Sustainability?
A housing & community perspective

Dr Nessa Winston

School of Social Policy, Social Work & Social Justice, UCD

Overview

- **What is sustainability re: Irish (urban) housing & communities?**
  - *Many dimensions*, but focus here:
    - Residential density
    - Built-forms
    - Public and active transport
  - Rationale for selection:
    - well-being, social inclusion, equity
    - but also have natural environment & climate change dimensions (not really discussed here)
- **How is Ireland doing?**

1. What is Sustainable housing/community in Irish context?

a) Residential density

- Resisting urban sprawl
- Brown > green-field
  - NB: blue & green
- Mixed use
- Good public transport (time)
  - Renewable energy

Malmo

Freiburg
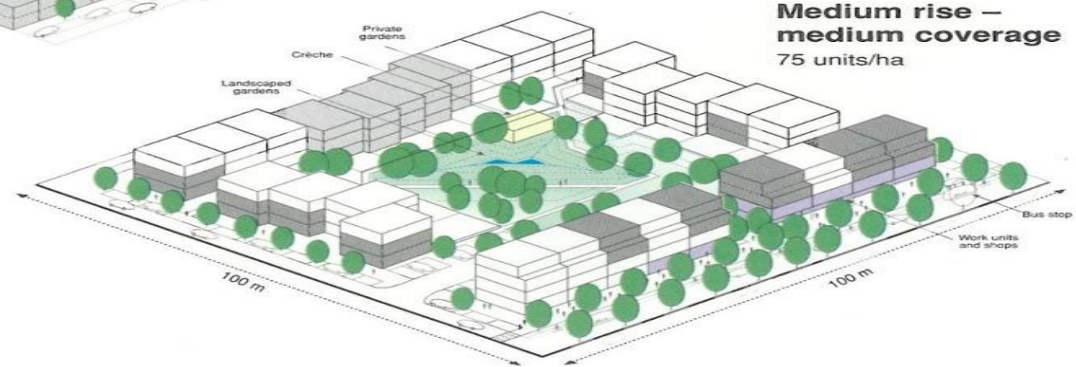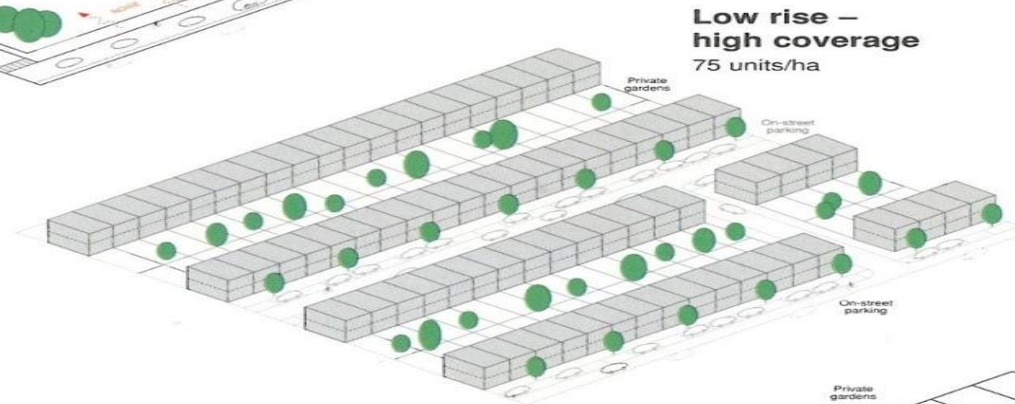
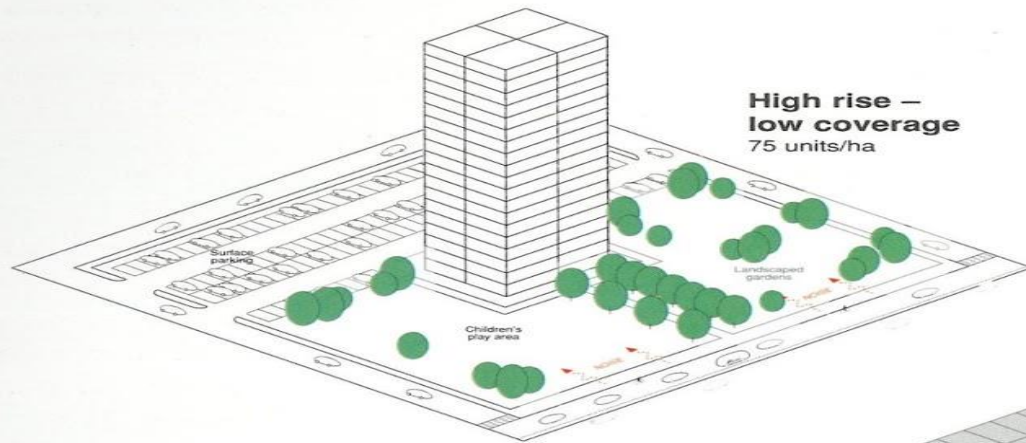# b) Higher residential density & built-forms

Bath, England

- Why?
  - Land & energy efficiency
  - Supports mixed use & sustainability of services
  - Most journeys active / public transport

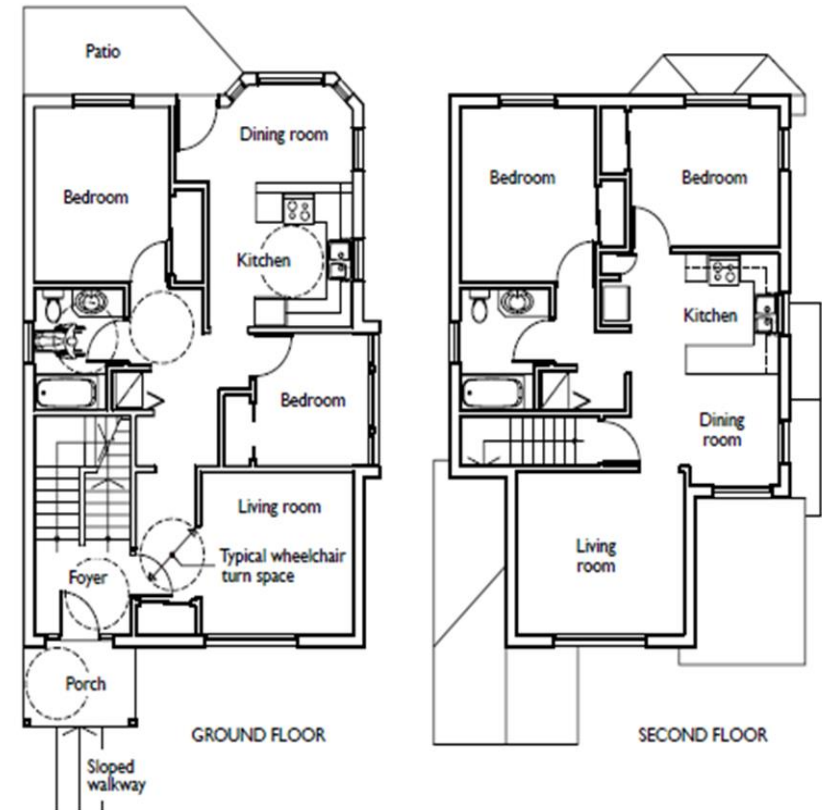Figure 2.6: Relationship between density and urban form

Higher density =/= high rise

(Andrew Wright Associates)

b) Higher density built-forms ctd

- **Life-time adaptable, flexible housing & communities**
- Accessibility: all ages & stages

Flexible Housing

- main floor as self contained "accessible" unit for elders/disabled or office
- upper floor can be converted into a two bedroom unit
- ground oriented main living areas
- space zoning – living areas to the south, beds, storage, carports to north

Main Floor Plan
CMHC Demonstration Unit

Upper Floor Plan
CMHC Demonstration Unit

BR⊕ADWAY
ARCHITECTS

b) Higher density built-forms (ctd)

- **Requires high quality housing**
  - Dwelling: light, noise etc
  - But aspects of neighbourhood quality higher correlation with quality of life (Winston)
    - Crime, safety
    - Pollution (air, water, noise...)
    - Green/blue space (Scott et al)
      - leisure, food, local energy, waste, pond, river...

b) Higher density built-forms (ctd)

- **Require affordability & social mix**
  - Ensure viability of local services, trades & skills
  - Avoids **social wave syndrome** (Barton, 2000)
    - almost all initial residents @ same family stage
    - uneven demand for services
      - creches, schools…nursing homes

b) Higher density built-forms ctd

- **Require social resources**
  - Community services & centres
    - Meetings, parties
    - Libraries
    - *Leisure resources*
      - *Children, teenagers,* older people

  - Community development, networks & social capital

c) Transport

- Good quality, frequent, accessible public transport reduces
  - car use
  - car dependence
  - social exclusion (move or eat?)
  - 'obesenogenic environments'

c) Transport ctd

- Facilitate walking & cycling (e.g. 'Home zones')
  - Significantly reduce motorized vehicles
  - force them to drive slower
  - Alter streets
    - benches, play areas, green space
 - Community quality of life, health benefits

2. How is Ireland doing?

a) Urban sprawl & built form

- Sprawl common trend EU but *Ireland extreme case (Budovic et al; Williams & Redmond)*
- One-off housing, open countryside: *rising again, Ireland extreme case (Brady)*
  - Some 'returners' but some escaping urban problems (Scott et al, Winston)
    - *Affordability*
    - *Poor quality of urban life*
- Ireland outlier in EU in favouring 'houses' (urban & rural)

# % living in houses (detached/semi-detached), 2017, EU-SiLC
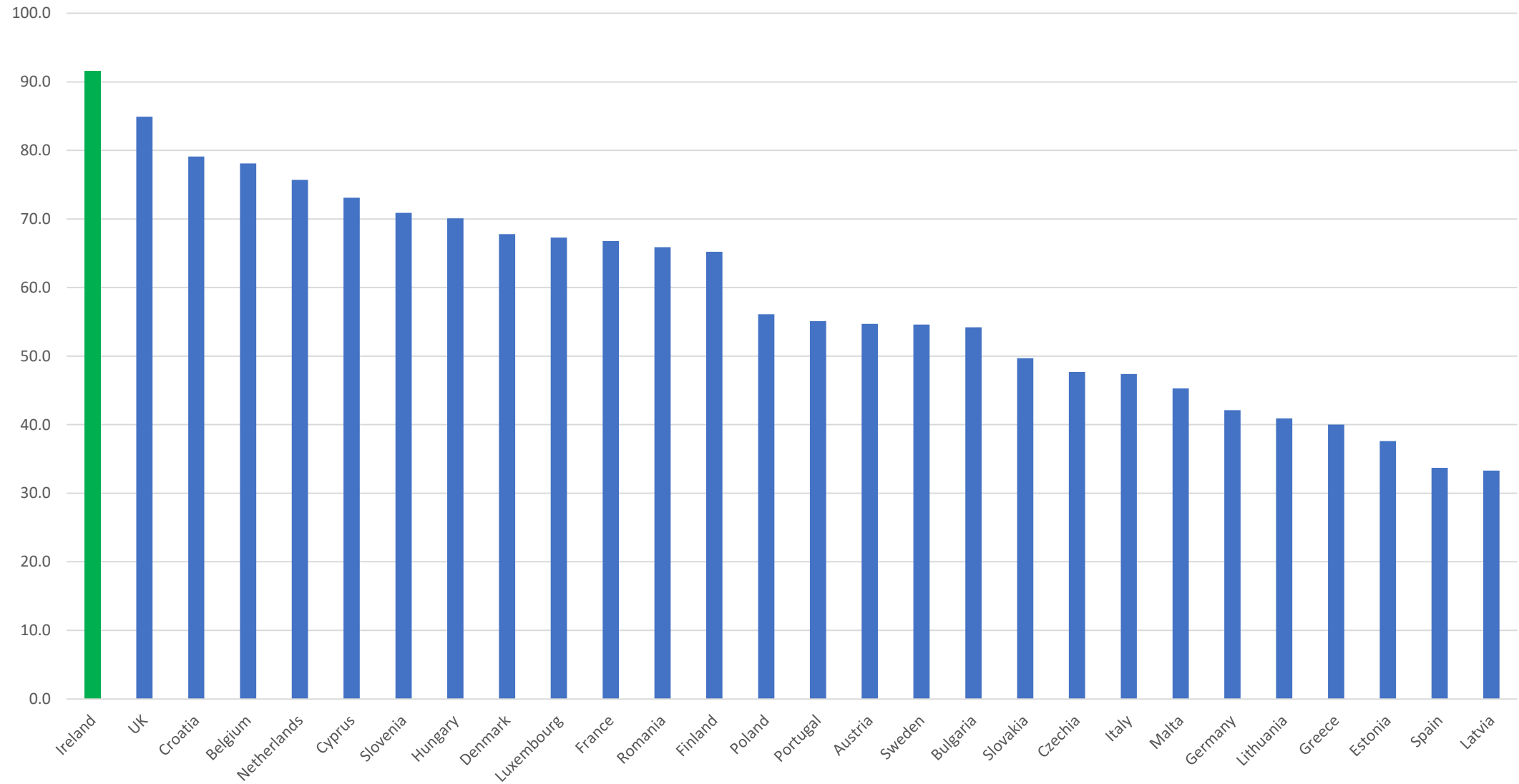
How is Ireland doing (ctd)?

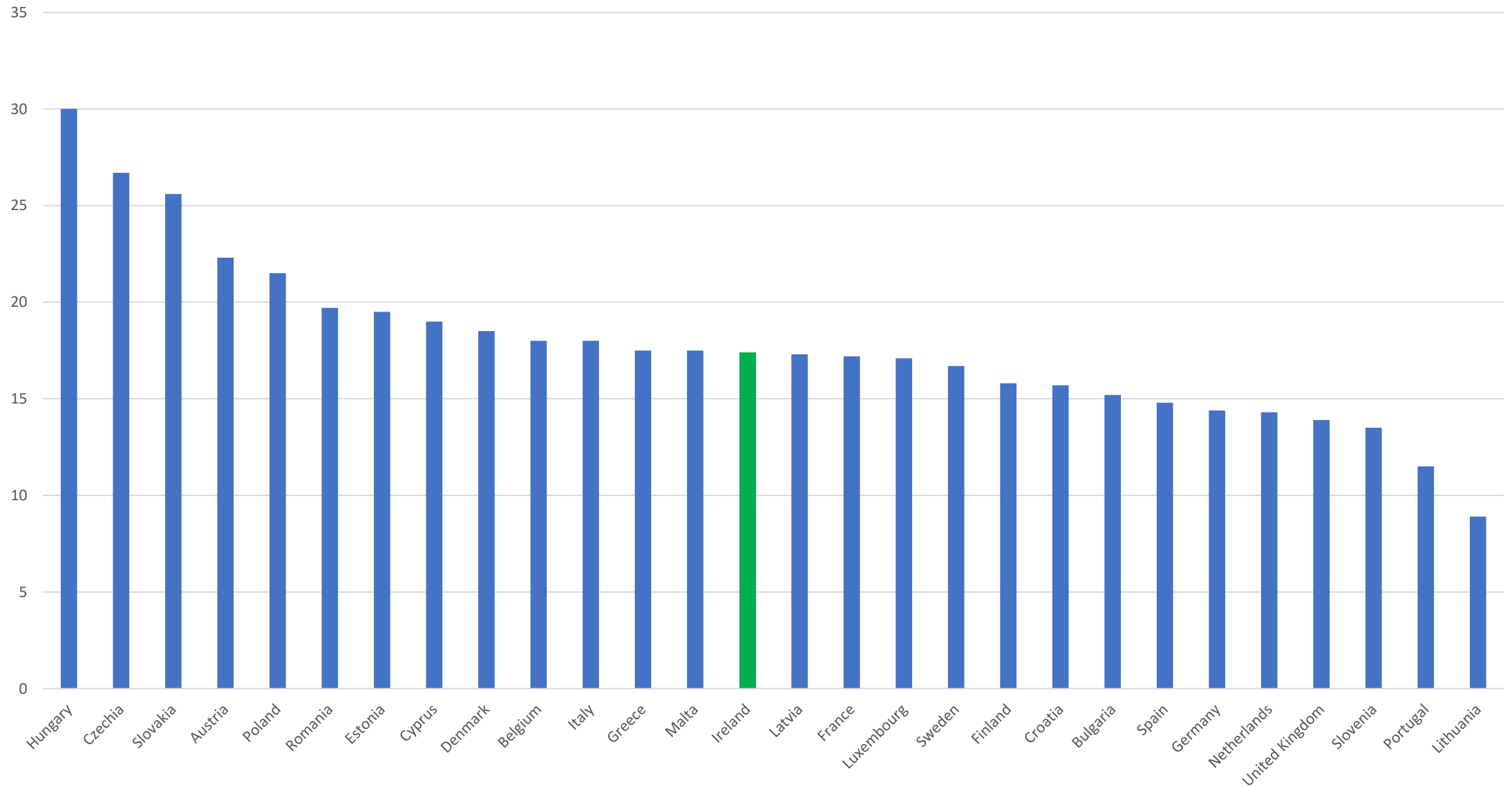2. Transport

- Car dependence & social exclusion
  - Urban (Wickham)
    - Dublin v other cities
    - GDA but also Dublin
    - Move or eat (Drew, Winston & Koeppe)
  - Rural
- Transport inequities & Dublin suburbs (Ahern et al)
  - Very long commuting times via public transport
  - Forced car ownership
  - Low- & middle-income groups

Share of buses & trains in total passenger transport (%)
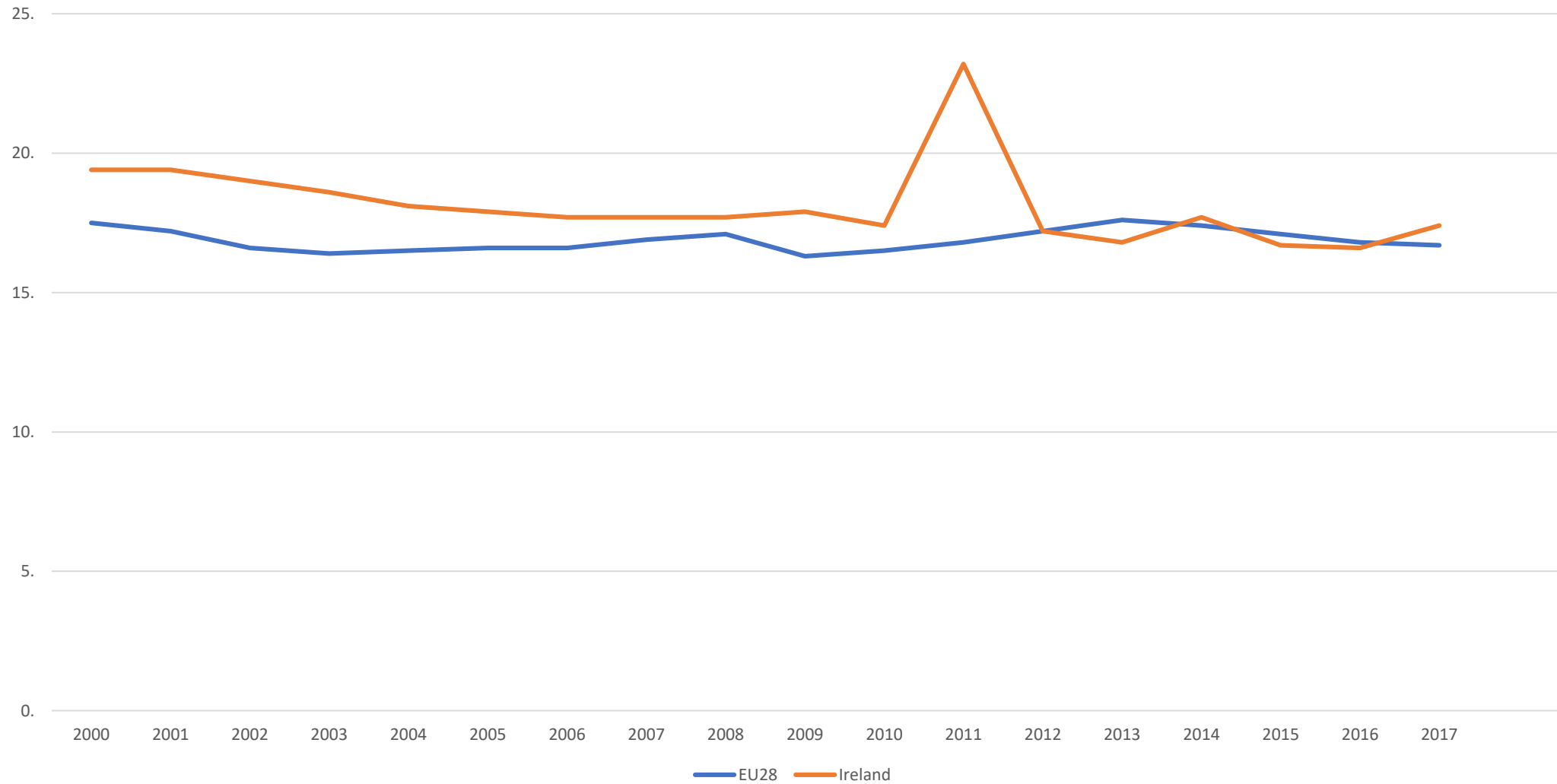
Share of buses & trains in passenger transport (%), 2017

Means of Travel (to Work, School or College)

Census of Population 1991-2016

- Work mainly at or from home: 11.2 ... 3.1
- Other means (incl. lorry or van): 2.4 ... 4.6
- Motor car: Driver/Passenger: 35.5 ... 58.0
- Motorcycle or scooter: 0.7 ... 0.3
- Train, DART or LUAS: 1.5 ... 2.7
- Bus, minibus or coach: 16.2 ... 10.2
- Bicycle: 6.2 ... 2.7
- On foot: 21.8 ... 13.9

Legend: ■ 1991 ■ 1996 ■ 2002 ■ 2006 ■ 2011 ■ 2016
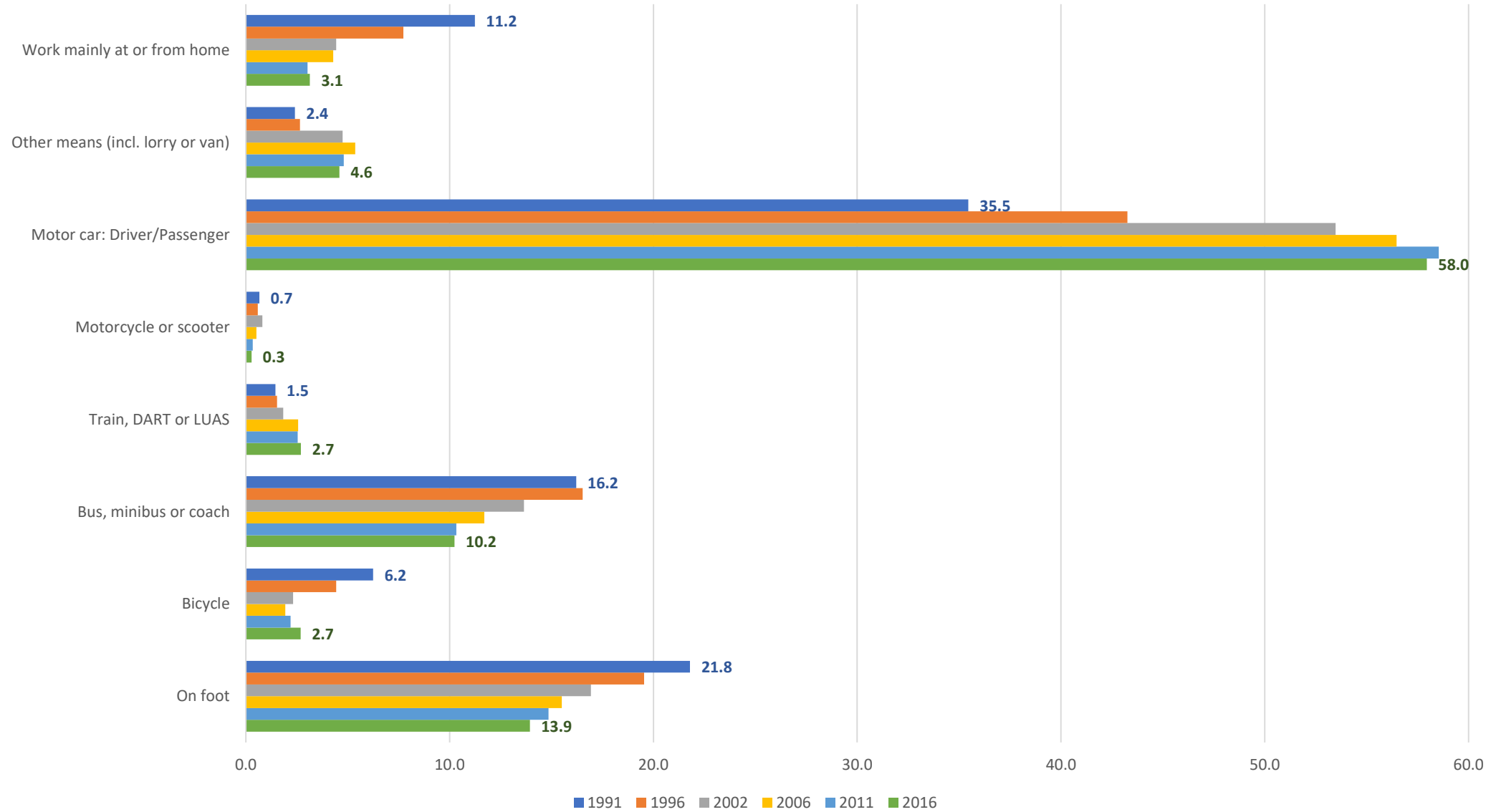
Towards more sustainable urban communities

1. Increase supply via higher density, *high quality urban communities*
   - Multi-family housing (incl. apartments): *higher* space standards (Gallent at al; Winston)
   - Alternative tenures (e.g. co-ops): older people, separated/divorced
   - Densify suburbs: *space* for environmental, economic & social infrastructure (Bramley et al)
     - BedZed, London
   - NB: Good quality green & blue space (Scott et al)

Towards more sustainable communities

2. Transport

- Improve proximate, fast, & affordable public transport

- Reduce cars (taxation, speed …)

- Cost Benefit Analysis: benefits of transport-oriented developments v dispersed settlements (Williams et al)

Final points: sustainable communities

- Not an end state, evolve over time, responsive to different contexts
- Requires holistic approach
  - Depts: Housing, planning, transport, energy, climate change
- Environment, economic, social trade-offs
  - Long-term thinking essential....costs will be brought down or save elsewhere (e.g. health)
- Long legacy of construction if get it wrong: costs of retrofitting, pushing people out

Final points ctd

- Explore alternative pathways
  - actors & their connections? goals & values prioritized?
    - different understanding & capacities to present pathways for change…
  - Implications for marginalised households & communities
    - equitable access to services & social resources
    - reducing transport poverty & inequities
    - Reducing leisure poverty/inequities [infrastructure (blue & green space), commuting time, …]
  - Improve well-being (mental & physical), equity, social inclusion.