Planning Active Spaces

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Structure of presentation

- How does the built environment shape our lives?
- How did we get to this point?
- Planning for active space provision *(and networks)*
- Strategic considerations

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How does the built environment shape our lives?

- Organisation of time/space – home, work, education, play activities
- Socio-spatial patterns (activities) of daily life
- Patterns of transport and mobility and impact of those choices
  - Rarely an end in itself, it is about co-presence
- Policy has limitations – the way to change transport practices is also by changing the form of social obligations and patterns
- Patterns of mobility do not necessarily change because of policy changes

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How did we get to this point?

- Historic legacy – separation of work and home, still shaping patterns of contemporary mobility
- Assumptions of universal car ownership in late 1960s and 1970s
- Predict and provide of road transport infrastructure
- Effects of traffic disproportionately impact on deprived areas and individuals – pedestrian casualties, noise, air pollution, effect of severance on local communities

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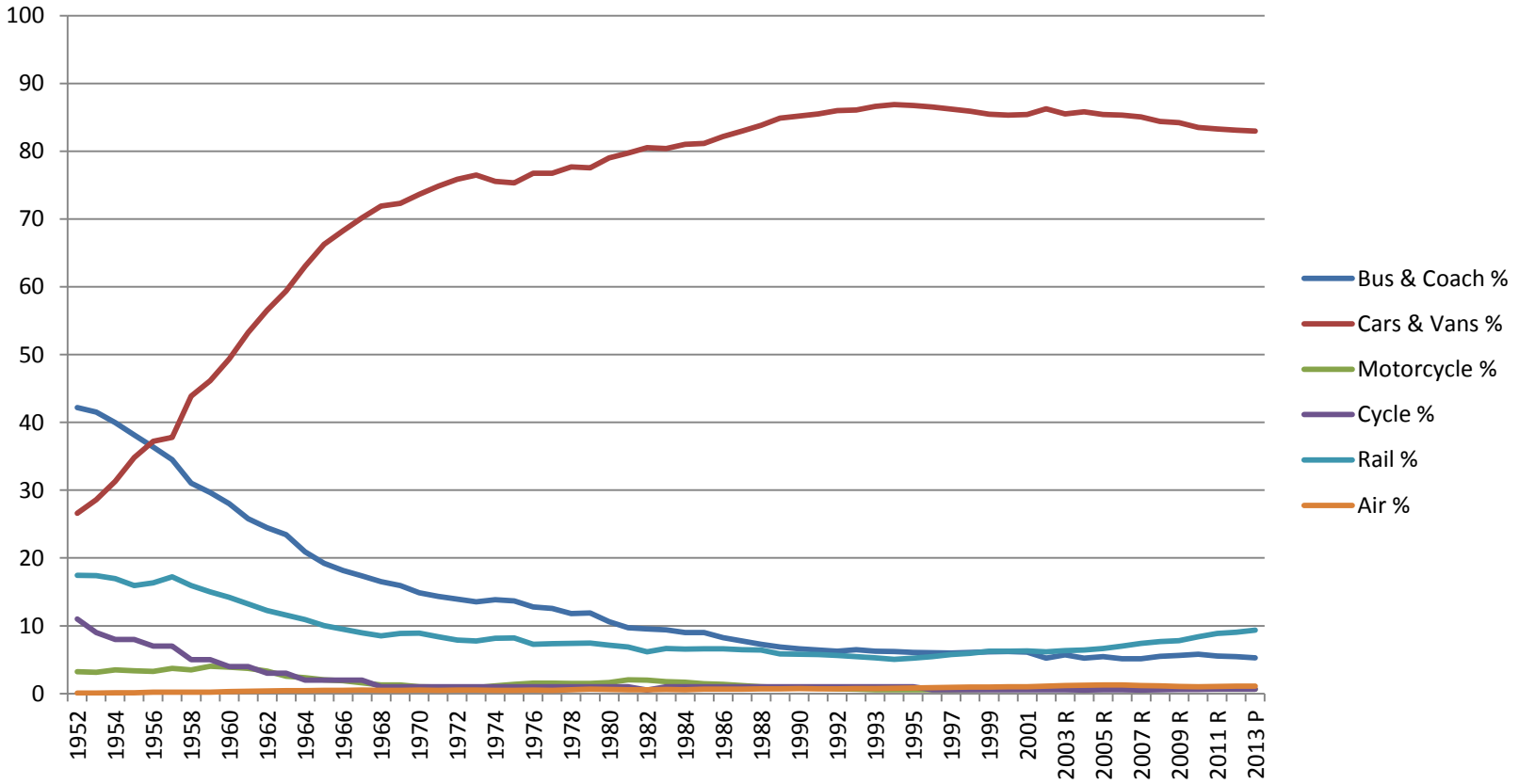
Mode share 1952-2013, GB

(Transport Statistics Great Britain 2014)



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Growth in car, decline in walking & public transport

Average number of journeys per person per year and average journey length by main mode*: 2000-2002, 2005-2007, 2009-2011 and 2010-2012

Journeys/Miles

Travel mode*	Journeys per person per year				Average journey length			
	2000-2002	2005-2007	2009-2011	2010-2012	2000-2002	2005-2007	2009-2011	2010-2012
Walk	187	164	143	**143**	0.7	0.8	0.9	**1.0**
Bicycle	7	5	6	**7**	2.5	3.7	3.9	**4.2**
Car Driver	409	426	440	**451**	7.3	7.6	7.4	**7.4**
Car Passenger	258	228	204	**202**	6.9	7.0	7.3	**7.1**
Car Undefined	5	-	-	**-**	6.7	..	..	**..**
Motorcycle	3	2	1	**1**	10.0	9.9	9.1	**9.9**
Other private	25	34	36	**37**	12.9	12.7	13.1	**11.6**
Citybus/Metro and Ulsterbus**	40	41	38	**35**	8.0	7.8	7.9	**8.1**
Other bus	10	5	5	**4**	10.0	11.7	11.0	**12.6**
NI Railways	3	4	5	**5**	21.0	22.3	20.8	**20.3**
Black taxi	2	1	1	**1**	3.0	3.3	4.1	**4.7**
Taxi	19	18	16	**14**	3.7	3.9	3.5	**3.7**
Other public	-	-	-	**-**	..	..	..	**..**
Undefined mode	3	-	-	**-**	7.1	..	..	**..**
All modes	970	929	894	**900**	6.1	6.5	6.6	**6.5**

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Rise of demand management in NI?

- RDS/RTS/SIB investment strategy achievements
- Reduction in age of bus fleet
- Investment in new rail fleet
- Rising patronage levels on public transport – rail and bus
- Road investment (strategic and regional network)
- Growing recognition of need to manage demand in urban centres
- Transport strategies for urban and rural areas – RDS
- Belfast on the Move, Quality Bus Corridors, Park and Ride

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Strategic considerations

- Continued growth in car based trips
- Potential for CO2 emission reduction limited if focus remains only on car commute. Yet 50% of all journeys per person per year are made by car drivers (450 journeys, 2937 miles) (72% if passengers included).
- Population growth – 1.9m in 2022
- Ageing population – 65+ to increase by 44%
- How much behaviour change/demand management has been/can be achieved?
- Different strategies needed to target different market segments/geographies? Non users compared to users of PT

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Strategic considerations

- What type of strategy is required given future challenges? Reduce car mode share (VMT)? Mode split targets?
- Less carbon intensive, emissions reductions future proofed?
- Higher density urban areas, shorter average distances with more public transport
- Rural areas with more public transport innovation (but also car trips)
- More use of a subsidised public transport system required? How much mode shift can be accommodated at current investment levels?

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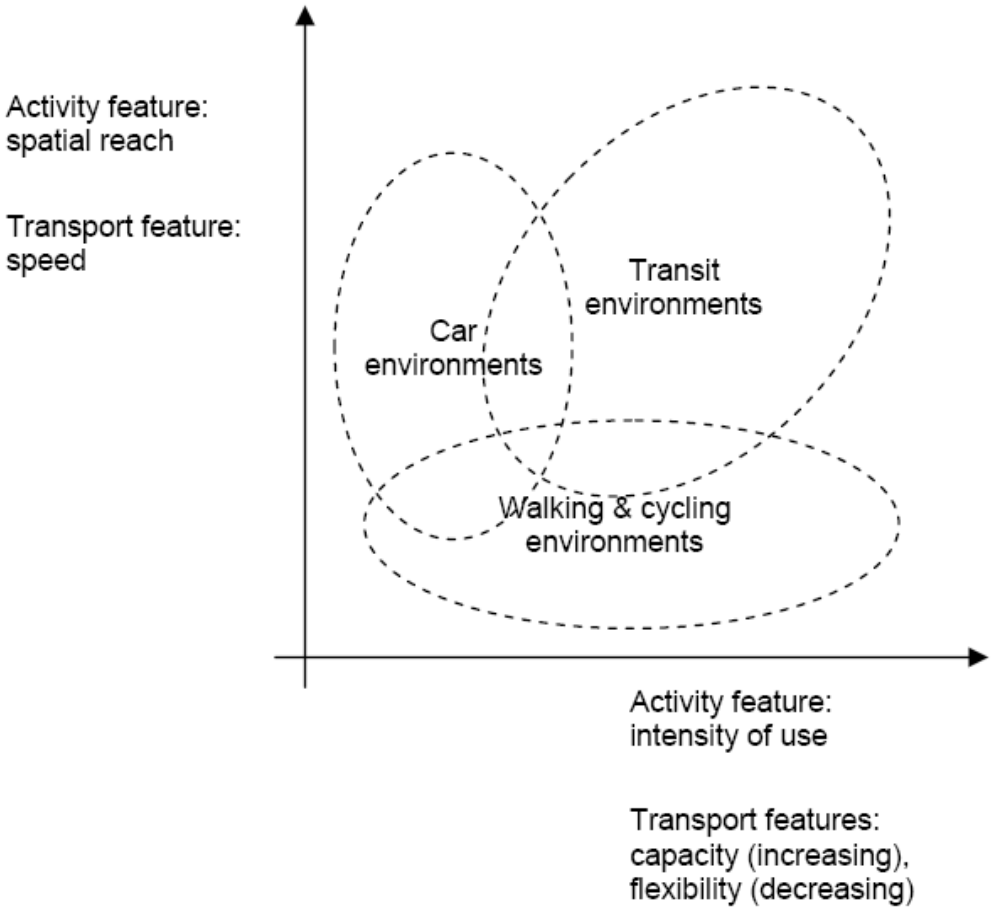
Basic transport and land use correlations



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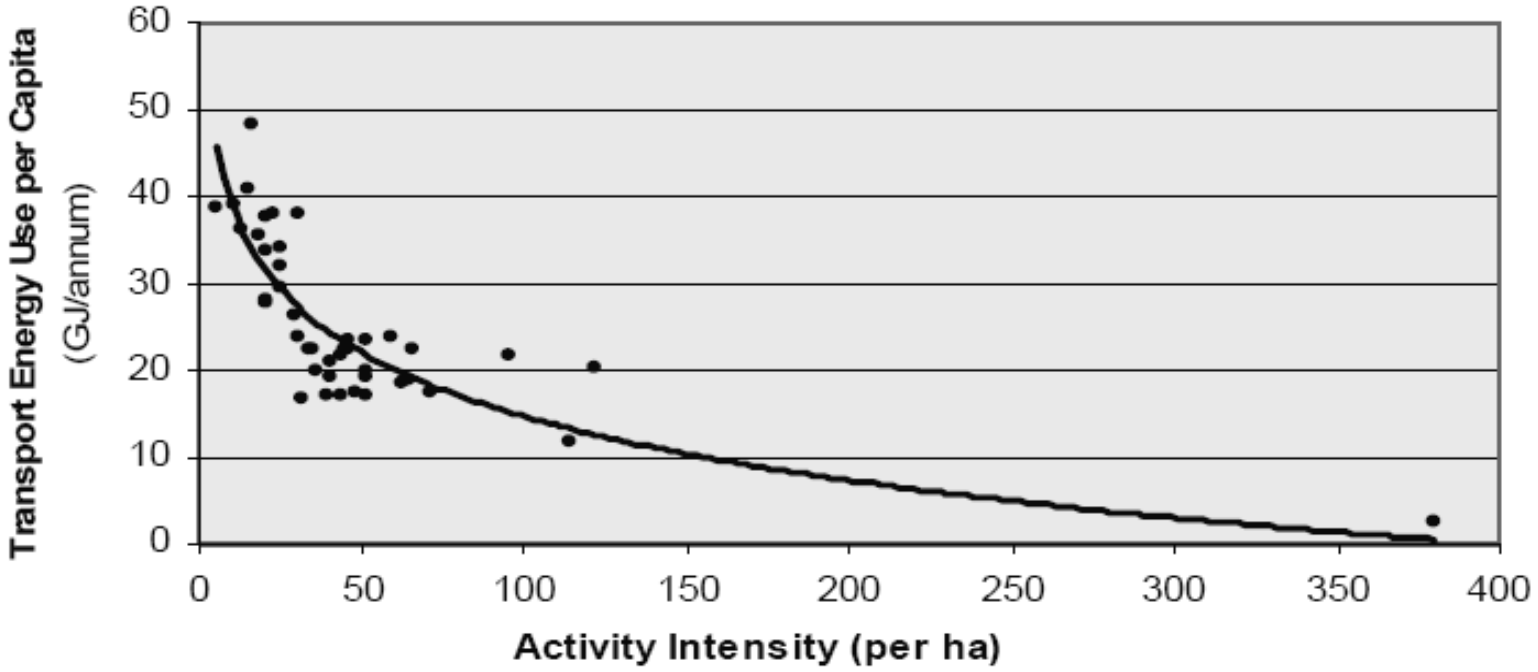
Bertolini et al., 2009

Why do we need centres in a strategic plan?

Centres provide services and amenity based on economies of scale and density

Centres enable car dependence to be reversed without destroying the character of suburbs



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Newman (2009)

Planning for active space provision

- Manipulate the built environment
  - Density, trip length
  - Locational policy, key trip generators
  - Transit Orientated Development
  - Design criteria, service provision
- Redesign networks and spaces
- Benchmarking areas - data

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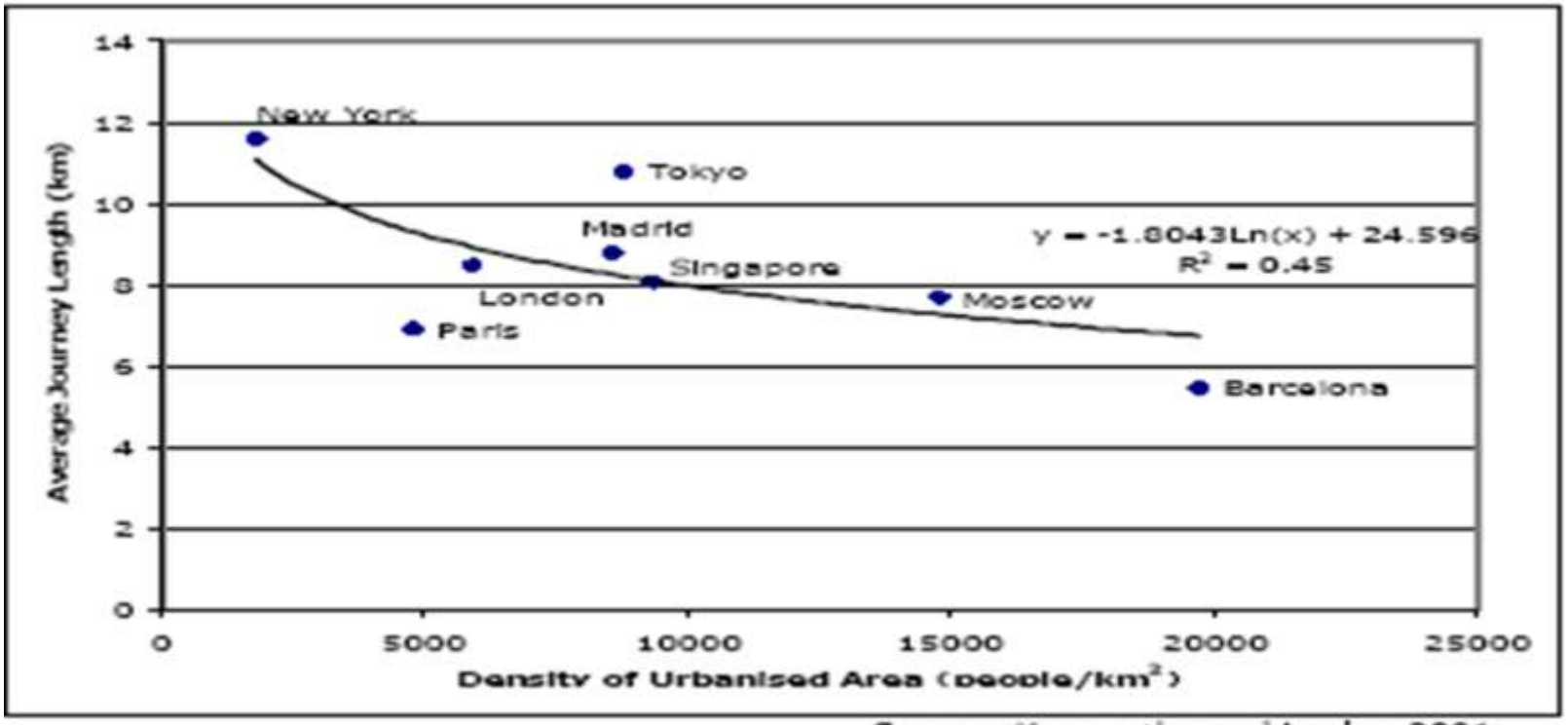
Density, Journey Length

Figure 2.9 – Density and Average Journey Length



Source: Kenworthy and Laube, 2001

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Land use planning system

- Locational policy – trip generators
- Parking standards and development control
  - Maximum not minima
  - Linked with locational policy, parking zones
  - Public transport access
- Street character – changes in use/changes in transport profile

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Parking standards LB Haringey and use classes order

C. A3 – FOOD AND DRINK

	Public Transport Accessibility Maximum number of car parking spaces			Disabled Parking	Cycle Parking
Type	Low	Medium	High	Minimum spaces	Minimum spaces
Take Away less than 20 seats	None			None	1 space per 15 seats of part thereof
Take away more than 20 seats/fast food/café	1 space per 5 seats	1 space per 8 seats	None	2 spaces where customer parking is provided	
Pub restaurant	1 space per 10m^2 GFA			2 spaces	1 space per 30m^2 GFA
Public House	1 space per 15m^2 GFA	1 space per 30m^2 GFA	1 space per 60m^2 GFA	2 spaces	
Restaurant	1 space per 12m^2 GFA	1 space per 15m^2 GFA	1 space per 20m^2 GFA	2 spaces	

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Conclusions

- Effective planning of active spaces and networks must link to wider strategic transport and planning considerations
- New opportunities for managing the built environment require new data/ new benchmarking
- Health data, transport and mobility data

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