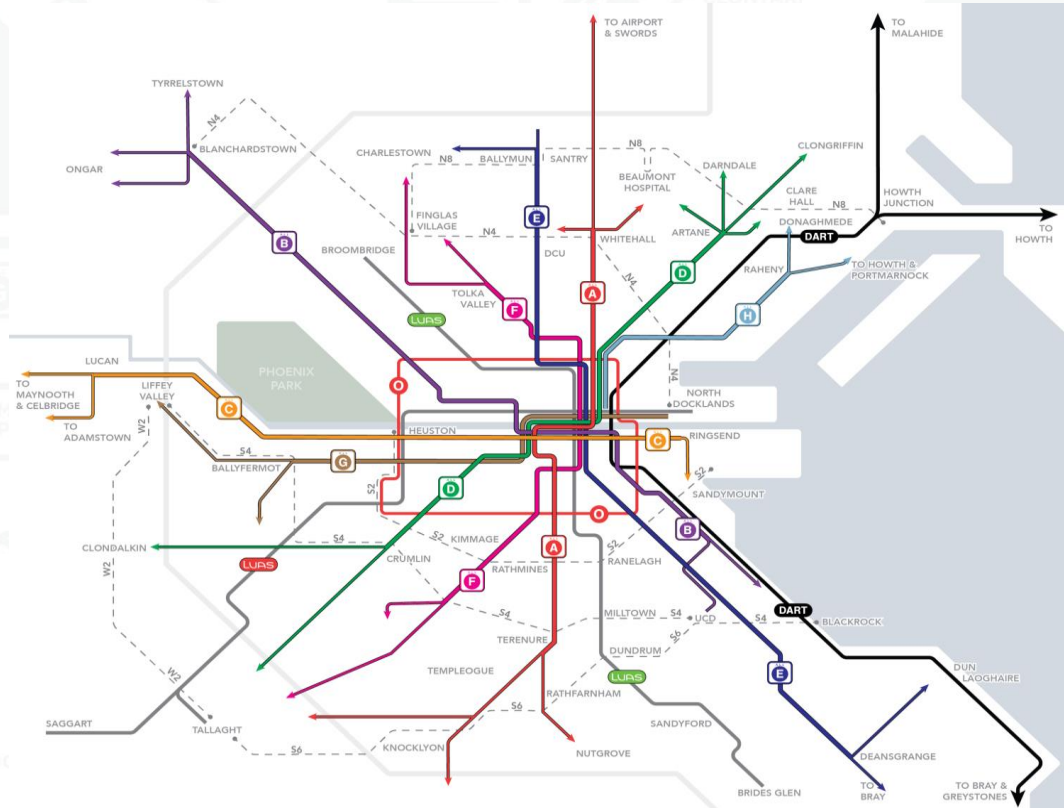
**Enhancing equal access is a continuous process working across all activities.**



# Key Concepts

- **Spines:** There are eight high frequency Spines
- **Orbitals:** There are ten orbitals covering the north, south and west of the city
- **Capacity:** More all day services
- **Times:** Longer service hours at weekends and evenings

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# Next steps



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## Bus Network

- Second round of public consultation on network completed
- Close to 13,000 submissions received by web form, email, consultation forms and post
- Submissions are being analysed and some more changes will be made
- Final network will be published in Q2 2020
- Implementation in stages will commence in Q1 2021

# Summary

- ✓ Transport strategies for all cities will be in place by 2020/early 2021
- ✓ Planning process will have commenced for Metrolink, Dublin BusConnects bus corridors & Galway city centre bus corridor in 2020
- ✓ Procurement of diesel electric hybrid double deck buses and battery electric/electric rail fleet will be complete in 2019 & 2020 respectively

# Summary

- ✓ Cycle network plans in place for all cities – NTA design office in place to speed up delivery – 3 fold increase in budget
- ✓ Additional Luas lines route options commenced
- ✓ Design work commenced on electrification of Dublin commuter rail
- ✓ Programme of Park & Ride projects to be developed

# Summary

- ✓ Lots happening to keep Ireland moving sustainably
- ✓ A lot more to be done
- ✓ We must ensure that equality of access is at the heart of all our plans