

# Planning for Buses in Urban Developments

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### Why BUD?

#### NPPF Core Planning Principle

 "actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling..."

#### BUT

- Lack of guidance on how to do it
- Reduced planning and transport budgets loss of sustainable transport planning skills

Relevant also in Ireland?



# National Development Plan (Ireland) 2018-2027

#### National Strategic Outcome 1

#### **Compact Growth**

... critical mass and scale in urban areas... increased investment in public and sustainable transport ...

#### National Strategic Outcome 4

#### **Sustainable Mobility**

- BusConnects (Cork, Dublin, Galway, Limerick, Waterford)
- Bus corridors, additional capacity, new bus stops, shelters

# But... NDP also promotes:

#### "Increased Investment in Roads Programmes"

- "Investment in national, regional and local road infrastructure will be delivered"
- "Roads will be improved to reduce journey times, remove bottlenecks..."
- "New roads will be built to connect communities and encourage economic activity."

#### **Context for BUD**

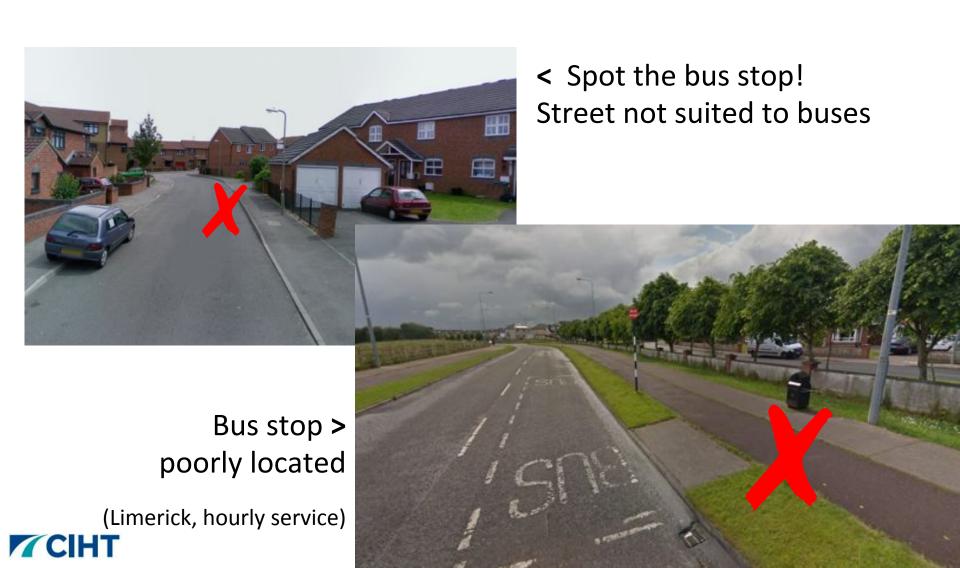


- Growing population means more housing and new developments (25-35k homes pa in NDP)
- Environment, climate and health issues increase the push for sustainable modes
- Competition from car: bus has to up its game
  - Not just bus priority, or zingy looking vehicles
  - Street and bus stop designs need to promote bus use
  - Services must cater for all needs

    People travel on Sundays as well except in Waterford?



#### Buses marginalised



### A better integrated example





#### Aims of BUD



- 1. Outline benefits of buses in shifting travel to sustainable modes;
- 2. Explain how development should be shaped to increase the quality and viability of buses;
- 3. Show how streets and places can be designed for effective bus operation;
- 4. Give bus operators an overview of what they should expect from local authorities.



#### **Contents**

Section A: Context and policy framework

Section B: The infrastructure for buses

Section C: Bus services and information

Section D: Participation and collaboration

Focuses on physical setting and infrastructure required for effective bus services, rather than who owns or regulates the services.





# Promoting a quality image

Luton busway

> "Concept" bus shelter (Photo courtesy Greater Manchester)



#### Section A

Planning the physical environment

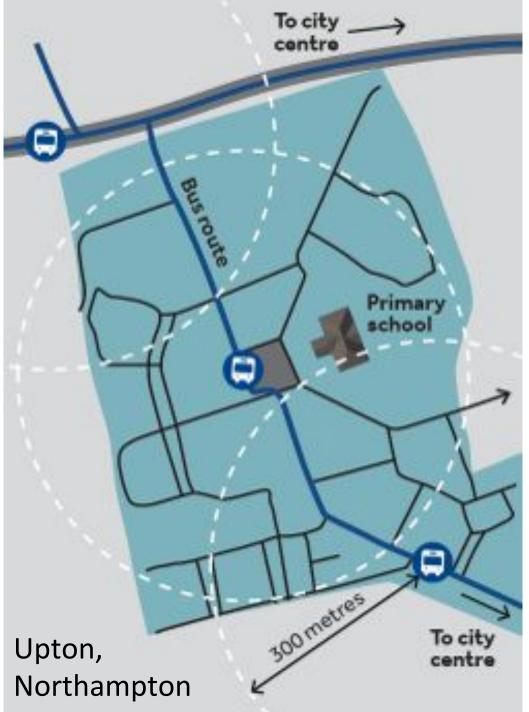
Bus oriented development: Milton Keynes Western Expansion Area







Walking catchment of bus stops





#### Recommended maximum walking distances

Situation	Maximum walking distance
Core bus corridors with two or more high-frequency services	500 metres
Single high-frequency routes (every 12 minutes or better)	400 metres
Less frequent routes	300 metres
Town/city centres	250 metres

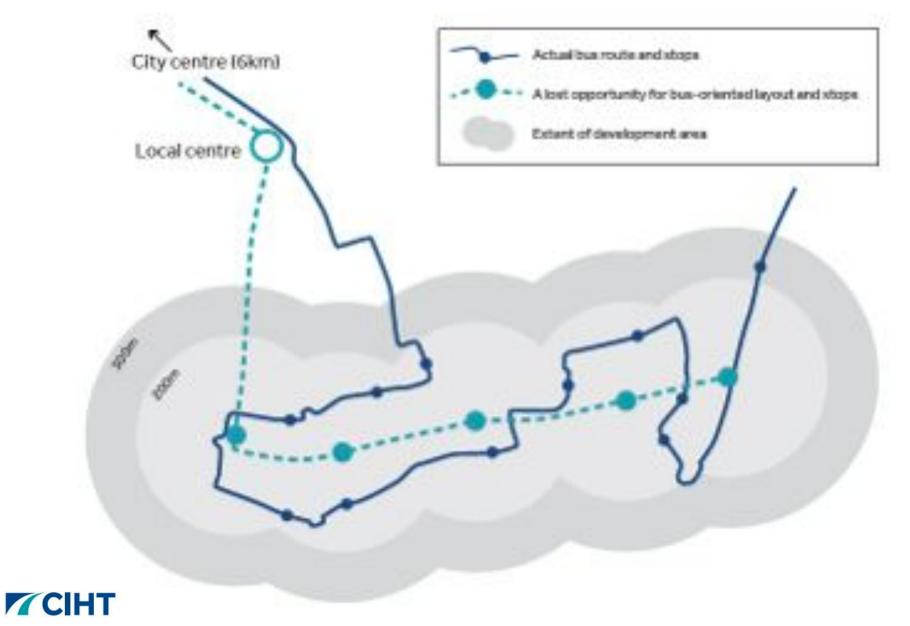


# Preferential routing for buses



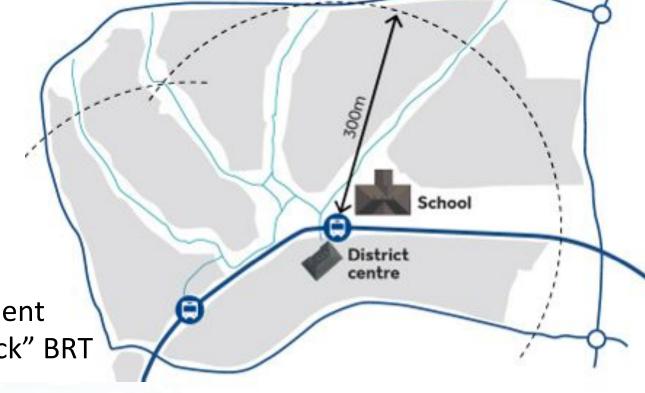


### A lost opportunity



# Bus-oriented development

"The Bridge" development (Dartford) with "Fastrack" BRT









#### Section B - The infrastructure for buses

Bus streets, bus stops and walking routes



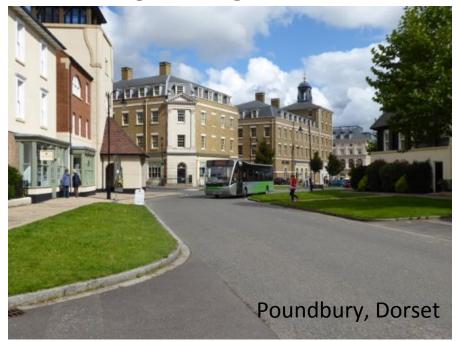
Gratuitous bends, for people and buses



Coherent street



Interesting walking environment





Walking routes to bus stops

how not to do it

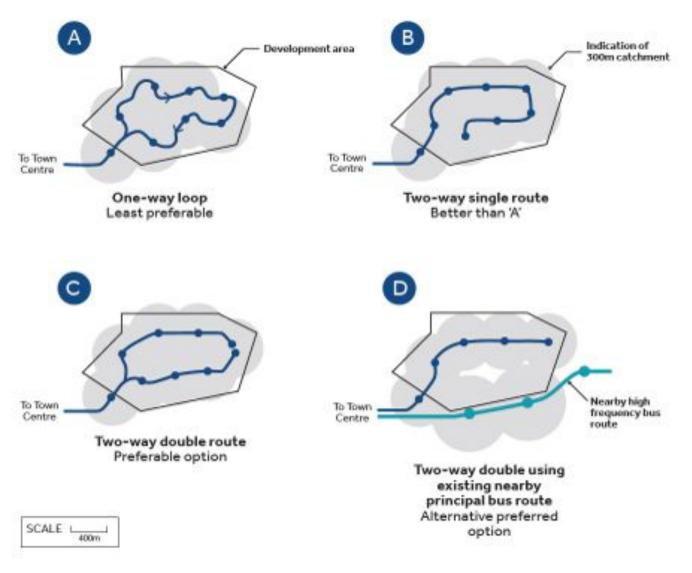


Birmingham



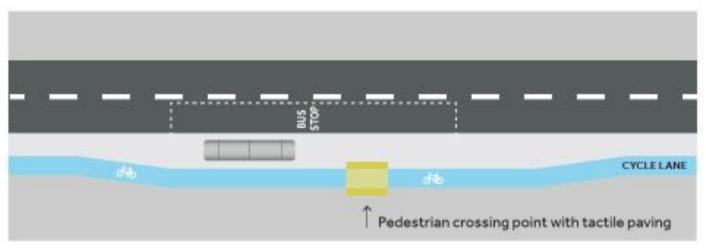


# Bus route options





# Cycle lane options







#### Realtime and fixed information



Fastway, Crawley





Traffic calming

Access for all



### Key messages



- New developments compact or dense enough to support high frequency and viable bus services;
- Buses integral to the community, aided by
  - Spatial planning
  - Development management (e.g. parking regime)
  - Local transport policies (e.g. bus priority)
  - Service levels that cater for all needs;
- The layout of streets and paths should allow efficient bus operation, and provide attractive walking routes to bus stops.



## Thank you



#### **Audience for BUD**

- Spatial and land use planners
- Transport planners
- Highway and traffic engineers
- Urban designers
- Developers
- Public transport operators







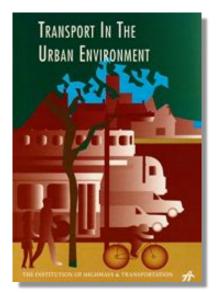






#### **TUE to STUE**

2018



1997

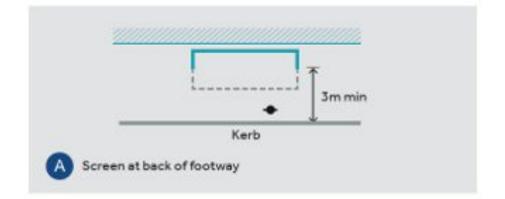




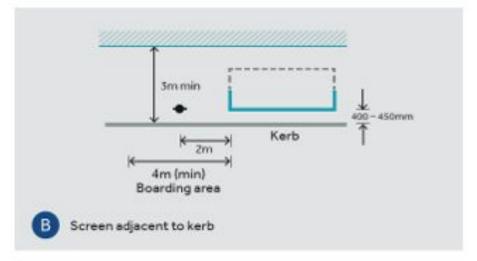
From 2014

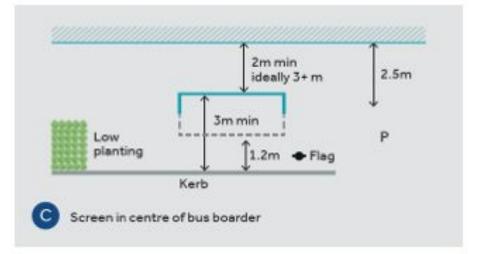






### Bus shelter options

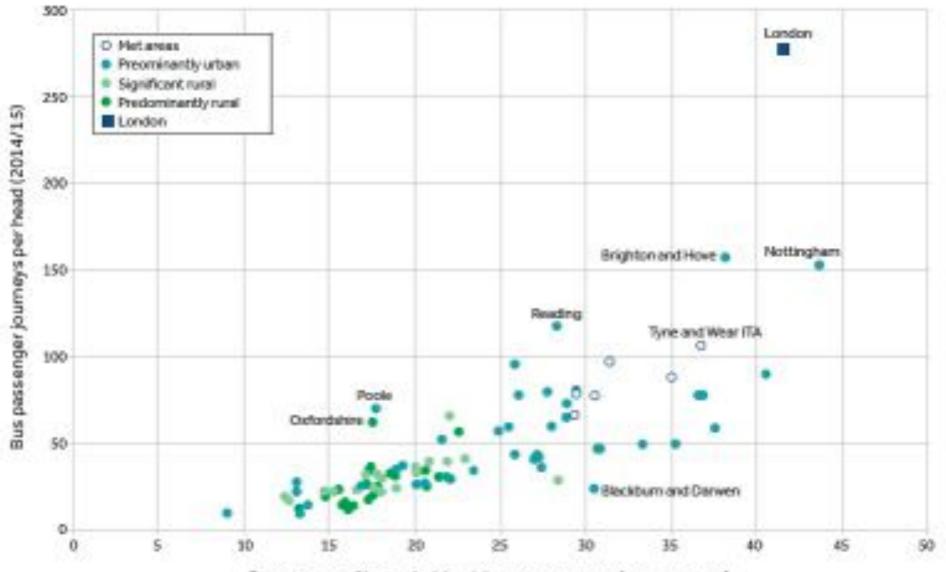








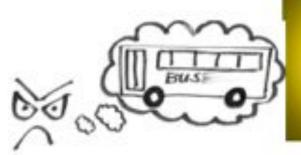
#### Bus use and car ownership



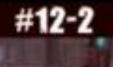








i hate buses



I Hate Buses



HATE

**BUSES!** 

I HATE BUSES









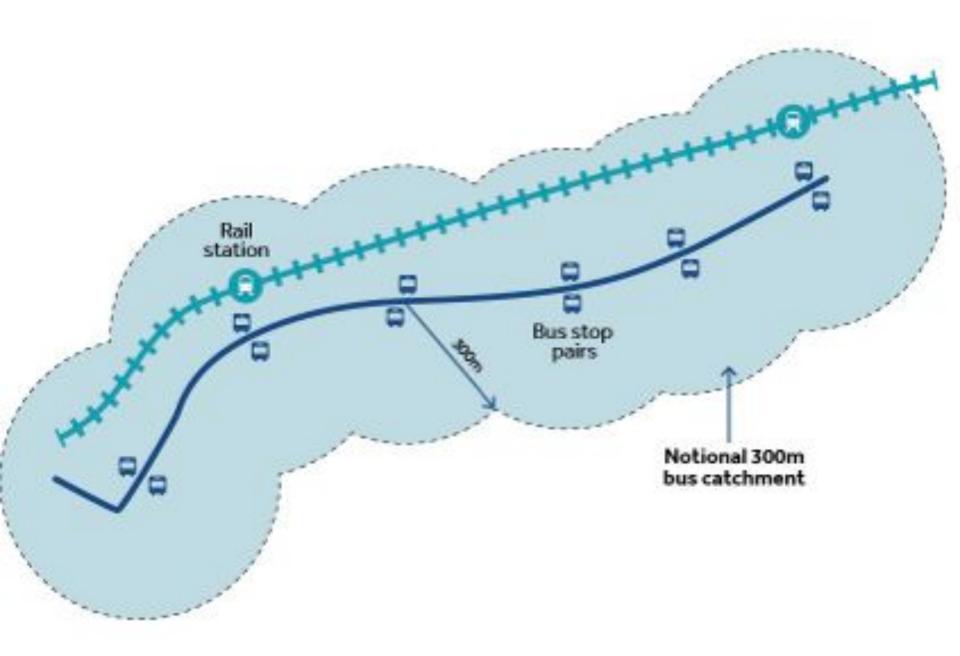




#### Institute of Directors report 2017 Future Proofing Infrastructure

 "Bring in (journey) speed targets for buses and repurpose roads to better suit spacefriendly buses"









## The right message?



