



University spatial development and urban regeneration: *Interim findings from case study research*

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I. Key findings

1. Funding

Partnership arrangements with external stakeholders can open up diverse sources of funding, minimise the need for borrowing, and reduce financial risk. But while they can provide reassurance within institutions, they can also lead to accusations of universities building 'on the cheap'. Most importantly, coherent as opposed to piecemeal funding is shown to be crucial to ensure direction, continuity and quality in the immediate and long term. Funding delivered in tranches from a variety of sources, eg HE allocations, economic development grants, lottery funds, philanthropy, market sales of land/ property, loans, or income generated by tuition fees, can jeopardise the effective scheduling and synchronisation of development programmes and subsequent occupation of properly equipped buildings. It can make it difficult to apply a long-term perspective to development processes, and have a negative impact on the design quality of new university buildings, surrounding spaces and amenities. In the case of Cambridge North West (see Section II below), the decision to raise a bond (based on its AAA rating, and to be repaid in phases through market sales of private housing on the site) to finance the development as a comprehensive operation with proper financial underpinning has been identified as key to ensuring the coherence and quality of the development over the long term, and to the professionalisation of the whole initiative: 'this type of finance is going to be key for all universities' (Chris Hearn, Head of Education at Barclays).

2. Governance and planning

The case studies show that a strong 'project champion' with relevant experience is key to articulating an early vision, establishing leadership, and mobilising institutional support for a development over time, supported by clear (but variable) structures for advisory, review, and sign-off processes. While this may be a Vice-Chancellor, Registrar, or equivalent, it may also be an academic at Faculty level, or someone brought in from outside with development experience specifically to manage the project. There is a need for coherent, accountable, transparent, and professional governance structures that include academic buy-in to be put in place from the outset for the smooth running and delivery of projects based on consensus and trust; however it is clear that in most cases tensions arise between the academic and estates management sides of the university organisation which may be more or less successfully resolved through dual representation on project delivery teams. In the case of Newcastle University, the project was led from Faculty level, and the importance of academic leadership was stressed: 'a build can only be successful if you

have strong academic leadership on it to get what...to get the building that you want' (Professor Glendinning). At Cambridge, the development was taken out of the oversight of the university estates department and established as a separate, financially ring-fenced syndicate advised by three panels, with a dedicated executive development team. This was considered to demonstrate professionalisation and 'commercial edge' in the university's development operation and to inspire confidence within the academic community, as well as ensure the delivery of an 'enlightened client brief'.

3. Academic planning

The case studies demonstrate that in most cases there is little correlation of academic planning with actual building requirements at an early stage, and that this may often remain flexible and open-ended far into the project development. Academic planning posits proposed research programmes and course activities as income streams to fund facilities in the knowledge that they are subject to many variables and to future alteration and replacement which buildings must be able to accommodate. Research funding, teaching priorities, and student numbers change over time, and proposed activities on new sites can be further affected both by institutional re-structuring and by organisational issues around convergence/autonomy on dual campuses. New research programmes and courses may fail to take off due to lack of academic and residential critical mass on a campus, as at Durham Queen's Campus, lecturers 'parachuting' in without commitment, and tensions at faculty, management and leadership level - as well as inadequate buildings and resources. Hence there are many unknowables and variables at the early stages of academic planning which demand an open-ended approach; while at the same time a convincing academic vision is required to rally institutional support around a project and give it a defined identity.

4. Site characteristics

The physical accessibility of identified sites is central to their selection but may be defined by different conditions. Distance from the main campus may not be an issue if transport connectivity is efficient, comfortable, and affordable, but immediately becomes problematic otherwise. However, any distance between sites may be perceived as a problem if it is also correlated with feelings of separation from the heart of the university and its corridors of power, or with a substandard academic offer - even where new facilities are more up-to-date and provide more space for staff and students. Ideally, a new site should be able to offer connectivity between existing sites, or located within easy reach of city centres and a range of urban and social amenities which are attractive to university communities. Staff and students do not want to be isolated in out-of-town campus environments, but integrated within existing university and urban settings, with access to a variety of offers, including decent, affordable housing. Good public transport or pedestrian links to city centres are seen as essential, and provision of staff and student housing either within or within easy reach of new university developments has become key to many new projects - for example, the primarily residential Cambridge North West project, where the affordable housing category has been deployed to provide dedicated 'key worker' housing for university employees.

Site safety and security is also highlighted (particularly in the US case studies) in relation to contiguous neighbourhoods. However site or place image may not be as important in an international market for staff and students as sometimes suggested, so long as the facilities are good. Waterfront sites are often identified as advantageous in terms of environmental quality and

open space provision. However international students entertain different imaginaries of university life and do not necessarily share the preconceptions of home students of what a particular university location should look or feel like, which often revolve around traditional and historic associations. On the other hand, they are more likely to compare facilities and settings with comparative international examples, based on a global circulation of images of higher education offers which emphasises the quality of resources and student experience across the board.

5. Planning and regeneration contexts

In general, universities are aware of the need for long-term preparatory work to build relationships with local city authorities and garner support for the realisation of their own ambitions within the context of larger planning and economic regeneration contexts in which they are seen to have a role to play. Newcastle University has been involved in a long-term partnership with the city council through the Science City programme aimed at both building up a new knowledge-based urban and regional economy, and generating physical renewal of run-down urban areas as part of that programme. Newcastle and Durham Universities have both contributed significantly to local strategies for the redevelopment of redundant industrial, brownfield sites, while Cambridge spent 10 years working with the city council on a strategy to accommodate growth in the city through the release of greenbelt land for housing development and its replacement with radial 'green wedges' of open public space connecting to the city centre. In all these cases, universities have benefited from planning agreements which have allowed them to develop new university facilities on these sites under advantageous conditions; in New York, as in the case of Columbia, this has included state intervention on its behalf with the power of eminent domain (compulsory purchase). However universities are often expected to provide not only commercial access to research facilities and resources in return, but also housing and social infrastructure for the benefit of the wider community. This in turn can open universities to criticism that they should be focusing their investment on educational provision rather than urban infrastructure. Furthermore, expectations that university developments supported by local authorities will inevitably lead to local and regional economic growth and new jobs are often disappointed when it becomes evident that most of those jobs will be filled by highly-qualified and/or migrant knowledge workers rather than local, lower-skilled candidates. In addition, large incoming student populations can increase spending in local areas, but also unbalance local economies and existing demographics.

6. Masterplanning and design

Planning and design quality of new spatial development initiatives consistently shows up as key to their success, not only in terms of staff and student satisfaction, but also in terms of how the university is perceived by neighbouring communities and local authorities, especially from the perspective of sustainability. Environmental sustainability has become fundamental to the urban development agenda, and universities are usually expected to lead the way in realising exemplary flagship developments which local authorities can present as a model to commercial developers. While some criticism has been levelled at universities for embracing a superficial 'eco-aesthetic' without addressing fundamental issues, institutions know they need to appoint consultants through competitive processes who can achieve high sustainability ratings on their projects - not just individual eye-catching landmark buildings - notably through key decisions around design, materials

specification, and space allocation which generate radical reductions in energy, water, and private transport usage.

With environmental sustainability comes social sustainability, and project teams are increasingly aware of the need to plan and design for site appeal, connectivity, and permeability to visitors and outside users at different times of day, areas of interactive and open public space/ facilities (eg meeting-rooms, community space), and high standards of provision of social infrastructure (including social study space and decent catering) as well as academic space for staff and students which generate critical mass and conviviality on site. In some cases this will also include the allocation of commercial space for use by spin-off and start-up companies generated by the university, especially where there is co-location of university and non-university facilities allowing for the smooth transition of developing businesses from one site to another.

7. Briefing and appointments

Although architects acknowledge that the HE sector is one of the better ones to work in, and describe academics as generally good to work with as clients, architects, academics and estates managers do not always see eye-to-eye on the briefing and procurement process, and many tensions arise in the negotiation of relationships and aspirations at this stage of university development plans. Masterplanners and architects may be invited to make an expression of interest through an existing university framework, OJEU notice, and/or RIBA competition. On the academic side the process of competitive tendering and selection may be compared to a shortlisting for an academic post, but universities are sometimes accused of producing unrealistic briefs which emphasise a visionary idea of the future development and do not provide enough solid information about space requirements and proposed activities for architects to work with. While estates teams are more pragmatic, primarily concerned with issues of cost, space efficiency, and future maintenance, the tension between academics and estates representatives on the client side may mean that architects end up taking on the role of mediator and using up valuable time in the design process on resolving those issues and undertaking additional essential information-gathering to ascertain requirements. Universities sometimes fall short in the production of 'enlightened' briefs, and need to appoint design teams with whom they can build good working relationships – not just on the basis of attention-grabbing design propositions - in order to work through complex internal institutional dynamics as well as engage with external stakeholders.

8. Community relations/ engagement

Investment in community engagement and building relationships with neighbours and external stakeholders over the long term now underpins most universities' strategies for development and expansion, and is usually promoted by urban policy guidelines around social inclusion and local participation in planning processes. Effective communication between institutions and their internal and external constituents is often managed by dedicated units in conjunction with external community engagement consultants, and may include both arts and science-led social outreach programmes. In addition, academics and researchers are increasingly encouraged to develop the social relevance and impact of their work in relation to local communities and in the context of new building programmes. It is recognised that such strategies are essential if universities are to build trust with their neighbours and local councils, not only to minimise the potential obstacles to their own development and nurture a sense of local ownership over new building projects, but also to

deliver a message about the nature and spirit of the university, its public image and reputation, and make a recognised contribution to the amelioration of urban problems.

However universities are also criticised for underestimating the real social dynamics of local areas which surround their sites, and the depth of the cultural gap and disengagement that can exist between higher education institutions and local communities which see them as irrelevant to their lives. Many universities encounter strong and entrenched opposition to their spatial development projects, and find themselves accused of disregarding the local knowledge and long-standing expertise of existing community organisations whose experience they could fruitfully draw on.

9. Translation into place: construction dynamics

Large-scale, long-term construction processes on urban sites usually generate intense disruption, pollution, and uncertainty for local communities for years at a time, which may also translate into significant health problems and resentment. The question of how to manage, contain, and ameliorate these processes through careful phasing, organisation of access, timing, and institution of sitewide practices for reduction of noise and particulate pollution and its dispersal, is recognised by universities as fundamental to their development strategies. It is also one in which the construction industry itself has a large part to play, in partnership with clients, through the development of new technologies, prefabricated construction methods, and strongly enforced working practices and codes of conduct on site.

In addition however, many institutions are looking into ways of promoting interim uses, patterns of occupation, and even naming of different elements on site during the long process of development, in order to establish presence and dialogue with those most affected (as well as marketability where relevant – eg in the case of integral commercial housing components). Such measures may include interactive, artist-led, public art programmes (eg construction of a model of the development in cob at Cambridge), community gardens, pop-up facilities, educational projects for children and adults, or construction-based (and other) training programmes, to engage a cross-section of the public and build a broad-based understanding of what a university presence on a site might mean in the long term and for the future.

II. Research overview

This research based in the Urban Laboratory has incorporated an overview of university spatial development projects in the UK, Europe, North America, Brazil and Qatar, and (to date) in-depth case studies of Durham University's Queen's Campus in Stockton, Newcastle University's Science Central development, Cambridge University's North West development (based on site visits, original and secondary sources) and three comparative US examples: Pennsylvania University, Columbia University and New York University (based mainly on secondary sources).

The first point to make is that the sheer number and range of universities engaging in more or less ambitious spatial development projects around the world presents a real challenge in terms of identifying those most relevant and useful to the UCL East case. The selection has aimed to focus on a number of universities of similar status as major research institutions with global reach, located in urban contexts, while embracing a range of different types of development agenda and site, since none are identical – while there are also strong similarities and areas of common ground between

them. In particular the research has set out to deliver some insights (bearing in mind significant issues around insitutional access and confidentiality) both into the insitutional policies, visions, and processes involved in pushing forward and implementing significant development plans, and into the specific urban and planning contexts in which these projects are embedded, as well as the impacts or projected impacts which they have on existing sites and communities in terms of urban and economic regeneration.

Overall the research demonstrates the impact of public funding cuts and intensifying international competition on universities. Universities are under pressure from government and market forces alike to enhance their offer in terms of space, facilities and resources in order to attract and retain students and staff, while also exploring the potential of partnerships with industry (through research development and translation) to generate new income streams and demonstrate economic relevance and a measurable contribution to society. These factors are exerting a strong influence on universities of all rankings to invest in significant new capital projects and spending programmes. At the same time, the research shows that universities are highly valued by local authorities and other agencies as anchor institutions and key actors in complex urban development processes where the same effects of public funding cuts and international competition are being felt. Universities are seen as stable, committed, long-term potential partners with access to a range of funding sources and research expertise which can be translated into wider material, social and economic benefits for the urban and regional populations with which they co-exist, as part of the shift towards new knowledge economies. Universities for their part are keen to demonstrate their engagement with a localised civic or public service mission, including both widening access and community outreach, while maintaining their international profile and research status in university league tables: a delicate balance. Furthermore, many universities have a vested interest in shaping urban renewal processes in contiguous and neighbouring areas which impact on their own campus settings and security.

Thus universities are valued as potential partners, and universities are motivated by various factors to deliver social benefits beyond their academic mission, but, as the research also shows, may be viewed with wariness as predatory forces in sensitive urban ecosystems. Interactions both within, and between universities and their external partners and stakeholders, do not always run smoothly and large-scale spatial development programmes often provoke opposition and dissent, exacerbated by their long-term and capital-intensive nature. In general, they require strong leadership and clear structures for decision-making and communication in order to come to fruition in a consensual form.