



Places of Tomorrow: A People-Centric Approach to Sustainable Development

**ICLRD Conference
Derry-Londonderry
November 6th 2019**

Louise Kempton
Senior Research Associate, Centre for Urban and Regional Development Studies
Associate Dean for Research and Innovation, Humanities and Social Sciences Faculty
Newcastle University

Presentation overview

- Newcastle and Newcastle University
- Newcastle City Futures – Background and context
- What we did
- Some project examples
- (If time) Newcastle's 'System of Systems'

Some expectation management



The city



Cradle of industrial revolution – history of entrepreneurialism and invention (steam engine, light bulb) based on carboniferous industry
 1930s to 1980s – steady decline of extractive and manufacturing industries
 Still significant challenges and gaps with national averages on business starts, skills, R&D investment, productivity, health, attraction of graduates and skilled migrants
 But areas of strength in emerging niche sectors (data innovation, life sciences) and university/ies seen as key assets

The university



One of the 19th century English 'civic' universities established in the (mostly Northern) cities at the behest of local civic leaders and industrialists to supply the skills needed to fuel the industrial revolution (e.g. engineering, medicine).

Top 1% globally, research intensive institution with significant direct (and indirect?) impact on the local economy



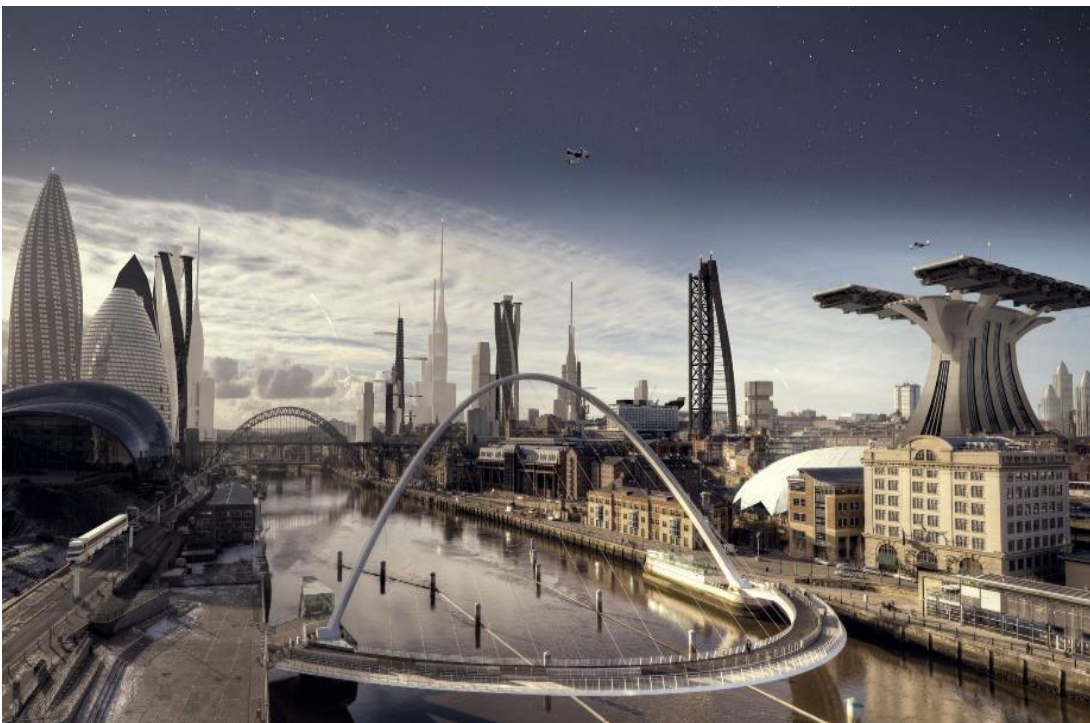
Background and Context



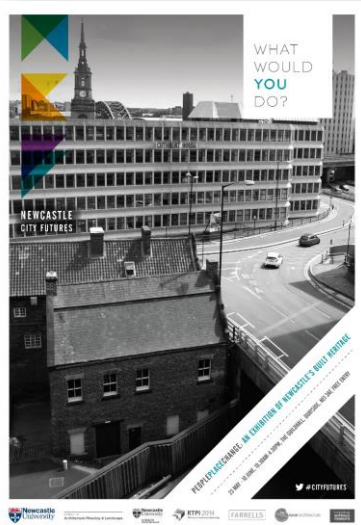
Where have we come from?



Where are we now?



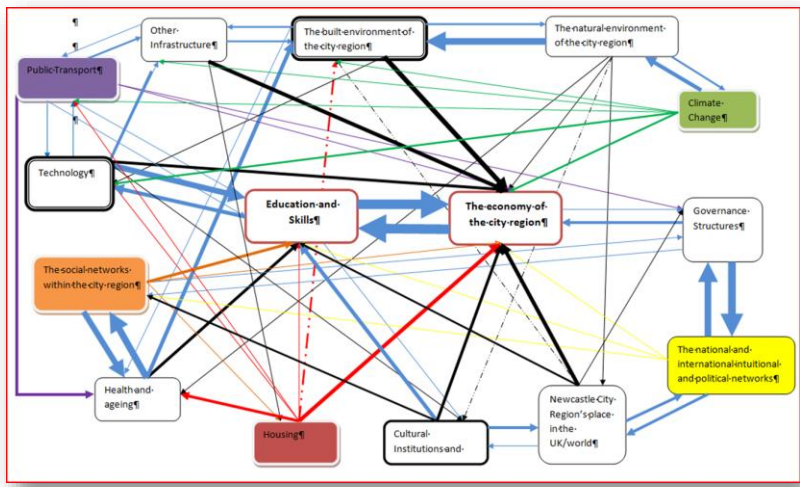
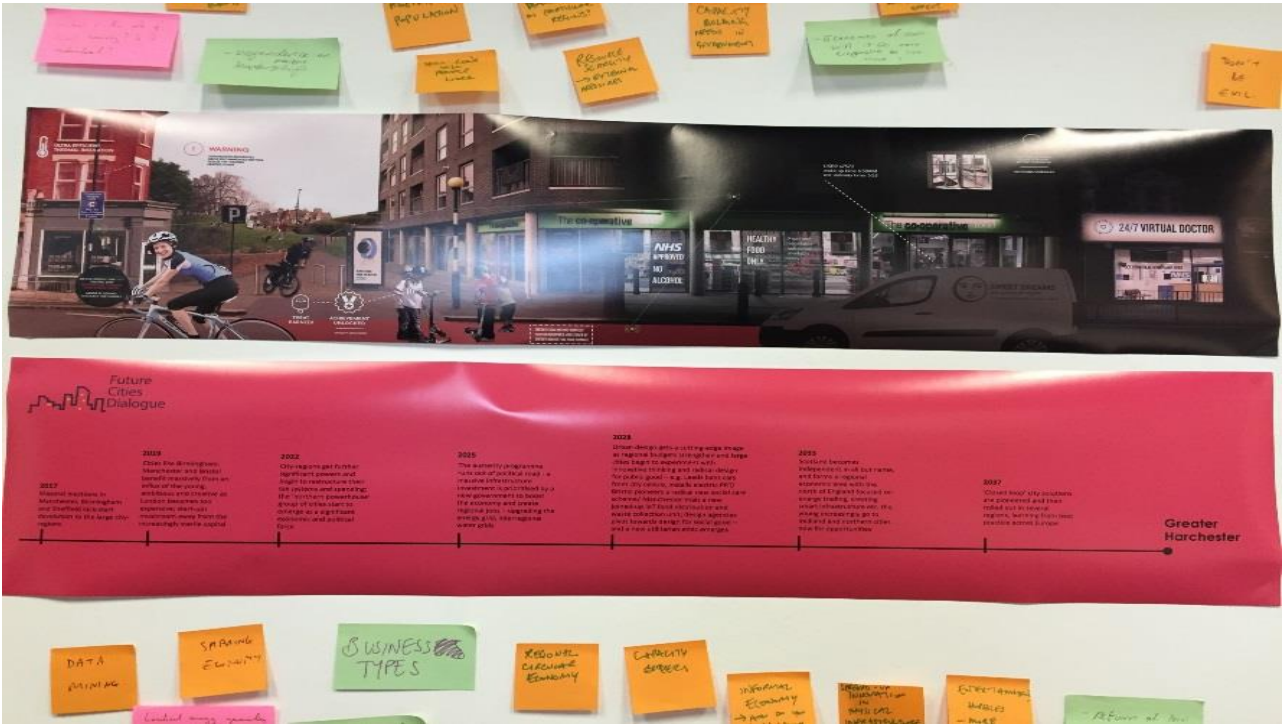
Where do we want to go?



2014 – Series of events, exhibitions and public engagement to set out a vision for Newcastle in 2065







Delphi survey to collaboratively identify key themes



Aims

To take a **broad and overarching look at the long-term future** of cities over the next 50 years using Newcastle upon Tyne and its region as a pilot

To develop a more **strategic and inclusive approach using futures methods** and **city-wide participatory processes**

To show how **universities can work more proactively with and for the cities in which they are located**

To use **creative techniques and expertise** to foster city-wide civic engagement and demonstrator projects.



Themes

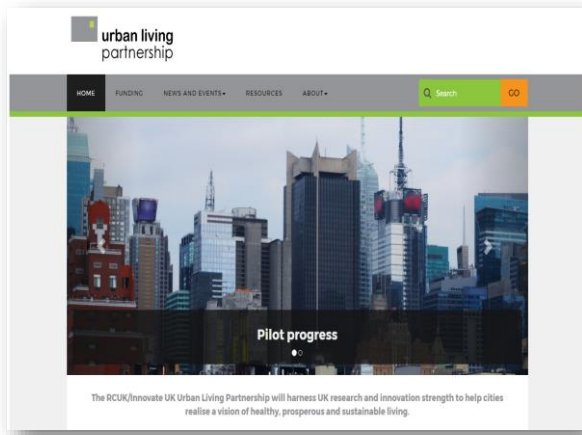
1. **Age Friendly City:** relationships between an ageing society, housing needs, and the use of digital technology;
2. **Sustainable City:** relationships between transport and highway design, digital technology and public health benefits;
3. **Creative City:** relationships between enhancing local democracy and engagement, visualisation of the urban realm, and cultural and creative arts to generate public interest.
4. **Science City:** relationships between science and engineering and collaborative democracy, particularly around themes such as energy consumption, and health.

2016 awarded one of five Urban Living Partnership Pilots

Aims

- To diagnose the complex and interdependent challenges within the urban region, working collaboratively to co-design and implement initiatives and solutions in order to contribute to the life and development of the area
- To act as a collaborative platform that facilitates cross-sectoral **demonstrator projects** addressing challenges and opportunities in the city-region

Funded by RCUK/Innovate UK for two years to July 2018



What we did



Brought people from across disciplinary and sectoral silos together to address city challenges and opportunities



Working on a 'quadruple helix' basis with all sectors represented on all projects

Grew our initial partnership from 20 in 2016

to **160** by 2018

- Private sector
- Universities and colleges
- Third sector/non profit
- Public sector





new projects initiated

Case studies

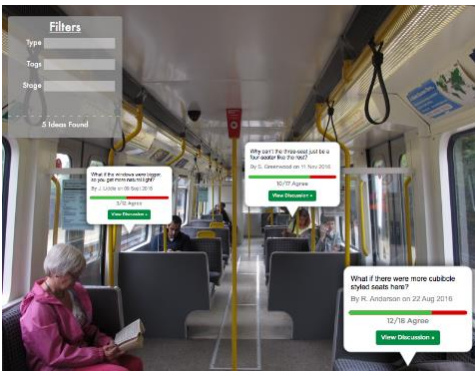
Future Homes: Digitally Enabled Sustainable Housing for the Lifecourse



karbon homes ARUP
 Ryder Newcastle City Council



Metro Futures: Accessible and inclusive trains for multiple generations



The Future High Street: Digital retailing, green infrastructure and creativity



get into **newcastle**
ne1 for everyone **NE1**



FAULKNERBROWNS ARCHITECTS
Newcastle
City Council

Project A1: Digital social housing for adult social care



Supplying **broadband capability in the social housing sector** of the city to provide digital inclusiveness but that will also utilise the technology to assist with air quality monitoring and the delivery of adult social care in the home.

Location: Byker, Newcastle
Status: consortium in place, £20m Innovate UK bid preparation continuing.



Newcastle Gateshead Clinical Commissioning Group

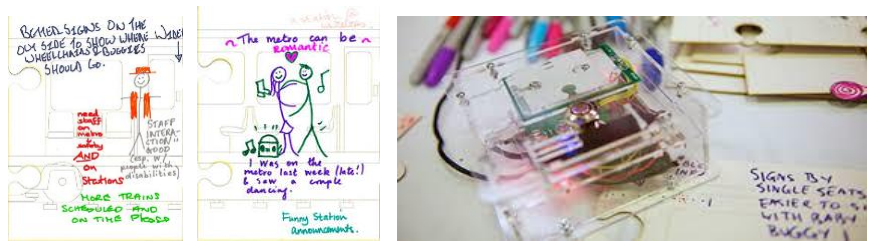
Last Mile: Coordinated deliveries to improve congestion & air quality



Last mile freight logistics distribution hub to coordinate deliveries to the universities, city council and hospitals, to remove lorry traffic numbers and improve air congestion Location: Newcastle
 Status: consortium discussions underway, modeling completed and electric lorry in ownership of university. £1m ERDF bid submitted.



Engaging young people in shaping their own places



The Farrell Centre: An urban room for the city with digital engagement and research



Farrell Centre architecture, planning and built environment urban room, located in the city centre, as a city engagement space and resource with digital installations, incubator space and start-up space for graduates. Location: Newcastle
 Status: £10m project backed by Farrells, Newcastle University and others, planning application submitted for 2020 opening.

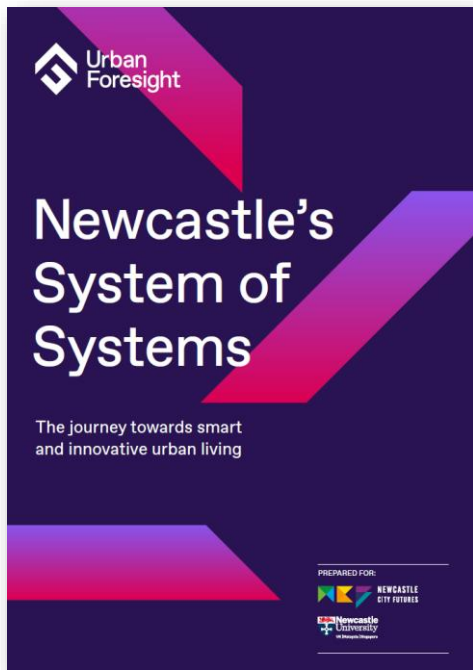


FARRELLS



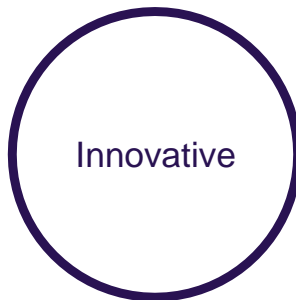
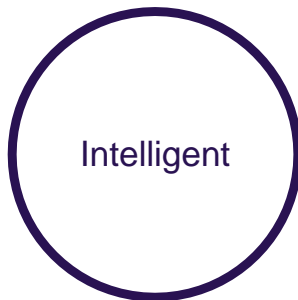
Northumbria University
NEWCASTLE

Newcastle's System of Systems



Helped to build a shared understanding of potential impacts and beneficiaries of investments in new smart city technologies and services in the city

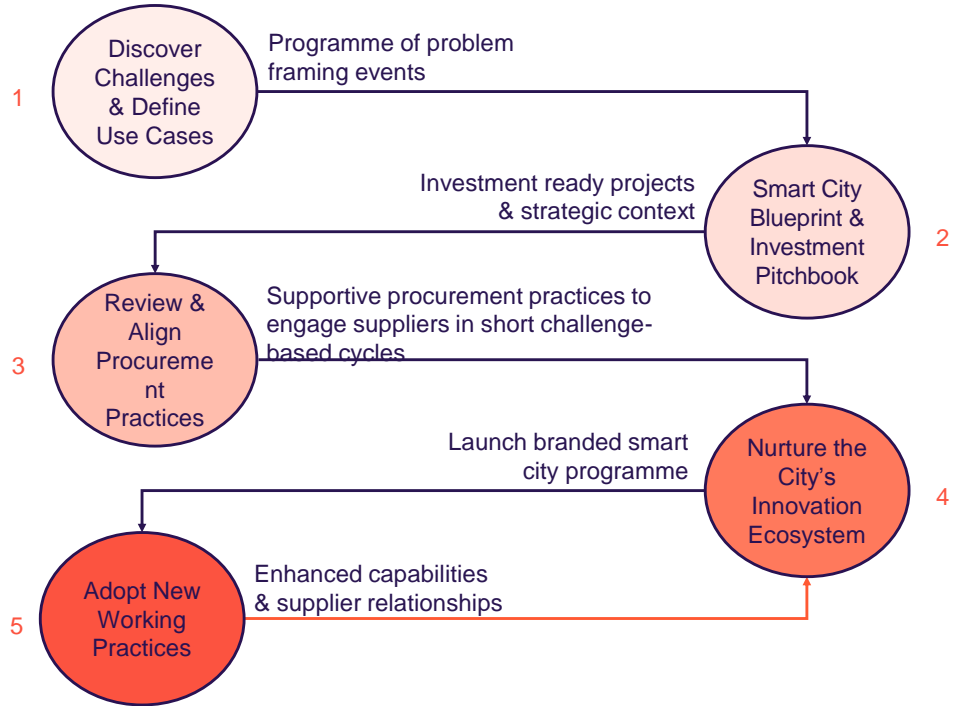
Newcastle City Council's Objectives for a Test Bed City



Biggest challenge



Forward Actions for a Smart City



www.newcastlecityfutures.org



Newcastle City Futures Channel