



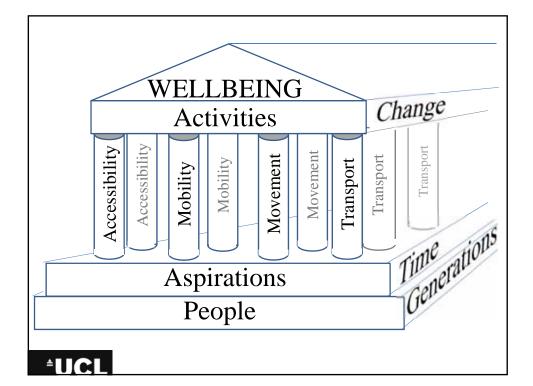


We tend not to think about what cities are for instead we tend to think about what cities are (or might be) ≜UCI

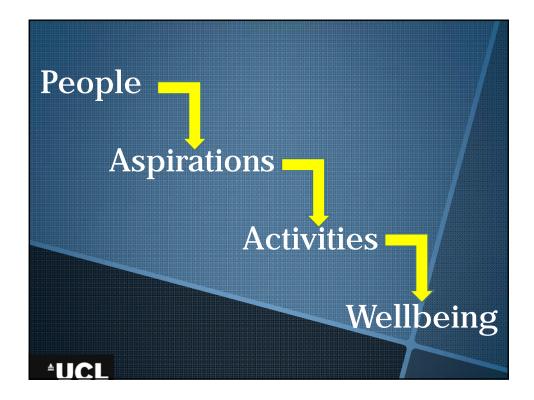
So thinking is mostly about the elements of a city Ge Buildings ff Public space ff Transport systems Communications systems Water systems ff Economic systems ff Health systems 55 Education systems etc. **≜UCI**

••• But if we think about who cities are for... **UCL**

... we need to think about who they are and how to support what they want to achieve **≜UCL**



and so we need to think about the city systems that support what people want to achieve **≜UCL**

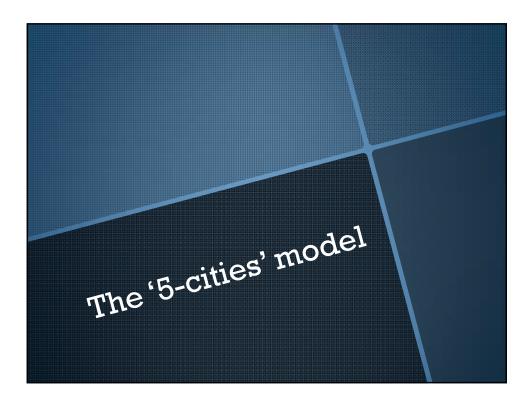


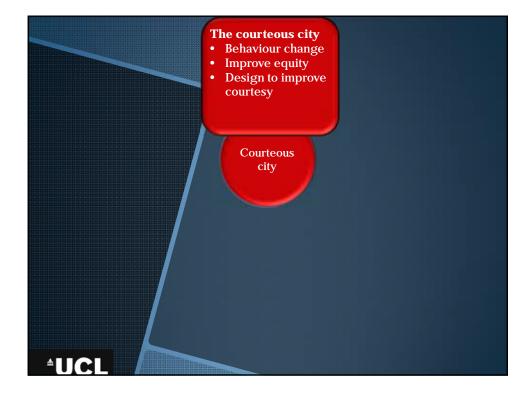
So we need a different framework to rethink the city -based around improving the state of Wellbeing **UCL**

So what might a city look Wilat ingra and like if it is designed to develop a sense of Wellbeing? **UCL**

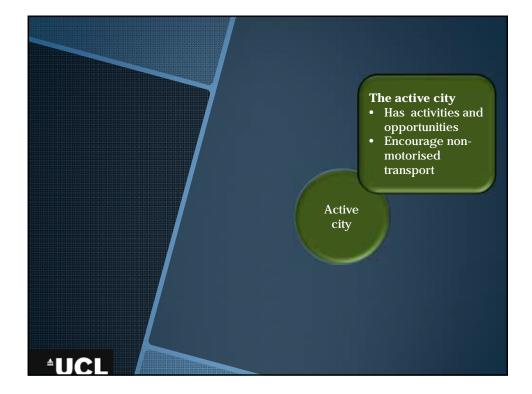


What do we want our city' to be like if it is to be 'for the people'? **≜UCL**

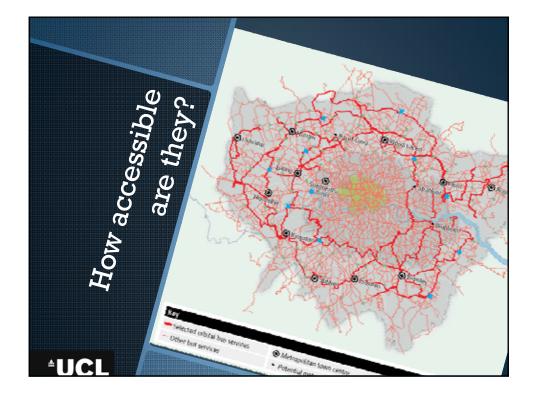


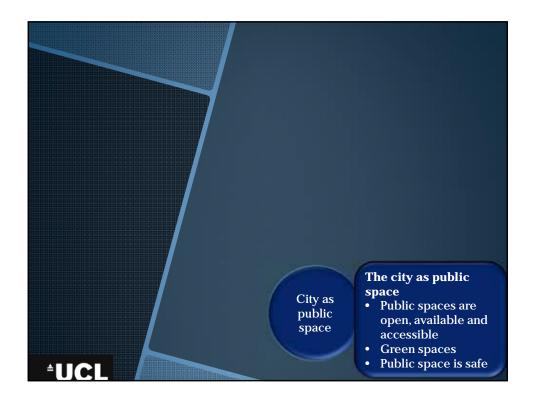




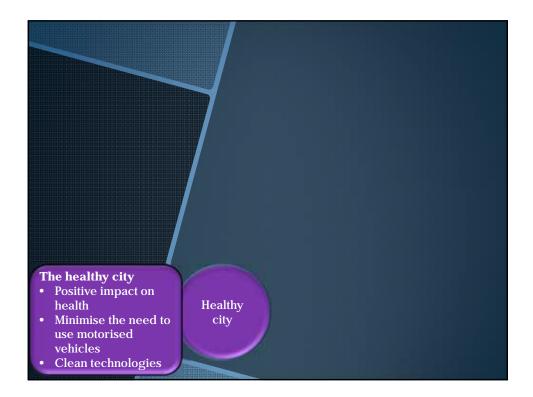










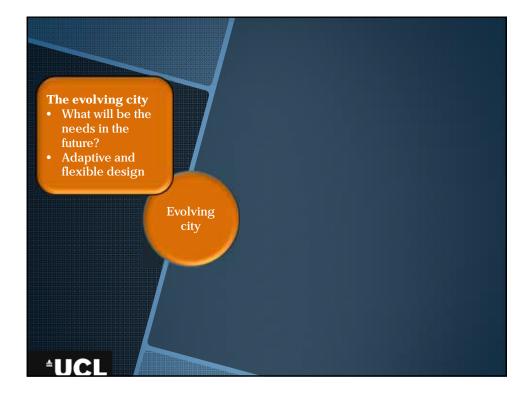






Positively healthy environments need to be created **Old infections;** progressively lost due to modern medicine Happy to lose them Microbiotor deploted by contribution Microbiota; depleted by antibiotics, caesarean Section etc. Need to modify behaviour Organisms from the natural environment; depleted by reduced contact. Need more green **≜UCI**





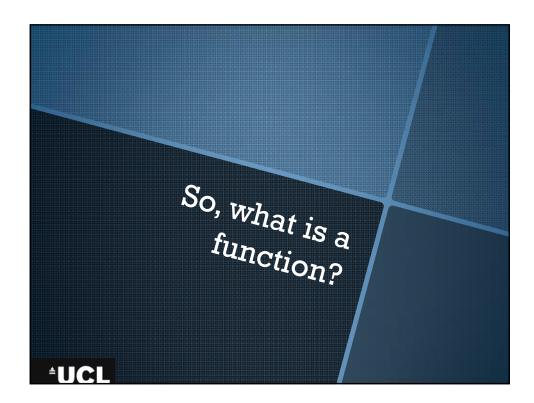


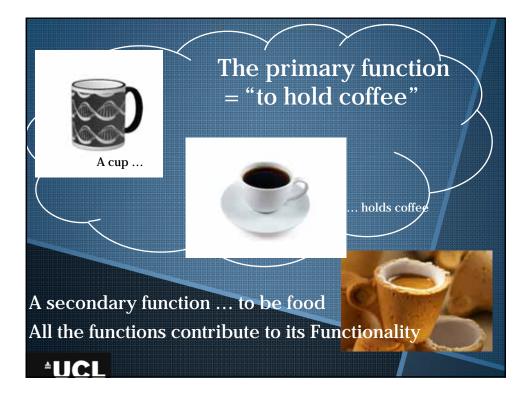






achievement of an improved quality of life – a function of 'Activities' Let's think of wellbeing as the [±]UCL

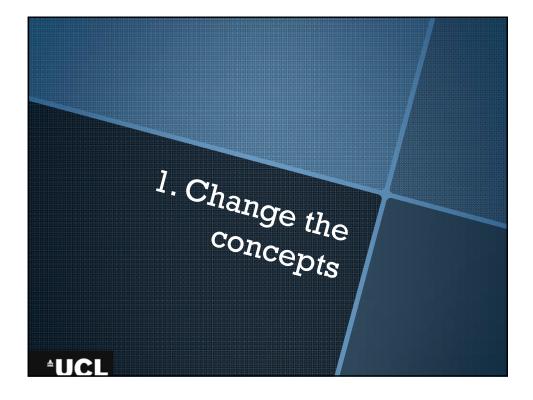






Value Engineering ff The process of engineering value by enhancing achievement relative to aspiration by managed use of resources **≜UCI**

So how do we link transport to wellbeing in practice? **≜UCL**









⁺UCL

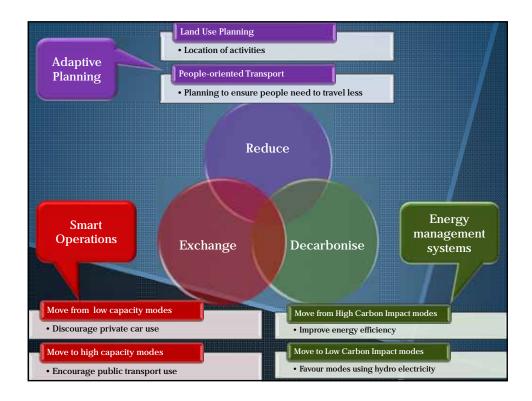
But ... this train has 6 times as many accidents involving stumbling than the old trains

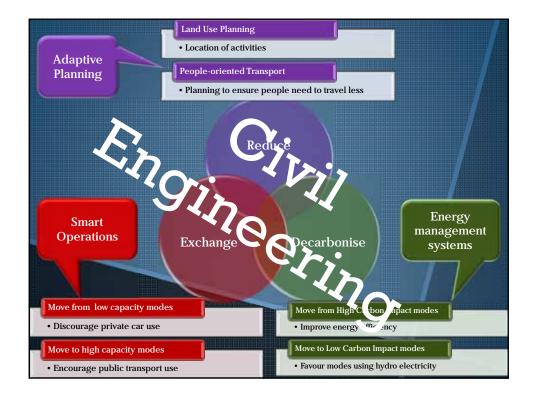
The vertical gap here is around 5-10mm. Before it was about 150mm

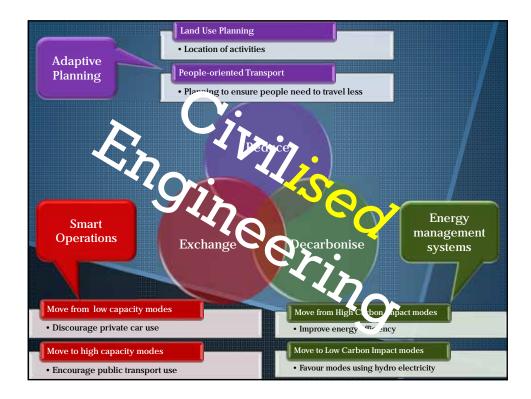


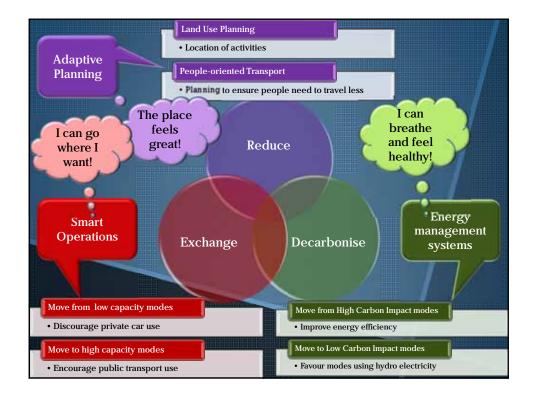
So we have to make it a good the species within it 2. The city is not a place ... place It is an eco system **≜UCL**

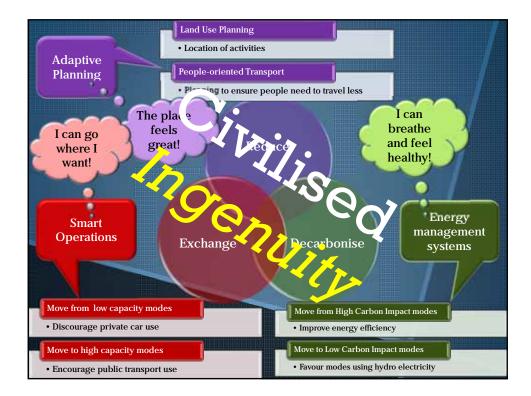
S. MaximiseS. MaximiseS. MaximiseS. MaximiseS. MaximiseS. MaximiseS. MaximiseMinimis **≜UCL**









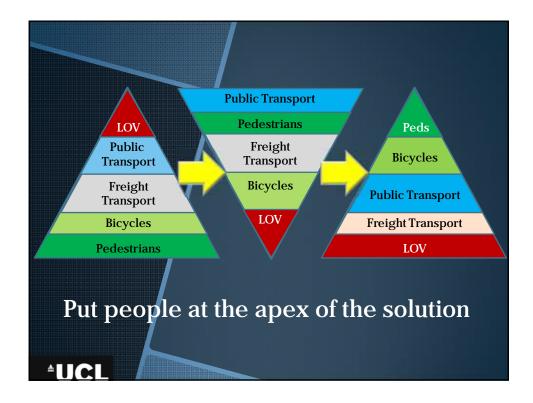


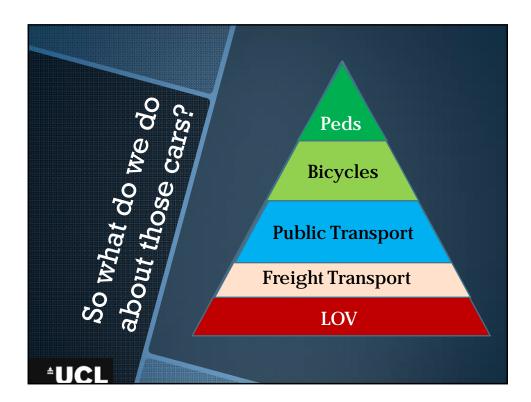


So what about the people? **≜UCL**

How many of your daily needs can you reach on foot? **UCL**







The person who is smart enough to buy a [BMW Series 7] should be smart enough to know when not to use it e.g. Curitiba, Brazil **≜UC**



A city is a habitat So, transport for Wellbeing means I. Better concepts 55 Aim for Wellbeing-based objectives Technology alone will Meed to understand aspirations **ff** Develop adaptivity - do not freeze capacity for the long term

ff Formulate the problem 56 rellbeing means Better decisions Smarter decision processes " Determine the desired What factors will support outcomes What factors will work So, t against achievement 55 Actions are how we combine these factors ff Evaluate outcomes N ≜UCI

66 So, transport for Wellbeing means Scale: from the macroscopic to the **A. Better science** nanoscopic 55 Unidisciplinary -Multidisciplinary -Transdisciplinary " Cities should act positively for people - science and society " Energy, emissions, health, should all act positively for the people 66 Smart energy management to reduce energy consumption and emissions

ff The community is at the Centre of engineering Wellbeing means Engineers make things ler engineering happen 56 Do not shrink from the impossible if it is the right thing to do " Engineer for future Generations Educate present Soft generations for the future Create a better world ≜UC

ff The community is at the centre of being ingenious We can be indenious We can work together to make things happen ingeniously " ^{urans}port j being mea Do not shrink from the Do not sin nik nom me impossible if it is the right thing to do " Be ingenious for future generations So.tr *Educate present Generations for the future* Create a better world 40



