

Progress in Planning 78 (2012) 101–150



www.elsevier.com/locate/pplann

Local experiences of urban sustainability: Researching Housing Market Renewal interventions in three English neighbourhoods

Catalina Turcu*

Bartlett School of Planning, University College London, Wates House, 22 Gordon Street, London WC1H 0QB, United Kingdom

Abstract

Ideas and thinking about sustainability and sustainable development have permeated over the last decades into most disciplines and sectors. The area of urban studies is no exception and has generated an impressive body of literature, which aims to marry 'sustainability' and 'urban development' by grounding the many interpretations of sustainability in an urban setting. This has taken many forms and inspired a range of initiatives across the world including 'healthy cities', 'urban villages', 'millennium communities' and the 'mixed communities' movement. Moreover, urban regeneration has come under considerable scrutiny as one of the core mechanisms for delivering sustainable urban development. At the most basic level, it can be argued that all urban regeneration contributes to a certain extent to sustainable development through the recycling of derelict land and buildings, reducing demand for peripheral development and facilitating the development of more compact cities. Yet, whether urban regeneration bears an effect on urban sustainability is an underresearched area. In addition, little is known about these impacts at local level. This paper aims to extend our understanding in these areas of research. We do so, by taking a closer look at three neighbourhoods in Salford, Newcastle and Merseyside. These neighbourhoods underwent urban regeneration under the Housing Marker Renewal Programme (2003-2011), which aimed to 'create sustainable urban areas and communities' in the Midlands and North of England. Approximately 130 residents from the three areas were interviewed and a further 60 regeneration officials and local stakeholders consulted. The paper looks at the impact of urban regeneration on urban sustainability by examining whether interventions under the Housing Market Renewal Programme have helped urban areas and communities to become more sustainable. It also discusses impacts at local level, by probing into some of Housing Market Renewal's grounded 'sustainability stories' and looking at how change is perceived by local residents. Furthermore, it re-opens a window into the Housing Market Renewal Programme and documents the three neighbourhoods within the wider context of scale and intervention across the whole programme. © 2012 Elsevier Ltd. All rights reserved.

Keywords: Urban sustainability; Local sustainability; Urban regeneration; Housing Market Renewal; Local impacts; Urban sustainability indicators

Contents

1.	Introd	luction	102
2.	Sustai	inability and urban regeneration	105
	2.1.	Measuring urban sustainability	106
	2.2.	Urban sustainability indicators	106

* Tel.: +44 2076794761.

E-mail address: catalina.turcu@ucl.ac.uk.

^{0305-9006/} - see front matter © 2012 Elsevier Ltd. All rights reserved. http://dx.doi.org/10.1016/j.progress.2012.04.002

3.	The rise and fall of an urban renewal programme					
4.	4. Mapping urban activity		12			
5.			18			
6. A portrait of urban sustainability in three neighbourhoods						
	6.1. Attitudes towards living in three area		25			
	6.2. Different degrees of local sustainability		27			
			28			
			29			
			30			
			33			
	6.2.5. Local services and facilities		35			
	6.2.6. Governance mechanisms		36			
7.	7. Discussion		39			
	7.1. How sustainable is sustainable?		39			
	7.2. Housing Market Renewal in hindsight		40			
8.			1 2			
	8.1. The wider context.		1 2			
	8.2. Continuing investment and support		43			
	8.3. People matter.		14			
	Acknowledgements		45			
	References		45			

1. Introduction

Urban regeneration and the land-use planning system have come under considerable scrutiny as the core mechanism for the delivery of sustainable urban development (Bruff & Wood, 2000; Owens & Cowell, 2002; Rydin, 1998). As Owens (1994, p. 440) notes:

Planning and sustainability share two fundamental perspectives: the temporal and the spatial. Both are concerned with future impacts on and of particular localities.

At the same time, the strategic aims of urban regeneration are amendable to the goals of sustainable development in various specific ways. At the most basic level, it can be argued that all urban regeneration contributes to a certain extent to sustainable development through the recycling of derelict land and buildings, reducing demand for peripheral development and facilitating the development of more compact cities (Couch & Dennemann, 2000). Similarly, regeneration projects encompass a spatial-temporal dimension across a range of organisations which offer scope for joined-up thinking and multi-agency partnering (Davoudi, 2000; DETR, 1999). Planning and designing of 'compact' or 'convivial' cities can contribute to a more sustainable way of life, particularly in industrialised societies. This can be done by encouraging the development over time of integrated mixed-use urban communities where people have a say in the making of their cities, more 'liveable' and greener places, in much the same way that has been advocated by a diverse range of architectural critics and urban planners (Florida, 2002). Such cohesive and convivial human settlements could provide diverse, yet socially balanced, communities in attractive urban areas.

These ideas fitted neatly with the agendas of multiagency partnership working, inclusiveness and community cohesion, mixed communities and the shift from government to governance pursued with great enthusiasm in the UK by the New Labour government since it took office in 1997. They also converged under the 'British Urban Renaissance' agenda, the leading theme of New Labour's urban policy which focused on the revival of inner- and post-industrial urban areas in British cities, and sparked a range of urban programmes and area-based initiatives intended to tackle multiple area disadvantage, including the New Deal for Communities, Neighbourhood Fund and Urban Development Companies.

However, the most prominent programme of all has been perhaps the Housing Market Renewal Programme, which aimed to use market 'restructuring' as a tool for 'creating sustainable urban communities' in areas of low demand housing in the Midlands and North of England. Indeed, the programme was designed to combat wider structural changes such as population decline, weak local economies and poor housing, which undermined the housing demand in these areas. Launched in 2003 by the Sustainable Communities Plan, it was seen as a 'national urban programme' and was initially planned to span over a 15 year period of time, spending an estimated £6 billion from the government's pocket and attracting a further £11 billion from private and other sources (Audit Commission, 2005). However, the programme came to an abrupt end in March 2011 under the Coalition Government which succeeded New Labour in May 2010. An estimated £2.2 billion was invested by then by the government, which secured more than £1 billion additional investment from public and private partners (HoC, 2011a).

The Housing Market Renewal Programme was different from previous urban programmes because of its grand scale, but also because of its widely publicised ambitious goal to target 'unsustainable urban areas' through 'holistic urban regeneration intervention'. This included a range of strategies and initiatives, encompassing and addressing a number of inter-related economic, social, environmental or physical aspects of urban areas. In sum, 'unsustainable areas' in need of regeneration suffer from a weakened economic base, combined with high concentrations of unemployment and socially disadvantaged residents. These problems were often manifested in an area with a poor physical and environmental setting such as contaminated or derelict land and poor quality housing and amenities. This nexus of conditions led to poverty, crime and other problems. Thus, urban regeneration was seen through the lens of the Housing Market Renewal Programme as the sum of interventions that sought to address these inter-related problems.

However, whether interventions under the Housing Market Renewal Programme have, indeed, led to more sustainable urban areas and communities are problematic to assess for a number of reasons. First, it is difficult to distinguish between the effect of the Housing Market Renewal Programme, designed to re-calibrate low-demand housing markets to the needs of a competitive economy (Ferrari & Lee, 2010) and broader market influences, especially following the 2008 economic downturn. Indeed, most studies merge Housing Market Renewal with other urban initiatives taking place at the same time, casting a bird's eye view of urban intervention in the UK. A high profile example is the work of Leunig and Swaffield which examines the theme of unsuccessful and successful urban areas both here in Britain and abroad, challenging the value of wider urban policy intervention, which has not stopped cities from slipping further behind (Leunig & Swaffield, 2008a, 2008b). Second, when compared to previous urban regeneration initiatives, the programme had been

intended to undertake a longer term view and approach but was not granted its full lease of life and was dismantled half way through. Third, urban sustainability and the 'success' of Housing Market Renewal have been loosely monitored along the way.

The Department for Communities and Local Government's national evaluation of the programme (DCLG, 2009), Audit Commission' reports (Audit Commission, 2009a, 2009b, 2009c, 2011) and a number of independent reviews – see for example Parkinson, Ball, Blake, and Key (2009), Nevin and Leather (2007), and Shelter (2009) – have all pointed to 'some good progress' made by the Housing Market Renewal Programme: house prices have increased in most Housing Market Renewal areas; policies have been strategically aligned at sub-regional level and communities engaged in a 'thoughtful way'. In other words, 'signs of revival' in these urban communities and areas have been witnessed across Housing Market Renewal areas.

However, whether urban areas have become more sustainable is difficult to say as existing evaluations do not frame Housing Market Renewal within the concept of urban sustainability. Moreover, some authors noted that, when compared to its overall performance, the Housing Market Renewal Programme has fared less well in terms of sustainability criteria and thus, it has failed to achieve long-term 'sustainable communities and areas' (CAG Consultants, 2006; SDC, 2007; Wilkinson, 2006b). Is that the case? *This paper aims to probe this question further by examining whether the sustainability of local communities and urban areas has been influenced by Housing Market Renewal interventions.*

Little is known about the more finely grained coverage or types of urban interventions in practice, differences between areas and 'recipes' for sustainability or otherwise. In other words, most of what we know today comes from the 'top-down' perspective of area statistics and we have less detail about performance and development at local level apart from hasty 'case study vignettes' in official reports. In the case of the Housing Market Renewal Programme, for example, only few studies engage in more detail with impacts at the local level. These include Minton's (2009) journalistic account which documents local action against clearance initiatives (Minton, 2009); Allen's (2008) 'social class' grounded book that puts forward a strong case against 'elite' understanding of housing regeneration (Allen, 2008) and Webb's (2010) reframing of housing markets which calls for a more sceptical view of 'top-down' or expert knowledge (Webb, 2010). Thus,

this paper seeks to extend our understanding of impacts at local level by looking at how Housing Market Renewal's impact on urban sustainability has been seen from a 'bottom-up' perspective.

The Housing Market Renewal Programme has also been less discussed in the academic literature when compared to previous urban programmes, the Single Regeneration Budget¹ (SRB) or New Deal for Communities² (NDC), which have received a greater deal of attention. More recently, however, research has started to highlight the many controversies within the Housing Market Renewal Programme including the marginalisation of communities, manipulation of evidence, the tensions between delivering the programme and the realities of political life at both local and national level and the dominance of 'economic competitiveness' thinking (Allen, 2008; Ferrari & Lee, 2010; Webb, 2010). Yet, is there any new evidence and lessons that can be uncovered and learned? We seek here to add to this emerging body of evidence by uncovering new evidence about the Housing Market Renewal Programme and drawing lessons that are of wider relevance for urban policy making.

To summarise, this paper aims to contribute more widely to the 'urban regeneration' literature and more specifically to the 'local sustainability' and 'Housing Market Renewal' literature in three ways. First, it looks at the impact of urban regeneration on urban sustainability by examining whether interventions under the Housing Market Renewal Programme have helped urban areas and communities to become more sustainable. Second, the paper discusses the impacts on urban sustainability at local level, by probing into some of Housing Market Renewal's grounded 'sustainability stories' and looking at how change is perceived by local residents. The scope of the paper is such that it does not intend to construct a holistic interpretation and assessment of the Housing Market Renewal Programme's impacts. Rather, it is an exploration of local

perspectives on the sustainability of urban communities, a concept at the root of Housing Market Renewal. Third, it re-opens a window into the Housing Market Renewal Programme and documents three areas of intervention within the wider context of scale and intervention across the whole programme. It is a bottom-up account of change and views of change in three small urban areas rather than an investigation of the impacts and effectiveness of the Housing Market Renewal Programme per se.

This is a timely paper. The Housing Market Renewal Programme has just come to an end and recent studies calls for the regeneration of formal industrial cities in the Midlands and the North of England to continue (Ferrari & Rae, 2011; Hastings, Bramley, Bailey, & Watkins, 2012). Thus, area based initiatives such as the Housing Market Renewal Programme, might come into vogue once more. The evidence uncovered here constitutes a basis for further research and ensures that progress made by past urban initiatives is not lost and where appropriate could be built on. Some of the lessons learnt will help our understanding of local urban sustainability as well as of mechanisms to achieve this through urban intervention. This may also assist urban policy more generally as well as governments that seek to design more effective strategies and policies to deal with such issues.

Following this section, the remaining of this paper consists of seven main sections. Section 2 problematises urban sustainability and its measurement, and selects a number of urban sustainability indicators, which can be 'deployed' to examine the effects of urban intervention on local sustainability. In Section 3, we undertake an overview of the Housing Market Renewal Programme and Housing Market Renewal Pathfinders, briefly describing policy developments and achievements between 2002/2003 and 2011. Third, we discuss the programme's scale and types of interventions by looking at its developments in the field by 2007/ 2008. We also describe in detail the selection process of three urban areas on which the paper focuses subsequently. Section 5 examines the socio-economic profile of the three areas. These areas are located in Salford, Newcastle and Merseyside and were selected from a pool of over 140 areas. They are examined by drawing on a survey of ca. 130 residents, interviews with almost 60 key actors and secondary analysis of existing survey and census data. In Section 6, we examine the local outlook of urban sustainability following Housing Market Renewal intervention in the three areas. In doing so, we look at the urban sustainability indicators selected in Section 2. In

¹ The SRB Programme (1994–2006) combined twenty previously separate programmes designed to bring about economic, physical and social regeneration in local areas. Its main purpose was to act as a catalyst for regeneration and to attract other resources from the private, public and voluntary sectors. It was designed to do this by addressing local need, stimulating wealth creation and enhancing the local competitiveness of the area as a place in which business wished to invest and people wanted to live.

² The NDC Programme (1999–2010) was designed to achieve the 'revival' of 39 areas by improving outcomes across six themes: three area or 'place-related' outcomes: crime, the community, and the housing and physical environment; and three 'people-related' outcomes: education, health and worklessness.

Section 8, the paper discusses the sustainability of the three areas and looks in retrospect at the Housing Market Renewal Programme. Finally, in Section 8 lessons for the development of future British urban policy and the wider urban sustainability agenda are discussed.

2. Sustainability and urban regeneration

'Sustainability' and 'sustainable development' have generally been defined as an aggregate of characteristics including economic security and growth, environmental quality and integrity, social cohesion and quality of life, empowerment and governance. The complex interdependencies between economic, social and environmental phenomena, and the need to *balance* or *harmonise* these over time, have been the focus of particular attention in defining sustainability (Atkisson, 1999; Lafferty, 2001). This definition is, however, imprecise: it is holistic and attractive, but too elastic – it does not actually say what 'sustainability' *really* means. Moreover, no single way of telling the extent to which sustainability had been achieved in any sector has been agreed so far.

Despite this caveat, ideas and thinking about sustainability and sustainable development have permeated over the last two decades into most disciplines and sectors. Swimming with the tide, the area of urban studies has generated an impressive body of literature, which aims to marry 'sustainability' and 'urban development' by grounding the many interpretations of sustainability in an urban setting. Thus, hundreds of urban sustainability 'projects' have been initiated across the world. Collectively termed as the 'urban sustainability movement', these efforts have inspired a range of initiatives in the UK including 'healthy cities', 'urban villages', 'millennium communities', 'mixed communities', 'growth areas' and 'Housing Market Renewal' projects.

The 'urban sustainability' concept has attracted, however, much criticism. It has been argued that urban areas rely on too many resources crossing their boundaries to be sustainable and only by, for example, 'rehabilitating' natural capital stocks, such as local fisheries, forests and agricultural land, they can become more self-reliant (Rees, 1997; Rees & Wackernagel, 1996; Renn, Goble, & Kastenholz, 1998). In addition, Owens (1992) argues that the notion of urban sustainability is a contradiction. Urban areas will always be net consumers of resources, drawing them from the world around them. They are also likely to be major degraders of the environment, simply because of the relative intensity of economic and social activity taking place in such places (Owens, 1992). More so, a growing body of research suggests that urban regeneration and sustainable urban development have emerged as parallel strands of urban policy, and there has been little coordination between them and an imbalance in action (Couch & Dennemann, 2000; Evans & Jones, 2008). The intrinsic vagueness of the concept of sustainable development acted as a barrier to successful holistic or sustainable urban redevelopment (Astleithner, Hamedinger, Holman, & Rydin, 2004; Davies, 2002) and fuelled a microcosm of pre-existing local conflict and interests (Rydin, Holman, Hands, & Sommer, 2003).

Current urban regeneration practice has been seen in places as a tool to create 'incubation zones' for sustainable development (Dale & Newman, 2009) and its implementation has received considerable attention in the literature. Redmond and Russell's (2008) study of Irish housing estates identifies many factors at play in the demolition and replacing of estates, publicly deemed as 'unsustainable', with a market-driven model for mixed tenure, 'regenerated' and socially – or more accurately, economically – stable communities. They show the extent to which regeneration programmes overlook residents' conceptualisations of their own communities and their subjective meaning of 'sustainability'.

In another analysis of the implementation of sustainable urban regeneration at the neighbourhood scale, Bunce (2009) reviews the regeneration of Toronto's Waterfront where the process of area gentrification is veiled by claims of 'developing sustainability' and argues that 'sustainable communities' may become the domain of urban elites, marginalising, or ignoring, social justice and equity concerns in the process (Bunce, 2009). Adding to the gentrification-sustainability debate, Dale and Newman's (2009) case study analysis of brown field regeneration in Canada notes that there is no guarantee that applying principles of 'sustainable regeneration' encourage or even maintain existing social diversity and equity within a neighbourhood (Dale & Newman, 2009).

To contrast these negative claims, there is, however, a more positive view of urban sustainability. The term proved to be an useful label for those who seek to move towards more stable and balanced urban areas which can become 'sustainability heroes' and offer a better quality of life by being well-governed, using resources efficiently and lowering their waste and greenhouse gas emissions (Satterthwaite, 2002). For example, various authors argue that urban intervention via urban renewal programmes has had a positive impact on the overall quality of life of many urban communities over the last two decades (Cole, 2008; Power, 2009; SDC, 2007) and that, more generally, area-based urban intervention could be seen as an example and inspiration for future approaches of delivering sustainability at local level (Foresight, 2008). Furthermore, Evans and Jones (2008) note that intertwining principles of sustainable development and urban regeneration could make a difference in practice by improving many aspects of the overall urban sustainability (Evans & Jones, 2008). But, what are these aspects? And what does 'improving' mean?

2.1. Measuring urban sustainability

There is no generally accepted definition or measurement of sustainability (Hardi et al., 1997, quoted in Bell & Morse, 2003). On the one hand, it has been argued that the issue of sustainability is a moving target and that developing precise definitions and measures at any one point in time is not worth the effort (Hempel, 1999). Existing methods are seldom influential in the sense that key players such as policy makers and politicians take little note of subsequent results and findings (Innes & Booher, 2000). On the other hand, it is important to define concepts and monitor progress, as people need a reality check to ensure that things are moving in the desired direction (Brandon & Lombardi, 2005; Hemphill, Mcgreal, & Berry, 2002; Innes & Booher, 2000).

Given this disparity of views it is not surprising that 'there is no textbook which gives an accepted methodology which could be applicable across regions and sectors' (Hardi et al., 1997, quoted in Bell & Morse, 2003). Defining and measuring sustainability are not only objective issues but also, unavoidably, political and social ones which point to the difficulty of comprehending the 'social construction' of sustainability which is unlikely to be 'objective'. Sustainability 'is not a single, well-defined concept; rather, various positions and perspectives exist - whichever view is propagated, it entails a normative choice' (Zeijl-Rozema & Martens, 2010, p. 8). Thus, breaking down 'urban sustainability' into aspects or indicators and examining the effect of urban intervention on these indicators to assess whether sustainability has been achieved is no easy task.

There is an extensive body of literature documenting 'physical' indicators of urban sustainability. Many studies have focused on the discussion of sustainable urban areas and communities from a 'physical' or 'design' perspective which looked at the built environment's characteristics such as layout, density, building design and specification that make a 'sustainable', 'healthy' or 'vital' neighbourhood or urban area (Barton, Grant, & Guise, 2003; Green, Grimsley, & Stafford, 2005; Groves, Middleton, Murie, & Broughton, 2003), while others have looked at 'sustainable buildings' or 'sustainable construction' (Cooper & Curwell, 1998; Miller, Spivey, & Florance, 2008; RICS, 2005). However, remarkably little attention has been paid to date to socio-economic processes by which urban sustainability has been achieved (Rydin, Holman, et al., 2003).

Many authors employ rather ad-hoc 'check-lists' of sustainability without a clear methodological framework (see for example Barton, 2000; Barton et al., 2003; Bell & Morse, 2003; Brownhill, 2002). In parallel, a range of approaches have been pursued to measure 'urban sustainability' including the ecological footprint and cost-benefit analysis (CBA) methods (Rees, 1992; Rees & Wackernagel, 1996; van der Bergh & Verbruggen, 1999), but perhaps, the most influential ones are still those dedicated to developing sets of urban sustainability indicators (see for example Maclaren, 1996; Mega & Pedersen, 1998; Ravetz, 2000; Spiekermann & Wegener, 2003). Indicators have never failed to capture the imagination of both scholars and politicians, in an attempt to encapsulate the real meaning of urban sustainability.

2.2. Urban sustainability indicators

There are many sets of urban sustainability indicators (SIs) but none has emerged so far as having universal appeal (Mitchell, 1996). Some indicators are especially made for a certain city, community or organisation (Atkisson, 1999; McAlpine & Birnie, 2005; Roberts, 2000; Tasser, Sternbach, & Tappeiner, 2008) while others are universally applied across a number of areas, projects or organisations in a comparative exercise (European Communities, 2001; Expert Group on the Urban Environment, 2000; Pulselli, 2008; Schlossberg & Zimmerman, 2003; Tiezzi & Bastianoni, 2008). Moreover, urban SIs have been widely employed, especially at European level, in an attempt to help policy-makers ensure the continued success of their cities (Maclaren, 1996; Mega & Pedersen, 2005; Ravetz, 2000; UN, 2004).

Views on how to choose indicators or develop sets of indicators are also split, as there is an on-going tension between the subjective and objective in their development and use (Astleithner & Hamedinger, 2003; Rydin, Holman, & Wolff, 2003). This inability of existing methodologies to guide sustainability indicator development is recognised by several authors including Bossel (1999), Gallopin (1997), McCool and Stankey (2004) and Maclaren (1996). On the one hand, there is general agreement that sustainability indicators should be 'contextual', that is to say they need to be relevant to the target audience, and include interpretations that help that audience make sense of the data. In other words, a set of indicators which is not 'embedded in' and 'reflective of' its target context will prove difficult to implement and yield effective results. Thus, it is far more likely that if the target audience is allowed to participate in the conceptualisation and development of these indicators they will also use and appreciate the results (Bell & Morse, 2001; Pinfield, 1997b; Rydin, Holman, & Esther, 2003).

On the other hand, the development of sustainability indicators rests on a challenging choice between two 'methodological paradigms' or approaches (Reed, Fraser, & Dougill, 2006): expert-led approaches, also called 'top-down' or government models which are based on formal hierarchies, and *citizen-led* approaches, also known as community-led, governance or 'bottom-up' models, which draw on a 'participatory philosophy'. The tensions between these two models are well documented in the literature. They can inhibit the effective use of any type of indicators - see the Pinfield-Brugmann debate (Brugmann, 1997a, 1997b; Pinfield, 1997a) - and can make it difficult to bridge the gap between policy makers and end-users (Eckerberg & Moineur, 2003). Therefore, in order to lessen these tensions, scholars have argued for integration between expert- and citizen-led approaches (Batterbury & Forsyth, 1997; Fraser, Dougill, Mabee, & Reed, 2006; Nygren, 1999; Reed, 2005; Reed et al., 2006; Thomas & Twyman, 2004).

Turcu (2012) puts forward such an 'integrated' set of urban sustainability indicators which is designed to 'factor in' the context of urban areas under regeneration intervention, and draw on both 'top-down' (or expertled) and 'bottom-up' (or citizen-led) approaches to indicator development. This set of urban sustainability indicators was primarily derived from the 'prism of sustainability' model (Valentin and Spangenberg, 1999) which rests on four pillars: economic sustainability, social sustainability, environmental sustainability and institutional sustainability. The four pillars were subsequently developed into six relevant 'domains of urban sustainability' (economy and jobs, community, use of resources, housing and built environment, services and facilities, governance) which in turn were 'operationalised' by 26 indicators (Table 1).

The indicators in the table above were the result of a two-way participatory consultation process with 'sustainability experts' (policy makers, local stakeholders and community groups) and residents living in three small areas undergoing urban renewal.³ Initially, a 'tentative' set of indicators were selected from a large pool of already existing indicators according to three criteria. First, the indicators had to be 'visible', perceptible and relevant at local level (and to local people). Second, the indicators had to be the reflection of their specific context, that is to say urban areas undergoing urban regeneration. Third, the indicators had to be able to reflect change triggered by urban intervention in order to make it possible to hint at possible effects of urban intervention on local sustainability. The 'tentative' set of indicators was then 'refined' through discussions with stakeholders, policy makers and local residents, in a desire to ground the various 'stories' of urban sustainability and marry the wider goals of sustainability with local perspectives, values and understandings of sustainability (Turcu, 2012).

This set of SIs represents the integration between participatory, bottom-up and expert, top-down traditions of indicator development. However, it very much emphasises and draws on the importance of the local context and various levels of sustainability 'expertise' that one could find in an urban location. It also acknowledges that SIs are socially constructed and therefore constantly changing. At the same time, this paper aims to look at the effects of urban regeneration on area sustainability from a local perspective. Therefore, the SIs listed in Table 1 form a solid base from which we could investigate the local effects of urban intervention on urban sustainability which per se calls for a participatory, bottom-up approach to understanding this. The indicators are employed later in Section 5 of this paper to depict a portrait of urban sustainability and examine the effects of urban regeneration on local sustainability in three Housing Market Renewal neighbourhoods in Salford, Merseyside and Newcastle. However, before doing so, the following three sections take us through the story of the Housing Market Renewal Programme (2003-2011), the scale and nature of its interventions, and describe in greater detail the three urban areas in Salford, Merseyside and Newcastle.

³ For a detailed discussion of the selection process employed to design such a list of urban sustainability indicators see Turcu (2012).

Т	abl	e	1			
			c ·	1.	c	

A list of indicators of urban sustainability.

Four pillars of sustainability	Domains of urban sustainability	Indicators of urban sustainability	Description
Economic sustainability	Economy and jobs	Jobs	Number and range of jobs available locally (to local people?)
		Access to jobs	Area's/people's links/access to other labour markets
		Business activity	Levels and types of local business activity
		Training and skills	Types and availability of local training; up-skilling initiatives
		House prices	Local house prices change
		Housing affordability	Local housing affordable to local people (gentrification?)
Social sustainability	Community	Moving patterns	People moving in and out of an area
		Sense of community	Levels of local social contact and community activity
		Crime and safety	General safety of the area; fear of being a victim of crime; walking around the area (during day and at night)
		Tenure mix	Levels of home owners/social tenants/private tenants
		Income mix	'Better-off' people moving in the area
		Ethnic mix	Levels of white/non-white people living in the area
Environmental sustainability	Use of resources	Energy use	Energy efficiency measures implemented; local use of energy
		Water use	Water saving measures implemented; local use of water
		Waste recycling	Waste recycling measures implemented; local waste recycling
	Housing and built	Housing/area conditions	Area's overall physical outlook
	environment	Housing state of repair	State of repair of individual parts' (i.e. front/back of the house; roof; enclosing walls/fences; kitchen; bathroom etc.)
		Satisfaction with own home	Residents satisfaction with their home
		Green open space	Quality of and access to (local) green open space
	Services and facilities	Services and facilities	Quality of local services and facilities
		School	Local school performance and access
		GP/local health services	Quality of and access to local health services provision
		Public transport	Provision and quality of local public transport
Institutional sustainability	Governance	Community involvement	Community activity (no. of organisations); influencing decision making
		LA services	Quality of services provided by LA
		Partnerships	Existence and type of local partnerships

Source: Adapted from Turcu (2012).

3. The rise and fall of an urban renewal programme

The story of the Housing Market Renewal (HMR) Programme can be traced back to the 1970s and 1980s when the then government started to look into 'unpopular' and 'difficult-to-let' housing across the UK (DoE, 1981). However, it was only during the 1990s that news about the collapse of property values due to housing abandonment in the former industrial cities of the North of England made the headlines. In parallel, a series of studies started to emphasise the high turnover rates and number of vacant properties in parts of the public and private housing sector in these areas (Cole, Kane, & Robinson, 1999; Holmans & Simpson, 1999; Murie, Nevin, & Leather, 1998; Power & Mumford, 1999; Power & Tunstall, 1995, 1997; Urban Task Force, 1999).

In order to present a convincing case to politicians and decision makers, and establish the scale of the

109

problem, the Centre for Urban and Regional Studies (CURS) at University of Birmingham carried out a detailed study of the metropolitan North West, which was to become the well-known '*M62 Study*'. The study carried out for the first time a cross-regional overview of the emerging areas of low demand housing. Its findings were dramatic in scale and implications: 900,000 homes were identified as being in areas which were either suffering from, or at risk of, low demand in the Midlands and North of England (CURS, 2001a).

The implications of this widespread phenomenon could have been significant: as many as 250,000 houses might have been demolished in the following 15 years to stop the problem spreading further (Owen-John, 2003). The *M62 Study* was subsequently complemented by research in Yorkshire and Humberside, the North East and the rest of the North West. Parallel studies also looked at the West Midlands and North Staffordshire and a similar range of problems were uncovered in these areas (CURS, 2001a, 2001b, 2002; Lee & Nevin, 2001; Murie, 2001; Murie et al., 1998; Nevin, 2001b). This prompted the Core Cities Group⁴ to make a submission to the government's spending review, advocating financial support for these areas of low demand housing (HNHF & CIH, 2001; RICS, 2004).

This mounting pressure from various interested groups is of particular relevance for the understanding of the political context for HMR intervention. When compared to previous urban programmes and despite being a national initiative, the programme originated as a 'bottom-up' (local and regional level) concept as opposed to a 'top-down' (led by central government) one (Ferrari & Lee, 2010). Moreover, it was promoted and advocated by a wide range of local institutions and academics who provided 'evidence-based' material and a 'rational-scientific' perspective (Healey & Hillier, 2008). Over 1000 organisations were involved in the lobby process (Nevin, 2004) and the programme was strongly associated with some of the New Labour's grand names: John Prescott and Lord Falconer, the then deputy prime minister and housing minister, respectively.

The government's response came in 2002 when the HMR Programme was announced to target 'unsustainable urban areas and markets' in these areas. The programme aimed to address housing market failure by taking a 'holistic' approach to tackling the 'very roots of low demand areas and creating sustainable communities in areas of high deprivation'. One year later, tackling low demand urban areas was declared one of the key action areas of the Sustainable Communities Plan and a first instalment of £500 million was announced to kick start investment in these areas (ODPM, 2003).

The Sustainable Communities Plan was a document that effectively acted as the national planning strategy, a substitute for the country's spatial strategy that had been called for by some of the originators of the HMR Programme (Nevin, 2001a). It offered a set of policy measures which aimed to tackle the twofold problem of English housing; on the one hand, HMR Pathfinders in the Midlands and North had to grapple with low demand and a surplus of housing, on the other hand, Growth Areas in the South dealt with affordability pressures and a shortage of housing. Ferrari and Lee (2010) note how the Plan introduced new regional housing boards to complement the existing regional planning bodies and to provide a more comprehensive framework for understanding housing in relational to regional economic strategies. Via the newly developed Regional Spatial Strategies, housing policy and strategy became a 'lever' of planning policy, aiming to balance demand across England and 'regionalise' supply decisions (Ferrari & Lee, 2010). While the Growth Areas in the South focused on unlocking new housing supply and providing infrastructure, the HMR Pathfinders in the North planned to close the gap between low-demand areas and their regions.

However, a great deal of debate has arisen over the Plan because of the incompatibility between overall goals of sustainable development and the promotion of large scale clearance in the North (via Housing Market Renewal) as opposed to mass house building in the South East (via Growth Areas) which reemphasise a 'North–South divide' in England (Hall & Hickman, 2004). The Plan has also been challenged on issues such as community involvement and tools for delivery (Power, 2003) and its relation to planning for housing in the context of social cohesion alongside environmental protection and economic prosperity (CIH and RTPI, 2003). Moreover, Rydin (2007) notes that it has emphasised the economic and social dimensions rather than ecological ones in order to achieve its targets.

In addition to the broader aim of 'creating sustainable urban communities and areas', three detailed objectives were added to the HMR Programme in the government's subsequent *Sustainable*

⁴ The Core Cities Group is a network of England's major regional cities, which form the economic and urban cores of wider surrounding territories. It includes eight cities: Birmingham, Bristol, Leeds, Liverpool, Manchester, Newcastle, Nottingham and Sheffield.

Communities: Homes for All (2005) strategy (ODPM, 2005). They were:

- to eradicate the problems caused by low demand housing by 2020;
- to reduce by a third the difference in levels of vacancies and house prices between HMR Pathfinders and their regions; and
- to reconnect HMR areas to local housing markets in neighbouring areas.

Its scope was later broadened to address a number of other aspects such as good quality and sustainable housing design, anti-social behaviour, unemployment, community cohesion and economic investment (Cole, 2008).

The programme was 'centrally' planned to be delivered under three five-year plans focusing broadly on demolition and acquisition; new built and major development; and 'fine tuning' and 'hand-over' (Turcu, 2010). However, despite its 'centrality', it was expected that the real innovation within HMR would come from the 'bottom-up' through the HMR Pathfinders, nine cross-boundary local authority partnerships (Fig. 1). This implied that its delivery, including analysis of 'evidence' and implications, remained inherently local and sub-regional, with associated political pressures (Ferrari and Lee, 2010).

The HMR Pathfinders submitted proposals for backup investment in low-demand housing in their areas and received their first funding instalment between 2003 and 2004. They were:

- four HMR Pathfinders located in the North West region: Manchester-Salford, Oldham-Rochdale, East Lancashire and Merseyside;
- the Newcastle-Gateshead HMR Pathfinder located in the North East region;
- two HMR Pathfinders located in the West Midlands region: Birmingham-Sandwell and North Stafford-shire; and
- two HMR Pathfinders located in the Yorkshire and Humberside region: South Yorkshire and Hull-East Riding.

In 2005, three further new HMR Pathfinder areas were announced: West Yorkshire (Yorkshire and Humberside region), West Cumbria/Furness (North West region) and Tees Valley (North East region).

The scale of HMR Pathfinders was significant, ranging from 60,000 properties in Birmingham-Sandwell to 140,000 properties in South Yorkshire, many the

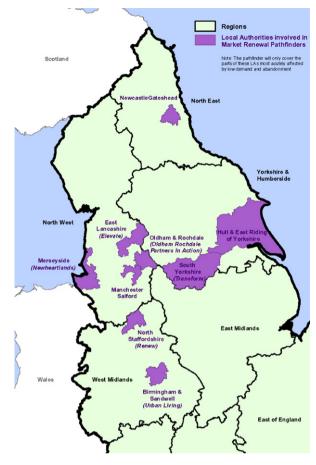


Fig. 1. The location of the nine HMR Pathfinders. *Source*: DCLG website.

sizes of small cities in their own right. They totalled some 900,000 homes, more than half of all 1.5 million properties estimated to be at risk of low demand in 2002, and about one in twenty homes in England (NAO, 2007; RICS, 2004). Their overall aim was to improve the quality of neighbourhoods and integrate interventions within a sub-regional framework that linked housing, planning and economic development. They were seen as an opportunity to re-calibrate obsolete housing markets to respond to a 'new urban economy' (Ferrari & Lee, 2010) and an opportunity to showcase how 'joined-up' thinking and cross-boundary working could be developed for the purposes of sustainable urban communities. Such strategy and policy integration at sub-regional level had rarely been tried before and required a high level of coordination between local authorities and other partners, putting the HMR Pathfinders in a unique position of great autonomy and little accountability to the central government.

HMR Pathfinder areas were characterised by decline in population, dereliction, poor services and poor social conditions – they all fall among the fifth most deprived areas in England, measured by the Index of Multiple Deprivation (IMD 2000). The causes of this were complex and often interlinked but have been generally attributed to three broad factors: economic restructuring leading to depopulation; changes in housing preferences; and changes in behaviour resulting in a surplus of housing and area 'stigmatisation' (Bramley & Pawson, 2002). This evidence was strongly supported by a group of leading housing academics including Brendan Nevin and Ian Cole who readily provided the evidence to backup the 'unsustainable' conditions, described by:

- a lack of housing choice, determined mainly by a surplus of older Victorian properties and a perception that the existing housing stock did not meet the needs and aspirations of current and future residents;
- a high proportion of either private or social renting, or both;
- poor housing and area conditions;
- a significant outward migration of resident populations;
- high levels of crime, stigma and poor image; and
- a concentration of low income households and/or ethnic minority groups.

However, we must not forget that the HMR 'evidence' and 'conditions' were, on the one hand, the construct of a highly political environment which had a tendency to see whole neighbourhoods and urban areas as markets and, on the other hand, a platform that reflected the tensions between these ideas and the realities of political life at both local and national level (Ferrari & Lee, 2010). In fact, Webb (2010) argues that the 'HMR evidence' only 'served' the interests of specific groups involved in urban renewal and was 'manipulated' to produce 'partial knowledge claims' that fitted the interests of those groups (Webb, 2010). Other accounts noted how the HMR rationale played to the interests of the middle classes and how research was used selectively to support desired outcomes and exclude the indigenous 'working class' population (Allen, 2008).

Following the 2008 economic recession, the environment in which the HMR Programme has been delivered has changed profoundly. The credit crunch has had an impact on some of the underlying strategic and operating assumptions that shaped the design of the HMR Programme. Reports released by the Audit Commission in 2010 note that the HMR Pathfinders were performing well despite the prevailing economic circumstances. However, a National Audit Office report published back in 2007 already expressed concerns over 'government's oversight' and programme's 'value for money', and government's 'high-risk investment strategy' (NAO, 2007). The policy environment has also shifted and thus, rumours about closing the programme down partially or gradually started to emerge.

At the same time, the academic community has started to take a more critical view of the HMR Programme on the grounds of: its plans for demolition (Minton, 2009; Power, 2008; Power & Houghton, 2007; Wilkinson, 2006a, 2006b); 'elite' and 'middle class' thinking, and the 'manipulation' of evidence to support desired outcomes (Allen, 2008; Webb, 2010); marginalisation of communities, 'hand-picked' community involvement and displacement of existing communities through 'state sponsored gentrification' (Allen, 2008; Cameron, 2006). The programme has also been seen as failing to carry local interests along with HMR implementation plans, while it was felt that the 'economic competitiveness' thinking, that came to dominate the HMR strategy development was a conundrum that generated tensions between the aspirations of local communities on the one hand and the proposals to attract new people into areas of decline, on the other (Ferrari & Lee, 2010).

The year 2010 marked 'the beginning of the end' for the HMR Programme: in May 2010 the New Labour government, the HMR's political supporter and 'creator', lost power to the newly formed Conservative Liberal-Democrat Coalition Government. As part of the October 2010 Spending Review the new government announced the end of funding for HMR as a separate programme from March 2011 – just eight years into what was originally envisaged as a fifteen-year urban programme. The rationale for this included (HoC, 2011a, 2011b, p. 5):

imposed large scale demolition and clearance.

centrally driven schemes that were often resented by local communities and created as many problems as they solved. This top-down approach has not worked, often resulting in blighted areas where large-scale demolition and clearance projects have been stopped in their tracks, leaving some families isolated in abandoned streets.

 $[\ldots]$

Areas were effectively managed into decline – to make the notional benefits of wholesale demolition more attractive, ensuring a larger windfall gain for the state.

 $[\ldots]$

Local communities in some of the most deprived areas of the country were told they would see transformation of their areas, which in reality amounted to bulldozing buildings and knocking down neighbourhoods, pitting neighbour against neighbour and leaving families trapped in abandoned streets. This was wrong.

By March 2011, the HMR Programme had succeeded in (Audit Commission, 2011):

- refurbishing more than 108,000 homes, almost 80% of its lifetime target;
- building 15,000 new homes, a nearly 13% of it 15-year plans;
- clearing some 30,000 properties, half of its often revised and controversial proposed target;
- generating some £5.8 billion of economic activity across the economy; and
- creating some 19,000 jobs in construction and related industries.

The following section delves into greater detail into the type and nature of urban interventions under the HMR Programme. It aims to uncover new evidence about the scale, coverage and number of HMR projects by 2008 and uses this as a representative platform for the selection of three HMR areas (in Salford, Newcastle and Merseyside) where the effect of urban intervention on local sustainability is later examined, in Sections 4 and 5.

4. Mapping urban activity

We undertook an extensive survey of HMR intervention areas in 2007/2008: 144 different intervention sites were initially identified in seven HMR Pathfinders. These projects were identified based on an Internet review of HMR activity, and supplemented by discussions with 25 HMR officials. The pool of 144 projects represented various types of interventions and aimed to provide a representative image of HMR interventions undertaken by 2007/2008. They also illustrated a wide range of housing types and tenures, locations and scales which we have grouped under four main categories: *minor, moderate, major* and *mixed intervention* regeneration projects.

First, projects in the 'minor intervention' category displayed a range of 'light touch' urban interventions, broadly described as either environmental works, improvements to the quality of local environments and public realm, neighbourhood management measures or a combination of these. Most of these interventions were exclusively funded through regeneration budgets or other public funding. More specifically, these projects included:

- light external improvements to housing and immediate surroundings such as 'face-lift' or 'cosmetic' works to the external fabric of properties including brick cleaning, repairs and re-pointing; boundary treatments including new railings, gates, fences and walls at the front and/or the back of properties; alley-gating including closure and management and/or embellishment of alleys at the back of properties;
- improvements to the general streetscape and area's gateways including improvements to important buildings within an area; upgrading of the public realm including improvements to local squares, green areas and communal gardens; tree planting; home-zone treatment and traffic calming zones;
- upgrading of existing local parks and large areas of green open space including provision of new seating areas and play areas; and/or refurbishment of park facilities such as football pitches or tennis courts; and
- neighbourhood management measures, mainly addressing community crime and safety and maintenance issues such as street wardens, community police officers, estate caretakers and park rangers.

Second, the 'moderate interventions' category was represented by projects which took a more integrated approach to urban regeneration such as Group Repairs, Block Improvement and Decent Homes schemes, including works to both the exterior and interior of buildings; major refurbishment works such as housing conversion; and sometimes, selective demolition and housing infill. These types of interventions can be described in more detail as follows:

• The Group Repair schemes aimed to increase confidence in an area by combining improvements to the general area's visual appearance with financial assistance to participant households. These usually consisted of extensive external works and improvements to the housing envelope including re-roofing, re-pointing, new double-glazed windows and doors; locks and alarm systems; gutters; fences and back walls; and in some cases new porches. They also targeted a relatively large area and aimed to have a full coverage, although households' participation in the scheme was not compulsory. Participant households were assisted by either interest-free loans and grants, or direct subsidies.

- Block Improvement schemes were similar to Group Repair schemes and carried out selective improvements or refurbishment to housing in order to support the housing market within an area, including also a similar range of refurbishment works. The main difference was that once the Block Improvement area was defined, the full cost of refurbishment was covered by regeneration funding.
- Decent Homes Standard works included improvements to the social renting stock. More specifically, alongside external improvements, these included internal house upgrading and modernisation such as central heating, loft and water tank insulation, and sometimes replacement of bathrooms and kitchens.
- Building conversions consisted of major internal refurbishment including full or partial demolition of internal partition walls and a reconfiguration of the internal layout in order to respond to a different use or function, or combining smaller properties into larger ones.
- Selective demolition was carried out on a small select number of properties, usually to make space for additional green space such as communal gardens and play areas, or to provide opportunities for private development infill in order to cross-subsidise other interventions, and diversify housing tenure and typology within an area.

Third, 'major interventions' corresponded to a significant step change in the approach to urban regeneration and included relatively extensive demolition, followed in many cases by residential or mixed-use development. These types of interventions:

- were in many cases the result of complex and lengthy compulsory purchase orders and master-planning processes and envisaged the creation of 'sustainable urban areas' through providing new services and facilities such as 'community hubs' and new housing usually in a 'mix-use' format;
- involved displacement and/or relocation of existing households and financial support packages for assistance of displaced/relocated households;
- were drawing on public and private funding whereby demolition was paid for by regeneration funding, while redevelopment was mainly funded by private investors and to a lesser extent by social landlords.

Finally, 'mixed interventions' were those projects that could not be included in any of the above categories or could involve in a relatively equal share a combination of the previous intervention types. These

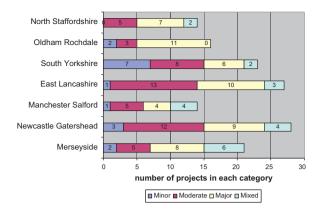


Fig. 2. Distribution and types on interventions across seven HMR Pathfinders. *Source*: Research fieldwork 2007/2008.

were usually large-scale projects, with a long tradition of public urban investment and intervention and on the drawing board or in their early stages of implementation in 2007/2008. To further understand this classification, the question of scale of intervention is also important here: for example, one *major* project might have effects which exceed in size the effects of many *minor* and/or *moderate* projects.

Fig. 2 shows how the 144 intervention areas were distributed across seven HMR Pathfinders according to the type of intervention described above. It is clear that the most common types of intervention by 2007/2008 were either moderate or major interventions. There were slightly more *major* intervention projects overall, many including significant housing clearance and in three HMR Pathfinders (Merseyside, North Staffordshire and Oldham Rochdale) the majority of projects identified were under this category. This could help explain public perceptions of 'large scale' demolition being pursued by the HMR Programme. At the same time, finding a large number of moderate intervention projects across the HMR Pathfinders was unexpected and disproved the dominant public perception of demolition-driven HMR.

On the one hand, the balance between 'refurbishment' and 'demolition' was clearly laid out by individual HMR Pathfinder plans. On the other hand, there was an expectation that demolition and land acquisition would be the focus during the first phase of the HMR Programme between 2003 and 2008. Yet five years into the programme and we found that a notable number of refurbishment or *moderate* intervention projects were being rolled out across the country. Moreover, only a few *major* intervention projects were complete by 2007/2008. HMR officials, developers and

<u>C</u>	
C. Turcu/Progress in Plann	
rogress	
in I	
Planning	
78 (
R (2012) 101-1.	
101–1	

Table 2 Actual achieved by 2007/2008 and long-term plans (2003/2004-2018) for individual HMR Pathfinders.

Pathfinder	Refurbishment ^a (no. of u	Refurbishment ^a (no. of units)		Demolition (no. of units)		New homes ^b (no. of units)	
	Actual achieved (2003/2004–2006/2007)	Long-term plans (2003/2004–2018)	Actual achieved (2003/2004–2006/2007)	Long-term plans (2003/2004–2018)	Actual achieved (2003/2004–2006/2007)	Long-term plans (2003/2004–2018)	
Merseyside (NewHeartlands HMR Pathfinder, 2005)	8758	42,821	758	11,210	338	16,378	
Newcastle Gateshead (Newcastle Gateshead HMR Pathfinder, 2005)	2567	10,000	1560	ca. 5000	101	12,000	
Manchester Salford (Manchester Salford HMR Pathfinder, 2005)	10,127	13,769	1968	7500	138	30,102	
East Lancashire (East Lancashire HMR Pathfinder, 2005)	1840	6723	1178	6679	16	7618	
South Yorkshire (Transform South Yorkshire HMR Pathfinder, 2005)	3788	11,860	2705	6692	178	12,978	
Oldham Rochdale (Oldham Rochdale HMR Pathfinder, 2005)	2248	10,853	501	8600	106	12,300	
North Staffordshire (North Staffordshire HMR Pathfinder, 2005)	2633	35,467	615	14,501	2	12,528	
Totals	31,961	131,493	9285	60,182	879	103,904	
Actual number achieved as % of long-term pl	ans 24%		15%		1%		

Source: Compiled by the author as follows: data for 'actual achieved' from DCLG (2009) and data for 'long-term plans' from Pathfinders' Scheme Update (2005/2006).

^a Refurbishment includes both repairs to Decent Homes and other repairs.
 ^b New homes also refer to conversions for the first time and include all new homes kick-started by HMR funding, not only new homes funded by HMR.

planners explained that demolition was carried out first and re-development plans were still on the drawing board or in negotiation with potential developers and local authorities.

Table 2 shows that when achievements by 2007/2008 are compared to long-term plans, most of the HMR Pathfinders' efforts were being put both into housing refurbishment and demolition, while only a few new homes were delivered. However, significantly more houses were refurbished than were demolished (24% compared to 15%), while only 1% were newly built.

The table above also shows the mismatch between the number of properties demolished and that of planned new homes. Despite HMR's overall plans to tackle an 'oversupply' of housing in the Midlands and North of England, all HMR Pathfinders but two aimed to build more houses than they demolished in their long-term plans: Manchester-Salford planned to build some 20,000 more new units, while Merseyside, Newcastle-Gateshead, South Yorkshire and Oldham-Rochdale planned to deliver some extra 5000 new units each. Only North Staffordshire planned to build less than it proposed to demolish, while East Lancashire aimed to replace roughly all the housing demolished. It was not clear whether that could be achieved in the market, nor it was clear that there was sufficient demand for those properties.

It is apparent from these figures that the HMR's rationale for demolition should raise many questions about the overall validity of the programme. One of the main debates at the heart of HMR has been over the scale and scope of its proposed interventions. Demolition or *major* projects taking place during the first years of the HMR Programme covered whole areas, rather than single properties, taking out some well-maintained properties alongside inadequate or derelict ones (Power, 2008; Power & Houghton, 2007). Even in the most rundown areas proposed for demolition, on average over 70% of homes were occupied (NAO, 2007). These projects proved to be deeply unpopular with existing residents and more expensive than expected, due to rising property values fuelled by public investment in these areas (Minton, 2009; Turcu, 2010). In addition, the previous experience of slum clearance programmes in the UK showed that saving existing homes is a less disruptive and more socially considerate approach than wide scale demolition (Power, 2008). In fact and as we showed in the previous section, the whole affair of 'large scale demolition' had proved to be the 'Achilles heel' when it came to the programme's demise in 2011 (HM Treasury, 2010b).

This mapping of HMR activity also revealed that many projects had a long tradition of public investment,

with the HMR Programme continuing, overlapping with or attracting other funding streams from previous or parallel national and European regeneration programmes such as the New Deal for Communities, Single Regeneration Budget, Neighbourhood Renewal Fund and European Structural Funds. Only in a few places was the HMR Programme the first and sole regeneration investor. Moreover, many projects did not have a clear cut distinction between moderate and major types of intervention. Most presented a combination of both, with one of them being predominant. For example, we found schemes where demolition was prevalent but some refurbishment and environmental works were also delivered and areas where refurbishment was the main intervention but accompanied by selective demolition.

From the 144 HMR projects identified, through discussions with 25 HMR officials we gathered further information and were granted permission to visit 28 initiatives located in six HMR Pathfinders (Fig. 3). We then selected a smaller number of areas from this pool of 28 projects according to five criteria, drawing on the scoping survey findings, interviews with the HMR officials and information uncovered during our visits.

First, we decided to focus on *moderate* interventions. We considered *minor* interventions as having an insignificant impact on urban areas and communities, to the extent that they could have been seen an important tool in achieving urban sustainability. In addition, the scoping survey revealed that not many *major* interventions were complete by 2007/2008, had residents living on site or were of a significant scale; most of these projects had only completed demolition by 2007/2008 and had redevelopment proposals 'on the drawing board'.

Second, the selected areas had to be considered good practice, in order to facilitate the work and collaboration with the HMR Pathfinders. We considered that we were more likely to gain access to information and support when the regeneration staff felt confident about the success of regeneration in a specific area. One could think that this might introduce an element of selection bias. This could have been the case if we aimed to present a general and balanced view of the whole HMR Programme. Instead, our purpose was different: we sought to understand whether and how area and community sustainability were affected by urban interventions such as those carried out under the HMR Programme. Moreover, we showed in the beginning of this paper how previous studies have cast doubts about whether HMR was successful in creating sustainable areas and communities (CAG Consultants,

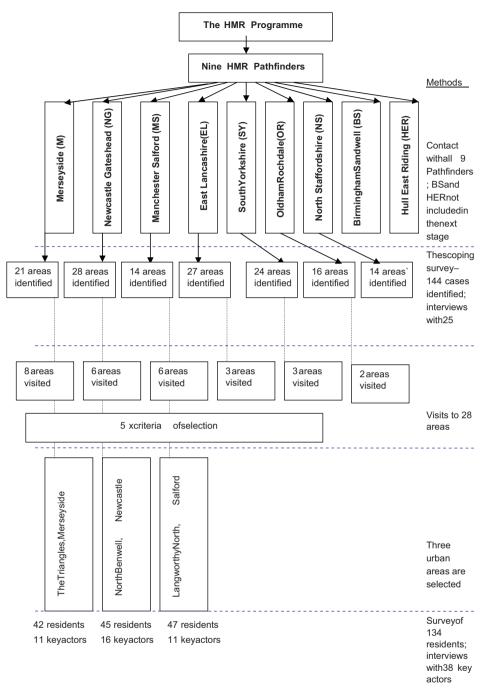


Fig. 3. Selecting three HMR areas.

2006; SDC, 2007). We aimed to examine 'good practice' cases, in order to offset some of these doubts – if HMR intervention failed under the 'best' possible circumstances, it was unlikely to do so under less 'promising' conditions.

Third, the areas had to have between some 250 and 1000 homes. Urban areas are concerned with elements

of spatial scale such as size and boundaries. In the literature, the clearest examples of defined spatial scale for an 'area' are those based on human habitation such as 'settlement', 'village' or 'neighbourhood'. Some research looks at strategic and large administrative units such as 'wards' or 'boroughs' (Khadduri, 2001; Tunstall, 2003) while others focus on the 'human-scale' levels that

are easily perceived by people such as streets, blocks or entire housing estates (Brophy & Smith, 1997; Page & Boughton, 1997). We aimed to investigate the impacts at local level, indicating the smaller scale approach. We aimed in particular to understand how people perceive local job opportunities, accessibility and connectivity, amenities within walking distance, such as schools, parks, and other community services, and the importance of these in creating sustainable urban areas and communities. Areas with 250–1000 homes were considered small enough to walk across, but large enough to create through regeneration new demand for community and social services (Urban Initiatives, 2002).

Fourth, areas had to be populated for at least five years at the time of selection. This was necessary in order to learn about residents' perceptions and experiences of the regeneration process, and go beyond design plans and vision statements to understand lessons for sustainable urban areas and communities. At the same time, a fiveyear perspective equated to the first phase (2003–2008) of the HMR Programme and thus, offered the possibility of shedding some light over its potential achievements as well as understanding urban changes and sustainability from a temporal perspective.

Finally, the regeneration of the areas had to be complete or close to completion in 2007/2008. Finished projects offered more stability and little scope for major change, especially in terms of economic (funding) and institutional (governance) change. At the same time, both regeneration staff and local residents in those areas had a more rounded understanding of the regeneration process, its immediate outcomes and impacts on the various urban indicators that we sought to examine, as well as how well their expectations were met.

Table 3 shows how each of the 28 areas we visited matched these five selection criteria. As expected, many sites were close to meeting all the case study criteria. However, only five areas, highlighted in the table, did meet all the criteria: Langworthy North and West Seedley, both in Salford; Bank Top in Blackburn; North

Table 328 HMR urban initiatives and 5 criteria of selection.

Area	Criteria					
	'Moderate' regeneration?	Good practice?	250/300–1000 homes?	Residents on site?	Complete?	
Baytree, Manchester			×	1	4	
Bute, Manchester	×	×		🖊 some	×	
Beswick, Manchester	×		×		×	
Urban Splash Chimney Pot Park, Salford				🖊 some	×	
Langworthy North, Salford			🖊 ca. 400			
Seedley West, Salford			🖊 ca. 600			
Project Phoenix, Accrington	×	×		×	×	
Bank Top Area, Blackburn			🖊 ca. 1000			
Infirmary Area, Pendle	×			×	×	
Norfolk Park, Sheffield	×		×		×	
Arbourthorn, Sheffield		×	×			
Park Hill, Sheffield			×	✓ some		
Granville Mill, Derker	×	×	×			
Central Werneth Area, Rochdale		×	×		×	
The Cambrian, Newcastle	×		×	✓ some	×	
Pendoer Estate, Newcastle		×			×	
North Benwell Terraces, Newcastle			🖊 ca. 700			
High Cross, Newcastle		×			×	
Lower Delaval Estate, Newcastle		×			×	
Scotswood Village, Newcastle	×		×		×	
Rock Ferry/Fiveways, Wirral	×	×	×	×	×	
Queens Road, Wirral	×		×			
The Triangles, Wirral			🖊 ca. 400			
River Streets, Wirral	×	×	×	×	×	
Stanley Park, Liverpool	×				×	
Camelot/Elwy Streets, Anfield, Liverpool			×		×	
Welsh Streets, Liverpool	×				×	
Dobson Robson Street, Sefton	×		×			

Source: Research fieldwork 2007/2008.

Benwell in Newcastle and the Triangles in Wirral, Merseyside.

The five shortlisted case studies shared some basic characteristics. They had a long tradition of public intervention and regeneration investment; received national and regional prizes or were considered 'best practice' at HMR Pathfinder level. They all displayed a range of two-down-two-up Victorian terraces which received major external works, upgrading of streetscape and sometimes of adjacent parks, and were subject to intensive neighbourhood management arrangements. They also included some selective demolition in order to make room for additional green and community space. The population of the Triangles and Salford sites was predominantly white, while at Bank Top and North Benwell we found a significantly above-average proportion of ethnic minority residents.

The Bank Top area in Blackburn was considerably larger than the other three areas. It was also difficult to access via public transport, with only four trains per day running between Preston and Blackburn due to works being carried out to the East Lancashire Rapid Transit System (Manchester City Council, 2005). For these reasons we decided not to look at this area. As regarding the two areas in Salford, our discussions with local regeneration staff revealed that the West Seedley was less 'settled', because of plans to re-develop the adjacent area of South Seedley, and 'received less attention' than Langworthy North, which sat just next to a widely publicised private development. Thus, we also decided to discard West Seedley and research in more detail the remaining three areas: Langworthy North in Salford, North Benwell in Newcastle and the Triangles in Wirral.

Before examining local experiences of urban sustainability in these three areas we were further interested to find out how they compared in terms of housing tenure split, economic activity, household and ethnic composition, and demographic characteristics (age and gender). The understanding of their socioeconomic coordinates would not only establish a robust base for comparison and analysis across the three areas, but also facilitate the 'transferability' (or not) of research findings to other urban areas and, perhaps, offer possible explanations of why certain aspects of urban sustainability have been seen differently in a particular area. The following section discusses the socio-economic profiles of our three selected areas: Langworthy North, North Benwell and Triangles. These profiles are then employed to select a typical sample of residents from each area.

5. Three areas: a profile

The three selected areas were similar in that they all met the criteria described in the previous section. They all contained between 400 and 700 homes, with North Benwell being the largest area with approximately 700 homes, while Langworthy North and the Triangles were areas of a similar size with approximately 400 dwellings each. All were inhabited by indigenous populations for at least five years in 2007/2008, with many local residents living through the regeneration process and experiencing the area both at its lowest and following regeneration. Each area was regarded as good practice at HMR Pathfinder and sometimes national level and had won a number of prizes, particularly Langworthy North and North Benwell. In fact, the regeneration staff talked with pride about these three areas, they made the headlines of local newspapers and were prized by the HMR Pathfinder and Audit Commission's progress reports.

They were also similar in some other ways. They were all located within easy access and walking distance to city centres, via light rail, the Merseyrail in Merseyside and Metrolink in Salford, and direct bus service in Newcastle, and took an active part in their growing regional city centres: Manchester, Newcastle and Liverpool. They consisted of Victorian terraces which underwent major external refurbishment works. plus some internal works as well as improvements to the public realm and local parks (Figs. 4-6). In addition, in both Langworthy North and North Benwell some smallscale selective demolition was carried out, which opened up the areas for new green spaces and community areas. All three areas received some HMR funding from 2003 onwards, while the regeneration of the Triangles was entirely financed by HMR; in both Langworthy North and North Benwell, HMR



Fig. 4. The Langworthy North area in 2007/2008.



Fig. 5. The North Benwell Terraces in 2007/2008.



Fig. 6. The Triangles area in 2007/2008.

funding overlapped with previous Single Regeneration Budget investment, which brought together a range of interventions that sought to address not only physical decline but also area deprivation. There were both similarities and differences in their socio-economic profiles. Their profiles were compiled from most recent statistical sources, made available by local authorities or regeneration agencies in each area. These were the 2005 Single Regeneration Budget (SRB) Survey in Langworthy North, 2005–2007 Newcastle Neighbourhood Information Survey (NNIS) in North Benwell and 2006 Triangles Door-to-Door Survey. However, there was no recent information on the area's household composition in any of the three areas and area's economic activity in two areas. As a consequence, we relied on 2001 Census data at either Super Output Area (SOA) or ward level.

The main housing tenure was owner occupation at both Langworthy North and Triangles. Yet if the rest of the housing stock was almost equally split between social and private renting at Langworthy North, at the Triangles it was predominantly private renting. In contrast, the housing stock was almost equally split among the three types of tenure at North Benwell (Fig. 7). They all had significant lower levels of home ownership and notably higher levels of private renting than the national averages of 69% and 12%, respectively (CLG, 2007).

Economic activity and household composition profiles followed similar patterns in all three areas with an almost equal split between economically active and inactive residents, and households with and without children respectively (Figs. 8 and 9). Yet there were fewer economically active people at North Benwell and fewer households with dependent children at Langworthy North, when the three areas were compared. In all three areas levels of households with dependent children were considerably higher than the national average of 25%, while only the Triangles matched closely the national profile of 54% economically active

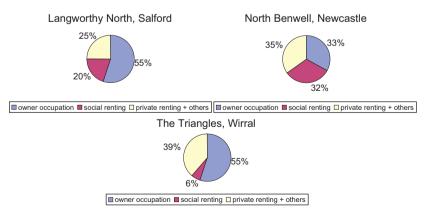


Fig. 7. Housing tenure profile by case study area (2005/2006 estimates).

Source: Langworthy North - 2005 SRB Survey; North Benwell - 2005/2007 NNIS Survey; The Triangles - 2006 Door-to-Door Survey.

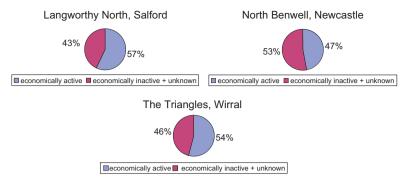


Fig. 8. Economic activity profile by case study area (2005/2007 and 2001 estimates). *Source:* Langworthy North – 2005 SRB Survey; North Benwell – 2001 Census; The Triangles – 2001 Census.

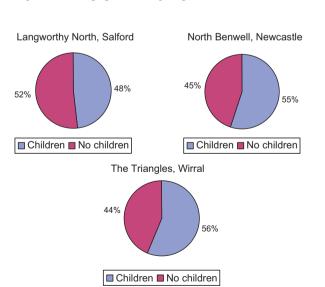
and 46% economically inactive, respectively (2001 Census).

Fig. 10 shows that the population of both Langworthy North and Triangles was predominantly white, 98% compared to the national average of 92%. In contrast, at North Benwell almost half of the local population (47%) was from an ethnic minority background, which was strikingly different from the national average of 8% (2001 Census).

Fig. 11 shows that the population age profile, distributed over four age bands, had a comparable configuration at both Langworthy North and Triangles, in contrast to North Benwell, which had the youngest population (25–49). This was explained by a large number of ethnic minority groups living in the area, and high population turnover. Langworthy North had the largest older population group (over 65) and the

Triangles the smallest younger population group (16–24). When compared nationally, North Benwell was the closest to the national age profile, while both Langworthy North and the Triangles had an older resident population, 27% and 21% respectively compared to 18% nationally (Census 2001).

The three areas, however, were different in a number of ways, as Table 4 shows. The regeneration of Langworthy North had been completed for two years at the time of our first visit in 2007. The area was well established and 'functioning' with extensive support from the Seedley and Langworthy Trust (SALT), a community-based advocacy organisation, despite regeneration plans in adjacent areas which worried



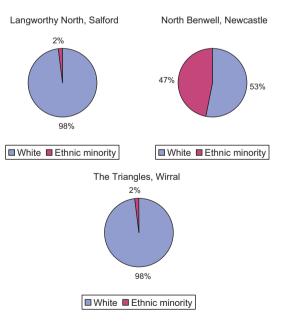


Fig. 9. Household composition (children) profile by case study area (2001 estimates).

Source: All three areas based on 2001 Census data.

Fig. 10. Ethnic affiliation profile by case study area (2005/2007 estimates).

Source: Langworthy North – 2005 SRB Survey; North Benwell – 2005/2007 NNIS Survey; The Triangles – 2006 Door-to-Door Survey.

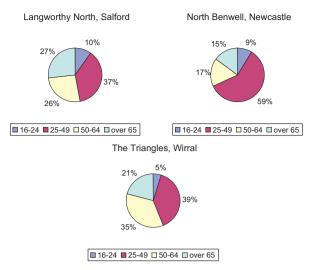


Fig. 11. Population age profile by case study area (2005/2007 estimates).

Source: Langworthy North – 2005 SRB Survey; North Benwell – 2005/2007 NNIS Survey; The Triangles – 2006 Door-to-Door Survey.

local residents. Regeneration at North Benwell Terraces was just completed in 2007 and a neighbourhood office was still located in the area, the Neighbourhood Management Initiative (NMI), which was run by Newcastle Council. However, rumours were circulating that the office was about to move to the adjacent newly

Table 4

Introducing the case study areas: similarities and differences.

declared renewal area, which unsettled local residents and concerned front-line staff. In contrast, the regeneration of Triangles was almost complete, with two thirds ready and the last phase still on-site. The three areas also had different organisational structures and despite the HMR Programme that sought to integrate market and regeneration agendas, they still had different local priorities and took different regeneration approaches influenced by their local circumstances, governance arrangements and ultimately their past history and legacy.

Thirty-eight key actors were interviewed across the three areas in 2007/2008. They represented a wide range of people including HMR officials, front line staff such as housing officers, street wardens and community police officers; developers and contractors, site and project managers; architects and planners; regeneration and community development officers; housing association and local authority staff involved in the area's regeneration; youth and social workers; head teachers; shop assistants and shop or business owners; local councillors, chairs and members of local organisations; and local estate agents. A breakdown of the type and number of key actors interviewed by area is given in Table 5.

Contact was made at first via the HMR office responsible for each area, with the on-site community

Aspect	Langworthy North	North Benwell Terraces	The Triangles
Location	Salford central; 20 min on Metrolink from Manchester city centre	West Newcastle; 15 min by bus and 30 min by foot from Newcastle Central Station	Birkenhead, Wirral; 15 min by Metrolink from Liverpool city centre
Type of area	Back off pavement Victorian terraces built for mining industries	Victorian Tyneside flats in Victorian terraces look-like format for mining and manufacturing industries	Larger Victorian terraces built for shipping industries
No. of properties	468	703	413
Type of intervention	Block Improvement Scheme including selective demolition; alley gating, two communal gardens and works to the public realm	Renewal Area (major refurbishment) including selective demolition; communal areas and improvements to the public realm	Group Repairs Scheme including major refurbishment
Stage of works	Complete 2005	Complete 2007	Complete 2/3 in 2007; due to complete in 2009/2010
Funding	Mainly SRB5 until 2006, but also ESF, HNF and HMR since 2006	Mainly SRB6 until 2006, HMR since 2006	HMR since 2005
Housing tenure	Mainly home owners (55.2%); 19.7% social tenants and 14.5% private tenants	Mainly renting from social (32%) or private (33%) landlord; 33% home owners	Mainly home owners (55%) but a significant share of private renting (39%); 6% social renting
Population profile (compared to their boroughs)	Predominantly white (98.2%), older, less economically active and with more children	Half white (53%) and half ethnic minority (47%); younger; less economically active and with more children	Predominantly white (98.3%), older, less economically active and with more children
Interviews/survey	11 key actors 42 residents	16 key actors 45 residents	11 key actors49 residents

Table 5 The type and number of key actors interviewed by area.

Type of key actor	Langworthy North, Salford	North Benwell, Newcastle	The Triangles, Wirral	Total by type
HMR official	2	4	2	8
Regeneration/project officer	1	-	2	3
Housing officer	1	3	1	5
Community group/project representative	3	5	_	8
Developer/contractor	_	-	1	1
Architect/consultant	1	_	1	2
Warden/community patrols	1	3	_	4
Shop assistant	2	_	2	4
Head teacher	_	1	1	2
Local councillor	-	-	1	1
Total by area	11	16	11	38

Source: Research fieldwork 2007/2008.

offices at both Langworthy North and North Benwell and the Wirral Improvements Team at the Triangles. During this first period of contact, we usually corresponded with a senior member of staff, describing the research and attaching a copy of the questionnaire and short description of the project. All three organisations proved to be extremely reliable and of great support, helping us to identify further useful contacts, promoting our research to local residents and offering their offices to carry out interviews.

In addition to the interviews with key actors, we also surveyed on an average of 41 residents in each area. The three areas were surveyed by the means of a quota sample, mirroring the socio-economic profile of the area described in the beginning of this section. The proposed sample size was fifty residents per area based on the resources available for the research. We decided against a purely random selection, since we sought to reflect the profile, in terms of quotas, of local resident populations as closely as possible - and with only fifty respondents per area, we recognised that a random sample may not achieve this. The survey was based on a face-to-face questionnaire, which was administrated individually. The questionnaire was designed using a combination of national survey questions and questions from previous surveys in the three areas. This has facilitated harmonisation between our results, national figures and findings from previous research in each of the three areas. Most questions incorporated a time perspective in order to reflect change by asking respondents to compare the area's present situation with its conditions 2–5 years previously. For ease of coding and analysis, the questions were closed questions and offered a restricted number of answers. Yet the majority of questions included follow-up questions which aimed to 'flesh-out' and enliven respondents' closed answers.

We used a snowballing method for contacting respondents in order to create a sample of residents that reflected local population characteristics in each area. Some respondents were recruited via local contact groups and advice organisations, others through direct personal contact at local access points such as schools, cafés and shops, doctor's surgeries, community centres and Post Offices. When our sample contained enough respondents with certain characteristics, we recruited to match other characteristics. We recruited a broad crosssection of residents from these three areas.

One potential drawback of this method is that the sample may be self-selecting and only respondents taking an active part in their community were included while 'difficult to reach' or passive respondents were excluded. In practice and as Table 6 shows, we found

Table 6	
Levels of community involvement by case study are	a.

Area	Residents involved in at least ONE community group/project	Residents not involved in ANY community group/project	Total number of residents
Langworthy North, Salford	23 (55%)	19 (45%)	42 (100%)
North Benwell, Newcastle	18 (39%)	27 (61%)	45 (100%)
The Triangles, Wirral (check)	12 (25%)	35 (75%)	47 (100%)

Source: Research fieldwork 2007/2008.

that a significant proportion of the interviewed respondents were not involved at all in their communities and knew little about 'regeneration initiatives' in their area. Another drawback of the quotas sample is that, although the population profile is mirrored in the sample interviewed, few generalisations can be made. As a consequence, we are cautious when making generalisations and our findings are discussed in the light of these limitations.

The resident samples were based on local socioeconomic profiles and mirrored the following six characteristics:

- 1. *Housing tenure* including home ownership, social and private renting.
- 2. *Economic activity* including economically active and inactive residents. Economically active residents were considered to be those who were employees, self-employed or unemployed but actively looking for work. Economically inactive residents were considered those who were retired, in full-time education (students), looking after home/family, or had a long term sickness or disability.
- 3. *Ethnic affiliation* including white and ethnic minority respondents.
- 4. *Household composition* looking at both households with and without children.
- 5. *Gender* seeking to interview an equal number of male and female respondents.
- 6. Age looking at getting the opinions of a wide range of age groups structured under four age bands: 16–24, 25–49, 50–64 and over 65.

The first four characteristics were chosen because they were considered to be important predictors of 'low demand' and 'unsustainable' urban areas. They have all been related in previous studies to housing 'popularity', 'neighbourhood sustainability' and perceived attractiveness of an area. Low demand and 'unsustainable' housing were also associated with the predominance of social and/or private renting, high levels of economic inactivity, high proportions of ethnic minority residents and high concentrations of children (Cameron & Field, 2000; Lee & Murie, 1997; Nevin, Lee, & Phillimore, 2001).

It is important to note here how we defined who was, and was not, a member of an ethnic minority group. A straightforward solution would have been to use the 2001 Census definition and include either all of those who do not identify as white, or all those who do not identify as white British. However, an analysis of people from white minority ethnicities interviewed as part of the 1999 Health Survey for England indicated that their economic and health profile were similar to those of white British people and that around half of the first and second generation Irish people living in England labelled themselves as white British, suggesting that white minority groups should not be a focus of the study as they tend to integrate with the white majority (Nazroo, 2005). As a result, we considered that a respondent was from an ethnic minority background when he/she did not identify himself/herself as white (including white British, white Irish and other white backgrounds).

The last two characteristics, gender and age, were chosen in order to offer a balanced view and include both gender and age perspectives of urban regeneration and sustainability. There is an increasing body of academic literature reflecting on the different ways in which women and men experience regeneration (Brownill, 2000; Brownill & Drake, 1998; Gosling, 2008; May, 1997; Warr, 2005). Research on deprived neighbourhoods also shows that different age groups experience regeneration differently. For example, research shows that marginal age groups like children and the elderly are often excluded or ignored altogether from regeneration processes, as current practice mainly focuses on the needs and preferences of adults (Frank, 2006; Matthews, 2003; Silverman, Lupton, & Fenton, 2006; Speak, 2000; Spencer, Wooley, & Dunn, 2000). Table 7 shows a breakdown by area of the six sample characteristics.

All data was collected between 2007 and 2008 and then analysed in SPSS. The SPSS database greatly facilitated quantitative analysis within and across the three areas and allowed us for differentiated findings by sample characteristics. It also enabled us to show via tables and charts what 134 residents thought about area regeneration and the various indicators of urban sustainability, and compare findings across the three areas, and between areas, their regions and the UK. Figures from these tables were also used to support what residents said. However, the analysis had its limitations due to the small size of the sample. In order to address this limitation the analysis has been supplemented by a significant amount of qualitative analysis drawing on residents' rich descriptions and views.

It was difficult to use SPSS to analyse qualitative responses. This problem was overcome by using SPSS to provide individual resident profiles for each area, including all the verbatim responses to open-ended and follow-up questions, which we then analysed individually. With open-ended questions such as 'What are the three things that you like least about your area?', we

Table 7 The distribution of sample quotas by area (in number of residents).

Sample characteristics	Langworthy North, Salford	North Benwell, Newcastle	The Triangles, Wirral	Total by quota
Housing tenure				
Home owners	22	15	23	60
Social tenants	9	14	6	29
Private tenants	11	16	18	45
Economic activity				
Active	18	23	27	68
Inactive	24	22	20	66
Ethnicity				
White	39	23	44	106
Ethnic minority	3	22	3	28
Children in the household	1			
Yes	19	24	24	67
No	23	21	23	67
Age				
16–24	7	5	6	18
25-49	15	27	18	60
50-64	8	8	15	31
Over 65	12	5	8	25
Gender				
Male	19	24	21	64
Female	23	21	26	70
Total by area	42	45	47	

Source: Research fieldwork 2007/2008.

analysed responses on the basis of recurring themes that residents themselves identified, for example crime and antisocial behaviour, littering and local facilities. We then grouped residents' responses under these broad themes and identified patterns of dominant concern across a relatively wide range of residents in relation to a particular issue.

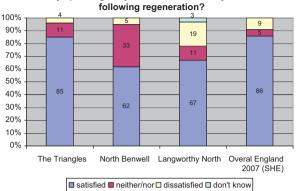
6. A portrait of urban sustainability in three neighbourhoods

The previous sections laid down the foundations for analysing local sustainability in three urban areas which went through a process of urban intervention under the HMR Programme. We first examined the relationship between sustainability and urban regeneration more generally, and paused on the challenge of measuring sustainability. Urban sustainability indicators were highlighted as a potential approach to measurement and a list of 26 indicators was put forward (Table 1). These indicators were the result of a highly consultative process, aimed to match closely an 'urban regeneration context' and integrate both experts and citizens' views of urban sustainability. We then took stock of the HMR Programme and mapped its urban activity by 2007/ 2008. From a large number of HMR projects identified in the field we selected three urban areas: Langworthy North in Salford, North Benwell in Newcastle and the Triangles in Merseyside.

The following section examines in greater detail these three areas in order to answer the three major questions posed in the beginning of this paper:

- Has urban sustainability been influenced by HMR intervention?
- What have been the impacts at local level? and
- What new evidence can be uncovered about the HMR Programme?

We do so by triangulating what 134 residents living in the three areas told us with the views from 38 local actors or stakeholders and secondary information from other research and reports. The local impacts of HMR intervention on urban sustainability are examined by looking in detail at the 26 urban sustainability indicators listed in Table 1. However, before proceeding to describe these 'local experiences of urban sustainability', we first examine the wider background of residents' attitudes towards living in our three areas as a broad indicator of how successful the regeneration of the area had been perceived to be, but also as an early indication of local social sustainability.



Generally speaking, do you fell satisfied with your local area

Fig. 12. Residents' levels of satisfaction with area, by case study area

and compared to England. Source: Field work survey (2008/2008) and Survey of English Housing, DCLG (2007a).

6.1. Attitudes towards living in three area

This paper focuses on understanding urban sustainability at local level. Thus, understanding the context in which local communities are embedded, including their aspirations and the things they like or dislike about an area, is important. Residents' perceptions and attitudes towards living in an area are a good indicator of this and perhaps the most general measure of it is the level of *resident satisfaction*. Satisfaction levels for each of the three areas are compared to overall levels of satisfaction in English cities in Fig. 12. We found that satisfaction levels were similar to national levels at the Triangles and lower in the other two areas. We also found high dissatisfaction levels at Langworthy North.

High levels of satisfaction at the Triangles were particularly noteworthy in light of its surrounding areas, which had a reputation for high levels of poverty and deprivation, and were earmarked for demolition. Across the three areas, almost three quarters of each tenure group - home owners 72%, social tenants 71% and private tenants 75% - were satisfied with their area following regeneration, less than the national levels of 89%, 80% and 85% respectively (DCLG, 2008a). Home owners were more likely to be satisfied in North Benwell and the Triangles than in Langworthy North, while social and private tenants were more likely to be satisfied at Langworthy North and the Triangles than at North Benwell. The main reasons for residents' satisfaction were: the area's improved visual appearance and safety, rising house prices and greater community sense and cohesion.

Regeneration has totally turned the area around: it is a much safer place to live, people are talking to each other now; in the past you couldn't trust anybody ... also house prices have gone up and it holds a better community to live in ... and people seem to be happier at last (Resident in Langworthy North) I am happier going in and out from home to work, I feel safer ... at first it was absolutely appalling: the people, the conditions, the landlords ... houses many years ago were very sought after then they went down and now they seem to pick up again (Resident in North Benwell)

Now it is visually pleasing and the regeneration had had the desired effect of improving housing market values ... and the finishing touches by the neighbours ... flowers, planters show pride in the area which was not noticeable before (Resident in the Triangles)

However, levels of dissatisfaction at Langworthy North were much higher than at both the other two areas and national level. Residents in Langworthy North commented about the "unfairness of regeneration boundaries" and "pockets of deprivation" pepperpotted around the area which they felt had a negative impact on the overall image of the area. They also felt that the whole regeneration process was too slow, involving "too many meetings, proposals and presentations" and "bearing too little fruit", and were concerned about the potential of future demolition in the area as a result of the property market pressures, that sought "to make more room for fancy and expensive new developments".

Fig. 13 shows that a majority of residents were also optimistic about the *future of community* across the three areas, with 75% (in North Langworthy and the Triangles) and 80% (in North Benwell) saying so. This is notably higher than average levels of EU and UK residents (50% and 44%, respectively) who admit being optimistic about their life in the future (EC, 2004).

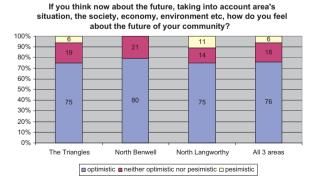


Fig. 13. The future of community as perceived by residents by area and in three areas combined. *Source*: Fieldwork survey 2007/2008.

Residents in the three areas felt this way because their area was "*in the spotlight*" and "*at the heart of wider regeneration initiatives and plans*".

Today, the area has the potential for more shops, better employment and training opportunities for local people. Things are getting much better for us, house prices are going up and it means it is going to attract better quality of people to this area (Resident in Langworthy North)

I am optimistic because it's come so far in the last ten years ... the house prices are rising faster than other areas in the city for the first time in years ... also a lot of stuff has been set up and as long as we are able to sustain this we should see more and more improvements (Resident in North Benwell)

With Wirral's attitude and initiatives for generating new business and the massive long term plans for docklands by Peel Holdings [Wirral Waters] ... along with group repair scheme, confidence is boosting in East Wirral and this should reverse the long standing decline of the whole area (Resident in the Triangles)

Residents were more likely to be pessimistic in Langworthy North than in the other two areas. They expressed their concerns regarding area gentrification and potential demolition plans in the future. In all three areas, key actors felt that there was "*still a long way to go*" and "*it was still early days*" before a final evaluation could be made. They were all concerned about the uncertainty and short-term commitment of regeneration investment, as both Langworthy North and North Benwell were at the end of major Single Regeneration Budget funding and it was not clear whether the HMR Programme will continue to gap-fund these areas, while at the Triangles there were concerns that the HMR Pathfinder could cut back or withdraw funding at any time before the end of the project.

Another important indication of area stability and success is the proportion of people who want to stay in an area. Each year in England about 10% of households move house. Some people seem to be more mobile than others. Groups more likely to be mobile are the unemployed, higher socio-economic groups, private renters, younger adults and among the younger adults, white people and Black Caribbeans (Donovan, Pilch, & Rubenstein, 2002). However, at national level 44% of people express a preference for moving. Thus, more people want to move than actually succeed in doing so (Boheim & Taylor, 2002). Their preferences may be limited by financial constraints or current tenure. For example, social tenants are more likely to be

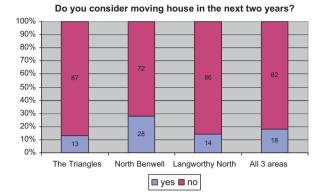


Fig. 14. Residents considering moving house in the next two years by case study area and in three areas combined. *Source*: Fieldwork survey 2007/2008.

constrained or 'frustrated' in their preferences than other tenures (Clarke, 2008; Hughes & McCormick, 1985).

Fig. 14 shows that almost one fifth (18%) of the total sample considered *moving house in the next two years*, with a notable proportion of residents (28%) at North Benwell saying so. Higher levels of residents thinking of leaving North Benwell were partly explained by the area's historic high turnover and attraction to immigrant populations, and partly by the high number of rented properties.

Across the three areas, residents considering moving were mainly younger (under 44 and many between 16 and 24), white and living in private rented accommodation, all matching the more mobile categories identified above. More variation was noted in North Benwell, where despite key actors' accounts of low turnover rates in the social renting sector, more than one third (39%) of the social tenants interviewed considered moving from the area. Discussions with local residents revealed that the majority of the social tenants who intended to move were from an ethnic minority background and had larger families than average; they thought that large family houses with gardens were more suitable for their extended families than small three bedroom terraces with tiny back yards available in the area. There were also a few single mothers accommodated in two bedroom flats who expected their second or third child and therefore sought larger accommodation.

People move for many reasons. Most moves are driven by the desire to improve the quality and nature of housing rather than for job-related reasons. Lack of satisfaction with homes is one important reason why people choose to move, perhaps even more important than lack of satisfaction with the surrounding neighbourhood according to one study (Parkes, 2002). Most moves over short distances seem to be associated with relationship formation and break ups, family, a desire to move up or down the housing ladder or move into another area. Moves over longer distances within a region are predominantly for higher education- and jobrelated reasons (Donovan et al., 2002).

Reasons for moving, common to all three areas, were the lack of larger family homes in the area and rising living costs. Other reasons were related to the place of employment, further education or the desire to move countries. Another reason, especially prevalent at North Benwell and Triangles, was moving to a better place to bring up children, closely related to issues of crime and safety in the area. Conversations with couples and young families revealed that many of them were concerned that continuing to live in the area would expose their children to undesirable behaviour such as intimidating street gangs, children hanging around the streets and drug abuse. This finding contributes to the evidence on migration patterns in HMR areas, whereby outward migration of younger people and families with children was still a problem in these areas (Nevin & Leather, 2007). It also highlights the challenge of retaining younger people and families in these areas in order to create communities that are more 'balanced' and 'mixed'.

A common pattern of *what was least liked* about the areas emerged across the three areas. *Local crime* and *anti-social behaviour*, followed by *litter* were mentioned by a large proportion of residents and key actors in all three areas as Fig. 15 shows. This compared well to what the local council in each area recognised as a priority for improvement: *reducing levels of crime* was the first priority in all three boroughs, while *clean streets* was identified as a second or third priority (Audit

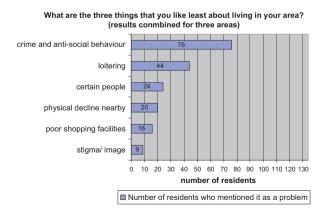


Fig. 15. A gradient of 'least liked' things in three areas combined. *Source:* Fieldwork survey 2007/2008.

Commission, Area Profiles, 2009). At national level anti-social behaviour, including vandalism, street gangs and hooliganism, was also identified as a main problem by 40% of households, and litter and rubbish by 43% (DCLG, 2008b). In addition, the incidence of anti-social behaviour including teenagers hanging around the streets rose between 1992 and 2008 from 20% to 31% (DEFRA, 2008).

6.2. Different degrees of local sustainability

We found that the HMR intervention has had a diversified impact on the various domains and indicators of urban sustainability listed in Table 1. Some domains of urban sustainability went through a greater deal of positive change, while others witnessed little or no change. This is briefly summarised in Table 8. It appears that urban intervention has had a *clear positive* effect on the overall 'housing and built environment' of the three areas, a *somewhat positive* effect on their overall local 'economy and jobs' and 'community', and an *uncertain* effect on local 'use of resources', 'services and facilities' and governance mechanisms.

For example, many aspects of the housing and the built environment and community domains were improved in all three areas, while urban regeneration had little impact on local job markets, and negatively affected the position of some local business, services and facilities. This means that while some urban indicators moved closer to sustainability, others moved away from sustainability. Moreover, evidence from the three areas showed that some indicators were more difficult than others to be directly influenced by urban intervention, no matter how 'holistic' and 'comprehensive' this was designed to be. Indicators that were more likely to depend on broader forces and factors than those directly involved in the regeneration process, were less likely to drive the sustainability of an area, for example, local economies and labour markets, migration and immigration patterns and local governance arrangements. However, all these considerations are discussed in greater detail in the following sections. As mentioned previously, the basis for this discussion draws on the harmonisation of information from interviews with residents and key stakeholders in the three areas, as well as other published secondary and primary sources. This 'bottom-up' approach is very much a consequence of this paper's conceptual framing which aims to examine local impacts, that is to say effects of urban regeneration on local sustainability.

128

Table 8

	The overall impact of urban	(HMR) intervention on	the various domains	of urban sustainability.
--	-----------------------------	-----------------------	---------------------	--------------------------

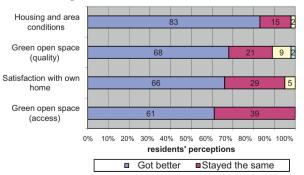
Domain of urban sustainability	Indicators of urban sustainability	Overall impact ^a of urban intervention
Housing and built environment	Housing and area conditions; housing state if repair; satisfaction with own home; green open space	Clear positive
Economy and jobs	Jobs; access to jobs; business activity; training and skills; house prices; housing affordability	Somewhat positive
Community	Moving patterns; sense of community; crime and safety; tenure/income/ethnic mix	Somewhat positive
Use of resources	Energy use; water use; waste recycling	Uncertain
Services and facilities	Services and facilities; school; GP/health services; public transport	Uncertain
Governance	Community involvement; LA services; partnerships	Uncertain

^a 'Overall impact' is defined here as the 'impact on each domain of urban sustainability' and not on individual indicators under each domain.

6.2.1. Housing and the built environment

The effect of urban regeneration on local housing and built environment is likely to be positive as indicators which are related to area's physical appearance such as standards of external appearance, cleanliness and quality of public space are likely to be improved during urban regeneration processes (Beekam, Lyons, & Scott, 2001; Jupp, 1999; Page & Boughton, 1997). This also is where most regeneration investment went under the HMR Programme. Indeed, evidence from the three areas indicates that area regeneration has had a *clear positive impact* on all selected indicators of local housing and built environment (Fig. 16). In all three areas housing and area conditions were greatly improved, houses were in a better state of repair and residents were happier with their homes.

More specifically, the general *housing and area conditions* were perceived improving significantly across the three areas as a direct result of regeneration



Housing and built environment in three areas combined

Fig. 16. Indicators of housing and built environment as perceived by residents in three areas combined. *Source*: Fieldwork survey 2007/2008.

works. Interviewees talked about streets and houses looking smart and uniform, the area's new appearance which "was tidier and very attractive" in Langworthy North, "had greatly improved" in North Benwell and showed that the area was "well looked after by its residents" in the Triangles. Local residents were also more satisfied with their homes as a result of their better state of repair. They mentioned warmer and safer homes, and improvements made to meet their needs. Yet across the three areas the housing state of repair offered a less unified picture: more effort was put into improving the visible 'front of the house', including front gardens, doors and windows, roofs and chimney stacks, than the less visible back such as back walls and vards. In addition, many residents felt that their kitchens and bathrooms were in much need of repair and upgrading.

The residents most satisfied with their homes were from the Triangles (81%), followed by those in Langworthy North (67%) and North Benwell (49%). A possible explanation for high levels of satisfaction at the Triangles could be the nature and extent of refurbishment works carried out which involved extensive improvements and generous subsidies for all residents willing to take part in the scheme. In contrast, a more piece-meal approach was taken at North Benwell, whereby home owners and social tenants were the main beneficiaries of regeneration subsidies. As a result, private tenants, a significant share of area's population, were left out. In fact, only 21% of North Benwell's private tenants were more satisfied with their homes, in comparison to 89% at Langworthy North and 56% at the Triangles.

Previous research drew attention to the highly variable approach to *green open space* delivered under current urban regeneration practice in the UK, with best results rather occurring in Growth Areas than under HMR intervention (SDC, 2007). In contrast, the three case study areas were good practice examples in their approach to green open space. Urban regeneration made visible improvements to the quality and quantity of green open space by providing additional space in two areas and upgrading the existing green space in all three areas. Overall, 68% of the interviewed residents held the view that the area's green space was of higher quality and regeneration contributed significantly to raising its standards. Residents' access to green open space was also found to have improved in all three areas. Both the Triangles and Langworthy North had benefited from the recent and extensive refurbishments of nearby parks, Birkenhead Park and Chimney Pot Park, while Langworthy North and North Benwell had benefited from additional green space opened up through

6.2.2. Economy and jobs

selective demolition.

The interpretation of sustainable development along purely economic lines is a common theme within the regeneration literature, and the ambiguity of the term is often depicted as enabling the economic agenda. Couch and Dennemann's (2000) study of the regeneration of a inner-city area in Liverpool found that economic aspects were prioritised over social and environmental concerns and that economic regeneration and more precisely property development were the main driving forces regenerating the area, while Raco's (2003) study of Reading found a similar bias towards the economic, this time articulated through the concept of growth (Raco, 2003).

A major study looking into the impact of urban renaissance on overall economic performance of British cities presents a startling picture. The study found that overall and relative to other cities, 'urban regeneration cities' that were struggling in 1997 were still struggling in 2007. These cities have not only failed to catch up but also fallen even further behind. Their GVA was 13% below the national average, and the gap has increased by 40% since 1997; inhabitants were 33% less rich than those in other cities, a 3% increase since 1997; even after a decade of raising employment, unemployment rates were 40% above the national average; and people were 38% less likely to register a new business. The study concluded that the UK story was not one of successful urban policy convergence, but a tale of two kinds of cities, one free to prosper, the other dependent on regeneration funding (Leunig & Swaffield, 2008a).

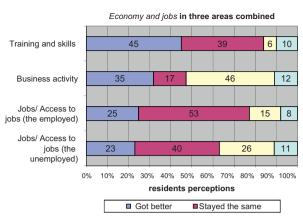
Despite this picture, we found that urban intervention had a *somewhat positive impact* on local *economy*

Fig. 17. Indicators of economy and jobs as perceived by residents in three areas combined. *Source*: Fieldwork survey 2007/2008.

and jobs in all three areas and a number of economic indicators seemed to improve as a result of urban intervention in at least two areas (Fig. 17). Local residents improved their skill base as a result of more readily available training courses offered throughout the regeneration process; house prices and land values rocketed in all three areas and there were signs that local business activity was slowly picking up in two areas. Yet local job markets were still weak, as not many jobs and opportunities seemed to have been created locally across the three areas.

Both Langworthy North and North Benwell were better off in terms of their overall economic outlook at the end of the regeneration process than in its beginning, perhaps a direct consequence of Langworthy North's close relationship to the nearby market jobs of Salford Quays and Manchester City, and North Benwell's successful local business activity fuelled by ethnic minority-led entrepreneurship. In contrast, the Triangles' economy seemed cut-off and hampered by proposed demolition in the surrounding areas. However, local economies and job markets in all three areas appeared to be in a fragile balance and subordinated to wider economic rationales. On one hand, house prices increased significantly in all three areas and local residents appeared better prepared to take on new job opportunities as a result of better training opportunities. On the other hand local job markets and business activity still struggled and areas seemed to become less and less affordable to local residents.

Evidence from the three case study areas showed that local residents reported that they gained employment only marginally throughout the regeneration process, despite their overall skill base being much improved. This finding complements previous research which also



found that despite comprehensive physical regeneration with resultant economic growth undergone by the UK's cities, those living near or in regeneration areas did not benefit much in terms of employment prospects and only a fraction of dedicated budgets were spent on tackling unemployment and boosting skills and enterprise in regeneration areas (All Party Urban Development Group, 2009; Hayman, 2009).

Jobs and access to jobs were generally perceived as poor by residents in all three areas as a result of poor local choice and opportunities, and failure to promote viable employment alternatives to previous industry and manufacturing jobs. Key actors thought that creating local employment opportunities was not one of the strengths of the regeneration process, that "jobs have not been successfully linked into the regeneration process" and "jobs still needed to kick in". Yet a few new local jobs were created, mainly as a result of the regeneration process per se, including construction apprenticeships and clerical positions.

Levels of local *business activity* were perceived in both Langworthy North and the Triangles as deteriorating, a result of declining and disappearing traditional high-street shops in favour of big supermarkets and demolition plans which fuelled private investors' lack of confidence in the area. In contrast, in North Benwell local businesses were doing well and predominantly catered for ethnic minority groups. Despite residents' negative perceptions, key actors talked about local business activity that "*started to pick up recently*" in Langworthy North and North Benwell, mainly as a result of on-going construction works: developers, contractors and labourers were using local shops and businesses to either order construction materials, buy their lunches or sub-contract work.

Residents' access to new *training and skills* improved across the three areas. Both residents and key actors agreed that regeneration greatly facilitated local residents' access to new training, and especially so in Langworthy North and North Benwell. A number of training courses and initiatives targeting residents' low skills base were publicised throughout the regeneration process via leaflets, local newspapers and board notes at local neighbourhood offices in two areas. Yet residents at Langworthy North complained about the difficulty of finding a job once a training course had been completed, and thought that a better match between jobs available locally and the local skills base, on one hand, and training courses, on the other hand, should be sought by regeneration and economic development programmes.

House prices and land values usually increase in renewal areas (Groves et al., 2003; Razzu, 2004;

Roessner, 2000; Turok, 1992). Findings from the three case studies supported this evidence. House prices and land values increased by a significant amount in all three areas and at a faster pace than their boroughs and regional counterparts. Moreover land or houses had initially been turned over to developers and buyers at essentially nil value. Public realm and infrastructure improvements had been subsidised with public investment, and the majority of the newly refurbished homes for sale had been heavily subsidised. Yet respondents did not know precisely by how much house prices increased and a wide range of figures were mentioned in each area, together with a slight inclination for exaggeration when compared to actual prices and values in the area.

Key actors across all three areas thought that the areas were still affordable when compared to the city in general and to terraced housing within the city in particular, and a main attraction to first time buyers who "wanted to get on the property ladder". However, the wider areas within which the three case studies sat. experienced increases in the affordability gap between 2002 and 2006, with North Benwell and Langworthy North HMR wider areas undergoing a higher increase than that of the Triangles, 61% and 48% change compared to 37% change, respectively (Nevin & Leather, 2007). Moreover, local residents mentioned increasing costs and rents at North Benwell, an active buy-to-let market represented by "private landlords who took over the streets" at the Triangles, and feared being pushed out of the area "by young professionals working in Manchester" at Langworthy North.

For low-income residents increasing land values can be problematic, despite the fact that the value of their assets increases as well. In fact local residents voiced concerns across the three areas regarding increasing lack of local affordability. Limited evidence from the three case studies supports previous evidence which indicated a fall in affordability across the HMR areas and residents feeling priced out of the market as a result of area regeneration (Nevin & Leather, 2007). Moreover, lack of affordability for low income local residents could lead to area gentrification. As house prices in an area increase, low-income home-owners may find it difficult to improve their housing situation within the area, and their relatives or other social tenants looking to move into home ownership may be priced out, contributing to the so-called 'exclusionary' or 'second generation' displacement (Marcuse, 1986).

6.2.3. Local communities

Previous studies show that urban regeneration intervention has an overall positive impact on areas

with poor community cohesion through promoting more interaction among different resident groups (Audit Commission, 2008; SDC, 2007). It has also been noted that levels of crime are negatively correlated to levels of community cohesion: the higher the levels of cohesion within a community, the lower its crime rates (Hirschfield & Bowers, 1997). Overall, we found that urban regeneration appeared also to have a somewhat positive impact on the social outlook of the three areas. It fostered, indeed, a greater sense of community and levels of crime were reduced in all three areas. Yet the community mix was still challenging as tenure diversification did not actually happen in any of the three areas, despite general perceptions that better-off people were actually moving into all three areas. Two main changes in the overall social outlook were notable across all three areas. First, area regeneration fostered a local sense of community at all case study areas. Second, all three areas experienced important changes in terms of ethnic composition, with new migrant populations, mainly from Eastern Europe, coming into the areas. Fig. 18 illustrates how various indicators of *community* were perceived by the residents in the three areas.

It was generally agreed that the regeneration process had contributed to consolidate the existing community and fostered a greater *sense of community*, with more social contact and community activity noted especially in two areas, Langworthy North and North Benwell, much supported by the two local neighbourhood offices. However, research also found that increased socioeconomic and ethnic diversity could impact negatively on community cohesion (Dekker & Bolt, 2005). We found some evidence of this in North Benwell where despite a generally acknowledged strong sense of community, local residents mentioned little communication and ties among the various local ethnic communities and key actors expressed concerns about

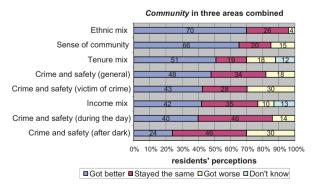


Fig. 18. Indicators of community as perceived by residents in three areas combined. *Source*: Fieldwork survey 2007/2008.

the "*local community that did not gel*" because of such an ethnic diversity.

Power (2004) lists four key questions about sense of community (Power, 2004). These questions were answered for the three areas in Table 9 below. A comparison across the three areas in these terms shows that Langworthy North and North Benwell offered more scope for building a stronger sense of community than the Triangles for example.

Sense of community and belonging to an area can be promoted by informal meeting places such as streets, public open spaces or bus stops as well as more formal places such as community and sport centres and schools (Appleyard & Gerson, 1981; Gehl, 1971). The alleygating, communal gardens and pocket parks at Langworthy North and North Benwell were mentioned by residents as valuable informal meeting places. In both areas there were also a few formal community venues, most notably the Cornerstone in Langworthy North, a new state of the art community facility built with regeneration funding, and the Millin Community Centre in North Benwell, an existing and well run local community facility. There were not many places as such at the Triangles and local residents relied on wider area community facilities. In addition, the Birkenhead Park was perceived as part of a wider circuit and so not a place which potentially could increase social contact among the Triangles' residents.

Sense of community was also fostered by the local community activity developed through a range of community organisations and projects: there were 23 active community groups and initiatives in Langworthy North and 16 in North Benwell. Moreover, at both Langworthy North and North Benwell, and in contrast to the Triangles, a range of front-line jobs, such as street wardens, community police officers and park keepers, which offered a human link and a neighbourhood presence, were established throughout the regeneration process.

Reducing crime levels in areas of urban regeneration has been seen as a pre-requisite of successful urban regeneration and levels of crime have been found to decrease in areas of urban regeneration and as area conditions improved, residents' perceptions of crime also have improved (Coleman, 2004a, 2004b; SEU, 2001). Official statistics reported that all three areas experienced significant reductions in levels of crime throughout the regeneration process and people reported feeling safer in their communities.

Perceptions of local *crime and safety* were more positive at Langworthy North and North Benwell, than at the Triangles: residents walked more confidently

ruore y				
Questions	on	sense	of	community.

Questions of sense of community	Langworthy North	North Benwell	The Triangles
Are there any community meeting points?	Yes many (e.g. SALT office, communal gardens; gated alleys; Chimney Pot Park)	Yes many (e.g. RMI office; communal gardens; pocket parks)	Limited (e.g. Birkenhead Park)
Are there community facilities for hire?	Yes many (e.g. Cornerstone, SALT office)	Yes many (RMI office; Millin Centre)	No
Are there any community organisations?	23	16	1
Are there any front-line jobs?	Yes (e.g. park keeper, street wardens)	Yes (e.g. street wardens, community police officers)	No
Overall area assessment	Positive	Positive	Limited

Source: Adapted from Power (2004).

about their area and were less concerned about becoming a victim of crime. They felt safer as a result of less reported crime, public realm improvements such as better street lighting and surfacing, and better channels to report crime including neighbourhood offices, street wardens and community police officers. Yet the future of these front-line jobs in both areas was very much questioned at the time of fieldwork due to shortfalls in funding and reconfiguration of regeneration plans.

Police patrolling was intensive and closely networked with the local community at North Benwell via community police officers, who patrolled the area each day between 6 am and 11 pm, 'junior wardens' trained in the local school and neighbourhood watch schemes. In addition, the area was sandwiched between two busy commercial roads, West Road and Adelaide Terrace which stimulated more pedestrian flows through the area. In contrast, there was no street policing at the Triangles, the neighbouring areas were partially abandoned and the local high street, Liard Street, was lined with boarded-up shops.

Policy makers and city planners have tried for many years to mix communities better by attracting better-off households back into urban deprived urban areas, in order to prop up schools, de-concentrate poverty and prevent sprawl. Better-off households, in particular, are expected to contribute to an area by pressuring local bodies and institutions for better services, monitoring public order and facilitating social interaction across different backgrounds, resulting in an improvement in standards (Silverman et al., 2006; Tunstall & Fenton, 2006). Moreover, re-balancing tenure in the favour of home-ownership has been seen as a pre-requisite of successful regeneration delivery and sustainable communities in the HMR areas (Audit Commission, 2006; Shelter, 2009). We found little evidence of this in the three case study areas.

Tables 10–12 show changes in *housing tenure* between 2001 and 2006 in each area. Small changes across all housing sectors were noted at Langworthy North and North Benwell and more significant changes at the Triangles. At Langworthy North all three housing sectors contracted in favour of *other*, perhaps an indication of increasing *concealed* households within the area. The Triangles was the only area that experienced important changes across all tenures between 2001 and 2006, with both home-ownership and social renting shrinking in favour of the private rented sector. In previous research, the shift to private

Table IC	Ta	ble	1	C
----------	----	-----	---	---

Housing tenure at Langworthy North (2001-2006).

Housing tenure	2001	2006
Home ownership	59%	55%
Social renting	22%	20%
Private renting	17%	14%
Other	2%	10%

Source: Figures for 2006 were based on author's calculations from the survey carried out in 2006 for Quaternion (2007); figures for 2001 are based on 2001 Census data for Lower Layer Super Output Area (Salford 023C).

Note: Totals may not add up to 100% as percentages were rounded to one decimal place.

Table	11
-------	----

Housing tenure at North Benwell (2001-2006).

Housing tenure	2001	2006
Home ownership	29%	30%
Social renting	35%	35%
Private renting	33%	35%
Other	23%	-

Source: Figures based on Social Regeneration Consultants (2005) and Total Research (2007).

Note: Totals may not add up to 100% as percentages were rounded to one decimal place.

Table 12 Housing tenure at the Triangles (2001–2006).

Housing tenure	2001	2006
Home ownership	60%	55%
Social renting	17%	6%
Private renting	20%	39%
Other	2%	-

Source: Figures for 2006 are based on author's calculations drawing on the Wirral Door-to-Door survey carried out in 2006; figures for 2001 are based on 2001 Census data for Super Output Area which perfectly overlapped over the case study area's middle section (Thornton-Clifford-Kinsley streets); assumptions were made that tenure was distributed evenly across the case study area.

Note: Totals may not add up to 100% as percentages were rounded to one decimal place.

renting has been related to collapsing local housing markets and surrounding areas earmarked for demolition, the latter certainly being the case at the Triangles (Holmans & Simpson, 1999; Keenan, Lowe, & Spencer, 1999). In addition, residents across the three areas noted a higher number of better-off residents in their areas who "drove expensive cars" and "bought expensive furniture, wore smart suits" or "went to work every morning".

The *ethnic mix* of an area is not often explicitly mentioned in official discussions of social balance, perhaps due partly to legal obstacles for affirmative action (Cole & Goodchild, 2001). This research did not focus on area's change in ethnic mix, as little information was available on the three areas' ethnic profiles. Our area interviews indicated important changes in the ethnic composition of all three areas which led to adjustments and tensions within the already-existing local communities: many interviewees reported the arrival and settling of Eastern European populations who either "did not speak too much English" or "drove expensive cars around the area" or "ganged together" at certain times of the day or week.

In places, local residents felt threatened by the new arrivals: they did not know what "these Eastern Europeans were doing for living" or why they gathered together. In contrast, a recent study on Eastern European migration in HMR areas found that its impact was both beneficial, through stabilising areas of low demand and improving community cohesion, and problematic, as a result of an increased demand on local services. It also indicated that these migrants were positively impacting upon such areas by increasing demand for private rented and owner-occupied housing, as well as having skills and qualifications that were supportive of achieving regional employment targets (Pemberton, 2009).

Changes in the ethnic composition of our three areas were not seen as a direct impact of the regeneration process but rather as a result of wider UK migration policy and practice. Residents at Langworthy North and North Benwell were more likely to report significant changes in their area's ethnic mix than those living in the Triangles. A possible explanation of this is that both Langworthy North and North Benwell were dispersal areas for asylum seekers and refugees and thus supposedly subject to higher flows of ethnic minority populations. Moreover, the population of Langworthy North was historically white and thus changes in area's 'quantity' of ethnic minority population was easier and faster noticeable, while at Benwell North, change was noted on the background of change in the nature of dominant ethnic minority groups from predominantly Asian and Bangladeshi to newer Easter European and Black African populations. In North Benwell, the only area where more detailed ethnic minority information was available, the indigenous white population declined by 13% between 2001 and 2006, from 75% in 2001 to 62% in 2006, in favour of other ethnic minority groups (Total Research, 2007).

6.2.4. Use of resources

Couch and Dennemann (2000) suggest that the policy goals of urban regeneration and reducing use of resources have failed to be effectively integrated in practice because of three types of barriers (Couch & Dennemann, 2000):

- *perceptual*, by which different professions involved in delivery such as economists, engineers, planners and environmental coordinators have different perceptions and do not share a common agenda as they have not worked together historically;
- *institutional*, whereby the complex network of institutions involved in delivering urban regeneration perpetuates an ambiguity over responsibilities and a configuration of local interests; and
- *economic*, when short-term financial efficiency seems to be the predominant criteria.

Evidence from the three areas indicates, indeed, that the positive impact of housing refurbishment-led regeneration was less clear on local *use of resources*. An up-front 'environmental' agenda was pursued in only one area (the Triangles), while in the other two areas measures were implemented unevenly and sparingly. This appeared to be the effect of an *economic barrier* in all three areas, by which the up-front cost was the predominant criteria in deciding whether to

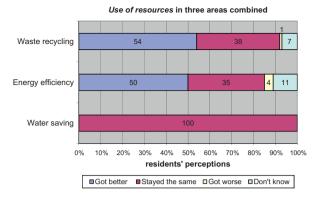


Fig. 19. Indicators of use of resources as perceived by residents in areas combined.

Source: Fieldwork survey 2007/2008.

implement a measure or not. Nevertheless, a majority of residents across the three areas felt that their homes were more energy-efficient and they recycled more waste as a result of improvements carried out throughout regeneration works (Fig. 19).

Looking at the wider urban context of each area, both Salford and Newcastle councils have shown very good progress on energy-efficiency and waste recycling when compared to national figures, in contrast to Wirral council which lagged behind (Audit Commission, Area Profiles). Moreover, Newcastle came first in a recent classification of UK's most sustainable cities (Forum for the Future, 2009). Residents in all three areas showed some awareness regarding energy use in their homes only when specifically questioned about various measures to increase energy-efficiency which they immediately related to cheaper bills. The most easily recognisable and reported energy-efficiency measures were double glazing, loft insulation and energy saving bulbs. Few residents commented or knew if they had room thermostats or water tank insulation. This evidence suggests that the insufficient knowledge of effective ways to reduce household energy use was a potential barrier for greater energy efficiency in the three areas (Steg, 2008).

The private rented sector is the least energy efficient sector (DCLG, 2007a). We found that private tenants were less likely to be informed about energy efficiency measures at their properties than other residents. More interestingly, when comparing the two areas with similar large private renting sectors, North Benwell and the Triangles, private tenants at the Triangles were likely to be more informed about measures implemented in their homes than those at North Benwell. This could have two possible explanations.

First, these measures might have been missing altogether from some privately rented accommodation, as a result of landlords not being interested in investing in their properties. At the Triangles, the council developed 'Homesteading', an 'out-reach' initiative which actively aimed to track and involve 'absent' landlords, while North Benwell's two schemes, the Private Rented Service and Accreditation Scheme, passively aimed to involve landlords and had a less of an outreach approach. Second, it could be explained by turnover in the privately rented sector, whereby current tenants were less likely to know about improvements carried out previously to their time at the property. The Triangles scheme was still on-going at the time of fieldwork and thus residents were more likely to be aware about works carried out in their houses.

More efforts for an efficient consumption of local resources were noted at the Triangles than at Langworthy North and North Benwell where less coordinated approaches were noted. When compared to the other two areas, the Triangles' regeneration plans were more aligned to national and regional energyefficiency policy, and, as a result, a more uniform approach to energy-efficiency was pursued throughout the regeneration process. Most houses received double glazing, roof insulation, draught-proofing and central heating, and the whole scheme committed to using local and low-maintenance construction materials. In contrast, at both Langworthy North and North Benwell, energy-efficiency measures were inconsistently and sparingly applied throughout successive regeneration initiatives.

Cutting on water use in homes is important, despite a general lack of public awareness (EST, 2008), which could be, per se, a consequence of the less welldocumented evidence and government support on the subject. Financial incentives and public subsidy have been less publicised and promoted for water saving than for energy efficiency and waste recycling (SDC, 2007). As a result, water efficiency programmes have registered to date a relatively low level of activity for a series of reasons such as uncertainty of water saving returns, technological aspects, unclear regulatory framework and a misleading perception of UK as 'water plentiful' (Howarth, 2009). Findings from the three areas support this evidence: plans for an efficient use of water in homes were little considered within the areas' initial regeneration plans. Water butts were installed at Langworthy North and water meters were initially discussed at both North Benwell and the Triangles, but never implemented due to high costs. Local residents also showed little water efficiency concern and awareness. Only one resident at the Triangles made a specific comment regarding a water leak at the next door property and wondered whose responsibility was to stop water waste.

All three areas progressed notably in terms of *waste* recycling, from being basically non-recycling areas to areas where waste recycling was publicly promoted and acknowledged by local partners and residents. A good proportion of local residents across two areas. Langworthy North and the Triangles, admitted that they recycled more waste in their homes as a result of measures implemented during the regeneration of the area. In all three areas, door-step waste recycling schemes had only been running for a relatively short period of time at the time of fieldwork: one year at Langworthy North and North Benwell and less than six months at the Triangles. These schemes were supplemented by a monthly Skip Day in Salford and an annual Week of Action in Newcastle. Our discussions with key actors revealed, however, that practice across all three areas lagged well behind city practice and was hindered by practical issues such as irregular collections and wider issues including turnover in the North Benwell area.

The percentage of people claiming to be recycling more waste following regeneration at the Triangles is particularly noteworthy. This could have a twofold explanation: first, the newness of the recycling scheme in comparison to the other two areas and second, the close relation between the local community and the local council, also reflected by residents' high levels of satisfaction with council services and which led to smooth-running, coordinated waste collection and management services. By contrast, both the other areas complained about unreliable collection services, and at North Benwell, the area with the lowest percentage of people saying that they recycled more following regeneration, waste collection seemed to be hindered by high population turnover and differences reflected In cultural practice.

6.2.5. Local services and facilities

Local services and facilities can contribute to the vitality of an area. Barton et al. (2003, p. 91) argued that "many local jobs are related to local services. Local shops, schools, surgeries, pubs, police, social services ... can amount to 30% of total demand". The presence of 'friendly' neighbourhood business can thus be a real asset for an urban area. We found that the impact of urban intervention on local services and facilities was uncertain across the three areas. Generally, local services and facilities benefited and improved little

throughout the regeneration process in all areas by 2007/2008. Some of the local facilities and services were demolished or closed down, few were built or upgraded and others were in the pipeline.

Previous research showed that local services and facilities might be struggling in the early years of a regeneration scheme, particularly where demolition had temporarily reduced the volume of users for shops, health services, and leisure activities (Clark, Dyson, & Millward, 1999; West & Noden, 2009). We found evidence of this in all three areas, and particularly at Langworthy North and the Triangles where considerable demolition had already taken place or had been proposed. Local services and facilities are also likely to be geared to the predominant population in one area (Page & Boughton, 1997) which was the case with North Benwell where many shops, facilities and services catered for the large ethnic minority population.

Fig. 20 shows that four in ten (43%) residents across the three areas thought that the overall quality of local facilities and services improved as a result of urban regeneration. Yet some residents commented about the lack of facilities for children and young people in their areas. Some local shops and services were lost during the regeneration process in all three areas. At Langworthy North, some of the local shops and businesses were relocated following demolition, while the local primary school was awaiting demolition. Yet some new facilities were provided, including the Langworthy Cornerstone Centre, a brand new local community centre. In North Benwell, disappearing traditional high street shops were replaced at a fast pace by ethnic minority-led businesses. However, an important North-South link bus line running through the middle of the area had been cancelled and the nearby



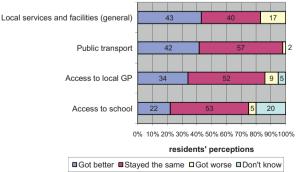


Fig. 20. Indicators of local services and facilities as perceived by residents in three areas combined. *Source*: Fieldwork survey 2007/2008.

hospital planned to relocate, to be replaced by a major Tesco's supermarket and shopping centre. At the Triangles, the threat of demolition in the immediate surrounding area kept potential services and businesses at bay, shops kept closing down and residents had to travel farther afield in order to access community facilities and services.

Involving the local *school* in regeneration plans is challenging (Lawless, 1999; Lawless & Dabinett, 1995). Yet, in North Benwell, the school was somewhat involved in the regeneration of the area: well adapted to a high population turnover, it played an active role by adding to the curriculum extra courses such as literacy for adults and junior neighbourhood warden courses. Nevertheless, local schools in the three areas benefitted little from the regeneration of the area. Open spaces around and within schools were little improved; children's routes to schools were in need of upgrading for example through larger and better pavements, cycle paths, 20 mph restrictions on roads and pedestrian areas, and residents felt they were less safe than before regeneration as a result of increased car traffic and chaotic car parking arrangements. At the Triangles, the head teacher noted that while the school's yard and football pitch were recent additions, most of the funding did not come through the regeneration partnership, and the timing was unrelated. Residents also thought that little had been done to improve local schools.

Residents complained about local *GPs and health* services closing down in all three areas. Long waiting lists and difficult access and journeys due to building works and demolitions were other reasons for dissatisfaction. In fact only a third (34%) of all residents thought that access to local health services actually got better following regeneration and residents at the Triangles, where a new state-of-the-art medical centre was built nearby, were more likely to think so than those living at Langworthy North and North Benwell.

Despite its positive impact on the property market, investment in *public transport* infrastructure and provision has been little related to and delivered via urban regeneration programmes (Barton et al., 2003). Moreover, regeneration and transport investment come under separate funding streams and government departments, and as a result there is little coordination and partnering between these two areas, something discussed in the literature as the 'silo' approach or 'old ways of thinking' (Healey, 2007).

We found no evidence of integration between regeneration plans and wider public transport strategy, which in the case of North Benwell, for example, could have brought more benefits to the area through faster and more reliable links to the city centre. Urban regeneration plans in all three areas relied mainly on already-existing and well-established public transport infrastructure and provision. Across the three areas, two in five residents (42%) thought that the quality of public transport had improved following area regeneration, varying from 64% saying so in North Benwell, to 25% in the Triangles. They often cited more buses, better and more reliable service.

6.2.6. Governance mechanisms

'The prism of sustainability' developed by Valentin and Spangenberg (1999) introduced governance as the fourth pillar of sustainable development (Valentin & Spangenberg, 1999). This new 'pillar' complements the previously existing three pillars of sustainable development and places a greater emphasis on social equity and the participative, democratic and political aspects for achieving this within the process of sustainable development (Spangenberg, 2003, 2004). Drawing governance into the sustainability debate is in fact, a reflection of the Agenda 21 document produced as a result of the summit in Rio de Janeiro (1992) which identified citizen involvement and people's active participation in democratic processes at local level as central prerequisites for change towards more sustainable development.

Governance has different meanings to different people but has broadly been defined as the intersection of power, politics and institutions (Leach, Scoones, & Stirling, 2010) or a complex set of institutions and actors that are drawn from but also beyond government (Stoker, 1998). We acknowledge these wider definitions but focus primarily on some of the governance mechanisms that help urban policy making and implementation at local level such as: community action, partnerships arrangements and local authority services. On the one hand, community involvement in decision making and local partnerships have been considered important in shaping local governance structures (Kotecha, Graham, & Cebulla, 2008) and have acted as key drivers for the wider British urban policy over the last twenty years. On the other hand, local authorities represent the first tier of government in the UK and play an important role in 'steering' urban areas and communities. Our study found that, however, urban regeneration appeared to have an uncertain effect on governance mechanisms across the three areas.

Community involvement and action in urban areas build up local links, knowledge and understanding of the local area and increases residents' confidence and team-working (Hay, 2008). Regeneration areas with high levels of community involvement tend to have residents with a stronger sense of commitment to the area, and the regeneration staff tend to be more positive about and value more community involvement (Ray, Hudson, Campbell-Barr, & Shutes, 2008). Community participation in mechanisms of local governance is central in three ways. First, it plays an important role in improving public services, by strengthening the hand of service providers petitioning for more or flexible resources. Second, it tackles the 'democratic deficit' and thus local residents become more influential in local political processes (Maguire & Truscott, 2006). Third, it creates 'linking' social capital between the community and local service providers (Skidmore, Bound, & Lownsbrough, 2006). Yet community involvement can be dominated by a small group of insiders, the so-called 'usual suspects', that benefits the social capital building with no guarantee that the wider community benefits further beyond them (Skidmore et al., 2006).

We found that community involvement throughout the regeneration process varied across the three areas with an overall two in five (41%) residents feeling more involved in the making of their area than following the regeneration process (Fig. 21). Sherry Arnstein's 'ladder of citizen participation',⁵ with its three-tier incremental structure and eight degrees of citizen participation, can be employed here to describe the type and degree of community involvement in the three areas (Arnstein, 1969):

- a combination of *partnership* and *delegated power* at Langworthy North, where the local community was well represented in local partnerships and Seedley and Langworthy Trust (SALT) was delegated by the local council to carry out various 'tasks' during and following the regeneration of the area;
- *placation* at North Benwell, whereby a few handpicked community representatives informed and were involved in the regeneration plans, but the regeneration partnership retained the right to judge the legitimacy or feasibility of the advice; and

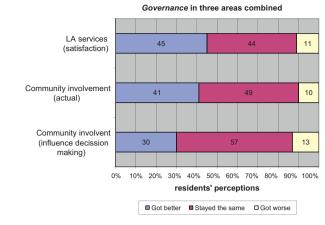


Fig. 21. Indicators of governance as perceived by residents in three areas combined. *Source:* Fieldwork survey 2007/2008.

• *consultation* at the Triangles, where residents' opinions were invited to inform and not to shape regeneration plans for the area.

High levels of community activity and membership were noted in two areas, Langworthy North and North Benwell. At Langworthy North, the regeneration of the area took place against the background of intensive and ongoing community participation and empowerment. Notably, one in two residents (55%) we interviewed was a member of a community group. Yet, in North Benwell, key actors commented about significant historic levels of community involvement which had recently dropped. Indeed, in comparison to Langworthy North, only two in five of the residents interviewed (39%) were a member of a community group.

Across the three areas, approximately one third of residents (30%) felt that they were more able to influence decisions about the area than before regeneration. Residents at Langworthy North and the Triangles were more likely to feel that they could influence decisions regarding their areas, and figures were also closer to the national average of 37% (DCLG, 2007b), than those at North Benwell, where only 21% felt so. An analysis of the 2007 Citizenship Survey showed that people's feelings about their ability to influence local decision-making were related to levels of trust in the local council, volunteering and civic involvement in local life. It also found that an important role was played by community cohesion which was seen as necessary for people to effectively act collectively and exert influence (DCLG, 2006a).

Indeed, residents at North Benwell showed less trust in the local council as a result of high staff turnover at

⁵ She proposed a 'ladder of citizen participation' with a three-tier pyramidal structure – starting with *non-participation*, trough *tokenism* and ending with *citizen power* – which had eight degrees of citizen participation. She also argued that the closer a community is to the top of the pyramid, the more effective its involvement becomes. The two bottom rungs of the ladder, *manipulation* and *therapy*, describe levels of 'non-participation', 'engineered' to substitute genuine participation. In contrast, at the top of the ladder, citizens can negotiate and engage in trade-offs with traditional power holders or decision makers.

the local neighbourhood office and plans to move the regeneration focus on a neighbouring area. Moreover, residents described their community as less united and felt that community cohesion was undermined by an increased cultural and ethnic diversity and transient populations who lacked the motivation to invest in their area. In contrast, higher levels at Langworthy North were the result of long-term community building programmes, while at the Triangles, the close and 'consultative' relationship between the local council and residents created the impression of effective community involvement in decision-making; in reality, residents were presented with a set of pre-defined choices they had lithe say on.

Research shows that lower levels of residents who feel unable to influence decisions affecting their local area are linked to age – younger (16–24) and older (over 65) populations – and (lower) levels of qualifications. Moreover, Black and Asian populations are more likely than other ethnic groups and whites to agree that they can influence decisions in their areas (DCLG, 2006b). At North Benwell, the overall resident population was not particularly younger or older than average and a large amount was of Bangladeshi origins. Bangladeshi groups have long been associated with lower educational attainment, qualifications and occupations (Phillips, 2009). This could offer a good explanation for lower levels of residents feeling that they can influence decisions about their area in North Benwell.

Another important indication for an area's governance outlook is the type and quality of local administration and local authority services. The local authority's approach across the three areas varied from a 'back-seat' approach in Langworthy North, where the Seedley and Langworthy Trust (SALT) had been invested with many local responsibilities, to a 'concealed top-down' approach in North Benwell, where the council veiled its centralised control by setting up the Neighbourhood Management Initiative (NMI), and 'overt top-down' approach in the Triangles. The latest national survey of user satisfaction and local government service provision found that approximately two fifths of respondents (42%) were satisfied with the way that their council ran things, while one fifth expressed a degree of dissatisfaction (21%) (DCLG, 2006b). We found that satisfaction with council services was similar across the three areas, averaging 45%, and slightly higher than the national average of 42%. More importantly, levels of dissatisfaction were significantly lower than the national average in all three areas.

'Joined-up' or 'multi-agency' partnerships have been seen as one of the strengths of recent urban regeneration initiatives, with one evaluation noting that "when the level of participation was low, performance was poor" (Cullingworth & Nadin, 2002, p. 303). A number of studies have praised the partnership and multi-level working arrangements of recent regeneration initiatives (Audit Commission, 2009a; Cole, 2008; Shelter, 2009). In contrast, earlier regeneration initiatives such as some of the Urban Development Corporations did not develop local partnerships, bypassing the local authority and residents, resulting in bureaucratic resistance, insufficient attention to local needs and recurring problems (Foster, 1999; Robson et al., 1994).

Most of New Labour's urban regeneration initiatives have adopted some kind of local partnership arrangement. These have usually included local public authorities such as local councils and social landlords, local service providers, residents or community-based organisations and sometimes local businesses. Their role has been to provide leadership, create a vision and build consensus, translate a vision into workable objectives, bring together the public, private and voluntary sector, maximise resources and encourage private investment. Yet three difficulties are associated more generally with local partnerships. First, large multi-agency partnerships tend to marginalise the contribution of residents (Allen, Camina, Casey, Coward, & Wood, 2005: Power & Mumford, 1999). Second, residents in low-income areas are expected to invest far more time in these partnerships than if they live in middle class neighbourhoods (Barnes et al., 2008; Foot, 2009). Third, service providers in fields such as health, education and leisure may find it difficult to engage with these partnerships which represent issues beyond service delivery and their agendas, draining time from business-as-usual. Their time and input into regeneration extra activities are little acknowledged when their performance is evaluated at national level.

Local partnership arrangements were similar in a number of ways at Langworthy North and North Benwell. First, a wide range of local partners and stakeholders were involved in the regeneration of both Langworthy North and North Benwell, all under the supervision of relatively large scale partnerships which equally orchestrated the regeneration of the area and advocated its priorities. Second, once dissolved, these partnerships transferred some of their responsibilities to wider-area arrangements/partnerships and neighbourhood based organisations such as the Seedley and Langworthy Trust (SALT) and Neighbourhood Management Initiative (NMI). In contrast, no such partnership was present at the Triangles. Discussions with key actors in the three areas highlighted their concerns regarding the extent to which wider governance structures took into account local and area specific issues, such as street wardens and communal gardens maintenance, as resources were even more thinly spread over wider areas, which, per se, pointed to one of the limitations of partnership arrangements, the tendency to marginalise resident involvement.

7. Discussion

7.1. How sustainable is sustainable?

Some common messages emerge from examining local conditions of 'urban sustainability' in the three areas. All three areas have generally improved following urban regeneration intervention. They offered better housing, in a generally cleaner and safer neighbourhood. Stigma had been reduced or overcome at all three areas as a result of reductions in crime levels and better area image and perceptions, house prices and land values raised. Community cohesion had been strengthened and local residents seemed satisfied with their neighbourhoods and homes. However, we have also found that all three areas needed further support and guidance: local economies were still struggling and local residents found it difficult to adjust to economic restructuring and growing competition in the labour market, the housing tenure mix was still dominated by social and private renting, some of the local governance mechanisms were fragile and local services and facilities appeared to improve little and did not meet residents' needs and expectations. Thus, the impacts of urban intervention on local sustainability show 'mixed' success as for as the selected urban sustainability indicators are concerned.

Comparisons among the three areas, however, suggested a number of distinctions. They all had different industrial legacies, history of regeneration investment and local partnerships, degrees of local government involvement and visions to achieve sustainability. To a degree, the outcomes in each area depended on the specific and local personalities and circumstances, and further research would be needed to establish whether these findings can be generalised to other urban areas with similar conditions. Yet the three areas seemed to have reached different degrees of sustainability by 2007/2008.

Langworthy North seemed to be the most sustainable area among our three selected areas and to continue its progress towards sustainability: it offered good links into nearby job markets, new private development which aimed to diversify the local housing choice and improve the community mix, and above all an entrepreneurial local community organisation (SALT) which laid robust foundations for the future governance of the area. Yet levels of resident satisfaction were lower than at the other two case study areas, a result, perhaps, of mixed views regarding the impact of the nearby private development, and potential demolition in the immediate area.

North Benwell appeared to be the second most sustainable area: it faced up to the challenge of a particularly diverse and highly mobile resident population, strenuously working towards bringing the community together, and offered a particularly successful local school, which despite its limited involvement in the regeneration of the area was an important factor in the general make-up of the area and the sustainability of the local community.

The Triangles area, in contrast to the previous two areas, seemed to be the slowest in its progress towards sustainability. The community was at the centre of an area proposed for clearance, hence few employment opportunities were to be created in the short and medium term, crime and safety were still major concerns for local residents, private landlords seemed to take hold of the local housing market, and local services and facilities were few and further away. Yet, despite the fact that the council did not have a clear vision for the area beyond regeneration works, it worked closely with residents and, as result, levels of resident satisfaction were the highest among the three case study areas. In addition, the area was only two-thirds refurbished at the time of the fieldwork and its completion may show the area in a different light.

A few last thoughts are worth noting here. Despite some overall progress noted across the three areas, they all needed further investment and monitoring of their development towards sustainability, especially so in the aftermath of the economic recession. Among the lessons learnt here, some discussed in more detail below, there is the importance of continual urban investment in order to tackle multiple disadvantage and achieve sustainability, the need for long-term visions which look at how area's governance is shaped and developed beyond area regeneration initiatives, the need to focus on adjacent areas and their relation to the newly regenerated areas and communities. Moreover, resident-based assessments of local sustainability play an important role in understanding the underlying conditions of urban sustainability and highlighting the needs and aspirations of urban communities. However, the most difficult and time-consuming task of all may be bringing back economic prosperity in these urban areas.

7.2. Housing Market Renewal in hindsight

We found the extent and scale of HMR Programme impressive - the largest, most complex and comprehensive urban programme undertaken under any government in England. By 2007/2008, many projects had been started and completed, communities engaged, financial means and other resources involved. HMR Pathfinders have progressed within the space of a less than a decade in terms of market information and local knowledge, developing new approaches and monitoring systems, deploying a whole range of innovative solutions and engaging with a series of private and civil sector players. If at the beginning of this study we felt intrigued and sceptical of the sheer scale of the HMR Programme, its web of partners, its ambitious targets and daring vision to create sustainable urban areas, by the end we felt more positive about HMR achievements, many of which changed the face of many urban neighbourhoods.

Today the HMR Programme is history but nevertheless, its legacy including skills in managing complex and often competing situations, its drive towards the integration of different actors and initiatives targeting deprived urban areas and the amount of market intelligence collected will form a valuable point of departure for future urban programmes. However, we also have to acknowledge here that a number of more recent studies raise fundamental questions about the robustness of the rationale behind the HMR intervention (Allen, 2008; Cameron, 2006; Ferrari & Lee, 2010; Minton, 2009; Webb, 2010). Beyond the scope of this paper, the further investigation of these questions could develop a fully fledged argument about the impact and effectiveness of the HMR Programme per se. Yet of these, at least two can be further discussed here: the HMR focus on physical appearance and demolition, and its ambition to balance housing markets.

First, the HMR goal of 'holistic' regeneration acted in places as a veiled declaration for physical intervention via demolition or light area improvements. The initial expectation was that through HMR intervention, the 'surplus' of housing would be demolished to bring housing supply and demand into a better balance. However, this has proved to attract negative responses from local communities (Allen, 2008; Minton, 2009; Webb, 2010) and played a key role in the programme's demise. This is, perhaps, an inevitable (and thus foreseeable) outcome bearing in mind this country's history of and opposition to housing clearance. Moreover, demolition plans were little justified by HMR plans to increase housing supply in the long term. We also found that while aspects of the 'housing and area appearance' improved significantly, 'non-visible' housing conditions, such as back-of-the-house parts (back yards, walls and alleys) were less well dealt with in all three areas. Their neglect could lead to crime, antisocial behaviour and littering, which in the longer term might undermine the existing improvements (Keeling & Coles, 1996; Wilson & Keeling, 1982).

Second, rebalancing of regional housing markets through the encouragement of home ownership against social and private renting, considered by HMR 'undesirable' characteristics of sustainable housing markets, did not seem to work in our three areas. On the contrary, a buoyant private renting market was present, which, however, was little monitored or 'regulated'. This may mean that home ownership is not always 'the solution' for a housing market. In fact, a recent report warns that the 'era of the owner-occupier could be in decline', with millions facing a lifetime as tenants rather than home owners (Davies & Lupton, 2010). The same research forecasts that by 2020 some 20% of households will be privately rented - up from 15% in 2010 and a low of 9% in 1988. By contrast, it predicts that owner-occupied households will make up 62% by the start of the next decade - down from the 2010 figure of 67% and an all-time high of just under 71% in 2003.

In 2010, the Audit Commission published its final strategic reviews on the HMR Pathfinders which highlighted the risks associated with the programme ending at area level.⁶ The programme's full shut-down was not generally expected. A rather phased withdrawal was anticipated which would have allowed for a planned exit – in fact, the HMR Pathfinders had always feared the government's withdrawal and lobbied at each stage for continued support and funding. The HMR Programme has now 'dried up', and its demise is coupled with wide-spread cuts in overall public funding and shrinking local authorities budgets. So, is there any hope for continuing some of the HMR activities?

Local authorities and Local Enterprise Partnerships (LEPs) have generally been seen as the successors of the HMR partnerships (Audit Commission, 2011; Housing Inside, 2010) and some £5 million have already been made available by the government over the following

⁶ See reports available on Audit Commission's website at: http:// www.audit-commission.gov.uk/housing/marketrenewalpathfinders/ strategicreviews/Pages/Strategicreviewofprogress2010.aspx.

two years to provide support for such work within LEPs (HoC, 2011b). Other approaches have also been tried. For example, the East Lancashire HMR Pathfinder merged in 2010 with a private regeneration company forming Regenerate Pennine Lancashire which implements major developments on behalf of surrounding local authorities. In Newcastle and Gateshead, the HMR Pathfinder is helping to set up joint venture vehicles in both constituent councils, while in Birmingham and Sandwell and North Staffordshire partners are exploring the possibility of setting up Local Asset Based Vehicles to create an investment stream. Another option available is to bid for funding from other funding streams now in existence or announced, including the New Homes Bonus and the Regional Growth Fund. These, however, will only finance a limited level of regeneration and are available across the country. What will be the impact of these new arrangements on urban areas such as those discussed by this paper?

The extent of community involvement and local governance mechanisms will probably diminish as some of the community organisations and projects, local partnerships and arrangements will cease to exist in these areas; neighbourhood offices may close doors and more importantly the funding for current neighbourhood management arrangements, including street wardens and police patrols may be lost in the light of current spending cuts. All these may mean that communities in these urban areas will be less involved in the making of their areas, less well managed and more importantly feel less safe in their homes and neighbourhoods. By October 2011, however, how cuts will exactly affect the three urban areas and which services will curtail or disappear was not clear.

The importance of involving local people in the revival of urban areas and taking their needs and expectations into consideration are well acknowledged now in the wider discussion of urban sustainability. The most successful community capital and capacity building programmes were achieved where the community was 'represented' by an area-based community organisation, made up of a small number of dedicated staff and 'built from within' the community. By the time of writing the organisation in Langworthy North had managed to secure Big Lottery funding until 2014 while the responsibility for running the 'community office' in North Benwell had been 'transferred' by Newcastle Council to a local housing association. Yet keeping the momentum and securing investment for this type of organisations, which 'hold conditions' in urban areas, will prove challenging in years to come.

By 2007/2008, population turnover was balanced in all three areas, with more people on average wanting to move in than out, as a result of the three areas' improved conditions and reputations. Younger and better-off people seemed to be moving into these areas, keen to seize the opportunity of climbing onto the property ladder or securing an easy investment return. Students were also moving in and out of these areas, which were sought for their cheap rental accommodation and proximity to academic institutions or city centres. A notable number of Eastern Europeans had also moved into all three areas in the last ten years. More recent evidence, however, shows that the impact of economic recession has been more pronounced in HMR areas than other urban areas (Audit Commission, 2011; Parkinson et al., 2009). This means that despite a short period of stabilisation, these areas may start again to lose population.

All three areas had also seen an important change in the state of local housing markets. House prices rocketed almost overnight and some local residents feared for themselves or their families being pushed out of these areas, as a result of falling local housing affordability and increasing costs of living. Better-off people and landlords appeared to be moving in and as a result some local residents found it difficult to improve their housing situation within the area. This seemed problematic at the time in these urban areas of closeknit communities, where younger generations expected to continue living near friends, family and relatives. By 2011, however, the gap in house prices between HMR areas and their respective regions has started to grow apart again and the number of house sales has rapidly declined (Audit Commission, 2011) - while area gentrification was a possible 'threat' in 2007/2008, growing fears of a new housing market collapse haunt these areas today.

However, we found that urban intervention under the HMR Programme has had an overall positive impact on the sustainability of our three urban areas by 2007/2008. They all showed progress towards being more sustainable areas following urban intervention. Our finding challenges thus, the 'top-down' view, coming from large scale analysis, showing British urban regeneration that has failed to date to advance positive change in our cities (Leunig & Swaffield, 2008a, 2008b). From a 'bottom-up' perspective, from the level of residents and other key actors in three small urban areas, we found that urban regeneration intervention can drive positive change and progress towards sustainability in these areas.

However, we also found that urban regeneration can have a differentiated effect as measured by the various indicators of urban sustainability. This highlights the fragile equilibrium among the different aspects of urban sustainability: what looked like 'moving towards sustainability' in 2008 may look differently today as a consequence of current events including the 2008 recession, the abrupt ending of the HMR Programme, and the more general background of current spending cuts and rising living costs.

8. Conclusions

Several important lessons could be drawn in regard to the effect of public urban intervention on the local sustainability of urban areas. These lessons are important for both future urban regeneration policies as well as the wider urban sustainability agenda. They highlight:

- the importance of the wider context within which urban regeneration takes place and the need for a greater integration between this and other policy areas such as employment and education;
- the importance of continued support and work, and long-term models for developing sustainable urban areas and communities;
- the importance of community capacity building and close neighbourhood management in making areas and communities more sustainable, and the challenge of getting the 'right mix' in these areas.

8.1. The wider context

The sustainability of local areas and the wider urban context are closely inter-related. The sustainability of a particular urban area should be seen in the context of city, region and even national sustainability as a whole: local or area impacts have effects on wider areas or are 'spatially exported' and vice versa (Brugmann, 1996; Finco & Nijkamp, 2001; Rydin, 2007; Turok, 1992). For example jobs require wider structural changes, ecosystems operate over bigger areas and energy supply and costs are international. To look at all these issues would have been beyond the scope of this paper which has focussed on the sustainability of 'geographically bounded' small urban areas, and the local impact of public urban intervention on these areas. However, the lesson learnt here is that both the sustainability of an area and the impact of urban regeneration cannot be examined in isolation, but in relation to wider aspects of sustainability and cities. Moreover, for many years urban regeneration has been seen as a means for physical upgrading of targeted areas. If these areas are to become more sustainable, a wider approach to urban regeneration is needed including more integration with other policy areas such as employment, education, health but also energy, water and transport policy.

We found little integration and communication between various regeneration agencies, employment agencies and potential employers, despite the HMR Programme's promise to act 'holistically'. Access to jobs and job prospects was greatly enhanced when intervention areas were linked into wider areas and job markets. Langworthy North was a successful example because of its proximity to and links with Salford Quays and Manchester City Centre, supported by an efficient and fast transport link. The strength of the Manchester job market was instrumental in improving Langworthy North's economic outlook. Overall, however, little has been created in terms of the forecasting and timeframes of possible employment opportunities in all three areas. Moreover, training and skills schemes need to be better linked into and tailored to local employment markets. A majority of residents acknowledged the role played by the regeneration process in disseminating information, via leaflets, local newsletters and offices, establishing and supporting local training and skills courses. We found that these courses had a better intake when they were tailored to residents' needs and linked into the local job market. For instance, in Langworthy North and North Benwell, local councils and on-site offices worked together to identify residents' needs and skill gaps, and local job market demand.

There is a need for greater integration of education and urban policy and initiatives in delivering sustainable urban areas. Schools are important 'keepers' of information about urban areas and could contribute to building a more accurate picture about the needs of an urban community. A recent report commissioned by the National Union of Teachers looks at the impact of the physical environment on schools and highlights the importance of physical urban conditions in children's school attainment. It recommends that "policy should address the educational impact of the physical environment in local neighbourhoods by locating schools within strategic plans for local neighbourhood regeneration, community safety and environmental renewal" (Perpetuity Research, 2008, p. 42). In all three areas, schools benefited little by way of additional resources and were only marginally involved in the overall regeneration plans for the area. In North Benwell and the Triangles, the two local primary schools were under pressure to play a larger role in the community by hosting services and facilities for local residents such as adult literacy courses and junior wardens. This may detract from teaching and stretch schools' capacity and resources. However, based on evidence from other studies, community involvement is enhanced and children's learning is extended when schools adopt wider roles in local communities and become 'extended schools', 'community schools' or 'community learning schools' (Power, 2007; Power, Wilmott, & Davidson, 2011).

8.2. Continuing investment and support

Deprived urban areas need long term visions, sustained investment and commitment to tackle often entrenched and complex disadvantage in order to become more sustainable. Recent research calls for the continuation of regeneration of the former industrial cities in the Midlands and the North of England (Hastings et al., 2012) and shows the close correlation between housing volatility and area deprivation which lends support to an ongoing programme of Housing Market Renewal in low demand areas (Ferrari & Rae, 2011). This paper complements these studies. We found that urban regeneration has had an overall positive impact on the sustainability of all three areas. Yet they all needed in one form or another either extra work and investment to be done or 'fine-tuning' of existing arrangements. The pattern of regeneration investment, including its length and continuity and how local priorities are addressed in the wider context, has an important role in securing the sustainability of urban intervention and supporting the community within to become more sustainable.

All three case studies and the review of literature showed that the outcomes of urban intervention materialise after relatively long-term investment, generally 20 or 30 years. Moreover, governments timescale do not coincide to those of urban programmes and even less with those of sustainable urban development. Areas and communities with long-term and on-going regeneration investment such as Langworthy North and North Benwell were doing better; they had a better overall sustainability outlook and a greater likelihood to continue moving towards sustainability than the Triangles which benefited from short-term one-off regeneration investment. In other words, deprived communities in areas under sustained regeneration investment where local needs are acknowledged and resourced within the wider context of borough or city, are more likely to move towards sustainability than those that draw on short-term investment and a localised pool of resources.

The environmental agenda and efficient use of finite resources had risen high on the political agenda and had achieved some notable progress overall, but still need better understanding and implementation at local level. Consistent environmental agendas were little pursued in our three local areas, as it was obvious that they had to compete with other objectives. Cheaper energy bills and the desire to reduce housing costs were strong incentives for residents to greater energy efficiency and a wiser use of energy in homes. Yet little energy efficiency training or public awareness campaigning was pursued throughout the regeneration process. Double glazing and loft insulation were installed in many properties but not in a coordinated way and did not always reach the private rented sector. Despite local residents recycling more waste in their homes, recycling schemes were not always well managed and were challenged by the lack of adequate storage space and poor practice, especially in areas with high turnover and/or a large private rented sector. More local environmental training and awareness campaigns, better systems and incentives can improve local outcomes of the efficient use of natural resources.

Urban regeneration improves the condition and standard of the overall housing stock, but less so in the case of the private rented sector which needs more attention and, perhaps, regulation. The private rented sector is still a challenge as we found that people renting privately were less likely to be satisfied with their homes than those living in social housing, while private landlords were more difficult to co-opt into regeneration agreements and less likely to improve their properties. In addition, evidence points to the fact that many vulnerable households live in non-decent private sector housing (Rugg & Rhodes, 2008). While the New Labour government provided ring-fenced funding programmes to enable the Decent Homes target to be met for social housing, there were no equivalent dedicated funding for improving private sector homes to a decent standard. Local councils were allocated Regional Housing Pot Grants with the expectation that they were used to improve the condition of the private sector housing stock. However they were unspecified capital grants and could be used for any form of capital expenditure. In practice, the use of these funds varied, with some local authorities using the grant to improve the condition of the private sector stock while others spent it for other purposes.

Ring-fenced funding and using statutory accreditation to target the private rented sector could help to improve conditions and standards for private tenants. A concern, however, is that more regulation of the private rented sector could impact negatively on its growth; this could then threaten its development as an alternative to owning a home, although this has not happened in Germany due to a strong subsidy system alongside clear regulation (HM Treasury, 2010a). Thus, in 2007 just 43% of German households were owner-occupied, compared to 69% in the UK and thanks in no small part to legal systems which made renting more attractive and secure (Davies & Lupton, 2010). This is also complemented by a healthy supply of good quality rental accommodation, stringent lending requirements which make ensure that there is no oversupply of housing finance available, and Germany's tax regime, which is not particularly favourable to property owners (Palmer, 2011).

8.3. People matter

Community activity, an important aspect of area sustainability, can be sustained and increased through local partnerships and 'delegated power'. Significant levels of community activity were present in both North Benwell and Langworthy North. The regeneration of these areas was a catalyst for community involvement and greatly contributed to community cohesion and more sustainable areas and communities. In all three areas, regeneration was described as an important mechanism to bring together troubled communities and give them a voice. In both Langworthy North and North Benwell, strenuous efforts were invested in building community 'capital' through a wide range of initiatives and programmes that improved community participation and involvement in regeneration in particular and community activity in general. This was greatly supported through the establishment of local community offices in the two areas. Perhaps an important lesson is that building and sustaining community is not easy in these urban neighbourhoods. It requires dedication, resources and effort, but it is important, possible and valued by residents. Merely 'engineering' spaces for interaction may not be sufficient. It may prove worthwhile to develop new tools and disseminate practical information of this type to those involved in 'the creation' of other 'sustainable urban areas'.

Sustained neighbourhood management can provide an overview of neighbourhood issues, link between agencies and deliver positive change. The importance of neighbourhood management in 'sustaining area conditions' is firmly established by previous research (Franke, 2001; Power, 2004; Sullivan, 2002; Taylor, 2007). At both Langworthy North and North Benwell, residents could refer problems with safety, cleanliness and anti-social behaviour to a single, on-site office which also supervised a range of front-line jobs, such as street wardens and community police officers. Across these two areas, front-line staff took on multiple environmental and social tasks including security patrols, brokering neighbourhood disputes, informing the office and police about disruptive behaviour and criminal incidents, mapping and dealing with litter and fly-tipping. What seemed to be important was that there were people at ground-level keeping an eye out for problems, undertaking low-level supervision, supporting vulnerable residents, and passing on information and that there was someone to pass the information to. However, funding these positions can be challenging. While public funding may fund such schemes in the initial stages, there is a need to address long-term funding sources. Both Langworthy North and North Benwell, where such schemes were in place, struggled with longer-term funding arrangements.

Achieving the 'right' mix is, perhaps, one of the most challenging tasks when regenerating urban areas. The regeneration of existing inhabited urban areas offers less scope for adjusting the tenure or income mix by, for example, building new homes. In addition, in deprived urban areas, it is more difficult to impact on mix, which critically depends on demand for housing but which is weak by definition. Demand for housing is a variable that policy makers can only indirectly influence, through changes to the housing stock, to the labour market conditions and the appearance of the area. When demand is created, prices in the area are pushed up and thus low-income households may find it difficult to improve their housing situation within the area. We found little change in the overall tenure mix in two areas and levels of home ownership across the three areas. Two main challenges were uncovered in relation to area tenure mix. First, both the Triangles and North Benwell had buoyant buy-to-let markets which fed into a significantly larger-than-average private rented sectors. Second, a stronger demand for housing created through additional private development at Langworthy North opened an avenue for area gentrification.

Finally, the most important thing we uncovered was about the resilience of existing urban areas and communities, and the potential of public urban intervention to turn around these areas. All three areas were deemed 'unsustainable', 'un-fit for habitation' and set for demolition ten years ago. Mainly thanks to community opposition the housing was retained and the areas were on their way to being 'better places to live' and more sustainable by 2007/2008. Urban refurbishment-led regeneration proved indeed to be a cheaper, faster, less disruptive and oppositional option to demolition and re-development. More importantly, by building upon existing areas and communities, urban regeneration proved to revalue and give them a new lease of life. Whether, they will perish or 'sustain', struggle or thrive is for us to say in years to come.

Acknowledgements

The author is indebted to the UK's Economic and Social Research Council (ESRC) and London School of Economics (LSE) for funding that has made possible this research. The author is further grateful for the comments of four anonymous reviewers and the editor who have helped her to shape this paper into its current format. Finally, the author would like to thank residents and organisations in the three areas of Langworthy North (Salford), North Benwell (Newcastle) and Triangles (Merseyside) – their participation, guidance and suggestions were invaluable in understanding the three case study areas.

References

- All Party Urban Development Group. (2009). *Building local jobs: Ensuring local communities gain employment from regeneration.* London: All Party Urban Development Group.
- Allen, C. (2008). Housing market renewal and social class. New York/ London: Routledge.
- Allen, C., Camina, M., Casey, R., Coward, S., & Wood, M. (2005). *Mixed tenure twenty years on – Nothing out of the ordinary*. London: Chartered Institute of Housing and Joseph Rowntree Foundation.
- Appleyard, D., & Gerson, M. (1981). *Liveable streets*. Berkeley, CA: University of California Press.
- Arnstein, S. R. (1969). A ladder of citizen participation. Journal of the American Planning Association, 35, 216–224.
- Astleithner, F., & Hamedinger, A. (2003). The analysis of sustainability indicators as socially constructed policy instruments: Benefits and challenges of 'interactive research'. *Local Environment*, *8*, 627–640.
- Astleithner, F., Hamedinger, A., Holman, N., & Rydin, Y. (2004). Institutions and indicators – The discourse about indicators in the context of sustainability. *Journal of Housing and the Built Envi*ronment, 19, 7–24.
- Atkisson, A. (1999). Developing indicators of sustainable community: Lessons from sustainable Seattle. In D. Satterthwaite (Ed.), Sustainable cities. London: Earthscan.
- Audit Commission. (2005). *Housing market renewal. Best practice handbook.* London: Audit Commission.
- Audit Commission. (2006). Housing market renewal. Annual review 2005/06. London: Audit Commission.
- Audit Commission. (2008). Market renewal Manchester Salford partnership – Strategic review. London: Audit Commission.
- Audit Commission. (2009a). Housing Market Renewal Programme review. Housing National report. London: Audit Commission.
- Audit Commission. (2009b). Innovation and good practice in regenerating communities: Learning from the housing market pathfinders, focusing on the private sector (online). London: Audit Commission. (accessed).

- Audit Commission. (2009c). Market renewal bulletin. Regeneration developments and good practice Issue 12.
- Audit Commission. (2011). Housing Market Renewal Housing programme review. London: Audit Commission.
- Barnes, M., Skelcher, C., Beirens, H., Dalziel, R., Jeffares, S., & Wilson, L. (2008). *Designing citizen-centred governance*. York: Joseph Rowntree Foundation.
- Barton, H. (Ed.). (2000). Sustainable communities. The potential for eco-neighbourhoods. London: Earthscan.
- Barton, H., Grant, M., & Guise, R. (2003). Shaping neighbourhoods. A guide for health, sustainability and vitality. London: Spon Press.
- Batterbury, S., & Forsyth, T. (1997). Environmental transformations in developing countries: Hybrid research and democratic policy. *Geographical Journal*, 163, 126–132.
- Beekam, T., Lyons, F., & Scott, J. (2001). Improving the understanding of the influence of owner occupiers in mixed tenure neighbourhoods. Edinburgh: Scottish Homes.
- Bell, S., & Morse, S. (2001). Breaking through the glass ceiling: Who really cares about sustainability indicators? *Local Environment*, 6, 291–309.
- Bell, S., & Morse, S. (2003). Measuring sustainability. Learning from doing. London: Earthscan.
- Boheim, R., & Taylor, M. (2002). Tied down or room to move? Investigating the relationship between housing tenure, employment status and residential mobility in Britain. *Scottish Journal of Political Economy*, 49, 369–392.
- Bossel, H. (1999). Indicators for sustainable development: Theory, method, applications. Winnipeg, Canada: International Institute for Sustainable Development.
- Bramley, G., & Pawson, H. (2002). Low demand for housing: Incidence, causes and UK national policy implications. *Urban Studies*, 39, 393–422.
- Brandon, P. S., & Lombardi, P. (2005). Evaluating sustainable development in the built environment. Oxford: Blackwell.
- Brophy, P. C., & Smith, R. (1997). Mixed-income housing: Factors for success. *Cityscape*, 3, 2–31.
- Brownhill, D. (2002). A sustainability checklist for developments. Watford: British Research Establishment.
- Brownill, S. (2000). Regen(d)eration: Women and urban policy in Britain. In J. Drake, S. Ledwith, & R. Woods (Eds.), Women and the city: Visibility and voice in urban space. Basingstoke: Palgrave.
- Brownill, S., & Drake, J. (1998). Rich mix: Inclusive strategies for urban regeneration. Bristol: Polity Press.
- Bruff, G. E., & Wood, A. P. (2000). Locals sustainable development: Land-use planning's contribution to local modern government. *Journal of Environmental Planning and Management*, 43, 519–539.
- Brugmann, J. (1996). Planning for sustainability at the local government level. *Environmental Assessment Review*, 16, 363–379.
- Brugmann, J. (1997a). Is there a method in our measurement? The use of indicators in local sustainable development planning. *Local Environment*, 2, 59–72.
- Brugmann, J. (1997b). Sustainability indicators revisited: Getting from political objectives to performance outcomes – A response to Graham Pinfield. *Local Environment*, 2, 299–302.
- Bunce, S. (2009). Developing sustainability: Sustainability policy and gentrification on Toronto's waterfront. *Local Environment*, 14, 651–667.
- CAG Consultants. (2006). In-depth review of the Sustainable Communities Plan. Report to the UK Sustainable Development Commission. London: CAG Consultants.

- Cameron, S. (2006). From low demand to rising aspirations: Housing market renewal within regional and neighbourhood policy. *Hous*ing Studies, 2, 3–16.
- Cameron, S., & Field, A. (2000). Community, ethnicity and neighbourhood. Urban Studies, 15, 827–843.
- CIH, & RTPI, (2003). Planning for housing The potential for sustainable communities. A CIH/RTPI policy paper. London: Chartered Institute of Housing and Royal Town Planning Institute.
- Clark, J., Dyson, A., & Millward, A. (1999). Housing and schooling: A case-study in joined-up problems. York: Joseph Rowntree Foundation.
- Clarke, A. (2008). Understanding demographic, spatial and economic impacts on future affordable housing demand. Cambridge: Centre for Housing and Planning Research.
- CLG. (2007). English House Condition Survey 2007. Headline report.
- Cole, I. (2008). The Housing Market Renewal Programme in perspective: Maintaining momentum through difficult times. Sheffield: Centre for Regional Economic and Social Research.
- Cole, I., & Goodchild, B. (2001). Social mix and the 'Balanced Community' in British Housing Policy: A tale of two epochs. *GeoJournal*, 51, 351–360.
- Cole, I., Kane, S., & Robinson, D. (1999). Changing demand, changing neighbourhoods: The response of social landlords. Sheffield: Centre for Regional, Economic and Social Research.
- Coleman, R. (2004a). *Reclaiming the streets: Surveillance, power and social order*. Cullompton: Willan Publishing.
- Coleman, R. (2004b). Watching the degenerate: Street camera surveillance and urban regeneration. *Local Economy*, 19, 199–211.
- Cooper, I., & Curwell, S. (1998). The implications of urban sustainability. Building Research and Information, 26, 17–28.
- Couch, C., & Dennemann, A. (2000). Urban regeneration and sustainable development in Britain – The example of the Liverpool Ropewalks Partnership. *Cities*, 17, 137–147.
- Cullingworth, B., & Nadin, V. (2002). *Town and country planning in the UK*. London: Routledge.
- CURS. (2001a). Changing housing markets and urban regeneration in the M62 corridor. Birmingham: Centre for Urban and Regional Studies.
- CURS. (2001b). *The West Midlands housing markets: Changing demand, decentralisation and regeneration.* Birmingham: Centre for Urban and Regional Studies.
- CURS. (2002). Yorkshire and the Humber: Changing demand and urban regeneration. Birmingham: Centre for Urban and Regional Studies.
- Dale, A., & Newman, L. (2009). Sustainable development for some: Green urban development and affordability. *Local Environment*, 14, 669–681.
- Davies, A., & Lupton, M. (2010). Widening the rental housing market. Coventry: Chartered Institute of Housing (CIH).
- Davies, R. G. (2002). Power, politics and networks: Shaping partnerships for sustainable communities. Area, 34.
- Davoudi, S. (2000). Sustainability: A new 'vision' for the British planning system. *Planning Perspectives*, 15.
- DCLG. (2006a). 2005 Citizenship Survey: Active communities topic report. London: Department for Communities and Local Governance.
- DCLG. (2006b). User satisfaction and local government service provision: A national survey. London: Department for Communities and Local Governance.
- DCLG. (2007a). English House Condition Survey 2005. Annual report. London: Department for Communities and Local Government.

- DCLG. (2007b). Citizenship Survey: April September 2007. England and Wales. London Department for Communities and Local Government.
- DCLG. (2008a). Survey of English Housing: Satisfaction with area by characteristics of the household. London: Department for Communities and Local Governance.
- DCLG. (2008b). Sustainable development in government. Reviewing progress on National Indicators. London: Department for Communities and Local Governance.
- DCLG. (2009). National evaluation of Housing Market Renewal Pathfinders 2005–2007. London: Department for Communities and Local Government.
- DEFRA. (2008). *National indicators: Reviewing progress*. London: Department for Environment, Food and Regional Affairs.
- Dekker, K., & Bolt, G. (2005). Social cohesion in post-war estates in the Netherlands: Differences between socioeconomic and ethnic groups. Urban Studies, 42, 2447–2470.
- DETR. (1999). Urban task force prospectus: Our towns and cities: The future – Delivering an urban renaissance. London: Department of the Environment, Transport and the Regions.
- DoE. (1981). An investigation of difficult to let housing. London: Department of Environment.
- Donovan, N., Pilch, T., & Rubenstein, T. (2002). *Geographic mobility*. London: Cabinet Office.
- EC. (2004). Eurobarometer 62 Public opinion in the European Union: United Kingdom. Brussels: European Commission (EC).
- Eckerberg, K., & Moineur, E. (2003). The use of local sustainability indicators: Case studies in two Swedish municipalities. *Local Environment*, 8.
- EST. (2008). Energy saving fact file. London: Energy Saving Trust.
- European Communities. (2001). Towards a local sustainability profile

 European common indicators: Methodology sheets and technical report.
 Luxembourg: Office for Official Publications of the European Communities.
- Evans, J., & Jones, P. (2008). Rethinking sustainable urban regeneration: Ambiguity, creativity and the shared territory. *Environment* and Planning A, 40, 1416–1434.
- Expert Group on the Urban Environment. (2000). Toward a local sustainability profile: European common indicators. In: Working Group on Measuring, M. A. E. I. L. S. (Ed.). Brussels: European Commission.
- Ferrari, E., & Lee, P. (2010). Building sustainable housing markets: Lessons from a decade of changing demand and housing market renewal. Coventry: Chartered Institute of Housing (CIH).
- Ferrari, E., & Rae, A. (2011). *Local housing market volatility*. York: Joseph Rowntree Foundation (JRF).
- Finco, A., & Nijkamp, P. (2001). Pathways to urban sustainability. Journal of Environmental Policy and Planning, 3, 289–302.
- Florida, R. (2002). The rise of the creative class. New York: Basic Books.
- Foot, J. (2009). *Citizen involvement in local governance*. York: Joseph Rowntree Foundation.
- Foresight. (2008). Powering our lives: Sustainable energy management and the built environment. London: Government Office for Science.
- Forum for the Future. (2009). *Sustainable Cities Index 2009 (online)*. London: Forum for the Future. (accessed).
- Foster, J. (1999). *Docklands: Cultures in conflict, communities in collision*. London: UCL Press.
- Frank, K. (2006). The potential of youth participation in planning. Journal of Planning Literature, 20, 352–371.
- Franke, T. (2001). Neighbourhood management A key instrument in integrative urban district development. *European Urban Research* Association conference.

- Fraser, E. D. G., Dougill, A. J., Mabee, W., & Reed, M. S. (2006). Bottom up and top down: Analysis of participatory processes for sustainability indicator identification as a pathway to community empowerment and sustainable environmental management. *Journal of Environmental Management*, 78.
- Gallopin, G. C. (1997). Indicators and their use: Information for decision-making. Part One – Introduction. In B. Moldan, S. Billharz, & R. Matravers (Eds.), Sustainability indicators: A report on the project on indicators of sustainable development. Chichester, UK: John Wiley & Sons.
- Gehl, J. (1971). Life between buildings: Using public spaces. Copenhagen: Danish Architectural Press.
- Gosling, V. (2008). Regenerating communities: Women's experiences of urban regeneration. Urban Studies, 45, 607–626.
- Green, G., Grimsley, M., & Stafford, B. (2005). The dynamics of neighbourhood sustainability. York: Joseph Rowntree Foundation.
- Groves, R., Middleton, A., Murie, A., & Broughton, K. (2003). *Neighbourhoods that work.* York: Joseph Rowntree Foundation.
- Hall, P., & Hickman, P. (2004). Bulldozing the North and concreting over the South? The United Kingdom government's Sustainable Communities Plan. *Geocarrefour*, 79, 143–152.
- Hastings, A., Bramley, G., Bailey, N., & Watkins, D. (2012). Serving deprived communities in a recession. York: Joseph Rowntree Foundation (JRF).
- Hay, S. (2008). Local Links Developing active networks in local communities. York: Joseph Rowntree Foundation.
- Hayman, A. (2009). Where the cash went. Regen.net (online).
- Healey, P. (2007). Urban complexity and spatial strategies. Towards a relational planning for our times. New York: Routledge.
- Healey, P., & Hillier, J. (2008). *Critical essays in planning theory.* Hampshire: Ashgate.
- Hempel, L. C. (1999). Conceptual and analytical challenges in building sustainable communities. In D. Mazmanian & M. Kraft (Eds.), *Toward sustainable communities: Transition and transformations in environmental policy*. Cambridge, MA: MIT Press.
- Hemphill, L., Mcgreal, S., & Berry, J. (2002). An aggregated weighting system for evaluating sustainable urban regeneration. *Journal* of Property Research, 19, 353–373.
- Hirschfield, A., & Bowers, K. J. (1997). The effect of social cohesion on levels of recorded crime in disadvantaged areas. *Urban Studies*, 34, 1275–1295.
- HM Treasury. (2010a). *Investment in the UK private rented sector*. London: HM Government.
- HM Treasury. (2010b). Spending review 2010. London: HM Government.
- HNHF, & CIH, (2001). Securing housing market renewal. A submission to the comprehensive spending review. London: National Housing Federation and Chartered Institute of Housing.
- HoC. (2011a). *Housing Market Renewal Pathfinders*. London: House of Commons (HoC).
- HoC. (2011b). Written evidence submitted by the Chairs of the Housing Market Renewal Pathfinders. London: House of Commons (HoC).
- Holmans, A., & Simpson, M. (1999). Low demand Separating fact from fiction. London: Chartered Institute of Housing.
- Housing Inside. (2010). Pathfinders to join forces with LEPs.
- Howarth, D. (2009). Water conservation: An overview of research and practice. London: National Water Demand Management Centre and Environment Agency.
- Hughes, G. A., & Mccormick, B. (1985). Migration intentions in the U.K. Which households want to migrate and which succeed? *The Economic Journal*, 95, 113–123.

- Innes, J., & Booher, D. (2000). Indicators for sustainable communities: A strategy building on complexity theory and distributed intelligence. *Planning Theory and Practice*, 1, 173–186.
- Jupp, B. (1999). Living together: Community life on mixed tenure estates. London: DEMOS.
- Keeling, G. L., & Coles, C. (1996). Fixing broken windows: Restoring order and reducing crime in our communities. New York: Free Press.
- Keenan, P., Lowe, S., & Spencer, S. (1999). Housing abandonment in inner cities – The politics of low demand for housing. *Housing Studies*, 14, 703–716.
- Khadduri, J. (2001). Deconcentration: What do we mean? What do we want?. *Cityscape*, 5, 69–84.
- Kotecha, M., Graham, J., & Cebulla, A. (2008). Feeling able to influence local decision making; understanding, barriers, facilitators and strategies for increasing empowerment. London: Department for Communities and Local Government.
- Lafferty, W. M. (2001). Introduction. In W. M. Lafferty (Ed.), Sustainable communities in Europe. London: Earthscan.
- Lawless, P. (1999). Urban regeneration and transport investment: A case study of Sheffield 1992–96. Urban Studies, 36, 527–545.
- Lawless, P., & Dabinett, G. (1995). Urban regeneration and transport investment: A research agenda. *Environment and Planning A*, 1029 (0308-518X).
- Leach, M., Scoones, I., & Stirling, A. (2010). Dymanic sustainabilities. London: Earthscan.
- Lee, P., & Murie, A. (1997). *Poverty, housing tenure and social exclusion*. Bristol: Policy Press.
- Lee, P., & Nevin, B. (2001). Changing demand for housing: Restructurating markets, partnerships and the public policy framework. Birmingham: Centre for Urban and Regional Studies.
- Leunig, T., & Swaffield, J. (2008a). *Cities unlimited*. London: Policy Exchange.
- Leunig, T., & Swaffield, J. (2008b). Success and the city: Learning from International Urban Policies. London Policy Exchange.
- Maclaren, V. W. V. (1996). Urban sustainability reporting. Journal of the American Planning Association, 62, 184–202.
- Maguire, K., & Truscott, F. (2006). The value added by community involvement in governance. York: Joseph Rowntree Foundation.
- Manchester City Council. (2005). Greater Manchester integrated transport strategy. Manchester: Manchester City Council.
- Marcuse, P. (1986). Abandonment, gentrification and displacement: The linkages in New York City. In P. Smith & P. Williams (Eds.), *Gentrification of the city*. London: Unwin Hyman.
- Matthews, H. (2003). Children and regeneration: Setting an agenda for community participation and integration. *Children and Society*, 17, 264–276.
- May, N. (1997). Challenging assumptions: Gender issues in urban regeneration. York: Joseph Rowntree Foundation.
- McAlpine, P., & Birnie, A. (2005). Is there a correct way of establishing sustainability indicators? The case of sustainability indicator development on the Island of Guernsey. *Local Environment*, 10, 243–257.
- McCool, S. F., & Stankey, G. H. (2004). Indicators of sustainability: Challenges and opportunities at the interface of science and policy. *Environmental Management*, 33, 294–305.
- Mega, V., & Pedersen, J. (1998). Urban sustainability indicators. Dublin: European Foundation for the Improvement of Living and Working Conditions.
- Mega, V., & Pedersen, J. (2005). Urban sustainability indicators. Brussels: EU – European Foundation for the Improvement of Living and Working Conditions.

- Miller, N., Spivey, J., & Florance, A. (2008). Does green pay off? Journal of Real Estate Portfolio Management, 14, 385–400.
- Minton, A. (2009). Ground control: Fear and happiness in the twentyfirst century. London: Penguin.
- Mitchell, G. (1996). Problems and fundamentals of sustainable development indicators. Sustainable Development, 4, 1–11.
- Murie, A. (2001). *Birmingham housing market study*. Birmingham: Centre for Urban and Regional Studies.
- Murie, A., Nevin, B., & Leather, P. (1998). Changing demand and unpopular housing. Working paper no 4. London: Housing Corporation.
- NAO. (2007). Department for Communities and Local Government: Housing market renewal. London: National Audit Office.
- Nazroo, J. (2005). A longitudinal survey of ethnic minority people. Focus and design – Summary of draft report to the ESRC and ONS. London: University College London.
- Nevin, B. (2001a). Housing market renewal: Submission to the comprehensive spending review. London: National Housing Federation.
- Nevin, B. (2001b). Stabilising the population of Liverpool: Employment markets and housing choice. Liverpool: City of Liverpool.
- Nevin, B. (2004). Dealing with housing abandonment: A coherent framework to facilitate urban restructuring? *Local Economy*, 19, 1–7.
- Nevin, B., & Leather, P. (2007). Transition to transformation: One year on, a review of the market renewal programme: Emerging issues and the current policy debate. Shrewsbury: Nevin Leather Associates LLP.
- Nevin, B., Lee, P., & Phillimore, J. (2001). Measuring the sustainability of neighbourhoods in Liverpool. Birmingham: Centre for Urban and Regional Studies.
- Nygren, A. (1999). Local knowledge in the environment Development discourse. From dichotomies to situated knowledges. *Critique of Anthropology*, 19.
- ODPM. (2003). Sustainable communities: Building for the future. London: Office of the Deputy Prime Minister.
- ODPM. (2005). Sustainable communities: Homes for all. A five year plan from the Office of the Deputy Prime Minister. London: Office for the Deputy Prime Minister.
- Owen-John, H. (2003). Pathfinders and the historic environment. Context, 82, 16–18.
- Owens, S. (1992). Energy, environmental sustainability and land-use planning. In M. J. Breheny (Ed.), Sustainable development and urban form. London: Pion Limited.
- Owens, S. (1994). Land, limits and sustainability—a conceptualframework and some dilemmas for the planning system. *Trans*actions of the Institute of British Geographers, New Series, 19, 439–456.
- Owens, S., & Cowell, R. (2002). Land and limits: Interpreting sustainable development within the planning system. London: Routledge.
- Page, D., & Boughton, R. (1997). Mixed tenure report: Improving the design and management of mixed tenure estates in London. London: Notting Hill Home Ownership.
- Palmer, J. (2011). Brits buy homes, the Germans rent which of us has got it right? London: The Guardian.
- Parkes, A. (2002). Residential perceptions and housing mobility in Scotland: An analysis of the Longitudinal Scottish House Condition Survey 1991–1996. Bristol: Centre for Neighbourhood Research.
- Parkinson, M., Ball, M., Blake, N., & Key, T. (2009). The credit crunch and regeneration: Impact and implications. An independent report

to the Department for Communities and Local Government. London: Department for Communities and Local Government.

- Pemberton, S. (2009). Economic migration from the EU 'A8' Accession Countries and the impact on low-demand housing areas: Opportunity or threat for Housing Market Renewal Pathfinder Programmes in England? Urban Studies, 46, 1363–1384.
- Perpetuity Research. (2008). One more broken window: The impact of the physical environment on schools. Birmingham: NASUWT The Teacher's Union.
- Phillips, C. (2009). Ethnic inequalities: Another 10 years of the same? In J. Hills, T. Sefton, & K. Stewart (Eds.), *Towards a more equal society? Poverty, inequality and policy since 1997.* Bristol: Policy Press.
- Pinfield, G. (1997a). The use of indicators in local sustainable development planning: A response to Jeb Brugmann. *Local Environment*, 2.
- Pinfield, G. (1997b). The use of indicators in local sustainable development planning: A response to Jeb Brugmann. *Local Environment*, 2, 185–187.
- Power, A. (2003). In LSE Housing (Ed.), Sustainable communities and sustainable development – A review of the Sustainable Communities Plan. London: London School of Economics.
- Power, A. (2004). Neighbourhood Management and the Future of Urban Areas. CASEpaper 77. London: Centre for Analysis of Social Exclusion.
- Power, A. (2007). City survivors. Bringing up children in disadvantaged neighbourhoods. Bristol: Policy Press.
- Power, A. (2008). Does demolition or refurbishment of old and inefficient homes help to increase our environmental, social and economic viability? *Energy Policy*, *36*, 4487–4501.
- Power, A. (2009). New labour and unequal neighbourhoods. In J. Hills, T. Sefton, & K. Steward (Eds.), *Towards a more equal Society? Poverty, inequality and policy since 1997*. Bristol: Policy Press.
- Power, A., & Houghton, J. (2007). Jigsaw cities. Big places, small spaces. Bristol: Policy Press.
- Power, A., & Mumford, K. (1999). The slow death of great cities? Urban abandonment or urban renaissance York: Joseph Rowntree Foundation.
- Power, A., & Tunstall, R. (1995). Swimming against the tide: Progress or polarisation on 20 unpopular housing estates. York: Joseph Rowntree Foundation.
- Power, A., & Tunstall, R. (1997). Dangerous disorder: Riots and violent disturbances in thirteen areas of Britain, 1991–92. York: Joseph Rowntree Foundation.
- Power, A., Wilmott, H., & Davidson, R. (2011). Family futures. Childhood and poverty in urban neighbourhoods. Bristol: Policy Press.
- Pulselli, F. (2008). Integrating methods for the environmental sustainability: The SPIn-Eco Project in the Province of Siena (Italy). *Journal of Environmental Management*, 86, 332–341.
- Raco, M. (2003). Assessing the discourses and practices of urban regeneration in a growing region. *Geoforum*, 34, 37–55.
- Ravetz, J. (2000). Integrated assessment for sustainability appraisal in cities and regions. *Environmental Impact Assessment Review*, 20, 31–64.
- Ray, K., Hudson, M., Campbell-Barr, V., & Shutes, I. (2008). Public officials and community involvement in local services. York: Joseph Rowntree Foundation.
- Razzu, G. (2004). On the economics of low demand. Cambridge: European Network of Housing Research.

- Redmond, D., & Russell, P. (2008). Social Housing Regeneration and the Creation of Sustainable Communities in Dublin. *Local Econ*omy, 23(3), 168–179 (112).
- Reed, M. S. (2005). Integrating methods for developing sustainability indicators to facilitate learning and action. *Ecology and Society*, 10.
- Reed, M. S., Fraser, E. D. G., & Dougill, A. J. (2006). An adaptive learning process for developing and applying sustainability indicators with local communities. *Ecological Economics*, 59.
- Rees, W. (1992). Ecological footprints and appropriated carrying capacity: What urban economics leaves out. *Environment and Urbanisation*, 4, 121–130.
- Rees, W. E. (1997). Is 'Sustainable City' an Oxymoron? *Local Environment*, 2, 302–310.
- Rees, W. E., & Wackernagel, M. (1996). Urban ecological footprints: Why cities cannot be sustainable – And why they are the key to sustainability. *Environmental Impact Assessment Review*, 16, 223–248.
- Renn, O., Goble, R., & Kastenholz, H. (1998). How to apply the concept of sustainability to a region. *Technological Forecasting* and Social Change, 58, 63–81.
- RICS. (2004). Housing market renewal Making the Pathfinders succeed. London: Royal Institute of Chartered Surveyors.
- RICS. (2005). Green value: Green buildings, growing assets. London: Royal Institute of Chartered Surveyors.
- Roberts, I. (2000). Leicester environment city: Learning how to make Local Agenda 21, partnerships and participation deliver. *Environment and Urbanization*, 12, 9–26.
- Robson, B. et al. (1994). Assessing the impact of urban policy. London: Department of Environment.
- Roessner, J. (2000). A decent place to live. Boston: Northeastern University Press.
- Rugg, J., & Rhodes, D. (2008). The private rented stock: Its contribution and potential. York: Centre for Housing Policy.
- Rydin, Y. (1998). Land use planning and environmental capacity: Reassessing the use of regulatory policy tools to achieve sustainable development. *Journal of Environmental Planning and Man*agement, 41.
- Rydin, Y. (2007). Sustainable cities and local sustainability. In G. Atkinson, S. Dietz, & E. Newumayer (Eds.), *Handbook of sustainable development*. Cheltenham: Edward Elgar.
- Rydin, Y., Holman, N., & Esther, W. (2003a). Local sustainability indicators. *Local Environment*, 8, 581–589.
- Rydin, Y., Holman, N., Hands, V., & Sommer, F. (2003b). Incorporating sustainable development concerns into an urban regeneration project: How politics can defeat procedures. *Journal of Environmental Planning and Management*, 46, 545–561.
- Rydin, Y., Holman, N., & Wolff, E. (2003c). Local sustainability indicators. *Local Environment*, 8, 581–589.
- Satterthwaite, D. (2002). *Coping with rapid urban growth*. London: RICS Leader Edge Series.
- Schlossberg, M., & Zimmerman, A. (2003). Developing statewide indices of environmental, economic, and social sustainability: A look at Oregon and the Oregon Benchmarks. *Local Environment*, 8.
- SDC. (2007). Building houses or creating communities? A review of Government progress on Sustainable communities London: Sustainable Development Commission.
- SEU. (2001). A new commitment to neighbourhood renewal: National strategy action plan. London: Social Exclusion Unit.
- Shelter. (2009). Policy briefing: Housing market renewal. A discussion of the lessons learnt and the future role of the Housing Market Renewal Pathfinders. London: Shelter.

- Silverman, E., Lupton, R., & Fenton, A. (2006). A good place for children? Attracting and retaining families in inner urban mixed income communities York: Joseph Rowntree Foundation.
- Skidmore, P., Bound, K., & Lownsbrough, H. (2006). Do policies to promote community participation in governance build social capital? York: Joseph Rowntree Foundation.
- Social Regeneration Consultants. (2005). North Benwell Neighbourhood Management Initiative - Baseline Report. Newcastle: Social Regeneration Consultants.
- Spangenberg, J. H. (2003). New challenges need new answers. EPA Ireland 10th anniversary conference: Pathways to a sustainable future.
- Spangenberg, J. H. (2004). Reconciling sustainability and growth: Criteria, indicators, policies. *Sustainable Development*, 12.
- Speak, S. (2000). Children in urban regeneration: Foundations for sustainable participation. *Community Development Journal*, 35, 31–40.
- Spencer, C., Wooley, H., & Dunn, J. (2000). Participating in their towns: Children feel ignored. *Streetwise: The Magazine of Urban Studies*, 10, 16–18.
- Spiekermann, K., & Wegener, M. (2003). Modelling urban sustainability. International Journal of Urban Sciences, 7, 47–64.
- Steg, L. (2008). Promoting household energy conservation. *Energy Policy*, 36, 4449–4453.
- Stoker, G. (1998). Governance as theory: Five propositions. International Journal of Social Sciences, 50, 17–28.
- Sullivan, H. (2002). Modernization, neighbourhood management and social inclusion. *Public Management Review*, 4.
- Tasser, E., Sternbach, E., & Tappeiner, U. (2008). Biodiversity indicators for sustainability monitoring at municipality level: An example of implementation in an alpine region. *Ecological Indicators*, 8, 204–223.
- Taylor, M. (2007). Neighbourhood management and social capital. Technical report. London: Department for Communities and Local Government.
- Thomas, D. S. G., & Twyman, C. (2004). Good or bad rangeland? Hybrid knowledge, science, and local understandings of vegetation dynamics in the Kalahari. *Land Degradation & Development*, 15.
- Tiezzi, E., & Bastianoni, S. (2008). Sustainability of the Siena Province through ecodynamic indicators. *Journal of Environmen*tal Management, 86, 329–331.
- Total Research. (2007). *Life in North Benwell 2007*. Newcastle: Neighbourhood Services Directorate, Newcastle City Council.
- Tunstall, R. (2003). Mixed tenure' policy in the UK: Privatisation, pluralism or euphemism? *Housing, theory & society*, 20(3), 153–159.
- Tunstall, R., & Fenton, A. (2006). In the mix. A review of research on mixed income, mixed tenure and mixed communities. London: Housing Corporation/Joseph Rowntree Foundation/English Partnerships.
- Turcu, C. (2010). Examining the impact of housing refurbishment-led regeneration on community sustainability: A study of three housing market renewal areas in England. PhD thesis. London School of Economics and Political Sciences.
- Turcu, C. (2012). Re-thinking sustainability indicators: Local perspectives of urban sustainability. *Journal of Environmental Planning and Management*, in press (available online 20 July 2011).
- Turok, I. (1992). Property-led urban regeneration: Panacea or placebo. Environment and Planning A, 24, 361 (0308-518X).

- UN. (2004). Making the modern world Urban sustainability indicators. UN.
- Urban Initiatives. (2002). *Investigating the potential of large mixed use housing developments*. London: Greater London Authority.
- Urban Task Force. (1999). Towards an urban renaissance.
- Valentin, A., & Spangenberg, J. (1999). Indicators for sustainable communities. International COST C8 workshop on assessment methodologies for urban infrastructure.
- Van Der Bergh, J., & Verbruggen, H. (1999). Spatial sustainability, trade and indicators: An evaluation of the 'ecological footprint'. *Ecological Economics*, 29, 61–72.
- Warr, D. J. (2005). Social networks in a 'discredited' neighbourhood. Journal of Sociology, 41, 285–308.

- Webb, D. (2010). Rethinking the role of markets in urban renewal: The Housing Market Renewal Initiative in England. *Housing, Theory* and Society, 27, 313–331.
- West, A., & Noden, P. (2009). Attainment gaps between the most deprived and advantaged schools. London: The Sutton Trust.
- Wilkinson, A. (2006a). Demolition job. London: The Guardian.
- Wilkinson, A. (2006b). *Pathfinder*. London: Save Britain's Heritage.Wilson, J. Q., & Keeling, G. L. (1982). Broken windows: The police and neighbourhood safety. *The Atlantic Monthly*.
- Zeijl-Rozema, A., & Martens, P. (2010). An adaptive indicator framework for monitoring regional sustainable development: A case study of the INSURE project in Limburg, The Netherlands. *Sustainability: Science, Practice & Policy*, 6, 6–17.

Catalina Turcu is a lecturer in sustainable urban development at the Bartlett School of Planning, University College London. Over the last six years, she has conducted research in the fields of urban sustainability, urban regeneration, housing and policy. She holds a PhD from the London School of Economics which looked at measuring the impact of urban intervention on local sustainability.