

## Birmingham researchers look to the urban future with new book on how to design "resilient" cities

Posted on Wednesday 18th April 2012

A new book based on groundbreaking research led by academics from the University of Birmingham on how to create robustly-sustainable cities is being launched in London this month.

*Designing Resilient Cities: A Guide to Good Practice* puts forward radical ideas and solutions to ensure our cities are able to adapt to and survive change, whatever the future brings.

It lays out the methodology developed by a project called Urban Futures to enable city designers to make resilient decisions about sustainability in urban regeneration areas. These include incorporating density gradients around transport hubs, implementing grey water recycling in residential developments and designing for mixed use.

Urban Futures is a £3.2, four-year research project funded by the EPSRC (Engineering and Physical Sciences Research Council) led by Professor Chris Rogers from the University of Birmingham and including the universities of Exeter, Lancaster, Birmingham City and Coventry.

Already some of the project's innovative ideas have been taken on board both in this country, by the Environment Agency, and by consultants working internationally.

"Given that the majority of our population lives in urban areas, we have to do whatever we can to make sure that the decisions we take today do not lead to a negative future legacy," says Chris Rogers, Professor of Geotechnical Engineering.

What sets the Urban Futures method apart from other approaches is that it devises solutions for problems and needs that haven't yet materialised.

"You can project what will happen in the future by saying, for example, the population is so many million now, so in ten, 20, 30 or 40 years' time it will be so many more million – the same with demand for travel, or water resources, or energy," says Chris. "But what if the future is very different to today? What if our projections are wrong?"

The Urban Futures method is designed to help city planners, councillors and communities make decisions that are more likely to remain sustainable over the longer-term with a toolkit of scenarios against which the impact and robustness of today's decisions can be judged.

"A solution that remains robust and resilient after being tested against four possible future scenarios is more likely to remain sustainable over the longer term. Any that fail the test can be examined to see how they might be improved," says Chris.

Topics covered by the new book include biodiversity, surface-built environment and open spaces, air quality, organisational behaviour and innovation, water and 'planning'

*Designing Resilient Cities: A Guide to Good Practice*, published by the BRE (Building Research Establishment), will be launched at the Hoare Memorial Hall, Church House, Westminster, London on Wednesday, April 18 from 3.00pm until 5.30pm. For more details, contact organiser Joanne Leach at [j.leach@bham.ac.uk](mailto:j.leach@bham.ac.uk) (<mailto:j.leach@bham.ac.uk>) or on 0121 414 3544/ 07785 792 187.