The changing world of planning Bike Hire to encourage active travel

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Overview

• How we’ve helped plan public bike share and cycle hire
  – What might our clients aim for
  – What data this needs
  – What we can do when data isn’t available

• Changing bike hire technology and its impact on planning
  – How our role will change
Planning and Bike Hire

• General context of deploying bike hire
  – Encouraging cycling in general
  – Targeting students
  – Targeting social inclusion
  – ‘Easy wins’? More affluent areas & flatter terrain
  – Integration with public transport

• Helping local authorities prioritise these
Data Requirements

- Census: pop density; deprivation; car ownership; employment
- Major public transport
- Suburban town centres
- Terrain
- Previous bike infra locations
Data Analysis

- Manual selection of potential locations
- Prioritisation scoring: flexibility
  - Grid or census Output Areas
  - GIS datasets must be internally complete and consistent

- What we do when data isn’t available?
  - Digitise it ourselves
  - Use a related dataset
  - Reproject it
  - Collect it
Data Analysis

• How to address density of docks in different towns/cities
  – Key trip attractors
  – Suburban centres

• Completeness and consistency of data
  – ‘Healthy skepticism’ of data
  – Local knowledge always important
Changing Bike Hire Technology

• More on-bike features
  – Satellite positioning (GPS/GNSS)
  – Self-locking wheels
  – App connectivity for payment and unlocking
  – E-bikes

• Dockless or ‘dumb docks’
  – Solves the last mile problem
  – Easier to install, but still requires street space
Changing Bike Hire Technology

• Ofo in Cambridge
• Mobike in Manchester
• YoBike, Bristol

• How to make sure deprived areas get benefits?

Images: bristolpost.co.uk; communities.gov.uk
Changing Bike Hire Technology

• Less work to be done determining dock locations … but…
  – How to rebalance while scheme is in place?
  – Can only smartphone users access?
  – Theft and vandalism

• Bikeplus has an accreditation scheme for new installations
  – Provision for rebalancing etc.
What it means for deploying new schemes

• More emphasis for LA on ‘management’ of operator (!)
• Far less need to plan specific dock locations

• But still need to address:
  – Target users
  – Social inclusion
  – Integration with other transport
What it means for deploying new schemes

• More of a programme management task
• Less of the detailed location planning work?

• Integration with PT payment systems – complicated!

• Cycle route infrastructure still essential
  – Eg. Nottingham has 2 good suburban corridors
Thanks for listening

Big thanks also to our partners Bikeplus