125

URBAN DESIGN

Winter 2013
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MIXED STREETS

URBAN DESIGN GROUP

VIEW FROM THE CHAIR

I hope that those of you who were able to make the UDG Conference in Oxford had a great time, and I want to express my thanks to all those involved in organising the event which has been widely accepted as one of the best of recent years. To those that weren't able to be there, please do look up the videos on UrbanNous (www.urbannous.org.uk) and see what you missed!

While in Oxford I took some time to have a walk around the city and I soon remembered how fantastic it is as a place to just stroll, a place where you can discover hidden spaces and courtyards and capture glimpses of buildings down winding streets and alleys. In this regard it struck me as being a little similar to Bruges where I had been the previous weekend. Both are tourist attractions with droves of visitors arriving each year to admire the architecture and urban landscapes; what is it about these places that create such a level of interest? Is it just because they are old, or is it their intimate scale? I suspect that it is both: they provide a balance between heritage, culture and adventure. They demonstrate an inherent spatial quality and a complexity which means that the experience for a visitor on foot (or bike!) is a special one. It reminds me of some of the classic urban design texts – I*mage of the City*, *Townscape*, and *Responsive Environments* – which speak of the importance of the glimpsed view, the discovery of a hidden courtyard or maybe a vista to a distant building. This urban intimacy is something that many modern schemes seem to lack.

As urban designers we are responsible for creating the towns and cities that will become the World Heritage Sites of tomorrow, and as members of the UDG we share a commitment to doing this in a way that improves the lives of those that live and work in them every day. But do we give sufficient thought to the small scale details that provide excitement and delight when discovered on a stroll around town? Maybe we focus too much on efficiency and ease of movement and I wonder whether the places we are designing today will hold the same kind of interest and intrigue for visitors in 500 years time?

● Paul Reynolds

UDG NEWS

Urban design is a cause as well as a vocation. It is something we believe in, and because of this, the more obstacles that are thrown in its path, the more determined we become to make a difference. In recent months this determination has been much in evidence. In the Solent area, a group of private and public sector practitioners has formed and has held meetings in Southampton, Winchester and Bournemouth. In Wales, two combined events have been hosted at Cardiff University with the support of the Centre for Regeneration Excellence in Wales. Most recently in Kent, Mark Chaplin from Ashford Borough Council, has convened a first meeting of a Kent group of urban design enthusiasts. Attended by nearly 20 people from across the county, the group discussed challenges, including how development control can ensure that approved landscaping schemes are actually planted out; and how to encourage traditional practice in highways design and maintenance to adopt quality of place as a goal.

The range of disciplines present at these meetings, architecture, landscape architecture, surveying, planning and engineering, is most encouraging. It means that there is a growing number of people, who, despite having different professional labels, are united in their determination to improve people's lives through quality urban design.

← Mark Chaplin, and colleagues drawn from Kent admire the new public realm scheme in Maidstone town centre

UTILITIES VERSUS QUALITY PUBLIC REALM

UDG has been working through the Institution of Civil Engineers to produce a balanced guidance note on the use of quality paving which recognises the practicalities of underground utilities. Some utility interests want to promote a public realm surfaced in bitumen. They argue that natural stone bedded on 150mm of reinforced concrete can increase the cost of road openings by up to seven times. But the point of the public realm is not merely to provide convenient access to utilities. A solution is needed that can provide an attractive and functional environment for all road users, as well as access to essential underground services. Many people think the answer is a properly designed approach using ducts and combined utilities tunnels, rather than the present chaotic intertwining of pipes and cables, many of which are unrecorded.

WATER SENSITIVE URBAN DESIGN

UDG is supporting the work of CIRIA, the Construction Industry Research Information Association in developing the practice of Water Sensitive Urban Design. With the climate becoming increasingly unstable, and population growth putting pressures on water and land supply, Water Sensitive Urban Design seeks to conserve water, minimise flood risk, provide natural habitats, and create a wonderful and attractive urban environment. Publications are expected to follow in 2013.

● Robert Huxford and Louise Ingledow

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This issue has been generously sponsored by Space Syntax

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Mile End Road, London
Photograph Claudia Schenk

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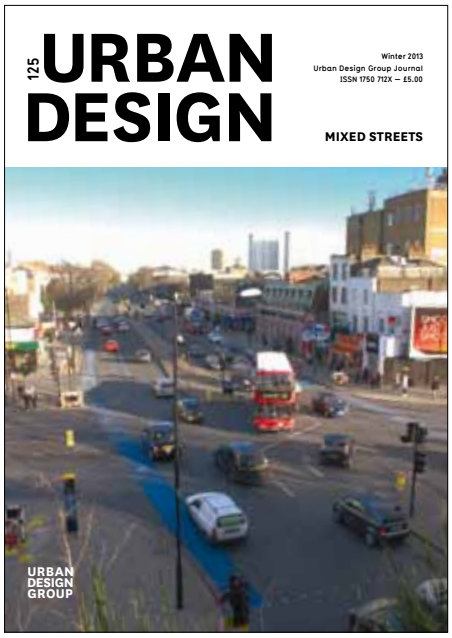

DIARY OF EVENTS

Unless otherwise indicated, all LONDON events are held at The Gallery, 70 Cowcross Street, London EC1M 6EJ at 6.30 pm. Tickets on the door from 6.00pm. £3.00 for full price UDG members and £7.00 for non-members; £1.00 for UDG member students and £3.00 for non-member students. For further details see www.udg.org.uk/events/udg

TUESDAY 8 JANUARY 2013
Urban Design & Built Environment Quiz Night
Kick off the New Year with this fun event. Come along on your own or with a team, ready to answer obscure questions on urban design, planning, towns, transportation, public health and a host of other subjects.

WEDNESDAY 23 JANUARY 2013
Mixed Streets
Introduced by Matthew Carmona and picking up the theme of *Urban Design* issue 125, this event will look at the future of mixed streets including long term economic and social changes and the decline in place-based retail through to practical urban design options.

WEDNESDAY 6 FEBRUARY 2013
National Urban Design Awards 2013
Our annual celebration of excellence in urban design will be held at the Royal Overseas League, St James's. Awards will be presented for practice, local authority and student project work, in addition to the urban design publisher prize and the UDG's annual lifetime achievement award.

TUESDAY 26 FEBRUARY 2013
The Middle East
Following on from the recent issue of *Urban Design* on this topic, this event will look at the latest developments in urban design in the Middle East with speakers including Farnaz Arefian (topic editor of issue 124) and input from Dar Al Handasah.

WEDNESDAY 13 MARCH 2013
Alternative Housing Models
In recent years, residential development in the UK has been dominated by major housebuilders. This event will explore the alternatives on offer and asks the question to what extent does the future lie in self-build, co-housing and similar 'emergent' models?

WEDNESDAY 27 MARCH 2013
Airports
Spoke, hub or integral part of the urban fabric? This event, led by Ben van Bruggen, will look at airport policy as viewed from urban eyes.

WEDNESDAY 17 APRIL 2013
Intelligent Cities
Led by Riccardo Bobisse, this event will look at the growth in importance of information in urban systems, both as a tool for the city and a tool for urban designers and managers.

FUTURE DIRECTIONS

This year's very successful conference, which managed to explore the subject of the value of urban design from different angles, suggests directions in which the Urban Design Group needs to go: expand its audience and membership and show that it is not just a minority interest group. Only then will it be listened to.

Coincidentally in this issue, John Billingham reflects on his involvement with the UDG over a third of a century and suggests the way ahead. It is impossible to over-emphasise his influence over the group and to list all of his achievements. Simply put, this journal would not exist and would not have reached its present level of quality without him. I personally owe him a huge amount of gratitude since a number of years ago, he trusted me to partly take over the editorial role under his vigilant guidance and supportive mentoring. He is not saying goodbye as he will continue to keep an eye on the magazine but we all say a big thank you to him.

Some changes are being introduced in this issue: feedback indicates that the reports on events at the Gallery have become somewhat redundant as a result of the videos produced by UrbanNous and posted on the website. We will continue to attend these events and write critical reports but we will also post them on the website. This will give us more space for weightier articles and other contributions from members.

Six interesting Public Sector entries shortlised for the Francis Tibbalds Award are included in this issue. Local authorities need support and encouragement at a time when they are besieged by destructive legislation. Please remember that you will be asked to vote for what you think is the best contribution to urban design and that the awards will be given at an event in February 2013.

Matthew Carmona is the topic editor for this issue and he has assembled nine challenging articles from several countries on the subject of Mixed Streets. All contributions give food for thought on a matter that is a the core of urban design.

Finally we would like to ask our readers to check the topics of our future issues: if you think you have something to contribute, contact one of us as soon as possible.

● Sebastian Loew

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Championing a new strategic direction for Design Review

January marks a special birthday for London – the Tube will be 150 years old. Soon it will be joined by Crossrail, which will mean the capital is more connected than ever before. Despite the economic downturn such improvements to the capital's infrastructure are supporting the rapid growth of new neighbourhoods across London. Soon we will witness the transformation of areas like Vauxhall and Nine Elms, Earls Court and White City, in addition to the Olympic Park. In this context, when local authority budgets are so stretched, finding smarter ways to use finite resources to assess design quality and share expertise is not only sensible but essential.

To this end, Cabe's new London Design Review service, launched in September 2012, is a network for London of a different kind; it supports boroughs in their efforts to ensure that growth enhances life in this great city. For the first time the capital will have a dedicated service to review schemes of regional or national importance. This will supplement existing design review services offered by Cabe's key partners across England.

Cabe's partnership with London boroughs is a response to a key recommendation of the *National Planning Policy Framework* (NPPF), published in March 2012. It states that councils 'should, when appropriate, refer major projects for a national design review', noting that national design reviews are 'currently provided by Design Council Cabe'. While Cabe remains a non-statutory consultee in the planning process, this recognition of the importance of design review and Cabe's key delivery role has given us a status and responsibility we've not had previously. And, I'm delighted to say that more than half of the London boroughs have already signed up for the service.

Cabe's agreement with the boroughs aims to ensure that design review panels, whether Cabe or borough-led, abide by the 10 principles of design review, outlined in *Design Review Principles and Practice*: Independent, Accountable, Expert, Advisory, Accessible, Proportionate, Timely, Objective, Focused on outcomes for people, and Focused on improving quality. Our partnership agreements aim to simplify the process for clients and their design teams seeking independent advice, be that from Cabe or one of the growing number of local authority-run review panels. It also offers London boroughs and key statutory agencies the opportunity to share learning, expertise and experience of promoting good design with the establishment of the London Design Support Advisory Board.

Inevitably as Cabe transitions from government funded body to independent charity, questions about the funding of previously free services have been asked. The notion of charging for design advice is nothing new. Local authorities now widely charge for pre-application advice, as does the GLA, and client funded panels are long established at Cabe with the likes of the Olympic Delivery Authority (ODA) and Crossrail ensuring better design outcomes on multi-billion pound projects. In fact, the £8,000 investment in a Cabe Design Review is small compared to the project costs overall, particularly considering that investing in design time at an early stage pays dividends down the line.

And what about Cabe's independence? Will payment secure a particular outcome? In both the ODA and Crossrail projects, Cabe did not shy away from sending strong, often critical messages, and this independent view was precisely what the clients sought. As Cabe's Director, Nahid Majid, says 'we're still independent; it's our unique selling point'. Undoubtedly clients of London Design Review will also understand, respect and value this independence.

Cabe's design review offer has also been refined, following feedback from clients, and we have made two significant changes. Firstly, the whole panel visits the site of the proposed development with the design team and local authority; previously it was solely the Cabe advisor. This gives the panel a first-hand understanding of the site context. Secondly, the length of the review has increased from one hour to 90 minutes. This allows the design team half an hour to present the scheme and more time for questions and clarification before the panel comments. This maintains the right pace for a review, while allowing more time for dialogue. As someone who has witnessed the review of hundreds of schemes during my five years as an advisor at Cabe, the feedback from both the panel and presenting teams convinces me that these changes will significantly enhance the quality of the advice given. Capturing this advice in a written report, which represents Cabe's formal advice on the project, remains a vital stage in the process.

Design Review panellists will now be drawn from Cabe's newly appointed network of Built Environment Experts (BEEs), the bedrock of all the services we provide. Three in five of the 250 BEEs are planners and architects, leaders in their respective fields and able to use their considerable experience to advise presenting teams. We are also particularly proud of the fact that the remaining 40 per cent is made up of a diverse range of experts in areas such as law, commercial development, academia, community, and psychology. This gives us a wider pool to draw from than ever before.

Ultimately, the aim is to ensure that regardless of where you live... be it Camden or Bromley, Kensington or Hackney... major development in the capital will be better as a result of London Design Review. Conversations continue with the boroughs but London Design Review has momentum and the buy-in received from both local authorities and the development industry bodes well for the future.

● **Jonathan Freeman, Advisor, Design Review, Cabe at the Design Council**

The Value of Urban Design

National Conference
on Urban Design,
Oxford 18-20 October 2012

This year UDG conference was the most ambitious and the weightiest event organised by the Group in a very long time. Extending over three days and with some parallel sessions, it had over 30 speakers, a masterclass and guided tours, plus the now traditional conference dinner which took place in the wonderful refectory of Pembroke College. The very rich programme was put together and chaired by Louise Thomas and Georgia Butina-Watson, who as head of Oxford Brookes Department of Planning, was the co-host of the conference. The location for the main events on Friday was the very grand Said business School and the smooth running of the three days was the result of hard work by UDG's Robert Huxford and Louise Ingledow. As Issue 126 of this journal will publish the majority of the papers presented at the conference, this report will only briefly summarise and evaluate what was presented and discussed.

GATHERING THE EVIDENCE

From the start, with Yolande Barnes of Savills and Chris Brown of Igloo's introductory papers, it was clear that this was a serious conference intending to get to the heart of the matter and to understand what we mean by value, how we can measure it and achieve it. Yolande emphasised that the relationship between quality and value was not a simple one of physical determinism but a deeper one. For her, new developments cannot give the same satisfaction as established local neighbourhoods for several reasons: the way the value of the house was the only one being measured and not the public realm, the silo mentality of the industry and the business models of land owners (who accrue most of the value). Savills has a series of recommendations for their clients based on a different, more joined-up approach, as they see the world changing and becoming more responsive to locality. After agreeing with most of the above, Chris Brown wondered how free the haloed free market was and how many elements taken into account when measuring value, were really measurable. He thought we should find ways for example, of relating Building for Life requirements to monetary value, and that incentives should be given for quality, such as ranking developments according to quality. He saw an increased role for self-build and for new radical approaches to urban design.

In the debate that ended this first session, urban designers were encouraged to use the free market and economic value to achieve their goals: work with it and use its own tools. Neighbourhood planning may offer an opening though the control of resources is an issue that hasn't been resolved.

Chris Tinker of Crest Nicholson plc was the next speaker, a champion of urban design within a firm that does a lot of mass housing, but wants to maintain a reputation for high design quality and environmental sustainability. His argument is that this policy has many advantages: it helps them obtain higher values, improve their sales rates, broaden their appeal, places them in a differential position in the market place, and more. However, he also outlined the difficulties they have encountered and emphasised that some of their better schemes could not be built in the present climate. Sustainability adds to the challenges they have to face, particularly since the technology is new and very complex. Finally he listed some of the barriers to good urban design quality: the undersupply of housing (which makes any house easy to sell); a competitive land market combined with ill defined planning policies; added initial costs and new lower values, particularly outside London. He therefore emphasised the importance of a strong commitment to quality development at board level.

THE LOCAL GOVERNMENT VIEW

A different, softer approach, was taken by Meredith Evans, former corporate director of Telford and Wrekin Council, who gave a brief history of the evolution of urban design, from obscure beginnings in the 1970s, through the bad old days of 22/80 (a young audience may not know what this means!) and then prosperity, as academia first and government later, discovered its importance. When Meredith outlined current challenges, one in particular – different to what other speakers mentioned – struck a chord: the industry has become complacent and all master plans seemed the same; and as a result, not all feedback was positive. To remedy this and looking to the future, he suggested that theory had to be refreshed and linked to practice, and that links with sustainability should be reinforced. Like other speakers, he saw opportunities in neighbourhood planning and advised: 'tell the story about the place and where it wants to go'.

Simon Eden, Winchester's Chief Executive, also started by looking back at the good years of planning and urban design, but warned that the paradigm had shifted once again and so had the language being used by the industry: 'outcomes' instead of services; doing 'more for less'; 'transforming services', etc. In this climate, urban designers need to talk to laymen in terms of solving problems, and be inclusive: everybody can make a contribution. He gave some tips, probably mostly for those working in local government: learn the language; understand how money is being spent; think laterally; quantify the benefits and remember the politics.This very rich morning ended with a short exchange with the audience and a lunch pause during which participants were able to carry their discussions and network.

ECONOMIC VALUE AND COMMUNITY VALUE

For the first half of the afternoon, participants divided into two groups, one emphasizing economic value, the other community value. The latter started with a participatory game organised by Sophia de Sousa, chief executive of The Glass House. This was followed by two presentations: the first by Mark Ames, a cycling advocate, who sees urban design as fundamental to the safety of cyclists, and therefore campaigns for improvements in the

public realm that take this into account (see his blog on ibikelondon). Then Georgia Butina Watson together with Liz Kessler argued that urban design skills were essential in retrofitting disadvantage neighbourhoods. Their work in EC1 New Deal for Communities between 2005 and 2011, was successful because it was based on sound urban design principles. The process had been complex and sometimes difficult but at the end it had cost less and finished earlier than if it had been done solely by the local authority.

Meanwhile the group concerned with economic value, first heard Alain Chiaradia of Cardiff University presenting work carried out for CABE on the value of design for high streets and correlating success with design quality. His co-researcher, Angela Koch gave an account of improvements on Kentish Town Road. They were followed by Stuart Gulliver of the University of Glasgow and Steven Tolson of RICS Scotland, offering ten propositions to deliver better places in Glasgow, a city he judged as having a poor quality public realm. They emphasized the importance of leadership and of public investment, in order to improve the quality of places and in turn raise market values, and evoked the role that long term land ownership had in achieving these goals. Sarah Milliken of Greenwich University argued for the value of green infrastructure, particularly in the context of climate change. She suggested that in contrast with other design benefits, the costs and benefits of green infrastructure could be measured, for instance in terms of reduction of air pollution (benefit) or tree maintenance (cost), though she admitted that these measurements could be influenced by socio-ethical attitudes. Finally Ian Bentley of the International Network for Settlement Design, described his involvement in the development strategy of the city of Betim in Brazil, where he worked to convince stakeholders of the value of quality public realm and mixed use.

ENSURING THE ROLE OF URBAN DESIGN

Back in the main hall, Matthew Carmona, Professor of planning and urban design at the Bartlett, suggested that as not everybody believed that urban design added value, and since urban designers were a tiny minority of public sector staff (0.02 per cent!!!), evidence had to be found to convince the sceptics. He described four types of evidence – economic, structural, experiential and process related – on which he had undertaken research, indicating that results helped even though they were not always conclusive or measurable in monetary terms. The power of knowledge was a good motivation for further research. Sue Riddlestone of BioRegional argued that urban designers and local communities were complementary and needed each other. She used her own area of Hackbrige in Sutton, designated a Neighbourhood Planning Frontrunner, as a laboratory and showcase in blending urban design and sustainability.

UDG conferences don't often benefit from the presence of another professional body's higher echelons, but this time Colin Haylock current President of the RTPI, opened the final debate of the day. He rightly emphasised the need to embed urban design in local plans and to take advantage of the opportunities given by the legislation. He also warned that local authorities are desperately short of resources and therefore have to lean heavily on the development industry to achieve what they require. Looking back on some of the previous contributions, Colin suggested that urban designers get involved with Design Council Cabe, revive the Urban Design Alliance and work with Local Enterprise Partnerships. Finally, John Slaughter of the Home Builders Federation, emphasised the importance of dialogue between the profession and the building industry.

The day ended up with a visit to Pembroke College's extension led by Peter Newton and Alan Berman, and the now traditional splendid dinner at the same college. Ian Lyne of Place Dynamix was the after dinner speaker who sent delegates away challenged, ready to rest and prepare for the final day of the conference.

FURTHER EXCHANGES

Saturday offered further exchanges on the value of urban design looking at development quality and place-making, with panels of academics and practitioners. Peter Baird presented a Nathaniel Lichfield and Partners project aimed at measuring the built environment aesthetics valued by people in a suburban (garden city) context. Taking a different approach, Trevor Francis of Swansea Metropolitan University considered the cost of poor design and badly undertaken renovation of buildings. Then Dep Upadhyaya of Homes and Communities Agency ATLAS, presented a conceptual approach to the value of urban design as a proposal for the development industry to deliver more sustainable solutions. The last speakers, Stefan Kruczkowski and Paul Collins of Nottingham

Trent University wondered how Building for Life 12 could be used to raise standards and aspirations, but doubted that it should be used as an assessment tool. Jon Rowland, Nicholas Falk and Jonathan Tarbatt delivered a rich discussion on suburbs, place-making, self-build and plots. The morning ended with a panel discussion that drew together the many arguments demonstrating the value of urban design.

WHAT NEXT?

With such a plethora of presentations and ideas, it is far from easy to extract some salient conclusions and recommendations for the urban design profession; nevertheless here is an attempt to do so:

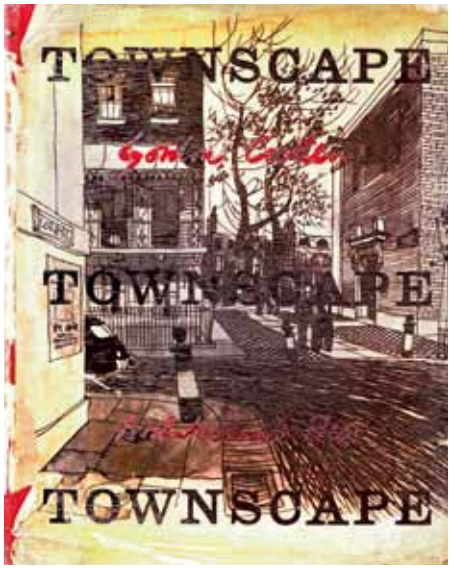
- Some form of measure, preferably economic, is necessary to convince people of the value of urban design
- Early negotiations with stakeholders are essential
- Use the language of the market: 'quality sells'; use examples to prove it
- Long-term investment (private or public) helps to achieve quality.
- Self-build may offer new avenues
- Sustainability and urban design should be friends.

A last thought is addressed to the Urban Design Group: reach out to the non-converted!

● Sebastian Loew
With help from Judith Ryser

The Urban Design Library # 7

Gordon Cullen: Townscape (Architectural Press, 1961)



For over thirty years before his death in 1994, Cullen was a busy consultant completing influential studies, masterplans and urban design projects, such as for the new town for Alcan Industries (1964–68) and, later, the Isle of Dogs in London. His formative years, however, were spent as part of an influential group led by Hubert de Cronin Hastings, the eccentric proprietor of the *Architectural Review* (AR) where in 1946, Cullen was appointed Art Editor. From there he joined forces with luminaries such as painter John Piper, Hugh Casson, architectural director for the 1951 Festival of Britain, writer Nikolaus Pevsner, and iconoclast Ian Nairn, author of *Outrage* and scourge of 'subtopia', those places Nairn derided for their loss of individuality and spirit of place.

The term 'townscape' dates from a 1949 AR article by Hastings. Over the years that followed, Cullen's artistic work for the magazine – including the monthly Townscape column and many other articles – provided rich material for the dense assemblage of photos, plans and free-hand illustrations that characterised the book. The collective gathered around Hastings sought to revive the picturesque, an aesthetic mode of regarding the world that was cultivated in the 18th century by an elite with a taste for foreign travel. While often associated with landscape, as Richard Williams points out in his study on the origins of townscape, the picturesque has also long been accepted as a mode of perceiving the city, with its visual power acting as a means of assuaging urban anxieties.

In the context of the post-war era and the end of Empire, *Townscape* reinterpreted the picturesque as symbolising an English allegiance to freedom and liberty, an alternative to the monumentalism of the Beaux Arts tradition. However, as Williams notes, the AR's egalitarianism existed simultaneously and in tension with a conservative 'aristocratic world-view', where the city as an aesthetic object acted as a source of spectacular pleasure for the privileged observer.

Through numerous case studies of the streets and publics spaces of places such as Shepton Mallet and Basildon, and including Liverpool Cathedral precinct and a re-imagined London Bankside, Cullen explores the 'art of relationship': 'Bring people together and they create a collective surplus of enjoyment; bring buildings together and they can give visual pleasure which none can give separately'. Cullen advocated an artistic approach to using environmental 'elements' including buildings, trees, water, traffic, advertisements and so on, each of which was to be woven together in such a way that drama was released.

In *Townscape*, the environment is apprehended 'almost entirely through vision' and not only acts as a means of navigation but also evokes our 'memories and experiences and emotions.' The key components are Serial Vision – the experience of the city as an uninterrupted sequence of views that unfold like stills from a movie, Place – designing for experience according to the position of the body within the environment, and Content – the colour, texture, scale, style and character. Collectively they add up to the fabric of a place, with Cullen presenting a methodology for urban visual analysis and design based on the psychology of perception, the human need for visual stimulation, and notions of time and space.

Cullen's interest in design as a means of deepening emotion differs from the current fad for 'urban memory' as a means to recreate community, and design peddled as a way to boost emotional 'well being'. Unlike today's purveyors of urban design therapy, Cullen simply expressed the confidence of the age that emotional connection with places was important, and that through their skills, designers could enhance the experience of a place.

Half a century on, a striking aspect of the book is the assurance and self-belief it exudes: Cullen is at ease expressing his worldview via photos and sketches, interspersed with short bursts of explanatory text. This is a marked contrast to today when designers feel the need to justify their work via cold scientific assertions of its 'value', whether carbon, community or cost related. *Townscape* seems at odds with such imposed policy-based formulas for evaluating design. As Norman Foster points out in David Gosling's Cullen anthology, Cullen was notable for 'his untiring jabs at bureaucracy'. Instead he struck a blow for freeing the imagination, arguing that 'we have to rid ourselves of the thought that the excitement and drama that we seek can be born automatically out of the scientific research and solutions arrived at by technical man'.

As is suggested by the use of an English dinner party as a metaphor for the city, Cullen's was a rather bourgeois outlook which was often disdainful of the modern world and mass culture. Emerging industries, modes of distribution – and indeed work generally – were ignored, save for the odd pylon or isolated power station that appealed as aesthetic objects. Instead, the privileged world of play – emphasised through the exotic and the surreal – took centre stage, in the form of quirky signs, oblique pieces of urban furniture, or juxtaposed statues. In *Townscape*'s attempt to address social anxieties of that age, a certain deviation from good manners was encouraged as a means of reinforcing the rules. However, Cullen's attempt to create a 'pleasant degree of complexity and choice' that 'allows the individual to find his personal path' seems generous compared to current deterministic attempts to shape behaviour.

Townscape had an important influence on the way towns were perceived and, gradually, remade – although, ironically, Cullen would later express disappointment that his work seemed to have inspired a 'superficial civic style of bollards and cobbles... traffic free precincts'. Yet there are undoubtedly many who remain, like Norman Foster, 'entranced by the magic of those sketches'. Arguably one reason for *Townscape*'s continuing appeal is that many of its imaginative designs are now beyond the scope of what is permissible. Difficult sites – for example, near water or on steep hills – are now regularly deemed off-limits, either due to environmental controls such as onerous flood risk assessments, or because current mores deem that nature must be protected from human intervention rather than enhanced through it.

Ironically, given that Cullen's 'urban sets' might be criticised as rather twee, *Townscape* seems to capture an age when cities were less sanitised, when nooks and crannies could be planned into a place without *Secure by Design* inspired instructions to secure it through floodlighting or clear it of the wisteria inhibiting a sightline. Culturally, a level of ambiguity within urban environments remained acceptable, meaning books could still contain images entitled 'mystery' and captioned with just a hint of daring, albeit with the requisite dig at modernity: 'From the matter-of-fact pavement of the busy world we glimpse the unknown, the mystery of a city where anything could happen or exist, the noble or the sordid, genius or lunacy. This is not Withenshawe',

● **Alastair Donald is Associate Director of the Future Cities Project, and co-editor of *The Lure of the City: From Slums to Suburbs* (Pluto Press, 2011)**

Read on

Ian Nairn (1959), *Outrage: On the Disfigurement of Town and Countryside* (Architectural Press)
David Gosling (1996), *Gordon Cullen: Visions of Urban Design* (John Wiley & Sons)
Richard Williams (2004), *The Anxious City* (Routledge)

The Urban Design Interview: Colin James

What is your current job and how long have you been there?
I have been Director of Urban Design at LDA Design for the past 5 years.

Can you describe the path that you followed to become an urban designer and what motivated you?
In one of my earliest architecture projects I created a place in front of an office building that could host informal traders. My delight at seeing it taken up as intended was dashed when the developer fenced it off. He was concerned about its impact on property value and considered my design to have overstepped the brief. It was an experience that made me realise that to be more effective in shaping the environment in the way that felt most meaningful to me, I needed to move into urban design where I would have more of a stake in setting the agenda.

What do you find exciting about your work?
I have always been fascinated by how society shapes cities and equally how cities shape societies. So it is a great privilege to earn a living by playing a part in this dynamic and bringing a creative influence to bear.

What do you think are the most important skills of an urban designer?
Empathy for people – to be able to subjectively understand the urban environment through the lives of those it affects. And empathy for place – the ability to 'feel' urban space as it is, and as it could be.

What would you like to be doing in ten years' time?
Continuing on the path that I am on – it's a great profession.

As an urban designer, do you have a role model?
My role models are the studio leaders who I was lucky enough to have in my first real job as an urban designer – Martin Crookston and the late David Walton. Their passion, knowledge and generous spirit remain an inspiration to this day.

If you were to recommend an urban design scheme or study (past or present) for an award, what would you chose?
The great on-going and ever inventive urban project that is Barcelona.

The historic city holds invaluable lessons, from the vibrant Las Ramblas to the large perimeter blocks, gridded streets and chamfered corners of the Eixample district.

But it is the contemporary works which I find particular worthy of merit. They include the well documented Olympic transformation that reoriented Barcelona towards the sea and the on-going commitment to a liveable compact city, through a focus on brownfield regeneration. And of course, the continual inspiring programme of 'urban acupuncture' that has left a legacy of high quality public space, renewed covered markets and local resources in every neighbourhood.

Most recently I've been fascinated by watching the changes taking place in @22 Barcelona. Enabled by new infrastructure, this regeneration project is focussed on a very deliberate and precise land-use programme. It aims to co-locate appropriate business to shape a vibrant symbiotic hub that will help establish the city as a European leader in the creative and IT industries. Most interestingly, this mixed use area has also been set up as an 'urban lab'. It allows the city to be used as a test-bed by the private and public sector for new forms of infrastructure and services.

Where is your favourite town or city and why?
I am in love with London. A modern city that is alive with seemingly endless urban conditions that never fail to amaze and inspire. And its on-going changes and challenges seem to be the very embodiment of the struggle for a modern cosmopolitan urban model.

Where is your most hated place and why?
It's not a place, but rather an attitude to place. I am no fan of walls. From personal experience of growing up in Johannesburg, living in Belfast, working in Palestine and touring in Nicosia, I am clear that in every form they take – from 'peace lines' to gated communities – walls are insidiously anti-urban.

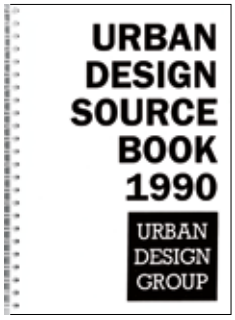
Of course where things are changing, the impact is profound. One of the most rewarding projects I've worked on was for Christopher Carvill, an inspiring Northern Irish developer who saw in regeneration the potential for wider and meaningful change. On the Sirocco site, we worked together to build a new piece of Belfast city between two separated communities. With streets that radiated inwards towards a central community square, it sought not to keep them apart, but instead shaped the urban form that would bring the communities together. The masterplan embodied the conviction that the public realm is the essential space where we all get to meet and know the archetypal 'other'. And in so doing, it is the space where we formulate a more generous and open understanding of what society is, of what we want it to be and of our place in it. Great cities – open cities – are always liberalising.

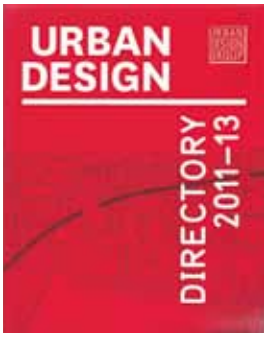
What advice would you give to UD readers?
To always bring your own values to bear on whatever is the current political urban agenda.

What should the Urban Design Group be doing now or in the future?
I would like to see it help urban design evolve into a recognised profession.

Finally, who would you like to see interviewed by UD?
It's a pity the urban anarchist Colin Ward never made an interview; he offered enlightened thinking on informal settlements and the urban poor.

→ Inclusive vision for the Sirocco site, on the interface between the Short Strand and Newtownards Road





Some Reflections

John Billingham looks back at his involvement with the UDG and hints at what the group should do in the future

After studying architecture and planning at Manchester, Toronto and Philadelphia (with Lou Kahn) I knew that my interests lay in the wider urban framework, and work in Manchester and later in Sheffield confirmed that view. My active involvement with the UDG began at one of the early committee meetings chaired by Francis Tibbalds. I had recently moved from Irvine Development Corporation where I was Chief Architect Planner, and where the role of urban design in providing structures for new communities was an essential part of the process. I wasn't at the first meeting at the RIBA in 1978 as I was still working in Irvine, but shortly afterwards moved to be City Architect and Planning Officer at Oxford which enabled me to travel to meetings and events in London. At the time, 70 people expressed an interest in joining the new group; about seven of them are still members today.

I have always been concerned about members outside London who cannot travel

to many events in the capital. So early on, as a member of the Executive, I undertook the responsibility of developing links to the regions. One product of this initiative was the organisation of Urban Design Forums: the first three were held in Bath, York and Liverpool with between twenty and forty people attending.

URBAN DESIGN JOURNAL

The journal began as an initiative developed by Francis who produced fine summaries of the conferences that were held in most years. However, as the journal grew in importance as a means of contacting and developing the membership of the group, the need for an editor became apparent. Mike Galloway took on this role but before long, he moved from London to Glasgow and a replacement was sought in 1987. As I had already been an editor with *Architecture North West* (at the same time as Keith Ingham, who played an important part in the UDG's activities and organisation) and later when working in Sheffield, with *Yorkshire Architect*, it was a role that I felt I could take on and develop. Comparing the size and appearance of a regular issue of 1986 containing some 15 pages, to a current one shows that it was the right decision.

The production technology has changed significantly from the original paste-up through to word processing, into colour printing. It originally used the resources of people working in offices such as DEGW; then from issue 53, a graphic designer, Simon Head, was introduced to design a template that others could use. In 2003 Claudia Schenk was selected through a design tender, and became the journal's designer from issue 91 onwards.

During part of this time I was working with Milton Keynes Development Corporation, and when the government wound it up in 1992, I was able to get involved in other aspects of the UDG's programme, as explained below. At one stage we used Cathedral Communications (who produced the journal of the Institute of Historic Building Conservation (IHBC)), but soon realised that the Group would be financially better off managing the printing directly, and started doing so about five years ago. It all sounds so simple but it really wasn't and we are now on our fourth printer. The evolution of the journal can be seen on the bottom of the pages in issue 100. Sebastian Loew became joint editor in 1996 and when I stepped down in 2004, Louise Thomas agreed to join him.

OTHER UDG ACTIVITIES

Since teaching architecture at Manchester and working on that city centre's plan, urban design education has always been an important part of my interests; later in 1997, an active education working group set up a number of initiatives which were published in issue 64 of the journal. As part of that group's work, I carried out a survey which showed that over 200 students were enroled in the 12 courses that returned information. This is an area where statistics are not currently available and the UDG could be leading the field in providing accurate and up to date information. Without these it is difficult to make considered submissions to other bodies.

Jon Rowland together with among others Mike Gwilliam, Director of the Civic Trust, saw that a body that linked the interests of all the built environment professions would have benefits; thus the Urban Design Alliance (UDAL) was created in 1997 to bring together the professions involved in urban design. In many respects this strengthened the idea of joint working, even though, to some extent it diminished what the UDG might have achieved through creating its own partnerships with individual professions. Jon Rowland had already established other joint initiatives with the RIBA and RTPI which resulted in events, but these were then overtaken by the RTPI developing its own conference arm which included urban design as one of its topics.

A recurring theme in urban design (and the subject of issues of the journal such as UD49) has been the work with local communities. The UDG was involved in Urban Design Assistance Teams in London and Plymouth, and I took part in a trip organised by Arnold Linden, that went to the Russian town of Pereslavl (as recorded in UD41). This work with communities eventually led to research supported by the DETR and published by Nick Wates, initially in the journal (UD67), and then in separate publications. Community involvement is now in greater demand than ever, and the UDG could consider ways to contribute to it.

Rob Cowan, the first director of the UDG office in London, and author of a number of

publications, widened the work of the Group in conjunction with UDAL. Publications by the Group included *The Good Place Guide* in which Richard Cole and I developed an idea first put forward by John Worthington, of identifying good places. It initially appeared in UD 75; then Tom Neville, editor of B.T. Batsford, agreed to publish it with expanded material and in 2002, this emerged as a book designed by Claudia Schenk.

For many years, overseas visits have been part of the UDG programme, established by excellent annual study tours organised by Alan Stones. Sebastian Loew and I wanted to extend this to other locations involving current urban design examples; as a result, I arranged overseas visits to Copenhagen and Ljubljana, as well as being involved in one run by Graham Smith, mainly to Holland to study *woonerven*.

THE URBAN DESIGN DIRECTORY AND AWARDS

The intention behind the *Directory* was to produce a biennial publication which would generate income for the Group, as well as publicise the work of practices to people outside it. It followed on from the *Urban Design Source Book* which first appeared in 1990 and included the activities of the Group, listed practices and courses and provided an index to the journal. The last *Source Book* in 2004 included illustrations of the work of four practices in order to test whether that idea had possibilities. Following a positive reaction, the first *Directory* was published in 2006 and included the work of 46 practices.

The idea of awards grew out of the desire by the Editorial Board to publish examples of urban design work as part of the journal's coverage; the approach taken many years before by *Architectural Design* in featuring proposed schemes, had a strong influence on ours. The fact that the Francis Tibbalds Trust was prepared to fund prizes in some of the categories, strengthened the proposal; the Trust was then restructured in order to support these objectives. At first submissions from practices were invited to compete for the awards; later these were extended to include publishers, students and local authorities and led to an annual awards event.

OBJECTIVES

Why did I invest so much of my time? I believe that there continues to be a need for a professional group concerned with how the parts contribute to the whole. As eloquently expressed by Michael Wornum, architect and former Californian politician: 'We, the design profession believe that a society's welfare is enhanced by a beautiful environment, and yet we are the first to scream at any abridgement of our rights to design in complete freedom and in complete disregard for others' freedoms. It should be axiomatic to those in environmental design that the whole is greater than the sum of its parts. The only way to achieve that whole is to voluntarily accept restraint in our absolute right to design the parts'.

ADVICE FOR THE FUTURE

I believe the UDG should consider the following:

- Producing a UDG timeline showing major activities and achievements over the years; this would be invaluable to appreciate what has already happened and to assist in projecting future possibilities for the Group.
- Convening a general meeting of the Group's members – or at least a wider representation than the executive – to obtain views about future directions. Two such meetings have been held in the past to debate policy, the last as long ago as 1995.
- Following the example of the IHBC in forming an institute – without the panoply required to become a full professional institute with Privy Council approval. The IHBC is a group about the same size as the UDG with members spread across the whole country.
- Continuing to take a lead on urban design education and maintaining a record of student numbers, including those from other countries, to enable the Group to monitor changes that are being introduced. Only by doing this, can the UDG become an authoritative reference on education for which no other comparable UK body appears to exist.

● John Billingham

Conquistador towns

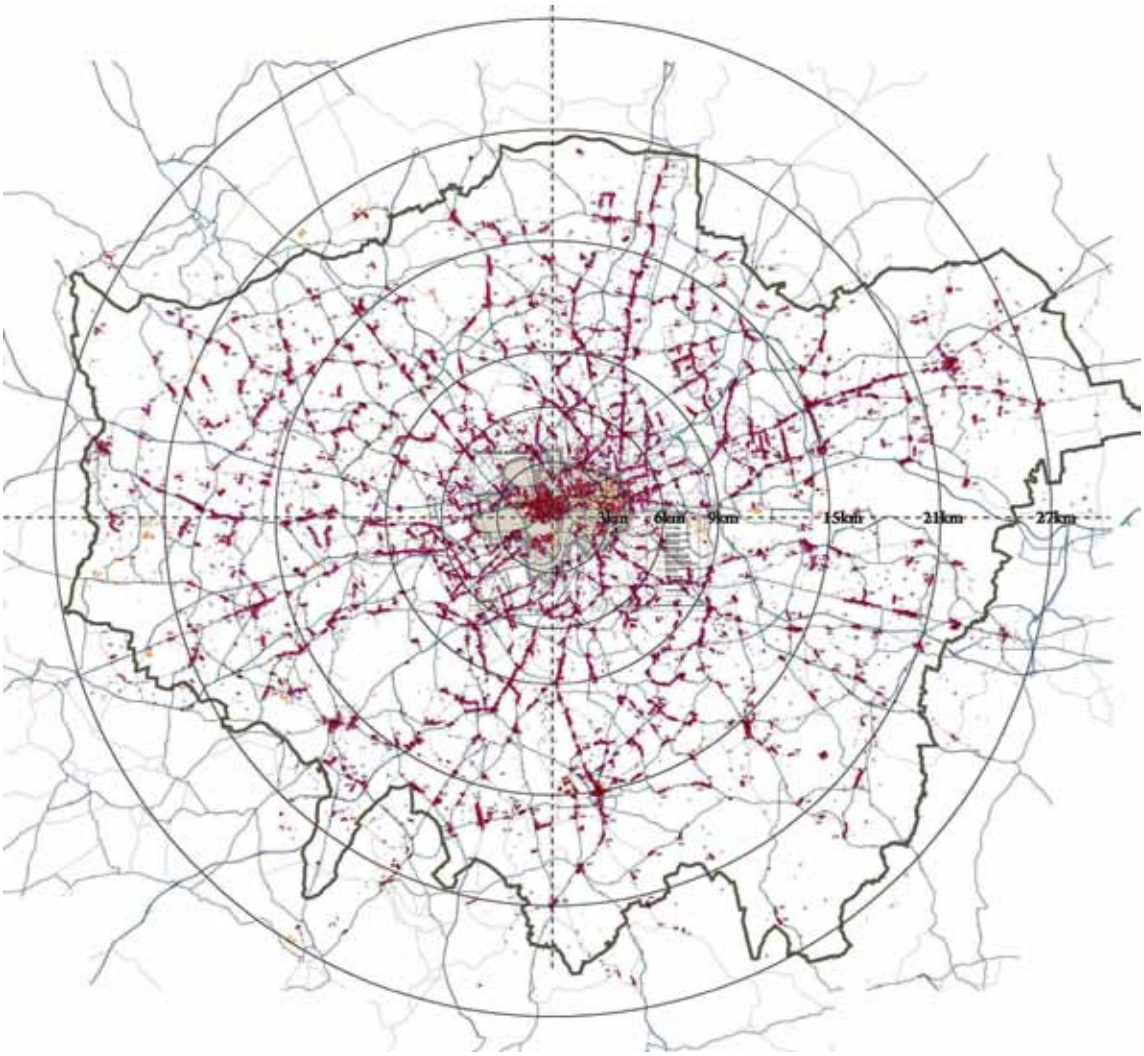
Urban Design Group Study Tour
11 -19 May 2013

The likes of Trujillo, Cáceres and Jerez de los Caballeros in Extremadura were the birthplaces of Pizarro, Cortes, Balboa and their henchmen. They deployed the wealth of the Indies in gracing their home towns with many fine mansions, but since their heyday these towns have reverted to the obscurity from whence they came. We shall also be visiting the dramatic cliff-edge town of Cuenca and Toledo, capital of medieval Castile.

The price of £900 (£860 for UDG members) includes rail travel from London, travel around the towns by coach and train, and eight nights' accommodation in tourist class hotels.

Further information can be obtained from Alan Stones, Fullerthorne, Church Street, Kelvedon, Essex CO5 9AH, email a.stones907@btinternet.com, or phone 01376 571351. The last booking date is Friday 15th February 2013.

MIXED STREETS



↑ Revealing London's mixed high street corridors through mapping retail and office use

Working on a project for Design for London some three years ago, the amazing potential of the mixed street corridors that still interlace and connect up our traditional cities really came home to me. The project involved mapping the city's local mixed/ high streets outside central London, and conducting a series of case studies to get under the skin (or more correctly behind the façades) of these streets to fully understand their complexity and potential. To give some headline findings from the study:

- London's local high streets support more employment than the Central Activities Zone
- Half of London's brownfield land is on or within 200m of a high street
- Two thirds of Londoners (5 million people) live within a five minute walk of a local high street.

London's local high streets account for just 3.6 per cent of the city's road network, but represent some of the most important spaces in the city, with significant strategic growth potential and critical local

significance. At the same time, they are also some of the most neglected, congested, polluted and complex spaces in the city, and for this reason, often languish on the 'too difficult to handle' register[1].

The intention of bringing this topic together was therefore to explore how research and practice, both here in the UK and internationally, are responding to the huge opportunities and challenges associated with these spaces. The issue includes two contributions that explore them conceptually. The first explores Multiple Centrality Assessment as a tool to map the centrality of urban street spaces (existing and new) in order to reveal those most likely to support complex mixed use. The other (p.17) follows with an analysis of London's suburbs which demonstrates both the great interconnectedness of traditional suburban high streets, and the diverse mix of activities (not just retail) that this has given rise to, and which these streets still support. In between, the US Complete Streets initiative is discussed showing that the problem of change is not merely a technical one, but instead represents a much more complex and profound political and cultural challenge.

Next come four international case studies where the huge strategic potential of these mixed corridor spaces is being debated and/or actively harnessed as part of the strategic design of cities. The case of Melbourne illustrates an attempt to use mixed urban corridors to re-direct the city away from suburban sprawl and back to urbanity. Auckland demonstrates the universal technical and professional barriers that need to be overcome in order to think differently, and how through the right process, professionals can be nurtured out of the safety and security of narrow technical thinking. In Berlin, the city's radial routes are being mooted for just this sort of thinking, as the focus of a new international competition to explore the sustainable future of these spaces and the peripheral city at large. Finally, in the US, the commercial strip is being re-thought as an over-supply of retail nationally, and the carbon reduction imperative is leading to a radical re-thinking of these most American of city spaces.

The topic concludes with two papers taking an explicitly local view. In Bradford the complex social dimension of mixed streets is explored, and the need to adopt intervention strategies that have at their heart a recognition of the complex needs and agendas of the sorts of multi-cultural businesses and communities that now inhabit these spaces. Finally, we come back to London to explore the High Street 2012 project. This has aimed to inject creativity into the everyday complexity of one of London's arterial high street spaces, from Aldgate to Stratford, and demonstrates that incremental rather than comprehensive change, is likely to be the most effective route to realising the potential of these vital urban arteries. ●

● **Professor Matthew Carmona, The Bartlett School of Planning, UCL**

Reference

1 Carmona M, Davies M, Scott F, Gort J & Haward M (2010) *High Street London*, Design for London, LDA

MULTIPLE CENTRALITY ASSESSMENT

Sergio Porta and his colleagues apply a computer based methodology to mixed use streets

Milan

Geneva

Lancaster

↑ Street betweenness centrality in three cities (red=high, blue=low)

Non-residential economic activities are the heart of mixed use streets. That makes mixed use streets extremely difficult to plan and develop as the activities they support require certain conditions to flourish. Those conditions, in turn, depend on spatial as well as non-spatial drivers, and equally they depend on each other. Like the emergence and evolution of living organisms, that of mixed use streets goes through an infinite succession of individual and collective initiatives, the vast majority of which are destined to fail due to adverse environmental conditions. Managing such conditions is the only chance that designers have to influence the development and evolution of mixed streets in their plans.

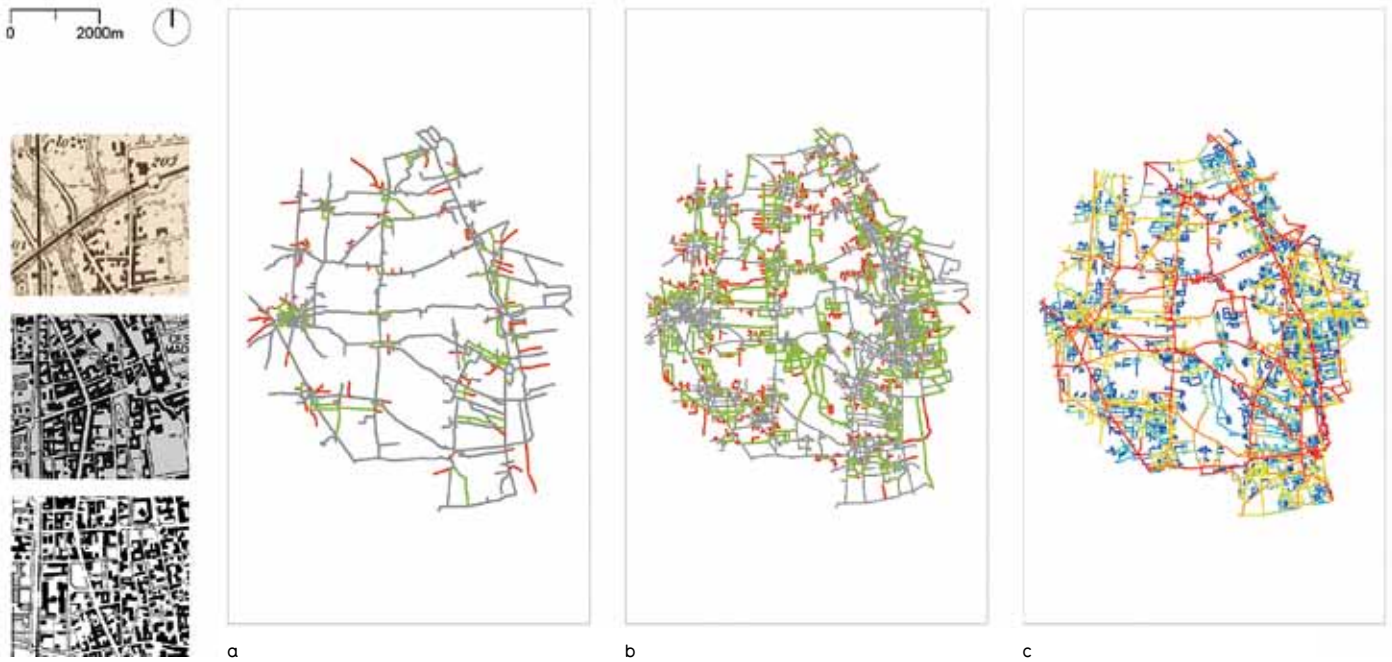
One of the most profound spatial determinants of non-residential uses in cities is street centrality. Multiple Centrality Assessment (MCA) is a computer-operated procedure for mapping the centrality of urban streets and spaces. It applies to spatial cases a set of methods drawn from research into the physics of complex networks in nature, society, culture and technology which emerged in the late 1950s and have gained momentum since the 1990s. Centrality is a critical element of the structure of all complex networks; its importance in spatial networks has been widely acknowledged in geography, transportation planning and regional analysis, as linked to a notion of proximity. In urban design, since the mid 1980s, Space Syntax has developed a wider understanding of centrality in urban systems. The MCA has re-interpreted these as a special class of complex networks. In both, centrality goes beyond proximity, dealing with how people experience and navigate the system of streets and intersections. The importance of street centrality for urban designers and planners is twofold: it influences collective behavior – impacting on key-dynamics such as real estate values, land use and crime; it is a primal factor in development and evolution of city form over time.

THE MCA ANALYSIS OF CITIES

In the MCA of street patterns we developed evidence-based knowledge at the interface between form and use of the public realm in three main areas: the structure and evolution in time of street networks; the correlation between street centrality and location of economic activities; and the structure of space – either external (not necessarily streets) or internal to buildings.

We first applied MCA at city scale to comparative studies of dozens of cities highlighting and distinguishing non-planned from planned street patterns, up to a classification of cities, and identifying common universal patterns as well as specificities of the urban form.

We then looked at the evolution of street networks in time, by analysing the process of urbanisation of a 125 km2 suburban area close to Milan, Italy over two centuries. We found a dynamic of spatial fragmentation that follows two distinct patterns, one of densification and one of expansion (exploration). Remarkably, the structure of very central streets tends to remain constant in the long term despite substantial economic, cultural,



technological and demographic change.

Also significant is the close correlation between centrality and the location of different categories of economic activities; correlation emerges in most different physical, cultural and economic contexts. Surprisingly, however, we found that in cities as different as Bologna, Barcelona and Glasgow, primary activities (eg. rare and specialist shops and services) tend to cluster around central streets, but secondary activities (eg. mainstream shops and services of daily use) require all the centrality they can get, and cluster around peaks of centrality even more than primary ones. MCA captures here a deep determinant of urban form, evolution and life.

MCA IN PROFESSIONAL MASTERPLANNING

With most significant masterplanning projects, unless they are in existing city centres, the majority of uses are residential. The commercial rule-of-thumb ratio of retail demand to residential numbers is surprisingly high at between 660:1 and 1,000:1 units. Furthermore, as developments progress at sales rates of 2.5 to 3 units per month, the time taken to create this critical mass can be considerable. Experience has shown that well-located small commercial units, clustered and associated with housing, can contradict negative market predictions based on a simple assessment of supply, without reference to context. Recent investigation into residential sales potential has also shown that sale by location would ideally include proximity to local shops. This indicates that there might be financial justification for subsidising retail outlets at early stages of development in order to create active streets. Mixed use and active streets can, therefore, contradict conventional market assessments, and confirm the widely observed benefits of mixed use and active streets in creating a sense of place and an attachment to that place, the symbiotic relationship between these uses and the social advantages of locally shared facilities.

If the advantages are to have credibility and if the allocated uses are to survive, the location of the uses has to be effective. Centrality and the best location for street activity are often relatively clear but it can be hard to persuade land-holders or regulatory authorities concentrating on immediate return or rigid regulation. With a scientific tool such as the MCA not only can the best location for active streets be more clearly identified and fine-tuned but can be demonstrated with clarity and effectiveness.

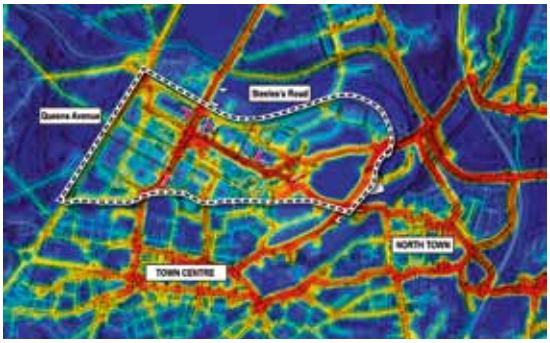
Recently ADAM Urbanism has partnered the Urban Design Studies Unit at University of Strathclyde under the EPSRC-Knowledge Transfer Account programme to study the capacity of MCA in professional urban design. As part of this experiment, MCA was applied to the masterplan of Aldershot, UK. The project is for a new mixed use residential development of around 3,800 homes. The 148 hectare site is surplus military land owned by Ministry of Defence. The scheme will provide community facilities, schools, local centres and leisure uses. The plan will include the restoration and conservation of several historic buildings, including the landmark Cambridge Military Hospital. The masterplan is structured on a strong network of well-connected streets and spaces linking the development to the wider area. In this approach, the hierarchy of streets, as nicely captured by MCA, plays an important role in sustaining a variety of uses. Queen's Avenue, the central North-South axis, is the main mixed use street within the masterplan: the neighbourhood centre, a hospital, two churches, a school, shops, offices and houses are facing this street. Another mixed use street is Steele's Road. It intersects Queen's Avenue in the main square of the new development where the neighbourhood centre is located and it is characterised by the presence of a school, offices and houses.

> There might be financial justification for subsidising retail outlets at early stages of development in order to create active streets

Mapping the density of betweenness centrality in Aldershot shows that the global connectivity of the area improves in a natural manner that

↑ Evolution of street network in the Groane area Milan
a) Grey: streets in 1833, green: new streets in 1914, red: new streets in 1914,
b) Grey: streets in 1980, green: new streets in 1994, red: new streets in 1994
c) Street betweenness centrality in 2007, red: high centrality, blue: low centrality

→ Aldershot: density of betweenness centrality in the proposed masterplan (dashed boundary), with location of mixed use buildings (purple) along main streets
↘ Aldershot, UK, image of the proposed development along a main street



● Sergio Porta, Ombretta Romice, Paola Pasino, Gianpiero Bianchi, Urban Design Studies Unit, Department of Architecture, University of Strathclyde, Glasgow, UK
Emanuele Strano, LASIG Laboratory, EPFL Lausanne, CH
Alessandro Venerandi, Civil Environmental and Geomatic Engineering, UCL London, UK
Robert Adam, ADAM Urbanism, Winchester, UK

adds potential to the social hub of the proposed development: the new neighbourhood is better connected with North Town through a West-to-East axis (Steele's Road) and the good connectivity of the North-South axis (Queen's Avenue) is kept the same. Moreover, it clearly highlights the importance of these streets as optimal locations for a mix of different functions as proposed in the masterplan: in this case, the MCA analysis confirmed and supported the design choices.

CONCLUSIONS

The MCA analysis of urban streets and spaces has demonstrated a high capacity to capture their potential to develop into mixed use urban environments. As such, it has been applied as a supporting tool on masterplans designed by ADAM Urbanism in several real professional cases. MCA confirmed and justified a series of design choices regarding the generation and character of mixed use streets and enabled the team to select the most desirable option from several alternatives.

Work continues on the research front at University of Strathclyde as well as on the professional front at ADAM Urbanism, looking at the best methods for presenting the MCA to prospective commercial and regulatory users. MCA's potential lies in how it combines with other more established types of analysis, and how to easily explain its benefits to commissioning bodies, without the recourse to technical language. Currently, presentation techniques are being tested on various client groups and the development of appropriate terminology and case studies is under way. ●

COMPLETE STREETS: MORE THAN A NEW DESIGN

Barbara McCann suggests a new approach to street design

→ Typical incomplete street in the United States (Joan Hudson)

The Complete Streets movement has swept the US over the past few years, as more than 400 jurisdictions have adopted Complete Streets policies and many more have discussed the concept. Yet the true meaning of the term is often misunderstood, leading to an ultimately fruitless search for the ideal complete street. Those searching for the ideal project may miss the real transformative power of the Complete Streets movement.

In the US, the norm has long been the incomplete street. The US transportation industry was deeply influenced by the massive project of building the Interstate Highway system – a network of 47,000 miles of limited-access freeways that knitted the country together in the 1950s and 1960s. Solving the design and safety challenges in creating this system set an orientation that persists to this day in US transportation planning and design. The goal of transportation projects is usually assumed

to be a reduction in automobile congestion while speeding travel; design manuals are primarily aimed at moving cars; and the most common measure of success is automobile Level of Service (LOS).

This has resulted in quite a number of spectacularly incomplete streets, particularly in suburban areas developed alongside the interstate system. These roadways host significant numbers of pedestrians and often public transportation users, yet these travellers are relegated to a path trampled in the grass, or a dash across a street that far too often results in death or injury.

For decades some transportation professionals and citizens have been trying to solve this problem, suggesting innovative street designs, fighting for inclusion of bicycle paths and sidewalks and finding funding and support to build a few beautiful boulevards. Yet the project delivery system always seems to revert to producing incomplete streets – roads that fail to take into account all the users of the corridor.

The problem has been seen as a technical one: many an engineer has complained that what stands in their way are restrictive design standards. They say design manuals, particularly the national manual that is known ironically as the Green Book, won't allow narrower lanes to accommodate other modes, and require a certain level of automobile capacity at intersections to avoid an LOS grade of F. Worse, any proposal to deviate from these standards is believed to present a safety hazard – and a potential liability problem.

Defining the problem as a technical issue – in a field tightly bound by technical specifications – has locked out citizen input and innovation. The focus on the project level has meant that creating multi-modal streets has required putting tremendous effort into each project, pushing against the headwind of standard practice.

LOOKING DIFFERENTLY

The Complete Streets movement defines the problem differently. In this view, the primary problem is a political and cultural one. If transportation agencies are on auto-pilot, still solving the problem of building roads only for automobile capacity, the leadership of the community needs to be very clear that they now have a different problem for transportation professionals to solve. If practitioners are trying to change old ways from within to ensure that roads serve everyone using them, they need tools to help the community to understand, affirm, and support the new approach.

The Complete Streets movement focuses on encouraging community and agency leaders to create, pass, and implement multi-modal policies at the state and local level. These policies most often start out in the form of a non-binding resolution, but include local ordinances, state laws, and internal agency directives. What they all have in common is this: a simple declaration that all future projects undertaken by the agency will accommodate all users of the roadway. Often these users are listed and include people of all ages and abilities who are walking, riding bicycles, and catching public transportation, as well as operators of public transportation vehicles, automobiles, and even freight.

The National Complete Streets Coalition has developed a list of ten elements in an ideal policy[1], but the simple core commitment is essential. The process of making it sparks community discussions that allow engineers and citizens alike to weigh in. Once the commitment is made, it serves as a compass bearing toward a new direction in transportation planning and design.

But the question still gets asked: what does a complete street look like? The Dubuque Iowa Millwork District Complete Streets project offers an example, bolstered by a $5.6 million federal grant focused on creating a complete street network in the neighbourhood. Many of the changes were in the details: the area now features revamped utilities and human-scale features to make the streets more accessible for public transport riders, cyclists and pedestrians, including wheelchair users. It also has been designed for stationary street users, including a portion of the network designed to be closed to cars, to create a space for public gatherings. A major goal of the project was preserving the district's historic character, so old rail tracks were incorporated, and somewhat ironically trees were left out because they were not a part of the original fabric of this industrial centre! These decisions may run contrary to typical prescriptions about creating modern streets, but the hallmark of a Complete Streets approach is that it is not prescriptive, but is responsive to community needs.

Most places adopting a Complete Streets approach are doing so without large government grants. Often they are simply making relatively small changes to a wide variety of projects using existing funds; in fact, an Indianapolis City Council member speaking in support of a proposed policy recently called it 'a plodding kind of change'. Since Complete Streets policies generally cover all future transportation projects, they often result in incremental change and in making the limited improvements that are possible given current funding levels. But as Councilman Jay Jenkins continued 'things won't change overnight, but [Complete Streets] is an achievable goal'.

ROAD DIETS

One commonly used technique in implementing a Complete Streets policy is the road 'diet' or road

↑ Incomplete streets create a significant barrier to using public transportation

↑ Dubuque project: pedestrian-scale amenities, preserved historic rail tracks and a smooth surface for bicycle riders (City of Dubuque)
↑↑ East Boulevard road conversion in Charlotte (Charlotte Department of Transportation)

conversion. While there are many variations, the most typical conversion redesigns a four-lane undivided roadway into a five lane road, with two through automobile lanes (one in each direction), a centre turn lane, and two bicycle lanes.

Working out how to do this may seem like an entirely technical problem to a transportation engineer. But as shown by the experience of Charlotte, North Carolina, getting the first road diet built meant overcoming community and political barriers.

Charlotte, a mid-sized but rapidly growing city in the South, adopted their Complete Streets approach in 2006, with a visionary *Transportation Action Plan* that was expanded into award-winning *Urban Street Design Guidelines*. One of their first and most challenging large projects was the conversion of East Boulevard, a busy four-lane undivided roadway with many business uses and high pedestrian and bicycle traffic. The roadway had automobile speeds well in excess of the posted limit, too few designated pedestrian crossings and a significant number of non-motorised crashes. To create a safer, more inviting environment in line with residents' interests, the city planned a road diet, with several new pedestrian crossings and carefully designed pedestrian refuge islands. Research shows that such diets reduce speed and conflicts, as fast-moving cars can no longer slalom through traffic and left-turning vehicles have clearer sight-lines. Bicycles and pedestrians also have a safer place to travel.

The challenge in converting this roadway was in convincing a sceptical public that fewer automobile lanes wouldn't result in perpetual backups. The local paper ran a disparaging editorial cartoon when the idea was first raised, before the Complete Streets policy had been formally adopted; during and immediately after construction residents expressed dismay in public forums at the unfamiliar design; the term 'road diet' wasn't going over well on what was known as a busy roadway. Yet the project proceeded because of consistent support from the city's leadership, and careful outreach by the agency's staff that brought many residents on board. The neighbourhood was consulted on the project every step of the way. The diet concept was counter-intuitive and required lots of explanation – and plenty of photographs. The agency also documented the project's success: once the conversion was completed, they compared before and after measurements to confirm that the project reduced speeds and traffic crashes. Positive comments about the conversion began to surface from citizens and the media, and particularly from the bicycle community, one lesson for subsequent projects being to change the term 'road diet' for 'road conversion'.

Charlotte has continued to use road conversions as one tool in their Complete Streets toolbox under the slogan 'We can't keep widening our roads, so we have to broaden our thinking'.

NOT BETTER DESIGN, BUT BETTER PLANNING

Such broadened thinking is the key to the transformative power of the Complete Streets movement. The innovation is not in new designs, but in new ways of approaching transportation planning. Places with successful Complete Streets policies have re-examined their day-to-day procedures and changed them to ensure the needs of all users are taken into account as a matter of course. They have trained personnel in how to achieve a balance for the mix of users on a particular street. They have usually made changes to design manuals, and they are coming up with new ways to measure their success.

In fact, the main innovation in Charlotte's *Urban Street Design Guidelines* is not in the designs themselves, but in a new six-step project development process which ensures that planners and engineers are thinking about all users of the road network during every step in the planning and project delivery process. Half of the US states have adopted policies, but not all have yet embraced the deep institutional changes that a Complete Streets approach requires.

Communities will continue to celebrate and point to certain signature roadways as Complete Streets. But the true success of the Complete Streets movement in the United States comes as multi-modal streets become more and more routine – and the practice of building incomplete streets comes to an end. ●

● **Barbara McCann, McCann Consulting, former Executive Director, National Complete Streets Coalition**

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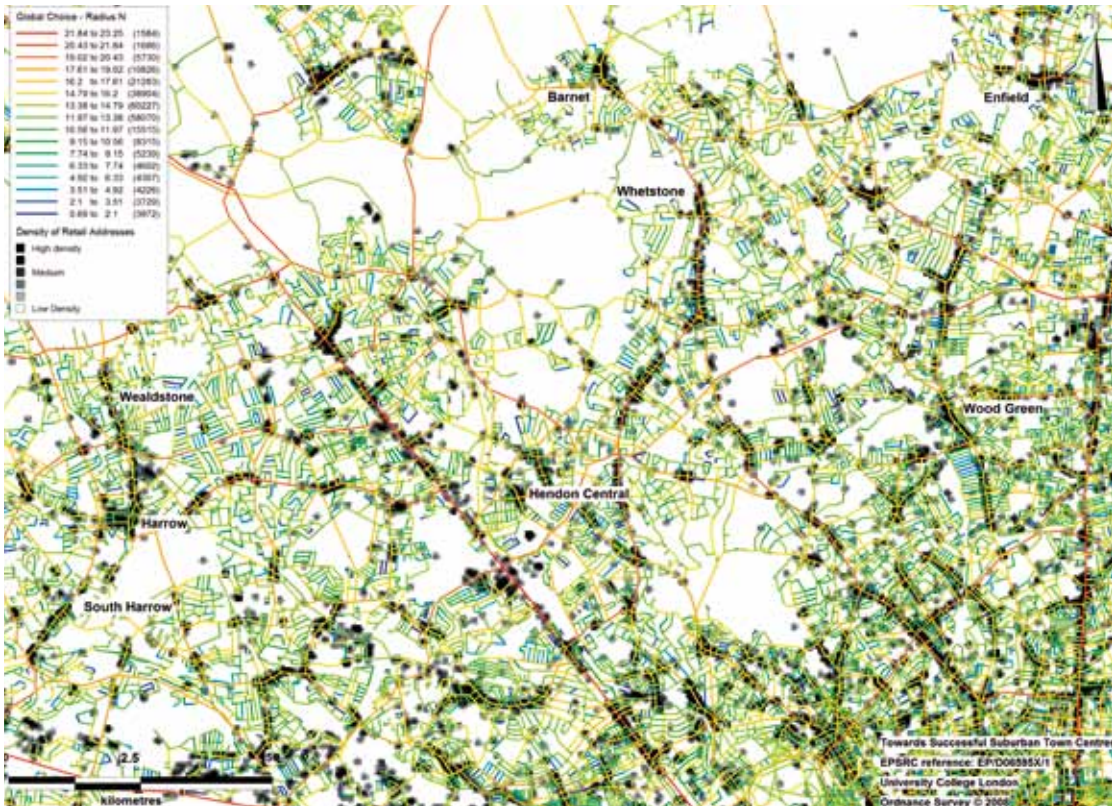
A SUBURB IS NOT A TREE

Laura Vaughan and Sam Griffiths analyse the evolution of suburban centres



Christopher Alexander famously proposed that urban centres work to form a lattice of overlapping sets of socio-spatial systems. Despite this, there is still a prevailing view that town centres are best viewed as part of a rank-ordered hierarchy. Such representations are rarely value neutral since they are typically assembled using statistical measures such as retail or commercial floor area that inevitably emphasise the primacy of large centres. The danger of policies premised on town centre hierarchies produced in this manner is that they risk creating a self-perpetuating cycle of decline in which smaller centres that are less attractive for big businesses will be increasingly perceived as falling behind, reinforcing the argument for ever-increasing centralisation of shopping activities.

In opposition to hierarchical or polycentric models of cities such as London, the urban theorist Bill Hillier has proposed the alternative notion of 'pervasive centrality' to explain how town centres function at all scales and in all sizes throughout the urban street network. Recent EPSRC-sponsored research at UCL has investigated sources of socio-economic sustainability in London's outer suburbs. It has suggested that pervasive centrality helps maintain an interdependence between spatial, social and economic factors within cities.

Our research found that reductive approaches to measuring 'town centeredness' in terms of market catchment tended to disregard the complex socio-spatial conditions that sustain mixtures of land-uses in local centres such as Chipping Barnet, South Norwood and Surbiton which are frequently dismissed as being purely retail centres, despite the data available to refute this notion. We propose that the long-term viability of such centres arises from their ability to support a mixture of different land uses that are positioned so as to take advantage of their position in the network.

Although London's outer suburbs are no longer manufacturing hubs, local business and small-scale industrial activities are often located in proximity to the centres. Their presence is indicative of the continuing economic and social importance of the suburbs as places of work. Our fieldwork revealed small workshops, garages and other minor industrial activities to be characteristic features of the suburban landscape. Tucked away in courtyards or in back streets (as opposed to isolated industrial parks) they help to sustain an interdependent mesh of production, services, offices and shops, which as an ensemble serve to generate movement around and through the town centre. The *High Street London report* confirms this picture, noting that behind the relatively stable street frontages are buildings described as more 'transient and temporary'. The size of units also allows for adaptability, in that a smaller unit can change usage without costly structural change. This is less in evidence with big-box supermarkets that typically

↑ Density of retail activity overlaid on London-wide accessibility

↑ Glass studio, Chipping Barnet
↑↑ Polish convenience store, South Norwood

interrupt the regular intervals of doorways and windows along the length of the high street.

MIXED USE AND MEASURES OF SUCCESS

It is often assumed that to be regarded as successful, a suburban centre has to follow a gentrification model, characterised by the appearance of upmarket shops, artisan bakeries and boutique coffee outlets. Such a model neglects the more mundane attractions of a location such as Borehamwood in outer-north London, with its thriving twice-weekly market and mixture of local firms, community enterprises, corporate headquarters and ethnic shops, as well as the inevitable cluster of national chains housed in its self-styled Boulevard. This bias is because standard measures of town centre success tend to overlook places that are socio-economically active in the broadest sense – encompassing leisure and community as well as retail – but that lack the smartness and prestige brands of more prosperous locations. Fast food outlets or pound shops may even be viewed as measures of decline, yet such places that may be distinctly distasteful to brand-conscious council officers may also, ironically perhaps resist being characterised as clone towns. Many of London's less fashionable suburban centres have managed to survive, even thrive, against the odds for long periods of time. It is worth urban designers trying to understand the reasons for this.

A recent report emphasises how high streets can be social centres, stating that 'wanting to go into town is about an experience. It is about sociability and relaxation, creativity and being part of something you cannot get at home or at work…'. The greater the mix of activities, the more likely a centre will be a hub for the social life of the suburb. A high street is so much more than its shops. A study of neighbourhood identity, for example, explains how 'community [is] constructed through familiar, everyday social interactions within various… settings… often enough to give people a powerful sense of attachment and belonging'. One can reasonably extend this reference to encompass the humble high street. Our own research found that a significant proportion of sampled visitors to suburban town centres had undertaken activities other than shopping; indeed, many of these did not intend to shop at all.

A significant proportion of sampled visitors to suburban town centres had undertaken activities other than shopping; indeed, many of these did not intend to shop at all

It is, of course, evident that shops in smaller centres can find it difficult to operate independently, since they need have access to sufficient numbers of potential customers to make them viable. However, the challenge of high streets is the need to provide both 'links in a movement system that connects places', and 'destinations, or "places" in their own right'. In other words the socio-economic viability of an individual suburban centre relates also to their interdependence in terms of both public and private transport connections.

PERVASIVE CENTRALITY AND LAND USE SYNERGY

Christopher Alexander has shown that town centres are fields of relatively intense activity, providing 'a contrast between intensity and calmness'. He states that: 'the wholeness of any portion of the world is the system of larger and smaller centres, in their connections and overlap'. This is confirmed by our findings that suggest that London's suburbs have adapted to historical patterns of movement between different centres; the way in which they overlap and converge affects their subsequent development. Building types and land-use distributions that may appear characteristically local may have emerged over a great deal of time as a consequence of the position of a centre within the urban network.

Space Syntax analysis considers the urban network as a spatial configuration, proposing a fundamental relationship between spatial morphology, movement patterns and the distribution of land uses as a 'movement economy'. The synergy of activities in and around suburban town centres has been shown to stem from the presence of overlapping movement flows, which

↑ South Norwood town centre: street sections are coloured in a range of red-blue, showing through-movement potential

in turn create the conditions for local diversity in land use. Using space syntax analysis the through-movement accessibility of South Norwood, a suburb in south-east London can be measured (see image above). At radius-n (left), the model takes account of all streets within London. It shows how the centre has important links at the larger urban scale. At radius-800m (right), the model takes account of all streets at a distance approximating a ten-minute walk into the surrounding residential area.

Statistical analysis shows that non-residential land uses correspond with the most spatially accessible streets within the area. This highlights the importance of the streets and yards just off or behind the retail-focused high street. It suggests how the interdependence between retail and other types of non-residential activity, whether on the high street or adjacent to it, arises because the built environment of London's suburbs is well adapted to sustain a wide variety of activities. It is also interesting to consider how smaller centres adapt to their relative inaccessibility to the wider network by developing a niche specialism aimed at a non-local as well as local market, in some cases using the internet as a parallel stream of revenue to a local business. This suggests how smaller centres can provide low-risk locations for businesses to start up. With greater flexibility in land uses classes, business rates and rents, such adaptability can contribute to regeneration.

MIXED USE INTERDEPENDENCE

Accounts of urban hierarchies commonly focus on the largest towns including the metropolitan centre and major regional hubs. However, simplistic notions of hierarchy are inadequate to address the complexity of the urban system, which encompasses multiple links between larger and small centres, places of home, work and leisure that are better described in terms of a mesh than as a hierarchical, tree-like system. Urban design does not directly determine the distribution of land uses – neither should it always seek to do so. Many high streets in the suburbs of Greater London have survived as centres of socio-economic activity for a century or more despite the radical socio-economic changes that have occurred over that period – and the current economic downturn notwithstanding. Nurturing this quality of adaptability is vital for sustaining smaller centres of activity and for the resilience of the urban network as a whole.

Of course, the dream of a suburban renaissance may never be fulfilled, but it is hoped that this article has shown why many of London's suburban town centres already possess the potential for genuine sustainability in their ability to support the diverse socio-economic activity and a dynamic neighbourhood street life. An analysis of suburban places that takes account of the relative stability of their development is, we suggest, an essential basis for designing for the future adaptability and vitality of suburban town centres, whether in London or beyond. It is also important that urban designers should consider how the interdependence of urban systems relates to the design of particular sites and locations. ●

● **Laura Vaughan and Sam Griffiths, Bartlett School of Graduate Studies, UCL**

DESIGN A GOOD STREET AND YOU DESIGN A GOOD CITY

Rob Adams applies basic principles to absorb Melbourne's increasing population whilst maintaining urban quality

↑ Tram corridors between walkable suburbs

For the last 40 years I have studied, designed and built parts of cities and have come to the realisation that 'if you design good streets you design a good city'. Why? Because 80 per cent of the public realm of any city is made up of street space and hence the primary experience of any urban encounter is dominated by the quality of its streets. Given that most of us could easily articulate the qualities of a good street, it should follow that designing cities is relatively easy. So why do we so often make such a mess of it?

Clearly there are many reasons but I would argue that two key influences have shaped our thinking on the street. The first and most obvious is the emergence of the motor car which eventually led to the segregated model where the design of roads was increasingly driven by the need to move more vehicles at higher speeds, until the car became entrenched as the dominant user of our streets. The second is the Suburban Metropolis with its simplistic zoning sprawling across vast areas, and slowly choking under the pressures of congestion. The casualty of these two influences is the simple mixed street.

Melbourne, as many cities that grew in the motor car age, suffered from the dual problems of a dead centre and a sprawling inefficient metropolis that is increasingly difficult to sustain. Central Melbourne has successfully dealt with the first of these problems through a comprehensive strategy adopted in 1985, centred on the vision of creating a 24-hour modern city that built on the unique characteristics of the 19th century city. Almost 30 years later, a suite of programmes to repopulate the city centre has led the city to a more sustainable future, which has been recognised internationally, with Melbourne's rating as one of the world's most liveable cities. The programmes included over 15,000 new residential units, creating a better balance between the motor car, pedestrians, public transport and bicycles, improvements to the overall amenity of the public realm with high quality footpaths, trees and street furniture, and expanded events, arts and culture programmes.

CONSEQUENCES OF SPRAWL

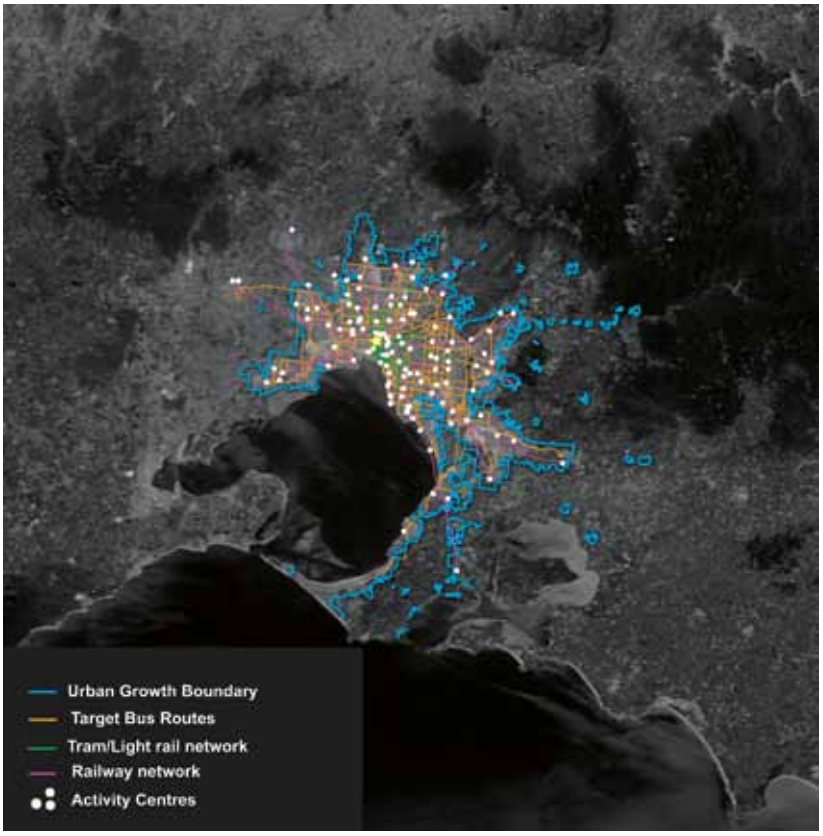
Strategies to deal with the second of these issues namely suburban sprawl have proved less successful. Melbourne, with a population of 4.1 million people spread over 8806 sq. kilometres is one of the lowest density cities in the world and is starting to exhibit all the symptoms of a failing city. Travel times, congestion, lack of community infrastructure and a failing fringe housing market are a few of the early signs that a business as usual approach is unlikely to succeed. Nowhere is this better illustrated than in the VAMPIRE index produced by Griffith University[1] which clearly indicates an increasing problem caused by the new landscape of oil and mortgage vulnerability in Australian cities. All the Australian capital cities have experienced a dramatic increase in vulnerability from 2001-2006, and this is now

translating into increased social and financial isolation, a feature of current commentary in our daily newspapers.

Combine this with the continued allocation of new development land on the fringe of the city, 50,000 hectares in the last 3 years, and there is cause for concern. Fortunately, earlier generations had the vision to preserve the tram system that, with its imbedded infrastructure, acted as a catalyst to an extended high street model providing some resistance to the segregated model of suburbia. A helicopter view of the city throws up a very recognisable morphology:

- a radial rail system with stations forming the centres for a large number of 'villages'
- a supportive tram system that links many of these centres with linear high streets
- a gridded road system supporting an extensive but underutilised bus network.

Thrown across the top of this network is a suburban blanket that is starting to react to the stresses of the current approach to development. Since the early 1990s there has been a slow swing away from the detached house and towards higher density living in apartments. This swing started in the central city but more recently has emerged further out in the metropolitan area; it is this trend that may spell the saviour of the city.



CAPACITY STUDIES

In 2009 the City of Melbourne with the Department of Transport undertook a study Transforming Australian Cities[2], to measure the capacity of the city to absorb a doubling of population to eight million over the next 50 years, without expanding the city's boundaries. This was done not only to support the existing transport system but also because it was going to be too expensive to build the necessary infrastructure to support further expansion. In fact, recent research undertaken by Curtin University found that for every 1000 dwellings, the infrastructure costs for infill and fringe developments are $309 million and $653 million respectively[3]. Additional fringe development costs include hard infrastructure such as power and water, increased transport and health costs, and greenhouse gas emissions. Therefore by encouraging infill development, the economic savings to society would equate to over $300 million per 1000 housing units, or in Melbourne's case, if all of the next million people were located within existing developed areas, this would constitute a saving of $110,000,000,000 over the next 50 years. This figure does not take account of the indirect benefits to society of factors such as increased social capital and economic productivity as a result of better health and closer knit communities.

The study looked at capacity in three areas: existing grey field sites, activity centres around railway stations and along existing transport corridors. The Transforming Australian Cities report undertook detailed studies of these areas to determine their capacity; on a very conservative estimate that avoided conflicts with heritage sites and other essential uses, and with development of no greater than eight storeys, known redevelopment sites can accommodate 500,000 people, activity centres 860,000 and properties abutting road-based public transport, namely buses and trams can accommodate 2,400,000. Furthermore this redevelopment could take place on only 7.5 per cent of the metro area, thus relieving any pressure on established suburban residential areas. As can be seen from these numbers, the bus and tram corridors emerged as the major opportunity for the future. Equally exciting was that while undertaking the study it became apparent that new high-density development was already targeting these corridors despite the lack of government policy directing it to these locations.

Computer generated images of how this corridor development may occur give an interesting insight into how the city of the future may develop: high-density, mixed use development, immediately adjacent to the existing road-based public

↑ Public Transport Framework within the old growth boundaries
↓ Recent high density development along mixed streets and adjacent to walkable suburbs

↑ The future potential form of Melbourne

transport, surrounded by low-density suburbs within walking distance of these emerging mixed use streets. A simple change in the planning framework to encourage development along these corridors while prohibiting it from invading the adjacent suburban areas would produce not only a more sustainable, socially inclusive and economically viable outcome, but more importantly is likely to win the approval of local governments and their communities.

> The reinforcement of road-based public transport would see the development of improved quality mixed streets providing improved opportunities for their adjacent suburban populations

BENEFITS OF URBAN CONTAINMENT

The ingredients for successful urban areas are no longer a mystery to us. In the multiple debates about city health and vitality, six characteristics consistently emerge: local character, good connectivity, density, mixed use, a high quality public realm and a high level of adaptability.
It is apparent that the trend to develop along Melbourne's road-based public transport corridors is likely over time to produce all of these characteristics, and a simple set of guidelines that ensure appropriate development that does not compromise the character of the adjacent suburban areas, could easily be introduced along with as-of-right development to help speed up the process.
The benefits of this approach are significant:

- The expansion of the city's boundaries will be put on hold and with it, the need for new expensive infrastructure for future fringe developments.
- The existing residential areas will over time, acquire better access to mixed use, high-density high streets offering increased services and some employment. Many of these will be within walking or cycling distance from home.
- Existing infrastructure will be better utilised reducing the cost to government and the community. This is clearly illustrated at the city of Melbourne where, as the density has increased, the relative costs of providing services have declined from 13 cents in the dollar in 1996 to 4 cents in the dollar in 2012.
- Recent redevelopments along these corridors are generally of a smaller scale than wholesale redevelopment reflecting the existing subdivision patterns.
- Adjacent areas will be protected and able to concentrate on collecting water, producing solar energy and planting more trees to mitigate the increased temperatures of climate change. This trend has already commenced, with a reduction of 3 per cent on the state's base load electrical needs. These areas will become the new green wedges.
- The greater use of public transport and the decline in car ownership and green house gases associated with proximity to public transport will both improve disposable income and the fitness of the population. Obesity is costing Australia $85 billion a year.
- Melbourne and Australia have an aging population. The 60+ age group is in the main highly active and still engaged in society. Residing in apartments within their communities is increasingly popular and helps maintain the local population.

While these are a few of the benefits, the introduction of as-of-right development approvals could be combined with requirements on new developments to provide 20 per cent affordable housing and contributions to open space, thus further assisting in providing resilient communities.

Melbourne is at a crossroads: is it to be seduced by the current liveability rating and continue with the business as usual sprawl, or will it recognise the early signs of failure, and move to transform itself through the greater utilisation of existing assets? This could be the substantial public transport system which lacks only the addition of density and mixed use to increase its viability. The reinforcement of road-based public transport, in particular buses, would see the development of improved quality mixed streets providing improved opportunities for their adjacent suburban populations. This would build on existing trends and over time help mitigate the shortcomings of the sprawling city.

As mentioned at the start, 'if you design good streets you will design a good city' and Melbourne is fortunate to have a city form and infrastructure that will help this solution to drive financial, social and environmental benefits as well. ●

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● **Rob Adams, Director City Design, City of Melbourne**

LIVEABLE ARTERIALS IN AUCKLAND CITY

Ian Munro and Ross Rutherford present New Zealand's first urban design-based transport plan

The management of Auckland City's arterials has historically followed a predict-and-provide strategy of network capacity improvements and widening, until it became apparent that the spatial and financial costs of continuing this approach were unbearable. Additionally, the Council adopted numerous strategies, most of which implicitly depended on the arterial network, including an urban intensification strategy for the city's centres (all on arterials). This will require the reprioritisation of road space and amenity to support and attract living and recreating within arterial corridors.

Key network characteristics included:

- Many arterials at 20.1m wide with 14.6m carriageways, significantly limiting what could be accommodated. The costs of acquiring land for further widening were unbudgeted and would run into billions of dollars;
- Most arterials were consistently carrying over 20,000 vehicles per day (vpd), with the busiest carrying over 40,000vpd. This equates to an increased pressure from two to four (or more) vehicle travel lane outcomes per street;
- Passenger transport plans called for permanent bus lanes and associated facilities on many of the arterials, including the busiest;
- Pedestrian and cycle plans called for facilities on many of the arterials, including the busiest;
- Land use plans called for a significant amenity shift in favour of those living and transacting on arterial streets rather than those driving through them; but
- Despite the above, freight and general transport plans called for less congestion and improved travel times for all vehicular modes;
- The network was relatively well connected although there were many instances where topography and historical development choices restricted the provision of supporting road networks adjacent to main arterials, limiting opportunities to disperse or spread flows;
- Where local networks did exist, they were usually managed to deliberately restrict through movement. This forced more traffic onto arterials than was actually necessary, contributing to congestion and spatial conflict; and
- Arterial intersections were becoming increasingly 'blown out' with additional through and turning lanes. Major grade separated interchanges were being more frequently mooted by the engineering fraternity.

Dominion Road (20.1m–25m wide) provides an excellent example of this contested arterial network space, carrying more than 30,000vpd in 2006. Relied upon as an important link for general traffic, passenger transport, pedestrians and cyclists, it is also very developed with businesses and other urban activities, often built to the road boundary. Moreover, there are plans to intensify the street along most of its length.

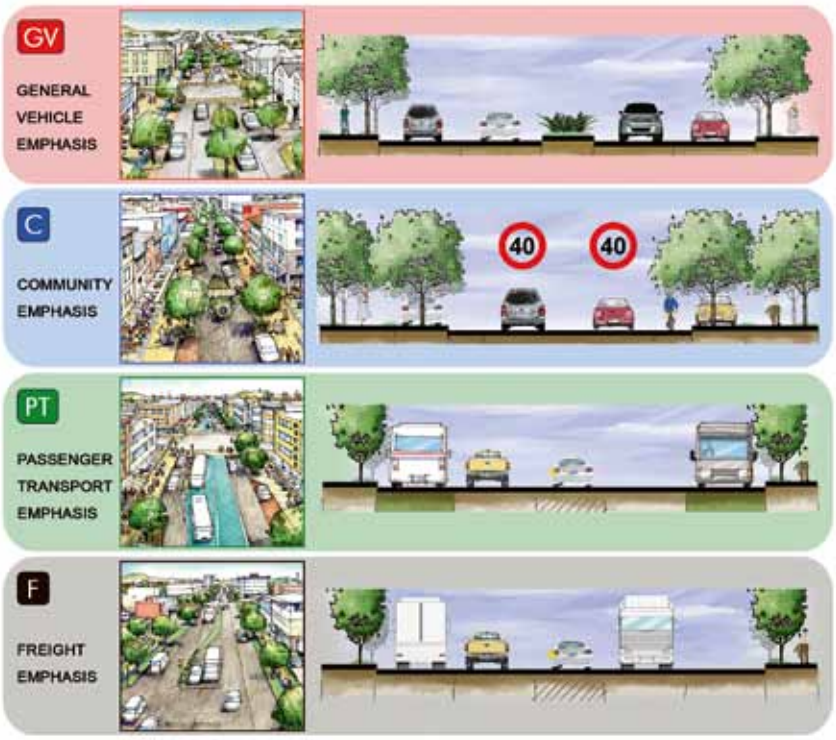
↑ Dominion Road, Auckland

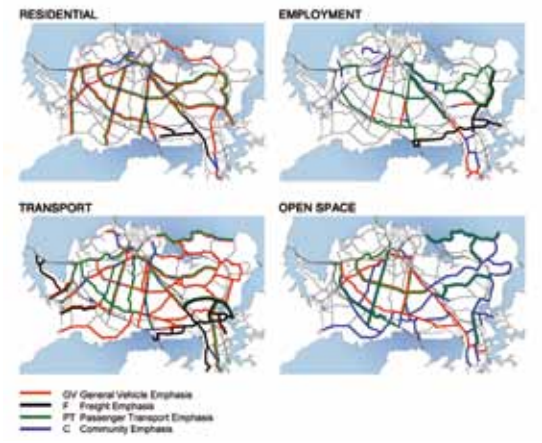
THE LIVEABLE ARTERIALS PLAN

The answer to this conundrum, the *Liveable Arterials Plan*, was New Zealand's first network-wide transport plan based on an urban design-led process. It set out a 25-year framework for the management of arterial roads in the city and incorporated a number of innovations, including that integrated design, rather than transport models and fixed engineering standards, should be the primary shaper of road space.

The project was anchored around a series of inquiry-by-design workshops informed by issue-specific research. These involved a core team of 20 to 25 senior-level practitioners from consultancies and the council. First, a number of parallel technical themes were identified as the key issues around which an equitable and informed design negotiation could commence: regional dynamics, transport, open space networks, community infrastructure, activity centres, residential growth and economic development.

Second, a selfish depiction of arterial network objectives, issues, opportunities, and constraints from the point of view of each theme, was explored.





Those responsible for each theme had to justify and sell their priorities to the wider group, and the limits that this would set on the space and opportunities available to others. The process identified the place-specific competition between key priorities that for the first time could be understood across the whole network.

> This solution would not have arisen in the absence of an urban design process that forced the issues onto the same table and a design innovation to resolve the conflict.

Third, based on this, a toolbox of four arterial segment typologies was identified and agreed by consensus. Each typology represented a particular set of emphases, reflecting this within a model of the scarce road space available. The typologies were Community, Passenger Transport, General Vehicle and Freight. Rather than inflexible standards, each was designed as a framework of spatial and functional priorities to be worked through in succession until available road space had been consumed. Whist accommodating as much as possible for as many as possible, the process accepted that hard choices would on occasion need to be made.

Finally the arterial segments were allocated across the network in a way that would best implement the preferences of each theme. The composite of these created a form of common language that identified the actual spatial problems at hand. The issue then became a spatial and technical challenge of identifying design solutions rather than a moral question of which amongst competing policy interests was the most right. Extraordinarily, this led to such buy-in and acceptance of how integrated the issues were across the network, that participants actively started breaking down their silos and looked to help solve problems associated with other themes, as well as their own.

For much of the network there was a ready consensus on the way forward. Those corridors that presented particular challenges were subjected to place-based analysis exploring different opportunities within those corridors. These design tests varied from 1:500 to 1:1000 scales, on corridor roll plots of up to 10m or longer. In one case, for example, the tension between community advocates seeking a high-amenity and low-intensity road edge interface with land uses, and passenger transport advocates seeking provision for high-speed high-frequency buses, was resolved through a design solution previously unheard of in Auckland, that provides permanent bus lanes in the centre of an arterial. This solution would not have arisen in the absence of an urban design process that forced the issues onto the same table and a design innovation to resolve the conflict.

With such design intelligence, each theme re-visited its segment allocation preferences to resolve areas of the network where disagreement remained. These revised preferences were again overlaid, and remaining competition was subjected to a further and enhanced round of design testing, investigation and debate. This was repeated until a consensus for the network was reached. The process resulted in a cross-disciplinary agreement for the arterial network, as well as an unprecedented understanding of how the network as a key part of the urban system could support

↑ Arterial segment typologies
↗ Allocating the arterial segments
↗↗ Final Liveable Arterials Plan

or repress the different objectives of the different disciplines over time.

IMPLEMENTING THE PLAN

The *Liveable Arterials Plan* is implemented through Corridor Management Plans (CMPs), each taking a 20-30 year corridor-specific transport and development vision for an arterial, including the street and related land use catchment.
A number of CMPs have been undertaken in accordance with the *Liveable Arterials Plan*, each following the same multi-disciplinary, urban design-led format. This, in conjunction with the comprehensive process underpinning the *Liveable Arterials Plan* itself, allows CMPs to break new ground in land use/ transport integration.

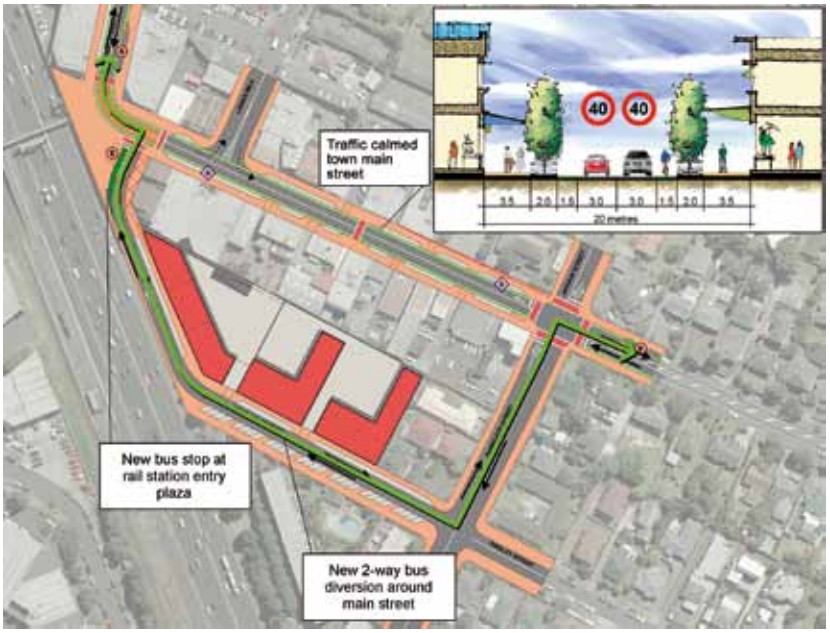
Whereas previous CMPs had been criticised for taking an almost singular view on accommodating predicted transport flows, the new CMPs included clear land use consequences, concepts and possibilities. For the first time, plans emerged that explored the way in which – depending on anticipated timeframes – changes in the road could not only support but help induce identified land use changes, and vice versa. This involved, in some instances, recommendations to accept carefully managed peak period congestion, based on securing the optimum overall outcome for the city.

By way of example, Ellerslie has been identified as an important urban growth centre over the next 30 years and is defined by its 20m wide main street. The street space was hotly contested, with priorities expressed for permanent bus lanes and cycle lanes, a pedestrian-focussed street and retail environment that appealed to residents and shoppers, landscaping and amenity space, and on-street car parking. Conventional approaches would have simply identified travel lane and bus lane requirements as the most important in the space available, and installed them to the detriment of the other identified priorities. But through a comprehensive urban design process an alternative outcome was identified that diverted buses and enabled the re-prioritisation of space within the main street to a more pedestrian and amenity-based outcome.

LESSONS LEARNED

The *Liveable Arterials Plan* and subsequent CMPs succeeded in introducing a new way of thinking about arterials and how they are managed. It has demonstrated that professionals from different disciplines can overcome their conflicts and prejudices, to produce outcomes that otherwise would not have arisen. Urban design acted as an effective unifying influence in this regard, from which some key lessons were learned:

- **Don't integrate too soon**
  The process highlighted the need for successful integration to be based on a level playing field and mutual respect between participants and inputs. Perhaps counter-intuitively, this meant that the process of synthesising and integrating could only be undertaken after an initial period of deliberate non-integration to ensure a full understanding of the different professional perspectives.



↑ Ellerslie Town Centre concept

- **Good process alone can't cut it**
  The whole council was committed to the Plan and this was reflected in the seniority of participants that were made available for the project's duration. Later CMPs had a lower profile and inconsistencies in participant experience became at times problematic. Junior practitioners are often unable to commit organisations to the risky design innovations proposed.

- **Urban design is not yet a universal language**
  The Plan was so integrated and iterative that practitioners not involved in the process or unfamiliar with urban design have not always accepted its outcomes at face-value. The Plan could have been disaggregated at its conclusion into discrete discipline-specific versions. This would have allowed each technical discipline involved in implementation to have its own Liveable Arterials sub-Plan based on terms, contexts, justifications and logic familiar to each.

- **Application to Urban Planning**
  To urban planners and designers, it is no longer acceptable to describe arterials in terms of conventional engineering-based hierarchies and codes. These have been shown to leave too many important spatial outcomes and design innovations to chance, or as nice-to-have add-ons. ●

● Ian Munro, Senior Associate, Urbanismplus Ltd, Auckland
Ross Rutherford, Director, Transport Planning Solutions Ltd, Auckland

RE-THINKING BERLIN'S RADIAL STREETS

Cordelia Polinna suggests ways of ensuring the future success of the city's old neighbourhoods

↑ Tower Restaurant Bierpinsel (1972–76) – icon of the car-oriented era

The so-called 'energy turnaround' will be one of the most daunting challenges to face Germany in years to come, and will first and foremost have to be met in the urban realm. It will mean much more than a farewell to an era of nuclear energy. It will also mean saying goodbye to cheap oil and to many of the much-loved features that went along with it, for example mass motorisation. New approaches in urban design will have to be developed to address two key tasks: first, many urban structures built in the second part of the 20th century will have to be adapted to the new circumstances. Second, a new sustainable urban mobility will have to be promoted.

COPING WITH THE CAR-ORIENTED CITY

Many German cities and especially Berlin have been changed radically in the second part of the 20th century due to mass motorisation. These changes left a difficult legacy: streets and squares widened to fit the needs of the car and urban motorways cut through the urban fabric, in many cases through dense inner city quarters. To complement this vision of the car-oriented city, huge mega-structures like Berlin's International Congress Centre or bizarre buildings such as the tower restaurant Bierpinsel (beer brush) were erected, to create landmarks for drivers travelling at high speed. Berlin also has its share of suburban sprawl.

As most of Germany's urban areas are either shrinking or only growing at a very moderate pace, the existing urban structure will have to be adapted and enhanced so that it will be resilient to climate change and allow for a sustainable lifestyle. A key precondition of this adaptation process is a paradigm change regarding urban mobility. Vehicles will have to emit less noise and dirt while at the same time being more energy efficient. Public spaces will need to be improved, and switching between different types of sustainable transport will have to be much easier than today.

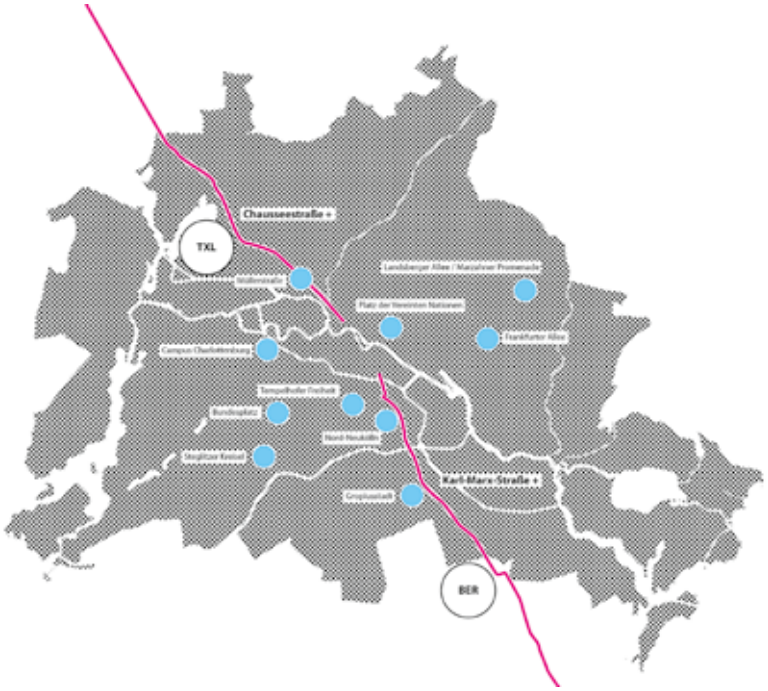
AN INTERNATIONAL BUILDING EXHIBITION AS A TOOL TO MASTER NEW CHALLENGES?

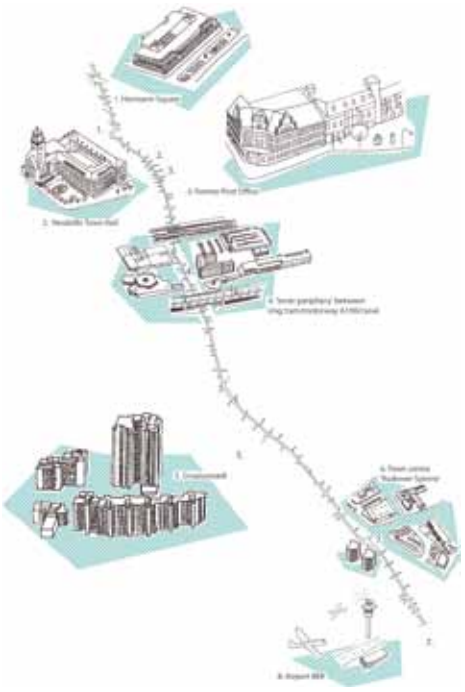
Berlin has a long history of Building Exhibitions, most notably the Interbau 1957 and the IBA 1987. Berlin's Senate Department for Urban Planning and the Environment is currently in discussions about launching another IBA for the year 2020. Building exhibitions have turned into an important and distinctive urban design tool throughout Germany. As they create a 'temporary state of exception' (Werner Durth) they allow for experimental approaches to urban design and architecture to be tested, and innovative instruments to be developed. This laboratory of architecture and urban design, lasting for a period of about 5-10 years, allows funding to be pooled and for temporary institutions to be established. But in order to justify this state of exception the theme of an IBA must be of outstanding relevance.

Various ideas for the IBA's key theme and locations are being discussed. The Berlin-based urban design team Think Berl!n has proposed the concept Radikal Radial to reshape Berlin's radial streets according to the challenges of sustainable mobility and the adaptation of existing urban structures to the needs of climate change. This proposal has received plenty of positive feedback and the originators of the idea are now consulting Berlin's planning department on how to incorporate it into the IBA concept.

BERLIN'S RADIAL STREETS

Berlin's large radial streets organise the city region. The city only started to grow rapidly during industrialisation. Before this expansion took place, rural roads which commenced at the city gates, connected Berlin with its surrounding towns. Once





the city had expanded, those roads developed into radial streets, and were flanked by public transport, the underground, trams and in some cases also by commuter trains. Apart from Berlin's two main centres, the old town centres along the radial roads developed into important hubs for public and municipal services, shopping and cultural activities, forming the polycentric structure of the metropolitan region. Although no radial street is the same as another, all are characterised by a similar succession of urban typologies.

Towards the centre of the city, they are typically lined by dense 5-storey tenement buildings originating from the late 19th/early 20th century. Outside the commuter train ring, buildings get lower and housing estates from the inter-war and post-war period dominate. These areas are dotted with inner periphery-type developments such as car dealers, petrol stations, box-like retail units or drive-ins. Towards the outskirts of the city are the single-family homes typical of such locations. The radial streets are crossed by main roads, the circular urban motorway, the circular commuter train and by canals.

In the past decades, many of Berlin's radial streets have been fighting against a loss of uses and attractiveness. Local shops have had to compete with shopping malls, and busy traffic often makes the street an uninviting place. Today, flats above shops are often the least attractive places to live. Many large buildings are abandoned, especially those dating from the 1960s and 1970s. And because people living in the adjacent neighbourhoods strongly identify with their radial street, its prosperity or decline is mirrored in the fortunes of the surrounding areas.

WHAT CAN BE DONE?

As an IBA could only work through exemplary projects, it is proposed that two radial streets are selected along which many of the challenges and urban design issues Berlin has to deal with in the next decade are concentrated. The Chausseestraße, leading north towards Tegel Airport TXL (to close in 2013), would be a good choice as a new stimulus to growth is needed here. For example, funding will be available in order to turn the huge airfield into an enterprise zone for new urban technologies. But for this strategy to be successful it will be important to link this rather isolated airport to existing city quarters, such as the Kurt-Schumacher-Square located on Chausseestraße. This square offers an important connection to the underground system but is today not much more than a busy traffic junction with a struggling 1980s shopping mall. As soon as the noise from low-flying airplanes ceases, a new quality of life will be brought to the area. Further south, a town centre in Wedding, a deprived neighbourhood, suffers from large quantities of traffic, a historic indoor market that is slowly dying, and a social infrastructure poorly adapted to its socially and ethnically diverse community.

The second radial street could be Karl-Marx-Straße, leading through the deprived neighbourhood of North Neukölln, and close to the large housing estate of Gropiusstadt (50,000 inhabitants) which desperately needs a greater social and functional mix and investment in its public spaces, in order to tackle deprivation. North Neukölln, by contrast, is currently gentrifying fast because of its central location and its vicinity to the former Tempelhof Airport, which has been turned into a very attractive open space. Thus the IBA could also develop tools to counterbalance upgrading, which is seen as a rather negative process in Germany. And because Karl-Marx-Straße leads to the new airport (BER), there will be many catalysts for growth which will offer the opportunity to incorporate private investors into the IBA and persuade them to realise projects that can act as exemplars for other developers to follow.

Pilot projects along the two streets described – and possibly in a few more key locations on other radial streets throughout the city – should promote sustainable mobility in a post-fossil fuel era and improve the connectivity between pedestrians, cyclists and public transport. The full potential of intermodal hubs should be realised by making public spaces more attractive and by concentrating on other important facilities such as libraries, close

↖ Two radial corridors and other key projects along radial streets could be chosen for an IBA 2020
↑ Possible project locations along the radial street Karl-Marx-Strasse

↑ Gropiusstadt housing estate needs more of a social and functional mix.
↑↑ Defunct department store waiting for new uses
↑↑↑ Inner periphery type structures are not easy to deal with

to these nodes. Public spaces and parks should be upgraded and connected with other green and blue links. New ideas should be tested on how to adapt some of the icons of the car-oriented era that are considered problematic buildings today.

> The full potential of intermodal hubs should be realised by making public spaces more attractive and by concentrating on other important facilities

However, the biggest challenges will lie in defining urban design concepts for the areas outside the inner city, where radial streets turn into motorways that act as a barrier between their adjacent areas, and where peripheral structures begin with their in-between nature as the most dominant characteristic. The experimental character of an IBA would make it possible to come up with ideas for infill and intensification of uses for areas made up of large-scale retail units, drive-in restaurants and suburban housing developments. The IBA could implement model projects that demonstrate how local centres can be established through small interventions that strengthen the local economy. It would also have to develop ideas to re-structure large scale retail in order to make it attractive and accessible for pedestrians and cyclists, and add more small-scale uses.

The details of how this can be achieved are still open for debate, and it is not even clear whether Berlin will embrace such a concept as IBA 2020. But it would help to unite spatial design with transport planning, and it would focus on outer Berlin, an important and large part of the city, which has for a long time been neglected, but which is key to creating a sustainable city region. If these challenges are approached in a bold way, Berlin could once again become a centre for cutting-edge urban design. ●

● **Cordelia Polinna, Professor of Sociology of Architecture and Planning, member of Think Berl!n, partner of Polinna Hauck Landscape + Urbanism**

RESHAPING THE AMERICAN COMMERCIAL STRIP

Karen L. Gulley faces the challenges of the emblematic car-dominated corridors

The classic American commercial strip can be defined as a stand-alone, auto-dominated linear commercial corridor that is challenging to retrofit as a productive, multimodal place integrated with the fabric of the community. It is time to start looking at commercial corridors as potential linear villages, so that over time a better balance of uses can be achieved in a liveable environment, with the right transportation options to enable people to move about locally and regionally.

After the single-family detached house, nothing typifies the American city more than its arterial corridors lined with never-ending commercial strip centres. These low-intensity, non-descript corridors are the in-between spaces of a city that connect people to their neighbourhoods, job centres, downtowns, and other activity nodes. Even before the downturn in the US economy, commercial corridors across the country were long neglected and typically overlooked as places of new market opportunities. Over the last two decades, urban design and place-making skills have been honed on reinventing downtowns, creating new town centres, and adding lifestyle additions to malls. But more often than not, auto-dominated commercial corridors have remained stagnant, almost in a timewarp, despite shifts in demographics and the growing cultural diversity of most communities.

The United States had the makings of modern corridors before it had a president and constitution. To pay Revolutionary War debt, the Congress of the Confederation adopted the Land Ordinance of 1785, which established the township and range basis for land surveys, and provided for conveying title to land through deeds of one-square-mile lots. The resulting one-mile rectangular grid defines the built environment and the public right-of-way network of arterial highways and corridors for most of the country west of the Appalachian Mountains. The default zoning by local governments on many of these corridors is commercial, without regard for what the market can bear. Despite the expansive interstate highway system, commercial arterial roads remain the workhorses of our communities, accommodating some 65 per cent of the daily vehicle trips, compared to 35 per cent on freeways.

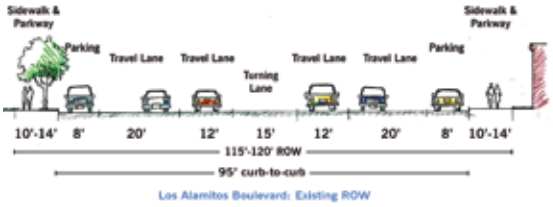
In the Southern California region alone, five counties encompass nearly 12,000 miles of arterial corridors, of which 5 to 6,000 miles are estimated to contain commercial strip centres built mostly in the 1960s and 70s. These corridors are generally wide – 80 to 100 feet curb-to-curb with four to six lanes for travel. Some are even wider, with up to eight lanes, yet are still controlled by traffic signals, intersect with smaller local roads, and are lined with hundreds of shops and businesses with individual curb cuts for miles on end.

NEW CONCERNS

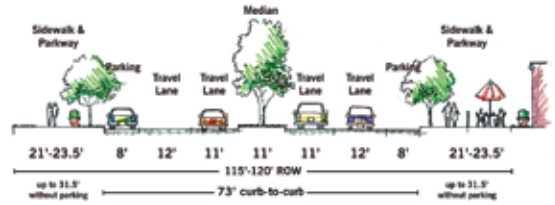
Today, as many state and local governments adopt new regulations to address climate change through reductions in vehicle-miles travelled, attention is shifting to these underutilised corridors as places to intensify and better organise, to reduce travel demand. Commercial corridors are also the recipients of increased public transit investments, particularly expansion of express bus services connecting to commuter rail stations and major local and regional destinations. Transit agencies and metropolitan planning organisations are joining forces with local jurisdictions to address the challenges of commercial corridors holistically and to prepare the way for new private sector investment.

This requires a marriage of disciplines and new ways of thinking about the purpose of the streets, the function of the corridor both locally and regionally, the relationship of uses to each other and to surrounding neighbourhoods, the role of all modes of transportation, and the form of the

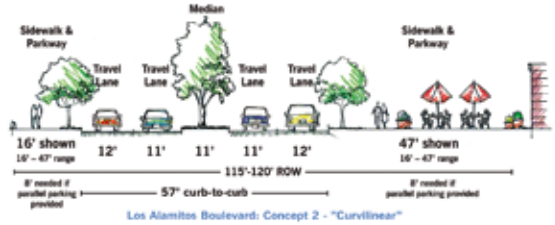
↑ Commercial corridor in Monroe County, PA
↑↑ Historic El Monte, California



Los Alamitos Boulevard: Existing ROW



Los Alamitos Boulevard: Concept 1 - "Straight"



Los Alamitos Boulevard: Concept 2 - "Curvilinear"

built environment and open spaces. It also requires working with local developers to identify the barriers to new investment, which can range from potential infrastructure constraints to inhospitable street conditions, to uncertain political support for change. Our work shows that there are four key steps to reshaping commercial strips.

PHASE OUT EXCESS RETAIL

An overabundance of retail is an affliction in nearly every area of the country. Excess retail occurs when an individual business relocates, closes a branch or fails. These cases are part of the normal life-cycle of businesses and the normal economic cycle. But when a corridor is plagued by long-term high-vacancies, high turnover, and marginal businesses, it has structural vacancy problems which can deter developers interested in potential commercial infill projects in the local area. New commercial space is less attractive to neighbourhood-serving retail and service businesses when cheaper space is available a block away. It is also more difficult to finance new commercial building space in an over-retailed corridor segment.

Unfortunately local leaders are often resistant to any conversion of retail to non-retail uses. In some states, the more retail, the more local tax revenue, leading many elected officials to keep corridors zoned for commercial use regardless of the retail environment. This has led to a national trend where American cities are over-retailed. An alternative model that is much more strategic and can result in greater economic vitality, involves scaling back the retail to key nodes and infilling with housing, educational, and other community-serving uses. Limiting the retail to key nodes also allows each to serve various niches. This can add value to these locations, value that is missing with miles of undifferentiated shopping centres, each trying to grab the attention of motorists.

REMOVE BARRIERS TO NEW HOUSING

New housing is now increasingly part of the solution to over-retailed corridors. Not all corridor segments are suitable for housing; it needs to fit as part of an overall market-based plan that includes access to neighbourhood-supporting amenities. Generation Y and some empty nesters may be willing to trade private space for public realm activities, but often the quantity and quality of these third places is sorely lacking along corridors. Removing barriers to new housing should be done in conjunction with identifying nodes to create walkable destinations along the corridor, understanding household demographics and relationships to housing needs, and how and why residents in the adjoining neighbourhoods are currently using the corridor.

Where it is appropriate, cities are responding favourably to a range of new and redesigned multifamily housing products that work on a variety of lot sizes and configurations. Vacant big-box sites and auto dealerships are large enough to appeal to the large-scale rental developer, while smaller, narrower lot configurations are appealing to the niche builder. During this economic downturn, smart architecture firms have been developing new housing and mixed use prototypes that respond to the new economic realities. Building parkland on a green roof over surface parking is one such innovation that is improving the bottom line for builders and meeting needs for open space. In

↑ Typical low value over-supplied commercial corridor space
↑↑ New corridor residential in Anaheim, CA
↗ Concepts for redesigning Los Alamitos Boulevard

most suburbs, vertical mixed use is not viable, but horizontal mixed use is just as effective. It does not matter to a retail business if the customer lives upstairs or next door. What matters is having feet on the street from both nearby jobs and housing.

ADDRESS THE PUBLIC REALM

Traditionally, corridor planning has focused on improvements to enable more cars to move faster through the roadway. In fact, America's arterials are designed for the worst two hours of traffic of the day. A new generation of traffic engineers is embracing the Complete Streets approach to circulation planning (see Barbara McCann's article). The reshaping of the commercial strip is as much about the redesign of the street as it is about repositioning land uses. In some cases, such as the City of Los Alamitos in Southern California, there is excess right-of-way that can be reclaimed and given back to the general public for safer and more attractive walking and outdoor dining.

In addition to the design of the street, the buildings and their relationship to it, ground floor uses, the use of the setback area for cars or people, and the design of the open spaces, constitute the true public realm of the corridor environment, which is either a catalyst for new investment or a hindrance. For multifamily housing developers facing price-constrained consumers, the shopping, entertainment, and nearby recreational uses along the corridor replace typical project amenities (clubhouse, pool, ...). The quality of this ped-shed in turn relies on the commercial developers who create the space, the businesses that operate there, and the local government that provides parks, policing, maintenance, and parking. The ped-shed will increasingly influence where developers invest for their next housing project and how they market it.

SEED CHANGE WITH INCREMENTAL INVESTMENT

Corridors do not exist in a vacuum but are typically flanked with neighbourhoods and business. Too often jurisdictions and consultants offer strategies to improve corridors that only revolve around replacing what exists with high-value, high-income development. Instead, where land values don't support major redevelopment, greater focus should be placed on implementing more modest changes that respond to adjacent neighbourhood needs. Corridors may never be the most culturally or economically valuable areas, but they are important indicators of the care and attention paid to the neighbourhoods and businesses. Even ignoring the importance of serving all residents, a neglected and poorly performing corridor can undermine the overall identity of a town or city, damaging property values and business opportunities. Therefore, an important strategy in reshaping these areas is to take small immediate steps while creating a long-term vision and action plan. The American Planning Association selected President Clinton Avenue in Little Rock, Arkansas, as one of its Great Streets in 2009. A long time business leader commented that it was 'an overnight success 20 years in the making', referring to the transition of the corridor from derelict warehouses to a cultural and entertainment environment complete with public transport.

↑ Concept for reshaping a typical suburban corridor in Southern California

A master plan for repositioning a corridor is not enough. During the planning process we must interact with property and business owners, and nearby residents to identify smaller improvements and demonstration projects that can be made at low cost and start the change immediately. These can be as simple as new paint, fixing windows and removing the bars over them, transforming vacant parcels into temporary parks or urban gardens, or adding seating and shade around transit stops.

> A neglected and poorly performing corridor can undermine the overall identity of a town or city, damaging property values and business opportunities

Reshaping the American Strip is arguably the most daunting challenge of the built environment, whether in an urban or suburban setting. It requires sustained attention by public officials and a holistic approach to identifying and creating catalysts for change. This focused attention can achieve major public benefits, including improved economic vitality through a broader and more sustainable mix of uses; improved mobility for pedestrians, cyclists and public transport users; and expanded housing options for under-served markets. Strategically locating new multifamily housing along corridors enables communities to accommodate growth while providing long-term stability to adjacent single-family neighbourhoods. New housing brings new demand for local uses, which also benefit nearby neighbourhoods. And finally, local jurisdictions have the capacity to ensure that as the corridor is reshaped, there is improved connectivity to the adjacent neighbourhoods. Developers can also play an important role as both advisers and champions of innovation and high-quality pedestrian or transit-oriented design. In the end, corridor revitalisation is about reconnecting to surrounding neighbourhoods physically, socially, and economically – making them relevant and desirable places for the community. ●

● **Karen L. Gulley, Principal, The Planning Centre, California**

BRADFORD: COMPLEX STREETS, COMPLEX SOCIETIES

Ali Baig and Myfanwy Trueman emphasise the importance of engagement with diverse populations

↑ Manningham Neighbourhood Development Plan (www.bradford.gov.uk)

Bradford's industrial heyday has long gone. The wool and textile industry, which has been in terminal decline since World War II, is now practically extinct. Its legacy, however, still impacts upon the urban, economic and social landscape of this once great northern city.

The city centre bears the scars evident in many post-industrial cities. Retail units are closed and boarded up and there are a number of cheap pound and gambling shops. It is also suffering the effects of a prolonged 'will they, won't they' investment from Westfield – a shopping centre which, after the demolition of many existing retail units, is yet to materialise.

However, a recent £24 million investment in the city centre means that Bradford now possesses the largest man-made water feature in the UK. The nearby Alhambra Theatre attracts shows from London's West End and the National Media Museum complements the city's recent accolade as the first UNESCO City of Film. The city has growing clusters of financial, technological and new media organisations and headquarters of many national and global firms.

POST-WAR IMMIGRATION

The immigration that kept the textile factories alive throughout the 1960s and 70s, has resulted in large Pakistani, Indian and Bangladeshi communities which are dominant in and around the city centre. One such area is Manningham, with mills and terraced houses that gave waves of immigrants the employment and shelter they needed in post-war UK.

Manningham Lane, which dissects the area and guides traffic to and from the city centre, was once a glorious boulevard brimming with fine Victorian architecture. Most of its history, unfortunately, has been demolished, replaced by an out-of-town style shopping park and various small businesses run by local entrepreneurs. Manningham Lane still attracts weekly crowds, but the queues that form are not in anticipation of the latest production at the theatre or a sale at an exclusive department store but rather they gather around the local job centre.

The recent arrival of a huge Toys R Us and a Tesco Express have added an extra retail dimension to a road dominated by ethnically owned takeaway and furniture shops. Many of these suffer from poorly designed shop frontages and are not very inviting for the huge number of passing commuters streaming into the city from Bradford's suburbs or surrounding villages. The local immigrant community is currently large enough to support these businesses, but as future generations become more acculturated and look elsewhere to satisfy their retail needs it will be imperative that the local businesses attract non-ethnic customers in order to survive. It is therefore unfortunate that Manningham Lane was a focal point of the two riots that further blighted Bradford's recent history. Even the local football team, whose stadium nestles beside Manningham Lane, can no longer attract the razzamatazz of Premier League football as it once did. It now languishes in the fourth-tier and is constantly on the brink of disappearance, a state that somewhat reflects its immediate physical surroundings.

TAKING THE INITIATIVE

Over recent years several well-meaning regeneration initiatives have been planned and implemented in the Manningham area, though there has been little impact on Manningham Lane itself. The Oak Lane area of Manningham, for example, has benefited from Urban Splash's multi-million pound investment in the Lister Mills site. The conversion of this huge former textile factory into apartments has brought designer urban chic into the heart of the ethnic inner-city. However, to reach this oasis of modern living from the centre of town involves journeying along Manningham Lane, which can quickly dissipate any feelings of exclusivity or elegance.

Recently a group of local businesses in and around Manningham Lane attempted to create a grass roots regeneration initiative called Manningham Means Business. It sought to identify collective goals to benefit both the businesses and the local community living in the area. Although many businesses were enthusiastic and participated in the organisation, others, particularly ethnically-owned businesses, appeared apathetic and disinterested. They would not reply to invitations to meetings at the football ground or respond to mail shots in the local newspaper.

The lack of engagement from these groups ultimately meant that their needs were not registered. The ethnic businesses were not just ignorant of Manningham Means Business but also of the plethora of other organisations which existed to assist these communities. The outcomes reflected this mutual ambivalence. Bollards went up on Manningham Lane to prevent illegal and perceived excessive street parking which the businesses actually relied on. Blue themed street furniture and hanging baskets were deemed necessary rather than the extra security or police presence genuinely required. One particularly bizarre outcome stemmed from a team of well-wishing volunteers who landscaped some overgrown gardens by trimming and cutting down trees. The furious owner of a previously secluded hotel, now blames the initiative directly for his lack of trade, as cars parked outside the establishment, previously shrouded by foliage, are now visible to everyone!

Today the road's potential social, cultural and economic importance to the city and its surrounding community remains relatively untapped.

IMPORTANCE OF EFFECTIVE ENGAGEMENT

The introduction of Neighbourhood Plans may lead to more engagement with communities and to more realistic user-focused solutions to urban development. The issue, particularly for diverse communities such as those along Manningham Lane however, is how to effectively engage with such disparate groups to get to the heart of the problems facing the people who actually live and work there.

The ethnicity of the Asian communities living and working along Manningham Lane for example, cannot be simplified as merely Indian, Pakistani or Bangladeshi. Each group is subdivided further into micro-segments based on religion, language and even caste. The recent growth of satellite and cable television means that people can now view programmes from their country and region of origin and exist almost entirely detached from the host or neighbouring groups. The internet, radio and even newspapers are in their native language and in such a context it quickly becomes evident why an advert for a neighbourhood forum placed in the local Bradford newspaper doesn't reach them. Even if the advert is eventually read, people may not want to go to the football ground where the meeting is held, an alien world of perceived hooliganism and racism.

Research has found that each business along Manningham Lane has a different set of insights and agenda. Highly acculturated businesses are more self-actualised and therefore appreciate how hanging baskets, for example, can improve the

↖↑ Manningham Lane as was, Busby's department store, destroyed by fire in 1979 (Bradford Museums and Galleries)
↑ Manningham Lane today, the current Busby's site (www.bbc.co.uk)
↖ Urban Splash's redevelopment of Lister Mills (www.urbansplash.co.uk)
← Hanging baskets and blue bins – well-meaning street furniture

↑ A typical business with poor shop frontage

exteriors of their properties. Less acculturated, harder to reach businesses are more focused on fulfilling basic needs such as economic survival and therefore less inclined to engage with an agenda focused on ornamentation.

Consultation fatigue may also be prevalent in hard to reach communities that have been prodded and probed many times before, often with little to show in return. There could be a lack of trust or even fear of the council and its related organisations. Suspicions over real motives may persist, such as 'are they trying to force us into being VAT registered'? Anyone attempting to communicate with these groups needs to understand the formal and informal business and personal networks that exist.

Anyone attempting to communicate with these groups needs to understand the formal and informal business and personal networks that exist

GET TO KNOW KEY STAKEHOLDERS

Communication must therefore address language differences and any communications strategy must be built on effective and appropriate local knowledge. Personalised engagement is essential and it was the involvement of a University of Bradford School of Management research project that began to unravel some of the key issues facing Manningham Lane and its communities.

The project involved direct face-to-face interviews with key stakeholders. This not only enabled the gathering of fundamental data but allowed local entrepreneurs, particularly those who conduct their daily business along the road, to have their fears and anxieties voiced. These interactions also allowed mutual benefits of proposed initiatives to be explained and clarified, and uncovered virtual, direct verbal and media channels for effective communication. A range of recommendations emerged from the research that will be of direct relevance to other attempts to engage the complex mixed societies that inhabit many of the UK's mixed street environments:

- **Utilise both mainstream and ethnic media**
  The radio stations in Bradford popular with ethnic-minorities include Sunrise Radio and Radio Ramadan. Asian television channels such as ARY and Zee TV can also be used to target an ethnic audience.
- **Emulate the ethnic marketers**
  The promotion methods currently employed by ethnic businesses must be exploited. The use of simplified and multi-lingual posters in shops and places of worship can be used. The distribution of unambiguous and straightforward leaflets and the sponsorship of events might be considered. Combined with the use of ethnic media, these methods imitate the style of marketing currently preferred by ethnic businesses targeting their Asian audience.
- **Personalise and interact**
  There must be informal approaches to key-stakeholders. The regeneration initiative should preferably use an ethnic-minority person, selected from the target community, to help communicate the messages.
- **Educate**
  Through personalised media specifically targeting certain communities a common consensus with key stakeholders can be formed that change is necessary and achievable.
- **Be open, accessible and transparent**
  Organisations must display characteristics that will reduce the risk of distrust or apathy resulting from unclear motives. Misperceptions can be avoided with an unambiguous mission that does not prefer some groups over others and does not alienate communities which may be less acculturated or integrated.
- **Obtain feedback**
  Personalised visits must be used to obtain clear data regarding responses of the target community to regeneration messages and the communications method used. They are also helpful in clarifying the wishes and needs of the community and ensuring that initiatives are consistent with these.
- **Use a specialist agency**
  If the initiative is to be marketed to a large number of hard to reach communities it may be necessary to utilise a specialist marketing company experienced in communication strategies towards these audiences.

Once information is gathered it goes without question that it should be acted upon. Manningham Lane is beginning to improve but the process is slow and recent immigration from within the EU has moved the goalposts once again. Multiculturalism can create isolated communities, but with the correct engagement, these communities can be woven together to create the rich tapestries and fabric that Bradford in particular has always been famous for. ●

● Ali Baig, Lecturer in Marketing and Advertising, Coventry University
Myfanwy Trueman, Heinz Lecturer in Innovation and Marketing, Bradford University School of Management

HIGH STREET 2012: CELEBRATING A GREAT LONDON HIGH STREET

Tunde Awofolaju and Paul Harper describe the transformation of a major London artery as part of the Olympic legacy

In 2005, London was confirmed as the host city for the 2012 Olympic Games. The bid documents submitted by the London Organising Committee focused on the regeneration of East London as a key games legacy.

As well as the physical legacy of the new Olympic Park and the venues that will be retained post Games for the use of local communities, neighbouring boroughs also developed proposals for improvement of the public realm in order to harness the momentum associated with the Games. High Street 2012 (HS2012) is a programme of physical improvements to the A11 leading from Aldgate on the fringes of the City of London, through to Stratford and the Olympic Park. The London Boroughs of Tower Hamlets and Newham have collaborated with the Greater London Authority, Transport for London and English Heritage to develop the vision for an ambitious programme of works.

As the A11 travels east from Aldgate it adopts the names of its interlinking high streets including Whitechapel High Street, Whitechapel Road, Mile End Road, Bow Road and Stratford High Street. Similar to other urban mixed use streets it is composed of a mix of retail and residential, as well as being a major transport artery. This key route is characterised by the diversity of its people, having served as home to changing new immigrant communities since the late 17th century.

HOUSING, RETAIL, TRANSPORT AND TRAFFIC

Housing features strongly along the route, notably with the social housing of the Ocean Estate at Stepney Green, residential uses above the shops all along the street, the single and double fronted Georgian terraces at Mile End and the pockets of student accommodation for Queen Mary College. There are also clusters of traditional retail parades (particularly at Whitechapel and Mile End) with shop signs that often clutter the building frontages, obscuring their historic features. The shops themselves are dominated by fabric operators and fast-food restaurants, with few multiple high street stores. Brick Lane with its renowned offer of assorted curry restaurants, is accessed just off the High Street at Aldgate.

The 6km HS2012 is well served by public transport with six Underground stations, Docklands Light Rail, a major bus route, and the planned Crossrail station interchange at Whitechapel, due to open in 2017. Cars dominate the local environment however with 30,000 vehicles per day using the route.

↑ High Street 2012 vision diagram

↑ Whitechapel facades and shop signs
↑↑ Aldgate historic building schemes, before and after

The traffic traverses areas of exceptional architectural and historic interest, whose character and appearance Tower Hamlets Borough has chosen to protect with Conservation Areas in Stepney Green, Whitechapel and Mile End (Tredegar Square). These are interspersed with post World War II reconstruction projects of varying success that have led to a multitude of building forms, styles and heights.

From Bow to Stratford this is a 21st century high street, and although often vehicle-dominated and inhospitable, the street has the potential to house tens of thousands of new residents and associated shops, schools, open space, leisure and entertainment.

DEVELOPING THE VISION

In 2008, architectural practice Fluid was commissioned to produce a vision study which aimed to create a healthy, connected high street and to celebrate it revealing its rich social and cultural heritage. The study proposed a range of actions that would take place along its length with eight area-specific initiatives at Aldgate, Whitechapel, Mile End Waste, Ocean Green, Mile End Intersection, Bow, the Greenway and Stratford, to be delivered by varied teams of professional urban design and architectural practices.

Simultaneously, a range of route-wide actions were proposed, including historic building enhancements, de-cluttering the street, creating a green thread, and improving lighting, street surfaces and way finding. For example, in partnership with English Heritage and Design for London, a delivery plan for a Historic Buildings Conservation Scheme was prepared which identified over 100 buildings in five locations along the route as priority targets for work. These proposals include elements for delivery both before and after the 2012 games.

Community engagement was embedded in the delivery of High Street 2012 right from its inception, and a real dialogue was built up over time with a broad range of individuals, businesses and organisations that provided a rich mix of practical everyday information, genuine insight and moments of inspiration.

REALISING THE VISION

High Street 2012 built on what was there, and by celebrating the everyday and injecting creativity into the process of incremental change, brought about effective, durable and long lasting change.

In Aldgate, at Braham Street Park, a new park has emerged from the unravelling of a one-way traffic system. This project was funded by a private developer who recognised that offices next to a park would be much more attractive than offices next to an urban motorway. The result is not a corporate plaza but a softer more welcoming park accessible to local residents as well as office workers. Two years on, a large Pret-A-Manger has occupied part of the ground floor of one of the buildings fronting the space, and now activates one of its edges drawing people into and through the park which remains a flexible and programmable space.

At Altab Ali Park, an archaeological dig literally excavated the history of the site and an Alpana street painting event revealed the richness of the culture of the Bangladeshi community living in the area. These events opened up a meaningful dialogue between those using the park and those living, working or studying nearby. This helped the design team to produce a sophisticated, layered design that provides space for sitting, chatting, playing and for social and political gatherings, and a space where people can learn about the history of the area. A similar process of engagement with a rich history and dynamic present are about to reveal another

multi-layered landscape at Mile End Waste.

At Whitechapel, the market was probably the most logistically complex project and the most difficult to deliver. The improvements are subtle, designed to make the market work better, with improved lighting, drainage and servicing, particularly when Crossrail arrives.

At Ocean Green, plans were already well advanced when it became part of the HS2012 project. The resulting design uses landscape at the edge of the estate to re-connect it to the high street whilst still providing privacy and protection for residents. Access to Mile End Park has also been improved and the green bridge replanted. A magnificent floating towpath has appeared on the canal, and the cycle superhighway now snakes its way down part of the street. Paving, lighting and carriageway changes have started to make Stratford High Street a little more like a street than an urban motorway.

It has not been easy to nurture change of quality whilst negotiating a way through the complex network of ownership, responsibility and regulation that characterises work in the public realm. Getting good designers on board has been crucial but as important has been the holding together of an expanded client team for them to work with. This team has included highway authorities, local authorities, heritage organisations, private developers, parks departments, artists, market traders, schools, museums, women's groups, religious organisations and many more. It is a long list that has allowed the project to tap into shared imaginings of how good things might be, to reveal shared and hidden histories and to make physical changes that improve the experience of everyday London life.

THE FUTURE OF HIGH STREET 2012

Times have changed since HS2012 was first mooted four years ago. There is now more of a focus on job creation and support for local businesses in the area, to help entrepreneurs flourish and provide sources of employment for local residents. In December 2011, the Portas Review outlined recommendations to revitalise high streets across the country, explaining that this is vital to ensure that they do not lose the battle with internet shopping and out-of-town shopping centres.

The £23 million invested in the project over the last couple of years shows how carefully judged interventions to improve the physical fabric of such street together with initiatives to engage in a meaningful dialogue with residents, businesses and property owners, can help such places continue to thrive as venues of commerce and business activity, as an important social, civic and community resource, and as a balanced transport route.

High Street 2012 as a project, will come to a natural end in 2012. However it was only ever a small contribution to the incremental evolution of this ribbon of everyday London life. The process of incremental change will continue and the opportunity remains to influence this as Crossrail arrives, the emerging 21st century Stratford High Street starts to take shape post Olympics, and as the City continues to spread eastwards from Aldgate. ●

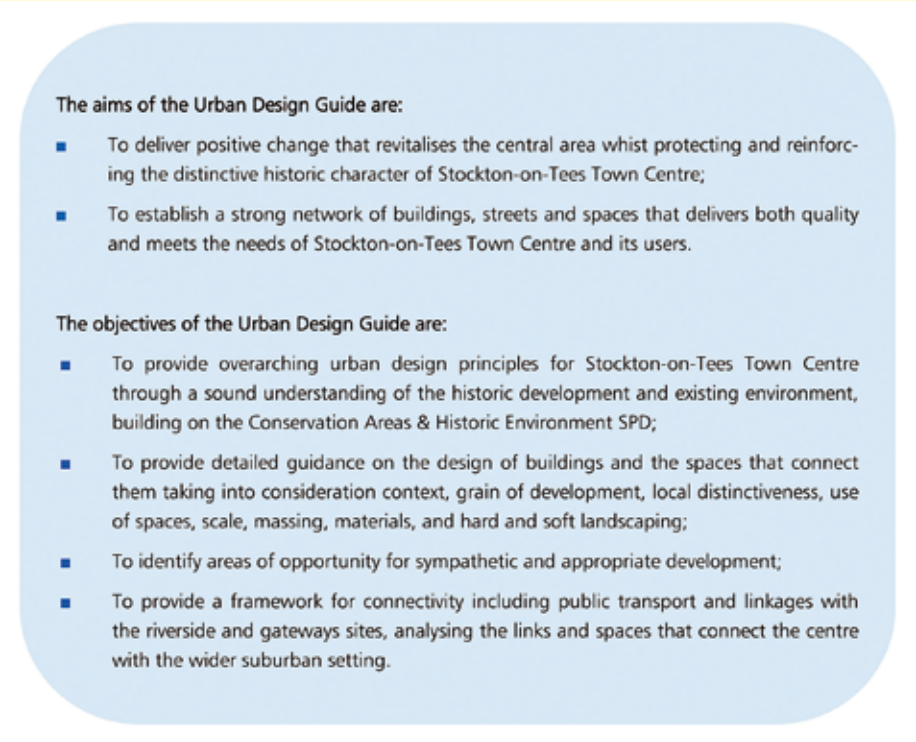
↑ Altab Ali Park
↑↑ Floating towpath at Bow
↑↑↑ The future of the high street

● **Tunde Awofolaju, London Borough of Tower Hamlets**
Paul Harper, Design for London

TOWN CENTRE URBAN DESIGN GUIDE

Stockton-on-Tees Borough Council describes its ambitious document

↘ Central area opportunities plan
↘↘ Area covered by the Guide
↘↘↘ Analysis and concept



The aims of the Urban Design Guide are:

- To deliver positive change that revitalises the central area whist protecting and reinforcing the distinctive historic character of Stockton-on-Tees Town Centre;
- To establish a strong network of buildings, streets and spaces that delivers both quality and meets the needs of Stockton-on-Tees Town Centre and its users.

The objectives of the Urban Design Guide are:

- To provide overarching urban design principles for Stockton-on-Tees Town Centre through a sound understanding of the historic development and existing environment, building on the Conservation Areas & Historic Environment SPD;
- To provide detailed guidance on the design of buildings and the spaces that connect them taking into consideration context, grain of development, local distinctiveness, use of spaces, scale, massing, materials, and hard and soft landscaping;
- To identify areas of opportunity for sympathetic and appropriate development;
- To provide a framework for connectivity including public transport and linkages with the riverside and gateways sites, analysing the links and spaces that connect the centre with the wider suburban setting.

BACKGROUND

The Borough of Stockton-on-Tees, in line with the current national economic picture is in a challenging period for economic growth. As the economy begins to recover, the assets within the town centre must be built upon to ensure that a new and exciting era of positive change brings growth. There is real potential to attract new investment, businesses, residents and visitors through a strategic and integrated approach to the town centre's regeneration.

Previous strategic work undertaken by the council suggested the need for a planning policy to be developed ensuring that the authority has the power to guide development into the most appropriate locations, resist applications that do not benefit or support the key development priorities for the town centre, and give potential investors comfort that the council has a robust strategic vision for the Stockton Central Area.

Through the delivery of a Heritage Partnership scheme funded by English Heritage, the *Stockton Town Centre Urban Design Guide* was developed and designed to be used by any party involved in the ongoing regeneration of Stockton town centre.

GUIDING VISION

The Guide aims to deliver positive change that will revitalise the town centre by establishing a strong network of buildings, streets and spaces that delivers both quality and meets the needs of the town centre and its users, whilst protecting and reinforcing the distinctive historic character of area. It provides detailed analysis of the town centre's current situation including a health check, land uses, scale, urban grain, frontages, landmarks and visual structure, pedestrian circulation, public realm and green space, and movement and parking.

The document sets out ten urban design principles that all town centre developments should follow including investing in quality to secure the right design team to deliver quality design and materials; that developments create a sense of identity, which enhances the town centre's historic character and creates an impact and sense of arrival; have clear legibility to ensure they are welcoming, easy to use and orientate; and provide good connectivity by creating visual and physical links to the surrounding buildings, spaces and transport corridors.

The historic context, urban design analysis and character area guidelines have been used as the foundations for a concept plan and vision for a sustainable and attractive town centre, complemented by guidance on streetscapes, built form and public realm materials.

LESSONS LEARNED

Consultation played an essential part in the development of the guide, specifically consultation with the planning department and key stakeholders. Close working relationships with these areas ensured complete buy-in from those who will seek to use the guide.

Initial consultation suggested that design guides are sometimes considered as being a hindrance to the planning process or a reason to inflate the cost of development or improvements. Good design doesn't necessarily mean expensive design; good design guidance is about providing the appropriate tools for the right context.

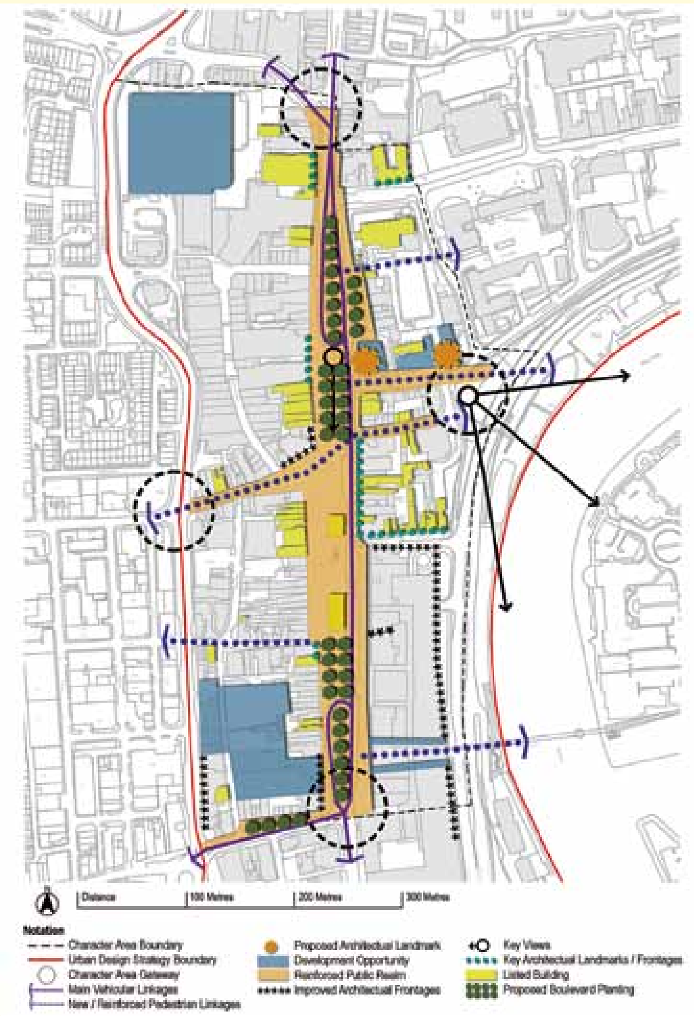
GOING FORWARD

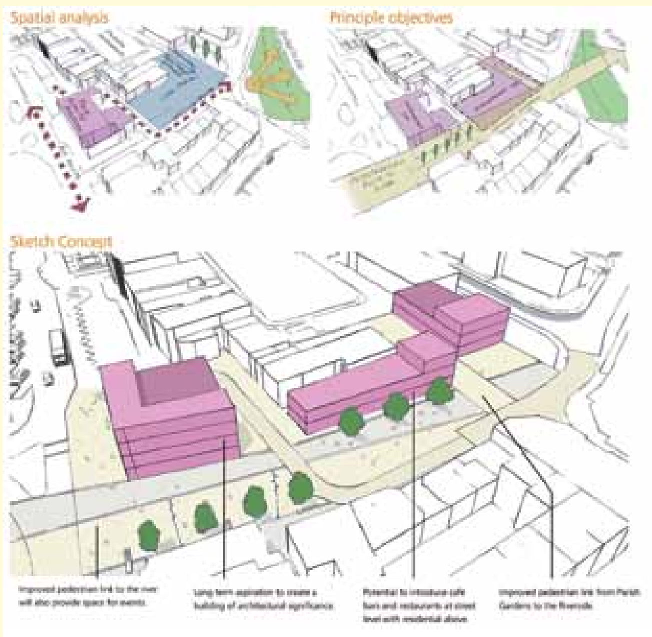
The Council's ambitious plans for the regeneration of Stockton town centre are underpinned by this guide, which as a document was delivered entirely by the authority's own in-house urban design team, using local knowledge and expertise to promote the appropriate conservation and enhancement of the town centre's built environment.

We believe this has been a unique project for a local authority, and as a result the guide has been a catalyst for a £38m investment plan within the town centre, including £17m public realm improvements (again delivered by our in-house design team) which started on site in September 2012.

The guide also supports the delivery of a current Heritage Lottery Funded Townscape Heritage Initiative Scheme, which seeks to improve the built form heritage and bring vacant floor space back into use, thus contributing to the town's future economic growth. It is intended that the *Design Guide* will eventually be formally adopted as a Supplementary Planning Document (SPD) as part of the Local Development Framework process to support and ensure good design within the town centre's built environment. ●

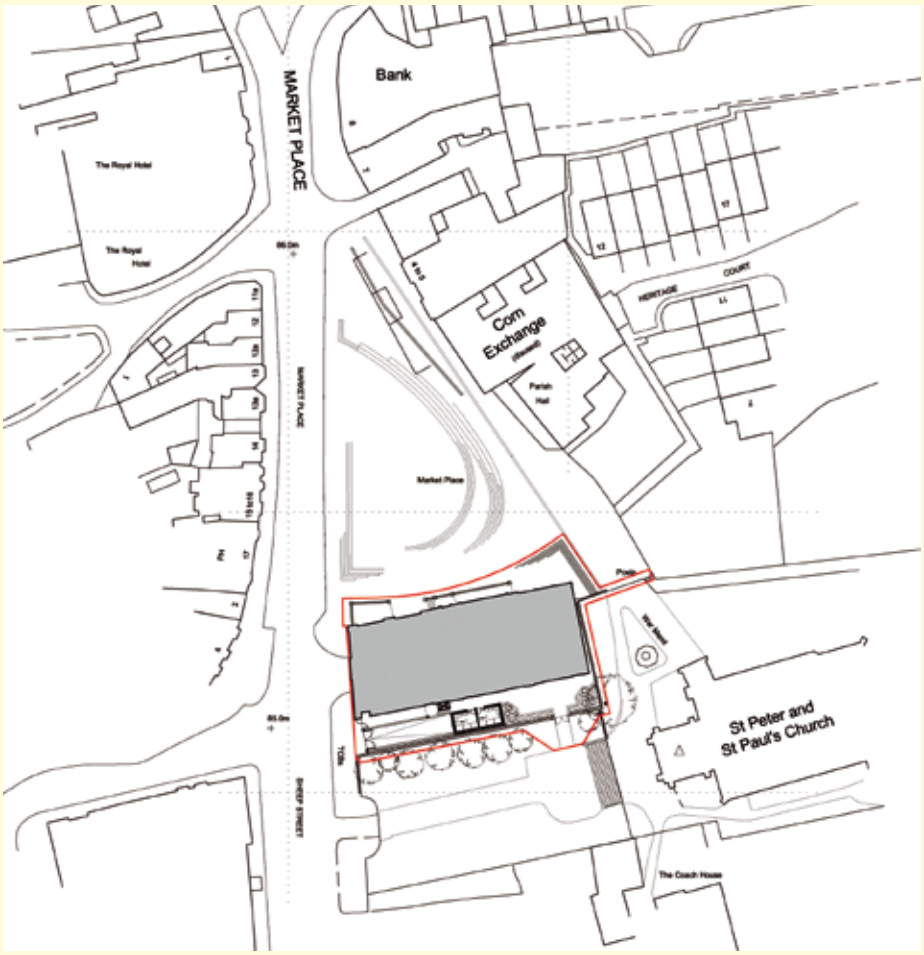

Urban Design Principles
01 Quality
02 Community
03 Identity
04 Legibility
05 Permeability
06 Connectivity
07 Sustainability
08 Security
09 Vitality
10 Longevity


Distance
100 Metres
200 Metres
300 Metres
Notation
Character Area Boundary
Urban Design Strategy Boundary
Character Area Gateway
Main Vehicular Linkages
New / Reinforced Pedestrian Linkages
Proposed Architectural Landmark
Development Opportunity
Reinforced Public Realm
Improved Architectural Frontages
Key Views
Key Architectural Landmarks / Frontages
Listed Building
Proposed Boulevard Planting


Spatial analysis
Principle objectives
Sketch Concept
Improved pedestrian link to the river will also provide space for events
Long term aspiration to create a building of architectural significance
Potential to introduce cafe bars and restaurants at street level with residential above
Improved pedestrian link from Parish Gardens to the Riverside

REVIVING THE TOWN'S MARKET PLACE

Kettering Borough Council shows its sensitive intervention



Historically, Kettering's market place had been enclosed by built-form on the three sides of the square. However, this sense of enclosure had been eroded by the demolition of the previous buildings on this site in the early 20th century. The human scale of the space was lost, leaving an open, desolate, rarely-used area, with a small car-park and public convenience block dominating the southern side of the square.

Our aim was to regenerate this forlorn, miserable area of town within the Kettering Town Centre Conservation Area, whilst respecting the surrounding listed buildings, including the prominent – Grade 1 listed – Parish Church, and other buildings of architectural interest.

Against commercial advice, which advocated a mix of commercial/retail with office space above, we approached the revival of this area by building two restaurant units with ten residential units above and resident basement-parking below. Whilst not slavishly copying the design of the properties that once stood upon this piece of land, it was intended to recapture the spirit of those structures and their relationship to the adjacent church of SS Peter & Paul.

The buildings are now complete and the market place environment has been improved by recreating the historic form, using quality materials and modern build methods, to establish a friendlier, more intimate, and therefore more widely-used, space. The view of the church and its spire is enhanced by being framed by the new properties, whilst the relationship with the award-winning Market Place itself is reinforced with the use of glass canopies on the market place buildings, echoing the striking market place canopy.

The ten residential units helped meet town-centre housing requirements and were fully let within two months of completion, at better than average town-centre rental rates. The demographic profile of tenants illustrates popularity with retirees and professionals/ semi-professionals, given the proximity both to the railway station and the town-centre retail hub.

Tenants of the residential units have a ringside seat for regular activities, including the recent Olympic Torch Relay through the borough, with a scheduled stop on the Market Place, and the Urban Beach Volleyball tournament which took place late July 2012. They also have easy access to the adjacent town library, museum and the acclaimed Alfred East art gallery, as well as a quality coffee shop which has opened in the former Tourist Information Centre, an historic coach-house adjunct to the town museum.

The restaurant units have designated outside dining space and terraces, which, like the apartments above, overlook the award-winning, vibrant market place, on which children now play in splash fountains, whilst families and shoppers linger on the terraced stone auditorium. One of the two restaurant units is already occupied by Prezzo, with indications of strong interest in the remaining restaurant unit. The area has gone from one of desolation to one of vibrancy and joyousness, which frequently echoes to the sounds of children's laughter.

LESSONS LEARNED

The importance of a strategic vision: the restaurant quarter was seven years in the making; the design has evolved, and improved, but the vision has remained the same: to create a lively, welcoming place that is surrounded by high quality buildings that animate the edges of the space and draw people into the restaurant quarter.

'You said, we did' we spent a long time consulting with local residents, traders and interest groups and have delivered what we promised to deliver for them.

Partnership working: we have worked very closely with our restaurant quarter neighbours, in particular the Parish Church, to ensure that they understood the vision for the space. Our discussions resulted in their removal of physical barriers between the Market Place and the church forecourt. We continue to work together on projects in that area. ●

↙ Plan of Restaurant Quarter
↓ Historic Market Place
Buildings with church
↓↓ The new Market Place
Buildings with church

↓ Market Place taken 5 years
ago with church
↓↓ Forlorn and miserable
↓↓↓ Restaurant Quarter
Summer 2012

CITY PARK

City of Bradford Metropolitan District Council reviews its bold design

City Park is a major new public space in the centre of Bradford. It comprises water features, trees, stone sculptures, a pavilion building with facilities, bespoke lighting columns, a new bus canopy and interactive lasers. At the heart of City Park is the UK's largest city centre water feature, a 3,600m2 'Mirror Pool' which boasts more than 100 fountains, including the tallest in any UK city at 30m high.

FROM ASPIRATION TO DELIVERY

The concept for a new city park with a large body of water as its focus dates back to 2003. A masterplan for the city centre by Alsop Architects identified the site as the natural heart of the city. It is located at the lowest point of the bowl in which Bradford sits and where its valleys and historic routes converge and meet.

Further work was undertaken to translate the visionary nature of the masterplan into a deliverable scheme, including engaging with the community at several stages. In 2007 a consultant team led by Gillespies was appointed in partnership with multi-disciplinary teams from Bradford Council, to develop the detailed design and delivery of the park. The scheme was funded by Bradford Council, Yorkshire Forward and the Regional Transport Board and was completed in January 2012.

CONNECTING THE CITY

The park is surrounded by a variety of city centre destinations. These include the National Media Museum and cultural quarter, the central shopping area, the university and college, the transport interchange, City Hall, and various civic uses, offices and hotels. Prior to the scheme, the site was a major bus route which dissected the city centre and impeded pedestrian movement between these destinations.

There was concern that the large body of water originally proposed in the masterplan could also interrupt pedestrian flows. In response to this the design evolved into a mirror pool where the water levels can be lowered to reveal pedestrian pathways through the space (dividing the water up into three smaller pools). This allows people to move easily in a variety of directions, connecting the city centre together.

Another issue to address was the city centre ring road (Princes Way) which effectively cut the site off from the learning and cultural quarters to the west. This was a poor pedestrian environment dominated by vehicles, safety barriers and inconvenient staggered crossings. The scheme has transformed this part of the ring road to create a more human scale environment. The barriers have been removed, the pavements widened, landscape and street trees added, and a wide new super crossing installed to enable easy and direct pedestrian access.

The relationship of City Park to the ring road needed careful consideration. Strategically placed landscape mounds, trees and hedges have helped to reduce the noise and visual impact of the traffic whilst still retaining pedestrian permeability and visual links between the park and wider city.

A DIVERSE, VIBRANT AND FLEXIBLE SPACE

The park offers a stimulating sensory environment. The pool is designed to provide different moods depending on the occasion or time of day. It can be a calm, reflective pool with occasional ripples, or a lively and dynamic space with fountains and erupting geysers, and it can be transformed again at night with atmospheric lighting. Also when walking through the park the spatial definition of the space constantly changes and different views are revealed creating visual interest and variety.

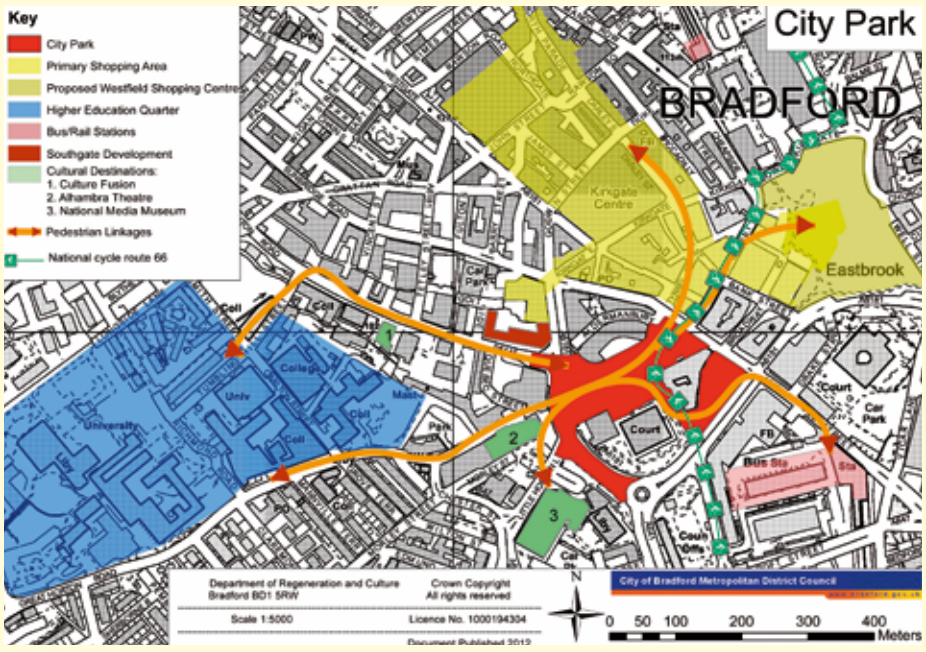
The design of the pool seeks to encourage people to engage with the water. One of the overwhelming successes of the scheme is undoubtedly the way in which local people have embraced and interacted with the water. It has introduced new activities to the city centre such as paddling, playing in the water and relaxing on the boardwalk. This has helped create a space which facilitates an active social life and feels like the heart of the city. This is further supported by the ability to drain the pool to create a flexible space that can be used for diverse events such as markets, theatre productions and community festivals.

A QUALITY PUBLIC REALM

The park is constructed from high quality natural materials which will enable it to stand the test of time. These include sandstone flags, porphyry setts, granite

↙ City Park highway works completed
↓ City Park completed
↓↓ Highways during construction
↓↓↓ City Park

↓ City Park completed
↓↓ Before City Park



cubes and a hardwood boardwalk. The design and pattern of the floorscape helps to create unity with the surrounding buildings contributing to a harmonious cityscape and a space that is distinctive to Bradford. The materials and street furniture, such as the lighting columns, are arranged in a way which helps to define the different parts of the park.

The public realm extends to the roof of the pavilion building which includes grassed areas to sit providing views out over the park. The pavilion itself houses the water tank and equipment for the fountains as well as free public toilets. There is also a fully fitted changing place with a hoist ensuring facilities are accessible to all.

The whole park has been designed to be accessible by a wide range of users. This has included careful consideration of the levels and using materials, colours and textures to signify different types of space, including a tactile edge to the pool.

Management arrangements are in place to ensure that the quality of the space is maintained. This includes a daily programme of cleaning the park early in the morning and draining the pool at night.

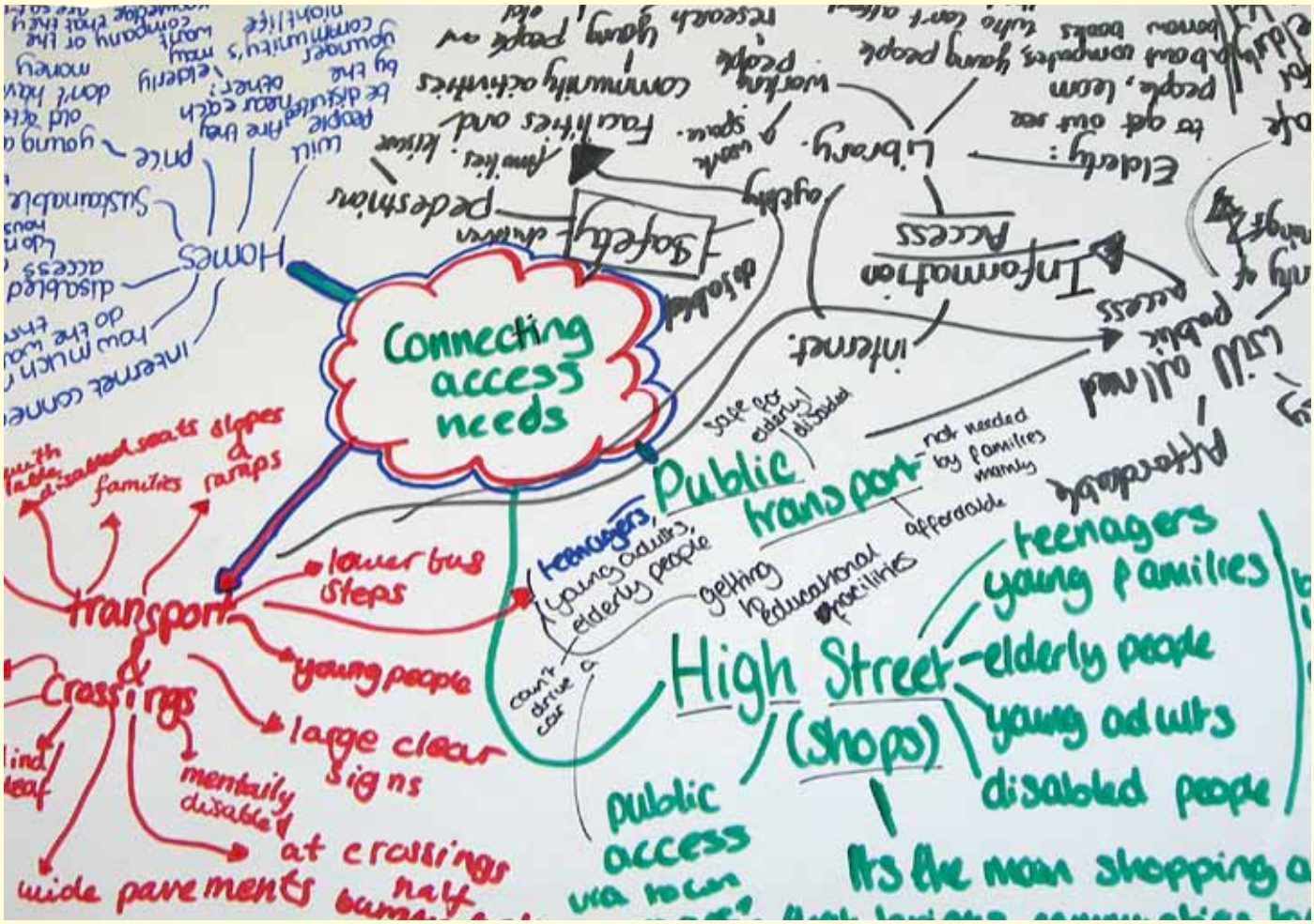
LESSONS LEARNED

A lesson to take from the project is the importance of keeping hold of the vision and maintaining the ambition and commitment to quality in delivering the scheme. Numerous challenges had to be overcome but partnership working, cross party political support and buy-in from the local community and business community were key in bringing the scheme forward.

The result is a park that has at once become an iconic space for Bradford, synonymous with the image of the city, but it is also very much a social space where people from all the district's communities come to meet, interact, relax and have fun. ●

LISTENING TO YOUTH VOICES

The Partnership of South Hampshire (PUSH) encourages more involvement



South Hampshire is planning for substantial economic growth in the next twenty years. With that growth will come new houses: houses built in our existing communities and upwards of 20.000 in new, self contained communities. This is being planned and managed by ten local authorities working together in the Partnership for Urban South Hampshire (PUSH).

As with any growth, the plans are contentious: public meetings are full of those concerned about the impact of these new homes on them. But the voices that shout loudest are usually over thirty years of age, and often against change. The ones who don't attend meetings or exhibitions are those who have a real stake in the future of South Hampshire – young people under eighteen who will grow up to live, work and raise families here.

'What' – asked our councillors – 'do the youth of our region want from new communities?' PUSH commissioned Space, Place-making and Urban Design (SPUD) to find out. They asked them to work with five schools in the parts of the region likely to experience growth, to design the places that they wanted to live in.

Each school group undertook a period of investigation into their locality, exploring both their positive and negative experiences of those places. This enabled them to identify aspects that they felt were in need of improvement or change and also to understand the practical issues and context in which change might take place.

As a team, each group agreed the focus and theme to prepare a brief from which they would develop proposals for change. Students were encouraged to extend their research through direct contact with the professionals involved in planning and development in their areas, sharing their experiences with their peers. In total, 75 young people from across the sub-region took part, and at least one now wants to be an architect and one an urban designer!

> We thought hard about how we could incorporate sustainable design into our ideas. Reusing the existing buildings, designing a 'green' community centre and reclaiming the High Street...

The young people's ideas were presented to an audience of councillors, planners and community representatives in late 2011. The audience were impressed with what they heard, and

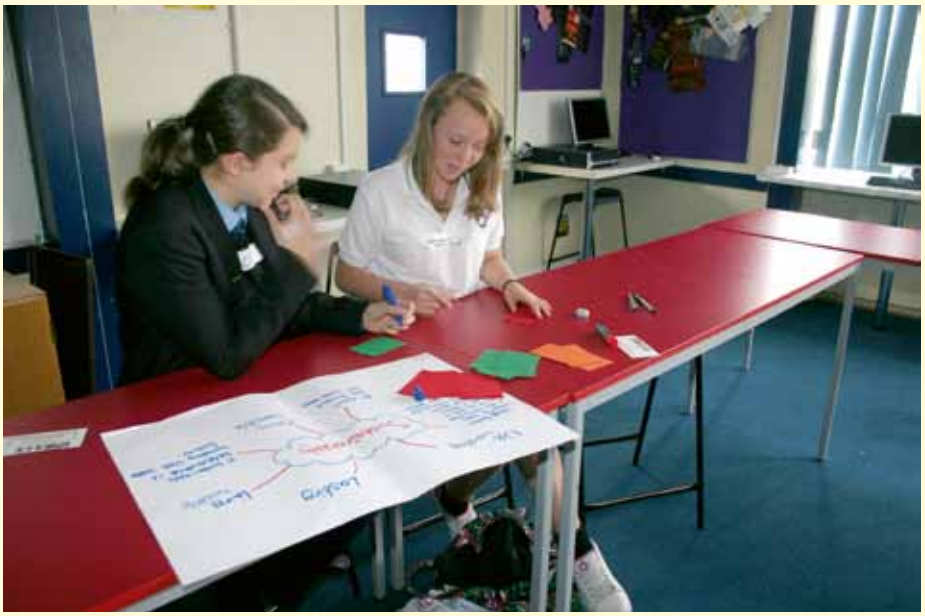
↙ Student thought shower exploring access issues (Swanmore College of Technology)
↘ Student photomontage for ideas for the approach to Portsmouth from M275), showing a new car park, sports facilities and marina (St Edmund's Catholic School)
↘↘ Students from Mill Chase Community Technology College, Bordon taking part in a workshop to prioritise key issues
↘↘↘ The SPUD 5x5 website
↘↘↘↘ Student from Quilley School of Engineering working on a master-planning exercise with all 5 schools

the presentations have been repeated at council meetings across the region. They've also been published in a booklet sent to all the PUSH councils, with copies for planning committee members and their officers (www.spudgroup.org.uk/#!spud-youth/vstc2=current-activity). The councils have committed to ensuring that, as detailed planning begins for new development, so they will look at how best they can give young people a voice.

> We appreciated having our views heard for once, by the local councillors

The project has given our young people an appreciation that they can and should have a say in planning and designing new communities in their area. But perhaps most importantly the young people, through their maturity and imagination, have begun to persuade councillors that they should be given a real voice in designing their future.

For 2012/13 PUSH has committed money to developing this approach further allowing us to embed a youth voice in our approach to urban design and planning for growth. We plan a programme of sessions for young people in Winchester and Southampton, in each case giving 15 youngsters the chance to learn about urban design over 20 evenings per group, and use their experience to plan the future of their cities. Once again, we'll present their ideas to local councillors and let young people have a say in their future. Our aim is to make these events a regular part of all our councils' debates about development and planning. ●



CHAIN STREET GOITSIDE URBAN DESIGN FRAMEWORK

City of Bradford Metropolitan District Council promotes quality in this residential area

The Chain Street area is historically important to the social development of Bradford as it was the location of the first major council housing scheme (1909). The residential properties were tenement blocks of a cottage style influenced by the Garden City movement. The site sits at the point where the regeneration zones known as The Learning Quarter, the city centre and the World Mile and Markets meet. Current works at the University to create a sustainable student village are starting to ripple regeneration into Goitside, where two students housing schemes have been created. On a similar basis it is envisaged that the mirror pool development in the city centre will bring regeneration opportunities to the western fringe of the city centre. The study site is located at the heart of these three regeneration zones and has the potential to link up these converging drivers for change.

The Framework seeks to promote a step-change in the quality of housing and environment by combining the best of the old with the best of the new; addressing community safety concerns whilst respecting the rich heritage and history of the area.

The study process consulted with users and service providers who tested and considered a broad range of options and assessed the merits of each. Five place-making scenarios evolved and were assessed on a qualitative basis, after which the Building for Life criteria were used to identify a clear preferred option for further detailed development.

The preferred option proposes a development form that utilises the existing streetscape reinforcing this to create a new linear park and formal square that is overlooked and engages with the new green space.

Chain Street comprises four discreet but interdependent sites with a separate solution identified for each:

- Two storey linear terraces of bed-sitters with some architectural merit were re-ordered vertically creating modern social housing standard family housing.
- 'U Block' flats were demolished to form a mix of private and social housing. The dwellings had a 3 storey form that responded to the surrounding city centre scale.
- Where the pedestrian route through the linear park changed direction, a small urban square was introduced, overlooked by a new extra-care residential development, and
- This site has two distinct sides to it. One fronts Westgate which is a busy main road connecting the centre through to the themed shopping area of the World Mile. This developed into a commercial frontage with apartments above. The rear half was proposed as family housing fronting the surrounding streetscapes.

The park will include play space within its landscaped setting to provide for the children living in the family houses. The linear park form evolves into a more formal square, where it passes through Site C. All public spaces are well overlooked by the adjacent buildings that engage with the green space.

The Framework identified the need for a radical transformational strategy for redeveloping these sites, while knitting the development into the existing historic city centre streetscape. The strategy seeked to evolve Dutch urban models of locating family housing within the city centre along landscaped corridors which link into more traditional residential communities. The proposed development form and architectural language was deliberately modern, with the aim of challenging and transforming perceptions of the area and providing a development catalyst for the wider regeneration of the Goitside area.

The overall development respects the area's history and social context whilst providing a flagship regeneration project raising the profile of the wider Goitside conservation area. The Housing and Communities Agency supported the delivery of social housing, enabling an early start on site by InCommunities. The private housing elements of the scheme were funded through the provision of £1.2 million of gap funding support from the Council.

LESSONS LEARNED

- Identifying a demand for family housing in city centre
- Aspirational design quality is needed to transform perceptions
- Extensive broad consultation from outset led to delivery drive/engagement with the Framework
- Developing innovative strategies for using public owned assets to rive transformational regeneration
- Retaining and remodelling the best of the publicly owned assets to drive the quality of the Conservation Area, whilst not being afraid to demolish other buildings and replace them with high quality contemporary design
- Having established a demand for housing, the scale of the houses should

↙ Aerial view of existing site and context
↓ Proposed layout
↓↓ Roundhill Place: existing street frontage
↓↓↓ Roundhill Place: proposed street frontage

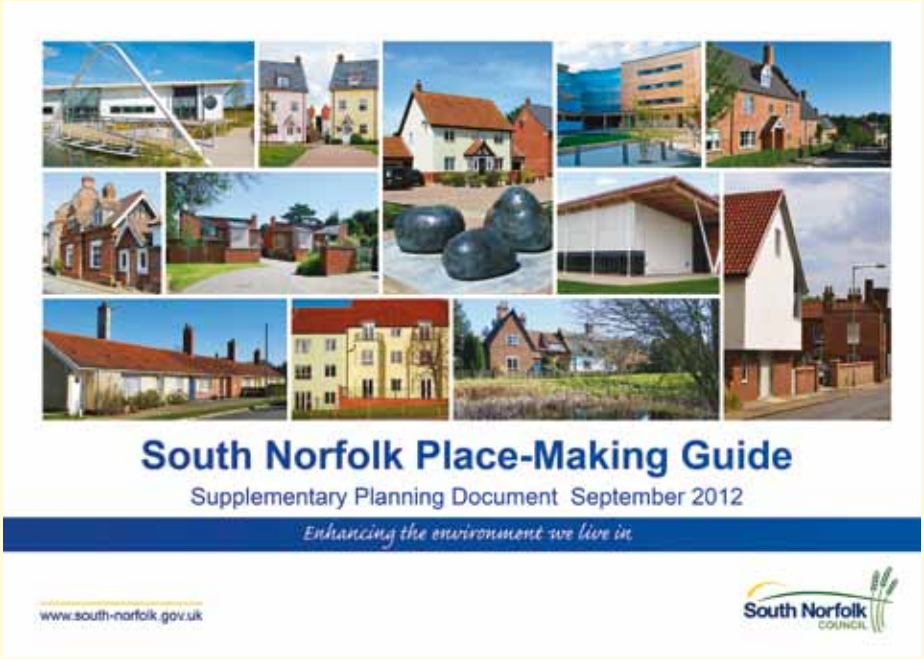
↓ Perspective of proposed layout
↓↓ Proposed linear park perspective
↓↓↓ Section through the site

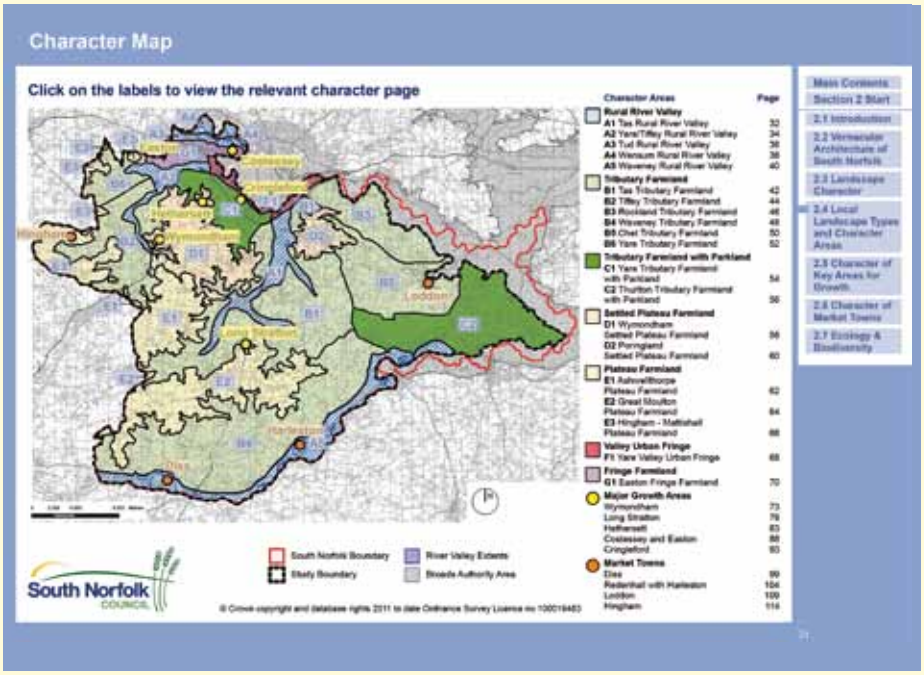
be appropriate for their city centre location. This requires a unique design solution rather than standard house types that are designed for suburban sites

- Utilising the best elements of the existing streetscape can deliver a best value solution through the use of the existing infrastructure. ●

PLACE-MAKING GUIDE

South Norfolk Council sets out its key principles





South Norfolk Council identified a need to influence and raise the quality of the design and layout of new development in the district. The *Place-Making Guide* is seen as a positive tool to deliver one of the Council's key priorities: 'Enhancing our quality of life and the environment we live in'.

The guide underpins the Council's commitment to maintaining and enhancing the quality of the built environment by providing practical advice to all those involved in the design and planning process on what is considered to be sustainable and sensitive design solutions, which positively integrate with existing communities to create attractive places.

The guide promotes local distinctiveness but also recognises the value of innovation and contemporary approaches. Fundamental to all approaches is the need for an integrated process where good place-making principles and sustainable development are considered as one.

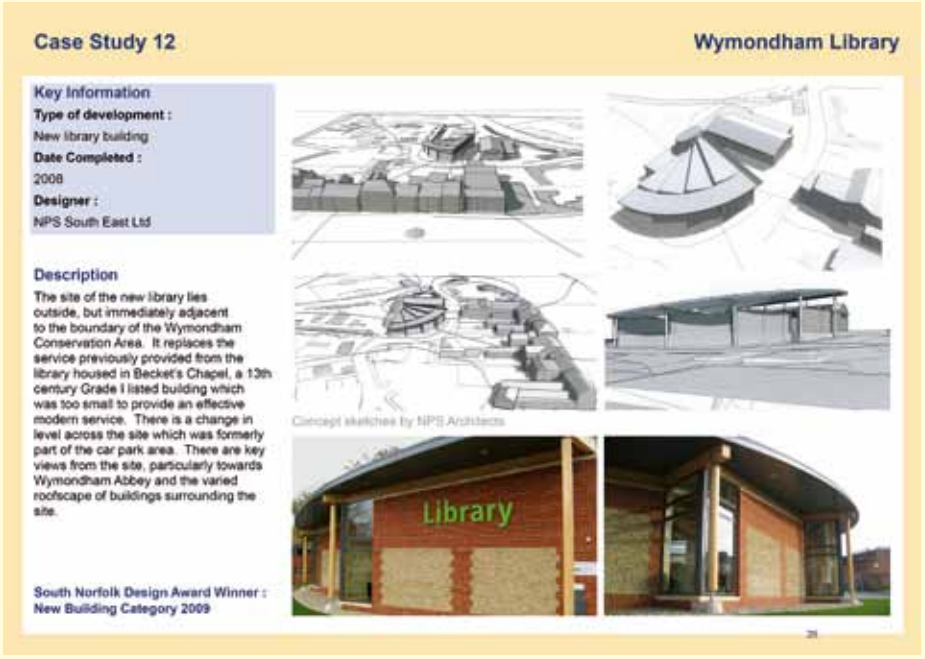
To ensure a proper understanding of the local context and distinctive character of South Norfolk, the guide defines the local landscape types, areas for growth and market towns within the district, and summarises the characteristics of each. Under each section, it suggests design principles which developers are expected to take into account when proposing any new development.

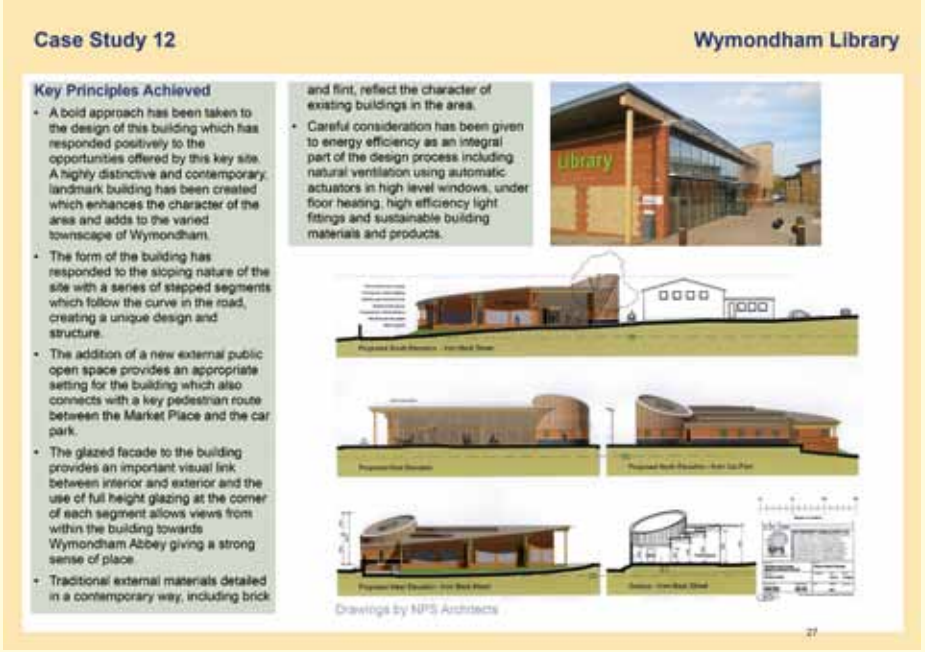
The guide sets out the key place-making and design principles that will be used to assess proposals for new development. These principles provide a checklist for anyone preparing a planning application to guide proposals, assessed using the *Greater Norwich Development Partnership Joint Core Strategy Policy 2: Promoting Good Design*. The guide uses a worked example to illustrate how these principles can be incorporated and also local case studies to demonstrate successful schemes.

The guide was subject to extensive public consultation and public exhibitions during May and June 2012, which followed a number of stakeholder workshops to inform its extent and content. It was produced in partnership with Tibbalds Planning & Urban Design Ltd., who were responsible for drafting the design principles section of the guide and preparing an electronic, interactive document for public consultation. The interactive guide allows instant access to any particular part of the guide using key words, locations or any of the main contents lists or maps, as well as website links to other guidance and best practice documents.

LESSONS LEARNED

Key lessons were learned during the preparation of the guide, particularly through the stakeholder workshops and the public consultation stage, and the document was amended in response to feedback received. Lessons included the need to ensure a holistic approach to appraising and understanding the site and its context, particularly in relation to ecology and biodiversity so that appropriate consideration is given to issues such as green infrastructure during the design process, and the guidance was strengthened to achieve this. Although the





↙ Cover of the guide
↙↙ Character map
↘ Three pages from the guide: Architectural Quality Case Study 12

guide mentioned the local distinctiveness of South Norfolk and required that design proposals respond positively to this, it became clear that there was a need to emphasise that good quality innovative and contemporary design solutions could also be appropriate; this was addressed with additional photographs and a number of case studies to illustrate a variety of contemporary building types, as examples of good design. There was also a very positive response to the interactive, electronic version and further website links were added to a wide range of additional documents and best practice guidance to allow instant and comprehensive access to appropriate information.

The *Place-Making Guide* SPD was formally adopted in September 2012 and will be a significant aid to applicants, developers and designers towards achieving high quality and sustainable development throughout South Norfolk. It will also assist elected members and officers in pre-application discussions and the evaluation of such proposals in accordance with the *National Planning Policy Framework*. ●

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Neither the Urban Design Group nor the editors are responsible for views expressed or statements made by individuals writing in *Urban Design*

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E landscape@leedsmet.ac.uk
W www.leedsmet.ac.uk/courses/la
Master of Arts in Urban Design consists of one year full time or two years part time or individual programme of study. Shorter programmes lead to Post Graduate Diploma/Certificate. Project based course focusing on the creation of sustainable environments through interdisciplinary design.

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Department of Architecture, Planning and Landscape, Claremont Tower, University of Newcastle, Newcastle upon Tyne NE1 7RU
T 0191 222 6006
C Georgia Giannopoulou
E georgia.giannopoulou@ncl.ac.uk
W www.ncl.ac.uk/apl/study/postgraduate/taught/urbandesign/index.htm
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OXFORD BROOKES UNIVERSITY
Joint Centre for Urban Design, Headington, Oxford OX3 0BP
C Georgia Butina-Watson, Alan Reeve
T 01865 483403
Diploma in Urban Design, six months full time or 18 months part time. MA one year full-time or two years part-time.

UNIVERSITY COLLEGE LONDON
Development Planning Unit,
34 Tavistock Square, London WC1H 9EZ
T 020 7679 1111
C Anna Schulenburg
E anna.schulenburg@ucl.ac.uk
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Salford M5 4WT
T 0161 295 4600
C Dr Riccardo Balbo
E course-enquiries@salford.ac.uk
W www.salford.ac.uk/built-environment
The MSc/PGDip in Urban Design & Regeneration develops physical digital design expertise in sustainable design and policy. Suitable for architecture and urban planning graduates and practitioners.

UNIVERSITY OF SHEFFIELD
School of Architecture, The Arts Tower, Western Bank, Sheffield S10 2TN
T 0114 222 0341
C Florian Kossak
E f.kossak@sheffield.ac.uk
W www.shef.ac.uk/architecture/study/pgschool/taught_masters/maud
One year full time MA in Urban Design for postgraduate architects, landscape architects and town planners. The programme has a strong design focus, integrates participation and related design processes, and includes international and regional applications.

UNIVERSITY OF STRATHCLYDE
Department of Architecture,
Urban Design Studies Unit,
131 Rottenrow, Glasgow G4 ONG
T 0141 548 4219
C Ombretta Romice
E ombretta.r.romice@strath.ac.uk
W www.udsu-strath.com
The Postgraduate Course in Urban Design is offered in CPD,Diploma and MSc modes. The course is design centred and includes input from a variety of related disciplines.

UNIVERSITY OF THE WEST OF ENGLAND, BRISTOL
Faculty of the Built Environment, Frenchay Campus, Coldharbour Lane, Bristol BS16 1QY
C Janet Askew
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MA/Postgraduate Diploma course in Urban Design. Part time two days per fortnight for two years, or individual programme of study. Project-based course addressing urban design issues, abilities and environments.

UNIVERSITY OF WESTMINSTER
35 Marylebone Road, London NW1 5LS
T 020 7911 5000 x3341
C Bill Erickson
E w.n.erickson@westminster.ac.uk
MA or Diploma Course in Urban Design for postgraduate architects, town planners, landscape architects and related disciplines. One year full time or two years part time.

Sainsbury's Global

I was recently in a meeting with planning officers and a national housebuilder, to discuss a proposal to build a town extension. Among other things we discussed the local centre proposed on the plan, which had a footprint labelled *Retail Unit*. The housebuilder's representative said 'I'll contact possible operators – there are only four or five of them'. Presumably she meant Tesco Express, Sainsbury's Local, etc. I had a sudden insight; this is how globalisation happens. There may be existing independent traders in the town who would be interested in the prospect of opening up a new store. But how would a national housebuilder get to know of them? It is much easier to have the telephone numbers of a few national retailers than to engage in complicated locally-based research and negotiations. The results of this are predictable. The town extension becomes a bit more similar to everywhere else; residents' choice is limited; and money migrates to London instead of staying in the town's local economy.

To an extent, this is the result of a development process that sets out to build several hundred houses, a school, some commercial premises and some shops, more or less all at once, on green fields. Unlike in older parts of a town that have grown incrementally and organically, with little if any planning, there is no time for local businesses to get involved in the process, to weigh up the opportunities for investing, or even to get to know the people who are taking the decisions.

My local high street, Ladypool Road in Balsall Heath, is the exact opposite of the case described above. It has grown over about a century and a half. It is a narrow, winding street (up to the 19th Century a country lane), lined on both sides for 750 metres with very few gaps, by shops and restaurants, and now, sadly, one remaining pub. It is the centre of the Balti restaurant culture which immigrants from Kashmir imported to Birmingham (or, some say, invented). Most remarkably, with one exception (a Betfred betting shop), there are no nationally-based businesses; no Boots, no Next, no Starbucks. There are three quite big food supermarkets, all with fresh fruit and veg outside on the pavement, several smaller food shops, a number of clothes shops, off-licences, a very good watch repairer, a big hardware shop, and lots of restaurants. They are all one-offs, and all fairly locally owned.

Ladypool Road is the Localism agenda, expressed in economic terms, in built form. When the government published its report on the future of high streets by Mary Portas in 2012, I invited her to visit Ladypool Road and see a thriving high street that seems to buck the downward trend. She hasn't been, although government ministers visit frequently, to see Localism in action. Balsall Heath is one of the government's Frontrunner pilot studies in both neighbourhood planning and neighbourhood budgeting (unique in being both), and I am currently coordinating the making of the Neighbourhood Development Plan, for the Balsall Heath Forum. All being well, early in 2013 we shall reach the final stage, the referendum on the plan. We have to get a majority of votes in favour, in order for the plan to become statutory. But I can see at least one snag: DCLG policy is that the referendum is based on the electoral register, of those living within the NDP boundary. But many of the traders who have businesses in the neighbourhood plan area, although local, do not live within the red line. They will not have a vote on the changes we are proposing to Ladypool Road and elsewhere, that will affect their future (I hope for the better). We haven't publicly discussed the referendum yet, so they probably don't realise this. It's a flaw in the neighbourhood planning regulations, and I can see it causing trouble.

● **Joe Holyoak**

↑ Two views of Ladypool Road, in Balsall Heath, Birmingham, a thriving local high street

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