



Newcastle Science City
TRANSFORMING TOMORROW





For the North East to be recognised globally as leading in the development and delivery of affordable sustainable transport





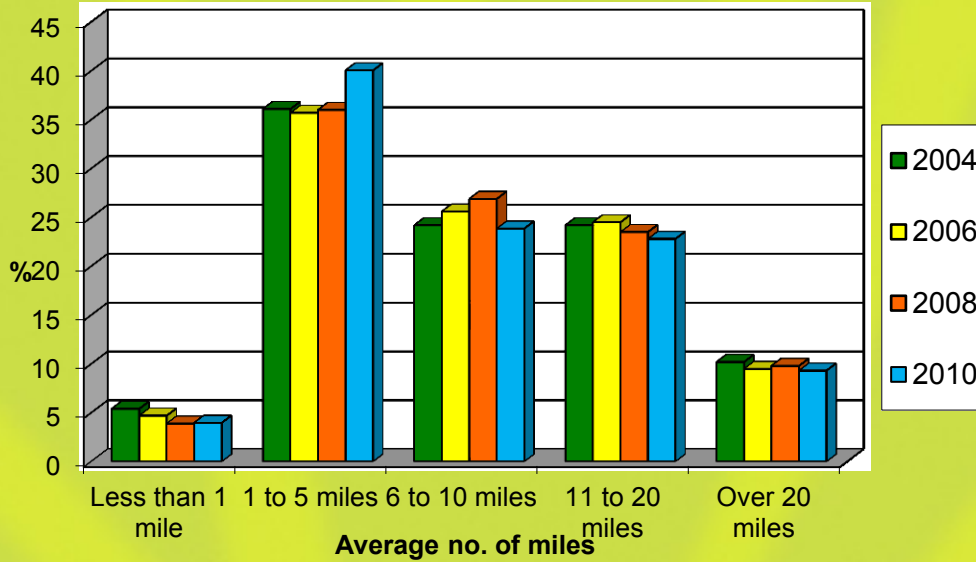
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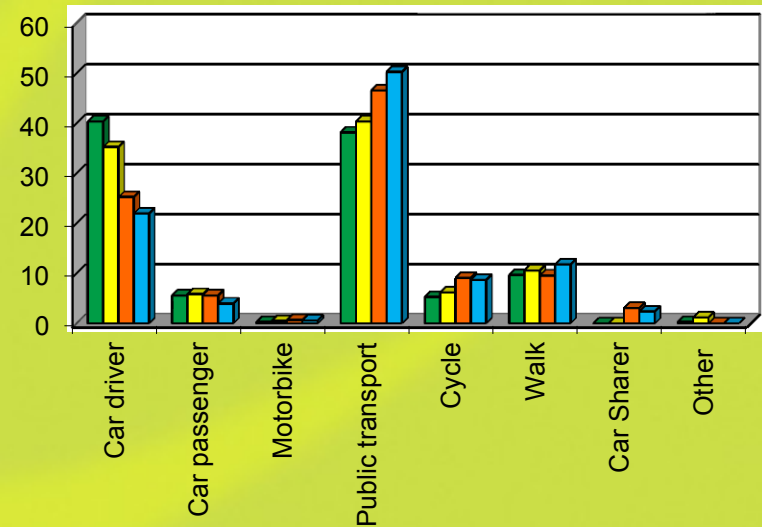
http://www.bbc.co.uk/history/interactive/animations/rocket/index_embed.shtml



Distance travelled to work



Mode of transport





Bicycle Choice

Enabling technologies

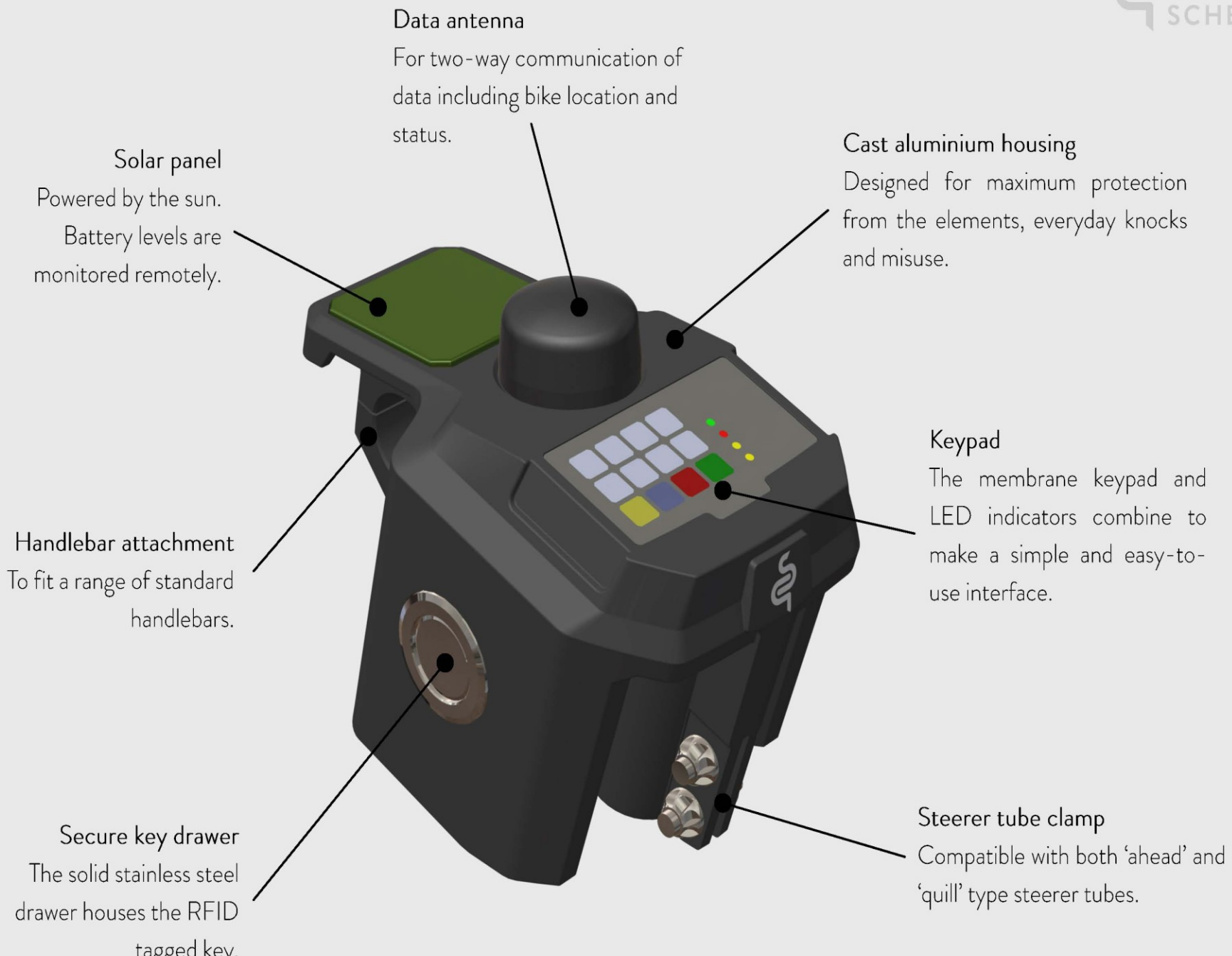
- **Smart cards**
- **Locking system**
- **Charging system - smart charging**
- **Mobile platform (real time information)**
- **GPS tracking/ navigation**
- **Reward/incentive systems**
- **Traffic information**
- **Modelling and optimisation**



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Data antenna
For two-way communication of data including bike location and status.

Solar panel
Powered by the sun.
Battery levels are monitored remotely.

Cast aluminium housing
Designed for maximum protection from the elements, everyday knocks and misuse.

Handlebar attachment
To fit a range of standard handlebars.

Keypad
The membrane keypad and LED indicators combine to make a simple and easy-to-use interface.

Secure key drawer
The solid stainless steel drawer houses the RFID tagged key.

Steerer tube clamp
Compatible with both 'ahead' and 'quill' type steerer tubes.



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Stand

- Charging port
- RFID reader
- Card reader
- Solenoid lock





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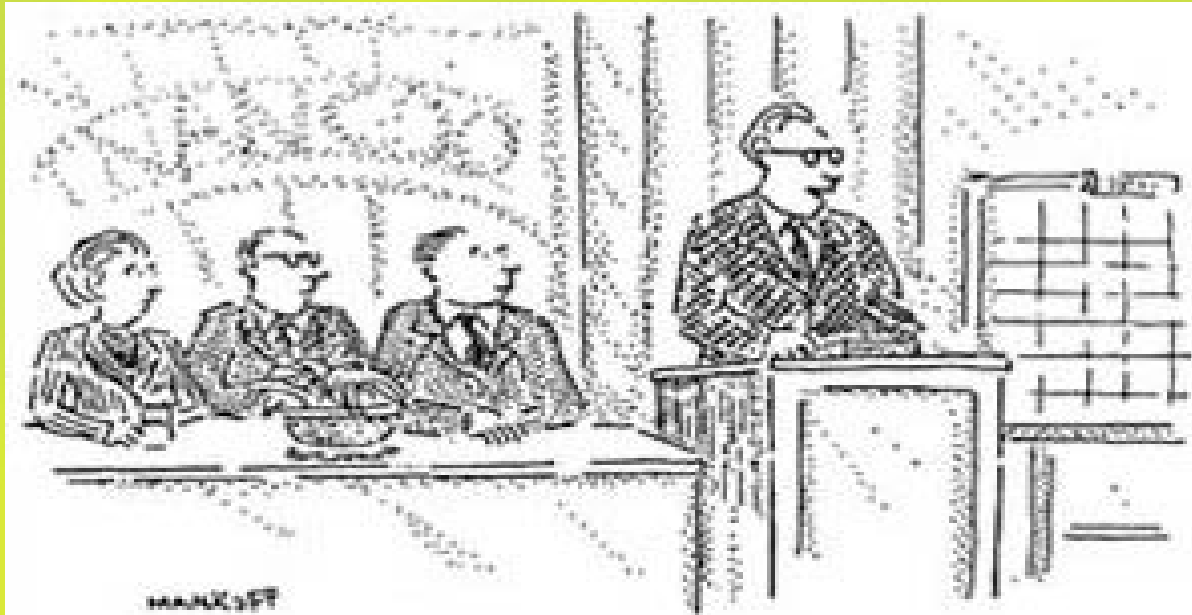
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Cheapest
Fastest
Greenest
Coolest



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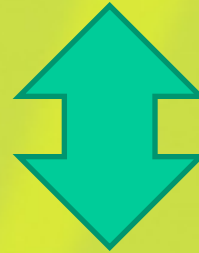
"And so, while the end-of-the-world scenario will be rife with unimaginable horrors, we believe that the pre-end period will be filled with unprecedented opportunities for profit."

Global trends

- **Varied approaches to ownership and use**
- **Mobility on demand transport**
- **Smart cities - integrated transport**
- **Expansion share schemes 60,000 bike share Hangzhou, e-car sharing Paris**
- **Redefining value chains**



User



Common platform



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andy@haddonassociates.com



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