Transitioning towards sustainable urban mobility: A comparative analysis of Oxford

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Sustainable Transport: Drivers for Change
Low Carbon Oxford – Unipart House, Oxford
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The need for change

Transport is the **maker** or **breaker** of cities

Current urban transport patterns are environmentally and socially **unsustainable**
Radical reductions in energy demand require transitions to new socio-technical systems.
The role of cities

Cities seen as focal points for transition towards more sustainable mobility futures
  - Peak car, rail renaissance, cycling boom
  - In keeping with wider trends of low carbon experimentation and more proactive growth of cities in climate governance

Within the UK context Oxford is a front runner in multiple ways
Oxford in past decade

Lack of space for development – significant volumes of inward travel

Less car travel, more bus use and cycling within the city

Own research:


b) Less car club usage and investment in cycling infrastructure & personalised travel planning than Brighton, though more than Liverpool
The role of organisations and businesses
Reducing fossil fuel use and emissions (i)

a) Fewer trips ☞ if infeasible:

b) Different modes ☞ if infeasible:

c) Shorter distances ☞ if infeasible:

Clearer vehicles:

d) Alternative fuels ☞ if infeasible:

e) Improved fuel economy
# Reducing fossil fuel use and emissions (ii)

## Types of mobility

- **a)** Commuting (staff)
- **b)** Visitors (customers, service users, etc)
- **c)** Delivery/‘inputs’ (suppliers, service providers, etc)
- **d)** ‘Outputs’ (products, services, etc)
- **e)** …

## Time of day & week

- **a)** Morning peak
- **b)** Day time
- **c)** Evening peak
- **d)** Night time
- **e)** Saturday
- **f)** Sunday
### Reducing fossil fuel use and emissions (iii)

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<th>Fewer trips</th>
<th>Different modes</th>
<th>Shorter distances</th>
<th>Cleaner vehicles: alternative fuels</th>
<th>Improved fuel economy</th>
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<td><strong>Commuting</strong></td>
<td>e.g. Telecommuting</td>
<td>e.g. Mobility management</td>
<td>e.g. Incentives to live closer to work</td>
<td>e.g. Offer EV charging</td>
<td>e.g. Parking &amp; other incentives for small cars</td>
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<td><strong>Visitors</strong></td>
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<td>e.g. Parking restrictions &amp; charging</td>
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<td>e.g. (fast) EV charging</td>
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<td><strong>Delivery/inputs’</strong></td>
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<td>e.g. More local sourcing</td>
<td>e.g. Switch suppliers</td>
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<td>e.g. More trip chaining</td>
<td>e.g. Fleet of EVs</td>
<td>e.g. Fleet of Smaller and/or more efficient vehicles</td>
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Thank you

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