p.4 Introduction to the Case Studies

p.18 CASE STUDY 1
Queen's Campus: Durham University in Stockton Widening access to higher education on a brownfield site

p.36 CASE STUDY 2
University of Cambridge: North West Cambridge Development A new urban district on former green belt land

p.62 CASE STUDY 3
Newcastle University at Science Central A 'living laboratory' for sustainability in the city centre

p.86 CASE STUDY 4
The US models: University of Pennsylvania (Philadelphia), New York University and Columbia University (NYC) Global universities embedded in urban neighourhoods and renewal processes

p.114 CASE STUDY 5
Lambeth Council, Brixton Green and Ovalhouse theatre in south London A co-operative community-led development in inner London

p.143 Policy milestones in urban regeneration and higher education

CASE STUDIES IN UNIVERSITY-LED URBAN REGENERATION

Clare Melhuish
UCL Urban Laboratory
September 2015

urbanlab UCL ESTATES UCL

CASE STUDIES IN UNIVERSITY-LED URBAN REGENERATION

Clare Melhuish
UCL Urban Laboratory
September 2015

FOREWORD

“Since UCL began exploring potential sites for a new development in East London, UCL Urban Laboratory has been keen for the university's estates strategy to be informed by, and respond to, its strong traditions of critical urban scholarship and practice. We strongly believe there is a need for new ethical models of urban renewal – particularly in London – which are genuinely research-driven rather than misleadingly ‘evidence-based’. In this, the university sector can play a leading role in advancing civic approaches to the benefit of wider communities as well as their own staff, students and partner organisations.

These Case Studies – funded and commissioned by UCL Estates and the project team charged with locating and developing UCL's new site, but produced independently by Dr Clare Melhuish working in the Urban Laboratory – show a commitment to that principle and a desire to understand and learn from related examples. Each one has been researched rigorously, with a forensic eye to the complexities of decision-making processes, and their consequences. They are richly detailed with clear summaries and conclusions. From the project outset we committed to these documents being publicly available, free of charge, so that they can inform a wider discussion about the role of universities in urban change.”

Dr Ben Campkin,
Director, UCL Urban Laboratory

INTRODUCTION TO THE CASE STUDIES

Contents

1 Universities as actors in urban regeneration

2 Regeneration, universities and communities

3 Visions and typologies of university-led urban regeneration

Acknowledgements

Universities as actors in urban regeneration

> 'Cities are produced through processes of uneven development based on rounds of accumulation, commoditisation, and particular geographies of biased investment and preference that produce unequal processes of urbanisation. This historical process of accumulation and dispossession has to be actively produced – urbanism is an unequal achievement, and in that achievement, the past, present, and future of the city are constantly being brought into being, contested, and rethought'
> *(McFarlane 2011:652)*

Since 2014, UCL's Urban Laboratory has been housed in short-life temporary accommodation, the large warehouse building previously owned by British Home Stores behind Euston station in central London – a site and a whole neighbourhood in limbo as decisions on the implementation of HS2, along with the demolition and redevelopment of the station and a large swathe of the surrounding area await clarification. If and when it goes ahead, it will mark the beginning of another decade of radical redevelopment based on 'particular geographies of biased investment' as described by McFarlane above, which have seen the transformation of the King's Cross area to the east into a new business and cultural district, and the lives of countless people in the surrounding neighbourhoods blighted by years of construction noise, pollution, and disruption – only to be followed by significant rises in land and property values that will push many out.

Development hoardings, Imperial West, London: alluring rhetoric and imagery conjure visions of new urban futures. *Photos C.Melhuish 2013*

As Ruth Glass, urban sociologist and founder of UCL's former Centre for Urban Studies (1958–80), predicted in 1964: 'London may quite soon be a city which illustrates the principle of the survival of the fittest – the financially fittest, who can still afford to work and live there. (Not long ago, the then Housing Minister advised those who cannot pay the price to move out)' (Glass 1964:xx). But major redevelopment projects always promise economic benefits for local communities: for example, quoting from the King's Cross regeneration strategy: 'King's Cross Central could also deliver around 30,000 new jobs, of which up to 40% might be taken up by local people with the right employment brokerage and training measures in place. Moreover, the development would also significantly increase Business Rate and Council Tax revenues for the Local Authorities' (Arup/Argent 2004:2). This is urban regeneration, and universities are increasingly playing a part in these processes. They have become one among the multiple urban actors and agencies involved in assembling and re-assembling cities around the world to meet the needs of the post-industrial knowledge economy, projecting new urban futures through a proliferation of promises packaged in rhetoric and alluring visual imagery. Like University of the Arts at King's Cross, universities and other higher education institutions are

increasingly embedded in new speculative urban developments as cultural anchors, or science and technology hubs linked to enterprise zones. But they are also ever more likely to take the lead on new academic and mixed-use developments in their own right, shaped by urban masterplans designed by international firms, which explicitly make links and physical connections with the wider city and communities beyond the academy.

As Allan Cochrane described in the Urban Laboratory's Future Univercities seminar series in 2013, and more recently in the Urban University conference in Northampton,[1] many universities have assumed a proactive role as landowners and developers, generators of employment, and investors in roads and local government in the course of promoting their own spatial development projects (in the UK for example the University of Hertfordshire owns bus companies in Welwyn and Hatfield, while Falmouth University has launched a Shared Services Initiative whereby the University provides administrative and IT services to the local council). Their property strategies involve working with other developers, government and non-government agencies (such as local authorities and, formerly, Regional Development Agencies and Urban Development Corporations), public, private and third sector bodies, participating in wider urban processes. McCann Ward and Roy further underline the international and translocal context of these processes, elaborating on the concept of assemblage (see McFarlane above): 'to describe the practices of actors who assemble policies from close by and elsewhere (Allen and Cochrane, 2007) … engaging with various policy networks and communities, stretched across the globe, in order to learn, teach, and share knowledge about best practice models. Through their assemblage work … they produce cities and policies as emergent translocal policy assemblages "deducted" from wider flows (Deleuze and Guattari, 1987; Prince, 2010). In the contemporary globalized context, almost every policy can be seen as an assemblage of expertise and resources from elsewhere' (McCann Ward Roy 2013:583).

Development hoardings, City University, London: building a vision of the institution's future in an urban and global context. *Photos C.Melhuish 2013*

As the following case studies show, universities are very much part of these wider flows. Driven by competition (for reputation, staff and students) in an international marketplace, and released from financial constraints by the lifting of the cap on student fees (as recommended by the Browne Review 2010), they engage in intense scrutiny of what their peers are doing, in order to produce locally embedded variants of global higher education models. These assume physical and spatial form within the parameters of distinct, but increasingly similar, city planning and urban regeneration contexts defined by an 'assemblage of expertise and resources from elsewhere'. And in many cases, cities and towns are becoming increasingly expectant of, and reliant upon universities to represent and promote their own urban interests at regional, national and international levels. Wiewel and Perry note that, 'The urban location and centrality of universities to the nature and well-being of

cities means that cities and countries can be expected to turn to their universities as part of strategies to respond to the new challenges and opportunities that global economic competition poses for urban regions' (Wiewel and Perry 2008:304). Indeed, Cochrane points to 'the surprising alignment of regional/local priorities and university priorities, despite different drivers',[2] and to the circulation of a shared language and imagery in the promotion of these common interests. Alan Harding has also emphasised the role of universities as anchor institutions in the transition from an industrial to a knowledge economy, increasingly operating in collaboration with local authorities within a framework of 'growth coalitions and urban regimes' such as Local Enterprise Partnerships. As he says, they are in this sense beginning to catch up with American institutions which have been players in development strategies for a long time, positioned as businesses, deliverers of services, and attractors for new investment[3] – as well as drivers of urban renewal (*see Case Study 4*). In many cases (eg Liverpool and Newcastle universities, *see Case Study 3*) this has meant re-visiting and reinventing their founding charters as civic universities established to meet local demands for specific skills and knowledge applicable to particular fields of industry. Goddard and Vallance, of Newcastle University, have explored the implications of this shift in many publications, pinpointing the question: 'Is the university *in* the city or *part of* the city? … we make the case for the civic university working with others in the leadership of the city in order to ensure that its universities are both globally competitive and locally engaged' (Goddard and Vallance 2011:1). Indeed, they stress that 'all publicly-funded universities in the UK have a civic duty to engage with wider society on the local, national and global scales, and to do so in a manner which links the social to the economic spheres' (Goddard 2009:4).

Robin Hambleton has further elaborated on the idea of universities as the 'sleeping giants of place-based leadership'[4] in a globalising world. He suggests that they are now beginning to stir from their slumbers to become proactive in the development of innovation zones which lie at the interface of, and bring into alignment, different realms of leadership: community- and business-based, political, public, managerial and professional. In this set of case studies we present a number of different scenarios for this kind of 'place-based leadership': **Durham University**, which took on a key role in the economic and social regeneration of Teesside back in the early 1990s, with an emphasis on tackling issues around health, poverty, and lack of access to higher education through the development of its Queens Campus site in Stockton; **Newcastle University**, which is currently developing new university facilities on the city's emerging Science Central site in partnership with the city council, in order to stimulate the transition to the knowledge economy, promote sustainability research, and address social inequalities in the local area; and **University of Cambridge**, which is developing a new urban quarter in the northwest of the city to accommodate its postdoctoral research staff but also to provide community infrastructure for the wider residential area, contribute to the city's much-needed housing supply, and set new standards of sustainable design. In case study 4, we compare these scenarios with initiatives launched by three US universities over a similar period – **Pennsylvania, New York University and Columbia** – to highlight the transatlantic and international context in which universities are developing their spatial expansion strategies, and the corresponding emphasis on participation in wider urban regeneration processes. And finally in case study 5, we look at an example of local urban regeneration in London – **Somerleyton Road** – proceeding without the input of a university 'anchor institution', with a view to highlighting the similarities and contrasts between development approaches, specifically in terms of the principle of local community participation and benefits, and co-operative working with the local council.

Regeneration, universities and communities 2

For the issue of community engagement and local needs occupies a central position in all these university scenarios, and returns us to the conundrum at the heart of urban regeneration: increased land values, gentrification and social displacement. Ruth Glass is credited as the original creator of the term 'gentrification', and the UCL Urban Laboratory has focused attention on the need to address this issue 40 years on, especially in the context of UCL's own plans for a new university site at Stratford in the Queen Elizabeth Olympic Park (www.ucl.ac.uk/ucl-east): 'If economic growth, and the supposed "trickle-down" effects of increased land values have come to dominate regeneration rhetoric and practice, how can they be rebalanced towards the needs and values of existing communities?' (Campkin, Roberts and Ross 2013). As cities compete for status in a world hierarchy of cosmopolitan urban centres, radically re-making vast tracts of the urban landscape to attract global investment, it is vital to consider what voice under-represented and marginalised local communities have in preserving their identity and right to sustain ordinary dwellings and livelihoods (Campkin, Melhuish and Ross 2014). But the discourse and practice of urban regeneration naturally relies for its legitimacy on a prior concept of urban decline and *de*generation, which Campkin has explored in the case of London in some detail (Campkin 2013). Within this discourse, the identification of local communities and environments as disadvantaged and degraded is often framed within a suggestive rhetoric of disorder, social decline, criminality and the desirability of economic 'convergence' in order to justify investment, property acquisition, and reconstruction of entire neighbourhoods on inner city sites. It is often linked to imminent international events hosted by cities, such as the Olympics in London or the FIFA World Cup, and now Olympics, in Brazil, when the image and reputation of a city and nation as a whole is considered to be at stake (*see Case Study 5* for a note on London's Great Outdoors improvement programme in the run-up to 2012). Indeed, the case of Newham in east London has often been cited as a case in which regeneration, anchored by the Olympic Park and a number of high-profile educational and cultural institutions (including UCL East) has moved 'away from a [local] renewal and "convergence" agenda … towards a rebranding and globalising initiative positioning the site in a symbolic relationship to national economic and imaging priorities' (Melhuish 2015:5).

The backdrop against which this idea of urban regeneration as a necessary remedy for economic stagnation and social decline has flourished is addressed by Massey Quintas and Wield in their 1992 critique of science park development, which can be seen as a clear precursor of the new types of university expansion and innovation cluster projects which are emerging today, but with a shift to more integrated urban locations (*see case study 3*). They discuss the relocation of industry away from the north of England in the context of Peter Hall's 1985 dismissal of the former urban manufacturing centres of the north, which they quote: 'the old industrial city has an ageing workforce resistant to change … a depressing physical environment unattractive to mobile workers … [the old cities] often suffer from poor transportation linkages … lack of innovative entrepreneurship. They lack the right milieu. They have, in other words, little going for them' (Massey Quintas Wield 1992:241). This attitude had led to the abandonment of whole populations and the development of the new science and technology-based industry in more attractive, new locations such as Cambridge, the home of one of the country's first science parks (*see Case Study 2*). Much like the new urban university developments of the 2000s, considerable investment was made in their design and development, driven by competition for and retention of the new mobile, international knowledge workers over and above a commitment to improving local conditions and prospects. Massey et al quote a *Financial Times* story of 1984 to this effect: "In the kind of service we provide, good staff are fiendishly hard to come by and you've got to play every card you've got in

the vicious business of attracting them, including the environment" (Massey Quintas Wield 1992:89). The importance of a high-quality environment as key to maintaining institutional viability is a recurring theme in the following university case studies, but as in the case of the earlier science park developments does not guarantee economic and social convergence. Indeed, Massey et al suggest that science park development did nothing to solve the problems of unemployment for those outside the elite science and technology workers and even exacerbated social inequalities (in places like Cambridge). This then is a fundamental question which arises with the new wave of university-led urban regeneration, with little long-term evidence available to date to support any hard-and-fast conclusions on the economic benefits or otherwise for local, 'non-elite' populations, from knowledge-based development.

In his US-based survey Moretti argues that universities do not specifically contribute to the generation of local skilled workforces, because students usually move away from the city where they studied. However, he does conclude that a university presence in metropolitan areas is associated with a better-educated labour force overall and higher local wages across the board (in that area), especially linked to academic research and translation in the fields of medicine, medical technology, electronics, optics and nuclear technology, but even in low-skilled jobs. On the other hand, universities can only contribute to these effects if supported by local governments and attractive cities with strong financial systems in place (Moretti 2013).

Addie Keil and Olds suggest that despite university engagement with a place-making agenda in the north American context, and the development of innovation and creative economies in cities, many institutions remain detached from their regions. In fact many major research universities only have a marginal impact on their immediate local economies: 'physical … infrastructures … are central to universities' strategies of knowledge transfer … yet their impact on surrounding communities and social spaces are often a secondary concern to the production of innovation and economic growth' (Addie Keil Olds 2015:34), in a global context. They note that there is an additional lack of evidence of the benefits and mechanisms of community engagement in different higher education institutions (HEIs), and point to the frequent 'tensions between universities and their surrounding communities, including … use of urban space (e.g. insensitive development projects … cultural conflicts between academic and non-academic groups) and potentially exploitative relationships between students and communities as research subjects' (Addie et al 2015:34). So although universities are increasingly used (by governments) to support austerity projects and neo-liberal agendas through the assumption of political and economic functions, 'narrow policies aimed at optimizing the economic function of universities' do not necessarily lead to benefits for less skilled workers and excluded communities in local neighbourhoods.

In their evaluation of the UK Labour government's New Deal for Communities programme (1997–2010), Lawless and Pearson set out the indicators for the impact of investment and community participation in urban regeneration which provide a useful measure against which to guage the potential benefits of university-led regeneration beyond reductionist economic criteria: reduction in crime, enhanced sense of local community, quality and provision of housing and the physical environment, rising health standards, access to education, and reduction in worklessness (Lawless and Pearson 2013). NDC specifically aimed to make communities more resilient and boost social capital (understood as knowing and looking out for local people, increased trust in local institutions, and enhanced sense of personal empowerment in influencing local decisions). But Lawless and Pearson note that 'there is little consistent evidence … on the impacts and benefits associated with community participation' (Lawless and Pearson 2013:510) in urban regeneration through such programmes, partly due to problems including ethnic and cultural diversity, intra-community strife, transience, loss of community interest, and 'over-optimistic assumptions on the part of local residents as to what could ever be achieved' (Lawless and Pearson 2013:509).

These observations underline the challenges facing universities entering the urban regeneration game which genuinely do have aspirations to deliver on a place-based economic and social agenda which goes beyond narrow neoliberalist-driven policies, and is underpinned by mechanisms for genuine community engagement. As Bromley, Benneworth and many others have highlighted, many universities on both sides of the Atlantic have embraced the so-called 'third mission', placing both community participation and social innovation at the heart of their institutional identities. The Great Cities Institute of the University of Illinois in Chicago (a city which had been the subject of extensive sociological research by the Chicago School at the University of Chicago since its rapid industrialisation in the 1930s) has played a significant role in expounding the benefits of partnership between academy – the 'engaged university' – and community, supported by federal government initiatives and others such as the Building Communities programme launched by the Rockefeller Foundation (2001). The University of Pennsylvania's Institute for Urban Research was also appointed by the US Department of Housing and Urban Development in 2009 to co-ordinate a Task Force to investigate how anchor institutions such as universities could be more effectively leveraged to improve communities and help solve urban problems (*see Case Study 4*). In the UK, the work done by US universities in terms of their 'civic mission' and 'service learning' programmes (Bromley 2006) has been acknowledged, and, as Robinson and Adams described in 2008, many universities have taken steps to engage with and support local communities through business and employment-related regeneration activities, as well as volunteering and widening access initiatives.

Over two-thirds of the respondents in Robinson and Adams' research (35 universities, of which 40% were pre-1992 institutions, and 60% post-1992) 'stated that their institutions had dedicated urban regeneration teams' (Robinson and Adams 2008:282); however at that point the number of universities engaged in urban regeneration initiatives as property developers through spatial development projects was very small – only three – while two 'simply did not see regeneration and community engagement as relevant activities for a HEI' (Robinson and Adams 2008:286). Since then however, universities have come under increasing pressure to play the role expected by government in local urban regeneration initiatives, especially since the Coalition government's reform and decentralisation of the planning system to place decision-making powers more squarely in the hands of local agencies and community bodies (Localism Act 2011, *see Case Study 5*). UK urban policy has placed a strong emphasis on multi-sector partnership and community participation in area-based planning and neighbourhood regeneration for several decades (Lees and Melhuish 2012; Hall and Hickman 2002), in successive government bids to address the problems of post-industrial city centres (*see Policy milestones*) and as referred to above in relation to New Deal for Communities (*see Case Study 3*). In 2013 the Witty Review of Universities and Growth stressed the need for universities to work harder with the new LEPs on Strategic Economic Plans, especially by providing research and advice to SMEs; but universities engaging in spatial development face additional pressures, in common with other property developers, to demonstrate how they will contribute to those wider regeneration benefits – including infrastructure, skills and training provision, housing growth and improvement, community development and neighbourhood renewal (identified by Cambridge Economic Associates et al 2010 for the Department of Communities and Local Government), e.g. under Section 106 agreements – in conjunction with academic programmes tailored towards social relevance, community impact, and widening access.

In 2014, HEFCE announced a five-point framework for a university-wide renewal of of principles around place-making and social engagement, which had been present in the wave of university expansion during the 1960s and 70s, launched by the Robbins Report (1963), but become lost in the subsequent competitive race for international research profile and ratings. Speaking at the National Engage

(NCCPE) conference in Bristol,[5] HEFCE CEO Professor Madeleine Atkins declared that the arrival of the 39 Local Enterprise Partnerships and European Structural Funds for regional development now represent 'the only secure source of funding for universities over the coming years', due to cuts in public funding for higher education and increased competition for students. Universities should therefore embrace a multi-disciplinary approach related to the societal Grand Challenges to drive thinking and dynamics around engagement. Atkins identified five specific areas in which this should occur: engagement with local schools; local skills agendas; social innovation and social enterprise; cultural engagement; and local economic growth. It will be supported by HEFCE through new local collaborative networks, partnership funding for social investment and a Catalyst Fund to develop a new model of exemplary anchor institution.

Also in 2014, a report for the Russell Group of universities found that £9bn was projected to be spent by universities on capital development projects to 2017, covering facilities for research and teaching, science, technology and engineering campuses, student accommodation, business schools, and IT facilities (Biggar Economics 2014). This investment is indicative of the increasing emphasis on STEM subjects in the curriculum, geared towards economic growth, and the interest in developing physical urban innovation clusters in which academic and business interests are co-located. The UK government, reflecting the largely instrumentalist approach critiqued by Addie et al in the north American context, endorsed the economic benefits universities are believed to bring to cities and regions with its establishment of a £15m government budget for new University Enterprise Zones (Bristol, Nottingham, Liverpool, and Bradford) in 2013 – including support from UK Trade and Investment and simplified planning constraints (though no business rate discounts), similar to the old UDCs. This support is based on published statistics showing that at a national level university output in the UK (for 2011–12) accounts for 2.8% of GDP and 1% of employment. That includes £26.7 bn in direct expenditure, just slightly less than the amount earned, plus additional output and employment in other sectors through secondary multiplier effects – estimated at £37.63 bn (Universities UK 2013).

Universities are promoted then as agents of urban regeneration because they are seen to generate economic activity and produce skilled localised workforces to power the knowledge economy (NESTA 2009, RSA 2014), while offering stability and 'sticky capital' (to use the term coined by Maurrasse 2001) as anchors for development with a long-term commitment to place (*see Case Study 2*) and community participation. Furthermore they have access to alternative and diverse sources of funding, from both higher education and urban renewal funds, that can be directed into physical projects with benefits for stakeholders including business and local communities (Goddard and Vallance 2013). Hence university spatial development plans often garner support from national and local government as vehicles for long-term urban regeneration initiatives – even though the primary driver for such projects is nearly always the need for additional space, including high quality facilities and environment to attract and retain the best staff and students (Austrian and Norton 2005). Indeed in many cases, especially in the US, HEIs may have long track records of conflict and distrust with local communities who see them as predators on their territory (*see Case Study 4*), and so the active embrace of the third or civic mission is vital to re-balancing those relationships within the larger discourse of urban regeneration.

As Benneworth has highlighted however, the third mission is not an easy one for universities to manage, especially in a place-based urban context: 'Universities are not just actors which relate to governments and customers, but institutions en-meshed in complex relationship systems with societal partners with their own goals, intentions, cultures and norms. This is visible in the systematic barriers restricting community engagement. These barriers emerge from shifting accountability and

authority relations in public administration more generally' (Benneworth 2013:5). He identifies a number of issues which many universities have found difficult to resolve, in particular their fundamental spatial independence from their physical contexts arising from their position within global circuits or flows, of capital (see McCann Ward Roy above), and their relationship with the city as a strategic rather than physical space, to be managed in order to promote their global performance rather than local regeneration. In addition, institutional deadlock makes it hard for individual academic actors to engage with local contexts and various types of urban stakeholders from a research and impact perspective, while those same university actors often lack local and contextual knowledge about their physical location because they deal in a universal vision of knowledge production which is validated as such by the academic system. Finally, local stakeholders on their part distrust universities for 'laboratorising' the city and its inhabitants, without bringing any, or at least limited, benefits – or because of historical predatory takeover bids and failures to engage with communities, often coloured by ethnic and racial issues.[6] All these issues present difficult challenges for universities wishing to engage on a long-term, mutually beneficial basis with local communities, especially socially-excluded groups.

Benneworth usefully identifies the key mechanisms of social exclusion – short-term flexible work contracts and restricted workforce progression, combined with financial penalisation resulting from insecure income; remotely located housing with poor services (including healthcare and education) and transport provision; fragmentation of family units across areas (due to housing allocations and lack of affordable options), reducing opportunities for interaction and informal support; and retreat of police from problem areas, with concomitant exclusion of 'problem' communities from decision-making (Benneworth 2013:19). There is certainly a body of opinion that for universities to try to fix this range of structural issues as urban regeneration actors is well beyond their remit as publicly-funded higher education institutions; yet a growing expectation that they will find the ways and means to do so, working in collaboration with 'citizen scientists' on the ground, under the even larger rubric of the global societal challenges – notably urban sustainability and prosperity.

However the argument that universities should steer clear of 'laboratorising' the city is also a cogent one. Karvonen stresses that urban knowledge is specific to local contexts, and therefore incapable of being translated to the status of 'generally valid knowledge', applicable to universal problems. Urban environments are complex, messy, and exhibit endless variations, hence the idea of generating a best practice formula for university-led urban regeneration is an elusive one – notwithstanding the global production of cities as 'policy assemblages' from elsewhere, as noted by McCann Ward and Roy (2013). Many universities evoke the 'urban' or 'living' laboratory model to describe a particular attitude to engaged, outward-looking, innovative urban teaching, research and practice, and a modus operandi for the modern university in the contemporary city. But as Karvonen and Evans point out, 'The explicit purpose of a laboratory is to create a space apart from the norm … In bounding space, urban laboratories represent a specific type of niche that is often created by university-led partnerships to emphasize the importance of knowledge production' (Karvonen and Evans 2014:415). The danger of this is that ultimately the process of drawing boundaries may 'reinforce the divide between the knowledge community and the surrounding neighbourhoods rather than integrate these in new ways' (Karvonen and Evans 2014:426). In the case of Manchester's Oxford Road Corridor, a 'low-carbon laboratory' for sustainable change, representing a partnership between the University of Manchester and the City Council, Karvonen and Evans conclude that: 'it serves as a rhetorical device for the aspirational goals of influential urban actors in Manchester, but does not in and of itself provide a means for realizing real change on the ground' (Karvonen and Evans 2014:421).

Visions and typologies of university-led urban regeneration 3

While the laboratory model has entered the rhetoric of university-led urban development (see for example the case of Newcastle, *case study 3*), the material typology of new university development – including so-called urban laboratories and innovation hubs, designed to create interfaces and alignment with other spheres and practices of place-based leadership (see Hambleton above), as well as learning centres and sports facilities intended to be open to community use – remains under-documented. However, as van Heur notes, there has been a 'flurry of [HE] building activity in cities around the world' (van Heur 2010) as institutes of higher education step up to the task of meeting their own space needs alongside wider urban regeneration objectives. In general, this building activity has been located on urban sites, with an emphasis on connectivity, permeability, and accessibility within the wider urban context; as such, it represents a shift away from the out-of-town campus model of university planning. As Bender describes, this was always more typical of the Anglo-American than the European university tradition (Bender 2008), but subsequently came to define the later science park concept as a frame for the separation of scientists and experts from everyday citizens.

Wiewel and Perry (2005:9) note that 'University capital requirements increasingly dictate that real estate development projects be mixed-use in nature – blurring the edge of the old campus and the purposes of new buildings, creating projects that are part academic and part commercial, and making the traditional notion of the campus more a thing of the past'. Certainly, universities have turned towards the terminology of the urban precinct, quarter, or extension, as in the case of North West Cambridge (*case study 2*), to promote their own spatial projects alongside innovation clusters and mixed-used developments (*case study 3*) – but not only for financial reasons. Universities are also keen to re-integrate scientists, researchers and academics with local communities, and also to participate in the wider discourse and practice of urban regeneration. Within these developments then, the shape and form of university buildings is increasingly being determined by the demands of the commercial and public interface. However it also reflects changes in models of pedagogy within the academy, and especially an increased emphasis on multi-disciplinary, cross-disciplinary and collaborative teaching, learning and research. The growing importance too of informal social learning spaces for self-directed learning, in the context of reduced student-staff contact time as student numbers grow, is shaping new approaches to the briefing and design of university buildings. As universities get bigger and more anonymous, the need for greater connectivity in student life and provision for social contact is articulated by students, while the pressure on available appropriate teaching space, and lack of dedicated individual workspace, is often a frustration for staff (Boys, Melhuish and Wilson 2014).[7] These factors are leading to the design of larger, more generic and more flexible academic buildings or 'hubs', often shared by different disciplines, and supported by state of the art ICT infrastructure. They are intended to promote collaborative work, and may include a multimedia venue, social learning cafés and forum or atrium areas designed for displays and events promoting staff and student interaction, as well as public or semi-public areas intended for university-community interface, and start-up units for commercial translation of research. They are likely to be co-located with conference centres and hotels, business centres, sports facilities and retail provision, as well as student and staff housing, and public open space. As with the new University of Northampton campus in the UK, they may be situated in a government-supported Enterprise Zone, taking advantage of waterfront sites well-served by existing or future public transport interchanges.

In this context of accelerated university/urban development, and recognising the importance of built form itself in materialising certain objectives and outcomes, Bas van Heur (2010) has identified a need for 'comparative synthetic research that

can: evaluate finished and ongoing building projects; analyse actual interactions between researchers, firm members and/or citi zens in and as a result of these buildings; and provide concrete suggestions for improvement of future HER buildings' (van Heur 2010:1713). He notes that much of the scholarship on university development comprises mainly historical accounts of university architecture, alongside the body of work on university estates development strategy and campus planning in the US and internationally by Wiewel and Perry (2005, 2008), Temple (2014) and others, and research on the economic dimensions of university development (such as Goddard and Vallance 2013). However there is a relative lack of attention to the spatial and material manifestations of university expansion and development and their effects on cities.

As contributors to this sphere of knowledge in particular, Benneworth and Hospers (2007) have coined the term 'planning animateur' to describe universities (such as Newcastle) which have taken an active role in the production of 'university-influenced urban landscapes' (Benneworth Charles Madanipour 2010) through their spatial developments. The purpose of the UCL Urban Laboratory's case study-based research has been then to consider universities in this light, and to provide some insights into both the institutional visions which drive such initiatives and the emerging material typologies of the new university developments and their effects or projected impacts on cities, in variable urban and peri-urban contexts. Each case study is divided into four sections, looking firstly at the historical institutional context for the development, the way it has been shaped by national higher education and regeneration policies, and the choice of a site; secondly at the institutional and external visions and narratives which have defined and communicated the idea of the project and mobilised a wide base of support for its realisation; thirdly at the processes and structures put in place to bring the development to fruition, including governance, finance, and partnerships with other urban actors, as well as the tools used to materialise the vision, in particular community engagement and architects' plans and drawings; and finally at the process of translation of visions and aspirations into the reality of local place, through the complex business of local planning systems, construction, and towards a set of hoped-for social, economic and environmental benefits for the wider urban area.

The research, conducted over an 18-month period from July 2013 to December 2014, was based on a mixture of desk-based and archival work, site visits, and interviews with key personnel within the academic institutions concerned, planning authorities and regeneration agencies, architectural and masterplanning practices, and community groups. It is far from complete, but aimed to generate a multi-faceted picture of the process of university development in each case from inside and outside the institution, and across the comparative context of the five case studies. It owes a great deal to the access and time generously provided by interviewees, and the public availability of much institutional documentation on the web – while it also brought into focus the commercial confidentiality of much institutional business. Hence while financing, governance and leadership are core to the processes of university development, it is not surprising that they are also rather understudied: as Wiewel and Perry comment of the international case studies contained in their 2008 volume, discussion about individual leaders or leadership, for example, is 'strikingly absent' (Wiewel and Perry 2008:307) – even though as they note in their earlier US-focused publication, 'strong leadership seems to be a critical success factor' (Wiewel and Perry 2005:303).

But equally important, we suggest, are motivation, clarity of vision, and communication, even where, as the case studies show, definitive programming and concrete detail on space utilisation and standards seem to be lacking, open-ended, and long-term. Austrian and Norton (2005:196) suggest that: 'Recognizing what motivates universities' real estate development activities is important in studying the development process. Motivation obviously affects the types of projects

that universities undertake, but it can also affect the structure of the decision-making process, availability of various financing mechanisms, and the nature of university-community relations. The prime motivation for physical expansion by many universities is steady growth in student enrollment'. The case studies suggest however that, while motivation is key to success, it is not only driven by the desire for institutional growth. Even though increasing student numbers, driven by international competition and, in the UK, the lifting of the cap on enrolment, are a catalyst for development in most cases, there are clearly other factors at play in the development of the vision, the mobilisation of commitment across a network of academic and other actors, and the belief in the project's social value which are fundamental to the institutional motivation which will eventually propel it into reality.

In fact the distinctive feature of university development which seems to set it apart from other forms of corporate or commercial property development is an underpinning narrative of identity and purpose which goes well beyond the maths around student numbers and income from teaching and research, and varies from institution to institution – shaped by its own founding charter and heritage, and increasingly embedded in the wider discourse of local urban place-making in which universities are both positioning themselves and being positioned by external forces. It is the development and communication of this narrative, in both verbal and visual form, which performs a vital function not simply in representing or projecting a future identity for the university, but also in building social relationships and alliances among the different actors implicated in it and keeping dissent at bay within the free-thinking academic community.

University visions of development comprise two dimensions: the institutional, embracing the structure and organisation of the university as an educational institution; and the physical – the university as a particular kind of place where research and teaching are carried out. But there is often a significant dysjunction between the two. Academics and administrators may not consciously visualise universities as physical places, but rather as a complex organisation of teaching and research programmes that need to be accommodated. Estates teams often only see universities as spatial and operational entities which pose particular issues around maintenance and running costs. Communication between the two is often fraught with tensions, and further complicates the process of communication between the university as a unified entity with the heterogeneous communities outside it which have an interest in its plans. Thus when spatial development projects come onto the horizon, masterplanners, architects, and engagement consultants are brought in to develop a three-way mediation process. Then, that vision needs to be communicated to wider audiences beyond the university, to build support for the project, both through statutory consultation exercises, and other types of research and outreach initiatives shaped by that ambition.

The visioning and communication process thus involves particular types of imagery and language in which we can see an evolution of universities' idea of themselves and what they want to project in terms of their heritage and identity, within a global urban placemaking discourse that translates into locally-embedded forms and variants. Most universities are working hard to distance themselves from the imagery of dreaming spires, ivory towers, academical villages, and other utopian scholastic communities with which they identified in the past. Instead, as the case studies show, they are using the language of the knowledge or innovation cluster, urban laboratory, communiversity, non-campus campus, and other terms, to evoke new images and institutional identities that are gradually emerging as new types of built form. These are being packaged as new components of the urban landscape, within precincts, quarters and extensions, to underpin a re-visioning of the university as urban placemaker and agent of regeneration which is subtly different from the civic identity which historically made the 'urban' university urban.

The unfolding materialisation of these re-visioning operations is a complicated,

contingent and elusive process to follow however, especially within the framework of an 18-month research period. As McFarlane notes of urban policy more generally, it is 'assembled not just through structures of political economy, but through particular atmospheres of reception in the boardroom or coffee room, the materiality of policy documents themselves (eg the agentic force of the texts and their visuals and modes of presentation), serendipitous moments and juxtapositions, and forms of friendship or conflict, all of which operate with different and contingent forms of power and impact' (McFarlane 2011:652). Furthermore, university-led urban development projects are long-term enterprises that take many years to come to fruition, witnessing many changes in personnel in the duration. This set of case studies can only touch on the longitude and depth of the processes which they put in motion, the staff input and accumulated knowledge and expertise, but provide a reference point from which to draw some specific insights and details across a set of variables.

Acknowledgements

With much thanks and appreciation to all those who agreed to make time to be interviewed in the course of this research, and willingly shared information and personal insights in relation to the university- and community-led development projects in which they have been involved – whether as academics, university managers, architects and masterplanners, engagement co-ordinators, council planning and regeneration officers, or community group representatives. In addition to those represented in the completed case studies, a number of others contributed invaluable perspectives and guidance at both a general and case-based level. These include UCL participants in the Urban Laboratory seminar 'University-led urban regeneration: research methods in practice' (Nov 2013) – Pushpa Arabindoo (Geography), Adam Drazin (Anthropology), Nawed Khan (Estates), Barbara Lipietz (DPU), and Jane Rendell (Architecture) – as well as Ben Campkin (Director, Urban Lab) and Yvonne Rydin (Planning), mentors on the project; Adam Harman (Estates), Project Director UCL QEOP; Kim Townsend (PACE), Public Engagement Co-Ordinator (East); and participants in the UCL Campus Concept Group chaired by Alan Penn (Dean, The Bartlett). Also due thanks are: Sarah Bell (Engineering), Sam Barton (Geography) and Katie Beinart (Architecture), Jorge Fiori (DPU), Han Pham (ICRI Cities, along with Christian Jetter, Lisa Koeman and Pedro Monteiro), and Michael Shattock (IoE) of UCL; Simone Abram (Durham Anthropology); Jos Boys (UNSW Sydney); Zeca Brandao (Architecture, Federal University of Pernambuco, Brazil); Peter Chomowicz (Associate Dean for Research & Development at VCU Qatar); the Director and staff of UCL Qatar; Steven Pidwill of Shepheard Epstein Hunter; Sabine Coady-Schaebitz (Collaborative Centre of the Built Environment) and Terry Neville (Chief Operating Officer) at the University of Northampton, along with Paul Lewin (Planning Policy and Conservation Manager) and Reddy Nallamilli of Northampton Borough Council; Diana Hampson (Estates) and Andrew Karvonen (Architecture and Urbanism) at the University of Manchester; Harry Audley and Henry Petersen (White City Residents' Association and St Helen's Residents Association, North Kensington, respectively); Paul Dimoldenberg (Quatro). And finally, thanks to Jordan Rowe for co-ordinating the Urban Lab, and Guglielmo Rossi, for designing the case studies.

Notes

1 Univercities 1: Space: universities, cities and globalisation, UCL Urban Laboratory, May 9th 2013; The Urban University: universities as place-makers and agents of civic success in medium-sized towns and cities, University Town Northampton project, Northampton July 2nd – 3rd 2015

2 Allan Cochrane, speaking at the Urban University conference, July 2nd 2015

3 Alan Harding, speaking at Univercities 1 seminar, UCL, May 9th 2013

4 Robin Hambleton, speaking at the Urban University conference, July 2nd 2015

5 National Co-ordinating Centre for Public Engagement, annual conference, Dec 3rd and 4th 2014, Bristol

6 Paul Benneworth speaking at Universities, Cities and Transformation International Workshop, Anthony Burgess Foundation, Manchester, organised by Salford University's SURF Centre, September 1st and 2nd 2014

7 Based on research at the University of Northumbria, Newcastle, in 2013–14; and previously at the Universities of Brighton and Sussex, 2008–09

References cited

Addie, Jean-Paul, Roger Keil and Kris Olds
2015 'Beyond town and gown': higher education institutions, territoriality and the mobilization of new urban structures. Territory, Politics, Governance, 3,1: 27–50

Arup, Argent St George, LCR and Exel
2004 King's Cross Central Regeneration Strategy. London: Arup

Austrian, Ziona and Jill S. Norton
2005 An Overview of University Real Estate Investment Practices. *In* The university as urban developer: case studies and analysis. Wim Wiewel and David C. Perry, eds. Pp. 193–221. Armonk NY: M.E.Sharpe

Bender, Thomas
1988 The university and the city: from medieval origins to the present. New York, Oxford: Oxford University Press

Biggar Economics
2014 Economic impact of the capital investment plans of the Russell Group of Universities. 5th March. http://www.russellgroup.ac.uk/uploads/Economic-impact-of-the-Russell-Group_1.pdf

Benneworth, Paul, and Gert-Jan Hospers
2007 Urban competitiveness in the knowledge economy: universities as new planning animateurs', *Progress in Planning* 67 105–197, 148

Benneworth, Paul, David Charles and Ali Madanipour
2010 Building localized interactions between universities and cities through university spatial development. European Planning Studies, 18:10, 1611–1629

Benneworth, Paul, ed.
2013 University engagement with socially excluded communities. Dordrecht: Springer Netherlands

Bromley, Ray
2006 On and off campus: colleges and universities as local stakeholders, Planning, Practice, and Research 21:1, 1–24

Boys, Jos, Clare Melhuish and Angelina Wilson
2014 'Developing research methods for analyzing learning spaces that can inform institutional missions of learning and engagement'. Report from the recipients of the 2013 Perry Chapman prize. Society for College and University Planning, Ann Arbor MI

Cambridge Economic Associates with eftec, CRESR, University of Warwick and Cambridge Econometrics
2010 Valuing the benefits of regeneration. Economics paper 7. Vol 1 – Final Report. London: Department of Communities and Local Government

Campkin, Ben
2013 Remaking London: decline and regeneration in urban culture. London: I.B.Tauris

Campkin, Ben, David Roberts and Rebecca Ross, eds.
2013 Regeneration Realities, Urban Pamphleteer #2. London: UCL Urban Laboratory

Campkin, Ben, Clare Melhuish and Rebecca Ross, eds.
2014 Heritage and renewal in Doha, Urban Pamphleteer #4. London: UCL Urban Laboratory

Glass, Ruth
1964 London: aspects of change. London: MacGibbon & Kee

Goddard, John
2009 Reinventing the civic university. Provocation 12, London: NESTAhttps://www.nesta.org.uk/sites/default/files/reinventing_the_civic_university.pdf

Goddard, John, and Paul Vallance
2011 'The civic university and the leadership of place'. CURDS Newcastle University. http://www.talloires2011.org/wp-content/uploads/2011/06/Civic-University-and-Leadership-of-Place-John-Goddard.pdf

Hall, Stephen and Paul Hickman
2002 Neighbourhood renewal and urban policy: a comparison of new approaches in England and France. Policy Review Section, Regional Studies 36:6, 691–707

Van Heur, Bas
2010 The built environment of higher education and reearch: architecture and the expectation of innovation. Geography Compass 4/12: 1713–1724

Karvonen, Andrew and James Evans
2014 'Give me a laboratory and I will lower your carbon footprint!' – urban laboratories and the governance of low-carbon futures. International Journal of Urban and Regional Research 38: 2, 413–30

Lawless, Paul and Sarah Pearson
2012 Outcomes from community engagement in urban regeneration: evidence from England's New Deal for Communities programme. Planning theory and practice 13:4, 509–527

Lees, Loretta and Clare Melhuish
2015 Arts-led regeneration in the UK: the rhetoric and the evidence on urban social inclusion. European Urban and Regional Studies 22:3, 242–260

Massey, Doreen, Paul Quintas, and David Wield
1992 High-tech fantasies: science parks in society, science, and space. London; New York: Routledge

Maurrasse, David
2001 Beyond the campus: how colleges and universities form partnerships with their communities. New York: Routledge

McCann, Eugene, Kevin Ward and Ananya Roy
2013 Urban pulse – assembling/worlding cities. Urban Geography, Vol. 34, No. 5, 581–589

McFarlane, Colin
2011 The city as assemblage: dwelling and urban space. *Environment and Planning D: Society and Space* 29: 649–671

Melhuish, Clare
2015 'The role of the university in urban regeneration: collaborations on the periphery', Letters, Arq 19:1, 5–7

Moretti, Enrico
2013 (2012) The new geography of jobs. Boston Mass.: Mariner Books

NESTA
2009 The connected university: driving recovery and growth in the UK economy. London: NESTA

Robinson, Claire and Neil Adams
2008 Unlocking the potential: the role of universities in pursuing regeneration and promoting sustainable communities. Local Economy 23:4, 277-289

RSA City Growth Commission
2014 Univercities: the knowledge to power UK metros. London: RSA

Temple, Paul
2014 The physical university: contours of space and place in higher education (International Studies in Higher Education) London: Routledge

Universities UK
2013 The impact of universities on the UK economy.

Wiewel Wim and David C. Perry, eds.
2005 The university as urban developer: case studies and analysis. [US case studies]. Armonk NY: M. E. Sharpe

Wiewel, Wim and David C. Perry, eds.
2008 Global universities and urban development. Armonk NY: M.E.Sharpe

CASE STUDY 1

QUEEN'S CAMPUS: DURHAM UNIVERSITY IN STOCKTON

Widening access to higher education on a brownfield site

Contents

Introduction

1 Historical and policy contexts
1.1 The need for growth and rationalization
1.2 Reconstituting the academic model
1.3 The regeneration agenda
1.4 A collaborative initiative

2 Processes and Structures
2.1 The project champion
2.2 Governance
2.3 Organization and constitutional issues: from college to campus
2.4 Funding arrangements
2.5 Site planning, design and construction

3 Visions and narratives
3.1 The physical image
3.2 The non-campus campus
3.3 'Durhamisation': streamlining the image, narrative
3.4 Academic programming: local v national focus
3.5 The present and future

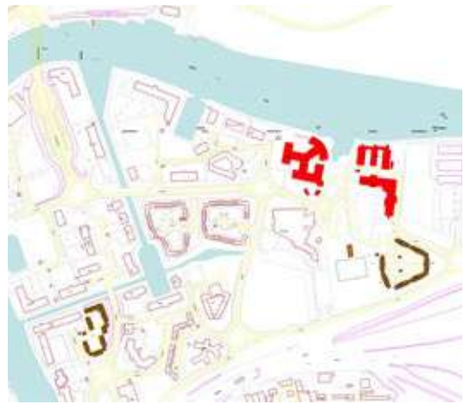
4 Translation into place
4.1 Campus planning and typologies
4.2 Economic impacts of the development
4.3 Student contribution to local life and the economy
4.4 Social impacts

5 Key issues and learning points

Summary

1

1 Aerial perspective of site before construction of Infinity Bridge, with academic buildings to left of river and Stockton-on-Tees in background
2 Site plan with academic buildings shown in red and college accommodation in brown
3 Aerial view of Teesside site with academic buildings on Queen's Campus shown in red
Images courtesy Shepheard Epstein Hunter



2

3

Queen's Campus was an initiative driven by government-led regeneration policy, which fitted with a vision fostered by the University leadership of a more outward-facing institution engaged with deprived areas of the North-East and communities blighted by deindustrialisation. It also provided an opportunity to experiment with a new multi-disciplinary and modular approach which might generate new courses with greater appeal to non-traditional students. The site is located just outside Stockton-on-Tees, and was constructed piecemeal over the course of a decade, as and when funding from a number of external sources became available. Lack of residential and research space early on slowed the development of the campus's social and academic life but was subsequently rectified. It has developed teaching and research strengths in the areas of environmental science, health and wellbeing (including GP training), and business studies, and hosts a mixed residential population of local and international students, especially from the Far East. Today the campus boasts modern facilities and high-quality sports provision in a waterfront location, and is regarded by the Local Enterprise Partnership as central to the ongoing regeneration of the surrounding areas, including Stockton town centre itself.

Introduction

'We have to do something to regenerate this area'
Ray Hudson, Deputy Vice-Chancellor 2014 [1]
'Durham … is essentially university-centred; Stockton … is very much a university within society … it was seen by some as an agent of change'
John Hayward, former Provost Queen's Campus (Hayward n.d:110)

Durham University's Queens Campus is located on the outskirts of Stockton-on-Tees, on the banks of the River Tees. It sits on the edge of the Teesdale Business Park which has grown up on the site since the first university buildings were constructed from 1992 onwards. The campus took its first intake of students in October 1992, and represented an experimental venture for Durham University at the time, strongly encouraged by government. Now 20 years old, its contribution to the life of the region and of the university is recognized, both by the Local Enterprise Partnership and by the University leadership itself: 'Stockton presses a lot of buttons in terms of the internationalization agenda, diversifying income streams … but also a higher proportion of local students who tend to come from, you know the priority neighbourhoods and social groups and so on. So it presses all sorts of buttons' (Ray Hudson, Feb 2014). But at the same time the trajectory of its academic and organisational development has not always been clear or consensual and has demanded successive renewals of commitment from within the institution itself over the years: 'There were times when success seemed highly unlikely, particularly in the early years. That was when the vision needed to be bolstered by determination, when the commitment needed political support, when the calculated planning needed good fortune. Despite broad ranging support, the development constantly needed to win over opposition both within the University and outside' (Hayward n.d: 8). This experience over the first 10 years of the campus's life has been described in an informative personal account by its first Principal, then Provost, John Hayward, on which this case study draws extensively.[2]

Historical and policy contexts 1

As the university's website explains, the concept of the 'remote' campus was not new to Durham, and indeed it took the lead in establishing 'overseas campuses a century before the concept was reinvented: in Barbados in 1875 and Sierra Leone in 1876' (Durham University n.d). Strictly speaking, these were affiliated colleges (with a focus on theology), which both became re-affiliated in 1967 to their national universities. Queen's Campus, which now contains two of its 16 colleges, represents a modern continuation of that tradition (albeit only 18 miles from Durham) – a so-called 'colony from the mother city' (Hayward n.d:9), inspired by a similar missionary zeal, whereby 'the University established a significant presence at our Queen's Campus in the heart of Tees Valley, re-initiating medical teaching [though not full degrees in medicine] and breaking disciplinary boundaries to enhance public health and social wellbeing' (Durham University:nd).

Nevertheless, when the idea of opening a new university college in the Tees Valley was first mooted in the 1980s, with reference to a 'Birkbeck of the North' (ie geared towards non-traditional and often mature students), the university's new Vice-Chancellor Fred Holliday described it in pioneering and risk-laden terms. Hayward reports that in October 1987 he announced to staff that, 'To survive in the 1990s will require us to think thoughts and do things never before contemplated in Durham' (Hayward n.d:14).

The need for growth and rationalization 1.1

What then were the factors which prompted the University to take such steps? In 1985 Durham University's student population was less than half the size it is now, at just under 5,000 students – compared to 10,000 undergraduates and 4,000 postgraduates today, with another 2,000 students based at Queen's Campus. The institution was made up of many small departments, representing a relatively narrow range of closely interlinked subjects considered in some quarters old-fashioned compared to the new courses promoted by the campus universities founded in the wake of the 1963 Robbins Report.[3] In 1986 the Conservative government led by Margaret Thatcher announced stringent cuts in public funding to higher education – the beginning of HE reforms and rationalization which has led with inexorable logic first to the opening up of mass education with the transformation of polytechnics into universities under the Conservatives in 1992 (the post-1992 universities), then to Labour's controversial introduction of student tuition fees in 1998, and eventual nine-fold increase by 2012 under the current Coalition government, with reduction of public funding to under one-third of university revenue. The then University Grants Committee, which had overseen the emergence of a national system of public universities following the Robbins Report, demanded that universities re-structure to ensure that better management structures were put in place, along with measures for widening student access and generating qualified manpower relevant to the needs of the national economy – or else face the loss of their funding streams. Durham was forced to consider ways of creating a more 'balanced university' (Hayward n.d:11), with larger academic groupings for resource allocation, and increased student numbers, or implement redundancies.

Reconstituting the academic model 1.2

However the possibilities of growth in Durham City were very limited. Holliday suggested creating a new Durham college on Teesside, specifically conceived as a Centre for Adult and Continuing Education, and with an emphasis on broadening access in Science and Engineering. It was proposed that it would have a multidisciplinary focus, based on three centres: a Centre of Regional Studies focused on Teesside, a Centre for Transnational Studies developing links between Europe, Japan and the Pacific Rim, and a Key Technologies Centre focused on technologies identified by the Engineering council. The agenda around broadening access had already been laid down by reforms to the School of Education in Durham, with the establishment of a new four-year BEd in primary education which was open to local students with lower A-level qualifications than normally required by the university.

The regeneration agenda 1.3

In 1987 Margaret Thatcher made a visit to Teesside to promote the government's new regeneration programme and launch of Teesside Development Corporation. Her famous 'walk in the wilderness' around the derelict, contaminated site of the Head Wrightson Engineering Works site, later to be transformed into Teesdale Business Park, was a spur to the university's emergent plans. Thatcher welcomed the idea of a Birkbeck of the North in Teesdale, stressing the need for university engagement with regeneration through local HE provision. Teesside was the only major industrial conurbation in Britain without a university, and regeneration funding could be made available for a university initiative through the Development Corporation apparatus. Since local unemployment stood at 25%, and take-up in higher education among the lowest in Britain, plus poor health outcomes, a mortality rate 20% higher than national average, and crime rates among the highest in the country, there was a pressing need to retain teachers and doctors in the region (Hudson 2013).

A collaborative initiative 1.4

The Teesdale site was one of five which would be considered as a location for a new university college, with land and buildings provided through the Development Corporation and in partnership with Stockton Borough Council (Teesdale Business Park would become one of the corporation's flagship projects by the time it was wound up in 1998). The innovative decision was taken to join forces in the foundation of a new joint college with Teesside Polytechnic, which was approved by the University Senate and Council, and greeted by the UGC with a positive response in 1989. It was established that the new University Funding Council, which took over the UGC's functions that year, would work with the Polytechnic and Colleges Funding Council to agree the funding mechanism for the new institution. Further funding streams through the regional and district health authorities were also discussed, particularly in relation to nursing training, and with local companies, with a view to establishing new types of partnerships with non-academic organisations as part of the wider regeneration impacts that could be delivered by the university.

An outline curriculum assembled by a new Academic Planning Group was approved in the same year, with an initial focus on Health Studies and Education in Phase 1, followed on by degrees in Social Sciences and Human Biology in Phase 2, designed to make 'hard' science more appealing to non-traditional students by integrating it into an applied and social science context. The curriculum would also offer Drama and Theatre Studies. It was 'a set of courses … established on the basis that they wouldn't compete with what was offered at either institution…' (Ray Hudson Feb 2014), and included provision for modular courses with the idea that they would also be available part-time, in order to attract a wide range of students (in fact this was never realized). In 1991 the joint college, offering joint degrees as Joint University College on Teesside (JUCoT), was officially announced. A funding package of £8.4m was subsequently agreed by the government for the site and one building just in time for the first intake of students in September 1992. In the same year however, Teesside Polytechnic was itself to assume new university status (as Teesside University), which would fundamentally undermine the delicate collaborative and academic balance which had been established with the new venture. In 1993 the college was officially opened by the Queen as University College Stockton, under Principal Professor Bob Parfitt.

Processes and Structures 2

> 'The key to success lay in partnership, in stepping outside the constraints of higher education and its restricted funding with the support of a strong academic base and reputation'
> *John Hayward (Hayward n.d:8)*

University College Stockton represented the first new university site to be opened in 25 years, but it was organisationally and typologically distinct from the new university campuses founded during the 1960s and 1970s. Not only was it clearly defined as 'collegiate', although it would later be redefined as a campus, but it was also unusual in involving another institution as a joint venture partner, a local authority, and a development corporation. Furthermore, it was to provide the anchor for a new business park on a contaminated brownfield site. In all these respects it would presage a new wave of post-millennial university spatial development, driven to a significant extent by urban regeneration agendas, a growing hole in public funding, and a steady shift towards devolution of the planning system to local level.

The project champion 2.1

Central to most, if not all, university development plans is the vision and determination of a particular individual capable of forging some level of cohesion across the various disparate actors involved in such complex projects. Vice-Chancellor Fred Holliday, after whom Queen's Campus's original building would be named, took up his post in 1980 and set the chain of events in process which resulted in the materialization of the campus in 1992. A Professor of Biology and Zoology at Aberdeen University, he had past experience as acting principal of the University of Stirling, a campus university founded in 1967. He brought to Durham an open-minded outward-facing outlook, embracing the possibility of new opportunities and connections with the world beyond academia, in response to the government's policy reforms around higher education. He championed the idea of creating a Birkbeck of the North, and when he announced plans for his retirement in 1990 (to be succeeded by Evelyn Ebsworth, a chemist from the University of Edinburgh) it opened up fissures of dissent within the university which de-stabilised the venture. There was opposition both to the concept of the development as a university college (since uniquely amongst the others it had responsibilities for teaching, but no residential accommodation), and to the idea of a university college being established as a separate entity at a 25-mile distance from the university on a remote site. Furthermore, the approval in 1989 by the University Senate and Council of proposals for a new Institute of Health Studies based in Durham, without consultation with Teesside Polytechnic, caused a major rift between the two partner institutions. In 1990 a corporate Joint Developments Executive with four members from each institution was created, to which the new Institute of Health Studies would be responsible for the parts of its operation taking place on Teesside, with funding through the Department of Health and Regional Health Authority.

Governance 2.2

The plans for Queen's Campus had to be agreed by the University Senate (the academic governing body, made up of academic staff and student representatives, and chaired by the Vice-Chancellor), Council (with ultimate responsibility for university affairs, comprising academic and lay members and student representatives, and chaired by a lay member), the Development Corporation, and Teesside Polytechnic, in consultation with Cleveland County Council. In addition, approval from the University Funding Council and Department of the Environment was required for the project to go ahead. In 1987 a third Pro-Vice Chancellor post was created to chair two Working Groups established the following year – one responsible for academic planning; the other for administration, finance and accommodation. They comprised between 15 and 19 members, including representatives from Teesside Polytechnic, and were constituted with a view to mobilizing broad support for the project across the two institutions. Following approval of the plans and outline curriculum, a Joint Developments Executive was set up to oversee the joint venture as limited company, in which Durham had responsibility for building services during the building phase, along with general and academic administration and student admissions, while Teesside took on financial and legal services, library provision, personnel and payroll, and estates and buildings after the opening of the college. On Teesside Poly's reconstitution as a university in 1992, with its own Vice-Chancellor, the executive board was re-established as a Board of Directors until the company was finally wound up in 1994, and a Board of Governors with joint representation took its place. At that point Durham University assumed full responsibility for the financial and organizational affairs of the college along with ownership of the building in order to streamline services delivery, although academic delivery continued on a joint venture basis. This fundamental re-structuring was accompanied by the appointment of a new

Principal for the college, John Hayward, who had been Registrar and Secretary at Durham, and would continue there as Head of Administration alongside his role at University College Stockton.

Organization and constitutional issues: from college to campus 2.3

From 1994 onwards, services at the new college at Stockton were subject to a steady process of convergence with the university, or 'Durhamisation' as it has been described, which was never entirely consensual. However, in 1997 John Hayward's role as Principal was replaced by that of Provost, which he filled until 2001 in a new capacity completely separated from his former functions at the University, giving a sense of increased autonomy. The college also continued to run until 2001 on a semester basis, in contrast to Durham's term-based model. But graduation ceremonies had already been transferred from Stockton to Durham at the request of students, and from 1998 joint degrees were dropped and awarded solely by Durham University. The college was re-positioned as a campus of the university – under the new name University of Durham, Stockton Campus. In 2001, the two halls of residence were established as colleges in the established sense (John Snow and George Stephenson) in place of the old University College, and the campus again re-named, this time as **Durham University: Queen's Campus** (2002).

This consolidation, linked to faculty restructuring within the university as a whole, was further established with Hayward's retirement, and the decision not to replace his post as Provost. Instead, the Vice-Chancellor of the University took on a combined role incorporating responsibility for Queen's Campus, resonating with the view expressed by Ray Hudson today: 'rather than thinking about Stockton as a separate campus, for me that just doesn't make any sense; it just happens to be a place where we deliver certain courses' (Ray Hudson Feb 2014).

Funding arrangements 2.4

> 'We've not had to borrow … I don't think any of the development we've done in Stockton we've had to borrow against. And in terms of running costs it's much higher quality than a lot of [university buildings]'
> *Ray Hudson 2014*

Durham's original capital outlay at Stockton was very small, with the costs of the land and an initial building of 6000m² paid for by the UDC, with government funding finally approved by the Department of the Environment as part of its regeneration agenda in September 1991. Grant funding for subsequent construction has kept those capital costs minimal, along with low running costs due to the design of the buildings. However no funding was provided at the outset for the provision of residential accommodation, and since neither university was willing to put up the finance, opting for a private development approach which never materialized due to lack of interest, two temporary residential buildings provided by Stockton Borough Council were used for the first two years of the college's life until an agreement could be finalized.

The ongoing revenue funding for the delivery of the academic offer has been more of a problem, frustrated by the reluctance of the Funding Council (HEFCE as it became in 1992) to support the requested number of student places at the outset. Although it was accepted that the college would need a minimum of 1500 students by the end of its first three years for academic and financial viability, the initial funding allocation was for only 100 places, half of that requested. Furthermore, no funding was offered for equipment. This was not forthcoming until after the college opened, when, following its site visit, HEFCE finally offered £500,000 for equipment to be matched by the college. Sun Corporation also paid £200,000 for a computer laboratory, conditional on the purchase from them of a second lab for £160,000.

In his account of the college's early years, Hayward describes how the bareness of the site and lack of facilities (no library, labs, residential accommodation, dining room, or social facilities) when the college opened discouraged many students of the first intake – it did not even have its own phone line. He suggests that less than 85% continued into the second year, and many abandoned ship after the first semester. Although these deficits were slowly rectified, funding remained problematic. By 1996 the university knew that it had to grow physically in order to achieve a critical mass, and stepped up efforts to explore different options for the funding of new buildings on both sides of the river (North Shore and south bank), particularly research facilities. These included approaches to the European Regional Development Fund, HEFCE, the Sports and Millennium Lottery Funds, and various potential non-academic partners including Glaxo, Wellcome, Wolfson Trust and Landfill Tax Credits. In 1997, the Development Corporation pledged the land for a second building on the site, designed by Dennis Lister Architects and later named Ebsworth, which provided 7900m² of space. It brought the value of the university's assets at Stockton, including the freehold for the Holliday building purchased from the Development Corporation, to over £27m, of which it had itself found £10m. In March 1998 it received a final grant of £800,000 from the Development Corporation before its winding-up, for an International Research Centre for Regional Regeneration and Development Studies linked to Geography. In 2001, a third building, the Wolfson Research Institute, was constructed, financed by the Wolfson Foundation, ERDF, and HEFCE Medical Development at a cost of £14.5m, bringing the total amount of academic space to 13,996 sq m by 2005 (with 9,829 sq m of residential space).[4] However, long-term hopes to open a new research facility on the North Shore, combined with a public focus and sports facilities (mainly river-based, following the construction of the barrage on the Tees in 1995) in collaboration with the Development Corporation, came to nothing, despite the eventual commitment of £17m of EU funding for a new footbridge (the Infinity Bridge, completed 2009) connecting the two sides in 2001. A £150m Development Corporation proposal included a large research centre in Sports Science, then Biomedical Science, plus a 12,000 seat arena, ice pad, popular science centre, 600 student bedrooms and facilities, a 1000m² Centre of Sports Excellence, and indoor racquets facility, but never secured funding. The 4.3 acre site owned by the university on the North Shore remains empty today, although there is ongoing exploration of plans for residential development there, while the recent (2014) agreement of a £5m grant by the NHS will allow for the further extension of the Wolfson Institute on the south side.

Site planning, design and construction 2.5

The Teesdale site was selected from five possibilities – including Middlehaven, Poole Hospital, Polytechnic land, and Wynyard Hall. Hayward describes the hospital and Wynyard sites as very pleasant but with poor public transport access, while the polytechnic land lay south of Ormesby, outside the Teesside Development Corporation area, and Middlehaven would be a very expensive docklands redevelopment in Middlesborough. Despite a similar need for extensive remediation, Teesdale came with the attraction of UDC funding and strong support from Stockton Borough Council, notwithstanding some concerns that it could blight development in Middlesborough. The idea was that it would provide an anchor for the development of a new business park, sitting in a bend of the River Tees, which following the construction of a barrage in 1995 was transformed from tidal mud into clean water, and has been developed with a range of water-based sports facilities. It is served by bus and by rail from Thornaby train station on the line from Middlesbrough to Newcastle, Durham, Darlington and Carlisle, or the Transpennine route to Liverpool, and was a factor in the station's reconstruction in 2003. However most visitors, including university staff, arrive by car, and in 2002 70% of survey respondents at

43 firms and organisations located there 'saw the need for improvements, mainly to the infrastructure of the site, over half mentioning road access and nearly half car parking' (Tully and Townsend 2002:4).

College accommodation, constructed 1994: John Snow College, as it became in 2001. *Photo C. Melhuish 2014*

The original university building, now housing administration, dining and student facilities, was specified, designed by architects Halliday Meacham, and constructed at breakneck speed in 1991 to 1992. Hudson describes how, when it opened, 'all there was was the Holliday building and then industrial wasteland so I used to park the car, walk round the back, take my wellingtons out, put them on, and walk through mud, into Holliday, wellingtons off, shoes on….' (Ray Hudson 2014). But in 1994 and 1998, two halls of residence were constructed by Taylor Woodrow (designed by Fletcher Joseph Leeds, and Dennis Lister & Associates), providing accommodation for around 500 students – now insufficient to house even the first year. Others live in privately-rented housing on the Teesdale site: 'we call it toytown', comments David Fionda, Operations Director at Queen's Campus, [5] referencing the pastiche design and brick cladding of the residential development through which one walks en route from the station to the Holliday building.

Ebsworth is a super-flexible frame building containing the library, lecture theatres, and seminar rooms, but essentially adaptable to suit any purpose, designed by Dennis Lister & Associates. Shepherd Construction started work in January 1998, on the same day the land transfer was executed, and it was completed in time for the new academic year in October. The current Estates Strategy includes provision for its refurbishment and reconfiguration, along with plans for the extension of the Wolfson Research Institute to provide accommodation for a new GP training scheme in partnership with Stockton Borough Council, and new accommodation for Durham University Business School. Listers also prepared the drawings for this building prior to 2001, but the final design was by The Austin Company, and comprises high-quality, multi-functional laboratory space originally used by Environmental Science courses delivered by Geography, as well as by Anthropology for its applied research in Sleeping patterns (the Sleep Lab). Some of this lab space has been recently re-fitted to accommodate new Pharmacy courses, but some is also said to be significantly under-utilised.

In 1997 the old Working Men's Club near the station was converted into student facilities, and Thornaby Town Hall was also renovated in 2000 to provide accommodation for e-Tees Valley with IT courses developed by staff from the Centre for Lifelong Learning at UDSC (now Foundation Centre) working with the Department of Computer Science at Durham with funding from (European Social Fund/European Regional Development Fund) in partnership with Stockton Borough Council.

A high-quality sports building regularly hosts international competitions, for example badminton, as does the Watersports Centre, including a 1000m rowing course, built in 2001 on the river following the construction of the new barrage. These facilities attract students from the university's Durham colleges to Stockton, as well as large numbers of outside visitors, and so constitute an important component of the site contributing to its animation and the continuint development of its social life which will be supported by further plans for its improvement in the future. These include new landscaping, the removal of car-parking to the perimeter, and completion of Stevenson Junior Common Room, along with possible residential college development on Northshore (Estates Strategy 2011-2020 n.d:23). There is a general sense that the campus could now benefit from a new building of some architectural quality, with a significant reduction of space devoted to cars. In Hudson's words, 'From the point when that car park became the central feature of the University … what I would really like to do is put a nice iconic building there and push the car parking round the edge' (Ray Hudson 2014), reflecting the growing emphasis

by university estates departments on minimising vehicular traffic, and investing in landmark buildings which make a positive contribution to the environment and atmosphere of university sites.

Visions and narratives 3

> 'The focus should be on health including medicine, sport and environment as well as regeneration and the social and economic well-being of the region in helping to address social factors such as unemployment, poor housing, poverty and pollution'
> *John Hayward (Hayward n.d:79)*

The investment in Queen's Campus was always less focused on producing a strong architectural or physical image for the development and more about realising a set of decent facilities which would deliver on a clear narrative about engagement with the region and contribution to the social and economic wellbeing of its population. As Hayward notes, 'at that time unemployment on Teesside was almost twice the national average, the educational achievement of 16 year olds and the percentage of 18 year olds proceeding to tertiary education was amongst the lowest in the UK. The crime rate was the third highest and the proportion of single parents 45% above the national average' (Hayward n.d:79). This narrative has gradually been shaped through an academic vision which has emphasized the desirability of non-traditional courses with a specific appeal to local students, and accessibility through its entrance requirements and course structures. However it has also suffered from frequent changes to the academic programme over the 20 years of the campus's existence and a shortage of campus-based academic staff. This has been balanced by the particular commitment of a number of different individuals who have played a significant role in the development of the campus over time, and worked hard to promote a vision of what it should be both to the university and to the outside world.

The physical image 3.1

For many students, the attraction of Durham University lies as much in the physical and symbolic presence of its castle and the cathedral, evoking particular associations around the idea of a university rooted in centuries of history, as in its academic reputation. By contrast, Queen's Campus has been described by one staff member as 'stuck on the end of an industrial estate' made up of a disparate collection of relatively undistinguished buildings, and out of reach of a lively city centre. Due to the shortage of residential accommodation there is a lack of social life on the campus, with few organized societies and activities. Students are often disappointed to realize they will be based at Stockton rather than in Durham: 'Love Durham uni but hate Stockton Campus – is it worth going?' asks one potential applicant on a student forum (The Student Room 2014). On the other hand, the campus is compact, modern and well-equipped with high quality sports facilities, including white-water rafting on the Tees, which are also used extensively by students based in Durham. Furthermore, among the steadily increasing intake of overseas students (now 30% of the total), not all share the same place-based image of the university: '… a high proportion of Far Eastern students … they don't have this stereotype of Durham which is the castle and the Cathedral … and they're not there to party…' (Ray Hudson 2014). Thus they may be less concerned about accessibility to city centre attractions, while staff report they also show more interest in exploring the local rural hinterland more widely, and getting involved in other activities not directly related to the university. Hence the

Queen's Campus image may be perceived as more neutral, but also less bounded and inward-looking than that of Durham, offering greater freedom to explore student life in other ways.

The non-campus campus 3.2

The term was coined by John Hayward to describe a vision of the campus which extended beyond its own academic buildings and resources, and built up partnerships with other educational and non-academic organisations for the wider benefit of the region. It demonstrates the perceived dichotomy between the bounded nature of conventional campus typology and the outward-facing institutional agenda which drove its development at Stockton, and points to the steady shift of universities as institutions towards engagement and integration with urban and peri-urban contexts and communities. This was reiterated more recently by the Deputy Vice-Chancellor, underlining the particular opportunities offered by Queen's: 'the sort of things that we develop there – a lot of them depend on links with the partnerships with local organisations – there isn't the capacity to do that in Durham' (Ray Hudson 2014). Hayward identified the key elements of this vision as extended subject provision, innovation in teaching and learning with full-time and part-time options, and taught and research-based postgraduate degrees. He strove to encourage research focused on the college and region, and establish educational, industrial, cultural and sports-related partnerships located on sites adjacent to College in order to create a 'broadly-based' campus (Hayward n.d:69). He also saw it as vital to promote lifetime learning through Continuing Education and Continuing Vocational Education courses, working with Stockton Council and other agencies 'in order to establish the identity of College as a resource for the community' (Hayward n.d:69). The co-location in 2003 of the local Stockton and Billingham Further Education college on an adjacent site was seen as a key part of this strategy, and one that he regretted would not be developed further after the university's 2001 review of the campus.

'Durhamisation': streamlining the image, narrative 3.3

Hayward's departure heralded a decisive shift towards convergence and integration. The re-constitution of the college as a campus of the university represented a desire to project a unified image of the two sites as integral parts of the same institution, subject to the same policies. Queen's would do slightly different things – the Working Group's review recommended focusing on professional studies in Education, Business and Finance, Medicine and health-related studies, while the innovative multi-disciplinary Environmental Sciences and Geography of Cities degrees would be closed due to lack of demand. Furthermore, the entry tariff would be raised to Durham standards (now an AAA* offer), encouraging a shift towards a more traditionally constituted student body in line with the central institution. Today these developments are still regarded by some as an imposition of old-fashioned processes and structures which has acted as a brake on the more experimental and outward-facing agenda which underpinned the original conception of the new campus. But for others they have been crucial to the creation of a more consistent narrative about the university as a whole which supports rather than challenges its national and international academic profile.

Academic programming: local v national focus 3.4

> 'If something's going to be an integral part of the University it lacked lots of things – it lacked any research, college residential accommodation, student facilities more generally … it had a set of courses which had been established on the basis that they wouldn't compete with what was offered at either Institution … what it left us with was a set of courses that didn't fit very easily into our structure. They had different terms for example.'
> *Ray Hudson 2014*

At the beginning, the Stockton initiative was strongly driven by the idea that it would provide a forum for exploring new approaches to teaching and research, particularly with regard to the concept of multi-disciplinary teaching outside the faculty system – in which it was a fore-runner of trends now gathering impetus today. But frustration grew, as, increasingly, courses started at Stockton were closed or taken back to Durham: 'We create things then they move to Durham' comments one staff member.

The first new degrees in 'human sciences' (BA Human Sciences, BSc Environmental Sciences) combined social and natural sciences and a number of different departments, including Anthropology, Economics and Psychology. They were based on five themes, which underlined the application and relevance of the courses to social issues and problems: what makes humans human; society and human welfare; society and social values; ways of change; studying people. It was anticipated that these would appeal to a broader student base than the traditional disciplines offered at Durham, and also open up science to a wider range of applicants – again presaging current developments across the HE sector. In addition, a BA in European Studies was offered. In 1995 a Biomedical Sciences degree was established in partnership with the Development Corporation, and in 1996 Initial Teacher Training and Childhood Studies, while a range of additional new undergraduate subject areas were considered – Applied Psychology, Sports Science, Reactor Technology, Business Finance, Urban Studies and Performing Arts, Combined Literary Studies, and a History and Philosophy course focusing on the Industrial Revolution. In 2000 the BA in Education moved to Stockton from Durham, but the popular Childhood Studies degrees were dropped, reflecting the growing concern about the need to develop a research base at Stockton and a more national and international focus to the work. The college was re-framed as a 'national resource [ie as part of Durham University] deployed to make a regional contribution' (Hayward n.d:52), building on links with other universities in the EU, and the successful Sleep Lab officially opened in the Ebsworth building as a research lab of the Department of Anthropology and research centre in the Faculty of Social Sciences and Health. Efforts were stepped-up to secure funding and land for new facilities on site suitable for hosting and promoting multi-disciplinary research.

When the Wolfson Building opened in 2001, these ambitions were finally established. Today the Wolfson Research Institute for Health and Wellbeing hosts 90 staff and 30 researchers and has strong relationships with the NHS and local government through a number of different research centres.[6] In addition to health-focused and applied research, it has also hosted the International Research Centre for Regional Regeneration and Development Studies linked to Geography, and the Centre for Social Justice and Community Action, both with a focus on regional priorities.

However the original aspirations for development of collaborative and entrepreneurial research links with industry[7] have not materialized as hoped, and despite extensive negotiations early on with Kvaerner Process Technology (subsequently Davy), although Kvaerner did give £100,000 to the college to extend and equip a lab in readiness for the first intake in Biomedical Sciences in 1995. New research centres in land recovery and clean technology were considered as possible joint ventures, but never taken forward. Computing Science never found a home at Stockton, nor Engineering, since it already had well-equipped labs in Durham and the set-up costs for new facilities would have been too great, and Stockton has never developed as a hub for science and technology partnerships or spin-off companies.

The present and future 3.5

Instead, Stockton has retained a focus on health, wellbeing, and Part 1 medicine (the only course with permanent staff at Queen's), with a new course in Pharmacy recently established, along with a GP training scheme: 'We'll bottom out there with about a couple of thousand students … we'd quite like to develop some CPD because there's a lot of possibilities around this area between social care, what's coming out of the NHS and going into the Local Authorities … and around health itself … the Tees Valley is not quite as unhealthy as Glasgow but it's not far off' (Ray Hudson 2014). In addition, the Business School has developed a strong strategic view and courses in Business and Accountancy are particularly popular with overseas students. The campus also maintains an agenda around encouraging non-traditional students into higher education, with a Foundation course for widening access that achieves a 75% conversion rate to full degrees; and a progression scheme aimed at encouraging 14–15 year olds into higher education. As Ray Hudson points out, however, and just as at its original conception, the materialization of any vision and strong narrative of what the campus is and might be is driven very much by the leadership and commitment of the academic staff who take it on: 'it doesn't matter how good the structures are, what it comes down to is somebody who's prepared to get a grip and drive it'.

Translation into place 4

The translation of the Stockton vision into its physical location on the Teesdale site, on the south side of the river Tees, was guided by the preference of the Development Corporation and the support of Stockton Borough Council. The prospective development was perceived as key to unlocking the industrial decline of the region through a regeneration of the site which would provide the catalyst for economic and social benefits. 20 years later the presence of the university campus is also regarded as central to the ongoing £300m North Shore scheme by Tees Valley Regeneration, including offices, leisure facilities, housing and a hotel. This scheme capitalises on the realisation of the £17m Infinity Bridge (led by Expedition Engineering) in 2009, using EU and other funds leveraged by the presence of the university – although some would have preferred to see that funding invested in the campus itself. It is part of a wider development programme for Stockton's town centre which focuses on opening up connections between the centre and the river frontage to attract businesses, retail and associated visitors. It includes a new pedestrian area, Infinity View, with views of the eye-catching footbridge, and a permanent light installation along the river frontage which will also create a stronger sense of connection across the water to the Teesdale business park, university campus and housing.

Campus planning and typologies 4.1

> 'The plan of a university, like that of a city, should be a mechanism for enabling things to happen, for the enhancement of life'
> *Sir Peter Shepheard, Shepheard Epstein Hunter 1980* [8]

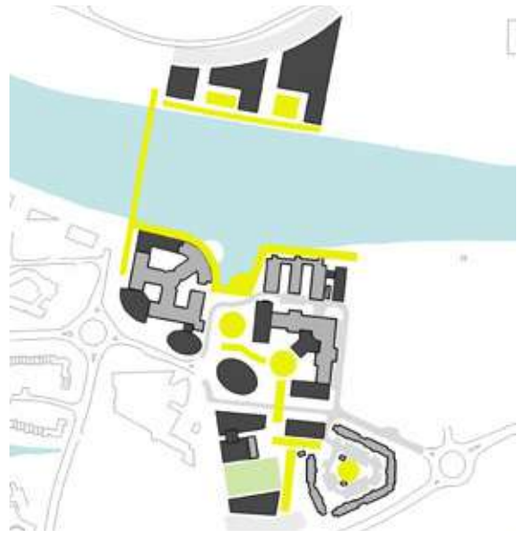
Queen's is not a stand-alone campus, nor is it integrated into an urban context, in contrast to Durham University itself. Stockton is a market town rather than an urban centre, and the site is essentially disconnected from its centre by the river, while also firmly bounded to the south and east by railway infrastructure. It was a contaminated, ex-industrial, brownfield site redeveloped as a business park under exceptional UDC powers, unconstrained by the local authority planning framework, which privileged car access and parking over other public realm considerations. The

buildings were erected piecemeal, without an overall masterplan, and the site as a whole has subsequently been criticised as lacking in both a 'cultural heart' and an efficient circulation system, although the waterfront location could provide an asset for development.

View of the campus from the bus leaving for Durham City. *Photo C.Melhuish 2014*

The vision for the Stockton campus was then developed more or less independently of any clear concept of campus typology, architectural design or urban planning framework, and materialised at breakneck speed in response to an emerging national regeneration framework and government reforms to the higher education system. The lack of integrated residential accommodation represented a major flaw from the start, having significant impacts both on student perceptions of the campus, and on the development of a sense of community supported by social facilities amongst the student population. Even after the construction of two residential halls was agreed, the disconnected location of what is now John Snow College on the west of the Teesdale site among other non-university buildings fragments the unity of the campus. The Shepheard Epstein Hunter masterplan of 2006 states that 'pedestrian access to the main academic buildings is hampered by a confused and tortuous arrangment of public pathways. Many apparently public routes are barred to the public. Likewise the route from the main station to the University is hardly an inviting or pedestrian-friendly one' (SEH masterplan, 2006:94).

The SEH masterplan underlines the need to improve pedestrian connections across the site between the university's buildings, and across the river – presaging the construction of the footbridge. It also proposes the removal of the traffic roundabout in front of the Holliday building and the creation of a new prominent entrance to the campus, along with the relocation of parking to the perimeter of the site in order to create a series of courtyards within it, providing protection from the weather: 'there is a need to create a sense of place and enclosure' (SEH masterplan 2006:8) It further emphasises the importance of improved connections back to the town centre from the new bridge, since the pedestrian route along the south bank is again 'tortuous'. All of these measures could help to reinforce an agenda around engagement with local communities and neighbours, re-imaging the campus as an integrated extension of the town.



Proposals for new pedestrian connections, courtyard, and vista to NorthShore, Shepheard Epstein Hunter masterplan 2006. *Image courtesy Shepheard Epstein Hunter*

As part of this process, the waterfront itself has the potential to become a valuable social asset. Waterfronts have become central to design policies and practices which towns and cities internationally are using to regenerate their economic and social life. At Stockton, a major step forward in the reinvention of the river Tees as a site of leisure and associated social activity was the construction of the barrage in 1995 which transformed tidal mud into clean water and presented the catalyst for the construction of new river-based sports facilities including the Whitewater-rafting centre on the North Shore. However the academic buildings do not make the most of their riverside frontage and so far the university has not taken up the opportunity to expand to the north shore and integrate the river as a dynamic part of its own campus development.

Economic impacts of the development 4.2

> 'When we started down there – September 1992 – all there was was the Holliday building and then industrial wasteland.... had you been here 20 years ago you'd realise just how much both the University's development, but also the development around it, that was triggered by it, has come on. Yeah okay, there are empty office blocks on Teesdale – there are empty office blocks everywhere. They're building housing on the other side, which at one stage you just couldn't have imagined'
> *Ray Hudson 2014*

The integration of the campus into the local area and the region has rested heavily on economic outcomes generated by its presence. And by several accounts, the area has undergone a positive transformation in the time since it first opened to students. In terms of direct local employment it created 100–130 new academic posts and 75 supporting posts (45% part-time) – among the current staff the Operations Director comes from Middlesbrough and was formerly an employee of British Steel, and the Campus Services Manager has worked at Queen's since it opened.

But it also, as reported by its own International Centre for Regional Regeneration and Development Studies in 2002,[9] kickstarted the growth of the business park with which it is co-located. The research found that other businesses were attracted to the site by its status and location, as well as low property prices on arrival and a pool of skilled labour and trainable staff at advantageous wage levels (especially women and young people). It was seen as the premier office park of the Tees Valley, with the largest employers having HQs in London or SE, but possibly at the expense of other Tees Valley office centres eg central Stockton and Middlesbrough. Most of the facilities opened were call centres for those companies, with construction accelerating between 1997 and 2001, and 4,500 people employed by 2002. Five of the employers surveyed had 400 or more staff (including the University) and 18 under ten. 60% of employees overall were women, reflecting the nature of the work as data inputters/telephonists and administrators, with a minority of professional and technical occupations on offer. The report found that it had brought an income of £47.3m to the sub-region.

In the view of the Local Enterprise Partnership, Tees Valley Unlimited, in 2014, the investments made by both Durham and Teesside universities in research and development facilities and business schools means they are vital partners in the continuing economic development of the region, with a focus on the knowledge economy.[10] Queen's in particular is central to attracting investment from large healthcare companies, especially in telecare and telehealth, which are drawn to the area by the skills and access to research facilities which it offers. A spokesman emphasises that they 'would like to see it evolving over next 10 years to bring more reputation to area' – and also, 'more international students', who are seen as a valuable resource. Even if then, as a staff member suggests, 'Durham doesn't know

what to do with Queens', it appears that the local economic agencies have a fairly clear idea of the contribution it can make to the wider life of the region.

Student contribution to local life and the economy 4.3

As noted by Hayward in his account of the campus's first 10 years, 2000 students graduated in that time, many of whom were already local or from the North-East (45%) and would have remained in the region as graduate employees, as well as taking up employment in Durham. The impact of this would be not only to inject an infusion of new skills into the local economy (and currently Queen's is building up a postgraduate community around Business Studies as well as health), but also to contribute to an increased sense of regional self-esteem through involvement with higher education (Hayward n.d). The student population itself – which by 2002 was larger than that of any single Durham College, and remains steady at 2000 – has also had its own impact on the area, through spending on accommodation and services, although no evaluation has been carried out of the multiplier effect. The demand for private rental accommodation remains high, due to the continuing shortage of university provision (around 500 places) and relatively under-developed student life on campus – despite improvements in pastoral care structures and social amenities – and it is suggested that in future this demand may well increase due to the relocation of students from Durham city in search of cheaper accommodation further afield.

Social impacts 4.4

> 'Students come from mixed backgrounds, and contain, by the standards of British academia, a relatively high proportion of mature, working-class people who are the first in their family to go to university'
> *(Coleman and Simpson 1999:4)*[11]

The impact of Stockton on the wider community has stemmed as much from the make-up of its student body as from any other factor. At the outset, its widening access agenda was innovative, with entry assessed by 'evidence of life experience and commitment rather than academic qualifications' (Coleman and Simpson 1999:4), and in fact not all students stayed the course: Durham anthropologists Coleman and Simpson refer to one student 'characterizing both the university and the course as building a "prison" around him ... [he] consistently maintained that he felt that he was being forced into a middle-class straight-jacket by being required to adopt a language, an attitude and a set of assumptions that were alien both to who he was and the person he wished to become' (Coleman and Simpson 1999: 6). Over time, entry standards have increasingly been aligned with the rest of the university, but Stockton continues to promote recruitment of non-traditional students from the local area alongside its internationalisation agenda. The proportion of students who live locally is promoted through the university's Foundation and progression programmes, even though links with the local FE college have not been developed to the extent that was originally envisaged. In addition, partnerships with the NHS on schemes such as GP training and CPD in social care make a direct input to healthcare frameworks in the area, addressing issues around the place-based nature of national health inequalities highlighted by Hudson in a Demos publication also supported by the Wolfson Research Institute for Health and Wellbeing (Hudson 2013).

As Hudson notes in his concluding chapter, national geographies of economic success correlate with those of population health and wellbeing, and 'in deindustrialised towns and cities and former mono-industrial places ... the legacies of occupationaly specific illnesses and diseases ... and the general legacy of hard physical work in demanding and often dangerous workplace environments combined with the effects of chronic worklessness on the mental health of those who had lost

their jobs. The cumulative effects of poverty and multiple deprivation … wreaked havoc on the health and wellbeing of people and place' (Hudson 2013:69). Taking a lead in addressing these issues, the campus has developed active collaborative partnerships with community groups, for example Thrive, a community project based in Thornaby-on-Tees which is a partner with Church Action on Poverty. From June 2005, the Centre for Social Justice and Community Action based in the Wolfson Institute, and supported by Beacon North East, has been working with Thrive to do research on experiences of household poverty, isolation and mental health in Teesside, deploying some of the university's Part 1 medical students both as household interviewers and mentors on placements with Thrive, and as analysts of the data collected.[12] The University also provided a research consultant to design stage two of the research, funded by grants from the Wolfson Institute, alongside an action resesarcher funded by Beacon NE to work with Thrive. This was followed by a new bid for funding to the Northern Rock Foundation by the university and Thrive for action research on debt on Teesside, demonstrating the mutual benefits that can potentially be derived from a university presence in relation to goals around social regeneration. In this case, the partnership has offered the opportunity for a mutual exchange of learning and resources, as well as enhanced profile on both sides by association with the other – a prestigious university on the one hand, having both research expertise, funds, and academic knowledge at its disposal; and an embedded community organisation with in-depth knowledge of local challenges, social dynamics, and politics, as well as a wide range of social contacts, on the other.

Key issues and learning points

5

The key drivers for the initiative were not so much a need for space, but government-led regeneration policy and funding cuts to universities linked to requirements for restructuring and widening access. However there was also an interest within the university in developing interdisciplinary academic programmes and engaging with local community needs especially related to health and wellbeing, business, and the environment.

Funding the University relied almost entirely on external funding and partnerships, especially with the local Urban Development Corporation, which obviated the need for capital borrowing, but made it more difficult to plan for the ongoing running costs and future development of the campus, and slowed the development of critical residential and academic mass.

Location the site was regarded as remote from the university's administrative and academic heart, although within easy reach by car. It was also perceived as poorly connected to Stockton town centre, and did not make the most of its waterfront location at the outset. Few academics were based there, and some students expressed negative perceptions of the site compared to Durham City.

Masterplanning and design the campus was not masterplanned, and the buildings were realised by a number of different architectural firms and construction companies over time. It is co-located with a business park and private residential development, and the public realm is dominated by car-parking. The Infinity Bridge provided a new 'landmark' for the site but has been slow to generate wider public realm improvements, and pedestrian connectivity is weak.

Academic programming there is ongoing exploration of the kind of academic programme best suited to this site, which specifically relates to surrounding

conditions and communities, particularly through courses related to health and wellbeing, business studies and education, as well as a foundation centre. Programming over the years has been affected by a sense of instability due to courses being closed or taken back to Durham because of lack of demand and funding, and issues around the convergence / autonomy of the campus in relation to the university in Durham City.

Non-academic engagement partnerships with industry were part of the original vision but did not materialise as hoped due to lack of drive from the university and conflicts with the later centralisation agenda, although Davy Process Technology runs a laboratory facility adjacent to the site. But some community partnerships have emerged, eg through the university's Centre for Social Justice and Community Action, and the LEP recognises the university as an important attractor for high-profile companies to come to the area – access to skills, research facilities, and students staying on to work in area has been significant positive impact.

Specific assets the buildings provide flexible teaching and research space, and generate relatively low running costs compared to Durham's older stock. The provision of high quality sports facilities, also taking advantage of the waterfront location, has been a positive asset attracting students and outside visitors to the site, as well as enhancing the profile of the campus through international events. Lower housing costs in the area are also likely to be a draw in future for university students and staff priced out of Durham City.

Notes

1 Ray Hudson, Deputy Vice Chancellor, interview by Clare Melhuish at University of Durham, February 2014 (transcript). All further attributed quotations as cited, unless otherwise stated

2 This account by John Hayward is available as Occasional paper No. 3 from the Oxford Centre for Higher Education Policy Studies: http://oxcheps.new.ox.ac.uk/MainSite%20pages/Resources/OxCHEPS_OP3.pdf

3 *Higher education: report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins 1961–63,* Cmnd. 2154, London: HMSO. The Robbins Report recommended the expansion of higher education including the provision for all College of Advanced Technology to assume the status of universities

4 See University of Durham: Development Framework and Master Plan, Shepheard Epstein Hunter 2006, 23

5 David Fionda, Bursar and Operations Director, Queen's Campus, interview by Clare Melhuish at Queen's Campus, Stockton-on-Tees, February 2014

6 For more details see https://www.dur.ac.uk/wolfson.institute/test/centres.units

7 Aspirations framed in the context of the government's White Paper, *Realising our Potential: a strategy for science, engineering and technology,* of May 1993. London: HMSO

8 As quoted in *University of Durham: Development Framework and Masterplan,* by Shepheard Epstein Hunter 2006, 1

9 Janet Tully and Alan Townsend, *Teesdale Business Park Survey* (Durham: University of Durham, 2002)

10 Tees Valley Unlimited, April 2014: Strategic Economic Plan, https://www.teesvalleyunlimited.gov.uk/media/234704/sep.pdf

11 Simon Coleman was formerly Reader in Anthropology at Durham University, and Bob Simpson is currently Professor in the Department of Anthropology

12 https://www.dur.ac.uk/beacon/social-justice/researchprojects/debt_on_teesside

References cited

Coleman, Simon and Bob Simpson
1999 'Unintended consequences? Anthropology, pedagogy and personhood', in *Anthropology Today* 15:6, 3–6

Durham University
N.d About Durham University: our history and values. https://www.dur.ac.uk/about/shaped/, last accessed July 10th, 2015

Durham University
N.d Estates Strategy 2011–2020. https://www.dur.ac.uk/resources/about/policies/EstatesStrategy2011-2020.pdf

Hayward, John
N.d *Breaking the mould: the surprising story of Stockton. The first ten years of the University of Durham's Stockton Campus,* OxCHEPS Occasional paper No. 3. Oxford: Oxford Centre for Higher Education Policy Studies, http://oxcheps.new.ox.ac.uk/MainSite%20pages/Resources/OxCHEPS_OP3.pdf

Hudson, Ray
2013 'Conclusion: divided kingdom? Health, the regions and austerity economics', in Wood, C., ed, *Health in Austerity*. London: Demos

Shepheard Epstein Hunter
2006 University of Durham: development framework and masterplan, http://www.seh.co.uk/projects/durham-university-masterplan

The Student Room
2014 http://www.thestudentroom.co.uk, last accessed July 10th 2015

Tully, Janet and Alan Townsend
2002 *Teesdale Business Park Survey*. International Centre for Regional Regeneration and Development Studies on behalf of Stockton on Tees Borough council and Teesdale Business Association. Durham: University of Durham

CASE STUDY 2

UNIVERSITY OF CAMBRIDGE: NORTH WEST CAMBRIDGE DEVELOPMENT

A new urban district on former green belt land

Contents

Introduction

1 Historical and policy contexts
1.1 Collegiate v. campus organisation
1.2 Growth of the postdoctoral research community
1.3 The need to attract and retain staff
1.4 The expansion of research facilities

2 Structures and processes
2.1 Funding: raising a bond
2.2 Project set-up: the Syndicate
2.3 Planning process: long-term engagement and partnership
2.4 Community engagement
2.5 Engagement through public art
2.6 Appointment and roles of masterplanners and architects
2.7 Design and planning process

3 Visions and narratives
3.1 University and city – 'mixed and balanced'
3.2 Design vision
3.3 Sustainability agenda and design code
3.4 Future flexibility for university estate
3.5 Place-making and naming

4 Translation into place
4.1 Site context
4.2 Phased construction process
4.3 Community infrastructure and social impacts
4.4 Future growth and the urban economy

5 Key issues and learning points

Summary

1

1. North West Cambridge development: aerial view of site, with boundary marked in red
2. CGI model of whole site development, viewed from south
3. CGI model of phase 1 development, viewed from southeast. *Images courtesy University of Cambridge/AECOM*

2

3

This case study demonstrates how universities can be proactive in engaging with local planning authorities to bring forward new development which delivers sustainable housing provision and social infrastructure within the context of an urban extension. The 150ha North West development forms part of an expansion plan for Cambridge designed to accommodate its growing economy and population, particularly in the science and technology sector. The University is recognized as central to that economy, as a leading global research institution, but its very success has highlighted the need to address issues around affordable housing and transport. Construction commenced in 2014 and the first phase, comprising university and market housing and a community centre, is due for completion by Spring 2017. Later phases will deliver additional housing and potentially academic research and translation facilities. The project is supported by a masterplan developed by Aecom, and will feature a range of work by different architects working together in teams across a number of sites. Design quality has been central to the development agenda, and is underpinned by Code 5 for Sustainable Homes and the BREEAM Excellent standard, in a bid to create a national flagship for sustainable development.

Introduction

'An urban extension with a proper sense of community'
Jonathan Nicholls, Registrary, 2014[1]

The University of Cambridge's North West Cambridge development, currently in the early stages of site preparation and construction, is not a typical urban regeneration scenario. Controversially it involved taking land out of the Green Belt, designated since the 1950s, but the university has successfully argued that its presence and continued international competitiveness is essential not only to its own future, but also to the city and region's economic health through the coming decades. The new development, located on a 150-hectare area of university farmland between the M11, Madingley Road and Huntingdon Road, will provide some additional academic and research space, but primarily much-needed affordable housing for university staff and students. This is recognised as essential to the university's ability to attract and recruit the best from around the world. It will also offer housing on the open market which has been in desperately short supply as a result of the 'Cambridge phenomenon' (the boom in science and technology-based industries based in the city), along with new social amenities. It has therefore been welcomed by the city council as an opportunity to promote a 'flagship development' which might raise the bar for other developers, especially in relation to sustainability criteria. As a local planning officer explains, 'universities are seen as being able to push boundaries' and 'there's motivation on both sides to have something that looks good in the long term' (planning officer 2014).[2]

Historical and policy contexts 1

'Colleges provide an environment where academics live and work closely together, which is important to inspire and enhance creative thinking. The University wants to ensure that this productive academic environment is replicated at North West Cambridge, whilst being conscious of the need to create a wider community amongst all of the residents and workers on the site'
Working with You (University of Cambridge 2011:18)

The North West Cambridge project has necessitated a shift of perspective on the historic college-based structure of the University's institutional and social organisation which is not completely suited to the direction of future growth focused on research and translation activity and increasing numbers of research staff in the higher education sector. It demonstrates an interesting endeavour to balance that model with a more explicitly urban approach which accommodates both housing and academic activity within a university-orientated environment, and avoids the pitfalls of the segregated campus-style approach to university growth which have been manifested, and criticised, at other sites such as West Cambridge (masterplan 1995) and, even earlier, in the Cambridge Science Park (1970).

Collegiate v. campus organisation 1.1

During its eight centuries in existence, the University of Cambridge has continuously developed a collegiate model of university teaching and living, dispersed through the city. Over time, new colleges have been created through particular endowments and taken root at increasing distances from the city centre where the oldest are concentrated, in more suburban residential areas; while other colleges have developed additional residential annexes in various locations to house their students, particularly at postgraduate level. In tandem with that process, faculty buildings

have developed on particular concentrated sites distributed around the city, and in recent years the University has taken steps to utilise its extensive land holdings in order to add to the capacity of those sites with significant new ones, notably at West Cambridge, and the old Addenbrookes Hospital site to the south of the city.

The net result of these accretive development processes over time has been a thorough physical intermixing of university and city amenities, in contrast to the campus model of higher education provision. Yet at the same time town and gown have not been exactly integrated, and tensions have persisted in the historical relationship between the two – as noted by the *Cambridge Evening News:* 'From mutilations to murder, the university's 799-year history is marked by a whole host of riots and atrocities between the "Town" and the scholars, or "Gown"' (Brigham 2008). The collegiate model of courtyard development, secluded from the street and largely closed to public access, has ensured a significant degree of introversion and self-enclosure on the part of the university, which has also helped to shore up its perceived and real privileges.

The challenge of the North West Cambridge development has then been to balance the advantages associated with a 'collegiate atmosphere' for academic work and achievement 'at the highest international levels of excellence' (University of Cambridge 2007:11), with a desire for increased integration, diffusion and societal impact. In the words of Professor Marcial Echenique from the university's Department of Architecture, also an international planning consultant and early advisor on the North West Cambridge site: 'the best thing about Cambridge is the way that the University is integrated into the normal fabric of the city and the public can dip in and out, [and] it's important to retain that' (Marcial Echenique 2013).[3]

Growth of the postdoctoral research community 1.2

However it also needs to address a phenomenon specific to the contemporary development of higher education, and that is the significant growth in postdoctoral research staff on temporary contracts, who have historically been rarely affiliated to or accommodated by the colleges – unlike established teaching staff and students.

The latest estates strategy projection for growth (University of Cambridge 2007:9) in undergraduate numbers is 0.5% a year, while postgraduate students and 'unestablished staff' will increase by 2.0% a year. Research staff are crucial to the University's development of its research, translation and impact activities in the future, and yet its inability to offer housing and social infrastructure provision of a high quality has become a significant problem in attracting and retaining such staff. There are many who feel that the postdoctoral community has been neglected and indeed barely recognised in the life of the University, and point out that it is high time that this issue was addressed, including some kind of pastoral framework. Since a majority of postdoctoral researchers come from overseas, they represent a significant and relatively rootless population of largely single people who may struggle to establish a social life in Cambridge outside the framework of student and staff life based around the colleges. Furthermore, since research staff are predominantly employed on fixed-term contracts, they are exposed to financial instability that prevents participation in the housing market and significantly limits their options in terms of securing appropriate accommodation within a reasonable distance of their work-place.

The need to attract and retain staff 1.3

The North West Cambridge development is then conceived as a direct response to this particular issue in relation to the university's continuing academic reputation and status in the future. 'To hold its competitive position against Stanford, Yale, Harvard, Cambridge needs to provide housing for postdoctoral staff ... [along with] department space of various types, and a commercial research base which is related to university

activity' (masterplanner 2013).[4]

However the city council and the public have also made it clear that they do not wish to see an introverted collegiate model of university development rolled out across the 150 ha site on the edge of the city, arguing that – paradoxically – it would produce a campus-like, institutional landscape from which the public would feel excluded: 'you must integrate with the existing community – we don't want this to become a university ghetto' (University of Cambridge 2011). For the time being then, the collegiate model of higher education provision which Cambridge exemplifies – incorporating residential and teaching accommodation across a network of physical locations – is not being implemented at the site; while the more ephemeral idea of a 'collegiate atmosphere' is one which the project team has striven to realise through a specific approach to masterplanning and design of the proposed facilities and housing to a high quality.

The expansion of research and translation facilities 1.4

The University owns a number of other sites around Cambridge which are suitable for research growth, and this is not the immediate priority at the North West site. The outline provision of 100,000 sq m of research space includes a commitment to incorporating academic and commercial space at a ratio of 60:40, but is so far unspecified as to use or date of construction. The University Green Paper of 2010 clearly states that: 'commercial research space will only be built when there is demand' (Cambridge University Reporter 2010: 110–111) However, locations have been identified for such uses towards the edge of the site in close proximity to the M11, which would be particularly appropriate for the development of more commercial applications should such opportunities for collaboration with industry arise. North West Cambridge was the only possible opportunity for housing growth, and is specifically intended not to be a campus-style development like West Cambridge, the Science Park or the new Cambridge Biomedical Campus on the Addenbrookes hospital site to the south, but rather a mixed-use scheme with an emphasis on residential. However, the initiative will also offer an opportunity to develop a relationship with the research-focused West Cambridge site through its social infrastructure, as well as being instrumental in the development of a more strategic and interconnected approach to the university's other research sites, especially through the design of new transport links between them.

Structures and processes 2

> 'It has evolved robust governance structures to hold the responsibility of a major capital project, be accountable both up and down, and yet be able to act autonomously and effectively in the manner of an executive board … If you embark on a major capital project you need an effective client. There are lots of important constituencies and stakeholders but having an effective client is key or you won't get anywhere'
> *Masterplanner 2013*

The University has implemented a number of new approaches in its development of the North West Cambridge site, generated by recognition of the need for a professionalisation of its spatial development processes, including efficient and transparent systems for management and accountability, as well as the import of specific expertise in the areas of masterplanning and architectural design to ensure high quality. The decision to ring-fence the project and appoint a small dedicated management team to run it, removing it from the direct oversight of the University's Estates department, was influenced by the University Registrary Jonathan Nicholls,

based on his past expertise and experience as Registrar at Warwick University through the 1990s. It may be seen as indicative of the trend towards universities taking on roles as property developers alongside, and in association with, the delivery of higher education, and evolving increasingly specialised and professional systems to optimise the performance of that function and realisation of land value.

Funding: raising a bond 2.1

The University's Green Paper of 2010 detailed the anticipated cost, a financial appraisal, and potential risks of the North West project, underlining the need for viability and ringfencing to protect the University from exposure. It suggested that joint venture arrangements with appropriate partners might be developed for specific elements or phases of the project, but stressed that there would be no advantage in transferring the estate out of the direct ownership of the University to a separate corporate vehicle (Cambridge University Reporter 2010).

The total cost of the project, including the private housing, is projected to be £1bn, spread over 15–20 years, and split 40:60 between the University and private developers, 'on the assumption that the University would develop the infrastructure, the University housing, the local centre, and be responsible for the associated s106 payments' (Cambridge University Reporter 2010:17). The total development expenditure by the University is thus estimated at £400m plus. This excludes the value of the land itself, which, as the former University Farm, already lies within its ownership. In order to capitalise the project, the University took advantage of its AAA credit rating to sell a bond to investors (mainly pension funds), producing a working capital fund of £350m, of which a proportion is loaned to the project for the first phase of development on a 40-year repayment basis at 4.25% interest, and sales (400 serviced sites for market housing) and rental income will be used to repay the loan. From the masterplanner's perspective, this capitalisation process has been very important in terms of enabling the implementation of a coherent, strategic approach to planning and design, avoiding the pitfalls associated with a lack of capital base for infrastructure at the outset – as at West Cambridge, where this was manifested in 'very uneven development' (masterplanner 2013) that has been the subject of persistent criticism since: 'If we're to achieve the degree of ambition [we want] in quality objectives it needs to be capitalized properly, it can't be done on a piecemeal basis – which is how universities usually do things' (masterplanner 2013).

For the Registrary, it was important that 'the university should take advantage of the market' and demonstrate 'commercial edge' (Jonathan Nicholls 2013) while ensuring that the project was also entirely ring-fenced. On the other hand, the bond issue also prompted concern among some members of the university. It was reported that, amongst others, 'Ross Anderson, professor of security engineering at Cambridge, was the sole member of the institution's council to dissent from the original decision to seek external financing for the project. He said that the proposal "was a child of the now-vanished property boom. I took the view that we'd be better off keeping the land, as the basis for [the] development of new departments and institutes" over the next 50 years' (Morgan 2012). With a view to mitigating the potential impacts of a collapse in the property market, the Green Paper stresses that risk on developments is to be transferred to others 'wherever feasible and in accordance with the University's policies, particularly market housing' (Cambridge University Reporter 2010:19). However, in comments on the Green Paper, members of a local residents' association (NAFRA) also remind the university that the land 'has not been taken out of the Green Belt to solve the University financial woes by creating a vast shopping mall, or high-rise science park, or high-rise housing project, or whatever' – but rather 'to provide for [its] housing, academic and research facility needs', above and beyond any motives of financial profit.[5]

In terms of meeting its own needs, the University anticipates that a further

source of funding in the future may be buy-in from the colleges to postgraduate student housing for their own members; while additional 'donation possibilities' could also at some point result in the foundation of a new college foundation on the site. But for the present, it has made the bold decision to accelerate the funding and design development for the first phase of the project, amounting to one-third of the total scheme, in order to drive the whole initiative forward and enable the occupation of the site at the earliest opportunity.

Project set-up: the Syndicate 2.2

> 'If the North West Cambridge site is developed, it will take more than a decade for all phases to be completed. It is also likely that the University will have a perpetual financial and ownership interest in the developed site. The duties arising from this, as well as those from the development phases, would best be discharged, not through a committee, but through a commercially focused Syndicate'
> *Green Paper (Cambridge University Reporter 2010:17)*

Notwithstanding the acceleration of the first phase of the development, the North West project has a long-term time-frame, including a long lead-in. The university started thinking about the project during the late 1990s, taking the view that major decisions would require an 'extensive warming-up process' (Deputy Project Director 2013)[6] in order to maximise the scope for consensus supported by 'proper reporting protocols and a share information base' (Registrary 2013). Initially the project was run from the Estates Management and Building Services department as a policy initiative, until the decision was taken to set up a Syndicate, with delegated responsibilities from the University Council, 'which will operate at arm's length from all parties including the University itself and with a balanced membership reflecting internal and external perspectives and skills' (Cambridge University Reporter 2010:19). That Syndicate subsequently delegated a small executive development team in 2009, to operate as a special project unit apart from the Estates department, and act as client for the masterplanner and all the architects appointed to the masterplan.

According to the Registrary, it was considered that the company structure would 'give confidence to academic colleagues' (Jonathan Nicholls 2013), with a clear mechanism for accountability to the University including regular financial reports. The University is governed by two bodies, Regent House, comprising more than 3,800 members with a range of interests across the University, and a University Council, an elected group of University officials and departmental representatives, which delegates some responsibilities to particular syndicates established to deal with specific areas of activity – eg Cambridge University Press, and the West and North West Cambridge syndicate. Decision-making processes are distributed across these bodies, with syndicates having autonomy except in certain matters which need to be referred either to the Council, the Finance Committee, or to Regent House for a balloted vote – as in the case of the decision to raise a bond and proceed with Phase 1 of the North West development.

The Syndicates in turn include University members, some of whom also sit on the Council or Finance Committee, and external members with relevant experience – in this case, development expertise: 'the Syndicate needs to balance representing the University's interests with making a survival Development Project' (Deputy Project Director 2013). The Registrary and Pro-Vice Chancellor Jeremy Sanders both sit on the North West Syndicate, which meets monthly and returns verbal reports to Council. It is further advised by three panels, for Quality (similar to Design and Review), Sustainability, and Public Art, meeting at different intervals. Each panel includes a Syndicate representative, so at all levels of the project structure there is overlap: 'the nature of discussions within the University are not dissimilar to many multi-headed

agencies or organisations' (Deputy Project Director 2013).

The Development Team is a stand-alone team located near the project site and has no direct reporting relationship except to the Syndicate, as executive board, and to Roger Taylor, who was appointed Development Director at the start, but has since become Estates Director in charge of the University's overall estates strategy, and from 2013 has been supported by Heather Topel as Deputy Project Director with day-to-day responsibility for running the project. Taylor brought with him experience in mixed-use development for Taylor Wimpey across the country, while Topel was previously Director of the Planning team at AECOM, coordinating the planning application operation across all the consultancies, before moving client-side.

As she says, the university team started small with two people growing to three or four when the architects started working on the project in 2012. Her role is 'project oversight on behalf of the University, dealing with all of the University interface issues and governance, all of the stakeholder management [including] University, public, local authorities, community groups. I look after the planning issues from a client perspective, all the town planning detail and some special projects like the school proposals, community centre joint venture…' (Deputy Project Director 2013). By 2014 there were 12 people on the team, including a Commercial Director, Construction and Design Director, and a series of Design Managers with responsibility for design details as well as more strategic issues.

The University's adoption of a professional, small-scale company structure for the project, answerable to but ringfenced from the University, is said to have provided reassurance to colleagues and observers, while the different elements of the structure are held together both formally and informally by overlapping individual representation – including Topel's own transfer from consultant to client side, embedding imported planning expertise within the organisation. This has been crucial to the smooth running of the process: as her former colleague at AECOM, Jonathan Rose, points out, 'a major [university] client should have a way of holding those relationships institutionally' (masterplanner 2013).

Planning process: long-term engagement and partnership 2.3

> 'There's a very rigorous planning process, a very rigorous process all-in-all; in terms of presenting to various University bodies and to the University's Design Panel, and then to the planners'
> *Architect 2014*[7]

The University has from the outset emphasised the nature of the North West project as a partnership with the local authorities. On both sides there were clear outcomes that were to be achieved: the University wanted to build a 'flagship development' to 'show off', the City Council wanted 'exemplary development' (planning officer 2014), and between them they agreed to commit to an 'elevated level of sustainability' as a framework for achieving those objectives.

As a planning officer explained, the University is 'not a cut and run developer' in the public perception, and therefore it's 'not surprising that people are a bit complacent about the scheme – because it's the University' (planning officer 2014). On the other hand, the University is clear about the need to engage actively with the city planning authorities and district council in order to 'maintain a planning policy background at the regional, county and district level, which is favourable to the direct interests of the University (predominantly in Cambridge or very close to Cambridge) [and] ensuring that the planning authority understands the local, national and international roles of the University' (University of Cambridge 2007:5). This stance underpins the extensive long-term engagement with the authorities which has paved the way for the North West project and made it possible, dating back to the Cambridge Futures initiative of 1999.[8]

'People don't realise how much work was done through Cambridge Futures to pave the way for the development to take place with no objections' (Marcial Echenique 2013): this policy initiative led by a research team based in the University's Department of Architecture (led by Professor Echenique), in partnership with businesses and the council, was set up to explore future planning options for the city in consultation with the public, based on the principle that 'universities have a key role to play in helping to develop and articulate responses to the highly complex planning problems that face contemporary society' (CABE Archive 2011). A number of alternative models were presented for stasis or growth, to show 'the impact of alternative strategies on issues such as the costs of production and housing, social mix and traffic congestion' (CABE Archive 2011). All of these had become significant problems due to the constraints on growth imposed by the 1950s Green Belt designation and the explosion of growth in the science and technology sector (the 'Cambridge Phenomenon') which, as reported in the Cambridge City Council Urban Capacity Study of 1998, had produced a significant increase in the working population and an influx of 40,000 people into the city each day from the surrounding areas (Platt 2015). The public response favoured the case for expansion, allowing the Cambridgeshire and Peterborough Structure Plan to be changed at a Public Inquiry in 2003 so that the green belt could be released through a system of 'green swaps', or 'green wedges' extending from the periphery into the centre of the city. The plan established a need for 8,900 new homes to be constructed in the built-up area of the city, with 8,000 new homes to be built on the edge, and designated the site between Madingley and Huntingdon Roads as a Strategic Employment Location to be reserved for predominantly University-related uses when a clear need could be demonstrated, with the requirement that a masterplan be prepared for its development.

At the same time, the Government's Sustainable Communities Plan (2003) set out the need to address housing supply and affordability in the south-east, especially in relation to recruitment and retention of staff around Cambridge, identifying London-Stansted-Cambridge-Peterborough as a Growth Corridor. These significant policy shifts provide the context for the University's efforts to bring its University Farm site on the edge of the city out of the Green Belt, and bring forward development on it. In 2001 EDAW was appointed to draw up a planning feasibility study that would articulate the University's need for housing and research growth, and associated uses to cross-subsidise the development.

The work was complicated by the fact that half the site lay under the jurisdiction of the City of Cambridge, and half under that of South Cambridgeshire District Council. However it helped to spur the formation of a new joint development control committee (JDCC) to oversee a decision-making process that also encompassed measures for the growth of the transport network, new social infrastructure and retail provision, and the establishment of the principle of 'mixed and balanced' communities at the site, as well as on other developments in the city fringes.

In 2006, the City Council identified new sites on the edge of the Local Plan where new housing developments could go, including the North West site, agreed on the basis of 'university need'. In 2009 a new Area Action Plan was produced collaboratively between the planning authorities and the University's consultants (AECOM which had by then absorbed EDAW) presenting evidence on behalf of the University, to establish the detail of how the land would be developed, including a requirement for 50% housing for sale on the open market. AECOM was appointed the same year as masterplanner for the site through a competitive tender.

The City Council points out that they had already 'learnt lessons from other sites elsewhere' (council spokesman) and did not need the University to lead the way; rather it was a collaborative approach which developed in parallel with the plans for a neighbouring site to the West, Darwin Green, which had also been taken out of the green belt for housing development led by David Wilson Homes, subsequently

replaced by Barratts. However, there is a clear sense that a differential quality of development on the two sites is anticipated: in the words of a local resident, 'we can expect a lot of little boxes there [at Darwin Green]' (local resident 2014). By contrast, there is an expectation that the university site will meet higher standards and constitute a proper new 'urban quarter'. The key problem which has been identified by some local residents is a lack of proper 'joined-up thinking' across the two sites (local resident 2014),[9] and an inability on both sides to engage with the question of links between the two in the early stages.

Community engagement from the outset 2.4

> 'NAFRA looks forward to similar soliciting of feedback from all with an interest in this project as it proceeds, and hopes that this won't be restricted to members of the Regent House and to formal University decision-making procedures.
> A Green Paper is an uncommon (but by no means unwelcome) approach to University development … In the interests of transparency, and to give greater credibility to the outcome, we would urge publication (via the NWC website) of comments received'
> *NAFRA (Cambridge University Reporter 2010:4)*

The sheer extent of proposed development across the two sites in this part of Cambridge necessitated a concerted effort on the part of the University to establish a comprehensive public engagement strategy early on. It was well aware that failure to mobilise support from largely affluent and well-connected local residents, many of whom were themselves University or college staff with their own networks of contacts inside the University, would not only hinder its ambitions but also tarnish its reputation.

Consultancy Communications Management was appointed in 2009, contracted to oversee engagement on the masterplan through to planning permission (secured 2013). The three key audiences were carefully mapped out as: internal members of the University (academic staff and students – of which the latter will not benefit from the development – and support staff); key stakeholders, both local and from further afield, including councillors, vicars, MPs, the Cycling Forum, Preservation Society and subregional organisations; and the general public. The engagement strategy had to conform to the University's established decision-making processes, making it more complicated than it would be on a normal development, with a view to developing long-term relationships on the ground. A **Community Group** was set up early on, to meet three times a year to discuss subjects determined by its members – invited representatives from specific community groups. This has subsequently been supplemented by a Council-run joint Community Forum established for both the NWC and Darwin Green developments, in order to address the problem of the relationship between the two. A stand-alone NWC **project website**[10] was launched, described by a Council planning officer (2014) as 'the best I've ever seen for a development', and including a Statement of Community Engagement. In addition, a subscriber **newsletter** was produced and a series of **regular briefings** offered, as well as a **regular letter** to 3,000 local residents in the immediate vicinity. Finally, **workshops** were organised for key stakeholders during the development of the masterplan itself: 'interactive discussions around plans with opportunities to move around land uses and density' (Deputy Project Director 2013).

Paul Barnes of Communications Management notes that the Community Group has remained consistent over time and even grown, and that the university has put in 'a lot of the work … around thanking people – [for] their commitment of time and effort' (Barnes 2013).[11] The view of residents, such as those who set up Nineteen Acres Field Residents Association specifically in response to the proposals, is that:

'we would prefer to see the North West Cambridge Site remain undeveloped, as it is, with much of it remaining in the Green Belt. The development of this site will have a markedly negative impact on our lives…. However, we realize that the University has an expressed need to develop the North West Cambridge Site for housing, academic and research purposes, and … that the accommodation provided by the University will contribute toward meeting the housing needs of the Cambridge region over the next decade. Therefore … we have worked with the Department of Estate Management at the University and later with the North West Project Group, along with the Cambridge City and South Cambs planning personnel, to try to assure that this development would be sensitive to our needs as existing residents as well as being attractive and sustainable in its own right. We are reasonably content that we have achieved these goals' (Cambridge University Reporter 2010:2). However it is also noted that, although the University is considered to have 'shone in how much it was doing' (local resident 2014), especially by contrast with Darwin Green's developers, planning fatigue over a long period is a significant problem, and many residents are too busy with their day jobs to engage in the process unless it directly alters the view from their back gardens. They are 'scared they'll be given jobs to do' (local resident 2014), and in addition they are sufficiently reassured by the fact that the university is the developer not to inform themselves in too much detail: 'our perception … is that residents look to the University Scheme to deliver on quality that they cannot rely on others to do. And part of that has to do with the investment, knowing that the University will be there for the long-term … when it comes to the University facilities they are very keen to benefit from them. And the retail and community facilities, having something nearby….' (Deputy Project Director 2013).

However, one resident suggests that 'it's only just dawning on most residents what's happening to the city'. She also notes that, although the consultation net has been widely drawn, certain groups – particularly the Church – have, by virtue of being well-organised, exerted particular influence over the process. One Parish in particular is seen as having 'stolen a march' on the project, with four units of housing reserved for faith workers, which, she says, 'we feel … is wrong … [since] the majority of people are not of faith', and the emphasis on the role of faith in the constitution of the new community (although there is no provision for a dedicated new faith building) runs counter to the views of secularist and humanist residents. On the other hand, she says, 'attendance at forum meetings hasn't been wonderful', and if there are complaints from residents 'it's their fault' (local resident 2014).

Engagement through public art 2.5

While the project team has been cautious about both over-consulting on and over-publicising its development activities, it has been keen to promote its public art strategy, as an integral, though not formal, part of its overall community engagement plan. The AAP and the Council's planning guidance both emphasise the need for public art to be part of the proposed development 'to help generate pride in the area, increase a sense of ownership, develop cultural identity, create distinction, character and identity and contribute to quality of life…' (North West Cambridge 2012:2). From the project team's point of view, it is an important component in bringing visibility to the site and promoting public awareness of the project, due to the nature of its location: 'it's essentially a backland site … it has one public footpath over it now and it feels like it's on the fringes of Cambridge. So establishing an awareness of the Site from very early on and making it feel connected and part of the City, and developing a programme of events around that, is important' (Deputy Project Director 2013).

This view led to the appointment in 2011 of InsiteArts and the Contemporary Art Society as advisors/curators for five years, and to write a public art strategy in collaboration with Roger Taylor. The budget for Phase 1 is £1.5m, with £3.2m allocated for the full 25 year programme, funded by the s106 agreement and potentially through

additional alumni donations. The strategy was promoted to the architects who attended the tender briefing to ensure that it was embedded into the design approach from the start, and premises and facilities for the artists have been provided at the Gravel Hill site office.

Three artists in residence are appointed each year to work with selected university departments, receiving a fee of £10,000 each, and a £5,000 making budget. In 2012, two artists, Nina Pope and Karen Guthrie, worked with the Archaeology Department and members of the public to create a model village of the first phase of the development using the mud spoil produced by the archaeological dig which preceeded infrastructure works. In addition, artists are appointed to undertake permanent commissions on the site, working alongside the Design Team. For example, Winter and Hoerbelt worked in collaboration with the landscape designers on a project called The Wanderer, located at the edge of the site. This is a sculptural work relating to ideas about water management and sound mitigation.

The permanent works involve less public participation, but are intended to engage the public in different ways, and to reach people who may slip through the net of conventional consultation tactics. Sam Wilkinson of curators InsiteArts has explained: 'It's not about art for art's sake, but about making a place, taking ownership. Consultation is big, but fatigue is also a big problem. Public art leaves a mark on you personally … it's about reaching out to the people who aren't in those networks' (Sam Wilkinson 2014).[12] Not all residents are convinced of course. One describes the public art programme as 'a bit of a joke' (local resident 2014), which serves to distract attention from more political issues. She also questions how much it must be costing the university, when there are so many people involved, and whether that money might not better be spent on education.

Nina Pope and Karen Guthrie, 'Tomorrow, Today': a scale model of the first phase of the development created with community participants in Spring 2014, following the artists' residency with the Archaeology department. *Photo C.Melhuish 2014*

Appointment and roles of masterplanners and architects 2.6

> 'The four big drivers for the masterplan: connectivity, community, character and climate'
> *AECOM, World Architecture Festival 2014* [13]

Following its appointment as masterplanner, and the stakeholder and public consultations in November 2009, AECOM began work towards submission of the outline planning application – the city's largest – in 2011. The 15-strong team was split

Left: Illustrative masterplan, Phase 1, Feb 2013. Right: Phase 1: lot boundaries. *AECOM/University of Cambridge*

between urban design, planning and landscape. Its role involved not only producing and submitting the planning application for the masterplan and design code (based on the parameters developed and set out in the AAP), but also writing the brief and design guidance for the architects, and participating in the selection process, as well as briefing the urban design charette (2012) run by the University for students and staff in the Department of Architecture.[14] Following the appointment (also 2012) of 14 architectural practices to seven commissions for the design of buildings in the first phase, AECOM took on a coordination role of 'masterplan guardianship', to ensure that all the design proposals conformed to the design code which had been established and approved by the planning authorities.

The call for architects, run by Colander, was divided between seven lots, with very high numbers of applications on each one. The University followed strict procurement guidelines to produce shortlists of 10, then three or four invited to tender on each: 'it was an incredible amount of work to get that right' (masterplanner 2013). Roger Taylor has described the field as 'a galaxy of architectural talent' (Roger Taylor 2013),[15] but the selection process was 'as much about how they might work together … a common ethos, approach to materials … the environmental response' (masterplanner 2013). The architects were expected to conform to general principals enshrined in the masterplan and agreed with the local authority, but to be proactive in terms of interpretation and in the design of their own buildings.

Architectural appointments were awarded in summer 2012 to Wilkinson Eyre and Mole Architects with landscaping by Townshend (Lot 1, supermarket, energy centre, GP surgery, university apartments); David Chipperfield, subsequently replaced by Stanton Williams (Lot 2 local shops, housing office and university apartments); Mecanoo (Lot 3 university apartments); Cottrell and Vermeulen, Sarah Wigglesworth Architects and AOC, (Lot 4 university apartments and family houses – the Ridgeway Village); RH Partnership (Lot 5 student housing); MUMA (Lot 7 community centre and nursery); Witherford Watson Mann and MacCreanor Lavington (Lot 8, university apartments); Alison Brookes (Lot 9, university market housing). Lot 6, the school, remained on hold until the following summer, when Marks Barfield was appointed. Peter Guthrie, Director of the University's Centre for Sustainable Development, was also appointed to lead a design quality panel to review projects. The local authorities resolved to grant outline planning approval for the masterplan in August 2012 which was ratified with the signing of the section 106 agreement in February 2013; and in January 2013 Regent House gave formal approval for Phase 1 of the project to go forward, aiming for scheduled completion in 2016.

Left: Lot 3, university apartments by Mecannoo: marketing impression
Right: Lot 4, housing at the Ridgeway Village, by Cottrell and Vermeulen, Sarah Wigglesworth Architects and AOC. *Images courtesy the architects/University of Cambridge*

Design and planning process 2.7

> 'There was this ambition that everyone was going to be working together to develop a kind of collective vision'
> *Architect 2014*

The key elements of the masterplan include a green buffer zone adjacent to the M11 and a central park, constituting one-third of the site as public space, in addition to 1500 university and 1500 private homes. The local centre (Eddington: Phase 1) and two 'villages' of residential development (known as Gravel Hill and Ridgeway Village) make up the rest of the 'walkable' development, with higher density (3–5 storeys) mixed-use buildings in the centre, and lower density typologies around the edges, backing onto existing housing and gardens. The 2,000 units of student housing are broken down into three clusters, to reproduce a college scale of development, if not typology. Future research and development activities are distributed in three clusters on the north-western, western, and south-eastern edges of the site. It is traversed from south to north by a new primary street connecting Madingley and Huntingdon Roads, with a dedicated pedestrian/cycle route also cutting through the centre of the development and connecting to the existing network into the centre of Cambridge via Storey's Way.

The design challenge was how to create buildings at the right density that support a sense of community amongst a diverse and transient population of mostly university-related workers and students, and generate a collective vision across the large number of architectural practices, rather than an 'architectural zoo'. AECOM produced a 3D computer-generated reference model into which the architects' models of their own buildings could be incorporated as they emerged, which would pull the project together as a cohesive entity, but also give the architects something 'to push and pull against' (masterplanner 2013). Each lot would then be the subject of its own detailed planning application, coming forward incrementally from 2013 onwards. In early 2015, two further parcels of development were awarded to two commercial developers, Hill Residential and Countryside Properties, working with Alison Brooks Architects and Pollard Thomas Edwards, and Proctor and Matthews Architects respectively to deliver market housing in line with the parameters set by the masterplan.

The design principles established both by the masterplan and by the University's own design charette underline the importance of avoiding the introverted collegiate model, with outward-facing buildings that engage with the street ('a welcoming environment … a desirable destination for both "town" and "gown"'),[16] and creates very clear rules concerning the massing of buildings, the relationships between them, and organisation of vehicular access and circulation. While this provides the advantage of cohesion, it is noted that 'it also creates an awful lot of

Eddington local centre: marketing impression. *Image courtesy Stanton Williams/University of Cambridge*

constraints which everyone has to work with, even if you discover some very good reason why it might be better to do something else' (architect 2014). Since the masterplan is driven to a great degree by technical requirements relating to daylighting, fire access, waste management etc, one of the problems identified is that it has forced the introduction of large spaces (typically 10m wide) between buildings as they get taller. This creates a disproportionate amount of empty public circulation space to building mass and communal organisation, which the architects have endeavoured to address by designing semi-courtyard, semi-permeable structures to introduce a sense of intimacy, proximity, and interaction in the development, evoking without replicating the college model in order to produce a scale of construction and inhabitation which is more in line with that of the city centre.

Visions and narratives 3

The overarching vision behind the North West Cambridge Development has been that of 'a vibrant, urban extension to the City that predominates as a University quarter but is also a mixed academic and residential community … connected internally and with the wider city by green spaces and pedestrian and cycle routes … It will be an exemplar of what can be achieved through contemporary technology, architecture, and urban planning' (Cambridge University Reporter 2010:3). The idea that North West Cambridge would set new standards in urban design has been fundamental to the project from the start, over and above any academic vision of what the site would offer in terms of university research and teaching programmes, which indeed remain largely missing from the narrative. However, as Marcial Echenique points out, urban design alone cannot bring vibrant places into being. Careful economic and spatial modelling are required to assess the relationship of land use, employment, and transport provision, ensuring that everything connects together; while also being careful 'to keep the special quality of Cambridge as a good place to live, or it will lose its fundamental appeal, its basis for growth' (Marcial Echenique 2013).

University and city – 'mixed and balanced' 3.1

The projected residential population of the new quarter is estimated at 7,000 on completion, with a working population of around 4,500 hosted by the academic and commercial research facilities (Cambridge University Reporter: 2010). Although it is university-led, the Council's planning guidelines enforce the principle of 'mixed and

balanced', so that it should neither become a 'university ghetto', nor a repetition of the West Cambridge development where there was little or no consultation with residents and limited residential provision. North West is viewed as part of a 'necklace' of new residential development designed to address Cambridge's chronic housing shortage – *not* as the Option 3 model defined by Cambridge Futures as circling the city outside the greenbelt, but one lying within it and including Darwin Green and Orchard Park eastwards towards Cambridge Science Park.

In the public exhibition prepared in 2009 and 2010, it was stated that 'The vision for the development is a sustainable new *collegiate* community close to the local centre designed to meet the needs of a growing postgraduate student community in the city. Students live in small sociable family house groups'.[17] However this narrative has been significantly modified to emphasise the character of the development as an 'urban quarter' bringing benefits to the wider population, rather than as an exclusive university community. The council has worked hard with the University to achieve this shift of emphasis, explaining that: 'we as officers have always been concerned to get the "mixed and balanced" community right' (planning officer 2014). Nevertheless, the vision for the new community is hardly 'mixed and balanced' in the conventional understanding, since, under an unusual planning anomaly, the University has been permitted to classify all of its staff accommodation at North West Cambridge as affordable 'key worker' housing (50% of housing provision of the site, on a discounted rental basis set as a proportion of net household income), in place of the standard 40% of affordable housing (including both social and intermediate rent) normally imposed by the council for new developments. Although council officers state that the new housing stock will help to ease pressure on the council housing waiting list, it seems unlikely that many university staff would be eligible for housing assistance through this channel, and certainly none of the future occupants will be unemployed. Hence the 'mixed and balanced' complexion of the new development will be delivered essentially through the private housing component sold on the open market at standard Cambridge prices, to a mix of university and non-university owner-occupiers (including young researchers taking the next step into 'leg-up' housing after their first contract) – moving within similar social networks.

Design vision 3.2

> 'The image of a campanile marking North West Cambridge is beguiling, the efficacy of which will be discussed with the appointed architects and the University's development team'
> *Jonathan Rose, AECOM, 2012*[18]

Another vision for this new balanced community was produced by graduate students in the University's Department of Architecture as part of a separate academic design exercise that ran in parallel with the actual appointment of architects for the site in 2012. It had a traditional feel, marked by a campanile perhaps a little too evocative of the 'ivory tower' image which universities have been keen to put behind them. On the other hand, it demonstrated the desire to establish an urbanity based on traditions and scales of development which recognize the identity of Cambridge as a quintessentially university town, and rejects both typical campus-style development and suburban typologies and densities. It produced recommendations intended to make North West Cambridge 'a desirable destination for both "town" and "gown"'.[19]

The vision embodied in the AECOM masterplan also establishes an integrated urban model of development, distinct from that of a dormitory town or university campus, which is intended to nurture 'the art of daily life' (AECOM)[20] as an extension of the city. But it adopts a more contemporary design approach which is strongly shaped by the technical requirements imposed by the sustainability agenda – for example the use of flat roofs with photovoltaics throughout the scheme, and

particular materials (principally brick). This has led to the appointment of architects who work in an explicitly contemporary idiom using modern building technologies, while also drawing on traditional typologies of spatial organization and building distribution, including the models of the college and market square, in order to create a sense of social interaction and community across the scheme. In the words of one architect describing the design approach to Lot 2, it's about 'how you start to create established communities around groups of people as you do in the traditional college – a community of key workers – and then work out towards the more urban aspects of the Scheme. That's how we've been developing this, looking for spatial structures *around* the buildings which encourage people to interact' (architect 2014). At the heart of the scheme, the local centre focused around a public square, is designed to establish a community hub which generates the social and spatial identity of the wider development through an expanding network of spaces of different character. Thus the design vision for the project lies as much in its spatial organization and connectivity as in the facades and architectural detailing of the buildings themselves, with a view to bringing people together within a cohesive new neighbourhood.

Sustainability agenda and design code 3.3

Fundamental to the planning deal with the authorities was the agreement that North West Cambridge would establish new standards of environmental sustainability through its design and construction. It will be the first Code for Sustainable Homes Level 5 development of its scale in the country, with retail and non-residential elements designed to BREEAM Excellent. It will have the largest non-potable rainwater sustainable drainage and recycling system in the UK, and a very low parking ratio, seen as 'ambitious' by a planning case officer, based on the principle that many of the inhabitants will be single or couples rather than families, and cycle rather than use cars. Vehicular traffic through the development is channeled along two main routes, with restricted access to other areas, and the size of the supermarket, 2000 sq m of retail space operated by Sainsbury's, has been agreed on the basis of what would be suitable for local use as opposed to attracting incoming traffic from further afield.

The impact of the development on traffic flow through the area, and on local water resources, has been questioned repeatedly at community consultation events during the development of the masterplan and building projects. Traffic heading into Cambridge from the north-west already runs 'nose-to-tail' past her house, comments one resident, in the morning rush hour. And in an area of the country classified as 'semi-arid', how will the water consumption of an additional 7,000 residents be accommodated? The project team maintains that, according to Cambridgeshire County Council's own studies, additional traffic generated from the site at peak times will not be more than 1% of existing volumes, with fewer than 40% of residents travelling to work by car (University of Cambridge 2011:5), while its plans also include improvements to existing bus services which will be subsidized by the University. As for water management, the Code 5 design standard will minimize water use in homes by nearly 50% through the use of rainwater channeled in rills running down the natural slope of the site to the west, where it will be collected in ponds in the open space next to the M11 to be treated and pumped back into homes for non-potable use. This system also addresses fears of increased risk of flooding on the site due to development.

In addition to these measures, a £2.98m District Heating System contract has been awarded to Vital Energi Utilities, and an innovative waste management system of 450 underground bins is to be put in place, with a shared service collection agreed between the City and District Councils, whereby the former will empty and maintain the bins on behalf of both using a new, specially adapted collection vehicle.

These various points of the sustainability agenda have had an important

influence on the development of the design code and architectural responses to it. As an architect explains, 'The whole development is codified for sustainable homes, and that has driven a lot of the architectural language; it has a significant impact on what we can and can't do … [and] there's a great deal of common language between the buildings partly driven by those technical issues.' For example: 'Code Five drives very well-insulated, quite simple volumes … a limited building envelope to floor-plate … and difficulties in getting very articulated facades because of thermal bridging issues' (architect 2014). It has also resulted in the implementation of flat roofs across the site which has not been received well by some residents on the perimeter, and even surprised the masterplanner and architects: 'there were ambitions in the original masterplan to have more broken-up roof forms, and it was a surprise for everyone that actually the only answer was a flat roof with photovoltaics on' (architect 2014). On the more positive side however, the requirement for high levels of daylighting to apartments has set deep apartment plans off-limits, leading to a higher quality of residential accommodation.

In terms of materials, the sustainability requirements have indicated durable, low-maintenance options which weather well, leading to the adoption of 'a shared palette … which is principally brick' (architect 2014). Rather than experiment with ecological prefabricated timber construction systems, the University's preference was to use traditional, tried-and-tested techniques. 'There's a bible … it's quite complicated and it was probably *more* complicated because the Design Code was being developed in parallel with [the architects'] design proposals', comments an architect (architect 2014). On the other hand, it has also created scope for some interesting design explorations. For example, the emphasis on cycling and provision of cycling facilities has prompted the architects for the housing in Lot 2 to think about how that can mesh the environmental with the social sustainability of the site: 'we like the idea that you arrive by bicycle, and parking your cycle in a communal structure where you meet other people is one of the opportunities to reinforce this sense of community. So we are creating houses or courtyard gardens for bicycles. Each of them has an opening with trees growing through it. These are actually rain gardens, so they [are linked to] our sustainable drainage strategy. They're broken down into groups of bicycles, so that means that you're sharing them with more than just the people on your staircase and there's an opportunity to meet other people' (architect 2014).

For other developers, North West Cambridge will certainly set a high standard of what is attainable in terms of setting and meeting sustainability criteria. However, as a planning case-officer points out, it is a slightly 'false hope' that the University will raise the bar for sustainability standards, since 'normal' developers are not required to conform to the same 'elevated policy levels'. So, although universities as developers are viewed as being able to push boundaries and generate exemplary models, it remains unclear how those standards might be enforced for others with less advantageous access to finance and resources, and no long-term commitment.

Future flexibility for university estate 3.4

> 'In terms of quality and how that drives quality, most of the streets, public spaces, buildings, land within the site will be retained by the University; it's not being offered to the City for adoption, or South Cambridgeshire, and it will be managed by the University Estate … the University's in it for the long haul'
> *Deputy Project Director 2013*

Notwithstanding the rhetoric around high quality design and an urban vision, the North West project is anchored in a strong narrative around its own financial viability, institutional reputation, and long-term flexibility in terms of its estate. As the largest single capital development it has undertaken in its 800-year history, North West has

mobilized and consumed enormous resources and will continue to do so over the 25 years of its phased implementation. At the same time, it represents a resource in itself from which the university intends to profit – but, as a planning officer puts it, 'a different kind of profit' from a commercial developer, which is invested in a long-term vision and commitment to the site. In the words of the Deputy Project Director: 'Since many of the occupants will be University constituents there is an incentive to ensure that you are responding to their needs – and that's everything from academic interests to sustainability and environmental quality, and making sure facilities are there from the get-go. So that drives quality … The main priority for the University here is to provide affordable, fit-for-purpose housing that's going to help maintain its competitiveness. The sole driver is *not* a commercial out-turn … the University is looking to drive up standards, and raise the bar in terms of sustainability and design' (Deputy Project Director 2013).

This is generally understood by the local community, as expressed in NAFRA's comments on the Green Paper (Cambridge University Reporter 2010), yet at the same time the development of the site will undoubtedly transform this part of Cambridge to an extent which may not yet be fully grasped by many residents. A planning officer speculates that people will be 'shocked' when they finally start to see five-storey buildings materializing on the site, and may regret not having taken more interest earlier on. The reality is that most residents who have engaged with the consultation process have put their trust in the University as a historic landowner with a reputation to maintain, while focusing most closely on aspects of the scheme which immediately affect their own properties (ie proximity of new buildings), rather than the impact of the development as a whole in terms of its transformation of the area into a wholly new kind of place.

Place-making and naming 3.5

> 'Identifying place names for the development is not an easy task. We are grateful to our local community which, through consultation, has informed our approach to naming … Natural naming grounds the new development within its location, adding to the sense of place that we are creating'
> *Roger Taylor, Project Director (North West Cambridge 2014)*

The rhetoric of place-making has become a familiar aspect of urban development in the so-called 'experience economy' (Lonsway 2009), evoking an idea that new places can be instantaneously created and rooted in existing contexts by assembling an inventory of particular design elements held together by a convincing story-line. But there have been many questions about the vision and characterization of the North West development as a new 'urban quarter', highlighted by the issue of identifying appropriate names for new neighbourhoods and streets within the development.

From the start, North West Cambridge has been intended to tell an 'urban' story that would set the development apart from its suburban and rural hinterland, as an extension of the city reaching out towards the perimeter – yet the city of Cambridge is hardly an urban context, rather a market and university town. Furthermore, the decision to create a new 'market square' at the heart of the North West local centre creates confusion since a historic market square already exists in the centre of Cambridge. The urban narrative seems directed towards justifying the large scale and volume of the intervention in a much less dense and small-scale, low-rise context, and also perhaps with an international cosmopolitan audience in mind; while the naming of the two residential neighbourhoods as Ridgeway Village and Gravel Hill, referencing existing natural landscape features, seems designed to appeal to existing residents familiar with the rural context in which Cambridge sits.

As a council spokesman mentions, naming new developments is a sensitive issue, and closely linked to branding strategies on the part of developers, commercial

or otherwise. The Council has been keen to work with the university on its branding and placemaking strategy, because it knows from past experience that local communities can be very sensitive about the names that developers dream up for their sites, and because 'we want to have together some influence over this area of the town' (planning officer 2014). For this reason, one strand of the Public Art Strategy, in which the council has had a significant hand, has been the 'Making Place – Naming Commission', designed to mobilise artists to work with local people towards the development of ideas for new names for the development 'and to support branding of the development' (North West Cambridge 2012). This will involve three text-based artists, writers or poets working alongside the marketing team to gather thoughts, memories and stories from local people about the area as each phase of the development unfolds and develop a range of site names.

Early in 2015 it was announced that a name had finally been identified for the new local centre on the site: Eddington, after the astronomer, mathematician and physicist Sir Arthur Eddington. Not only is the University's Department of Astronomy located immediately adjacent to the site, but Eddington himself lived for some time in the Gravel Hill Farmhouse, where the site office is now located. But more importantly perhaps, Eddington's name will have resonance within the field of scientific research and enterprise on an international scale, lending global reach to the naming decision behind the local centre.

Translation into place 4

> 'It's almost like seeding the development … the heart of the thing is developed by the University and then it can spread out'
> *Architect 2014*

As the process of naming unfolds, drawing both on natural physical and geographical features of the landscape, and on people who may combine a strong connection with the University and an internationally recognizable profile, the construction of the North West project is concurrently translating the masterplanner and architects' designs into a material reality embedded in that physical and social landscape. With the University's decision to accelerate the construction of the first phase, containing the local centre and its social amenities, there is optimism that this 'seeding' process will kickstart the development into life as a real 'place' at an early stage, allowing subsequent phases to evolve in a more natural organic process, spreading out from the heart. 'The centre will establish the identity of the wider development', explains an architect (architect 2014) but also, it is hoped, provide the catalyst for positive change in the area which will benefit the city as a whole.

Site context 4.1

The North West Cambridge development is neither a typical scenario for urban regeneration on the one hand, nor concerns about gentrification on the other. It is an affluent, suburban area, within a 20–30 minute walk of the historic city centre, and described by a planning officer as 'very nice – posh' (planning officer 2014). He further notes that there is no significant deprivation anywhere in Cambridge, and development has been encouraged primarily in order to address a housing shortage caused by an economic boom, not the effects of recession, and in recognition of the continuing importance of the University's role in sustaining the city's economic growth.

The site is located within a triangular wedge of land between the two main radial roads leading north-west out of Cambridge (Madingley and Huntingdon

Roads), and bounded on its western edge by the M11. The area abutting the M11 is open farmland, bordered along Huntingdon Road by private houses and gardens. On the other side of Huntingdon Road, as it heads towards Girton, lies a network of residential streets which will be densified in time by the Darwin Green development. Madingley Road hosts more mixed development, with access to three of the newer Cambridge colleges and extensive student accommodation on the north side, alongside some clusters of private detached houses on the edges of the site. To the south of Madingley Road lies the university's West Cambridge site. Although the roads are busy at times with traffic, the area has a leafy, quiet, and secluded atmosphere, with an almost complete lack of shopping or other social amenities. The houses are set back from the roads within generous gardens, veiled from the public eye by greenery. But passers-by are few and far between, despite the concentration of student numbers at the colleges – more evident from the large numbers of bicycles parked outside than human presence or sound.

The 150 ha new development will spread out from the end of Storey's Way to the edge of the M11 and Madingley Rise, with the new local centre located just north of the park-and-ride facility off Madingley Road. Student housing will be distributed to the west and north of it, buffered from the motorway by a long strip of open parkland. Other residential provision is distributed to the east (Gravel Hill) and north (Ridgeway Village), forming a natural extension to the existing concentration of residential development either side of Huntingdon Road. Hence the view expressed by one architect: 'I don't think it's invading a community in any way – they're more interested in what they're going to get out of it and how close the development is to their back gardens, because they're 50 ft long and look out onto fields…' (architect 2014).

Phased construction process 4.2

Nonetheless, this has been a prime concern both for the project team and for the local residents associations, particularly NAFRA and Storey's Way. The decision to start the highest density development (apartment buildings) at the furthest point from existing houses is a strategic response to local concerns, allowing subsequent waves of residential development (family houses) to unfold gradually at decreasing densities towards the north-eastern edge of the site, interspersed with significant areas of open land.

Having commenced infrastructure works on site in August 2014 (under the £49.9m contract awarded to Skanska), it is anticipated that the first 352 student housing units (contractor GRAHAM Construction), 400 private homes, and 352 university key worker apartments, will be occupied between the end of 2015 and mid-2016 (Phase 1A), with a coherent neighbourhood centre up and running (contractor BAM) – including a new primary school run by the university scheduled to open in September 2015 (contractor Willmott Dixon). The remainder of Phase 1 will be finished by mid 2017 (including another 300 market homes). The second phase of university and market housing is broadly scheduled for completion in 2021, and the conclusion of development, including potential academic and research facilities, is due to finish between 2025 and 2030; however none of this has yet been determined or approved for implementation by the University.

From the council perspective, there is confidence that the phasing will work and the university accommodation built as scheduled, along with the social infrastructure that will bring people into the site from the start. With most sites, the concern is that there won't be enough social infastructure in place early on. But there is more anxiety here that a new economic downturn could mean that the private housing won't be delivered on time, to realise the mixed environment that has been promised. This would contravene the planning principle enshrined in the 2009 Area Action Plan, and undermine the identity of the development as a truly urban quarter.

Community infrastructure and social impacts 4.3

'I think we'll be better off – but we'll have more buildings – more building – and loss of green lung'
Local resident 2014

The North West Cambridge site is not one, then, in need of 'regeneration' as such, but it has received planning approval on the basis that it will deliver 'a strong and healthy community', to quote Roger Taylor (Hopkirk 2012), and this has been pinned to the provision of both mixed housing and much-needed shopping and social amenities in an under-serviced area, including one-third of the scheme returned as public open space. This has been driven in part, on the University's side, by an awareness of the problems inherent in the previous West Cambridge development, which is widely seen as being 'socially, a disaster' (local resident 2014), with no shops for miles.

But there has also been debate around the proposed schools provision, and local disagreement over the uneven distribution of social amenities across the North West and Darwin Green sites, which are identified with slightly different demographics. Residents have long been campaigning for a new secondary school in the area, and have been disappointed that North West Cambridge will not deliver one. All the sixth-form provision is located on the south side of the city, and the new secondary promised on the Darwin Green development, towards which the University is making a substantial contribution, will only go up to 16 years. Conversely, there are already two primary schools in the area, which the new University Primary seems set to duplicate. 'It will either be a disaster, or somewhere everyone wants to go, to the detriment of the others', claims one resident (local resident 2014), while the development team points out that these schools are already at capacity and certainly won't be able to meet demand from a new community of 6,500 residents.

Furthermore, the proposed development of 1800 homes at Darwin Green has been approved without any community hall facility and only two units of retail accommodation – in contrast to the 700 sq m of community space (200 sq m more than required) plus retail at North West Cambridge. Residents have demanded to know why Barratts have been 'let off' provision of community amenities, while the University seems to be under pressure to invest funds in social infrastructure which perhaps should be channeled directly into higher education. The council has argued that this is not the case, but that the Darwin Green development, being more family-orientated, has a different demographic which should be reflected in the provision of a 'youth café' or children's centre rather than duplicating facilities on the North West site.

Indeed, the North West site will have a rather unique social demographic, comprising a high proportion of highly-qualified, international, and probably transient employees alongside the student population: 75% of those eligible for key worker housing are likely to be post-doctoral researchers, while only 25% will be university support staff who might otherwise be on the council waiting list for housing. Applicants will be means-tested to ensure eligibility based on the rent accounting for more than 30% of net household income – a task somewhat simplified by the fact that all applicants will be on the University's own payroll. However this has not passed without criticism, as the university's student newspaper reported: 'concerns have been raised that low-cost homes are being provided to university staff already earning as much as £47,000, instead of automatically favouring lower-income Cambridge residents' (Graham 2013). Furthermore, 75% of the new affordable university housing will be made up of one-or two-bedroom units favouring single people or couples, with only 25% designed as family accommodation, although the figures are reversed for the market housing which has no affordable component. The remaining 50% of more family-friendly market housing provision will sell in line with Cambridge's elevated property prices.

Unlike Darwin Green and other developments, where planning guidelines specify that affordable housing be pepper-potted throughout the development to avoid concentrated areas of unemployment and antisocial activity associated with it, the North West site distributes the key worker accommodation in more cohesive clusters. This reflects an implicit assumption that tenants known to be qualified and employed are unlikely to create trouble-spots of disruptive behaviour; but also the recognized need for transient international staff without collegiate affiliations, located at a distance from the city centre and facilities, to be provided with some kind of social structure through the planning of the accommodation around communal areas. This awareness has also prompted the establishment by the University of a new Office of Postdoctoral Affairs with pastoral responsibilities for the social, as well as academic, welfare of postdoctoral staff. In addition, the housing clusters are located in proximity to the public space in the scheme, with a view to encouraging tenants to occupy it for a range of activities, and contribute to the development of community life more widely on the site. The community centre, run by a trust jointly funded and staffed by university and council community development workers will play a key role in pulling this together, and in ensuring that the area doesn't become a 'university ghetto' in the future.

This ambition is further echoed in the manifesto for the new university training school, a three-form entry local authority school. The newly-appointed head teacher James Biddulph explains that: 'Although the school has the name of the university we want to very much be part of the community of local schools and be in partnership with them' (Welham 2015). But there are concerns that both a lack of critical mass at the outset, and high turnover of the population over a three-year cycle into the future, could jeopardise the hoped-for social development and sustainability of the new neighbourhood. An architect mentions that strategies are being considered for the curation of the public spaces with organized, programmed activity (eg a farmer's market, screenings, special events), as for example at high profile development sites such as King's Cross in London, in order 'to boost its identity'. There is an understanding, then, behind the rhetoric of placemaking and community building, that 'seeding' a healthy new community on the site is likely to be a long, slow process which will need to be supported by a continuing input from the University before it bears fruit.

Future growth and the urban economy 4.4

> 'It's very difficult to disentangle the University from Cambridge; they're inextricably intertwined'
> *Deputy Project Director 2013*

In its award-winning submission to the World Architecture Festival, AECOM stated that the 'As the masterplan comes alive in the coming years and decades, one of the world's most beautiful urban settings will continue to be a world centre for research and inquiry. The foundations are firmly in place for this UNESCO-listed town centre and iconic university to grow sustainably well into the centuries ahead'.[21] For the University, the opening up of the site as a key component of their estates strategy has allowed the development of a new 40 to 50-year perspective on the estate across all the areas of collegiate growth, graduate student growth, post-doctoral research staff need, and academic and research requirements to bolster its competitive strengths. For the city, the long-term process involved in negotiating the release of the land has led to a significant revision of the regional Structure Plan which has lifted the constraints on growth, and allowed for new urban development to accommodate the economic advantages brought about by the boom in science and technology research-led industries.

Although the primary aim of the North West development was to provide

affordable housing for university staff, it is also recognized that the site will provide scope for potential research-related job growth in the future which will benefit the city. Along with the University's other sites dispersed around the city, it is likely to provide an example of innovation cluster type growth, in which like-minded businesses want to co-locate both with each other and in proximity to University resources, but one which is better integrated into a mixed urban setting, connected to the city centre. As such, it falls in line with the trend towards urban integration of innovation and knowledge-based business enterprises, and away from the campus-style developments of the past, exemplified by early science parks such as Cambridge's own.

The question it raises is whether it is necessarily a good thing for a city to become exclusively dependent on the knowledge economy, how widely the benefits of such knowledge-based growth can be distributed among the general population, and how long a healthy 'mixed and balanced' demographic can be sustained if it is unsupported by other areas of activity. For one sceptical resident, the concept of 'dynamic equilibrium' is preferable to that of pure expansion in one dimension. Cambridge has been privileged in surviving the recession almost unscathed, and manifests very low indicators of deprivation. But as a council spokesman puts it, it has existed 'in a bubble', largely protected from the economic realities which have afflicted much of the country by a combination of the university and its science and technology-related industries.

Key issues and learning points 5

Key drivers the priority for this development was less to provide new academic research space than to address the lack of affordable housing in the city for University staff and students, especially postdoctoral research staff, in order for the university to be able to retain and attract the best inernational staff and students. It also had to be a flagship for integrated, 'mixed and balanced' development which would not become a 'university ghetto', and for sustainability (designed to Code for Sustainable Homes level 5 across the whole site, with retail and non-residential elements designed to BREEAM Excellent).

Funding it demonstrates the importance of proper capital funding underpinning from the outset, through bond financing, to ensure quality in the immediate and long term. The total cost of the project (£1bn) is split 40:60 between the University and commercial housing developers responsible for the delivery of market housing on designated sections of the site. Finance for the project is ring-fenced within the North West Cambridge syndicate accountable to the University's finance committee, and a small dedicated management team appointed to run it.

Location the 150 acre site comprises university farmland released for development from the green belt. It lies just within the northwestern edge of the city bounded by the M11 motorway, and also well-connected to the city centre (a 15-minute cycle ride). It is surrounded by affluent suburban residential and college development to the east, west and south, and the development will deliver a new community hub, supermarket and public open space intended to serve the wider area.

Masterplanning and design the site has been masterplanned by global consultancy Aecom, which has implemented a coherent, strategic approach to planning and design, with separate architectural teams appointed across a number of different lots through a high-profile architectural competition. High quality design has been central to the project brief from the start, and a rigorous process of design review

is conducted through the university bodies, its design panel and the city planners. Some issues have been highlighted in the relationship between the masterplan and architectural components, eg the amount and breadth of open public circulation space (including emergency access) relative to building mass and communal amenities, and the potential need to 'curate' public spaces to boost activity and identity. An emphasis on provision for cycling as a common mode of transport has generated some interesting design proposals intended to promote sociability, eg cycle parking in communal 'houses' or courtyards (rain gardens).

Academic programming to date there is no academic programming for the site, and construction of academic facilities will only be implemented once a need has been established.

Non-academic engagement the project has invested heavily in community engagement and building local relationships over the long term, both to achieve progress in the development and to deliver a message about the nature and spirit of the university, its public image and reputation. An independent engagement consultant was appointed to co-ordinate activities, and an extensive public art programme has been implemented to engage local communities and create a sense of ownership in the development. The project will include the construction of a new primary school and community centre jointly run by the University and local community representatives.

Specific assets the North West project provides a model for the transformation of a university estates department into a professional developer and client which has built internal capacity through a circulation of expertise into the university from outside. holding relationships institutionally. The physical development is conceived as an integral part of the city, or 'urban extension', which delivers on an expectation for universities to engage with wider communities and social challenges in addition to higher education services.

Notes

1 Jonathan Nicholls, University Registrary, phone interview by Clare Melhuish, Nov 2013. All further attributed quotations as cited unless otherwise stated
2 Planning officer, Cambridge City Council, interview by Clare Melhuish, March 2014. All further attributed quotations as cited unless otherwise stated
3 Marcial Echenique, Emeritus Professor of Land Use and Transport Studies, former Head of Department 2003–8, Department of Architecture University of Cambridge, interview by Clare Melhuish, Churchill College Cambridge, Nov 2013. All further attributed quotations as cited unless otherwise stated
4 Principal: Design and Planning, AECOM, masterplanner for the North West Cambridge Development, interview by Clare Melhuish, Nov 2013. All further attributed quotations as cited unless otherwise stated
5 North West Cambridge Development, Responses to Green Paper, 4. NAFRA (Nineteen Acre Field Residents Association), 3
6 Deputy Project Director (Heather Topel) North West Cambridge Development, interview by Clare Melhuish, UCL London, 2013. All further attributed quotations as cited unless otherwise stated
7 Architect on North West Cambridge development, interview by Clare Melhuish, London, Feb 2014. All further attributed quotations as cited unless otherwise stated
8 Cambridge Futures, http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/case-studies/cambridge-futures
9 Local resident, interview by Clare Melhuish, Cambridge, Feb 2014. All further attributed quotations as cited unless otherwise stated
10 http://www.nwcambridge.co.uk
11 Paul Barnes, Communications Management, phone interview by Clare Melhuish, Jan 2014
12 Sam Wilkinson, Director InsiteArts, interview by Clare Melhuish, London July 2014
13 The North West Cambridge masterplan won Award of the Year in the Future Projects – Masterplanning category at World Architecture Festival 2014, Singapore
14 North West Cambridge Urban Design Charette 2012, Department of Architecture, University of Cambridge http://www-falcon.csx.cam.ac.uk/site/ARCT2/research/north-west-cambridge-charrette/north-west-cambridge-urban-design-charrette, last accessed 26.1.14
15 Roger Taylor speaking at Community Forum, Methodist Church Hall, Castle Road, Cambridge 2013.
16 North West Cambridge Urban Design Charette 2012, Department of Architecture, University of Cambridge
17 Public exhibition boards 2010
18 http://www.arct.cam.ac.uk/research/north-west-cambridge-charrette
19 http://www.arct.cam.ac.uk/research/north-west-cambridge-charrette
20 AECOM, project description, World Architecture Festival 2014, Singapore.
21 AECOM, project description, World Architecture Festival 2014, Singapore

References cited

Brigham, Allan
2008 'Is town v. gown a thing of the past?', *Cambridge Evening News* 7th October. http://www.colc.co.uk/cambridge/tours/article2.htm
CABE
2011 Cambridge Futures, CABE Case Studies. The National Archive. http://webarchive.nationalarchives.gov.uk/20110118095356 http://www.cabe.org.uk/case-studies/cambridge-futures
Cambridge University Reporter
2010 North West Cambridge Project: A Green Paper. Cambridge University Reporter No. 6194, Vol CXL: 35, 25th June. https://www.admin.cam.ac.uk/reporter/2009-10/weekly/6194/section1.shtml
Graham, Nick
2013 University approves £1 billion new town development. *Varsity Online* 2nd February
Hopkirk, E
2012 'Cambridge University wins outline planning for £1bn city extension', *Building Design*, 10th August
Lonsway, Brian
2009 *Making leisure work: architecture and the experience economy.* London: Routledge
Morgan, John
2012 'Risk and reward', *Times Higher Education* October 18th. http://www.insidehighered.com/news/2012/10/18
North West Cambridge
2012 Public Art Strategy, http://www.nwcambridge.co.uk/files/o2_20_public_art_strategy.pdf
North West Cambridge
2014 'Local Centre to be named Eddington', press release, 26th June
Platt, Stephen
2015 Cambridge Futures 1990–2030, in Ying Jin (editor), *Traffic in Towns: the next 50 years.* Landor Links
University of Cambridge/Communications Management
2011 *Working with You: working in partnership to create a better community.* Appendix 7: Statement of Community Involvement, North West Cambridge http://www.nwcambridge.co.uk/files/o1_5_statement_of_community_involvement.pdf
University of Cambridge
2007 Estate Strategy, http://www.em.admin.cam.ac.uk
Welham, Holly
2015 Learning shouldn't be a competitive sport that only a few can succeed at. Teacher Network/ Talking Heads. *The Guardian*, 18th January

CASE STUDY 3

NEWCASTLE UNIVERSITY AT SCIENCE CENTRAL

A ‘living laboratory’ for sustainability in the city centre

Contents

Introduction

Introduction

1 Historical and policy contexts
1.1 The civic university
1.2 The university in the ‘science city’
1.3 Growth and international research profile

2 Structures and processes
2.1 Partnership and co-location
2.2 European and other funding in recession
2.3 Academic leadership and project organisation
2.4 Site organisation and timescale
2.5 Architects: briefing and appointment
2.6 Community engagement

3 Visions and narratives
3.1 The ‘living laboratory’
3.2 New approaches to learning and teaching space
3.3 Sustainability?

4 Translation into place
4.1 Site context: regeneration
4.2 Planning policy context
4.3 The university as anchor institution
4.4 Economic regeneration
4.5 Social impacts and inclusivity

5 Key issues and learning points

Summary

1

2

3

1. Science Central site, viewed from the northeast, September 2014
2. Science Central, artistic impression of projected development at outline masterplan stage, from southwest, including Urban Sciences building (coloured brown, centre ground)
3. Urban Sciences building, as seen from across Science Square: artistic impression.
Images courtesy Hawkins/Brown

Newcastle University is developing its presence on the Science Central site to the north-west of the city centre, as part of a partnership-based initiative to re-position itself as a civic or public university for the 21st century. The university has been central to the city’s designation as a Science City, and its strategy for economic revitalisation based on the promotion of a socially-inclusive, post-industrial knowledge society. Science Central was conceived as a form of science and technology park, integrated into the city centre, which would be a physical embodiment of the Science City and the council’s partnership with the university; a former colliery and brewery site where new university research facilities would be co-located with businesses, public open space, community gardens and homes, attracting investment and government funding for research and physical infrastructure. The University’s first building dedicated to Urban Sciences will open in Autumn 2017, as a resource for academics and the public, and in March 2015 benefited from the announcement of an additional £10m of government investment through the Collaboratorium for Research in Infrastructure and Cities (UKCRIC). This ‘living laboratory’ for sustainability research will be followed by two further university buildings in due course around a new public square, one of two at the heart of the site.

Introduction

The University of Newcastle-upon-Tyne was established as an independent institution in 1963, shaking off its past history as Kings College (1937) of Durham University, which had itself been created through a merger of Durham's Newcastle-based College of Medicine (1852) and College of Physical Sciences (1871). Its roots lie in a more secular and science-orientated mission than Durham University's colleges in Durham, shaped by Newcastle's own, distinct, industrial economy and identity, and by a local demand for science-based education applicable to the particular fields of mining, agriculture and manufacturing. During the 1960s, the newly-autonomous university's Kings campus became integrated into a larger complex of civic institutions established through urban redevelopment, reinforcing the notion of the university's participation in the economic and social life of the city. And in the more recent past, its Centre for Urban and Regional Development Studies (CURDS) has generated a body of research in economic and urban geography which has focused on developing an understanding of how such a role might be reinterpreted in the present and future, to enable this university and others to be proactive in shaping thriving cities. The university's decision to expand onto the Science Central site north-west of the city centre, in partnership with the city council, represents then a fundamental aspect of a commitment to reinvent the university's historic mission in response to current needs.

Historical and policy contexts 1

'In my view the knowledge business of universities has both a supply side and a demand side. Our search for truth, our creative drive, and our definition of academic disciplines are part of what we can supply in terms of knowledge. Our engagement with the world, our response to societal issues, and our duty as citizens are part of meeting a demand for knowledge'
Professor Chris Brink, Vice-Chancellor (Brink 2007)

The expansion onto Science Central, incorporating an Urban Sciences building, teaching centre, and adjacent Business School, is the most recent example of the university's 'experimental approach' to campus development (Benneworth and Hosper 2007:148). It was predated by its involvement in the International Centre for Life in the 1990s, located on a former cattle market close to the railway station. The new initiative is linked to Newcastle's nomination as one of six Science Cities in the UK in 2005, recognizing the steps it had taken towards moving on from its industrial past and reinventing itself as a hub of the knowledge economy. Noting this 'societal shift' as a general phenomenon, Chris Brink observes that it 'is bound to impact on universities, just as it did 200 years ago…' (Brink 2007:4), and the Science Central expansion represents part of the University's initiative to re-engage with its 'civic' roots in an altered economic context.

The civic university 1.1

'Is the university **in** the city or **part of** the city? … we make the case for the civic university working with others in the leadership of the city in order to ensure that its universities are both globally competitive and locally engaged'
(Goddard and Vallance 2011:1) [1]

Scholars from the university's CURDS centre have argued in a large number of publications for a re-engagement of universities with the cities and regions in which they are located. John Goddard, Emeritus Professor of Regional Development Studies,

proposes that 'all publicly-funded universities in the UK have a civic duty to engage with wider society on the local, national and global scales, and to do so in a manner which links the social to the economic spheres. Engagement has to be institution wide commitment, not confined to individual academics or projects … to embrace teaching as well as research…' (Goddard 2009:4). While Newcastle was not one of the original six civic (or 'redbrick') universities established in the UK's major industrial cities to deliver practical manufacturing and engineering-based skills, its civic identity was well-established in its origins, and has been given renewed vigour in the commitment enunciated by Brink to 'pursue "knowledge for life" … causally connected with life and the world around us' (Brink 2007:9).

As Brink notes, 'universities are expected to deal with an extraordinary number of issues and agendas' (Brink 2007:5) in the transition from industrial to knowledge economy, and therefore he advocates a 'supply and demand'-driven approach which focuses on specific local and regional needs and applications. In the case of Newcastle four areas of research strength have thus been identified for development as priorities for the community and local partnerships: Sustainability (formerly Environment and Energy), Ageing and Health, Stem Cells and Regenerative Medicine, and Molecular Engineering. Each of these strands has further been linked to a particular physical site in the city, with Sustainability mapped onto Science Central.

The university in the 'science city' 1.2

By 2005, Newcastle had sufficiently established a reputation for leadership in science to be named one of the UK's six 'science cities' – regional development projects designed to generate science-based economic growth. The university's presence and research strengths had played a significant role in this designation, which described a partnership between the City Council, the University and the regional development agency, OneNorthEast (1999–2012). The university's participation in the Science City was underpinned by co-investment with its two partners in the Science Central site, a former brewery close to the St James's football ground, with a view to establishing some kind of science and technology park integrated into the city centre.

This initiative built on the university's past experience of working with OneNorthEast's predecessor, Tyne and Wear Development Company, on the scheme for the International Centre for Life (ICfL) in the mid-'90s, part-funded by the government with £8m from its Joint Infrastructure Fund. TWDC had been actively involved for some years in regenerating industrial sites in the city, but as Benneworth and Hospers report, had been criticised for a lack of community engagement (Benneworth and Hospers 2007:148).[2] ICfL was perceived as an opportunity to recruit university support for a project which would be seen as delivering more explicit social benefits. According to Benneworth and Hospers, 'Newcastle University put a great deal of effort into justifying ICfL, representing it as a place where life science technologies from the university could successfully be commercialised, bringing about economic development benefits, both in terms of new firms, but also helping to regenerate a former derelict quarter of the city' (Benneworth and Hospers 2007:148). This emphasis on the urban regeneration agenda underscored the emerging idea of the university as a 'planning animateur' (Benneworth and Hospers 2007) in urban policy and design, leading to the development of 'university-influenced urban landscapes' (Benneworth, Charles and Madanipour 2010:1612), as well as an agent of urban economic recovery and growth.

The City Council's Core Strategy document of 2014 refers to 'the success of the research and development activities of the Centre for Life, Newcastle University and our hospitals' as the basis for the development of Science Central (Gateshead Council and Newcastle City Council 2014:168). The ICfL incorporates a visitor attraction – a popular science centre – alongside bars and restaurants around a new public square, NHS facilities, university biomedical research space, and commercial

office space occupied by a majority of university spin-off companies. Although the Science Centre currently attracts around 250,000 visitors a year, the project has also been criticised for providing expensive office space rather than meeting the needs of regional life science firms, and for prioritising the academic research and funding needs of the university over and above wider urban benefits (Benneworth and Hospers 2007). Nevertheless, it provided a flagship for closer co-operation between the university and other urban actors in the 'Science City', based on 'the development of entrepreneurial and collaborative opportunities with other universities and commercial organisations' which the University Estates Strategy for 2007–12 set out as a key aspect of the University's Institutional Plan (Newcastle University 2008:2). In 2009, the university set up its Newcastle Institute for Research on Sustainability (NIReS) as an organisational framework for research across three faculties and to lead on the Sustainability theme within the context of a wider city partnership: as Goddard points out, the omission of the term 'university' from the name was not accidental (Goddard and Vallance 2013). It is this institute (now Institute for Sustainability), together with the Faculty of Science Agriculture and Engineering (SAgE) and Science Central team (also established 2009) which has been at the forefront of plans for the university's presence on Science Central, conceived as one of a number of new 'knowledge hubs' embedded within the city.

Growth and international research profile 1.3

Alongside the University's policy of commitment to local civic engagement and urban development, a concern to maintain and enhance its academic ranking and research profile at an international level has also been a key driver behind the rationalisation of its existing main campus and expansion onto additional sites around the city. Newcastle is a Russell Group University, ranked in the top 1% of universities in the world (QS World University Rankings 2014) and 22nd in *The Sunday Times* 2015 Good University Guide. Its Estates Strategy clearly states its mission: 'To be a world-class research-intensive university, to deliver teaching of the highest quality' – *as well as* 'to play a leading role in the economic, social and cultural development of the North East of England'. It is supported by a policy of 'controlled growth' in the number of home students, and recruitment of international students and staff. Integral to this ambition will be 'an attractive, cohesive, financially sustainable environment supporting the provision of a high-quality student experience and internationally renowned research. This will be delivered through a comprehensive and integrated approach to capital investment, maintenance and space utilisation' (Newcastle University 2008:1). The Science Central site then offers the possibility of constructing new, state-of-the-art research and teaching facilities, which will enhance and project the university's academic image both at home and abroad, and arguably contribute to its ability to attract students and staff. The university's project director suggests that it could drive the recruitment of 50 additional staff in the SAgE faculty itself, based both at the site and elsewhere, because of the new research and teaching programmes that the Science Central initiative enables 'across the board' (Stephanie Glendinning Nov 2014).[3]

Structures and processes 2

The University's approach to the Science Central development has been embedded in a collaborative, partnership framework from the outset, positioning the institution as one of a number of actors in a complex, long-term urban development project. The partnership approach has been complicated by shifting relationships between the actors due to factors outside the university's control, such as changes in government

regional development policies and financial arrangements. However it has also delivered a range of mutual advantages and enabled the project to move forward despite difficult economic conditions. From the university's side, involvement in the project has been centered within the Faculty for Science Agriculture and Engineering, in collaboration with Computing Science and the re-named Institute for Sustainability (formerly NIReS), with an emphasis on strong academic leadership to achieve the buildings it wants, with a balanced input from the Estates team.

Partnership and co-location 2.1

The Science Central initiative is the direct outcome of an existing partnership arrangement between the university, City Council and regional development agency. The closure of One NorthEast in 2012 complicated the structural set-up, but led to a renewal of commitment to the partnership approach, with the two remaining partners buying up One NorthEast's share in the company. The Science City delivery company itself was wound up as a separate entity in March 2015, with some of its staff moving to direct employment by the respective partners and others facing redundancy. However the Newcastle Science City banner will continue as the face of the partnership – 'with a key focus on delivering the Science Central development', as stated by Vice-Chancellor Chris Brink (Newcastle University 2014b).

As Brink points out, 'The partnership has … adapted to major challenges including the recession in 2008 and the demise of the Regional Development Agency' during its lifetime, as well as more recent public funding cuts' (Newcastle University 2014b). It has been viewed as a successful, collaborative approach which has enabled access to other sources of funding from central and European sources. Pat Ritchie, Chief Executive of Newcastle City Council, stresses that the combination of 'City Council expertise with academic insight' will further allow for an effective approach to tackling the 'big societal challenges' (Newcastle University 2014b).

Fundamental to the partnership approach is the physical co-location and interaction of university with non-university functions. The Core (or 'gateway') building, financed by the council, will house a mix of occupants from early 2015, some on a temporary basis, including the University's Continuing Professional and Executive Development (CPED) department and Cloud Computing Centre, incubator space for 'those wanting to co-locate with the university' (Pearson 2011) and, in its last few weeks of existence, the Science Central team, relocated from its home on the main campus. Operated by Creative Space Management under contract from the Council, the Core will also provide a public space available for use by different groups for events. The University's Urban Sciences building and teaching centre will be a close neighbour, providing a mix of research and teaching space for the Department of Computing Science, SAgE, and the Institute for Sustainability, as well as rentable space for start-up companies in the early stages before they become more established as commercial operations and potentially relocate to the Core: the Estates Strategy states that 'University-occupied buildings will be adjacent to business buildings to aid commercialisation of research; stem cell, molecular engineering, energy and environmental translational research' (Newcastle University 2008:8).

However, the representation of the partnership relationship has also been a delicate matter. Despite the common presentation in urban regeneration discourse of universities as attractors to private business, it is understood that this is not always the case. Furthermore, while some businesses prefer not to work with or alongside universities – fearing they could lose their distinctive brand or end up paying over the odds for the privilege – they are no less wary of being associated with councils. As a result, some care has been taken to ensure that the Core building is clearly not affiliated with either, but representative of Science Central as an independent entity which transcends the identities of the partners.[4]

European and other funding in recession 2.2

> 'The high-quality design will set the tone for the whole site, and because of the nature of its use as an incubator for small businesses it would not be realistic to expect the private sector to construct it in the current climate…. The university will be the lead investor in the remainder of the infrastructure on the site'
> *Spokesman, Science Central (Pearson 2011)*

This quotation from a local paper underlines the increasing expectation that universities will step in both to underwrite major urban infrastrucuture and renewal projects under the current conditions of recession and austerity, and to act as catalysts for subsequent private sector investment (Lawless 2011). For Newcastle University, investment in Science City was a significant component of a Capital Plan which projected expenditure to 2012 of £40 million for student residences and £100 million on the academic estate (Newcastle University 2008). The investment relied on the availability of external funding, including government support, and in 2011 £6m was made available from the Coalition Government's new Regional Growth Fund. In a joint statement from Newcastle University and Newcastle City Council, this provided 'further evidence that the Government believes in the ability of Science City to attract new businesses and create the next generation of jobs…' (Pearson 2011).

In total, it is reported that a minimum £50m of funding support is required to enable the entire development, of which £31.5m had been identified by 2013, including £9.33m from the University. This was matched by an equal amount from the City Council, plus 1.33m from One North East, £5.5m from the European Regional Development Fund (for site remediation), and £6m from the Regional Growth Fund (Lawless 2013). In 2011 the failure of developers to take on the construction of the Core building, or businesses to commit to taking space on the site, led the local press to suggest that the city council would have to foot much of the bill for the project, while the university would benefit from building research space 'on the cheap', as Councillor Bill Shepherd put it (Pearson 2011). However, designation in 2012 of the NewcastleGateshead Accelerated Development Zone (ADZ – the government scheme allowing local authorities to retain future business rates generated by developed sites to finance debt incurred in the initial infrastructure investment), including Science Central as one of four sites, provided access to significant new funding to kickstart development (projected to be up to £320m in total across the four sites by 2038).[5] £8m was also secured from the Local Growth Fund to support an Energy Centre and Life Sciences incubator units on the site, while the 'Future Cities' agenda is being viewed as a source of opportunities for future funding from government and European sources (Newcastle University 2014b).

In 2013, the university countered Councillor Shepherd's accusations with an announcement that it would invest a further £50m in the construction of its new Urban Sciences building, in addition to £2m for the Cloud Computing Centre contributed by the Department for Culture, Media and Sports. Professor Phil Taylor, head of the Institute for Sustainability, described the investment as based on a 'solid business case' grounded on the prospect of 'great returns through fantastic research outcomes, collaborations with industries and other partners on the site including the city council … an investment in growth for Newcastle University to make sure that it stays competitive nationally and internationally' (Ford 2013).

Academic leadership and project organisation 2.3

> 'The business plan is obviously looking at income and cost, and for the income we needed to work out how much additional research we might get, how much additional teaching. So really that's an academic exercise'
> *Professor Stephanie Glendinning 2014*

The university's business case for the Urban Sciences building was produced not by the university's Estates department, but by academics and researchers from SAgE, the Institute for Sustainability and Department of Computing Science, under the leadership of project champion Professor Stephanie Glendinning (Civil Engineering) in 2013. It was based on an agenda for new research rather than on any clear vision of a building as such, which had been initiated by an open call for ideas to the faculty from the new Pro-Vice Chancellor of SAgE, Stephen Homens. Homens had been tasked with making something happen on the site for the university, in the absence of any concrete proposals, and in 2012 it was decided that, in addition to a new research programme, the whole of the School of Computing Science would also be relocated to the new building. A revised Activity Plan – urbanism, sustainability, and digital economy – was produced in March 2013, signed off by the university committees over the following six months, and costed for the business plan based on information provided by academics leading on various works elements, with some input from Estates. The business case was approved by Council in November 2013, just after the architectural brief had been issued.

According to Glendinning, the Estates team had not anticipated that the academics would take so much interest in the process and such a strong lead on the project. She notes that there was quite a lot of internal conflict in the early stages. However she took advice from a colleague at Loughborough University who had led a building project there: 'he was very insistent that a build can only be successful if you have strong academic leadership on it to get the building that you want'. Glendinning's own role was shaped by her 'home' in Civil Engineering, and the fact that she had already done a secondment with Arups, the engineers on the the masterplanning team for Science Central, where she sat on the consulting group for the project. It was she who assumed responsibility for decision-making in the first stage, and was released from teaching activities to take on the role of project champion until September 2017 when the building is scheduled for completion.

In addition there are a number of other champions for different elements of the project, including both the building facilities and the various user groups, with academic leads for each lab representing a specific research activity – eg the Smart Grid Lab, Cyberphysical Lab, and Urban Observatory – as well as Computing Science. It has not always been easy to resolve tensions between the different groups, which have highlighted issues of ownership over the building and played out through the refinement of the brief with the appointed architects. Furthermore, the Project Team, comprising two managers and representatives from both the academic and estates sides, is also responsible for maintaining relations with Science Central and the council.

Thus the project has generated a complex network of relationships of sometimes competing interests, which have been further influenced by the impact of the different funding streams involved in the process. The production of the brief crystallised many of these different interests. Following advice from Loughborough, Glendinning argued for making the 'key dilemmas and challenges … explicit in the brief' (Glendinning Nov 2014), and using it to challenge the appointed architects to resolve them – no easy task.

Site organisation and timescale 2.4

Architects Hawkins Brown were appointed to the design of the Urban Sciences building early in 2014, and as they note,[6] their task was not made any easier by the fact that the masterplan for the site was already fixed (including building masses, heights and relationships) and the corresponding infrastructure realised, imposing additional constraints on the design response. Planning permission for the masterplan, by MAKE, was finally granted in April 2012, and divides the site into four key areas which will be developed over a 20–25 year period: citing the Councils' Core Strategy

planning document, 'a knowledge area including science and knowledge based industries, a live-work area including smaller-scale offices and houses, a home zone area which will be a new residential neighbourhood, which will all be supported by a local facility area' (Gateshead Council and Newcastle City Council 2014:171). It further emphasises that 'predominant uses will be research and development-related with some offices, residential and student accommodation supported by local services' (GC/NCC 2014:171), and underlines the urban and sustainable aspects of the scheme, with good connectivity to the city centre, prominent 'gateways' into the site, a pedestrian-friendly ground plane animated by retail and restaurant use, an energy centre and district heating system.

Although masterplanning work (by EDAW) began in 2007, and the existing brewery was demolished in 2008, progress was delayed by the impact of the ensuing economic recession. The financial viability of the project was severely challenged, with an estimated deficit of £100m–£150m, as was the delivery model based on the identification of a single partner for the entire project (Lawless 2011). In 2009 the regeneration company 1NG (subsequently wound up in 2011) was appointed as Development Manager, and the agreement of its economic masterplan for Newcastle and Gateshead (1Plan, leading to the joint Core Strategy), prioritising Science City development, provided the impetus for the project to move forward, with the appointment of MAKE as architectural masterplanners and agreement of outline planning consent in 2011.

Phase 1 of the development includes completion of the new Core building (2014) and two new squares (including Knowledge Square), following on from the excavation of around 50,000 tonnes of coal remaining near the surface, grouting and capping of redundant mineshafts, and remediation (2012). During the future development of the site, including the construction of the Urban Sciences building to 2017, and two further university buildings, a range of interim uses is being promoted, including community gardens, to encourage and establish public use.

Architects: briefing and appointment 2.5

> 'Newcastle University has appointed London-based architects Hawkins\ Brown, in conjunction with BuroHappold and BD Landscapes, to design a £50 million 'living lab' on Science Central'
> *Newcastle University press release, February 2014 (Newcastle University 2014a)*

The university's appointment followed an RIBA (Royal Institute of British Architects) competition calling for 'architect-led teams to design a distinct and recognisable [10,000 sq m] building which would underpin the University's core research theme of digitally enabled urban sustainability' (Newcastle University 2014a). It was judged by a panel including the Vice-Chancellor Professor Chris Brink, senior academics from the Faculty of Science, Agriculture and Engineering, representatives from the Estate Support Service and University Council, together with John Whiles (of Jestico + Whiles) acting as the RIBA Architect Adviser to the competition.

According to Glendinning, the idea of running an RIBA design competition came from Estates, which had been surprised not only by academic interest in the design process, but also by the academic team's readiness and ability to cut costs where necessary without a fuss. On the academic side, the competition was approached 'rather like a shortlisting for an academic post' (Glendinning Nov 2014). But there was disappointment at the quality of the initial submissions. For Glendinning, who had run a masterplanning exercise for three years and then a building design project relating to the site with fourth year MEng students, the quality and imagination seemed to fall short compared to the student work. From the architects' side however, there was frustration at the quality of the brief itself: 'it was a

description of the spirit of the place, not a building' (assessor July 2014);[7] 'academics are used to pitching for research funds – so there is never any realism in the user brief. The estates department is more pragmatic, and there's always tension' (architect Sept 2014).[8]

In the end, two teams were shortlisted on the basis that they would provide the best leadership on the stakeholder engagement side – because 'we knew we really needed somebody to drive this engagement in the design' (Glendinning Nov 2014). The RIBA assessor encouraged the client body to opt for a team it could work with, rather than a concept it liked, and score the submissions rather than being emotionally swayed by the spirit of the presentations. Hawkins Brown frontloaded the design fee in brief development and concept delivery, creating a space for developing engagement on all fronts, both with key stakeholders and client, and this proved invaluable to working towards a resolution of the challenges contained in the brief.

One of the key issues for the architects was to understand how the building could be 'a physical embodiment of sustainability research', as described in the Activity Plan,[9] when both the concept of sustainability and a clear research programme seemed to be under-developed, despite the presence of the Institute. 'Sustainable research doesn't really exist yet at the university. The user body is a mix of hardcore mathematicians and much more interactive new computing…' (architect Sept 2014). Furthermore, the building needed to 'welcome people in from researchers, students, business people and the public' – a wide mix of visitors for different purposes – and 'be a research facility in its own right' – but 'Estates didn't know how they could operate the building or what it would cost to run … it would be hugely expensive' (assessor, July 2014). Finally, the triangular plot defined by the masterplan and infrastructure was not considered to be an appropriate shape for the best building, but could not be altered.

Nevertheless, the university concluded that: 'The team at Hawkins/Brown demonstrated an excellent understanding of the brief to create something unique that would embody our commitment to sustainability and innovation by creating an environment that would be open, creative, inclusive and entrepreneurial' (Newcastle University 2014a). The appointment marked the start of a further information-gathering process towards the goal of designing a building that would include flexible academic spaces, start-up business incubator space, public workshop and demonstration spaces, a 'digital' library/learning centre and a café with social spaces to create informal learning opportunities. It will be a massive flat floor structure, with the possibility of converting teaching space into workspace, and a research wing fitted out with loose partitions on a 1.5m grid, allowing for flexibility and customisation. The different elements will be held together by a central forum space that will also offer the potential to be used for public engagement activities.

As the architects have commented, 'academics challenge, think and probe – they are good to work with as clients go. The spaces are not speculative, but have to work, for a specific user' (architect Sept 2014). However, they also ran up against difficulties in obtaining the information required to set up the parameters of the design, which led to delays in the programme. One problem was that users didn't understand exactly what was needed, or that the information changed; another was that many of the prospective user groups still did not exist, 'so you go through many more iterations of the scheme' (architect Sept 2014). As Glendinning concurs, 'it was a difficult process, and we learnt too late that were behind programme…'. She suggests that 'you need one person or a very small group which takes responsibility for it, which has some relevant experience to know what the implications of particular decisions might look like'. The architects however accept that a key part of their role is mediation, and note that, compared to other sectors, Higher Education is a good one to work in.

Community engagement 2.6

> 'It's very unlikely that any of those lads would end up going to University. However, they might end up going into buildings like The Core, like the University's new building a year or two down the line, for a day trip to understand what they're doing about smart meters or what they're doing about that vertical green wall. And then it's more important that they feel that ownership – "I know what they do there and why it's important, and how it relates ultimately to what I've done; I've built this for this backyard in Byker and I might get a job doing that one day".'
> *Education, Skills and Engagement Manager, Science Central 2014*

While stakeholder engagement and mediation were crucial to negotiating the first stages of the design process on the Urban Sciences building, Science Central as a whole has a remit to deliver community engagement, and the University has a key role to play in that. When Science City was set up in 2009, its role was defined as being not only to support businesses and create new ones in the science sphere, but also to carry out public engagement with local schools and communities – especially to promote science education in deprived areas (Goddard and Vallance 2013).

While Hawkins Brown has had a role to play in statutory public consultation on the design proposals, which received planning approval in July 2015, public engagement in a wider sense has so far not been key to the university's involvement with the Science Central site, although it is likely to be connected to the urban sustainability theme. External engagement to date has been with key stakeholder partners, including Siemens, Northern Powergrid, and Northumbria Water, which have participated in collaborative workshops to input into the design process from their specific areas of expertise and interest and are recognised as strategic partners for the Institute of Sustainability.

The lack of wider public engagement to date, other than the launch of a website,[10] has been partly a result of pressure to meet deadines on the design programme. As Glendinning explained in November 2014, 'certain decisions have to be made … the structural form, the heating and ventilation system, the electrics and water … all of that has to be designed into the nitty-gritty of the building, and building the engagement side in won't happen until the next stage … it's waiting as part of this package to be awakened.' However, the brief for the building design is itself founded on certain principles of public accessibility and engagement, partly in response to comments from the Council. 'It's being designed to accommodate, welcome – not look like a University building', explains Glendinning, while noting that there is not an absolute internal consensus within the University on how far this should go.

According to the competition assessor, the idea of opening the labs to the public as showcases for research that would provide a forum for engagement around science, was essentially prompted by the city authorities. But in the view of Science Central's Engagement Manager, it will take some work to persuade local people, especially from the more disadvantaged neighbourhoods of West End, Cowgate and Byker to approach the university's buildings, which they do not see as being relevant to their own lives: 'I know that some of these groups in Byker would think: I couldn't do that, it's nothing to do with me'. She suggests that it is vital to do engagement work that is 'very far removed from what the University itself will be doing … the University is not going to be working with Building Futures East, whilst they're supporting 20 lads, 16–24 years old to get basic construction skills to build vertical growers – that's not what the University is about'.

In response to this, the Engagement Manager has been building up a programme of action based on both Science Central's past engagement work at the site, especially with children, and the work of its Community Science Team, supported by European funding, in deprived areas prior to that. She is mapping

out a network of community organisations that could be connected to the site and funded by EU or Lottery money via Science Central itself as facilitator. Organisations which focus on delivering skills and training to local people, especially in the areas of construction, such as Building East, and computing, could be vital in opening minds to the possibilities that the site, the university facilities, and the knowledge economy in general – with a particular emphasis on sustainability and energy technologies – might offer in the future, especially in terms of jobs. She explains that this is the sort of initiative that could: 'help local people see that whilst it seems very far away and it's not really going to help Brian pay his electricity any better, it will in the long-run. And it's important they do this so that in a few year's time Brian's Smart Meter works better and works the way he needs it to and that there's never a blackout…. And then Brian and his mates might actually want to come in to the Community's research centre, the University's Research Centre…. He might think yeah I'll go with one of me mates for the day to see it, because now I understand about these meters and how they are making them work better – it'll be good to see it' (Engagement Manager Nov 2014).

The hope is that in the long run the University might support such an approach. But in the meantime, the Engagement Manager is dubious about the value of commissioning artists to work on science-based public art projects in collaboration with researchers, as proposed. She warns, 'don't put the word "science" into anything! Because nine times out of ten people go, oh science that's got nothing to do with me…'. There is also sensitivity in the community about the loss of the city's industrial past, reflected in the decision taken (since reversed) not to re-use the Blue Star symbol of the former Scottish and Newcastle Brewery, or any of the old names in the redevelopment of a site which employed so many workers before that to work in the mines (Elswick Colliery). She suggests it is important to demonstrate the continuing ownership of local people in that history and its re-working, to challenge their sense of disconnection with the 'knowledge economy'. To that end, she worked on a project with children and adults, including many who had worked for the brewery, to make a film with a local historian about life on the site over the years and design a time capsule: 'to show them that it was still going to be industry, education and housing. And yeah the industry and the type of education were slightly different, but the history of the site really is kind of staying the same'.

Finally, she points out that the new Core and university buildings will command a magnificent view not only of the two public squares to be constructed on the site, but also of a young people's hostel and a busy soup kitchen which sit on its immediate boundaries. There is no doubt in her mind that much of the site's future vitality will stem from a mixing of social groups in its open public spaces that is not directly linked to its science-based research and business activities, but embodies the very real social needs and problems of the city which some might prefer to hold at arm's-length from Science Central. As she says, this should be treated as an opportunity for proactive and positive management within an overall public engagement strategy within which the university could play a significant role.

Visions and narratives 3

> 'Our vision on Science Central is to provide a unique environment where internationally renowned engineers and scientists can work together with Newcastle City Council, industry, communities and emerging technologies, to find solutions to global urban sustainability challenges'
> *Professor Phil Taylor, director, Institute for Sustainability*[11]
> 'This isn't just some out-of-town science park, this is right in the centre of the city'
> *Andrew Lewis, assistant chief executive, Newcastle City Council (Ford 2013)*

The narrative around the university's involvement in Science Central has been strongly framed by the themes of partnership, collaboration, and outward-facing involvement with the city, while at the same time emphasising the idea of cutting-edge scientific research within a laboratory-like setting. In fact the concept of the laboratory is evoked in a number of ways within the projected vision of the university's presence on the site. On the one hand, the new Urban Sciences building itself is described as a 'living laboratory'; while on the other hand, the city is framed as an 'urban laboratory' which is the object of the university's scientific research carried out inside the living laboratory – specifically a research programme focused on sustainability, with the goal of discovering solutions to key urban problems, which might be further developed as universally applicable principles. The University's Science Central web pages state that: 'Engineers, scientists and digital researchers will work together with industry partners Siemens, Microsoft, Red Hat and Northern Powergrid, to discover solutions to the urban sustainability challenges we face', and describes the new facilities as 'a beacon of urban innovation'[12] where new urban technologies will be trialled. As such it has been hailed by Future Cities Catapult as a leading urban innovation hub in the UK.

The 'living laboratory' 3.1

Urban Sciences Building: perspective view, north–west facade. *Image courtesy Hawkins\Brown*

In 2014 a 'revamped vision' for Science Central was unveiled by the partnership, in which 'City Council staff and University researchers will work together to create a living laboratory to *map out the city of the future* … it will combine digital ingenuity and sustainability research with social innovation to lead advances in the development of future or "smart" cities…' (Newcastle University 2014b).

As previously noted, this vision did not start with a building, but emerged rather out of an open call for research ideas, subsequently translated into a research agenda, or activity plan, and only then into an architectural brief. Goddard and Vallance note that the grounding of the sustainability research theme in a physical site at Science Central was probably valuable in terms of encouraging academics to focus their research towards urban development embedded in Newcastle, and specific applications (Goddard and Vallance 2013). From the outset, the site offered opportunities for developing learning processes in dialogue with the masterplanners and engineers (ARUP) appointed to produce a strategy for its remediation and use. For example, a 2km long, 8 inch-diameter borehole was drilled to access geothermal energy from hot water (50+ deg C) underground which it was hoped could be used to heat buildings on the development and beyond. Ultimately the flow rate proved to be too low to use as a single energy source, but as the council's director of investment and development stated, 'It was really exploratory and in essence achieved everything that was set out by academics [working with Mott MacDonald], about

understanding geothermal heat' (Proctor 2014). Newcastle academics also provided a qualitative sustainability assessment of options for extracting, or leaving and infilling underground, 30,000 remaining tonnes of coal – favouring the former.

Urban Sciences Building: study of modular facade system. *Image courtesy Hawkins\Brown*

When the building is ready, it will have a wild-flower rooftop garden to promote local biodiversity, and plug in to Science Central's district heating infrastructure and sustainable urban drainage system. The modular façade system has been designed to reduce on-site waste and provide solar shading, in collaboration with Martyn Dade-Robertson, a lecturer in architecture and computation in the School of Architecture, Planning and Landscape. It will also house the Cloud Computing Centre for Big Data, which will move from The Core, while the Cloud Innovation Centre will provide a forum for engagement, data-sharing and knowledge-transfer with business and the public sector.

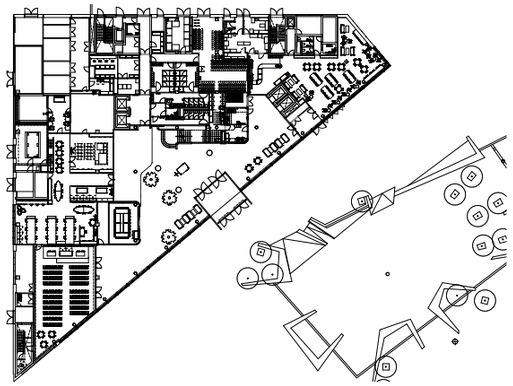
Newcastle is not the only university to have promoted the idea of the 'living laboratory' for grounded research focused on urban sustainability – notably the University of Manchester has been developing similar ideas, but on a smaller scale, embedded in its existing campus with a focus on smart technology (Evans and Karvonen 2014). But Newcastle has been in the forefront of ideas around the development of physical facilities themselves as a resource for applied sustainability research (although Manchester again is working towards a similar goal with the design of its new Engineering building). This is driving a particular vision of the Urban Sciences building both as an experimental site for teaching and research and a material representation of what the university stands for in this field.

New approaches to learning and teaching space 3.2

> 'We are leading in terms of sustainability, we have to lead on that and show that we are actually doing something different … what we need to produce is something that looks different and is looking to the future…'
> *Professor Stephanie Glendinning 2014*

The design agenda for the Urban Sciences building is concerned with creating an environment which both enables and represents to a wide audience new ways of working in the field of digitally-enabled urban sustainability. In an interview with a local paper in 2013, Professor Phil Taylor, heading the Institute for Sustainability, stated that the way to 'make big breakthroughs' in research that would bring sustainability to cities around the world, was by building 'cutting-edge labs' and multi-disciplinary spaces in which academics, researchers and students could work together in more collaborative ways. 'It is about trying novel ideas and research and taking them forward to be used in infrastructure into 2030, 2040, 2050', he said (Armstrong 2013). Alongside the labs (including a unique Cyberphysical laboratory), some of which will potentially be open to the public, will be 'maker space' owned by one of the research groups, and an Urban Observatory and Decision Theatre for processing urban data (relating to water, energy, waste, transport and digital control systems) – as well as the Cloud Computing and Innovation centres, a lecture theatre, central forum, café and shops to draw the public in.

The architectural plans have been developed through a series of user workshops and the core project team within the university, which revealed a certain amount of tension between those in favour of open-plan space (particularly on the Estates side) and those who wanted to maintain quiet individual working spaces, but also an existing 'diversity of working styles', especially within Computing Science – from those who 'don't even have a desk' and will sit down with a laptop anywhere,



Left: Urban Sciences Building: section through public forum space. *Image courtesy Hawkins\Brown*
Right: Urban Sciences Building: ground floor plan. *Drawing courtesy Hawkins\Brown*

to those who 'want absolute visual and noise cut-off' (Glendinning Nov 2014). Equally, it became clear that people had very different ideas about what the building should look like on the outside – whether a conventional design that stands for the traditional university and civic values, or something different that reflects the innovative and experimental vision behind the facility and its working-spaces within.

However, these conflicts have run alongside an aspirational narrative about a building which could provide a model of integration – integration at several levels, between academics, researchers, business people, and members of the public, but also between users and the building fabric, and between different elements of the building fabric itself. As Professor Glendinning explains, 'lots of elements of a building are studied as single systems. But our aim is to look at the integration of those, and to look at the integration of those with the users. So for example, we could use the expertise we've got in both Cyberphysical Systems and Smart Grid Technology, or Human Computer Interaction and Building Monitoring Systems, to do some novel research at the building scale' (Glendinning Nov 2014).

But what does all this mean to the general public? With a lack of structured public engagement to date, the University has depended on press releases and coverage in the local press to communicate its vision of an innovative and integrated research facility that has relevance to real urban and problems. This has translated into headlines such as: 'Newcastle planning £50m hi-tech Science City: new "intelligent buildings" are being constructed to keep track of everything from energy use to workers' movements' (Armstrong 2013). In this story – and very much not in line with the academic vision, which is acutely aware of the privacy and ethical issues it raises (it is conducting a pilot study to understand these more fully) – the proposed Decision Theatre is likened to 'the one seen in the Hollywood movie The Hunger Games'. It is suggested that the new buildings will have special monitors and sensors in the walls to follow energy use and workers' movements, while Twitter and Facebook will also be monitored. It further references a 'City of the Future', with the potential to monitor and manage traffic and pollution through road sensors connected to the Cloud Computing Centre, and academics teaming up with business 'to bring green technology to the masses'. But this disparate array of popular reference points fails to add up to the coherent vision of urban sustainability which the university has put its name to, and reinforces the sense that there is more work to be done in grounding that vision in the public domain. As a first step in that process, a series of scenarios, or 'vignettes', have been published on the university's Science Central web pages to tell illustrated stories about a future sustainable Newcastle that different public audiences might relate to.[13] As it says, many of these scenarios of the future (eg increased flooding) and proposed responses are 'rapidly transitioning from a dream into physical reality', and sustainability research and translation carried out at Science Central will have an increasing role to play in that process.

Left: Green flood management: vignette. Right: Smart energy network: vignette. *Illustrations by Katie Chappell, www.katiechappell.com © Newcastle University.*

Sustainability? 3.3

'Our vision and commitment to being a world-class civic university means we do not just look at what we are good at but also what we are good for. One of the areas in which we make a contribution to civil society is urban sustainability, and it is very pleasing that we have now found academic and financial resources to make a major push'
Chris Brink, Vice-Chancellor (Armstrong 2013)
'We envisage an aesthetically eye-catching building, which makes a statement about our core theme of digitally enabled sustainable urban environments'
Project Brief 2014

Science City has been defined from the outset as an innovation hub for a zero carbon future and urban sustainability, and the University's Institute for Sustainability was established as an interface for the University's engagement in that initiative. The masterplan for the site was embedded in a Sustainability Framework which included a range of indicators and targets, but at the same time the planning authorities recognised 'some challenges' – notably, sustainability versus viability, and the difficulty of maintaining flexibility for the future within approved, fixed design parameters, both of which raised the question, 'how to stay true to the vision?' (Lawless 2013). As a result, the framework was never really finished, and nor was there any system of governance to enforce its implementation. This made it difficult to develop a specific sustainability framework for the new Urban Sciences building which also speaks to the sitewide framework, although a bespoke framework is now in place; while at the same time, the idea that it should make a clear aesthetic statement about sustainable environments is core to the vision written into the brief.

According to the Project Manager, 'It's quite easy to say sustainability is in everything we do … [but] actually we don't really understand what sustainability is … and [it's] difficult to make sustainability actually work in practice' (Glendinning Nov 2014). But, approached as a 'laboratory' for experimentation, this is perhaps precisely what this project can do – in part by embedding the building within the bespoke sustainability framework as a critical element for delivering its outcomes at all stages of the building lifecycle, from design through procurement, construction and in-

service. While at an overarching level, it is what the university is geared to achieve as part of its contemporary civic mission.

Translation into place 4

> 'Knowledge-based economies are driven by market forces that seek to come closer together in dense and complex relationships … it is not just about the numbers of people and their levels of skills, but the extent to which they form relationships with their employers, suppliers and clients, and, crucially with local places of learning and culture on an ongoing basis…. These flexible, mobile and ever more diverse knowledge workers demand ever higher standards of environment, housing, public realm and cultural capital'
> *One Core Strategy 2030 (Newcastle Gateshead 2010:14)*

As this statement from the Newcastle Gateshead economic strategy demonstrates, there is a well-established belief in the transformative powers of the knowledge economy at the local level of place and culture, which has been a driver behind the Science Central initiative. The historical displacement of the colliery by a brewery and now by an innovation cluster, or knowledge hub, reflects a process of evolution which foregrounds physical emplacement as much as virtual connectivity, recognizing the effects of human association on urban change. But as Science Central's Engagement Manager stresses, knowledge-based economies can also fail to achieve inclusivity at local level, resulting in a disconnection of existing communities from new developments.

Site context: regeneration 4.1

There are currently two new buildings at the Science Central site – one is the brand new Core building within the site boundary, the other is the recently finished new Sikh gurdwara just outside it to the northwest of the site. The latter reflects the varied ethnic mix of people who have been associated with the site over many decades; while along the western boundary of the site is a row of small houses operated as hostels of different sorts by the Cyrenians. To the east lies St James's Park football ground, a number of new-built towers of student accommodation enlivened with colourful cladding, and the University's Business School. These structures now overshadow the popular People's Kitchen, situated a stone's throw from the Core, housed in an attractive historic building across the new square.

The academic team at the university are working together with senior management to produce a strategy for engagement with neighbours around the site, which at 24 acres will be the largest city centre development for a generation, situated just west of the main retail area, and southwest of the civic centre and main university campus. It is described as a 'city centre extension', in contrast to the ICfL – 'a science village' located on a former cattle market close to the River Tyne. A short stone's throw further west lies the university's Campus for Ageing and Vitality, a partnership initiative with Newcastle Hospitals, located in the heart of the West End. It is this western and north-western edge of the city which represents some of its most disadvantaged areas, where issues such as healthy eating, smoking, lung cancer, diabetes, unemployment and fuel poverty have been the focus of previous work by the Science Central's Community Science Team. One of the key organisations which collaborated with the team on these projects was Centre West, the former New Deal for Communities (NDC) group, which also participated in a multi-actor action research project for the West End, Developing Low Carbon Neighbourhoods, partly facilitated by the University's Business School through a Beacon North-East Fellowship grant.

Thus Science Central is strategically located as a 'gateway' to the centre, in close proximity to those areas of the city identified as being most in need of regeneration, which since 2000 have been the focus of engagement work by Newcastle NDC to stimulate participatory neighbourhood renewal over a 10-year period in 13 locations identified by indicators for social exclusion and multiple deprivation.[14] The hope then is that increasing participation and physical presence on the part of the university will help to realise the city authorities' existing ambitions relating to social justice and equality through economic and cultural regeneration: 'Newcastle will be a fairer and more equal city, with our growing population participating fully in the economic, social and cultural life of the city' (Newcastle City Council 2010:2).

Planning policy context 4.2

Newcastle's Core Strategy identifies the northern edge of the Urban Core as a Civic Sub-Area – stretching from Science Central on the West, to the two universities[15] and Civic Centre on the East – containing important arrival points into the city (one mainline station, two metro stations and two bus stations). It states that it will support growth in the area through science and educational development, particularly at Science Central 'as a key site for growth in the knowledge economy including science, research and residential uses' (Newcastle Gateshead 2014:166), enhanced by its ADZ Status. In addition, the site will enhance the Urban Green Infrastructure Network by providing new public open spaces.

The overarching framework for this planning policy is the need for the city to grow in population (to 500,000 by 2030) and diversify in its economy, making a concerted effort to attract in-migration from other countries in order to fill the skills gaps that exist in relation to the development of a knowledge economy. The metropolitan core of Newcastle Gateshead was identified in the Regional Spatial Strategy (abolished in 2010 by the Coalition government) as a suitable and sustainable location for growth and a driver for regional regeneration. This indicated both the development of new and varied employment opportunities (14,000 new jobs by 2030), and the improvement of the physical environment, especially in terms of housing (21,000 new homes) and public space, to make it more attractive to incoming workers. The Gateshead and Newcastle councils accordingly formed a joint development strategy (see Newcastle Gateshead 2014) which 'represents a continuation of our ongoing partnership working on culture-led regeneration, housing market renewal, growth points and most recently our economic master plan "the 1Plan"' (Newcastle Gateshead 2010:2). This is informed by four main themes which have grown out of the two councils' Sustainable Communities Strategies:

- Economic growth and prosperity – a place of opportunity with a flourishing economy driven by science, creativity and innovation, a place recognised for and characterised by a highly skilled, inclusive working population.
- Health and wellbeing – a place of high rates of emotional and physical wellbeing, delivered through encouraging and promoting healthy lifestyles and reducing inequalities across NewcastleGateshead.
- Homes and thriving neighbourhoods – a place where people choose to live that offers quality-housing set in safe, attractive neighbourhoods with good access to employment, education and health care.
- Sustainable quality of place – a place that maximises the potential of its landmarks, environment, riverscape, townscape, heritage and culture – using these to inform standards for development across NewcastleGateshead. (Newcastle Gateshead 2010:3)

Science Central represents one component of a wider spatial strategy identifying a number of key sites for regeneration, which has been developed with the aim of translating these themes into place-embedded reality, and ensuring that all the city's

communities have access to facilities, opportunities and housing. In this context, the university may then be positioned as an 'anchor institution' for the mixed-use development, bringing investment and reputation rooted in local knowledge in a time of scarce public funding, and acting as an attractor for further investment from both private and public sources.

The university as anchor institution 4.3

> '[This is] our opportunity to take the research out of the university into the city and then beyond. It's built on the underpinning research strengths of the university, one of which is sustainability. [We'll] take those over to the Science Central site which then forms a hub to get further engagement and generate new business. The individual research interests will continue in the university … the added value is jobs, prosperity, improving life in the city ultimately'
> *Professor Stephanie Glendinning 2013 (Newcastle Science Central)*[16]

The term 'anchor institution' has become current in the UK during the period of economic austerity since 2008, transplanted from the States as part of a conceptual framework of approaches to filling the gaps left in the organisation of economic and social life by the withdrawal of public funding (Work Foundation 2010). In 2001, Maurrasse highlighted the potential of higher education institutions to lead on partnerships in urban areas aimed at revitalising communities in the US, within the context of devolved federal responsibility for social services to local institutions. He further stated that, because universities and colleges were so embedded in urban situations, 'the fate of communities is the fate of higher education' (Maurrasse 2001:5). In the UK a similar pattern has emerged, with universities increasingly becoming involved in local economic development partnership vehicles and physical development projects which offer the potential to build stronger relations with community and business interests (Goddard and Vallance 2013).

This process often involves a willingness on the part of the university to become more mobile in terms of embracing new sites and bringing new communities of people to them – and less inward-focused at a bounded primary campus. But for academics and students alike, this can be also be difficult, especially when commuting between two or more different work locations is implicated. Many faculties are reluctant to move wholesale to remote facilities set apart from the central hubs of university administration and management. In the case of Newcastle, the decision to move the whole of the Computing Science department to Science Central has been couched within a narrative around the building as a cutting-edge research laboratory that will offer better quality research and teaching space. On the main campus, space is at a premium, especially in terms of resources for teaching and learning. The Estates Strategy has prioritised space use reduction and rationalisation, which will be compensated for by expansion onto other sites. The Business School has already relocated close to Science Central, and it is only a 15-minute walk away. But nevertheless, the idea of relocation has been an issue for staff who see it as a significant distance, and worry about the idea of separation from the main campus.

Furthermore, many academics may fear the loss of a more exclusive academic environment in which to work, and resent the feeling of being coerced into social engagements as part of economic regeneration initiatives which they do not regard as primary within their research. While there is a body of academic research at Newcastle, particularly within CURDS, which has made an explicit engagement with its local and regional context, most university research generally is conducted at an international level of engagement. As a result, university relocations even within cities have to be embedded within larger institutional discourses which draw on a sense of a university's unique history and identity. In the case of Newcastle this has leaned

heavily on the idea of its civic roots and mission in the industrial city, and the need to reinvent itself to meet the demand for relevant knowledge in the 21st century.

Economic regeneration 4.4

> 'Newcastle has a great economic future. A working city, with a vibrant city centre, new industries and new jobs in growing sectors, opportunities for our people to acquire new skills. A great student city which brings young people from across the world to study and contribute to our society.... A city willing to intervene to support the economy, with an ambitious investment plan, and active measures to support jobs and skills'
> *Nick Forbes, Newcastle City Council Leader (Newcastle Gateshead 2014:2)*

Newcastle University has been central to the city's plan of action to intervene in the economy and promote spatial development to support it, particularly through the Science City Partnership initiative. A University press release affirms this contribution: 'Since its inception Science City has supported over 755 regional companies to commercialise new ideas, created 43 new companies, and in the last year alone helped over 6,000 schoolchildren across the city to get involved in science-based events and activities and to see what it could mean for their future' (Newcastle University 2014b).

The university's reputation for being able to deliver in terms of creating spin-off companies and urban regeneration was established with the earlier ICfL initiative – but Benneworth and Hospers suggest that in reality 'its formal relationships with ICfL were arm's length' and that its main priority was to secure investment from external partners for scientific projects directly relevant to its professors' own research. Nevertheless, it demonstrated that regional engagement could be something 'from which many professors could benefit' (Benneworth and Hospers 2007:148), justified by the university's own criteria relating to its identity as a Russell Group research institution.

In terms of the Science Central initiative, it took the University several years to decide what presence it wanted to have on the site itself, and even as plans for the new Urban Sciences building are submitted for planning permission, there is a certain lack of definition about who will occupy the new building, particularly in terms of any potential spin-offs or business engagement. Indeed, the university's role in the development has been regarded with some scepticism during the history of the development. As one councillor, formerly in charge of regeneration, warned in 2011: 'It is important that this is not just a chance for the university to build research facilities on the cheap with the bill picked up mainly by the city council. Our original aim was that we wanted this to be the site that will find a home for the firms which are at the beginning of becoming the next Boeing, the next Microsoft, the next Amazon, to see that happen in Newcastle and see Science City as the crucible for this. If what we end up getting bit by bit is just another shopping centre and some flats next to purely university-based research that will be a huge failure for the city' (Pearson 2011).

From the university's perspective, however, the research facilities are not cheap, and the university has picked up more than 50% of the bill. It shares the fear that the innovation cluster concept might not materialise – but its fears coalesce around the role of the council in the initiative and its lack of resources, despite the fact that in 2012, coming through the worst of the financial crisis, Newcastle Science Central had re-affirmed its confidence that: 'backed by Newcastle University and Newcastle City Council, the scheme will have huge potential to attract new businesses and help support job creation and long-term investment for the city over the next 15 to 20 years … the work will be completed by summer 2014, bringing the reality of the new urban quarter into view for people living and working in the city, alongside potential investors'. The Council's Head of Development Management summed up the anticipated overall project benefits as: 1,900 net jobs (4,500

gross; with 163 in the first phase completing Nov 2014); 17,4710sq m of mixed-use development including 550 new homes; and £225m of private sector investment. It would enhance Newcastle's reputation in the knowledge economy and sustainability research and practice, and provide space for high-growth knowledge intensive business (Lawless 2011, 2013). The Science Central website further stresses its potential as a new innovation hub which 'offers companies the ideal environment to work alongside like-minded individuals, a place to collaborate and share knowledge and expertise' – while also pointing out that is already part of 'one of the largest economic centres in the North of England, home to over 600 leading global firms including Wellstream, Duco, Nissan, Bridon, Procter and Gamble, Nestlé, The Sage Group, Northumbrian Water Ltd, Siemens and Northern Powergrid', and so well-positioned in terms of 'making the most of a loyal and motivated workforce, highly competitive labour costs, [and] the highest graduate retention rate outside London' (Newcastle Science Central n.d). Furthermore it is well integrated within the urban centre]of Newcastle, within easy access of city-centre amenities, making it an attractive environment in which to work.

When the University pledged its further £50m of investment in a new building in 2013, with two further buildings in the pipeline, the local press seemed to concur that the development offered an exciting prospect for the city. One indeed that lends substance to the idea, promoted by two of the university's own academics, that 'Through the development of these urban sites, universities can contribute more widely to the physical and symbolic regeneration of cities, particularly when this regeneration is seen as part of a move towards a post-industrial knowledge-based economy and society' (Goddard and Vallance 2013:19).

Social impacts and inclusivity 4.5

> 'We hope the local community will embrace the opportunities which will be generated throughout the evolution of the Science Central project and it is our vision that it will form a large part of the fabric of the city. It will be a vibrant quarter where local people can work, play and live, linking the West end to the city centre.'
> *Colin MacPherson, Science Central Development Director 2012* [17]

If the perceived and potential social impact of the university's involvement at Science Central is both physical and symbolic then it is interesting to consider not only the longer-term projected social benefits for Newcastle's population in terms of jobs and access to housing and amenities, but also the material and visual impact of the site as a symbol of the city's transformation during its development. Much emphasis has been placed on the importance of interim uses of the site, as a means of drawing the public in both to the place and the idea of the development during its materialisation. These include community gardens, parkland, public art commissions, areas for university trials, and an innovative temporary structure for the university that could seed the idea of engagement, again through artist commissions, around science from a public perspective – as well as provide leverage for early inward investment in its research programmes. Once the Core building is up and running there will also be space available for community groups to use for events.

But, if the idea of social as well as physical remediation of the site is intrinsic to its reinvention, with the public good in mind, there are also potential conflicts embedded in the conditions of its location in the city which may not be easily resolved. 'I think the dynamics on that piece of land will be interesting', observes Science Central's Engagement Manager: 'People's Kitchen feeds people below the minimum wage, people who have maybe a council house or are in sheltered accommodation, but they can't afford to feed themselves. They will congregate in one of the public squares outside the University's brand shiny-new building – I think we

need to acknowledge that. So for example, make sure that all the left-over food from The Core goes to the People's Kitchen…. So the Core will be here, the young people [from The Foyer] will be there and the older people will be there. They've also built accommodation with over 2,200 rooms for foreign students right beside The People's Kitchen and the University's new building. And I know because of the space that there will be skate-boarders and there will be parkour…' (Engagement Manager Nov 2014). In addition, match days at neighbouring St Jame's Park will bring supporters 'past the front door of the university in their thousands' (architect, Sept 2014). So while the principle of public access, permeability and visibility is enshrined in the masterplan for the site, the implications for spontaneous and potentially volatile social interactions, and in turn the introduction of security and surveillance measures, are not yet clear.

As the Engagement Manager also notes, there are many organisations which have been doing effective work with different groups in the city to tackle social exclusion, at least since the launch of the New Deal programme, who could be invited to make proposals on these issues. She suggests there is scope for programming co-ordinated activities – for example skateboarding contests – which would be a positive use of the public space alongside its occupation by an international crowd of knowledge workers working and living in the new buildings. It offers a vision of Science Central as a source of social benefits conceived as embracing both inclusivity and diversity, based on a participatory approach which is already enshrined in the city council's own Core Strategy, based on the principles of fairness and equality.

The public engagement around Science Central is an important channel for ensuring that its social impact is inclusive, recognising the fact that for many local people the opportunities it offers seem very far away. So, 'for every stem company, for every scientist and engineer that they employ at the top, there's about three or four non-STEM people that keep that business running: who are the accountants, who are the admin, who's doing the logistics, who's delivering stuff to them, right down to the cleaners and the security guys … it's about helping the local people see that they *could* have some involvement' (Engagement Manager Nov 2014). For this reason, the Science Central team has been busy creating a 'pipeline of skills', which involves connecting local organisations like Northern Architecture and Building East to Science Central to ensure that local people will be qualified in future to participate in what it has to offer – as well as the in-migrants from overseas who may know it first from seductive images in glossy brochures.

Key issues and learning points 5

Key drivers Newcastle University's investment in and development on the Science Central site was conceived as a core element of the city's strategy aimed at reversing post-industrial city decline and promoting a knowledge economy. Social inclusivity and participation were key to the vision for the economic plan, with an emphasis on science education in disadvantaged communities. The University's partnership with the City Council and Regional Development Agency was designed to forward that agenda and identified with the physical site even before the university had a clear idea of the academic faciities it wished to build there. The partnership structure has changed over time due to government policy changes, but the development initiative has provided a vehicle for combining City Council expertise with academic insight in the pursuit of the city's urban sustainability goals.

Funding the university has committed £50m to the construction of its Urban Sciences building, but the development of the site as a whole, including the costs of remediation, has relied on external partnership funding from sources including local, regional and European growth funds. While the partnership approach has opened access to various

sources, it has also led to some instability and lack of overall control, as well as exerting influence over the way that phasing structures have been determined.

Location the expansion of the university onto Science Central is intended to position the university more fully within the fabric of city. The brownfield site was formerly a colliery and brewery, and is located in close proximity to the city centre, as well as the local football stadium, and a number of hostels. Beyond its northwest boundary lies the city's West End area, which has been the focus of various New Deal initiatives in the past to address issues around unemployment and health. The areas around the Science Central site are also ethnically diverse, having been occupied by many different migrant groups over the years, and there is some sensitivity among local people about the loss of its industrial heritage.

Masterplanning and design the principle of public access and permeability is enshrined in the masterplan, which was designed by EDAW, Make and Arup. It provides a framework for development on the site which is characterised by the co-location of university and non-university buildings intended to be indistinguishable from each other, and the creation of significant new areas of public space accessed via a series of 'gateway' points from the city centre. The architects for the Urban Sciences building, Hawkins Brown, have translated a brief based on a research activities plan into a scheme for a research building that includes public access, but the route to resolving the realationship between the academic and architectural visions was not straightforward, and depended on university leadership invested in a very small project management group. Research space will be capable of customisation by academics to suit diverse working styles, using a system of flexible partitions.

Academic programming the academic programme is based on a series of designated research laboratories, bringing together the Institute for Sustainability, Faculty of Science, Engineering and Agriculture, and Department of Computing Science. It provided the basis for a business plan put together by academics on the basis of projected income from teaching and research, and a commitment to the idea of strong academic leadership to get the building that they wanted. The remediation and infrastructure work on the wider site has also been used as an opportunity for applied academic research especially in the area of geothermal heat, but not for public engagement around the concept of sustainable development. The difficulty of conveying an accessible vision and understanding of sustainable development into the public domain is currently being addressed by the university.

Non-academic engagement part of the remit for the development is to engage local communities in science education. However there is a need to generate engagement programmes that are relevant to local communities' real needs, especially in the areas of skills and training, as well as the existing social dynamics around the site that will have an impact on the way it is occupied in future. There is an emphasis on the importance of interim uses during the long-term development process, and the promotion of commercial research translation and start-up enterprise alongside, but not over-identified with, academic facilities.

Specific assets firstly, the project has been strongly led from the academic side, surprising the university's estates team. Secondly, it has been driven by a sustainability agenda in several dimensions – as an academic research programme; embodied in the material fabric of a research building; and framing the relationship of the university with the city conceived as a 'living laboratory' for sustainability research with the potential to be scaled up to international level. Thirdly, it encompasses an explicit agenda around the re-positioning of the university within the city, pursuing a

civic mission, that draws on its historic identity to develop a fresh idea of the public university for the present and future.

Notes

1 See also Goddard, J., Kempton, L., and Vallance, P., 2013, 'The civic university: connecting the global and the local', in Capello, R., Olechnicka, A., and Gorzelak, G. (eds), *Universities, cities and regions: loci for knowledge and innovation creation*. Abingdon: *Routledge*

2 Paul Benneworth was at this time based in Newcastle University's CURDS

3 Stephanie Glendinning, Professor of Civil Engineering, and project manager within SagE for Science Central, interview with Clare Melhuish at Newcastle University, November 2014. All further attributed quotations as cited, unless otherwise stated

4 As reported by Education Skills and Engagement Manager, Science Central, interview by Clare Melhuish, Newcastle University/Science Central, November 2014. All attributed quotations as cited, unless otherwise stated

5 Newcastle City Deal, July 2012, accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221015/Newcastle-City-Deal-Paper.pdf

6 In interview with project team at Hawkins Brown Architects, London, by Clare Melhuish, September 2014

7 Assessor, interview by Clare Melhuish, London, July 2014. All attributed quotations as cited, unless otherwise stated

8 Architect at Hawkins Brown, interview by Clare Melhuish, London, September 2014. All attributed quotations as cited, unless otherwise stated

9 'Transforming sustainability research in Newcastle: a unique interdisciplinary environment for research, learning and engagement on Science Central'. Activity Plan, SAgE, Newcastle University

10 http://www.ncl.ac.uk/sciencecentral/about

11 http://www.ncl.ac.uk/sciencecentral *(since updated)*

12 http://www.ncl.ac.uk/sciencecentral *(since updated)*

13 http://www.ncl.ac.uk/sciencecentral/smartcity

14 Newcastle NDC was one of 39 created nationally as part of a new government initiative to tackle social exclusion under New Labour. See also discussion in Lawless and Pearson 2012

15 That is, University of Newcastle-upon-Tyne, and Northumbria University

16 http://www.newcastlesciencecentral.com/about/sustainability. NCL Science 2013, https://www.youtube.com/watch?v=gxducO9nTsU

17 Newcastle Science City, press release 9th Aug 2012, 'Science Central Vision moves one step closer'

References cited

Jeremy Armstrong
2013 'Newcastle planning £50m hi-tech 'Science City' featuring intelligent buildings' *Mirror* Dec 12th

Benneworth, Paul, and Gert-Jan Hospers
2007 Urban competitiveness in the knowledge economy: universities as new planning animateurs', *Progress in Planning* 67 105–197, 148

Benneworth, Paul, David Charles, and Ali Madanipour
2010 'Building localised interactions between universities and cities through university spatial development', *European Planning Studies* 18:10, 1611–1629

Brink, Chris
2007 'What are universities for?' www.ncl.ac.uk/executive/assets/documents/WhatareUniversitiesfor.pdf

Evans, James and Andrew Karvonen
2014 'Give me a laboratory and I will lower your carbon footprint!' Urban laboratories and the governance of low-carbon futures. *IJURR* 38.2, 413-30. See also University Living Lab, University of Manchester: universitylivinglab.org

Ford, Coreena
2013 'Newcastle University unveil £50m investment into Science Central' *The Journal* 12th December

Goddard, John
2009 *Reinventing the civic university*. Provocation 12, London: NESTA https://www.nesta.org.uk/sites/default/files/reinventing_the_civic_university.pdf

Goddard, John, and Paul Vallance
2011 'The civic university and the leadership of place'. CURDS Newcastle University. http://www.talloires2011.org/wp-content/uploads/2011/06/Civic-University-and-Leadership-of-Place-John-Goddard.pdf

Goddard, John and Paul Vallance
2013 *The university in the city*. London: Routledge

Lawless, Kath
2011 Science Central Masterplan to Delivery. Newcastle City Council http://www.rtpi.org.uk/media/9998/science-central-kath-lawless.pdf

Lawless, Kath
2013 Science and the city, presentation to Urban Design Group Conference, Newcastle, http://www.udg.org.uk/sites/default/files/uploads/Science-Central-Kath-Lawless.pdf

Lawless, Paul and Sarah Pearson
2012 'Outcomes from Community Engagement inUrban Regeneration: Evidence from England's New Deal for Communities Programme', *Planning Theory & Practice* 13:4, 509–527

Maurrasse, David
2001 *Beyond the campus: how colleges and universities build partnerships with their communities*. New York, London: Routledge

Newcastle City Council
2010 Sustainable Community Strategy Information Sheet, http://www.newcastle.gov.uk/wwwfileroot/legacy/cxo/grantfund/NewcastleFundSCSInformationSheet.pdf

Newcastle Gateshead (Newcastle City Council and Gateshead Council)
2010 *One Core Strategy 2030,* Draft Population Topic Paper
2014 *Planning for the Future: Core Strategy and Urban Core Plan for Gateshead and Newcastle upon Tyne 2010–2030*. Submission Document – February 2014

Newcastle Science Central
n.d http://www.newcastlesciencecentral.com

Newcastle University
2008 Estate Strategy 2007–2012. http://www.ncl.ac.uk/estates/about/documents/NU-EstatesStrategy.pdf

Newcastle University
2014[a] 'Newcastle University appoints design team for Science Central 'living lab', February 24th

Newcastle University
2014[b] 'Newcastle Science City review puts focus on Science Central', press release 26th August

Pearson, Adrian
2011 'Newcastle city leaders to take on Science Central costs', *The Journal*, November 23rd

Proctor, Kate
2014 'Giant 2km borehole project fails to bring hot water to Newcastle businesses', *Chronicle* 28th Nov.

The Work Foundation
2010 'Anchoring Growth: the role of "Anchor Institutions" in the regeneration of UK cities'. Research Paper 2 in Regeneration Momentum, The Northern Way

CASE STUDY 4

THE US MODELS: UNIVERSITY OF PENNSYLVANIA (PHILADELPHIA), NEW YORK UNIVERSITY AND COLUMBIA UNIVERSITY (NYC)

Global universities embedded in urban neighourhoods and renewal processes

Contents

Introduction: the US context

1 Historical and policy contexts
1.1 Universities in a changing urban environment
1.2 Universities as drivers of community regeneration
1.3 Universities as economic development engines
1.4 Universities in the fight to be competitive

2 Structures and processes
2.1 Avoiding ‘death by consensus’: Penn
2.2 Rallying the sceptics within: NYU
2.3 Co-ordinating physical and academic planning: Columbia

3 Visions and narratives
3.1 An incremental approach: Pennsylvania
3.2 Framework 2031: NYU in NYC
3.3 Ivy League and West Harlem sharing space: Columbia

4 Translation into place
4.1 Neighbourhood tactics and strategies: Penn
4.2 Building trust with the community: NYU
4.3 Achieving positive economic outcomes: Columbia

5 Key issues and learning points

Summary

1

2

3

1. Columbia University, NYC, Manhattanville campus development: aerial view of existing site in West Harlem
2. Columbia University, Manhattaville campus site plan (showing Science Center bottom right). *Images courtesy Renzo Piano Building Workshop, architects in collaboration with SOM, urban designers*
3. New York University, NYC, approved Core plan. *Image courtesy NYU and Grimshaw/Michael van Vakenburgh Assocs Inc.*
4. University of Pennsylvania, Philadelphia, aerial view showing extent of campus development, including recent eastern expansion. *Image courtesy University of Pennsylvania*

4

This case study presents a comparative view of three American global research universities located in two of its most important east coast cities – New York, an international hub for business, real estate and culture, with the biggest urban population in the country; and Philadelphia a regional centre for manufacturing, healthcare and health education, business and financial services – the University of Pennsylvania opened the first teaching hospital, medical and business schools in the country. It occupies around 300 acres of land in the University City area of West Philadelphia, where it has been engaged for two decades in neighbourhood revitalisation initiatives, and is now forging new connections with the city centre across the Shuylkill River. NYU, which became one of the country’s largest universities in the early 20th century, and established a reputation for excellence particularly in the arts and humanities, occupies around 230 acres in the city and is currently engaged in re-shaping its central Washington Square Core campus as a symbolic anchor location for its global operation, along with a number of satellite locations dispersed beyond the city’s central Manhattan Island. Columbia on the other hand, with a high profile in science and technology research, and approximately 300 acres at its disposal, is investing in a major project to develop a cohesive single campus within the central area by linking its two existing city sites (Morningside and Washington Heights) through a new development in Manhattanville – a former wharfside neighbourhood on the Hudson River. Each of these university expansion initiatives has raised key questions about the relationship between the institution and the city, and demonstrates similar approaches to resolving those issues which also highlight specific differences between the three cases.

Introduction: the US context

> 'A university has the power to be a great agent of change; … It has the intellectual, financial, and human resources to take on the challenge of community transformation. It espouses values that embrace shared community, diversity, and engaged discourse. The efforts, however, are unlikely to reach these ambitious goals quickly or easily … Today Penn celebrates its ongoing transformation into a world-class urban research university that is nourished by the neighborhood it helped to develop and revitalise'
> *Judith Rodin, President of University of Pennsylvania 1994–2004 (Rodin 2007:182–3)*

For UK universities there are many lessons to be learned from their US counterparts, which have been drawing on a long tradition of 'public service' and community engagement in relation to their own initiatives around expansion and renewal. Many of the internationally-renowned American research universities are physically embedded in urban contexts and associated urban problems, and since the 1950s have both encouraged and been supported by a number of federal initiatives to respond actively as responsible and powerful actors to the needs of disadvantaged urban populations. Largely pre-dating significant efforts on the part of UK universities in this direction, the Campus Compact was founded in 1985 by the Presidents of three leading private universities (Brown, Georgetown and Stanford) to integrate the concept of civic engagement into campus and academic life and address specific problems in the areas of literacy, health care, hunger, homelessness, the environment and care for the elderly. This was followed in 1990 by the Declaration of Metropolitan Universities signed by 48 presidents and chancellors of public universities, establishing a national consortium with a commitment to addressing the problems of metropolitan areas through teaching, research and professional service and different kinds of partnership, at both the urban and regional level (Bromley 2006). This commitment has been interpreted in different ways among institutions over time, including a focus on the contribution to economic regeneration more widely as a fundamental part of the university remit. However, as we can see in the case studies (particularly Columbia's Manhattanville development), this argument has not always been accepted by local communities as an authentic response to localised urban problems, resulting in distrust and tensions which can become intractable in university-community relations.

Historical and policy contexts 1

University of Pennsylvania and Columbia University are both among the US's oldest universities – two of the nine original Colonial Colleges founded before the American Revolution (1740/49 and 1754 respectively), and both part of the elite Ivy League group of eight universities. New York University was founded almost a century later in 1831, as a nonsectarian institution aimed at the city's middle-classes, which was modelled on the University of London. All three are now private, globally-focused research universities, acutely aware of the need to compete at an international level, and Columbia and NYU both operate a number of global academic centres located around the world as part of their academic mission. At the same time, they share a common interest in demonstrating the depth and breadth of their local engagement in tandem with urban and regional economic growth.

Universities in a changing urban environment 1.1

The 1950s witnessed in many US cities 'white flight' from centre to periphery on a significant scale, leaving a vacuum at the heart of American urban life. As in the UK two decades later, empty and run-down properties in urban cores became home for poor and disadvantaged black, migrant, and ethnic communities lacking access to proper social infrastructure and services. Many of these increasingly derelict and insanitary neighbourhoods were cleared and replaced through large-scale urban renewal and social housing projects which were to create their own problems and in many cases intensify existing racial prejudices and divides. Between 1968 and 1974, a network of 'urban observatories' was sponsored by the US Department of Housing and Urban Development to monitor and intervene in the problems of such neighbourhoods, until funds ran out.

Jane Jacobs' seminal 1961 publication, the *Death and Life of Great American Cities* (Jacobs 1961) charted these problems and offered a stinging critique of the urban planning policies that had swept away street life and neighbourhood relations in many local areas. During the 1960s, the Ford Foundation had actively supported university engagement to address a complex array of urban problems, where the very term 'urban' was often used as a euphemism for 'black' (Glazer 1988). But, as Glazer notes, there was a lack of any 'marked success', as universities themselves grappled with the changes in their physical environs – characterised by escalating rates of crime and phenomena such as a graffitti plague on the New York subway which 'symbolised a growing loss of control of the social environment' (Glazer 1988:173).

While some universities had long-standing traditions of urban engagement – such as Chicago, through its School of Sociology established in the 1930s to develop a focus on local, field-based urban inquiry - others did not. The University of Columbia was focused on leadership training (Bender 1988) and international research and reputation, while New York University (1832), was originally created to meet the needs of the city's middle-classes (Glazer 1988). The University of Pennsylvania in Philadelphia meanwhile was a 'commuter university' founded by Benjamin Franklin (1749) 'to prepare students for lives in business and public service' (Kromer and Kerman 2004:5).

Glazer recounts that in 1967 Columbia's provost Jacques Barzun described the neighbourhood at its site in Manhattan's Morningside Heights, located just above Harlem – '"the capital of Black America" for generations' (NYC DCP 2007:83) – as 'uninviting, abnormal, sinister and dangerous' (Glazer 1988:273), and unattractive to students and staff. The University's response was to begin buying up and renovating buildings for its own use, evicting existing tenants and sowing not only the seeds of hostile relations with the local community, but also student opposition and dissent which erupted in 1968. The legacy of these policies can be seen today in the fight over the development of its new Manhattanville campus. NYU (New York University) on the other hand benefited from selling its McKim Mead White campus in the Bronx to address a financial deficit in the 1970s, as the area steadily fell apart under the impact of crime, drugs and arson. By contrast, its Washington Square site in bohemian Greenwich Village was sheltered from the city's increasing social problems, and provided the opportunity for the university to invest in programs in arts, theater, and film (Glazer 1988). However the university's presence also contributed to processes of local gentrification that continue to cause friction today in its project to expand its Core holdings.

The University of Pennsylvania played an integral role in state-funded urban renewal initiatives in Pennsylvania from the 1950s onwards, both as a key player and as a beneficiary (Rodin 2007), becoming strongly identified with radical clearance policies seen as detrimental to existing communities, and again arousing student opposition. In 1959 Penn, Drexel University, and other city institutions formed the West Philadephia Corporation to implement a scheme for a new University City

zone at the eastern end of the campus – 151 buildings on an inner-city 269-acre campus bordered by residential neighborhoods to the north, west and south, and open industrial spaces to the east. In the 1960s the Philadelphia Redevelopment Authority designated the University City Urban Renewal Area to promote institutional and economic growth: this involved property acquisition, tenant relocation, and clearance. The university's launch of a new Science Center on the site of 20 blocks in Black Bottom became the trigger for anti-racist demonstrations protesting that, notwithstanding the promise of jobs, 'urban renewal means negro removal' (in the term coined by novelist James Baldwin). But the university continued to expand its reach west and north through the 1960s, including the construction of a new Super Block on the site of Hamilton Village, displacing 1,220 local people (Rodin 2007). Eventually, the university was sued by the Walnut Street community group over its planned demolition of this and Sansom Street – a projected loss of 3400 blocks. By the mid-80s, and in response to rising crime and social deprivation in West Philadelphia, the University was engaged in a major re-think of its controversial urban expansion policies which resulted in the launch of the West Philadelphia Initiatives in 1997 and forms the backdrop to its more recent Penn Connect and Penn Connect 2 development plans.

Universities as drivers of community regeneration 1.2

> 'It is hardly likely that New York's universities and colleges will again be tempted to play a significant role in dealing with the problems of an enormous world city.... They will continue to do what they have done ... adapting to change rather than guiding it'
> *Nathan Glazer (Glazer 1988:287)*

As Glazer's comment illustrates, the history of US university intervention in urban problems has been a difficult one, despite the support of national government for the integration of such an approach into universities' own development plans. Bromley points out that universities are often forced to see themselves as 'local stakeholders', simply because their assets and names are fixed in particular places and, furthermore, tied funding and named endowments often come with particular legal obligations (Bromley 2007).

During the 1960s and 1970s, calls were made for the precedent established by the 1862 land grant universities, built to serve rural communities, to be extended to the urban realm with funding made available for urban engagement; however the Urban Grant University programme (Title XI, 1981) was shelved under the Reagan administration. Under President Clinton from 1993, and following on from the 1985 Campus Compact, and the 1990 Declaration of Metropolitan Universities to accept broadened social responsibility and address a wide range of metropolitan issues, urban policy research was again promoted and the Community Outreach Partnership Centers programme established (four years of financial support to community partnerships at higher education institutions nationwide), with Lempert's concept of the 'communiversity' entering circulation in 1996 (Bromley 2007). In 2001, the 'Building Communities' programme was set up by the Rockefeller Foundation, headed by David Maurrasse, and the concept of the university as 'anchor institution' in urban neighbourhoods promoted (Maurrasse 2007).[1]

Maurrasse summarises the ideal behind the programme, pointing out that previous work by universities with communities had tended towards both the punitive and the paternalistic, while treating communities as if they were primarily research subjects: 'academia has to work itself out of the punitive approach of ... policing urban communities ... Community partnerships are beginning to progress beyond the paternalistic approach ... Partnerships have been challenging the lab approach ...' (Maurrasse 2001:7). He also points to another common problem: 'the lack of cohesion

within institutions of higher education may be generally understood by those within academia; however when partnering externally ... it can create confusion ... leaving neighborhood residents wary of even the most well-intentioned outreach efforts' (Maurrasse 2001:7).

University development plans offer many different kinds of opportunity for community engagement and partnership, while also presenting ample scope for dissent and conflict – both within institutions and in their relations with neighbours and external partners. Columbia's $7 billion, 25-year Manhattanville project, its largest expansion in 100 years, is accompanied by a $150 million community benefits agreement, locked in for 20 years, including a new secondary school sponsored by the University. In addition, the proposed 6.8 million sq ft of education, research, and cultural facilities in the former manufacturing zone (where over 50% of buildings lay in existing University ownership) is intended to provide an interface between the university community and its neighbours and job opportunities. Even so, Columbia has faced vocal opposition from community groups during the planning process, especially in relation to its use of the power of eminent domain (compulsory purchase by the state on behalf of the university) over commercial properties in the area which it needed to acquire to complete its holdings. In 2006, the lobby group WE-ACT (West Harlem Environmental Action) underlined the threat posed by the university to the existing community, and to the city's cultural heritage more widely: 'Columbia plans to satisfy its space needs by moving into an occupied neighborhood that is already vibrant with a unique synergy of ethnic, cultural and socioeconomic diversity – one of the few such communities in the City' (WE-ACT 2006:1). In response, the university has argued that 'The Proposed Actions are intended to provide zoning and land use changes needed to revitalize this section of Harlem', and that the Academic Mixed-use plan would both 'Create a lively, welcoming urban environment for graduate students, faculty, other employees, and the community' and 'Promote employment opportunities for local residents' (NYC DCP 2007:14).

Columbia's approach has aroused particular opposition because it rode roughshod over an alternative plan for low-impact infill development prepared by Community Board 9. The university's determination for its new space to be housed on one site within a comprehensive development plan framework implicated what the Center for an Urban Future (a New York-based think tank) described as: 'an aggressive clearance and buildout to its entire projected space need literally decades hence' (Hochman 2010:3). The University's own online journal (published by the Undergraduate Writing Program) noted that 'The residents of West Harlem question why the university insists on occupying all of the land in the proposed area' (Huffman 2008). And as the CUF report points out, Columbia's strategy contrasts with the approach adopted by NYU to its own expansion policy.

NYU: new facilities at Jay Street, Brooklyn.
Image courtesy NYU

NYU, which describes itself as 'a private university in the public service' (NYU 2008), and was designated by the Carnegie Foundation in 2006 as a university that is 'community engaged' (with 15,000 student volunteers placed in various community organisations) (NYU n.d:16) has opted for a multi-pronged approach which combines development within its Core site at Washington Square with additional dispersed sites (to be identified) within the local neighbourhood, and further 'remote' locations beyond lower Manhattan. Of the latter, the key opportunities include Jay Street in Brooklyn, through an affiliation with Polytechnic Institute, Governors Island, and the health corridor on First Avenue. The first of these is informed by a specific agenda around social and economic benefits to Brooklyn, where 190 NYU students already provide 30,000 hours of tutoring a year in reading and maths in 16 Brooklyn public (state) schools. The Washington Square proposals are also strongly informed by the need to improve its relationship

to the neighbouring community identified in the USPWG (University Space Priorities Working Group's) Interim Report of July 2013 (USPWG 2013:4), and which reached crisis point with two lawsuits brought by opponents of the Core Plan, one by tenants in protected tenancies in Washington Square Village, and another opposing new development on open public space between the University's existing Superblocks. NYU has therefore been engaged in an extensive outreach process involving a long list of community groups, and is committed to providing new space for community use as part of its development. The Office of Government and Community Affairs is responsible for building partnerships with local community groups and other organisations as well as providing regular updates and liaison on the University's development process.

At University of Pennsylvania, the launch of the Center for Community Partnerships located in the Office of the President in 1992 represented a formal commitment to a programme of community engagement that would run in parallel with research and teaching in the institution. The following year, the Penn Faculty and Staff for Neighborhood Issues (PFSNI) group was also formed and the university started working with an external partner, The Community Builders. On Judith Rodin's appointment as President in 1994, a strong lead was established towards the launch of the West Philadelphia Initiatives, which was specifically presented not as a masterplan for development, but as a roll-out of different initiatives related to neighbourhood safety and services, housing, local commerce, economic development, and education provision through a Penn-supported school. Rodin, who acknowledges the strong influence of Jane Jacobs' work on her thinking, documented the process and experience of implementing the WPI in an invaluable personal account published in 2007 (Rodin 2007). As a result of this experience, and accumulated expertise, the University was appointed by the US Department of Housing and Urban Development in 2009 to co-ordinate, through its Institute for Urban Research, a national Task Force commissioned to investigate how the HUD could 'increase its impact and strategically leverage anchor institutions, particularly higher education and medical institutions ('eds and meds'), to improve communities and help solve significant urban problems' (MARGA 2010).[2]

Universities as economic development engines 1.3

> 'Federal grantors now favor large-scale, interdisciplinary collaborations that integrate departmental silos and invite collaboration with industrial research and development (R&D) organizations. That's a tall order for campuses configured in the last century or earlier, so universities across the United States are expanding or – if landlocked, as Columbia is at Morningside Heights – are creating entirely new districts for overflow or relocation'
> *David Hochman, economic development consultant (Hochman 2010:2)*

As Bromley points out, many US universities have commissioned studies to demonstrate to politicians and business leaders that, in terms of outreach, regional economic development is one of their main areas of impact (Bromley 2007). Addie Keil and Olds have also described the 'competitive dance' around economic growth in which 'urban regions and HEIs are partners' (Addie Kiel Olds 2015:29), highlighting the significance of the New York Applied Sciences competition of 2011, in which universities were invited by Mayor Bloomberg to compete to work as partners with the city in the creation of a new technology campus that would establish New York as a global leader in the technology and innovation industry. They argue, citing Friedman (2012), that the ecosystems of the new IT revolution are made up of cities and towns which also 'combine a university, an educated populace, a dynamic business community', but that universities' interest in the production of economic growth may also override a concern for their impact on surrounding communities

and social spaces: 'space relations are largely treated as instrumental; innovation networks appear separated from the contingencies of place, or divorced from broader processes of contemporary urbanization' (Addie Kiel Olds 2015:33).

NYU launched its first strategic physical space planning exercise, the 2031 Framework, in 2007 to coincide with the introduction of Mayor Bloomberg's bold planning policies for the city. The Framework states that, 'In the wake of 9/11, NYU decided to affirm aggressively its connection to New York' and 'has assumed a leadership role in promoting sustainability and public service' (NYU 2008:9). It also pointed out that, in the absence of historic support from wealthy alumni, it had been dependent on 'entrepreneurial academic initiatives' (NYU 2008:7) to support its growth and achievements since 1981. From the city's perspective, Mayor Bloomberg affirmed: 'it's very hard to differentiate where New York University stops and New York City starts. That is one of the real keys to NYU – the city goes right through it. NYU benefits from the city, and the city benefits from NYU … if you are a student there, you are a citizen here' (NYU n.d:4). The NYU Strategy document further underscores the key role of the university in contributing to the city's future growth and prosperity: 'By the middle of this new century, a small set of worldwide "idea capitals" will likely have emerged … the capitals of a comprehensive and global knowledge-based enterprise, and they will be marked by the presence of great universities' (NYU n.d:10). NYU's plans for development at its 'remote' sites are specifically conceived as incubators for the city's growing knowledge economy – notably its Jay Street site in Brooklyn, 'which will serve as the home of NYU's Center for Urban Science and Progress (CUSP), one of the City's designated "genius schools" to help foster New York's fledgling tech/innovation economy – [and] will also house NYU's highly-regarded entrepreneurial incubators' (NYU 2014), as well as its Urban Future Lab and Media and Games Network (MAGNET). This initiative is highlighted in the 2031 Framework as one which can enable NYU to be 'a key engine of economic development for the local, regional, national, and global economies through promoting its capacity for invention, innovation, and entrepreneurship' (NYU 2008:16).

Left: Columbia University, Science Center: 3D aerial view. *Image courtesy Renzo Piano Building Workshop*
Right: Pennovation Works, overview. *Image courtesy University of Pennsylvania*

Columbia already counts itself as the seventh largest nongovernmental employer in New York City with over 14,000 employees, and a significant contributor to the New York economy – spending approximately $2.4 billion annually (including more than $1.25 billion in salaries), of which 70% is spent in the greater New York metropolitan area (NYU DCP 2007). Its Manhattanville site is intended to enhance that contribution, providing 17 new buildings (of which only six have designated uses to date) for university activities, and 6,000 permanent jobs (Hochman 2010). One of the buildings is the Jerome L. Greene Science Center for neuroscience including 70 labs, along with a Business School, School of the Arts, School of International and Public Affairs, and an academic conference centre. The project involves the re-zoning

of the site from manufacturing to mixed-use, again with an emphasis on kick-starting economic revitalisation in the area and beyond. Community objectors dubbed the University's proposed development an 'academic-biotech industrial complex' at odds with the community-generated West Harlem Master Plan, supported by the NYC Economic Development Corporation (WE-ACT 2006:1), and concerns have been raised about the hazards posed to the public by the science labs. However, the university's consent for re-zoning does not permit commercial research activities to take place on the site, and no such space is proposed, placing limits on the future of the site as a science or tech-based hub. It is anticipated that, alongside the university's research buildings, the main new uses would be retail, office and residential alongside a waterfront park and other public spaces, including interactive outreach facilities intended to foster citizen science.

At the University of Pennsylvania – already the largest private employer in the city with 24,000 employees and a 300-acre campus (Rodin 2007) – a Knowledge Industry Partnership was formed in 2002, and Keystone Innovation Zones established in the form of sites clustered around university facilities to promote the growth of new businesses with access to university facilities. Biotech research and entrepreneurship was established as a key element of the university's expanded operation on 14 acres of land acquired along the west side of the Shuylkill river, through a partnership venture with Drexel University and pump-priming funding from state and city sources aimed at promoting the biotech industry through university-industry collaborations (Lincoln Institute n.d). The venture was supported by the appointment of Penn President Judith Rodin to head the Mayor of Philadelphia's New Economy Development Alliance, which would take on as its first task the project of facilitating the development of the research centre, seen as 'having the potential to transform the Schuylkill riverfront into another Cambridge, Mass., abuzz with biotech entrepreneurs' (Lincoln Institute n.d). Since then, the University's planning vision for 2011–2030 (Penn Connects 2) has built on the acquisition of a further 23 acres of industrial land on the south bank of the river, which will host an alignment of university-related research functions with private business orientated towards tech-transfer development opportunities. The so-called Pennovation Works is described by the University as 'a fertile environment for entrepreneurial growth' geared towards business opportunities in the region,[3] while complementing the existing University City Science Centre.

Universities in the fight to be competitive 1.4

> 'Universities all over America are now finding they have to plan expansion and growth, particularly in science'
> *Kathy A. Spiegelman, chief planner, Harvard Allston (Viswanathan 2008)*

While US universities compete to prove their contribution to economic development at local and regional level, and for the associated funding offered through state and city programmes, they have at the same time been forced to focus their efforts on enhancing their international reputations and offers. As the NYU 2031 Framework notes: 'Until 10 years ago, a great river of faculty and student talent flowed from around the world to America's great research universities. Then, both Europe (which created an educational common zone) and Australia/New Zealand aggressively began to recruit foreign students (with Europe seeking parity with the United States in this regard). China is now building up to ten research universities each year and India also has begun intensive efforts to retain its faculty and students. After 9/11, the United States began to impose restrictions on faculty and students from abroad, ranging from visa screens to export rules. Thus, even if the number of foreign faculty and students coming to US Colleges and universities is relatively stable, the nation's share of the very best is diminishing … all research universities will be forced to deal with this change' (NYU 2008:6).

Plans for expansion and growth, in order to provide new and up-to-date facilities for both academic and social purposes, along with good quality housing for staff and students, in an attractive physical environment, have therefore become fundamental to universities' strategies to secure their international reputations and the federal research grant funding awarded on that basis. Columbia's comprehensive approach to campus planning on its Manhattanville project is justified as essential to the maintenance of its position as a leading institution of higher education in the US, which could not be achieved through an ad hoc expansion over dispersed sites, without a cohesive identity: 'An interchange of ideas among various intellectual disciplines is greatly facilitated by having several schools in one place, and it is key to the accomplishments of the University's faculty, graduates, and students' (NYC DCP 2007:10). It will also provide a central location connecting the Morningside Heights campus south, and Medical Center site north as a cohesive university environment (NYC DCP 2007). Indeed, community objectors suggest that it is this need 'to compete with its elitist Ivy League peer institutions, such as Yale, Princeton, and Harvard', rather than a genuine desire to revitalise the neighbourhood, which is driving the project (WE-ACT 2006:1).

For NYU, the new physical expansion strategy was a response to a serious lack of space, including a 20-year backlog, which was viewed as a major obstacle to the university's growth and competitiveness: 'The aim is to provide the necessary square footage (est 6m sq ft) to advance NYU's academic trajectory … serious challenges lie ahead both for research universities in general and for NYU in particular. The University will need to be especially creative and nimble if it is to realize an agenda of continued advancement' (NYU 2008:5). It points out that 'if Columbia at 230 gross sq ft per student rightly describes itself as "space deprived" vis a vis peers, NYU at 160 gross sq ft per student is space-starved' (NYU 2008:8). New faculty housing provision, especially larger units, is also viewed as a vital part of the offer, recognised as 'an essential strategic resource in NYU's recruitment and retention of high-quality teachers, scholars, and practitioners' (NYU 2014: 35). Although the strategy is 'not a masterplan, for the university does not have a large contiguous campus over which it can exert control' (NYU n.d:18), it boldly promotes the idea of 'a major research university with no campus … [which] overturns traditional notions of a university and perforates boundaries between diverse local and global communities' (NYU n.d:12), and further extends its reach to a number of additional international sites (eg Abu Dhabi). Redefining itself as 'a global network university' (NYU 2008:17), or 'global research university' of the future, it suggests that universities tied to a single location 'may limit their capacity to capitalize fully on highly fluid knowledge and talent markets' (NYU 2008:10), while acknowledging also that 'one of these challenges is how, as the University extends its locational endowment to sites across the world, to be in and of the place, while being in and of the whole' (NYU 2008:10).

In the case of the University of Pennsylvania, Judith Rodin's tenure as president (1994 – 2004) represented a period of dramatic growth in its research funding and endowment, and saw the University rise from 16th to 4th place in the national rankings for research universities by 2002. Rodin herself attributed some of that success to improvement of its relationship with the urban context in which it is embedded: 'Today Penn celebrates its ongoing transformation into a world-class urban research university that is nourished by the neighborhood it helped to develop and revitalise' (Rodin 2007: 182–3). In 2001 a new masterplan laid out a strategy for future university expansion towards the east that focused on creating new connections between the university and city centre and cementing the role of the university in the wider economic life of the city and region.

Structures and processes 2

> 'Institutions of higher education, together with medical institutions, may be among the few stable private entities in some inner cities'
> John Kromer and Lucy Kerman *(Kromer and Kerman 2004:9)*

As Kromer and Kerman point out, universities can be crucial allies for local government in processes of inner city renewal, valued for their fixed presence, long-term commitment and multiple resources – unlike government bodies subject to the vagaries of change in politics, policies, and funding streams. However universities also suffer from the uncertainties generated by changes in personnel, institutional re-structuring, and funding cuts, all of which play a major role in the success or otherwise of spatial development projects. Internal dissent and lack of leadership often become obstacles to progress and may compromise the delicate relationships between universities and other urban partners and communities – as highlighed by Maurrasse (Maurrasse 2001). Hence clear structures, processes and systems of accountability need to be put in place by universities embarking on such projects if they are indeed to function as 'anchor institutions' in wider urban renewal programmes.

Avoiding 'death by consensus': Penn 2.1

Speaking of the West Philadelphia Initiatives, Rodin stated that: 'Only one entity had the capacity, the resources, and the political clout to intervene to stabilize the neighborhood quickly and revitalize it within a relatively short time period, and that was Penn' (Kromer and Kerman 2004:11). The University had considered forming a separate non-profit development body to run the Initiatives and raise funding, but instead decided to locate the leadership and management of the project within the university's own administration – described by Kromer and Kerman as 'a key defining characteristic of Penn's approach to neighborhood revitalization' (Kromer and Kerman 2004: 9). Hence 'the Initiatives were an administratively driven approach that was academically informed, led and managed by the University's President and senior administrators …' – but 'not structured as an academic project or an assignment to a community affairs department or staff person. Instead, the Initiatives were made a top-priority University policy that widely engaged the institution … Dr. Rodin chose to delegate responsibility and authority across the University's major administrative departments as part of a broad, decentralized reorientation of the University to this new priority' (Kromer and Kerman 2004:11), working closely with the Board of Trustees, the latter constituted as a standing Committee on Neighborhood Initiatives.

Overall leadership was provided by the office of the President, through her direct participation and assignment of senior staff to deal with key responsibilities, and day-to-day implementation handled by the Executive Vice President. A new post of Vice President for Government, Community and Public Affairs, reporting to the President, was created to manage external communications and co-ordination with government and community representatives. Further official roles were assigned to the Deans and leadership of the Graduate School of Education, Center for Community Partnerships, and Penn Design. The Cartographic Modeling Lab – a joint venture between the School of Design and School of Social Work – provided access to neighborhood-level market and demographic data through its Neighbourhood Information System, which was an essential resource for staff working on the property side.

A new merged Office of Facilities and Real Estate Services was formed to consolidate responsibilities and integrate built environment and services across the five initiatives – neighbourhood safety and amenities, housing, local commerce, economic development, and education provision. The Vice President for Business Services, along with the Office of City and Community Relations, developed an economic inclusion programme (Economic Opportunity Plan) that specifically

included neighbourhood residents and businesses in procurement processes as well as home ownership programmes (including a mortgage programme and rehabilitation of empty houses), through The Office of Community Housing. The Division of Public Safety worked with 'safety ambassadors' employed by University City District (a special designated services district) and coordinated staffs with patrol officers from the Police Department (Rodin 2007).

Relations between the University and the surrounding neighbourhoods were mediated via monthly 'First Thursday' information exchange meetings with local community representatives, as well as scheduled updates, regular dialogue with the Mayor, and a series of 'Third Thursday' events which were also established to draw people to University City in the evenings, with various shopping and entertainment attractions. In addition Penn Praxis, a consulting practice based in the School of Design, helped to facilitate interaction between local people and university staff and students, and academic projects and design studios were established to investigate topics related to the Initiatives and relevant to neighourhood priorities (Kromer and Kerman 2004, Rodin 2007).

As Rodin emphasises, it was considered crucial to establish a structure for the implementation of the initiatives that would be both flexible and robust enough to avoid 'death by consensus' (Rodin 2007:58). Managing the redevelopment programme as an internal leadership team was both more efficient, and permitted greater ease of access to investment capital from banks, contractors, and service providers. However, it was also understood that the Initiatives should not be conceived or put across as an imposed 'masterplan', but rather implemented gradually as a responsive approach to the complexities of the urban situation, based on a broad-based consultative process, and allowing for the emergence of a range of partnership arrangements with both community and business organisations. Indeed, as Kromer and Kerman note: 'The formal publication of goals and strategies did not occur until implementation activities were well under way' (Kromer and Kerman 2004:17).

By contrast, the subsequent Penn Connects planning initiative launched from 2005, under President Amy Gutmann, was directed by a Campus Development Planning Committee on the basis of a much more university-centered consultative process conducted through the following groups: Council of Deans, Faculty Senate, Academic Planning and Budget, Penn Alumni Society, University Council, University Council Committee on Facilities, Undergraduate Assembly, Graduate and Professional Student Assembly, Penn Professional Staff Assembly, Weekly Paid Professional Staff Assembly, Senior Planning Group, University Health System, and a University-wide Faculty Advisory Group.[4] This reflects the decision made by the university to re-focus development towards former industrial lands bordering the river to the east, with a view to generating stronger connections into the city centre, and away from the residential neighbourhoods to the west and north which had for so many decades felt the impact of the University's presence and encroachment to both good and bad effect.

Rallying the sceptics within: NYU 2.2

> 'In September 2007 the Executive Committee of the Board of Trustees asked that the University's leadership submit to it a document describing the likely challenges to the continued development of the University's academic mission over the coming decades and offering a framework for making the choices necessary to maximize that development'
> *NYU Framework 2031 (NYU 2008:25)*

By 2012, NYU's Core Project proposal had been approved by New York City Council, allowing the university to construct new facilities within a revised 'zoning envelope' just south of its Washington Square site[5] in Greenwich Village, framed by its two southern residential 'superblocks' (Washington Square Village, two residential slab

blocks to the north; and University Village, also known as Silver Towers, three Listed residential towers by I.M.Pei plus the Coles Sports Center to the south - both of which house a mix of university and non-university residents, with open space in between). This approval was granted through the City's Uniform Land Use Review Procedure (ULURP) and on the basis of 'hundreds' of meetings between the University and local stakeholders, civic groups, faculty and students, and local officials.[6] It was conditional on the provision and maintenance of space for community and public use, with an option for the NYC School Construction Authority to build a school on the site, and an embargo on any construction on the northern superblock until 2022.

The project will extend to as much as 2m sq ft of development, a quarter to a third of which will be below ground,[7] and is projected to include 53% academic space as the main priority for the University, in addition to 17% student housing, 9% sports facilities, 6% faculty housing, 7% community (non-NYU) use; and 5% other (including retail and parking). Following the ULURP consent, an internal consultation across faculties and departments was established to ascertain the priorities for the space required. This was co-ordinated by a University Space Priorities Working Group made up of 26 representatives from the faculties, the Student Senators Council, Administrative Management Council and University Administration, and chaired by Professor Ted Magder from the Steinhardt School of Culture, Education and Human Development. The Working Group met the deans from all the schools near Washington Square, as well as other relevant stakeholders and community representatives (NYU 2014b) and set up three subcommittees to deal with specific areas of concern. These were the Academic and Non-Academic Space Subcommittee, the Finance Subcommittee, and Stewardship and Quality of Life Subcommittee.

The Working Group was conceived as an open and transparent forum that would extend its reach to the whole university community, with a designated interactive website on which to share and solicit feedback on its reports.[8] It was presented as 'a model that advances the University's effort to re-imagine its mechanisms for governance' (NYU 2014b :7). It met 17 times and in Spring 2013 convened three Town Hall meetings to deliberate the concerns of each of the subcommittees, prior to submission of its report in May. The focus of its remit was to decide on the appropriate allocation and usage of existing and new space, and propose ways of managing the inevitable disruption caused by the building programme. In particular it recommended the provision of substantial new performance space as an integral part of the academic space requirement, as well as a new sports facility, and a flagship science building on a site to be identified in or near the Core. It also recommended the construction of 150,000 sq ft of new faculty housing, particularly larger units for families, and the consideration of other options for additional housing provision such as mortgage or rental assistance and shared equity programmes. The final report specified the need for 80 new classrooms, a proscenium theater and four workshop theaters and performing arts spaces, new student study and student life spaces, an athletic and recreation centre with an assembly facility for community emergencies, halls of residence for 500 first-year students, and housing for 100 NYC faculty families, based on four principles intended to 'balance the divergence of views and steer the Working Group's fact-finding and recommendations' (NYU 2014b:3):

'1 The University has an obligation to its students to provide adequate space for their educational purposes, including their interactions with faculty and staff.
2 The University has an obligation to advance improvements on the Superblocks, which directly affect NYU residents, community residents, the neighborhood, faculty, and students.
3 Any construction project should leave the neighborhood a better place in which to live.
4 The University's proposed Capital Spending and Financing Plan should be fiscally responsible, and the process of planning and budgeting should be transparent' (NYU 2014b:3).

Overall responsibility for reviewing the Core Plan was invested in the University's President John Sexton and his Office, which accepted and passed on the Working Group's recommendations with its support to the Board of Trustees, while noting that 'The members of the group – some of whom were acknowledged skeptics of the University's proposals for the Core, most of whom were faculty, and most of whom live on the superblocks – took on this assignment at a time of significant fractiousness in our community; that requires great strength of character'.[9] The university community's decision to build on and densify its South Block site (specifically the Coles Sports Center) was not reached without ambivalence, partly due to concerns about the financial risk – opposition was spearheaded by FASP, Faculty Against the Sexton Plan, with the support of residents and architectural heritage groups. But as part of the deal to go forward, a new Superblock Stewardship Committee was established to oversee and monitor development in line with the recommendations of the Working Group. In addition, a number of community commitments were implemented, including space for a childcare programme and facilities for the elderly.[10]

One of the key problems for the masterplanners appointed to produce a feasibility plan for the project in 2012, Grimshaw, was the issue of territorial definition at the site, security, and the connection with surrounding areas. Very wide pavement setbacks on the east and west sides, created by a road widening scheme that never materialised, have subsquently been appropriated as informal public spaces including a community garden and playground. Furthermore, the I.M.Pei towers are listed as architectural landmarks and so cannot be significantly altered in their setting. The masterplanners' task was then framed as balancing and realigning contested understandings of ownership and occupation at the University's site. This has prompted a shift of new development to the edges of the southern site with a new, smaller block that would not compete with Pei's 300 ft tall structures (an earlier 'Pinwheel' scheme for a fourth tower was rejected by the architect), the redevelopment of the existing large sports center (Zipper), and enhanced pedestrian flow and community spaces between the buildings – as well as, in time to come, two new buildings on the east and west sides of the northern site.[11]

Key to the rationale behind the Core development plan is the fact that NYU already owns the land earmarked for development, which would significantly reduce its capital outlay. Faculty opposition to financial risk was strong, and the USPWG report underlined the fact that financial planning should be conservative and that capital costs should not be met through future adjustments to tuition fees or faculty, administrative, or staff salary projections. The Capital Spending and Financing Plan for 2013–22 (South Block only) amounts to $3.01bn, almost exactly the same as in the previous 10 years, and it is proposed that this is financed with long-term borrowing of $1.45bn, short-term borrowing (repaid before 2022) of $360bn, fundraising $136bn, drawdown of cash $130bn, and reinvestment of annual operating surpluses during the period of $399m. With a credit rating of AA-, NYU is considered to be in a strong position to meet financial commitments; however if student registration does not increase between 2013 and 2022, or if MOOCs (Massive Open Online Courses) and online education disrupt the tuition-based business model, then elements of the capital spending plan would have to be reviewed (NYU 2014b).

Co-ordinating physical and academic planning: Columbia 2.3

'Acquiring the necessary approvals and planning for Manhattanville has been an enormous, sometimes hectic, undertaking of land acquisition, environmental study, fundraising, community relations and negotiations. During this phase, the physical planning naturally took precedence over academic planning'
Campus Planning Task Force (Columbia University 2010:9)

This quote underlines the extent of the work and organisation involved in getting university spatial developments off the ground even before any clear structures or direction for academic planning of desirable activities on the site have been put in place. However the latter may also be seen as a weakness or lack of clarity on the part of a university, especially when it comes to communicating a clear vision of its future operation to external stakeholders and consultees.

In 2003, Columbia created a Campus Task Force, chaired by Peter Marcuse (Professor Emeritus of Urban Planning) and Sharyn O'Halloran (Professor of Political Economics and International and Public Affairs), to oversee and coordinate processes towards the planning, design, and realisation of the Manhattanville Campus. This included design guidelines, consultation with architects and stakeholders, dissemination of information, and updates to the President, Lee Bollinger, and Trustees. The Task Force approved the plans for the Manhattanville development, while abstaining from expressing a view on issues where they felt they had been provided with 'insufficient information': notably, 'the desired uses of buildings…; the role of community and/or non-University uses in the model; the presence or absence of affordable housing connected with the development; and the mechanisms for making decisions as to uses and developments at the site during the interim phases before full build-out' (Columbia University 2010:26). It further requested information on the timetable for the academic planning programme, specifically the process for requesting and assessing proposals from the schools for their space requirements and planned activities on the new campus. It noted that planning already in hand for the School of the Arts and new science buildings could provide a model for further academic planning and that the information be shared more widely, 'including suggestions for a consistent form of response incorporating a grid dealing with student numbers, space needs, and academic objectives. We commend this A&S approach as a possible model for other planning efforts, including the responses of Columbia schools to the Provost's solicitation last fall. We stress the need for full involvement of faculty, students and staff in preparing these responses' (Columbia University 2010:15). In addition, it stressed the need to consider the role of the school 'in relation to the University, the surrounding community, and the wider artistic community, as well as issues of space, cost, facilities, and, in particular, the challenge and use of future technologies' (Columbia University 2010:16). It also mentioned that the Business and Engineering schools had generated different planning models that could be useful for other schools just starting the process, including the School of International and Public Affairs (SIPA). This process had involved students and staff in assessments of the impact of their current space on their academic reputation, and of the benefits which might be derived from the provision of new space for specific purposes, including a financial appraisal of the likely costs and funding sources.

In 2007 the Task Force was formally asked to review and make recommendations on the relationship between physical and academic planning. Following consultations with the President and Provost, key administrators, and deans of different departments, it found that there was a significant lack of coordination between the two, and also within academic planning itself, which was often carried out either at departmental level with little reference to the rest of the university, or conversely at central administration level with little reference to academic departments. Furthermore, different schools within the University manifested strongly contrasting levels of preparation and resource in relation to the opportunities presented by the Manhattanville campus. They concluded that: 'Successful long-term academic planning requires ongoing governance that enhances transparency, encourages participation, leverages existing institutional structures, and coordinates academic, fiscal and physical planning across units' (Columbia University 2010:10). As a result, the Senate's Physical Development Committee was expanded in 2010 to include academic planning (as the Academic and Physical Planning Committee) and absorb the Task Force itself, and provision made for the formation of a board of

Trustees, faculty, students, alumni, staff and possibly outside experts to solicit and assess detailed proposals from the schools for activities on the new campus and their funding sources.

By 2011, Columbia had resolved the controversial legal issues around its ownership of the site and announced that the first buildings would be opened in 2016, with Phase 1 scheduled for completion by 2020, and the remainder by 2030. Architects were appointed for the individual buildings, including Renzo Piano Building Workshop, the masterplanner (with SOM), and Diller Scofidio Renfro, with landscaping by Field Operations. The Education and Libraries Committee recommended that buildings should be designed with a focus on 'the campus-wide use of walls and open spaces of the entryways, landings, atria and corridors of University buildings to broaden the intellectual landscape' (Columbia University 2010:30), as well as multipurpose common space, and an interactive neuroscience laboratory and other community outreach activities in the Greene Science Center. Digital media and simultaneous broadcasting of teaching sessions at multiple locations would support integration across the university's sites, while, as described on the University's website: 'new trees, lighting, street furnishings, public art and publicly accessible open space would invite people to the entire area. New buildings would not only be open to the public but would also look and feel open because of transparent glass at the street level' (Huffman 2008).

Left: Columbia University, Manhattanville site: masterplan model, with Science Center at bottom right (in blue). *Image courtesy Renzo Piano Building Workshop*
Right: Columbia Manhattanville, landscape proposals by Field Operations: artistic impression, large square. *Image Field Operations*

However, the university was strongly criticised for failing to set up adequate structures for debating these issues with the local community, and, especially, providing sufficient detail on how the new campus would actually benefit West Harlem except in the most general terms of new public space. CUF's David Hochman suggested that: 'Columbia has a superb design and engineering team working on a powerful and (to me) elegant physical plan, and it has signed a CBA [Community Benefits Agreement] that, whatever one may think of the process that produced it, does includes many significant and useful commitments to genuine university/community partnership' (Hochman 2010:3); but WE-ACT had earlier claimed that 'Although Columbia has claimed to be considerate of the community's concerns, it has never allowed the community any input into its proposed development'. Instead, 'it chose to conduct a series of "public meetings," hosted by CB9 [the local Community Board], where it gave grand presentations, lecturing residents about the "benefits" that the new campus would bring to the West Harlem community' (We-ACT 2006:2). Indeed, 'Chairperson of the local community board Jordi Reyes-Montblanc commented, "On a scale of 1 to 10, Columbia is a minus 5 in terms of trust"' (Williams 2006).

It was further reported that: 'At an August 2007 public hearing, Nellie Bailey of the Harlem Tenants Council argued: "Columbia University's expansion cannot be viewed in isolation from the overall gentrification of Harlem … The masses of Blacks, especially the poor and working classes are exacerbated, angry, demoralized and put

off … there is no political will from elected officials to provide a viable alternative to the powers-that-be including Columbia University's land grab that will permanently alter the ethnic, socio-economic and political demographics of West Harlem, and by extension the greater community of Harlem" (NBPC website)' (Huffman 2008).

In response to these 'toxic dynamics' and a demand for inclusive job development on the site (Hochman 2010:4), the University's External Relations and Research Policy Committee made a number of recommendations, including the co-ordination of a University-wide plan to raise community and media awareness of the benefits of the new campus, notably jobs and economic development; establishing a 'welcome center' on the campus where local residents can apply for jobs and obtain information about the construction programme; implementing best building practices and expanding its medical outreach programmes to ameliorate any impact on West Harlem's asthma epidemic; and promoting staff and student collaboration with the West Harlem Local Development corporation to implement the CBA, alongside organisations already involved in community outreach (such as Community Impact and the Gateways initiative) (Columbia University 2010: Appendix 4).

Nevertheless, Columbia has struggled to convince the local population that it will bring genuine urban renewal, not just gentrification, to the area. Public comments on the Draft Environmental Impact plan challenged the definition of West Harlem as blighted, and re-affirmed the feeling that financial rather academic interests are driving the scheme, while the University's imperative to remain competitive rests above all on its real estate strategy (NYC DCP 2007:21) – perceptions that the University will need to prove wrong as the scheme proceeds, if it is to regain local trust.

Visions and narratives 3

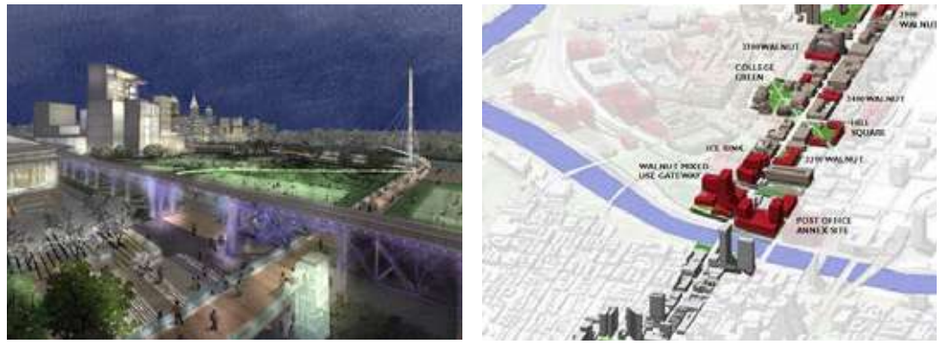
'An urban campus isn't defined by gates and walls, but by weaving the university into the fabric of city life'
Columbia University/Manhattanville website
'We saw that we could promote connectivity with the community and the city by taking walls and fences down and emphasizing visual transparency of buildings and accessibility to open spaces'
Judith Rodin, President University of Pennsylvania (Rodin 2007:168)

University spatial developments provide the opportunity for universities' visions of themselves, and what they represent to others, to be manifested as collections of facilities and spaces in which particular activities take place and communities assemble. Before that can happen, visions have to be created through collective effort in words, images and technical drawings – usually masterplans for real identified sites. Different institutions vary in their approach to how material the vision should be, and how far it should be shared with a wider public, but they all recognize the importance of conveying a public message which increasingly stresses the interconnectivity of university and city, and the necessity of minimizing the physical and psychological barriers which have defined university campuses in the past. Although this may not extend to a vision of the 'open university' as an institutional entity open to all, it does emphasise the place-based nature of the campus as one to be extended and opened up to a larger urban constituency with potential benefits for all.

An incremental approach: Pennsylvania 3.1

'Penn Connects is an inspiring and achievable vision for the future of the entire campus and, in particular, the new and existing land in the east. It sets forth a vision rooted in the tradition and history of the campus; one

which extends and enhances the successes of previous planning and design initiatives that have transformed the campus, such as the creation of Locust and Woodland Walks and Blanche Levy Park. The creation of concept corridors, or "Bridges of Connectivity," enliven the pedestrian experience and create opportunities for vibrant development'
Penn Connects website[12]



Left: University of Pennsylvania: Penn Connects 2 – a vision for the future.
Right: Penn Connects 2: Walnut Street axis re-visioned as gateway to the city centre.
Images University of Pennsylvania, www.pennconnects.upenn.edu

The Penn Connects vision is grounded firmly in campus planning and urban design manoeuvres, presented through attractive CGI imagery on its website. 'Connectivity' is key to that vision, both the connectivity of campus, city and region, and the connectivity of cutting-edge medicine, academic facilities and research, with the world of commercial translation and the wider benefits that can be derived from that. Hence the development of 'Pennovation Works' (and its play on words) on a former industrial site, and other translational facilities on campus.

The Penn Connects vision is very visual and spatial, but by contrast the West Philadelphia Initiatives which form such a significant part of the campus's history and traditions in which it is rooted were embedded in a more incremental, but also holistic, vision which could not be transmitted so effectively via concrete plans and images. Indeed, this was not felt to be a desirable approach, and a clear decision made not to announce a comprehensive masterplan to the public at the start, but rather to 'roll out' the Initiatives little by little, in recognition of 'the impossibility of being truly comprehensive in urban planning from the start' (Rodin 2007:55).
As an unfolding narrative then, the Inititatives comprised several key components, including: shared planning principles developed by PennPraxis (the outreach, practice and professional arm of the School of Design)[13] for the development of the 40th Street corridor running along the residential western edge of the new University City District; established goals for economic inclusion, notably increased spending through purchasing relationships with community-based businesses and those owned by ethnic minority groups; the avoidance of gentrification as a principal of the university's housing regeneration policy, by focusing on affordable rented housing, home ownership for smaller homes, and a mortgage scheme from which developers or investors were barred; and the revitalisation rather than fortification of the campus (Kromer and Kerman 2004:8).

As defined by Kromer and Kerman, there were two key messages which the University aimed to put across through the West Philadelphia Initiatives: 1. 'The health and vitality of Penn and West Philadelphia are intertwined', and 2. 'Penn is deeply committed to West Philadelphia' (Kromer and Kerman 2004:13). And these were aimed at the widest possible audience: local residents and their representatives, students and their families, university staff, alumni, local government officials,

corporations and foundations, other academic institutions and the media. By reinventing the University's domain (along with Drexel University) in the troubled West Philadelphia area as University City District they also effectively rebranded it as a specific amalgam of university and city, responsible for delivering particular services, amenities and opportunities to local residents and businesses. These include projects such as the West Phildelphia Skills Initiative launched in 2010, based on the following premise: 'WPSI operates from the viewpoint that many of West Philadelphia's unemployed residents are talented individuals ready and willing to contribute value to their next employer – given the right opportunity'.[14]

The West Philadelphia Initiatives are often cited as a model for university participation in urban renewal processes. However Penn's implementation of its vision of university-neighbourhood integration has not escaped accusations of gentrification – especially in relation to the demographic data showing a diminishing black and growing white community – and questions about its real motivations. By 2000 and again in 2010, census data was analysed by the university to demonstrate reduced crime, and increased commercial development and local purchasing in the UC area.[15] But Harley Etienne, in an ethnographic study based on 42 neighbourhood interviews, suggests that Penn's view of its own role in neighbourhood improvement is 'somewhat overstated' and that both crime reduction and increased housing values simply mirrored national trends. Moreover, while most local residents appreciated the university's input, and felt they benefited from resources that other city institutions did not provide, they were also sceptical about its motives and found that 'in dealing with area leaders and neighborhood groups, the university was not always fair or transparent' (Edelman 2013:388). Comments of this nature point perhaps to the advantages of a clear and communicable vision over and above an incremental plan which may be perceived as implementation by stealth; while on the other hand, universities fear being held to a comprehensive masterplan which ultimately they cannot deliver due to complex evolving urban conditions beyond their control.

Framework 2031: 'NYU in NYC' 3.2

NYU unveiled a vision for its future development over 25 years in its Framework 2031, as a response both to its own crisis in space provision, and to Mayor Bloomberg's request that all New York's major institutions outline their long-term plans in relation to the city to inform his PlaNYC 2030. NYU's vision rests on two principles of development – provision of space for growth and improved student experience, and an advancement of its institutional role as a globally networked university in the evolution of the city as an 'ideas capital' and hub of the knowledge economy. But these elements of the narrative are also anchored in a vision of space and place which hinges on the university's physical and symbolic Washington Square location and its existing architectural and urban identity: 'Its presence there is essential for its identity and mission and has only become more important as NYU's network extends globally' (NYU 2031 n.d:115).

NYU's expansion at the 'Core' is pinned to visions of modern urbanism which it aspires to fuse in its plans for new development, blurring the boundaries between city and university. The two slab blocks and the three towers built on the two southern superblocks between East 3rd Street and West Houston Street in the late 1950s and mid- 1960s, are surrounded by open public space, exemplifying the modernist vision of the city as a rational organisation of dwellings and work-places set amidst open green space for leisure and exercise (NYU 2031 n.d:142).[16] The superblocks were created by New York City's slum clearance programme, which demolished buildings across the entire neighbourhood to create them, opening the way for the university to take their place. The new plans acknowledge the problems caused by this radical approach to city renewal, and the need to reinstate something of Jane Jacobs' vision of the city as a place of juxtaposed scales, textures, and activities that produce vitality

through their friction: 'NYU's intention in this plan is to respect and bring into balance these conflicting visions that coexist in the community' (NYU 2031 n.d:145).

In line with this ambition, it has also engaged in the redevelopment of a city-owned, 'long-dormant', building on Jay Street in Brooklyn to provide a mixed-use academic centre that will focus on engineering and applied sciences, particularly in relation to urban issues. As the home for NYU's Center for Urban Science and Progress amongst other programmes and incubators, it will provide a physical base in which to explore the university's vision of itself in a close relationship with the city as 'laboratory and classroom'. Here it will promote research into issues such as resilience, renewable energy, and informatics, as well as developing entrepreneurship and innovation as part of its drive to become a key engine of economic development locally, regionally and globally (NYU 2014a).

Thus NYU's vision for its future development as a city-based university unconstrained by campus parameters, and fully engaged in contributing to urban vitality and prosperity, is manifested both in its architectural and academic plans. On the one hand, its proposed infill developments and enhanced community spaces on the two superblock sites evoke Jane Jacobs' vision of the street-level city; while on the other, its newly established presence in Brooklyn through a merger (with Polytechnic Institute) to create the NYU Polytechnic School of Engineering, and the various interdisciplinary urban programmes to be housed at Jay Street, represents a developing vision of the institution as outward-facing and engaged with urban communities and future priorities.

Ivy League and West Harlem sharing space: Columbia 3.3

Columbia's vision of itself as an urban campus woven into the fabric of city life (see quotation above, Section 3) has been framed by the masterplanner's concept of the Manhattanville development as centered on a piazza, or talking place, which will bring people together on the university's territory. Columbia has a reputation less for openness than for heavy-handed security at all its campus sites, but *The Morningside Review* reported that: 'Piano [Renzo Piano Building Workshop, masterplanners with SOM] and the university aim to create a space where the Ivy League and West Harlem communities can share their day-to-day activities and thereby engage in a dialogue that will further human understanding' (Huffman 2008). It is the university's physical expansion which can make this happen, producing new fields of interaction in the city that did not exist before, and generating new benefits for the urban population more widely – in the architects' words: 'The new campus will be a place of research and knowledge production integrated with the city, in close contact with its social reality, street culture and energy … Unlike the gated campus just five blocks south at Morningside Heights, the Manhattanville development is designed to be part of the neighbourhood and open to all. University programs have been pushed up a floor or more above street level, creating what has been termed the "Urban Layer", whereby the ground floor of each building on the new campus will be devoted to public activity' (Renzo Piano Building Workshop).[17]

As we have seen, however, this vision of shared space facilitating dialogue and mutual understanding has not been equally shared by representatives of the West Harlem community. Their vision was of 'a unique opportunity for Columbia to assume a leadership role in changing how development programs are planned and implemented in New York City. Indeed, this project can serve as a model for a revolutionary government-private interest-community collaboration in urban renewal and economic planning nationwide' (We-ACT 2006:1). This vision was laid out in the 197-a Plan produced by the neighbourhood Community Board 9 from 1991 onwards, which privileged affordable housing provision, and the retention of some light manufacturing activities alongside new job-intensive businesses to benefit locals – in addition to the provision of green space and social, cultural and economic opportunities.[18]

Columbia University Manhattanville campus, Science Center: rendering (left), and under construction (right).
Images courtesy Renzo Piano Building Workshop (left), Columbia University 2015 (right)

The co-existence of these two visions of how Manhattanville might be developed underline the reality of the area as a problematic and contested space in the city, while at the same time – and as emphasised by the university's own Student Coalition on Expansion and Gentrification (SCEG) – 'Almost no-one is against the expansion entirely' (SCEG n.d:3). Indeed, to outside observers, the initiative seems impressive – as enunciated in an anonymous post responding to *Columbia Spectator's* announcement of the construction plans: 'Looks fantastic. Columbia continues to lead the way. Other universities will not be able to compete with these plans' (Vigeland 2011). And Columbia's vision has been ratified by the city's implementation of re-zoning legislation through the Uniform Land Use Review Procedure (ULURP), in order 'To allow Columbia to fulfill its role as a leading academic institution that makes a significant contribution to the economic, cultural, and intellectual vitality of New York City' NYC DCP 2007:4). As buildings start to rise on the site, and clarification is sought over the dispersal of the $150m community benefits fund, the university may need to enhance its narrative and communication channels to ensure that an attentive public audience can understand better how that will happen.

Translation into place 4

The impacts of these university developments are both immediate and long-term, as they materialise on site and re-shape neighbourhoods. They raise strong concerns about the disruption and effects on public health caused by extended periods of construction activity, and about the loss of historic buildings and urban settings, along with social displacement and cumulative gentrification in the future. As discussed in section 1, these concerns often go back a long way, rooted in histories of perceived university encroachment on the city and an unequal pitting of community against university resources. In addition to the disappearance of homes and small businesses, one of the key issues is the securitisation of urban territory, as part of a more general trend towards the privatisation of public space in the city; another is the 'studentification' of residential neighbourhoods and services, at the expense of families and older people. However universities are also well-equipped with knowledge and know-how in the fields of planning, design and social sciences which should make them ideal partners in new development initiatives, if these resources can be effectively mobilised and coordinated both with estates and facilities programmes, and with local planning and urban renewal frameworks.

Neighbourhood tactics and strategies: Pennsylvania 4.1

One of the key features of the University of Pennsylvania's West Philadelphia Initiatives was the move to bring undergraduate students back to live in new accommodation constructed on campus, in order to mitigate against the effect of studentification in the surrounding neighbourhoods. Kromer and Kerman report that in 1990, 41.2% of the local population was white, 46.2% African American, and 11.2% Asian. The median family income was $27,657, and 15.7% of families were registered as being below the poverty line (Kromer and Kerman 2004:8). There was a perception that the university had used development strategies over the years to separate itself from its neighbours through the construction of office and residential buildings for its own use on the sites of former homes and businesses, especially to the north. From 2000, the university set out to reverse this situation through a policy of acquiring and renovating dilapidated housing (of which 15% owned by absentee landlords), through its Neighbourhood Housing and Development Fund (1999), and returning it to the rental market for occupation by a mixture of university and neighbourhood tenants. The proportion of graduate students renting increased slightly, while the undergraduate population dropped, and the university opened a successful new public school (Penn Alexander) in 2001 for local families. The North-South 40th Street corridor, which was viewed by many as an unspoken boundary between university and neighbourhood to the west, became the focus of improvement strategies implemented by the 40th Street Action Team to create a more welcoming, well-maintained and integrated environment.

As Judith Rodin recounts, the university's first priority was to implement a policy of 'clean and safe', ranging from relatively small tactics such as providing new rubbish bins, painting shops, installing new lighting, and cleaning at weekends, to larger strategies including the creation of the University City District entity. This was set up as a not-for-profit organisation involving 35 'safety ambassadors', to organise arts and other events, and co-ordinate renewal schemes such as the farmer's market, UC Green – an urban gardening collective – and LUCY (Loop through University City), a shuttle service. The UCD also met with representatives from Town Watch groups to co-ordinate public safety, and organised bicycle patrols of University police, and crime levels dropped significantly.

The University also developed three major projects to boost commercial development, including the $19m Sansom Common mixed-use retail complex, comprising a hotel, cinema, and good quality supermarket, with support from banks and foundations. It introduced sites on campus for existing street vendors to sell fresh food, and promoted small businesses along 40th street, including a mix of ethnic restaurants, galleries, a performance centre and free studio and residential space for artists. Its advisory committee on economic inclusion made a commitment to increasing the participation of ethnic minority workers and businesses as providers of construction, goods, and services to the university. Kromer and Kerman state that of $550 million invested in all construction projects since the inception of the Economic Opportunity Program in 2000, $134 million (24%) was spent with minority and women-owned businesses.

However, whether as a direct result of these improvements or following national trends, house prices in the neighbourhood rose by 154% between 1994 and 2004, house sales increased by two-thirds, and the new school provision proved to be a key attraction to incoming residents – all indicators of processes of gentrification that were perhaps inevitable and are still being debated. In more recent years, the university has turned its attention to less controversial territory to the east – redundant industrial land along the river ripe for re-use as 'innovation zones' and 'knowledge neighbourhoods'. These development models for extension of the campus with mixed academic and commercial spaces will physically transform the river-edge landscape, and also update the initiative established by the older University

City Science Center research park of 1963 – the first and biggest in the US, said to contribute $9bn each year to the regional economy[19] – for the 21st century.

Building trust with the community: NYU 4.2

> 'The Superblocks have been a source of strain between NYU and the community for the past 50 years. Members of the community see NYU as repeatedly breaking promises and ignoring community needs. For their part, some NYU administrators feel NYU cannot make even minor improvements without being attacked as destroying the neighborhood. Partly, this is a matter of some ineffective public relations. Partly, this is due to an intractable history…'
> *University Space Priorities Working Group, NYU (NYU 2014b:38)*

NYU has grappled with the issues presented by its site for many years, leading to delays and hesitation in maintaining and developing its estate due to various disputes over jurisdiction. Its decision to move forward with a substantial physical development plan has been accompanied by significant concerns over the actual process of translation into place, and the mitigation of negative impacts from the construction process – including measures such as installation of sound-proof windows to existing buildings, and sequencing of heavy-duty construction activity. Construction on the northern Washington Square Village block will be delayed until 2022 at the earliest.

Unlike Penn, NYU is not considering building a public school for the neighbourhood on the site. However the Schools Construction Authority was offered an option to build one on the site of an existing grocery store on the southern block, with no charge for the land. It must make a decision as to whether it wishes to proceed by the end of 2018, and if so, to start construction by 2020. This deal, including an extension of the original deadline by four years, has been welcomed by the local Community Board (CB2) as 'a great victory for the community' (Tcholakian 2014).

In Brooklyn, NYU's initiative to embed the university's presence in the area has been welcomed by Borough President Eric Adams: 'I am pleased to support a project that embraces sustainable construction and energy efficiency, as Brooklyn looks to be a leader in these areas. Our borough will continue to benefit from the great ideas that will emerge from 370 Jay Street, from world-class education to creative entrepreneurship' (NYU 2014a). The university has employed Mitchell Giurgola Architects to design the adaptive reuse of the building both to provide suitable accommodation for its new functions, including a Citizen Science Centre, and as a model in itself for the practices of sustainable construction and energy reduction which will be among the areas of research. The university's rhetoric around the project responds to the perceived disconnection of institution and neighbourhood in Greenwich Village, by emphasising the fundamental connection and service of the building to the local neighbourhood as a process of 'Putting the building back to work for the borough' for the benefit of residents.

Achieving positive economic outcomes: Columbia 4.3

> 'In the end we're making a campus, not just buildings – we're working on a small city'
> *Elizabeth Diller, Diller Scofidio + Renfro (Vigeland 2011)*

Columbia's translation of its Manhattanville vision into place has been facilitated by the rhetoric of articulate architects who have consistently emphasised the urban character of the new development and the importance of the spaces in between the new buildings as sites of social interaction. It has placed relatively little emphasis on the economic and social dimensions of the initiative as a place-based project. Indeed,

Hochman for CUF noted in 2010 that: 'What's different about Manhattanville … is that to this point the plan has included no discernable emphasis on jobs other than in the university itself and in retail or service businesses that mostly offer low wages and limited advancement potential. By contrast, many new campus plans nationally make it possible for businesses that are research partners of the university to operate cheek-by-jowl with new academic space, sparking the growth of a sustainable regional technology cluster and the creation of jobs that pay relatively well' (Hochman 2010:2).

Columbia however has no planning consent for commercial research space on the site, so its facilities will include mainly facilities for graduate and post-graduate education and research, along with a central Forum building intended to provide a meeting hub on the piazza. But the impact of these buildings on the local area has been questioned, not only from a social and economic point of view, but also in terms of their form. The proposed new buildings will range in height from 140 feet from 260 feet to the roofline and have large floor plates which were criticised in comments from the Harlem Community Development Corporation and Community Board 9 on the Environmental Impact Statement: 'Large floor plate buildings have a tendency to deaden streetscapes, which contradicts an important part of the plan. The EIS should explore alternative designs for research buildings' (NYC DCP 2007:77). Furthermore, it was noted that no public ground floor uses were proposed along the perimeters of the midblock passageways and private quad/square, which 'may reduce their attractiveness, safety and accessibility to the public' – to which the university responded that 'While Columbia has stated that its intention is to create the liveliest possible streetscape, the EIS reasonable worst-case development scenario will assume the "minimum," i.e., the required, public ground-floor uses only' (NYC DCP 2007:79).

On the other hand, the University has been applauded for aiming high in its environmental sustainability ratings, with the campus set to become the first LEED-Platinum certified neighbourhood plan in the city: 'While many people hate the constant construction and the whole expansion plan, Columbia is trying to do right by the environment, at least … they are using extensive clean construction practices. Thirty-three buildings were demolished to make way for the mega-project, and about 90 percent of those materials have been saved or recycled'. In addition, 'All diesel construction equipment, running on ultra-low sulfur fuel, is equipped with particulate filters which release neither soot nor smell, and electric power is used whenever possible. To help create a dust free construction site, all construction vehicles have their wheels and undercarriages washed down twice before they leave the site, and the water use is recycled for future washes' (Dailey 2012).

But the debate over the social and economic impact of the project on West Harlem continues. 'To develop the campus, most of the structures and people in the neighborhood will be displaced. Behind these walls is a community that has been sensitive to the threat of displacement since the '60s … This West Harlem neighborhood is the frontier of a gentrification movement sweeping through New York City and other American urban centers', writes Huffman in *Morningside Review* (Huffman 2008). Local representatives state that the plans will not create jobs, but 'get rid of the jobs of 1,500 people who work for the small businesses in the area (storage companies, meat markets, auto repair shops, and so on). There will be some temporary construction jobs while Columbia puts up its buildings in the area, but there would be at least as many construction jobs if affordable housing was built for the area instead' (NYC DCP 2007:53). And expert critics have expressed doubts as to how the plan will create any jobs other than for professors, biotech experts and maybe some lab assistants, if there are no commercial partnerships in the picture.

'If done right, the end result will not just be a larger campus for Columbia, but a range of positive economic outcomes for the surrounding community: the university's own investments could prompt private companies based on advanced

science and engineering technologies to set up shop nearby, boosting the city's long-faltering innovation economy while creating a range of high-value, fair-wage jobs for local residents', writes Hochman – but, 'we're still behind on understanding how to leverage Manhattanville for significant economic development … The city's job is now to articulate and promote a vision under which development of private-sector job opportunity goes forward in a way that's compatible and even synergistic with affordable housing and other features desired by the community' (Hochman 2010:4).

Key issues and learning points 5

Key drivers all three universities had experienced growing concerns about urban degeneration in the neighbourhoods contiguous with their campuses, manifested in crime, even murder, graffitti, and various social problems, which was having a negative effect on the experience and perceptions of students, staff and observers. Furthermore, the universities faced criticism from local communities and stakeholders for their own appropriation and redevelopment of local real estate, and they recognized the need to improve university-community relationships, build trust, and make a more measurable contribution to the urban economy. At the same time, they needed to protect and enhance their global profiles by ensuring that university space standards, facilities and the surrounding environment were of a quality to recruit and retain the best international staff and students.

Funding Pennsylvania's decision to manage the WPI redevelopment programme as an internal leadership team permitted greater ease of access to investment capital from banks, contractors, and service providers. NYU already owns the land earmarked for development, and faculty opposition to risk has been strong, therefore its financial planning is conservative. Capital is to be generated through a mix of long-term and short-term borrowing, reinvestment of surpluses and fundraising. Columbia's financial plan includes some funding, towards a new Institute for Data Sciences and Engineering, from the 2011 Applied Sciences NYC competition.

Location both Pennsylvania and Columbia are capitalising on new acquisitions of proximate river-edge tracts of land formerly in industrial use, which in the latter case has been re-zoned for mixed-use. NYU by contrast, unable to expand on its historic site, is re-structuring its historic Washington Square base within a revised zoning envelope to consolidate and maximise its use as a central symbolic site for the 'global network university', along with a number of additional 'remote' sites dispersed across the city beyond Manhattan Island.

Masterplanning and design while Pennsylvania avoided a comprehensive masterplanning approach to the West Philadelphia Initiatives it subsequently adopted the Penn Connects blueprint for land use and urban design which, like the Columbia and NYU strategies for campus development stresses the urban dimension – permeability and connectivity with the city, including green open space and facilities for commercial and/or public use. The viability of Columbia's masterplanning approach has been dependent on the controversial use of eminent domain to secure land assembly. All three institutions have invested in high-profile international architectural practices to produce signature buildings within the masterplan framework, while NYU has had to address specific issues of new development and design within the context of listed modern architectural heritage.

Academic programming NYU includes substantial new performance space (a proscenium theatre, four workshop theatres and performing arts spaces) as an

integral part of the academic space requirement, as well as a new sports facility, and a flagship science building on a site to be identified in or near the Core. Columbia's programme includes new buildings to house several schools for Business, the Arts, and Engineering and Applied sciences, as well as the new Science Center and an academic conference centre. Penn Connects has seen the realisation and projected construction of extensive new medical research and clinical space and a nanotechnology centre, as well as the renovation and expansion of the Music Building and Public Policy Center.

Non-academic engagement Columbia has signed a significant community benefits agreement locked-in for 20 years, including a new public school, although it is still to win the trust of Harlem community. It will provide a 'welcome center' on campus where residents can apply for jobs and obtain information. NYU has been engaged in an extensive outreach process, and is committed to providing new space for community use as part of its development. Its plans for development at its 'remote' sites are specifically conceived as incubators for the city's growing knowledge economy. Pennsylvania's West Philadelphia Initiatives included a swathe of neighbourhood revitalisation tactics and strategies, and it further launched a Knowledge Industry Partnership in 2002, and Keystone Innovation Zones designed to encourage business use of university facilities.

Specific assets the West Philadelphia Initiatives brought about significant improvements in public safety, the neighbourhood economy, and local housing provision, facilitated by Penn Praxis in the School of Design – although they have also been criticised for stimulating gentrification processes. The next phase of development for the university under the Penn Connects vision will see the construction of a significant new innovation centre to boost knowledge translation and enterprise. Columbia has no planning permission for commercial research facilities on its Manhattanville site but is making a significant investment in innovative research buildings for applied science and neuroscience alongside sustainable, publicly accessible spaces for art, culture and community. NYU has placed a strong emphasis on the provision of new faculty housing in the development of its Core site, alongside new academic and sports facilities, recognizing that this is a key issue in attracting and retaining staff. But it has also undertaken the redevelopment of its new Brooklyn facility to provide a home for its Center for Urban Science and Progress and other incubators, in order to explore a closer relationship with the city as 'laboratory and classroom', and help to address New York City's slow development of innovation clusters comparable to those around Stanford and MIT.

Notes

1 In 2014 the Initiative for a Competitive Inner City (ICIC) found however that only a handful of 70 anchor institutions interviewed were actually measuring their impact on the local community, and proposed a set of recommendations for gathering metrics http://www.icic.org/connection/blog-entry/blog-strategies-for-measuring-the-shared-value-of-anchor-initiatives

2 The Anchor Institutions Task Force is led by the University of Pennsylvania and administered by Marga Incorporated. The Penn Institute for Urban Research coordinated the development and publication of a series of task force reports

3 http://www.pennconnects.upenn.edu

4 See Penn Connects website, http://www.pennconnects.upenn.educoordinated the development and publication of a series of task force reports

5 http://www.nyu.edu/community/nyu-in-nyc/core-plan-commitments/nyu-space-planning-the-core-plan.html

6 http://www.nyu.edu/content/dam/nyu/govCommunAffairs/documents/nyu-in-nyc/core-plan-commitments/2014-10-15-Final-Coles-Redevelopment-Fact-Sheet.pdf

7 http://www.nyu.edu/nyu2031/nyuinnyc/growth/the-plan.php#Intro

8 http://www.nyu.edu/about/university-initiatives/space-priorities.html

9 http://www.nyu.edu/about/leadership-university-administration/office-of-the-president/redirect/speeches-statements/accepting-the-recommendations-of-the-university-space-priorities-working-group.html, Mar 4th 2014

10 ibid

11 http://grimshaw-architects.com/project/new-york-university-masterplan/

12 http://www.pennconnects.upenn.edu

13 http://www.design.upenn.edu/penn-praxis/about

14 http://universitycity.org/west-philadelphia-skills-initiative

15 http://www.icic.org/connection/blog-entry/blog-strategies-for-measuring-the-shared-value-of-anchor-initiatives last accessed Mar 23rd 2014.

16 Cf Le Corbusier's Ville Radieuse and Plan Voisin.

17 Renzo Piano Building Workshop http://www.rpbw.com/project/73/columbia-university-campus-plan/

18 197-a Plan, Community Board 9, http://www.prattcenter.net/cp-cb9.php

19 *Philadelphia Business Journal,* Sept 14th 2009, http://www.bizjournals.com/philadelphia/stories/2009/09/14/daily4.html

References cited

Addie, Jean-Paul, Roger Keil and Kris Olds
2015 'Beyond town and gown': higher education institutions, territoriality and the mobilization of new urban structures, *Territory, Politics, Governance,* 3,1: 27–50

Bender, Thomas
1988 *The university and the city: from medieval origins to the present.* New York, Oxford: Oxford University Press

Bromley, Ray
2006 On and off campus: colleges and universities as local stakeholders, *Planning, Practice, and Research* 21:1, 1–24

Columbia University
2010 Manhattanville and Academic and Physical Planning at Columbia University: Report of the Campus Planning Task Force, University Senate

Dailey, Jessica
2012 'Here, now, Manhattanville's public spaces by James Corner', CURBED, June 6th http://ny.curbed.com/archives/2012/06/06/here_now_manhattanvilles_public_spaces_by_james_corner.php

Edelman, David J.
2013 Review of *Pushing Back the Gates: Neighborhood Perspectives on University-Driven Revitalization in West Philadelphia* (Philadelphia: Temple University Press), *Journal Of Urban Affairs* Vol. 35/No. 3

Glazer, Nathan
1988 Facing three ways: city and university in New York since World War II. *The university and the city: from medieval origins to the present.* New York, Oxford: Oxford University Press, 267–289

Hochman, D
2010 'Making the Most of Manhattanville', Off the CUF: Center for an Urban Future, January: nycfuture.org

Huffman, Lukas
2008 'Manhattanville, Meet West Harlem: An Urban Frontier', *Morningside Review*, 2007/8 edition. http://morningsidereview.org/essay/manhattanville-meet-west-harlem-an-urban-frontier

Jacobs, Jane
1961 *The death and life of great American cities*. New York: Random House

Kromer, John and Lucy Kerman
2004 *The West Philadelphia Initiatives: a Case Study in Urban Revitalization.* University of Pennylvania: Office of the President / FELS Institute of Government, p.9

Lincoln Institute of Land Policy
N.d University Real Estate Development (URED), Pennsylvania (database): Biotech Park http://www.lincolninst.edu/subcenters/university-real-estate-development/MARGA Incorporated/ University of Pennsylvania Institute for Urban Research
2010 Anchor institutions task force. http://www.margainc.com/initiatives/aitf

Maurrasse, David
2001 *Beyond the campus: how colleges and universities form partnerships with their communities.* New York: Routledge
2007 *City Anchors: Leveraging Anchor Institutions for Urban Success, CEOs for Cities.* Chicago, IL

New York City Department of City Planning
2007 Manhattanville Final Scope of Work: Proposed Manhattanville in West Harlem Rezoning and Academic Mixed-Use Development: Environmental Impact Statement (Final Scope) http://www.nyc.gov/html/dcp/pdf/env_review/manhattanville/final_scope.pdf

New York University
n.d *A University as great as its city: NYU's strategy for future growth.* NYU 2031, NYU in NYC
2008 NYU 2031 Framework, June 24th
2010 Manhattanville and Academic and Physical Planning at Columbia University. Report of the Campus Planning Task Force, University Senate
2013 Interim Report, University Space Priorities Working Group, July
2014a NYU Unveils design for new academic center in Brooklyn, press release June 26th
2014b Final Report, University Space Priorities Working Group, March

Philadelphia Business Journal
2009 University City Science Center's impact $9B, study says http://www.bizjournals.com/philadelphia/stories/2009/09/14/daily4.html Sept 14th

Rodin, Judith
2007 *The University and Urban Revival: Out of the Ivory Tower and into the Streets,* Philadelphia: University of Pennsylvania

Student Coalition on Expansion and Gentrification (SCEG)
n.d *Columbia's West Harlem Expansion: A look at the Issues.* A guide andreference

Tcholakian, Danielle
2014 'NYU Extends Construction Deadline for Proposed Bleecker St. Public School', *DNA Info*. http://www.dnainfo.com/new-york/20141021/greenwich-village/nyu-extends-construction-deadline-for-proposed-bleecker-st-public-school, Oct 21st

Vigeland, Finn
2011 'In Manhattanville, plans develop where buildings stood', *Columbia Spectator* April 25th

Viswanathan, Vidya
2008 Columbia expansion approved in NYC, *The Harvard Crimson*, Jan 3rd. West Harlem Environmental Action (WE ACT) for Environmental Justice
2006 Official Executive Summary on Columbia's Proposed Manhattanville in West Harlem Zoning and Academic Mixed-Use Development Environmental Impact Statement Draft Scope of Work, January 6th old.weact.org/columbia/Official_Executive_Summary-06JAN06.pdf

Williams, Timothy
2006 'In West Harlem Land Dispute, It's Columbia University vs. Residents.' *The New York Times* 20 November http://www.nytimes.com/2006/11/20/nyregion/20columbia.html

CASE STUDY 5

LAMBETH COUNCIL, BRIXTON GREEN AND OVALHOUSE THEATRE IN SOUTH LONDON

A co-operative community-led development in inner London

Contents

Introduction

1 Historical and policy context
1.1 Changes to Council structure and delivery of public services
1.2 Foundation and aims of Brixton Green
1.3 Future Brixton Masterplan 2009
1.4 The Somerleyton Road site
1.5 The potential for community-led development
1.6 Social deprivation and displacement

2 Processes and structures
2.1 A partnership approach
2.2 Engagement/consultation
2.2.1 The action planning workshops
2.2.2 The project workshops at Six Brixton
2.2.3 The emergent themes and tensions
2.2.4 The limits of engagement
2.2.5 UCL 'Data what?' Workshop: the role of technology in community engagement
2.3 Delivery mechanism: doing it differently
2.4 Financial viability and risk mitigation
2.5 Design: connectivity and social infrastructure

3 Visions and narratives
3.1 Vibrancy
3.2 Democracy through housing provision
3.3 Safety and social cohesion

4 Translation into place: 'what does success look like?'

5 Key issues and learning points

Summary

1

1. Somerleyton Road, London SW2: aerial view of site, running along right of image. Southwyck House, aka the barrier block, stands out in the middle ground (four linked blocks)
2. Masterplan layout by Igloo/Metropolitan Workshop, April 2015. *Images courtesy Lambeth Council/Igloo*

2

Urban regeneration in London has become a war waged with increasing desperation to secure affordable housing for the majority of the city's population which has been priced out of both the home-ownership and rental markets. Many of London's residents live in the city because it offers better prospects of employment then elsewhere, yet are unable to afford adequate accomodation. Most new-build developments and large-scale urban regeneration schemes offer a smaller proportion of affordable and genuinely affordable housing than private housing, much of which is sold to overseas investors as buy-to-let, or buy-to-leave. Hence the redevelopment of Somerleyton Road in south-west London, through a partnership between Lambeth Council, Ovalhouse Theatre, and Brixton Green mutual benefit society, has been promoted as a potential model for a genuinely community-led development that will provide 100% rented housing (c 301 homes) on mixed tenures – social target rent, affordable, and private – with a view to enabling a local, diverse population to continue living and working in an area which has become one of the capital's latest gentrification hotspots. This case study sets out to offer some insights into the structures and processes which have been put in place to bring the vision behind this project towards realisation over the last six years and more, without the input of either a developer or a major anchor institution such as a university. Although Ovalhouse theatre will fill the role of a cultural anchor for the development to some extent, and a resource for youth engagement and training, the project has been heavily reliant on the voluntary enterprise and hours of time put in by local residents and professionals appointed to support them, alongside the work dedicated to it by numerous council officers. Communication between stakeholders has been central to the process, coloured by the inevitable tensions which arise in the balancing of multiple interests and a tight budget. However the ambition is that the project will ultimately provide an exemplar for not-for-profit development which reinvests returns in the community, providing long-term housing and social assets on a currently under-used site, which other councils and partners may choose to follow.

Introduction

Brixton in south London has been one of the central stages of urban regeneration discourse and policy since the 1990s, when lack of social and economic opportunities and decent housing was recognised as an underlying cause of social unrest. Under the Conservative government of the 1980s and 90s, a series of riots in Brixton were triggered by a number of controversial confrontations between the police and the Afro-Caribbean community. In 1993 the government allocated City Challenge funding to improve the area and attract public and private investment which would create new opportunities for local people. However only a fraction of the allocated £187m was spent – on the refurbishment of a number of landmark entertainment venues in the town centre area – and private investment never materialised; consequently the programme was suspended. Since 2000, renewed efforts to regenerate the area have made moderate progress, perhaps lacking any significant local anchor institution, university or otherwise, to catalyse and support economic development. However, they have aroused plenty of local opposition to a perceived gentrification and commercialisation which is displacing long-standing residents, many of whom represent second and third generation immigrant communities which made Brixton home. The Somerleyton Road development is notable then for having been initiated in 2008 as a potential model for community-led and managed regeneration development, in partnership with the local authority and Ovalhouse theatre, which will provide genuinely affordable rented homes, social infrastructure, and training and employment opportunities for local people on land owned by the council.

Historical and policy context 1

In 2009-10, Brixton's central public civic space was re-landscaped and re-named as part of the Mayor of London's programme of public space improvements in the run-up to the Olympics, which included the Olympic Park itself. The 'Great Outdoors' programme was co-ordinated by Design for London (part of the London Development Agency, one of the nine national RDAs, which itself sat within the GLA), and, as City Hall explained, represented an investment in public space which 'contributes to maintaining and improving London's image as the world's most green and liveable big city and highlights London's offer as a city that can sustain economic growth'.[1] Windrush Square was named for the ship which brought over the first West Indian immigrants in 1948, many of whom settled in Brixton. It has become the symbolic centrepiece of Brixton's ongoing regeneration policy and implementation by a Labour-led local authority (Lambeth) which in 2012 re-launched itself as a co-operative council, prompting significant organisational and operational changes in its delivery of public services and infrastructure projects. Against this context, the Somerleyton Road project has emerged as a showcase for the council's new partnership-based modus operandi, working 'with, rather than for' citizens to put local interests at the centre of regeneration and invert the top-down approach.

Changes to Council structure and delivery of public services 1.1

Lambeth's move followed the passing of the Coalition government's Localism Act in 2011, which, accompanied by massive public spending cuts and local authority redundancies, greatly reduced state responsibility for local planning affairs and devolved decision-making and service delivery to local bodies. It built on successive initiatives by the previous Labour government (*see Policy Milestones*) to increase community participation and empowerment at neighbourhood level, and instituted a new right for charitable trusts and voluntary bodies both to take on responsibility

for services previously provided by councils, and produce neighbourhood plans for the development of local areas. It also included provision for designated Community Assets (including land and buildings) to be taken over, managed, and even owned, by Community bodies. As part of this raft of devolution measures, the Act also provided for the abolition of the RDAs, and their replacement by Local Enterprise Partnerships without central government funding.

Lambeth's 2012 re-organisation as a co-operative council, under council leader Stephen Reed, fitted within this over-arching policy framework. Citizens and volunteers would be encouraged to take on the work formerly done by council employees and contractors, but also assume greater influence over and ownership of local assets and services. They would be supported by four new council 'clusters' for Commissioning (working closely with Cabinet Members), Delivery, Enabling, and Co-Operative Business Development.[2]

The following year, the council agreed to partner with a local community benefit company (or mutual), Brixton Green, along with Ovalhouse Theatre, on the development of the Somerleyton Road site, which was a largely council-owned, under-used asset. Under the new community right to reclaim and build on unused public sector land, local people had the right to apply to develop the land for housing and much-needed community facilities, while Lambeth's own Enabling Community Assets policy set out its commitment to: 'enable an increase in the Community Ownership and Management of assets consistent with Cooperative Council principles, its Community Hubs Strategy and national good practice. In summary, we will enable the acquisition and management of land and buildings by Community and Social Enterprises through the provision of support for: the Meanwhile Use of Assets; Community Asset Transfer; the Community Right to Bid for "assets of community value" provisions; the Community Right to Reclaim Land; and Compulsory Purchase for Communities' (Lambeth Council 2012:3). As a co-operative council, Lambeth was also committed to exploring 'the potential for mutuals to rebalance the relationship between the council and citizens, create new types of value for local communities, and develop more bottom-up, frontline-driven public services' (Shafique 2013:16).

Foundation and aims of Brixton Green 1.2

Brixton Green was founded by Philippe Castaing and Brad Carroll, local residents and business-owners. Castaing was involved in the Brixton Business Forum. They had been working with key figures in the Community Land Trust and Co-Operative movements (Bob Paterson and David Rodgers)[3] to develop a formula for the the delivery of local affordable housing solutions. In 2008 Brixton Green was established as one of ten national community share pilots (enterprises in which shares are sold to finance community ventures), becoming a community benefit society, or mutual (run for the benefit of the wider community, not only its members – in contrast to a co-operative society) in 2009. Brad Carroll sat on the supervisory board for the National Community Land Trust Network, and Brixton Green became affiliated to London Citizens, the regional branch of Citizens UK, which helped to establish the East London CLT in 2007 with a view to building permanently affordable homes in east London. With support from the Mayor of London the ELCLT secured the transfer of land from the GLA into CLT ownership in 2012. The site of the former St Clement's hospital in Mile End is currently being developed in partnership with Peabody Trust and Linden Homes (selected by the GLA as preferred delivery partner), through a community-led design process facilitated by architects John Thompson and Partners, with a mix of genuinely affordable homes (linked to local wage levels) for rent and sale, as well as market housing. A democratic Community Foundation will manage and own the freehold of the site in perpetuity.

Brixton Green, advised by Dow Jones Architects, became aware of the potential of the Somerleyton Road site for a similar purpose in 2008, when it was

discussed with Chuka Umunna, then Labour's prospective parliamentary candidate for Streatham. In 2011 Brixton Green commissioned architects Feilden Clegg Bradley Studios to produce a framework proposal for housing, a theatre, children's centre and dental surgery on the site and launched a bid for a lease on the site from Lambeth, on the understanding that the council would honour the principle of its ownership as a community asset by a mutual rather than sell it to a commercial developer. However, the council's decision in 2013 to retain ownership of the site itself, and work in partnership with a mutual to develop a community-led and managed housing development represented a significant step forward in the council's policy towards management of its own assets for the provision of affordable local housing.

Future Brixton Masterplan 2009 1.3

The Independent reported in 1995, 'There are deep resentments about the lack of jobs and social and recreational facilities in Brixton. No one wants to see a repeat of the 1981 or 1985 riots. And to prevent that, this Government gave £37.5m as a grant to set up Brixton City Challenge in 1993, to regenerate the area...' (Rahman 1995). The subsequent failure of the programme was attributed in part to 'the legacy of an incompetent and inefficient local authority – which is of course also the main partner in the City Challenge...' (Rahman 1995). But in 2008 the London Development Agency commissioned a new Visioning Framework for Brixton in partnership with the council, and the following year saw the launch of the **Future Brixton Masterplan** (Lambeth Council 2009). In 2010 Peter Bishop, director of Design Development and Environment at the LDA, marked the opening of Windrush Square with the announcement that 'We [the GLA/LDA] want to continue to work closely with Lambeth [council] on their future plans to enhance the distinctive character of the town centre and harness the energy of Brixton's creative and cultural industries' (Mayor of London 2010). Notwithstanding the subsequent closure of the LDA, the Windrush initiative and the eventual opening of the Black Cultural Archives in a new permanent home on the square established a more positive perspective on the council's efforts to regenerate Brixton in partnership with other agencies, and in 2012 the council launched a tender to find a development partner for a £50 million regeneration project focused on the central Brixton town hall area.

In the 2009 Masterplan, Somerleyton Road is identified as an opportunity area for development, representing one of four 'gateways' to the town centre (Gateway D, from the east). The Masterplan stated that: 'Gateway D also functions as a more localised gateway to the residential neighbourhood of the Moorlands Estate, whereas Gateway C [the overland station] is metropolitan in scale as it forms a threshold and sense of arrival for commuters and visitors to Brixton. The gateways with their landmark buildings and destinations, associated hubs of activities and services form a perimeter around the markets area. Reinforcing and enhancing the distinctive characteristics and mix of uses and improving the connectivity between the gateways will result in not only defining the uniqueness of Brixton's town centre but also activating footfall through the markets area' (Lambeth 2009:46).

The Somerleyton Road site 1.4

Hence Somerleyton Road, located within a 5-minute walk from Brixton's underground and overground stations, was recognized as a significant location both for locally-focused development and as a catalyst for economic growth in the centre. Furthermore it had been deprived of investment for years since the demolition of its generous Victorian terraces in the 1970s to make way for the GLC's abortive plans to build the Southern Cross section of the London Ringway scheme (an orbital motorway circling the inner city) through Brixton. Following the Council's discussions and partnership agreement with Brixton Green and other stakeholders, the Supplementary

Planning Document (SPD) produced by Allies and Morrison: Urban Practitioners (where Peter Bishop now held a post as director) in 2013 provided more detailed strategies for the four identified 'investment areas', including Somerleyton Road. It stated that: 'The south eastern section of the SPD area is a focus for improving connections and local environments. The residential estates in this area are not well connected to the town centre and surrounding amenities and there is a need to enhance physical linkages to support greater integration of this area ... A major redevelopment opportunity exists in the Somerleyton Road area ... Major investment here would deliver new housing, community infrastructure including a new major cultural facility and provide new job opportunities' (Lambeth Council 2013a:38).

The potential for community-led development 1.5

The SPD further stressed that the delivery of the recommendations for Somerleyton Road and Future Brixton in general would be based on partnership and collaborative working between the council and other stakeholders, prioritising projects according to an assessment of where they could bring greatest benefit. They would be funded from a number of different sources, including the new Community Infrastructure Levy (CIL, introduced to support the provisions of the Localism Act), capital receipts, partners' resources and external grants. Land assembly would be assisted by the Council's use of its own assets, but also compulsory purchase orders where necessary.

However, the question articulated by Philippe Castaing of Brixton Green three years earlier, on commissioning FCBS to visualise a development for Somerleyton Road, was 'how you actually make a community site effective' (Brixton Blog 2010). As he said, 'What is exciting about Brixton is the meeting of generations and backgrounds that happens here – but how do you do that in a new community space?' (Brixton Blog 2010). For Brixton Green, which had been founded specifically to foster economic opportunity in the area, the answer lay in its governance structure as a community shares venture, which would ensure local ownership of the project through the purchase of shares at just £1 each. Brixton Green launched its share offer on the Moorlands Estate in 2010, with a target membership of 5,000 individuals living within the five wards of central Brixton, each of whom is entitled to one vote. The money raised would contribute to the costs of bringing forward Somerleyton Road as a potential land trust for community development and social enterprise.

The Guardian drew a comparison between the project and the Letchworth Garden City model, affirming that: 'there is no reason why the land trust model cannot be deployed in urban areas, such as Brixton, by building on the guiding principle of the Letchworth garden city heritage foundation to "create, maintain and promote a vibrant environment while maximising the financial returns from the assets we hold in trust, and to reinvest those returns". Today, that means that the foundation [Letchworth], which owns much of the local land, reinvests around £3m annually for the upkeep of Letchworth without making any demands on council taxpayers' (Hetherington 2009). The vision also met with a positive response from the leader of Lambeth Council, Stephen Reed, who stated that: 'We are looking to see how we can support what will become the first venture of its kind in an urban area ... The old idea that speculators own property to make money has gone' (Hetherington 2009). While this latter statement is clearly far from the truth, Lambeth Council's decision to back the project while maintaining its ownership of the land opened the door to a partnership venture that has promised to deliver a development in which the benefits from the assets will stay in the community where they are much needed.

Social deprivation and displacement 1.6

Somerleyton Road is located in Coldharbour Ward, which is classified as the poorest in the borough of Lambeth. Three out of five residents live in social housing, and

the Moorlands Estate, the council estate which directly abuts the road on the east side was identified by Lambeth's State of the Borough Report for 2012 as 'seriously deprived in income, employment and wider barriers to services domains' (Scott 2013:19). There is a high concentration of single parent families (male and female) in the Brixton SPD area generally, and a need for investment in social infrastructure – school places, after-school and community facilities, health provision and open space and leisure amenities. In 2011 male unemployment in the local area stood at 12.4%, compared to 7.6% female unemployment (Lambeth Council 2013b), and gang-related crime is repeatedly flagged up as a local problem, spatially focused on Somerleyton Passage, the cut-through under the railway line which connects Somerleyton Road and the east side of Brixton with the more affluent residential area on the west of the tracks.

Somerleyton Road forms part of the P5 bus route. *Photo C.Melhuish 2014*

'I know people wait for the P5 [bus] and don't walk up to Guinness Trust at a certain time of the night' noted a participant in one of the community workshops (workshop participant 2014).[4] Her reference is to the 1930s Guinness Trust Estate at the southern end of the road, past the council recycling depot, which has been the locus of protests against tenant eviction and regeneration of the properties for a number of years. However, Somerleyton Road also sits within immediate proximity at its northern point of the newly redeveloped Brixton Village market, which is credited with generating a dramatic increase of evening and weekend visitors to Brixton as well as a significant rise in local house prices.

'The market's very expensive – all those cafes and things … Mostly tourists go in there', observed another workshop participant, eliciting the following response from a co-ordinator: 'there's going to need to be an element of this that generates an income … you know, wealthy outsiders coming in and spending their money in this area and then that money is retained and invested in some of the things that we've talked about today' (workshop participant 2014).[5] The delicacy of this balance is flagged up in the 2014 Brief to Consultants (the masterplanners and architects): 'The town centre is a lively mix of independent shops and well known high street brands – with H&M, TK Maxx and Mac all recently finding a home here. The Brixton pound is celebrating its fifth birthday and more than 300 businesses now accept the local currency. But the speed and nature of change concerns communities living and working here. The acclaimed success of the indoor markets brings a noticeable change in the types of new business opening up there. Private rents and house prices are rising rapidly as more people are drawn to this exciting town centre'.[6]

Lambeth's Equality Impact statement (2013/14) on the Somerleyton project further reports that the 2001 Census recorded 44.3% or residents in the ward as black or black British, but suggests that figure has since fallen by 8% due to the outward movement of families to suburbia – in contrast to an increase of 9% in the overall population) (Lambeth 2013/14).[7] Indeed, many of the Victorian houses along the road were occupied until their demolition as lodgings by the first waves of migrants from the Caribbean in the 1950s and 60s. As a whole, Lambeth has the second highest proportion of black Caribbean people in the UK (approx 10%), but Brixton also has high proportions of mixed heritage, Portugese and South American residents. While the area's appeal is largely attributed to the cultural vitality that this diversity has generated, the spectre of gentrification is closely linked to the displacement of those ethnic groups who have given Brixton its distinctive identity. Hence one of the key drivers for the Somerleyton Road project is the ambition to provide genuinely affordable homes for local people that will help to stem the tide of less affluent residents away from Brixton, alongside homes for sale at market prices in order to promote greater integration between different income groups, and supported by opportunities for local training and employment.

Processes and structures 2

> 'The council also has a responsibility to all of its citizens; to provide affordable housing, to use our resources effectively and to achieve equality and fairness in everything we do'
> *Somerleyton Road Project Brief to Consultants 2014*

The Somerleyton case study stands apart from the rest in that the development is not led by a university or other major institution, but by a partnership of three organisations working in collaboration with local people to achieve the community benefits which are central to the narrative of much university-led spatial development. Hence it demonstrates a comparative way of working which is driven by a 'co-operative' vision in which the concept of 'community ownership' is paramount. However it also reveals the tensions, difficulties, and long-term nature of the project which come with this territory.

A partnership approach 2.1

Following Lambeth Council's announcement of its its intent to work with Brixton Green and Ovalhouse Theatre on the Somerleyton Road project, Social Life, a social enterprise set up by the Young Foundation, was commissioned to conduct community-based Action Planning workshops between January and March 2013. The GLA provided funding from its 'Build your own home – the London way' fund to pay for this work, which would establish a clear protocol for collaborative working between stakeholders. In June that year, the council commissioned another architectural practice, Pollard Thomas Edwards, to produce a concept design for a shared vision of what might go on the site based on the outcome of the workshops, which could be used to invite expressions of interest from potential development partners capable of delivering the project.

By this time, Brixton Green had sold shares to over 1,000 members. It was described by the council as 'a registered community benefit society set up four years ago to make it possible for all sections of the community to come together and make a positive and informed contribution to the redevelopment of Somerleyton Road … [it] is a consultative body affiliated with local organisations that provides a wide community base for discussions over the future of Somerleyton Road' (Lambeth Council 2013b:3). Reporting on the proposed procurement strategy in July 2013, the Cabinet Member for Housing and Regeneration further clarified that: 'The project exemplified the new partnership approach being taken as a result of the Cooperative Council, with Oval House and Brixton Green working together with Members and officers, who he thanked for their hard work'.[8] This approach emphasised the concepts of co-operative commissioning (based on evidence and input from service users, citizens and staff) and co-production in the design and delivery of public services, including housing.

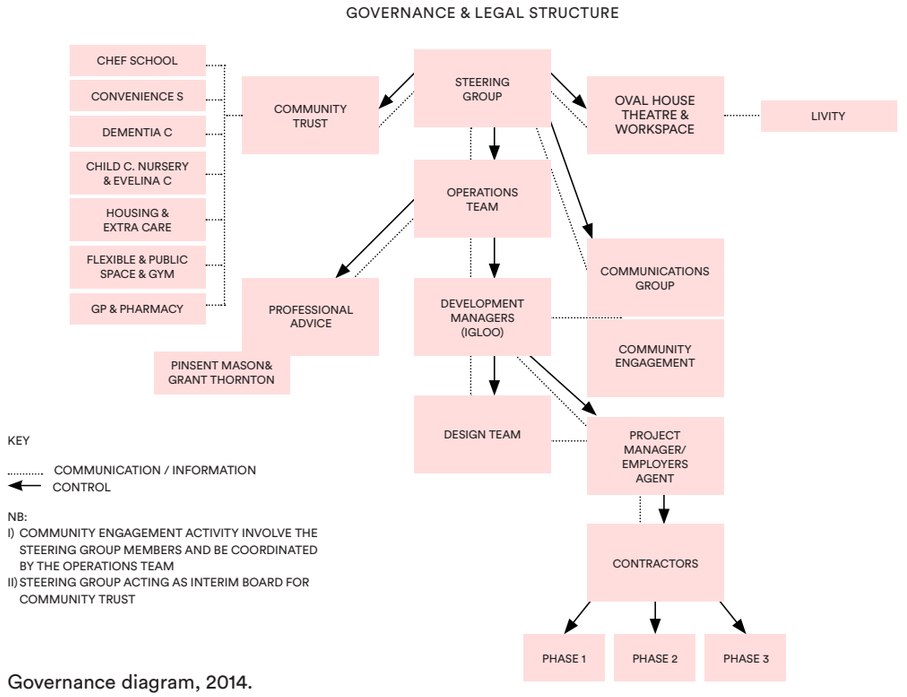
A report from the Royal Society of Arts that year noted that 'the Coalition government is actively encouraging a stronger role for third sector organisations, social enterprises and public service mutuals in the delivery of public services' (Shafique 2013:6), and highlighted the emergence of co-operative councils and the work of Lambeth council in particular as an example of partnership and mutualisation in action. But it also suggested that 'the process needs to be skilfully managed. In the right setting public service mutuals can unlock the creative potential of services and generate social and economic benefits for communities. However, the spinning-out process itself can be extremely challenging and difficult' (Shafique 2013:4). One of the problems which the report identified was the 'recognition that "sectional capture" is always a risk in participative democracy, and therefore the council is seeking innovative ways to engage all communities at various levels, in multiple ways, drawing

on a diverse set of methodologies including ethnographic research, service user councils and social network analysis' (Shafique 2013:14).

One of the criticisms that have been levelled at Brixton Green from certain quarters [9] is that of 'sectional capture', notwithstanding its community share governance. In July 2013 Brixton Buzz reported that 'Some residents of Southwyck House [the council-owned housing block on the corner of Somerleyton Road and Coldharbour Lane] were both bemused and angered to find a big banner stuck outside their block proclaiming, "We Support Brixton Green." Seeing as Brixton Green have no idea of what support – if any – they enjoy from the residents of the block, it seems more than a little presumptuous to put up such a misleading message'. Brixton Buzz noted that Brixton Green had not made any approach to the Residents Association beforehand, and that 'this is exactly the kind of activity that has led some locals to treat Brixton Green with extreme suspicion' (Brixton Buzz 2013) – notwithstanding Brixton Green's repeated efforts to put such suspicions to rest (culminating in a public statement made by the Board on 21st July 2015).[10] In addition, as mentioned by the council officer in charge, there were concerns that the Afro-Caribbean community in particular was under-represented in the project, reflecting the pattern of consultation for the wider SPD: 'the consultation sample for the SPD is very over-represented in terms of White British and underrepresented in terms of Black or Black British African and Caribbean people' (Lambeth 2013b). Concerns have also been aired on the Urban 75 webforum (linked to Brixton Buzz; Urban 75 2013) that Brixton Green's board of trustees was influenced by business and property interests, while Brixton Green maintains that the professional expertise embodied in certain co-opted trustees and the co-founders has been essential to the successful development of the project.[11] For example, Stephen Jordan the chair, is described on its website as having been involved with 'unlocking' the Kings Cross and Stratford City development plans – 'publicly owned land developed by private sector expertise and investment', while vice-chair Dinah Roake, an architect, worked for the Homes and Communities Agency and currently HCA-ATLAS, advising on social infrastructure provision and stewardship. Another trustee, Devon Thomas, albeit a long-standing Brixtonian from the black community, was chair of Brixton Business Forum and 'substantially involved in the Brixton City Challenge, having written the regeneration strategy for Brixton after much research in the 1980s'.[12]

Brixton Green's agreement to a partnership arrangement with the council has itself coloured opinion of its independent and autonomous status: 'buying into the new structures of the co-operative council, [it] is now part of the system' (Scott 2013:28). Since then, the project has been subsumed under the 'Future Brixton' umbrella, and directed by a steering group established in October 2013, comprising three members from the council, three from Brixton Green, and two from Ovalhouse theatre.[13] This group was initially chaired by Lambeth's Cabinet member for Housing and Regeneration, subsquently replaced by the Cabinet member for Jobs and Growth, while within the council the project is led by an operations team managed by Neil Vokes, also on the steering group (*see governance diagram*).

The Social Life report published in June had stated that the Council's first option would be to follow the more conventional private developer-led route of procuring the project, selling a leasehold on the land to a new development partner (Social Life 2013:50). In this scenario the income from sales of private housing on that part of the site would be used to subsidise 40% affordable housing and community infrastructure on the rest. But in July the Cabinet agreed to consider a second option as well, which demonstrated a growing confidence in the partnership to deliver the project itself. Under this option, the council would retain ownership of the whole site, borrow the money for the development, and procure a development partner/contractor to build the project. The borrowings would be paid back over 30 to 40 years out of income on a 40:60 mix of target/affordable and private rental housing managed by either a registered provider or housing co-operative, and the Council



Governance diagram, 2014.
Image courtesy Lambeth Council

would grant a leasehold on the site to a new community body that would oversee all the housing and amenities. In November 2013, it was confirmed that the Council would adopt the second option, working through the joint steering committee with a development manager and design team, with a view to making an appointment in Spring 2014. This would be followed by submission of a planning application in Summer 2015, after which Brixton Green in its current form would be replaced by a new stewardship body set up to become the long-term headleaseholder of the site (minus the Ovalhouse plot) from the Council.

Engagement/consultation 2.2

The partnership approach was anchored in the principle of community engagement and consultation and, as noted above, the Council's decision to work with Brixton Green was strongly influenced by the understanding that, as a mutual, it could establish 'a wide community base for discussions over the future of Somerleyton Road' (Lambeth Council 2013b:3), and hopefully avoid the pitfalls of 'sectional capture' highlighted by the RSA, also flagged up by the SPD in 2013. 'Brixton Green has carried out broad community engagement for the last five years, involving a wide cross section of the community', reported Social Life, further noting that 'In parallel to Social Life's work, throughout March and April 2013, Brixton Green convened further engagement activities, including drop-in workshops in Brixton Village and Herne Hill market and meetings with specific groups' (Social Life 2013:6). It was this preparation which paved the way for the more targeted deliberative workshops organised by Social Life.

The action planning workshops 2.2.1

The Social Life workshops took the form of three meetings at the Lambeth Volunteer Centre in Brixton for each of four themes (ie 12 meetings in total) – housing and

communal spaces; health, education and culture; employment and training; and long-term management. They were attended by a total of 79 people, but it was noted that fewer young people and residents of the Moorlands estate participated than hoped for (although a workshop specifically for schoolchildren at Hillmead Primary was also organised). The participants were a mix of those who had signed up at the two public community events or at stalls set up by Brixton Green round Brixton in March, and those reached through Brixton Green's membership, as well as emails sent to 160 local community groups, councillors and agencies.

The workshops themselves combined a mix of external speakers on comparative projects, presentations of local data and draft proposals – both for the development strategy and constitution of the community stewardship body – and discussion with participants, along with production of ideas maps and priorities. Participants were also asked to indicate their support or otherwise for the proposals; of 52 people who gave their views, 11 supported the proposals without any reservations, 35 supported them subject to some queries and reservations, mostly to do with community control, and six did not support them at all. The report also notes that 'there were some concerns about the impact of a "shiny" new development, with high design standards, on the adjacent areas that are more run down, and how this would make residents feel, in terms of their sense of belonging and self worth. Questions were raised about whether the new services and facilities could duplicate and potentially replace existing services and facilities, such the Moorlands Community Centre. There were also some disagreements about youth provision, and what would best appeal to the full diversity of Lambeth youth. It was agreed that young people should be heavily involved in designing the scheme in the next stages, and that this broad principal should apply to provision for all ages' (Social Life 2013:11).

Above all however, the engagement process itself was criticised, as being too short and too rushed. As one participant observed: 'The structure of consultation is being made as the discussions are taking place. Not very satisfactory. The community is being given short time span to look at these plans' (Social Life 2013:47). But in November 2013 a new programme of public workshops was launched, as a further demonstration of the commitment to collaborative working and, more specifically, a forum for a new round of focused discussion on key topics: procurement models, legal structures for managing community assets, housing tenures, finance structures, and the brief and criteria for selecting a development manager and design team. Most of these workshops were attended and observed by this author, generating the following observations.

The project workshops at Six Brixton 2.2.2

> 'This place that we're in at the moment – it's a bit run-down, but it was an old Local Authority kitchen and we're calling it Meanwhile at No 6 and this is gonna be a test-bed for some of those uses that we'll be bringing along; it's a way of engaging – again with our neighbours – to say we're here, this is really gonna happen and be part of it and we will use it for reaching out to people, as well as to try out new ventures and so on'
> *Stephen Jordan, Chairman Brixton Green 2013* [14]

This round of workshops was facilitated between December 2013 and April 2014 by the project steering committee. All but the first one took place in a building provided for the project's use – a redundant council kitchen on the site in Somerleyton Road offered as a 'meanwhile' space, and made over as 'Six Brixton' by Brixton Green and young people from 'Build It' (an initiative by London Youth) to host a programme of community events. This building has been central to the community engagement initiative as a physical base from which to reach out to different stakeholders, as well as being available for hire to a range of different community groups for their own use,

Six Brixton, Somerleyton Road. Left: Bidders Day, December 2013. Right: growing the garden, with donations from Chelsea Flower Show, May 2014. *Photos C.Melhuish 2014*

and promoting ideas about the types of activity which might continue to take place on the site after its development. However it has also more latterly been dubbed 'the trouble-plagued Brixton community project' (Brixton Blog 2015) due to disputes over access with volunteers who have run a number of community projects, highlighting the ownership and management issues which can arise around temporary spaces.

The initial drop-in session was held in a local church community centre run by Brixton Community Base, which expressed interest in relocating to the Somerleyton Road site in the eventuality that the church sells the property in the future. It was attended by a handful of people (around eight over two hours) who were informed that notices had been published the previous week inviting teams to submit expressions of interest for the role of development manager on the Somerleyton project. The purpose of this meeting was to ask participants what questions they thought should be put to the prospective teams as part of the shortlisting process scheduled for early February. The response seemed hesitant, although a strong interest in making the scheme sustainable, with a view to reducing household heating bills, came through.

The subsequent meeting, held at Number Six, was an information day for prospective bidders. At this event, Councillor Robbins stressed that engagement work would be key to the process. As he said, 'part of the engagement work would be working with the general population if you like, who might be interested in moving in' (Cllr Robbins 2014),[15] underlining the personal interest that many local people have in the project. It was followed some weeks later by the first community meeting to take place in the building, an evening event combining 'festive refreshments', as advertised, in the run-up to Christmas and serious discussion organised around three tables dedicated to different topics: 'governance and decision-making'; 'project programme and design process'; and 'wider community feeding in – the vision'. This meeting began quietly, but filled up and became quite animated. It was attended by an even mix of men and women, although very few members of the black community/ies, or the 16–30 age group, were present. One woman brought her 11-year old daughter along. Also present were the director and project manager of a cultural events agency which Brixton Green had engaged to manage and fund-raise for the community programme at Number Six, and it seemed that many of the people attending had specific interests in hiring the space for different activities, rather than engaging more generally in a discussion about the long-term Somerleyton Road project.

The meeting was co-ordinated by Lambeth Council members of the steering group, differentiated from most other attendees by their office attire (suits and jumpers). They emphasised the importance of using these gatherings to make 'big decisions' about both the design of the project and 'who's going to live there' (Neil Vokes 2013),[16] but recognised that 'some people don't like coming to meetings like this', and 'no-one likes the word stakeholder'(Cllr Robbins 2013b).[17] Nevertheless, they would need to find some people willing to give up some time to the project.

Six Brixton: presentations by the Lambeth Council/Brixton Green/Ovalhouse partnership on Bidders' Day December 2013. *Photo C.Melhuish 2014*

The selected architects would also need to show they can engage with the local community, and this would form part of the criteria for scoring their tenders. 10% of points would be awarded on the basis of legal requirements, 30% on the basis of price, and 60% on quality of the submission. This news was enthusiastically received, but the admission that a recent tender for work on Brixton Town Hall had, contrary to the council's stated intentions, been awarded on price not quality, elicited cries of dismay and disbelief.

Despite this unpromising premise, participants seemed ready to find a place at the tables and get involved in the discussions, with comments recorded in felt pen on A3 pads of white paper by designated table leaders. There was little evidence of timidity in contributing thoughts and opinions; perhaps some were emboldened by their role as representatives for particular organisations, while relatively few had simply walked in off the street as local residents in a wholly private capacity. The atmosphere was relaxed and sociable, eased by the fact that many people seemed to know each other already, and by the provision of drinks and snacks that created opportunities for participants to chat informally away from the tables in pairs or smaller groups.

The key issues that came out of this initial meeting were a strong concern with transparency, particularly with regard to the financial model for the development, and effective communication of the process, along with provision of concrete information that would enable participants to engage in the discussion on a properly informed basis. It was stressed by participants, one of whom was a member of the Carlton House Mansions co-op which will have to vacate this building at the north of the site, that there is little point talking in abstract about the design approach without fully understanding what the facts and constraints are; moreover it is a waste of participants' time. This man's position also illustrated the fact that 'different people have different interests' in the debate – so while his was driven by his housing concern, a woman who described herself as an interior designer suggested that many local architects and designers would be 'gagging to contribute to the design discussion'. Another man pointed out that the full range of local interests could never be addressed through consultation: 'no-one can consult all the communities of Brixton' because it's so diverse and heterogeneous (workshop participants 2013).[18]

This meeting agreed that information should be shared by a variety of different channels – emailed updates would work for some but not all, and public meetings likewise, since it's not easy for many people to attend in the evening, whether because of work or family commitments. The Future Brixton website has subsequently been used as a public forum for posting reports on the various workshops, and associated presentation materials.[19] It was noted that although it was good to put Council minutes online for public viewing, it was also evident that they are 'not full and frank

and don't reveal the background information' (workshop participant) – or discord – which the councillor attributed to commercial confidentiality. He also mentioned that the first draft of the financial model supplied by the accountants was difficult to share, because so complicated that it posed a challenge even for council staff to understand.

It was further agreed that Number Six itself, as a building and a venue, provided a great opportunity to build up a vision of the development through iterative practice – ongoing activities – which should be published via a monthly campaign to raise awareness and establish new forms of social occupation on the site. The provision of this facility, rough and ready as it may be, was recognised as a distinct advantage in terms of representing and 'growing' the project and its ambitions in a real-life context. Over the next few months, the work on the building itself included the creation of a garden to the back and front (enhanced by donations from the Chelsea Flower Show), and the busy outdoor Block Workout gym to the side, run by young men from the local black community against a backdrop of thumping music, as well as art displays inside in the main hall and a community radio station in a small room behind it. A programme of activities including yoga and dance classes began to evolve indoors, with highlights including the screening of the FIFA World Cup matches in the summer of 2014.

Six Brixton: a venue in which to develop a vision of the future. Left: Block Workout gym in action. Right: masterplanners' drop-in event November 2014. *Photos C.Melhuish 2014*

The first workshop after Christmas launched some hard work on discussion of the financial model, and was attended by only 22 people. This was more of a conventional presentation with question-and-answer session, and general discussion. Working in the background were two 'graphic harvesters', making notes on the discussion and translating it into a large mural-style illustration mounted on the wall. The production process contributed to the dynamic of the session and generated an attractive visual outcome, although one couldn't be sure how accurate the translation was or how helpful in representing the information presented by the council's money expert. The second session of the year was another technical workshop focused on discussing the options for the legal forms which the stewardship body might take – eg community interest company (CIC), co-operative, or charitable incorporated organisation. This raised some key questions about how widely the community benefit of the development should extend, and how the new homes could be protected both from buy-to-let practice and right-to-buy policy. It was agreed that the latter could be achieved by investing the housing in a fully mutual co-operative, which would be represented on the board of an overarching stewardship body with a charitable remit, in which residents, non-residents, the council and the wider community could all have a voice.

The next workshop, convened to discuss the potential non-residential uses on the site (amounting to 2,000m^2, additional to Ovalhouse theatre), took place a

'Understanding the money': graphic by graphic harvesters Odd Zebra, produced during public workshop January 2014. *Image courtesy Lambeth Council/ Odd Zebra*

month later and attracted many more participants, maybe partly attracted by the barbeque outdoors. By this time, a shortlist of development teams had been drawn up, behind closed doors, and as it transpired, some of the architects on this list were present anonymously at the workshop – 'to find out what it was all about' (workshop participant 2014).[20] In addition there were representatives from various local businesses. Once again, the participants split up around different tables organised on three themes: Arts and Culture, Employment and Enterprise, and Health and Wellbeing. They were exhorted to think about potential uses on the site with attention to the question of 'how do you pay for them?'.[21] The feedback from these workshops is considered below.

The emergent themes and tensions 2.2.3

These workshops delivered a clear message from participants that they wanted the Somerleyton Road development to be handled not simply as a construction project delivering benefits for locals, but also as a political one that should stand up as an exemplary model with relevance beyond Brixton itself: 'it's going to be very visible, very marketable, a model to say this is what can be done in an urban setting – and then the delivery team could go off and do it all over London' (workshop participant 2014). They emphasised a preference for avoidance of conventional commercial solutions to viability, such as office use on the site, and support for amenities such as community health and dental care, a gym, Extracare housing and a dementia centre, workshop space, a multimedia training centre, start-up and social enterprise facilities and pop-up shops etc. One young teenager – a lone representative of his age group – suggested that young people should be involved in managing some of the spaces, to give them a sense of ownership and responsibility, and also to keep them busy and out of trouble. Participants pushed for a fully environmental scheme that would set high standards, with talk of community gardens and allotments, charging-points, and solar energy generated on-site. They also questioned why the new rental housing could not be provided at 100% council target rents – set at £95–£138pw for one- to four-bedroom flats, compared to £270–£600 in the private rented sector,[22] but seemed to accept the council's argument that in this scenario it would stand to lose £21m, that the development needed to generate some kind of income, and that by establishing a new benchmark for the private rented sector with fixed rents over 3–5 year tenures the council could exert a positive long-term influence on the market.

Safety also came up as a key concern, and one that participants hoped improvements to the physical landscape would successfully address: 'some people are frightened of walking through there [Somerleyton Passage] at a certain time of the night but if you make it in a way where it can be accessed at any time then it could encourage people so they can come from that way and go in the other way'

(workshop participant). But so too did the desire for the street to retain its character as a real place in Brixton where locals could continue to feel at home: 'I've got this fear … I would hate to see it become a Disney version of what people, *outsiders* think Brixton used to be … that then it's so posh, *nobody* local wants to use it and it, it doesn't really represent the place that we've all lived in' (participant). Indeed, a perceived tension between insiders and outsiders, and a need for locals to retain ownership over the territory was a strong theme throughout the workshops, as indicated by the following comments from various participants: 'you don't want things like in the market up *here* … they're very expensive … is this going to be a place for tourists or for local people? I mean it can mix, but I don't know…'. And again, 'it should not be for anybody really *outside* to come in and invade people's space … in the estate down there where people live – the two estates…'; 'because that's … proper dwellings and people living down there'. On the other hand, there was a clear sense that the local community itself was highly diverse, and that this could be represented and celebrated in artwork for the development, such as mosaic in the passageway, which represents the stories of 'all the different groups'.

The idea of 'proper dwellings' and the need to reproduce that resource for all the groups, including different age groups, has been core to the engagement process. Brad Carroll affirms his belief that 'how housing is delivered is fundamental to democracy',[23] and much of this process has been about building trust within the community that the council and its partners will deliver the genuinely affordable housing it has promised, convincing the public that they will retain control of that resource long-term, and creating a structure for those goals to be realised. Number Six has provided a valuable physical space where the project can be developed and represented to the local community, both as a social reality – characterised by 'bluetack, barbeques, and gazebos' (Brad Carroll 2015), and a lively summer street fair – and as material transformation of the surrounding environs: a 'space … *for* the Project, so we can leave models here, we can have images up on the boards and they can be here permanently for people to come in and see' (Neil Vokes 2014).[24]

Somerleyton Road street fair, June 2014. *Photo C.Melhuish 2014*

The limits of engagement 2.2.4

However, the management and use of the building has not been without its problems, highlighting in microcosm the tensions between different interests which inform all building projects of this scale. Brad Carroll has acknowledged that there have been many arguments over the use of the space, and a succession of different centre managers has passed through its doors. Subsequently complaints have been made by volunteers that the building has not been as accessible as it should be, and questions asked about the spending of funds granted for community projects in 2014–15 which Brixton Green has dismissed as defamatory. The engagement process itself stopped short of participatory or co-design of the development, possibly to avoid the additional conflicts, negotiation, and investment of time often implicated in such ventures. The drawing and visualisation of the ideas discussed in the workshops, translated into a Consultants' Brief, was entrusted to the new development and design team, 'with the skills and expertise' (Neil Vokes 2014) to do so, although a new community workshop was convened in spring 2015 to discuss the design of the housing in more detail with the architects.

Igloo and Metropolitan Workshop were appointed in April 2014, following a decision-making process reserved to the steering committee. They were introduced to the public at a community street fair in June, when they canvassed opinions on the development, particularly the housing component, at a stall shared with Brixton

Green and Lambeth's Neighbourhood Regeneration officer. There was then a hiatus in engagement activities until the new feasibility and massing studies were presented on exhibition boards and in model form at Number Six in November at a public drop-in. The Igloo-led team also took responsibility for appointing the architects who would work on individual buildings, who were in turn introduced to the public and presented design concepts for separate plots within the development in March 2015, at a similar drop-in session.

Left: Public drop-in, Six Brixton: masterplan proposals November 2014
Right: 'Meet the architects' event, Six Brixton, April 2015. *Photos C.Melhuish 2014*

In April 2015 there was a significant demonstration against gentrification in Brixton – Reclaim Brixton – showing that despite the Council's efforts to engage the public in discussion about the regeneration of the whole SPD area, including Somerleyton Road, and promises to deliver on affordable housing, there was still a high level of antipathy to the proposed improvements and fear of displacement due to the increased land and rental values they are likely to produce. It reflected findings published two years earlier in the Social Heritage Record produced by Anchor and Magnet, a group of locally-based artists, for the Future Brixton: Townscape Heritage Initiative. Using 'artistic methods as research tools', to engage with personal stories linked to memories, sites and objects, the artists' aim was to document a 'largely unheard' public debate about the changes going on in Brixton. Participants in their research referred to 'Bourgeois Bohemians generating a 'state-led gentrification' (Anchor and Magnet 2013:10) in the area, and described a fragmentation into 'parallel universes' due to the closure of assets and communal spaces. This included an 'economic apartheid' operating in the markets whereby 'the indoor market is predominantly white people and the outdoor market working-class whites and blacks – people who can afford to go out in the evening and the people who work and shop in the daytime' (Anchor and Magnet 2013:20).

Engagement on the Somerleyton Road development has been working hard towards generating a shared and inclusive vision of the social life which could emerge on the site in future, but the sheer number of engagement initiatives taking place under the Future Brixton umbrella is confusing and overwhelming for many people, and demands a great deal of time and energy from those who may already be over-burdened with job and family commitments, as well as suffering from consultation fatigue. The workshop scenario may look too much like hard work to many, and furthermore may be found intimidating. Lack of confidence to participate may in turn lead to hostility towards the project and 'insiders' involved with it, and there are no easy solutions to these problems.

UCL 'Data what?' Workshop: the role of technology in community engagement 2.2.5

Left: UCL Data What stand, Somerleyton street fair June 2014
Right: UCL Data What workshop, July 2014, at Six Brixton. *Photos C.Melhuish 2014*

On the appointment of the delivery and design team, the council had proposed introducing a new community engagement team into the picture. However it was considered that the creation of yet another layer of engagement might simply contribute to the consultation fatigue which was already evident. In the meantime, UCL's Urban Laboratory and ICRI Cities had been awarded a Beacon Bursary for public engagement to conduct a couple of workshops at Somerleyton Road which would specifically explore the potential of technology in the engagement process, and possibly further as an integral component of the design approach. This proposal was prompted by Brad Carroll's interest in exploring the role of technology in community-led development, which he considered limited, and ICRI Cities' prior presence in Brixton as part of its London Living Labs project, using sensors to measure air quality data as part of its work on data literacy. It was agreed that the UCL team would use air quality as a hook to engage community participants in a discussion and visualisation activities around the relevance of urban data and how it might enhance community participation in, and help to shape, urban development. The intention was to give participants an opportunity to take away some learning and skills relating to the reading and understanding of urban data which, although increasingly ubiquitous in public services, is often presented in an inaccessible or irrelevant form. ICRI Cities would then provide a bespoke air quality sensor for installation at the Number Six building, to collect air quality data from the site over the next two years (ie up to and during the construction work on the development), and provide a focal point for future community activities.

Potential participants in the workshops were recruited at the street fair in July, with around 15 signing up, including some with a prior or professional/activist interest in the subject. Amongst those who approached the stand, one suggested that local people were probably more concerned with putting food on the table and wouldn't have time to worry about air quality; other comments suggested that a sense of powerlessness in addressing the problem would inhibit others from getting involved, even though it was recognised as such. An approach by email to Brixton Green and local organisations, including the local primary school, including participants in previous workshops, did not succeed in expanding the numbers greatly; the single workshop that went ahead was attended by 13 people, including three from Lambeth Council's regeneration and open data offices, as well as three students and an academic, a couple of local artists, a schoolgirl from the local primary, and Number Six's new Centre Manager, plus several volunteers. Of these a minority actually lived in the local community and the majority had a professional or academic interest either in Brixton's regeneration or the use of open data or both. But all joined enthusiastically in reading and interpreting local air quality data on iPads, generating a lively conversation about how air quality and other forms of data could shape people's

experience of a place, and, via different types of personal and public interface (from mobile phone apps to public screens), enhance shared social knowledge within the community, as well as connections between people and services.

However there was little follow-up to this workshop, partly due to timing – the start of school summer holidays, which meant there could be no follow-on engagement with local schools – but also, further down the line, due to the vacuum that had emerged in the wider community engagement programme, which could not be agreed by the partners in the development. In addition, the new managers of Number Six and its activities programme seemed doubtful that they would be able to make use of the air quality sensor data installed on the outside of the building without training and/or continuing input from the university. The possibility of recruiting community stewards with some knowledge of data, or staff from the council's open data unit to run some community-based activities around the sensors was discussed, and an invitation issued via the Data What? email, but did not evolve in the short-term. Nor did the potential for sharing the data and activities around it with Grow: Brixton, a local food-growing organisation leading on a nearby community development of the same name (now Pop Brixton,[25] from which it subsequently withdrew due to partnership problems on that project).

This initiative thus planted the seeds of an idea for a technology-based form of community participation in the emerging plans for the design and future use of the site, that would also deliver information about its impact on air quality over time. However due to a combined lack of both infrastructure on the ground and continuing university input, they have remained largely dormant for the time being.

Delivery mechanism: doing it differently 2.3

> 'The Council recognises that there is an opportunity to do things differently at Somerleyton Road and to deliver a flagship project co-operatively. The approach outlined in this report will be shaped by local people, be unique to Brixton and give us the best chance of meeting people's aspirations'
> *Lambeth Council Cabinet, November 2013 (Lambeth Council 2013c)*

Following the council's decision to develop the project co-operatively, within the framework of an extensive community engagement programme, and using the services of a development manager, prospective teams were initially invited to attend a 'Bidders Day' at Number Six in December 2013, at which information about the site and project was shared, and questions answered. Teams were informed that they could bid both as architects and development managers, and that the council wanted to make a quick decision. Neil Vokes from the Council explained that: 'we've split it [tender documents] into these two items for developing and managing a design team – so in terms of the Design Team it's Planning Consultant, Landscape Architects – everything that will get us to Planning Consent for Somerleyton Road. And then we're very keen to see a very experienced Development Manager role come forward as part of the bid, to help mitigate some of the risk that we're looking at [as the developer for the project]. So some of the work that would involve would be, as the design develops, looking at the financial model, revisiting it, looking at where is the best place for the Council to get the funding to actually deliver this, and are there any opportunities along the way to share risk with other parties as well'.[26]

Amongst the firms represented at this meeting were Savills, Guinness Trust, Igloo, Coplan Estates, Metropolitan Workshop, and PTEa, the architects commissioned by the council to produce a concept design report earlier in the year. The shortlist produced in Spring 2013 consisted of five teams combining masterplanning, design, and finance expertise, including some big names which would not normally be associated with a community-led development – AECOM, which has been appointed to masterplan Brixton Town Centre (billing itself 'a

global provider of architecture, design, engineering, and construction services',[27] including investment; also the masterplanner of the North West Cambridge development, Case Study 2), with FCBS (Fielden Clegg Bradley Studios, the practice commissioned by Brixton Green to produce a framework proposal in 2011); Igloo (a regeneration company which combines asset and fund management with development management) with Tibbalds Planning and Urban Design and architects Metropolitan Workshop; Mae Architects with EC Harris (the 'leading global built asset consultancy');[28] Redloft (housing development and estate regeneration); PRP Architects with Mace (international construction and management); and Kier Group (construction and investment) with PTEa.

Although the assessment of this list was to be directed primarily by quality and design as the main evaluation criteria, teams were not asked to produce any design work, and the selection process focused rather on their capability to work collaboratively with the partners on the project. They were also asked to state at the outset whether they intended to bid again in the second stage process, after planning consent, to procure a contractor. This process led to the appointment of Igloo as the retained development manager on the project, responsible for selection, management and appointment of the wider project team, including Metropolitan Workshop as lead architects, and four further architectural practices to work on the design of individual plots. These include Zac Monro Architects, a local firm, for the Carlton Mansions plot, Foster Wilson Architects for the Ovalhouse theatre plot, Mae Architects for the Extracare housing (65 units), and Haworth Tompkins for part of the housing (71 units, pepperpotted tenures) and community amenities (nursery, retail, outdoor gym) on Plot E. Metropolitan Workshop will design housing (166 units, the same), a shop and chef's school on two further plots.

At the time of writing, it is hoped that construction could start by April 2016 with first phase completion (northern end of Somerleyton Road) by March 2017, depending on a successful planning application by November 2015, and a smooth delivery of the project steered by what the council has described as 'an incredibly strong partnership', represented by the steering committee: 'we do have a very good governance strategy, structure … we meet fortnightly and we've changed the Council's Constitution so that members can actually make key decisions. So we feel that we've got a very quick decision-making process, and that hopefully gives you confidence in us as a client', explained the council's project manager at the Bidders Day event. While Stephen Jordan affirmed on Brixton Green's part, 'we're very happy to be active co-producers with Lambeth and Ovalhouse, we're part of the client team, and I say that we're actually in the tent helping to make it happen, but with proper commercial discipline'.[29]

However from stage 2 of the delivery process, Brixton Green will be superseded by the new overarching community body, which will represent the voice of the community throughout the development process. The role of the development manager will in turn shift to become that of client representative, with responsibility for contractor procurement, oversight of construction, and ultimately handover back to the council. Lambeth will then grant a long headlease on the site to the new community body which, as set out in Social Life's report, 'should have a clear social purpose set out in a constitution or charitable articles: "to be a not-for-profit social business working to support the social, economic and environmental sustainability of the Somerleyton Road project; and involving residents, social enterprises, local businesses and the wider Brixton community"' (Social Life 2013:20). This body, comprising a board of elected local trustees or governors, and a team of paid staff, will grant underleases to a housing co-operative responsible for managing the housing element of the development, and to the various commercial entities which establish themselves on the site, and assume responsibility for delivery of social programmes including training and young people's projects. It will be responsible for setting rent levels, and vetting the non-residential users, to make sure their business plans are

realistic, and that they will be able to pay their rent.[30] At the same time it will continue to represent the voice and ownership of the community in the long-term, ensuring that the assets and benefits delivered by the development remain within the community for posterity.

Financial viability and risk mitigation 2.4

> 'A financially viable scheme which represents value for money for the council and which repays in full the up-front capital investment without unnecessarily limiting the council's ability to undertake other investment projects within the borough'
> *Consultants' Brief 2014*[31]

In December 2013, Stephen Jordan declared to prospective bidders, 'We're not precious about who actually owns the freehold as long as there's an interest there that enables the Community to have a really active role in the management and isn't a burden on Council'.[32] However, Lambeth's decision to retain full ownership of the site, develop the scheme itself in partnership, and hang on to its assets, represented a significant departure from conventional processes of neighbourhood regeneration and housing delivery. At the same time, the council's desire to mitigate its risk and ensure the scheme's financial viability is paramount, not least to avoid jeopardising regeneration initiatives in other parts of the borough, which could negatively influence public opinion.

The initial capital investment funding of £1m for the first phase of work, including procurement of a development manager/design team and design work to planning stage, and the development of funding and legal structures for delivery and long-term management and ownership, was agreed at the Council's July 2013 Cabinet meeting.[33] The second stage, costing around £50m, would be facilitated through the preferred Council borrowing model, repaying the debt over 30–40 years from rental income on 280 homes; the funder could be from the private sector, or the council could decide to borrow prudentially (ie directly from the Treasury). However this scenario would be reviewed by the Council after planning permission for the project is secured.

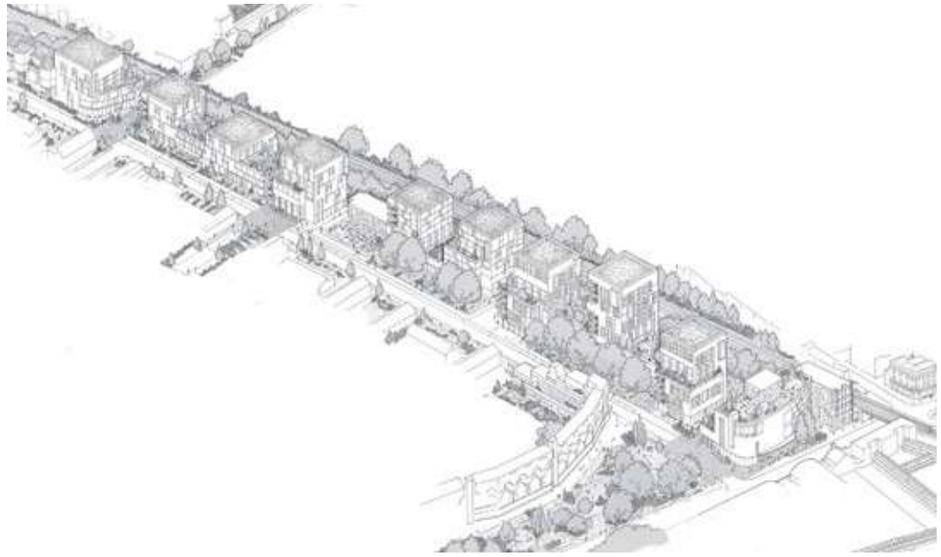
The development manager and design team would deliver the project on behalf of the Council for a fee, but it was also suggested at the Bidders' Day event that, 'If the costs are starting to overrun beyond budgets we have available we'd be looking at whether we could share risk [with the development manager], and then in the same way share benefits as they come later on' (council project manager). Additional sources of funding would include a £2.8m GLA grant for extra care housing and a £5m GLA grant for general needs housing, already secured, while Ovalhouse would hope to obtain grant funding from the Art Council. Other sources for the 2000 sq m of non-residential space could potentially include the EU, NHS, and TfL, as well as lottery grants, Sport England, and trusts such as Joseph Rowntree Foundation, the Sainsbury Foundation, Cadbury Foundation, City Bridge, and Wellcome.

In the financial workshop held in February 2013, it was demonstrated that if the council borrowed £43m at an interest rate of 4.5% it could pay off the total debt of £61m by 2060, based on a rental income received from mixed-tenure properties of £60m. This figure was contrasted against both the significantly reduced sum of £39m that would be generated by the scheme if the affordable component were to be let at 100% target rents, and, at the other end of the spectrum, the £250m that would be generated by a 100% private rental scheme (minus typical marketing costs of around £2m). At the end of this period, the Council would be debt-free but still earning rental income – provided the houses are still standing. From the outset, the Council has been keen to stress that, partly in order to ensure the long-term value of its assets, it will not compromise on build quality and would seek to implement the

highest standards of sustainable construction. However concerns were raised that the projected figure of £1200 per sq m would not be enough and should possibly be increased to £1500 – issues for the development manager and design team to scrutinise in their development of detailed design proposals for the site.

Design: connectivity and social infrastructure 2.5

> 'The density and volume will set a new standard for Brixton, but the great thing is it will have local ownership'
> *Brad Carroll November 2014*[34]



Somerleyton Road, proposed development: aerial perspective presented at 'meet the architects' event, April 2015, Six Brixton. *Image courtesy Lambeth Council/Igloo*

The massing study and architects' proposals presented at Number Six between November and March 2013 show a reasonably dense scheme of medium rise housing blocks at the north end of Somerleyton Road, tailing off to slightly lower-rise development at the southern end. The Ovalhouse theatre and adjacent Carlton House Mansions (Plots A and B), converted into creative workspaces, occupy the northernmost site facing Coldharbour Lane, presenting a public face to the development in close proximity to the entrance to the popular Brixton Village market. The development echoes, but does not reproduce, the 'barrier block' typology of Southwyck House, which sits on the opposite corner of Somerleyton Road, in relation to the railway tracks with which it runs in parallel. However it largely overshadows the low-rise construction of the Moorlands estate which it faces across the road, even though the buildings are interspersed with small pocket gardens and communal spaces, breaking up the development into bite-sized chunks, and the street frontage is softened by regular setbacks.

The eight-acre site is made up of four further plots: Plot C, directly behind the theatre, comprises 125 homes and a chef's school, while Plot D contains the 65 extracare homes for the elderly in two blocks. Plot E offers another 71 homes, a nursery, and children's centre in three lower blocks, together with the relocated outdoor gym. The end plot, F, holds 40 new homes and a shop unit fronting Somerletyon Passage. The scheme mostly conforms to the guidelines set out in the SPD, which required the introduction of a major 'new cultural facility' as an anchor for activity and employment opportunities, but also proposed the opening up of new routes beneath the railway at this end of the site to improve pedestrian connections

with the town centre, which has not been implemented. The SPD further stresses the importance of improving the existing Somerleyton Passage by introducing active ground floor uses and public realm improvements around it, and recommends a height limit of five storeys for the housing blocks, with gardens, mentioning the potential for a slightly higher building at the northern end. The current scheme seems to slightly increase those height limits, while reducing the scale of the theatre, and breaking up the building mass along the road with lower-rise connecting blocks and planting.

The scheme is comparable in outline to the two earlier studies carried out by PTEa and FCBS, with variations in massing, set-back, and distribution of communal space across the three. However the earlier studies both contained a proposal for a high-rise block on the northern corner, co-located with the cultural centre, which has since been rejected. The new proposals in their current outline form (June 2015) seem to offer a relatively limited amount of community infrastructure, including the scope of the retail provision, compared to both the enthusiastic deliberations of the workshops and CABE's earlier (2011) recommendations describing: 'A mixed-use development with a rich variety of community activities, shops, work places and flats [which] has the potential to create a vibrant streetscape. The variety of activities in the whole block will balance the potential over-dominance of residential units. An imaginative, adaptable new form of buildings could provide spaces for living and working and retail opportunities that could enliven Somerleyton Road' (CABE 2011). However the details of the design will not be fully known until the planning application is submitted and approved by November 2015.

Visions and narratives 3

> 'We want to bring streetlife back to Somerleyton Road and it's not a sanitized or gentrified streetlife but a lively, friendly and safe, *Brixton* streetlife. And we want to be part of the long-term management to safeguard that vision for the future'
> *Stephen Jordan, Bidders' Day 2013*

Vibrancy 3.1

CABE's comments, responding to the original FCBS framework proposal, conjured a vision of Somerleyton Road in the future as a 'vibrant' place which would draw people along its length – possibly towards 'a new beacon for the area' close to the railway passage (CABE 2011). This vision, drawing a contrast with the currently under-occupied, semi-industrial state of its western edge, has been reiterated during the course of the project's development, and matches much international urban design and placemaking/ place-marketing rhetoric, as well as public perceptions of Brixton specifically as a lively neighbourhood with a special atmosphere. However, it also became evident through the project workshops that the vision entertained by many local people was somewhat different; they did not actively want to open up the area as a 'destination' for outsiders and tourists, but strongly felt that its character as a place of 'proper dwellings', where ordinary people made their homes, supported by everyday infrastructure, should be nurtured.

In the early days of the project, Philippe Castaing described to *The Guardian* his 'vision for new housing, businesses, allotments and big glasshouses for growing fruit, alongside education and training facilities' (Hetherington 2009), creating a sustainable resource for local homes and employment. That vision of a vibrancy fuelled from within the community itself was reaffirmed in Brixton Green's Foreword to Social Life's report, embedded in the principle of local participation which has

driven the project since its inception: 'We believe the community must have a real voice in what is built, how it is paid for and how it is managed and run in the future. We aim to build new homes, boost employment and empower the community to thrive' (Social Life 2013:2). This theme has constituted the over-arching narrative for the development of the project, institutionalised within the partnership framework of the co-operative council and the structure established for community engagement in the development of the project brief and the legal and financial models for its delivery and long-term stewardship.

Democracy through housing provision 3.2

In Brad Carroll's view, the real driver for the project has been a vision of democracy articulated through the way that housing is delivered. It is the organisational diagram of the new community stewardship body which represents what the project will look like, more than any architectural visualisation of its physical form,[35] emphasising a vision of the development as a social initiative in building relationships within the community as much as a physical regeneration, with access to homes at the core of this enterprise.

The project brief identifies the first over-riding principle of the project as maximisation of the amount of genuinely affordable housing which can be provided on the site, and this is reinforced in the Equalities Impact statement as one that should ensure the accessibility of the provision to 'people of different races' (Lambeth Council 2013b:6). It was noted that 'those living in social housing and from BME groups were more likely to support proposals for new homes for rent' (Lambeth Council 2013b:7) especially since, according to local estate agents, house prices in the area had risen by 20% in one year since the opening of Brixton Village. Responding to the widespread anxiety felt by local people about the potential for speculation on property values, the third and fourth principles are identified in the brief as 'A long-term role for the community in managing and maintaining the development' and 'The land is not sold to a private developer, instead the profits are retained for maximising the community benefit'.[36] The vision of accessibility, affordability, and community ownership also encompasses a local lettings policy aimed at people living in the immediate vicinity, including private rented with longer tenancies to appeal to local families who are 'locked in', and a reduction of the running costs of occupying the new housing as far as possible through the quality of construction and environmental design: 'we're very interested in things like passive housing developments and anything around that which can bring the cost of living for these homes down' (Stephen Jordan 2013).[37]

However some concerns have been raised in the local community regarding the lack of detail on how the housing will actually be allocated once available, and pointing to discrepancies in the narrative around housing and democracy. The Urban 75 community webforum hosted a debate in 2010 as to whether the new provision was really intended to re-house residents decanted from Southwyck House itself, which has several times been flagged for demolition, and why Southwyck House residents had not been consulted about the development. It has further drawn attention to the obvious anomaly in the proposed ratio of council and private rented accommodation in this context, pointing out that 'The special feature of this Somerleyton Scheme was that the council will retain control … If the council is able to specify everything about the scheme why can't they have 100% "target rent"? With interest rates at record lows … the politicians should be pressing to get a proper 100% social housing scheme using the proposed funding method-not simply accepting the housing split normally done by the private sector' (Urban 75 2013).

The project partnership has justified its approach on the basis that a 100% social housing scheme would reduce the rental income over 45 years by £21m, necessitating an extension of the proposed 'one-generation' borrowing period which

is deemed a risk. However the modelling of options for private, affordable (including 'discounted' at 80% of market rent, and 'capped' at 50%), and target rents remains to be explored and finalised in a form that will meet local expectations of the vision for Somerleyton as both a construction initiative and a political project – a 'model for what can be done in the urban setting' (workshop participant)[38] that could be delivered elsewhere.

Safety and social cohesion 3.3

Brixton's public image has long conflated sociability and positive ethnic inter-mixing with inequality, crime and social injustice. The Somerleyton site embodies the disjunctions within the area's social geography, exacerbated by the physical barrier of the railway tracks and the concentration of low-income communities to the east. Somerleyton Passage, the sole pedestrian link under the tracks with the more affluent areas to the west, has become an actual and symbolic focus for criminal and anti-social activity and associated fears around local safety.

The second guiding principle of the project then is to maximise jobs, training and employment opportunities, especially for young people, that might start to mitigate against the uneven social distribution of prospects and wealth in the immediate locality, and bring about a concomitant reduction of crime and and gang-related activity among the young. While a residents' survey in October 2012 reported that '50% of Brixton residents definitely agree that their local area is a place where different people get on well together (compared with 26% across the borough as a whole)', the Equalities Impact statement affirmed that 'more work is needed to understand whether people of different income levels and educational attainment get on well together' (Lambeth Council 2013b:13). It stressed the importance of the Somerleyton project in building and supporting the high level of cohesion which already exists, but the need to extend that through the creation of jobs and apprenticeships aimed at local people.

This ambition has been central to the vision for the project from the outset as a mixed-use development rather than a monocultural residential zone, and has been pursued by the partnership at various levels: 'We want a viable Co-op neighbourhood store. And we've talked to Co-op and at the highest level they've said 'Yeah, we'd like to come to Brixton and Somerleyton Road in particular'. We wanted a chef's school 'cos we see in London there's a great opportunity to train young people to become chefs for all the catering establishments in London, but we haven't just said we'd *like* that, we've actually talked to the best people who *provide* those sort of training facilities; we've talked to Westminster Kingsway and they said yes, we'd love to come and run a chef's school and we can then grow up proper qualifications that are used across London. We said we wanted a community fitness element, but we just didn't wanna let it to a standard gym and we talked to Block Workout and they have a unique offer which would fit right into this area' (Stephen Jordan).[39] In addition, local people have expressed a desire to see other types of provision, including affordable studio space, catering for artists and other creative people who can no longer afford to operate in areas of inner London, to keep the distinctive creative energy of Brixton alive (Social Life 2013).

If such a mix can be achieved, fuelling cohesion across ethnicities, income levels, and education, then the Somerleyton vision could potentially materialise in a form that not only captures but also helps to reproduce the dynamic for which Brixton has been celebrated: 'if Somerleyton Road can start attracting people from across both sides of the track that'd be an enormous influence' (workshop participant).[40]

Translation into place: what does success look like? 4

'Land assembly at Somerleyton is relatively straightforward if anything.
We feel confident that we can deliver the whole Site'
Stephen Jordan, Bidders' Day 2013

As with all urban regeneration projects, the question of land assembly at Somerleyton has been key to the prospects of translating the vision into reality. The fact of the council's prior ownership of 75% of the 8-acre site has facilitated the progress of the project to an enormous degree; however a question still remains over some privately-owned elements of the site, over which the Council has approved the potential use of Compulsory Purchase Orders. These include a large warehouse storage facility for frozen fish, as well as an LUL substation which cannot be released. In addition, the project has implicated the acrimonious eviction of the co-op occupying short-life housing in Carlton Mansions at the north of the site. The proposed use of CPO and the evictions have not had a positive influence on public opinion, but have been deemed critical to the eventual translation of the project into a material and social reality, and a necessary compromise towards achieving the perceived common good of 'making the street itself come alive' (workshop participant).

One of the key projected impacts of the development is this transformation of the street space itself, through a re-assemblage of its territories, into a new piece of public realm for Brixton which could potentially host performances, festivals and activities, as well as accommodating everyday children's play and social interaction. For many workshop participants, when asked 'what does success look like?',[41] it was the potential for a development that could generate viable new social spaces on different scales, from small communal areas for drying clothes and storing bicycles and prams, to gardens and the wider space of the street itself, as much as the offer of affordable housing, employment opportunities and reduction of crime in the area.

'Meanwhile' uses of the site have been critical to the process of translating the project into place, using real-life events and activities to evoke an embedded vision of the street's transformation with new forms of social occupation which CGIs can only represent at a distance, notwithstanding the immersive capacities of digital visualisation technology. The Block Workout gym, providing access to outdoor equipment, supervision and a lively sociable atmosphere in which to work out, has provided a consistent backdrop to other activities at Number Six, and the screening of the World Cup matches and final on an outdoor screen in the garden drew together an animated crowd of people from the neighbourhood and further afield. The street fair in July lasted all afternoon, with carnival floats, live music, dancing, stalls, food, and dominoes in the front garden of Number Six, attracting visitors of all ages, with a strong Afro-Caribbean presence.

In his candidacy statement for Brixton Green's board of trustees in 2013, Zayn Al-Jawad, a former resident of the Moorlands Estate, wrote that: 'The land west of Somerleyton Road has, for too long, been a separating wedge between the estate and the rest of Brixton exacerbating the division the railway embankment causes. I passionately believe that Brixton Green can deliver real long-term improvements to the people of Brixton using new developments to stitch together Moorland estate with the rest of Brixton'.[42] In its letter of endorsement for the project in 2011, CABE (Commission for Architecture and the Built Environment) had evoked a similar view, describing it as 'a key project in the improvement of the neighbourhood', with potential to become 'a vibrant destination in Brixton'. However it also emphasised the fact that the project alone 'cannot resolve the problems around Somerleyton Road, Loughborough Park and Coldharbour lane', and that its success would depend on the wider masterplan for the area and 'continued collaborative working between the stakeholders' (CABE 2011).

As one participant put it, a key indicator of the project's success would be 'Resident Surveys saying they like it, that it's popular with the residents' (workshop participant).[43] For the consultants, it is a development that's 'secure by design' and sustainable, not only in terms of energy consumption, but also as a measure of health, happiness and wellbeing in the community.[44] For Ovalhouse theatre, it will be a dynamic new premises that allows them to develop outreach in the community. For the Council it will be a new housing resource that takes local people off its waiting list, produces a viable financial return and long-term asset, and doesn't jeopardise other regeneration initiatives elsewhere in the Borough. For Brixton Green's trustees and volunteers it will be the realisation of a long-term vision, pay-off for years of hard work, and evidence that the community shares model is a viable solution to London's housing crisis. However all this depends on the successful transition from design to construction, and, critically, the establishment of a new long-term stewardship body which can effectively mobilise an inclusive and equitable representation of community interests and aspirations. It also depends on holding together the unity of the project, and ensuring that the community remains in control.

Key issues and learning points

5

Key drivers Somerleyton Road has been driven by the need to provide an alternative model of housing and community infrastructure provision which would not displace existing local communities, but provide for them. It is intended to demonstrate a way forward for co-operative, community-led development supported by the local council, without the intervention of a commercial developer. It forms one element of a more comprehensive redevelopment strategy for Brixton town centre aimed at revitalising the local economy and improving the physical landscape.

Funding mitigation of risk has been a primary concern in the development, but the Council's decision to retain ownership of the site and borrow the funds to develop the site in phases has been calculated to ensure that the Council does not divest itself of ownership of its own assets, while being able to repay its borrowings from rental income within a generation, and continue to invest in other parts of the borough as well. It will hope to avoid the criticism which has been levied at its approach to the PFI redevelopment of Myatts Field North, now re-branded Oval Quarter, led by a private developer.

Location the site lies along the edge of railway lines opposite a council housing development built during the 1970s and 80s following the abandonment of a radical traffic circulation scheme (the South Cross route) for which existing housing had been demolished. It is currently occupied by a number of light and semi-industrial uses and a Transport for London substation. Connectivity to the centre of Brixton is limited by the railway tracks, but the site lies in close proximity to the popular markets and the transport interchanges, making it a desirable location for development which could help to integrate the eastern and western parts of the area.

Masterplanning and design Somerleyton Road has been subject to a series of different masterplanning and design studies, led by firms which have a track record of experience in designing mixed-use neighbourhood developments integrating housing and community infrastructure. The eventual appointment of Igloo with Metropolitan Workshop as masterplanners and development managers was conducted through an invited competitive tender which attracted significant interest from a number of international firms. The subsequent planning and design of plots on the site has been led by Igloo and Metropolitan Workshop, along with the financial strategy, which

has enabled an integrated approach; they have also been responsible for appointing architects for the separate plots. The development process has been strongly informed by the findings from the many community workshops which were held in the previous two years, however it has not encompassed a co-design approach as such.

Engagement a great deal of work has been invested by Brixton Green and Lambeth Council in fostering a wide base for community engagement, both via local community groups and schools, and through door-to-door contact with individual households. It demonstrates that people are often primarily motivated for reasons of personal interest rather than the common good, although some have a professional, academic or activist commitment to the project as an exemplary model; however it is hard to sustain consistent participation over the long term due to consultation fatigue and for other reasons. Engagement processes need to be strongly-led and well-organised, and highlight that community is heterogeneous not homogenous and identifies with different causes; however the demand for equitable access to housing in a safe environment is the key unifying factor.

Specific assets the community benefit structure of Brixton Green as a mutual society provided an effective way of representing and mobilising a sense of ownership over the project and governance within the local community, which is to be perpetuated into the future management of the development. A physical base for engagement has had advantages both for representing the development project, providing a venue for events and bringing people together on the site, but has also become a visible focus of conflicts with the potential to damage the project. The continued ownership of the land by the council and decision to proceed as a partnership without a developer has strengthened the partnership's position in terms of the site's future management and projects a positive message about the council's commitment to the local area and its housing need.

Notes

1 https://www.london.gov.uk/priorities/regeneration/londons-great-outdoors
2 http://www.lambeth.gov.uk/elections-and-council/about-lambeth/how-lambeth-council-is-organised
3 Dr Bob Paterson, Community Finance Solutions at Salford University, technical advisor to the Community Land Trust Fund; David Rodgers, former chief executive of CDS Co-Operatives, commissioner on the Commission for Co-operative and Mutual Housing and pioneer in the development of Community Land Trusts
4 Workshop participant, community workshop on non-residential uses, 27th Feb 2014, Six Brixton: transcript
5 Workshop participant, community workshop on non-residential uses, 27th February 2014, Six Brixton: fieldnotes/transcript
6 Somerleyton Road Brixton, Project Brief for the Consultants 2014. Ovalhouse/Brixton Green/Igloo/Lambeth
7 See also Lambeth's Oct 2011 report 'A Caribbean Critique?' https://www.lambeth.gov.uk/sites/default/files/Lambeth-black-caribbean%20report%202011.pdf
8 http://moderngov.lambeth.gov.uk/ielssueDetails.aspx?IId=31814&Opt=3&LO=1
9 In particular Urban75, a Brixton-focused website edited by 'Mike Urban', a resident of Southwyck House, the residential block known as the barrier block at the north end of Somerleyton Road
10 http://www.brixtongreen.org/board-statement-21-07-15
11 Brad Carroll, director Brixton Green, interview by Clare Melhuish, Brixton 14.05.15
12 Brixton Green website, http://www.brixtongreen.org/who
13 In 2013 these were:
Lambeth Council: (Chair) Cllr Pete Robbins, Cabinet Member for Housing and Regeneration, Lambeth Council, Neil Vokes, Somerleyton Road Project Manager, Lambeth Council, Bruce McRobie, Development Surveyor, Lambeth Council
Brixton Green: Brad Carroll, Director, Brixton Green; Stephen Jordan, Chair, Brixton Green; Dina Roake, Trustee, Brixton Green;
Ovalhouse Theatre: Deborah Bestwick, Managing Director, Ovalhouse theatre, Robin Priest, Trustee, Ovalhouse theatre. In 2014, Cllr Robbins was replaced by Cllr Hopkins, Cabinet member for Jobs and Growth
14 Stephen Jordan, introducing Bidders' Day, information event for prospective development managers and architects at Six Brixton, 4th Dec 2013: fieldnotes/transcript
15 Councillor Pete Robbins, speaking at Bidders' Day, information event for prospective development managers and architects at Six Brixton, 4th Dec 2013: fieldnotes/transcript
16 Neil Vokes, Lambeth Council project manager, speaking at community event and festive refreshments, Six Brixton, 18th Dec 2013: fieldnotes/transcript
17 Cllr Robbins, speaking at community event and festive refreshments, Six Brixton, 18th Dec 2013: fieldnotes/transcript
18 Workshop participants, comments, 18th Dec 2013: fieldnotes/transcript
19 http://futurebrixton.org/somerleyton-road/about
20 Workshop participant, non-residential uses workshop, Six Brixton, 27th Feb 2014: fieldnotes/transcript
21 Non-residential uses workshop, Six Brixton, 27th Feb 2014: fieldnotes
22 Workshop figures based on GLA London Rents Map https://www.london.gov.uk/priorities/housing-land/renting-home/rents-map
23 Brad Carroll, interview by Clare Melhuish, Brixton, May 2015
24 Neil Vokes, non-residential uses workshop, Six Brixton, 27th Feb 2014: fieldnotes
25 Pop Brixton:http://www.popbrixton.org
26 Neil Vokes, speaking at Bidders' Day, information event for prospective development managers and architects at Six Brixton, 4th Dec 2013: fieldnotes/transcript
27 www.aecom.com
28 www.echarris.com
29 Neil Vokes and Stephen Jordan speaking at Bidders' Day, information event for prospective development managers and architects at Six Brixton, 4th Dec 2013: fieldnotes/transcript
30 As set out in Somerleyton Road Brixton, Project Brief for the Consultants 2014. Ovalhouse/Brixton Green/ Igloo/Lambeth, p.13
31 Somerleyton Road Brixton, Project Brief for the Consultants 2014. Ovalhouse/Brixton Green/Igloo/Lambeth:9
32 Stephen Jordan speaking at Bidders' Day, information event for prospective development managers and architects at Six Brixton, 4th Dec 2013: fieldnotes/transcript
33 July Cabinet under the Future Brixton: Somerleyton Road Project Part II report (86/13–14)
34 Brad Carroll, in conversation with Clare Melhuish, design exhibition and public drop-in, Six Brixton, 28th Nov 2014
35 Brad Carroll, in conversation with Clare Melhuish, Six Brixton, 28th May 2014
36 Somerleyton Road Brixton, Project Brief for the Consultants 2014. Ovalhouse/Brixton Green/Igloo/Lambeth:9
37 Stephen Jordan speaking at Bidders' Day, information event for prospective development managers and architects at Six Brixton, 4th Dec 2013: fieldnotes/transcript
38 Workshop participant, non-residential uses workshop, Six Brixton, 27th Feb 2014: fieldnotes/transcript
39 Stephen Jordan, speaking at Bidders Day 2013
40 participant, non-residential uses workshop, 27th Feb 2014
41 Non-residential uses workshop, 27th Feb 2014
42 Brixton Green website, Candidates for trustee positions, statements 2013
43 Participant, non-residential uses workshop, 27th Feb 2014
44 Based on Igloo's Footprint assessment tool for sustainable investment, http://www.iglooregeneration.co.uk/downloads/footprint.pdf

References cited

Anchor and Magnet
2013 Social heritage record and complementary projects development outline for Future Brixton: Townscape Heritage Initiative. Part 1: Report. Barby Asante, Katy Beinart, and Kate Theophilus

Brixton Blog
2010 Interview: Philippe Castaing on Brixton Green, by Zoe. July 9th
2015 Frustrations continue for volunteers at No 6 Somerleyton Road, by Anna McKie, June 9th

CABE (Commission for Architecture and the Built Environment)
2011 Letter from CABE (Diane Haigh, Director of architecture and design review) to Brad Carroll, 16th March. Re: Lambeth Council: Brixton Green

Brixton Buzz
2013 http://www.brixtonbuzz.com/2013/07/southwyck-house-residents-angered-as-brixton-green-unilaterally-claim-support, by Mike Urban, July 18th

Hetherington, Peter
2009 The rise of community owned land, *The Guardian* 8th April

Lambeth Council
2009 Future Brixton Masterplan, Stock Woolstencraft/ Bioregional/ Lambeth Smith Hampton http://moderngov.lambeth.gov.uk/documents/s57901/01%20Future%20Brixton%20Masterplan%201.pdf
2012 Enabling community asset ownership and management. 1st October. http://www.lambeth.gov.uk/sites/default/files/pts-community-asset-ownership-management.pdf
2013[a] Draft Brixton Supplementary Planning Document. Allies and Morrison: Urban Practitioners
2013[b] Equality Impact Assessment Report: Future Brixton, Somerleyton Road Project. Author Neil Vokes.
2013[c] Future Brixton: Somerleyton Road project – Delivery Strategy: Executive Summary. Cabinet meeting, 4th Nov 2013

Mayor of London
2010 Mayor unveils new bigger brighter greener Windrush Square in Brixton. Press release, 26th February

Rahman, Mike
1995 A dream unfulfilled, *The Independent* 15th Dec

Scott, Shauna
2013 'Austerity measures, the Coalition government and the Local Authority – Preparing for the Future'. Unpublished MSc dissertation, Faculty of the Built Environment, UCL

Shafique, Atif
2013 Enterprise solutions: new approaches to commissioning and public service mutuals: lessons from co-operative councils. London: RSA 2020 Public Services. www.2020ps.org

Social Life
2013 Community consultation on the future of Somerleyton Road: a report of Social Life's work in Brixton in early 2013. London: Social Life

Urban 75
2013 http://www.urban75.net/forums/threads/tell-me-about-brixtongreen-a-community-led-development-on-somerleyton-road.271475/page-15

POLICY MILESTONES IN URBAN REGENERATION AND HIGHER EDUCATION

1963 Robbins Report: *Higher education: report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins 1961–63,* Cmnd. 2154, London: HMSO. The Robbins Report recommended the expansion of higher education including the provision for all Colleges of Advanced Technology to assume the status of universities. It launched a national system of mass university education, including a wave of new out-of-town campus universities constructed during the 1960s and 1970s

1979 Election of Conservative government headed by Margaret Thatcher

1981 Government funding cuts to universities of 11%: introduction of full-cost fees for international students, and reduction of student places by 20,000

1981 Urban Development Corporations and Enterprise Zones created:relaxing development constraints in particular areas to stimulate regeneration

1986 Second wave university funding cuts under Thatcher: introduction of Research Assessment Exercise, instituting research accountability and separating funding of teaching from that of research

1986 Abolition of structure plans and replacement with county planning statements and Unitary Development Plans

1990 Freezing of student maintenance grant and introduction of top-up loans through Student Loans Company

1990 Resignation of PM Margaret Thatcher, succeeded by John Major

1991 City Challenge: competitive bidding introducted for government funds for urban regeneration initiatives

1992 Re-election of Conservative government led by John Major

1992 Further and Higher Education Act: allowed polytechnics and other HE institutions to apply for university status and ended the binary divide between providers; established new funding councils – HEFCE

1992 Local Agenda 21 (LA21): United Nations action plan on global sustainable development, including statement of community involvement in planning as a fundamental principal of implementation by local authorities (Earth Summit, Rio de Janeiro)

1994 Single Regeneration Budget: set up to bring together a variety of different regeneration programmes and budgets from several government departments and identify areas of need

1997 Labour Government elected, led by Tony Blair

1997 Dearing Report into funding of universities: favoured means-tested tuition fees and recommended that students should pay around 25 per cent of the cost of tuition. Upfront fees capped at £1,000 were introduced and the maintenance grant abolished for 1998–99

1998 National Strategy for Neighbourhood Renewal: set up by Social Exclusion Unit as the most comprehensive government initiative to date to implement joined-up thinking across departments around neighbourhood decline, and inclusive, partnership-based action. Included New Deal for Communities programme, Community Plans, Local Strategic Partnerships (LSPs)

1998–2000 Regional Development Agencies established: nine non-departmental public bodies to oversee development of Government Office regions

1998 Teaching and Higher Education Act: introduced student fees of £1000 and student loans to replace maintenance grants except for poorer students

2000 Urban White Paper: Our Towns and Cities: based on Lord Rogers Urban Task Force Report, it aimed to encourage business to invest in UK cities, including better design and provision of affordable homes. 'Urban renaissance' placed at heart of planning system, and a Neighbourhood Renewal Fund of £800m made available over 3 years

2001 Labour government re-elected under Tony Blair

Renewed action on community participation in local planning and neighbourhood renewal:

2001 *A new commitment to neighbourhood renewal: national strategy action plan* (Cabinet Office)

2002 *Sustainable Communities: Delivering through Planning* (ODPM) (*Community Involvement: Roots of a Renaissance?* 2002)

2003 *Sustainable Communities: Building for the Future* (ODPM)

2003 The Future of Higher Education White Paper:recommended raising student fees to £3000 pa, implemented 2004 (Higher Education Act)

2005 Single Community Programme launched: to merge Community Empowerment Fund, Community Chests and Community Learning Chests, forming a single funding stream to support community participation in neighbourhood renewal

2005 *Sustainable Communities: people, places and prosperity*

2005 Local Development Framework and new Planning Policy Statements

2006 Department of Communities and Local Government created: replaces Office of the Deputy Prime Minister under John Prescott, and launches *Together We Can!; Strong and Prosperous communities*: Local Government White Paper (DCLG)

2007 *Action Plan for Community Empowerment: building on success*

2007 *Planning for a Sustainable Future:* Planning White Paper (CLG)

2010 Browne Review: recommends removing the cap on student fees

2010 **Coalition government elected, led by David Cameron**

2010 Coalition government votes to increase fees to £9000 pa from 2012

2010 Great Outdoors programme: public realm improvements for London in run-up to Olympics – investment in public space to maintain London's image

2010 Wilson Review: promoting university-business collaboration following Higher Education White Paper. The review places universities in their wider context locally and internationally

2011 Localism Act: devolution of planning decision-making process, abolition of RDAs and replacement by Local Enterprise Partnerships without central government funding; designation of Community Assets and Community Right to Build, and promotion of Neighbourhood Plans

2013 Witty Review of Universities and Growth: published by Department for Business Innovation and Skills. Encouraging universities to work with LEPs on Strategic Economic Plans as important sources of economic advantage with international reach, and to interact with SMEs, by providing research and advice (especially Business Schools)

United States

1960s Ford Foundation supported university engagement to tackle urban problems

1968–1974 'Urban observatories' network: sponsored by the US Department of Housing and Urban Development to monitor and intervene in problem neighbourhoods

1985 Campus Compact: founded by Brown, Georgetown and Stanford Universities, to integrate the concept of civic engagement into campus and academic life and address specific problems in the areas of literacy, health care, hunger, homelessness, the environment and care for the elderly

1990 Declaration of Metropolitan Universities signed by 48 presidents and chancellors of public universities, establishing a national consortium with a commitment to addressing the problems of metropolitan areas through teaching, research and professional service and different kinds of partnership, at both the urban and regional level

2001 Building Communities programme: launched by Rockefeller Foundation, headed by David Maurrasse